

Operable Unit 2 Remedy Monitoring and Operations and Maintenance Fourth Quarter 2019 through Third Quarter 2020

Former Fort Ord, California



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Former Fort Ord, California**

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Acronyms and Abbreviations

%v	percent by volume
°F	degrees Fahrenheit
µg/L	micrograms per liter
µg/m ³	micrograms per cubic meter
1,1-DCA	1,1-dichloroethane
1,2-DCA	1,2-dichloroethane
1,2-DCPA	1,2-dichloropropane
1,2,3-TCP	1,2,3-trichloropropane
27CCR	Title 27 California Code of Regulations
cis-1,2-DCE	cis-1,2-dichloroethene
ACL	Aquifer Cleanup Level
Ahtna	Ahtna Global, LLC
Air District	Monterey Bay Air Resources District
ARAR	applicable or relevant and appropriate requirement
Army	U.S. Department of the Army
bgs	below ground surface
BLM	Bureau of Land Management
CAMU	Corrective Action Management Unit
CCRWQCB	California Regional Water Quality Control Board, Central Coast Region
COC	chemical of concern
CT	carbon tetrachloride
DTSC	California Department of Toxic Substances Control
EP	extraction point
ESD	Explanation of Significant Differences
EW	extraction well
Evoqua	Evoqua Water Technologies
FO-SVA	Fort Ord Salinas Valley Aquitard
GAC	granular activated carbon
gpm	gallons per minute
GWMP	groundwater monitoring program
GWTP	groundwater treatment plant
GWTS	groundwater treatment system
JV	RORE Innovative Solutions Joint Venture
LFG	landfill gas
LLDPE	linear low-density polyethylene
LOQ	limit of quantitation
MCL	Maximum Contaminant Level

MMBtu/hr	million British thermal units per hour
MRA	Munitions Response Area
N/A	not applicable
ND	not detected
NMOC	non-methane organic compound
O&M	operations and maintenance
OU2	Operable Unit 2
OUCTP	Operable Unit Carbon Tetrachloride Plume
PCE	tetrachloroethene
PDB	passive diffusion bag
PLC	programmable logic controller
ppbv	parts per billion by volume
QAPP	Quality Assurance Project Plan
QC	quality control
RAO	remedial action objective
RCRA	Resource Conservation and Recovery Act
RI/FS	Remedial Investigation/Feasibility Study
ROD	Record of Decision
RSL	regional screening level
SCADA	supervisory control and data acquisition
scfm	standard cubic feet per minute
SGS	SGS North America, Inc.
Sites 2/12	Sites 2 and 12
SL	screening level
TCE	trichloroethene
TEW	temperature element well
TTU	thermal treatment unit
USACE	U.S. Army Corps of Engineers
USEPA	U.S. Environmental Protection Agency
VC	vinyl chloride
VFD	variable frequency drive
VOC	volatile organic compound
VSR	Validation Summary Report

1.0 Introduction

The former Fort Ord, located in northern Monterey County, California (Figure 1), encompasses approximately 28,000 acres and was an active U.S. Army base from 1917 to 1994. The U.S. Environmental Protection Agency (USEPA) added Fort Ord to the National Priorities List primarily on the basis of groundwater contamination discovered in 1990 beneath the Fort Ord Landfills area, which was subsequently designated as Operable Unit 2 (OU2). Fort Ord was placed on the Base Realignment and Closure list in 1991. As the lead agency, the U.S. Department of the Army (Army) manages the cleanup of the former Fort Ord in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act, commonly known as Superfund. Activities include conducting risk assessments, remedial investigations, feasibility studies, and implementation of selected remedies for site cleanup of hazardous substances released into the environment as a result of previous Army activities. A remedial alternative and cleanup goals are selected in a decision document, and remedial activities are initiated accordingly. Monitoring of remedial activities ensures the remedy is operating properly and successfully to achieve cleanup goals.

The quarterly groundwater monitoring program (GWMP) at the former Fort Ord began in 1993 as a result of a Basewide Remedial Investigation/Feasibility Study (RI/FS) conducted in accordance with the Federal Facility Agreement. The Federal Facility Agreement became effective November 19, 1990, after it was signed by representatives of the Army, USEPA Region 9, the California Department of Health Services (now the California Department of Toxic Substances Control [DTSC]), and the California Regional Water Quality Control Board, Central Coast Region (CCRWQCB). The GWMP currently includes monitoring the progress of remedial actions at three sites: Sites 2 and 12 (Sites 2/12), OU2, and Operable Unit Carbon Tetrachloride Plume (OUCTP). This report summarizes remedial activities and monitoring at OU2.

The quarterly GWMP includes measuring depth to water and collecting groundwater samples for chemical analysis from groundwater monitoring and extraction wells at OU2 (Figure 2).¹ The presence and concentration of eleven chemicals of concern (COCs) in wells associated with OU2 are compared with each COC's Aquifer Cleanup Level (ACL) to determine their horizontal and vertical distribution in the aquifers. Table 1 lists the ACLs for OU2 COCs as stated in the *Record of Decision, Operable Unit 2, Fort Ord Landfills, Fort Ord, California* (OU2 ROD; Army, 1994) and the *Explanation of Significant Differences, Operable Unit 2, Fort Ord Landfills, Fort Ord, California* (OU2 ESD No. 1; Army, 1995). Groundwater elevations and flow directions are determined using depth to water measurements collected during the GWMP quarterly events.

¹ Well names are referenced throughout this report according to a Fort Ord-specific naming convention (ST-SSS-000-XXX), where ST = monitoring station type, SSS = two- or three-character site identification code, 000 = monitoring station number, and XXX = aquifer designation. Monitoring station type codes (ST) are EW = extraction well, MW = monitoring well, and TS = treatment system. Site identification codes are BW = Basewide (generally OUCTP wells) and OU2 = Operable Unit 2, though a well with a specific code may be used to monitor more than one study area. Aquifer designations are A = A-Aquifer and 180 = Upper or Lower 180-Foot Aquifer. An "R" added to the end of the aquifer designation indicates a replacement well. For example, well name EW-OU2-13-A represents OU2 extraction well number 13 that is screened in the A-Aquifer.

The OU2 groundwater remedy includes a groundwater treatment system² (GWTS) in operation since October 1995 to remediate the OU2 A-Aquifer, OU2 Upper 180-Foot Aquifer, and OUCTP Upper 180-Foot Aquifer. The GWTS (Figure 3) extracts groundwater from the A-Aquifer and the Upper 180-Foot Aquifer and treats it with granular activated carbon (GAC) at the OU2 groundwater treatment plant (GWTP) shown in Figure 4.

The quarterly landfill gas (LFG) monitoring program at the Fort Ord Landfills began in the Second Quarter 2000 to confirm compliance with Title 27 of the California Code of Regulations (27CCR) per the OU2 ROD (Army, 1994). The LFG monitoring program includes collecting LFG samples for chemical analysis from LFG probes and the LFG extraction and treatment system.³ The presence and concentration of methane and volatile organic compounds (VOCs) in LFG are evaluated via an analytic approach defined in a Quality Assurance Project Plan for the Fort Ord Landfills (AEI, 2019b/2020) to confirm compliance.

The OU2 Landfills remedy includes clean closure of Landfill Area A, an engineered cover system over buried refuse at Landfill Areas B through F, and collection and removal of LFG. The remedial action at the former Area A was conducted from 1996 to 1998 and construction of an engineered cover over Areas B through F was completed in 2002. The LFG extraction and treatment system (Figure 5) has been in operation since 2001 to mitigate LFG migration by extracting LFG from Landfill Areas D, E, and F and treating it at the thermal treatment unit (TTU) shown in Figure 6.

Project activities were performed according to the following documents:

- *Quality Assurance Project Plan, Former Fort Ord, California, Volume I, Appendix A, Final Revision 7, Groundwater Remedies and Monitoring at Operable Unit 2, Sites 2 and 12, and Operable Unit Carbon Tetrachloride Plume (Groundwater QAPP; AEI, 2019a)*
- *Quality Assurance Project Plan, Former Fort Ord, California, Volume I, Appendix D, Final Revision 3, Operable Unit 2 Landfills (Landfills QAPP Revision 3; AEI, 2019b).*
- *Quality Assurance Project Plan, Former Fort Ord, California, Volume I, Appendix D, Final Revision 4, Operable Unit 2 Landfills (Landfills QAPP Revision 4; AEI, 2020).*
- *Operations and Maintenance Manual, Operable Unit 2 (OU2) Groundwater Treatment Plant, Former Fort Ord, 11000 Engineering Equipment Road, Marina, California 93933 (GWTP O&M Manual; JV, 2019)*
- *Operation and Maintenance Plan, Operable Unit 2 Landfills, Former Fort Ord California, Revision 3 (Landfills O&M Plan; AEI, 2019c).*

² The GWTS is comprised of the groundwater extraction system (extraction wells and conveyance), the groundwater treatment plant (GWTP) including controls and treatment equipment, and the treated groundwater conveyance and injection/infiltration systems.

³ LFG probe names are referenced throughout this report according to a Fort Ord-specific naming convention (SGP-00-XX), where SGP = soil gas probe, 00 = monitoring station number and landfill area, and XX = monitoring depth. Monitoring depths are expressed as feet below ground surface. For example, probe name SGP-6D-12 represents LFG probe number 6 at Landfill Area D that is screened at 12 feet below ground surface.

- *Accident Prevention Plan, Operable Unit 2, Sites 2 and 12, and Operable Unit Carbon Tetrachloride Plume, Former Fort Ord, California* and associated Activity Hazard Analyses (Ahtna, 2019b)

1.1 Purpose of this Report

Ahtna Global, LLC (Ahtna) prepared this Annual Report on behalf of the U.S. Army Corps of Engineers (USACE) Sacramento District, per Contract No. W91238-19-C-0027. This report documents the remediation and monitoring activities conducted for OU2 at the former Fort Ord, California (Figure 1) from October 1, 2019 through September 30, 2020 (the “reporting period”). The guidance contained in the *O&M Report Template for Ground Water Remedies (with Emphasis on Pump and Treat Systems)* (USEPA, 2005) was utilized in preparing this report.

This report presents:

- OU2 Landfills TTU O&M data.
- OU2 Landfills engineered cover system O&M data.
- OU2 LFG monitoring data.
- OU2 GWTS O&M data.
- OU2 GWMP data.
- Detailed discussions of OU2 remedy monitoring results and performance, including groundwater COC plume capture analysis.
- Recommendations for system modifications to improve performance, reduce costs, and/or increase the likelihood of site closeout.

1.2 Brief Summary of Conceptual Site Model

The former Fort Ord Landfills were active from 1955 to 1987 and included six landfill areas covering approximately 150 acres, including the immediate surrounding area (Figure 2). The former Landfill Area A, north of Imjin Parkway, was approximately 33 acres and separated from Landfill Areas B through F to the south of Imjin Parkway (Figure 7). Landfill Areas B through F encompass approximately 120 acres of undeveloped land. The former Area A was used from 1956 to 1966 and Areas B through F were operated from 1960 until 1987, when interim closure of the facility began, which effectively terminated waste disposal activities at the Fort Ord Landfills (AEI, 2019c). The Fort Ord Landfills were used for residential and on-base waste disposal typical of municipal landfills during that time. Waste was placed in parallel trenches 10 to 30 feet deep and then covered over with the native dune sand excavated during trenching operations. Detailed disposal records are not available. However, information gathered during field activities and from other sources indicates that household and on-base commercial refuse, dried sewage sludge, construction debris, and small amounts of chemical waste (paint, oil, pesticides, electrical equipment, ink and epoxy adhesive) were placed in the Fort Ord Landfills (Shaw, 2005a). These activities led to the release of contaminants to the underlying unconfined A-Aquifer, west of the A-Aquifer groundwater divide.

The OU2 groundwater COC plume, primarily identified by the COC trichloroethene (TCE), migrated west in the A-Aquifer to the edge of the Fort Ord Salinas Valley Aquitard (FO-SVA)⁴ where it entered the Upper 180-Foot Aquifer and migrated east and then down into the Lower 180-Foot Aquifer through a natural discontinuity in the Intermediate 180-Foot Aquitard (HLA, 1995 and MACTEC, 2006). Low concentrations of COCs associated with OU2 co-mingle in the Lower 180-Foot Aquifer with the OUCTP-associated plume west of Reservation Road.⁵

Depth to groundwater in the unconfined A-Aquifer is between 24 feet to 180 feet below ground surface (bgs) across the northern part of the former Fort Ord, and between 65 and 180 feet bgs in the OU2 area. Groundwater in the A-Aquifer flows radially from the south to the north and deviates to the west and east along a north to northeast-trending groundwater divide, which extends from the eastern portion of the Fort Ord Landfills to the former Fritzsche Army Airfield (now the Marina Municipal Airport). Groundwater west of the A-Aquifer divide flows toward the western edge of the FO-SVA where it enters the unconfined portion of the Upper 180-Foot Aquifer. Groundwater flowing east of the A-Aquifer divide eventually discharges to the Salinas River. The A-Aquifer lithology consists primarily of fine to medium well-sorted dune sands and is separated from the Upper 180-Foot Aquifer by the FO-SVA, which consists primarily of blue-gray plastic clay with interbedded units of fine sand.

Depth to groundwater in the Upper 180-Foot Aquifer is between 45 feet and 265 feet bgs across the northern part of the former Fort Ord, and between 60 and 265 feet bgs in the OU2 area. To the west where the FO-SVA pinches out, the unconfined A-Aquifer and confined Upper 180-Foot Aquifer combine to form a continuous, unconfined hydrostratigraphic unit (identified as the unconfined Upper 180-Foot Aquifer). A north-trending groundwater divide in the unconfined Upper 180-Foot Aquifer exists midway between the FO-SVA and Monterey Bay. Groundwater in the unconfined Upper 180-Foot Aquifer west of the divide flows west and discharges to the Monterey Bay. Groundwater in the unconfined Upper 180-Foot Aquifer east of the divide flows under the FO-SVA (becoming confined) toward the Salinas Valley. The Upper 180-Foot Aquifer lithology consists primarily of sandy deposits with some gravel approximately 60 feet thick and is separated from the Lower 180-Foot Aquifer by the Intermediate 180-Foot Aquitard, which consists primarily of silt and clay units.

1.3 Statement of Remedy Goals

1.3.1 Landfills Remedy Goals

As described in the *Record of Decision, Operable Unit 2, Fort Ord Landfills, Fort Ord, California* (OU2 ROD; Army, 1994), the Fort Ord Landfills remedy goals are to:

- Restrict rainfall infiltration through the landfill areas and prevent leaching of VOCs remaining in waste materials or soil to the underlying groundwater.
- Prevent potential direct exposure of VOCs to people or the environment.
- Collect and remove LFG, if necessary.

⁴ The FO-SVA thins and disappears (pinches out) near the western edge of OU2 and eastern edge of Site 12.

⁵ There are no ACLs for OU2 in the Lower 180-Foot Aquifer. This aquifer is discussed separately in the OUCTP quarterly and annual groundwater monitoring reports.

- Prevent exposure of sanitary waste in the Fort Ord Landfills to the surrounding environment.

The LFG monitoring program at the Fort Ord Landfills was established in accordance with 27CCR Section 20921(a)(2), which states:

- The concentration of methane migrating from the landfill must not exceed 5 percent by volume (%v) in air at the facility property boundary or alternative boundary approved in accordance with 27CCR Section 20925 (27CCR Section 20925(a)(1) also requires monitoring probes be spaced a maximum of 1,000 feet apart).
- Trace gases shall be controlled to prevent adverse acute and chronic exposure to toxic and/or carcinogenic compounds.

1.3.2 Groundwater Remedy Goals

Groundwater at OU2 and OUCTP is considered a potential drinking water, industrial water, and agricultural water source under the *Water Quality Control Plan for the Central Coastal Basin* (CCRWQCB, 2019), although the water is not currently being used for these purposes. Accordingly, the OU2 groundwater remedy goals are to protect human health and comply with Federal and State law by returning groundwater to a condition that will allow beneficial use, including potential future use as a drinking water source as described in the OU2 ROD (Army, 1994) and the subsequent OU2 ESD No. 1 (Army, 1995). Specifically, the remedial action objective (RAO) is to remediate COCs in the A-Aquifer and Upper 180-Foot Aquifer to Federal or State drinking water Maximum Contaminant Levels (MCLs), whichever is lower, and risk-based levels that are lower than MCLs for chloroform, 1,2-dichloropropane (1,2-DCPA), tetrachloroethene (PCE), and vinyl chloride (VC) (Army, 1994). These goals are accomplished through hydraulic control and containment of contaminated groundwater, and through extraction and treatment of groundwater with COC concentrations exceeding ACLs. It is further stated in the OU2 and OUCTP RODs that 1) the achievement of the RAO would restore the beneficial uses of groundwater within and adjacent to OU2 and OUCTP, and 2) the ACLs are acceptable contaminant concentrations that, when achieved within a site, would reduce potential risks and comply with applicable or relevant and appropriate requirements (ARARs).

The OU2 groundwater plume is characterized by the presence of eleven COCs in groundwater in the A-Aquifer and Upper 180-Foot Aquifer at concentrations above their respective ACLs. Carbon tetrachloride (CT) is the only COC for OUCTP in the Upper 180-Foot Aquifer with an ACL of 0.5 micrograms per liter ($\mu\text{g}/\text{L}$) and a treated water discharge limit of 0.5 $\mu\text{g}/\text{L}$ in effect during the reporting period, which are the same limits for OU2. Table 1 presents the ACLs and treated water discharge limits in effect during the reporting period.

Criteria for terminating the groundwater remedy are based on decision rules identified in the Groundwater QAPP (AEI, 2019a). Groundwater monitoring wells and extraction wells are sampled quarterly during the remediation monitoring phase. The remediation monitoring phase is complete and the attainment monitoring phase begins when four consecutive quarters of monitoring data show

concentrations of all COCs in a well are less than or equal to their respective ACLs.⁶ The attainment monitoring phase for a well is complete when concentrations of all COCs in the well are:

- Less than or equal to their respective ACLs in eight consecutive monitoring events and data analysis indicates COC concentrations are stable or declining, or
- Below their respective limits of quantitation or below 10 percent of their respective ACLs, whichever is greater, in six consecutive monitoring events.

When the attainment monitoring phase for a well is complete, the well may be removed from the sampling program. If the well is no longer needed for groundwater elevation data it will be proposed for decommissioning. The groundwater remedy termination metric to be evaluated will be whether the attainment monitoring phase is complete for all wells within each hydraulic zone at OU2,⁷ at which point operation of extraction wells within the hydraulic zone may be terminated. This approach recognizes the termination metric will likely be met zone by zone and not simultaneously throughout the plume. Thus, the operation of extraction wells within individual hydraulic zones will progressively cease until operation of the OU2 GWTS is terminated and closure of the OU2 groundwater remedy will be proposed in a remedial action completion report.

1.4 Remedy Description

The Operable Unit 2 remedy is defined by:

- OU2 ROD (Army, 1994)
- OU2 ESD No. 1 (Army, 1995)
- *Explanation of Significant Differences, Area A, Operable Unit 2 Landfill* (OU2 ESD No. 2; Army, 1996).
- *Explanation of Significant Differences, Consolidation of Remediation Waste in a Corrective Action Management Unit (CAMU), Operable Unit 2 Landfill* (OU2 ESD No. 3; Army, 1997).
- *Explanation of Significant Differences, No Further Action for Munitions and Explosives of Concern, Landfill Gas Control, Reuse of Treated Groundwater, Designation of Corrective Action Management Unit (CAMU) Requirements as Applicable or Relevant and Appropriate Requirements (ARARs), Operable Unit 2, Fort Ord Landfills* (OU2 ESD No. 4; Army, 2006a).

1.4.1 Landfill Area Remedies

The remedial action at the former Area A was conducted from 1996 to 1998 in accordance with the OU2 ROD (Army, 1994), ESD No. 2 (Army, 1996), and ESD No. 3 (Army, 1997). Approximately 585,000 cubic yards of refuse were excavated during the remediation. This material was placed and compacted as part of the general fill-in Areas B, C, D, and F of the Fort Ord Landfills (IT, 2001a). The selected remedial

⁶ The remediation monitoring phase and the attainment monitoring phase are defined in the *Recommended Approach for Evaluating Completion of Groundwater Restoration Remedial Actions at a Groundwater Monitoring Well* (USEPA, 2014).

⁷ See the *Final Technical Memorandum, Groundwater Remediation Exit Strategy, Sites 2 and 12 and OU2, Former Fort Ord, California* (MACTEC, 2009) and Groundwater QAPP (AEI, 2019a) for descriptions of OU2 hydraulic zones. Maps of the OU2 hydraulic zones in the A-Aquifer and the Upper 180-Foot Aquifer are presented in Appendix G. Extraction wells in each hydraulic zone and extraction well network are listed in Table 11.

action for soil, presented in the OU2 ROD, included placement of an engineered cover system over buried refuse at the Fort Ord Landfills. The Army completed construction of the engineered cover over Areas B through F from 1997 to 2002 (Shaw, 2005a).

1.4.2 Landfill Area E Vertical Expansion

Due to the need for remediation at the Site 39 Inland Ranges, and the availability of additional capacity at Area E, remediation waste from the Site 39 Inland Ranges was placed within the existing footprint of Area E as a vertical expansion. This decision was documented in the *Record of Decision Amendment, Site 39 Inland Ranges, Former Fort Ord, California* (Army, 2009), which also presented:

- Soil cleanup levels,
- Volume of soil addressed in the Site 39 Inland Ranges remedial action (originally identified in the Remedial Investigation Sites ROD), and
- Excavated soil placement above an existing linear low-density polyethylene (LLDPE) geomembrane cover at the Fort Ord Landfills (Area E).

Construction of the Area E vertical expansion involved placing additional remediation waste above the existing LLDPE geomembrane and providing a new cover consisting of a foundation layer, LLDPE geomembrane, and vegetative layer over the remediation waste. The design of the vertical expansion allows for placement of about 200,000 cubic yards of remediation waste in at least two phases (Gilbane, 2014b). Remediation waste from the Site 39 Inland Ranges is placed over an approximately 17-acre area of Area E as part of the foundation layer. Figure 7 shows the Phase 1 and Phase 2 Areas prepared in 2012 and 2013 to accept remediation waste. Phase 1 was completed in 2013 with approximately 147,000 cubic yards of remediation waste placed in the vertical expansion at Area E and sealed above and below by a LLDPE geomembrane (Gilbane, 2014b).

Remediation of the Site 39 Inland Ranges and placement of soil in the Area E vertical expansion may continue in future years; therefore, the vertical expansion was designed to accept another 50,000 cubic yards of remediation waste in the Phase 2 area. During Site 39 remediation activities in 2013, approximately 8,300 cubic yards of remediation waste were placed in the Phase 2 area on top of approximately 12 inches of the pre-existing vegetative soil layer that covered the original Area E LLDPE geomembrane.⁸ In 2015, the remediation waste was temporarily covered with approximately 12 inches of clean soil obtained from the Fort Ord Landfills borrow source area. Until the vertical expansion is complete, the remediation waste in the Phase 2 area will remain sealed below by an LLDPE geomembrane and covered by 12 inches of clean soil, which is being managed to prevent exposure of remediation waste to the environment. Details of the Area E vertical expansion design are provided in *the Final Design Report, Revised OU2 Landfill Area E Expansion Construction, Former Fort Ord, California* (Gilbane, 2012). Details of the Area E Phase 1 vertical expansion construction are provided in the *Final Quality Control and Quality Assurance Report, Area E Phase 1, Operable Unit 2 Landfills, Former Fort Ord, California* (Gilbane, 2014b).

⁸ This volume is based on 2 feet of soil being placed on an approximately 2.6-acre area, which is the uncapped Phase 2 portion of the Area E vertical expansion.

1.4.3 Landfill Gas Compliance Monitoring

Compliance monitoring probes at the Fort Ord Landfills are located around the property boundary (Figure 9) and quarterly monitoring for methane was performed during the reporting period in compliance with 27CCR Section 20933(a). Annual monitoring for VOCs was also conducted at designated compliance monitoring probes around the Fort Ord Landfills boundary. Landfill gas probe construction details are provided in Figure 8.

1.4.4 Landfill Gas Extraction and Treatment

The Army installed a pilot extraction and treatment system in 2001 to mitigate LFG migration along the eastern perimeter of Area F where housing is located closest to the landfill (Shaw, 2005a). The system began operation on June 4, 2001. The extraction and treatment system included a line of extraction wells (EWs) and LFG treatment with granular activated carbon to remove VOCs and potassium permanganate to remove vinyl chloride. Two 8-inch diameter perforated collector pipes, approximately 800 feet total length, were also installed in Area E near the surface during construction in 2002 for possible future methane extraction.

The pilot extraction and treatment system operated until March 2006. Based on the results of the pilot study, and in accordance with OU2 ESD No. 4 (Army, 2006a), the extraction and treatment system was expanded by adding vertical EWs along the perimeter and interior of Area F and replacing the existing treatment system with a TTU. The TTU, unlike the GAC/potassium permanganate treatment system, treats both VOCs and methane. The TTU started full-time operation on August 2, 2006. In 2008, EW-35 was installed in Area D to augment the methane output from the Area F extraction system.

The perforated collector pipes, installed in the foundation layer at Area E, are collectively referred to as extraction point (EP)-36. The conduit from EP-36 to the TTU was installed as part of the LFG system expansion (Shaw, 2008a). In April 2009, EP-36 was brought on-line to augment the methane output from the Area F extraction system.

Testing was performed on passive vent VF-4 in Area F to determine if it was a viable source of methane that could be used in operation of the TTU. Results of this test determined a significant increase in methane removal could be achieved by adding VF-4 to the extraction network. In June 2009, VF-4 was brought on-line to augment the methane output from the Area F extraction system.

In February 2011, four additional passive vents in Areas D and F (VD-2, VD-3, VF-3, and VF-5) were converted to EPs to augment the methane output. No additional sources of LFG have been added since 2011.

The LFG extraction and treatment system is currently composed of pipelines, condensate tanks, a TTU, and extraction wells (EW) and extraction points (EP) located at the Fort Ord Landfills:

- 11 EWs along the eastern perimeter of Area F
- 6 EWs along the northern perimeter of Area F
- 5 EWs along the western perimeter of Area F
- 7 EWs along the southern perimeter of Area F
- 5 EWs in the interior of Area F

- 1 EW in the interior of Area D
- 1 EP at Area E composed of two near-surface perforated collector pipes
- 2 EPs at Area D composed of converted passive vents
- 3 EPs at Area F composed of converted passive vents

Figure 5 shows the site layout, the locations of the EWs, EPs, pipelines, condensate tanks, and the TTU. LFG is not extracted from Areas B and C because they do not generate sufficient methane to require extraction or make extraction practical. Perimeter EWs are installed to depths of 22 or 32 feet bgs. The interior EWs are installed to depths of 60 or 70 feet bgs. Each EW and EP is equipped with an ACCU-FLO™ wellhead. The vent EPs extend 6 inches below the LLDPE geomembrane.

The TTU is an enclosed flare designed for low flow applications, operating from 0.8 million British thermal units per hour (MMBtu/hr) to 5.0 MMBtu/hr with existing thermocouples and controls. The temperature in the enclosed flare is controlled by three thermocouples. The thermocouples are located on the TTU stack at heights prescribed by the manufacturer to monitor combustion temperatures to achieve regulatory limits for the LFG being treated. The thermocouples are placed in three of four temperature element wells (TEW-1 through TEW-4) located vertically along the side of the stack. The set point of the controlling thermocouple is dependent upon the amount of MMBtu/hr of inlet LFG. The higher the MMBtu value, the higher the controlling thermocouple is located (TEW-4) above the flame zone in the stack. Conversely, when the MMBtu value drops, the lower thermocouple (TEW-1) is then utilized to control combustion temperature. Figure 6 shows a schematic diagram of the TTU and the location of TEW-1 through TEW-4 on the stack.

The current configuration has the three thermocouples located from TEW-2 through TEW-4, with the set point at TEW-2. This configuration allows the TTU to operate from 49 to 118 scfm at 40%v methane. The current configuration with a typical flow of 96 scfm can be operated with a methane concentration as low as 27%v.

1.4.5 Groundwater Extraction and Treatment

The OU2 groundwater remedy consists of a groundwater pump and treatment system designed to remediate groundwater containing COCs above ACLs. Construction of the original OU2 groundwater remedy is documented in the *Operations and Maintenance Manual* (IT, 1996). Groundwater extraction and treatment first occurred at OU2 on October 23, 1995. In a letter dated January 4, 1996 the USEPA concurred with the Army's determination that the OU2 groundwater remedy is "operating properly and successfully" (USEPA, 1996). Diversion of treated effluent water from the OU2 GWTP⁹ to the Site 2 aquifer recharge structures began on June 23, 1999.

Operational data since startup of the OU2 GWTS in 1995 indicated low carbon affinity COCs, such as chloroform, 1,1-dichloroethane (1,1-DCA), and cis-1,2-dichloroethene (cis-1,2-DCE), were the first compounds breaking through the liquid-phase GAC, resulting in carbon change-outs every five to six weeks. This indicated GAC usage was not optimal for the high carbon affinity compounds, such as TCE and PCE, which were not reaching their retention capacity before a change-out; therefore, discharge

⁹ The GWTP is a component of the GWTS and houses system controls and treatment equipment including the GAC vessels.

limits for three low carbon affinity COCs (chloroform, 1,1-DCA, and cis-1,2-DCE) were revised from those listed in the OU2 ROD (Army, 1994) to their respective ACLs for treated water discharged within the historical boundaries of the OU2 plume area (HLA, 1999).

The OU2 groundwater remedy currently consists of the GWTP, six extraction well networks (31 extraction wells total), four injection wells, and two infiltration galleries (Figure 3). Fourteen extraction wells, twelve in the A-Aquifer (EW-OU2-01-A through EW-OU2-13-A)¹⁰ and two in the Upper 180-Foot Aquifer (EW-OU2-01-180 and EW-OU2-02-180R), are in the middle and western portion of the plume and are part of the original extraction well network. Seven extraction wells (EW-OU2-14-A through EW-OU2-16-A, and EW-OU2-03-180 through EW-OU2-06-180) were installed as part of the OU2 groundwater remedy Phase I expansion and are located to the south and east of the original extraction well network. Installation of the seven additional extraction wells was completed during March 2000 and continuous operation of the seven additional extraction wells began during the latter half of September 2000. System operation at increased flow rates began on April 23, 2001 following completion of the treatment system expansion activities. Phase I construction is documented in the Construction Completion Report (IT, 2001b). Two extraction wells (EW-OU2-07-180 and EW-OU2-08-180) were installed as part of the OU2 groundwater remedy Phase II expansion and are located to the east of the original extraction well network. Installation of EW-OU2-07-180 was completed during January 2005. However, testing indicated EW-OU2-07-180 was ineffective in capturing the plume within the Upper 180-Foot Aquifer and a pump was not installed. Installation of EW-OU2-08-180 was completed in March 2006 and began continuous operation in July 2007 (Shaw, 2008b).

The OU2 GWTS also includes a remedy for the OUCTP Upper 180-Foot Aquifer described in the *Record of Decision, Operable Unit Carbon Tetrachloride Plume, Former Fort Ord, California* (OUCTP ROD; Army, 2008), with groundwater monitoring results discussed under separate cover (Ahtna, 2021a). The OUCTP Upper 180-Foot Aquifer remedy consists of one extraction well (EW-OU2-09-180) installed in 2010 and connected to the existing OU2 GWTS. Normal operations of EW-OU2-09-180 started in September 2011 as detailed in the *Upper 180-Foot Aquifer Remedial Action Construction Completion Report* (Shaw, 2012).

The RORE Innovative Solutions Joint Venture (JV) completed OU2 GWTS improvements in late 2018 and the transition to the new OU2 GWTP in November 2018. Improvements included design and construction of a new OU2 GWTP near the Fort Ord Landfills to replace the original OU2 GWTP located near the western extraction well network, constructing new extraction wells located north of the Fort Ord Landfills (four in the A-Aquifer [EW-OU2-17-A through EW-OU2-20-A] and three in the Upper 180-Foot Aquifer [EW-OU2-10-180 through EW-OU2-12-180]), and two new injection wells southeast of the Fort Ord Landfills (IW-OU2-04-180 and IW-OU2-05-180). Operation of the new OU2 GWTP including new extraction and injection wells began in late November 2018. However, the leak detection system associated with existing extraction wells in the western extraction well network requires upgrading and the work will be completed after the reporting period. Some of the work was completed during the

¹⁰ Excluding decommissioned extraction well EW-OU2-08-A. EW-OU2-11-A was decommissioned and replaced with EW-OU2-11-AR.

reporting period and EW-OU2-09-A restarted operation.¹¹ During the reporting period, four previously operating extraction wells (EW-OU2-02-A, EW-OU2-04-A, EW-OU2-05-A, and EW-OU2-06-A) were offline but are expected to be operated in 2021.¹²

The original OU2 GWTP was located in the western part of the OU2 plume area but was shut down in October 2018 and decommissioned in April 2019. The new OU2 GWTP is located at the Fort Ord Landfills and has been in operation since November 2018 and consists of six 20,000-pound GAC vessels (Figure 4). During treatment, groundwater is pumped from the extraction wells and piped in parallel through two trains of three GAC vessels each (GAC Train #1 with vessels 1A, 1B, and 1C; and GAC Train #2 with vessels 2A, 2B, and 2C) operated in series to remove COCs. The treated water flows into an effluent storage tank that discharges, with the aid of pumps controlled by variable frequency drives (VFDs), to aquifer recharge structures located at OU2 and Site 2. The capacity of the OU2 GWTP with the two parallel sets of GAC vessels in series is 1,600 gallons per minute (gpm), which is the practical maximum flow rate at which the inlet pressure to the GAC vessels does not exceed the allowable operating limit. Schematic diagrams of the equipment arrangements and sampling locations are shown in Figure 4.

Treated water from both the A-Aquifer (OU2) and the Upper 180-Foot Aquifer (OU2 and OUCTP) is discharged into the Upper 180-Foot Aquifer at five locations: two OU2 injection wells, two OU2 infiltration galleries (each collocated with an injection well), and the Site 2 aquifer recharge structures. The original OU2 recharge locations (IW-OU2-01-180, INF-OU2-01-180, IW-OU2-02-180, and INF-OU2-02-180) are west of the western edge of the plume (Figure 3). The newly operational (since November 2018) OU2 injection wells (IW-OU2-04-180 and IW-OU2-05-180) are southeast of the plume and Fort Ord Landfills (Figure 3). The Site 2 aquifer recharge locations are shown in the Sites 2/12 Report (Ahtna, 2021c). The OU2 injection well IW-OU2-03-180, located north of the plume, had not received treated water since 2000 and was decommissioned in 2014.

1.4.6 Other Remedy Components

As specified in the OU2 ROD (Army, 1994), the remedy includes institutional controls (i.e., deed restrictions) to ensure the integrity of the Fort Ord Landfills engineered cover system is maintained, to prevent potential direct exposures of VOCs to humans and the environment, and to prevent the use of groundwater within the contaminant plume for domestic or agricultural purposes. Institutional controls will be implemented when the land transfers outside of the Army's control to maintain the integrity of any current or future remedial or monitoring system, including the Fort Ord Landfills engineered cover system, LFG monitoring probes and extraction wells, and groundwater monitoring, extraction, and injection wells. Deeds for land within 1,000 feet of the Fort Ord Landfills also include a notification stating landowners should refer to 27CCR Section 21190, which identifies protective measures for structures built on or within 1,000 feet of a landfill.

¹¹ EW-OU2-09-A is part of the eastern extraction well network; however, the groundwater collection pipeline valve that isolates the western extraction well network is downstream of EW-OU2-09-A.

¹² EW-OU2-04-A restarted operation after the reporting period on October 1, 2020. EW-OU2-05-A and EW-OU2-06-A restarted operation after the reporting period on March 19, 2021.

2.0 Operations Summary – Landfills Inspection and Maintenance

This section summarizes the inspection and maintenance activities conducted at the Fort Ord Landfills in the reporting period. Further information on the inspection and maintenance requirements is presented in Section 3.0 of the Landfills O&M Plan (AEI, 2019c).

2.1 Annual Engineer Inspection

A State of California Registered Civil Engineer conducted the initial annual inspection of the Fort Ord Landfills on August 3, 2020. A follow-up inspection was carried out on September 25, 2020, which concluded the Fort Ord Landfills remedy is operating satisfactorily and functioning as designed. The inspection report is in Appendix A.

2.2 Monterey County Quarterly Inspections

Representatives of Monterey County Department of Health (Local Enforcement Agency for the California Integrated Waste Management Board) conducted quarterly inspections of the Fort Ord Landfills on the following dates:

- November 25, 2019
- March 16, 2020
- June 30, 2020 (No inspection conducted due to COVID restrictions)
- September 25, 2020

No violations were observed or documented during these inspections. Copies of the Monterey County quarterly inspection reports are in Appendix B.

2.3 Maintenance

Section 3.0 of the Landfills O&M Plan (AEI, 2019c) describes activities requiring inspection, monitoring, and maintenance. Table 1 of the Landfills O&M Plan presents a summary of the requirements.

In addition to the annual engineer inspection, Ahtna personnel conducted weekly inspections of the Fort Ord Landfills during the reporting period. In accordance with the Landfills O&M Plan (AEI, 2019c), inspections are also conducted after major regional storm events (rainfall greater than 2 inches in a 24-hour period), earthquakes with a moment magnitude greater than 3.0, wind storms (wind speed greater than 30 miles per hour), and on-site fires. The occurrence of a storm event is determined with meteorological data from the Monterey Peninsula Airport (<http://w2.weather.gov/climate/index.php?wfo=mtr>) and the occurrence of an earthquake with seismic data from the U.S. Geologic Survey Earthquake Hazards Program (<https://www.usgs.gov/natural-hazards/earthquake-hazards/earthquakes>).

Routine maintenance work included setting traps for burrowing animals, filling burrows, and cleaning out drainage ditches to allow unencumbered flow of surface water. Other routine activities included fence and service road maintenance, and cleaning of owl nest boxes. It is anticipated Barn Owls and other raptors will continue to aid in controlling gophers and ground squirrels.

Inspections of the Fort Ord Landfills after major storm events demonstrated the subdrain systems installed on the western slope of Area E and the northern slope of Area F performed per design. Water

was observed discharging from the subdrains, thus removing water that could otherwise undermine the slopes. No ponded water was observed in the tie-in trench on the western side of Area E or the northern part of Area F. These areas have had significant erosion issues historically. Other areas of the Fort Ord Landfills (Areas B through D) were monitored and had no significant erosion issues.

Rolling of slopes was not performed during the reporting period per the recommendations of the 2016 Annual Report (AEI, 2017a) and the concurrence of the Army biologist with the goal of establishing a more robust root system in the vegetative cover to minimize future erosion. Only limited areas of the Fort Ord Landfills with high grasses were mowed during the reporting period. The remainder of the Landfills was not mowed to encourage the growth of native species.

2.4 Range-Related Debris Management

One cubic yard of building demolition materials was transported to the Fort Ord Landfills and placed in the Area E expansion area in October 2019 (Figure 10). Upon completion of placement of the demolition materials, a 12-inch-thick interim clean soil cover was placed over the demolition materials and a soil stabilizer was applied (KEMRON, 2020). A final engineered cover system will be placed over this area after remediation is complete at the Site 39 Inland Ranges.

2.5 Impacted Soil Management

Fourteen cubic yards of soil impacted with total petroleum hydrocarbons were transported to the Fort Ord Landfills and placed in the Area E expansion area in October 2019 (Figure 10). Upon completion of placement of the soils, a 12-inch thick interim clean soil cover was placed over the soils and a soil stabilizer was applied (KEMRON, 2020). A final engineered cover system will be placed over this area after remediation is complete at the Site 39 Inland Ranges.

2.6 Spent Small Arms Ammunition Management

During the reporting period, per an agreement with DTSC (Army, 2006b), the Army received 400 pounds of spent small arms ammunition that were collected by the California Department of Parks and Recreation from Fort Ord Dunes State Park (Site 3, former Beach Trainfire Ranges) for disposal at the Fort Ord Landfills. The 400 pounds of spent small arms ammunition, in addition to the 389 pounds received in the previous reporting period, were placed in the Area E expansion area with the demolition materials and covered with clean soil as described in Section 4.4 (Figure 10). A final engineered cover system will be placed over this area after remediation is complete at the Site 39 Inland Ranges.

3.0 Operations Summary – Landfill Gas Extraction and Treatment System

Operating performance of the LFG extraction and treatment system is discussed below regarding extraction and treatment flow rates and totals, online effectiveness, non-routine operations, and indirect waste stream production.

3.1 System and Routine Downtime

The TTU was routinely non-operational 85 percent of the time as the operating schedule was set to meet the requirement for balancing LFG extraction and generation. The operating schedule may be revised in the future based on the decision rules presented in the latest revision of the Landfills QAPP. Specifically, if the concentration of methane is below 40%v and the flow rate is below 30 standard cubic feet per minute (scfm), or methane is below 30%v and the flow rate is below 50 scfm, as measured in the influent LFG, then the EW flow rates may be adjusted. The TTU may be shut down and operated intermittently, or supplemental fuel may be added to operate the TTU continuously. Because the TTU is already operating intermittently, ongoing evaluations and system adjustments will continue until such time supplemental fuel may be necessary.

3.2 Operational Data and Process Monitoring Data

The TTU typically burns LFG at an operating temperature of greater than 1,400 degrees Fahrenheit (°F) to meet local, state, and federal air quality regulations for emissions. Methane concentrations are variable and flow rates can be adjusted to maintain the TTU at required operating temperatures. The average burner temperature of the TTU in the reporting period was 1,650°F. This value is calculated from all readings that are equal to and greater than the required operating temperature of approximately 1,400°F (it takes approximately 7 minutes after startup for the TTU to reach 1,400°F).

The TTU operated an average of 52 hours biweekly (i.e., the TTU was operated every other week) throughout the reporting period. The reporting period operations summary and the operations summary since TTU startup on April 4, 2006 are presented in Table 2.

3.2.1 TTU Influent and Effluent, and Efficiency of Aboveground Components

A Yokogawa DAQ104 digital recorder is installed at the TTU control panel. The recorder is equipped with an Ethernet adapter that allows remote monitoring via an internet connection. Every 30 seconds, minimum and maximum vacuum draw measurements are recorded for the LFG extraction blowers, LFG flow rate, stack temperature, and methane concentration. The recorder downloads these data to a Type CF flash memory card and the data are periodically transferred to a folder on the Ahtna server. The files generated by the Yokogawa recorder can only be viewed using a program developed and licensed by Yokogawa (DAQSTANDARD Data Viewer, version R8.25.01/S2). Linked files are uploaded to a structured query language server database maintained by the Army.

Annual source testing of the TTU is conducted to demonstrate the TTU operates efficiently and meets air quality regulations for emissions. The TTU remedy is being performed under Comprehensive Environmental Response, Compensation, and Liability Act as amended by the Superfund Amendment and Reauthorization Act. As such, the Monterey Bay Air Resources District (Air District) does not have jurisdiction and a permit for operating the TTU and exhaust stack is not required; however, Air District

Rule 207 and Rule 1000 are identified as ARARs in the OU2 ROD (Army, 1994) and the substantive permit requirements were met during the reporting period.

The primary objectives of the source testing are to determine whether the TTU operates efficiently and meets air quality regulations for emissions based on Air District permits issued for similar facilities. Best Environmental, an approved California Air Resources Board source-testing contractor, performed the annual TTU source test on June 4, 2020. A copy of Best Environmental's Air Resources Board Approved Independent Contractor certificate is in Appendix C, and the Source Test Report is in Appendix D. Further details on source testing results are provided in Sections 3.2.1.2 through 3.2.1.5.

3.2.1.1 Flow Rates and Total Mass Treated

During the reporting period, the LFG extraction and treatment system operated utilizing a high temperature TTU. The flow rate and treated mass data for the reporting period are summarized in Tables 2 and 3, respectively. The average flow rate during operation for the reporting period was 97.8 scfm. The total mass of treated methane for the reporting period was approximately 115,501 pounds and the total mass of treated VOCs for the reporting period was approximately 10.1 pounds, of which 0.5 of a pound was OU2 groundwater COCs.

3.2.1.2 Influent Monitoring

During regular TTU operations, methane and other fixed gases are measured using a GEM-5000™ LFG analyzer (LFG analyzer) at all extraction points to optimize the performance of the TTU. Methane concentrations remained stable (as measured at the TTU influent) during the reporting period (Figure 11).

A TTU influent sample was collected and analyzed for VOCs, fixed gases, and sulfur compounds. Source test influent samples were collected using 1-liter Tedlar® bags and then delivered to Eurofins Air Toxics (Eurofins) and Atmospheric Analysis and Consulting, Inc. Eurofins is accredited through the Department of Defense Environmental Laboratory Accreditation Program. Additionally, samples were collected from all legs of the LFG extraction and treatment system for VOC analysis. LFG samples are analyzed for a project-specific list of VOCs as defined in Landfills QAPP Revision 4 (AEI, 2020) by USEPA Compendium Method TO-15 (USEPA, 1999), fixed gases by ASTM D1945-96, and sulfur compounds by ASTM D5504. Table 4 presents the VOC analytical results for the fixed laboratory samples collected for the source test and the leg sampling.

The concentrations of VOCs measured in the influent gas have generally decreased since the start of the TTU operation; however, during the reporting period the total VOC concentration increased (Table 4 and Figure 12). This increase in total VOC concentrations was mostly because of increases in the concentrations of alcohols (e.g., ethanol and 2-propanol), likely due to pockets of LFG with relatively high VOC concentrations migrating into the LFG extraction and treatment system at the time of sampling. Total VOCs in the TTU influent gas shortly after startup of the TTU in 2006 peaked at a concentration close to 25,000 parts per billion by volume (ppbv). As of June 4, 2020 (when annual sampling was conducted), the average concentration was 10,690 ppbv, which is well below the historical peak (Figure 12).

3.2.1.3 Discharge Compliance Monitoring

The source testing of TTU exhaust assesses the emissions of VOCs, non-methane organic compounds (NMOCs), oxides of nitrogen, carbon monoxide, sulfur dioxide, and oxygen. A TTU exhaust sample was collected using a 1-liter Tedlar[®] bag, delivered to Eurofins, and analyzed for VOCs. Table 4 presents the VOC results for the TTU exhaust sample collected for the source test. Samples were collected and analyzed for NMOCs, oxides of nitrogen, carbon monoxide, and oxygen using Best Environmental's mobile laboratory. Sulfur dioxide concentrations in the TTU exhaust were not measured but were calculated from the sulfur results at the TTU influent. The table below summarizes the mobile laboratory source test results (see also the Source Test Report in Appendix D).

Parameter	Average	Allowable Emissions ¹
Nitrogen oxides (lb/MMBtu)	0.044	0.06
Carbon monoxide (lb/MMBtu)	<0.0016	0.40
Total hydrocarbons (lb/MMBtu)	0.0007	0.03
Destruction Efficiency of NMOC	98.3%	≥98%
Inlet total sulfur, grs/100scf as hydrogen sulfide	0.028	50
Outlet sulfur dioxide (parts per million, calculated)	0.05	2,000

Notes:

¹ Allowable emissions based on a list of target optimum operating conditions for this type of TTU and Air District permits for similar facilities, as defined in the Landfills O&M Plan (AEI, 2019c).

grs/100scf = grains per 100 standard cubic feet

lb/MMBtu = pounds per million British thermal units

3.2.1.4 TTU Performance Monitoring

During regular TTU operations, methane and other fixed gases are measured using an LFG analyzer at all extraction points to optimize the performance. Figure 13 shows the concentration of methane in each of the operating EWs, EPs, and the TTU influent port versus time. The methane concentration measured at the influent to the TTU averaged 36.2%v during the reporting period.

Figure 14 shows the influent methane concentration versus the total cumulative hours the pilot and TTU treatment system have been in operation. The methane concentration averaged approximately 10%v during operation of the pilot treatment system, increasing to 45%v immediately after startup of the TTU; however, by adjusting flow rates and hours of operation, methane concentrations at the TTU influent are stable at approximately 36.5%v.

3.2.1.5 TTU Efficiency

As demonstrated by the source test results, the TTU operates efficiently and meets air quality regulations for emissions per the data quality objectives for source testing identified in Landfills QAPP Revision 4 (Ahtna, 2020). A destruction efficiency of 98.3% exceeded the required 98% destruction efficiency for NMOC. Air District Rule 207 and Rule 1000 are identified as ARARs in the OU2 ROD (Army, 1994) and the substantive permit requirements were met during the reporting period.

3.2.2 Extraction Point Data

Field data from individual EWs, EPs, and monitoring probes are collected using an LFG analyzer. Field data are uploaded into the Fort Ord Data Integration System chemistry database.

Operational influent LFG testing data are used to establish the schedule of operations, operate the TTU efficiently, and quantify the amount of VOCs being removed from the Fort Ord Landfills.

The LFG extracted since the startup of the TTU has been mostly from the interior EWs. In the reporting period, LFG was extracted from EP-36, EW-31, EW-32, EW-33, EW-34, VF-3, VF-4, VF-5, VD-2, and VD-3. EW-30 has been off since June 2009, and EW-35 has been off since October 2011 due to declining methane concentrations. No extraction was performed at any of the Area F perimeter EWs during the reporting period. The table below lists the approximate percent methane contribution of each EP (normalized based on flow rates):

Extraction Point Methane Contribution at TTU Influent

Extraction Point	Methane (%)
EP-36	24
EW-31	2
EW-32	18
EW-33	19
EW-34	20
VF-3	6
VF-4	3
VF-5	4
VD-2	3
VD-3	1

Figure 12 shows total VOCs measured in the influent over time. Figure 15 shows OU2 groundwater COCs measured in the influent over time. As shown in these figures, concentrations of VOCs at the TTU influent increased immediately after operation of the interior EWs and TTU was initiated in April 2006, reached a peak in September 2006, declined until 2011, and have remained mostly stable until the observed increase during the reporting period (see Section 3.2.1.2). Figure 16 shows the pounds of groundwater COCs removed per million pounds of methane on an annual basis. This figure demonstrates the proportion of COCs relative to methane has declined by more than 50 percent since the commencement of TTU operations. Figure 17 shows that the highest concentrations of COCs were observed in Area F EWs during the reporting period. Figure 18 shows vinyl chloride and TCE concentrations at the extraction sources since 2006.

3.3 Consumables and Waste Handling/Disposal

3.3.1 Consumables Used

During the reporting period the following consumables were used:

- Nitrogen gas to operate the two main actuated valves that allow LFG to flow into the TTU
- Propane gas to ignite the LFG in the TTU stack
- Penetrating low-viscosity lubricant on the TTU stack louver parts
- Lithium grease on the blower bearings

3.3.2 Waste Handling/Disposal

During operation of the TTU, LFG containing water vapor is extracted. Some of this water vapor condenses and flows to one of four condensate tanks. Condensate water was not removed from the condensate tanks during the reporting period. If any condensate needs to be removed, it is treated at the OU2 GWTP.

3.4 Problems Encountered with LFG Extraction and Treatment System Operation

3.4.1 Subsurface

There were no significant problems encountered with subsurface components of the LFG extraction and treatment system, and corrective actions were not required during the reporting period.

3.4.2 Aboveground Treatment System

There were no significant aboveground treatment system problems encountered during the reporting period and no corrective actions were required.

3.5 System Modifications and Maintenance

3.5.1 Routine Maintenance

Inspections and maintenance of the TTU follow the recommendations of the manufacturer presented in Appendix E of the Landfills O&M Plan (AEI, 2019c). Section 6.6 of the Landfills O&M Plan describes the maintenance inspections for the LFG extraction components. Table 5 presents a summary of the Fort Ord Landfills maintenance activities conducted during the reporting period.

A qualified Ahtna maintenance technician conducted periodic inspections and maintenance of the TTU and daily inspections (during operational days) of the TTU and extraction system components.

As necessary, maintenance activities are conducted to minimize the effects of rust buildup, including lubrication, replacement of rusted parts, washing of the TTU with fresh water, and touch-up painting.

3.5.2 System Modifications and Non-Routine Maintenance

There were no significant system modifications or non-routine maintenance performed during the reporting period.

3.6 Other Operations Information

No additional operations information was obtained during the reporting period.

4.0 Operations Summary – Groundwater Extraction and Treatment System

Operating performance of the OU2 GWTS is discussed below regarding extraction and treatment flow rates and totals, online effectiveness, non-routine operations, and indirect waste stream production. Flow rates and totals for the reporting period are presented in Table 6 and Figure 19. Treatment system operations were conducted following procedures in the GWTP O&M Manual (JV, 2019).

4.1 System Downtime

The OU2 GWTS was operational 97 percent of the time during the reporting period (Table 6), which is above the operational goal of 95 percent. Downtime includes scheduled and unscheduled operational outages.

4.1.1 Routine

OU2 GWTS downtime associated with scheduled operational shutdowns during the reporting period was approximately 116 hours. The following table summarizes routine events resulting in OU2 GWTS downtime during the reporting period.

Routine Events Resulting in System Downtime

Date	Routine Events	Duration (Hours)
07/23/2020-07/28/2020	OU2 GWTP shut down for installation of an isolation valve on the northern leg of the western network.	116
Total OU2 GWTS Routine Downtime:		116

4.1.2 Non-Routine

OU2 GWTS downtime associated with unscheduled operational shutdowns during the reporting period was approximately 174.5 hours. The following table summarizes non-routine events resulting in OU2 GWTS downtime during the reporting period.

Non-Routine Events Resulting in System Downtime

Date	Non-Routine Events	Duration (Hours)
10/16/2019	Loss of communications ¹³	12.0
10/29/2019	Loss of communications	6.5
11/13/2019	Loss of communications	3.5
11/19/2019	Loss of communications	4.0
11/20/2019	Loss of communications	4.0
11/23/2019	Loss of communications	4.0

¹³ Loss of communications that occurred during the reporting period may be due to system failure or adverse weather conditions.

Date	Non-Routine Events	Duration (Hours)
12/04/2019	Loss of communications	0.5
12/22/2019	Power outage ¹⁴	1.5
01/08/2020	Overcurrent fault at the Upper 180-Foot Aquifer extraction wells	6.0
01/21/2020	Programming issue	3.0
01/22/2020	Influent pump high pressure alarm	7.0
01/25-27/2020	Isolation vault leak near EW-OU2-03-180	40.0
02/10/2020	Loss of communications	12.0
02/11/2020	Loss of communications	5.0
02/12/2020	Loss of communications	0.5
02/19/2020	Loss of communications	1.0
03/07/2020	Power outage	11.0
03/29/2020	Loss of communications	7.0
05/04/2020	Loss of communications	5.5
05/24/2020	Loss of communications	12.0
06/13/2020	Loss of communications	8.0
08/15/2020	Power outage	14.0
09/17/2020	Loss of communications	4.5
09/21/2020	OU2 GWTP shut down for repair of leaking gasket at EW-OU2-09-A.	2.0
Total OU2 GWTS Non-Routine Downtime:		174.5

4.2 Operational Data and Process Monitoring Data

4.2.1 Plant Influent and Effluent, and Efficiency of Aboveground Components

This section presents an evaluation of treatment system monitoring data and efficiency of aboveground treatment components during the reporting period. Chemical concentrations are monitored at up to nine sampling locations at the OU2 GWTP. The sample station designations and descriptions are listed in the table below and shown in Figure 4.

¹⁴ Power outages may occur due to adverse weather conditions or electrical utility provider actions (e.g., Pacific Gas & Electric Public Safety Power Shutoffs to prevent wildfires in certain weather conditions, such as high winds, typically between the months of July and November).

Sample Station Designations and Descriptions

Station Designation	Description
TS-OU2-INF-01	Combined untreated influent groundwater from online Abrams/Imjin, Bunker Hill, and California State University Monterey Bay (CSUMB) network extraction wells for calculating total COC mass removal and monitoring treatment effectiveness. ¹⁵
TS-OU2-INF-02	Combined untreated influent groundwater from online Western, Eastern, GWTP, and Landfills network extraction wells for calculating total COC mass removal and monitoring treatment effectiveness. ¹⁶
TS-OU2-EFF-1A, -1B, and -1C	GAC Train #1 effluent stations for monitoring COC breakthrough to determine if a GAC change-out is required.
TS-OU2-EFF-2A, -2B, and -2C	GAC Train #2 effluent stations for monitoring COC breakthrough to determine if a GAC change-out is required.
TS-OU2-INJ-01	Combined treated water station from GAC Train #1 and GAC Train #2. Compliance monitoring point for comparison to treated water discharge limits (Table 1) before aquifer recharge.

The GWTP process monitoring schedule is presented in Table 7 and COC analytical data from the GWTP process samples are presented in Table 8. The GWTP process monitoring is conducted according to the schedule and validation in accordance with the Groundwater QAPP (AEI, 2019a), and all data are considered acceptable and suitable for use. The Validation Summary Reports (VSRs) for analytical results are presented in Appendix E.

4.2.1.1 Flow Rates and Total Volume Treated

During the reporting period, except when offline for maintenance activities, the OU2 GWTP operated in the automatic control mode utilizing six GAC treatment vessels (1A, 1B, 1C, 2A, 2B, and 2C). The flow rate and treated volume data for the reporting period are summarized in Table 6. The total volume of treated groundwater for the reporting period was approximately 435 million gallons. The OU2 GWTP design average flow rate is 1,600 gpm and the average flow rate for the reporting period was 826 gpm. The reported average monthly flow rate varies depending on flow rates for individual wells and downtime events at the OU2 GWTP or the extraction wells. The lower than design average flow rate during the reporting period is primarily attributable to:

- The western extraction well network being offline during the reporting period due to resolution of leak detection system issues.

¹⁵ Online network extraction wells during the reporting period: Abrams/Imjin (EW-OU2-16-A, -17-A, -18-A, -19-A, -20-A, -05-180, -06-180, -11-180, and -12-180), GWTP (EW-OU2-10-180), Bunker Hill (EW-OU2-09-180), and CSUMB (none).

¹⁶ Online network extraction wells during the reporting period: Western (none), Eastern (EW-OU2-09-A, EW-OU2-10-A, -11-AR, -12-A, -13-A, -02-180R), and Landfills (EW-OU2-03-180).

- The difference in actual flow rate compared to the design flow rate for individual of extraction wells (Table 11). Specifically:
 - EW-OU2-01-180 has a design flow rate of 160 gpm, but this extraction well did not operate during the reporting period due to a failed well screen.
 - On average, new A-Aquifer extraction wells installed in 2016 produce only 23 percent of the design flow rate.¹⁷
 - On average, new Upper 180-Foot Aquifer extraction wells installed in 2016 produce only 41 percent of the design flow rate.¹⁸

Cumulative treated groundwater flow since startup on October 23, 1995 through September 30, 2020 was approximately 8.2 billion gallons. Total system flow rates and design flow rates since system startup are shown graphically in Figure 19.¹⁹ Treated water was diverted to the Sites 2/12 GWTP at an average rate of 405 gpm, which resulted in an average aquifer recharge rate of 421 gpm at OU2 (INF-OU2-01-180, INF-OU2-02-180, IW-OU2-04-180, and IW-OU2-05-180).²⁰

4.2.1.2 Influent Monitoring

During the reporting period, the OU2 GWTP influent was sampled at TS-OU2-INF-01 and TS-OU2-INF-02 prior to entering the GAC vessels (Figure 4). Table 6 summarizes total influent COC concentrations (i.e., the sum of the weighted averages of detected COC concentrations at the two OU2 GWTP influent sample points) during the reporting period, and specific influent COC concentrations are presented in Table 8. A historical summary of influent COC concentrations is shown graphically in Figure 20. Six COCs were detected in the GWTP influent during the reporting period: 1,1-DCA; 1,2-dichloroethane (1,2-DCA); chloroform; cis-1,2 DCE; PCE; and TCE. During the reporting period, the highest detected concentration of any COC in the influent samples was TCE at 6.3 µg/L in the samples collected on March 3, 2020 from TS-OU2-INF-02. TCE was the only COC above its ACL in the GWTP influent during the reporting period.

4.2.1.3 Discharge Compliance Monitoring

Discharge compliance monitoring during normal operations is conducted as specified in the Groundwater QAPP (AEI, 2019a) to document compliance with treated discharge water requirements for aquifer recharge. Injection monitoring samples were collected during the reporting period at TS-OU2-INJ-01 (Figure 4). Analytical data for COCs are summarized in Table 8. Four COCs (1,1-DCA; 1,2-DCA; chloroform; and cis-1,2-DCE) were detected at the injection monitoring point TS-OU2-INJ-01 during the reporting period (Table 8) at concentrations below their discharge limits (Table 1).

¹⁷ Table 11 shows that A-Aquifer extraction wells installed in 2016 (EW-OU2-17-A, EW-OU2-18-A, EW-OU2-19-A, and EW-OU2-20-A) had design flow rates of 30 gpm. However, during the reporting period, the average operational flow rate was 7 gpm.

¹⁸ Table 11 shows that Upper 180-Foot Aquifer extraction wells installed in 2016 (EW-OU2-10-180, EW-OU2-11-180, and EW-OU2-12-180) had design flow rates of 130 gpm. However, during the reporting period, the average operational flow rate was 53 gpm.

¹⁹ Figure 19 indicates a decreasing trend in total flow rate since GWTS expansion for 2001 through 2018. This is primarily due to discontinued operation of specific extraction wells where COC concentrations are consistently below ACLs (see evaluation in Table 11). Variation in total flow rate during the reporting period is due to transition to the new OU2 GWTP and operation of new extraction wells.

²⁰ IW-OU2-01-180 and IW-OU2-02-180 are not operational and IW-OU2-03-180 was decommissioned in 2014.

4.2.1.4 GAC Performance Monitoring

The OU2 GWTP operated with six 20,000-pound GAC vessels during the reporting period. During treatment, groundwater is pumped from the extraction wells and piped in parallel through two trains of three GAC vessels each. GAC vessels 1A, 1B, and 1C operate in series in GAC Train #1 and GAC vessels 2A, 2B, and 2C operate in series in GAC Train #2. The monitoring data are used to assess COC breakthrough and determine when GAC needs to be changed in the primary (lead) vessel per Groundwater QAPP decision rules (AEI, 2019a).

At the OU2 GWTP, the secondary GAC vessel will become the primary vessel, and the previous primary vessel filled with freshly activated GAC will become the polishing vessel. Thus, the residual loading of chemicals in the former secondary vessel is immediately detected as lead vessel breakthrough after a GAC change-out. The breakthrough COCs detected from the primary vessel after a GAC change-out are typically 1,1-DCA; 1,2-DCA; chloroform; cis-1,2-DCE; and TCE.

GAC performance monitoring consists of sampling the effluent stream after treatment by the GAC vessels at the primary vessel effluent sample points (TS-OU2-EFF-1A or TS-OU2-EFF-2A through the September 16, 2020 first GAC change-out event at the new OU2 GWTP, and TS-OU2-EFF-1B or TS-OU2-EFF-2B afterwards). The GAC effluent stream is monitored in accordance with the schedule presented in the Groundwater QAPP (AEI, 2019a). Monitoring data from the injection point of compliance (TS-OU2-INJ-01) is used to determine polishing GAC vessel efficiency. During the reporting period through September 16, 2020, samples were collected at the primary GAC vessel effluents (TS-OU2-EFF-1A and TS-OU2-EFF-2A), the secondary GAC vessel effluents (TS-OU2-EFF-1B and TS-OU2-EFF-2B), and the polishing GAC vessel effluents (TS-OU2-EFF-1C and TS-OU2-EFF-2C). During the reporting period from September 16 through September 30, 2020, samples were collected at the primary GAC vessel effluents (TS-OU2-EFF-1B and TS-OU2-EFF-2B), the secondary GAC vessel effluents (TS-OU2-EFF-1C and TS-OU2-EFF-2C), and the polishing GAC vessel effluents (TS-OU2-EFF-1A and TS-OU2-EFF-2A). Six COCs (1,1-DCA; 1,2-DCA; chloroform; cis-1,2-DCE; PCE; and TCE) were detected at the primary GAC vessel effluents, five COCs (1,1-DCA; 1,2-DCA; chloroform; cis-1,2-DCE; and TCE) were detected in the secondary GAC vessel effluents, and five COCs (1,1-DCA; 1,2-DCA; chloroform; cis-1,2-DCE; and TCE) were detected in the polishing GAC vessel effluents during the reporting period (Table 8). The primary GAC vessel average TCE removal efficiencies were calculated at 49 percent, the secondary GAC vessel TCE removal efficiencies were calculated at 90 percent, the polishing GAC vessel average TCE removal efficiencies were calculated at 100 percent, and the OU2 GWTP TCE removal efficiencies were calculated at 100 percent during the reporting period (Table 10).

4.2.1.5 GWTS Efficiency

GWTS efficiency is evaluated by comparing GWTP influent and effluent TCE concentrations. For the OU2 GWTP, only TCE concentrations are evaluated because concentrations of TCE in the primary GAC vessel effluent have historically been the determining factor in scheduling GAC change-outs. Additionally, three of the eleven COCs are low carbon affinity compounds with discharge limits set at their respective ACLs; therefore, the inclusion of these COCs in the efficiency evaluation would negatively bias GAC efficiency calculations. As the GAC is loaded with chemicals removed from extracted groundwater over time, the GWTP becomes less efficient at removing additional chemicals; however, lower efficiencies are

acceptable as long as treated water discharge requirements are met (see Section 4.2.1.3). During the reporting period, the TCE removal efficiency for the OU2 GWTP was 100 percent (Table 10), which is comparable to the previous reporting period (Ahtna, 2020b).

4.2.1.6 COC Mass Removed

The OU2 GWTP removed 29 pounds of COCs during the reporting period and a cumulative 896 pounds have been removed since system startup in October 1995 (Table 6 and Figure 14). Cis-1,2-DCE; PCE; and TCE represented approximately 89 percent by weight of the total COCs in the untreated influent during the reporting period. The remaining 11 percent was a combination of 1,1-DCA; 1,2-DCA; and chloroform. The remaining COCs were ND at the OU2 GWTP influents during the reporting period (Table 8).

4.2.2 Extraction Well Data

Extraction wells are typically monitored quarterly.²¹ Extraction well locations are shown in Figure 3. Operational runtime, flow rates, volume pumped, and total COC concentrations for individual extraction wells are reported in Table 9. A brief evaluation of individual extraction well performance during the reporting period and recommendations for the next reporting period are presented in Table 11. The extraction well sample schedule is listed in Table 12 and any modifications to the schedule during the reporting period are listed in Table 13, with well maintenance conditions and status listed in Table 14. Depth to water measurements and groundwater elevations are listed in Table 15. Specific COC analytical data for each extraction well during the reporting period are presented in Tables 16 through 19. Analytical data generated during this reporting period were subjected to validation as described in the Groundwater QAPP (AEI, 2019a) and are considered to be acceptable and suitable for use. The VSR for these analytical data is presented in Appendix E.

4.3 Consumables and Waste Handling/Disposal

4.3.1 Consumables Used

On September 16, 2020, Evoqua Water Technologies (Evoqua) removed spent GAC from the two 20,000-pound primary GAC vessels (GAC vessels 1A and 2A) and replaced with reactivated 8 x 30 mesh GAC supplied by Evoqua from previous GAC change-outs.

4.3.2 Waste Handling/Disposal

When a GAC change-out event occurs, Evoqua transports the spent GAC removed during the change-out to its facility in Red Bluff, California for high-temperature steam reactivation. Spent OU2 GWTP GAC is a Resource Conservation and Recovery Act (RCRA) non-hazardous waste based on waste profile analyses (i.e., a test performed at the direction of the generator and disposal facility to demonstrate the spent GAC is not a characteristic hazardous waste). Using reactivated GAC is a green remedy that reduces spent GAC waste.

²¹ In accordance with the Groundwater QAPP (AEI, 2019a) decision rules or because of pump failures, not all groundwater extraction wells are sampled quarterly.

4.4 Problems Encountered with GWTS Operation

4.4.1 Subsurface

Table 11 lists OU2 GWTS extraction wells and provides a brief evaluation of each well's performance, operational status, problems identified during the reporting period, and recommendations for the next reporting period. Significant subsurface problems encountered during the reporting period include:

- On October 1, 2019 the western extraction well network and EW-OU2-09-180 lost communications with the supervisory control and data acquisition (SCADA) system due to an Internet Protocol (IP) address issue. Communications were restored to get data from both networks simultaneously for the western extraction well network the same day. EW-OU2-09-180 functioned in "hand" (manual) mode, but operations data were not recorded on the SCADA system. SCADA system automatic mode operations and data recording were restarted for EW-OU2-09-180 on October 4, 2019.
- On October 9, 2019 the western network extraction wells, INF-OU2-01-180, INF-OU2-02-180, and OU2 Excess (treated water diversion to the Sites 2/12 GWTP) lost communications. Communications were restored on October 11, 2019.
- On October 15, 2019 EW-OU2-20-A was turned off due to a broken y-strainer in the well vault. The y-strainer was repaired October 29, 2019 but EW-OU2-20-A was inadvertently not restarted until December 3, 2019.
- On October 15, 2019 EW-OU2-12-180 stopped communicating flow data to the SCADA system due to a failed flow meter.
- On October 28, 2019 the Abrams/Imjin extraction well network lost communications, which were restored the same day.
- On October 29, 2019 a failed pressure gauge was repaired at EW-OU2-02-180R, but flow data are not transmitting to the SCADA system due to a failed flow meter.
- On December 13, 2019 EW-OU2-11-180 shut down due to a VFD fault. The VFD was reset and EW-OU2-11-180 restarted on December 17, 2019.
- On December 16, 2019 EW-OU2-11-AR shut down due to rainwater flooding in the well vault. The vault was pumped out and EW-OU2-11-AR restarted on December 17, 2019. The well vault lid drain was cleaned out to prevent future flooding.
- On January 7, 2020, extraction well EW-OU2-20-A was shut down because the submersible pump was cycling excessively.²² The VFD was adjusted to reduce the flow rate and EW-OU2-20-A was restarted on January 9, 2020.
- On January 8, 2020, all the operational Upper 180-Foot Aquifer extraction wells shut down due to an overcurrent fault. The reduction in GWTP influent flow rate caused a GWTP shut down for six hours until the fault was cleared and the wells restarted.

²² Pump cycling occurs when the extraction well dewateres quickly during pump operation and the pump automatically shuts off when the water level in the well is close to the pump intake level then automatically restarts when the well recharges with groundwater. Excessive cycling can reduce the normal operational life span of the pump.

- On January 15, 2020, extraction well EW-OU2-12-180 shut down due to an overvoltage fault. It was determined there was a pump failure due to formation sand material that had accumulated inside the well screen and damaged the pump. No failure of the well casing or screen was identified. Redevelopment and pump installation is scheduled to occur after the reporting period in 2021.
- On January 15, 2020, a new pump was installed in EW-OU2-05-A and tested; however, the extraction well was not operational during the reporting period due to work remaining to be performed by the JV on the GWTS in the western network.
- On January 16, 2020, a new pump was installed in EW-OU2-06-A and tested; however, the extraction well was not operational during the reporting period due to work remaining to be performed by the JV on the GWTS in the western network.
- On January 22, 2020, extraction well EW-OU2-10-A was turned off due to a malfunctioning flow meter. The flow meter was repaired and the well restarted on January 30, 2020.
- On January 25, 2020, a leak occurred at an isolation valve vault near EW-OU2-03-180. The OU2 GWTP was offline for 40 hours during the repair. The isolation vault piping was repaired and the OU2 GWTP was restarted on January 27, 2020. EW-OU2-03-180 was operated in manual mode until February 7, 2020, when it was returned to automatic operation after clearing a high-pressure fault.
- On February 5, 2020, the OU2 Excess (XS) treated water pipeline and extraction well EW-OU2-06-180 were temporarily shut down for the installation of flow meters at the Site 2 infiltration galleries.
- On March 8, 2020, the OU2 GWTP was offline for eleven hours due to a power interruption.
- On April 16, 2020, EW-OU2-10-A was shut down due to a VFD fault. The VFD was reset and EW-OU2-10-A restarted on April 27, 2020.
- On May 18, 2020, EW-OU2-20-A was shut down due to a crack in the y-strainer in the vault piping. The cracked y-strainer was replaced, and EW-OU2-20-A was restarted on July 2, 2020.
- On June 7, 2020, EW-OU2-09-180 was shut down due to a programmable logic controller (PLC) issue. A failed analog card was replaced and EW-OU2-09-180 restarted on June 26, 2020.
- On June 26, 2020, EW-OU2-17-A, EW-OU2-18-A, and EW-OU2-11-180 shut down for an unknown reason. The wells were restarted on June 29, 2020. These same wells shut down on July 6, 2020 due to a VFD issue likely from a power outage. They were reset and restarted on July 7, 2020. These three wells were offline briefly on August 20, 2020 due to an unknown PLC error which was resolved by resetting the PLC. The wells shut down due to PLC issues September 8, 2020 through September 15, 2020.
- On July 23, 2020 an isolation valve in the western network was installed and the OU2 GWTP was shut down for the work until July 28, 2020.
- On August 31, 2020 new leak detectors were added to the western network allowing operation of EW-OU2-09-A, which had been offline since the GWTP transition period in October 2018 (Ahtna, 2020b).
- On September 21, 2020 a leaking valve at EW-OU2-09-A was repaired.

4.4.2 Aboveground Treatment System

Operability of the OU2 GWTP during the reporting period was 97 percent (Table 6). Significant aboveground treatment system problems encountered during the reporting period include:

- Intermittent communications losses resulting in OU2 GWTP shutdowns (approximately 90 hours during the reporting period) and loss of controls to extraction wells (see Section 4.4.1). Radio transceivers and ancillary antennae are located at the PLC panels for each extraction well network to transmit data between the extraction wells and the OU2 GWTP. Development at the former Fort Ord over the last several years has narrowed lines of sight between transceivers, and communications are more easily disrupted by variations in atmospheric conditions. A radio survey was conducted during the reporting period and infrastructure will be modified after the reporting period in 2021 to improve communications.
- On December 22, 2019 the OU2 GWTP was offline for 1.5 hours due to a local power outage.
- On January 21, 2020, the OU2 GWTP was offline for three hours due to a programming issue. The issue was corrected and the GWTP restarted.
- On January 22, 2020, the OU2 GWTP was offline for seven hours due to a high-pressure alarm on one of the influent pumps.
- On August 15, 2020, the OU2 GWTP was offline for 6.5 hours due to a weather-related power outage.

4.5 System Modifications and Maintenance

4.5.1 Routine Maintenance

Routine maintenance activities, such as visual inspections, housekeeping, scheduled maintenance procedures for major GWTS components, and periodic testing of process equipment, instruments, and safety and security equipment, were performed during the reporting period in accordance with the GWTP O&M Manual (JV, 2019).

4.5.2 System Modifications and Non-Routine Maintenance

The JV will complete work on the leak detection system for the western extraction well network (EW-OU2-05-A and EW-OU2-06-A) after the reporting period in 2021.

No other system modifications or non-routine maintenance were performed during the reporting period.

4.6 Other Operations Information

No other OU2 GWTS operations information requires reporting for this period.

5.0 Subsurface Performance Summary – Landfill Gas Monitoring

5.1 Sampling Events Performed this Reporting Period

The OU2 LFG probe monitoring events occurred as tabulated below.

LFG Monitoring Events Schedule

Event Description	Start Date	End Date	Monitoring Type
Fourth Quarter 2019	November 11, 2019	November 11, 2019	Quarterly Monitoring Event
First Quarter 2020	February 18, 2020	February 19, 2020	Quarterly Monitoring Event
Second Quarter 2020	June 3, 2020	June 5, 2020	Annual Monitoring and VOC sampling
Third Quarter 2020	August 26, 2020	August 26, 2020	Quarterly Monitoring Event

5.2 Sampling Methodologies and Laboratory Analyses

All gas samples were collected using SUMMA™ canisters. These samples were collected at 21 LFG compliance probes around the perimeter of the landfill.

Prior to sample collection at the compliance probes, the probes were purged for 2 minutes. When purging was complete, field measurements were made for fixed gas parameters using a LFG analyzer. Pre-evacuated 6-liter, stainless steel Summa™ canisters provided by the laboratory were then used to collect VOC samples, with subsequent analysis by gas chromatography. These canisters are passivated by the chemical treatment of the interior surface to make it inactive against the gases that will be contained. The VOCs are separated by gas chromatography and measured by a mass spectrometer.

Eurofins performed analyses for the OU2 LFG samples. The LFG samples are analyzed for a project-specific list of VOCs as defined in the Landfills QAPPs (AEI/Ahtna, 2019b/2020) by USEPA Compendium Method TO-15 (USEPA, 1999).

5.3 Deviations from the Landfills QAPP

There were two deviations from the Landfills QAPP during the reporting limit. Probe SGP-2F-32 is scheduled for quarterly sampling but was mistakenly not sampled during the Second Quarter 2020. Probes SGP-3D-12/22 are scheduled for annual sampling but were mistakenly not sampled during the Second Quarter 2020 annual monitoring event. Therefore, annual sampling of these probes occurred during the Third Quarter 2020 event. These probes are monitoring probes and not compliance probes.

5.4 Probe Maintenance

Field teams evaluated the physical integrity of each probe during monitoring activities to ensure collection of representative samples, and safe access to the probe by field technicians. During the reporting period, some locks were replaced, hinges were oiled, and the water drain holes were cleaned out. No painting of probe stovepipes or other maintenance was required.

5.5 Sampling Results and Interpretation

5.5.1 VOC Concentrations

The overall quality of the data was acceptable and usable. No data were qualified as rejected, although some results were qualified as estimated due to laboratory control sample and reporting limit outliers. The overall completeness was 100 percent.

Analytical results for samples collected from the 21 compliance probes during the annual VOC monitoring are summarized in Table 20 and indicate VOCs were mostly not detected (ND) to the limit of quantitation (LOQ). Annual VOC monitoring during the Second Quarter 2020 was conducted per Landfills QAPP Revision 4 (Ahtna, 2020). Concentrations of groundwater COCs associated with the Fort Ord Landfills have decreased significantly since implementation of TTU operations.

The VOC results were evaluated as they relate to the decision rules described in Section 3.2 of Landfills QAPP Revision 4 (AEI, 2020). These rules are based on a comparison of current analytical data with historical data since startup of the pilot LFG extraction and treatment system in 2001. The target analyte list for VOCs includes 36 compounds (AEI, 2020); however, based on historical concentrations of VOCs detected in perimeter probes at the Fort Ord Landfills, it was determined vinyl chloride is an appropriate indicator compound for VOCs in LFG (Shaw, 2006). Review of VOC data in 2016 indicated chloroform and PCE are also commonly detected in LFG at concentrations exceeding 100 times the USEPA regional screening levels (RSLs) for ambient air; therefore, chloroform and PCE were added as indicator compounds by which sampling frequency decision rules are applied (AEI, 2016).

Chloroform, PCE, and vinyl chloride historical and reporting period data are presented in Tables 21, 22, and 23, respectively. Based on these results, no changes to the monitoring program were required during the reporting period per Section 3.2 of Landfills QAPP Revision 4 (AEI, 2020).

The ranges of concentrations for groundwater COCs detected above their respective LOQs for the compliance probe VOC samples in the reporting period are listed below:

Groundwater Chemicals of Concern Concentration Ranges

Compound	Number of Detects	Concentration Range or Value (ppbv)	Concentration Range or Value ($\mu\text{g}/\text{m}^3$)
Benzene	1	0.55	1.76
Chloroform	13	0.32 – 3.9	1.56 – 19.04
Tetrachloroethene	8	0.55 – 5.4	3.73 – 36.63
Vinyl Chloride	1	0.42	1.07

5.5.2 Methane Concentrations

Methane concentrations continue to decline at the Fort Ord Landfills as measured at individual extraction points, extraction legs, and the TTU influent. This decrease is expected due to the age of the Fort Ord Landfills and the trend is expected continue.

Quarterly methane monitoring during Fourth Quarter 2019 and First Quarter 2020 was conducted per Landfills QAPP Revision 3 (AEI, 2019b). Quarterly methane monitoring during Second Quarter 2020 and Third Quarter 2020 was conducted per Landfills QAPP Revision 4 (Ahtna, 2020). All quarterly monitoring events included the 21 compliance probes. Annual monitoring (conducted during the Second Quarter 2020) included 12 additional monitoring probes.

Results for these quarterly monitoring events are presented in Tables 24 through 31, Figures 21 through 24, and are summarized below:

Methane was ND (less than or equal to 0.1%v) in all 21 compliance probes during the reporting period. Four additional monitoring probes had methane concentrations greater than 5%v:

- SGP-1E-12 had measured concentrations ranging from 5.5%v to 8.1% during the reporting period.
- SGP-2E-12 had a measured concentration of 9.7%v in the Second Quarter 2020.
- SGP-3E-12 had a measured concentration of 6.3%v in the Third Quarter 2020.
- SGP-4E-12 had measured concentrations ranging from 8.3%v to 29%v during the reporting period.

Probes SGP-1E-12, SGP-2E-12, and SGP-3E-12 are bounded by compliance probes with methane concentrations less than 5%v. SGP-4E-12 is located adjacent to Area E in the Landfills interior. None of the probes are part of the compliance monitoring; therefore, the regulatory requirement for methane concentrations less than 5%v at the property boundary does not apply.

Figure 25 presents methane data from 2000 to 2020 for monitoring probes that have historically exhibited greater than 5%v methane. As shown in this figure, the methane concentrations observed during the reporting period are consistent with those from previous reporting periods. Table 32 summarizes average methane concentrations along the eastern perimeter of Area F, where housing is located closest to the Fort Ord Landfills, during the reporting period. Methane was ND (less than or equal to 0.1%v) in any monitoring probes in this area.

5.5.3 Data Validation and Quality Control Assessment

One field duplicate was collected during the Source Test and three duplicate samples were collected during the VOC compliance probe monitoring during the Third Quarter 2020 at OU2.

One hundred-six analytical results required additional qualification based on 100 percent Stage 2B and 10 percent Stage 4 data validation review. Seventy-eight results were qualified as estimated (J) due to results reported below the LOQ. Twenty-four results were qualified as estimated ND based on the recoveries of the laboratory control sample/duplicate. Two compounds were qualified as estimated based on their presence in the sample container (Tedlar™ bag) used. Results of data validation for these events are provided in Appendix E. The limits of quantitation were raised due to sample dilution that occurred during analysis. Normally, one dilution occurs with the influent sample due high levels of target analytes. An additional dilution occurred when samples were transferred from the Tedlar® bags to SUMMA™ canisters to extend the holding time.

5.5.4 Barometric Pressure

Barometric pressure readings were obtained from the meteorological station operated by the Naval Postgraduate School at the Marina Municipal Airport, located approximately 2.4 miles north of the Fort Ord Landfills (Figure 1). Figure 26 presents quarterly barometric pressure readings. Graphs show readings one week before and one week after each monitoring event. It is expected LFG emissions increase as barometric pressure decreases because there will be an equilibration period during which the pressure in the landfill is higher than the outside pressure. It is desirable to sample during times of decreasing barometric pressure to provide the most conservative quantification of methane at the landfill probes. Barometric pressure either remained constant or was falling for all monitoring events with the exception of the First Quarter 2020. This event experienced a slight (<2 mm Hg) increase in barometric pressure over the course of sampling. This is not expected to have a significant effect on methane measurements that were collected during these monitoring events.

6.0 Subsurface Performance Summary – Groundwater Monitoring

6.1 Sampling Events Performed this Reporting Period

The OU2 groundwater monitoring events occurred as tabulated below.²³

GWMP Events Schedule

Event Description	Start Date	End Date
Fourth Quarter 2019	December 2, 2019	December 6, 2019
First Quarter 2020	March 2, 2020	March 6, 2020
Second Quarter 2020	June 1, 2020	June 5, 2020
Third Quarter 2020	August 31, 2020	September 4, 2020

6.2 Sampling Methodologies and Laboratory Analyses

The majority of the groundwater samples were collected using passive diffusion bags (PDBs) at groundwater monitoring wells and extraction wells where the extraction pump was removed. The vertical placement of a PDB within the well screen is designed to capture the highest COC concentration zone of the aquifer based on historical data from the saturated screen interval. If the well has two or more high (or similar) COC concentration zones, then hanging multiple PDBs or periodically rotating a PDB between hanging stations is necessary.

PDBs are placed at a designated depth using PDB sampler hardware consisting of a dedicated rope and stainless steel weight secured to the top of the well casing or well cap. The PDB hardware rope is fitted with PDB hanging stations, usually at five-foot intervals in the well screen zone. Depth to water measurements taken prior to sample collection ensures proper placement and complete groundwater submersion of the PDB, which is necessary for representative data collection. Once sampling is completed, a new PDB for the next quarterly GWMP event (if the well is sampled quarterly) is hung at the appropriate station. PDBs are typically left in place for three months (but must remain in place for at least two weeks) before sampling. Additionally, HydraSleeve™ sampling is conducted annually for dissolved metals (antimony, copper, and lead) at select OU2 groundwater monitoring wells during the Third Quarter annual GWMP event each year.²⁴

Aqueous sample collection at OU2 GWTP monitoring points and active extraction wells use the designated sampling spigot. Offline extraction wells are turned online for several minutes prior to sampling to remove stagnant water from the pumping and sampling pipelines. Sampling standard

²³ The listed start and end dates are the scheduled event dates. Additional samples may be collected after the scheduled end date for technical reasons (see Section 6.3 and Table 13).

²⁴ Metals are not identified as COCs for groundwater in the OU2 Record of Decision and therefore do not have ACLs (Army, 1994). However, dissolved metals are monitored to validate that groundwater near the Fort Ord Landfills is not impacted by soil and spent small arms ammunition disposed of in the Fort Ord Landfills during remediation of small arms firing ranges at Fort Ord.

operating procedures are in the Groundwater QAPP (AEI, 2019a). The GWMP sampling methods, monitoring schedule, and analytical schedule are shown in Table 12.

SGS North America, Inc. (SGS) performed analyses for the OU2 GWMP samples. SGS is accredited through the Department of Defense Environmental Laboratory Accreditation Program. Groundwater samples are analyzed for a project-specific list of OU2 COCs (Table 1) by USEPA Laboratory Method 8260 SIM (selected ion monitoring). Also, during the annual GWMP event (third quarter GWMP events) dissolved metals analysis is performed with USEPA Laboratory Method 6010D.

6.3 Deviations from the Groundwater QAPP

Periodically, the groundwater monitoring well sampling schedule is adjusted to fill data gaps or reduce sampling frequency at locations that have historically low COC concentrations. These adjustments are made based on analyses of historical results at each sampling point and comparison to decision rules in the Groundwater QAPP (AEI, 2019a). Additionally, specific wells that were not sampled or where depth to water was not measured in accordance with the Groundwater QAPP are noted in Tables 12 and 13.

The OU2 GWTP influent was sampled for 1,2,3-trichloropropane (1,2,3-TCP) on November 5, 2019 at the request of the CCRWQCB during a review of Groundwater QAPP Revision 7 (AEI, 2019a). The CCRWQCB requested confirmation that the 1,2,3-TCP at OU2 was below the 2017 California MCL of 0.005 µg/L. Previous OU2 results for 1,2,3-TCP were analyzed with a limit of detection above the MCL. The influent sample 1,2,3-TCP concentration from November 5, 2019 was ND at the limit of detection of 0.0025 µg/L (Table 8). The 1,2,3-TCP OU2 GWTP influent results from November 5, 2020 were validated and sent to the CCRWQCB in January 2020. The CCRWQCB had no further comment nor requested action.

6.4 Well Maintenance

Field teams evaluated the physical integrity of each well during routine monitoring activities to ensure collection of representative samples, aquifer protection from potential exposure to surface contaminants, and safe access to the well by field technicians. Well maintenance notes and repairs are shown in Table 14.

6.5 Sampling Results and Interpretation

6.5.1 A-Aquifer

6.5.1.1 Water Levels

Depth to groundwater measurements were collected from 54 OU2 A-Aquifer wells during the Third Quarter 2020. Measurements and calculated groundwater elevations are presented in Table 15. Groundwater elevation contours for the OU2 A-Aquifer are presented in Figures 27 through 30. Hydrographs of representative A-Aquifer wells in Figure 31 show relatively steady groundwater elevations in the A-Aquifer over time. Groundwater elevations increased by 0.05 of a foot on average since the Second Quarter 2020 (Ahtna, 2020a) and increased by 0.13 of a foot on average when compared to Third Quarter 2019 elevations (Ahtna, 2020b). The average OU2 A-Aquifer groundwater elevation increased by 1.72 feet since the Fourth Quarter 2016, which was the lowest groundwater elevation observed in the last eight years.

During the reporting period, groundwater elevations and flow directions in the A-Aquifer were consistent with previous trends. Groundwater elevations in the A-Aquifer do not exhibit significant seasonal variation, likely due to the thick vadose zone that appears to buffer precipitation infiltration over time and no seasonal increased pumping of the aquifer. With the exception of the western A-Aquifer near the edge of the FO-SVA where groundwater elevations were consistent throughout the period of the hydrograph, elevations have exhibited a decreasing trend since reaching relative highs during El Niño related precipitation in 1997 and 1998 and reached historic lows between the Third Quarter 2015 and Fourth Quarter 2016.

Local and statewide drought conditions led to less than normal precipitation in water years 2012 through 2015 with recent water years 2016 through 2019 reaching normal and above-normal precipitation, (except for water year 2018 and a decrease in 2020), as shown in the table below. California drought intensity was categorized as tabulated below during the same time span. Drought intensity peaked during the 2015 water year with 46 percent of the state of California categorized as “D4: Exceptional Drought” conditions. Dramatic drought condition improvement was seen in the 2017 water year with 54 percent of the state of California with “None: No Drought” conditions. This drought improvement receded in the 2018 water year with 32 percent of the state of California in the “D0: Abnormally Dry” conditions, though in the 2019 water year 62 percent of the state of California was in “None: No Drought” conditions, which was the highest observed since 2013. Drought conditions were similar in 2020 with a slight increase in drought.

Local Precipitation and California Drought Conditions, Water Years 2012 through 2020

Water Year ²⁵	Percent of Average Precipitation in California Central Coast ²⁶	Percent Area Covered in California: Average Drought Intensity ²⁷					
		None: No Drought	D0: Abnormally Dry	D1: Moderate Drought	D2: Severe Drought	D3: Extreme Drought	D4: Exceptional Drought
2012	67	No Data					
2013	56	9	17	26	46	2	0
2014	47	1	1	5	33	36	23
2015	73	0	2	5	21	27	46
2016	90	1	8	16	20	23	32
2017	150	54	15	11	7	7	6
2018	59	35	32	20	11	2	0
2019	136	62	16	17	5	1	0

²⁵ Water Year: time period of 12 months from October 1 through September 30 for which precipitation totals are measured.

²⁶ Source: DWR, 2012 to 2020.

²⁷ Source: NIDIS, 2020.

Water Year ²⁵	Percent of Average Precipitation in California Central Coast ²⁶	Percent Area Covered in California: Average Drought Intensity ²⁷					
		None: No Drought	D0: Abnormally Dry	D1: Moderate Drought	D2: Severe Drought	D3: Extreme Drought	D4: Exceptional Drought
2020	81	47	23	19	10	2	0

6.5.1.2 Groundwater COC Concentrations

The following summarizes the GWMP events during the reporting period.

- During the Fourth Quarter 2019, groundwater samples were collected at 34 OU2 A-Aquifer well locations. Analytical results for these samples are presented in Table 16 and TCE concentrations and COC contours at the ACL are shown in Figure 32.²⁸
- During the First Quarter 2020, groundwater samples were collected at 38 OU2 A-Aquifer well locations. Analytical results for these samples are presented in Table 17 and TCE concentrations and COC contours at the ACL are shown in Figure 33.
- During the Second Quarter 2020, groundwater samples were collected at 37 OU2 A-Aquifer well locations. Analytical results for these samples are presented in Table 18 and TCE concentrations and COC contours at the ACL are shown in Figure 34.
- During the Third Quarter 2020, groundwater samples were collected at 39 OU2 A-Aquifer well locations. Analytical results for these samples are presented in Table 19 and TCE concentrations and COC contours at the ACL shown in Figure 35. Metals analytical results from the four scheduled OU2 A-Aquifer wells are presented in Table 33.

Figure 36 shows historical and current TCE ACL exceedance contours for 2003 and 2020. The Third Quarter 2020 VSR is presented in Appendix E. Appendix F contains historical COC concentration trend charts for OU2 extraction wells and select monitoring wells.

Seven of the eleven OU2 COCs were detected at concentrations exceeding their respective ACLs during the Third Quarter 2020 (1,1-DCA; 1,2-DCA; chloroform; cis-1,2-DCE; PCE; TCE; and VC). The remaining four OU2 COCs (1,2-DCPA; benzene; CT; and methylene chloride) were detected at concentrations at or below their respective ACLs or were ND in the OU2 A-Aquifer (Table 19). The maximum detected concentration of each COC in the Third Quarter 2020 is listed in the table below. The area of 1,1-DCA; 1,2-DCA; PCE; TCE; and VC concentrations above their ACLs are shown in Figure 35. Figure 35 also summarizes COC detections during the Third Quarter 2020 lists the validation qualifiers described in Appendix E.

²⁸ COC ACL exceedance contours in Figures 32 through 35 and 42 through 45 are not drawn around single wells with COC concentrations above their ACLs if the well is outside the main COC plume and there are insufficient data to establish the extent of a plume contour. Regardless, all wells with detected concentrations of TCE above the ACL are indicated by bolded font in the figures. All wells with detected concentrations of COCs above their ACLs are indicated by bolded font in the associated tables.

Maximum COC Concentrations for the OU2 A-Aquifer in the Third Quarter 2020

COC Name	Max Concentration (µg/L)		Locations Above ACL	Locations with Detections	Additional Comments
	Result	Location			
1,1-DCA	21.6	MW-OU2-08-A	10	79%	Northeast of eastern extraction well network
1,2-DCA	4.1 J ²⁹	EW-OU2-13-A	14	51%	North of Imjin Parkway in the eastern extraction well network
1,2-DCPA	0.82	MW-OU2-75-A	0	33%	Northeast of eastern extraction well network
Benzene	0.25 J	MW-OU2-73-A	0	13%	Northern side of Landfill Area F
CT	ND	N/A ³⁰	0	0%	No detections in the A-Aquifer
Chloroform	5.2	MW-OU2-75-A	2	69%	Northeast of eastern extraction well network
cis-1,2-DCE	11.1	EW-OU2-19-A	3	64%	North of Landfill Area F
Methylene chloride	1.0 J	MW-OU2-08-A	0	3%	Northeast of eastern extraction well network
PCE	9.7	MW-OU2-81-A	8	87%	North of Imjin Parkway upgradient of the eastern extraction well network
TCE	12.1	MW-OU2-81-A	10	85%	North of Imjin Parkway upgradient of the eastern extraction well network
VC	7.5	MW-OU2-02-A	9	28%	Northwest side of Landfill Area F

Seven of the eleven OU2 COCs were detected at concentrations exceeding their respective ACLs during the reporting period (1,1-DCA; 1,2-DCA; chloroform; cis-1,2-DCE; PCE; TCE; and VC). The remaining four OU2 COCs (1,2-DCPA; benzene; CT; and methylene chloride) were detected at concentrations at or below their respective ACLs or were ND in the OU2 A-Aquifer (Tables 16 through 19). Figures 32 through 35 show COC detections during the reporting period, their respective ACLs, and the validation qualifiers as described in Appendix E. The maximum concentration of each COC in the reporting period is summarized in the table below.

²⁹ J: an estimated detection below the LOQ with a high (+) or low (-) bias.

³⁰ N/A: not applicable.

Maximum COC Concentrations for the OU2 A-Aquifer during the Reporting Period (2019-4Q through 2020-3Q)

COC Name	ACL (µg/L)	Max Concentration (µg/L)		Quarter Identified	Additional Comments
		Result	Location		
1,1-DCA	5.0	24.2	MW-OU2-08-A	2020-1Q	Located northeast of eastern extraction well network; maximum concentration decreased compared to the previous reporting period.
1,2-DCA	0.5	4.1 J+	EW-OU2-13-A	2020-3Q	Located in the eastern extraction well network; maximum concentration is comparable to the previous reporting period.
1,2-DCPA	1.0	0.92	MW-OU2-75-A	2020-2Q	Located northeast of eastern extraction well network; maximum concentration is comparable to the previous reporting period. The last time 1,2-DCPA was above the ACL was in the Second Quarter 2017.
Benzene	1.0	0.43 J	MW-OU2-73-A	2020-2Q	Located north side of Landfill Area F; maximum concentration is comparable to the previous reporting period. The last time benzene was above the ACL was in the Second Quarter 2015.
CT	0.5	ND	N/A	N/A	CT has been ND during the past seven annual reporting periods ³¹ except for a few detections at EW-OU2-14-A with concentrations below the ACL.
Chloroform	2.0	5.9	MW-OU2-75-A	2020-2Q	Located northeast of eastern extraction well network; maximum concentration is

³¹ The past seven annual reporting periods include data collected from the Fourth Quarter 2013 through the Third Quarter 2020.

COC Name	ACL (µg/L)	Max Concentration (µg/L)		Quarter Identified	Additional Comments
		Result	Location		
					comparable to the previous reporting period.
cis-1,2-DCE	6.0	12.7	EW-OU2-19-A	2020-1Q	Located north of Landfill Area F; maximum concentration decreased compared to the previous reporting period.
Methylene Chloride	5.0	2.0	EW-OU2-18-A	2020-2Q	Located northwest of Landfill Area F; maximum concentration is comparable to the previous reporting period. Methylene chloride has not been detected above the ACL during the past seven annual reporting periods.
PCE	3.0	11.4	MW-OU2-81-A	2020-1Q	Located north of Imjin Parkway upgradient of the eastern extraction well network; maximum concentration decreased compared to the previous reporting period.
TCE	5.0	12.1	MW-OU2-81-A	2020-3Q	Located north of Imjin Parkway upgradient of the eastern extraction well network; maximum concentration decreased compared to the previous reporting period.
VC	0.1	9.5	MW-OU2-02-A	2020-1Q	Located northwest of Landfill Area F; maximum concentration decreased compared to the previous reporting period.

The maximum concentration of COCs detected during the reporting period decreased for five COCs (1,1-DCA; cis-1,2-DCE; PCE; TCE; and VC) and was comparable for six COCs (1,2-DCA; 1,2-DCPA; benzene; CT; chloroform; and methylene chloride) when compared to the maximum COC concentrations detected in the previous reporting period (Ahtna, 2020b). Except for 1,2-DCPA and TCE, the maximum detected COC concentrations generally occurred at the same wells or in the same hydraulic zone as the previous reporting period.

Select A-Aquifer monitoring well COC concentration trends representative of each hydraulic zone are presented in Appendix F.³² The extent of the A-Aquifer COC plumes have historically remained relatively stable with minor reductions in the TCE plume footprint. However, there were some changes to the COC plumes in the A-Aquifer during the reporting period as shown in Figures 32 through 35 and described below according to the hydraulic zone.

- **Hydraulic Zone 1:** Encompasses monitoring locations in the area of the Fort Ord Landfills west of the groundwater divide. Four of the eleven COCs (benzene; cis-1,2-DCE; methylene chloride; and VC) were detected at the maximum concentration for the A-Aquifer during the reporting period at monitored locations in Hydraulic Zone 1. The COC plume limits in Hydraulic Zone 1 remained relatively stable during the reporting period, except for fluctuations in 1,2-DCA plume size from concentration changes at MW-OU2-73-A and MW-OU2-74-A. Five extraction wells (EW-OU2-16-A through EW-OU2-20-A) and six monitoring wells (MW-OU2-02-A, MW-OU2-44-A, MW-OU2-46-A, MW-OU2-73-A, MW-OU2-74-A, and MW-OU2-80-A) were sampled in Hydraulic Zone 1 during the reporting period. Key monitoring and extraction well trends observed in this reporting period are discussed below.
 - **MW-OU2-44-A (Appendix F, Figure F31):** Located northwest of Landfill Area F in the northern section of Hydraulic Zone 1 and between extraction wells EW-OU2-18-A and EW-OU2-19-A. Five COCs were detected at concentrations above ACLs (1,1-DCA; 1,2-DCA; cis-1,2-DCE; PCE; and VC). There has been an overall declining trend in COC concentrations from 2017 through 2019. The COC concentrations increased during the reporting period through the First Quarter 2020, followed by a decrease for the remainder of the reporting period.
 - **MW-OU2-73-A (Appendix F, Figure F34):** Located on the northern perimeter of Landfill Area F in the center of Hydraulic Zone 1 and upgradient of new extraction wells EW-OU2-19-A and EW-OU2-20-A. Three COCs were detected at concentrations above ACLs (1,1-DCA; 1,2-DCA; and VC). There has been an overall declining trend in COC concentrations from 2001 through the reporting period, with historical low COC concentrations for four COCs (1,1-DCA; 1,2-DCA; benzene; and cis-1,2-DCE) during the reporting period. 1,2-DCA concentrations increased above the ACL during the reporting period (first time below ACL historically in the Fourth Quarter 2019 and First Quarter 2020), resulting in an increase in the 1,2-DCA plume size in the Second and Third Quarters 2020 (Figures 34 and 35). The benzene concentration at MW-OU2-73-A was the maximum concentration for the A-Aquifer during the reporting period.
 - **MW-OU2-80-A (Appendix F, Figure F38):** Located on the eastern perimeter of Landfill Area F in the southeastern section of Hydraulic Zone 1 and upgradient of extraction well EW-OU2-16-A. PCE concentrations have historically varied above and below the ACL. During the reporting period, PCE remained below the ACL.

³² Hydraulic zones are based on the zone of groundwater with COC concentrations above ACLs and influenced by the groundwater remedy. A map of the OU2 hydraulic zones in the A-Aquifer is presented in Appendix G. See the Groundwater QAPP (AEI, 2019a) for descriptions of OU2 hydraulic zones.

- **Hydraulic Zone 2:** Includes monitoring locations east of the groundwater divide and northeast of Landfill Area F. Hydraulic Zone 2 is not in the current extraction well network capture area. PCE was detected at concentrations above its ACL in Hydraulic Zone 2 during the reporting period at MW-OU2-27-A. Four monitoring wells (EW-OU2-15-A,³³ MW-OU2-27-A, MW-OU2-28-A, and MW-OU2-45-A) were sampled in Hydraulic Zone 2 during the reporting period. Key monitoring and extraction well trends observed in this reporting period are discussed below.
 - **MW-OU2-27-A (Appendix F, Figure F27):** Located east of the groundwater divide, northeast of Landfill Area F in the western section of Hydraulic Zone 2. PCE concentrations were consistently above the ACL from 2013 through 2017, varied above and below the ACL from 2017 through 2019, and have been consistently above the ACL since then, resulting in variations in the size of the PCE plume (Figures 32 through 35). PCE concentrations ranged from 3.7 to 5.0 µg/L during the reporting period.
- **Hydraulic Zone 3:** Encompasses the eastern extraction well network and upgradient areas southeast of the extraction wells. The COC plumes remained stable during the reporting period. Five extraction wells (EW-OU2-09-A, EW-OU2-10-A, EW-OU2-11-AR, EW-OU2-12-A, and EW-OU2-13-A) and two monitoring wells (MW-OU2-12-A and MW-OU2-25-A) were sampled in Hydraulic Zone 3 during the reporting period. Extraction well EW-OU2-09-A was restarted in the Third Quarter 2019 after being offline since October 2018 and was not sampled during three quarterly events in the reporting period. 1,2-DCA at EW-OU2-12-A was detected at the maximum concentration for the A-Aquifer during the reporting period in Hydraulic Zone 3. Key monitoring and extraction well trends observed in this reporting period are discussed below.
 - **EW-OU2-10-A (Appendix F, Figure F6):** Located in the eastern extraction well network in the western section of Hydraulic Zone 3. 1,2-DCA concentrations increased above the ACL during the reporting period. There has been an overall declining trend in COC concentrations from 2017 through the reporting period.
 - **EW-OU2-12-A (Appendix F, Figure F8):** Located in the eastern extraction well network in the western section of Hydraulic Zone 3. Total COC concentrations were declining through 2014 but have been increasing since then. The 1,2-DCA concentration was the maximum for the A-Aquifer during the reporting period.
- **Hydraulic Zone 4:** This area encompasses the western extraction well network and upgradient areas east of the extraction wells. During the reporting period, there was no definable COC plume in Hydraulic Zone 4. Three extraction wells (EW-OU2-04-A, EW-OU2-05-A, and EW-OU2-06-A) and two monitoring wells (MW-OU2-40-A and MW-OU2-79-A) were sampled in Hydraulic Zone 4 during the reporting period. The western extraction well network (EW-OU2-02-A, EW-OU2-04-A, EW-OU2-05-A, and EW-OU2-06-A) has not been operational since October 2018. Extraction wells EW-OU2-04-A, EW-OU2-05-A, and EW-OU2-06-A were operated for sampling only in three quarterly GWMP events during the reporting period and extraction well EW-OU2-02-A was not sampled during the reporting period. After the reporting period, JV work on the western extraction well network will be completed to allow operation of the western extraction

³³ EW-OU2-15-A was an inoperable extraction well converted to a monitoring well in 2018.

well network. Key monitoring and extraction well trends observed in this reporting period are discussed below.

- **MW-OU2-40-A (Appendix F, Figure F30):** Located in the western extraction well network between extraction wells EW-OU2-05-A and EW-OU2-06-A. TCE concentrations at MW-OU2-40-A were consistently above the ACL during the reporting period, with concentrations ranging from 10.0 µg/L to 11.3 µg/L. It is expected TCE concentrations will decrease at MW-OU2-40-A once the western extraction well network is online.
- **Hydraulic Zone 5:** Encompasses the northern extent of the OU2 COC plumes in the A-Aquifer. Hydraulic Zone 5 is not in the current extraction well network capture area, except as noted below. Five of the eleven COCs (1,1-DCA; 1,2-DCPA; chloroform; PCE; and TCE) were detected at their maximum concentrations in the A-Aquifer during the reporting period at monitored locations in Hydraulic Zone 5. Eight monitoring wells (MW-BW-50-A, MW-OU2-04-A, MW-OU2-06-AR, MW-OU2-07-A, MW-OU2-08-A, MW-OU2-75-A, MW-OU2-81-A, and MW-OU2-83-A) were sampled in Hydraulic Zone 5 during the reporting period. Key monitoring well trends observed in this reporting period are discussed below.
 - **MW-BW-50-A (Appendix F, Figure F17):** Located southeast and upgradient of monitoring well MW-OU2-75-A in the northeast section of Hydraulic Zone 5. PCE concentrations varied above and below the ACL during the reporting period, resulting in variations to the PCE plume (Figures 32 through 35). There was an overall increasing trend in COC concentrations at MW-BW-50-A from 2013 through 2019, and an overall decreasing trend from 2019 through the reporting period, with PCE concentrations ranging from 2.9 µg/L to 5.4 µg/L during the reporting period.
 - **MW-OU2-04-A (Appendix F, Figure F20):** Located upgradient of the western extraction well network, downgradient of the eastern extraction well network, on the western edge of Hydraulic Zone 5, and in the western extraction well network capture area. 1,2-DCA concentrations were consistently above the ACL from 2019 through the reporting period.
 - **MW-OU2-06-AR (Appendix F, Figure F22):** Installed in 2017 as a replacement well for decommissioned MW-OU2-06-A and located downgradient of the eastern extraction well network in the western section of Hydraulic Zone 5. There has been an overall increasing trend in COC concentrations from 2017 through the reporting period. Six COCs reached their maximum historical concentrations at MW-OU2-06-AR during the reporting period (1,1-DCA; 1,2-DCA; 1,2-DCPA; cis-1,2-DCE; PCE; and TCE) and three COCs had concentrations above their ACLs (1,2-DCA; PCE; and TCE).
 - **MW-OU2-07-A (Appendix F, Figure F23):** Located north of the eastern extraction well network in the northern section of Hydraulic Zone 5. There has been an overall increasing trend in COC concentrations from 2017 through the reporting period. Two COCs increased and reached their maximum historical concentrations at MW-OU2-07-A during the reporting period (PCE and VC). Two COCs were above their ACLs during the reporting period (1,1-DCA and VC), resulting in increases in the plume sizes (Figure 32).
 - **MW-OU2-08-A (Appendix F, Figure F24):** Located northeast of the eastern extraction well network in the northern section of Hydraulic Zone 5. Seven COCs were detected at

concentrations above their ACLs during the reporting period (1,1-DCA; 1,2-DCA; chloroform; cis-1,2-DCE; PCE; TCE; and VC). There has been an overall increasing trend in COC concentrations from 2015 through 2018, and a decreasing trend from 2018 through the reporting period. During the reporting period, MW-OU2-08-A had the highest 1,1-DCA concentration detected in the A-Aquifer.

- **MW-OU2-75-A (Appendix F, Figure F36):** Located east and upgradient of monitoring well MW-OU2-08-A in the northeastern section of Hydraulic Zone 5. Five COCs (1,1-DCA; chloroform; PCE; TCE; and VC) had concentrations above their ACLs during the reporting period. There has been an overall increasing trend in COC concentrations from 2017 through the reporting period. Eight COCs were detected at historical maximum concentrations at MW-OU2-75-A during the reporting period (1,1-DCA; 1,2-DCA; 1,2-DCE; chloroform; cis-1,2-DCE; PCE; TCE; and VC). MW-OU2-75-A had the maximum concentrations of 1,2-DCE and chloroform for the A-Aquifer during the reporting period.

The results of annual (Third Quarter 2020) metals analyses for antimony, copper, and lead at four wells located at the Fort Ord Landfills are summarized in Table 33. The metals analytes were ND in the four wells. Antimony, copper, and lead are not identified as COCs for groundwater in the OU2 ROD and do not have ACLs; therefore, analytical results are compared to MCLs for drinking water.³⁴ These results are used to confirm that materials excavated from small arms firing ranges and disposed of at the Fort Ord Landfills have not impacted groundwater. Because antimony, copper, and lead were ND, there is no evidence of impacted groundwater.

6.5.2 Upper 180-Foot Aquifer

6.5.2.1 Water Levels

Depth to groundwater measurements were collected from 44 OU2 Upper 180-Foot Aquifer wells during the Third Quarter 2020. Measurements and calculated groundwater elevations are presented in Table 15. Groundwater elevation contours for the OU2 Upper 180-Foot Aquifer are presented in Figures 37 through 40. Groundwater elevations decreased by 1.16 feet on average since the Second Quarter 2020 (Ahtna, 2020a) and increased by 0.03 of a foot on average when compared to the Third Quarter 2019 elevations (Ahtna, 2020b). The average OU2 Upper 180-Foot Aquifer groundwater elevation for all monitoring wells follows a seasonal cycle with elevations at their peak in the first quarter (March) and at their lowest in the third quarter (September) each year.

During the reporting period, groundwater flow directions in the Upper 180-Foot Aquifer were consistent with previous trends and groundwater elevations. The hydrographs presented in Figure 41 illustrate the variation in the Upper 180-Foot Aquifer groundwater elevations at OU2 and relative seasonal fluctuations at each well location from September 1997 through September 2020. Groundwater elevations in the eastern Upper 180-Foot Aquifer fluctuate seasonally in response to variations in

³⁴ The MCL is the maximum concentration of a chemical that is allowed in public drinking water systems. Federal MCLs are established by USEPA and California MCLs are established by the State Department of Public Health. The Federal and California MCLs for antimony, copper and lead are the same numerical value.

precipitation and drainage through the natural discontinuity in the Intermediate 180-Foot Aquitard to the Lower 180-Foot Aquifer due to local pumping from active supply wells and regional pumping from the Salinas Valley (HLA, 1995 and MACTEC, 2006). Monitoring well MW-OU2-20-180, which is near the western extraction well network, experiences minimal seasonal fluctuation, while monitoring well MW-OU2-44-180, located north of the Fort Ord Landfills, experiences larger seasonal fluctuations with the highest groundwater elevations during the first quarter (end of winter) and the lowest groundwater elevations during the third quarter (end of summer) as shown in Figure 41.

6.5.2.2 Groundwater COC Concentrations

The following summarizes GWMP events during the reporting period.

- During the Fourth Quarter 2019, groundwater samples were collected at 30 OU2 Upper 180-Foot Aquifer well locations. Analytical results for these samples are presented in Table 16 and TCE concentrations and COC contours at the ACL are shown in Figure 42.
- During the First Quarter 2020, groundwater samples were collected at 28 OU2 Upper 180-Foot Aquifer well locations. Analytical results for these samples are presented in Table 17 and TCE concentrations and COC contours at the ACL are shown in Figure 43.
- During the Second Quarter 2020, groundwater samples were collected at 28 OU2 Upper 180-Foot Aquifer well locations. Analytical results for these samples are presented in Table 18 and TCE concentrations and COC contours at the ACL are shown in Figure 44.
- During the Third Quarter 2020, groundwater samples were collected at 29 OU2 Upper 180-Foot Aquifer well locations. Analytical results for these samples are presented in Table 19 and TCE concentrations and COC contours at the ACL are shown in Figure 45.

Figure 46 shows historical and current TCE ACL exceedance contours in 2001 and 2020. The Third Quarter 2020 VSR presented in Appendix E. Appendix F contains historical COC concentration trend charts for OU2 extraction wells and select monitoring wells.

Of the eleven COCs, TCE was the only detected COC in the Upper 180-Foot Aquifer at concentrations exceeding its ACL during the Third Quarter 2020. The remaining ten COCs were detected at or below their ACLs or were ND in the Upper 180-Foot Aquifer during the Third Quarter 2020 (Table 19). The maximum detected concentration of each COC in the Third Quarter 2020 is summarized in the table below. The area of TCE concentrations above the ACL is shown in Figure 45. Figure 45 also summarizes COC detections during the Third Quarter 2020 and the validation qualifiers described in Appendix E.

Maximum COC Concentrations for the OU2 Upper 180-Foot Aquifer in the Third Quarter 2020

COC Name	Max Concentration (µg/L)		Locations Above ACL	Locations with Detections	Additional Comments
	Result	Location			
1,1-DCA	0.43 J	MW-OU2-39-180	0	21%	North of Landfill Area B
1,2-DCA	ND	N/A	0	0%	No detections in the Upper 180-Foot Aquifer

COC Name	Max Concentration (µg/L)		Locations Above ACL	Locations with Detections	Additional Comments
	Result	Location			
1,2-DCPA	0.12 J	EW-OU2-06-180 & EW-OU2-11-180	0	7%	North of Landfill Area F
Benzene	ND	N/A	0	0%	No detections in the Upper 180-Foot Aquifer
CT	0.20 J	MW-OU2-53-180	0	10%	Northwest of Landfill Area D
Chloroform	0.75	MW-OU2-44-180	0	66%	Northwest of Landfill Area F
cis-1,2-DCE	2.6	MW-OU2-44-180	0	62%	Northwest of Landfill Area F
Methylene chloride	ND	N/A	0	0%	No detections in the Upper 180-Foot Aquifer
PCE	2.0	MW-OU2-53-180	0	62%	Northwest of Landfill Area D
TCE	13.3	MW-OU2-44-180	9	97%	Northwest of Landfill Area F
VC	ND	N/A	0	0%	No detections in the Upper 180-Foot Aquifer

One of the eleven OU2 COCs was detected at concentrations exceeding its respective ACLs during the reporting period (TCE). The remaining ten OU2 COCs (1,1-DCA; 1,2-DCA; 1,2-DCPA; benzene; CT; chloroform; cis-1,2-DCE; methylene chloride; PCE; and VC) were detected at concentrations at or below their respective ACLs or were ND in the OU2 Upper 180-Foot Aquifer (Tables 16 through 19).³⁵ Figures 42 through 45 show COC detections during the reporting period, their respective ACLs, and the validation qualifiers as described in Appendix E. The maximum concentration of each COC in the reporting period is summarized in the table below.

Maximum COC Concentrations for the OU2 Upper 180-Foot Aquifer during the Reporting Period (2019-4Q through 2020-3Q)

COC Name	ACL (µg/L)	Max Concentration (µg/L)		Quarter Identified	Additional Comments
		Result	Location		
1,1-DCA	5.0	0.43 J	MW-OU2-39-180	2020-3Q	North of Landfill Area B; maximum concentration was comparable to the previous reporting period. 1,1-DCA has been below the ACL in the last seven annual reporting periods.

³⁵ Analytical results for samples collected from extraction well EW-OU2-09-180 are included in Tables 16 through 19 because it is connected to the OU2 GWTS; however, this well is part of the OUCTP remedy and located outside the OU2 area, and is therefore excluded from the assessment of OU2 COC concentrations.

COC Name	ACL (µg/L)	Max Concentration (µg/L)		Quarter Identified	Additional Comments
		Result	Location		
1,2-DCA	0.5	ND	N/A	N/A	No detections in the Upper 180-Foot Aquifer. The last detection of 1,2-DCA was in the First Quarter 2019. 1,2-DCA has been below the ACL or ND in the last seven annual reporting periods.
1,2-DCPA	1.0	0.14 J	MW-OU2-44-180	2020-1Q	Located northwest of Landfill Area F; maximum concentration is comparable to the previous reporting period. 1,2-DCPA has been below the ACL in the last seven annual reporting periods.
Benzene	1.0	ND	N/A	N/A	No detections in the Upper 180-Foot Aquifer. The last detection of benzene was in the Third Quarter 2016. Benzene has been below the ACL or ND in the last seven annual reporting periods.
CT	0.5	0.25 J	MW-OU2-53-180	2019-4Q	Located northwest of Landfill Area D; maximum concentration is comparable to the previous reporting period. The only detections of CT above the ACL in the last seven annual reporting periods were at monitoring wells associated with OUCTP. ³⁶
Chloroform	2.0	0.76	MW-OU2-44-180	2019-4Q	Located northwest of Landfill Area F; maximum concentration decreased compared to the previous reporting period. Chloroform has been below the ACL in the last seven annual reporting periods.
cis-1,2-DCE	6.0	2.9	MW-OU2-44-180	2020-1Q	Located northwest of Landfill Area F; maximum concentration is comparable to the previous reporting period. Cis-1,2-DCE has been below the ACL in the last four annual reporting periods.

³⁶ Analytical results for these wells (MW-OU2-30-180, MW-OU2-64-180, and MW-OU2-67-180) are now reported under the OUCTP GWMP.

COC Name	ACL (µg/L)	Max Concentration (µg/L)		Quarter Identified	Additional Comments
		Result	Location		
Methylene chloride	5.0	ND	N/A	N/A	No detections in the Upper 180-Foot Aquifer. The last detection of methylene chloride was in the Third Quarter 2016, which was the only detection in the last seven annual reporting periods.
PCE	3.0	2.2	MW-OU2-53-180	2019-4Q	Located northwest of Landfill Area D; maximum concentration is comparable to the previous reporting period. PCE has been below the ACL in the last seven annual reporting periods.
TCE	5.0	17.7	MW-OU2-23-180	2020-2Q	Located southwest of Landfill Area B; maximum concentration increased compared to the previous reporting period.
VC	0.1	ND	N/A	N/A	No detections in the Upper 180-Foot Aquifer in the last seven annual reporting periods.

Compared to the previous reporting period (Ahtna, 2020b), the maximum COC concentrations increased for TCE during the reporting period. Concentrations decreased for chloroform and were comparable for five COCs (1,1-DCA; 1,2-DCPA; CT; cis-1,2-DCE; and PCE). The maximum detected concentrations of TCE in the Upper 180-Foot Aquifer for the last five reporting periods have been:

- 2019-2020 – 17.7 µg/L
- 2018-2019 – 16.4 µg/L
- 2017-2018 – 18.6 µg/L
- 2016-2017 – 20.0 µg/L
- 2015-2016 – 25.1 µg/L

The maximum TCE concentration is typically detected at MW-OU2-44-180 (2015-2016, 2016-2017, and 2018-2019 reporting periods), which is located northwest of Landfill Area F, or MW-OU2-23-180 (2017–2018 and 2019-2020 reporting periods), which is located southwest of Landfill Area B.

Select Upper 180-Foot Aquifer monitoring well COC concentration trends that are representative for each hydraulic zone are presented in Appendix G.³⁷ The western extent of the Upper 180-Foot Aquifer TCE plume was comparable to the previous reporting period (Ahtna, 2020b) and remained stable during the reporting period. However, the Upper 180-Foot Aquifer TCE plume eastern extent changed during

³⁷ A map of the OU2 hydraulic zones in the Upper 180-Foot Aquifer is presented in Appendix G. See the Groundwater QAPP (AEI, 2019a) for descriptions of OU2 hydraulic zones.

the reporting period due to decreasing TCE concentrations in the area. The Upper 180-Foot Aquifer TCE plume changes during the reporting period are described below according to hydraulic zone.

- **Hydraulic Zone 6:** Encompasses extraction well EW-OU2-03-180 and the upgradient extent of the southern lobe of the TCE plume. The TCE plume remained stable during the reporting period in this area and was comparable to the previous reporting period (Ahtna, 2020b). The plume in this area is defined by three wells with TCE concentrations above the ACL (EW-OU2-03-180, MW-OU2-23-180, and MW-OU2-50-180). The TCE concentration trends in these wells were stable or decreasing during the reporting period (Appendix F, Figures F43, F56, and F64). The maximum TCE concentration for the Upper 180-Foot Aquifer during the reporting period was at MW-OU2-23-180.
- **Hydraulic Zone 7:** Encompasses the TCE plume area upgradient of extraction wells EW-OU2-05-180, EW-OU2-06-180, EW-OU2-10-180, EW-OU2-11-180, and EW-OU2-12-180. The TCE plume in this area was comparable to the previous reporting period (Ahtna, 2020b), with the exception of TCE concentrations fluctuating below and above the ACL at MW-OU2-24-180, MW-OU2-53-180, and MW-OU2-81-180. The TCE plume in this area is defined by eight wells with TCE concentrations above the ACL (EW-OU2-10-180, EW-OU2-11-180, EW-OU2-12-180, MW-OU2-24-180, MW-OU2-44-180, MW-OU2-53-180, MW-OU2-56-180, and MW-OU2-81-180). Key monitoring and extraction well trends observed in this reporting period are discussed below.
 - **EW-OU2-06-180 (Appendix F, Figure F45):** Located north of Landfill Area F in the eastern section of Hydraulic Zone 7. TCE concentrations have been below the ACL since 2019.
 - **MW-OU2-53-180 (Appendix F, Figure F66):** Located northwest of Landfill Area D in the central area of the TCE plume and Hydraulic Zone 7, and in the current extraction well network capture area. TCE concentrations had been above the ACL consistently from 2015 through 2019 but fluctuated above and below the ACL during the reporting period.
 - **MW-OU2-56-180 (Appendix F, Figure F67):** Located northwest of Landfill Area F in the southern section of Hydraulic Zone 7, and in the current extraction well network capture area. TCE concentrations were consistently above the ACL from 2010 through 2018. During the reporting period, TCE concentrations fluctuated above and below the ACL.
- **Hydraulic Zone 8:** Encompasses the area downgradient and outside the capture area of operable extraction wells. The TCE plume had historically been contained by upgradient extraction wells EW-OU2-05-180 and EW-OU2-06-180 in Hydraulic Zone 7; however, TCE concentrations observed in MW-OU2-28-180 and MW-OU2-62-180 during the reporting period indicate the TCE plume now extends east into Hydraulic Zone 8. Key monitoring and extraction well trends observed in this reporting period are discussed below.
 - **MW-OU2-28-180 (Appendix F, Figure F58):** Located east of Landfill Area F. TCE was detected above the ACL for the first time during the Third Quarter 2020, resulting in an increase in the TCE plume extent (Figure 45). This is the historical maximum TCE concentration for this well. There has been an overall increasing trend in TCE concentrations since 2016 through the reporting period.

- **MW-OU2-62-180 (Appendix F, Figure F69):** Located on the northeastern edge of the Landfill Area F. TCE concentrations were consistently below the ACL until 2016, with concentrations intermittently exceeding the ACL since then through the reporting period. The TCE concentration decreased below the ACL in the Second and Third Quarters 2020, resulting in a decrease in the TCE plume size (Figures 44 and 45). There was an overall increasing trend in TCE concentrations from 2011 through 2019 and a decreasing trend through the reporting period, with a seasonal trend of higher TCE concentrations during the winter months and lower TCE concentrations during the summer months.
- **Hydraulic Zone 9:** Encompasses the area of extraction well EW-OU2-02-180R and upgradient in the northern lobe of the TCE plume. The TCE plume in this area remained stable during the reporting period (Figures 42 through 45). EW-OU2-02-180R is a replacement extraction well for decommissioned EW-OU2-02-180 and is the only well in Hydraulic Zone 9 with TCE concentrations above the ACL (Appendix F, Figure F42).

6.5.3 Data Validation and Quality Control Assessment

Eleven duplicate samples were collected during the Third Quarter 2020 at OU2. Trip blanks and field blanks were also collected during the GWMP event.^{38,39} Trip blanks and field blanks were analyzed, and no target analytes were detected, except as listed below.

Results of data validation for the Third Quarter 2020 GWMP event and the OU2 GWTP sampling are provided in Appendix E. Thirty six analytical results required additional qualification based on 100 percent Stage 2B and 10 percent Stage 4 data validation review.

Twenty-eight results were qualified as estimated (J), estimated with high bias (J+), or estimated LOQ (UJ) based on surrogate recovery outside control limits. One result was qualified as estimated with a high bias (J+) based on matrix spike recovery outside control limits. Seven results were qualified as ND (U) based on a detection in the associated trip blank by the validation report in Appendix E. However, it was determined after the reporting period that the laboratory-provided trip blanks were contaminated when they were produced (Appendix E), and the seven results were revised to report the original laboratory reported value. The VSR in Appendix E summarizes the data review based on Groundwater QAPP guidelines (AEI, 2019a). All data are considered acceptable and suitable for use.

The laboratory assigns data qualifiers when analytical results are less than the laboratory LOQ or quality control measures are not met. Qualifiers included a "U" meaning the analyte was ND at or above the limit of detection and a "J" meaning the analyte was detected at or above the detection limit, but below the LOQ.

³⁸ Trip blanks are laboratory provided sample bottles filled with analyte free water that are not opened but travel with regular field samples.

³⁹ Field blanks are sample bottles filled with analyte free water from an unused PDB during regular field sampling.

6.6 Groundwater Hydraulic Capture Evaluation

The basewide numerical groundwater flow model (the “model”) used to simulate groundwater conditions beneath the former Fort Ord was updated in January 2016 (USACE-HEC, 2016) to evaluate hydraulic capture of COCs by the A-Aquifer and Upper 180-Foot Aquifer OU2 extraction wells. The model was updated in 2017 to include an extension of the model 400 feet vertically and 1000 feet horizontally to the south. The model was further updated in 2018 to include a “wave-cut terrace” conceptualization to assist in the simulation of observed sharp drops in water levels in the A-Aquifer. Additionally, the number of homogeneous hydraulic conductivity zones was reduced based on limited field data and the concept of appropriate complexity. The model simulates backward-tracking groundwater flow paths induced by operation of the OU2 extraction wells. The following sections summarize the background, data inputs, results, and calibration of the model.

6.6.1 Fort Ord Groundwater Model Background

The model is based on the finite-difference MODFLOW-2005 software (Harbaugh, 2005) originally completed for the Fort Ord basewide hydrogeological characterization and used in the Basewide RI/FS (HLA, 1995). Particle tracking was originally generated using the PATH3D model code (Zheng, 1989) and is currently generated using MODPATH (Pollock, 1994) in conjunction with MODFLOW-2005. Groundwater model construction, calibration, and capture zone analysis are performed using the Groundwater Vistas (ESI, 2011) software package, which works in conjunction with MODFLOW-2005 and MODPATH.

The model has been modified several times since its inception to incorporate changes to extraction or injection well configurations or results from additional groundwater investigations. In the past, each annual update to evaluate the GWTS is generally limited to updating average extraction and injection well flow rates. The current model update includes changes in A-Aquifer boundary conditions to reflect decreased subsurface inflow and recharge resulting from a dryer than average water year during the reporting period.

6.6.2 Fort Ord Groundwater Model Data Inputs

The current model for OU2 accounts for average GWTS operating conditions reported from the Fourth Quarter 2019 through the Third Quarter 2020. Extraction and injection wells for the OU2 GWTS were simulated with average flow rate data reported from October 2019 through September 2020 and summarized in the following table.

OU2 GWTS Model Data Inputs

Extraction Well	Average Flow ⁴⁰ (gpm)	Status ⁴¹
EW-OU2-01-A	0	Offline and no longer sampled due to low COC concentrations
EW-OU2-02-A	0	Not operated during reporting period, not connected to GWTP

⁴⁰ Operational average during the reporting period.

⁴¹ Additional information provided in Table 11.

Extraction Well	Average Flow⁴⁰ (gpm)	Status⁴¹
EW-OU2-03-A	0	Offline and no longer sampled due to low COC concentrations
EW-OU2-04-A	0	Not operated during reporting period, not connected to GWTP
EW-OU2-05-A	0	Not operated during reporting period, not connected to GWTP
EW-OU2-06-A	0	Not operated during reporting period, not connected to GWTP
EW-OU2-07-A	0	Offline and no longer sampled due to low COC concentrations
EW-OU2-09-A	6	Minimal operation during reporting period, not connected to the GWTP for most of the reporting period
EW-OU2-10-A	17	Operational, sampled in GWMP
EW-OU2-11-AR	16	Operational, sampled in GWMP
EW-OU2-12-A	7	Operational, sampled in GWMP
EW-OU2-13-A	13	Operational, sampled in GWMP
EW-OU2-14-A	0	Not operated or sampled since March 2017, not connected to GWTP
EW-OU2-16-A	9	Operational, sampled in GWMP
EW-OU2-17-A	10	Operational, sampled in GWMP
EW-OU2-18-A	7	Operational, sampled in GWMP
EW-OU2-19-A	8	Operational, sampled in GWMP
EW-OU2-20-A	3	Operational, sampled in GWMP
EW-OU2-01-180	0	Offline, no pump, sampled in GWMP
EW-OU2-02-180R	92	Operational, sampled in GWMP
EW-OU2-03-180	169	Operational, sampled in GWMP
EW-OU2-04-180	0	Offline and no longer sampled due to low COC concentrations
EW-OU2-05-180	169	Operational, sampled in GWMP
EW-OU2-06-180	128	Operational, sampled in GWMP
EW-OU2-07-180	0	Offline due to low COC concentrations, sampled in GWMP
EW-OU2-08-180	0	Offline due to low COC concentrations, sampled in GWMP
EW-OU2-09-180	58	Operational, OUCTP Upper 180-Foot Aquifer remedy, sampled in GWMP
EW-OU2-10-180	126	Operational, sampled in GWMP
EW-OU2-11-180	16	Operational, sampled in GWMP
EW-OU2-12-180	29	Operational, sampled in GWMP
Injection/Infiltration Well	Average Flow (gpm)	Status
IW/INF-OU2-01-180	130	Operational
IW/INF-OU2-02-180	139	Operational
IW-OU2-04-180	95	Operational
IW-OU2-05-180	74	Operational

6.6.3 Model Results

Groundwater capture was evaluated by comparing the simulated groundwater particle pathlines and associated capture zones to the aquifer areas requiring groundwater capture. Historically, the areas requiring groundwater capture include those portions of the aquifer where TCE concentrations exceed the ACL of 5 µg/L. However, with operation of the OU2 GWTS and the reduction in size of the TCE plume, other OU2 COCs are now observed at concentrations exceeding their respective ACLs outside the extent of the TCE plume. OU2 COC concentrations from the September 2020 GWMP event were contoured and superimposed with the simulated particle pathlines in the A-Aquifer, as well as CT in the Upper 180-Foot Aquifer (Figures 47 and 48). Each COC is contoured to the limit of its respective ACL and the particle travel time of the pathlines is 15 years.

6.6.3.1 A-Aquifer

The encapsulation of the COC plumes by backward-tracking particle pathlines emanating from the A-Aquifer extraction wells illustrates successful capture of a portion of the southern sections of the COC plumes at OU2 by the extraction/injection configuration during the reporting period (Figure 47). Historically, a portion of the A-Aquifer COC plumes between monitoring well MW-OU2-02-A and extraction well EW-OU2-16-A (i.e., north/downgradient of Landfill Area F) was in a relatively stagnant or low-flow area. Additionally, the presence of a persistent groundwater divide in this area made it difficult for the eastern extraction well network (EW-OU2-09-A through EW-OU2-13-A) to capture the area beneath Landfill Area F. Optimization modeling yielded suggested modifications to the extraction configuration to enhance capture in this area as described further below.

The backward-tracking particle pathlines illustrated in Figure 47 represent a period of 15 years. Particle pathlines in the 2020 model are very similar to pathlines simulated in the 2019 model (Ahtna, 2020b). The major difference between the two models is the removal of western network extraction wells EW-OU2-04-A and EW-OU2-06-A in the 2020 model.

The long-term reduction of the TCE plume footprint (Figure 36) illustrates that the current extraction well configuration has effectively removed TCE mass from this aquifer. The persistence of TCE and other COCs downgradient from Landfill Area F demonstrates the need for continued operation of the GWTS. The performance of the eastern A-Aquifer extraction well network was historically less than optimal due to its relative distance from the suspected source areas at the Fort Ord Landfills and prevailing groundwater flow directions. The travel times for backward-tracking particle pathlines are over 10 years between the Fort Ord Landfills source areas and extraction wells of the eastern network, and capture of the area beneath this suspected source was considered incomplete. For these reasons, this area was specifically targeted for expansion of the GWTS following optimization modeling, which showed that four additional extraction wells (EW-OU2-17-A, EW-OU2-18-A, EW-OU2-19-A, and EW-OU2-20-A) provide enhanced capture and mass removal (Gilbane, 2014a) as shown on Figure 47.

6.6.3.2 Upper 180-Foot Aquifer

The encapsulation of the TCE plume by backward-tracking particle pathlines emanating from Upper 180-Foot Aquifer OU2 extraction wells illustrates that the extraction/injection configuration was able to provide successful capture conditions during the reporting period (Figure 48). Additions and

modifications to the OU2 extraction well system were implemented based on changes in the TCE plume footprint as well as groundwater optimization modeling activities discussed below.

Increased hydraulic communication occurs between the Upper and Lower 180-Foot Aquifers where there is an apparent gap or area of higher conductivity through the Intermediate 180-Foot Aquitard. This complicates potential groundwater flow patterns (both horizontal and vertical) in the area east of the Upper-180 Foot Aquifer TCE plume. Groundwater quality in the Lower 180-Foot Aquifer and nearby supply wells (reported in the OUCTP quarterly reports) will continue to determine future modification of the OUCTP groundwater remedy to prevent degradation of water quality in the deeper aquifer units. At this time, modifications to the extraction well network in the OUCTP CT plume area are recommended to mitigate migration of COCs into the Lower 180-Foot Aquifer as described in the OUCTP Fourth Quarter 2019 through Third Quarter 2020 Groundwater Monitoring Report (Ahtna, 2021a).

Historically, operating extraction wells in the Upper 180-Foot Aquifer maintained hydraulic capture of the TCE plume, but a persistent TCE footprint exceeding the ACL suggested an overall low efficiency of the GWTS for this aquifer. Model optimization simulations suggested three additional extraction wells (EW-OU2-10-180, EW-OU2-11-180, and EW-OU2-12-180) would lessen the time to reduce TCE mass to concentrations below the ACL by approximately seven years due to closer proximity to core TCE-impacted areas of the aquifer (Gilbane 2014a). Modifications to individual extraction wells, such as limiting flow from portions of the screened interval associated with relatively clean groundwater, may also increase the mass removal efficiency. TCE concentrations at Upper 180-Foot Aquifer extraction wells suggest that flow into these well screens may originate from deeper units, and characterization of one or more currently operating extraction well(s) within the eastern network via downhole flow monitoring should be considered. Results from these tests would be used to improve the accuracy of future GWTS capture analysis.

Extraction well EW-OU2-09-180 was installed in 2010 to implement the OUCTP Upper 180-Foot Aquifer groundwater remedy (Shaw, 2010). The first confirmed detection of CT in EW-OU2-09-180 was observed in the Third Quarter 2014, with intermittent detections at concentrations below the ACL since then, demonstrating the relative inefficiency of this well over its lifespan. Its simulated capture area is shown in Figure 48 with the associated CT plume in the Upper 180-Foot Aquifer, which is shown as being partially captured by the extraction well. The flow rate for EW-OU2-09-180 as presented in Figure 48 has historically been relatively low but has improved over the last four years with an operational average of 58 gpm as of the reporting period. The simulated capture zone appears wide enough to encapsulate most of the CT plume located upgradient of the well, but the average annual flow direction, as shown in Figure 48, may be somewhat offset from the long axis of the CT plume in this area.

6.6.4 Fort Ord Groundwater Model Calibration

Calibration of any model includes the comparison of simulated conditions to observed conditions. In this case, the model is calibrated to observed groundwater elevations at monitoring wells located throughout the OU2 area. Poor calibration results usually indicate that simulated conditions (e.g., boundary conditions, pumping rates, or aquifer parameters) are not consistent with actual conditions and usually require modification of input data until calibration results improve.

Groundwater elevation data collected from OU2 monitoring wells were used as calibration targets for the model. Water levels were averaged from four quarterly measurements taken between October 2019 and September 2020. Average extraction and injection well flow rates over the same period were also input into the model. The goal of the calibration process is to replicate field conditions of water levels and groundwater flow. A water level residual is defined as:

$$\text{Residual} = \text{Simulated Value} - \text{Measured Value}$$

Water level residuals are measured in units of feet. The closer the residual is to zero, the better the fit at a given target location. Calibration to water levels was performed manually to minimize the mean and absolute water level residuals. The residual statistics were evaluated by traditional statistics and graphical presentation of the observed target heads versus the model predicted heads. Calculated errors (residuals) were statistically evaluated by calculating the mean error, absolute mean error, and the root mean square error or standard deviation (Anderson and Woessner, 1992). In this case, residuals inevitably result from the simulation of average conditions (e.g., pumping rate, recharge rates) instead of transient rates that may reflect observed seasonal changes in groundwater elevation data.

Model calibration statistics are tabulated below and are within the range reported for previous annual reporting periods and indicate that the model is acceptably calibrated in accordance with the *Standard Guide for Calibrating a Groundwater Flow Model Application* (ASTM International, 2008).

Model Calibration Statistics

Calibration Statistic	OU2 A-Aquifer	OU2 Upper 180-Foot Aquifer
Mean error (feet)	-0.74	0.43
Mean absolute error (feet)	2.86	1.35
Root mean squared error (feet)	3.75	1.84

Linear plots of simulated versus observed groundwater elevation for each monitoring point are illustrated in Figure 49 (A-Aquifer) and Figure 50 (Upper 180-Foot Aquifer). A perfectly calibrated model would result in data plotting directly along the 45-degree line. As shown in Figure 49 and Figure 50, residuals for the A-Aquifer and Upper 180-Foot Aquifer generally plotted along the 45-degree line, and the sign and magnitude of residuals are randomly distributed within the model domain with relatively few outliers as is desired for an acceptably calibrated model.

As with all numeric modeling exercises, limitations and uncertainties in model input directly affect the model results. Model predictions (including the predicted particle pathlines used to evaluate capture herein), therefore, have the same uncertainties and limitations as the numeric model. Uncertainties in model input parameters include hydraulic conductivities, porosity, recharge, model water balance, or model boundary conditions. Uncertainty is also introduced by the simulated steady-state model conditions, which necessarily vary from transient conditions such as seasonal precipitation or pumping rates and associated groundwater elevation changes.

7.0 Interpretation of Progress Toward Remedy Goals

7.1 Landfills Remedy

As described in the OU2 ROD (Army, 1994), the Fort Ord Landfills remedy goals are to:

- Restrict rainfall infiltration through the landfill areas and prevent leaching of VOCs remaining in waste materials or soil to the underlying groundwater.
- Prevent exposure of sanitary waste in the Fort Ord Landfills to the surrounding environment.
- Prevent potential direct exposure of VOCs to people or the environment.
- Collect and remove LFG, if necessary.

Inspections of the Fort Ord Landfills by a State of California Registered Civil Engineer concluded the Fort Ord Landfills are operating satisfactorily and functioning as designed (Appendix A). There was no evidence of rainfall infiltration through the landfill areas or exposure of sanitary waste in the Fort Ord Landfills to the surrounding environment, and concentrations of the OU2 groundwater COCs associated with the Fort Ord Landfills have decreased significantly since implementation of the Landfills remedy. Representatives of Monterey County Department of Health conducted quarterly inspections of the Fort Ord Landfills and did not observe any violations during the reporting period (Appendix B).

The LFG monitoring program at the Fort Ord Landfills was established in accordance with 27CCR Section 20921(a)(2), which states:

- The concentration of methane migrating from the landfill must not exceed 5 percent by volume (%v) in air at the facility property boundary or alternative boundary approved in accordance with 27CCR Section 20925 (27CCR Section 20925(a)(1) also requires monitoring probes be spaced a maximum of 1,000 feet apart).
- Trace gases shall be controlled to prevent adverse acute and chronic exposure to toxic and/or carcinogenic compounds.

Quarterly LFG compliance monitoring was conducted during the reporting period in accordance with Landfills QAPP Revisions 3 and 4 (AEI, 2019b and 2020). In compliance with 27CCR Section 20921(a)(2), quarterly monitoring for methane was conducted at the Fort Ord Landfills perimeter. Methane was ND (less than or equal to 0.1%v) at all 21 perimeter compliance probes during the reporting period (Figures 21 – 24). The results indicate there is no LFG migration and the Fort Ord Landfills are in compliance with regulatory requirements.

Annual VOC monitoring was conducted concurrently with the Second Quarter 2020 LFG monitoring for compliance with 27CCR Section 20921(a)(3). Analytical results for samples collected from the 21 compliance probes during the annual VOC monitoring indicate VOCs were mostly ND at or above the LOQ (Table 20). Based on these results, 1,4-dioxane, 2-hexanone, bromodichloromethane, and chloroethane were removed from the target analyte list for the next reporting period per Landfills QAPP decision rules (AEI, 2020) because these compounds had not been detected in compliance probes for five consecutive annual monitoring events. Additionally, concentrations of indicator VOCs (chloroform, PCE, and vinyl chloride) were generally lower compared to the previous reporting period and did not exceed previous maximum recorded values (Tables 21, 22, and 23). Therefore, no modifications to

sampling frequency are required per Landfills QAPP decision rules (AEI, 2020). These results indicate trace gases are being controlled and the Fort Ord Landfills are in compliance with regulatory requirements.

Annual source testing of the TTU conducted during the reporting period demonstrated the TTU operated efficiently and met the substantive requirements of Air District Rule 207 and Rule 1000. The TTU operated for an average of 52 hours biweekly throughout the reporting period without the need for supplemental fuel. The operating schedule was set to meet the requirement for balancing LFG extraction and generation and the methane concentration measured at the TTU influent averaged 36.2%v during the reporting period (Figure 11). The TTU treated approximately 115,501 pounds of methane and 10.1 pounds of VOCs in the reporting period (Table 3).

7.2 Groundwater Remedy

Based on comparisons of the observed COC distribution to hydraulic capture areas simulated using the updated model, the current extraction well configuration partially captures the COC plumes in the A-Aquifer and partially captures of the COC plumes in the Upper 180-Foot Aquifer. Several improvements that reduce contaminant mass and remedial response time are possible and recommended (Section 8.0). Ahtna anticipates that most of these improvements will occur in conjunction with the continued operation of the OU2 GWTP and extraction well networks in both the A-Aquifer and the Upper 180-Foot Aquifer.

Remediation of A-Aquifer COCs is complicated by the presence of multiple contaminants and uncertainty regarding characterization of the Fort Ord Landfills source areas. Persistent PCE concentrations east of the groundwater divide in Hydraulic Zone 2 occur at MW-OU2-27-A (Appendix F, Figure F27). Additionally, persistent TCE concentrations above the ACL in the western OU2 A-Aquifer occur in Hydraulic Zone 4 at monitoring well MW-OU2-40-A (Appendix F, Figure F30). Expansion of the A-Aquifer COC plumes in Hydraulic Zones 4 and 5 to the north and west of the existing extraction well networks, as indicated by increasing COC concentrations in monitoring wells MW-OU2-06-AR (Appendix F, Figure F22), MW-OU2-07-A (Appendix F, Figure F23), MW-OU2-08-A (Appendix F, Figure F24), MW-OU2-75-A (Appendix F, Figure F36), MW-OU2-83-A (Appendix F, Figure F40), and MW-BW-50-A (Appendix F, Figure F17) may be the result of reduced efficiency of the aging eastern extraction well network (EW-OU2-09-A, -10-A, -11-AR, -12-A, and -13-A). Once the western extraction well network is operational in 2021, it is expected to provide further capture in the A-Aquifer west of the eastern extraction well network.

Analysis of Upper 180-Foot Aquifer extraction wells indicates the plume is mostly captured, although persistent TCE concentrations exceeding the ACL suggest relatively low mass removal efficiency in Hydraulic Zone 6 at MW-OU2-50-180 (Appendix F, Figure F64) and no mass removal in Hydraulic Zone 8 at MW-OU2-28-180 (Appendix F, Figure F58) and MW-OU2-62-180 (Appendix F, Figure F69). The capture of the core areas of the TCE plume in Hydraulic Zone 7 is being achieved. TCE concentrations observed in MW-OU2-28-180 (Appendix F, Figure F58) and MW-OU2-62-180 (Appendix F, Figure F69) during the reporting period indicate the TCE plume extends downgradient and to the east of the current Upper 180-Foot Aquifer extraction well network (Hydraulic Zone 8). This area has a suspected discontinuity in the Intermediate 180-Foot Aquitard as indicated by TCE detections in Lower 180-Foot Aquifer

monitoring well MW-BW-59-180 (see the OUCTP Annual Report). Hydraulic Zone 8 is outside the current extraction well network and no new extraction wells are recommended at this time; however, the presence of TCE in the Lower 180-Foot Aquifer will be addressed in the 5th Five-Year Review Report for Fort Ord Superfund Site, which is scheduled to be complete in September 2022.

Extraction well EW-OU2-09-180 has remained in operation to capture CT in the Upper 180-Foot Aquifer. However, since it began normal operations in September 2011, CT has only been detected at low concentrations below the ACL or ND at EW-OU2-09-180 (Appendix F, Figure F47). The operational efficiency of EW-OU2-09-180 improved through 2014 and with a pump upgrade in 2016. Increased concentrations of CT and other VOCs may be indicative of improved efficiency with respect to the capture of CT; however, increasing concentrations of cis-1,2-DCE and PCE with no corresponding increase in CT concentrations suggest this extraction well may be capturing a different, previously unidentified VOC plume. Continued evaluation of this area is warranted to 1) ensure the Upper 180-Foot Aquifer CT plume is effectively captured, and 2) assess the presence of other VOCs, particularly cis-1,2-DCE. Due to concerns regarding the capture of the CT plume in the Upper 180-Foot Aquifer, construction of an additional extraction well within the southern CT plume is recommended in the OUCTP Annual Report (Ahtna, 2021a).

7.2.1 Progress with Respect to Short-Term Goals

Short-term goals include optimizing extraction well network operations to address the expansion of the A-Aquifer and Upper 180-Foot Aquifer plumes beyond the capture areas of the existing extraction well networks. A-Aquifer extraction well maintenance and servicing, including well redevelopment and video logging to evaluate well screen conditions, and installation of additional A-Aquifer extraction wells were conducted in 2016 to improve COC plume capture and increase COC mass removal. Additional A-Aquifer and Upper 180-Foot Aquifer extraction wells were installed in 2016 and operational in 2018 after the transition period to the new OU2 GWTP with the goal of improving COC plume capture and increase COC mass removal.

The redeveloped existing extraction wells and newly installed extraction wells have detected COC concentrations above ACLs (Tables 16 through 19), indicating increased COC mass removal. Compared to the previous annual reporting period (Ahtna, 2019a), the simulated capture areas have also increased in size with operation of the newly installed extraction wells, including capturing more of the suspected source area at Fort Ord Landfills Area F in the A-Aquifer (Figure 47) and the central plume area in the Upper 180-Foot Aquifer (Figure 48). However, the western extraction well network was offline during the reporting period and evaluation of improved COC plume capture and increased COC mass removal will be conducted for this area during the next annual reporting period.

7.2.2 Progress with Respect to Long-Term Goals

The long-term goal is the closure of the OU2 groundwater remedial unit (in both the A-Aquifer and the Upper 180-Foot Aquifer). This goal includes attainment monitoring to evaluate whether concentrations of COCs will remain below ACLs.

The majority of COC mass above the ACL in the A-Aquifer is located close to the source area (Fort Ord Landfills) where the OU2 GWTP relocation and expansion has refocused remediation efforts. However, there is a persistent COC mass in A-Aquifer Hydraulic Zones 2 and 5 and Upper 180-Foot Aquifer Hydraulic Zone 8 that is outside of the current extraction well network capture areas and may need to be addressed separately. The eastern A-Aquifer extraction well network and the Abrams/Imjin A-Aquifer and Abrams/Imjin Upper 180-Foot Aquifer extraction well networks are intended as barriers for most COCs so they do not migrate further downgradient; therefore, keeping these networks operational and enhancing flow rates is imperative.⁴²

With further operation of the new OU2 GWTP and the expanded extraction well network, it is expected the rate of COC mass reduction will increase and shorten the time to achieve RAOs at OU2. Remedy completion is currently estimated to be 17 years after OU2 GWTS improvements are complete, or approximately by 2036 (Gilbane, 2014a). Progress toward achieving long-term goals is currently being accomplished through:

- Continued operation of groundwater extraction wells to maintain hydraulic control and containment of the OU2 COC plumes in the A-Aquifer and Upper 180-Foot Aquifer.
- Data collection for the GWMP, which supports the implementation of Groundwater QAPP decision rules for GWTS operations and termination of the groundwater remedies as described in Section 1.3.
- Expansion of the groundwater remedy to expedite progress toward achieving long-term goals.

A-Aquifer: Of the eleven OU2 COCs, ten were detected in the A-Aquifer during the reporting period (all except CT). Seven COCs were detected at concentrations above their ACLs (1,1-DCA; 1,2-DCA; chloroform; cis-1,2-DCE; PCE; TCE; and VC). There are five hydraulic zones for OU2 in the A-Aquifer and progress with respect to long-term goals varies in each zone:

- **Hydraulic Zone 1:** Includes the Fort Ord Landfills source area and the area north to Imjin Parkway. The historical TCE plume extent in this zone was reduced significantly (Figure 36) due to operation of the eastern extraction well network and EW-OU2-16-A. However, four of the eleven OU2 COCs were detected at their maximum concentrations during the reporting period in Hydraulic Zone 1 (benzene; cis-1,2-DCE; methylene chloride; and VC). The maximum COC concentrations detected in Hydraulic Zone 1 during the reporting period were:
 - EW-OU2-19-A: cis-1,2-DCE at 12.7 µg/L (Table 17).
 - MW-OU2-02-A: VC at 9.5 µg/L (Table 17).
 - MW-OU2-44-A: 1,2-DCA at 3.3 µg/L (Table 17).
 - EW-OU2-19-A: 1,1-DCA at 16.2 µg/L (Table 17).
 - MW-OU2-46-A: chloroform at 1.4 µg/L (Table 18).
 - EW-OU2-17-A: PCE 7.5 µg/L (Table 17) and TCE at 11.6 µg/L (Table 18).

New extraction wells EW-OU2-17-A through EW-OU2-20-A are located in Hydraulic Zone 1 and have been in operation since November 2018. The extraction wells and monitoring wells in Hydraulic Zone 1 have either decreasing or flat COC concentration trends (Appendix F, Figures

⁴² Extraction well networks are shown on Figure 3 and listed in Table 11.

F11 through F15, F19, F31, F33 through F35, and F38) indicating that, though significant COC mass remains in Hydraulic Zone 1, operating extraction wells are removing COC mass and the presence of the source area in Hydraulic Zone 1 is not a limiting factor for achieving long-term goals.

- **Hydraulic Zone 2:** Located east of the groundwater divide and east of the suspected source area at the Fort Ord Landfills. The only COC above the ACL in Hydraulic Zone 2 is PCE, which is consistently detected at MW-OU2-27-A with a variable concentration trend above and below the PCE ACL (Appendix F, Figure F27). The maximum PCE detection during the reporting period was 5.0 µg/L at MW-OU2-27-A (Table 18).
- **Hydraulic Zone 3:** Located west of Hydraulic Zone 1 and includes Landfill Area D and the area upgradient of the eastern extraction well network. The historical TCE plume extent in this zone was reduced due to operation of the eastern extraction well network (Figure 36). The maximum concentration of 1,2-DCA detected during the reporting period was 4.1 µg/L at EW-OU2-13-A in Hydraulic Zone 3 (Table 19). Maximum COC concentrations in Hydraulic Zone 3 during the reporting period were detected at MW-OU2-25-A: VC at 0.16 µg/L (Table 18) and EW-OU2-12-A: 1,1-DCA at 6.2 µg/L (Table 17), PCE at 5.2 µg/L (Table 17), and TCE at 8.5 µg/L (Table 18). Most wells in Hydraulic Zone 3 with COC concentrations above ACLs had decreasing concentration trends (Appendix F, Figures F5, F6, and F9), indicating Hydraulic Zone 3 is not a limiting factor for achieving long-term goals.
- **Hydraulic Zone 4:** Located west of Hydraulic Zone 5 encompassing the western extraction well network and immediate upgradient area. The historical TCE plume extent in this zone was reduced due to operation of the western extraction well network (Figure 36). However, monitoring well MW-OU2-40-A had TCE concentrations above the ACL with the highest concentration of 11.3 µg/L during the reporting period (Table 18). TCE at this location is expected to be remediated once the western network extraction wells become operational; therefore, Hydraulic Zone 4 is not a limiting factor for achieving long-term goals. MW-OU2-40-A is located upgradient of the edge of the FO-SVA and the Upper 180-Foot Aquifer groundwater divide, and A-Aquifer groundwater migrates into the Upper 180-Foot Aquifer in this area. Therefore, no additional monitoring in the A-Aquifer downgradient of MW-OU2-40-A is warranted.
- **Hydraulic Zone 5:** Located north of Hydraulic Zones 1 and 3 outside the groundwater capture area of the existing extraction well networks, and to the west downgradient of the eastern extraction well network. The historical TCE plume extent in this zone has increased due to COC migration to the north of the eastern extraction well network (Figure 36). Five of the eleven COCs were detected at their maximum concentrations during the reporting period in Hydraulic Zone 5 (1,1-DCA; 1,2-DCE; chloroform; PCE; and TCE). The maximum chloroform concentration was 5.9 µg/L at MW-OU2-75-A (Table 18). MW-OU2-08-A had the maximum COC concentrations in Hydraulic Zone 5 during the reporting period for 1,1-DCA at 24.2 µg/L (Table 17), 1,2-DCA at 1.5 µg/L (Table 18), cis-1,2-DCE at 6.6 µg/L (Table 17), and VC at 0.36 µg/L (Table 18). MW-OU2-81-A had the maximum COC concentrations in Hydraulic Zone 5 during the reporting period for PCE at 11.4 µg/L (Table 17) and TCE at 12.1 µg/L (Table 19). Seven Hydraulic Zone 5 monitoring wells have COC concentrations above ACLs with increasing trends (Appendix F, Figures F17, F21

through F24, F36, and F40), indicating Hydraulic Zone 5 is a limiting factor for achieving long-term goals. Therefore, additional remedial actions are recommended for Hydraulic Zone 5 (see Sections 6.6 and 8.3).

Upper 180-Foot Aquifer: Of the eleven OU2 COCs, seven were detected in the Upper 180-Foot Aquifer during the reporting period (all except 1,2-DCA; benzene; methylene chloride; and VC), though only TCE was detected at concentrations above its ACL. There are four hydraulic zones for OU2 in the Upper 180-Foot Aquifer and progress with respect to long-term goals varies in each zone:

- **Hydraulic Zone 6:** Located in the southwestern lobe of the TCE plume. The historical TCE plume extent in this zone was reduced due to operation of extraction well EW-OU2-03-180 (Figure 46). The maximum TCE concentration during the reporting period in Hydraulic Zone 6 is 17.7 µg/L at MW-OU2-23-180 (Table 18), which was also the maximum TCE concentration detected in the Upper 180-Foot Aquifer. The TCE concentration trends in Hydraulic Zone 6 are decreasing or flat (Appendix F, Figures F43, F56, F64, and F65), indicating Hydraulic Zone 6 may be a limiting factor for achieving long-term goals, primarily due to persistent TCE concentrations above the ACL at upgradient wells MW-OU2-23-180 and MW-OU2-50-180. However, no additional actions are recommended at this time because the plume Hydraulic Zone 6 is being captured by operation of EW-OU2-03-180 (Figure 48).
- **Hydraulic Zone 7:** Located in the central TCE plume area. The historical TCE plume extent in this zone was reduced due to operation of extraction wells EW-OU2-05-180 and EW-OU2-06-180, and new extraction wells EW-OU2-10-180, EW-OU2-11-180, and EW-OU2-12-180 that have been operating since November 2018 (Figure 46). The maximum TCE concentration detected during the reporting period in Hydraulic Zone 7 was 13.6 µg/L at MW-OU2-44-180 (Table 16). TCE concentration trends in Hydraulic Zone 7 are decreasing or stable (Appendix F, Figures F44, F45, F48, F49, F50, F57, F59, F61, F63, F66, F67, and F71). Therefore, Hydraulic Zone 7 is not expected to be a limiting factor for achieving long-term goals.
- **Hydraulic Zone 8:** Located in the eastern TCE plume area. The historical TCE plume extent in this zone increased due to TCE migration east beyond the capture area of the existing extraction well networks (Figure 46). The expansion of the TCE plume was first observed at monitoring well MW-OU2-62-180 in 2016 (Appendix F, Figure F69) and the maximum detected TCE concentration during the reporting period (8.6 µg/L) in Hydraulic Zone 8 was also at MW-OU2-62-180 (Table 17). However, TCE concentrations at MW-OU2-62-180 have also been on a declining trend since peaking in First Quarter 2019 at 13 µg/L, with concentrations below the ACL in the last two quarters of the reporting period. TCE was detected above the ACL for the first time at downgradient monitoring well MW-OU2-28-180 during the Third Quarter 2020 at 5.1 µg/L, resulting in an increase in the TCE plume extent (Figure 45). This is the historical maximum TCE concentration detected for this well and there has been an overall increasing trend in TCE concentrations since 2016 (Appendix F, Figure F58). The TCE plume in this area is migrating towards the area of a suspected discontinuity in the Intermediate 180-Foot Aquitard, which may be a source of TCE to the Lower 180-Foot Aquifer. This indicates Hydraulic Zone 8 may be a limiting factor for achieving long-term goals; however, no new extraction wells in Hydraulic Zone 8 are recommended at this time because the presence of TCE in the Lower 180-

Foot Aquifer and its source will be addressed in the 5th Five-Year Review Report for Fort Ord Superfund Site, which is scheduled to be complete in September 2022.

- **Hydraulic Zone 9:** Located in the northwestern lobe of the TCE plume including extraction well EW-OU2-02-180R and the upgradient area. The historical TCE plume extent in this zone was reduced significantly due to operation of extraction well EW-OU2-02-180R, which is a replacement extraction well that started operation in November 2018 (Figure 46). The maximum TCE concentration during the reporting period in Hydraulic Zone 9 was 5.7 µg/L at EW-OU2-02-180R (Table 18), though the TCE concentration trend for EW-OU2-02-180R is flat (Appendix F, Figure F42). Due to the reduced plume size and relatively low TCE concentrations, Hydraulic Zone 9 is not a limiting factor for achieving long-term goals.

The remediation progress will continue to be monitored and optimization recommendations incorporated as necessary to achieve long-term goals.

7.3 Gaps or Inconsistencies in the Conceptual Site Model

There are no identified gaps or inconsistencies in the conceptual site model described in Section 1.2.

8.0 Suggested System Modifications

8.1 Landfills Inspection and Maintenance

Recommended O&M activities and system modifications include:

- Continue mitigating for burrows near downdrains, downdrain inlets, and drainage swales for runoff entry points because these have previously initiated erosion on the side slopes.
- Monitor new growths of invasive plant species and spray with herbicide as soon as possible after emerging. Confirm the Bureau of Land Management (BLM) will continue spraying brush and invasive weeds with herbicide. Remove dead vegetation when dried out.
- Locate and remove woody shrubs from the vegetative cover.
- Remove vegetation and sediment buildup at downdrain outlets and V-ditches.
- Maintain new rock-lined drainage swales adjacent to Area B and Area F perimeter service roads.
- Repair erosion rills in the perimeter service road on the southeast side of Area D.⁴³
- Monitor the performance of subdrain systems on Areas E and F to mitigate subsurface saturation of the vegetative cover.
- Monitor vegetation recovery in the Phase 1 area of Area E where range-related debris was placed.
- Monitor the Phase 2 interim cover on Area E for erosion and maintain at least one foot of clean, compacted soil over the impacted soil area.
- Continue using synthetic fiber rolls as an erosion mitigation tool.
- Clear soil, debris, and vegetation away from settlement plates and survey monuments.
- Stamp or engrave identification numbers on settlement plates and survey monuments, or stencil on concrete pads.
- Modify engineering inspection triggers from the Landfills O&M Plan as follows:
 - Earthquakes with a greater than Magnitude 3.0 and Modified Mercalli Intensity of V. The Modified Mercalli Intensity refers to the effects actually experienced at a specific location. This scale, composed of increasing levels of intensity that range from imperceptible shaking to catastrophic destruction, is designated by Roman numerals. The shaking associated with Modified Mercalli Intensity of V is moderate, generally described as felt by nearly everyone; many awakened; some dishes, windows broken; unstable objects overturned; pendulum clocks may stop.
 - Sustained wind speeds greater than 30 miles per hour. Sustained is defined by the National Weather Service as “Wind speed determined by averaging observed values over a two-minute period.”

8.2 Landfill Gas Extraction and Treatment

The TTU operating schedule should continue to be managed to meet the requirement for balancing LFG extraction and generation, thereby reducing the likelihood supplemental fuel will be needed in the near future and preventing the introduction of ambient air to the subsurface, which would increase the risk of fire. The TTU can operate with influent methane concentrations as low as 25%v without the use of

⁴³ This work was completed after the reporting period in October 2020.

supplemental fuel per the design specifications. Based on the current operating schedule and flow rates, it is estimated supplemental fuel will not be needed until 2045.

8.3 Groundwater Extraction and Treatment

Ongoing changes to GWTS equipment and operational parameters occur as part of the GWTS optimization process and development of related exit strategies. Significant progress has been made in remediating the OU2 COC plumes. However, groundwater monitoring data indicate significant COC mass remains in the A-Aquifer and the Upper 180-Foot Aquifer, primarily in the area north of the Fort Ord Landfills.

The following system modifications are recommended to improve performance, reduce costs, and increase the likelihood of achieving cleanup goals:

- Continue operation of the new OU2 GWTS, which includes optimization measures to maximize mass removal and plume capture.
- Remove pump at EW-OU2-14-A, install PDB samplers, and sample quarterly.
- Replace failed pressure transducer in EW-OU2-13-A.⁴⁴
- Evaluate operation of EW-OU2-04-A with the existing pump after it is connected to the OU2 GWTP.
- Operate the western extraction well network (EW-OU2-02-A, EW-OU2-04-A, EW-OU2-05-A, and EW-OU2-06-A) after they are connected to the OU2 GWTP.⁴⁵
- Repair inoperable flow meters at EW-OU2-02-180R and EW-OU2-12-180.
- Redevelop EW-OU2-12-180 and install a new pump to restart operation.
- Investigate pump failure at EW-OU2-02-A and replace with a new pump if needed.
- Implement recommendations for individual extraction wells listed in Table 11.
- Implement optimization recommendations for the OU2 GWTP as listed in the *Operable Unit 2 Groundwater Treatment System Evaluation and Optimization Report* (Ahtna, 2021b).
- Expansion of the eastern extraction well network to the north with the addition of up to eight new A-Aquifer extraction wells to capture COC plumes migrating to the north of the eastern extraction well network in Hydraulic Zone 5.⁴⁶ Development in this area presents challenges to connecting these proposed extraction wells to the existing OU2 GWTS; therefore, a small-scale (two 2,000-pound GAC vessels) local GWTS should be considered.
- Evaluate the status of the OU2 groundwater remedy in Hydraulic Zone 8 with respect to the presence of TCE in the Lower 180-Foot Aquifer based on the conclusions of the 5th Five-Year Review Report for Fort Ord Superfund Site.

⁴⁴ Wells with failed pressure transducers are not included if the well does not need to be operated.

⁴⁵ EW-OU2-04-A restarted operation after the reporting period on October 1, 2020. EW-OU2-05-A and EW-OU2-06-A restarted operation after the reporting period on March 19, 2021.

⁴⁶ If recommendations for additional remediation are implemented, a work plan will be prepared describing the proposed extraction well locations, well construction details, and procedures for well borehole logging, development, pump specifications, initial sampling, and operations.

8.4 Landfill Gas Monitoring

Modifications to the LFG monitoring program are made by comparing analytical results to Landfills QAPP decision rules (AEI, 2020) after each quarterly monitoring event, and this process should continue in the next reporting period; however, all 21 perimeter compliance probes shall continue to be monitored quarterly per 27CCR.

Perimeter probe and vent methane concentration data will be reviewed for completeness and representativeness within two days of collection (see Section 2.0). If any data are missing, or appear anomalous or inconsistent with historical results, then resampling will be conducted as soon as possible.

8.5 Groundwater Monitoring

GWMP modifications are made by comparing analytical results to Groundwater QAPP decision rules (AEI, 2019a). GWMP modifications during the reporting period are discussed in Section 6.3. The recommended modifications to the GWMP after the Third Quarter 2020 are presented in Table 35. Wells recommended for termination of sampling will continue to be monitored for groundwater elevation data until they are recommended for decommissioning and removal from the Groundwater QAPP.

8.5.1 New Wells

The OU2 GWTP relocation and expansion included installation of new extraction wells to optimize and expedite groundwater remediation at OU2. No new monitoring wells were installed during the reporting period and no new monitoring wells are recommended at this time because operation of the expanded groundwater remedy and new OU2 GWTP, along with future operation of the western extraction well network, may change the configuration of the COC plumes.

8.5.2 Well Decommissioning

Three monitoring wells are recommended for decommissioning at OU2 in the A-Aquifer (Figure 51) and Upper 180-Foot Aquifer (Figure 52) as described below.⁴⁷

1. MW-OU2-26-A: well has an obstruction and was removed from the Groundwater QAPP; not needed for sampling or depth to water measurements.
2. MW-OU2-37-A: well has an obstruction and was removed from the Groundwater QAPP; not needed for sampling or depth to water measurements.
3. MW-OU2-37-180: well has an obstruction and was removed from the Groundwater QAPP; not needed for sampling or depth to water measurements.

No monitoring wells were decommissioned during the reporting period. After the reporting period, in December 2020, monitoring wells MW-OU2-05-A, MW-OU2-05-180, and MW-OU2-07-180R were decommissioned and replaced with new wells MW-OU2-05-AR and MW-OU2-84-180 in the Sea Haven

⁴⁷ If the recommendations for well decommissioning are implemented, a work plan will be prepared detailing the well decommissioning procedures.

residential development due to new construction. Details of the work conducted by the construction contractor will be described in the next OU2 Annual Report.

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⁴⁸ At the end of references included in the Fort Ord Administrative Record are the Administrative Record Numbers (AR#s) (e.g. BW-1234). To find the referenced document, this number may be typed into the Online Search tool at: <http://www.fortordcleanup.com/documents/search/>. Please note the referenced documents were available in the Fort Ord Administrative Record at the time this document was issued; however, some may have been superseded by more current versions and were subsequently withdrawn. TBD: to be determined.

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Tables

Table 1. COCs in Groundwater, ACLs, and Discharge Limits

OU2 A-Aquifer and Upper 180-Foot Aquifer			OUCTP Upper 180-Foot Aquifer
Chemical of Concern ¹ (COC)	ACL ¹ (µg/L)	Treated Water Discharge Limit ² (µg/L)	ACL ³ (µg/L)
1,1-Dichloroethane (1,1-DCA)	5.0	5.0	-
1,2-Dichloroethane (1,2-DCA)	0.5	0.5	-
1,2-Dichloropropane (1,2-D CPA)	1.0	0.5	-
Benzene	1.0	0.5	-
Carbon tetrachloride (CT)	0.5	0.5	0.5
Chloroform	2.0	2.0	-
cis-1,2-Dichloroethene (cis-1,2-DCE)	6.0	6.0	-
Methylene chloride	5.0	0.5	-
Tetrachloroethene (PCE)	3.0	0.5	-
Trichloroethene (TCE)	5.0	0.5	-
Vinyl Chloride (VC)	0.1	0.1	-

Notes:

-: not applicable

¹ OU2 COCs and ACLs are from the OU2 Record of Decision (Army, 1994) and the OU2 Explanation of Significant Differences (Army, 1995).

² Discharge limits for 1,1-DCA, chloroform and cis-1,2-DCE were revised from 0.5 µg/L to their ACLs to optimize the use of granular activated carbon.

³ OUCTP COCs and ACLs are from the OUCTP Record of Decision (Army, 2007).

Acronyms and Abbreviations:

µg/L: micrograms per liter

ACL: Aquifer Cleanup Level

OU2: Operable Unit 2

OUCTP: Operable Unit Carbon Tetrachloride Plume (applies to EW-OU2-09-180 only)

Table 2. Thermal Treatment Unit Operations Summary

Operations 2006 - 2020

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019 ¹	2020 ¹	Cumulative
Total Hours²	6,528	8,760	8,760	8,760	8,760	8,760	8,760	8,760	8,760	8,760	8,760	8,760	8,760	8,760	8,760	129,168
Total Hours Operated	2,891	4,035	2,816	4,524	2,474	2,530	2,509	2,098	1,961	2,653	2,039	1,554	1,661	1,422	1,350	36,519
% Operation	44%	46%	32%	52%	28%	29%	29%	24%	22%	30%	23%	18%	19%	16%	15%	28%

Operations Summary 2020	
Average Percent Methane at the Influent	36.2%
Average Temperature of Soil Gas in the Extraction Wells ³	66.9 °F
Extraction Well With Highest Temperature ⁴	EW-30 @ 79.4°F
Average Burner Temperature	1650 °F ⁴
Average Flow Rate	97.8 scfm ⁵

Notes:

¹ 2019 and 2020 Numbers are based on federal fiscal year (October through September). All other years are based on calendar year.

² Hours include system start-up and shakedown, which started on April 4, 2006. Thermal Treatment Unit started full time operation on August 2, 2006.

³ The low influent landfill gas temperatures are expected from moderately productive extraction wells. The observed temperatures are significantly below 131 °F, a value that typically indicates a biological activity breakpoint between mesophilic anaerobic bacterial decay and thermophilic aerobic bacterial decay (i.e., composting). Per the Landfills QAPP, if LFG temperatures are greater than 120 °F, then the individual EW(s) or the EW leg will be shut down.

⁴ This value is calculated from all readings that are equal to and greater than the required operating temperature of approximately 1400 °F. It takes approximately 7 minutes after startup for the Thermal Treatment Unit to reach 1400 °F.

⁵ This is calculated by averaging all individual 30 second flow Yokogawa data recorder measurements over the reporting period for when the system is in operation (when the burner is greater than the required operating temperature of approximately 1400 °F)

% = percent

°F = degrees Fahrenheit

scfm = standard cubic feet per minute

Table 3. Summary of Landfill Gas VOC and Methane Mass Removed April 2006 through September 2020

Type ¹	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019 ²	2020 ²	Cumulative ³
Start of Period	04/04/06	01/01/07	01/01/08	01/01/09	01/01/10	01/01/11	01/01/12	01/01/13	01/01/14	01/01/15	01/01/16	01/01/17	01/01/18	10/01/18	10/01/19	04/04/06
End of Period	12/31/06	12/31/07	12/31/08	12/31/09	12/31/10	12/31/11	12/31/12	12/31/13	12/31/14	12/31/15	12/31/16	12/31/17	12/31/18	09/30/19	09/30/20	09/30/20
Total Methane (pounds)	428,214	532,181	288,433	448,148	211,634	228,085	229,400	186,000	174,430	237,574	178,648	135,712	145,175	134,057	115,501	3,557,691
Total VOCs ⁴ (pounds)	55.4	59.0	26.0	28.8	11.1	11.3	10.7	9.5	8.6	5.0	4.0	5.6	7.0	6.8	10.1	259
Total COCs ⁵ (pounds)	9.5	6.2	2.8	3.3	1.4	1.4	1.3	1.1	1.0	0.5	0.4	0.5	0.6	0.5	0.5	31

Notes:

¹ Pounds of VOCs removed is calculated from concentration data at the TTU influent. Concentrations were assumed to be constant during the operation period from the time of collection until the next sample set was collected. Pounds of methane removed is calculated from field measurements during normal TTU operation. Conversion assumes 1 atmosphere pressure and 25°C.

² The 2019 and 2020 reporting periods are for federal fiscal years (10/1 - 9/30). All previous years are reported in the calendar year.

³ Cumulative mass removed is total pounds removed from 2006 through 2020.

⁴ Includes all VOCs detected in the samples collected (excluding methane). There are approximately 60 VOCs on the standard Eurofins TO-15 list of analytes.

⁵ Includes all groundwater COCs listed in Table 1, *Chemicals of Concern, Remediation Goals, and Discharge Limits*, of the OU2 Record of Decision (Army, 1994).

COCs = chemicals of concern, specifically for groundwater (Note 4).

LFG = landfill gas

NA = not applicable

OU2 = Operable Unit 2

TTU = Thermal Treatment Unit

VOCs = volatile organic compounds

Table 4. Detailed Landfill Gas VOC Results, Extraction System

Sample Location	AREA D	AREA E HEADER	AREA F	AREA F	MIXED	MIXED	STACK OUTLET	
Sample Number	TTU-D-114	TTU-ET-116	TTU-EF-115	TTU-VF-117	TTU-FM-111	TTU-FM-112	TTU-FO-113	
Date Collected	6/4/2020	6/4/2020	6/5/2020	6/5/2020	6/4/2020	6/4/2020	6/4/2020	
Sample Type	Regular	Regular	Regular	Regular	Primary	Field Duplicate	Regular	
Sample Container	6-liter Summa™ Canister	6-liter Summa™ Canister	6-liter Summa™ Canister	6-liter Summa™ Canister	1-liter Tedlar® bag	1-liter Tedlar® bag	1-liter Tedlar® bag	
COMPOUND	DETECT	Volatile Organic Compounds in ppbv and (µg/m ³)						
1,1-DICHLOROETHANE	YES	<9.8 (40)	<9.5 (38)	31 (125)	<9.6 (39)	<120 (486)	<130 (526)	<0.65 (2.6)
1,2-DICHLOROETHANE		<9.8 (40)	<9.5 (38)	<9.2 (37)	<9.6 (39)	<120 (486)	<130 (526)	<0.65 (2.6)
1,2-DICHLOROPROPANE		<9.8 (45)	<9.5 (44)	<9.2 (43)	<9.6 (44)	<120 (554)	<130 (601)	<0.65 (3)
BENZENE	YES	35 (112)	22 (70)	130 (415)	130 (415)	<120 (383)	<130 (415)	<0.65 (2.1)
CARBON TETRACHLORIDE		<9.8 (62)	<9.5 (60)	<9.2 (58)	<9.6 (60)	<120 (755)	<130 (818)	<0.65 (4.1)
CHLOROFORM		<9.8 (48)	<9.5 (46)	<9.2 (45)	<9.6 (47)	<120 (586)	<130 (635)	<0.65 (3.2)
CIS-1,2-DICHLOROETHENE	YES	<9.8 (39)	27 (107)	57 (226)	16 (63)	<120 (476)	<130 (515)	<0.65 (2.6)
METHYLENE CHLORIDE	YES	<49 (170)	<47 (163)	<46 (160)	<48 (167)	300 (1042)J	400 (1389)J	<1.5 (5.2)
TETRACHLOROETHENE		<9.8 (66)	<9.5 (64)	<9.2 (62)	<9.6 (65)	<120 (814)	<130 (882)	<0.65 (4.4)
TRICHLOROETHENE	YES	<9.8 (53)	<9.5 (51)	12 (64)J	<9.6 (52)	<120 (645)	<130 (698)	<0.65 (3.5)
VINYL CHLORIDE	YES	87 (222)	88 (225)	240 (613)	180 (460)	<120 (307)	<130 (332)	<0.65 (1.7)
1,1-DICHLOROETHENE		<9.8 (39)	<9.5 (38)	<9.2 (36)	<9.6 (38)	<120 (476)	<130 (515)	<0.65 (2.6)
1,2,4-TRIMETHYLBENZENE	YES	130 (639)	29 (143)	490 (2408)	640 (3146)	<160 (786)	<180 (885)	1.4 (6.9)
1,2-DICHLOROBENZENE	YES	47 (283)	<9.5 (57)	18 (108)	<9.6 (58)	<120 (721)	<130 (781)	<0.65 (3.9)
1,3,5-TRIMETHYLBENZENE	YES	10 (49)J	<9.5 (47)	72 (354)	71 (349)	<120 (590)	<130 (639)	<0.65 (3.2)
1,3-DICHLOROBENZENE		<9.8 (59)	<9.5 (57)	<9.2 (55)	<9.6 (58)	<120 (721)	<130 (781)	<0.65 (3.9)
1,4-DICHLOROBENZENE	YES	56 (337)	45 (271)	230 (1383)	210 (1262)	<120 (721)	<130 (781)	<0.65 (3.9)
1,4-DIOXANE		<49 (177)	<47 (169)	<46 (166)	<48 (173)	<280 (1009)	<310 (1117)	<1.5 (5.4)
2,2,4-TRIMETHYLPENTANE	YES	32 (149)	130 (607)	380 (1775)	520 (2429)	150 (701)J	150 (701)J	<0.65 (3)
2-BUTANONE	YES	<49 (144)	<47 (139)	410 (1209)	99 (292)	<280 (826)	<310 (914)	<1.5 (4.4)
2-HEXANONE		<49 (201)	<47 (193)	<46 (188)	<48 (197)	<280 (1147)	<310 (1270)	<1.5 (6.1)
2-PROPANOL	YES	<49 (120)	<47 (116)	<46 (113)	<48 (118)	4400 (10813)	5800 (14254)	9.8 (24)
3-CHLOROPROPENE		<49 (153)	<47 (147)	<46 (144)	<48 (150)	<280 (876)	<310 (970)	<1.5 (4.7)
4-ETHYLTOLUENE	YES	12 (59)J	<9.5 (47)	74 (364)	110 (541)	<120 (590)	<130 (639)	<0.65 (3.2)
4-METHYL-2-PENTANONE	YES	<9.8 (40)	<9.5 (39)	67 (274)	<9.6 (39)	<120 (492)	<130 (532)	<0.65 (2.7)
ACETONE	YES	52 (124)J	<47 (112)	1800 (4275)	580 (1378)	1400 (3325)J	1800 (4275)J	9.2 (22)J
BROMOMETHANE		<49 (190)	<47 (182)	<46 (179)	<48 (186)	<280 (1087)	<310 (1204)	<1.5 (5.8)
CARBON DISULFIDE		<49 (153)	<47 (146)	<46 (143)	<48 (149)	<280 (872)	<310 (965)	<1.5 (4.7)
CHLOROBENZENE	YES	92 (423)	12 (55)J	110 (506)	85 (391)	<120 (552)	<130 (598)	0.72 (3.3)J
CHLOROETHANE		<49 (129)	<47 (124)	<46 (121)	<48 (127)	<280 (739)	<310 (818)	<1.5 (4)
CHLOROMETHANE		<49 (101)	<47 (97)	<46 (95)	<48 (99)	<280 (578)	<310 (640)	<1.5 (3.1)
CUMENE	YES	24 (118)	70 (344)	110 (541)	170 (836)	<120 (590)	<130 (639)	<0.65 (3.2)
CYCLOHEXANE	YES	160 (551)	220 (757)	210 (723)	280 (964)	140 (482)J	140 (482)J	0.87 (3)J
ETHANOL	YES	67 (126)	<47 (89)	<46 (87)	<48 (90)	2400 (4521)	3300 (6217)	21 (40)
ETHYL BENZENE	YES	20 (87)	13 (56)J	510 (2214)	870 (3777)	180 (781)J	160 (695)J	0.7 (3)J
FREON 11		<9.8 (55)	<9.5 (53)	<9.2 (52)	<9.6 (54)	<120 (674)	<130 (730)	<0.65 (3.7)
FREON 113		<9.8 (75)	<9.5 (73)	<9.2 (70)	<9.6 (74)	<120 (919)	<130 (996)	<0.65 (5)
FREON 114	YES	370 (2586)	61 (426)	140 (979)	170 (1188)	140 (979)J	<130 (909)	<0.65 (4.5)
FREON 12	YES	<9.8 (48)	<9.5 (47)	270 (1335)	350 (1731)	200 (989)	180 (890)J	<0.65 (3.2)
HEPTANE	YES	400 (1639)	400 (1639)	710 (2909)	810 (3319)	360 (1475)	310 (1270)	<0.65 (2.7)
HEXANE	YES	150 (529)	160 (564)	310 (1092)	480 (1692)	180 (634)J	170 (599)J	0.98 (3.5)J
M,P-XYLENE	YES	17 (74)	22 (96)	300 (1302)	500 (2171)	130 (564)J	<130 (564)	0.83 (3.6)J
METHYL TERT-BUTYL ETHER		<9.8 (35)	<9.5 (34)	<9.2 (33)	<9.6 (35)	<280 (1009)	<310 (1117)	<1.5 (5.4)
O-XYLENE	YES	<9.8 (43)	<9.5 (41)	26 (113)	43 (187)	<120 (521)	<130 (564)	<0.65 (2.8)

Table 4. Detailed Landfill Gas VOC Results, Extraction System

Sample Location	AREA D	AREA E HEADER	AREA F	AREA F	MIXED	MIXED	STACK OUTLET	
Sample Number	TTU-D-114	TTU-ET-116	TTU-EF-115	TTU-VF-117	TTU-FM-111	TTU-FM-112	TTU-FO-113	
Date Collected	6/4/2020	6/4/2020	6/5/2020	6/5/2020	6/4/2020	6/4/2020	6/4/2020	
Sample Type	Regular	Regular	Regular	Regular	Primary	Field Duplicate	Regular	
Sample Container	6-liter Summa™ Canister	6-liter Summa™ Canister	6-liter Summa™ Canister	6-liter Summa™ Canister	1-liter Tedlar® bag	1-liter Tedlar® bag	1-liter Tedlar® bag	
COMPOUND	DETECT	Volatile Organic Compounds in ppbv and (µg/m ³)						
PROPYLBENZENE	YES	55 (270)	<9.5 (47)	120 (590)	210 (1032)	<120 (590)	<130 (639)	<0.65 (3.2)
STYRENE		<9.8 (42)	<9.5 (40)	<9.2 (39)	<9.6 (41)	<120 (511)	<130 (554)	<0.65 (2.8)
TETRAHYDROFURAN	YES	<9.8 (29)	32 (94)	140 (413)	50 (147)	<120 (354)	<130 (383)	<0.65 (1.9)
TOLUENE	YES	<9.8 (37)	24 (90)	22 (83)	26 (98)	710 (2675)	700 (2638)	3.2 (12)
TRANS-1,2-DICHLOROETHENE		<9.8 (39)	<9.5 (38)	<9.2 (36)	<9.6 (38)	<120 (476)	<130 (515)	<0.65 (2.6)

Notes:

- < = less than the reporting limit
- % = percent
- ppbv = parts per billion by volume
- µg/m³ = micrograms per cubic meter
- J = Estimated, Bias Indeterminate

Operable Unit 2 Chemical of Concern =

Table 5. Landfills and TTU Activity and Maintenance Log

Date		Group	Reason	Activity
Start	End			
10/1/2019	9/30/2020	Landfills	routine maintenance	Rodent control (squirrels and gophers)
10/1/2019	9/30/2020	Landfills	routine maintenance	Fence and gate maintenance, servicing gates, locks, etc. Trimming vegetation on fence. Replaced Government Property signs as needed.
10/1/2019	9/30/2020	Landfills	routine maintenance	Weekly inspections - Monday and Friday
10/1/2019	9/30/2020	Landfills	routine maintenance	Clearing of V-ditches (during the wet season)
10/1/2019	10/21/2019	Landfills	Other	Range debris/bullet placement at OU2 Landfills
10/23/19	10/23/19	Landfills	O&M	Cleaning of owl nest boxes
10/31/2019	3/30/2020	Landfills	routine maintenance	Erosion control/Landfill winterization
11/6/2019	11/6/2019	TTU	O&M	TTU inspection and maintenance
11/11/2019	11/11/2019	Landfills	compliance	Quarterly LFG monitoring
11/25/2019	11/25/2019	Landfills	compliance	Quarterly inspection by Monterey County Department of Health
12/24/19	12/24/19	Landfills	O&M	Seeding of erosion repair areas
12/26/19	12/26/19	Landfills	O&M	Automatic gate installation complete at main road into Landfill
2/18/2020	2/19/2020	Landfills	compliance	Quarterly LFG monitoring
3/16/2020	3/16/2020	Landfills	compliance	Quarterly inspection by Monterey County Department of Health
03/20/20	03/20/20	Landfills	O&M	Seeding of erosion repair areas
04/24/20	04/24/20	Landfills	O&M	Repair of erosion areas Area E
6/3/2020	6/4/2020	Landfills	compliance	Annual VOC Sampling of compliance probes
6/3/2020	6/5/2020	Landfills	compliance	Quarterly LFG monitoring
6/4/2020	6/4/2020	TTU	O&M/compliance	TTU source testing by Best Environmental
6/4/2020	6/5/2020	TTU	Sampling	TTU Leg sampling
6/30/2020	6/30/2020	Landfills	compliance	No Quarterly inspection by Monterey County Department of Health due to COVID restrictions
7/6/2020	7/6/2020	TTU	O&M	TTU inspection and maintenance
8/3/2020	8/3/2020	Landfills	annual inspection	Initial inspection by a California registered professional engineer
8/26/2020	9/18/2020	Landfills	compliance	Quarterly LFG monitoring
9/25/2020	9/25/2020	Landfills	compliance	Quarterly inspection by Monterey County Department of Health
9/25/2020	9/25/2020	Landfills	annual inspection	Followup inspection by a California registered professional engineer

Table 6. Monthly GWTP Flow Rate and COC Mass Removal

Month-Year	Monthly Operability (percent)	Volume ¹ (gallons)	Temporal Average Flow Rate (gpm)	Cumulative Volume ² (gallons)	COC Influent Concentration ³ (µg/L)	Mass Removed ⁴ (pounds)	Cumulative Mass Removed ² (pounds)
Oct-2019	97.5%	40,029,229	897	7,851,934,779	NS	2.6	870
Nov-2019	97.8%	39,268,830	909	7,891,203,609	8.7	2.9	873
Dec-2019	99.7%	40,960,191	918	7,932,163,800	NS	3.0	876
Jan-2020	92.5%	37,403,866	838	7,969,567,665	7.6	2.4	878
Feb-2020	97.3%	34,094,598	816	8,003,662,263	NS	2.2	880
Mar-2020	97.6%	36,329,040	814	8,039,991,303	8.0	2.4	883
Apr-2020	100.0%	35,252,496	816	8,075,243,799	NS	2.3	885
May-2020	97.6%	35,974,215	806	8,111,218,015	8.3	2.5	887
June-2020	98.9%	33,578,842	777	8,144,796,856	NS	2.3	890
July-2020	84.4%	31,305,452	701	8,176,102,308	8.3	2.2	892
Aug-2020	98.1%	35,636,023	798	8,211,738,331	7.1	2.1	894
Sept-2020	99.1%	35,524,915	822	8,247,263,246	8.1	2.4	896
Average:	96.7%	36,279,808	826		8.0	2.4	
Total:		435,357,696		8,247,263,246		29.1	896

Notes:

¹ Volume calculated as the sum of volumes from the OU2 and OUCTP groundwater extraction wells.

² Since system startup in October 1995.

³ Weighted average total COC influent concentration for the month from two influent streams, individual sample results in Table 8, sampled based on granular activated carbon (GAC) change-out cycle and Quality Assurance Project Plan (QAPP) sampling schedule.

⁴ COC mass removed from the A-Aquifer and Upper 180-Foot Aquifer by operating extraction wells.

Acronyms and Abbreviations:

µg/L: micrograms per liter

COC: chemical of concern

gpm: gallons per minute

GWTP: groundwater treatment plant

NS: not sampled

Table 7. GWTP Process Monitoring Schedule

GAC Cycle Week #	Sample Date	Sample Location								
		TS-OU2-INF-01	TS-OU2-INF-02	TS-OU2-EFF-1A	TS-OU2-EFF-1B	TS-OU2-EFF-1C	TS-OU2-EFF-2A	TS-OU2-EFF-2B	TS-OU2-EFF-2C	TS-OU2-INJ-01
GAC Vessels 1A/2A primary, Vessels 1B/2B secondary, and Vessels 1C/2C polishing										
38	10/2/2019			X			X			X
43	11/5/2019	XX	X	X	X	X	X	X	X	X
48	12/11/2019			X			X			X
51	1/6/2020	X	XX	X	X	X	X	X	X	X
56	2/4/2020			X			X			X
60	3/3/2020	X	XX	X	X	X	X	X	X	X
64	3/31/2020	X	XX	X	X	X	X	X	X	X
68	4/28/2020			X			X			X
72	5/27/2020	X	XX	X	X	X	X	X	X	X
76	6/23/2020			X			X			X
78	7/7/2020	X	XX	X	X	X	X	X	X	X
80	7/21/2020			X			X			X
82	8/4/2020	X	XX	X	X	X	X	X	X	X
GAC Vessels 1A/2A Change-Out on 9/16/2020; Vessels 1B/2B primary, Vessels 1C/2C secondary, and Vessels 1A/2A polishing										
0	9/21/2020	X	XX	X	X	X	X	X	X	X

Notes:

GAC was filled at the new OU2 GWTP on November 21, 2018
 The start of the 42-day test period began January 11, 2019
 The end of the 42-day test period was February 22, 2019
 The first GAC change-out was conducted on September 16, 2020

Acronyms and Abbreviations:

#: number
 GAC: granular activated carbon
 X: sample collected
 XX: duplicate sample collected

Station Descriptions:

TS-OU2-INF-01: eastern influent sample location
 TS-OU2-INF-02: western influent sample location
 TS-OU2-EFF-1A: effluent sample collected from northern GAC vessel 1A
 TS-OU2-EFF-1B: effluent sample collected from northern GAC vessel 1B
 TS-OU2-EFF-1C: effluent sample collected from northern GAC vessel 1C
 TS-OU2-EFF-2A: effluent sample collected from southern GAC vessel 2A
 TS-OU2-EFF-2B: effluent sample collected from southern GAC vessel 2B
 TS-OU2-EFF-2C: effluent sample collected from southern GAC vessel 2C
 TS-OU2-INJ-01: effluent sample location, injection discharge point of compliance

Table 8. Summary of Groundwater Treatment Plant Analytical Results

Station	GAC Cycle Week #*	Analyte: Units: Date:	1,1-DCA (µg/L)		1,2-DCA (µg/L)		1,2-DCPA (µg/L)		Benzene (µg/L)		CT (µg/L)		Chloroform (µg/L)		cis-1,2-DCE (µg/L)		MC (µg/L)		PCE (µg/L)		TCE (µg/L)		VC (µg/L)		Total COCs (µg/L)	1,2,3-TCP ¹ (µg/L)	
			Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Value	Value
TS-OU2-INF-01	43	11/5/2019	0.61		0.12	J	<0.25	U	<0.25	U	<0.25	U	0.32	J	1.6		<0.50	U	0.99		5.0		<0.05	U	8.6	<0.0025	U
	51	1/6/2020	0.43	J	<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.28	J	1.4		<0.50	U	0.94		4.2		<0.05	U	7.3		
	60	3/3/2020	0.53		<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.35	J	1.5		<0.50	U	1.10		5.3		<0.05	U	8.8		
	64	3/31/2020	0.44	J	<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.26	J	1.4		<0.50	U	0.90		4.0		<0.05	U	7.0		
	72	5/27/2020	0.40	J	<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.24	J	1.4		<0.50	U	0.87		4.7		<0.05	U	7.6		
	78	7/7/2020	0.55	J	0.11	J	<0.25	U	<0.25	U	<0.25	U	0.29	J	1.8		<0.50	U	1.1		4.4		<0.05	U	8.3		
	82	8/4/2020	0.28	J	<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.27	J	1.3		<0.50	U	0.86		4.1		<0.05	U	6.8		
	0	9/21/2020	0.55	J+	0.11	J	<0.25	U	<0.25	U	<0.25	U	0.32	J	1.5	J+	<0.50	UJ	1.0	J+	4.6	J+	<0.05	U	8.1		
TS-OU2-INF-02	43	11/5/2019	0.50		0.25	J	<0.25	U	<0.25	U	<0.25	U	0.29	J	1.3		<0.50	U	0.79		5.7		<0.05	U	8.8	<0.0025	U
	51	1/6/2020	0.37	J	0.22	J	<0.25	U	<0.25	U	<0.25	U	0.26	J	1.1		<0.50	U	0.76		5.2		<0.05	U	7.9		
	60	3/3/2020	0.49	J	0.24	J	<0.25	U	<0.25	U	<0.25	U	0.31	J	1.3		<0.50	U	0.82		6.3		<0.05	U	9.5		
	64	3/31/2020	0.39	J	0.24	J	<0.25	U	<0.25	U	<0.25	U	0.25	J	1.2		<0.50	U	0.73		5.2		<0.05	U	8.0		
	72	5/27/2020	0.38	J	0.26	J	<0.25	U	<0.25	U	<0.25	U	0.24	J	1.2		<0.50	U	0.72		6.1		<0.05	U	8.9		
	78	7/7/2020	0.40	J	0.23	J	<0.25	U	<0.25	U	<0.25	U	0.27	J	1.2		<0.50	U	0.82		5.5		<0.05	U	8.4		
	82	8/4/2020	0.30	J	0.20	J	<0.25	U	<0.25	U	<0.25	U	0.25	J	1.1		<0.50	U	0.63		4.9		<0.05	U	7.4		
	0	9/21/2020	0.44	J	0.26	J	<0.25	U	<0.25	U	<0.25	U	0.29	J	1.2	J+	<0.50	U	0.80	J+	5.5	J+	<0.05	U	8.5		
Maximum:			0.61	J	0.26	J	<0.25	U	<0.25	U	<0.25	U	0.35	J	1.8		<0.50	U	1.1		6.3		<0.050	U	10.4		
Percent of Total:			5.4		1.7		NC		NC		NC		3.5		16.6		NC		10.7		62.2		NC		100.0		
TS-OU2-EFF-1A	38	10/2/2019	0.63		0.16	J	<0.25	U	<0.25	U	<0.25	U	0.37	J	1.7		<0.50	U	<0.25	U	0.73		<0.05	U	3.6		
	43	11/5/2019	0.56		0.16	J	<0.25	U	<0.25	U	<0.25	U	0.34	J	1.7		<0.50	U	<0.25	U	1.1		<0.05	U	3.9		
	48	12/11/2019	0.40	J	0.14	J	<0.25	U	<0.25	U	<0.25	U	0.33	J	1.7		<0.50	U	<0.25	U	1.7		<0.05	U	4.3		
	51	1/6/2020	0.39	J	0.14	J	<0.25	U	<0.25	U	<0.25	U	0.33	J	1.6		<0.50	U	<0.25	U	1.5		<0.05	U	4.0		
	56	2/4/2020	0.48	J	0.18	J	<0.25	U	<0.25	U	<0.25	U	0.34	J	1.7		<0.50	U	<0.25	U	1.8		<0.05	U	4.5		
	60	3/3/2020	0.56		<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.38	J	1.8		<0.50	U	<0.25	U	2.5		<0.05	U	5.2		
	64	3/31/2020	0.43	J	0.16	J	<0.25	U	<0.25	U	<0.25	U	0.29	J	1.6		<0.50	U	0.11	J	2.3		<0.05	U	4.9		
	68	4/28/2020	0.48	J	0.17	J	<0.25	U	<0.25	U	<0.25	U	<0.50	U	1.7		<0.50	U	0.11	J	2.5		<0.05	U	5.0		
	72	5/27/2020	0.49	J	0.19	J	<0.25	U	<0.25	U	<0.25	U	0.35	J	1.7		<0.50	U	0.17	J	3.1		<0.05	U	6.0		
	76	6/23/2020	0.40	J	0.15	J	<0.25	U	<0.25	U	<0.25	U	0.31	J	1.5		<0.50	U	0.15	J	3.1		<0.05	U	5.6		
	78	7/7/2020	0.43	J	0.16	J	<0.25	U	<0.25	U	<0.25	U	0.30	J	1.6		<0.50	U	0.20	J	3.5		<0.05	U	6.2		
	80	7/21/2020	0.43	J	<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.32	J	1.5		<0.50	U	0.24	J	3.6		<0.05	U	6.1		
	82	8/4/2020	0.30	J	0.12	J	<0.25	U	<0.25	U	<0.25	U	0.25	J	1.3		<0.50	U	0.19	J	3.1		<0.05	U	5.3		
0	9/21/2020	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U		<0.50	U	<0.25	U	<0.25	U	<0.05	U	0.0		

Table 8. Summary of Groundwater Treatment Plant Analytical Results

Station	GAC Cycle Week #*	Analyte: Units: Date:	1,1-DCA (µg/L)		1,2-DCA (µg/L)		1,2-DCPA (µg/L)		Benzene (µg/L)		CT (µg/L)		Chloroform (µg/L)		cis-1,2-DCE (µg/L)		MC (µg/L)		PCE (µg/L)		TCE (µg/L)		VC (µg/L)		Total COCs (µg/L)	1,2,3-TCP ¹ (µg/L)	
			Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Value	Value
TS-OU2-EFF-1B	43	11/5/2019	0.70		0.17	J	<0.25	U	<0.25	U	<0.25	U	0.38	J	0.86		<0.50	U	<0.25	U	<0.25	U	<0.05	U	2.1		
	51	1/6/2020	0.48	J	0.16	J	<0.25	U	<0.25	U	<0.25	U	0.37	J	1.3		<0.50	U	<0.25	U	<0.25	U	<0.05	U	2.3		
	60	3/3/2020	0.65		0.19	J	<0.25	U	<0.25	U	<0.25	U	0.46	J	1.8		<0.50	U	<0.25	U	<0.25	U	<0.05	U	3.1		
	64	3/31/2020	0.51		0.18	J	<0.25	U	<0.25	U	<0.25	U	0.36	J	1.8		<0.50	U	<0.25	U	<0.25	U	<0.05	U	2.9		
	72	5/27/2020	0.58		0.20	J	<0.25	U	<0.25	U	<0.25	U	0.42	J	2.0		<0.50	U	<0.25	U	0.26	J	<0.05	U	3.5		
	78	7/7/2020	0.47	J	0.16	J	<0.25	U	<0.25	U	<0.25	U	0.35	J	1.9		<0.50	U	<0.25	U	0.41	J	<0.05	U	3.3		
	82	8/4/2020	0.39	J	0.14	J	<0.25	U	<0.25	U	<0.25	U	0.31	J	1.7		<0.50	U	<0.25	U	0.45	J	<0.05	U	3.0		
	0	9/21/2020	0.48	J	0.16	J	<0.25	U	<0.25	U	<0.25	U	0.35	J	1.9		<0.50	U	<0.25	U	0.99		<0.05	U	3.9		
TS-OU2-EFF-1C	43	11/5/2019	0.66		0.11	J	<0.25	U	<0.25	U	<0.25	U	0.21	J	0.12	J	<0.50	U	<0.25	U	<0.25	U	<0.05	U	1.1		
	51	1/6/2020	0.59		0.14	J	<0.25	U	<0.25	U	<0.25	U	0.27	J	0.32	J	<0.50	U	<0.25	U	<0.25	U	<0.05	U	1.3		
	60	3/3/2020	0.81		<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.43	J	0.72		<0.50	U	<0.25	U	<0.25	U	<0.05	U	2.0		
	64	3/31/2020	0.64		0.19	J	<0.25	U	<0.25	U	<0.25	U	0.37	J	0.83		<0.50	U	<0.25	U	<0.25	U	<0.05	U	2.0		
	72	5/27/2020	0.77		0.24	J	<0.25	U	<0.25	U	<0.25	U	0.49	J	1.2		<0.50	U	<0.25	U	<0.25	U	<0.05	U	2.7		
	78	7/7/2020	0.59		0.19	J	<0.25	U	<0.25	U	<0.25	U	0.42	J	1.3		<0.50	U	<0.25	U	<0.25	U	<0.05	U	2.5		
	82	8/4/2020	0.48	J	0.16	J	<0.25	U	<0.25	U	<0.25	U	0.36	J	1.2		<0.50	U	<0.25	U	<0.25	U	<0.05	U	2.2		
	0	9/21/2020	0.58		0.20	J	<0.25	U	<0.25	U	<0.25	U	0.43	J	1.6		<0.50	U	<0.25	U	<0.25	U	<0.05	U	2.8		
TS-OU2-EFF-2A	38	10/2/2019	0.56		0.20	J	<0.25	U	<0.25	U	<0.25	U	0.37	J	1.6		<0.50	U	<0.25	U	0.77		<0.05	U	3.5		
	43	11/5/2019	0.53		0.19	J	<0.25	U	<0.25	U	<0.25	U	0.35	J	1.6		<0.50	U	<0.25	U	1.0		<0.05	U	3.7		
	48	12/11/2019	0.38	J	0.16	J	<0.25	U	<0.25	U	<0.25	U	0.33	J	1.6		<0.50	U	<0.25	U	1.6		<0.05	U	4.1		
	51	1/6/2020	0.37	J	0.16	J	<0.25	U	<0.25	U	<0.25	U	0.31	J	1.4		<0.50	U	<0.25	U	1.9		<0.05	U	4.1		
	56	2/4/2020	0.49	J	0.19	J	<0.25	U	<0.25	U	<0.25	U	0.33	J	1.6		<0.50	U	<0.25	U	1.9		<0.05	U	4.5		
	60	3/3/2020	0.54		0.18	J	<0.25	U	<0.25	U	<0.25	U	0.37	J	1.7		<0.50	U	<0.25	U	2.7		<0.05	U	5.5		
	64	3/31/2020	0.42	J	0.17	J	<0.25	U	<0.25	U	<0.25	U	0.29	J	1.6		<0.50	U	<0.25	U	2.7		<0.05	U	5.2		
	68	4/28/2020	0.47	J	0.18	J	<0.25	U	<0.25	U	<0.25	U	<0.50	U	1.6		<0.50	U	0.14	J	3.4		<0.05	U	5.8		
	72	5/27/2020	0.52		0.20	J	<0.25	U	<0.25	U	<0.25	U	0.36	J	1.7		<0.50	U	0.13	J	3.8		<0.05	U	6.7		
	76	6/23/2020	0.41	J	0.14	J	<0.25	U	<0.25	U	<0.25	U	0.31	J	1.4		<0.50	U	0.12	J	3.8		<0.05	U	6.2		
	78	7/7/2020	0.43	J	0.16	J	<0.25	U	<0.25	U	<0.25	U	0.30	J	1.6		<0.50	U	0.17	J	4.1		<0.05	U	6.8		
	80	7/21/2020	0.43	J	<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.31	J	1.5		<0.50	U	0.21	J	4.3		<0.05	U	6.8		
	82	8/4/2020	0.33	J	0.14	J	<0.25	U	<0.25	U	<0.25	U	0.27	J	1.4		<0.50	U	0.15	J	3.8		<0.05	U	6.1		
	0	9/21/2020	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.50	U	<0.25	U	<0.25	U	<0.05	U	0.0		
TS-OU2-EFF-2B	43	11/5/2019	0.63		0.25	J	<0.25	U	<0.25	U	<0.25	U	0.36	J	0.92		<0.50	U	<0.25	U	<0.25	U	<0.05	U	2.2		
	51	1/6/2020	0.43	J	0.19	J	<0.25	U	<0.25	U	<0.25	U	0.35	J	1.1		<0.50	U	<0.25	U	<0.25	U	<0.05	U	2.1		
	60	3/3/2020	0.63		0.21	J	<0.25	U	<0.25	U	<0.25	U	0.45	J	1.6		<0.50	U	<0.25	U	0.21	J	<0.05	U	3.1		
	64	3/31/2020	0.49	J	0.20	J	<0.25	U	<0.25	U	<0.25	U	0.34	J	1.5		<0.50	U	<0.25	U	0.27	J	<0.05	U	2.8		
	72	5/27/2020	0.56		0.22	J	<0.25	U	<0.25	U	<0.25	U	0.41	J	1.7		<0.50	U	<0.25	U	0.65		<0.05	U	3.5		
	78	7/7/2020	0.47	J	0.18	J	<0.25	U	<0.25	U	<0.25	U	0.35	J	1.8		<0.50	U	<0.25	U	0.89		<0.05	U	3.7		
	82	8/4/2020	0.40	J	0.16	J	<0.25	U	<0.25	U	<0.25	U	0.32	J	1.6		<0.50	U	<0.25	U	0.95		<0.05	U	3.4		
	0	9/21/2020	0.49	J	0.17	J	<0.25	U	<0.25	U	<0.25	U	0.36	J	1.8		<0.50	U	<0.25	U	1.6		<0.05	U	4.4		

Table 8. Summary of Groundwater Treatment Plant Analytical Results

Station	GAC Cycle Week #*	Analyte: Units: Date:	1,1-DCA (µg/L)		1,2-DCA (µg/L)		1,2-DCPA (µg/L)		Benzene (µg/L)		CT (µg/L)		Chloroform (µg/L)		cis-1,2-DCE (µg/L)		MC (µg/L)		PCE (µg/L)		TCE (µg/L)		VC (µg/L)		Total COCs (µg/L)	1,2,3-TCP ¹ (µg/L)	
			Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Value	Value
TS-OU2-EFF-2C	43	11/5/2019	0.55		0.19	J	<0.25	U	<0.25	U	<0.25	U	0.23	J	0.28	J	<0.50	U	<0.25	U	<0.25	U	<0.05	U	1.3		
	51	1/6/2020	0.53		0.21	J	<0.25	U	<0.25	U	<0.25	U	0.29	J	0.52		<0.50	U	<0.25	U	<0.25	U	<0.05	U	1.6		
	60	3/3/2020	0.70		0.22	J	<0.25	U	<0.25	U	<0.25	U	0.41	J	0.81		<0.50	U	<0.25	U	1.3		<0.05	U	3.4		
	64	3/31/2020	0.53		0.21	J	<0.25	U	<0.25	U	<0.25	U	0.33	J	0.86		<0.50	U	<0.25	U	<0.25	U	<0.05	U	1.9		
	72	5/27/2020	0.46	J	0.22	J	<0.25	U	<0.25	U	<0.25	U	0.32	J	1.1		<0.50	U	<0.25	U	<0.25	U	<0.05	U	2.1		
	78	7/7/2020	0.51		0.20	J	<0.25	U	<0.25	U	<0.25	U	0.38	J	1.3		<0.50	U	<0.25	U	<0.25	U	<0.05	U	2.4		
	82	8/4/2020	0.43	J	0.18	J	<0.25	U	<0.25	U	<0.25	U	0.32	J	1.2		<0.50	U	<0.25	U	<0.25	U	<0.05	U	2.1		
	0	9/21/2020	0.56		0.21	J	<0.25	U	<0.25	U	<0.25	U	0.41	J	1.5		<0.50	U	<0.25	U	0.17	J	<0.05	U	2.9		
TS-OU2-INJ-01	38	10/2/2019	0.50		0.12	J	<0.25	U	<0.25	U	<0.25	U	0.15	J	0.13	J	<0.50	U	<0.25	U	<0.25	U	<0.05	U	0.90		
	43	11/5/2019	0.60		0.14	J	<0.25	U	<0.25	U	<0.25	U	0.21	J	0.20	J	<0.50	U	<0.25	U	<0.25	U	<0.05	U	1.2		
	48	12/11/2019	0.66		0.18	J	<0.25	U	<0.25	U	<0.25	U	0.27	J	0.35	J	<0.50	U	<0.25	U	<0.25	U	<0.05	U	1.5		
	51	1/6/2020	0.53		0.18	J	<0.25	U	<0.25	U	<0.25	U	0.28	J	0.45	J	<0.50	U	<0.25	U	<0.25	U	<0.05	U	1.4		
	56	2/4/2020	0.56		0.18	J	<0.25	U	<0.25	U	<0.25	U	0.30	J	0.51		<0.50	U	<0.25	U	<0.25	U	<0.05	U	1.6		
	60	3/3/2020	0.70		<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.39	J	0.72		<0.50	U	<0.25	U	<0.25	U	<0.05	U	1.8		
	64	3/31/2020	0.56		0.19	J	<0.25	U	<0.25	U	<0.25	U	0.34	J	0.84		<0.50	U	<0.25	U	<0.25	U	<0.05	U	1.9		
	68	4/28/2020	0.61		0.22	J	<0.25	U	<0.25	U	<0.25	U	<0.50	U	1.0		<0.50	U	<0.25	U	<0.25	U	<0.05	U	1.8		
	72	5/27/2020	0.64		0.23	J	<0.25	U	<0.25	U	<0.25	U	0.42	J	1.1		<0.50	U	<0.25	U	<0.25	U	<0.05	U	2.4		
	76	6/23/2020	0.48	J	0.17	J	<0.25	U	<0.25	U	<0.25	U	0.35	J	1.2		<0.50	U	<0.25	U	<0.25	U	<0.05	U	2.2		
	78	7/7/2020	0.51		0.19	J	<0.25	U	<0.25	U	<0.25	U	0.38	J	1.3		<0.50	U	<0.25	U	<0.25	U	<0.05	U	2.4		
	80	7/21/2020	0.53		0.19	J	<0.25	U	<0.25	U	<0.25	U	0.39	J	1.3		<0.50	U	<0.25	U	<0.25	U	<0.05	U	2.4		
	82	8/4/2020	0.42	J	0.16	J	<0.25	U	<0.25	U	<0.25	U	0.32	J	1.2		<0.50	U	<0.25	U	<0.25	U	<0.05	U	2.1		
	0	9/21/2020	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U		<0.50	U	<0.25	U	<0.25	U	<0.05	U	0.0	

Notes:

Results in **bold** are concentrations above the Aquifer Cleanup Level (ACL)

Results in **gray** are not detected concentrations (reported as <limit of detection [LOD])

#: number of weeks after last GAC change-out

*GAC was initially placed at the new OU2 GWTP on 11/30/18 and GAC change-out on 9/16/20, the average GAC cycle at the old OU2 GWTP was approximately 50 weeks

¹ 1,2,3-TCP was analyzed for at the GWTP influent at the request of the California Regional Water Quality Control Board, Central Coast Region.

Data Validation Qualifiers:

J: Laboratory or validation qualifier, estimated result between the detection limit (DL) and the limit of quantitation (LOQ) with a possible high (+) or low (-) bias.

U: Laboratory or validation qualifier, concentration not detected (reported as <LOD).

Acronyms and Abbreviations:

µg/L: micrograms per liter

COC: chemical of concern

GAC: granular activated carbon

NC: not calculated

Qual: qualifier

Station Descriptions:

TS-OU2-INJ-01: Injection point of compliance, the OU2 GWTP effluent pipeline

TS-OU2-INF-01 and TS-OU2-INF-02: Influent sampling points

TS-OU2-EFF-1A: Line 1 GAC Vessel 1A effluent

TS-OU2-EFF-1B: Line 1 GAC Vessel 1B effluent

TS-OU2-EFF-1C: Line 1 GAC Vessel 1C effluent

TS-OU2-EFF-2A: Line 2 GAC Vessel 2A effluent

TS-OU2-EFF-2B: Line 2 GAC Vessel 2B effluent

TS-OU2-EFF-2C: Line 2 GAC Vessel 2C effluent

Analyte Names:

1,1-DCA: 1,1-dichloroethane

1,2-DCA: 1,2-dichloroethane

1,2-DCPA: 1,2-dichloropropane

1,2,3-TCP: 1,2,3-trichloropropane

cis-1,2-DCE: cis-1,2-dichloroethene

CT: carbon tetrachloride

MC: methylene chloride

PCE: tetrachloroethene

TCE: trichloroethene

VC: vinyl chloride

Table 9. Groundwater Extraction Well Flows and Total COC Concentrations

Month-Year	EW-OU2-01-A ^{1,5}				EW-OU2-02-A ²				EW-OU2-03-A ^{1,5}				EW-OU2-04-A ²			
	Runtime	Average Flow Rate	Total Volume	Total COCs	Runtime	Average Flow Rate	Total Volume	Total COCs	Runtime	Average Flow Rate	Total Volume	Total COCs	Runtime	Average Flow Rate	Total Volume	Total COCs
	(percent)	(gpm)	(gallons)	(µg/L)	(percent)	(gpm)	(gallons)	(µg/L)	(percent)	(gpm)	(gallons)	(µg/L)	(percent)	(gpm)	(gallons)	(µg/L)
Oct-2019	0	0	0	NS	0	0	0	NS	0	0	0	NS	0	0	0	NS
Nov-2019	0	0	0	NS	0	0	0	NS	0	0	0	NS	0	0	0	NS
Dec-2019	0	0	0	NS	0	0	0	NS	0	0	0	NS	0	0	0	NS
Jan-2020	0	0	0	NS	0	0	0	NS	0	0	0	NS	0	0	0	NS
Feb-2020	0	0	0	NS	0	0	0	NS	0	0	0	NS	0	0	0	NS
Mar-2020	0	0	0	NS	0	0	0	NS	0	0	0	NS	0	0	0	1.7
April-2020	0	0	0	NS	0	0	0	NS	0	0	0	NS	0	0	0	NS
May-2020	0	0	0	NS	0	0	0	NS	0	0	0	NS	0	0	0	NS
June-2020	0	0	0	NS	0	0	0	NS	0	0	0	NS	0	0	0	1.7
July-2020	0	0	0	NS	0	0	0	NS	0	0	0	NS	0	0	0	NS
Aug-2020	0	0	0	NS	0	0	0	NS	0	0	0	NS	0	0	0	NS
Sept-2020	0	0	0	NS	0	0	0	NS	0	0	0	NS	0	0	0	2.5
Total/Ave:	0	0	0	NS	0	0	0	NS	0	0	0	NS	0	0	0	2.0

Month-Year	EW-OU2-05-A ²				EW-OU2-06-A ²				EW-OU2-07-A ^{1,5}				EW-OU2-09-A ²			
	Runtime	Average Flow Rate	Total Volume	Total COCs	Runtime	Average Flow Rate	Total Volume	Total COCs	Runtime	Average Flow Rate	Total Volume	Total COCs	Runtime	Average Flow Rate	Total Volume	Total COCs
	(percent)	(gpm)	(gallons)	(µg/L)	(percent)	(gpm)	(gallons)	(µg/L)	(percent)	(gpm)	(gallons)	(µg/L)	(percent)	(gpm)	(gallons)	(µg/L)
Oct-2019	0	0	0	NS	0	0	0	NS	0	0	0	NS	0	0	0	NS
Nov-2019	0	0	0	NS	0	0	0	NS	0	0	0	NS	0	0	0	NS
Dec-2019	0	0	0	NS	0	0	0	NS	0	0	0	NS	0	0	0	NS
Jan-2020	0	0	0	NS	0	0	0	NS	0	0	0	NS	0	0	0	NS
Feb-2020	0	0	0	NS	0	0	0	NS	0	0	0	NS	0	0	0	NS
Mar-2020	0	0	0	4.2	0	0	0	5.4	0	0	0	NS	0	0	0	NS
April-2020	0	0	0	NS	0	0	0	NS	0	0	0	NS	0	0	0	NS
May-2020	0	0	0	NS	0	0	0	NS	0	0	0	NS	0	0	0	NS
June-2020	0	0	0	5.0	0	0	0	4.7	0	0	0	NS	0	0	0	NS
July-2020	0	0	0	NS	0	0	0	NS	0	0	0	NS	0	0	0	NS
Aug-2020	0	0	0	NS	0	0	0	NS	0	0	0	NS	2	20	15,178	NS
Sept-2020	0	0	0	6.5	0	0	0	4.4	0	0	0	NS	99	28	1,198,714	0.36
Total/Ave:	0	0	0	5.2	0	0	0	4.8	0	0	0	NS	8	4	1,213,891	0.36

Table 9. Groundwater Extraction Well Flows and Total COC Concentrations

Month-Year	EW-OU2-10-A				EW-OU2-11-AR				EW-OU2-12-A				EW-OU2-13-A			
	Runtime	Average Flow Rate	Total Volume	Total COCs	Runtime	Average Flow Rate	Total Volume	Total COCs	Runtime	Average Flow Rate	Total Volume	Total COCs	Runtime	Average Flow Rate	Total Volume	Total COCs
	(percent)	(gpm)	(gallons)	(µg/L)	(percent)	(gpm)	(gallons)	(µg/L)	(percent)	(gpm)	(gallons)	(µg/L)	(percent)	(gpm)	(gallons)	(µg/L)
Oct-2019	98	20	870,600	NS	98	16	696,480	NS	98	8	348,240	NS	98	13	565,890	NS
Nov-2019	98	20	845,400	NS	98	19	803,130	NS	98	9	380,430	NS	98	13	549,510	NS
Dec-2019	100	20	891,014	2.2	97	17	733,078	4.6	97	8	344,978	22	100	13	579,159	14
Jan-2020	70	24	749,952	NS	92	22	908,160	NS	92	8	330,240	NS	92	14	577,920	NS
Feb-2020	97	22	894,300	NS	97	19	772,350	NS	97	8	325,200	NS	97	14	569,100	NS
Mar-2020	98	21	914,760	3.3	98	17	740,520	5.7	98	7	304,920	27	98	14	609,840	17
April-2020	37	19	303,696	NS	100	14	604,800	NS	100	7	302,400	NS	100	13	561,600	NS
May-2020	98	14	609,961	NS	98	13	566,392	NS	98	7	304,980	NS	98	13	566,392	NS
June-2020	99	13	555,422	3.5	99	10	427,248	5.5	99	10	427,248	27	99	13	555,422	17
July-2020	84	14	527,466	NS	84	17	640,495	NS	84	6	226,057	NS	84	14	527,466	NS
Aug-2020	98	14	613,086	NS	98	15	656,878	NS	98	5	218,959	NS	98	13	569,294	NS
Sept-2020	99	9	385,301	3.1	99	11	470,923	5.6	99	5	214,056	24	99	13	556,546	16
Total/Ave:	90	18	8,160,959	3.0	96	16	8,020,454	5.3	96	7	3,727,709	25	97	13	6,788,140	16

Month-Year	EW-OU2-14-A ³				EW-OU2-16-A				EW-OU2-17-A				EW-OU2-18-A			
	Runtime	Average Flow Rate	Total Volume	Total COCs	Runtime	Average Flow Rate	Total Volume	Total COCs	Runtime	Average Flow Rate	Total Volume	Total COCs	Runtime	Average Flow Rate	Total Volume	Total COCs
	(percent)	(gpm)	(gallons)	(µg/L)	(percent)	(gpm)	(gallons)	(µg/L)	(percent)	(gpm)	(gallons)	(µg/L)	(percent)	(gpm)	(gallons)	(µg/L)
Oct-2019	0	0	0	NS	98	8	348,240	NS	98	11	478,830	NS	98	9	391,770	NS
Nov-2019	0	0	0	NS	98	8	338,160	NS	98	11	464,970	NS	98	6	253,620	NS
Dec-2019	0	0	0	NS	100	9	400,956	21	100	17	757,362	16	100	5	222,754	24
Jan-2020	0	0	0	NS	92	11	454,080	NS	92	15	619,200	NS	92	8	330,240	NS
Feb-2020	0	0	0	NS	97	11	447,150	NS	97	9	365,850	NS	97	6	243,900	NS
Mar-2020	0	0	0	NS	98	9	392,040	25	98	8	348,480	21	98	7	304,920	32
April-2020	0	0	0	NS	100	8	345,600	NS	100	6	259,200	NS	100	6	259,200	NS
May-2020	0	0	0	NS	98	8	348,549	NS	98	6	261,412	NS	98	6	261,412	NS
June-2020	0	0	0	NS	99	10	427,248	25	90	9	349,920	22	90	9	349,920	34
July-2020	0	0	0	NS	84	11	414,438	NS	81	8	289,981	NS	81	9	326,229	NS
Aug-2020	0	0	0	NS	98	8	350,335	NS	95	7	296,544	NS	95	7	296,544	NS
Sept-2020	0	0	0	NS	99	7	299,678	23	76	7	229,824	18	76	8	262,656	30
Total/Ave:	0	0	0	NS	97	9	4,566,474	23	94	10	4,721,573	19	94	7	3,503,164	30

Table 9. Groundwater Extraction Well Flows and Total COC Concentrations

Month-Year	EW-OU2-19-A				EW-OU2-20-A ⁷			
	Runtime	Average Flow Rate	Volume	Total COCs	Runtime	Average Flow Rate	Volume	Total COCs
	(percent)	(gpm)	(gallons)	(µg/L)	(percent)	(gpm)	(gallons)	(µg/L)
Oct-2019	98	10	435,300	NS	50	3	66,960	NS
Nov-2019	98	6	253,620	NS	0	0	0	NS
Dec-2019	100	3	133,652	9.4	92	3	122,805	23
Jan-2020	92	8	330,240	NS	86	5	191,952	NS
Feb-2020	97	9	365,850	NS	97	3	121,950	NS
Mar-2020	98	9	392,040	47	98	3	130,680	18
April-2020	100	8	345,600	NS	100	3	129,600	NS
May-2020	98	8	348,549	NS	55	3	73,656	NS
June-2020	99	14	598,147	43	0	0	0	NS
July-2020	84	7	263,733	NS	79	3	106,199	NS
Aug-2020	98	8	350,335	NS	98	3	131,376	NS
Sept-2020	99	6	256,867	39	99	4	171,245	17
Total/Ave:	97	8	4,073,934	34	71	3	1,246,422	19

Table 9. Groundwater Extraction Well Flows and Total COC Concentrations

Month-Year	EW-OU2-01-180 ^{1,6}				EW-OU2-02-180R				EW-OU2-03-180				EW-OU2-04-180 ^{1,5}			
	Runtime	Average Flow Rate	Total Volume	Total COCs	Runtime	Average Flow Rate	Total Volume	Total COCs	Runtime	Average Flow Rate	Total Volume	Total COCs	Runtime	Average Flow Rate	Total Volume	Total COCs
	(percent)	(gpm)	(gallons)	(µg/L)	(percent)	(gpm)	(gallons)	(µg/L)	(percent)	(gpm)	(gallons)	(µg/L)	(percent)	(gpm)	(gallons)	(µg/L)
Oct-2019	0	0	0	NS	98	100	4,353,000	NS	98	177	7,704,810	NS	0	0	0	NS
Nov-2019	0	0	0	NS	98	100	4,227,000	NS	98	177	7,481,790	NS	0	0	0	NS
Dec-2019	0	0	0	0.11	100	97	4,321,420	7.1	100	177	7,885,477	7.9	0	0	0	NS
Jan-2020	0	0	0	NS	92	100	4,128,000	NS	74	181	5,979,082	NS	0	0	0	NS
Feb-2020	0	0	0	NS	97	100	4,065,000	NS	82	167	5,718,614	NS	0	0	0	NS
Mar-2020	0	0	0	4.1	98	90	3,920,400	7.5	98	156	6,795,360	9.7	0	0	0	NS
April-2020	0	0	0	NS	100	88	3,801,600	NS	100	164	7,084,800	NS	0	0	0	NS
May-2020	0	0	0	NS	98	85	3,703,334	NS	98	166	7,232,394	NS	0	0	0	NS
June-2020	0	0	0	4.7	99	81	3,460,709	7.9	99	164	7,006,867	8.9	0	0	0	NS
July-2020	0	0	0	NS	84	83	3,127,121	NS	84	170	6,404,947	NS	0	0	0	NS
Aug-2020	0	0	0	NS	98	84	3,678,515	NS	98	164	7,181,862	NS	0	0	0	NS
Sept-2020	0	0	0	4.3	99	90	3,853,008	7.4	99	166	7,106,659	8.6	0	0	0	NS
Total/Ave:	0	0	0	3.3	97	92	46,639,107	7.5	94	169	83,582,663	8.8	0	0	0	NS

Month-Year	EW-OU2-05-180				EW-OU2-06-180				EW-OU2-07-180 ^{1,6}				EW-OU2-08-180 ¹			
	Runtime	Average Flow Rate	Total Volume	Total COCs	Runtime	Average Flow Rate	Total Volume	Total COCs	Runtime	Average Flow Rate	Total Volume	Total COCs	Runtime	Average Flow Rate	Total Volume	Total COCs
	(percent)	(gpm)	(gallons)	(µg/L)	(percent)	(gpm)	(gallons)	(µg/L)	(percent)	(gpm)	(gallons)	(µg/L)	(percent)	(gpm)	(gallons)	(µg/L)
Oct-2019	98	167	7,269,510	NS	98	125	5,441,250	NS	0	0	0	NS	0	0	0	NS
Nov-2019	98	168	7,101,360	NS	98	129	5,452,830	NS	0	0	0	NS	0	0	0	NS
Dec-2019	100	167	7,439,970	3.8	100	126	5,613,391	6.3	0	0	0	2.9	0	0	0	2.8
Jan-2020	92	171	7,058,880	NS	92	132	5,448,960	NS	0	0	0	NS	0	0	0	NS
Feb-2020	97	172	6,991,800	NS	94	129	5,063,818	NS	0	0	0	NS	0	0	0	NS
Mar-2020	98	170	7,405,200	3.4	98	127	5,532,120	6.2	0	0	0	2.9	0	0	0	2.5
April-2020	100	169	7,300,800	NS	100	129	5,572,800	NS	0	0	0	NS	0	0	0	NS
May-2020	98	168	7,319,532	NS	98	130	5,663,923	NS	0	0	0	NS	0	0	0	NS
June-2020	99	169	7,220,491	3.5	99	128	5,468,774	6.3	0	0	0	2.8	0	0	0	1.9
July-2020	84	169	6,367,271	NS	84	126	4,747,196	NS	0	0	0	NS	0	0	0	NS
Aug-2020	98	168	7,357,029	NS	98	127	5,561,564	NS	0	0	0	NS	0	0	0	NS
Sept-2020	99	167	7,149,470	3.6	99	125	5,351,400	7.0	0	0	0	3.0	0	0	0	2.3
Total/Ave:	97	169	85,981,314	3.6	96	128	64,918,026	6.5	0	0	0	2.9	0	0	0	2.4

Table 9. Groundwater Extraction Well Flows and Total COC Concentrations

Month- Year	EW-OU2-09-180 ⁴				EW-OU2-10-180				EW-OU2-11-180				EW-OU2-12-180 ⁸			
	Runtime	Average Flow Rate	Total Volume	Total COCs	Runtime	Average Flow Rate	Total Volume	Total COCs	Runtime	Average Flow Rate	Total Volume	Total COCs	Runtime	Average Flow Rate	Total Volume	Total COCs
	(percent)	(gpm)	(gallons)	(µg/L)	(percent)	(gpm)	(gallons)	(µg/L)	(percent)	(gpm)	(gallons)	(µg/L)	(percent)	(gpm)	(gallons)	(µg/L)
Oct-2019	94	56	2,352,349	NS	98	120	5,223,600	NS	98	40	1,741,200	NS	98	40	1,741,200	NS
Nov-2019	98	58	2,451,660	NS	98	123	5,199,210	NS	98	20	845,400	NS	98	62	2,620,740	NS
Dec-2019	100	58	2,583,942	4.7	100	122	5,435,188	9.0	84	22	822,001	8.9	100	60	2,673,043	8.5
Jan-2020	92	63	2,600,640	NS	92	131	5,407,680	NS	92	23	949,440	NS	50	60	1,339,200	NS
Feb-2020	97	61	2,479,650	NS	97	125	5,081,250	NS	94	15	588,816	NS	0	0	0	NS
Mar-2020	98	62	2,700,720	4.8	98	125	5,445,000	11	98	9	392,040	9.0	0	0	0	NS
April-2020	100	60	2,592,000	NS	100	123	5,313,600	NS	100	11	475,200	NS	0	0	0	NS
May-2020	98	61	2,657,687	NS	98	123	5,358,943	NS	98	16	697,098	NS	0	0	0	NS
June-2020	33	58	826,848	5.3	99	120	5,126,976	12	90	20	777,600	7.5	0	0	0	NS
July-2020	84	54	2,034,513	NS	84	134	5,048,605	NS	81	7	253,734	NS	0	0	0	NS
Aug-2020	98	53	2,320,968	NS	98	134	5,868,107	NS	95	4	169,453	NS	0	0	0	NS
Sept-2020	99	52	2,226,182	4.9	99	133	5,693,890	10	76	3	98,496	6.5	0	0	0	NS
Total/Ave:	91	58	27,827,159	4.9	97	126	64,202,048	10	92	16	7,810,478	8.0	29	19	8,374,183	8.5

Notes:

- ¹ Extraction well offline due to low COC concentrations.
- ² Extraction well offline due to construction activities and transition to new OU2 GWTP (western network and EW-OU2-09-A).
- ³ EW-OU2-14-A offline 3/16/17 due to programmable logic controller (PLC) issue and RORE Innovative Solutions Joint Venture separating pipeline during constructing of new GWTP.
- ⁴ EW-OU2-09-180 online as part of the Operable Unit Carbon Tetrachloride Plume (OUCTP) Groundwater Remedy.
- ⁵ Removed from the sampling program according to QAPP decision rules.
- ⁶ Extraction well pump removed, well sampled with passive diffusion bag.
- ⁷ EW-OU2-20-A offline partially during the reporting period due to broken pipe in vault.
- ⁸ EW-OU2-12-180 offline partially during reporting period due to pump failure and casing or screen failure.

Acronyms and Abbreviations:

µg/L: micrograms per liter QAPP: Quality Assurance Project Plan
 COC: chemical of concern
 gpm: gallons per minute
 GWTP: Groundwater Treatment Plant
 ND: not detected above the limit of detection for all COCs
 NS: not sampled (well sample schedule is in the QAPP)

Table 10. GWTP Influent/Effluent TCE Concentrations and Efficiency

GAC was filled at the new OU2 GWTP on: 11/30/2018

GAC change-out was conducted on: 9/16/2020

TCE ¹									
Month-Year	Influent Concentration (µg/L)	Primary GAC Vessel Effluent Concentration (µg/L)	Primary GAC Vessel Efficiency (percent)	Secondary GAC Vessel Effluent Concentration (µg/L)	Secondary GAC Vessel Efficiency (percent)	Polishing GAC Vessel Effluent Concentration (µg/L)	Polishing GAC Vessel Efficiency (percent)	GWTP Effluent Concentration ² (µg/L)	GWTP Efficiency (percent)
Oct-2019	NS	0.75	NC	NS	NC	NS	NC	ND	100
Nov-2019	5.4	1.1	80	ND	100	ND	NC	ND	100
Dec-2019	NS	1.7	NC	NS	NC	NS	NC	ND	100
Jan-2020	4.7	1.7	64	ND	100	ND	NC	ND	100
Feb-2020	NS	1.9	NC	NS	NC	NS	NC	ND	100
Mar-2020	4.7	2.6	46	0.24	91	ND	100	ND	100
April-2020	NS	3.0	NC	NS	NC	NS	NC	ND	100
May-2020	5.4	3.5	36	0.46	87	ND	100	ND	100
June-2020	NS	3.5	NC	NS	NC	NS	NC	ND	100
July-2020	5.0	3.9	22	0.65	83	ND	100	ND	100
Aug-2020	4.5	3.5	23	0.70	80	ND	100	ND	100
Sept-2020	5.1	1.3	74	0.17	87	ND	100	ND	100
Average:	5.0	2.3	49	0.44	90	ND	100	ND	100

Notes:

Results in **bold** are concentrations above the TCE Aquifer Cleanup Level (ACL) of 5.0 micrograms per liter (µg/L)

¹ See Table 8 for laboratory and data validation qualifiers

² Located at the TS-OU2-INJ-01 sampling point, injection point of compliance

Acronyms and Abbreviations:

µg/L: micrograms per liter

GAC: granular activated carbon

GWTP: groundwater treatment plant

NC: not calculated; efficiencies cannot be calculated when the location is not sampled.

ND: not detected

NS: not sampled per Quality Assurance Project Plan sampling schedule and GAC change-out cycle.

TCE: trichloroethene

Table 11. Groundwater Extraction Well Historic Data, Evaluation and Recommendations

Extraction Well	2019-20 Runtime (percent)	Flow Rates (gpm)				Total COCs (µg/L)					Evaluation	Recommendations
		Design	Historical Maximum	Historical Average	2019-20 Average	Historical Maximum	Historical Minimum	Historical Average	2019-20 Average	Trend		
A-Aquifer Western Network (OU2 Hydraulic Zone 4)¹												
EW-OU2-01-A	0	45	58	0	0	18	ND	3.3	NS	N/A	Did not operate during the reporting period (pump removed and converted to MW in May 2012). COC concentrations below ACLs since 1997. Removed from the GWMP per QAPP (last sampled 2015-3Q).	Continue non-operation.
EW-OU2-02-A	0	30	66	54	0	42	0.40	5.8	NS	N/A	COC concentrations below ACLs since 2002. Offline since 3/13/2018 due to pump failure. Pump replaced 1/29/2019, but operation pending connection to the new OU2 GWTP.	Operate and sample quarterly per the QAPP after connected to new OU2 GWTP.
EW-OU2-03-A	0	30	66	0	0	8.1	ND	1.6	NS	N/A	Not operated since 2004 due to low COC concentrations (pump removed). COC concentrations below ACLs since 1997. Removed from the GWMP in 2013 per QAPP (last sampled 2013-3Q).	Continue non-operation.
EW-OU2-04-A	0	35	87	52	0	34	0.85	7.0	2.0	Steady	COC concentrations below ACLs since 2004. Operated to capture COC plume north of A-Aquifer Eastern Network. Offline since October 2018 through the reporting period pending connection to the new OU2 GWTP. Sampling restarted 2020-1Q.	Operate after connected to new OU2 GWTP. Continue sampling quarterly per the QAPP.
EW-OU2-05-A	0	50	81	37	0	44	3.1	15	5.2	Steady	COC concentrations below ACLs since 2008 (except for chloroform in 2017-2Q). Concentrations of TCE in adjacent MW-OU2-40-A are above the ACL. Offline since August 2018 due to pump failure. Pump replaced 1/15/2020, but remained offline during the reporting period pending connection to the new OU2 GWTP. Sampling restarted 2020-1Q.	Operate after connected to new OU2 GWTP. Continue sampling quarterly per the QAPP.
EW-OU2-06-A	0	50	50	35	0	41	4.1	15	4.8	Steady	Concentrations of TCE below ACL since 2012. Concentrations of TCE in adjacent MW-OU2-40-A are above the ACL. New pump installed 1/16/2020, but offline since October 2018 through the reporting period pending connection to the new OU2 GWTP. Sampling restarted 2020-1Q.	Operate after connected to new OU2 GWTP. Continue sampling quarterly per the QAPP.
A-Aquifer Eastern Network (OU2 Hydraulic Zone 3)												
EW-OU2-07-A	0	25	33	0	0	74	ND	9.4	NS	N/A	Not operated since 2007 due to low COC concentrations. Concentrations of all COCs below ACLs since 2003. Removed from the GWMP in 2013 per the QAPP (last sampled 2013-3Q).	Continue non-operation.
EW-OU2-09-A	8	30	41	11	4	95	0.36	22	0.36	Down	Concentrations of COCs below ACLs since 2017-2Q. Well offline since 7/17/2018 due to pump failure during construction activities. Pump was replaced, but remained offline pending connection to the new OU2 GWTP. Well connected to the OU2 GWTP and restarted operation and sampling 8/31/2020.	Continue operation and sample quarterly per the QAPP.
EW-OU2-10-A	90	30	44	12	18	68	2.2	21	3.0	Steady	Concentrations of 1,2-DCA above ACL since installation in 1996 through 2019-2Q (except for 2001-1Q) and below ACL through the reporting period until it increased above the ACL again in 2020-2Q and 2020-3Q. Concentrations of VC at or below ACL since 2017-3Q. All other COC concentrations below ACLs.	Continue operation and sample quarterly per the QAPP.
EW-OU2-11-AR	96	30	23	17	16	5.7	3.7	4.8	5.3	Steady	Replacement well for decommissioned EW-OU2-11-A. Operational since 2018-4Q. All COC concentrations below ACLs.	Continue operation and sample quarterly per the QAPP.
EW-OU2-12-A	96	25	30	14	7	102	8.6	33	25	Up	Concentrations of 1,1-DCA; 1,2-DCA; PCE; TCE; and VC above ACLs.	Continue operation and sample quarterly per the QAPP.
EW-OU2-13-A	97	20	46	12	13	67	14	24	16	Steady	Concentrations of 1,2-DCA and TCE above ACLs.	Continue operation and sample quarterly per the QAPP.

Table 11. Groundwater Extraction Well Historic Data, Evaluation and Recommendations

Extraction Well	2019-20 Runtime (percent)	Flow Rates (gpm)				Total COCs (µg/L)					Trend	Evaluation	Recommendations
		Design	Historical Maximum	Historical Average	2019-20 Average	Historical Maximum	Historical Minimum	Historical Average	2019-20 Average				
A-Aquifer CSUMB Network (OU2 Hydraulic Zone 2)													
EW-OU2-14-A	0	20	35	14	0	20	1.0	5.8	NS	N/A	Well offline since 3/16/2017 and no longer sampled due to PLC issue and pipeline disconnected during new OU2 GWTP construction. TCE concentrations intermittently above ACL since 2014. Concentrations of all COCs below ACLs in adjacent MW-OU2-45-A since 2009 (except TCE in 2012-1Q). Concentrations of all COCs below ACLs in adjacent EW-OU2-15-A since 2002.	Operation not warranted. Assess pump operation for sampling or conversion to monitoring well.	
A-Aquifer Abrams/Imjin Network (OU2 Hydraulic Zone 1)													
EW-OU2-16-A	97	27	63	10	9	110	0.76	52	23	Down	Concentrations of 1,1-DCA; 1,2-DCA; cis-1,2-DCE; and VC above ACLs during the reporting period.	Continue operation and sample quarterly per the QAPP.	
EW-OU2-17-A	94	30	17	9	10	31	16	23	19	Down	New well operational since 2018-4Q. PCE and TCE concentrations above ACLs during the reporting period.	Continue operation and sample quarterly per the QAPP.	
EW-OU2-18-A	94	30	13	6	7	42	24	33	30	Down	New well operational since 2018-4Q. 1,1-DCA; 1,2-DCA; PCE; TCE; and VC concentrations above ACLs during the reporting period.	Continue operation and sample quarterly per the QAPP.	
EW-OU2-19-A	97	30	19	13	8	60	9	43	34	Down	New well operational since 2018-4Q. 1,1-DCA; 1,2-DCA; cis-1,2-DCE; PCE; TCE; and VC concentrations above ACLs during the reporting period.	Continue operation and sample quarterly per the QAPP.	
EW-OU2-20-A	71	30	8	2	3	37	17	24	19	Down	New well operational since 2018-4Q. 1,1-DCA; 1,2-DCA; cis-1,2-DCE; and VC concentrations above ACLs during the reporting period. Extraction well pump over-cycles due to slow groundwater recharge of the well. Offline partially due to broken pipe in the vault which was repaired.	Continue operation and sample quarterly per the QAPP.	
Upper 180-Foot Aquifer Western Network (OU2 Hydraulic Zone 9)													
EW-OU2-01-180	0	160	336	0	0	32	0.11	7.2	3.3	Steady	Did not operate during the reporting period (no pump in well, converted to MW in 2003). COC concentrations historically below ACLs, sampling moved to annual frequency in 2003. TCE concentrations increased to above ACL in 2006 and sampling frequency increased to quarterly. Redevelopment attempted in 2016, but well screen found to be compromised. TCE below ACL since 2018-3Q.	Continue non-operation and sample quarterly per the QAPP.	
Upper 180-Foot Aquifer Eastern Network (OU2 Hydraulic Zone 9)													
EW-OU2-02-180R	97	130	100	72	92	9.2	7.1	8.0	7.5	Steady	Replacement well for decommissioned EW-OU2-02-180. Operational since 2018-4Q. TCE concentrations above ACL since operational in 2018 (except for 2019-4Q). All other COC concentrations below ACLs.	Continue operation and sample quarterly per the QAPP.	
Upper 180-Foot Aquifer Landfill Network (OU2 Hydraulic Zone 6)													
EW-OU2-03-180	94	150	400	170	169	47	1.4	18	8.8	Steady	TCE concentrations above ACL since installed in 2000 (except for two events in 2000-3Q and 2006-3Q). All other COC concentrations below ACLs.	Continue operation and sample quarterly per the QAPP.	
EW-OU2-04-180	0	115	153	0	0	14	ND	0.75	NS	N/A	Not operated since 2007 due to COC concentrations below ACLs. Removed from the GWMP in 2013 per the QAPP (last sampled 2013-3Q). Sampled 2019-1Q due to increase in TCE in downgradient MW-OU2-62-180. All COCs still below ACLs.	Continue non-operation.	

Table 11. Groundwater Extraction Well Historic Data, Evaluation and Recommendations

Extraction Well	2019-20 Runtime (percent)	Flow Rates (gpm)				Total COCs (µg/L)					Trend	Evaluation	Recommendations
		Design	Historical Maximum	Historical Average	2019-20 Average	Historical Maximum	Historical Minimum	Historical Average	2019-20 Average				
Upper 180-Foot Aquifer Abrams/Imjin Network (OU2 Hydraulic Zone 7)													
EW-OU2-05-180	97	160	400	105	169	20	1.7	8.3	3.6	Steady	All COC concentrations below ACLs (TCE concentrations below ACL since 2015). Pump failure in 2014, pump removed and converted to MW. Pump replaced December 2017 and operational since 2018-4Q.	Continue operation and sample quarterly per the QAPP.	
EW-OU2-06-180	96	135	400	130	128	23	4.7	8.6	6.5	Steady	TCE concentrations below the ACL since 2019-1Q. All other COC concentrations are below ACLs.	Continue operation and sample quarterly per the QAPP.	
EW-OU2-11-180	92	130	178	29	16	11	6.5	8.5	8.0	Down	New well first sampled 2018-4Q and operational beginning 2019-3Q. TCE concentration above ACL a few times (2018-4Q, 2019-4Q, and 2020-1Q). All other COC concentrations are below ACLs.	Continue operation and sample quarterly per the QAPP.	
EW-OU2-12-180	29	130	95	68	19	14	8.5	11	8.5	Down	New well operational since 2018-4Q. TCE concentration above ACL since operational in 2018. All other COC concentrations are below ACLs. EW-OU2-12-180 was offline during the reporting due to a pump failure on 1/15/2020 and was not sampled. Formation material was found in the well and was unable to restart operation with new pump.	Repair well to restart operation and sampling quarterly per the QAPP.	
Upper 180-Foot Aquifer GWTP Network (OU2 Hydraulic Zone 7)													
EW-OU2-10-180	97	130	145	128	126	12	8.5	10	10	Steady	New well operational since 2018-4Q. TCE concentration above ACL since operational in 2018. All other COC concentrations are below ACLs.	Continue operation and sample quarterly per the QAPP.	
Upper 180-Foot Aquifer Bunker Hill Network (OU2 Hydraulic Zone 8)													
EW-OU2-07-180	0	N/A	N/A	N/A	0	7.5	0.29	3.4	2.9	Up	Not operated since installation in 2005 (no pump in well, converted to MW). All COC concentrations below ACLs since 2010. Sampled as part of the OUCTP GWMP.	Continue non-operation and sample quarterly per the QAPP.	
EW-OU2-08-180	0	60	193	0	0	5.6	0.66	2.7	2.4	Steady	Not operated since 2011 due to low COC concentrations and operation of EW-OU2-09-180. Concentrations of all COCs below ACLs since operation began in 2007.	Continue non-operation and sample quarterly per the QAPP.	
Upper 180-Foot Aquifer Bunker Hill Network (OUCTP Hydraulic Zone 6)													
EW-OU2-09-180	91	55	79	50	58	11	0.81	3.4	4.9	Steady	Concentration of CT below ACL since operation began in 2011. Concentration of cis-1,2-DCE above California MCL (6 µg/L) in 2017-2Q and 2018-4Q. All other COCs below ACLs.	Continue operation for OUCTP remedy and sample quarterly per the QAPP.	

Acronyms and Abbreviations:

µg/L: micrograms per liter
 2019-20: 10/1/2019 through 9/30/2020
 ACL: Aquifer Cleanup Level
 COC: Chemical of Concern
 CSUMB: California State University Monterey Bay
 EW: Extraction Well
 gpm: gallons per minute
 GWMP: groundwater monitoring program
 GWTP: groundwater treatment plant
 MW: Monitoring Well
 N/A: not applicable

ND: not detected (below the laboratory limit of detection)
 NS: not sampled
 OU2: Operable Unit 2
 OUCTP: Operable Unit Carbon Tetrachloride Plume
 PLC: programmable logic controller
 QAPP: Quality Assurance Project Plan
 VFD: variable frequency drive

Analyte Names:

1,1-DCA: 1,1-dichloroethane
 1,2-DCA: 1,2-dichloroethane
 cis-1,2-DCE: cis-1,2-dichloroethene
 CT: carbon tetrachloride
 PCE: tetrachloroethene
 TCE: trichloroethene
 VC: vinyl chloride

Note:

¹ Hydraulic zones are based on the areas of groundwater with COC concentrations above ACLs and influenced by the groundwater remedy as shown in the QAPP.

Table 12. GWMP Sampling Methods and Analytical Schedule*

Well Name	Cu, Pb, Sb (6010D)	VOCs (8260-SIM)	Water Levels	Sampling Methods	Rationale
A-Aquifer					
EW-OU2-02-A		Q	Q	Sampling Port	OU2 ROD
EW-OU2-04-A		Q	Q	Sampling Port	OU2 ROD
EW-OU2-05-A		Q	Q	Sampling Port	OU2 ROD
EW-OU2-06-A		Q	Q	Sampling Port	OU2 ROD
EW-OU2-09-A		Q	Q	Sampling Port	OU2 ROD
EW-OU2-10-A		Q	Q	Sampling Port	OU2 ROD
EW-OU2-11-AR		Q	Q	Sampling Port	OU2 GWTP Relocation
EW-OU2-12-A		Q	Q	Sampling Port	OU2 ROD
EW-OU2-13-A		Q	Q	Sampling Port	OU2 ROD
EW-OU2-14-A		Q	Q	Sampling Port	OU2 ROD
EW-OU2-15-A		Q	Q	PDB	OU2 ESD
EW-OU2-16-A		Q	Q	Sampling Port	OU2 ROD
EW-OU2-17-A		Q	Q	Sampling Port	OU2 GWTP Relocation
EW-OU2-18-A		Q	Q	Sampling Port	OU2 GWTP Relocation
EW-OU2-19-A		Q	Q	Sampling Port	OU2 GWTP Relocation
EW-OU2-20-A		Q	Q	Sampling Port	OU2 GWTP Relocation
MW-BW-13-A		Q	Q	PDB	OU2 ROD
MW-BW-50-A		Q	Q	PDB	OU2 ROD
MW-OU2-01-A	A	Q	Q	HydraSleeve™, PDB	OU2 ROD
MW-OU2-02-A	A	Q	Q	HydraSleeve™, PDB	OU2 ROD
MW-OU2-04-A		Q	Q	PDB	OU2 ROD
MW-OU2-06-AR		Q	Q	PDB	OU2 ROD
MW-OU2-07-A		A	Q	PDB	OU2 ROD
MW-OU2-08-A		Q	Q	PDB	OU2 ROD
MW-OU2-12-A		Q	Q	PDB	OU2 ROD
MW-OU2-25-A		Q	Q	PDB	OU2 ROD
MW-OU2-27-A		Q	Q	PDB	OU2 ROD
MW-OU2-28-A		Q	Q	PDB	OU2 ROD
MW-OU2-34-A		Q	Q	PDB	OU2 ROD
MW-OU2-40-A		Q	Q	PDB	OU2 ROD
MW-OU2-44-A		Q	Q	PDB	OU2 ESD
MW-OU2-45-A		Q	Q	PDB	OU2 ROD
MW-OU2-46-A		Q	Q	PDB	OU2 ROD
MW-OU2-73-A	A	Q	Q	HydraSleeve™, PDB	OU2 ROD
MW-OU2-74-A	A	Q	Q	HydraSleeve™, PDB	OU2 ROD
MW-OU2-75-A		Q	Q	PDB	OU2 ROD
MW-OU2-79-A		Q	Q	PDB	OU2 ESD
MW-OU2-80-A		Q	Q	PDB	OU2 ROD
MW-OU2-81-A		Q	Q	PDB	OU2 ROD

Table 12. GWMP Sampling Methods and Analytical Schedule*

Well Name	Cu, Pb, Sb (6010D)	VOCs (8260-SIM)	Water Levels	Sampling Methods	Rationale
MW-OU2-83-A		Q	Q	PDB	Well Install Report
Upper 180-Foot Aquifer					
EW-OU2-01-180		Q	Q	PDB	OU2 ESD
EW-OU2-02-180R		Q	Q	Sampling Port	OU2 GWTP Relocation
EW-OU2-03-180		Q	Q	Sampling Port	OU2 ESD
EW-OU2-05-180		Q	Q	Sampling Port	OU2 ESD
EW-OU2-06-180		Q	Q	Sampling Port	OU2 ESD
EW-OU2-08-180		Q	Q	Sampling Port	OU2 ESD
EW-OU2-10-180		Q	Q	Sampling Port	OU2 GWTP Relocation
EW-OU2-11-180		Q	Q	Sampling Port	OU2 GWTP Relocation
EW-OU2-12-180		Q	Q	Sampling Port	OU2 GWTP Relocation
MW-BW-02-180		Q	Q	PDB	OU2 ESD/OUCTP ROD
MW-BW-14-180		Q	Q	PDB	OU2 ESD
MW-OU2-06-180R2		Q	Q	PDB	OU2 ESD
MW-OU2-07-180R		Q	Q	PDB	OU2 ESD
MW-OU2-20-180		Q	Q	PDB	OU2 ESD
MW-OU2-23-180		Q	Q	PDB	OU2 ESD
MW-OU2-24-180		Q	Q	PDB	OU2 ESD
MW-OU2-28-180		Q	Q	PDB	OU2 ESD
MW-OU2-30-180		A	Q	PDB	OU2 ESD
MW-OU2-39-180		Q	Q	PDB	OU2 ESD
MW-OU2-43-180		Q	Q	PDB	OU2 ESD
MW-OU2-44-180		Q	Q	PDB	OU2 ESD
MW-OU2-46-180		Q	Q	PDB	OU2 ESD
MW-OU2-47-180		Q	Q	PDB	OU2 ESD
MW-OU2-50-180		Q	Q	PDB	OU2 ESD
MW-OU2-51-180		Q	Q	PDB	OU2 ESD
MW-OU2-53-180		Q	Q	PDB	OU2 ESD
MW-OU2-56-180		Q	Q	PDB	OU2 ESD
MW-OU2-61-180		Q	Q	PDB	OU2 ESD
MW-OU2-62-180		Q	Q	PDB	OU2 ESD
MW-OU2-63-180		A	Q	PDB	OU2 ESD
MW-OU2-81-180		Q	Q	PDB	OU2 ESD
The Following Wells Are Measured for Groundwater Elevation Data Only:					
A-Aquifer					
EW-OU2-01-A			Q	DTW	DTW trend analysis
EW-OU2-03-A			Q	DTW	DTW trend analysis
EW-OU2-07-A			Q	DTW	DTW trend analysis
MW-BW-01-A			Q	DTW	DTW trend analysis
MW-BW-11-A			Q	DTW	DTW trend analysis
MW-OU2-03-A			Q	DTW	DTW trend analysis
MW-OU2-05-A			Q	DTW	DTW trend analysis

Table 12. GWMP Sampling Methods and Analytical Schedule*

Well Name	Cu, Pb, Sb (6010D)	VOCs (8260-SIM)	Water Levels	Sampling Methods	Rationale
MW-OU2-09-A			Q	DTW	DTW trend analysis
MW-OU2-13-A			Q	DTW	DTW trend analysis
MW-OU2-21-A			Q	DTW	DTW trend analysis
MW-OU2-23-A			Q	DTW	DTW trend analysis
MW-OU2-29-A			Q	DTW	DTW trend analysis
MW-OU2-30-A			Q	DTW	DTW trend analysis
MW-OU2-32-A			Q	DTW	DTW trend analysis
MW-OU2-35-A			Q	DTW	DTW trend analysis
MW-OU2-57-A			Q	DTW	DTW trend analysis
MW-OU2-58-A			Q	DTW	DTW trend analysis
MW-OU2-76-A			Q	DTW	DTW trend analysis
MW-OU2-77-A			Q	DTW	DTW trend analysis
Upper 180-Foot Aquifer					
EW-OU2-04-180			Q	DTW	DTW trend analysis
MW-14-03-180			Q	DTW	DTW trend analysis
MW-BW-12-180			Q	DTW	DTW trend analysis
MW-OU2-05-180			Q	DTW	DTW trend analysis
MW-OU2-09-180R			Q	DTW	DTW trend analysis
MW-OU2-20-180X			Q	DTW	DTW trend analysis
MW-OU2-29-180			Q	DTW	DTW trend analysis
MW-OU2-31-180R			Q	DTW	DTW trend analysis
MW-OU2-36-180			Q	DTW	DTW trend analysis
MW-OU2-49-180			Q	DTW	DTW trend analysis
MW-OU2-52-180			Q	DTW	DTW trend analysis
MW-OU2-54-180			Q	DTW	DTW trend analysis
MW-OU2-55-180			Q	DTW	DTW trend analysis
PZ-OU2-06-180			Q	DTW	DTW trend analysis

Notes:

*Schedule is current as of Groundwater QAPP Revision 7.

Acronyms and Abbreviations:

A: Sampled on an annual basis (during the third quarter event)
 Cu, Pb, Sb: copper, lead, and antimony, respectively
 DTW: depth to water
 ESD: Explanation of Significant Differences
 GWTP: groundwater treatment plant

OU2: Operable Unit 2
 OUCTP: Operable Unit Carbon Tetrachloride Plume
 Q: Sampled on a quarterly basis
 ROD: Record of Decision
 SIM: selected ion monitoring
 VOCs: volatile organic compounds

Table 13. Groundwater Sampling Schedule Modifications

Well Name	Previous Status	New Status	Mechanical/ Well Failure	Rationale / Notes / Corrections	Last Operational Period	Last Sampling Event/s	Last DTW Event
GWMP Schedule Modifications Based on Groundwater QAPP Decision Rules							
MW-OU2-05-A	Depth to Water Only	Quarterly	N/A	COC concentrations above ACLs in upgradient MW-OU2-07-A in 2019-3Q.	N/A	Ongoing	Ongoing
MW-OU2-07-A	Annual	Quarterly	N/A	COC concentrations above ACLs in 2019-3Q.	N/A	Ongoing	Ongoing
Mechanical, Well, or Sampling Issues							
EW-OU2-02-A	Offline	Offline	Not tied-in to new OU2 GWTP	Not sampled during the reporting period because it needs electrical tie-in to new lines of new OU2 GWTP.	2018-1Q	2018-1Q	2020-2Q
EW-OU2-04-A	Offline	Offline	Not tied-in to new OU2 GWTP	Sampled again starting 2020-1Q, missed 2019-4Q sample. Not connected to new OU2 GWTP yet due to work needed on the leak detection system.	2018-4Q	Ongoing	Ongoing
EW-OU2-05-A	Offline	Offline	Not tied-in to new OU2 GWTP	Pump replaced 2020-1Q but not connected to new OU2 GWTP.	2018-3Q	Ongoing	Ongoing
EW-OU2-06-A	Offline	Offline	Not tied-in to new OU2 GWTP	Pump replaced 2020-1Q but not connected to new OU2 GWTP.	2018-4Q	Ongoing	Ongoing
EW-OU2-09-A	Offline	Operating	Connected to new OU2 GWTP	Connected to the new OU2 GWTP 2020-3Q, missed sample in 2019-4Q, 2020-1Q, and 2020-2Q. Not connected to new OU2 GWTP yet due to work needed on the leak detection system on same pipeline in the Western network.	Ongoing	Ongoing	Ongoing
EW-OU2-14-A	Inoperable	Inoperable	PLC issue and piping removed	Pump inoperable due to PLC issue and pipeline disconnected during OU2 GWTP relocation construction.	2017-1Q	2017-1Q	2020-1Q
EW-OU2-12-180	Operating	Offline	Pump failure	Unable to sample 2020-1Q, 2020-2Q, and 2020-3Q due to a pump failure in 2020-1Q and sand in the well casing. Pending well redevelopment.	2020-1Q	2019-4Q	2020-2Q
EW-OU2-20-A	Operating	Operating	Broken pipe in vault	Missed one sample event in 2020-2Q to repair broken pipe in vault	Ongoing	Ongoing	Ongoing

Table 13. Groundwater Sampling Schedule Modifications

Acronyms and Abbreviations:

COC: chemical of concern

DTW: depth to water

GWMP: groundwater monitoring program

GWTP: groundwater treatment plant

N/A: not applicable

Ongoing: sampling or DTW measurements not affected by change in status

OU2: Operable Unit 2

QAPP: Quality Assurance Project Plan

Table 14. Groundwater Well Maintenance

Well ID	Quarter Identified	Condition/Repair Comments	Sample Frequency	Maintenance Notes
EW-OU2-01-180	2020-3Q	Screen silted 60 percent.	Quarterly	Well converted to monitoring well in 2003, well redevelopment attempted in 2016 but well screen is compromised. Remove the last PDB station #4 at 158 feet btoc since the total depth to silt layer is 155 feet btoc.
EW-OU2-03-A	2016-4Q	No lock. Needs new eyebolts on vault lid.	DTW Only	Welding required.
MW-14-03-180	2019-3Q and 2020-3Q	2019-3Q: Well cover needs to be labeled, one tab broken off. Both bolts broken. 2020-3Q: screen silted 28 percent.	DTW Only	Welding required for tabs. An important well for water levels, consider redevelopment.
MW-BW-11-A	2019-3Q	One tab stripped, one bolt broken	DTW Only	Welding required.
MW-BW-12-180	2016-4Q	Needs new 4-inch well casing cap.	DTW Only	
MW-BW-14-180	2016-3Q	Needs to be painted and labeled.	Quarterly	
MW-OU2-05-A	2019-2Q	Replace well vault	Quarterly	Well to be replaced by Sea Haven contractor in 2020-4Q.
MW-OU2-07-180R	2013-1Q	Missing all four tabs.	Quarterly	Welding required. Well to be replaced by Sea Haven contractor in 2020-4Q.
MW-OU2-13-A	2013-1Q	PVC threads broken.	DTW Only	
MW-OU2-20-180	2017-3Q and 2020-3Q	2017-3Q: Three stripped tabs and one broken bolt. 2020-3Q: screen silted 40 percent.	Quarterly	Current PDB sample stations at accessible depths, no changes needed. Consider redevelopment.
MW-OU2-21-A	2019-3Q	Need to retap two bolts	DTW Only	Welding and grinding required.
MW-OU2-29-180	2019-3Q	Missing bolts	DTW Only	
MW-OU2-30-A	2015-3Q	One broken tab.	DTW Only	Welding required.
MW-OU2-31-180R	2017-3Q	One stripped tab.	DTW Only	
MW-OU2-35-A	2019-3Q	Missing one bolt, three bolts need to be retapped	DTW Only	
MW-OU2-36-180	2013-1Q	One stripped tab.	DTW Only	Welding required.
MW-OU2-44-A	2018-1Q	Needs identification label on rope.	Quarterly	
MW-OU2-51-180	2020-3Q	Screen silted 31 percent.	Quarterly	Current PDB sample stations at accessible depths, no changes needed. Consider redevelopment.
MW-OU2-54-180	2019-3Q	One bolt needs to be retapped	DTW Only	

Table 14. Groundwater Well Maintenance

Well ID	Quarter Identified	Condition/Repair Comments	Sample Frequency	Maintenance Notes
MW-OU2-56-180	2017-3Q	Poison oak needs to be removed from around well.	Quarterly	
MW-OU2-57-A	2016-3Q	Needs new well cap (3 or 4-inch).	DTW Only	
MW-OU2-58-A	2016-4Q	Well lid hinge broken.	DTW Only	Welding and grinding required.
PZ-OU2-06-180	2016-3Q	Needs bolts and to be labeled.	DTW Only	

Acronyms and Abbreviations:

btoc: below top of casing

DTW: depth to water

MCWD: Marina Coast Water District

N/A: not applicable

PDB: passive diffusion bag

Q: quarter

Table 15. Groundwater Elevations, Fourth Quarter 2019 through Third Quarter 2020

Station Name	Top of Casing Elevation (feet) ¹	Date Measured	Depth to Water (feet) ²	Water Level Elevation (feet) ¹	Total Depth (feet) ²
A-Aquifer					
EW-OU2-01-A	109.98	12/3/2019	103.38	6.60	
		3/4/2020	102.87	7.11	
		6/2/2020	102.68	7.30	
		9/4/2020	102.85	7.13	140.60
EW-OU2-02-A	116.26	12/3/2019	NM	NM	
		3/6/2020	103.71	12.55	
		6/9/2020	103.64	12.62	
		9/4/2020	NM	NM	NM
EW-OU2-03-A	84.33	12/5/2019	77.04	7.29	
		3/6/2020	NM	NM	
		6/9/2020	NM	NM	
		9/4/2020	NM	NM	NM
EW-OU2-04-A	109.47	12/3/2019	NM	NM	
		3/5/2020	103.67	5.80	
		6/2/2020	103.66	5.81	
		9/2/2020	104.16	5.31	NM
EW-OU2-05-A	108.99	12/3/2019	NM	NM	
		3/5/2020	103.02	5.97	
		6/2/2020	107.93	1.06	
		9/2/2020	103.69	5.30	NM
EW-OU2-06-A	105.57	12/3/2019	NM	NM	
		3/5/2020	99.98	5.59	
		6/2/2020	100.08	5.49	
		9/2/2020	100.82	4.75	NM
EW-OU2-07-A	158.56	12/3/2019	NM	NM	
		3/6/2020	107.71	50.85	
		6/2/2020	NM	NM	
		9/2/2020	NM	NM	NM
EW-OU2-09-A	160.25	12/3/2019	NM	NM	
		3/6/2020	110.69	49.56	
		6/9/2020	107.30	52.95	
		9/2/2020	124.01	36.24	NM
EW-OU2-10-A	165.92	12/3/2019	126.00	39.92	
		3/6/2020	126.00	39.92	
		6/2/2020	123.14	42.78	
		9/2/2020	117.01	48.91	NM

Table 15. Groundwater Elevations, Fourth Quarter 2019 through Third Quarter 2020

Station Name	Top of Casing Elevation (feet) ¹	Date Measured	Depth to Water (feet) ²	Water Level Elevation (feet) ¹	Total Depth (feet) ²
EW-OU2-11-AR	171.31	12/3/2019	130.00	41.31	
		3/4/2020	126.05	45.26	
		6/2/2020	125.50	45.81	
		9/2/2020	117.71	53.60	NM
EW-OU2-12-A	175.39	12/3/2019	133.00	42.39	
		3/4/2020	131.41	43.98	
		6/2/2020	134.10	41.29	
		9/2/2020	127.08	48.31	NM
EW-OU2-13-A	180.15	12/3/2019	131.10	49.05	
		3/4/2020	130.78	49.37	
		6/2/2020	130.73	49.42	
		9/2/2020	129.21	50.94	NM
EW-OU2-14-A	185.85	12/3/2019	NM	NM	
		3/6/2020	107.05	78.80	
		6/2/2020	NM	NM	
		9/2/2020	NM	NM	NM
EW-OU2-15-A	194.26	12/4/2019	122.20	72.06	
		3/5/2020	122.12	72.14	
		6/3/2020	121.91	72.35	
		9/3/2020	121.76	72.50	138.55
EW-OU2-16-A	165.43	12/3/2019	95.81	69.62	
		3/4/2020	97.49	67.94	
		6/2/2020	97.83	67.60	
		9/2/2020	93.72	71.71	NM
EW-OU2-17-A	167.73	12/3/2019	97.81	69.92	
		3/5/2020	97.14	70.59	
		6/2/2020	95.99	71.74	
		9/2/2020	96.92	70.81	NM
EW-OU2-18-A	161.04	12/3/2019	89.49	71.55	
		3/5/2020	88.02	73.02	
		6/2/2020	89.68	71.36	
		9/2/2020	95.36	65.68	NM
EW-OU2-19-A	165.29	12/3/2019	92.62	72.67	
		3/5/2020	98.28	67.01	
		6/2/2020	96.45	68.84	
		9/2/2020	98.76	66.53	NM

Table 15. Groundwater Elevations, Fourth Quarter 2019 through Third Quarter 2020

Station Name	Top of Casing Elevation (feet) ¹	Date Measured	Depth to Water (feet) ²	Water Level Elevation (feet) ¹	Total Depth (feet) ²
EW-OU2-20-A	177.85	12/3/2019	110.21	67.64	
		3/5/2020	116.07	61.78	
		6/9/2020	98.32	79.53	
		9/2/2020	113.64	64.21	NM
MW-BW-01-A	141.17	12/5/2019	84.66	56.51	
		3/5/2020	84.64	56.53	
		6/4/2020	84.44	56.73	
		9/3/2020	84.57	56.60	102.54
MW-BW-11-A	112.34	12/3/2019	106.21	6.13	
		3/4/2020	105.40	6.94	
		6/2/2020	105.57	6.77	
		9/1/2020	105.82	6.52	121.09
MW-BW-13-A	103.16	12/4/2019	95.65	7.51	
		3/2/2020	95.20	7.96	
		6/2/2020	94.98	8.18	
		9/2/2020	95.10	8.06	129.99
MW-BW-50-A	182.25	12/5/2019	105.27	76.98	
		3/4/2020	105.16	77.09	
		6/4/2020	104.97	77.28	
		9/3/2020	105.24	77.01	129.22
MW-OU2-01-A	269.90	12/3/2019	179.22	90.68	
		3/5/2020	179.27	90.63	
		6/3/2020	179.29	90.61	
		9/1/2020	179.09	90.81	201.26
MW-OU2-02-A	185.50	12/5/2019	103.70	81.80	
		3/6/2020	103.80	81.70	
		6/2/2020	104.00	81.50	
		9/1/2020	103.81	81.69	130.11
MW-OU2-03-A	196.69	12/5/2019	135.50	61.19	
		3/5/2020	135.41	61.28	
		6/5/2020	135.48	61.21	
		9/4/2020	135.16	61.53	154.50
MW-OU2-04-A	Unknown ³	12/6/2019	102.76	Unknown ³	
		3/3/2020	102.54	Unknown ³	
		6/4/2020	102.34	Unknown ³	
		9/2/2020	102.22	Unknown ³	118.01

Table 15. Groundwater Elevations, Fourth Quarter 2019 through Third Quarter 2020

Station Name	Top of Casing Elevation (feet) ¹	Date Measured	Depth to Water (feet) ²	Water Level Elevation (feet) ¹	Total Depth (feet) ²
MW-OU2-05-A	149.05	12/5/2019	102.44	46.61	
		3/4/2020	102.45	46.60	
		6/4/2020	102.50	46.55	
		9/2/2020	102.14	46.91	129.95
MW-OU2-06-AR	152.11	12/4/2019	103.82	48.29	
		3/3/2020	103.50	48.61	
		6/4/2020	103.25	48.86	
		9/2/2020	103.10	49.01	120.38
MW-OU2-07-A	176.84	12/6/2019	122.95	53.89	
		3/4/2020	122.61	54.23	
		6/4/2020	122.81	54.03	
		9/2/2020	122.25	54.59	144.33
MW-OU2-08-A	160.35	12/5/2019	100.20	60.15	
		3/4/2020	99.71	60.64	
		6/4/2020	99.55	60.80	
		9/3/2020	99.43	60.92	128.61
MW-OU2-09-A	159.59	12/5/2019	111.10	48.49	
		3/4/2020	111.14	48.45	
		6/3/2020	111.03	48.56	
		9/2/2020	110.89	48.70	134.23
MW-OU2-12-A	180.05	12/4/2019	129.53	50.52	
		3/4/2020	129.10	50.95	
		6/4/2020	128.87	51.18	
		9/2/2020	128.36	51.69	148.50
MW-OU2-13-A	209.80	12/5/2019	123.28	86.52	
		3/6/2020	123.49	86.31	
		6/3/2020	123.89	85.91	
		9/4/2020	123.23	86.57	145.82
MW-OU2-21-A	140.61	12/5/2019	100.88	39.73	
		3/2/2020	101.09	39.52	
		6/5/2020	101.00	39.61	
		9/4/2020	100.80	39.81	110.39
MW-OU2-23-A	183.05	12/3/2019	122.16	60.89	
		3/3/2020	122.11	60.94	
		6/5/2020	122.12	60.93	
		9/3/2020	121.75	61.30	129.99

Table 15. Groundwater Elevations, Fourth Quarter 2019 through Third Quarter 2020

Station Name	Top of Casing Elevation (feet) ¹	Date Measured	Depth to Water (feet) ²	Water Level Elevation (feet) ¹	Total Depth (feet) ²
MW-OU2-25-A	208.99	12/5/2019	131.94	77.05	
		3/5/2020	131.95	77.04	
		6/4/2020	131.89	77.10	
		9/3/2020	131.74	77.25	154.83
MW-OU2-27-A	185.66	12/4/2019	102.16	83.50	
		3/5/2020	102.14	83.52	
		6/5/2020	102.01	83.65	
		9/2/2020	101.90	83.76	124.38
MW-OU2-28-A	198.04	12/4/2019	115.16	82.88	
		3/5/2020	115.16	82.88	
		6/3/2020	114.95	83.09	
		9/2/2020	114.74	83.30	137.55
MW-OU2-29-A	253.39	12/3/2019	159.75	93.64	
		3/6/2020	159.65	93.74	
		6/3/2020	159.85	93.54	
		9/4/2020	159.67	93.72	178.79
MW-OU2-30-A	163.20	12/4/2019	86.75	76.45	
		3/4/2020	86.78	76.42	
		6/4/2020	86.58	76.62	
		9/3/2020	86.75	76.45	110.08
MW-OU2-32-A	114.23	12/3/2019	108.87	5.36	
		3/2/2020	NM	NM	
		6/2/2020	108.60	5.63	
		9/2/2020	108.90	5.33	138.97
MW-OU2-34-A	142.65	12/4/2019	138.34	4.31	
		3/2/2020	137.61	5.04	
		6/2/2020	137.53	5.12	
		9/3/2020	138.13	4.52	163.19
MW-OU2-35-A	238.78	12/3/2019	147.20	91.58	
		3/6/2020	147.25	91.53	
		6/3/2020	147.23	91.55	
		9/4/2020	147.00	91.78	166.23
MW-OU2-40-A	115.28	12/4/2019	105.21	10.07	
		3/2/2020	104.60	10.68	
		6/2/2020	104.65	10.63	
		9/1/2020	104.85	10.43	124.08

Table 15. Groundwater Elevations, Fourth Quarter 2019 through Third Quarter 2020

Station Name	Top of Casing Elevation (feet) ¹	Date Measured	Depth to Water (feet) ²	Water Level Elevation (feet) ¹	Total Depth (feet) ²
MW-OU2-44-A	162.88	12/5/2019	84.01	78.87	
		3/5/2020	84.51	78.37	
		6/4/2020	84.71	78.17	
		9/3/2020	84.90	77.98	100.55
MW-OU2-45-A	195.03	12/4/2019	114.43	80.60	
		3/5/2020	114.33	80.70	
		6/3/2020	114.12	80.91	
		9/3/2020	113.83	81.20	136.10
MW-OU2-46-A	173.84	12/4/2019	93.46	80.38	
		3/5/2020	93.45	80.39	
		6/3/2020	93.27	80.57	
		9/3/2020	93.24	80.60	111.41
MW-OU2-57-A	194.86	12/5/2019	107.50	87.36	
		3/6/2020	108.04	86.82	
		6/3/2020	108.01	86.85	
		9/4/2020	108.83	86.03	134.52
MW-OU2-58-A	154.46	12/4/2019	80.29	74.17	
		3/4/2020	80.18	74.28	
		6/2/2020	80.09	74.37	
		9/3/2020	79.97	74.49	102.21
MW-OU2-73-A	172.18	12/5/2019	90.52	81.66	
		3/3/2020	90.54	81.64	
		6/2/2020	90.61	81.57	
		9/1/2020	91.44	80.74	135.90
MW-OU2-74-A	234.45	12/5/2019	148.31	86.14	
		3/3/2020	148.43	86.02	
		6/2/2020	148.37	86.08	
		9/1/2020	148.19	86.26	170.71
MW-OU2-75-A	160.53	12/5/2019	87.65	72.88	
		3/5/2020	87.65	72.88	
		6/3/2020	87.52	73.01	
		9/3/2020	87.35	73.18	122.60
MW-OU2-76-A	148.39	12/5/2019	85.75	62.64	
		3/5/2020	85.90	62.49	
		6/4/2020	85.68	62.71	
		9/4/2020	85.52	62.87	132.03

Table 15. Groundwater Elevations, Fourth Quarter 2019 through Third Quarter 2020

Station Name	Top of Casing Elevation (feet) ¹	Date Measured	Depth to Water (feet) ²	Water Level Elevation (feet) ¹	Total Depth (feet) ²
MW-OU2-77-A	185.24	12/5/2019	104.63	80.61	
		3/5/2020	104.91	80.33	
		6/3/2020	104.68	80.56	
		9/2/2020	104.45	80.79	128.05
MW-OU2-79-A	117.39	12/4/2019	109.97	7.42	
		3/2/2020	109.41	7.98	
		6/2/2020	109.31	8.08	
		9/1/2020	109.39	8.00	126.99
MW-OU2-80-A	197.38	12/5/2019	112.58	84.80	
		3/5/2020	112.54	84.84	
		6/3/2020	112.51	84.87	
		9/1/2020	112.34	85.04	135.01
MW-OU2-81-A	168.65	12/5/2019	94.58	74.07	
		3/4/2020	94.58	74.07	
		6/3/2020	94.52	74.13	
		9/3/2020	94.44	74.21	124.00
MW-OU2-83-A	150.57	12/5/2019	84.97	65.60	
		3/4/2020	84.74	65.83	
		6/3/2020	84.59	65.98	
		9/3/2020	84.50	66.07	120.63
Upper 180-Foot Aquifer					
EW-OU2-01-180	110.79	12/3/2019	104.89	5.90	
		3/4/2020	104.08	6.71	
		6/2/2020	104.32	6.47	
		9/1/2020	105.70	5.09	155.07
EW-OU2-02-180R	167.30	12/3/2019	206.00	-38.70	
		3/4/2020	186.48	-19.18	
		6/2/2020	187.62	-20.32	
		9/2/2020	206.01	-38.71	NM
EW-OU2-03-180	188.39	12/3/2019	246.00	-57.61	
		3/4/2020	216.02	-27.63	
		6/9/2020	217.33	-28.94	
		9/2/2020	219.31	-30.92	NM
EW-OU2-04-180	238.55	12/3/2019	NM	NM	
		3/6/2020	246.64	-8.09	
		6/5/2020	245.62	-7.07	
		9/2/2020	NM	NM	NM

Table 15. Groundwater Elevations, Fourth Quarter 2019 through Third Quarter 2020

Station Name	Top of Casing Elevation (feet) ¹	Date Measured	Depth to Water (feet) ²	Water Level Elevation (feet) ¹	Total Depth (feet) ²
EW-OU2-05-180	170.72	12/3/2019	199.26	-28.54	
		3/4/2020	216.82	-46.10	
		6/2/2020	214.32	-43.60	
		9/2/2020	214.32	-43.60	NM
EW-OU2-06-180	166.96	12/3/2019	184.08	-17.12	
		3/4/2020	181.66	-14.70	
		6/2/2020	182.48	-15.52	
		9/2/2020	176.21	-9.25	NM
EW-OU2-08-180	162.31	12/3/2019	166.41	-4.10	
		3/4/2020	180.85	-18.54	
		6/2/2020	187.61	-25.30	
		9/2/2020	198.04	-35.73	NM
EW-OU2-09-180	149.55	12/3/2019	161.10	-11.55	
		3/5/2020	168.00	-18.45	
		6/2/2020	171.23	-21.68	
		9/2/2020	172.23	-22.68	NM
EW-OU2-10-180	221.96	12/3/2019	249.47	-27.51	
		3/5/2020	249.07	-27.11	
		6/2/2020	248.51	-26.55	
		9/2/2020	253.12	-31.16	NM
EW-OU2-11-180	167.20	12/3/2019	208.48	-41.28	
		3/5/2020	203.76	-36.56	
		6/2/2020	217.91	-50.71	
		9/2/2020	213.56	-46.36	NM
EW-OU2-12-180	160.62	12/3/2019	196.12	-35.50	
		3/5/2020	172.54	-11.92	
		6/9/2020	168.70	-8.08	
		9/2/2020	NM	NM	NM
MW-14-03-180	194.58	12/5/2019	195.40	-0.82	
		3/6/2020	195.11	-0.53	
		6/5/2020	195.12	-0.54	
		9/4/2020	195.71	-1.13	218.80
MW-BW-02-180	141.25	12/5/2019	151.63	-10.38	
		3/5/2020	149.40	-8.15	
		6/4/2020	148.96	-7.71	
		9/3/2020	151.85	-10.60	170.72

Table 15. Groundwater Elevations, Fourth Quarter 2019 through Third Quarter 2020

Station Name	Top of Casing Elevation (feet) ¹	Date Measured	Depth to Water (feet) ²	Water Level Elevation (feet) ¹	Total Depth (feet) ²
MW-BW-12-180	112.34	12/3/2019	106.07	6.27	
		3/4/2020	105.33	7.01	
		6/2/2020	105.47	6.87	
		9/1/2020	105.90	6.44	184.79
MW-BW-14-180	119.74	12/4/2019	118.08	1.66	
		3/2/2020	117.25	2.49	
		6/2/2020	117.73	2.01	
		9/2/2020	118.59	1.15	185.19
MW-OU2-05-180	152.65	12/5/2019	155.20	-2.55	
		3/4/2020	154.36	-1.71	
		6/4/2020	155.39	-2.74	
		9/2/2020	156.81	-4.16	218.17
MW-OU2-06-180R2	151.69	12/4/2019	156.56	-4.87	
		3/3/2020	155.03	-3.34	
		6/4/2020	156.17	-4.48	
		9/2/2020	157.79	-6.10	215.39
MW-OU2-07-180R	176.14	12/6/2019	182.86	-6.72	
		3/4/2020	181.03	-4.89	
		6/4/2020	182.35	-6.21	
		9/2/2020	184.42	-8.28	240.49
MW-OU2-09-180R	159.60	12/5/2019	164.03	-4.43	
		3/4/2020	163.06	-3.46	
		6/3/2020	163.98	-4.38	
		9/2/2020	164.77	-5.17	208.29
MW-OU2-20-180	112.88	12/3/2019	108.52	4.36	
		3/2/2020	107.72	5.16	
		6/2/2020	108.04	4.84	
		9/1/2020	108.29	4.59	171.90
MW-OU2-20-180X	116.59	12/3/2019	112.44	4.15	
		3/2/2020	111.63	4.96	
		6/2/2020	111.85	4.74	
		9/1/2020	112.26	4.33	186.15
MW-OU2-23-180	182.49	12/3/2019	188.28	-5.79	
		3/3/2020	186.74	-4.25	
		6/5/2020	187.40	-4.91	
		9/3/2020	188.43	-5.94	234.97

Table 15. Groundwater Elevations, Fourth Quarter 2019 through Third Quarter 2020

Station Name	Top of Casing Elevation (feet) ¹	Date Measured	Depth to Water (feet) ²	Water Level Elevation (feet) ¹	Total Depth (feet) ²
MW-OU2-24-180	181.67	12/4/2019	187.94	-6.27	
		3/4/2020	186.29	-4.62	
		6/4/2020	187.89	-6.22	
		9/2/2020	189.28	-7.61	230.09
MW-OU2-28-180	198.20	12/4/2019	208.67	-10.47	
		3/5/2020	206.17	-7.97	
		6/3/2020	206.65	-8.45	
		9/2/2020	209.80	-11.60	250.59
MW-OU2-29-180	252.78	12/3/2019	261.88	-9.10	
		3/6/2020	259.90	-7.12	
		6/3/2020	259.54	-6.76	
		9/4/2020	257.03	-4.25	288.95
MW-OU2-30-180	163.59	12/4/2019	172.28	-8.69	
		3/4/2020	170.50	-6.91	
		6/4/2020	171.63	-8.04	
		9/3/2020	174.46	-10.87	219.18
MW-OU2-31-180R	65.65	12/4/2019	63.86	1.79	
		3/2/2020	63.05	2.60	
		6/2/2020	63.63	2.02	
		9/2/2020	64.33	1.32	119.72
MW-OU2-36-180	94.63	12/3/2019	90.16	4.47	
		3/2/2020	89.41	5.22	
		6/2/2020	89.74	4.89	
		9/2/2020	90.14	4.49	151.68
MW-OU2-39-180	198.58	12/5/2019	204.33	-5.75	
		3/5/2020	202.78	-4.20	
		6/4/2020	203.38	-4.80	
		9/3/2020	205.20	-6.62	245.77
MW-OU2-43-180	104.94	12/6/2019	105.67	-0.73	
		3/2/2020	104.56	0.38	
		6/4/2020	105.19	-0.25	
		9/2/2020	106.20	-1.26	160.59
MW-OU2-44-180	162.44	12/5/2019	171.75	-9.31	
		3/5/2020	169.57	-7.13	
		6/4/2020	170.23	-7.79	
		9/3/2020	172.58	-10.14	195.28

Table 15. Groundwater Elevations, Fourth Quarter 2019 through Third Quarter 2020

Station Name	Top of Casing Elevation (feet) ¹	Date Measured	Depth to Water (feet) ²	Water Level Elevation (feet) ¹	Total Depth (feet) ²
MW-OU2-46-180	174.49	12/4/2019	184.39	-9.90	
		3/5/2020	182.14	-7.65	
		6/3/2020	182.89	-8.40	
		9/3/2020	185.63	-11.14	207.47
MW-OU2-47-180	167.92	12/5/2019	177.48	-9.56	
		3/4/2020	174.96	-7.04	
		6/3/2020	176.26	-8.34	
		9/3/2020	178.70	-10.78	234.21
MW-OU2-49-180	154.18	12/5/2019	160.80	-6.62	
		3/5/2020	159.69	-5.51	
		6/4/2020	160.90	-6.72	
		9/2/2020	162.98	-8.80	NM
MW-OU2-50-180	189.52	12/2/2019	193.09	-3.57	
		3/5/2020	192.00	-2.48	
		6/5/2020	197.72	-8.20	
		9/3/2020	197.86	-8.34	227.50
MW-OU2-51-180	173.89	12/3/2019	177.04	-3.15	
		3/6/2020	176.00	-2.11	
		6/5/2020	176.15	-2.26	
		9/3/2020	177.08	-3.19	226.25
MW-OU2-52-180	190.61	12/3/2019	194.36	-3.75	
		3/2/2020	193.04	-2.43	
		6/5/2020	193.52	-2.91	
		9/4/2020	194.57	-3.96	239.62
MW-OU2-53-180	196.80	12/5/2019	204.93	-8.13	
		3/5/2020	203.16	-6.36	
		6/4/2020	203.86	-7.06	
		9/3/2020	205.77	-8.97	265.80
MW-OU2-54-180	194.85	12/2/2019	197.32	-2.47	
		3/6/2020	196.27	-1.42	
		6/5/2020	196.25	-1.40	
		9/4/2020	197.01	-2.16	222.49
MW-OU2-55-180	242.28	12/2/2019	250.16	-7.88	
		3/3/2020	248.34	-6.06	
		6/5/2020	248.38	-6.10	
		9/1/2020	249.74	-7.46	284.02

Table 15. Groundwater Elevations, Fourth Quarter 2019 through Third Quarter 2020

Station Name	Top of Casing Elevation (feet) ¹	Date Measured	Depth to Water (feet) ²	Water Level Elevation (feet) ¹	Total Depth (feet) ²
MW-OU2-56-180	193.81	12/5/2019	203.21	-9.40	
		3/6/2020	201.12	-7.31	
		6/3/2020	201.65	-7.84	
		9/1/2020	203.92	-10.11	237.10
MW-OU2-61-180	165.08	12/4/2019	176.32	-11.24	
		3/5/2020	173.95	-8.87	
		6/3/2020	174.83	-9.75	
		9/2/2020	177.00	-11.92	189.08
MW-OU2-62-180	202.99	12/5/2019	213.16	-10.17	
		3/5/2020	210.65	-7.66	
		6/3/2020	210.92	-7.93	
		9/1/2020	213.75	-10.76	234.21
MW-OU2-63-180	160.21	12/5/2019	169.02	-8.81	
		3/5/2020	167.01	-6.80	
		6/3/2020	168.22	-8.01	
		9/3/2020	170.56	-10.35	197.45
MW-OU2-81-180	168.32	12/5/2019	176.94	-8.62	
		3/4/2020	174.68	-6.36	
		6/3/2020	175.80	-7.48	
		9/3/2020	177.90	-9.58	214.15
PZ-OU2-06-180	168.19	12/6/2019	179.90	-11.71	
		3/4/2020	171.50	-3.31	
		6/9/2020	178.82	-10.63	
		9/3/2020	NM	NM	NM

Notes:

Gray cell indicate no measurement taken (total depth only collected in Third Quarter events)

NM = Not Measured

¹ Elevations are given in feet relative to mean sea level (MSL).

² Depth to water and total depth is measured from top of well casing. Wells with pumps, multi-port wells, or wells greater than 300 feet deep unable to measure total depth.

³ Well top of casing (TOC) raised approximately 30 feet in the First Quarter 2019, new TOC elevation not measured yet.

Table 16. Summary of Groundwater Monitoring Analytical Results, Fourth Quarter 2019

Station	Depth (ft btoc)	Analyte:	1,1-DCA (µg/L)		1,2-DCA (µg/L)		1,2-DCPA (µg/L)		Benzene (µg/L)		CT (µg/L)		Chloroform (µg/L)		cis-1,2-DCE (µg/L)		Methylene Chloride (µg/L)		PCE (µg/L)		TCE (µg/L)		Vinyl chloride (µg/L)	
		Units:	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual
Date:																								
OU2 A-Aquifer																								
EW-OU2-10-A	--	12/03/19	0.19	J	0.33	J	<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.76		<0.50	U	0.39	J	0.50		<0.050	U
EW-OU2-11-AR	--	12/03/19	1.1		0.28	J	<0.25	U	<0.25	U	<0.25	U	0.19	J	0.92		<0.50	U	0.66		1.4		<0.050	U
EW-OU2-12-A	--	12/03/19	5.1		2.1		0.29	J	<0.25	U	<0.25	U	0.83		3.4		<0.50	U	4.0		6.2		0.088	J
EW-OU2-13-A	--	12/03/19	1.3		3.5		0.16	J	<0.25	U	<0.25	U	0.64		1.8		<0.50	U	1.9		5.0		<0.050	U
EW-OU2-15-A	125	12/04/19	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.26	J	<0.25	U	<0.50	U	<0.25	U	1.6		<0.050	U
EW-OU2-16-A	--	12/03/19	4.8		2.0		0.59		0.15	J	<0.25	U	0.23	J	9.3		<0.50	U	1.7		1.7		0.34	
EW-OU2-17-A	--	12/03/19	1.8		<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.82		0.52		<0.50	U	5.6		7.2		0.055	J
EW-OU2-18-A	--	12/03/19	6.2		0.95		0.22	J	0.15	J	<0.25	U	0.51		3.0		1.6	J	4.5		6.1		0.30	
EW-OU2-19-A	--	12/03/19	0.37	J	<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.43	J	1.1		<0.50	U	1.3		6.2		<0.050	U
EW-OU2-20-A	--	12/03/19	7.1		1.2		0.43	J	0.22	J	<0.25	U	<0.25	U	12.4		<0.50	U	0.69		0.88		0.28	
MW-BW-13-A	126	12/04/19	0.50		<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.26	J	<0.25	U	<0.50	U	<0.25	U	1.6		<0.050	U
MW-BW-50-A	123	12/05/19	0.83		<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.68		<0.25	U	<0.50	U	4.0		0.76		<0.050	U
MW-OU2-01-A	184	12/03/19	0.14	J	<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.17	J	<0.25	U	<0.50	U	0.42	J	2.0		<0.050	U
MW-OU2-02-A	115	12/05/19	5.0	J-	1.3		0.23	J	0.31	J	<0.25	U	<0.25	U	2.0	J-	<0.50	U	2.0		0.52		7.6	J-
MW-OU2-04-A	107	01/20/20	0.75		0.72		0.17	J	<0.25	U	<0.25	U	0.16	J	1.3		<0.50	U	0.71		2.5	J-	<0.050	U
MW-OU2-06-AR	113	12/04/19	0.55		0.82		<0.25	U	<0.25	U	<0.25	U	0.59		0.31	J	<0.50	U	1.1		2.8		<0.050	U
MW-OU2-07-A	140	12/06/19	8.7		0.29	J	<0.25	U	<0.25	U	<0.25	U	0.89		1.1		<0.50	U	0.65		1.9		0.13	
MW-OU2-08-A	105	12/05/19	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.50	U	<0.25	U	<0.25	U	<0.050	U
MW-OU2-08-A^	110	12/30/19	0.97		<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.13	J	0.15	J	<0.50	U	<0.25	U	0.16	J	<0.050	U
MW-OU2-12-A	132	12/04/19	0.61		0.37	J	<0.25	U	<0.25	U	<0.25	U	0.13	J	1.2		<0.50	U	0.71		1.4		<0.050	U
MW-OU2-25-A	146	12/05/19	0.49	J	0.48	J	0.14	J	<0.25	U	<0.25	U	<0.25	U	2.7		<0.50	U	0.32	J	1.0		0.082	J
MW-OU2-27-A	108	12/04/19	0.36	J	<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.61		<0.25	U	<0.50	U	3.7		0.12	J	<0.050	U
MW-OU2-28-A	128	12/04/19	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.26	J	<0.25	U	<0.50	U	0.67		<0.25	U	<0.050	U
MW-OU2-34-A	158	12/04/19	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.50	U	<0.25	U	0.17	J	<0.050	U
MW-OU2-40-A	118	12/04/19	0.15	J	<0.25	U	0.19	J	<0.25	U	<0.25	U	0.82		3.3		<0.50	U	0.48	J	11.1		<0.050	U
MW-OU2-44-A	95	12/05/19	5.2		1.3		0.18	J	<0.25	U	<0.25	U	0.62		2.5		<0.50	U	2.3		1.8		0.23	
MW-OU2-45-A	115	12/04/19	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.21	J	<0.25	U	<0.50	U	<0.25	U	1.5		<0.050	U
MW-OU2-46-A	97	12/04/19	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.17	J	<0.25	U	<0.50	U	0.30	J	<0.25	U	<0.050	U
MW-OU2-73-A	107	12/05/19	2.3		0.27	J	<0.25	U	0.19	J	<0.25	U	<0.25	U	0.77		<0.50	U	2.0		<0.25	U	3.5	
MW-OU2-74-A	165	12/10/19	0.20	J	1.9		<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.90		<0.50	U	0.62		0.82		<0.050	U
MW-OU2-75-A	121	12/05/19	10.3		0.18	J	0.88		<0.25	U	<0.25	U	5.4		0.41	J	<0.50	U	7.4		6.5		0.13	
MW-OU2-79-A	122	12/04/19	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.28	J	<0.50	U	0.12	J	0.89		<0.050	U
MW-OU2-80-A	130	12/10/19	0.52		<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.22	J	<0.25	U	<0.50	U	2.6		0.34	J	<0.050	U
MW-OU2-81-A	121	12/05/19	2.3		0.32	J	<0.25	U	<0.25	U	<0.25	U	0.98		0.49	J	<0.50	U	9.5		11.9		<0.050	U
MW-OU2-83-A	111	12/05/19	5.0		0.20	J	<0.25	U	<0.25	U	<0.25	U	0.56		1.1		<0.50	U	1.2		1.4		0.096	J
Maximum Concentration (µg/L):			10.3		3.5		0.88		0.31	J	<0.25	U	5.4		12.4		1.6	J	9.5		11.9		7.6	J-
Number of Sampling Locations:			34		34		35		34		34		34		34		34		34		34		34	
Number of Locations above ACL:			6		10		0		0		0		1		2		0		7		7		8	
Percent of Locations with Detections:			82%		56%		31%		15%		0%		76%		71%		3%		85%		91%		35%	

Table 16. Summary of Groundwater Monitoring Analytical Results, Fourth Quarter 2019

Station	Depth (ft btoc)	Analyte:	1,1-DCA		1,2-DCA		1,2-DCPA		Benzene		CT		Chloroform		cis-1,2-DCE		Methylene Chloride		PCE		TCE		Vinyl chloride		
		Units:	($\mu\text{g/L}$)		($\mu\text{g/L}$)		($\mu\text{g/L}$)		($\mu\text{g/L}$)		($\mu\text{g/L}$)		($\mu\text{g/L}$)		($\mu\text{g/L}$)		($\mu\text{g/L}$)		($\mu\text{g/L}$)		($\mu\text{g/L}$)		($\mu\text{g/L}$)		
		Date:	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value
OU2 Upper 180-Foot Aquifer																									
EW-OU2-01-180	158	12/03/19	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.50	U	<0.25	U	0.11	J	<0.050	U	
EW-OU2-02-180R	--	12/03/19	0.18	J	<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.38	J	1.3		<0.50	U	0.33	J	4.9		<0.050	U	
EW-OU2-03-180	--	12/03/19	<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.12	J	0.14	J	0.62		<0.50	U	0.53		6.5		<0.050	U	
EW-OU2-05-180	--	12/03/19	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.19	J	0.38	J	<0.50	U	0.32	J	2.9		<0.050	U	
EW-OU2-06-180	--	12/03/19	0.14	J	<0.25	U	<0.25	U	<0.25	UJ	<0.25	UJ	0.35	J	1.3	J-	<0.50	U	0.62		3.9	J	<0.050	U	
EW-OU2-08-180	--	12/03/19	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.17	J	0.27	J	<0.50	U	0.25	J	2.1		<0.050	U	
EW-OU2-10-180	--	12/03/19	0.16	J	<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.34	J	1.2		<0.50	U	0.99		6.3		<0.050	U	
EW-OU2-11-180	--	12/03/19	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.39	J	1.1		<0.50	U	0.82		6.6		<0.050	U	
EW-OU2-12-180	--	12/03/19	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.40	J	1.2		<0.50	U	0.80		6.1		<0.050	U	
MW-BW-02-180	168	12/05/19	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.50	U	<0.25	U	0.29	J	<0.050	U	
MW-BW-14-180	168	12/04/19	0.23	J	<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.27	J	0.58		<0.50	U	<0.25	U	2.8		<0.050	U	
MW-OU2-06-180R2	203	12/04/19	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.18	J	0.12	J	<0.50	U	<0.25	U	1.3		<0.050	U	
MW-OU2-07-180R	238	12/06/19	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.11	J	<0.25	U	<0.50	U	<0.25	U	2.1		<0.050	U	
MW-OU2-20-180	154	12/03/19	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.19	J	<0.25	U	<0.50	U	<0.25	U	1.6		<0.050	U	
MW-OU2-23-180	229	12/03/19	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.15	J	1.1		<0.50	U	1.0		11.7		<0.050	U	
MW-OU2-24-180	209	12/04/19	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.25	J	0.19	J	<0.50	U	<0.25	U	3.7		<0.050	U	
MW-OU2-28-180	232	12/04/19	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.18	J	0.40	J	<0.50	U	0.31	J	5.0		<0.050	U	
MW-OU2-30-180	194	12/04/19	0.10	J	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.50	U	<0.25	U	<0.25	U	<0.050	U	
MW-OU2-39-180	239	12/05/19	0.40	J	<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.47	J	0.44	J	<0.50	U	0.30	J	1.7		<0.050	U	
MW-OU2-43-180	153	12/06/19	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.26	J	0.76		<0.50	U	0.17	J	3.7		<0.050	U	
MW-OU2-44-180	183	12/05/19	<0.25	U	<0.25	U	0.13	J	<0.25	U	<0.25	U	0.76		2.6		<0.50	U	0.51		13.6		<0.050	U	
MW-OU2-46-180	200	12/04/19	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.11	J	<0.25	U	<0.50	U	0.21	J	1.3		<0.050	U	
MW-OU2-47-180	208	12/05/19	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.50	U	0.23	J	0.81		<0.050	U	
MW-OU2-50-180	213	12/02/19	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.10	J	0.38	J	<0.50	U	0.62		5.1		<0.050	U	
MW-OU2-51-180	230	12/03/19	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.10	J	0.11	J	<0.50	U	0.27	J	0.65		<0.050	U	
MW-OU2-53-180	264	12/05/19	0.42	J	<0.25	U	<0.25	U	<0.25	U	0.25	J	0.58		0.74		<0.50	U	2.2		5.4		<0.050	U	
MW-OU2-56-180	225	12/05/19	0.31	J	<0.25	U	0.11	J	<0.25	U	0.11	J	0.46	J	1.8		<0.50	U	1.6		6.6		<0.050	U	
MW-OU2-61-180	186	12/04/19	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.10	J	<0.25	U	<0.50	U	0.13	J	0.61		<0.050	U	
MW-OU2-62-180	228	12/05/19	<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.13	J	0.15	J	0.99		<0.50	U	0.60		7.5		<0.050	U	
MW-OU2-81-180	199	12/05/19	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.27	J	0.33	J	<0.50	U	0.16	J	5.1		<0.050	U	
Maximum Concentration ($\mu\text{g/L}$):			0.42	J	<0.25	U	0.13	J	<0.25	U	0.25	J	0.76		2.6		<0.50	U	2.2		13.6		<0.050	U	
Number of Sampling Locations:			30		30		30		30		30		30		30		30		30		30		30		
Number of Locations above ACL:			0		0		0		0		0		0		0		0		0		11		0		
Percent of Locations with Detections:			27%		0%		7%		0%		13%		87%		73%		0%		73%		97%		0%		

Table 16. Summary of Groundwater Monitoring Analytical Results, Fourth Quarter 2019

Station	Depth (ft btoc)	Analyte:	1,1-DCA		1,2-DCA		1,2-DCPA		Benzene		CT		Chloroform		cis-1,2-DCE		Methylene Chloride		PCE		TCE		Vinyl chloride		
		Units:	(µg/L)		(µg/L)		(µg/L)		(µg/L)		(µg/L)		(µg/L)		(µg/L)		(µg/L)		(µg/L)		(µg/L)		(µg/L)		
		Date:	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	
OUCTP Upper 180-Foot Aquifer																									
EW-OU2-09-180 [‡]	--	12/03/19	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	3.7		<0.50	U	0.85		0.17	J	<0.050	U	

Notes:

Results in **bold** are concentrations above the Aquifer Cleanup Level (ACL).

Results in *gray* are not detected concentrations (result reported as <limit of detection [LOD]).

^ Sample collected at a deeper sampling station in the well.

--: sample collected from an extraction well pump spigot, therefore no sample depth is given.

[‡] EW-OU2-09-180 is a part of the Operable Unit Carbon Tetrachloride Plume (OUCTP) Upper 180-Foot Aquifer remedy; therefore, CT is the only COC for this well (see Table 1).

Data Validation Qualifiers:

J: Laboratory or validation qualifier, estimated result between the detection limit (DL) and the limit of quantitation (LOQ) with a possible high (+) or low (-) bias.

U: Laboratory or validation qualifier, concentration not detected (reported as <LOD).

UJ: Validation qualifier, the analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.

Acronyms and Abbreviations:

µg/L: micrograms per liter

ft btoc: feet below top of casing

OU2: Operable Unit 2

OUCTP: Operable Unit Carbon Tetrachloride Plume

Qual: qualifier

Analyte Names:

1,1-DCA: 1,1-dichloroethane

1,2-DCA: 1,2-dichloroethane

1,2-DCPA: 1,2-dichloropropane

CT: carbon tetrachloride

cis-1,2-DCE: cis-1,2-dichloroethene

PCE: tetrachloroethene

TCE: trichloroethene

Table 17. Summary of Groundwater Monitoring Analytical Results, First Quarter 2020

Station	Depth (ft btoc)	Analyte:	1,1-DCA		1,2-DCA		1,2-DCPA		Benzene		CT		Chloroform		cis-1,2-DCE		Methylene Chloride		PCE		TCE		Vinyl chloride			
		Units:	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)		
		Date:	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual		
OU2 A-Aquifer																										
EW-OU2-04-A	--	3/5/2020	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.16	J	<0.25	U	<0.50	U	<0.25	U	1.5		<0.05	U		
EW-OU2-05-A	--	3/5/2020	0.25	J	<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.34	J	0.28	J	<0.50	U	0.31	J	3.0		<0.05	U		
EW-OU2-06-A	--	3/5/2020	0.27	J	<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.40	J	0.68		<0.50	U	0.35	J	3.7		<0.05	U		
EW-OU2-10-A	--	3/4/2020	0.26	J	0.50		<0.25	U	<0.25	U	<0.25	U	<0.25	U	1.1		<0.50	U	0.67		0.75		0.056	J		
EW-OU2-11-AR	--	3/4/2020	1.2		0.32	J	0.10	J	<0.25	U	<0.25	U	0.21	J	1.2		<0.50	U	0.87		1.8		<0.05	U		
EW-OU2-12-A	--	3/4/2020	6.2		2.2		0.34	J	<0.25	U	<0.25	U	0.92		4.2		<0.50	U	5.2		7.7		0.12			
EW-OU2-13-A	--	3/4/2020	1.5		3.8		0.17	J	<0.25	U	<0.25	U	0.69		2.1		<0.50	U	2.3		6.0		<0.05	U		
EW-OU2-15-A	125	3/5/2020	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.13	J	<0.25	U	<0.50	U	<0.25	U	0.78		<0.05	U		
EW-OU2-16-A	--	3/4/2020	6.0		1.9		0.68		0.19	J	<0.25	U	0.28	J	10.7		<0.50	U	2.5		2.5		0.63			
EW-OU2-17-A	--	3/4/2020	2.1		<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.98		0.61		<0.50	U	7.5		9.4		0.071	J		
EW-OU2-18-A	--	3/4/2020	8.3		1.1		0.32	J	0.17	J	<0.25	U	0.64		3.9		1.4	J	6.4		9.3		0.47			
EW-OU2-19-A	--	3/4/2020	16.2		2.1		0.68		0.31	J	<0.25	U	0.27	J	12.7		0.52	J	6.3		6.1		1.3			
EW-OU2-20-A	--	3/4/2020	5.5		0.69		0.28	J	0.20	J	<0.25	U	<0.25	U	7.8		<0.50	U	1.5		1.2		0.53			
MW-BW-13-A	111	3/2/2020	0.80		<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.32	J	<0.25	U	<0.50	U	0.11	J	2.0		<0.05	U		
MW-BW-50-A	128	3/4/2020	2.4		<0.25	U	0.10	J	<0.25	U	<0.25	U	1.7		<0.25	U	<0.50	U	3.2		1.5		<0.05	U		
MW-OU2-01-A	189	3/5/2020	0.16	J	<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.19	J	<0.25	U	<0.50	U	0.6		2.3		<0.05	U		
MW-OU2-02-A	115	3/6/2020	4.9		1.0		0.23	J	0.29	J	<0.25	U	<0.25	U	1.9		<0.50	U	2.0		0.57		9.5			
MW-OU2-04-A	112	3/3/2020	0.80		0.71		0.14	J	<0.25	U	<0.25	U	0.15	J	1.5		<0.50	U	1.2		2.8		<0.05	U		
MW-OU2-05-A	105	3/4/2020	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.55		<0.25	U	<0.50	U	<0.25	U	<0.25	U	<0.05	U		
MW-OU2-05-A^	110	3/4/2020	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.22	J	<0.25	U	<0.50	U	<0.25	U	<0.25	U	<0.05	U		
MW-OU2-05-A^	115	3/4/2020	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.18	J	<0.25	U	<0.50	U	<0.25	U	<0.25	U	<0.05	U		
MW-OU2-05-A^	120	3/4/2020	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.18	J	<0.25	U	<0.50	U	<0.25	U	<0.25	U	<0.05	U		
MW-OU2-05-A^	125	3/4/2020	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.18	J	<0.25	U	<0.50	U	<0.25	U	<0.25	U	<0.05	U		
MW-OU2-06-AR	118	3/3/2020	2.0		0.98		0.12	J	<0.25	U	<0.25	U	1.1		0.76		<0.50	U	3.5		6.7		<0.05	U		
MW-OU2-07-A	120	3/4/2020	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.50	U	<0.25	U	<0.25	U	<0.05	U		
MW-OU2-07-A^	125	3/4/2020	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.50	U	<0.25	U	<0.25	U	<0.05	U		
MW-OU2-07-A^	130	3/4/2020	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.50	U	<0.25	U	<0.25	U	<0.05	U		
MW-OU2-07-A^	135	3/4/2020	0.10	J	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.50	U	<0.25	U	<0.25	U	<0.05	U		
MW-OU2-07-A^	140	3/4/2020	3.0		<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.34	J	0.39	J	<0.50	U	1.6		0.96		<0.05	U		
MW-OU2-08-A	115	3/4/2020	8.8		0.60		0.19	J	<0.25	U	<0.25	U	0.83		1.7		<0.50	U	2.9		2.1		0.18			
MW-OU2-08-A^	120	3/4/2020	20.3		1.4		0.71		<0.25	U	<0.25	U	2.8		6.0		1.1	J	5.2		6.8		0.41			
MW-OU2-08-A^	125	3/4/2020	24.2		1.3		0.77		<0.25	U	<0.25	U	3.8		6.6		1.0	J	5.8		7.6		0.37			
MW-OU2-12-A	142	3/4/2020	2.8		0.44	J	0.10	J	<0.25	U	<0.25	U	0.35	J	1.5		<0.50	U	1.8		2.4		<0.05	U		
MW-OU2-25-A	151	3/5/2020	0.61		0.50		0.22	J	0.13	J	<0.25	U	<0.25	U	3.7		<0.50	U	0.39	J	1.1		0.14			
MW-OU2-27-A	118	3/5/2020	0.36	J	<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.63		<0.25	U	<0.50	U	4.4		0.10	J	<0.05	U		
MW-OU2-28-A	123	3/5/2020	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.25	J	<0.25	U	<0.50	U	0.58		<0.25	U	<0.05	U		
MW-OU2-34-A	163	3/2/2020	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.50	U	<0.25	U	0.22	J	<0.05	U		
MW-OU2-40-A	118	3/2/2020	0.16	J	<0.25	U	0.16	J	<0.25	U	<0.25	U	0.75		3.1		<0.50	U	0.49	J	11.0		<0.05	U		
MW-OU2-44-A	90	3/5/2020	15.5		3.3		0.53		<0.25	U	<0.25	U	0.95		7.1		0.93	J	4.0		3.3		0.91			
MW-OU2-45-A	115	3/5/2020	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.18	J	<0.25	U	<0.50	U	<0.25	U	1.2		<0.05	U		
MW-OU2-46-A	102	3/5/2020	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.12	J	<0.25	U	<0.50	U	3.6		0.19	J	<0.05	U		

Table 17. Summary of Groundwater Monitoring Analytical Results, First Quarter 2020

Station	Depth (ft btoc)	Analyte:	1,1-DCA (µg/L)		1,2-DCA (µg/L)		1,2-DCPA (µg/L)		Benzene (µg/L)		CT (µg/L)		Chloroform (µg/L)		cis-1,2-DCE (µg/L)		Methylene Chloride (µg/L)		PCE (µg/L)		TCE (µg/L)		Vinyl chloride (µg/L)			
		Units: Date:	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual		
MW-OU2-73-A	112	3/3/2020	2.4		0.31	J	0.12	J	0.35	J	<0.25	U	<0.25	U	0.46	J	<0.50	U	2.2		<0.25	U	5.5			
MW-OU2-74-A	160	3/3/2020	0.20	J	1.7		<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.98		<0.50	U	0.74		0.76		<0.05	U		
MW-OU2-75-A	96	3/5/2020	5.6		<0.25	U	0.47	J	<0.25	U	<0.25	U	2.3		0.21	J	<0.50	U	3.9		2.8		0.055	J		
MW-OU2-79-A	112	3/2/2020	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.50	U	<0.25	U	0.33	J	<0.05	U		
MW-OU2-80-A	115	3/5/2020	0.39	J	<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.14	J	<0.25	U	<0.50	U	1.2		0.24	J	<0.05	U		
MW-OU2-81-A	106	3/4/2020	2.1		0.55		<0.25	U	<0.25	U	<0.25	U	1.1		0.62		<0.50	U	11.4		7.6		<0.05	U		
MW-OU2-83-A	101	3/4/2020	5.5		0.17	J	<0.25	U	<0.25	U	<0.25	U	0.50		1.3		<0.50	U	1.5		1.2		0.11			
Maximum Concentration (µg/L):			24.2		3.8		0.77		0.35	J	<0.25	U	3.8		12.7		1.4	J	11.4		11.0		9.5			
Number of Sampling Locations:			38		38		38		38		38		38		38		38		38		38		38			
Number of Locations above ACL:			9		13		0		0		0		2		5		0		12		9		11			
Percent of Locations with Detections:			79%		50%		47%		18%		0%		79%		66%		11%		84%		92%		37%			
OU2 Upper 180-Foot Aquifer																										
EW-OU2-01-180	143	3/4/2020	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.18	J	<0.25	U	<0.50	U	0.11	J	3.8		<0.05	U		
EW-OU2-02-180R	--	3/4/2020	0.20	J	<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.40	J	1.4		<0.50	U	0.33	J	5.2		<0.05	U		
EW-OU2-03-180	--	3/4/2020	<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.12	J	0.16	J	0.74		<0.50	U	0.68		8.0		<0.05	U		
EW-OU2-05-180	--	3/4/2020	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.18	J	0.33	J	<0.50	U	0.31	J	2.6		<0.05	U		
EW-OU2-06-180	--	3/4/2020	0.13	J	<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.33	J	1.2		<0.50	U	0.69		3.8		<0.05	U		
EW-OU2-08-180	--	3/4/2020	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.16	J	0.32	J	<0.50	U	0.28	J	1.7		<0.05	U		
EW-OU2-10-180	--	3/4/2020	0.19	J	<0.25	U	<0.25	U	<0.25	U	0.11	J	0.40	J	1.4		<0.50	U	1.2		7.4		<0.05	U		
EW-OU2-11-180	--	3/4/2020	<0.25	U	<0.25	U	0.12	J	<0.25	U	0.11	J	0.52		2.2		<0.50	U	0.92		5.1		<0.05	U		
MW-BW-02-180	168	3/5/2020	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.50	U	<0.25	U	0.22	J	<0.05	U		
MW-BW-14-180	173	3/2/2020	0.21	J	<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.22	J	0.44	J	<0.50	U	<0.25	U	2.5		<0.05	U		
MW-OU2-06-180R2	208	3/3/2020	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.15	J	<0.25	U	<0.50	U	<0.25	U	1.1		<0.05	U		
MW-OU2-07-180R	238	3/4/2020	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.14	J	<0.25	U	<0.50	U	<0.25	U	1.6		<0.05	U		
MW-OU2-20-180	159	3/2/2020	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.18	J	<0.25	U	<0.50	U	<0.25	U	1.8		<0.05	U		
MW-OU2-23-180	234	3/3/2020	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.16	J	1.2		<0.50	U	1.3		13.3		<0.05	U		
MW-OU2-24-180	214	3/4/2020	0.15	J	<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.55		1.5		<0.50	U	0.15	J	8.5		<0.05	U		
MW-OU2-28-180	232	3/5/2020	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.14	J	0.24	J	<0.50	U	0.24	J	4.0		<0.05	U		
MW-OU2-39-180	244	3/5/2020	0.39	J	<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.47	J	0.52		<0.50	U	0.36	J	1.7		<0.05	U		
MW-OU2-43-180	158	3/2/2020	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.19	J	0.60		<0.50	U	0.16	J	2.3		<0.05	U		
MW-OU2-44-180	188	3/5/2020	<0.25	U	<0.25	U	0.14	J	<0.25	U	<0.25	U	0.65		2.9		<0.50	U	0.72		11.4		<0.05	U		
MW-OU2-46-180	205	3/5/2020	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.23	J	0.48	J	<0.50	U	0.23	J	4.1		<0.05	U		
MW-OU2-47-180	213	3/4/2020	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.50	U	0.23	J	0.75		<0.05	U		
MW-OU2-50-180	213	3/5/2020	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.16	J	0.74		<0.50	U	1.0		11.8		<0.05	U		
MW-OU2-51-180	230	3/6/2020	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.14	J	0.17	J	<0.50	U	0.31	J	<0.25	U	<0.05	U		

Table 17. Summary of Groundwater Monitoring Analytical Results, First Quarter 2020

Station	Depth (ft btoc)	Analyte: Units: Date:	1,1-DCA (µg/L)		1,2-DCA (µg/L)		1,2-DCPA (µg/L)		Benzene (µg/L)		CT (µg/L)		Chloroform (µg/L)		cis-1,2-DCE (µg/L)		Methylene Chloride (µg/L)		PCE (µg/L)		TCE (µg/L)		Vinyl chloride (µg/L)			
			Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual		
MW-OU2-53-180	254	3/5/2020	0.42	J	<0.25	U	0.12	J	<0.25	U	0.21	J	0.60		0.81		<0.50	U	2.2		5.1		<0.05	U		
MW-OU2-56-180	230	3/6/2020	<0.25	U	<0.25	U	0.13	J	<0.25	U	0.14	J	0.50		2.3		<0.50	U	1.8		<0.25	U	<0.05	U		
MW-OU2-61-180	181	3/5/2020	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.50	U	<0.25	U	0.44	J	<0.05	U		
MW-OU2-62-180	228	3/5/2020	<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.14	J	0.19	J	1.2		<0.50	U	0.75		8.6		<0.05	U		
MW-OU2-81-180	204	3/4/2020	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.24	J	0.20	J	<0.50	U	0.14	J	4.7		<0.05	U		
Maximum Concentration (µg/L):			0.42	J	<0.25	U	0.14	J	<0.25	U	0.21	J	0.65		2.9		<0.50	U	2.2		13.3		<0.05	U		
Number of Sampling Locations:			28		28		28		28		28		28		28		28		28		28		28			
Number of Locations above ACL:			0		0		0		0		0		0		0		0		0		10		0			
Percent of Locations with Detections:			25%		0%		14%		0%		21%		89%		75%		0%		79%		93%		0%			
OUCTP Upper 180-Foot Aquifer																										
EW-OU2-09-180 [¥]	--	3/4/2020	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	3.7		<0.50	U	0.96		0.16	J	<0.05	U		

Notes:

Results in **bold** are concentrations above the Aquifer Cleanup Level (ACL).

Results in *gray* are not detected concentrations (result reported as <limit of detection [LOD]).

^ Sample collected at a deeper sampling station in the well.

--: sample collected from an extraction well pump spigot, therefore no sample depth is given.

¥ EW-OU2-09-180 is a part of the Operable Unit Carbon Tetrachloride Plume (OUCTP) Upper 180-Foot Aquifer remedy; therefore, CT is the only COC for this well (see Table 1).

Data Validation Qualifiers:

J: Laboratory or validation qualifier, estimated result between the detection limit (DL) and the limit of quantitation (LOQ) with a possible high (+) or low (-) bias.

U: Laboratory or validation qualifier, concentration not detected (reported as <LOD).

Acronyms and Abbreviations:

µg/L: micrograms per liter

ft btoc: feet below top of casing

OU2: Operable Unit 2

OUCTP: Operable Unit Carbon Tetrachloride Plume

Qual: qualifier

Analyte Names:

1,1-DCA: 1,1-dichloroethane

1,2-DCA: 1,2-dichloroethane

1,2-DCPA: 1,2-dichloropropane

cis-1,2-DCE: cis-1,2-dichloroethene

CT: carbon tetrachloride

PCE: tetrachloroethene

TCE: trichloroethene

Table 18. Summary of Groundwater Monitoring Analytical Results, Second Quarter 2020

Station	Depth (ft btoc)	Analyte:	1,1-DCA (µg/L)		1,2-DCA (µg/L)		1,2-DCPA (µg/L)		Benzene (µg/L)		CT (µg/L)		Chloroform (µg/L)		cis-1,2-DCE (µg/L)		Methylene Chloride (µg/L)		PCE (µg/L)		TCE (µg/L)		Vinyl chloride (µg/L)		
		Units:	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	
		Date:																							
OU2 A-Aquifer																									
EW-OU2-04-A	--	6/2/2020	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.16	J	<0.25	U	<0.50	U	<0.25	U	1.5		<0.05	U	
EW-OU2-05-A	--	6/2/2020	0.31	J	<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.42	J	0.47	J	<0.50	U	0.31	J	3.5		<0.05	U	
EW-OU2-06-A	--	6/2/2020	0.25	J	<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.35	J	0.59		<0.50	U	0.33	J	3.2		<0.05	U	
EW-OU2-10-A	--	6/2/2020	0.27	J	0.56		<0.25	U	<0.25	U	<0.25	U	<0.25	U	1.1		<0.50	U	0.68		0.87		0.052	J	
EW-OU2-11-AR	--	6/2/2020	1.2		0.32	J	<0.25	U	<0.25	U	<0.25	U	0.18	J	1.1		<0.50	U	0.79		1.9		<0.05	U	
EW-OU2-12-A	--	6/2/2020	5.9	J-	2.3	J-	0.32	J	<0.25	UJ	<0.25	UJ	0.78	J-	4.3	J-	<0.50	UJ	4.9	J-	8.5	J-	0.11	J-	
EW-OU2-13-A	--	6/2/2020	1.4		3.9		0.15	J	<0.25	U	<0.25	U	0.59		2.0		<0.50	U	2.1		6.5		<0.05	U	
EW-OU2-15-A	125	6/3/2020	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.32	J	<0.25	U	<0.50	U	<0.25	U	1.6		<0.05	U	
EW-OU2-16-A	--	6/2/2020	5.8		1.9		0.60		0.14	J	<0.25	U	0.26	J	10.0		<0.50	U	2.4		2.8		0.53		
EW-OU2-17-A	--	6/2/2020	1.8		0.11	J	<0.25	U	<0.25	U	<0.25	U	0.87		0.51		<0.50	U	7.1		11.6		<0.05	U	
EW-OU2-18-A	--	6/2/2020	7.7		1.2		0.29	J	0.19	J	<0.25	U	0.52		4.0		2.0		6.2		11.5		0.52		
EW-OU2-19-A	--	6/2/2020	14		2.2		0.58		0.24	J	<0.25	U	0.27	J	12.0		0.54	J	6.1		6.3		1.2		
MW-BW-13-A	126	6/2/2020	1.1		<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.39	J	<0.25	U	<0.50	U	0.13	J	2.4		<0.05	U	
MW-BW-50-A	123	6/4/2020	1.1		<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.77		<0.25	U	<0.50	U	5.4		0.88		<0.05	U	
MW-OU2-01-A	194	6/3/2020	0.20	J	<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.24	J	<0.25	U	<0.50	U	0.61		2.5		<0.05	U	
MW-OU2-02-A	115	6/2/2020	4.6		0.78		0.19	J	0.25	J	<0.25	U	<0.25	U	2.0		<0.50	U	2.5		0.71		9.3		
MW-OU2-04-A	107	6/4/2020	0.61		0.51		<0.25	U	<0.25	U	<0.25	U	0.15	J	0.98		<0.50	U	1.0		2.3		<0.05	U	
MW-OU2-05-A	105	6/4/2020	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.52		<0.25	U	<0.50	U	<0.25	U	<0.25	U	<0.05	U	
MW-OU2-06-AR	113	6/4/2020	0.60		1.1		<0.25	U	<0.25	U	<0.25	U	0.61		0.37	J	<0.50	U	0.69		3.6		<0.05	U	
MW-OU2-07-A	140	6/4/2020	1.7		<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.20	J	0.17	J	<0.50	U	0.29	J	0.35	J	<0.05	U	
MW-OU2-08-A	120	6/4/2020	16.3		1.5		0.65		<0.25	U	<0.25	U	2.9		5.7		1.3	J	4.5		8.1		0.36		
MW-OU2-12-A	137	6/4/2020	5.3		0.65		0.14	J	<0.25	U	<0.25	U	0.56		2.1		<0.50	U	1.8		3.7		<0.05	U	
MW-OU2-25-A	146	6/4/2020	0.62		0.61		0.19	J	<0.25	U	<0.25	U	<0.25	U	3.9		<0.50	U	0.36	J	1.2		0.16		
MW-OU2-27-A	113	6/5/2020	0.45	J	<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.72		<0.25	U	<0.50	U	5.0		0.13	J	<0.05	U	
MW-OU2-28-A	113	6/3/2020	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.59		<0.25	U	<0.50	U	<0.25	U	2.1		<0.05	U	
MW-OU2-34-A	148	6/2/2020	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.50	U	0.10	J	0.22	J	<0.05	U	
MW-OU2-40-A	118	6/2/2020	0.19	J	<0.25	U	0.19	J	<0.25	U	<0.25	U	0.87		3.3		<0.50	U	0.47	J	11.3		<0.05	U	
MW-OU2-44-A	95	6/4/2020	11.5		2.6		0.37	J	<0.25	U	<0.25	U	0.73		5.5		0.81	J	4.8		3.5		0.60		
MW-OU2-45-A	115	6/3/2020	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.27	J	<0.25	U	<0.50	U	<0.25	U	1.6		<0.05	U	
MW-OU2-46-A	107	6/3/2020	1.6		<0.25	U	<0.25	U	<0.25	U	<0.25	U	1.4		<0.25	U	<0.50	U	5.5		0.93		<0.05	U	
MW-OU2-73-A	127	6/2/2020	5.2		0.65		0.27	J	0.43	J	<0.25	U	<0.25	U	4.3		<0.50	U	1.3		0.26	J	6.2		
MW-OU2-73-A^	132	6/2/2020	5.1		0.64		0.26	J	0.43	J	<0.25	U	<0.25	U	4.2		<0.50	U	1.3		0.27	J	6.2		
MW-OU2-73-A^	137	6/2/2020	5.1		0.65		0.27	J	0.43	J	<0.25	U	<0.25	U	4.2		<0.50	U	1.3		0.27	J	6.3		
MW-OU2-74-A	150	6/2/2020	0.17	J	1.2		<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.73		<0.50	U	0.69		0.62		<0.05	U	
MW-OU2-75-A	101	6/3/2020	10.6		0.15	J	0.74		<0.25	U	<0.25	U	4.5		0.36	J	<0.50	U	9.9		6.9		0.091	J	
MW-OU2-75-A^	106	6/3/2020	12.6		0.17	J	0.92		<0.25	U	<0.25	U	5.9		0.43	J	<0.50	U	10.3		8.1		0.14		
MW-OU2-75-A^	111	6/3/2020	12.0		0.16	J	0.87		<0.25	U	<0.25	U	5.5		0.39	J	0.52	J	9.1		7.3		0.15		
MW-OU2-79-A	117	6/2/2020	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.29	J	<0.50	U	0.13	J	0.75		<0.05	U	
MW-OU2-80-A	120	6/3/2020	0.40	J	<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.14	J	<0.25	U	<0.50	U	2.8		0.30	J	<0.05	U	
MW-OU2-81-A	111	6/3/2020	1.9		0.46	J	<0.25	U	<0.25	U	<0.25	U	0.95		0.58		<0.50	U	10.8		8.2		<0.05	U	
MW-OU2-83-A	106	6/3/2020	5.9		0.20	J	<0.25	U	<0.25	U	<0.25	U	0.50		1.4		<0.50	U	1.4		1.5		0.12		

Table 18. Summary of Groundwater Monitoring Analytical Results, Second Quarter 2020

Station	Depth (ft btoc)	Analyte: Units: Date:	1,1-DCA (µg/L)		1,2-DCA (µg/L)		1,2-DCPA (µg/L)		Benzene (µg/L)		CT (µg/L)		Chloroform (µg/L)		cis-1,2-DCE (µg/L)		Methylene Chloride (µg/L)		PCE (µg/L)		TCE (µg/L)		Vinyl chloride (µg/L)	
			Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual
			Maximum Concentration (µg/L):																					
			16.3		3.9		0.92		0.43	J	<0.25	U	5.9		12.0		2.0		10.8		11.6		9.3	
Number of Sampling Locations:			37		37		37		37		37		37		37		37		37		37		37	
Number of Locations above ACL:			10		15		0		0		0		2		2		0		11		9		11	
Percent of Locations with Detections:			81%		54%		35%		14%		0%		81%		68%		14%		86%		97%		32%	
OU2 Upper 180-Foot Aquifer																								
EW-OU2-01-180	148	6/2/2020	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.17	J	<0.25	U	<0.50	U	0.11	J	4.4		<0.05	U
EW-OU2-02-180R	--	6/2/2020	0.20	J	<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.36	J	1.3		<0.50	U	0.30	J	5.7		<0.05	U
EW-OU2-03-180	--	6/2/2020	<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.15	J	0.15	J	0.67		<0.50	U	0.60		7.3		<0.05	U
EW-OU2-05-180	--	6/2/2020	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.16	J	0.30	J	<0.50	U	0.29	J	2.7		<0.05	U
EW-OU2-06-180	--	6/2/2020	0.13	J	<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.29	J	1.1		<0.50	U	0.63		4.1		<0.05	U
EW-OU2-08-180	--	6/2/2020	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.12	J	0.21	J	<0.50	U	0.21	J	1.4		<0.05	U
EW-OU2-10-180	--	6/2/2020	0.18	J	<0.25	U	<0.25	U	<0.25	U	0.11	J	0.36	J	1.3		<0.50	U	1.1		8.5		<0.05	U
EW-OU2-11-180	--	6/2/2020	<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.14	J	0.46	J	1.7		<0.50	U	0.87		4.3		<0.05	U
MW-BW-02-180	168	6/3/2020	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.50	U	<0.25	U	0.30	J	<0.05	U
MW-BW-14-180	178	6/2/2020	0.23	J	<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.22	J	0.42	J	<0.50	U	<0.25	U	2.7		<0.05	U
MW-OU2-06-180R2	213	6/4/2020	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.14	J	<0.25	U	<0.50	U	<0.25	U	1.0		<0.05	U
MW-OU2-07-180R	238	6/4/2020	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.21	J	<0.25	U	<0.50	U	<0.25	U	0.50		<0.05	U
MW-OU2-20-180	164	6/2/2020	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.18	J	<0.25	U	<0.50	U	<0.25	U	2.0		<0.05	U
MW-OU2-23-180	239	6/5/2020	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.18	J	1.3		<0.50	U	1.3		17.7		<0.05	U
MW-OU2-24-180	224	6/4/2020	0.15	J	<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.53		1.4		<0.50	U	0.15	J	10.5		<0.05	U
MW-OU2-28-180	232	6/3/2020	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.17	J	0.23	J	<0.50	U	0.28	J	4.3		<0.05	U
MW-OU2-39-180	239	6/4/2020	0.42	J	<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.45	J	0.42	J	<0.50	U	0.32	J	1.6		<0.05	U
MW-OU2-43-180	148	6/4/2020	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.11	J	0.19	J	<0.50	U	0.15	J	1.0		<0.05	U
MW-OU2-44-180	193	6/4/2020	<0.25	U	<0.25	U	0.13	J	<0.25	U	<0.25	U	0.58		2.5		<0.50	U	0.80		11.6		<0.05	U
MW-OU2-46-180	200	6/3/2020	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.11	J	<0.25	U	<0.50	U	0.21	J	1.3		<0.05	U
MW-OU2-47-180	208	6/3/2020	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.50	U	0.17	J	0.68		<0.05	U
MW-OU2-50-180	213	6/5/2020	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.14	J	0.71		<0.50	U	1.1		11.8		<0.05	U
MW-OU2-51-180	230	6/5/2020	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.13	J	0.17	J	<0.50	U	0.35	J	0.94		<0.05	U
MW-OU2-53-180	259	6/4/2020	0.35	J	<0.25	U	<0.25	U	<0.25	U	0.20	J	0.50		0.69		<0.50	U	2.0		5.5		<0.05	U
MW-OU2-56-180	235	6/3/2020	0.13	J	<0.25	U	<0.25	U	<0.25	U	0.13	J	0.33	J	2.2		<0.50	U	1.7		6.3		<0.05	U
MW-OU2-61-180	186	6/3/2020	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.12	J	<0.25	U	<0.50	U	<0.25	U	0.47	J	<0.05	U
MW-OU2-62-180	228	6/3/2020	<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.19	J	0.14	J	0.53		<0.50	U	0.60		4.0		<0.05	U
MW-OU2-81-180	209	6/3/2020	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.24	J	0.15	J	<0.50	U	0.12	J	5.4		<0.05	U
Maximum Concentration (µg/L):			0.42	J	<0.25	U	0.13	J	<0.25	U	0.20	J	0.58		2.5		<0.50	U	2.0		17.7		<0.05	U
Number of Sampling Locations:			28		28		28		28		28		28		28		28		28		28		28	
Number of Locations above ACL:			0		0		0		0		0		0		0		0		0		10		0	
Percent of Locations with Detections:			29%		0%		4%		0%		21%		93%		71%		0%		79%		100%		0%	
OUCTP Upper 180-Foot Aquifer																								
EW-OU2-09-180 ^Y	--	6/2/2020	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	4.1		<0.50	U	1.0		0.21	J	<0.05	U

Table 18. Summary of Groundwater Monitoring Analytical Results, Second Quarter 2020

Notes:

Results in **bold** are concentrations above the Aquifer Cleanup Level (ACL).

Results in *gray* are not detected concentrations (result reported as <limit of detection [LOD]).

^ Sample collected at a deeper sampling station in the well.

--: sample collected from an extraction well pump spigot, therefore no sample depth is given.

¥ EW-OU2-09-180 is a part of the Operable Unit Carbon Tetrachloride Plume (OUCTP) Upper 180-Foot Aquifer remedy; therefore, CT is the only COC for this well (see Table 1).

Data Validation Qualifiers:

J: Laboratory or validation qualifier, estimated result between the detection limit (DL) and the limit of quantitation (LOQ) with a possible high (+) or low (-) bias.

U: Laboratory or validation qualifier, concentration not detected (reported as <LOD).

UJ: Validation qualifier, the analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.

Acronyms and Abbreviations:

µg/L: micrograms per liter

ft btoc: feet below top of casing

OU2: Operable Unit 2

OUCTP: Operable Unit Carbon Tetrachloride Plume

Qual: qualifier

Analyte Names:

1,1-DCA: 1,1-dichloroethane

1,2-DCA: 1,2-dichloroethane

1,2-DCPA: 1,2-dichloropropane

CT: carbon tetrachloride

cis-1,2-DCE: cis-1,2-dichloroethene

PCE: tetrachloroethene

TCE: trichloroethene

Table 19. Summary of Groundwater Monitoring Analytical Results, Third Quarter 2020

Station	Depth (ft btoc)	Analyte:	1,1-DCA		1,2-DCA		1,2-DCPA		Benzene		CT		Chloroform		cis-1,2-DCE		Methylene Chloride		PCE		TCE		Vinyl chloride		
		Units:	(µg/L)		(µg/L)		(µg/L)		(µg/L)		(µg/L)		(µg/L)		(µg/L)		(µg/L)		(µg/L)		(µg/L)		(µg/L)		
		Date:	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	
OU2 A-Aquifer																									
EW-OU2-04-A	--	9/2/2020	0.37	J	<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.25	J	<0.25	U	<0.50	U	<0.25	U	1.9		<0.050	U	
EW-OU2-05-A	--	9/2/2020	0.46	J	0.30	J	0.10	J	<0.25	U	<0.25	U	0.37	J	0.85		<0.50	U	0.50		3.9		<0.050	U	
EW-OU2-06-A	--	9/2/2020	0.19	J	<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.30	J	0.57		<0.50	U	0.27	J	3.1		<0.050	U	
EW-OU2-09-A	--	9/2/2020	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.50	U	0.17	J	0.14	J	0.051	J	
EW-OU2-10-A	--	9/2/2020	0.25	J	0.51		<0.25	U	<0.25	U	<0.25	U	<0.25	U	1.0		<0.50	U	0.61		0.70		0.053	J	
EW-OU2-11-AR	--	9/2/2020	1.4		0.30	J	0.12	J	<0.25	U	<0.25	U	0.22	J	1.0		<0.50	U	0.77		1.8		<0.050	U	
EW-OU2-12-A	--	9/2/2020	5.4		2.1		0.36	J	<0.25	U	<0.25	U	0.68		4.1		<0.50	U	4.2		6.5		0.11		
EW-OU2-13-A	--	9/2/2020	1.5	J+	4.1	J+	0.17	J	<0.25	U	<0.25	U	0.66	J+	2.0	J+	<0.50	U	2.1	J+	5.9	J+	<0.050	U	
EW-OU2-15-A	125	9/3/2020	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.28	J	<0.25	U	<0.50	U	<0.25	U	1.4		<0.050	U	
EW-OU2-16-A	--	9/2/2020	5.7		2.0		0.69		0.15	J	<0.25	U	0.28	J	8.9		<0.50	U	2.2		2.5		0.57		
EW-OU2-17-A	--	9/2/2020	1.4		0.12	J	<0.25	U	<0.25	U	<0.25	U	0.82		0.43	J	<0.50	U	5.9		9.5	J+	<0.050	U	
EW-OU2-18-A	--	9/2/2020	6.6		1.0		0.26	J	0.18	J	<0.25	U	0.52		3.5		< 1.6	U	5.4		10.1		0.51		
EW-OU2-19-A	--	9/2/2020	12.6		1.9		0.55		0.23	J	<0.25	U	0.24	J	11.1		<0.50	U	5.4		5.3		1.3		
EW-OU2-20-A	--	9/2/2020	5.1		0.72		0.24	J	0.17	J	<0.25	U	<0.25	U	7.7		<0.50	U	1.3		1.3		0.86		
MW-BW-13-A	126	9/2/2020	0.89		<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.37	J	<0.25	U	<0.50	U	0.12	J	2.3		<0.050	U	
MW-BW-50-A	128	9/3/2020	1.9		<0.25	U	<0.25	U	<0.25	U	<0.25	U	1.4		<0.25	U	<0.50	U	2.9		1.1		<0.050	U	
MW-OU2-01-A	199	9/1/2020	0.17	J	<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.20	J	<0.25	U	<0.50	U	0.51		2.3		<0.050	U	
MW-OU2-02-A	115	9/1/2020	3.9		0.91		0.20	J	<0.25	U	<0.25	U	<0.25	U	2.0		<0.50	U	2.6		0.51		7.5		
MW-OU2-04-A	112	9/2/2020	0.70		0.61		<0.25	U	<0.25	U	<0.25	U	<0.25	U	1.3		<0.50	U	1.2		2.6		<0.050	U	
MW-OU2-05-A	120	9/2/2020	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.18	J	<0.25	U	<0.50	U	<0.25	U	<0.25	U	<0.050	U	
MW-OU2-06-AR	118	9/2/2020	2.4		0.84		<0.25	U	<0.25	U	<0.25	U	0.97		0.70		<0.50	U	2.4		5.6		<0.050	U	
MW-OU2-07-A	140	9/2/2020	6.3		<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.79		0.58		<0.50	U	0.51		0.54		<0.050	U	
MW-OU2-08-A	125	9/3/2020	21.6		1.4		0.65		<0.25	U	<0.25	U	3.1		5.7		1.0	J	6.6		6.4		0.31		
MW-OU2-12-A	132	9/2/2020	0.41	J	0.20	J	<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.97		<0.50	U	0.35	J	1.2		<0.050	U	
MW-OU2-25-A	146	9/3/2020	0.54		0.57		0.21	J	<0.25	U	<0.25	U	<0.25	U	3.8		<0.50	U	0.43	J	1.0		<0.050	U	
MW-OU2-27-A	118	9/2/2020	0.34	J	<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.65		<0.25	U	<0.50	U	4.1		<0.25	U	<0.050	U	
MW-OU2-28-A	118	9/2/2020	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.31	J	<0.25	U	<0.50	U	0.61		<0.25	U	<0.050	U	
MW-OU2-34-A	153	9/3/2020	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.50	U	<0.25	U	<0.25	U	<0.050	U	
MW-OU2-40-A	118	9/1/2020	0.16	J	<0.25	U	0.16	J	<0.25	U	<0.25	U	0.71		2.6		<0.50	U	0.42	J	10.0		<0.050	U	
MW-OU2-44-A	90	9/3/2020	5.5		1.3		<0.25	U	<0.25	U	<0.25	U	0.55		2.7		<0.50	U	1.5		1.2		0.22		
MW-OU2-45-A	115	9/3/2020	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.27	J	<0.25	U	<0.50	U	<0.25	U	1.5		<0.050	U	
MW-OU2-46-A	107	9/23/2020	0.74		<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.73		<0.25	U	<0.50	U	1.9		0.48	J	<0.050	U	
MW-OU2-73-A	117	9/1/2020	2.7	J+	0.51	J+	<0.25	U	0.25	J	<0.25	U	<0.25	U	1.0	J+	<0.50	U	1.9	J+	<0.25	U	5.2	J+	
MW-OU2-74-A	150	9/1/2020	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.50	U	0.34	J	<0.25	U	<0.050	U	
MW-OU2-75-A	116	9/3/2020	10.0		<0.25	U	0.82		<0.25	U	<0.25	U	5.2		0.35	J	<0.50	U	7.4		5.5		<0.050	U	
MW-OU2-79-A	122	9/1/2020	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.25	J	<0.50	U	0.11	J	0.86		<0.050	U	
MW-OU2-80-A	125	9/1/2020	0.39	J	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.50	U	2.3	J+	0.27	J	<0.050	U	
MW-OU2-81-A	116	9/3/2020	2.1		0.47	J	<0.25	U	<0.25	U	<0.25	U	1.1		0.62		<0.50	U	9.7		12.1		<0.050	U	
MW-OU2-83-A	111	9/3/2020	5.5		0.21	J	<0.25	U	<0.25	U	<0.25	U	0.55		1.5		<0.50	U	1.3		1.2		<0.050	U	

Table 19. Summary of Groundwater Monitoring Analytical Results, Third Quarter 2020

Station	Depth (ft btoc)	Analyte:	1,1-DCA		1,2-DCA		1,2-DCPA		Benzene		CT		Chloroform		cis-1,2-DCE		Methylene Chloride		PCE		TCE		Vinyl chloride		
		Units:	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	
Maximum Concentration (µg/L):			21.6		4.1	J+	0.82		0.25	J	<0.25	U	5.2		11.1		1.0	J	9.7		12.1		7.5		
Number of Sampling Locations:			39		39		39		39		39		39		39		39		39		39		39		
Number of Locations above ACL:			10		14		0		0		0		2		3		0		8		10		9		
Percent of Locations with Detections:			79%		51%		33%		13%		0%		69%		64%		3%		87%		85%		28%		
OU2 Upper 180-Foot Aquifer																									
EW-OU2-01-180	153	9/1/2020	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.20	J	<0.25	U	<0.50	U	0.11	J	4.0		<0.050	U	
EW-OU2-02-180R	--	9/2/2020	0.21	J	<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.39	J	1.3		<0.50	U	0.32	J	5.2		<0.050	U	
EW-OU2-03-180	--	9/2/2020	<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.12	J	0.16	J	0.59		<0.50	U	0.47	J	7.3		<0.050	U	
EW-OU2-05-180	--	9/2/2020	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.19	J	0.36	J	<0.50	U	0.34	J	2.7		<0.050	U	
EW-OU2-06-180	--	9/2/2020	0.18	J	<0.25	U	0.12	J	<0.25	U	<0.25	U	0.38	J	1.3		<0.50	U	0.77		4.2		<0.050	U	
EW-OU2-08-180	--	9/2/2020	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.13	J	0.21	J	<0.50	U	0.22	J	1.7		<0.050	U	
EW-OU2-10-180	--	9/2/2020	0.16	J	<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.36	J	1.1		<0.50	U	0.89		7.6		<0.050	U	
EW-OU2-11-180	--	9/2/2020	<0.25	U	<0.25	U	0.12	J	<0.25	U	0.12	J	0.42	J	1.5		<0.50	U	0.79		3.5		<0.050	U	
MW-BW-02-180	168	9/3/2020	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.50	U	<0.25	U	<0.25	U	<0.050	U	
MW-BW-14-180	158	9/2/2020	0.11	J	<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.25	J	0.68		<0.50	U	<0.25	U	4.1		<0.050	U	
MW-OU2-06-180R2	198	9/2/2020	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.50	U	<0.25	U	0.82		<0.050	U	
MW-OU2-07-180R	238	9/2/2020	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.27	J	<0.25	U	<0.50	U	<0.25	U	0.51		<0.050	U	
MW-OU2-20-180	154	9/1/2020	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.2	J	<0.25	U	<0.50	U	<0.25	U	1.9		<0.050	U	
MW-OU2-23-180	219	9/3/2020	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	1.0		<0.50	U	1.1		12.2		<0.050	U	
MW-OU2-24-180	219	9/2/2020	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.63		1.5		<0.50	U	<0.25	U	9.6		<0.050	U	
MW-OU2-28-180	232	9/2/2020	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.23	J	0.23	J	<0.50	U	0.4	J	5.1		<0.050	U	
MW-OU2-39-180	244	9/3/2020	0.43	J	<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.49	J	0.32	J	<0.50	U	0.3	J	1.1		<0.050	U	
MW-OU2-43-180	153	9/2/2020	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.20	J	0.54		<0.50	U	0.13	J	2.5		<0.050	U	
MW-OU2-44-180	183	9/3/2020	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.75		2.6		<0.50	U	0.37	J	13.3		<0.050	U	
MW-OU2-46-180	205	9/3/2020	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.50	U	<0.25	U	1.1		<0.050	U	
MW-OU2-47-180	213	9/3/2020	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.50	U	<0.25	U	0.47	J	<0.050	U	
MW-OU2-50-180	213	9/3/2020	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.63		<0.50	U	1.0		8.7		<0.050	U	
MW-OU2-51-180	220	9/3/2020	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.50	U	0.28	J	0.56		<0.050	U	
MW-OU2-53-180	264	9/3/2020	0.33	J	<0.25	U	<0.25	U	<0.25	U	0.20	J	0.53		0.68		<0.50	U	2.0		4.6		<0.050	U	
MW-OU2-56-180	220	9/1/2020	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.31	J	2.0	J+	<0.50	U	1.6	J+	7.0	J+	<0.050	U	
MW-OU2-61-180	181	9/2/2020	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.50	U	<0.25	U	0.35	J	<0.050	U	
MW-OU2-62-180	228	9/1/2020	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.37	J	<0.50	U	0.28	J	3.1	J+	<0.050	U	
MW-OU2-63-180	181	9/3/2020	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.50	U	<0.25	U	1.5		<0.050	U	
MW-OU2-81-180	209	9/3/2020	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	0.20	J	<0.25	U	<0.50	U	<0.25	U	3.7		<0.050	U	
Maximum Concentration (µg/L):			0.43	J	<0.25	U	0.12	J	<0.25	U	0.20	J	0.75		2.6		<0.50	U	2.0		13.3		<0.050	U	
Number of Sampling Locations:			29		29		29		29		29		29		29		29		29		29		29		
Number of Locations above ACL:			0		0		0		0		0		0		0		0		0		9		0		
Percent of Locations with Detections:			21%		0%		7%		0%		10%		66%		62%		0%		62%		97%		0%		

Table 19. Summary of Groundwater Monitoring Analytical Results, Third Quarter 2020

Station	Depth (ft btoc)	Analyte:	1,1-DCA		1,2-DCA		1,2-DCPA		Benzene		CT		Chloroform		cis-1,2-DCE		Methylene Chloride		PCE		TCE		Vinyl chloride		
		Units:	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	
		Date:	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	
OUCTP Upper 180-Foot Aquifer																									
EW-OU2-09-180 [‡]	--	9/2/2020	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	<0.25	U	3.9		<0.50	U	0.85		0.17	J	<0.050	U	

Notes:

Results in **bold** are concentrations above the Aquifer Cleanup Level (ACL).

Results in *gray* are not detected concentrations (result reported as <limit of detection [LOD]).

--: sample collected from an extraction well pump spigot, therefore no sample depth is given.

[‡] EW-OU2-09-180 is a part of the Operable Unit Carbon Tetrachloride Plume (OUCTP) Upper 180-Foot Aquifer remedy; therefore, CT is the only COC for this well (see Table 1).

Data Validation Qualifiers:

A: Validation qualifier, no additional qualification required.

J: Laboratory or validation qualifier, estimated result between the detection limit (DL) and the limit of quantitation (LOQ) with a possible high (+) or low (-) bias.

U: Laboratory or validation qualifier, concentration not detected (reported as <LOD).

Acronyms and Abbreviations:

µg/L: micrograms per liter

ft btoc: feet below top of casing

OU2: Operable Unit 2

OUCTP: Operable Unit Carbon Tetrachloride Plume

Qual: qualifier

Analyte Names:

1,1-DCA: 1,1-dichloroethane

1,2-DCA: 1,2-dichloroethane

1,2-DCPA: 1,2-dichloropropane

CT: carbon tetrachloride

cis-1,2-DCE: cis-1,2-dichloroethene

PCE: tetrachloroethene

TCE: trichloroethene

Table 20. Concentrations of Landfill Gas VOCs in Compliance Probes and Statistical Summary

Type	PROBE ID	DEPTH (feet)	SAMPLE NO	SAMPLE PURPOSE	DATE COLLECTED	Volatile Organic Compounds in ppbv and (µg/m3) ¹													
						1,1,1-TRICHLOROETHANE	ACETONE	BENZENE	CARBON DISULFIDE	CHLOROFORM	FREON 11	FREON 113	FREON 114	FREON 12	HEXANE	M,P-XYLENE	TETRACHLOROETHENE	TOLUENE	VINYL CHLORIDE
F	13	12	OU2GM6094	Primary	6/3/2020	<0.33 (1.8)	1.6 (3.8)J	<0.41 (1.3)	<0.82 (2.6)	1.3 (6.3)	<0.41 (2.3)	<0.41 (3.1)	5.4 (38)	40 (198)	<0.41 (1.4)	<0.41 (1.8)	<0.41 (2.8)	<0.41 (1.5)	<0.41 (1)
F	13	12	OU2GM6095	Field Duplicate	6/3/2020	<0.32 (1.7)	2 (4.8)J	<0.4 (1.3)	<0.8 (2.5)	1.3 (6.3)	<0.4 (2.2)	<0.4 (3.1)	4.8 (34)	40 (198)	<0.4 (1.4)	<0.4 (1.7)	<0.4 (2.7)	<0.4 (1.5)	<0.4 (1)
F	13	32	OU2GM6096	Regular	6/4/2020	<0.31 (1.7)	1.4 (3.3)J	<0.39 (1.2)	1.7 (5.3)J	<0.31 (1.5)	<0.39 (2.2)	<0.39 (3)	11 (77)	98 (485)	<0.39 (1.4)	<0.39 (1.7)	<0.39 (2.6)	0.63 (2.4)J	0.42 (1.1)J
F	15	12	OU2GM6097	Primary	6/4/2020	<0.31 (1.7)	2.9 (6.9)J	<0.39 (1.2)	<0.78 (2.4)	<0.31 (1.5)	<0.39 (2.2)	<0.39 (3)	4 (28)	55 (272)	<0.39 (1.4)	<0.39 (1.7)	<0.39 (2.6)	<0.39 (1.5)	<0.39 (1)
F	15	12	OU2GM6098	Field Duplicate	6/4/2020	<0.31 (1.7)	3.2 (7.6)J	<0.39 (1.2)	<0.78 (2.4)	<0.31 (1.5)	<0.39 (2.2)	<0.39 (3)	4.4 (31)	55 (272)	<0.39 (1.4)	<0.39 (1.7)	<0.39 (2.6)	<0.39 (1.5)	<0.39 (1)
F	15	32	OU2GM6099	Regular	6/4/2020	<0.31 (1.7)	2 (4.8)J	<0.39 (1.2)	3 (9.3)J	0.62 (3)J	<0.39 (2.2)	<0.39 (3)	9.3 (65)	130 (643)	<0.39 (1.4)	<0.39 (1.7)	<0.39 (2.6)	0.42 (1.6)J	<0.39 (1)
F	17	12	OU2GM6100	Regular	6/4/2020	<0.33 (1.8)	4.2 (10)J	<0.42 (1.3)	<0.84 (2.6)	1.7 (8.3)	<0.42 (2.4)	<0.42 (3.2)	<0.42 (2.9)	1.3 (6.4)	0.45 (1.6)J	0.5 (2.2)J	0.66 (4.5)J	0.87 (3.3)	<0.42 (1.1)
F	17	32	OU2GM6101	Regular	6/4/2020	<0.32 (1.7)	2.6 (6.2)J	<0.4 (1.3)	<0.8 (2.5)	3.9 (19)	<0.4 (2.2)	<0.4 (3.1)	<0.4 (2.8)	2 (9.9)	<0.4 (1.4)	<0.4 (1.7)	1.2 (8.1)	<0.4 (1.5)	<0.4 (1)
F	22	12	OU2GM6102	Regular	6/4/2020	<0.28 (1.5)	1.8 (4.3)J	<0.35 (1.1)	3.8 (12)	<0.28 (1.4)	2.2 (12)	0.4 (3.1)J	8 (56)	17 (84)	<0.35 (1.2)	<0.35 (1.5)	5.4 (37)	<0.35 (1.3)	<0.35 (0.89)
F	22	32	OU2GM6103	Regular	6/4/2020	<0.31 (1.7)	1.5 (3.6)J	<0.38 (1.2)	<0.77 (2.4)	1.6 (7.8)	1.1 (6.2)	<0.38 (2.9)	4.4 (31)	8.6 (43)	<0.38 (1.3)	<0.38 (1.6)	2.3 (16)	<0.38 (1.4)	<0.38 (0.97)
C	2	12	OU2GM6082	Regular	6/3/2020	<0.33 (1.8)	4.8 (11)J	<0.42 (1.3)	<0.83 (2.6)	1.1 (5.4)	<0.42 (2.4)	<0.42 (3.2)	28 (196)	20 (99)	<0.42 (1.5)	0.93 (4)	<0.42 (2.8)	1.6 (6)	<0.42 (1.1)
B	3	12	OU2GM6080	Regular	6/3/2020	<0.3 (1.6)	2.2 (5.2)J	<0.37 (1.2)	<0.74 (2.3)	<0.3 (1.5)	<0.37 (2.1)	<0.37 (2.8)	34 (238)	15 (74)	<0.37 (1.3)	0.77 (3.3)	<0.37 (2.5)	1 (3.8)	<0.37 (0.95)
C	3	12	OU2GM6083	Regular	6/3/2020	<0.32 (1.7)	3.8 (9)J	<0.4 (1.3)	<0.79 (2.5)	2.3 (11)	<0.4 (2.2)	<0.4 (3.1)	32 (224)	13 (64)	<0.4 (1.4)	<0.4 (1.7)	0.67 (4.5)J	<0.4 (1.5)	<0.4 (1)
B	4	12	OU2GM6081	Regular	6/3/2020	<0.29 (1.6)	3 (7.1)J	<0.36 (1.1)	<0.73 (2.3)	0.38 (1.9)J	<0.36 (2)	<0.36 (2.8)	17 (119)	3.5 (17)	<0.36 (1.3)	<0.36 (1.6)	<0.36 (2.4)	<0.36 (1.4)	<0.36 (0.92)
D	4	12	OU2GM6084	Regular	6/3/2020	<0.32 (1.7)	2.1 (5)J	<0.4 (1.3)	<0.8 (2.5)	0.32 (1.6)J	<0.4 (2.2)	<0.4 (3.1)	14 (98)	8 (40)	<0.4 (1.4)	<0.4 (1.7)	<0.4 (2.7)	0.72 (2.7)J	<0.4 (1)
D	4	22	OU2GM6085	Regular	6/3/2020	<0.33 (1.8)	4.1 (9.7)J	<0.41 (1.3)	<0.82 (2.6)	<0.33 (1.6)	<0.41 (2.3)	<0.41 (3.1)	26 (182)	14 (69)	<0.41 (1.4)	0.68 (3)J	<0.41 (2.8)	0.96 (3.6)	<0.41 (1)
D	6	12	OU2GM6086	Regular	6/3/2020	0.88 (4.8)	2 (4.8)J	<0.4 (1.3)	<0.79 (2.5)	1.9 (9.3)	3.3 (19)	0.42 (3.2)J	16 (112)	14 (69)	<0.4 (1.4)	<0.4 (1.7)	2.3 (16)	<0.4 (1.5)	<0.4 (1)
D	6	22	OU2GM6087	Regular	6/3/2020	1.7 (9.3)	8.6 (20)	<0.4 (1.3)	<0.8 (2.5)	1.8 (8.8)	5.9 (33)	0.73 (5.6)J	29 (203)	25 (124)	<0.4 (1.4)	<0.4 (1.7)	4.1 (28)	<0.4 (1.5)	<0.4 (1)
E	7	12	OU2GM6088	Regular	6/3/2020	<0.33 (1.8)	3.8 (9)J	<0.42 (1.3)	<0.83 (2.6)	<0.33 (1.6)	<0.42 (2.4)	<0.42 (3.2)	9.7 (68)	2.3 (11)	<0.42 (1.5)	<0.42 (1.8)	<0.42 (2.8)	1.3 (4.9)	<0.42 (1.1)
E	8	12	OU2GM6089	Regular	6/3/2020	<0.36 (2)	5.8 (14)J	0.55 (1.8)J	<0.91 (2.8)	0.55 (2.7)J	<0.46 (2.6)	<0.46 (3.5)	12 (84)	13 (64)	<0.46 (1.6)	0.52 (2.3)J	<0.46 (3.1)	1.7 (6.4)	<0.46 (1.2)
F	8	12	OU2GM6091	Primary	6/3/2020	<0.38 (2.1)	3.1 (7.4)J	<0.47 (1.5)	<0.94 (2.9)	<0.38 (1.9)	<0.47 (2.6)	<0.47 (3.6)	6.8 (48)	10 (49)	<0.47 (1.7)	<0.47 (2)	<0.47 (3.2)	<0.47 (1.8)	<0.47 (1.2)
F	8	12	OU2GM6092	Field Duplicate	6/3/2020	<0.39 (2.1)	1.6 (3.8)J	<0.48 (1.5)	<0.96 (3)	<0.39 (1.9)	<0.48 (2.7)	<0.48 (3.7)	7.6 (53)	11 (54)	<0.48 (1.7)	<0.48 (2.1)	<0.48 (3.3)	<0.48 (1.8)	<0.48 (1.2)
F	8	22	OU2GM6093	Regular	6/3/2020	<0.34 (1.9)	1.5 (3.6)J	<0.42 (1.3)	<0.85 (2.6)	<0.34 (1.7)	<0.42 (2.4)	<0.42 (3.2)	13 (91)	21 (104)	<0.42 (1.5)	<0.42 (1.8)	<0.42 (2.8)	1.1 (4.1)	<0.42 (1.1)
E	9	12	OU2GM6090	Regular	6/3/2020	<0.31 (1.7)	3 (7.1)J	<0.39 (1.2)	1.2 (3.7)J	<0.31 (1.5)	<0.39 (2.2)	<0.39 (3)	7.5 (52)	18 (89)	<0.39 (1.4)	<0.39 (1.7)	0.55 (3.7)J	<0.39 (1.5)	<0.39 (1)

Statistical Summary:

Detections:	2	24	1	4	13	4	3	22	24	1	5	8	10	1
Estimated detections below the LOQ:	0	23	1	3	4	0	3	0	0	1	3	3	3	1
Non-detect:	22	0	23	20	11	20	21	2	0	23	19	16	14	23
Minimum:	0.88 (4.8)	1.4 (3.3)	0.55 (1.8)	1.2 (3.7)	0.32 (1.6)	1.1 (6.2)	0.4 (3.1)	4 (28)	1.3 (6.4)	0.45 (1.6)	0.5 (2.2)	0.55 (3.7)	0.42 (1.6)	0.42 (1.1)
Maximum:	1.7 (9.3)	8.6 (20)	0.55 (1.8)	3.8 (12)	3.9 (19)	5.9 (33)	0.73 (5.6)	34 (238)	130 (643)	0.45 (1.6)	0.93 (4)	5.4 (37)	1.7 (6.4)	0.42 (1.1)
Average:	1.3 (7.1)	3 (7.2)	0.6 (1.8)	2.4 (7.6)	1.4 (7)	3.1 (17.6)	0.5 (4)	13.8 (96.7)	26.4 (130.8)	0.5 (1.6)	0.7 (3)	2.1 (14.7)	1 (3.9)	0.4 (1.1)

Notes:

¹ Only compounds with at least one detection are presented in this table

ppbv = parts per billion by volume

FD = Field duplicate

J = result estimate bias indeterminate

LOQ = Limit of quantitation

REG = REG field sample

U = value qualified as non-detect during data review

µg/m³ = micrograms per cubic meter

	= OU2 Landfills Groundwater Chemicals of Concern (based on Record of Decision)
12	= highest detection for specific compound
12	= detections above the detection limit
<0.79	= Non-detect to the Limit of Quantitation

Table 21. Concentrations of Chloroform in Landfill Gas Compliance Probes

Date Collected	Soil Gas Probe Locations																					
	SGP-3B-12	SGP-4B-12	SGP-2C-12	SGP-3C-12	SGP-4D-12	SGP-4D-22	SGP-6D-12	SGP-6D-22	SGP-7E-12	SGP-8E-12	SGP-9E-12	SGP-8F-12	SGP-8F-22	SGP-13F-12	SGP-13F-32	SGP-15F-12	SGP-15F-32	SGP-17F-12	SGP-17F-32	SGP-22F-12	SGP-22F-32	
	Chloroform in ppbv and (µg/m ³)																					
09/28/00													0.73 (3.6)	6.1 (30)								
12/13/00													1.5 (7.3)	6 (29)								
05/03/01													<6.1 (30)	<6.3 (31)	<17 (83)	<25 (122)	<31 (151)	<36 (176)	<0.8 (3.9)	<0.78 (3.8)		
07/03/01	0.19 (0.93)J	<0.76 (3.7)	0.22 (1.1)J		0.86 (4.2)	0.37 (1.8)J																
09/12/01					0.86 (4.2)	0.54 (2.6)J							<0.76 (3.7)	0.84 (4.1)	<3 (15)	<3.2 (16)	<3 (15)	<3.1 (15)	0.38 (1.9)J	0.66 (3.2)J		
09/13/01	<0.74 (3.6)	<0.74 (3.6)	<0.76 (3.7)																			
03/06/02													<0.72 (3.5)	0.26 (1.3)J	<1.5 (7.3)	<1.5 (7.3)	<1.5 (7.3)	<3 (15)	0.12 (0.59)J	0.18 (0.88)J		
03/07/02	<0.72 (3.5)	<0.73 (3.6)	<0.73 (3.6)		0.57 (2.8)J	0.44 (2.1)J																
06/11/02													0.32 (1.6)J	0.76 (3.7)J	<0.78 (3.8)	<0.79 (3.9)	<0.78 (3.8)	<0.78 (3.8)	0.24 (1.2)J	0.27 (1.3)J		
06/12/02	<0.76 (3.7)	<0.76 (3.7)	<0.78 (3.8)		0.36 (1.8)J	0.27 (1.3)J	3.4 (17)	3.8 (19)														
08/10/02	<0.78 (3.8)	<0.74 (3.6)	<0.76 (3.7)		0.36 (1.8)J	0.29 (1.4)J	3 (15)	3.6 (18)					0.28 (1.4)J	0.67 (3.3)J	0.2 (0.98)J	<0.72 (3.5)	<0.79 (3.9)	<0.79 (3.9)	<0.76 (3.7)	0.42 (2.1)J		
12/03/02													0.25 (1.2)J	0.39 (1.9)J	<0.73 (3.6)	0.34 (1.7)J	<0.73 (3.6)	<0.73 (3.6)				
12/04/02	<0.73 (3.6)				0.58 (2.8)J	0.52 (2.5)J	1.2 (5.9)	1.1 (5.4)											<0.72 (3.5)	<0.72 (3.5)		
12/05/02		<0.72 (3.5)	<0.74 (3.6)																			
03/20/03	<0.76 (3.7)		<0.78 (3.8)		0.65 (3.2)J	<2 (9.8)													0.31 (1.5)J	0.44 (2.1)J		
05/13/04	<0.79 (3.9)		0.14 (0.68)J		0.38 (1.9)J	0.18 (0.88)J													0.42 (2.1)J	0.49 (2.4)J		
03/30/05	<0.82 (4)		0.23 (1.1)J		0.53 (2.6)J	0.2 (0.98)J													0.51 (2.5)J	0.68 (3.3)J		
09/09/05	<0.79 (3.9)				0.14 (0.68)J	<0.78 (3.8)																
10/06/05	<0.79 (3.9)				<0.74 (3.6)	<0.74 (3.6)																
10/26/05	<0.78 (3.8)				<0.78 (3.8)	<0.78 (3.8)																
12/02/05	<0.8 (3.9)				<0.78 (3.8)	<0.78 (3.8)																
12/29/05	<0.74 (3.6)				<0.74 (3.6)	<0.73 (3.6)																
02/21/06	<0.73 (3.6)		<0.74 (3.6)		<0.74 (3.6)	<0.72 (3.5)													0.56 (2.7)J	1 (4.9)		
06/23/06	<0.74 (3.6)				0.26 (1.3)J	<0.76 (3.7)																
09/07/06	<0.79 (3.9)				<0.78 (3.8)	<0.79 (3.9)																
12/28/06	<0.8 (3.9)				<0.79 (3.9)	<0.78 (3.8)																
01/02/08	<0.79 (3.9)	<0.78 (3.8)	<0.79 (3.9)		<0.79 (3.9)	<0.76 (3.7)			1.8 (8.8)				0.16 (0.78)J	0.13 (0.63)J	0.38 (1.9)J	<0.8 (3.9)	<0.8 (3.9)	0.25 (1.2)J	0.79 (3.9)J	2 (9.8)		
07/16/08	<0.79 (3.9)	<0.79 (3.9)	0.16 (0.78)J	1.6 (7.8)	<0.8 (3.9)	<0.8 (3.9)	2.2 (11)	2.5 (12)	1.3 (6.3)	0.26 (1.3)J	0.17 (0.83)J	0.13 (0.63)J	<0.76 (3.7)	0.67 (3.3)J	<0.78 (3.8)	0.22 (1.1)J	0.28 (1.4)J	1.5 (7.3)	2 (9.8)	0.63 (3.1)J	0.65 (3.2)J	
08/19/09	<0.82 (4)	<0.82 (4)	0.12 (0.59)J	1.5 (7.3)	<0.82 (4)	<0.84 (4.1)	2.3 (11)	2.8 (14)	1.7 (8.3)	0.13 (0.63)J	0.098 (0.48)J	0.1 (0.49)J	0.11 (0.54)J	0.64 (3.1)J	0.22 (1.1)J	0.38 (1.9)J	1 (4.9)	2 (9.8)	2.3 (11)	0.75 (3.7)J	0.16 (0.78)J	
09/29/10	<0.78 (3.8)	<0.78 (3.8)	<0.79 (3.9)U	4.3 (21)	<0.78 (3.8)	<0.78 (3.8)	3.5 (17)	4.6 (22)	1.1 (5.4)	<0.78 (3.8)U	0.52 (2.5)J	<0.78 (3.8)U	<0.78 (3.8)U	0.65 (3.2)J	<0.8 (3.9)U	<0.79 (3.9)U	0.86 (4.2)	2 (9.8)	4.4 (21)	1.2 (5.9)	<0.78 (3.8)U	
06/22/11	<0.79 (3.9)	<0.78 (3.8)	0.32 (1.6)J						0.32 (1.6)J													
06/23/11										0.4 (2)J	<0.79 (3.9)	0.2 (0.98)J	0.19 (0.93)J								2.2 (11)	0.16 (0.78)J
06/24/11				5.7 (28)	0.18 (0.88)J	<0.78 (3.8)	5.5 (27)	5.3 (26)							0.7 (3.4)J	0.2 (0.98)J	0.39 (1.9)J	1.7 (8.3)	2.2 (11)	5.2 (25)		
06/28/12	<0.78 (3.8)	<0.79 (3.9)	<0.8 (3.9)																			
06/29/12										<3.2 (16)	<3.1 (15)	<6.4 (31)	<0.79 (3.9)	<0.78 (3.8)	<0.83 (4.1)U	<0.78 (3.8)U	<6.2 (30)	<6 (29)			<2.3 (11)U	<7 (34)
06/30/12				6 (29)J	<6.3 (31)	<6.3 (31)	5.1 (25)	<6.3 (31)U											<6.1 (30)U	5.5 (27)		
05/15/13	<0.78 (3.8)	<0.75 (3.7)	0.49 (2.4)J						0.33 (1.6)J	0.16 (0.78)J				<0.76 (3.7)							1.5 (7.3)	0.22 (1.1)J
05/16/13				4.4 (21)	0.35 (1.7)J	<0.74 (3.6)	4.3 (21)	4.2 (21)			<0.78 (3.8)	<0.8 (3.9)		0.63 (3.1)J	<0.77 (3.8)	<0.74 (3.6)	1.4 (6.8)	2.5 (12)	5.9 (29)			
06/05/14	<0.74 (3.6)	<0.74 (3.6)U	<0.73 (3.6)U						1.3 (6.3)	<0.73 (3.6)	<0.76 (3.7)U	<0.76 (3.7)	<0.73 (3.6)U								<1.3 (6.3)U	<0.74 (3.6)U
06/06/14				2.5 (12)	0.21 (1)J	0.13 (0.63)J	2.8 (14)	2.8 (14)							<0.74 (3.6)U	0.23 (1.1)J	0.25 (1.2)J	1.1 (5.4)	1.8 (8.8)	4.8 (23)		
06/02/15	0.16 (0.78)J	<0.78 (3.8)	0.65 (3.2)J						2 (9.8)	0.19 (0.93)J	0.15 (0.73)J										0.72 (3.5)J	0.15 (0.73)J
06/03/15				1.2 (5.9)	0.25 (1.2)J	<0.78 (3.8)	2.1 (10)	2.8 (14)					<0.76 (3.7)	<0.79 (3.9)	0.3 (1.5)J	0.19 (0.93)J	0.24 (1.2)J	0.99 (4.8)	1.5 (7.3)	4.1 (20)		
06/27/16	<0.28 (1.4)	<0.28 (1.4)	0.33 (1.6)J	0.81 (4)	<0.3 (1.5)	<0.28 (1.4)	1.9 (9.3)	2.3 (11)	1 (4.9)	<0.3 (1.5)	<0.3 (1.5)											
06/28/16													<0.29 (1.4)	<0.29 (1.4)								
06/29/16															0.57 (2.8)J	<0.29 (1.4)	<0.29 (1.4)	1.3 (6.3)	1.2 (5.9)	3.5 (17)	1.4 (6.8)	<0.28 (1.4)
06/20/17	<0.59 (2.9)	<0.58 (2.8)	<0.58 (2.8)						0.97 (4.7)	<0.6 (2.9)												

Table 21. Concentrations of Chloroform in Landfill Gas Compliance Probes

Date Collected	Soil Gas Probe Locations																				
	SGP-3B-12	SGP-4B-12	SGP-2C-12	SGP-3C-12	SGP-4D-12	SGP-4D-22	SGP-6D-12	SGP-6D-22	SGP-7E-12	SGP-8E-12	SGP-9E-12	SGP-8F-12	SGP-8F-22	SGP-13F-12	SGP-13F-32	SGP-15F-12	SGP-15F-32	SGP-17F-12	SGP-17F-32	SGP-22F-12	SGP-22F-32
Chloroform in ppbv and (µg/m ³)																					
06/21/17												<0.62 (3)	<0.58 (2.8)	<0.62 (3)	<0.62 (3)	<0.62 (3)	0.75 (3.7)	1.8 (8.8)	4.5 (22)	0.98 (4.8)	<0.6 (2.9)
06/22/17				1.3 (6.3)	<0.63 (3.1)	<0.64 (3.1)	2.5 (12)	2.8 (14)			<0.62 (3)										
06/19/18	<0.62 (3)	<0.61 (3)	<0.61 (3)						0.82 (4)	<0.6 (2.9)	<0.6 (2.9)	<0.61 (3)	<0.6 (2.9)							1.5 (7.3)	<0.58 (2.8)
06/20/18				2.8 (14)	<0.6 (2.9)	<0.6 (2.9)	2.6 (13)	2.6 (13)						1 (4.9)	<0.6 (2.9)	<0.62 (3)	0.6 (2.9)J	1.7 (8.3)	4.1 (20)		
05/07/19	<0.58 (2.8)	<0.64 (3.1)	1.1 (5.4)		<0.63 (3.1)	<0.62 (3)	2.3 (11)	2.1 (10)	<0.61 (3)	<0.6 (2.9)	<0.64 (3.1)							1.8 (8.8)	4.5 (22)	1.5 (7.3)	<0.62 (3)
05/08/19				2.1 (10)								<0.7 (3.4)	<0.72 (3.5)	1.2 (5.9)	<0.72 (3.5)	<0.71 (3.5)	0.86 (4.2)				
06/03/20	<0.3 (1.5)	0.38 (1.9)J	1.1 (5.4)	2.3 (11)	0.32 (1.6)J	<0.33 (1.6)	1.9 (9.3)	1.8 (8.8)	<0.33 (1.6)	0.55 (2.7)J	<0.31 (1.5)	1.3 (6.3)								<0.39 (1.9)	<0.34 (1.7)
06/04/20													<0.31 (1.5)	<0.31 (1.5)	0.62 (3)J	1.7 (8.3)	3.9 (19)	<0.28 (1.4)	1.6 (7.8)		

Notes:

J = estimated, bias indeterminate
ppbv = parts per billion by volume

U = value qualified as non-detected during data review
µg/m³ = micrograms per cubic meter

EPA-RSL = U.S. Environmental Protection Agency Residential Ambient Air Regional Screening Level

Probe ID	= Probe exhibited concentration greater than 100 x EPA-RSL for chloroform (100 x EPA-RSL = 12 µg/m ³ or 2.5 ppbv based on current EPA-RSL (EPA, 2017))
Chloroform	= Concentration greater than 100 x RSL (2.5 ppbv) per QAPP (highest concentration in bold)

Table 22. Concentrations of Tetrachloroethene in Landfill Gas Compliance Probes

Date Collected	Soil Gas Probe Locations																					
	SGP-3B-12	SGP-4B-12	SGP-2C-12	SGP-3C-12	SGP-4D-12	SGP-4D-22	SGP-6D-12	SGP-6D-22	SGP-7E-12	SGP-8E-12	SGP-9E-12	SGP-8F-12	SGP-8F-22	SGP-13F-12	SGP-13F-32	SGP-15F-12	SGP-15F-32	SGP-17F-12	SGP-17F-32	SGP-22F-12	SGP-22F-32	
09/28/00													1.2 (8.1)	3 (20)J+								
12/13/00													1.4 (9.5)A	2.6 (18)J+								
05/03/01													<6.1 (41)	<6.3 (43)	<17 (115)	<25 (170)	<31 (210)	<36 (244)	13 (88)	32 (217)		
07/03/01	0.41 (2.8)J	<0.76 (5.2)	0.36 (2.4)J		0.49 (3.3)J	0.61 (4.1)J																
09/12/01					0.51 (3.5)J	0.66 (4.5)J							0.63 (4.3)J	1.1 (7.5)	5.6 (38)	13 (88)	11 (75)	28 (190)	16 (109)	32 (217)		
09/13/01	<0.74 (5)	<0.74 (5)	<0.76 (5.2)																			
03/06/02													0.28 (1.9)J	0.58 (3.9)J	1.8 (12)	4 (27)	3.6 (24)	12 (81)	10 (68)	28 (190)		
03/07/02	<0.72 (4.9)	<0.73 (5)	0.25 (1.7)J		0.36 (2.4)J	0.67 (4.5)J																
06/11/02													0.32 (2.2)J	0.53 (3.6)J	0.99 (6.7)	2.6 (18)	0.58 (3.9)J	5.4 (37)	12 (81)	29 (197)		
06/12/02	0.11 (0.75)J	0.095 (0.64)J	0.35 (2.4)J		0.36 (2.4)J	0.62 (4.2)J	13 (88)	22 (149)														
08/10/02	<0.78 (5.3)	<0.74 (5)	0.39 (2.6)J		0.47 (3.2)J	0.81 (5.5)	14 (95)	24 (163)					0.37 (2.5)J	0.65 (4.4)J	0.42 (2.8)J	1.3 (8.8)	0.3 (2)J	3.9 (26)	12 (81)	30 (203)		
12/03/02													0.32 (2.2)J	0.7 (4.7)J	<0.73 (5)	0.87 (5.9)	0.49 (3.3)J	3.8 (26)				
12/04/02	<0.73 (5)				0.33 (2.2)J	0.6 (4.1)J	10 (68)	10 (68)											8.3 (56)	27 (183)		
12/05/02		0.54 (3.7)J	0.67 (4.5)J																			
03/20/03	<0.76 (5.2)		0.32 (2.2)J		0.37 (2.5)J	<2 (14)														12 (81)	29 (197)	
05/13/04	<0.79 (5.4)		0.32 (2.2)J		0.32 (2.2)J	0.72 (4.9)J														9.7 (66)	24 (163)	
03/30/05	<0.82 (5.6)		0.21 (1.4)J		0.29 (2)J	0.52 (3.5)J														6.3 (43)	18 (122)	
09/09/05	<0.79 (5.4)				0.31 (2.1)J	0.57 (3.9)J																
10/06/05	<0.79 (5.4)				0.28 (1.9)J	0.43 (2.9)J																
10/26/05	<0.78 (5.3)				<0.78 (5.3)	0.55 (3.7)J																
12/02/05	<0.8 (5.4)				<0.78 (5.3)	0.46 (3.1)J																
12/29/05	<0.74 (5)				<0.74 (5)	0.43 (2.9)J																
02/21/06	<0.73 (5)		<0.74 (5)		<0.74 (5)	0.51 (3.5)J														4.6 (31)	13 (88)	
06/23/06	2.1 (14)				<0.76 (5.2)	0.52 (3.5)J																
09/07/06	<0.79 (5.4)				0.33 (2.2)J	0.57 (3.9)J																
12/28/06	<0.8 (5.4)				0.58 (3.9)J	0.65 (4.4)J																
01/02/08	<0.79 (5.4)	<0.78 (5.3)	<0.79 (5.4)		<0.79 (5.4)	<0.76 (5.2)			0.53 (3.6)J			0.31 (2.1)J	0.65 (4.4)J	<0.8 (5.4)	0.88 (6)	0.42 (2.8)J	1.1 (7.5)	1.9 (13)	5.8 (39)			
07/16/08	<0.8 (5.4)	<0.79 (5.4)	<0.79 (5.4)	1.4 (9.5)	0.3 (2)J	0.42 (2.8)J	6.1 (41)	12 (81)	0.57 (3.9)J	<0.8 (5.4)	0.77 (5.2)J	0.24 (1.6)J	0.54 (3.7)J	0.32 (2.2)J	0.81 (5.5)	0.22 (1.5)J	1 (6.8)	2.1 (14)	5.9 (40)	2.8 (19)	11 (75)	
08/19/09	<0.82 (5.6)	0.45 (3.1)J	0.19 (1.3)J	1.8 (12)	0.27 (1.8)J	0.46 (3.1)J	6 (41)	11 (75)	0.5 (3.4)J	0.13 (0.88)J	0.82 (5.6)	0.33 (2.2)J	0.65 (4.4)J	0.3 (2)J	1.3 (8.8)	0.21 (1.4)J	0.94 (6.4)	2.1 (14)	4.9 (33)	3.5 (24)	6.3 (43)	
09/29/10	<0.78 (5.3)U	<0.78 (5.3)	<0.79 (5.4)U	1.6 (11)	<0.78 (5.3)U	0.54 (3.7)J	6.1 (41)	11 (75)	<0.78 (5.3)U	<0.78 (5.3)U	<0.78 (5.3)U	<0.78 (5.3)U	<0.78 (5.3)U	<0.8 (5.4)U	1.6 (11)	<0.79 (5.4)U	<0.97 (6.6)U	1.8 (12)	4.6 (31)	6.4 (43)	15 (102)	
06/22/11	<0.79 (5.4)	<0.78 (5.3)	<0.79 (5.4)						0.35 (2.4)J													
06/23/11										<0.79 (5.4)	0.51 (3.5)J	<0.79 (5.4)	<0.82 (5.6)U								3.7 (25)	10 (68)
06/24/11				1.4 (9.5)	<0.8 (5.4)U	<0.78 (5.3)U	5.7 (39)	9.9 (67)						<0.8 (5.4)U	1.2 (8.1)	<0.78 (5.3)U	<0.8 (5.4)U	1.6 (11)	3.4 (23)			
06/28/12	<0.78 (5.3)	<0.79 (5.4)	<0.8 (5.4)																			
06/29/12										<3.2 (22)	<3.1 (21)	<6.4 (43)	<0.79 (5.4)	0.39 (2.6)J	0.37 (2.5)J	0.99 (6.7)	<6.2 (42)	<6 (41)			2.8 (19)	9.6 (65)
06/30/12				<11 (75)	<6.3 (43)	<6.3 (43)	4.7 (32)	8.5 (58)											<6.1 (41)	2.9 (20)		
05/15/13	<0.78 (5.3)	<0.75 (5.1)	<0.74 (5)U						<0.74 (5)U	<0.74 (5)U			<0.76 (5.2)U								3 (20)	10 (68)
05/16/13				1 (6.8)	<0.81 (5.5)U	<0.74 (5)U	5 (34)	8.5 (58)			0.52 (3.5)J	<0.8 (5.4)U		<0.72 (4.9)U	1 (6.8)	<0.74 (5)U	<0.76 (5.2)U	1.3 (8.8)	2.7 (18)			
06/05/14	<0.74 (5)	<0.74 (5)	0.18 (1.2)J						0.43 (2.9)J	<0.73 (5)	0.68 (4.6)J	0.25 (1.7)J	0.43 (2.9)J								4.1 (28)	14 (95)
06/06/14				1.3 (8.8)	0.28 (1.9)J	0.45 (3.1)J	4.8 (33)	8.1 (55)						0.26 (1.8)J	0.96 (6.5)	0.22 (1.5)J	0.56 (3.8)J	1.4 (9.5)	3 (20)			
06/02/15	<0.78 (5.3)	<0.78 (5.3)	<0.76 (5.2)						0.52 (3.5)J	<0.74 (5)	0.64 (4.3)J										3.2 (22)	9.5 (64)
06/03/15				0.88 (6)	0.23 (1.6)J	0.39 (2.6)J	3.5 (24)	6.5 (44)				<0.76 (5.2)	0.36 (2.4)J	<0.74 (5)	0.54 (3.7)J	<0.76 (5.2)	0.4 (2.7)J	1.2 (8.1)	2.6 (18)			
06/27/16	<0.28 (1.9)	<0.28 (1.9)	<0.29 (2)	0.93 (6.3)	<0.3 (2)	0.36 (2.4)J	3.2 (22)	6.4 (43)	<0.29 (2)	<0.3 (2)	0.59 (4)J											
06/28/16												<0.29 (2)	0.3 (2)J									
06/29/16														<0.28 (1.9)	0.39 (2.6)J	<0.29 (2)	0.39 (2.6)J	0.96 (6.5)	2.4 (16)	3.4 (23)	10 (68)	
06/20/17	<0.59 (4)	<0.58 (3.9)	<0.58 (3.9)						<0.59 (4)	<0.6 (4.1)												
06/21/17												<0.62 (4.2)	<0.58 (3.9)	<0.62 (4.2)	<0.62 (4.2)	<0.62 (4.2)	<0.6 (4.1)	0.81 (5.5)	2.2 (15)	3.5 (24)	8 (54)	

Table 22. Concentrations of Tetrachloroethene in Landfill Gas Compliance Probes

Date Collected	Soil Gas Probe Locations																					
	SGP-3B-12	SGP-4B-12	SGP-2C-12	SGP-3C-12	SGP-4D-12	SGP-4D-22	SGP-6D-12	SGP-6D-22	SGP-7E-12	SGP-8E-12	SGP-9E-12	SGP-8F-12	SGP-8F-22	SGP-13F-12	SGP-13F-32	SGP-15F-12	SGP-15F-32	SGP-17F-12	SGP-17F-32	SGP-22F-12	SGP-22F-32	
	Tetrachloroethene (PCE) in ppbv and (µg/m ³)																					
06/22/17				0.83 (5.6)	<0.63 (4.3)	<0.64 (4.3)	3 (20)	5.6 (38)			<0.62 (4.2)											
06/19/18	<0.62 (4.2)	<0.61 (4.1)	<0.61 (4.1)						<0.6 (4.1)	<0.6 (4.1)	0.6 (4.1)J	<0.61 (4.1)	<0.6 (4.1)								2.3 (16)	6.9 (47)
06/20/18				0.86 (5.8)	<0.6 (4.1)	<0.6 (4.1)	3.3 (22)	5.7 (39)						<0.62 (4.2)	<0.6 (4.1)	<0.62 (4.2)	<0.58 (3.9)	0.96 (6.5)	2.1 (14)			
5/7/2019	0.68 (4.6)J	<0.64 (4.3)	<0.62 (4.2)		<0.63 (4.3)	<0.62 (4.2)	3 (20)	5.6 (38)	<0.61 (4.1)	<0.6 (4.1)	0.74 (5)J							1 (6.8)	2 (14)	1.9 (13)	6.5 (44)	
5/8/2019				0.76 (5.2)								<0.7 (4.7)	<0.72 (4.9)	<0.72 (4.9)	<0.72 (4.9)	<0.71 (4.8)	<0.74 (5)					
06/03/20	<0.37 (2.5)	<0.36 (2.4)	<0.42 (2.8)	0.67 (4.5)J	<0.4 (2.7)	<0.41 (2.8)	2.3 (16)	4.1 (28)	<0.42 (2.8)	<0.46 (3.1)	0.55 (3.7)J	<0.41 (2.8)								<0.48 (3.3)	<0.42 (2.8)	
06/04/20													<0.39 (2.6)	<0.39 (2.6)	<0.39 (2.6)	0.66 (4.5)J	1.2 (8.1)	5.4 (37)	2.3 (16)			

Notes:
J = estimated, bias indeterminate
ppbv = parts per billion by volume

U = value qualified as non-detected during data review
µg/m³ = micrograms per cubic meter

DTSC SL = California Department of Toxic Substances and Control Residential Air Screening Level

Probe ID	= Probe exhibited concentration greater than 1000 x DTSC SL for tetrachloroethene (1000 x DTSC SL = 460 µg/m ³ or 68 ppbv based on the current DTSC SL (DTSC, 2018))
PCE	= Concentration greater than 1000 x DTSC SL (68 ppbv) per QAPP

Table 23. Concentrations of Vinyl Chloride in Landfill Gas Compliance Probes

Date Collected	Soil Gas Probe Locations																					
	SGP-3B-12	SGP-4B-12	SGP-2C-12	SGP-3C-12	SGP-4D-12	SGP-4D-22	SGP-6D-12	SGP-6D-22	SGP-7E-12	SGP-8E-12	SGP-9E-12	SGP-8F-12	SGP-8F-22	SGP-13F-12	SGP-13F-32	SGP-15F-12	SGP-15F-32	SGP-17F-12	SGP-17F-32	SGP-22F-12	SGP-22F-32	
	Vinyl Chloride in ppbv and (µg/m ³)																					
09/28/00												0.73 (1.9)	210 (537)									
12/13/00												0.68 (1.7)A	140 (358)									
05/03/01												150 (383)	240 (613)	1200 (3067)	960 (2454)	580 (1482)	550 (1406)	<0.8 (2)	<0.78 (2)			
07/03/01	<0.76 (1.9)	<0.76 (1.9)	<0.76 (1.9)		<0.76 (1.9)	<0.78 (2)																
09/12/01					<0.78 (2)	<0.78 (2)						<0.76 (1.9)	<0.79 (2)	650 (1661)	990 (2530)	280 (716)	490 (1252)	<0.74 (1.9)	3.9 (10)			
09/13/01	<0.74 (1.9)	<0.74 (1.9)	<0.76 (1.9)																			
03/06/02												<0.72 (1.8)	<0.74 (1.9)	540 (1380)	400 (1022)	110 (281)	180 (460)	<0.74 (1.9)	<0.74 (1.9)			
03/07/02	<0.72 (1.8)	<0.73 (1.9)	<0.73 (1.9)		<0.73 (1.9)	<0.73 (1.9)																
06/11/02												<0.78 (2)	<0.79 (2)	<0.78 (2)	7.6 (19)	<0.78 (2)	1.8 (4.6)	<0.79 (2)	1.8 (4.6)			
06/12/02	<0.76 (1.9)	<0.76 (1.9)	<0.78 (2)		<0.74 (1.9)	<0.76 (1.9)	<0.76 (1.9)	<0.76 (1.9)														
08/10/02	<0.78 (2)	<0.74 (1.9)	<0.76 (1.9)		<0.76 (1.9)	1.4 (3.6)	<0.78 (2)	<1 (2.6)				<0.76 (1.9)	0.51 (1.3)J	0.8 (2)	5.2 (13)	<0.79 (2)	<0.79 (2)	<0.76 (1.9)	3 (7.7)			
12/03/02												<0.73 (1.9)	<0.72 (1.8)	<0.73 (1.9)	5.4 (14)	<0.73 (1.9)	3.3 (8.4)					
12/04/02	<0.73 (1.9)				<0.73 (1.9)	0.74 (1.9)	<0.72 (1.8)	<0.72 (1.8)											<0.72 (1.8)	3 (7.7)		
12/05/02		<0.72 (1.8)	<0.74 (1.9)																			
03/20/03	<0.76 (1.9)		<0.78 (2)		<0.78 (2)	<2 (5.1)													<0.78 (2)	2.2 (5.6)		
05/13/04	<0.79 (2)		<0.8 (2)		<0.8 (2)	<0.8 (2)													<0.82 (2.1)	0.92 (2.4)		
03/30/05	<0.82 (2.1)		<0.86 (2.2)		<0.82 (2.1)	0.69 (1.8)J													<0.7 (1.8)	0.42 (1.1)J		
09/09/05	<0.79 (2)				0.22 (0.56)J	0.99 (2.5)																
10/06/05	<0.79 (2)				<0.74 (1.9)	0.31 (0.79)J																
10/26/05	<0.78 (2)				<0.78 (2)	<0.78 (2)																
12/02/05	<0.8 (2)				<0.78 (2)	<0.78 (2)																
12/29/05	<0.74 (1.9)				<0.74 (1.9)	<0.73 (1.9)																
02/21/06	<0.73 (1.9)		<0.74 (1.9)		<0.74 (1.9)	<0.72 (1.8)													<0.78 (2)	1.5 (3.8)		
06/23/06	<0.74 (1.9)				<0.76 (1.9)	<0.76 (1.9)																
09/07/06	<0.79 (2)				<0.78 (2)	0.94 (2.4)																
12/28/06	<0.8 (2)				<0.79 (2)	<0.78 (2)																
01/02/08	<0.79 (2)	<0.78 (2)	<0.79 (2)		<0.79 (2)	<0.76 (1.9)			<0.79 (2)			<0.79 (2)	<0.8 (2)	<0.8 (2)	0.57 (1.5)J	<0.8 (2)	<0.8 (2)	<0.8 (2)	1.1 (2.8)			
07/16/08	<0.79 (2)	<0.79 (2)	<0.79 (2)	<0.8 (2)	<0.8 (2)	0.64 (1.6)J	<0.8 (2)	0.42 (1.1)J	<0.8 (2)	0.42 (1.1)J	2.1 (5.4)	<0.78 (2)	0.33 (0.84)J	<0.72 (1.8)	1.5 (3.8)	<0.78 (2)	0.96 (2.5)	<0.78 (2)	1.8 (4.6)	0.35 (0.89)J	1.6 (4.1)	
08/19/09	<0.82 (2.1)	<0.82 (2.1)	<0.82 (2.1)	<0.84 (2.1)	<0.82 (2.1)	0.56 (1.4)J	<0.8 (2)	0.34 (0.87)J	<0.82 (2.1)	<0.84 (2.1)	1.4 (3.6)	<0.8 (2)	<0.8 (2)	<0.78 (2)	0.79 (2)J	<0.8 (2)	0.56 (1.4)J	<0.82 (2.1)	1.2 (3.1)	<0.8 (2)	1 (2.6)	
09/29/10	<0.78 (2)	<0.78 (2)	<0.79 (2)	0.73 (1.9)J	<0.78 (2)	0.64 (1.6)J	<0.8 (2)	<0.8 (2)	<0.78 (2)	<0.78 (2)	<0.78 (2)	<0.78 (2)	<0.78 (2)	<0.8 (2)	1.2 (3.1)	<0.79 (2)	1.4 (3.6)	<0.8 (2)	2.1 (5.4)	<0.78 (2)	0.97 (2.5)	
06/22/11	<0.79 (2)	<0.78 (2)	<0.79 (2)						<0.78 (2)													
06/23/11									<0.79 (2)	<0.79 (2)	<0.79 (2)	<0.82 (2.1)								<0.84 (2.1)	<0.79 (2)	
06/24/11				<0.76 (1.9)	<0.8 (2)	<0.78 (2)	<0.8 (2)	<0.78 (2)						<0.8 (2)	1.4 (3.6)	<0.78 (2)	<1.1 (2.8)U	<0.8 (2)	<0.88 (2.2)U			
06/28/12	<0.78 (2)	<0.79 (2)	<0.8 (2)																			
06/29/12									<3.2 (8.2)	<3.1 (7.9)	<6.4 (16)	<0.79 (2)	<0.78 (2)	<0.82 (2.1)	0.95 (2.4)	<6.2 (16)	<6 (15)			<0.84 (2.1)	<7 (18)	
06/30/12				<11 (28)	<6.3 (16)	<6.3 (16)	<0.78 (2)	<6.3 (16)										<6.1 (16)	0.49 (1.3)J			
05/15/13	<0.78 (2)	<0.75 (1.9)	<0.74 (1.9)						<0.74 (1.9)	<0.74 (1.9)			<0.76 (1.9)							<0.78 (2)	<0.72 (1.8)	
05/16/13				<0.73 (1.9)	<0.81 (2.1)	<0.74 (1.9)	<0.74 (1.9)	<0.82 (2.1)			<0.78 (2)	<0.8 (2)		<0.72 (1.8)	<0.77 (2)	<0.74 (1.9)	<0.76 (1.9)	<0.76 (1.9)	<0.81 (2.1)			
06/05/14	<0.74 (1.9)	<0.74 (1.9)	<0.73 (1.9)						<0.73 (1.9)	<0.73 (1.9)	<0.76 (1.9)	<0.76 (1.9)	<0.73 (1.9)							<0.76 (1.9)	<0.74 (1.9)	
06/06/14				<0.79 (2)	<0.76 (1.9)	0.5 (1.3)J	<0.78 (2)	<0.78 (2)						<0.74 (1.9)	0.47 (1.2)J	<0.73 (1.9)	0.8 (2)	<0.72 (1.8)	0.62 (1.6)J			
06/02/15	<0.78 (2)	<0.78 (2)	<0.76 (1.9)						<0.8 (2)	<0.74 (1.9)	<0.78 (2)									<0.82 (2.1)	0.46 (1.2)J	
06/03/15				<0.76 (1.9)	<0.77 (2)	<0.78 (2)	<0.73 (1.9)	<0.76 (1.9)				<0.76 (1.9)	<0.79 (2)	<0.74 (1.9)	<0.72 (1.8)	<0.76 (1.9)	0.52 (1.3)J	<0.74 (1.9)	0.36 (0.92)J			
06/27/16	<0.28 (0.72)	<0.28 (0.72)	<0.29 (0.74)	<0.29 (0.74)	<0.3 (0.77)	<0.28 (0.72)	<0.29 (0.74)	<0.29 (0.74)	<0.29 (0.74)	<0.3 (0.77)	<0.3 (0.77)											
06/28/16												<0.29 (0.74)	<0.29 (0.74)									
06/29/16														<0.28 (0.72)	0.64 (1.6)J	<0.29 (0.74)	0.65 (1.7)J	<0.29 (0.74)	0.91 (2.3)	<0.29 (0.74)	<0.28 (0.72)	
06/20/17	<0.59 (1.5)	<0.58 (1.5)	<0.58 (1.5)						<0.59 (1.5)	<0.6 (1.5)												
06/21/17												<0.62 (1.6)	<0.58 (1.5)	<0.62 (1.6)	<0.62 (1.6)	<0.62 (1.6)	<0.6 (1.5)	<0.6 (1.5)	0.92 (2.4)	<0.61 (1.6)	<0.6 (1.5)	
06/22/17				<0.62 (1.6)	<0.63 (1.6)	<0.64 (1.6)	<0.61 (1.6)	<0.64 (1.6)			<0.62 (1.6)											

Table 23. Concentrations of Vinyl Chloride in Landfill Gas Compliance Probes

Date Collected	Soil Gas Probe Locations																				
	SGP-3B-12	SGP-4B-12	SGP-2C-12	SGP-3C-12	SGP-4D-12	SGP-4D-22	SGP-6D-12	SGP-6D-22	SGP-7E-12	SGP-8E-12	SGP-9E-12	SGP-8F-12	SGP-8F-22	SGP-13F-12	SGP-13F-32	SGP-15F-12	SGP-15F-32	SGP-17F-12	SGP-17F-32	SGP-22F-12	SGP-22F-32
	Vinyl Chloride in ppbv and (µg/m ³)																				
06/19/18	<0.62 (1.6)	<0.61 (1.6)	<0.61 (1.6)						<0.6 (1.5)	<0.6 (1.5)	<0.6 (1.5)	<0.61 (1.6)	<0.6 (1.5)							<0.6 (1.5)	<0.58 (1.5)
06/20/18				<0.61 (1.6)	<0.6 (1.5)	<0.6 (1.5)	<0.58 (1.5)	<0.61 (1.6)						<0.62 (1.6)	0.6 (1.5)J	<0.62 (1.6)	0.72 (1.8)J	<0.6 (1.5)	0.85 (2.2)		
5/7/2019	<0.58 (1.5)	<0.64 (1.6)	<0.62 (1.6)		<0.63 (1.6)	<0.62 (1.6)	<0.63 (1.6)	<0.61 (1.6)	<0.61 (1.6)	<0.6 (1.5)	<0.64 (1.6)							<0.63 (1.6)	0.88 (2.2)	<0.61 (1.6)	<0.62 (1.6)
5/8/2019				<0.68 (1.7)								<0.7 (1.8)	<0.72 (1.8)	<0.72 (1.8)	<0.72 (1.8)	<0.71 (1.8)	<0.74 (1.9)				
6/3/2020	<0.37 (0.95)	<0.36 (0.92)	<0.42 (1.1)	<0.4 (1)	<0.4 (1)	<0.41 (1)	<0.4 (1)	<0.4 (1)	<0.42 (1.1)	<0.46 (1.2)	<0.39 (1)	<0.41 (1)								<0.48 (1.2)	<0.42 (1.1)
6/4/2020													0.42 (1.1)J	<0.39 (1)	<0.39 (1)	<0.42 (1.1)	<0.4 (1)	<0.35 (0.89)	<0.38 (0.97)		

Notes:

J = estimated, bias indeterminate
ppbv = parts per billion by volume

U = value qualified as non-detected during data review
µg/m³ = micrograms per cubic meter

DTSC SL = California Department of Toxic Substances and Control Residential Air Screening Level

Probe ID = Probe exhibited concentration greater than 1000 x DTSC SL for vinyl chloride (1000 times the DTSC SL equals 9.5 µg/m³ or 3.7 ppbv based on the current DTSC SL (DTSC, 2018))
Vinyl Chloride = Concentration greater than 100 x RSL (3.7 ppbv) per QAPP

Table 24. Field Measurements, Landfill Gas Perimeter Probes November 2019

AREA	PROBE IDENTIFICATION	DEPTH(feet)	SAMPLE IDENTIFICATION	DATE	BAROMETRIC PRESSURE (mm Mercury)	METHANE (%v)	CARBON DIOXIDE (%v)	OXYGEN (%v)	BALANCE GAS (%v)
B	2	12	OU2GM6004	11/11/2019	405.81	1.3	13.8	0	84.9
B	3	12	OU2GM6005	11/11/2019	405.68	0	2.4	17.4	80.2
B	4	12	OU2GM6006	11/11/2019	405.95	0	1.5	18.7	79.8
C	2	12	OU2GM6007	11/11/2019	405.54	0	2.4	18.3	79.3
C	3	12	OU2GM6008	11/11/2019	405.81	0	1.2	19.2	79.6
D	1	12	OU2GM6009	11/11/2019	405.68	0	9	8.7	82.3
D	1	22	OU2GM6010	11/11/2019	405.54	0	14.9	2.2	82.9
D	4	12	OU2GM6011	11/11/2019	405.54	0	1.2	19.5	79.3
D	4	22	OU2GM6012	11/11/2019	405.41	0	2.3	18.1	79.6
D	6	12	OU2GM6013	11/11/2019	405.54	0	0.8	20	79.2
D	6	22	OU2GM6014	11/11/2019	405.54	0	1.4	19.4	79.2
E	1	12	OU2GM6015	11/11/2019	405	5.5	19.1	0.3	75.1
E	2	12	OU2GM6016	11/11/2019	405	0.3	16.3	2.8	80.6
E	3	12	OU2GM6017	11/11/2019	405.27	0.3	15.6	3.8	80.3
E	4	12	OU2GM6018	11/11/2019	405.13	26.1	26	0	47.9
E	7	12	OU2GM6019	11/11/2019	405.41	0	2.5	18.1	79.4
E	8	12	OU2GM6020	11/11/2019	405	0	2.6	17.7	79.7
E	9	12	OU2GM6021	11/11/2019	404.86	0	0.9	20	79.1
F	2	32	OU2GM6022	11/11/2019	405.81	0.8	16.5	0.3	82.4
F	4	12	OU2GM6023	11/11/2019	406.09	1.7	6.5	11.7	80.1
F	8	12	OU2GM6024	11/11/2019	405.68	0	2	18.2	79.8
F	8	22	OU2GM6025	11/11/2019	405.68	0	3.3	16.7	80
F	11	32	OU2GM6026	11/11/2019	405.68	0	3.4	16.1	80.5
F	13	12	OU2GM6027	11/11/2019	405.81	0	1.8	18.4	79.8
F	13	32	OU2GM6028	11/11/2019	405.68	0	0.3	19.9	79.8
F	15	12	OU2GM6029	11/11/2019	405.68	0	1.8	18.3	79.9
F	15	32	OU2GM6030	11/11/2019	405.81	0	4.2	15.4	80.4
F	17	12	OU2GM6031	11/11/2019	405.95	0	0.5	20	79.5
F	17	32	OU2GM6032	11/11/2019	405.95	0	0.8	19.8	79.4
F	22	12	OU2GM6033	11/11/2019	405.68	0	3.4	16.5	80.1
F	22	32	OU2GM6034	11/11/2019	405.68	0	1.9	18.4	79.7

Notes:

%v percent volume in air
mm millimeter

OU2GM5302 compliance perimeter probes for methane

Table 25. Field Measurements, Landfill Gas Perimeter Probes February 2020

AREA	PROBE IDENTIFICATION	DEPTH(feet)	SAMPLE IDENTIFICATION	DATE	BAROMETRIC PRESSURE (mm Mercury)	METHANE (%v)	CARBON DIOXIDE (%v)	OXYGEN (%v)	BALANCE GAS (%v)
B	2	12	OU2GM6049	2/18/2020	405.54	3.4	12.5	0	84.1
B	3	12	OU2GM6050	2/18/2020	405.41	0	2.7	15.9	81.4
B	4	12	OU2GM6051	2/18/2020	405.81	0	1.4	17.6	81
C	2	12	OU2GM6052	2/18/2020	405.54	0	3.2	16.3	80.5
C	3	12	OU2GM6075	2/19/2020	406.22	0	1.7	19	79.3
D	1	12	OU2GM6076	2/19/2020	406.36	0	11.4	5.8	82.8
D	1	22	OU2GM6077	2/19/2020	406.22	0	0.1	20.6	79.3
D	4	12	OU2GM6073	2/19/2020	405.81	0	2.1	18.4	79.5
D	4	22	OU2GM6074	2/19/2020	405.81	0	3	17.3	79.7
D	6	12	OU2GM6071	2/19/2020	405.54	0	1.5	18.9	79.6
D	6	22	OU2GM6072	2/19/2020	405.68	0	2	18.4	79.6
E	1	12	OU2GM6056	2/18/2020	404.05	6.9	18	0	75.1
E	2	12	OU2GM6055	2/18/2020	404.18	3	17.9	0.4	78.7
E	3	12	OU2GM6054	2/18/2020	404.32	0.5	8.9	5.3	85.3
E	4	12	OU2GM6078	2/19/2020	405.95	29	24.3	0	46.7
E	7	12	OU2GM6053	2/18/2020	404.32	0	2.8	16.8	80.4
E	8	12	OU2GM6057	2/18/2020	404.05	0	3.9	15.6	80.5
E	9	12	OU2GM6079	2/19/2020	405.68	0	1.9	18.9	79.2
F	2	32	OU2GM6063	2/18/2020	404.86	0.4	17.8	0.1	81.7
F	4	12	OU2GM6068	2/18/2020	405.13	1.3	6.7	11.4	80.6
F	8	12	OU2GM6060	2/18/2020	404.86	0	2.6	17.3	80.1
F	8	22	OU2GM6061	2/18/2020	404.73	0	3.8	16	80.2
F	11	32	OU2GM6062	2/18/2020	404.73	0	3.8	15.7	80.5
F	13	12	OU2GM6064	2/18/2020	404.86	0	2.5	17.5	80
F	13	32	OU2GM6065	2/18/2020	404.73	0	4.3	15.2	80.5
F	15	12	OU2GM6066	2/18/2020	404.73	0	2.4	17.4	80.2
F	15	32	OU2GM6067	2/18/2020	404.86	0	4.3	15.1	80.6
F	17	12	OU2GM6069	2/18/2020	405.13	0	0.9	19.7	79.4
F	17	32	OU2GM6070	2/18/2020	405	0	0.8	19.7	79.5
F	22	12	OU2GM6058	2/18/2020	404.18	0	3.5	16	80.5
F	22	32	OU2GM6059	2/18/2020	404.73	0	2.3	17.4	80.3

Notes:

%v percent volume in air
mm millimeter

OU2GM5302 compliance perimeter probes for methane

Table 26. Field Measurements, Landfill Gas Perimeter Probes June 2020

AREA	PROBE IDENTIFICATION	DEPTH(feet)	SAMPLE IDENTIFICATION	DATE	BAROMETRIC PRESSURE (mm Mercury)	METHANE (%v)	CARBON DIOXIDE (%v)	OXYGEN (%v)	BALANCE GAS (%v)
B	2	12	OU2GM6118	6/5/2020	402.69	4.7	13.6	0	81.7
B	3	12	OU2GM6080	6/3/2020	404.32	0	2.6	16.2	81.2
B	4	12	OU2GM6081	6/3/2020	404.18	0	1.8	17.1	81.1
C	2	12	OU2GM6082	6/3/2020	404.05	0	4	15.1	80.9
C	3	12	OU2GM6083	6/3/2020	404.18	0	1.6	17.5	80.9
D	1	12	OU2GM6124	6/5/2020	402.55	1.2	16.7	0.3	81.8
D	1	22	OU2GM6125	6/5/2020	402.55	2	16.4	0.5	81.1
D	4	12	OU2GM6084	6/3/2020	404.05	0	1.8	18.4	79.8
D	4	22	OU2GM6085	6/3/2020	404.05	0	2.7	17.1	80.2
D	6	12	OU2GM6086	6/3/2020	404.18	0	1.1	19.4	79.5
D	6	22	OU2GM6087	6/3/2020	401.6	0	1.6	18.5	79.9
E	1	12	OU2GM6121	6/5/2020	402.14	9.6	19.2	0	71.2
E	2	12	OU2GM6120	6/5/2020	401.87	9.7	20.1	1.6	68.6
E	3	12	OU2GM6119	6/5/2020	402.41	4.3	13.9	3.9	77.9
E	4	12	OU2GM6126	6/5/2020	402.14	8.3	7	11.6	73.1
E	7	12	OU2GM6088	6/3/2020	403.77	0	2.5	16.8	80.7
E	8	12	OU2GM6089	6/3/2020	403.5	0	3.6	16.5	79.9
E	9	12	OU2GM6090	6/3/2020	422.94	0	1.7	18.9	79.4
F	4	12	OU2GM6123	6/5/2020	403.09	3.2	7.8	10.7	78.3
F	8	12	OU2GM6091	6/3/2020	404.05	0	2.6	17.9	79.5
F	8	12	OU2GM6092	6/3/2020	404.05	0	2.6	17.9	79.5
F	8	22	OU2GM6093	6/3/2020	404.05	0	2.1	18.8	79.1
F	11	32	OU2GM6122	6/5/2020	402.69	0	4.1	15.5	80.4
F	13	12	OU2GM6094	6/3/2020	404.05	0	2.5	18.5	79
F	13	12	OU2GM6095	6/3/2020	404.05	0	2.5	18.5	79
F	13	32	OU2GM6096	6/4/2020	401.87	0	4.7	15.4	79.9
F	15	12	OU2GM6097	6/4/2020	402.01	0	3.2	16.5	80.3
F	15	12	OU2GM6098	6/4/2020	402.01	0	3.2	16.5	80.3
F	15	32	OU2GM6099	6/4/2020	402.01	0	5.1	13.9	81
F	17	12	OU2GM6100	6/4/2020	401.87	0	1	19.5	79.5
F	17	32	OU2GM6101	6/4/2020	402.01	0	1	19.3	79.7
F	22	12	OU2GM6102	6/4/2020	402.01	0	3.8	15.6	80.6
F	22	32	OU2GM6103	6/4/2020	402.14	0	3.2	16.5	80.3

Notes:

%v percent volume in air
mm millimeter

OU2GM5302 compliance perimeter probes for methane

Table 27. Field Measurements, Landfill Gas Perimeter Probes August 2020

AREA	PROBE IDENTIFICATION	DEPTH(feet)	SAMPLE IDENTIFICATION	DATE	BAROMETRIC PRESSURE (mm Mercury)	METHANE (%v)	CARBON DIOXIDE (%v)	OXYGEN (%v)	BALANCE GAS (%v)
B	2	12	OU2GM6141	8/26/2020	403.09	3.2	14.1	0	82.7
B	3	12	OU2GM6142	8/26/2020	403.23	0	2.8	16.6	80.6
B	4	12	OU2GM6143	8/26/2020	403.37	0	2	17.7	80.3
C	2	12	OU2GM6144	8/26/2020	403.23	0	3.5	17	79.5
C	3	12	OU2GM6167	8/26/2020	402.55	0	1.5	19.2	79.3
D	1	12	OU2GM6168	8/26/2020	402.96	0	12.1	6.8	81.1
D	1	22	OU2GM6169	8/26/2020	402.96	0.6	16.9	0.3	82.2
D	4	12	OU2GM6165	8/26/2020	402.82	0	1.6	19.1	79.3
D	4	22	OU2GM6166	8/26/2020	402.69	0	2.7	17.7	79.6
D	6	12	OU2GM6163	8/26/2020	402.82	0	1.1	19.8	79.1
D	6	22	OU2GM6164	8/26/2020	402.82	0	1.7	19.1	79.2
E	1	12	OU2GM6148	8/26/2020	402.41	8.1	19.3	0.4	72.2
E	2	12	OU2GM6147	8/26/2020	402.69	1.8	14.9	5.4	77.9
E	3	12	OU2GM6146	8/26/2020	402.82	6.3	15.5	5.7	72.5
E	4	12	OU2GM6170	8/26/2020	402.55	28.9	27.1	0	44
E	7	12	OU2GM6145	8/26/2020	402.96	0	3.1	17.2	79.7
E	8	12	OU2GM6149	8/26/2020	402.41	0	3.3	17.2	79.5
E	9	12	OU2GM6171	8/26/2020	402.14	0	1.3	19.6	79.1
F	2	32	OU2GM6155	8/26/2020	403.23	2.8	17.8	0.1	79.3
F	4	12	OU2GM6160	8/26/2020	403.5	2.7	7.3	11.7	78.3
F	8	12	OU2GM6152	8/26/2020	403.09	0	2.3	18.3	79.4
F	8	22	OU2GM6153	8/26/2020	403.23	0	3.4	17.1	79.5
F	11	32	OU2GM6154	8/26/2020	403.09	0	3.5	16.5	80
F	13	12	OU2GM6156	8/26/2020	403.23	0	2.4	18.4	79.2
F	13	32	OU2GM6157	8/26/2020	403.23	0	4.8	15.6	79.6
F	15	12	OU2GM6158	8/26/2020	403.23	0	2.3	18.2	79.5
F	15	32	OU2GM6159	8/26/2020	403.23	0	5.2	14.9	79.9
F	17	12	OU2GM6161	8/26/2020	403.5	0	0.8	20.2	79
F	17	32	OU2GM6162	8/26/2020	403.23	0	0.9	19.9	79.2
F	22	12	OU2GM6150	8/26/2020	402.69	0	4.5	15.3	80.2
F	22	32	OU2GM6151	8/26/2020	403.09	0	2.7	17.7	79.6
D	3	12	OU2GM6172	9/18/2020	403.5	0	11.7	6.3	82
D	3	22	OU2GM6173	9/18/2020	403.5	0	7.3	11.5	81.2

Notes:

%v percent volume in air
mm millimeter

OU2GM5302 compliance perimeter probes for methane

Table 28. Field Measurements, Landfill Passive Vents November 2019

AREA	VENT IDENTIFICATION	SAMPLE IDENTIFICATION	DATE	BAROMETRIC PRESSURE (millimeters Mercury)	METHANE (%v)	CARBON DIOXIDE (%v)	OXYGEN (%v)	BALANCE GAS (%v)
B	VB-1	OU2GM5990	11/11/2019	405.27	16.8	11.4	0	71.8
B	VB-2	OU2GM5991	11/11/2019	405.13	27.1	11.3	0	61.6
B	VB-3	OU2GM5992	11/11/2019	404.86	21.6	11.7	0	66.7
C	VC-1	OU2GM5995	11/11/2019	404.86	0.1	3.2	17.9	78.8
C	VC-2	OU2GM5994	11/11/2019	404.86	16.3	17.9	0	65.8
C	VC-3	OU2GM5993	11/11/2019	405	9	16.4	0	74.6
D	VD-1	OU2GM5996	11/11/2019	404.73	24.6	18.3	0	57.1
D	VD-4	OU2GM5997	11/11/2019	404.59	24.7	16.7	0	58.6
E	VE-1	OU2GM6003	11/11/2019	404.59	38.5	28.4	0	33.1
E	VE-7	OU2GM6001	11/11/2019	404.59	50.1	37.3	0	12.6
E	VE-8	OU2GM6002	11/11/2019	404.59	42.9	36	0	21.1
F	VF-1	OU2GM5998	11/11/2019	405.41	22.1	26.3	0	51.6
F	VF-2	OU2GM5999	11/11/2019	405.41	39.5	25	0	35.5
F	VF-6	OU2GM6000	11/11/2019	405.13	35	28.4	0	36.6

Notes:

%v percent volume in air

Table 29. Field Measurements, Landfill Passive Vents February 2020

AREA	VENT IDENTIFICATION	SAMPLE IDENTIFICATION	DATE	BAROMETRIC PRESSURE (millimeters Mercury)	METHANE (%v)	CARBON DIOXIDE (%v)	OXYGEN (%v)	BALANCE GAS (%v)
B	VB-1	OU2GM6036ADD	2/18/2020	405.54	15.8	10	0	74.2
B	VB-2	OU2GM6035ADD	2/18/2020	405.27	0.1	0.3	19.6	80
B	VB-3	OU2GM6037ADD	2/18/2020	405.41	21.1	10.7	0	68.2
C	VC-1	OU2GM6040ADD	2/18/2020	404.86	0	4.7	15.9	79.4
C	VC-2	OU2GM6039ADD	2/18/2020	405.13	15.6	16.3	0	68.1
C	VC-3	OU2GM6038ADD	2/18/2020	405.27	8.3	15	0	76.7
D	VD-1	OU2GM6041ADD	2/18/2020	405	24	16.3	0	59.7
D	VD-4	OU2GM6042ADD	2/18/2020	404.86	25.4	15.1	0	59.5
E	VE-1	OU2GM6048	2/18/2020	404.45	38.9	26.2	0	34.9
E	VE-7	OU2GM6046ADD	2/18/2020	404.45	53.9	32.2	0	13.9
E	VE-8	OU2GM6047	2/18/2020	404.45	52.7	34.5	0	12.8
F	VF-1	OU2GM6043ADD	2/18/2020	405.41	21.8	24.9	0	53.3
F	VF-2	OU2GM6044ADD	2/18/2020	405.54	39.1	22.2	0	38.7
F	VF-6	OU2GM6045ADD	2/18/2020	405.41	35.3	25	0	39.7

Notes:

%v percent volume in air

Table 30. Field Measurements, Landfill Passive Vents June 2020

AREA	VENT IDENTIFICATION	SAMPLE IDENTIFICATION	DATE	BAROMETRIC PRESSURE (millimeters Mercury)	METHANE (%v)	CARBON DIOXIDE (%v)	OXYGEN (%v)	BALANCE GAS (%v)
B	VB-1	OU2GM6104	6/5/2020	402.41	15.4	11.8	0	72.8
B	VB-2	OU2GM6105	6/5/2020	402.28	26	11.9	0	62.1
B	VB-3	OU2GM6106	6/5/2020	402.14	20.8	12	0	67.2
C	VC-1	OU2GM6109	6/5/2020	401.87	0	2.7	18.7	78.6
C	VC-2	OU2GM6108	6/5/2020	401.87	15.2	18.1	0	66.7
C	VC-3	OU2GM6107	6/5/2020	402.14	8	16.7	0	75.3
D	VD-1	OU2GM6110	6/5/2020	401.87	23.5	18.3	0	58.2
D	VD-4	OU2GM6111	6/5/2020	401.74	25.1	16.8	0	58.1
E	VE-1	OU2GM6117	6/5/2020	401.6	38.6	29.4	0	32
E	VE-7	OU2GM6115	6/5/2020	401.33	52.4	37	0	10.6
E	VE-8	OU2GM6116	6/5/2020	401.46	51	39.1	0	9.9
F	VF-1	OU2GM6112	6/5/2020	402.28	22.4	27.9	0	49.7
F	VF-2	OU2GM6113	6/5/2020	402.41	38.1	25.5	0	36.4
F	VF-6	OU2GM6114	6/5/2020	402.14	33.9	28.9	0	37.2

Notes:

%v percent volume in air

Table 31. Field Measurements, Landfill Passive Vents August 2020

AREA	VENT IDENTIFICATION	SAMPLE IDENTIFICATION	DATE	BAROMETRIC PRESSURE (millimeters Mercury)	METHANE (%v)	CARBON DIOXIDE (%v)	OXYGEN (%v)	BALANCE GAS (%v)
B	VB-1	OU2GM6127	8/26/2020	402.82	16	12.3	0	71.7
B	VB-2	OU2GM6128	8/26/2020	402.69	26.3	12.2	0	61.5
B	VB-3	OU2GM6129	8/26/2020	402.55	21	12.2	0	66.8
C	VC-1	OU2GM6132	8/26/2020	402.28	0	1.4	19.3	79.3
C	VC-2	OU2GM6131	8/26/2020	402.41	14.1	17.1	1.6	67.2
C	VC-3	OU2GM6130	8/26/2020	402.55	8.2	17.1	0	74.7
D	VD-1	OU2GM6133	8/26/2020	402.28	23.7	18.9	0	57.4
D	VD-4	OU2GM6134	8/26/2020	402.14	24.9	17.3	0	57.8
E	VE-1	OU2GM6140	8/26/2020	401.87	38.6	29.9	0	31.5
E	VE-7	OU2GM6138	8/26/2020	401.87	52	38.2	0	9.8
E	VE-8	OU2GM6139	8/26/2020	401.87	50.3	40.7	0	9
F	VF-1	OU2GM6135	8/26/2020	402.69	22.7	27.8	0	49.5
F	VF-2	OU2GM6136	8/26/2020	402.69	38.9	26.4	0	34.7
F	VF-6	OU2GM6137	8/26/2020	402.69	34.2	29.8	0	36

Notes:

%v = percent volume in air

Table 32. Landfills Area F, Eastern Perimeter Probe Monitoring Summary

Probe Description	Methane
Average Methane in Probes Adjacent to Eastern Extraction System ¹	<0.0%v
Average Methane in 32-Foot Probes	0.2%v
Average Methane in 22-Foot Probes	<0.0%v
Average Methane in 12-Foot Probes	0.3%v
Probe with Highest Methane Level ¹	All probes 0%v

Notes:

¹ Probes included in this calculation are from Area F and are as follows: 8F-12, 8F-22, 11F-32, 13F-12, 13F-32, 15F-12, and 15F-32.

%v = percent by volume in air

Table 33. Summary of Groundwater Metals Analytical Results, Third Quarter 2020

Station	Depth (ft btoc)	Analyte:	Antimony (µg/L)		Copper (µg/L)		Lead (µg/L)	
		Units: Date:	Value	Qual	Value	Qual	Value	Qual
Maximum Contaminant Level (MCL):			6		1,300		15	
MW-OU2-01-A	199	9/4/2020	<5	U	<2	U	<2	U
MW-OU2-02-A	115	9/4/2020	<5	U	<2	U	<2	U
MW-OU2-73-A	117	9/4/2020	<5	U	<2	U	<2	U
MW-OU2-74-A	150	9/4/2020	<5	U	<2	U	<2	U

Notes:

Results in **bold** are at or above the MCL.

Results in *gray* are not detected concentrations (result reported as <limit of detection [LOD]).

Acronyms and Abbreviations:

µg/L: micrograms per liter

ft btoc: feet below top of casing

MCL: Maximum Contaminant Level (in drinking water)

Qual: qualifier

Data Validation Qualifiers:

J: Laboratory or validation qualifier, estimated result between the detection limit (DL) and the limit of quantitation (LOQ) with a possible high (+) or low (-) bias.

U: Laboratory or validation qualifier, concentration not detected (reported as <LOD).

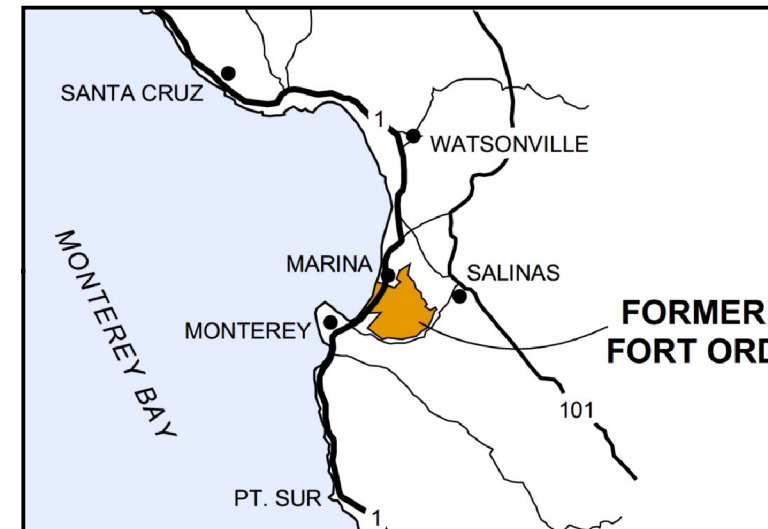
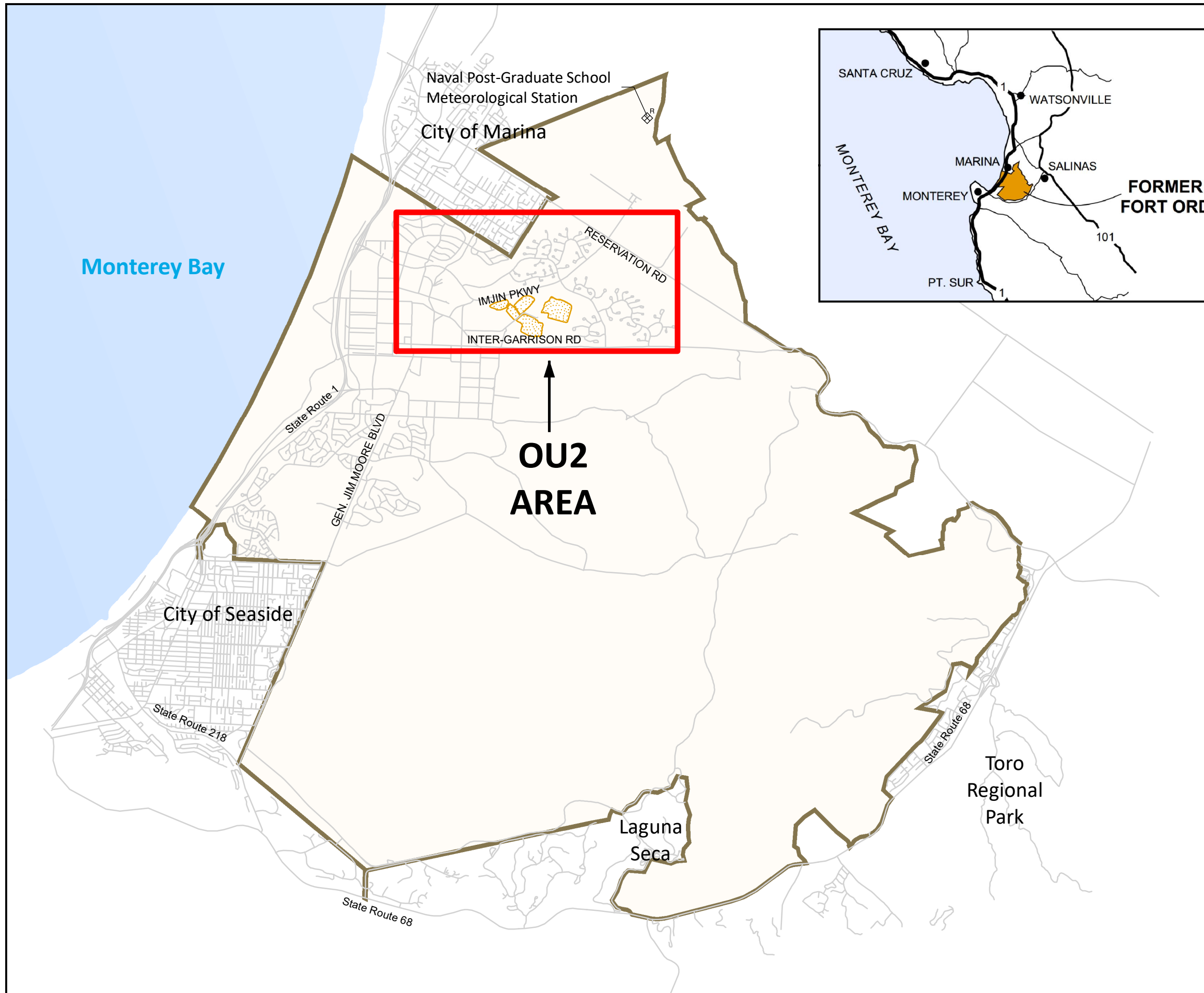
Table 34. Recommended Groundwater Sample Schedule Modifications

Well Name	Current Sampling Frequency	Recommended Sampling Frequency Change	Rationale
A-Aquifer			
EW-OU2-02-A	Quarterly VOCs	Quarterly VOCs	Restart sampling once connected to GWTP
EW-OU2-14-A	Quarterly VOCs	Quarterly VOCs	Convert to monitoring well and restart sampling
MW-BW-71-A	Depth to Water Only	Quarterly VOCs	Move from OUCTP A-Aquifer to OU2 and restart sampling
MW-OU2-26-A	Removed from QAPP	Decommission	Well blocked and unable to sample or collect water level
MW-OU2-37-A	Removed from QAPP	Decommission	Well blocked and unable to sample or collect water level
MW-OU2-76-A	Depth to Water Only	Quarterly VOCs	Due to increasing COC concentrations south of well, restart sampling
Upper 180-Foot Aquifer			
MW-OU2-30-180	Annual VOCs	Annual VOCs	Move to OUCTP Upper 180-Foot Aquifer report
MW-OU2-37-180	Removed from QAPP	Decommission	Well blocked and unable to sample or collect water level




Acronyms and Abbreviations:

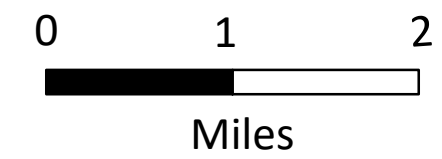
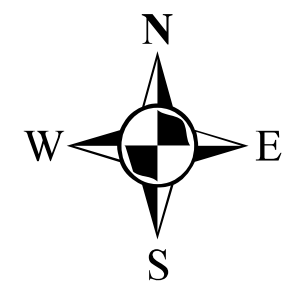
ACL: Aquifer Cleanup Level
 COC: chemical of concern
 QAPP: Quality Assurance Project Plan

Figures



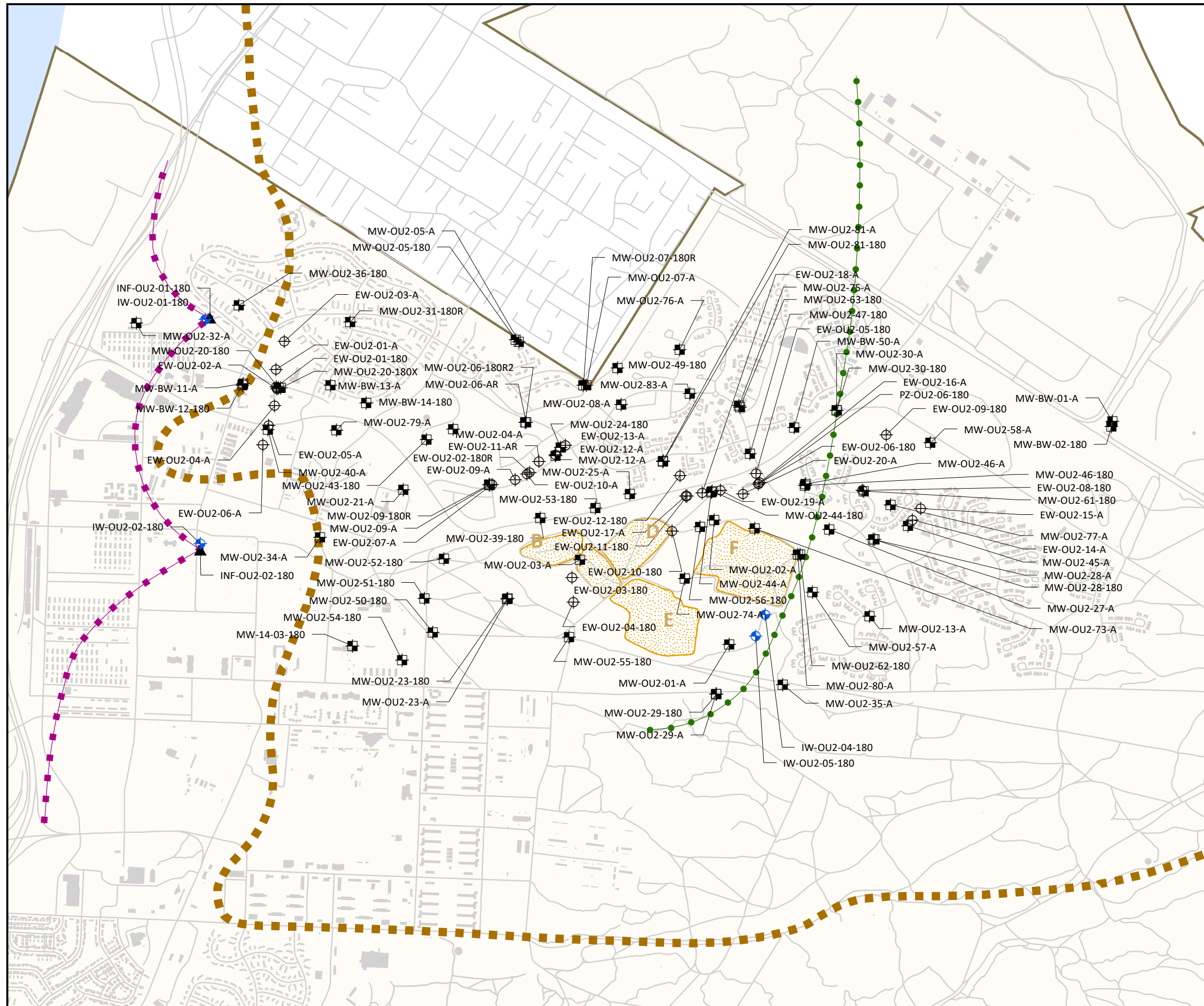
EXPLANATION

-  Former Fort Ord Boundary
-  Roads
-  Approximate Extent of OU2 Landfill



LOCATION MAP

Operable Unit 2 Remedy Monitoring and Operations and Maintenance, Fourth Quarter 2019 - Third Quarter 2020
Former Fort Ord, California



EXPLANATION

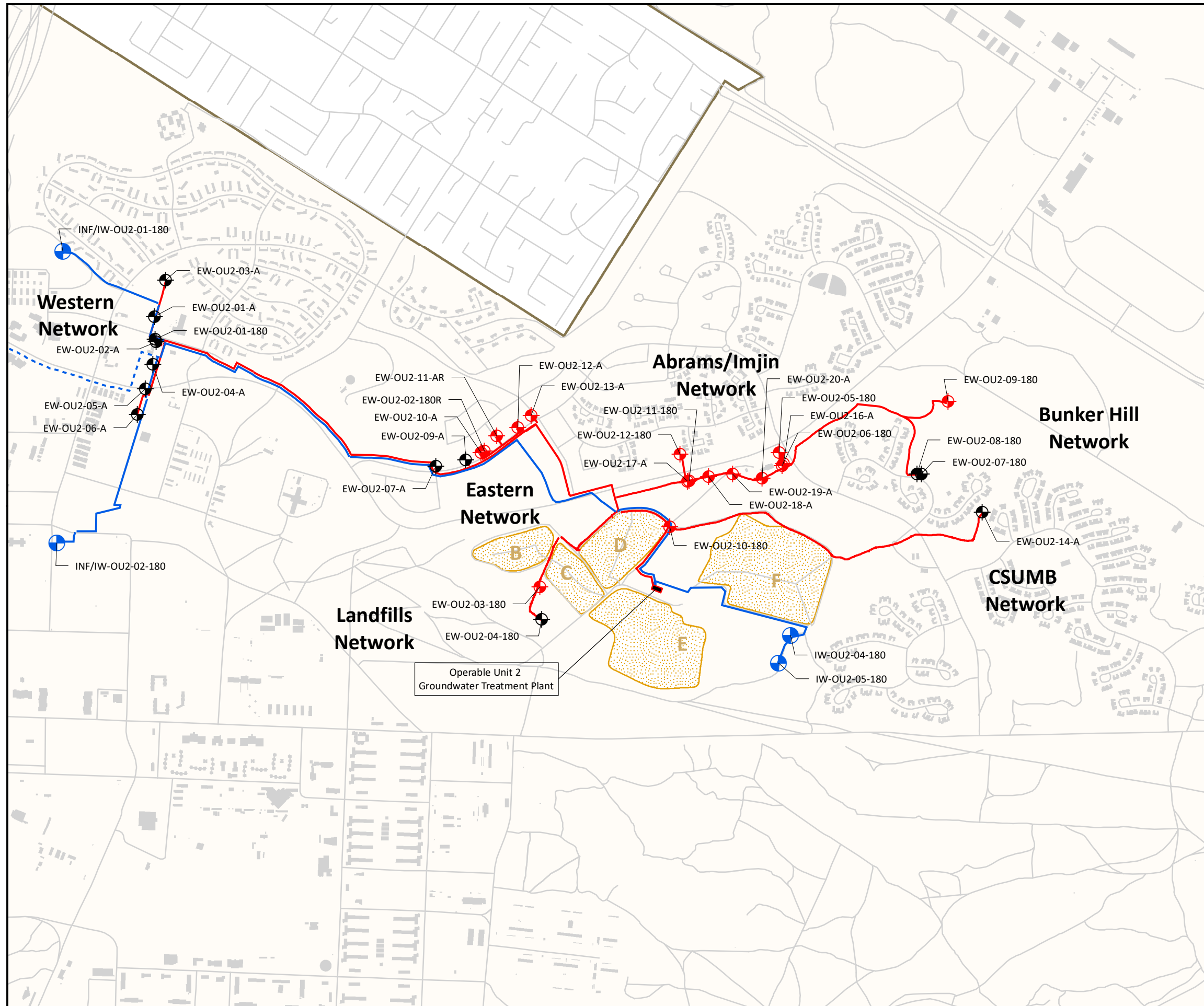
- Monitoring Well
- Extraction Well
- Piezometer
- Injection Well
- Infiltration Well
- Former Fort Ord Boundary
- Approximate Extent of OU2 Landfill
- Approximate Edge of the Fort Ord - Salinas Valley Aquitard
- Approximate location of the A-Aquifer Groundwater Divide
- Approximate location of the Upper 180-Foot Aquifer Groundwater Divide
- Facilities
- Roads

0 1,500 3,000
Feet

SITE VICINITY AND GROUNDWATER WELL LOCATIONS

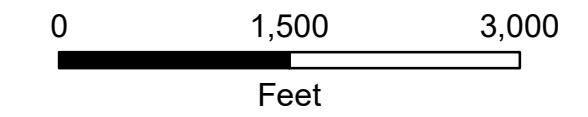
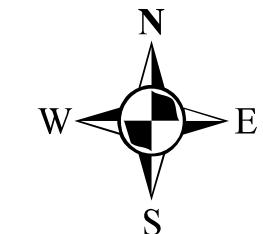
Operable Unit 2 Remedy Monitoring and Operations and Maintenance, Fourth Quarter 2019 - Third Quarter 2020
Former Fort Ord, California

	Date: 11/22/2020	Figure: 2
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EXPLANATION

- Groundwater Collection Pipeline
- Treated Water Injection Pipeline
- - - Injection Pipeline
- ⊕ Extraction Well Operated
- ⊕ Extration Well Not Operated
- ⊕ Injection Well
- Roads
- Approximate Extent of Landfill Areas
- Facilities
- Former Fort Ord Boundary



GROUNDWATER TREATMENT SYSTEM LAYOUT
 Operable Unit 2 Remedy Monitoring and Operations and Maintenance, Fourth Quarter 2019 - Third Quarter 2020
 Former Fort Ord, California

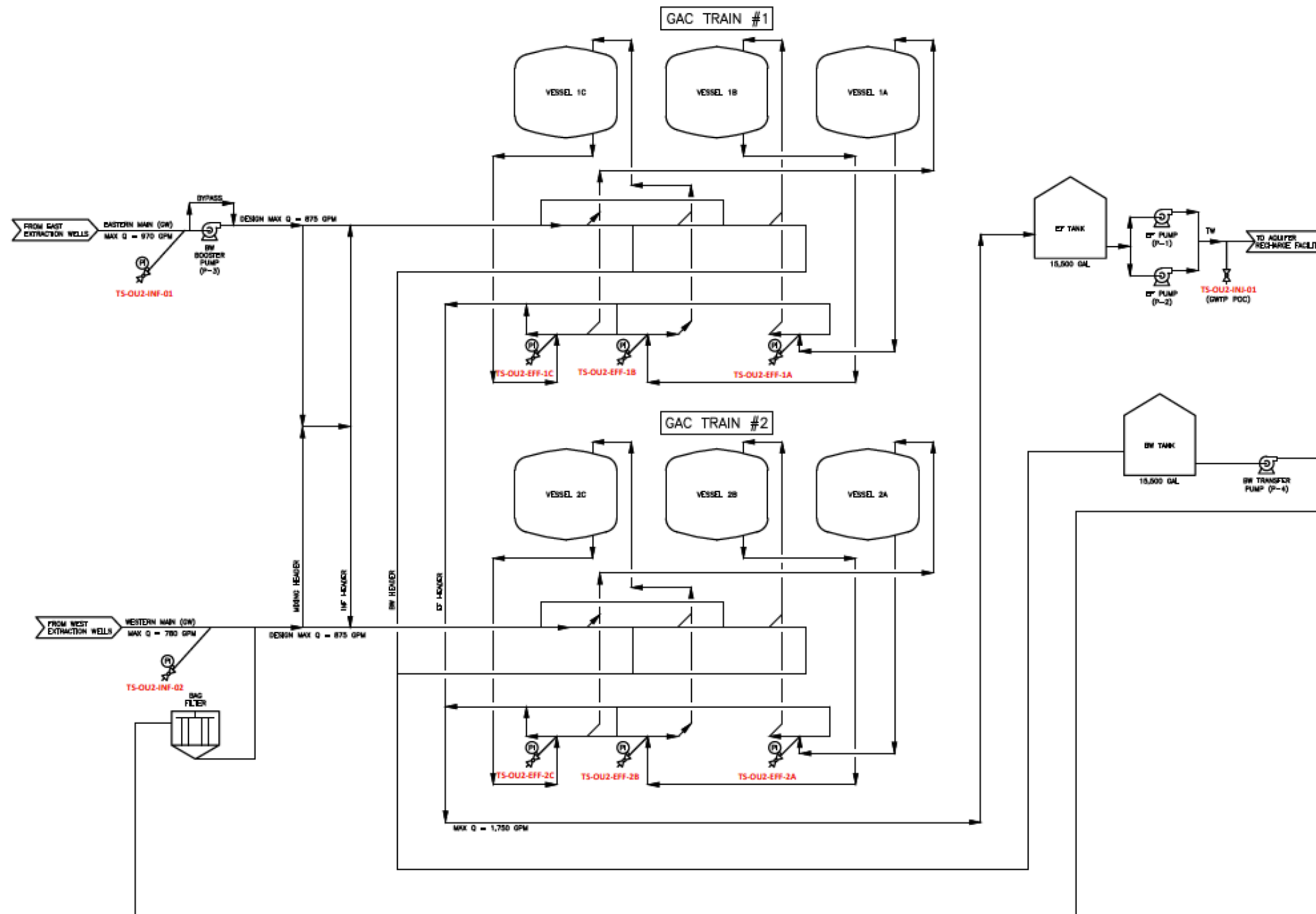
Explanation

Abbreviations

BW	Backwash
EF	Effluent
GAC	Granular Activated Carbon
GAL	Gallons
GPM	Gallons Per Minute
GW	Groundwater (Untreated)
GWTP	Groundwater Treatment Plant
MAX	Maximum
PI	Pressure Indicator
POC	Point Of Compliance
Q	Flow Rate
SP	Sample Port
TW	Treated Water

Notes:

1. Valves are not indicated.
2. Flow arrows indicated normal operation, with vessel sequence A-B-C in each GAC Train.
3. Locations in red font are sample locations.
4. The lead Gac Vessel effluent will be sampled at the time of each sampling event.



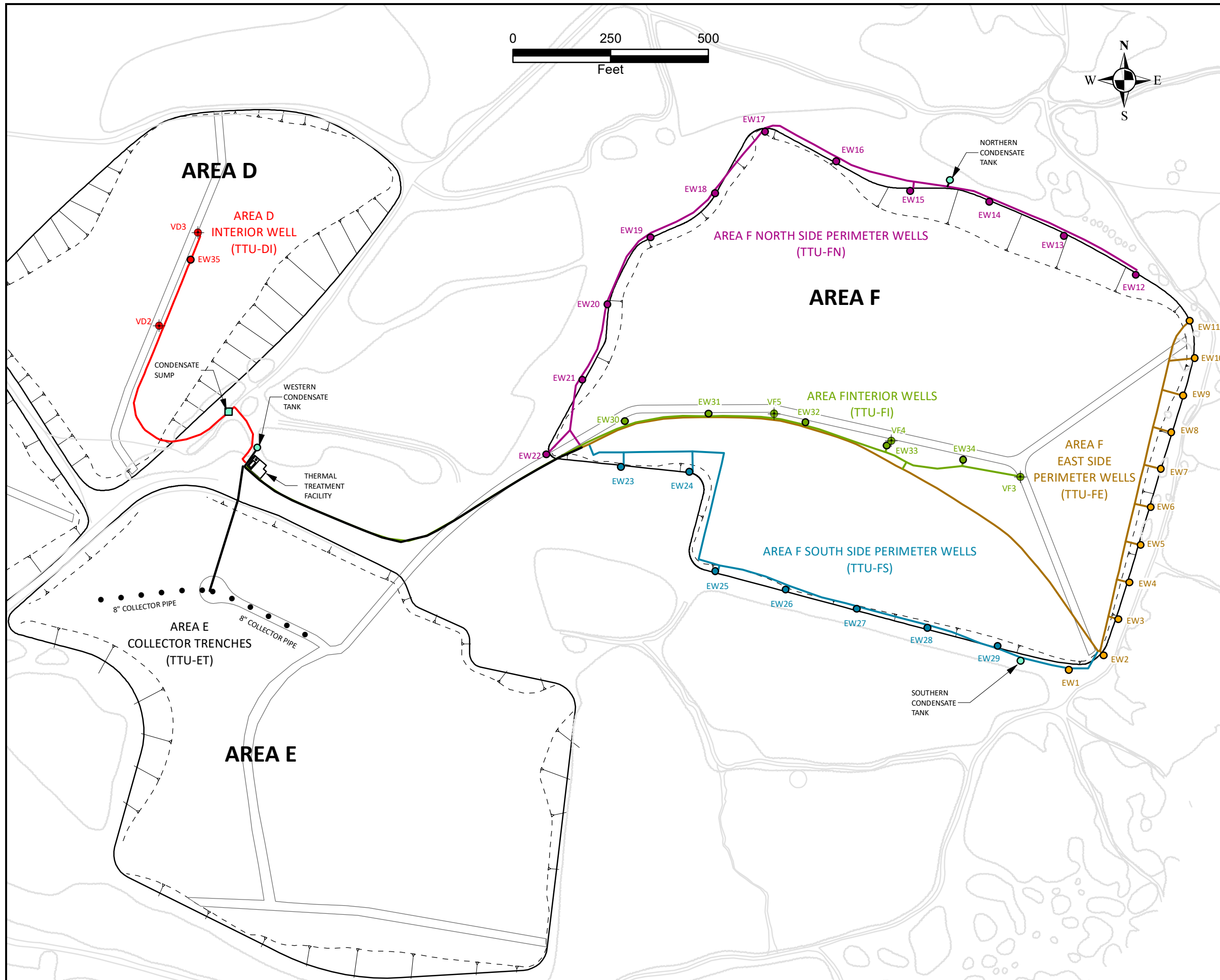
GROUNDWATER TREATMENT PLANT SCHEMATIC

Operable Unit 2 Remedy Monitoring and Operations and Maintenance, Fourth Quarter 2019 - Third Quarter 2020
Former Fort Ord, California

Ahtna

Date: 12/10/2020

Figure: 4

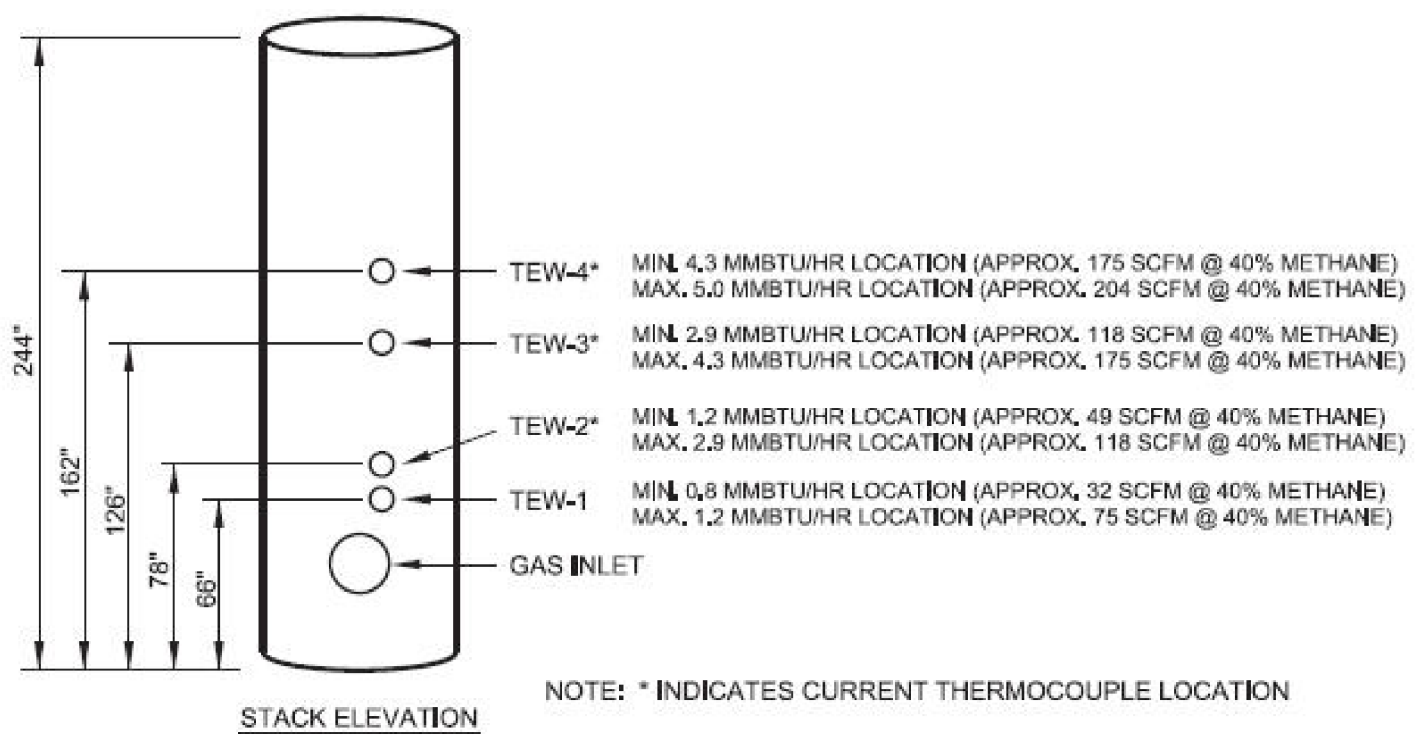
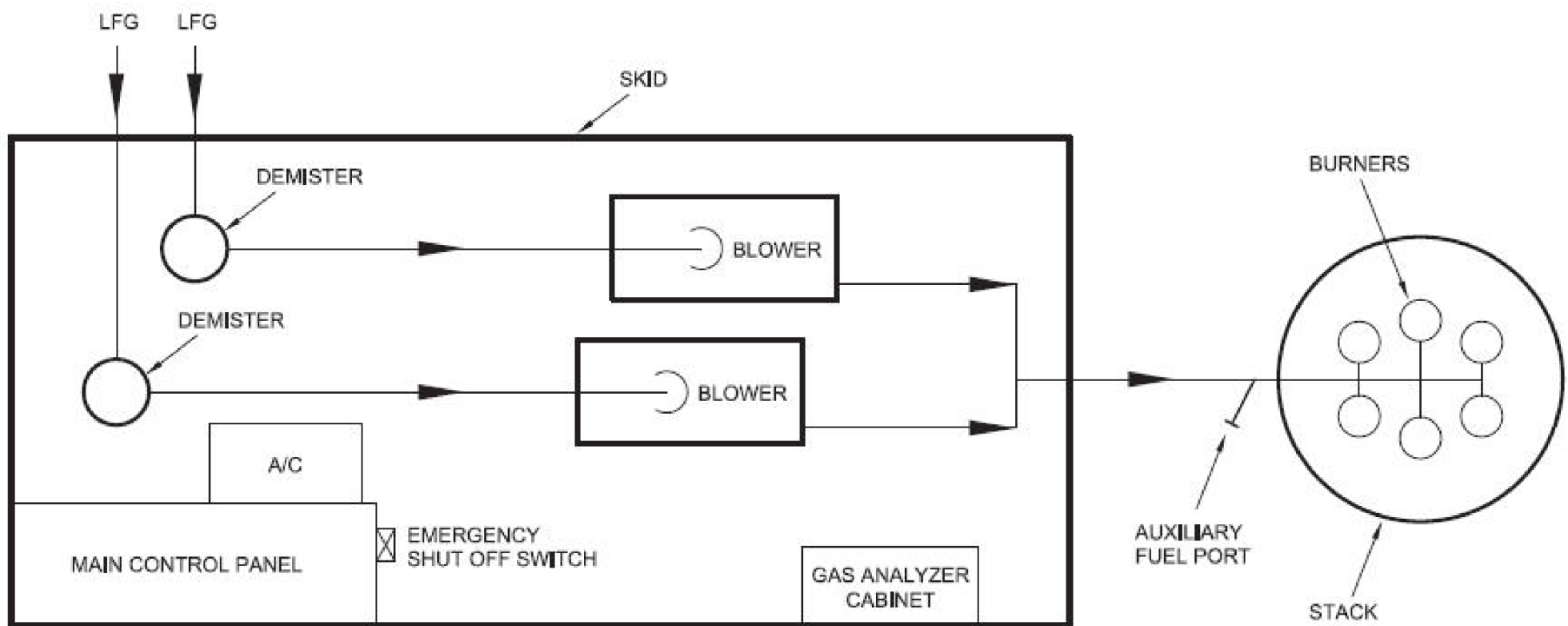


Explanation

- ◆ Area D Extraction Vent
- ◆ Area F Extraction Vent
- Area D Interior Probes
- Area F East Side Perimeter Probes
- Area F Interior Probes
- Area F North Side Perimeter Probes
- Area F South Side Perimeter Probes
- Area D Interior Header Pipe
- Area F East Side Perimeter Header Pipe
- Area F Interior Header Pipe
- Area F North Side Perimeter Header Pipe
- Area F South Side Perimeter Header Pipe
- Header Pipe
- ● ● Area E Collector Trench
- Condensate Sump
- Condensate Tank

AS-BUILT LFG EXTRACTION SYSTEM

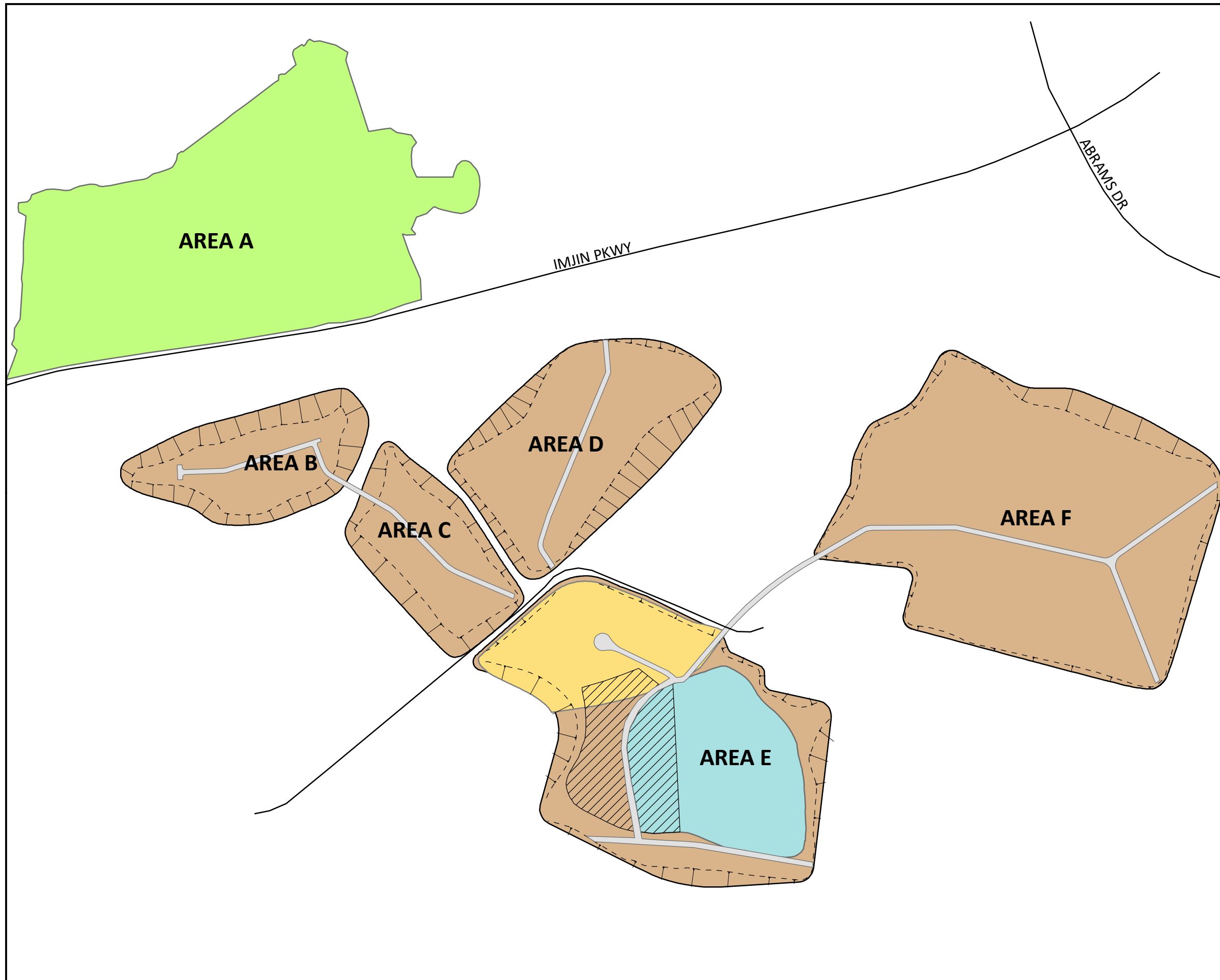
Operable Unit 2 Remedy Monitoring and Operations and Maintenance, Fourth Quarter 2019 through Third Quarter 2020, Former Fort Ord, California









SCHEMATIC DIAGRAM OF THE THERMAL TREATMENT UNIT

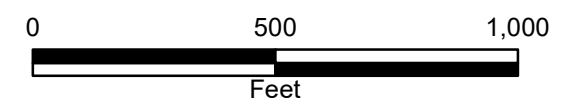
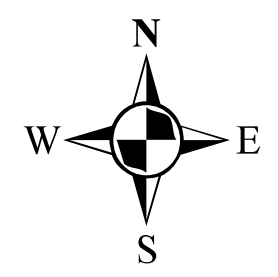
Operable Unit 2 Remedy Monitoring and Operations and Maintenance, Fourth Quarter 2019 through Third Quarter 2020, Former Fort Ord, California

<i>Ahtna</i>	Date: 3/23/2021	Figure: 6
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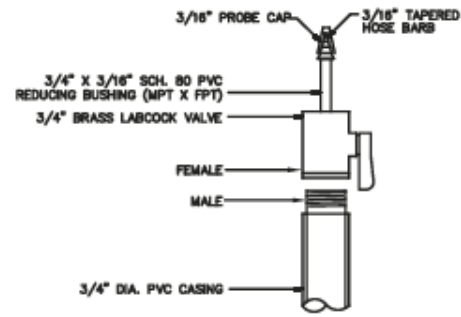
Explanation

-  Access Road
-  Areas Covered 1997 to 1998
-  Clean Closed 2001
-  Area Covered December 2002
-  Vertical Expansion (Phase I) 2013
-  Phase II TBD

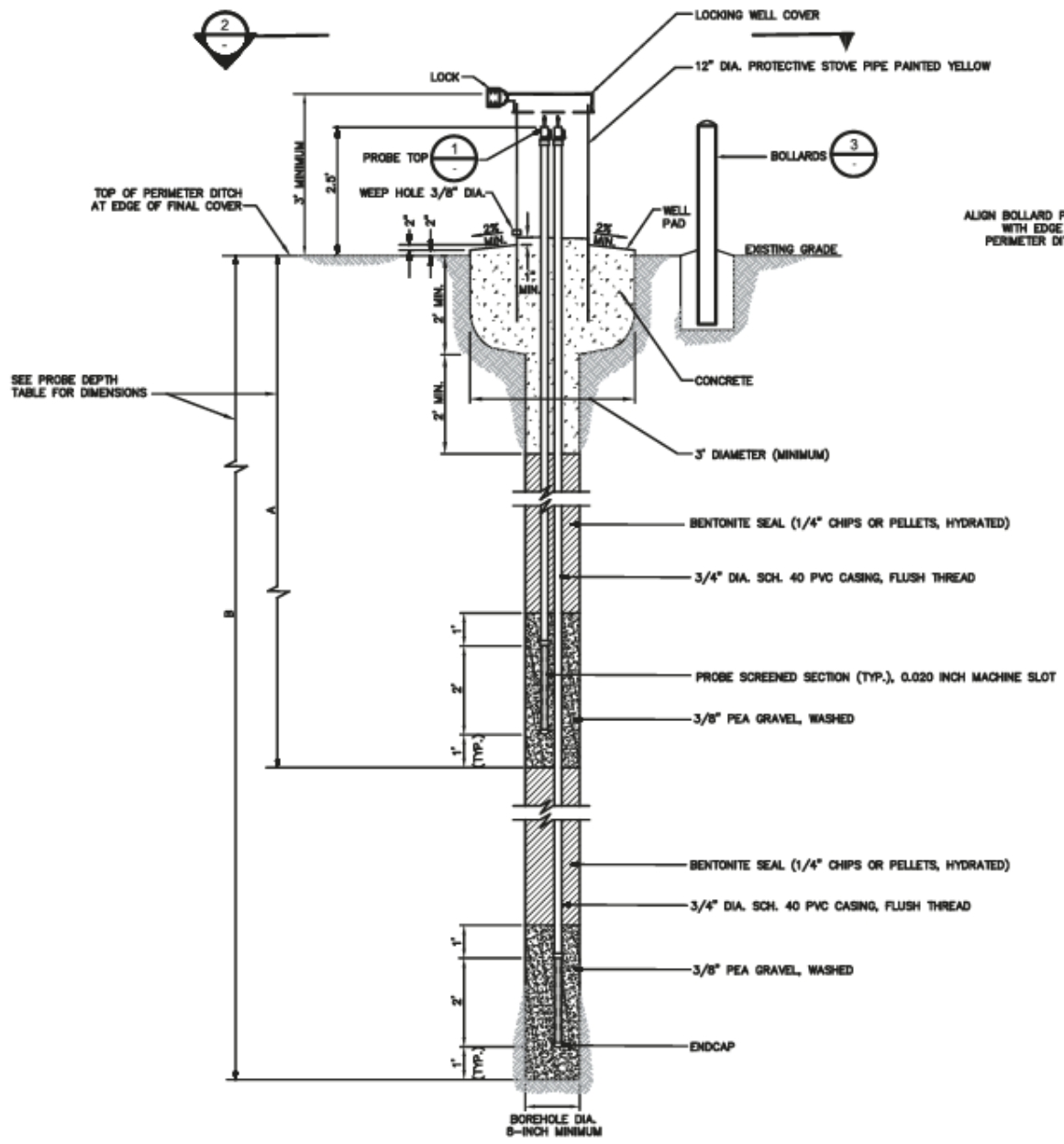


LANDFILLS SITE PLAN

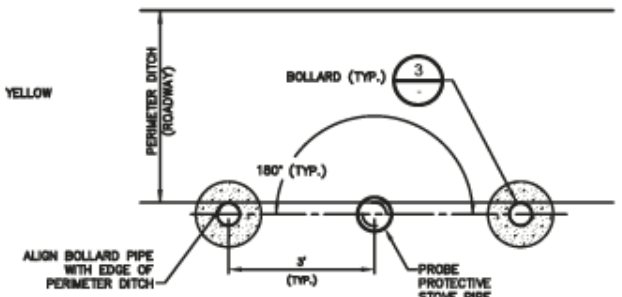
Operable Unit 2 Remedy Monitoring and Operations and Maintenance, Fourth Quarter 2019 through Third Quarter 2020, Former Fort Ord, California



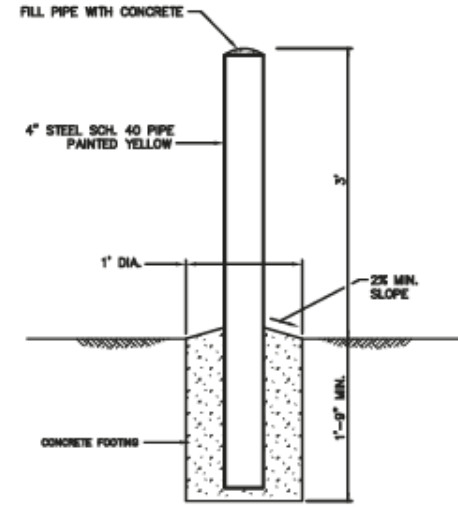
PROBE TOP DETAIL
N.T.S.



GAS MONITORING PROBE DETAIL
N.T.S.



BOLLARD CONFIGURATION PLAN
N.T.S.



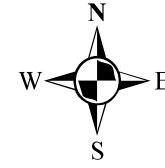
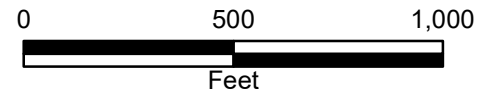
BOLLARD DETAIL
N.T.S.

PROBE DEPTH TABLE					
PROBE	DIMENSIONS (FT)		PROBE	DIMENSIONS (FT)	
	A	B		A	B
SGP-1B	12	-	SGP-1F	12	22
SGP-2B	12	-	SGP-2F	12	32
SGP-3B	12	-	SGP-3F	12	32
SGP-4B	12	-	SGP-4F	12	32
SGP-5B	12	-	SGP-5F	12	32
SGP-1C	12	-	SGP-6F	12	32
SGP-2C	12	-	SGP-7F	12	32
SGP-3C	12	-	SGP-8F	12	22
SGP-1D	12	22	SGP-9F	22	-
SGP-2D	12	22	SGP-10F	12	22
SGP-3D	12	22	SGP-11F	12	32
SGP-4D	12	22	SGP-12F	32	-
SGP-5D	4	-	SGP-13F	12	32
SGP-6D	12	22	SGP-14F	12	32
SGP-1E	12	-	SGP-15F	12	32
SGP-2E	12	-	SGP-16F	4	-
SGP-3E	12	-	SGP-17F	12	32
SGP-4E	12	-	SGP-18F	12	32
SGP-5E	12	-	SGP-19F	12	22
SGP-6E	12	-	SGP-20F	12	32
SGP-7E	12	-	SGP-21F	12	22
SGP-8E	12	-	SGP-22F	12	32
SGP-9E	12	-			

** In B dimension column means single probe.

LANDFILL GAS PROBE CONSTRUCTION DETAILS

Operable Unit 2 Remedy Monitoring and Operations and Maintenance, Fourth Quarter 2019 through Third Quarter 2020, Former Fort Ord, California

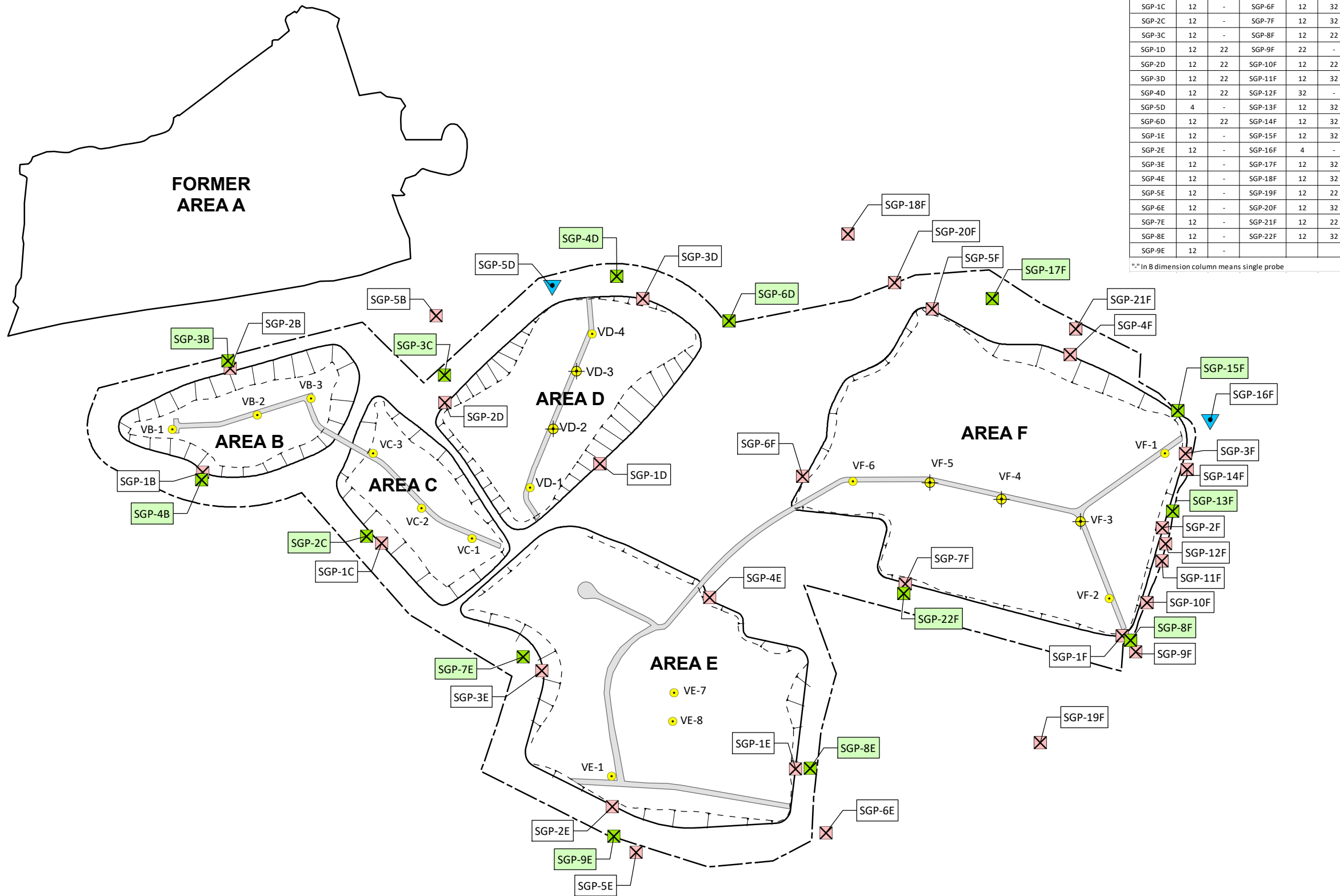


PROBE	DIMENSIONS (FT)		PROBE	DIMENSIONS (FT)	
	A	B		A	B
	SGP-1B	12		-	SGP-1F
SGP-2B	12	-	SGP-2F	12	32
SGP-3B	12	-	SGP-3F	12	32
SGP-4B	12	-	SGP-4F	12	32
SGP-5B	12	-	SGP-5F	12	32
SGP-1C	12	-	SGP-6F	12	32
SGP-2C	12	-	SGP-7F	12	32
SGP-3C	12	-	SGP-8F	12	22
SGP-1D	12	22	SGP-9F	22	-
SGP-2D	12	22	SGP-10F	12	22
SGP-3D	12	22	SGP-11F	12	32
SGP-4D	12	22	SGP-12F	32	-
SGP-5D	4	-	SGP-13F	12	32
SGP-6D	12	22	SGP-14F	12	32
SGP-1E	12	-	SGP-15F	12	32
SGP-2E	12	-	SGP-16F	4	-
SGP-3E	12	-	SGP-17F	12	32
SGP-4E	12	-	SGP-18F	12	32
SGP-5E	12	-	SGP-19F	12	22
SGP-6E	12	-	SGP-20F	12	32
SGP-7E	12	-	SGP-21F	12	22
SGP-8E	12	-	SGP-22F	12	32
SGP-9E	12	-			

*" In B dimension column means single probe.

Explanation

- LFG Perimeter Probe used for Quarterly Compliance Monitoring and Annual VOC Monitoring
- Additional LFG Monitoring Probe
- LFG Extraction Vent
- LFG Vent
- Utility Trench Monitoring Probe
- Access Road
- Landfill Parcel Boundary



LANDFILL GAS MONITORING LOCATIONS

Operable Unit 2 Remedy Monitoring and Operations and Maintenance, Fourth Quarter 2019 through Third Quarter 2020, Former Fort Ord, California




Date: 12/3/2020

Figure: 9



EXPLANATION

 Demolition Debris, Spent Ammunition, and TPH Soil Disposal Area

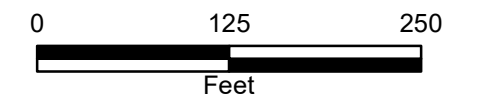
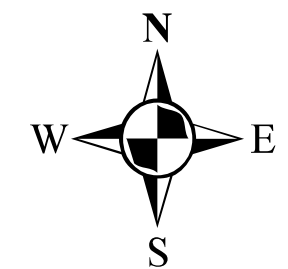
Thermal Treatment Unit

OU2 Groundwater Treatment Plant

**Fort Ord Landfills
Area E**

Demolition Debris, Spent Ammunition,
and TPH Soil Disposal Area

NOTES:
TPH = Total Petroleum Hydrocarbons



**DEMOLITION DEBRIS, SPENT AMMUNITION,
AND TPH SOIL DESPOSAL AREA
LANDFILLS AREA E**
Operable Unit 2 Remedy Monitoring and Operations and
Maintenance, Fourth Quarter 2019 through Third Quarter 2020,
Former Fort Ord, California

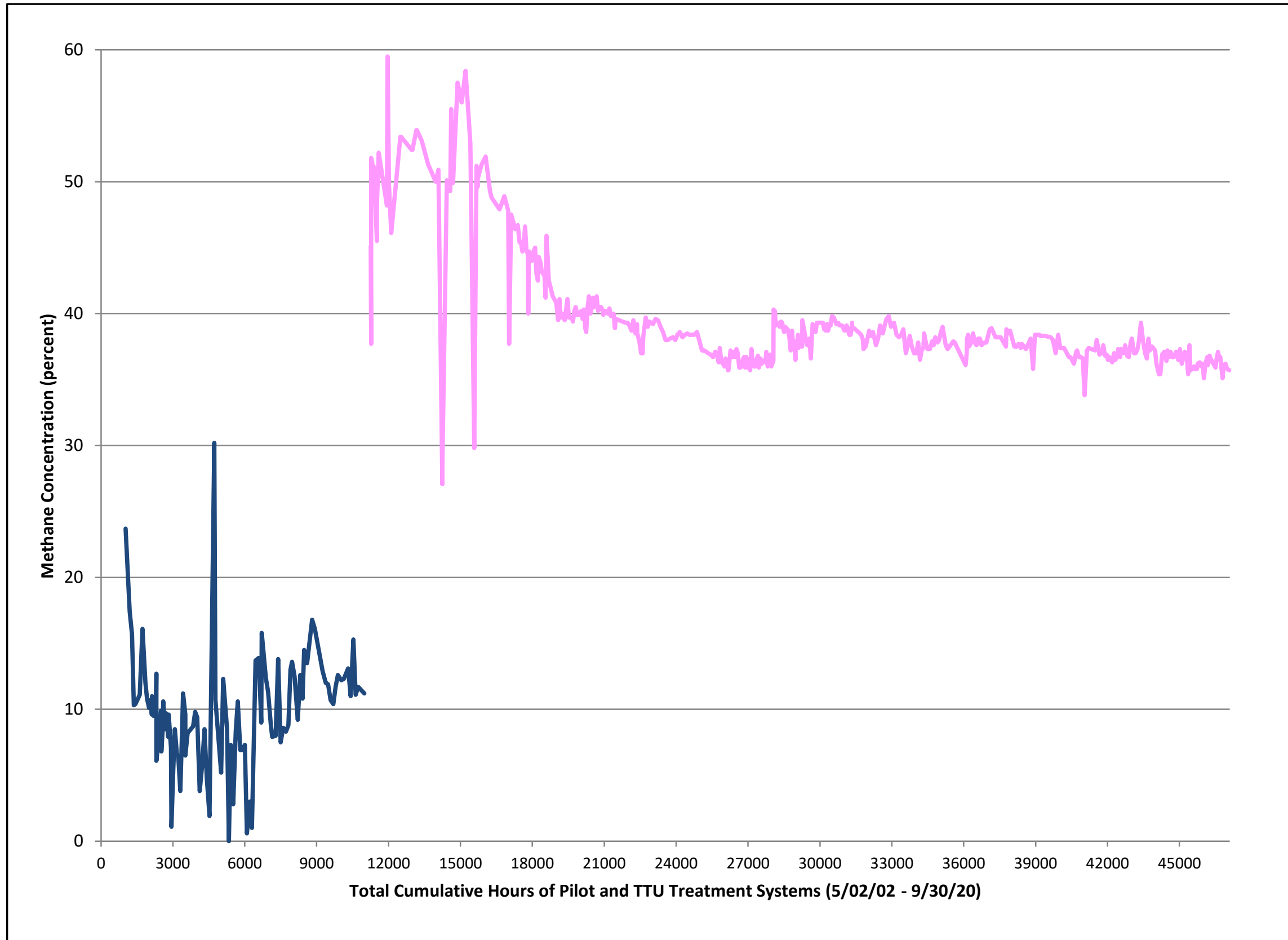


Date: 3/23/2021

Figure: 10

EXPLANATION

- Pilot Treatment System Influent Methane Concentration
- TTU Influent Methane Concentration



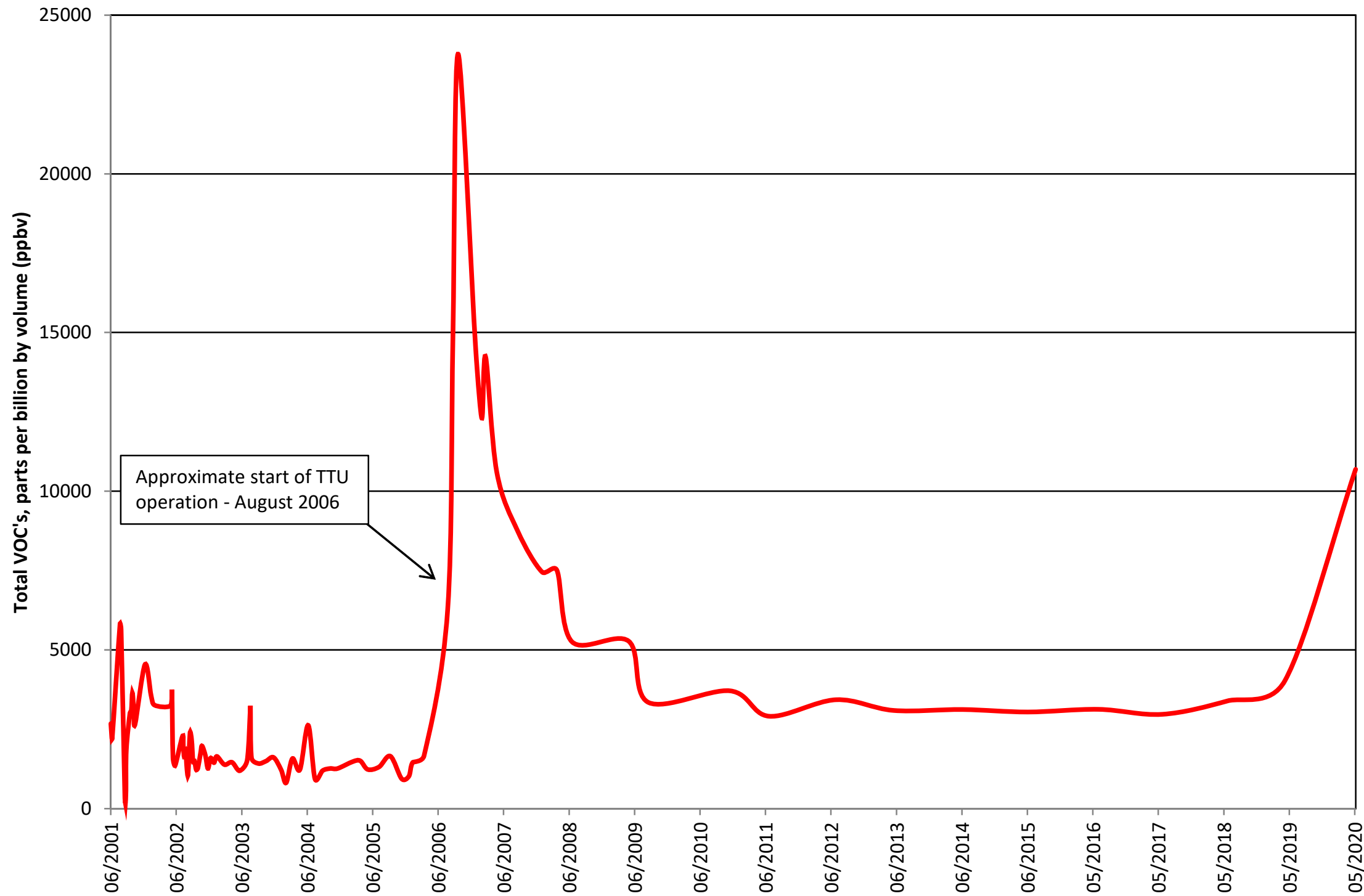
METHANE CONCENTRATION, 2002 - 2020 LANDFILL GAS TREATMENT SYSTEM INFLUENT

Operable Unit 2 Remedy Monitoring and Operations and Maintenance, Fourth Quarter 2019 through Third Quarter 2020, Former Fort Ord, California

Ahtna

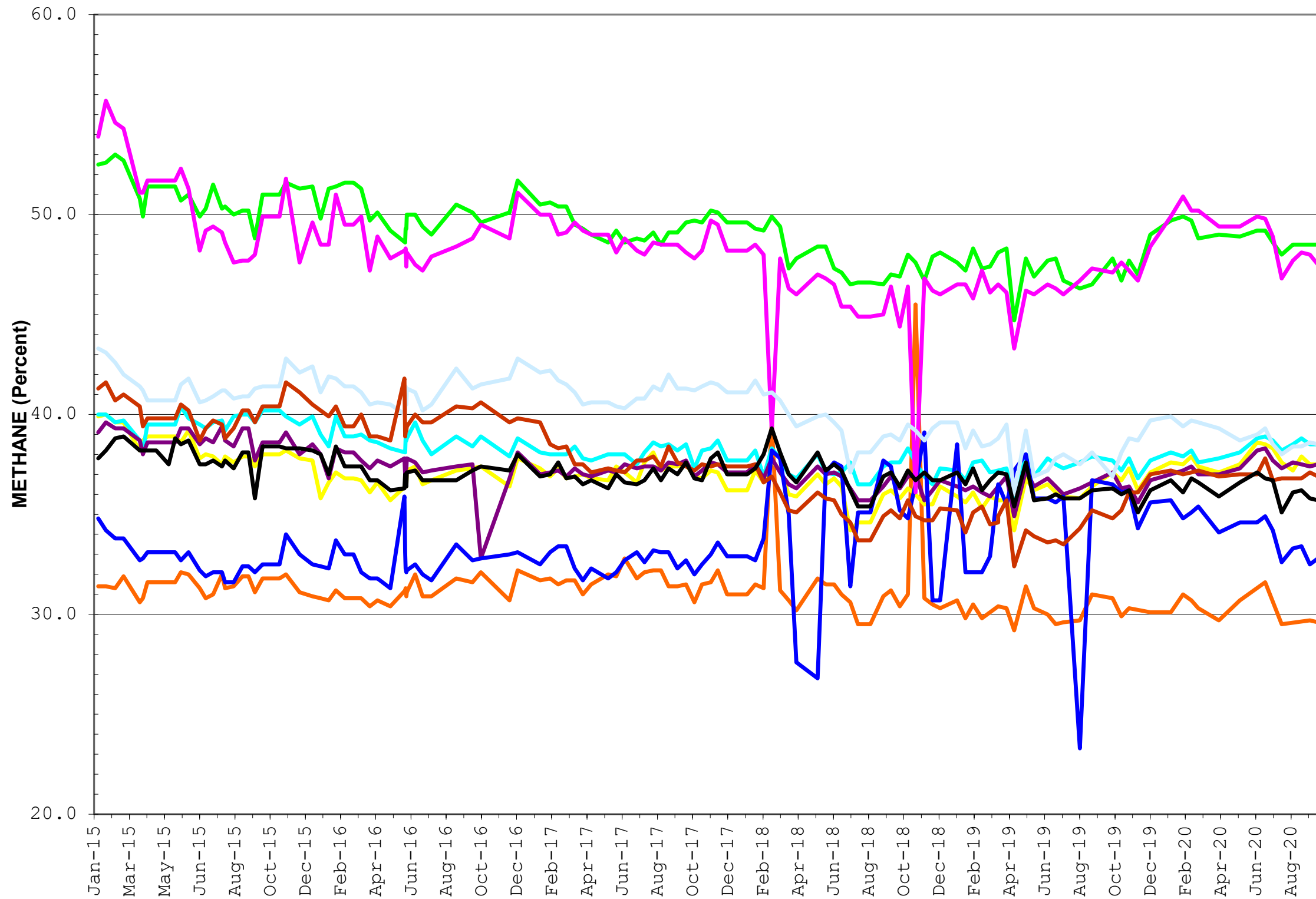
Date: 5/18/2021

Figure: 11



Approximate start of TTU operation - August 2006

TOTAL VOC CONCENTRATIONS, TTU INFLUENT		
Operable Unit 2 Remedy Monitoring and Operations and Maintenance, Fourth Quarter 2019 through Third Quarter 2020, Former Fort Ord, California		
<i>Ahtna</i>	Date: 3/23/2021	Figure: 12



EXPLANATION

- EW-31
- EW-32
- EW-33
- EW-34
- EP-36
- VF-3
- VF-4
- VF-5
- VD-2
- VD-3
- Influent TTU

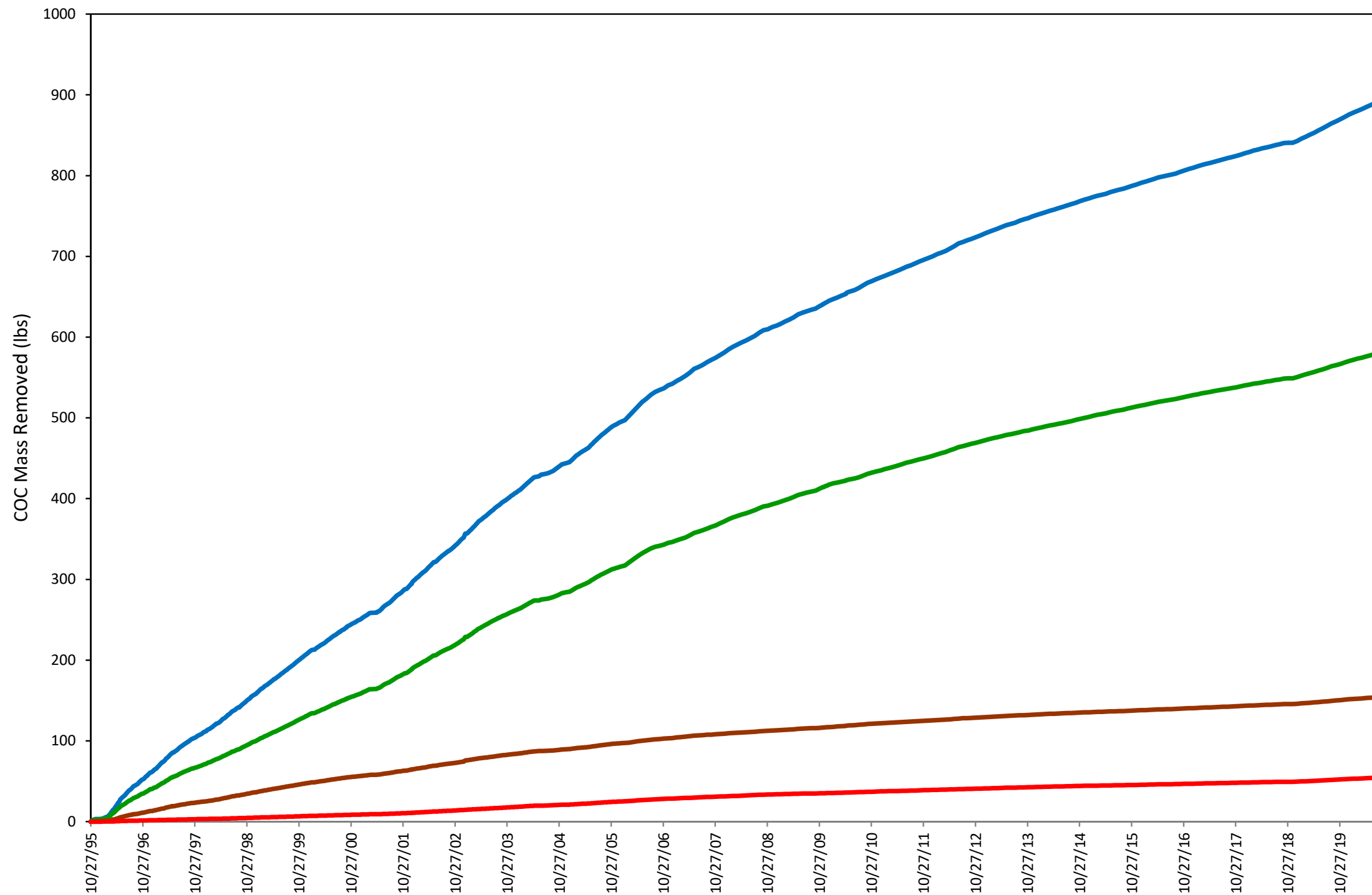
METHANE CONCENTRATION, EXTRACTION SOURCES AND TTU INFLUENT

Operable Unit 2 Remedy Monitoring and Operations and Maintenance, Fourth Quarter 2019 through Third Quarter 2020, Former Fort Ord, California



Date: 2/24/2021

Figure: 13



EXPLANATION

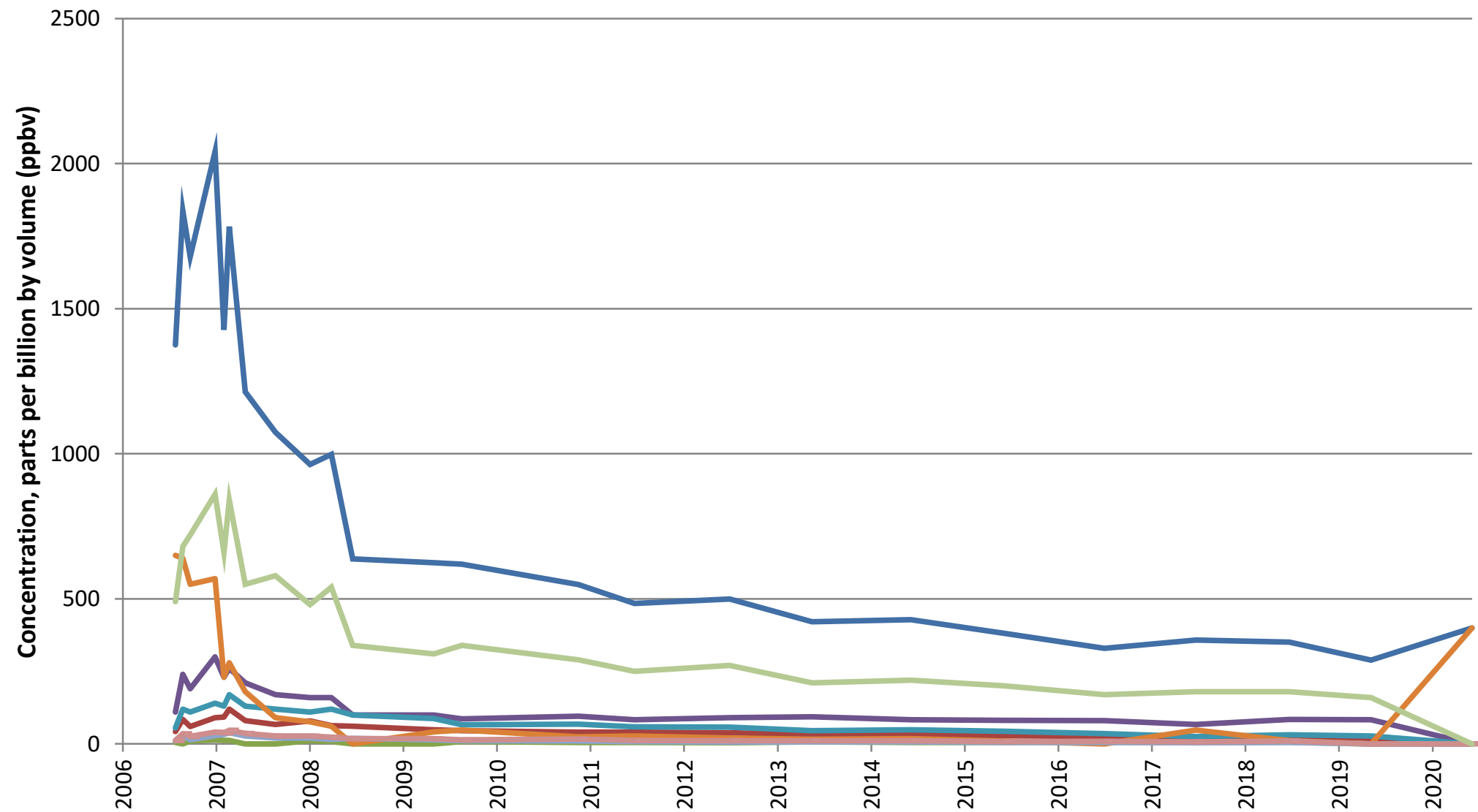
- Total COCs
- Trichloroethene (TCE)
- cis-1,2-Dichloroethene (cis-1,2-DCE)
- Tetrachloroethene (PCE)

CUMULATIVE COC MASS REMOVED
 OCTOBER 1995 THROUGH SEPTEMBER 2020
 Operable Unit 2 Remedy Monitoring and Operations and
 Maintenance, Fourth Quarter 2019 through Third Quarter 2020,
 Former Fort Ord, California



Date: 3/26/2021

Figure: 14



EXPLANATION

- Total Groundwater COCs
- 1,1-Dichloroethane
- 1,2-Dichloroethane
- Benzene
- Cis-1,2-Dichloroethene
- Methylene Chloride
- Tetrachloroethene
- Trichloroethene
- Vinyl Chloride

Notes:

Carbon tetrachloride, chloroform, and 1,2-dichloropropane, which are OU2 groundwater COCs, are not presented on this figure. Carbon tetrachloride was detected in only one sample at a concentration that was estimated below the reporting limit. 1,2-dichloropropane was only detected in only seven samples at concentrations at or estimated below the reporting limit. Chloroform was detected in only five samples at estimated concentrations below the reporting limit.

Due to sample dilution 2020 sample results had higher reporting limits.

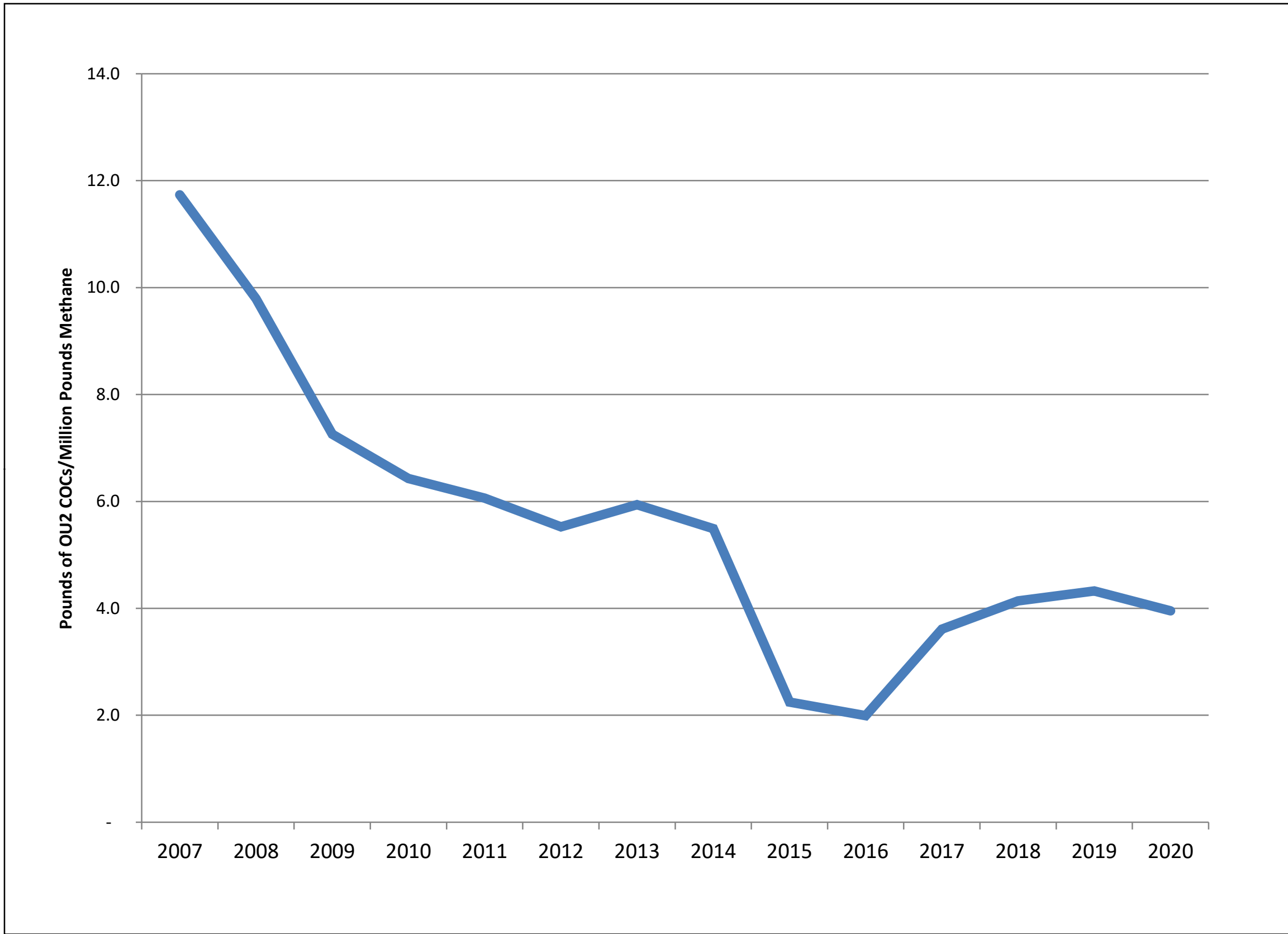
**OU2 GROUNDWATER CHEMICALS OF CONCERN
CONCENTRATIONS TTU INFLUENT**

Operable Unit 2 Remedy Monitoring and Operations and Maintenance, Fourth Quarter 2019 through Third Quarter 2020, Former Fort Ord, California



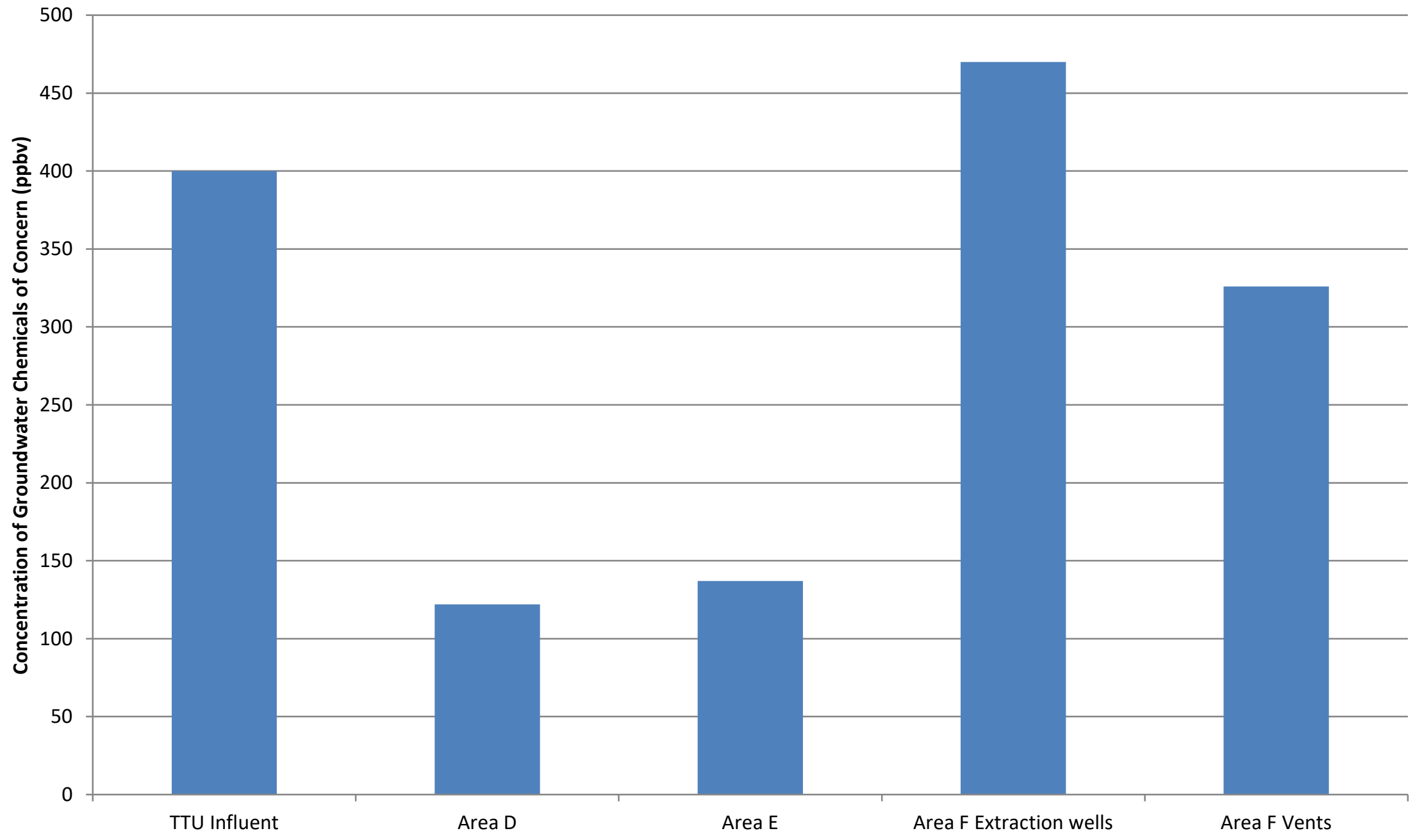
Date: 5/18/2021

Figure: 15



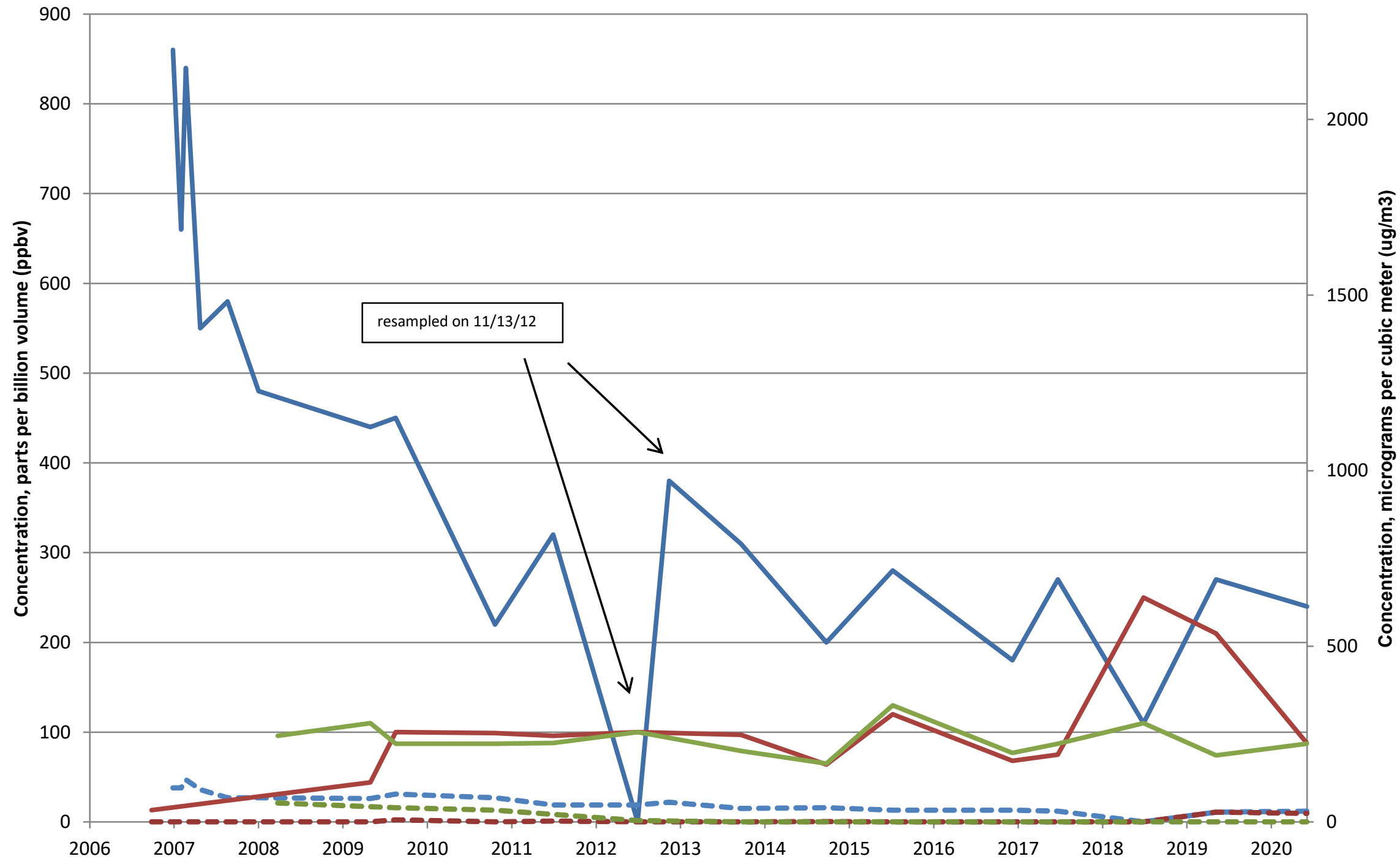
POUNDS OF OU2 GROUNDWATER CHEMICALS OF CONCERN PER MILLION POUNDS OF METHANE

Operable Unit 2 Remedy Monitoring and Operations and Maintenance, Fourth Quarter 2019 through Third Quarter 2020, Former Fort Ord, California



Note: Due to laboratory sample dilution, the analytical results for the two samples collected from the TTU influent had higher reporting limits.

<p>TOTAL GROUNDWATER CHEMICALS OF CONCERN CONCENTRATIONS, LANDFILL AREAS D, E, F</p> <p>Operable Unit 2 Remedy Monitoring and Operations and Maintenance, Fourth Quarter 2019 through Third Quarter 2020, Former Fort Ord, California</p>		
	Date: 3/23/2021	Figure: 17

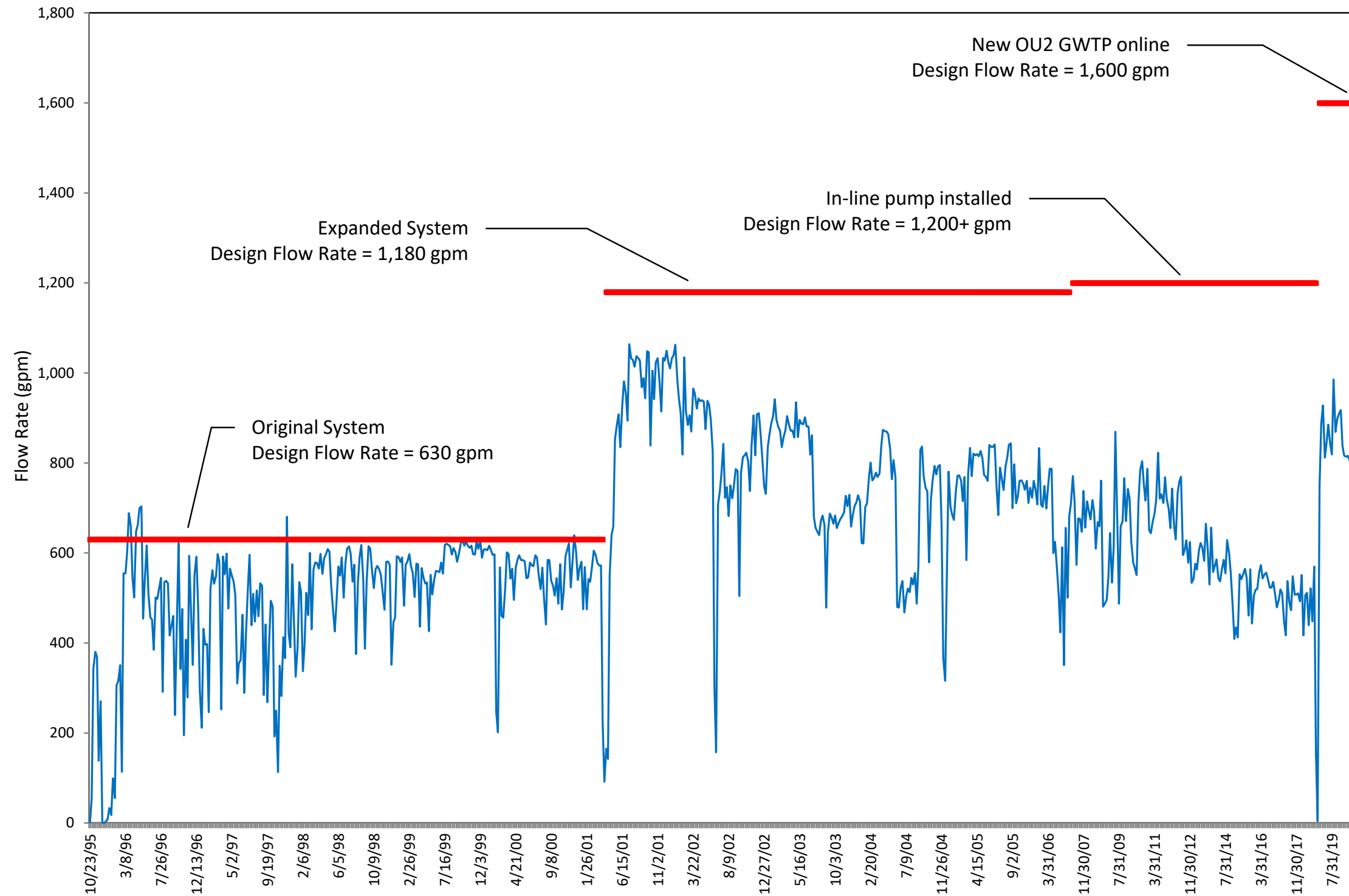


EXPLANATION

- Area F Extraction Wells Only (Vinyl Chloride)
- - - Area F Extraction Wells Only (Trichloroethene)
- Area E Extraction Pipe (Vinyl Chloride)
- - - Area E Extraction Pipe (Trichloroethene)
- Area D (Vinyl Chloride)
- - - Area D (Trichloroethene)

VINYL CHLORIDE/TRICHLOROETHENE
CONCENTRATIONS, LANDFILL GAS
EXTRACTION SOURCES

Operable Unit 2 Remedy Monitoring and Operations and
Maintenance, Fourth Quarter 2019 through Third Quarter 2020,
Former Fort Ord, California



EXPLANATION

- OU2 Groundwater Treatment Plant Design Flow Rate
- OU2 Groundwater Treatment Plant System Flow Rate

GROUNDWATER TREATMENT PLANT SYSTEM
 TOTAL FLOW RATE COMPARED WITH DESIGN
 FLOW RATE,
 OCTOBER 1995 THROUGH SEPTEMBER 2020
 Operable Unit 2 Remedy Monitoring and Operations and
 Maintenance, Fourth Quarter 2019 through Third Quarter 2020,
 Former Fort Ord, California

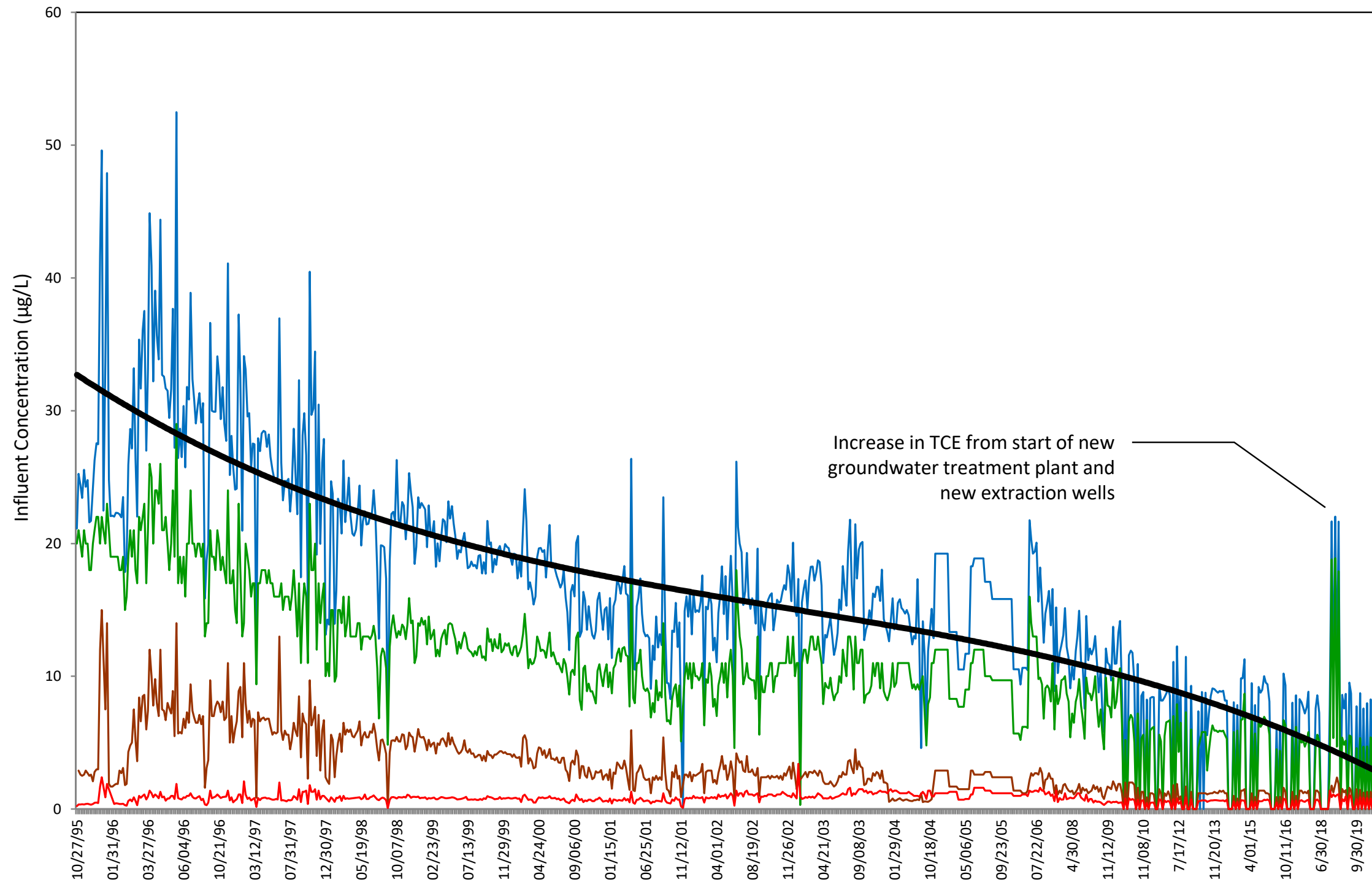


Date: 3/26/2021

Figure: 19

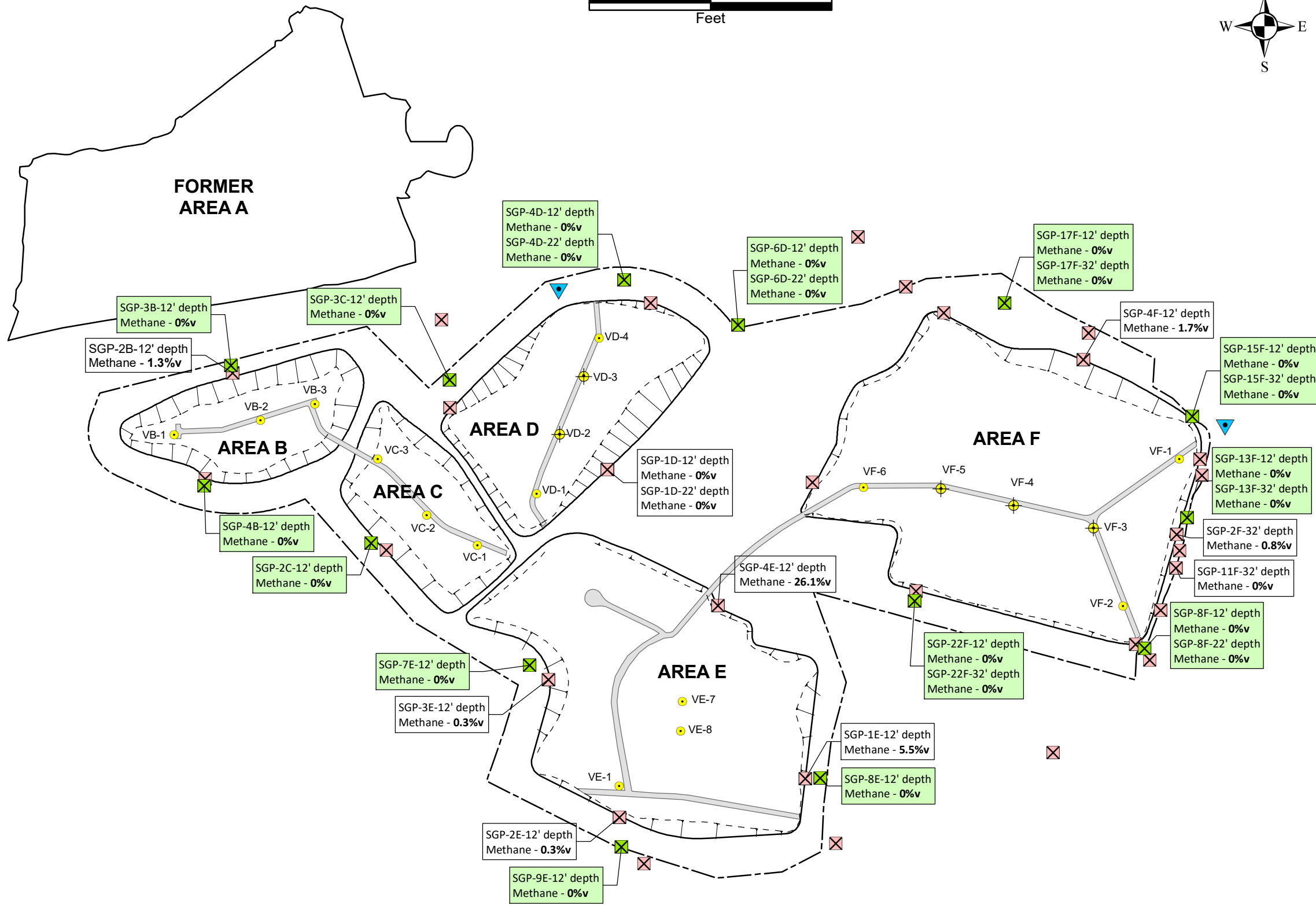
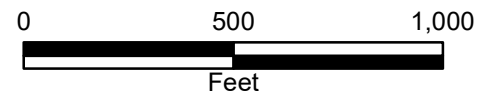
EXPLANATION

- Total COCs
- Trichloroethene (TCE)
- cis-1,2-Dichloroethene (cis-1,2-DCE)
- Tetrachloroethene (PCE)
- Total COCs Trend



Increase in TCE from start of new groundwater treatment plant and new extraction wells

GROUNDWATER TREATMENT INFLUENT
COC CONCENTRATIONS
OCTOBER 1995 THROUGH SEPTEMBER 2020
Operable Unit 2 Remedy Monitoring and Operations and
Maintenance, Fourth Quarter 2019 through Third Quarter 2020,
Former Fort Ord, California



Explanation

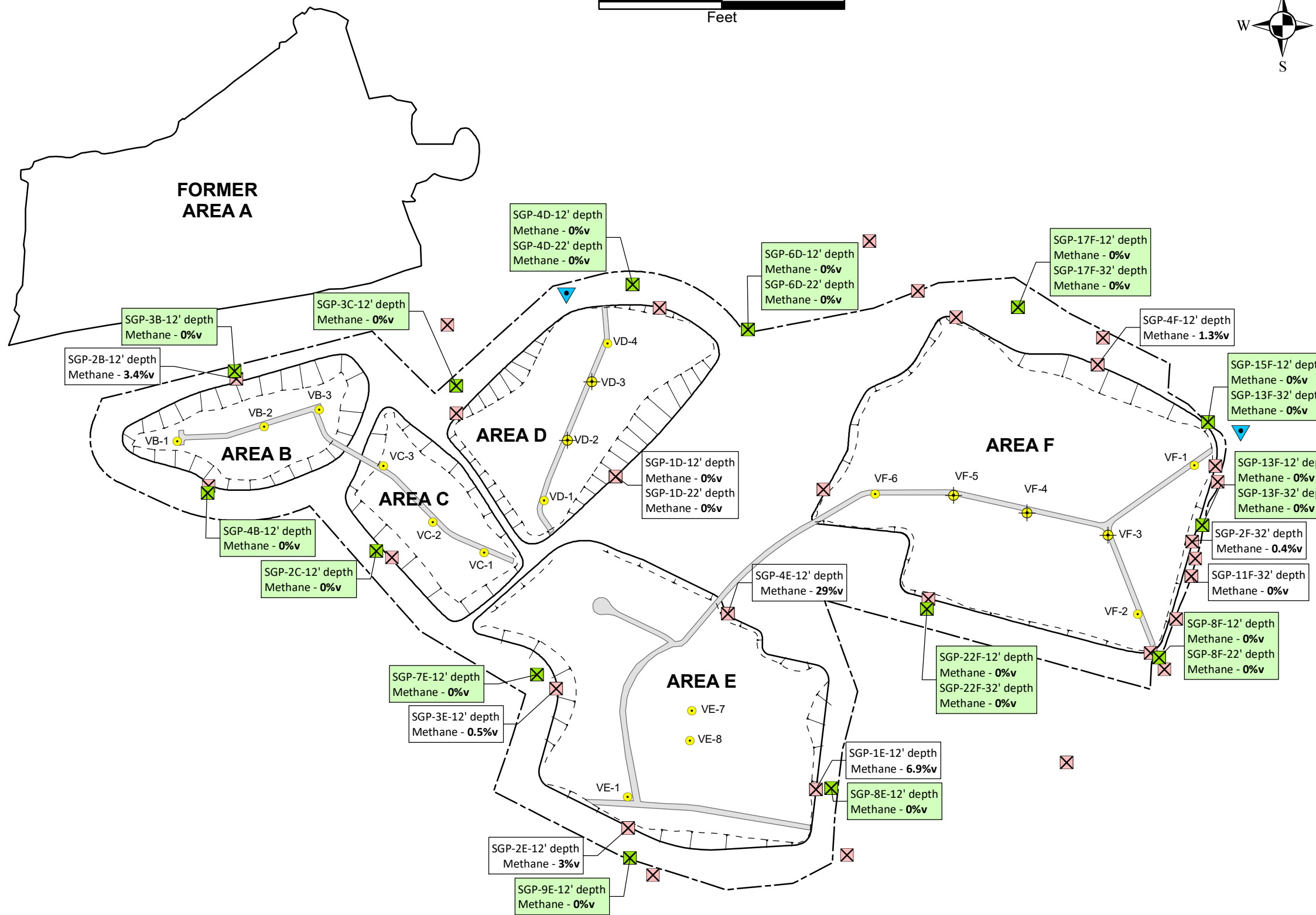
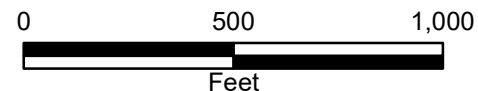
- LFG Perimeter Probe used for Quarterly Compliance Monitoring
- Additional LFG Monitoring Probe
- LFG Extraction Vent
- LFG Vent
- Utility Trench Monitoring Probe
- Access Road
- Landfill Parcel Boundary

FIELD MEASUREMENTS FOR
METHANE AT PERIMETER PROBES
FOURTH QUARTER 2019
Operable Unit 2 Remedy Monitoring and Operations and
Maintenance, Fourth Quarter 2019 through Third Quarter 2020,
Former Fort Ord, California



Date: 11/30/2020

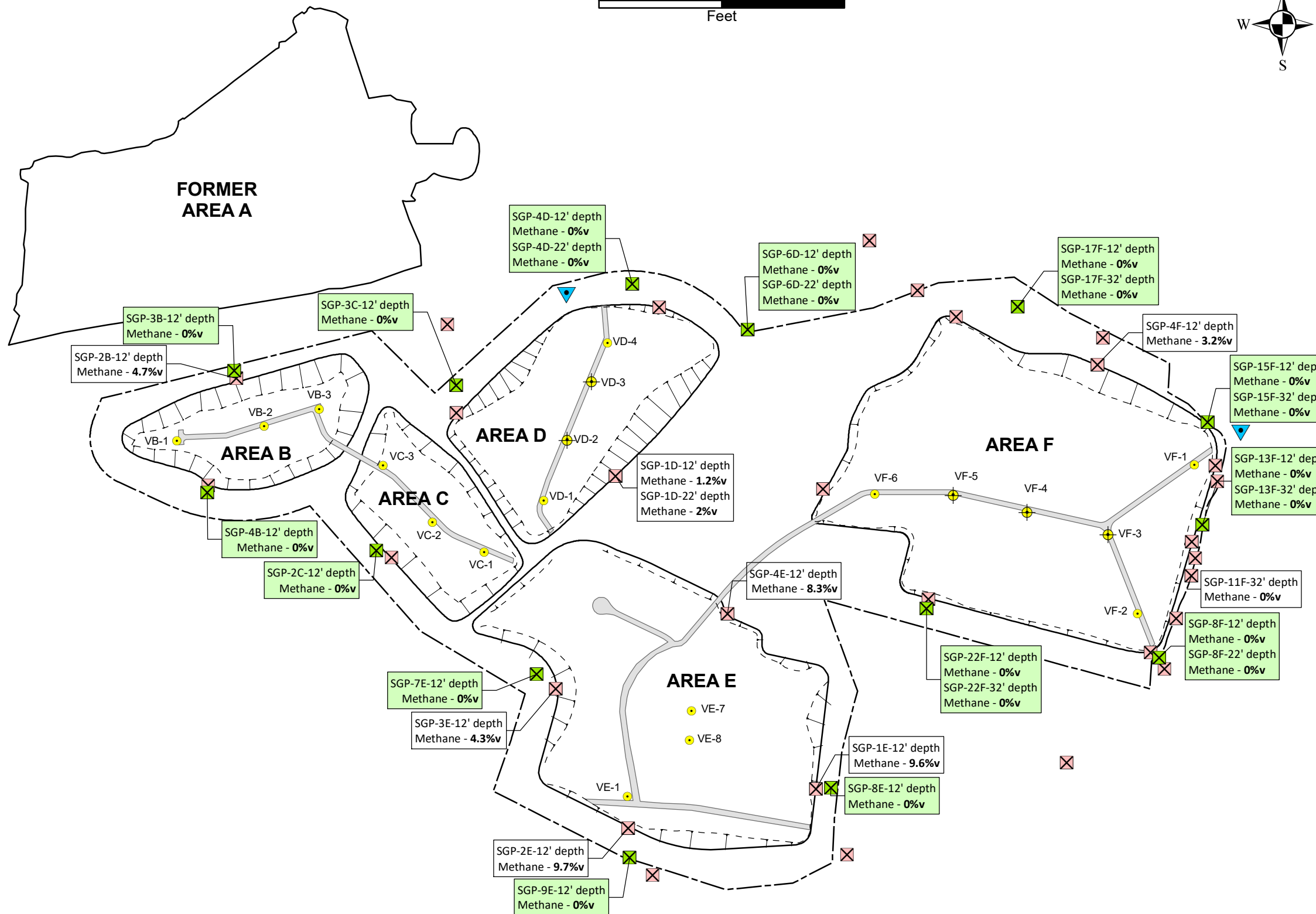
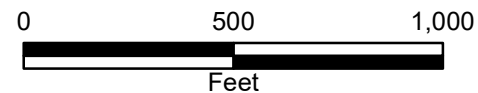
Figure: 21



Explanation

- LFG Perimeter Probe used for Quarterly Compliance Monitoring
- Additional LFG Monitoring Probe
- LFG Extraction Vent
- LFG Vent
- Utility Trench Monitoring Probe
- Access Road
- Landfill Parcel Boundary

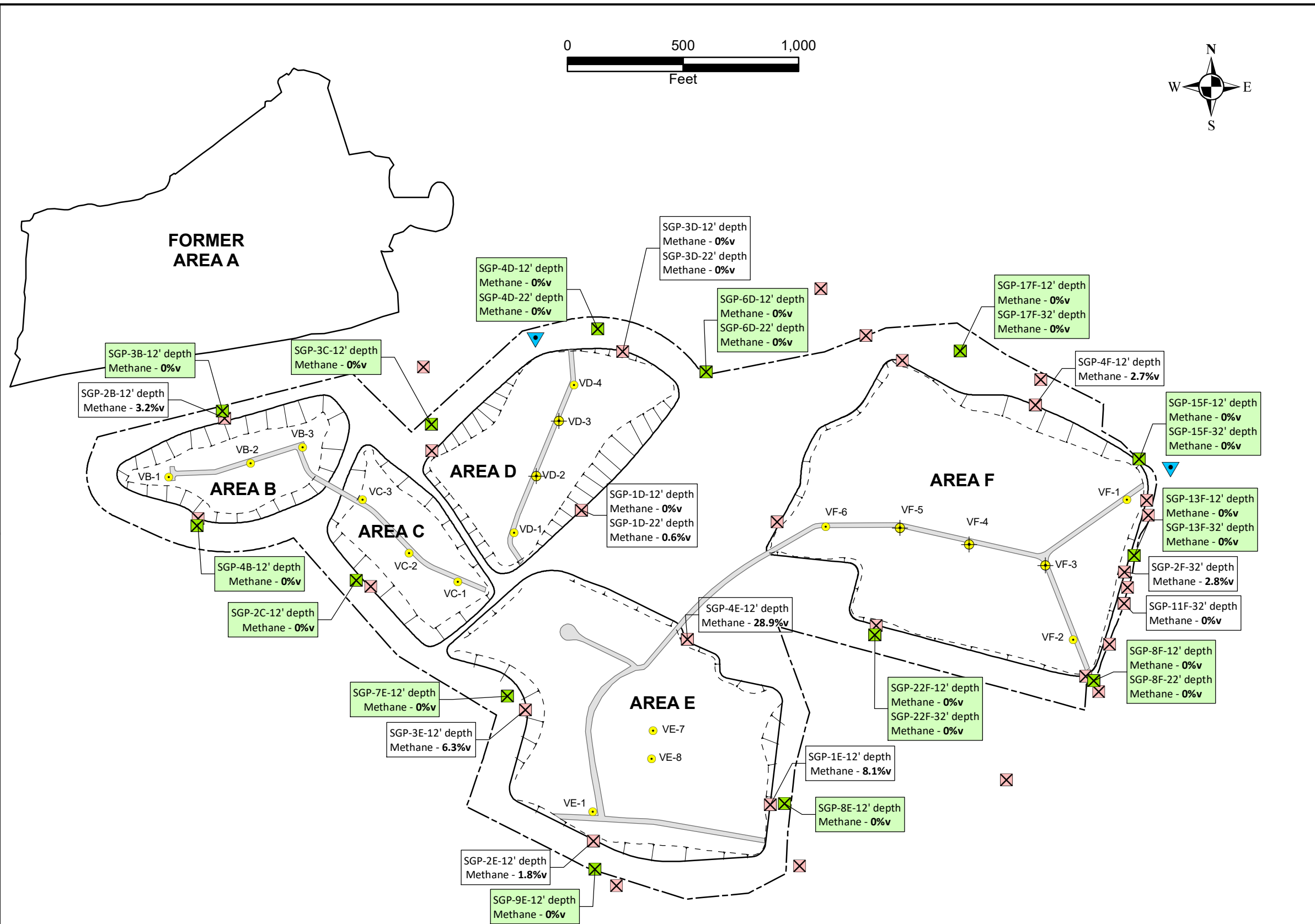
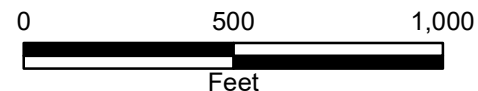
FIELD MEASUREMENTS FOR
METHANE AT PERIMETER PROBES
FIRST QUARTER 2020
Operable Unit 2 Remedy Monitoring and Operations and
Maintenance, Fourth Quarter 2019 through Third Quarter 2020,
Former Fort Ord, California



Explanation

- LFG Perimeter Probe used for Quarterly Compliance Monitoring
- Additional LFG Monitoring Probe
- LFG Extraction Vent
- LFG Vent
- Utility Trench Monitoring Probe
- Access Road
- Landfill Parcel Boundary

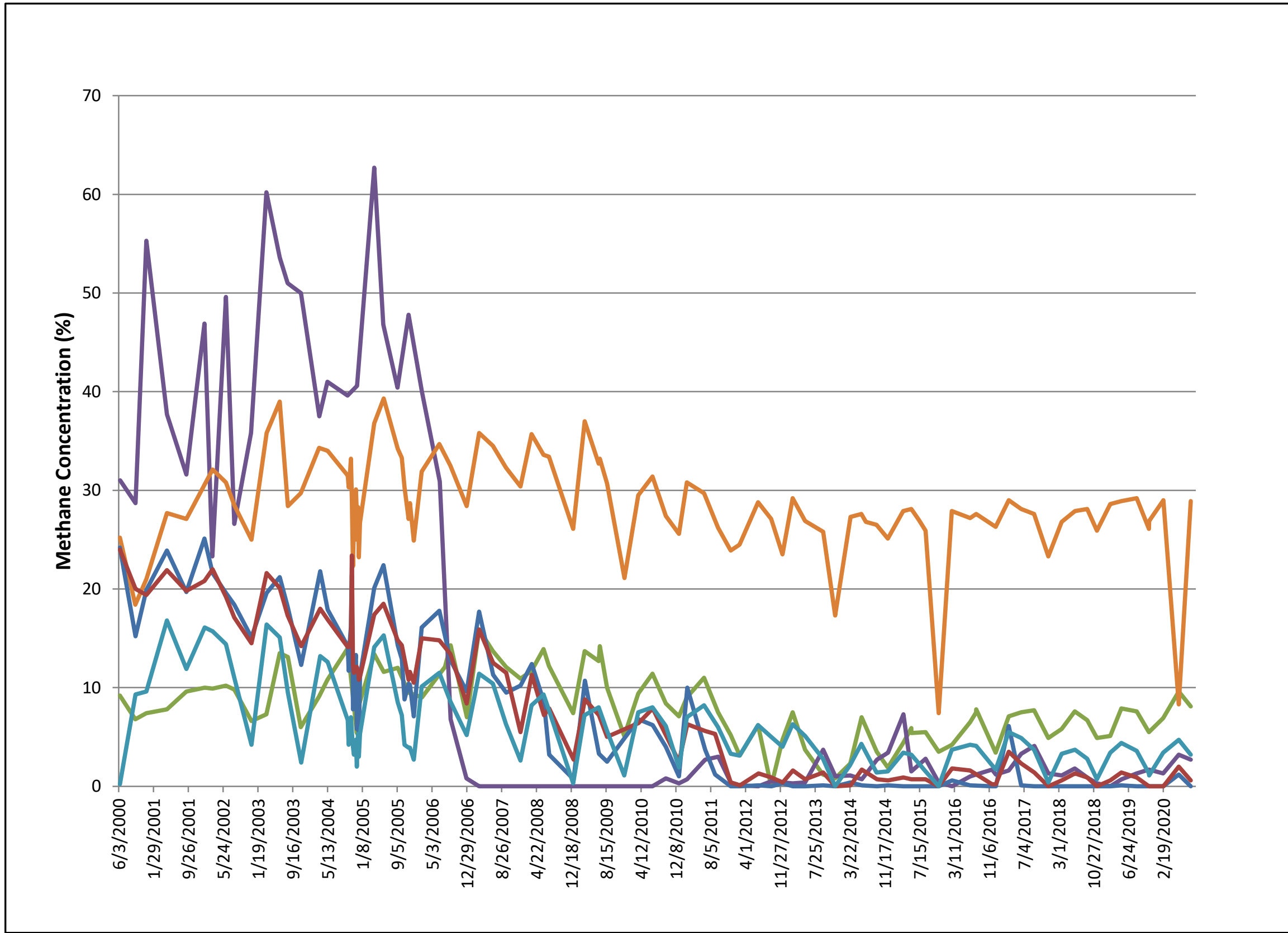
FIELD MEASUREMENTS FOR
METHANE AT PERIMETER PROBES
SECOND QUARTER 2020
Operable Unit 2 Remedy Monitoring and Operations and
Maintenance, Fourth Quarter 2019 through Third Quarter 2020,
Former Fort Ord, California



Explanation

- LFG Perimeter Probe used for Quarterly Compliance Monitoring
- Additional LFG Monitoring Probe
- LFG Extraction Vent
- LFG Vent
- Utility Trench Monitoring Probe
- Access Road
- Landfill Parcel Boundary

FIELD MEASUREMENTS FOR METHANE AT PERIMETER PROBES
 THIRD QUARTER 2020
 Operable Unit 2 Remedy Monitoring and Operations and Maintenance, Fourth Quarter 2019 through Third Quarter 2020, Former Fort Ord, California



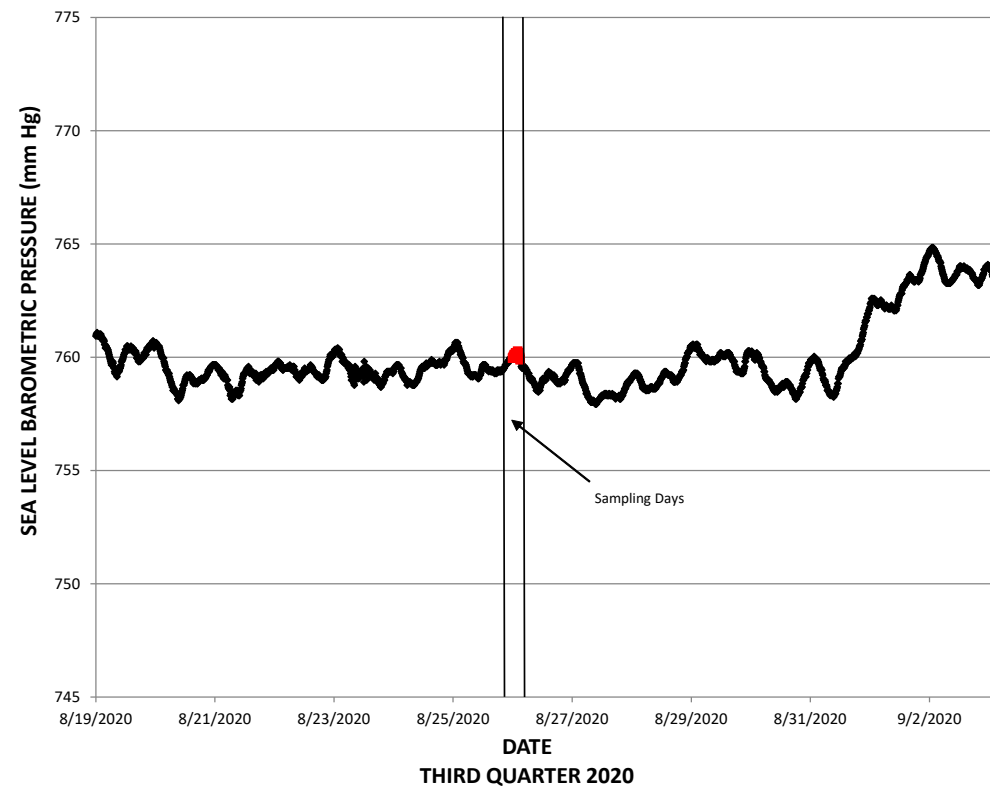
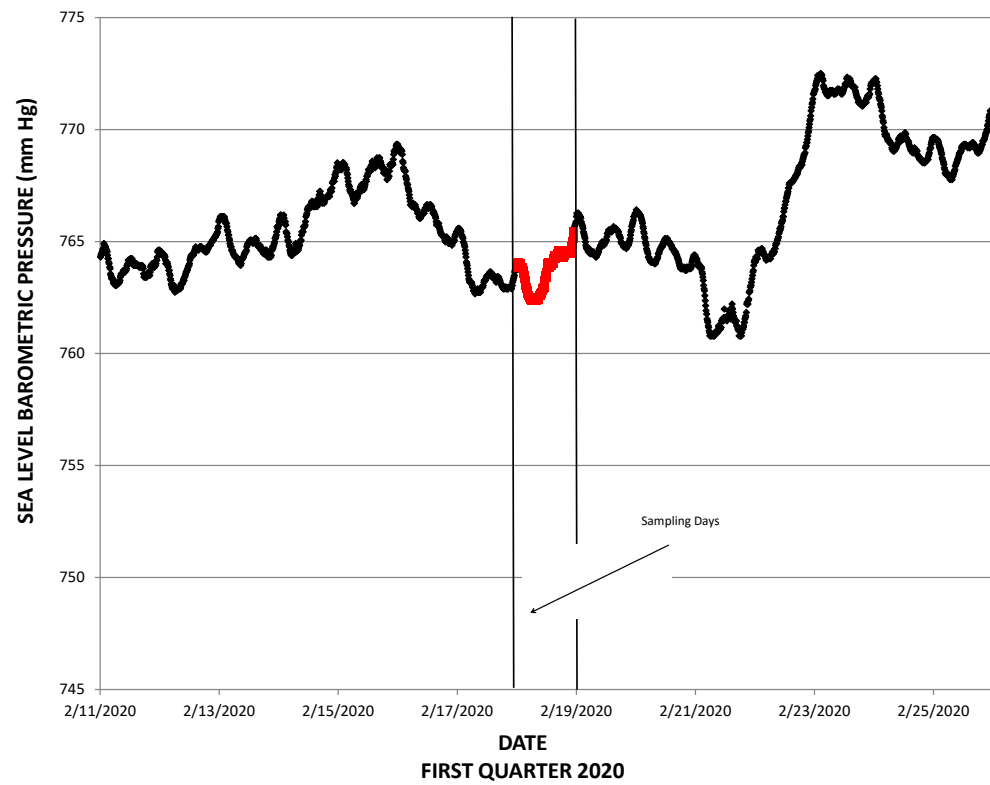
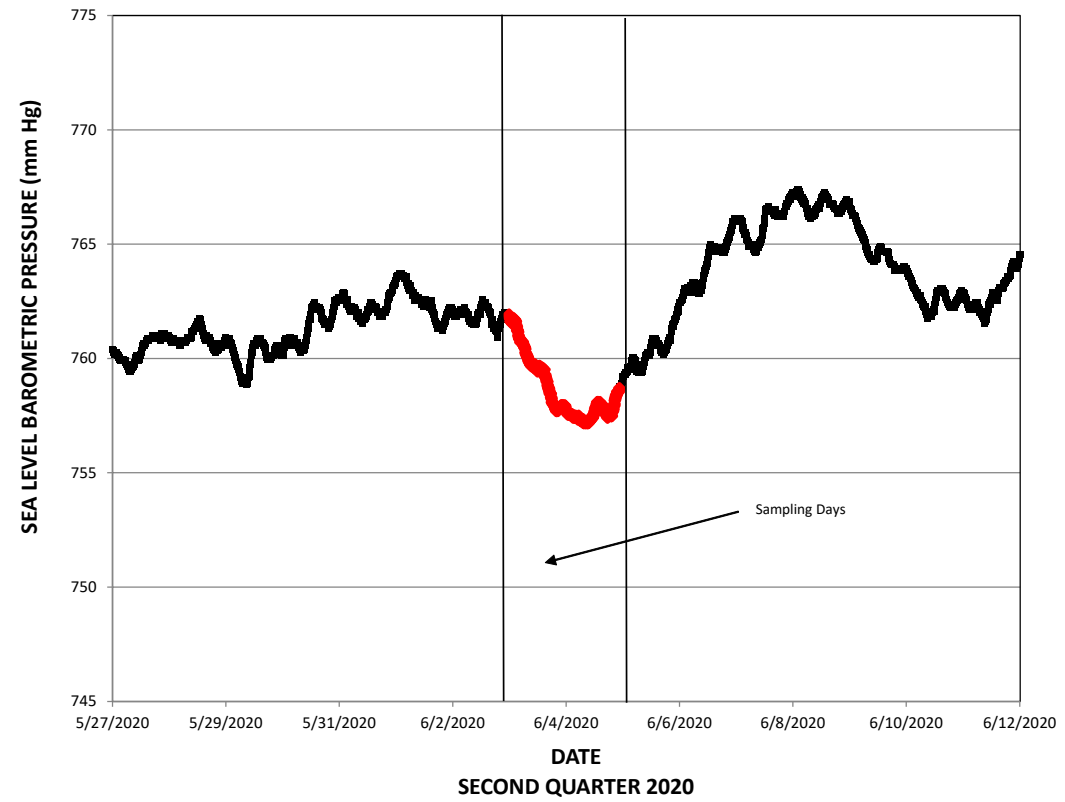
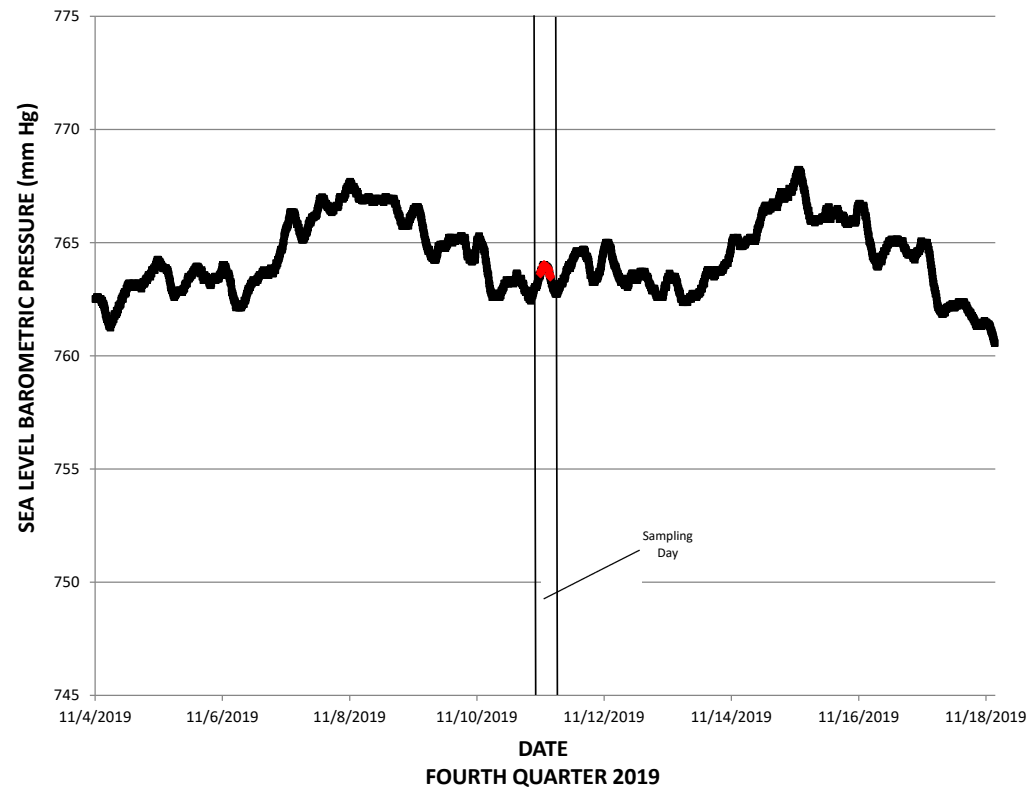
EXPLANATION

- 4F-12
- 4E-12
- 1D-12
- 1D-22
- 2B-12
- 1E-12

METHANE CONCENTRATIONS FOR SELECT PROBES,
JUNE 2000 THROUGH SEPTEMBER 2020

Operable Unit 2 Remedy Monitoring and Operations and
Maintenance, Fourth Quarter 2019 through Third Quarter 2020,
Former Fort Ord, California





EXPLANATION

- ◆ Barometric pressure on a non-sampling day; either 7 days before or 7 days after the sampling event.
- ◆ Barometric pressure during sampling.

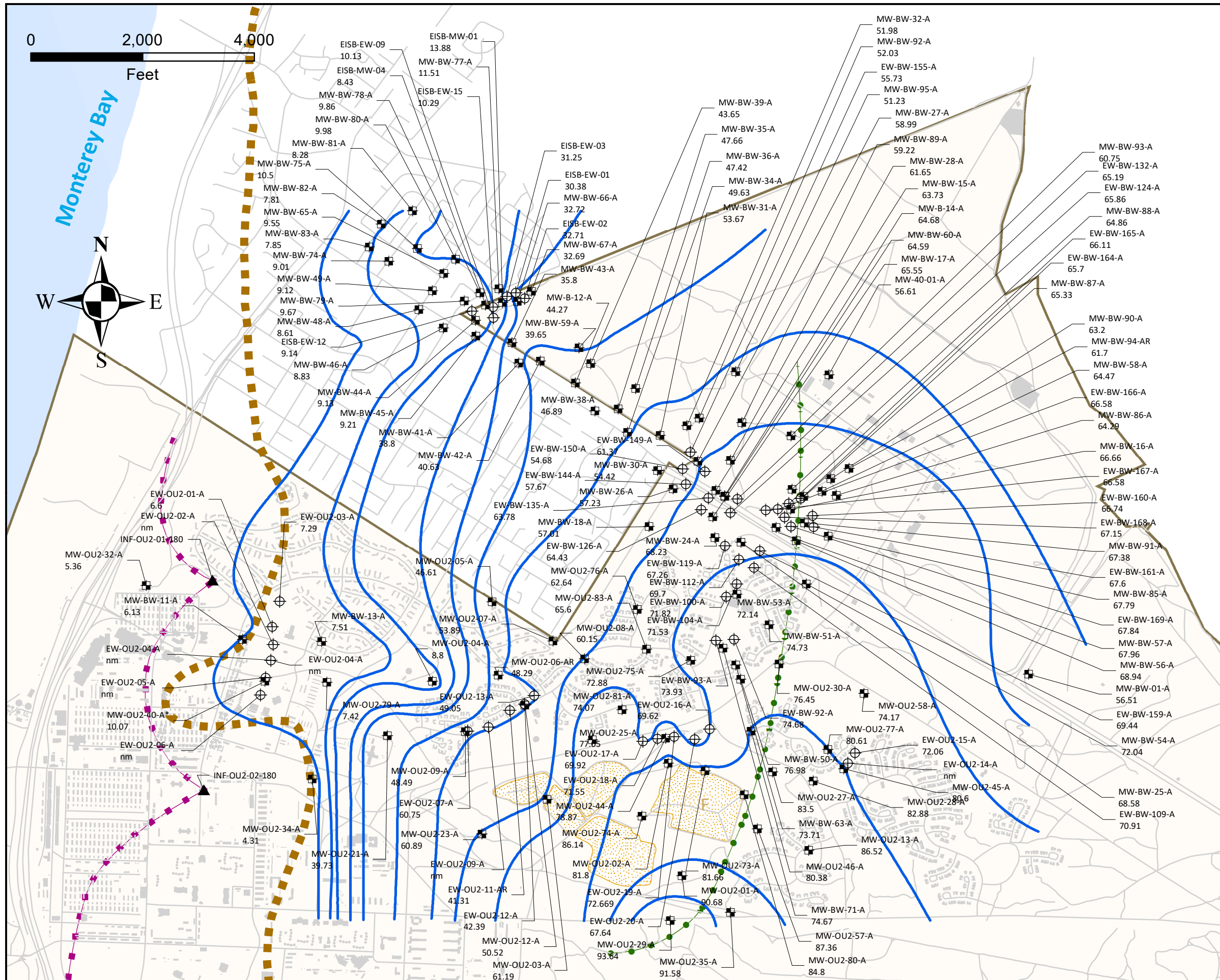
BAROMETRIC PRESSURE CHARTS

Operable Unit 2 Remedy Monitoring and Operations and Maintenance, Fourth Quarter 2019 through Third Quarter 2020, Former Fort Ord, California

Ahtna

Date: 2/24/2021

Figure: 26



EXPLANATION

- Monitoring Well
- Extraction Well
- Infiltration Well
- Water level not measured
- Water level not used for contouring.
- Well ID and Water-level elevation (feet)
- Approximate location of the A-Aquifer Groundwater Divide
- Approximate location of the Upper 180-Foot Aquifer Groundwater Divide
- Groundwater Elevation Contour
- Location of a Groundwater Mound
- Location of a Groundwater Depression
- Approximate extent of landfill areas
- Former Fort Ord Boundary
- Roads
- Facilities

SCHEMATIC CROSS SECTION-FORT ORD HYDROSTRATIGRAPHY

WEST EAST

MONTEREY BAY MAIN GARRISON FO SVA SALINAS VALLEY

36-FOOT (UPPER) SILT 180-FOOT (UPPER) 180-FOOT (LOWER) 400-FOOT 400-FOOT SVA

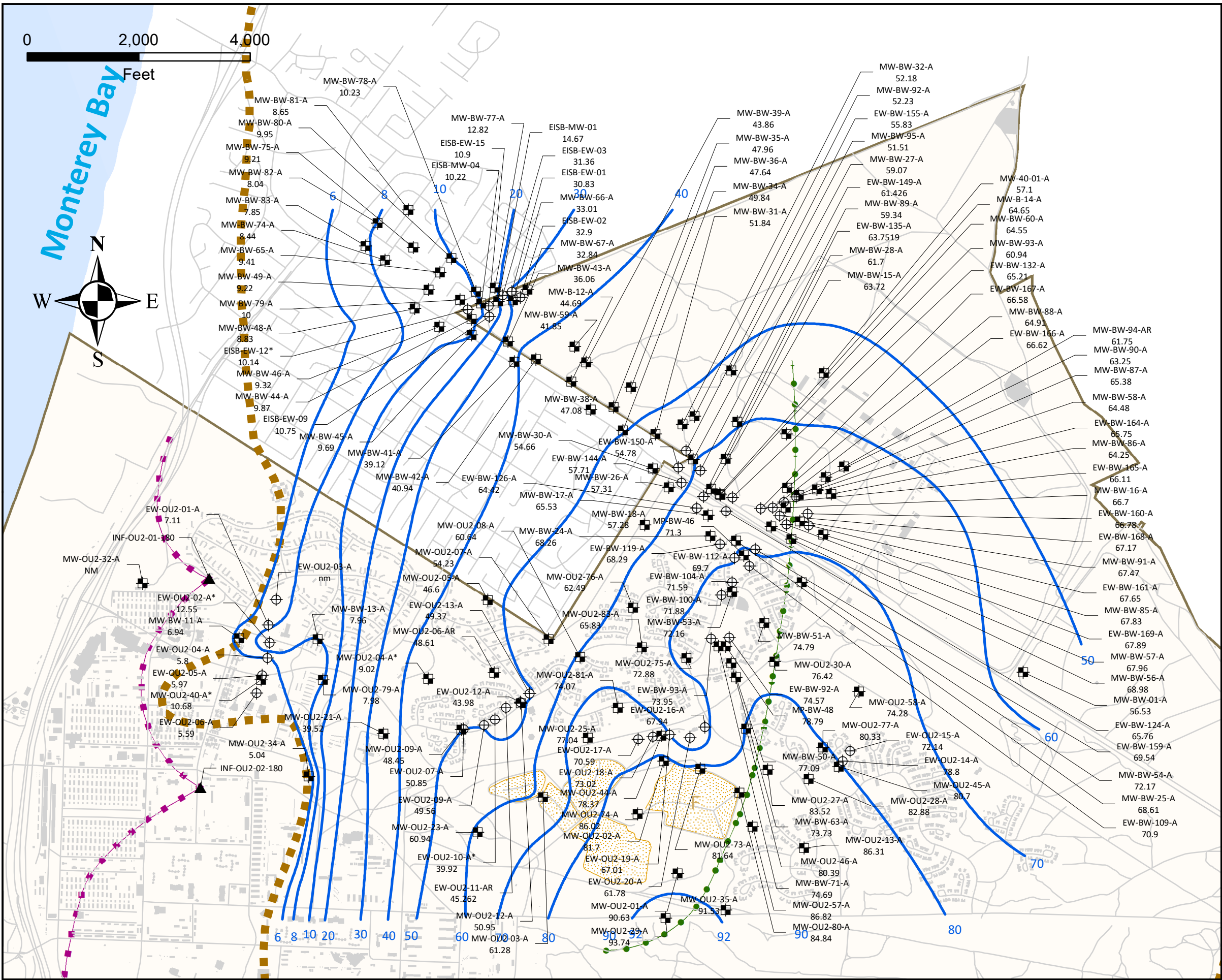
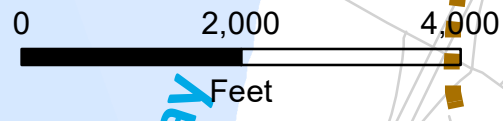
SHADED PORTIONS OF SCHEMATIC CROSS SECTION INDICATE AQUIFERS CONTOURED ON THIS MAP

NOTES:

- (1) Groundwater elevations were taken between December 2, 2019 and December 6, 2019.
- (2) Groundwater elevation contours are based on one interpretation of the data that were available at the time this report was prepared; other interpretations may be possible.
- (3) Groundwater elevations are relative to NGVD 1929.
- (4) Monitoring wells presented are a part of the basewide monitoring network.

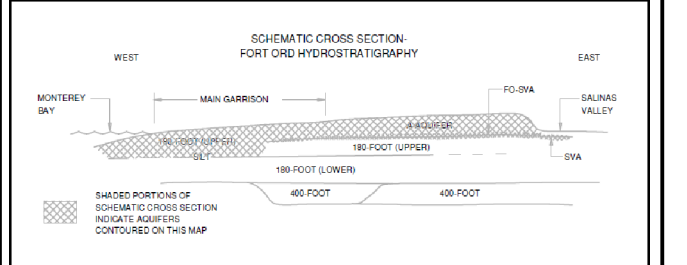
GROUNDWATER ELEVATIONS
A-AQUIFER
 Fourth Quarter 2019
 Operable Unit 2 Remedy Monitoring and Operations and
 Maintenance, Fourth Quarter 2019 - Third Quarter 2020
 Former Fort Ord, California

	Date: 11/23/2020	Figure: 27	
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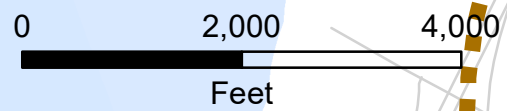
EXPLANATION

- Monitoring Well
- Extraction Well
- Infiltration Well
- nm Water level not measured
- * Water level not used for contouring.
- MW-BW-45-A 9.21 Well ID and Water level elevation (feet)
- Approximate location of the A-Aquifer Groundwater Divide
- Approximate location of the Upper 180-Foot Aquifer Groundwater Divide
- Groundwater Elevation Contour
- Location of a Groundwater Mound
- Location of a Groundwater Depression
- Approximate extent of landfill areas
- Former Fort Ord Boundary
- Roads
- Facilities
- Approximate Edge of Fort Ord-Salinas Valley Aquitard

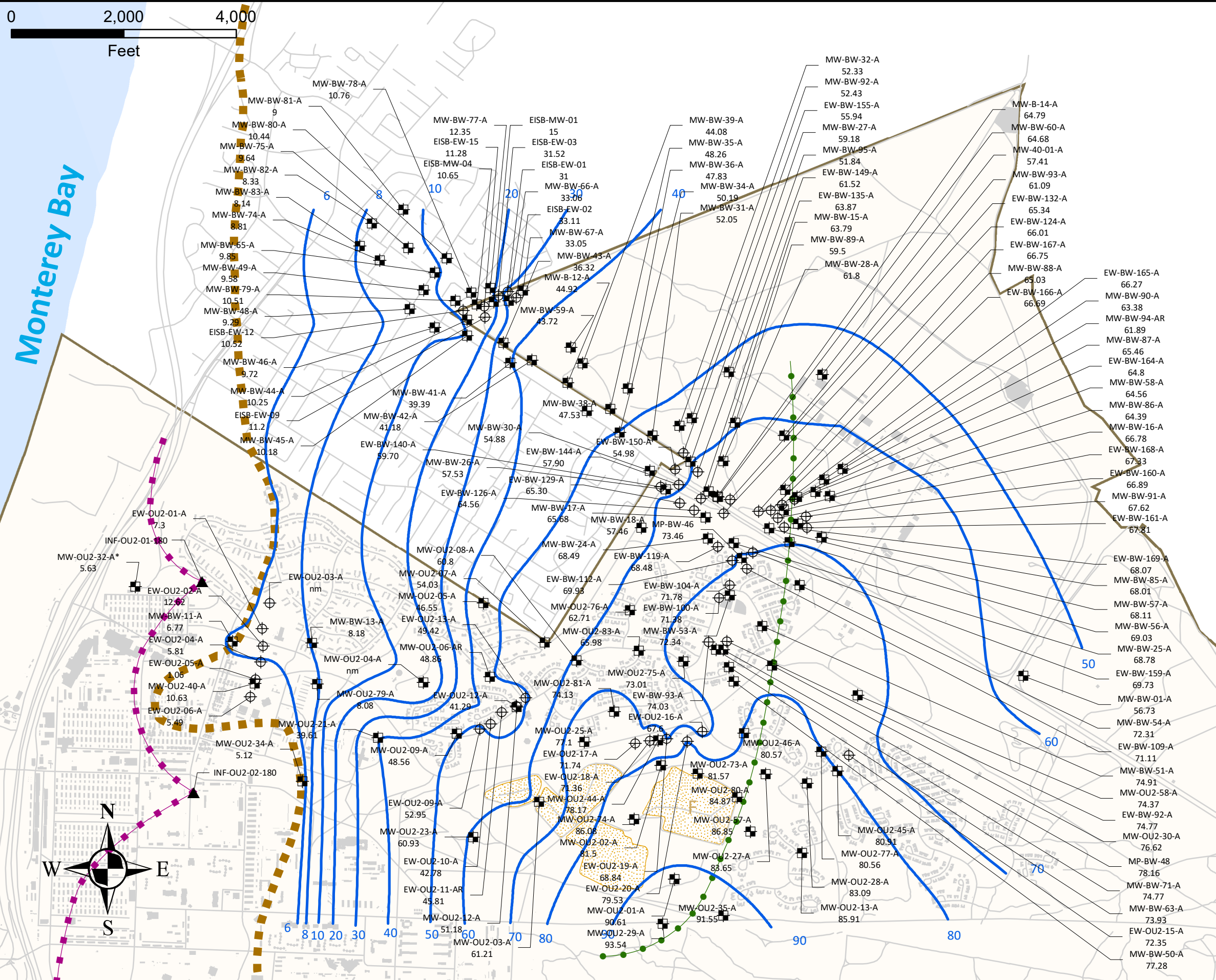


- NOTES:**
- (1) Water elevations were measured between March 2, 2020 and March 6, 2020.
 - (2) Groundwater elevation contours are based on one interpretation of the data that were available at the time this report was prepared; other interpretations may be possible.
 - (3) Groundwater elevations are relative to NGVD 1929.
 - (4) Monitoring wells presented are a part of the basewide monitoring network.

**GROUNDWATER ELEVATIONS
A-AQUIFER
First Quarter 2020**
Operable Unit 2 Remedy Monitoring and Operations and Maintenance, Fourth Quarter 2019 - Third Quarter 2020
Former Fort Ord, California

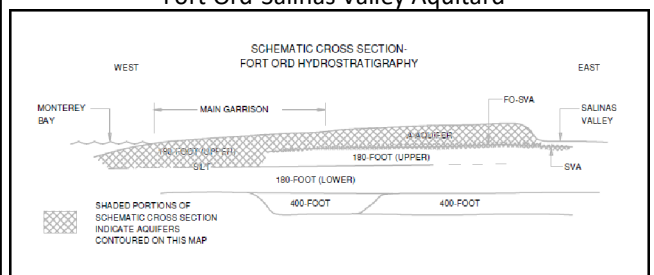


Monterey Bay



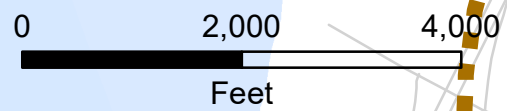
EXPLANATION

- Monitoring Well
- Extraction Well
- Infiltration Well
- nm
- *
- MW-BW-45-A**
9.21
- Well ID and Water level elevation (feet)
- Approximate location of the A-Aquifer Groundwater Divide
- Approximate location of the Upper 180-Foot Aquifer Groundwater Divide
- Groundwater Elevation Contour
- Location of a Groundwater Mound
- Location of a Groundwater Depression
- Approximate extent of landfill areas
- Former Fort Ord Boundary
- Roads
- Facilities
- Approximate Edge of Fort Ord-Salinas Valley Aquitard

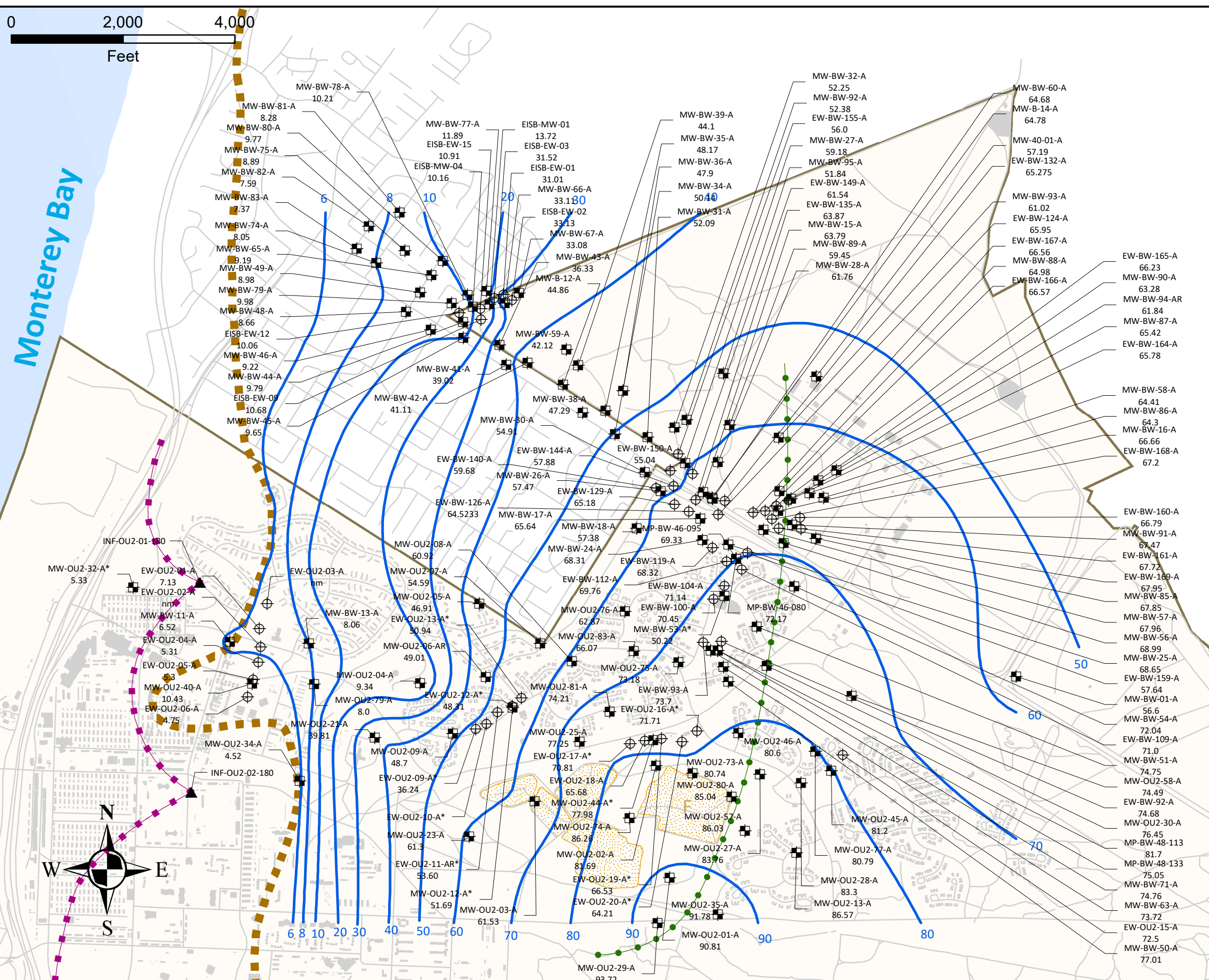


- NOTES:**
- (1) Groundwater elevations were taken between June 1, 2020 and June 9, 2020.
 - (2) Groundwater elevation contours are based on one interpretation of the data that were available at the time this report was prepared; other interpretations may be possible.
 - (3) Groundwater elevations are relative to NGVD 1929.
 - (4) Monitoring wells presented are a part of the basewide monitoring network.

GROUNDWATER ELEVATIONS
A-AQUIFER
 Second Quarter 2020
 Operable Unit 2 Remedy Monitoring and Operations and
 Maintenance, Fourth Quarter 2019 - Third Quarter 2020
 Former Fort Ord, California

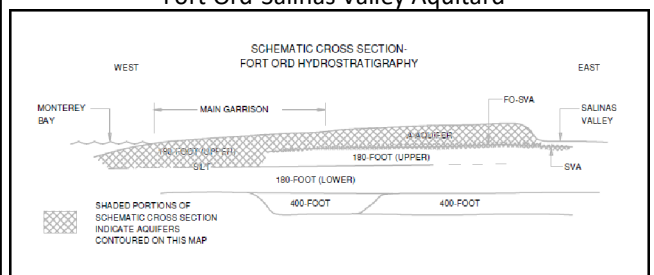


Monterey Bay



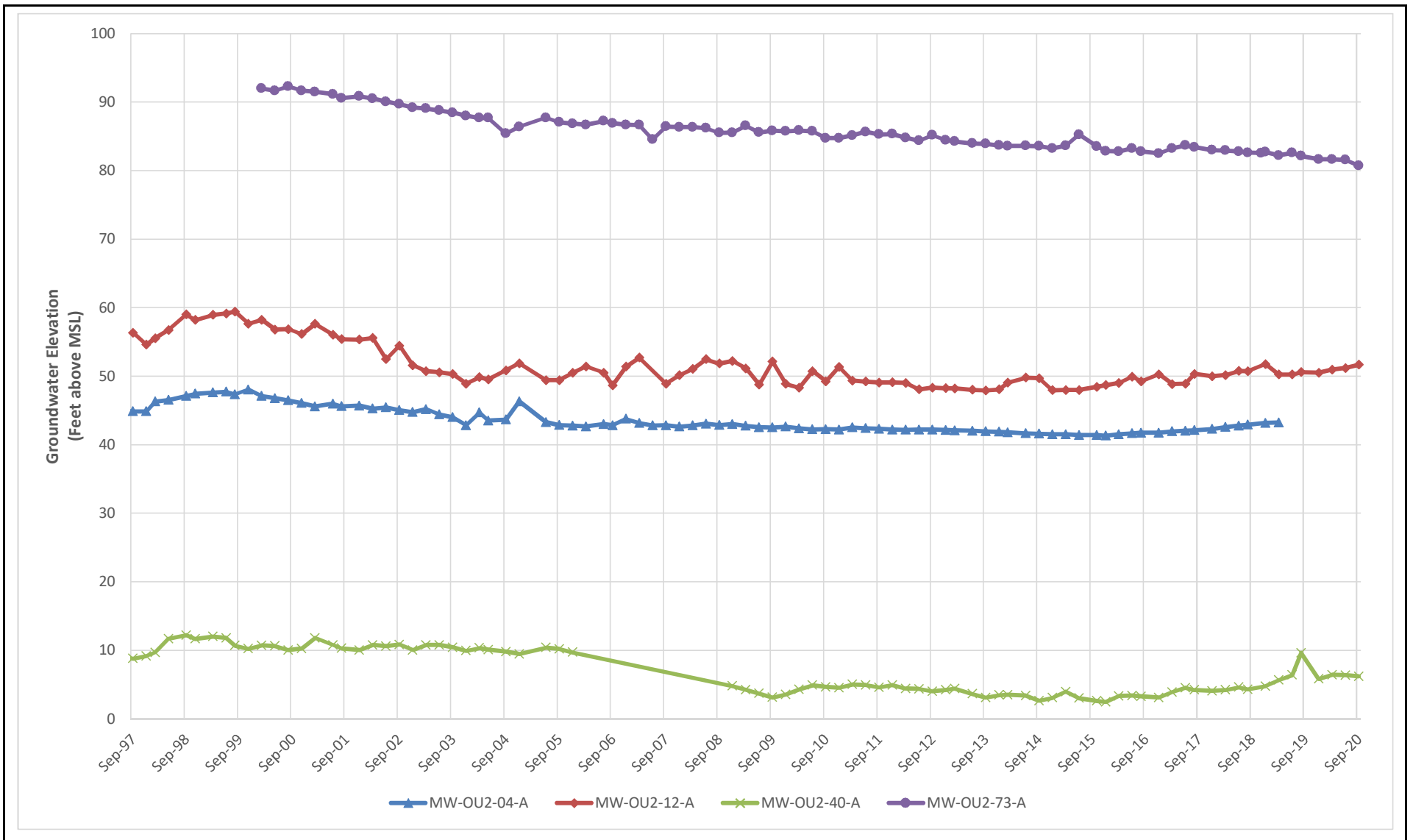
EXPLANATION

- Monitoring Well
- Extraction Well
- Infiltration Well
- Water level not measured
- Water level not used for contouring.
- Well ID and Water level elevation (feet)
MW-BW-27-A
59.18
- Approximate location of the A-Aquifer Groundwater Divide
- Approximate location of the Upper 180-Foot Aquifer Groundwater Divide
- Groundwater Elevation Contour
- Location of a Groundwater Inclination
- Location of a Groundwater Depression
- Approximate extent of landfill areas
- Former Fort Ord Boundary
- Roads
- Facilities
- Approximate Edge of Fort Ord-Salinas Valley Aquitard



- NOTES:**
- (1) Groundwater elevations were taken between August 31, 2020 and September 30, 2020.
 - (2) Groundwater elevation contours are based on one interpretation of the data that were available at the time this report was prepared; other interpretations may be possible.
 - (3) Groundwater elevations are relative to NGVD 1929.
 - (4) Monitoring wells presented are a part of the basewide monitoring network.

GROUNDWATER ELEVATIONS
A-AQUIFER
 Third Quarter 2020
 Operable Unit 2 Remedy Monitoring and Operations and Maintenance, Fourth Quarter 2019 - Third Quarter 2020
 Former Fort Ord, California



Hydrographs of Representative A-Aquifer Wells

September 1997 to September 2020

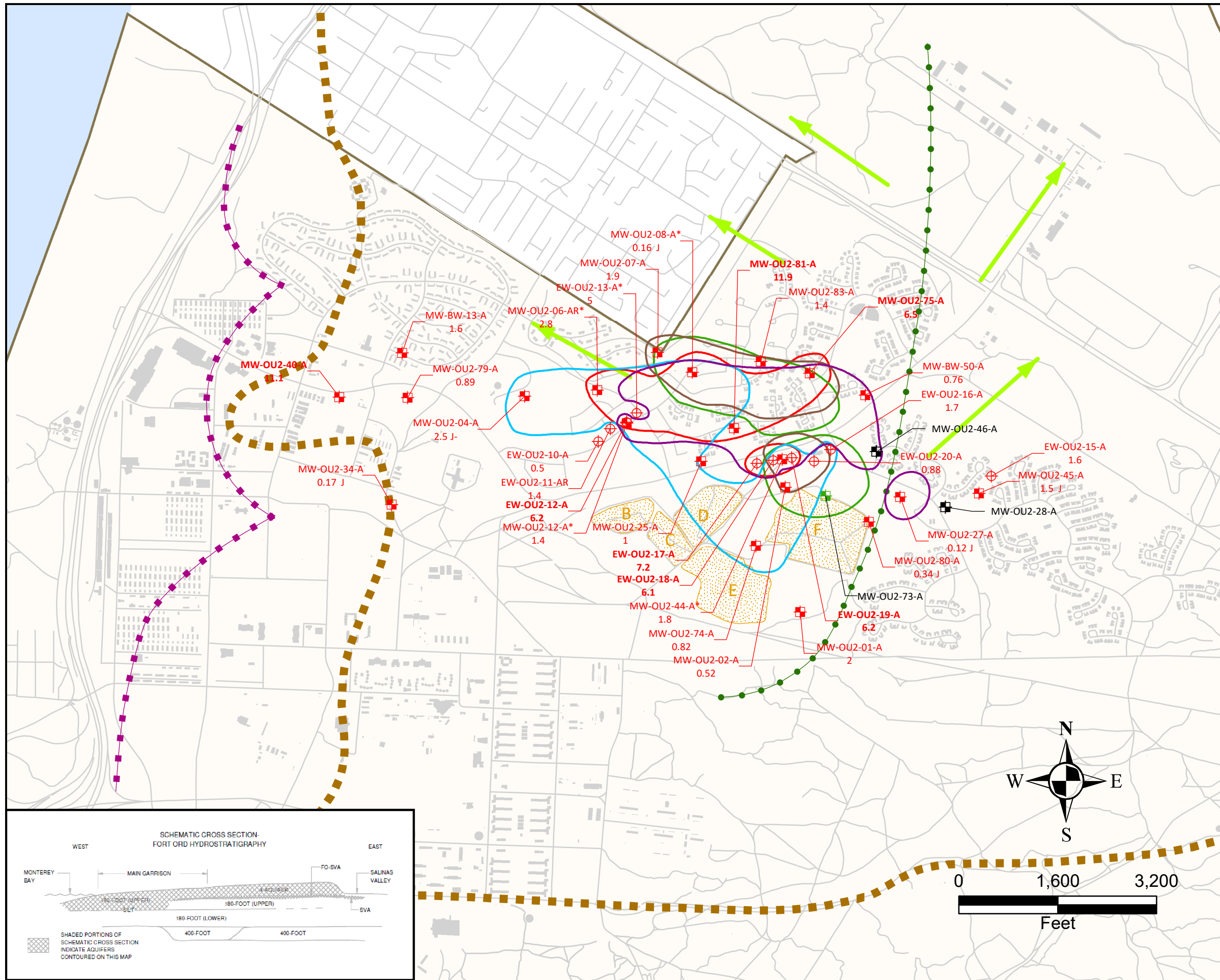
Operable Unit 2 Remedy Monitoring and Operations and Maintenance

Fourth Quarter 2019 through Third Quarter 2020

Former Fort Ord, California

Figure





EXPLANATION

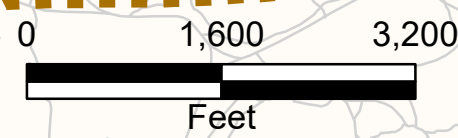
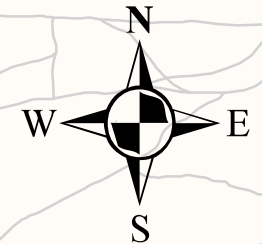
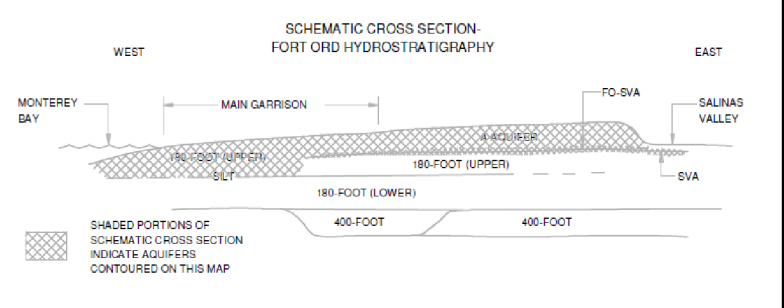
- Extraction Well with TCE Detection
 - Monitoring Well with TCE Detection
 - Monitoring Well with no COC ACL Exceedance and ND for TCE
 - Monitoring Well with COC ACL Exceedance and ND for TCE
 - General Groundwater Flow Direction
 - Approximate Edge of the Fort-Ord Salinas Valley Aquitard
 - Approximate location of the Upper 180-Foot Aquifer Groundwater Divide
 - Approximate location of the A-Aquifer Groundwater Divide
 - Roads
 - Approximated Extent of Landfill Areas
 - Facilities
 - Former Fort Ord Boundary
- Chemical of Concern (COC) Aquifer Cleanup Level (ACL) Exceedance Contour in µg/L.**
- 5 Trichloroethene (TCE)
 - 3 Tetrachloroethene (PCE)
 - 5 1,1-Dichloroethane (1,1-DCA)
 - 0.5 1,2-Dichloroethane (1,2-DCA)
 - 0.1 Vinyl Chloride (VC)
- Well ID - Bold When ACL Exceeded
- * Well not used for contouring
- TCE Concentration (µg/L) and validation/lab qualifier.

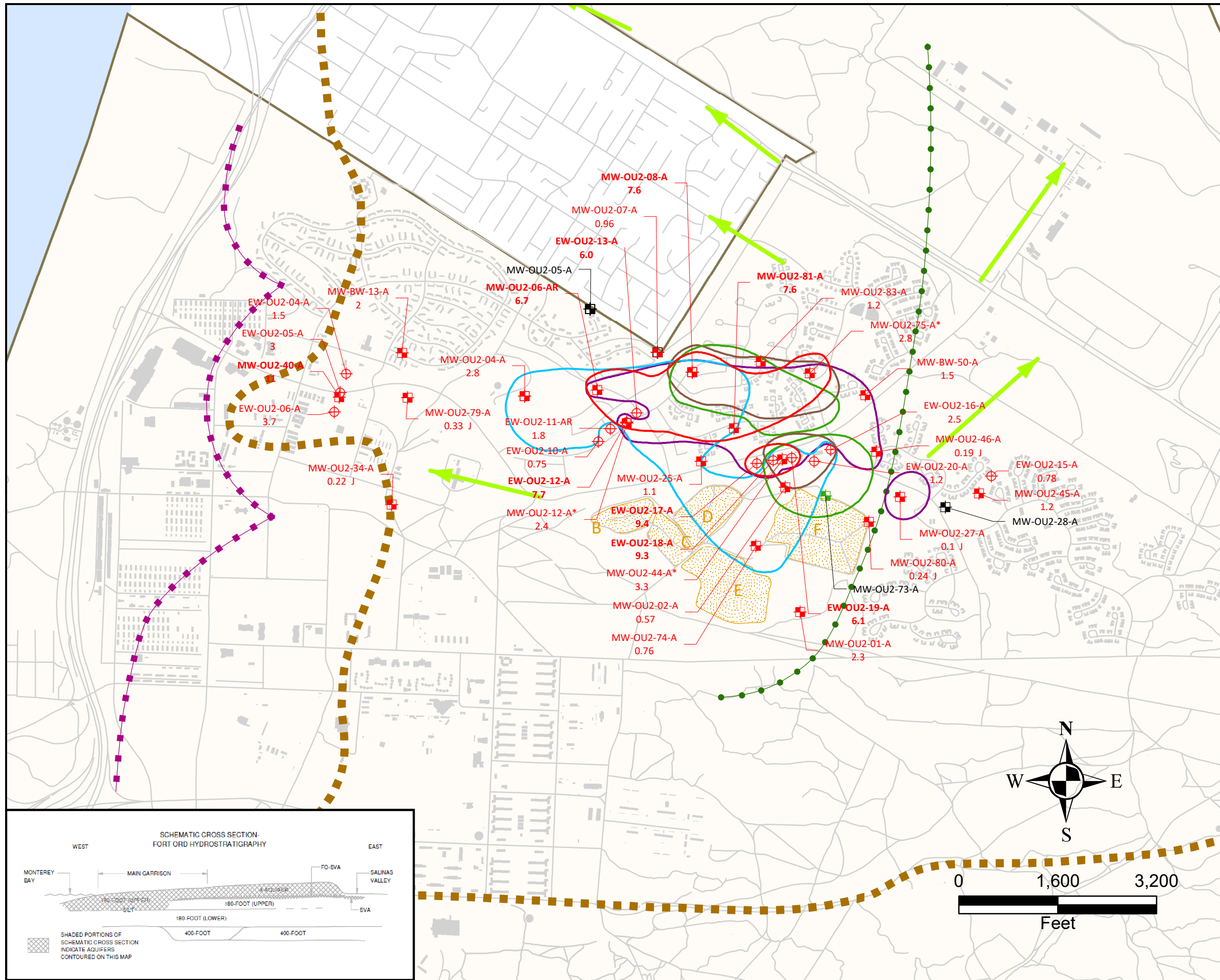
NOTES:

- (1) Samples were collected between December 2, 2019 and December 6, 2019.
- (2) Contours are based on one interpretation of the data that were available at the time this report was prepared; other interpretations may be possible.
- (3) Contours based on highest value obtained from multiple bags where applicable.
- (4) Contours near wells not sampled this quarter are inferred

**TCE CONCENTRATIONS AND OTHER COC ACL EXCEEDANCES
A-AQUIFER**

Fourth Quarter 2019
Operable Unit 2 Remedy Monitoring and Operations and Maintenance, Fourth Quarter 2019 - Third Quarter 2020
Former Fort Ord, California





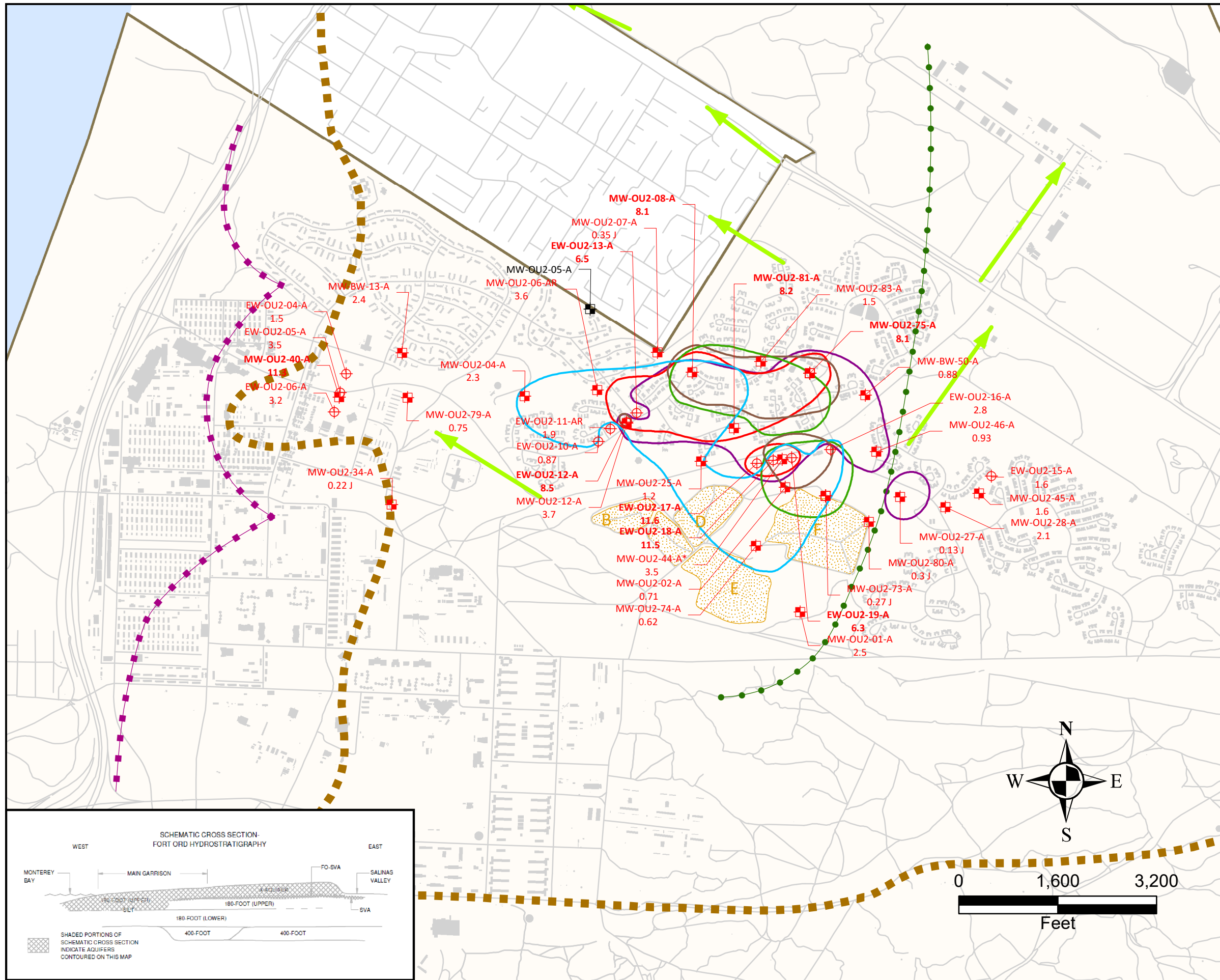
EXPLANATION

- Extraction Well with TCE Detection
 - Monitoring Well with TCE Detection
 - Monitoring Well with no COC ACL Exceedance and ND for TCE
 - Monitoring Well with COC ACL Exceedance and ND for TCE
 - General Groundwater Flow Direction
 - Approximate Edge of the Fort-Ord Salinas Valley Aquitard
 - Approximate location of the Upper 180-Foot Aquifer Groundwater Divide
 - Approximate location of the A-Aquifer Groundwater Divide
 - Roads
 - Approximated Extent of Landfill Areas
 - Facilities
 - Former Fort Ord Boundary
- Chemical of Concern (COC) Aquifer Cleanup Level (ACL) Exceedance Countour in µg/L.**
- 5 Trichloroethene (TCE)
 - 3 Tetrachloroethene (PCE)
 - 5 1,1-Dichloroethane (1,1-DCA)
 - 0.5 1,2-Dichloroethane (1,2-DCA)
 - 0.1 Vinyl Chloride (VC)
- Well ID - Bold When ACL Exceeded
- MW-OU2-08-A** * Well not used for contouring
- 7.6 TCE Concentration (µg/L) and validation/lab qualifier.

NOTES:

- (1) Groundwater samples were collected between March 2, 2020 and March 6, 2020.
- (2) Contours are based on one interpretation of the data that were available at the time this report was prepared; other interpretations may be possible.
- (3) Contours based on highest value obtained from multiple bags where applicable.
- (4) Contours near wells not sampled this quarter are inferred from previous analytical data.

TCE CONCENTRATIONS AND OTHER COC ACL EXCEEDANCES
A-AQUIFER
First Quarter 2020
Operable Unit 2 Remedy Monitoring and Operations and Maintenance, Fourth Quarter 2019 - Third Quarter 2020
Former Fort Ord, California



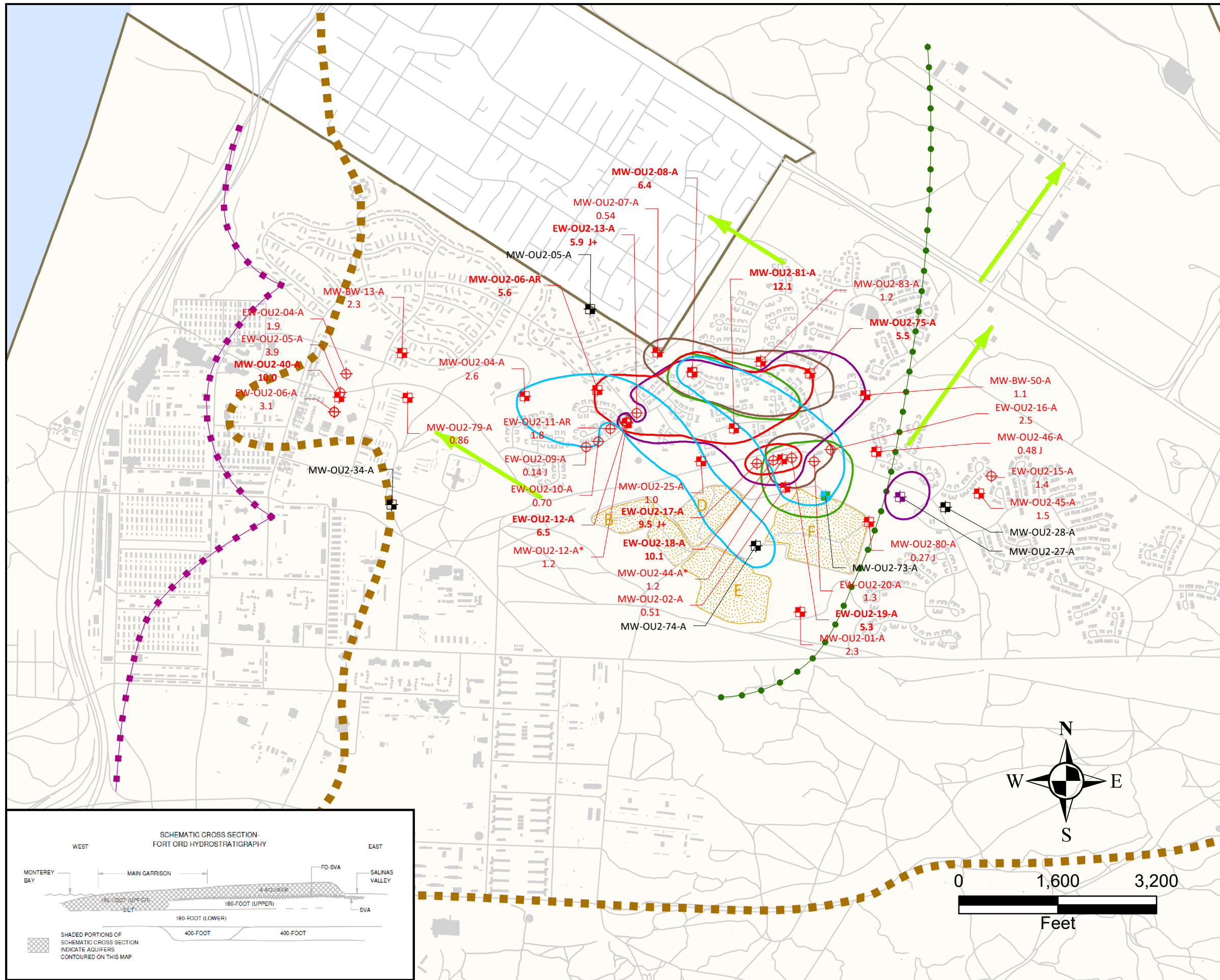
EXPLANATION

- Extraction Well with TCE Detection
 - Monitoring Well with TCE Detection
 - Monitoring Well with no COC ACL Exceedance and ND for TCE
 - General Groundwater Flow Direction
 - Approximate Edge of the Fort-Ord Salinas Valley Aquitard
 - Approximate location of the Upper 180-Foot Aquifer Groundwater Divide
 - Approximate location of the A-Aquifer Groundwater Divide
 - Roads
 - Approximated Extent of Landfill Areas
 - Facilities
 - Former Fort Ord Boundary
- Chemical of Concern (COC) Aquifer Cleanup Level (ACL) Exceedance Countour in $\mu\text{g/L}$.**
- 5 Trichloroethene (TCE)
 - 3 Tetrachloroethene (PCE)
 - 5 1,1-Dichloroethane (1,1-DCA)
 - 0.5 1,2-Dichloroethane (1,2-DCA)
 - 0.1 Vinyl Chloride (VC)
- Well ID - Bold When ACL Exceeded
 * Well not used for contouring
 TCE Concentration ($\mu\text{g/L}$) and validation/lab qualifier.

NOTES:

- (1) Groundwater samples were collected between June 1, 2020 and June 9, 2020.
- (2) Contours are based on one interpretation of the data that were available at the time this report was prepared; other interpretations may be possible.
- (3) Contours based on highest value obtained from multiple bags where applicable.
- (4) Contours near wells not sampled this quarter are inferred from previous analytical data.

TCE CONCENTRATIONS AND OTHER COC ACL EXCEEDANCES
 A-AQUIFER
 Second Quarter 2020
 Operable Unit 2 Remedy Monitoring and Operations and Maintenance, Fourth Quarter 2019 - Third Quarter 2020
 Former Fort Ord, California



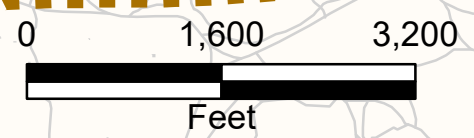
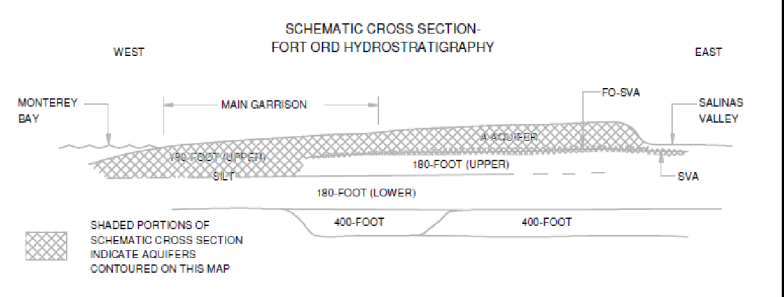
EXPLANATION

- Extraction Well with TCE Detection
 - Monitoring Well with TCE Detection
 - Monitoring Well with PCE ACL Exceedance and ND for TCE
 - Monitoring Well with 1,2-DCA and Vinyl Chloride ACL Exceedance and ND for TCE
 - Monitoring Well with no COC ACL Exceedance and ND for TCE
 - General Groundwater Flow Direction
 - Approximate Edge of the Fort-Ord Salinas Valley Aquitard
 - Approximate location of the Upper 180-Foot Aquifer Groundwater Divide
 - Approximate location of the A-Aquifer Groundwater Divide
 - Roads
 - Approximated Extent of Landfill Areas
 - Facilities
 - Former Fort Ord Boundary
- Chemical of Concern (COC) Aquifer Cleanup Level (ACL) Exceedance Countour in $\mu\text{g/L}$.**
- 5 Trichloroethene (TCE)
 - 3 Tetrachloroethene (PCE)
 - 5 1,1-Dichloroethane (1,1-DCA)
 - 0.5 1,2-Dichloroethane (1,2-DCA)
 - 0.1 Vinyl Chloride (VC)
- Well ID - Bold When ACL Exceeded
MW-OU2-08-A * Well not used for contouring
6.4 TCE Concentration ($\mu\text{g/L}$) and validation/lab qualifier.

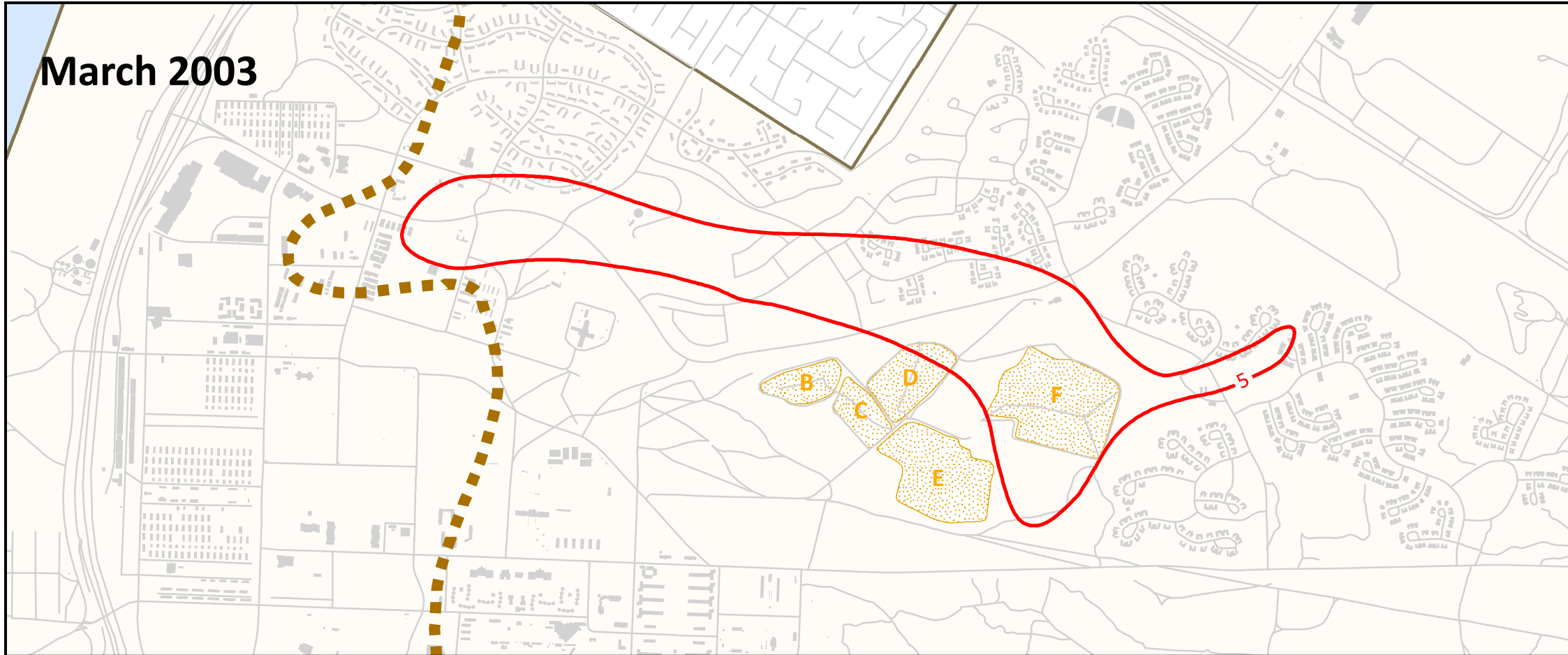
NOTES:

- (1) Groundwater samples were collected between August 31st, 2020 and September 23rd, 2020.
- (2) Contours are based on one interpretation of the data that were available at the time this report was prepared; other interpretations may be possible.
- (3) Contours based on highest value obtained from multiple bags where applicable.
- (4) Contours near wells not sampled this quarter are inferred

TCE CONCENTRATIONS AND OTHER COC ACL EXCEEDANCES
 A-AQUIFER
 Third Quarter 2020
 Operable Unit 2 Remedy Monitoring and Operations and Maintenance, Fourth Quarter 2019 - Third Quarter 2020
 Former Fort Ord, California



March 2003

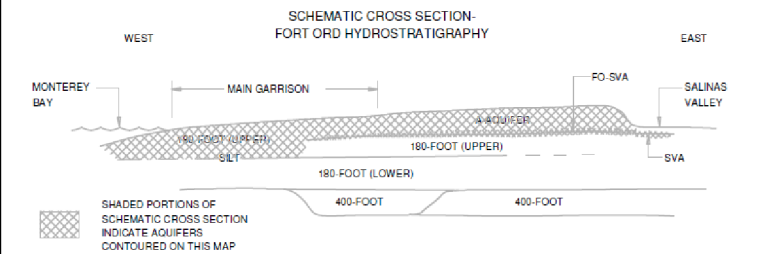


EXPLANATION

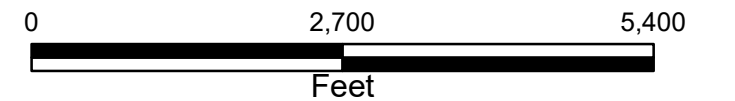
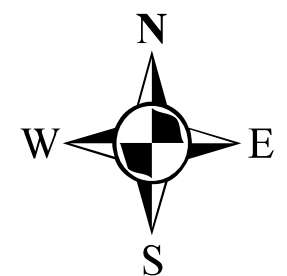
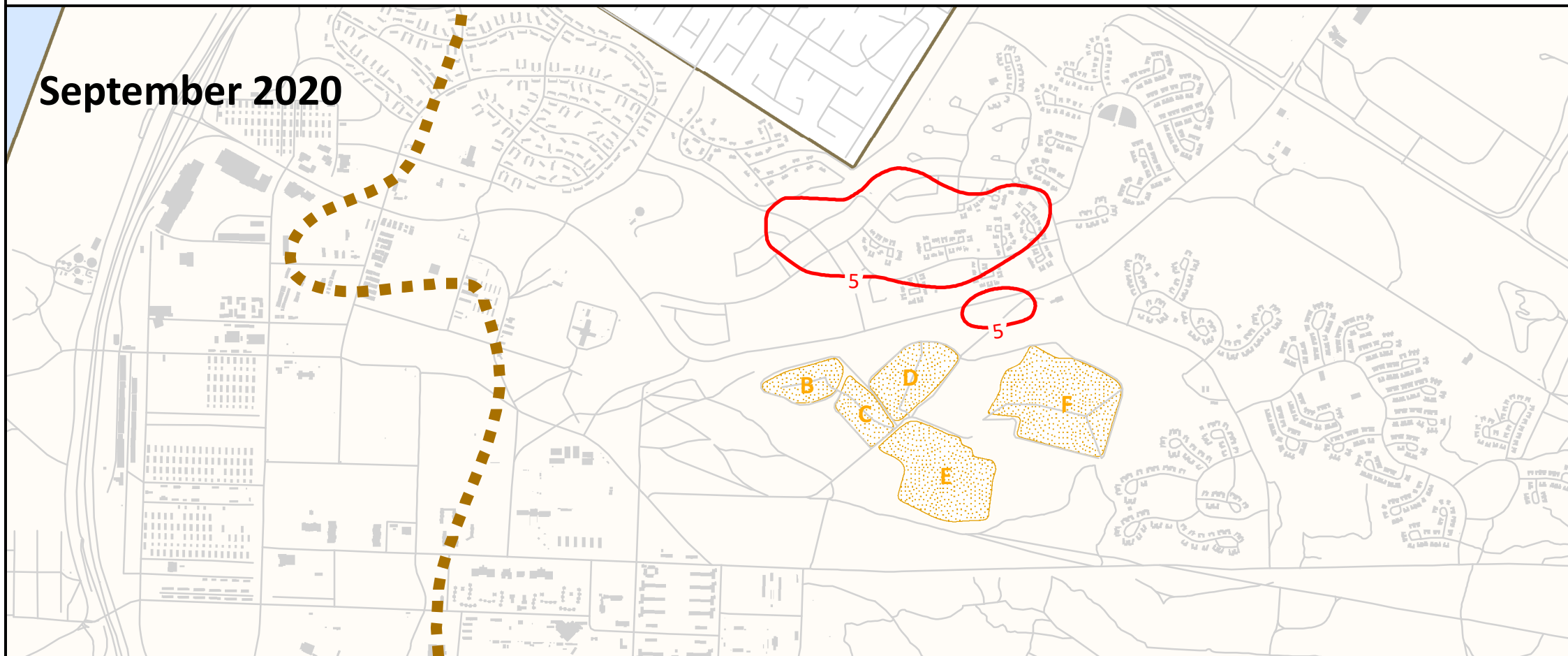
- Chemical of Concern (COC) Aquifer Cleanup Level (ACL) Exceedance Contour in $\mu\text{g/L}$.
- 5 — Trichloroethene (TCE) A - Aquifer (Concentration = 5)
 - Approximate edge of Fort Ord - Salinas Valley Aquitard (FO-SVA) Boundary
 - OU2 Landfill Areas B through F
 - Facilities
 - Roads
 - Former Fort Ord Boundary

NOTES:

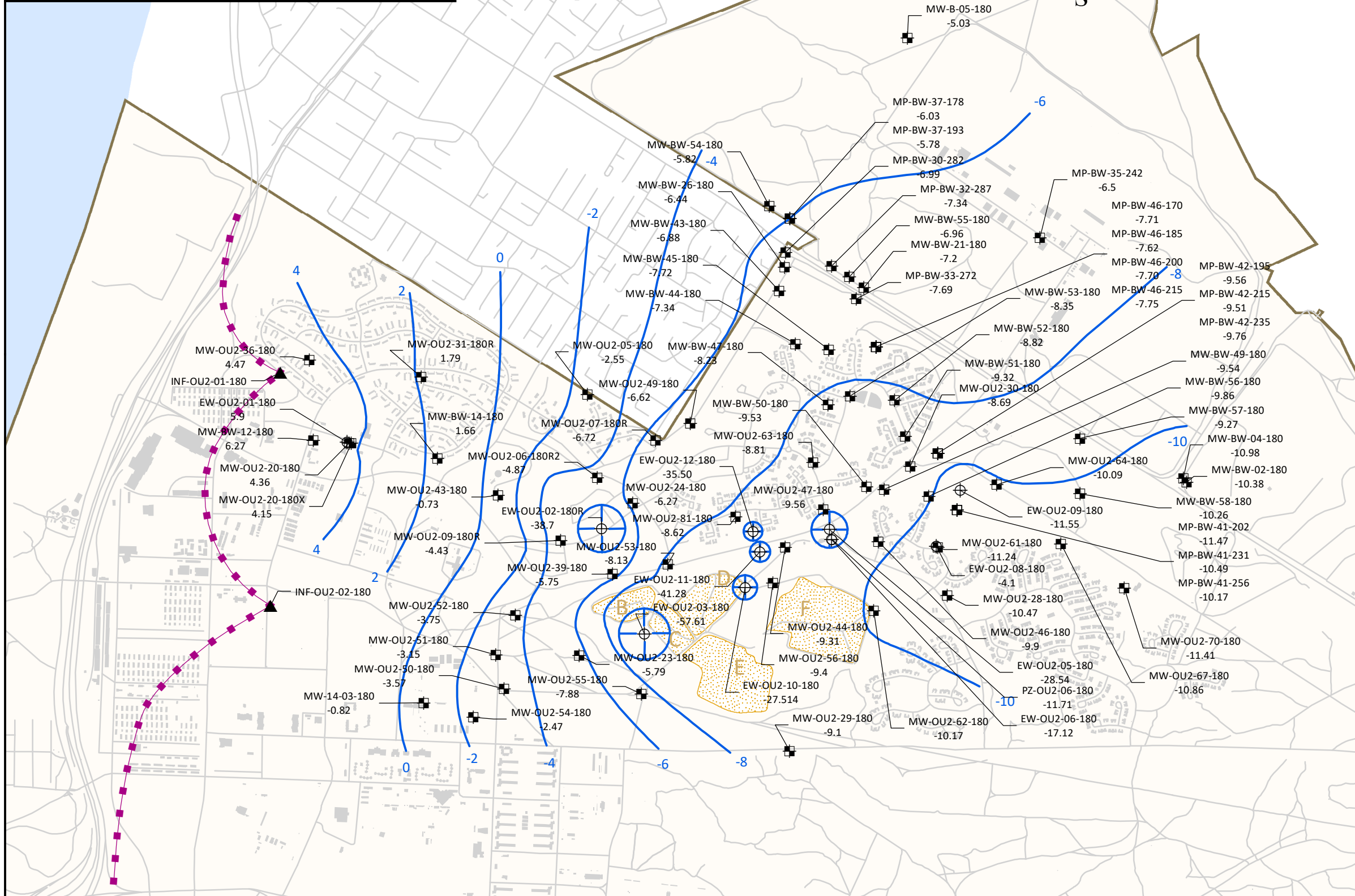
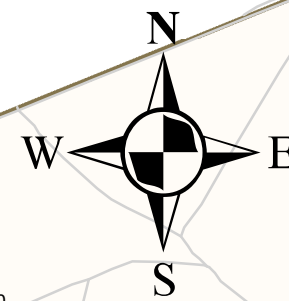
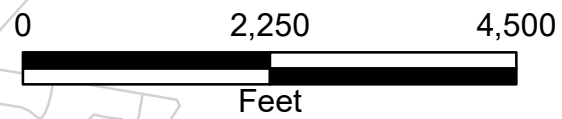
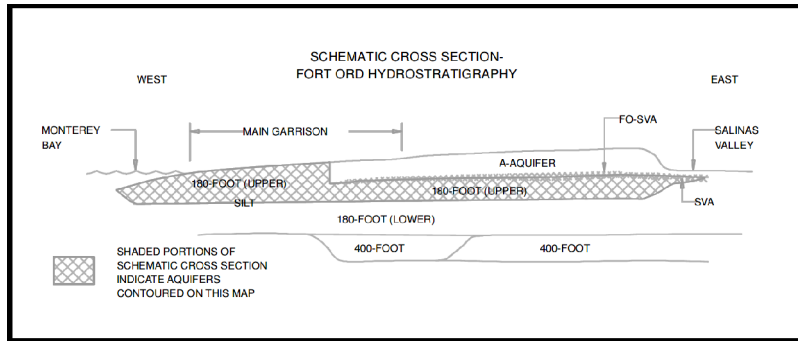
- (1) Contours are based on one interpretation of the data that were available at the time this report was prepared; other interpretations may be possible.
- (2) March 2003 Contour is at maximum historical extent.



September 2020



CURRENT AND HISTORICAL MAXIMUM TCE PLUME EXTENT, OU2 A-AQUIFER, MARCH 2003 AND SEPTEMBER 2020
Operable Unit 2 Remedy Monitoring and Operations and Maintenance, Fourth Quarter 2019 - Third Quarter 2020
Former Fort Ord, California

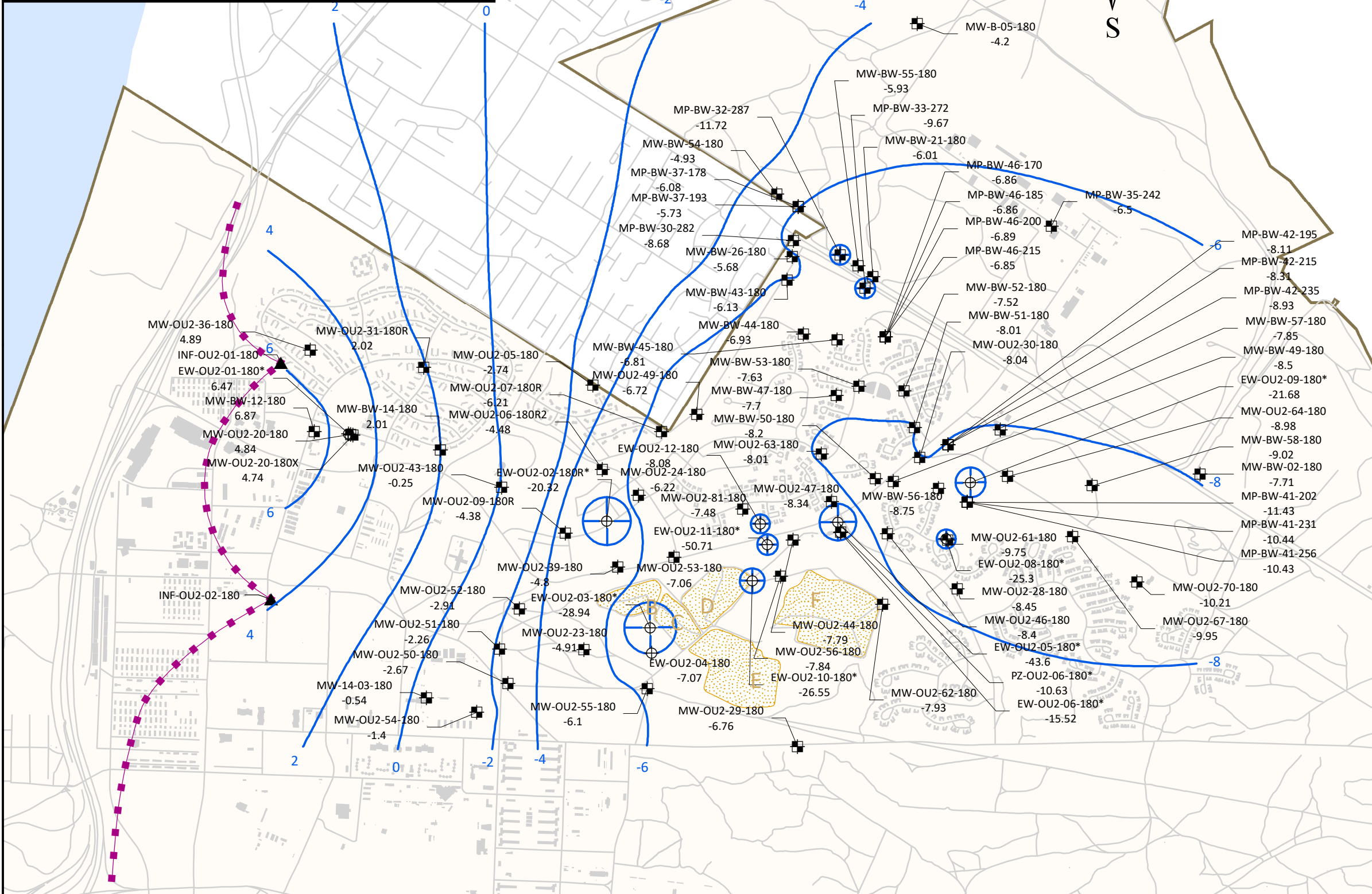
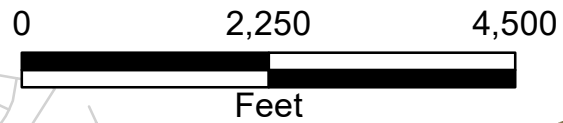
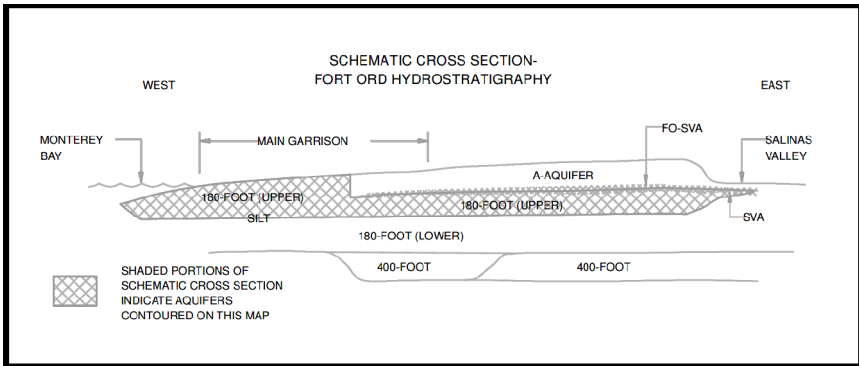


Explanation

- Extraction Well
- Monitoring Well
- Piezometer
- Infiltration Well
- MW-B-05-180 -5.03 Station ID and Groundwater Elevation (feet)
- NM Water level not measured this quarter
- * Water level not used for contouring
- Groundwater Elevation Contour
- Location of a groundwater depression
- Approximate location of the Upper 180-Foot Aquifer Groundwater Divide
- Roads
- Facilities
- Approximate extent of landfill areas
- Approximate Edge of Fort Ord - Salinas Valley Aquitard
- Former Fort Ord Boundary

- Notes:**
- (1) Water levels were measured between December 2, 2019 and December 6, 2019.
 - (2) Groundwater elevation contours are based on one interpretation of the data that was available at the time this report was prepared; other interpretations may be possible.
 - (3) Groundwater elevations are relative to NGVD 1929.
 - (4) Monitoring wells presented are a part of the basewide monitoring network.

**GROUNDWATER ELEVATIONS
UPPER 180-FOOT AQUIFER
Fourth Quarter 2019**
Operable Unit 2 Remedy Monitoring and Operations and
Maintenance, Fourth Quarter 2019 - Third Quarter 2020
Former Fort Ord, California



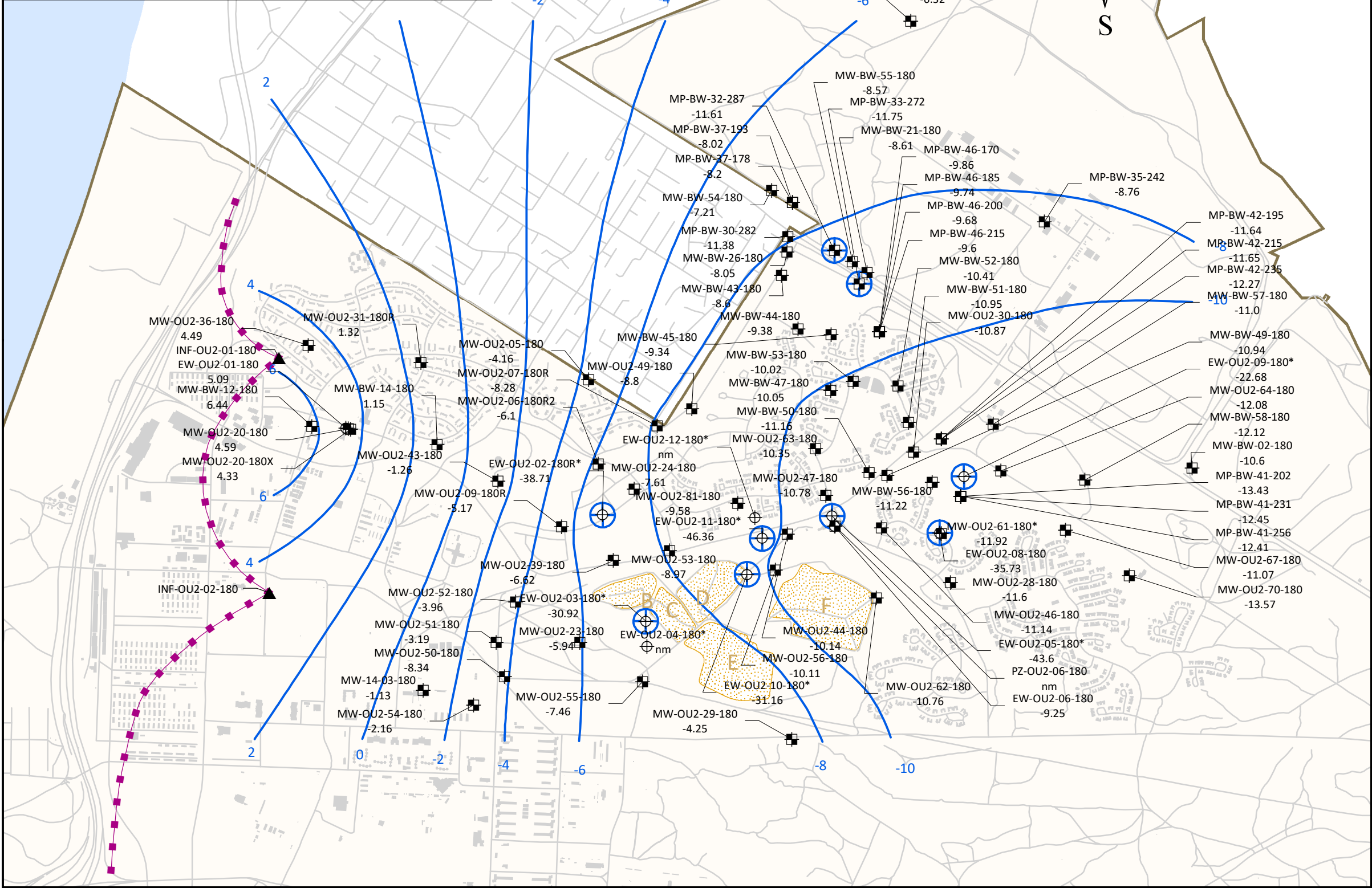
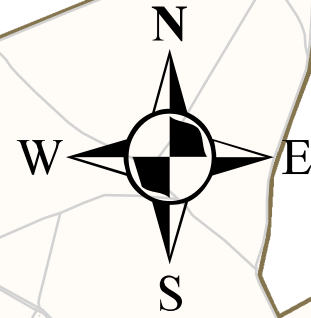
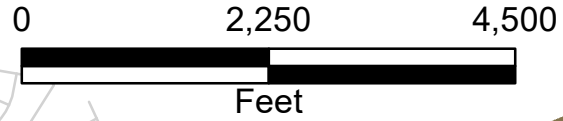
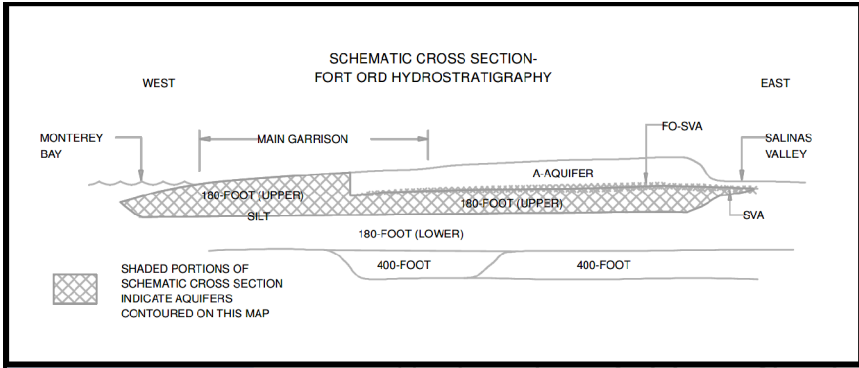
Explanation

- Extraction Well
- Monitoring Well
- Piezometer
- Infiltration Well
- MW-B-05-180 -4.2 Station ID and Groundwater Elevation (feet)
- NM Water level not measured this quarter
- * Water level not used for contouring
- Groundwater Elevation Contour
- Location of a groundwater depression
- Approximate location of the Upper 180-Foot Aquifer Groundwater Divide
- Roads
- Facilities
- Approximate extent of landfill areas
- Former Fort Ord Boundary

Notes:

- (1) Water levels were measured between June 1, 2020 and June 9, 2020.
- (2) Groundwater elevation contours are based on one interpretation of the data that was available at the time this report was prepared; other interpretations may be possible.
- (3) Groundwater elevations are relative to NGVD 1929.
- (4) Monitoring wells presented are a part of the basewide monitoring network.

**GROUNDWATER ELEVATIONS
UPPER 180-FOOT AQUIFER
Second Quarter 2020**
Operable Unit 2 Remedy Monitoring and Operations and
Maintenance, Fourth Quarter 2019 - Third Quarter 2020
Former Fort Ord, California



Explanation

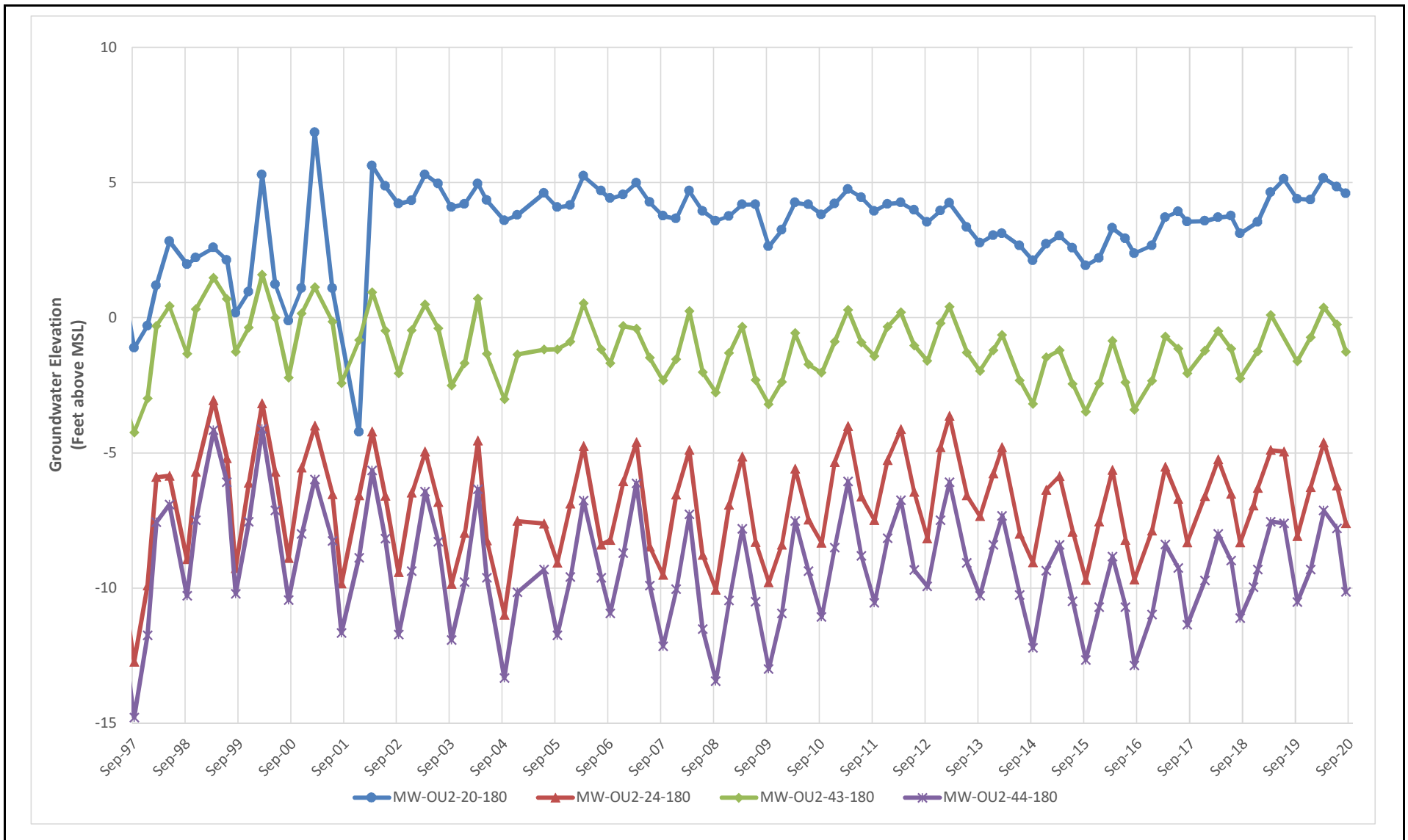
- Extraction Well
- Monitoring Well
- Piezometer
- Infiltration Well
- MW-B-05-180 -4.2 Station ID and Groundwater Elevation (feet)
- NM Water level not measured this quarter
- * Water level not used for contouring
- Groundwater Elevation Contour
- Location of a groundwater depression
- Approximate location of the Upper 180-Foot Aquifer Groundwater Divide
- Roads
- Facilities
- Approximate extent of landfill areas
- Former Fort Ord Boundary

Notes:

- (1) Water levels were measured between August 30, 2020 and September 31, 2020.
- (2) Groundwater elevation contours are based on one interpretation of the data that was available at the time this report was prepared; other interpretations may be possible.
- (3) Groundwater elevations are relative to NGVD 1929.
- (4) Monitoring wells presented are a part of the basewide monitoring network.

**GROUNDWATER ELEVATIONS
UPPER 180-FOOT AQUIFER
Third Quarter 2020**

Operable Unit 2 Remedy Monitoring and Operations and
Maintenance, Fourth Quarter 2019 - Third Quarter 2020
Former Fort Ord, California



Hydrographs of Representative Upper 180-Foot Aquifer Wells

September 1997 to September 2020

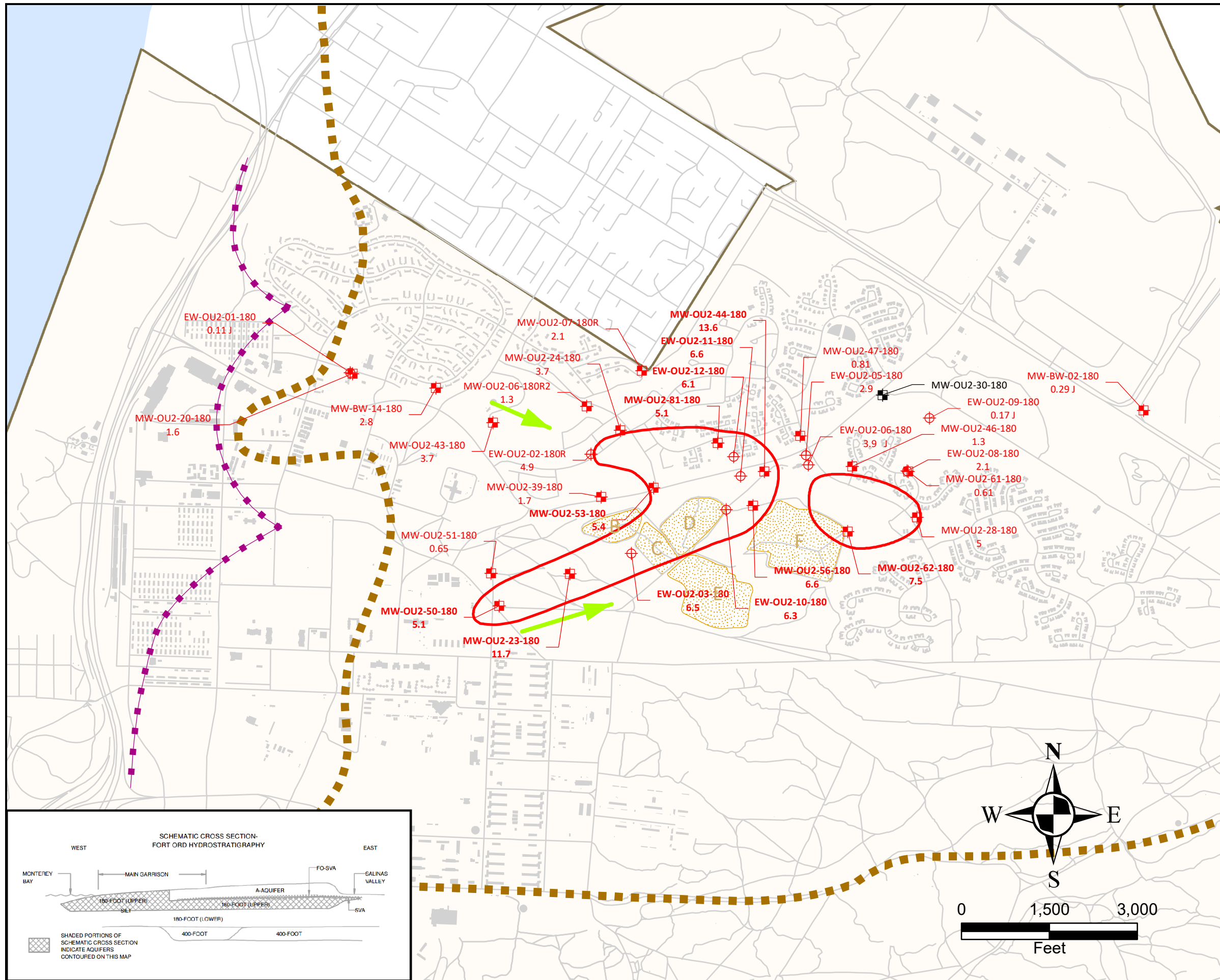
Operable Unit 2 Remedy Monitoring and Operations and Maintenance

Fourth Quarter 2019 through Third Quarter 2020

Former Fort Ord, California

Figure





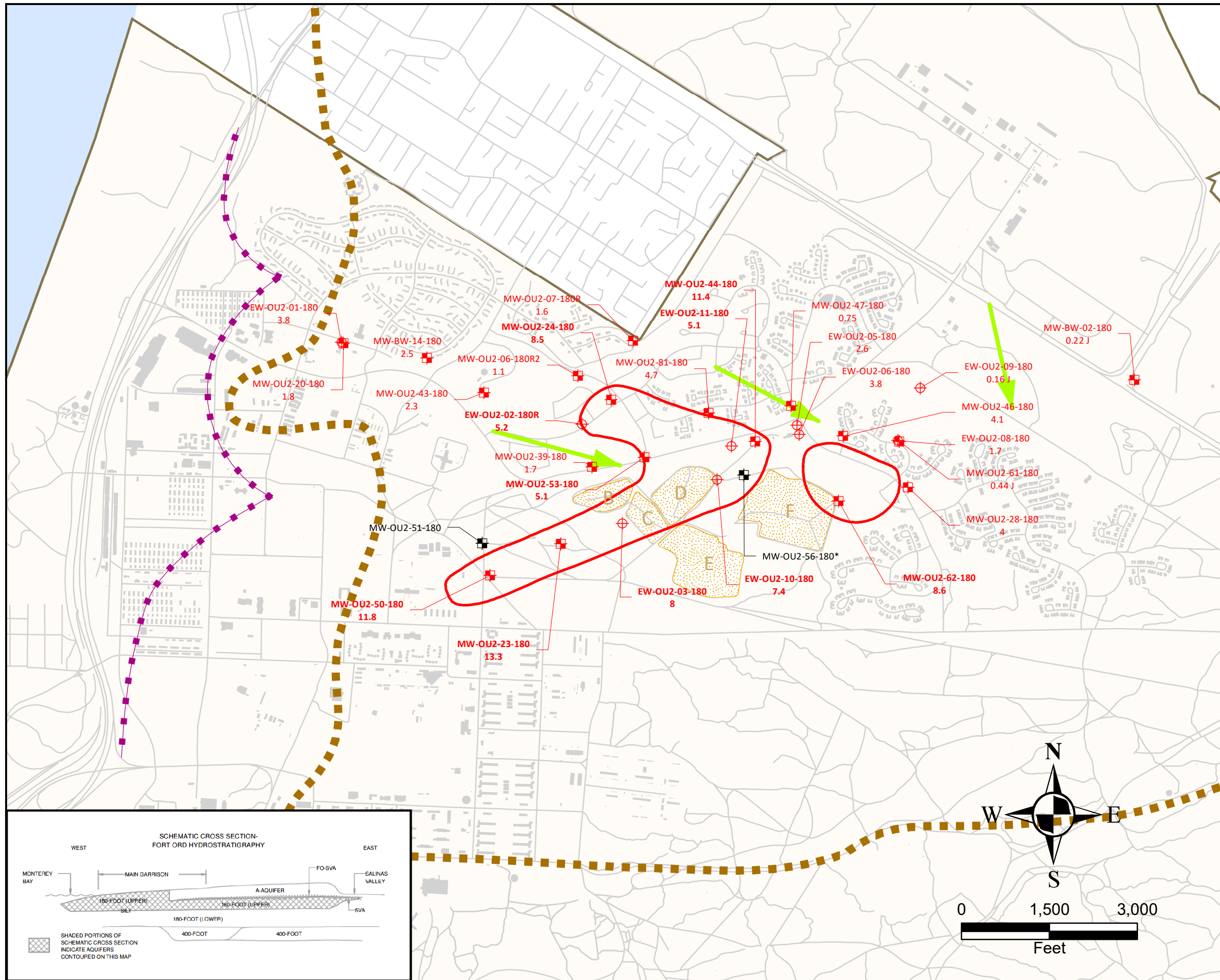
Explanation

- Extraction Well with TCE Detection
- Monitoring Well with TCE Detection
- Well ID - Bold When ACL Exceeded
(*Indicates: Sample not used for contouring)
- TCE concentration (µg/L) and lab qualifier.
- Monitoring Well with no COC ACL Exceedance and ND for TCE
- Chemical of Concern (COC) Aquifer Cleanup Level (ACL) Exceedance Contour in µg/L.
- 5 Trichloroethene (TCE)
- Approximate location of the Upper 180-Foot Aquifer Groundwater Divide
- General Groundwater Flow Direction
- Roads
- Facilities
- Approximate extent of landfill areas
- Approximate Edge of Fort Ord - Salinas Valley Aquitard
- Former Fort Ord Boundary

NOTES:

- (1) Samples were collected between December 2, 2019 and December 6, 2019.
- (2) Contours are based on one interpretation of the data that were available at the time this report was prepared; other interpretations may be possible.
- (3) Contours based on highest value obtained from multiple bags where applicable.

TCE CONCENTRATIONS AND OTHER COC ACL EXCEEDANCES
UPPER 180-FOOT AQUIFER
Fourth Quarter 2019
Operable Unit 2 Remedy Monitoring and Operations and Maintenance, Fourth Quarter 2019 - Third Quarter 2020
Former Fort Ord, California



Explanation

- Extraction Well with TCE Detection
- Monitoring Well with TCE Detection
- Well ID - Bold When ACL Exceeded
(*Indicates: Sample not used for contouring)
- TCE concentration (µg/L) and lab qualifier.
- Monitoring Well with no COC ACL Exceedance and ND for TCE
- * Well is not used for contouring

Chemical of Concern (COC) Aquifer Cleanup Level (ACL) Exceedance Contour in µg/L.

- 5 Trichloroethene (TCE)
- Approximate location of the Upper 180-Foot Aquifer Groundwater Divide
- General Groundwater Flow Direction
- Roads
- Facilities
- Approximate extent of landfill areas
- Approximate Edge of Fort Ord - Salinas Valley Aquitard
- Former Fort Ord Boundary

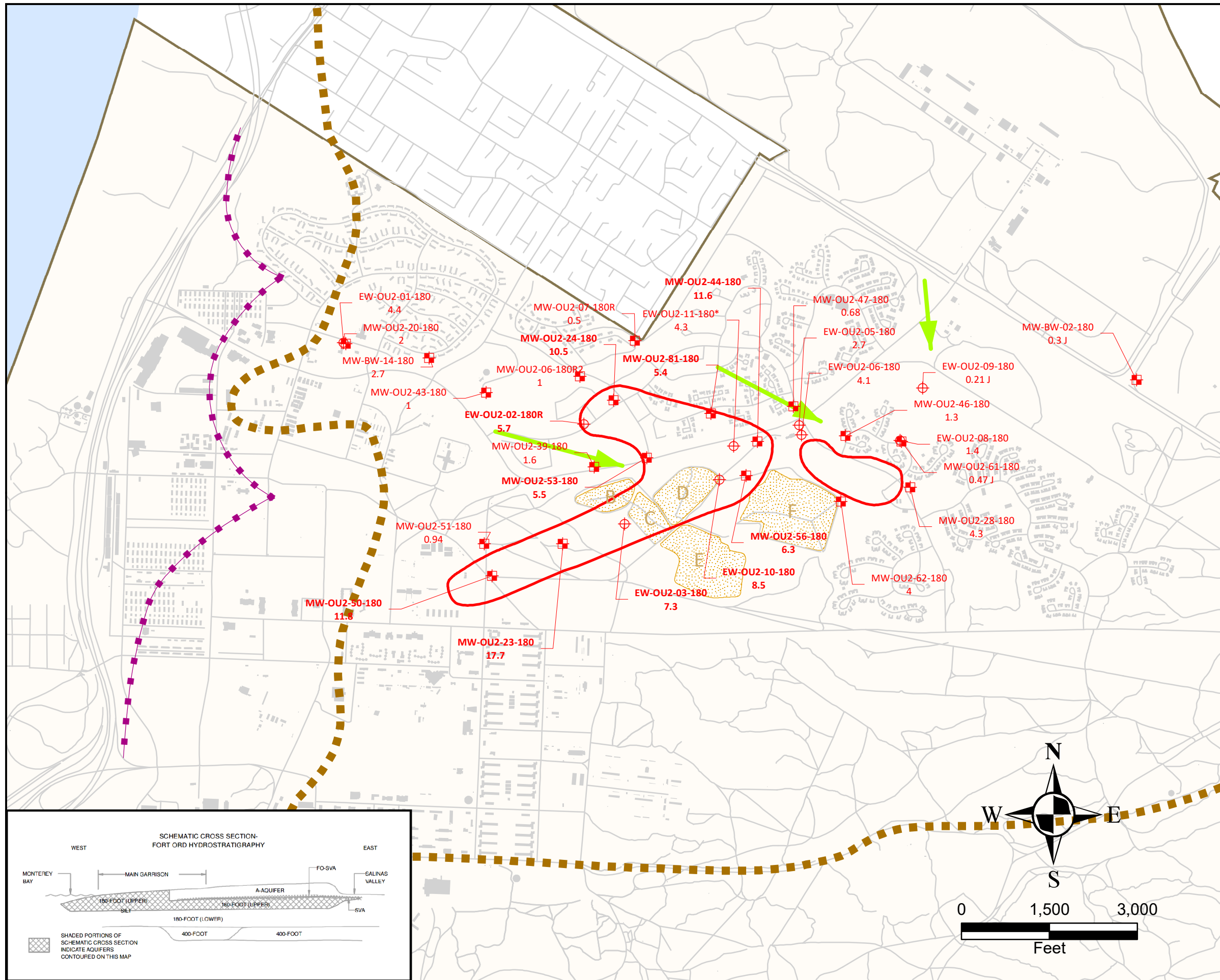
NOTES:

- (1) Groundwater samples were collected between March 2, 2020 and March 6, 2020.
- (2) Contours are based on one interpretation of the data that were available at the time this report was prepared; other interpretations may be possible.
- (3) Contours based on highest value obtained from multiple bags where applicable.

**TCE CONCENTRATIONS AND OTHER COC ACL EXCEEDANCES
UPPER 180-FOOT AQUIFER
First Quarter 2020**

Operable Unit 2 Remedy Monitoring and Operations and Maintenance, Fourth Quarter 2019 - Third Quarter 2020
Former Fort Ord, California

	Date: 11/23/2020	Figure: 43
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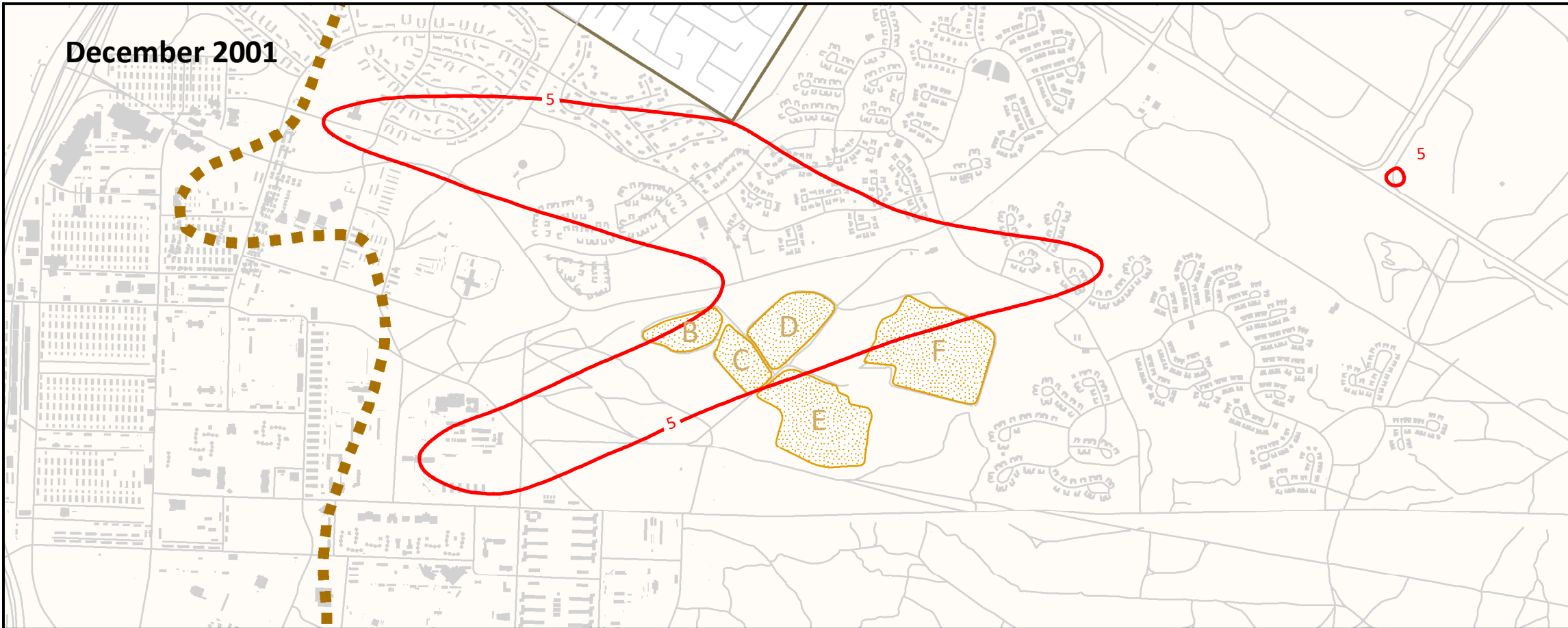
Explanation

- Extraction Well with TCE Detection
- Monitoring Well with TCE Detection
- Well ID - Bold When ACL Exceeded
(*Indicates: Sample not used for contouring)
- TCE concentration (µg/L) and lab qualifier.
- Monitoring Well with no COC ACL Exceedance and ND for TCE
- * Well is not used for contouring
- Chemical of Concern (COC) Aquifer Cleanup Level (ACL) Exceedance Contour in µg/L.
- 5 Trichloroethene (TCE)
- Approximate location of the Upper 180-Foot Aquifer Groundwater Divide
- General Groundwater Flow Direction
- Roads
- Facilities
- Approximate extent of landfill areas
- Approximate Edge of Fort Ord - Salinas Valley Aquitard
- Former Fort Ord Boundary

NOTES:
 (1) Groundwater samples were collected between June 1, 2020 and June 9, 2020.
 (2) Contours are based on one interpretation of the data that were available at the time this report was prepared; other interpretations may be possible.
 (3) Contours based on highest value obtained from multiple bags where applicable.

TCE CONCENTRATIONS AND OTHER COC ACL EXCEEDANCES
 UPPER 180-FOOT AQUIFER
 Second Quarter 2020
 Operable Unit 2 Remedy Monitoring and Operations and Maintenance, Fourth Quarter 2019 - Third Quarter 2020
 Former Fort Ord, California

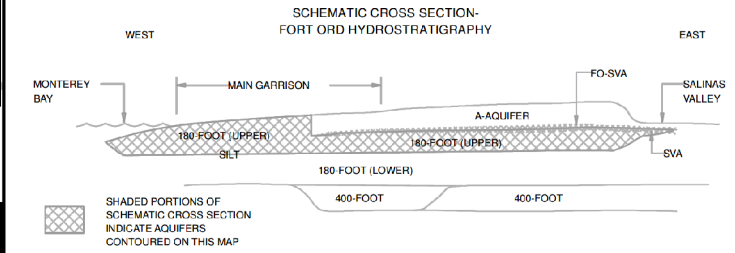
December 2001



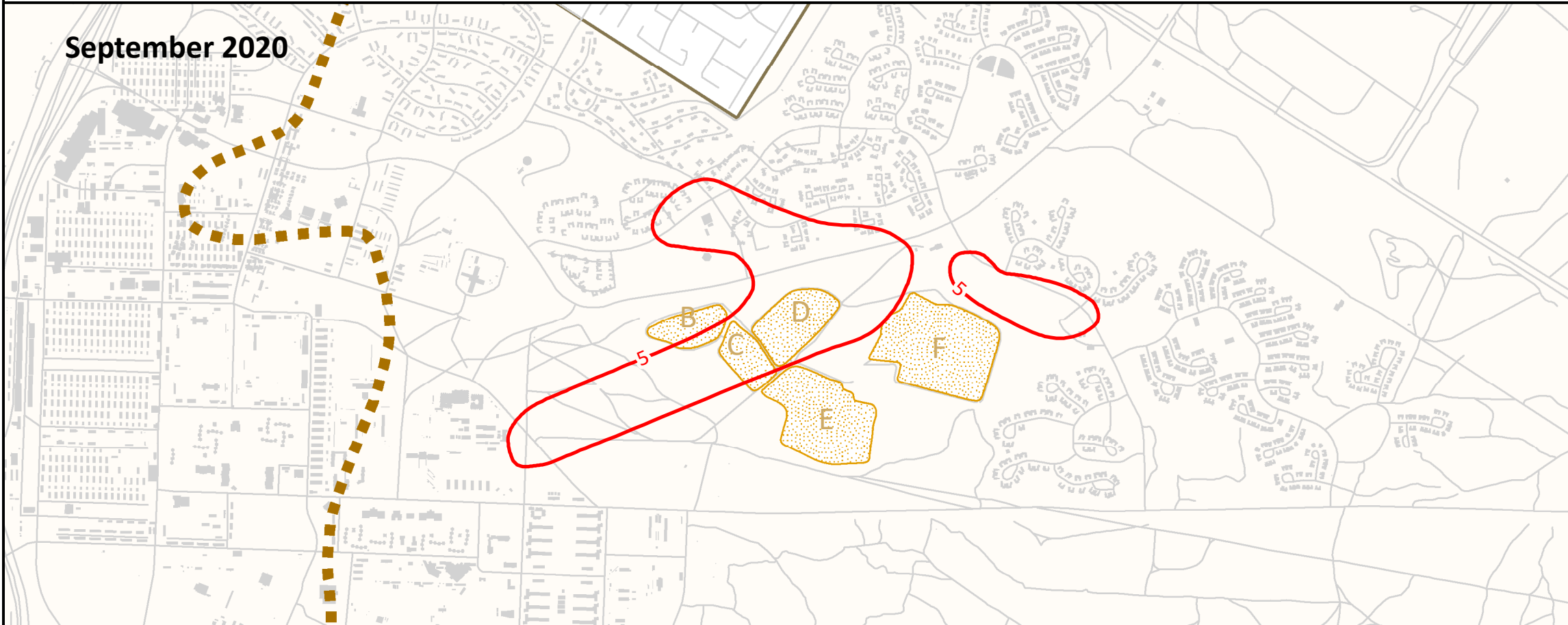
EXPLANATION

Chemical of Concern (COC) Aquifer Cleanup Level (ACL) Exceedance Contour in $\mu\text{g/L}$.

- 5 — Trichloroethene (TCE) (December 2001 Plume at Maximum Historical Extent)
- Approximate edge of Fort Ord - Salinas Valley Aquitard (FO-SVA) Boundary.
- Approximate Extent of Landfill Areas
- Roads
- Facilities
- Former Fort Ord Boundary

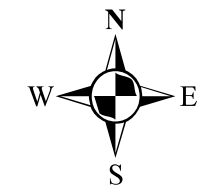
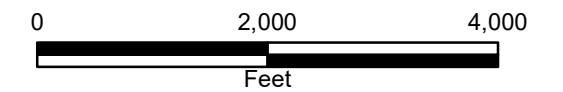


September 2020

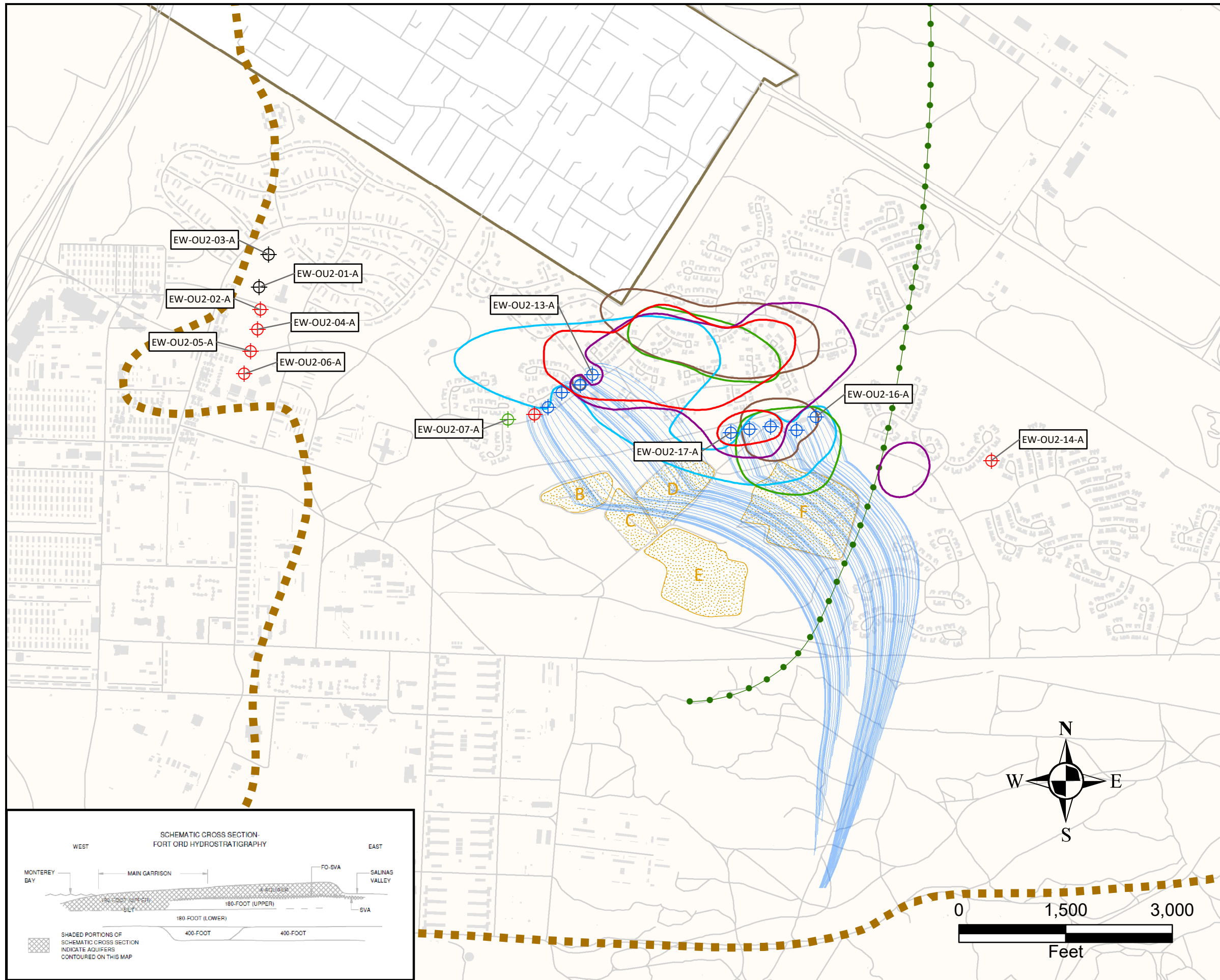


NOTES:

- (1) Contours are based on one interpretation of the data that were available at the time this report was prepared; other interpretations may be possible.
- (2) December 2001 Contour is at maximum historical extent.



CURRENT AND HISTORICAL MAXIMUM TCE PLUME EXTENT,
OU2 UPPER 180-FOOT AQUIFER,
DECEMBER 2001 AND SEPTEMBER 2020
Operable Unit 2 Remedy Monitoring and Operations and
Maintenance, Fourth Quarter 2019 - Third Quarter 2020
Former Fort Ord, California



Explanation

- No Pump - Low COCs
- Not Operated - Low COCs
- Not Operated - Not Connected
- Operated

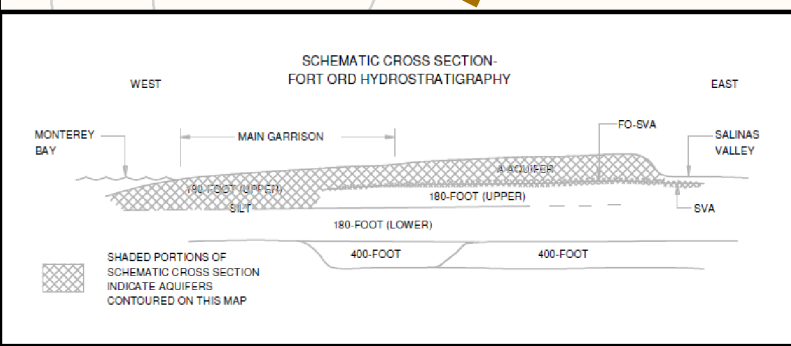
Chemical of Concern (COC) Aquifer Cleanup Level (ACL) Exceedance Contour in µg/L.

- 5 Trichloroethene (TCE)
- 3 Tetrachloroethene (PCE)
- 5 1,1-Dichloroethane (1,1-DCA)
- 0.5 1,2-Dichloroethane (1,2-DCA)
- 0.1 Vinyl Chloride (VC)

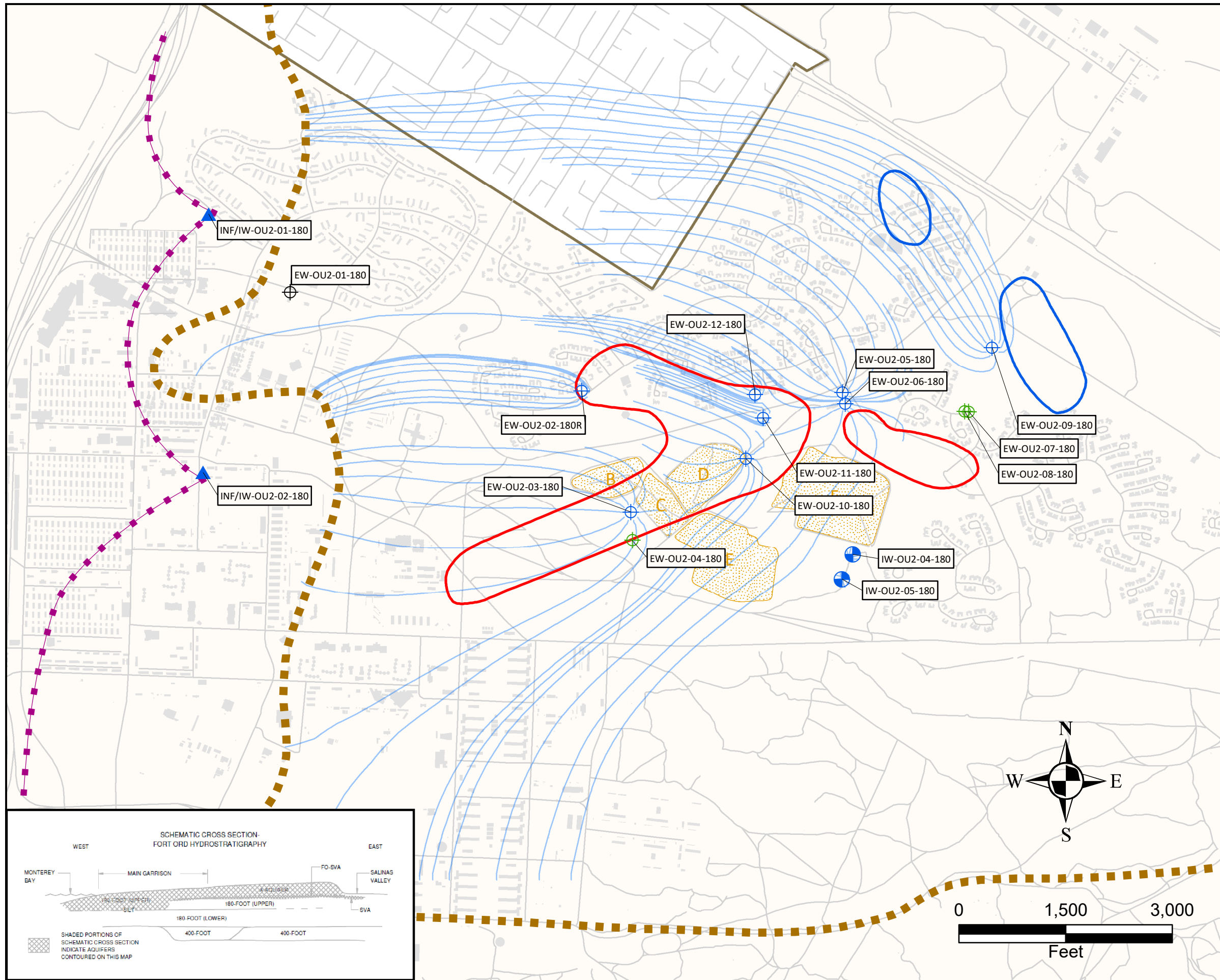
- Simulated Groundwater Capture A - Aquifer
- Approximate location of the A-Aquifer Groundwater Divide
- Approximate Edge of the Fort Ord - Salinas Valley Aquitard
- OU2 Landfill Areas B through F
- Facilities
- Roads
- Former Fort Ord Boundary

NOTES:






- (1) Groundwater samples were collected between August 31st, 2020 and September 23rd, 2020.
- (2) Simulated Groundwater Capture A - Aquifer created by ACOE.





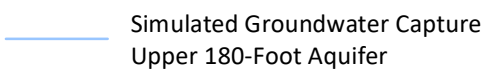
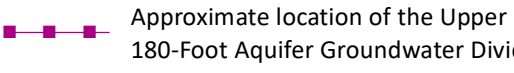
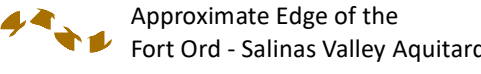
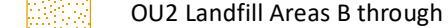



SIMULATED GROUNDWATER CAPTURE
A-AQUIFER
Third Quarter 2020
Operable Unit 2 Remedy Monitoring and Operations and
Maintenance, Fourth Quarter 2019 - Third Quarter 2020
Former Fort Ord, California



Explanation

-  No Pump - Low COCs
-  Not Operated - Low COCs
-  Operated
-  Infiltration Gallery/Injection Wells
-  Injection Wells

Chemical of Concern (COC) Aquifer Cleanup Level (ACL) Exceedance Contour in $\mu\text{g/L}$.


-  5 Trichloroethene (TCE)
-  0.5 Carbon Tetrachloride (CT)
-  Simulated Groundwater Capture Upper 180-Foot Aquifer
-  Approximate location of the Upper 180-Foot Aquifer Groundwater Divide
-  Approximate Edge of the Fort Ord - Salinas Valley Aquitard
-  OU2 Landfill Areas B through F
-  Facilities
-  Roads
-  Former Fort Ord Boundary

NOTES:

- (1) Groundwater samples were collected between August 31st, 2020 and September 23rd, 2020.
- (2) Simulated Groundwater Capture Upper 180 - Foot Aquifer created by ACOE.

0 1,500 3,000

Feet



WEST EAST

MONTEREY BAY MAIN GARRISON FO-SVA SALINAS VALLEY

180-FOOT (UPPER) 180-FOOT (UPPER)

SILT 180-FOOT (LOWER) SVA

400-FOOT 400-FOOT

SHADED PORTIONS OF SCHEMATIC CROSS SECTION INDICATE AQUIFERS CONTOURED ON THIS MAP

SIMULATED GROUNDWATER CAPTURE

UPPER 180-FOOT AQUIFER

Third Quarter 2020

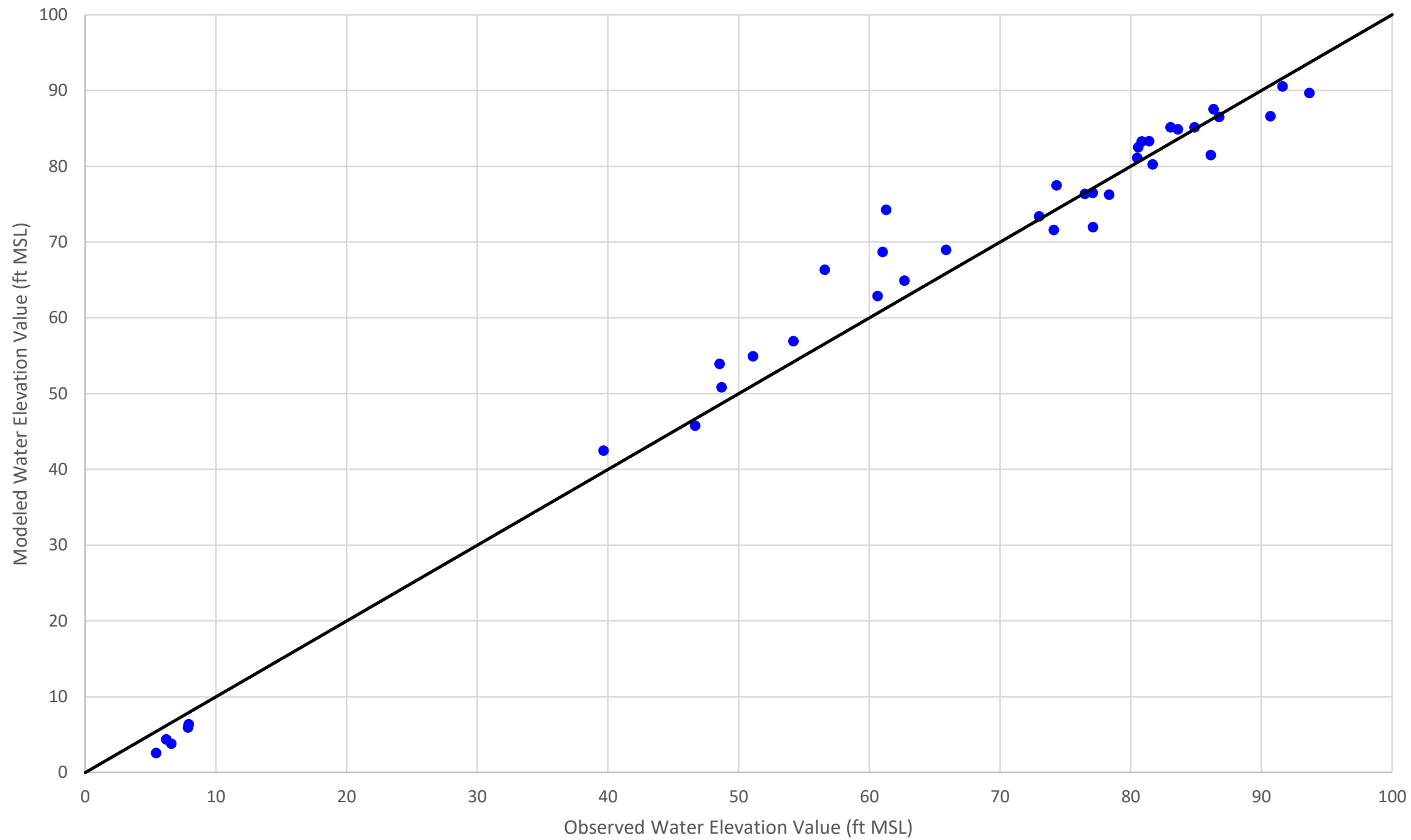
Operable Unit 2 Remedy Monitoring and Operations and Maintenance, Fourth Quarter 2019 - Third Quarter 2020

Former Fort Ord, California

Ahtna

Date: 12/16/2020

Figure: 48



EXPLANATION

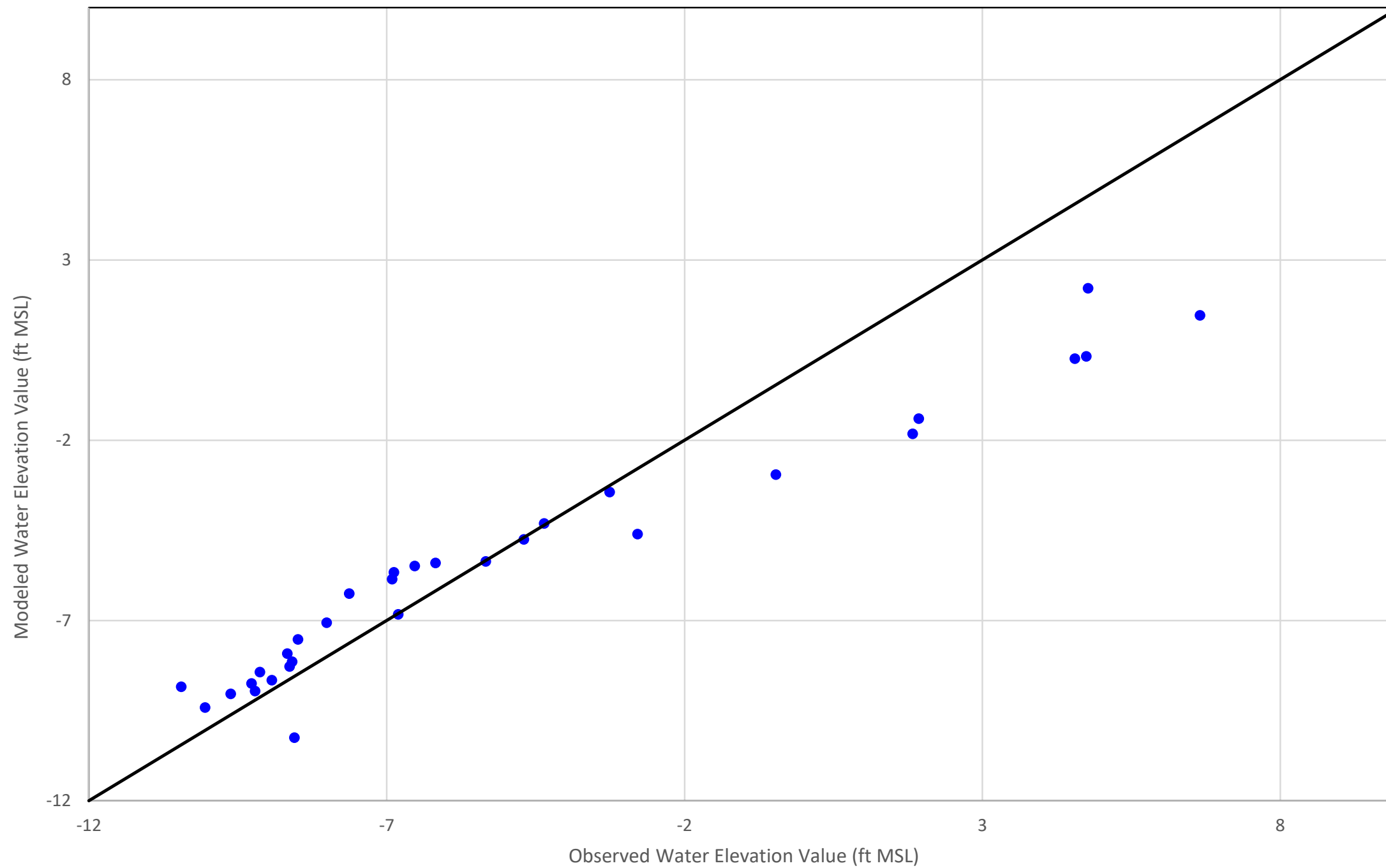
- A-Aquifer Observed vs Modeled Water Elevation (ft MSL)
- 1:1 Reference Line

OBSERVED VS MODELED GROUNDWATER ELEVATION VALUES OPERABLE UNIT 2 A-AQUIFER

Operable Unit 2 Remedy Monitoring and Operations and Maintenance, Fourth Quarter 2019 through Third Quarter 2020, Former Fort Ord, California

EXPLANATION

- Upper 180-Foot Aquifer Observed vs Modeled Water Elevation (ft MSL)
- 1:1 Reference Line

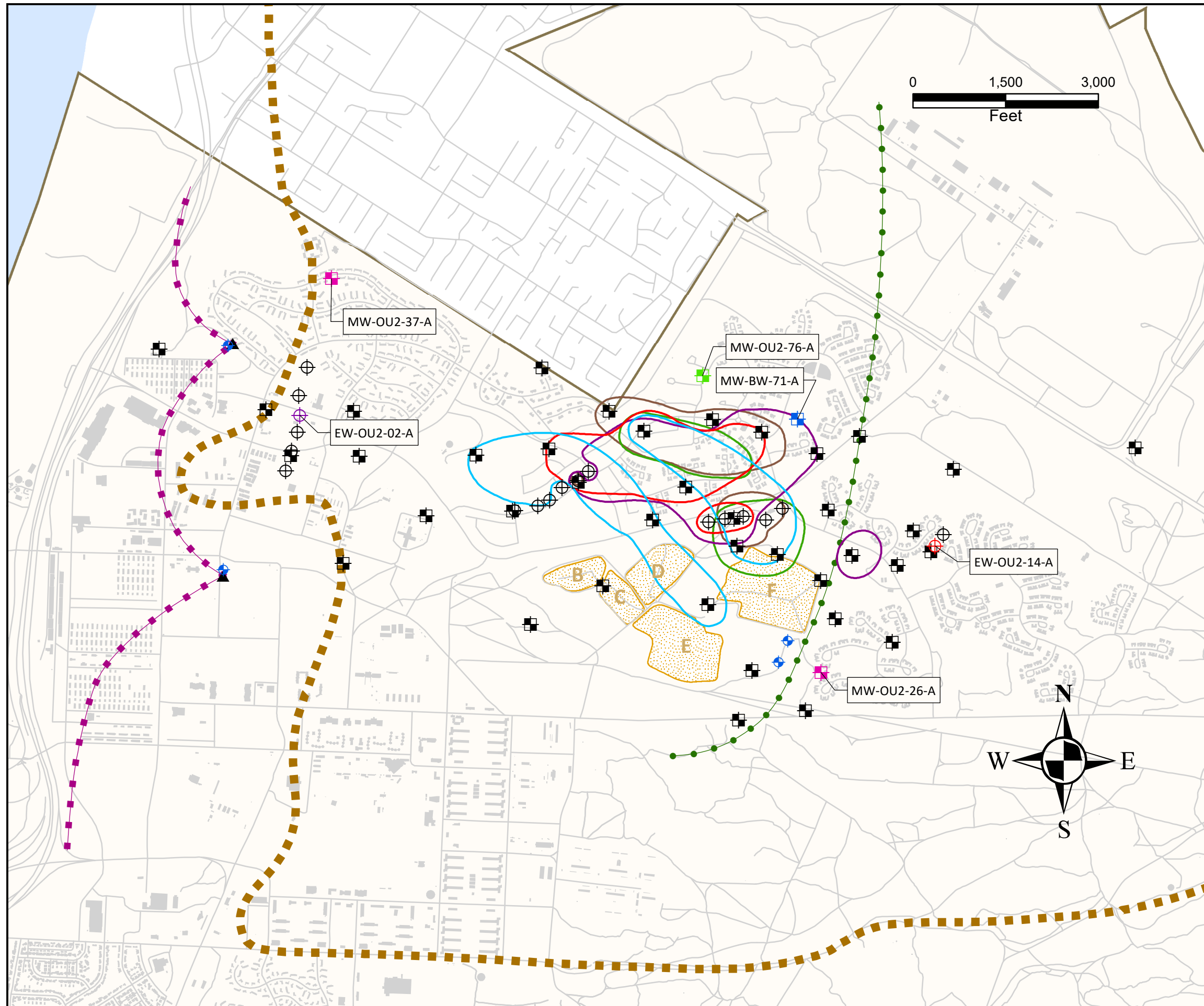


OBSERVED VS MODELED GROUNDWATER ELEVATION VALUES OPERABLE UNIT 2 UPPER 180-FOOT AQUIFER
Operable Unit 2 Remedy Monitoring and Operations and Maintenance, Fourth Quarter 2019 through Third Quarter 2020, Former Fort Ord, California

Ahtna

Date: 3/26/2021

Figure: 50



EXPLANATION

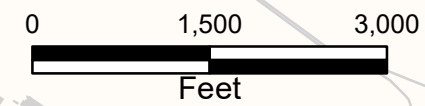
- Extraction Well; sample quarterly once connected to GWTP
- Extraction Well; convert to monitoring well and sample quarterly
- Monitoring Well; move from OUCTP report to OU2 report and sample quarterly
- Monitoring Well; decommission, unable to sample or measure water level due to obstruction
- Monitoring Well; recommend sample quarterly due to increasing COC concentrations south of the well
- Extraction Well
- Monitoring Well
- Infiltration Wells
- Injection Wells

Chemical of Concern (COC) Aquifer Cleanup Level (ACL) Exceedance Countour in µg/L.

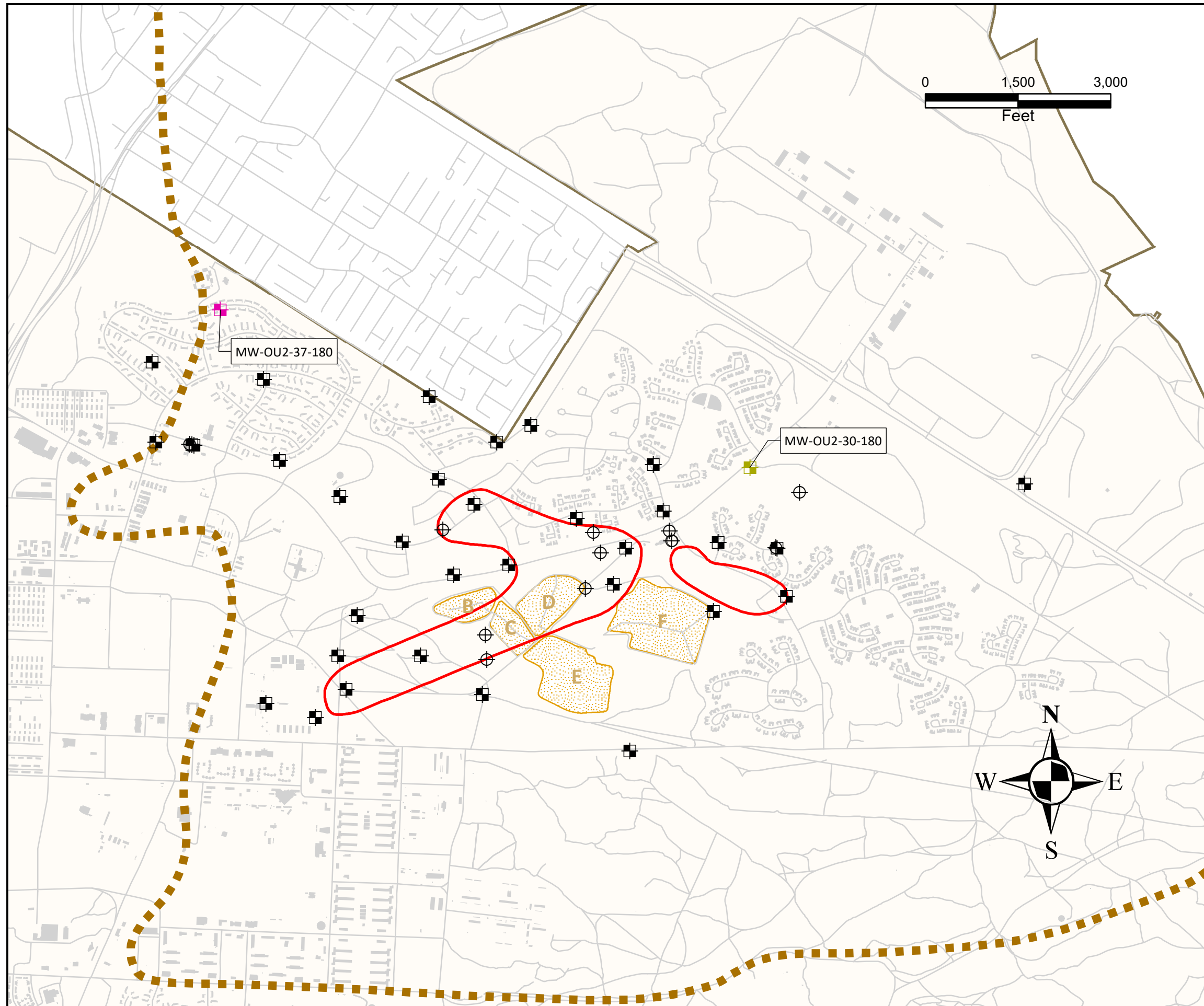
- 5 Trichloroethene (TCE)
- 3 Tetrachloroethene (PCE)
- 5 1,1-Dichloroethane (1,1-DCA)
- 0.5 1,2-Dichloroethane (1,2-DCA)
- 0.1 Vinyl Chloride (VC)

- Approximate location of the A-Aquifer Groundwater Divide
- Approximate location of the Upper 180-Foot Aquifer Groundwater Divide

- Former Fort Ord Boundary
- Approximate Extent of OU2 Landfill
- Approximate Edge of the Fort Ord - Salinas Valley Aquitard
- Facilities
- Roads



RECOMMENDED A-AQUIFER MONITORING WELL CHANGES
 Operable Unit 2 Remedy Monitoring and Operations and Maintenance, Fourth Quarter 2019 - Third Quarter 2020
 Former Fort Ord, California



EXPLANATION

- Monitoring Well; move from OU2 Report to OUCTP report
- Monitoring Well; decommission, unable to sample or measure water level due to obstruction
- Extraction Well
- Monitoring Well
- Piezometer

Chemical of Concern (COC) Aquifer Cleanup Level (ACL) Exceedance Contour in µg/L.

- 5 Trichloroethene (TCE)
- Former Fort Ord Boundary
- Approximate Extent of OU2 Landfill
- Approximate Edge of the Fort Ord - Salinas Valley Aquitard
- Facilities
- Roads

RECOMMENDED UPPER 180-FOOT AQUIFER MONITORING WELL CHANGES

Operable Unit 2 Remedy Monitoring and Operations and Maintenance, Fourth Quarter 2019 - Third Quarter 2020
Former Fort Ord, California

Ahtna

Date: 1/4/2021

Figure: 52

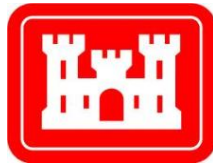
Appendices

Appendix A

Landfills Inspection Report 2020

Operable Unit 2 Annual Landfills Inspection Report Fourth Quarter 2019 through Third Quarter 2020

Former Fort Ord, California



Prepared for:
U.S. Army Corps of Engineers
Sacramento District
1325 J Street
Sacramento, CA 95814-2922

USACE Contract No. W91238-C-19-0027
Task No. 5.1



Prepared by:
Ahtna Global, LLC
9699 Blue Larkspur Lane, Suite 201
Monterey, CA 93940-6552

Date: **February 12, 2021**
Version: **Preliminary Draft**

Certification

Document Title: **Operable Unit 2 Annual Landfills Inspection Report
Fourth Quarter 2019 through Third Quarter 2020
Former Fort Ord, California**

Prime Contractor: Ahtna Global, LLC

USACE Contract No. W91238-C-19-0027

Task No. 5.1

In accordance with the Operation and Maintenance Plan, Operable Unit 2 Landfills, Former Fort Ord, California, and Title 27 of the California Code of Regulations, I certify that, to the best of my knowledge, the data and information presented in this report are accurate and complete and have been prepared in accordance with applicable regulations.¹

Derek S. Lieberman, P.E. Certificate No. C 57417,
QSD/P Certificate No. 20527
Engineer of Record
Ahtna Global, LLC

¹ In accordance with the Professional Engineers Act, Chapter 7, Article 3, Section 6735.5, the use of the word “certify” or “certification” by a registered professional engineer in the practice of professional engineering or land surveying constitutes an expression of professional opinion regarding those facts or findings which are the subject of the certification, and does not constitute a warranty or guarantee, either expressed or implied.

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1.0 Introduction

This report is part of the operations and maintenance (O&M) procedures for the Operable Unit 2 (OU2) Fort Ord Landfills, as described in the *Operation and Maintenance Plan Revision 3, Operable Unit 2 Landfills, Former Fort Ord, California* (O&M Plan; AEI, 2019b), and summarizes O&M inspection activities and findings for October 1, 2019 through September 30, 2020 (the “reporting period”). Additional information on the annual inspection requirements, including location maps, drawings, details, and inspection and maintenance activities, is included in the O&M Plan.

As part of continuing maintenance at the Fort Ord Landfills, weeds at the drainage structures are removed, areas around surface features such as service roads, vents, vaults, wells, and probes are mowed, burrowing animals are trapped, service roads are maintained, and the perimeter security fence is repaired when damaged by vandals or animals.

Landfill gas (LFG) monitoring and control were performed in accordance with the O&M Plan and are reported separately.

2.0 Landfills Inspection Frequency and Triggers

Inspections are performed annually at a minimum, and also after major storm events (rainfall greater than 2 inches in 24 hours), earthquakes (greater than Magnitude 3.0 and Modified Mercalli Intensity of V), windstorms (sustained wind speeds greater than 30 miles per hour), or onsite fires. The initial inspection of the Fort Ord Landfills was carried out on August 3, 2020. A subsequent or follow-up inspection was carried out on September 25, 2020 to evaluate the condition of the Fort Ord Landfills after maintenance actions in the reporting period. There were no major storm events, earthquakes, windstorms, or onsite fires at the Fort Ord Landfills during the reporting period.

2.1 Earthquakes

Typically, landfill covers (and geomembranes) have performed well in large seismic events. After the Loma Prieta earthquake (Magnitude 7.1) in 1989, the California Integrated Waste Management Board studied the earthquake’s effect on ten landfills from Salinas to the San Francisco Bay Area in California. Some of the relevant conclusions of the study were:

- The Loma Prieta earthquake was a major seismic event.
- Acceleration and duration of the earthquake are the most important factors.
- Even with a peak ground acceleration of 0.54g, effects were limited to minor surface damage.²
- Solid waste contained in landfills may dampen or attenuate earthquake effects.

From U.S. Geological Survey (USGS) records, the largest earthquake within 30 miles of the Fort Ord Landfills during the reporting period was a Magnitude 4.7 at 10.1 kilometers (6.3 miles) depth, 17 kilometers (10.6 miles) south-southeast of Tres Pinos, California on October 15, 2019. The epicenter of

² The peak acceleration is the largest increase in ground velocity recorded by a particular station during an earthquake, where g = acceleration due to the force of gravity (9.81 meters per second per second).

this earthquake was approximately 45.4 kilometers (28.2 miles) east of the Fort Ord Landfills and the USGS determined shaking at this distance was weak (Modified Mercalli Intensity of III), with a low likelihood of casualties and damage (USGS, 2021). No damage from the seismic event was observed on the vegetative cover, drainage ditches, downdrains, perimeter service roads, LFG probes, and other features at the Fort Ord Landfills.

2.2 Storm Events

Local and statewide drought conditions led to less than normal precipitation in water years 2012 through 2015; however, water years 2016, 2017, and 2019 reached normal and above-normal precipitation with precipitation at 136 percent of average for the California Central Coast in water year 2019.³ This resulted in minor to significant erosion on parts of the vegetative cover on the Fort Ord Landfills in the previous reporting period (AGL, 2021). In water year 2020, precipitation was 81 percent of average for the California Central Coast. During and after rain events, rainwater infiltrates the vegetative cover down to the linear low-density polyethylene (LLDPE) geomembrane, and from there by gravity the water migrates downslope. This drainage pathway is most apparent during water years with above-normal precipitation, where surface and subsurface stormwater runoff can undermine the vegetative cover; however, this did not occur during the reporting period (see Section 3.2).

3.0 Landfills Inspection Findings

The initial annual inspection was performed on August 3, 2020 by a California Registered Professional Engineer, Derek S. Lieberman, Certificate No. C 57417. After the inspection, the engineer met with site personnel to discuss deficiencies and scheduled a follow-up inspection for September 25, 2020. Comments from the inspections are included in Table 1, Form 1, and Form 2. The comments pertain to the locations shown in Figures 1, 2, and 3. Photographs show site conditions both during the initial inspection and the follow-up inspection.

3.1 Burrowing Animal Control

Burrowing animals, such as ground squirrels and gophers, disturb the vegetation root systems that hold the vegetative cover soil in place and increase the likelihood of erosion (Photograph 1). During heavy rains, these burrows collect stormwater runoff and can accelerate soil erosion from concentrated drainage flows. Additional vegetative cover damage may be caused by predators, such as bobcats and foxes, digging into the burrows in pursuit of prey. Maintenance personnel actively trap squirrels and fill in burrows in critical areas, such as drainage inlets and channels, as part of landfill cover maintenance to reduce the impact of burrowing animals on the vegetative cover. However, controlling burrowing animals is difficult against a large population of animals. Critical areas requiring burrowing animal control are:

³ Water Year: time period of 12 months from October 1 through September 30 for which precipitation totals are measured. The California central coast received 67%, 56%, 47%, 73%, 90%, 150%, and 59% of the historic average precipitation for the 2012 through 2018 water years, respectively, but 136% of the historic average precipitation for the 2019 water year (DWR, 2012 to 2019).

- Drainage swales leading to concrete inlet catch basins
- Berms along the swales, in particular at the downdrain inlets
- Sides of concrete V-ditches
- Steep sections of perimeter service roads armored with aggregate base
- Side slopes destabilized by the burrows

Two surplus utility poles, about 30 feet high, were installed on the north side of Area F in 2011 as perches for predatory birds (Photograph 2), such as the common western red-tailed hawk (*Buteo jamaicensis*). Red-tailed hawks usually search for prey from elevated perches and generally forage in open habitats containing lagomorphs (hares and rabbits), small rodents, and snakes. Consequently, they commonly occupy areas that provide a relative abundance of potential perching sites. Forty percent or more of the average red-tailed hawk home range contains at least ten perches per 40 acres (Tesky, 1994). The hawks are frequent visitors to the Fort Ord Landfills and provide additional help with pest control.

Barn Owl (*Tyto alba*) nest boxes and raptor perches were installed at twenty locations around the Fort Ord Landfills in 2017 (Photograph 2). Additional raptor perches were installed in 2018 and 2020 for a total of 27 perches, which achieved the desired density of ten perches per 40 acres of landfill area. The Barn Owl is an effective hunter and preys upon a variety of small mammals, including gophers and voles. Like most owls, Barn Owls are nocturnal hunters and, despite their smaller size, a high metabolic rate allows them to eat up to one-fourth of their body weight in prey each day. A nesting pair of Barn Owls may consume over 1,000 individuals of the pest species of interest in a single year, not including food consumed by juvenile owls. Once a nest box is established on a property it has more than a 40 percent chance of being occupied within the first six months, and once a Barn Owl nests there, it will typically remain in the area year-round (Tillmann, 2012).

Even if raptors consume rodents at the rates noted above, it is unlikely to completely inhibit the negative effects of burrowing animals at the Fort Ord Landfills without some other form of pest control (i.e., trapping). However, because of the low costs associated with the establishment of raptor populations using perches and nest boxes, it is expected the benefits will outweigh the costs of this integrated pest management strategy.

Compared to the side slopes, flat areas, such as the internal areas of the Fort Ord Landfills, do not require urgent attention for pest control, though burrowing is still disturbing the cover soil. At the time of the initial inspection, numerous burrows were apparent on the side slopes. In 2015, a smooth, steel drum compactor was used on the side slopes to collapse the burrows and trap rodents underground; however, this action appeared to have damaged vegetative cover on the side slopes. Therefore, rolling and compaction have not been done in subsequent years.

3.2 Slope Stability

In 1996, the U.S. Department of the Army approved a redesign of the Landfills engineered cover system that included reducing the side slope gradient from 3:1 to 4:1. The purposes of the reduced gradient

were to improve the ease of maintenance and safety during routine vegetative cover mowing and to minimize erosion of the vegetative cover, including sloughing and slope failure.

Slope stability issues occurred in 2016 and 2017 on the western side of Area E and the northern side of Area F. Eroded portions of the vegetative cover were repaired in 2017 to match the existing cover on Areas E and F and subdrain systems were installed at the crest of the western slope of Area E and the crest of the northern slope of Area F to capture subsurface water and redirect it to prevent migration downslope, which could result in slope instability (AEI, 2018).

The Fort Ord Landfills experienced no significant slope stability issues in the 2018 water year when there was less precipitation; however, the northern side of Area F that was repaired in 2017 destabilized in February 2019 due to a significant increase in precipitation in the 2019 water year and animal burrows undermining the downdrain. The slope in this area was repaired in July 2019 (Ahtna, 2021) and no erosion issues occurred in this area during the reporting period; however, animal burrows are prolific in this area (Photograph 3).

On April 6, 2020, erosion related to a storm event was observed on the eastern side of Area E (Photograph 4), which was repaired on April 24, 2020 (Photograph 5). Areas B, C, D and other parts of Areas E and F were also inspected and no slope stability issues were observed (Photographs 6 through 12).

3.3 Drainage Systems

Fort Ord Landfills cover drainage systems include a series of swales, berms, brow ditches, and downdrain pipe inlets set in concrete catch basins on the top decks (Figures 1, 2, and 3) with riprapped downdrain outlets at the bottom of side slopes at Areas D, E, and F (Photographs 13 through 33), and concrete-lined V-ditches in strategic locations around Areas D and E (Figures 1 and 2, Photographs 34 through 44). In 2015, Fort Ord Landfills cover drainage system repairs were implemented, including installation of additional concrete-lined V-ditches, an armored swale, armored steep grades on perimeter service roads, and a concrete discharge apron with a riprap outlet on the east side of Area E (Figure 2, Photographs 37 through 39). As noted in Section 3.2, subdrain systems were installed at Area E and Area F in 2017 to mitigate subsurface migration of water that could cause slope instability (Figures 2 and 3). The Area E subdrain discharges to the Area E southwestern V-ditch (Photograph 39) and the Area F subdrain discharges to a riprapped downdrain outlet (Photograph 27). The Area E northern and western V-ditches discharge to an infiltration basin at the western extent of Area E and adjacent to Engineer Equipment Road (Photographs 45 and 46). Drainage systems for Engineer Equipment Road include a swale along the southeast edge of Area C with inlets at the southeast corner of Area C (Photographs 47 through 50).

Perimeter drainage systems appear to be operating effectively, with downdrain outlets previously obstructed with sediment and vegetation having been cleared, though specific drainage outlets at Area C (Photograph 50), Area D (Photographs 16 and 35), Area E (Photographs 21, 42, 45), and Area F (Photographs 26, 29, and 31) remain partly obstructed.

3.4 Vegetative Cover

In accordance with the O&M Plan (AEI, 2019b) and with the concurrence of the Army Base Realignment and Closure (BRAC) Office biologist, the Fort Ord Landfills cover was not mowed in 2016 to allow vegetation an opportunity to recover from drought conditions and reduce rodent activity. In August 2020, after consultation with the BRAC Office biologist, limited mowing was conducted on the northeast corner of Area D, the southwest part of Area F, around surface features (service roads, LFG vents, vaults, monitoring wells, and LFG probes), and along the fence line.

Invasive shrubbery, such as Jubata grass, French broom, and ice plant, is usually controlled by spraying with herbicide, with the Bureau of Land Management (BLM) performing this work at least once per year. Invasive vegetation, such as willows and pampas grass, and woody vegetation, such as oak trees (Photograph 51) are eradicated when found. Weeds and shrubs are mostly under control but have historically proliferated in the downdrain inlets (Photographs 13, 15, 17, 19, 28, and 30). When found, these weeds are cut and removed, or treated with herbicide and cut off at the surface after dying.

Vegetative cover was observed to be in good condition overall at the Fort Ord Landfills, though there is some disturbance due to burrowing animal activity as described in Section 3.1 and areas of sparse vegetation (Photographs 52 through 62). In April and May 2019, ITSI Gilbane (under contract with the U.S. Army Corps of Engineers) placed approximately 500 cubic yards of range-related demolition debris in the Area E Phase 2 area and covered the debris with a minimum of 12 inches of clean imported soil (Photograph 59). A permanent engineered cover system, including LLDPE geomembrane and vegetative cover, will be constructed over the Phase 2 area after remedial actions at Site 39 are complete (AEI, 2019b).

3.5 Settlement

At least one settlement monitoring plate is installed on each landfill area and survey markers are located on the north side of Area D (Figure 1) and the east side of Area F (Figure 3). Settlement monitoring plates are marked with an orange survey marker stake. The plates and markers appeared in good condition (Photographs 63 through 73).

The Fort Ord Landfills accepted decomposable waste from 1956 to 1987 in a typical trench landfill. Area E accepted decomposable waste from 1966 to 1975. From 1996 to 1998, waste from Area A, an approximately 25-acre area north of Imjin Parkway, was excavated, transferred, and consolidated into Areas B through F south of Imjin Parkway, which allowed for clean closure of Area A (IT, 2001). Most of the long-term settlement in the waste trenches on the older landfill Areas B, C, and D had already occurred before construction of the engineered cover system in 1997 and 1998. Prior to placement of remediation waste, the existing waste trench locations were evident as long, parallel depressions between clean soil ridges. The waste disposal method often involved a single piece of equipment, such as a track-type tractor or dozer, which would excavate a trench for disposal of waste.

The level of waste compaction is unknown but did not likely follow typical waste compaction methods used at modern landfills. The waste would be mostly loosely compacted and therefore susceptible to

large settlement over the subsequent years. Typically, 20 percent of waste settlement occurs in the first 5 years after disposal as decomposition reduces the waste volume. Even though most of the waste settlement may have occurred before placement of remediation waste, settlement is still occurring. Waste trench settlement is mostly evident in Area F when driving on the undulating service roads at the center of the landfills (Photograph 74). Because of the settlement on Area F, periodic adjustment of the LFG collection pipe has been made, most recently in July 2019, so that the condensate continues to drain and LFG flows unhindered (Ahtna, 2021). Settlement on Areas B, C, D, and E has not been problematic.

An iso-settlement map of the Fort Ord Landfills was completed in 2018. The map shows limited differential settlement and demonstrates the design and construction of the Fort Ord Landfills engineered cover system is sufficient. The engineered cover system consists of about two feet of vegetative cover over a 60-mil (60 thousandths of an inch) thick LLDPE geomembrane designed to stretch with settlement. The numerical extent of settlement is within the design tolerances of the LLDPE geomembrane and no corrective action is needed (AEI, 2019a).

3.6 Perimeter Service Roads

The Fort Ord Landfills perimeter service roads are generally graded into the native *in situ* sandy soil. Many segments of these roads were created as through cuts; therefore, any drainage that is directed or captured in the roadway is concentrated and does not have a conduit to exit the road. In some areas, aggregate base was placed to improve road stability and concrete-lined V-ditches were also constructed to mitigate erosion. Synthetic fiber rolls were installed at critical locations and found to be effective in minimizing erosion (Photograph 75). In areas of more extensive erosion, coarse aggregate and straw bales were installed as temporary measures to mitigate further erosion; however, more permanent drainage and erosion control measures were implemented at Areas B and F in 2019 (Ahtna, 2021) and Areas C, D, and F in 2020 (Photographs 76 through 81). Erosion rills were regraded and backfilled, the *in situ* subgrade was scarified, moisture conditioned and compacted, and a 6-inch section of Class II aggregate base was added and compacted. A stabilization geotextile was installed at the interface of the sandy *in situ* soil and aggregate base to increase road stability.

Surface drainage was improved by crowning, insloping, outsloping, and constructing cross-drains in sections of the perimeter service roads as appropriate. Reverse grade (rolling) dip cross-drains (water bars) are effective for dispersing surface water on roads with grades less than 20%. Rolling dips were excavated out of the existing road grade perpendicular to the road, outsloped 3-5 percent with the outlet areas protected with rip rap, and spaced approximately 50 feet apart.

4.0 Summary and Maintenance Recommendations

4.1 Summary

The results of the O&M inspection indicate the Fort Ord Landfills are performing satisfactorily with the following findings:

- Eighteen Barn Owl nest boxes and six raptor perches were constructed at the Fort Ord Landfills in 2017 and additional raptor perches were installed in 2018 and during the reporting period for a total of 27 perches, which achieves the desired density of ten perches per 40 acres of landfill area. However, burrowing animals are an ongoing problem and control needs to be continued indefinitely.
- Side slopes are generally stable.
- Weed growth at downdrain inlet catch basins may inhibit drainage from the top decks.
- Vegetation is established in most areas; however, due to the drought, poor soil, and lack of nutrients, there are areas of sparse vegetation.
- Perimeter drainage systems appear to be operating effectively; however, some downdrain outlets are partly blocked.
- Downdrain systems are designed to capture surface runoff and do not mitigate subsurface saturation of the vegetative cover.
- Settlement is evident by depressions over waste trenches and undulating service roads on the landfill cover. No waste has been exposed and failure of the LLDPE geomembrane was not observed.
- Settlement monitoring plates and survey markers appeared in good condition, though settlement monitoring plates tend to become obscured by vegetation or covered by soil due to burrowing animal activity or wind action.
- Perimeter service roads around Areas C, D, and F had erosion channeling in some locations that was repaired after the reporting period.
- The perimeter fence is in place and functioning effectively.

4.2 Maintenance Recommendations

Maintenance recommendations are summarized as follows:

- Continue control of burrowing animals by removing gophers and squirrels.
- Continue mitigating for burrows near downdrains, downdrain inlets, and drainage swales for runoff entry points because these have previously initiated erosion on the side slopes.
- Cut and remove weeds at downdrain inlets and transition aprons, or treat weeds with herbicide and cut off at the surface after dead.
- Monitor new growths of invasive plant species and spray with herbicide as soon as possible after emerging. Confirm BLM will continue spraying brush and invasive weeds with herbicide. Remove dead vegetation when dried out.
- Locate and remove woody shrubs from the vegetative cover.
- Remove vegetation and sediment buildup at downdrain outlets and V-ditches.
- Maintain new rock-lined drainage swales adjacent to Areas B, C, D, and F perimeter service roads.
- Monitor the performance of subdrain systems on Areas E and F to mitigate subsurface saturation of the vegetative cover.

- Monitor vegetation recovery in the Phase 1 area of Area E where range-related debris was placed.
- Monitor the Phase 2 interim cover on Area E for erosion and maintain at least one foot of clean, compacted soil over the impacted soil area.
- Monitor vegetation recovery on the north side of Area D where the vegetative cover was disturbed during OU2 groundwater treatment system construction activities.
- Clear soil, debris, and vegetation away from settlement plates and survey monuments, and ensure orange survey marker stakes are secure.
- Stamp or engrave identification numbers on settlement plates and survey monuments, or stencil on concrete pads.

5.0 References

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Table

Table 1. 2020 Maintenance Inspection Recommendations, Fort Ord Landfills

Post-Closure Activity	Applicable Regulation	Monitoring Frequency	Identification of Problem Areas	Post-Closure Maintenance Recommendation	Recommended Scheduled Maintenance, Activity, or Event
Site Security	27 CCR §21135	Semiannually	None	None	None
Final Cover	27CCR §21090 27CCR §21140	Annually and after major events	Burrowing animals disturbing soil cover and vegetation and creating preferential flow paths for surface water drainage. Tall dense shrubs provide cover for small burrowing animals from predatory birds, coyotes, and cats.	Fill and collapse animal burrows. Continue trapping and removal of squirrels and gophers. Encourage natural predation of burrowing animals. Remove shrubs that provide cover for small burrowing animals. Promote growth of native grasses and ground cover by eradicating invasive shrubs using herbicide and cutting off at base when dead.	Fill and collapse animal burrows before start of winter rains. Remove shrubs, mow cover every 3 to 5 years at the direction of the Army biologist. Continue burrowing animal (pest) control (e.g., install additional perches for raptors).
Geomembrane	27CCR §21090	Annually and after major events	Ponding areas indicate geomembrane is under tension as waste below settles.	Monitor depth of settlement and calculate maximum allowable tension in geomembrane from settlement.	None at this inspection.
Final Grading	27CCR §21090 27CCR §21142	Annually and after major events	Monitor drainage at low points over settling waste trenches on Area F.	Ascertain if LFG line on Area F is draining correctly or needs re-leveling.	None at this inspection.
Settlement Monitoring	27CCR §21090	Prepare iso-settlement map 5 years after closure.	Settlement most noticeable on Area F ridge roads and Area F after rain and follows existing waste trench alignments. Water ponding on Area F.	Prepare an iso-settlement map of the landfill areas. Make further recommendations for Area F based on map and site observations. Ascertain if action is needed as settlement plates on landfill may not indicate settlement over waste trenches.	Perform an iso-settlement survey every 5 years and evaluate settlement, especially areas where water ponds after rain events.
Slope Stability	27CCR §21090 27CCR §21145	Annually and after major events	Burrows causing preferential flow paths for drainage. Slope stability problems observed on west side of Area E and north side of Area F.	Slope stability will be affected by burrowing animals disturbing the side slopes.	Control burrowing animals to minimize slope destabilization and sloughing.

Table 1. 2020 Maintenance Inspection Recommendations, Fort Ord Landfills

Post-Closure Activity	Applicable Regulation	Monitoring Frequency	Identification of Problem Areas	Post-Closure Maintenance Recommendation	Recommended Scheduled Maintenance, Activity, or Event
Drainage and Erosion Control	27CCR §21090 27CCR §21150	Annually and after major events	Monitor burrowing animal barriers (armor) at downdrain inlets.	Continue removing vegetation from armored areas around downdrain inlets. Use herbicide and do not physically pull vegetation which may disturb hardened underlying surface. See also recommendations for Final Cover.	See recommended maintenance for Final Cover. Inspect berms after major storm events and repair if breached.
Vegetative Cover	27CCR §21090	Annually and after major events	Non-native invasive plant species are common.	Eliminate non-native, invasive plant species, such as coyote brush, pampas grass, ice plant, and willows.	Work conducted annually by BLM. Confirm annual herbicide application.
LFG Monitoring and Control	27CCR §20921 27CCR §21160	Monitoring and control per separate plan	Settlement on Area F will impact condensate drainage in LFG pipe.	Check grade on LFG pipe on Area F. Re-level pipe or place pipe on adjustable supports.	Monitor LFG flow in pipe. Action may be required if condensate builds up and reduces pipe capacity.

Notes:

27CCR Title 27 California Code of Regulations
 BLM Bureau of Land Management
 LFG landfill gas
 “major event” major storm events, earthquakes, windstorms, or onsite fires

Forms

Form 1
Field Inspection Log
Landfill Cover, Drainage, and Erosion Control

Site: Operable Unit 2, Fort Ord Landfills, Area B

Date:

Initial Inspection: August 3, 2020

Follow-up Inspection: September 25, 2020

Inspected by: Derek S. Lieberman, P.E.

Item	Observation	Yes	No ¹	Comment or Note Number
B1	Cover surface intact?	X		See Photographs 6 and 52.
B2	Slopes stable?	X		Animal burrows may contribute to slope destabilization. Larger burrows observed on north side of Area B (Photographs 6 and 52).
B3	Berm stable along edge of top deck?			Not applicable. No berms on top deck.
B4	Inlet apron and downdrain on top deck free of debris?			Not applicable. No downdrains at Area B.
B5	Top deck drainage appears good?	X		No settlement or ponding observed.
B6	Side slope drainage appears good?	X		No comment.
B7	Perimeter drainage ditches in good condition?	X		New drainage ditches constructed adjacent to perimeter service roads in 2019.
B8	Perimeter drainage ditches clear of silt and debris?	X		Confirm during weekly inspections.
B9	Perimeter drainage ditches free of erosion rills deeper than 6 inches?	X		Erosion rills repaired in and adjacent to perimeter service roads in 2019.
B10	Is vegetation coverage adequate?	X		Some sparse areas; last mowed in June 2019.
B11	Vegetation growing satisfactorily? Coverage OK?	X		Some sparse areas; last mowed in June 2019.

¹ "No" requires a comment to define corrective action required.

Form 1
Field Inspection Log
Landfill Cover, Drainage, and Erosion Control

Site: Operable Unit 2, Fort Ord Landfills, Area C

Date:

Initial Inspection: August 3, 2020

Follow-up Inspection: September 25, 2020

Inspected by: Derek S. Lieberman, P.E.

Item	Observation	Yes	No ¹	Comment or Note Number
C1	Cover surface intact?	X		See Photographs 7, 8, 53, and 54. Animal burrowing is prolific, requires ongoing control.
C2	Slopes stable?	X		See Photographs 7 and 8. Animal burrows may contribute to slope destabilization.
C3	Berm stable along edge of top deck?			Not applicable. No berms on top deck.
C4	Inlet apron and downdrain on top deck free of debris?			Not applicable. No top deck inlet apron at Area C.
C5	Top deck drainage appears good?	X		No settlement or ponding observed (Photographs 53 and 54).
C6	Side slope drainage appears good?	X		See Photographs 7 and 8.
C7	Perimeter drainage ditches in good condition?	X		Clear ditches of sediment and debris before start of wet season.
C8	Perimeter drainage ditches clear of silt and debris?	X		See Photographs 47-50. Sediment tends to accumulate at downdrain outlet (Photograph 40). Install fiber roll or berm to prevent sediment from perimeter road from entering drainage basin.
C9	Perimeter drainage ditches free of erosion rills deeper than 6 inches?	X		No comment.
C10	Is vegetation coverage adequate?	X		See Photographs 53 and 54.
C11	Vegetation growing satisfactorily? Coverage OK?	X		See Photographs 53 and 54; last mowed in June 2019.

¹ "No" requires a comment to define corrective action required.

Form 1
Field Inspection Log
Landfill Cover, Drainage, and Erosion Control

Site: Operable Unit 2, Fort Ord Landfills, Area D

Date:

Initial Inspection: August 3, 2020

Follow-up Inspection: September 25, 2020

Inspected by: Derek S. Lieberman, P.E.

Item	Observation	Yes	No ¹	Comment or Note Number
D1	Cover surface intact?	X		See Photographs 1, 9, 14, 55, and 56. Animal burrowing is prolific, requires ongoing control.
D2	Slopes stable?	X		See Photographs 9 and 14. Animal burrows may contribute to slope destabilization.
D3	Berm stable along edge of top deck?	X		No comment.
D4	Inlet apron and downdrain on top deck free of debris?	X		See Photographs 13-16. Sediment and vegetation removal needed at one downdrain outlet (Photograph 16).
D5	Top deck drainage appears good?	X		No settlement or ponding observed.
D6	Side slope drainage appears good?	X		See Photographs 9 and 14.
D7	Perimeter drainage ditches in good condition?	X		See Photographs 34, 35, and 36. Sediment removal needed at discharge point.
D8	Perimeter drainage ditches clear of silt and debris?	X		See Photograph 36. Requires removal of burrow tailings from V-ditch and replacement of fiber roll barrier.
D9	Perimeter drainage ditches free of erosion rills deeper than 6 inches?	X		See Photographs 78 and 79; repairs completed in 2020.
D10	Is vegetation coverage adequate?	X		See Photographs 9, 14, 55, and 56; only a small area mowed in 2020 per consultation with BRAC Office biologist. Some woody shrubs require removal (Photograph 51).
D11	Vegetation growing satisfactorily? Coverage OK?	X		Some sparse areas. Regrowth needed in area where vegetation disturbed during pipeline installation for new GWTP (Photograph 56).

¹ "No" requires a comment to define corrective action required.

Form 1
Field Inspection Log
Landfill Cover, Drainage, and Erosion Control

Site: Operable Unit 2, Fort Ord Landfills, Area E

Date:

Initial Inspection: August 3, 2020

Follow-up Inspection: September 25, 2020

Inspected by: Derek S. Lieberman, P.E.

Item	Observation	Yes	No ¹	Comment or Note Number
E1	Cover surface intact?	X		See Photographs 10, 11, and 57-60. Animal burrowing is prolific, requires ongoing control.
E2	Slopes stable?	X		See Photographs 10 and 11. Minor slope erosion in 2019 repaired in 2020 (Photographs 4 and 5). Semi-permanent subdrain system installed above western slope and slope repaired in 2017.
E3	Berm stable along edge of top deck?	X		Phase 2 area berm repaired in October 2017. Phase 1 area berms are intact.
E4	Inlet apron and downdrain on top deck free of debris?	X		See Photographs 17-24.
E5	Top deck drainage appears good?	X		No comment.
E6	Side slope drainage appears good?	X		Semi-permanent subdrain system installed at crest of western Area E in 2017.
E7	Perimeter drainage ditches in good condition?	X		See Photographs 37-44.
E8	Perimeter drainage ditches clear of silt and debris?	X		Debris removal needed.
E9	Perimeter drainage ditches free of erosion rills deeper than 6 inches?	X		No comment.
E10	Is vegetation coverage adequate?	X		See Photographs 10, 11, and 57-60; sparse in some areas. Last mowed in June 2019.
E11	Vegetation growing satisfactorily? Coverage OK?	X		Sparse in some areas of the top deck (Photograph 58).

¹ "No" requires a comment to define corrective action required.

Form 1
Field Inspection Log
Landfill Cover, Drainage, and Erosion Control

Site: Operable Unit 2, Fort Ord Landfills, Area F

Date:

Initial Inspection: August 3, 2020

Follow-up Inspection: September 25, 2020

Inspected by: Derek S. Lieberman, P.E.

Item	Observation	Yes	No ¹	Comment or Note Number
F1	Cover surface intact?	X		See Photographs 3, 12, 61, and 62. Animal burrowing is prolific, requires ongoing control.
F2	Slopes stable?	X		See Photographs 3 and 12. Prolific burrowing on north slope repair area could destabilize the slope (Photograph 3).
F3	Berm stable along edge of top deck?	X		Berm on southern slope eroded but was repaired in October 2020 (Photographs 32 and 33).
F4	Inlet apron and downdrain on top deck free of debris?	X		See Photographs 25-31. Downdrain outlets on northeast side and south side require maintenance.
F5	Top deck drainage appears good?	X		Settlement is apparent (Photograph 74), but no ponding observed at time of inspection (Photographs 61 and 62).
F6	Side slope drainage appears good?	X		Subdrain system installed at crest of northern Area F in 2017, downdrain repaired in 2019 (Photographs 3 and 27).
F7	Perimeter drainage ditches in good condition?	X		Rock-lined drainage swales added to western perimeter service road in 2020 (Photograph 81).
F8	Perimeter drainage ditches clear of silt and debris?	X		No comment.
F9	Perimeter drainage ditches free of erosion rills deeper than 6 inches?	X		No comment.
F10	Is vegetation coverage adequate?	X		Sparse in some areas; only a small area mowed in August 2020 per consultation with BRAC Office biologist (Photographs 61 and 62).
F11	Vegetation growing satisfactorily? Coverage OK?	X		Sparse in some areas, particularly in the dry season (Photographs 61 and 62).

¹ "No" requires a comment to define corrective action required.

Form 2
Field Inspection Log
Survey Monuments and Settlement Plates

Site: Operable Unit 2, Fort Ord Landfills, Area B

Date: August 3, 2020

Type: Settlement Plate SM-B1

Inspected by: Derek S. Lieberman, P.E.

Item	Observation	Yes	No ¹	Comment or Note Number
1.	Concrete pad in good condition?	X		Buried and not visible. See Photograph 63.
2.	Marked disk in good condition?	X		Buried and not visible. See Photograph 63.
3.	ID number in good condition?		X	No ID number is visible. Recommend stamping or engraving ID number on disk.

Site: Operable Unit 2, Fort Ord Landfills, Area C

Date: August 3, 2020

Type: Settlement Plate SM-C1

Inspected by: Derek S. Lieberman, P.E.

Item	Observation	Yes	No ¹	Comment or Note Number
1.	Concrete pad in good condition?	X		Buried and not visible. See Photograph 64.
2.	Marked disk in good condition?	X		Buried and not visible. See Photograph 64.
3.	ID number in good condition?		X	No ID number is visible. Recommend stamping or engraving ID number on disk.

Site: Operable Unit 2, Fort Ord Landfills, Area D

Date: August 3, 2020

Type: Settlement Plate SM-D1

Inspected by: Derek S. Lieberman, P.E.

Item	Observation	Yes	No ¹	Comment or Note Number
1.	Concrete pad in good condition?	X		See Photograph 65. Vegetation and sediment should be cleared away.
2.	Marked disk in good condition?	X		Buried and not visible. See Photograph 65.
3.	ID number in good condition?		X	No ID number is visible. Recommend stamping or engraving ID number on disk.

Site: Operable Unit 2, Fort Ord Landfills, Area D

Date: August 3, 2020

Type: Survey Monument BM-D

Inspected by: Derek S. Lieberman, P.E.

Item	Observation	Yes	No ²	Comment or Note Number
1.	Concrete pad in good condition?	X		See Photograph 66. Vegetation should be cleared away.
2.	Marked disk in good condition?	X		See Photograph 66.
3.	ID number in good condition?		X	No ID number is visible. Recommend stamping or engraving ID number on disk, or stencil on concrete pad.

¹ "No" requires a comment to define corrective action required.

² "No" requires a comment to define corrective action required.

Form 2
Field Inspection Log
Survey Monuments and Settlement Plates

Site: Operable Unit 2, Fort Ord Landfills, Area E

Date: August 3, 2020

Type: Settlement Plate SM-E1

Inspected by: Derek S. Lieberman, P.E.

Item	Observation	Yes	No ¹	Comment or Note Number
1.	Concrete pad in good condition?	X		Buried and not visible. See Photograph 67.
2.	Marked disk in good condition?	X		Buried and not visible. See Photograph 67.
3.	ID number in good condition?		X	No ID number is visible. Recommend stamping or engraving ID number on disk.

Site: Operable Unit 2, Fort Ord Landfills, Area E

Date: August 3, 2020

Type: Settlement Plate SM-E3

Inspected by: Derek S. Lieberman, P.E.

Item	Observation	Yes	No ¹	Comment or Note Number
1.	Concrete pad in good condition?	X		Buried and not visible. See Photograph 68.
2.	Marked disk in good condition?	X		Buried and not visible. See Photograph 68.
3.	ID number in good condition?		X	No ID number is visible. Recommend stamping or engraving ID number on disk.

Site: Operable Unit 2, Fort Ord Landfills, Area E

Date: August 3, 2020

Type: Settlement Plate SM-E4

Inspected by: Derek S. Lieberman, P.E.

Item	Observation	Yes	No ¹	Comment or Note Number
1.	Concrete pad in good condition?			Not applicable. Settlement plate is enclosed in HDPE pipe. See Photograph 69.
2.	Marked disk in good condition?	X		See Photograph 70.
3.	ID number in good condition?		X	No ID number is visible. Recommend stenciling ID number on HDPE pipe.

¹ "No" requires a comment to define corrective action required.

Form 2
Field Inspection Log
Survey Monuments and Settlement Plates

Site: Operable Unit 2, Fort Ord Landfills, Area F

Date: August 3, 2020

Type: Settlement Plate SM-F1

Inspected by: Derek S. Lieberman, P.E.

Item	Observation	Yes	No ¹	Comment or Note Number
1.	Concrete pad in good condition?	X		See Photograph 72.
2.	Marked disk in good condition?	X		See Photograph 72.
3.	ID number in good condition?		X	No ID number is visible. Recommend stamping or engraving ID number on disk.

Site: Operable Unit 2, Fort Ord Landfills, Area F

Date: August 3, 2020

Type: Settlement Plate SM-F2

Inspected by: Derek S. Lieberman, P.E.

Item	Observation	Yes	No ¹	Comment or Note Number
1.	Concrete pad in good condition?	X		See Photograph 73.
2.	Marked disk in good condition?	X		See Photograph 73.
3.	ID number in good condition?		X	No ID number is visible. Recommend stamping or engraving ID number on disk.

Site: Operable Unit 2, Fort Ord Landfills, Area F

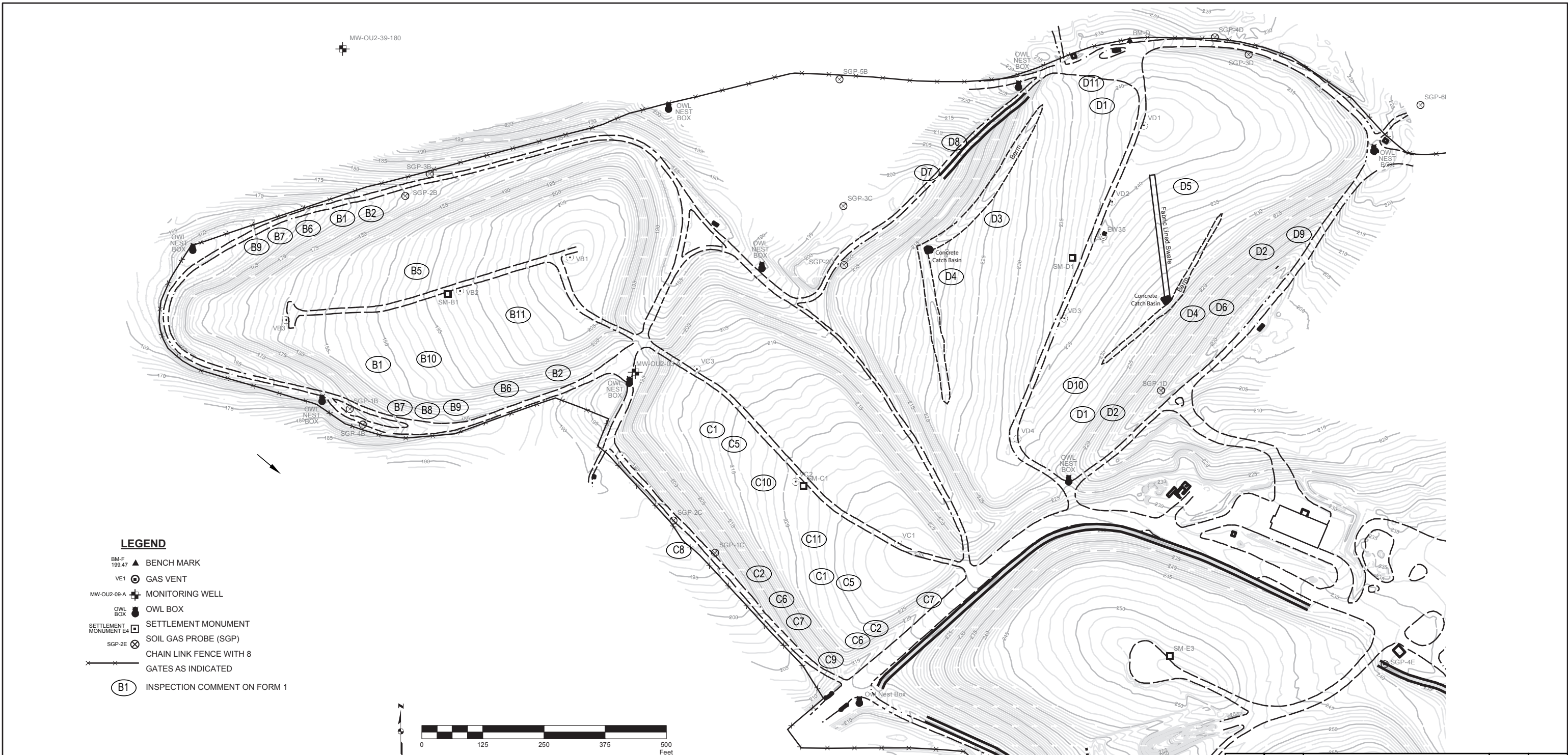
Date: August 3, 2020

Type: Survey Monument BM-F

Inspected by: Derek S. Lieberman, P.E.

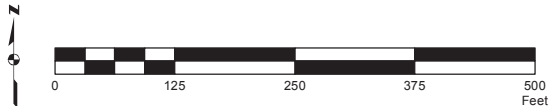
Item	Observation	Yes	No ¹	Comment or Note Number
1.	Concrete pad in good condition?	X		Outside Landfills fence and hidden by vegetation. See Photograph 71. Recommend installing marker stake or flagging on fence line.
2.	Marked disk in good condition?	X		See Photograph 71.
3.	ID number in good condition?		X	No ID number is visible. Recommend stamping or engraving ID number on disk, or stencil on concrete pad.

Figures



LEGEND

- BM-F 199.47 ▲ BENCH MARK
- VE1 ⊙ GAS VENT
- MW-OU2-09-A ⊕ MONITORING WELL
- OWL BOX ● OWL BOX
- SETTLEMENT MONUMENT E4 □ SETTLEMENT MONUMENT
- SGP-2E ⊗ SOIL GAS PROBE (SGP)
- x—x—x— CHAIN LINK FENCE WITH 8
- x—x—x— GATES AS INDICATED
- (B1) INSPECTION COMMENT ON FORM 1



NOTES:

1. EXISTING SITE TOPOGRAPHY IS BASED ON AN AERIAL PHOTOGRAMMETRIC SURVEY PROVIDED BY POLARIS CONSULTING, DATE OF PHOTOGRAPHY 8-6-18. DATA ARE BASED ON CALIFORNIA STATE PLANE COORDINATE SYSTEM, ZONE 4, NAD 83. HORIZONTAL CONTROL WAS DERIVED FROM FOUND MONUMENTS PER RECORD OF SURVEY FILED WITH THE COUNTY OF MONTEREY IN VOLUME 19 OF SURVEYS AT PAGE 20. SHOWN AS POINTS 58 AND 59 THEREON. POINT 81 IS DESTROYED. THEREFORE, BM-F WAS HELD FOR VERTICAL CONTROL. VERTICAL DATUM IS NGVD 1929 BASED ON BM-F SHOWN HEREON. ELEVATION = 199.47'. TABLE A LISTS THE SURVEY CONTROL MONUMENTS.
2. SETTLEMENT MONITORING PLATES WERE MEASURED AS PART OF THIS SURVEY.

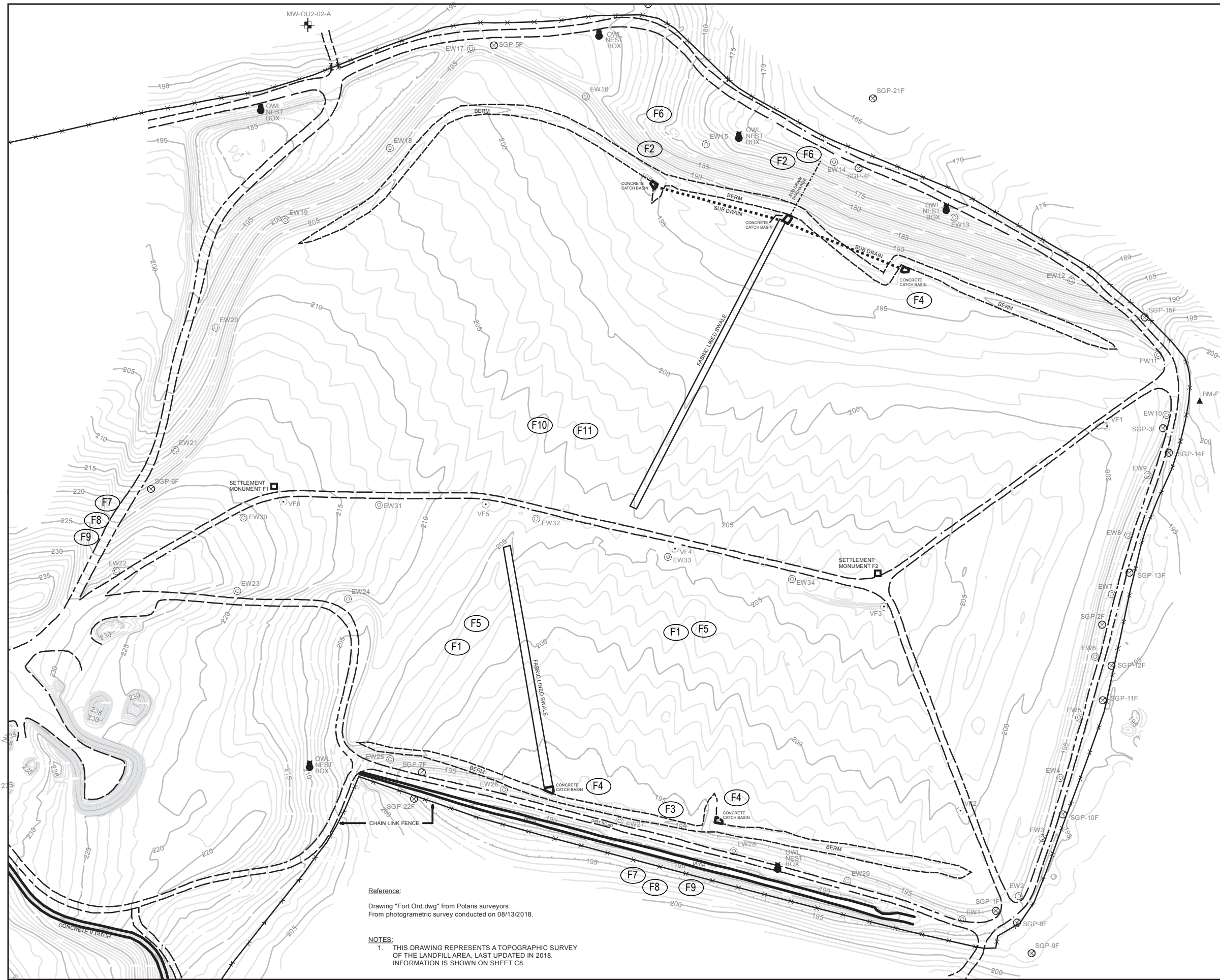
RECORD DRAWING

THIS DRAWING IS A RECORD COMPILING THE DESIGN INFORMATION, FIELD CHANGES, AND SURVEY INFORMATION USED DURING CONSTRUCTION OF THE FACILITY. THE INTENT IS TO PROVIDE THE OWNER WITH A DOCUMENT TO FACILITATE THE OPERATION, MAINTENANCE, AND POSSIBLE FUTURE MODIFICATIONS DURING THE LIFE OF THE FACILITY. THIS RECORD DRAWING MAY NOT BE AN EXACT AND PRECISE DEPICTION OF THE FACILITY. IF NECESSARY, FIELD VERIFY THE FEATURES SHOWN ON THIS DRAWING.

REVISION	DATE	DESCRIPTION	CHK	APP
5	10/15/18	NEW TOPOGRAPHY, CONCRETE V DITCHES, REVISE TITLE BLOCK	AH	ES
4	9/04/08	ADD DRAINAGE SWALE AND BERMS	KAB	MLW
3	2/24/03	REVISE TITLE BLOCK	KAB	MLW
2	1/08/02	ADD SETTLEMENT MONUMENT SURVEYED LOCATIONS	KAB	MO
1	4/25/00	ISSUE RECORD DRAWING	BJW	MLW
0	4/07/00	ADD BOLLARDS AND FILL ON AREA D	BJW	MLW
A	3/31/00	ISSUE FOR REVIEW	JGC	MLW

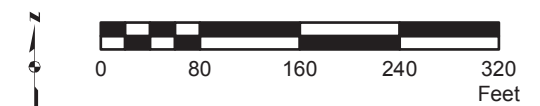
Ahtna AHTNA MONTEREY, CALIFORNIA
 DEPARTMENT OF THE ARMY SACRAMENTO DISTRICT, CORPS OF ENGINEERS SACRAMENTO, CALIFORNIA

DESIGN:	FIGURE 1. AREAS B, C, AND D		
MODIFY DRAWN:	OU2 LANDFILLS, FORMER FORT ORD, CALIFORNIA		
MODIFY CHECKED:			
SUBMITTED:	DATE APPROVED:	SCALE:	SPEC. No.
		C80	AEI_1966_E274



LEGEND

- BM-F 199.47 ▲ BENCH MARK
- VE1 ⊙ GAS VENT
- MW-OU2-09-A ⊕ MONITORING WELL
- OWL BOX ○ OWL BOX
- SETTLEMENT MONUMENT E4 □ SETTLEMENT MONUMENT
- SGP-2E ⊗ SOIL GAS PROBE (SGP)
- x—x— NEW CHAIN LINK FENCE WITH 8 GATES AS INDICATED
- (B1) INSPECTION COMMENT ON FORM 1



RECORD DRAWING
 THIS DRAWING IS A RECORD COMPILING THE DESIGN INFORMATION, FIELD CHANGES, AND SURVEY INFORMATION USED DURING CONSTRUCTION OF THE FACILITY. THE INTENT IS TO PROVIDE THE OWNER WITH A DOCUMENT TO FACILITATE THE OPERATION, MAINTENANCE, AND POSSIBLE FUTURE MODIFICATIONS DURING THE LIFE OF THE FACILITY. THIS RECORD DRAWING MAY NOT BE AN EXACT AND PRECISE DEPICTION OF THE FACILITY. IF NECESSARY, FIELD VERIFY THE FEATURES SHOWN ON THIS DRAWING.

Reference:
 Drawing "Fort Ord.dwg" from Polaris surveyors.
 From photogrammetric survey conducted on 08/13/2018.

NOTES:
 1. THIS DRAWING REPRESENTS A TOPOGRAPHIC SURVEY OF THE LANDFILL AREA, LAST UPDATED IN 2018. INFORMATION IS SHOWN ON SHEET C8.

REVISION	DATE	DESCRIPTION	BY	BY
4	10/16/2018	ADD E2 DRAIN & SUB-DRAIN, REVISE TITLE BLOCK	AM	ES
3	9/4/2008	ADD DRAINAGE SWALE, BERMS, AND ACCESSROAD	KAB	MLW
2	2/24/2003	REVISE TITLE BLOCK	KAB	MO
1	1/8/2002	ADD SETTLEMENT MONUMENT SURVEYED LOCATIONS	KAB	MO
0	4/25/2000	ISSUE RECORD DRAWING	JGC	MLW
A	4/24/2000	ISSUE FOR REVIEW	JGC	MLW

		AHTNA MONTEREY, CALIFORNIA		DEPARTMENT OF THE ARMY SACRAMENTO DISTRICT, CORPS OF ENGINEERS SACRAMENTO, CALIFORNIA	
		FIGURE 3. AREA F OU2 LANDFILLS, FORMER FORT ORD, CALIFORNIA			
DESIGN:		D. LIEBERMAN MODIFY DRAWN: A. HENDERSON MODIFY CHECKED: E. SCHMIDT			
MODIFY DRAWN:					
MODIFY CHECKED:					
SUBMITTED:		DATE APPROVED:	SCALE:	SHEET:	SPEC. No.
			C82	AEI_1966_E276	

Photographs



Soil disturbance by animal burrows, Area D eastern slope facing west (August 3, 2020)

Typical Animal Burrows

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Former Fort Ord, California

Ahtna

Photograph

1



Northern slope of Area F looking east (July 20, 2018)

Hawk on perch on Area C (August 3, 2020)

Typical Rodent Mitigation

OU2 Annual Landfills Inspection Report
Former Fort Ord, California

Ahtna

Photograph

2



Area F north slope repair area with animal burrows (August 3, 2020)

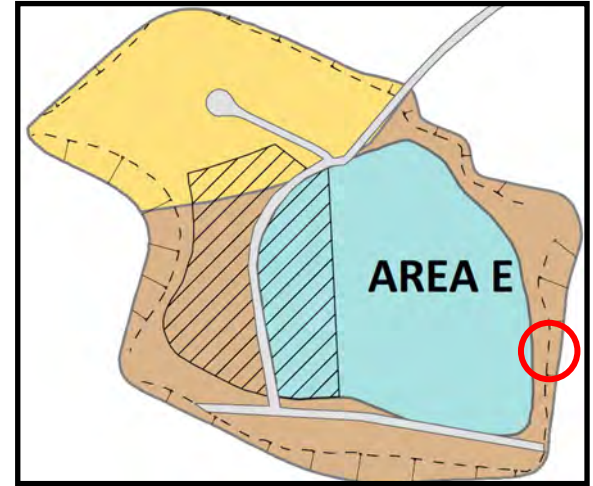
Area F 2019 Erosion Repairs and Animal Burrows

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Former Fort Ord, California

Ahtna

Photograph

3



4. Area E east slope erosion repair facing north
(April 24, 2020)



5. Area E east slope erosion repair facing north (August 3, 2020)

Area E Slope Stability

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Photographs

4 & 5



Area B north slope facing east (August 3, 2020)

Area B Slope Stability
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Former Fort Ord, California

Ahtna

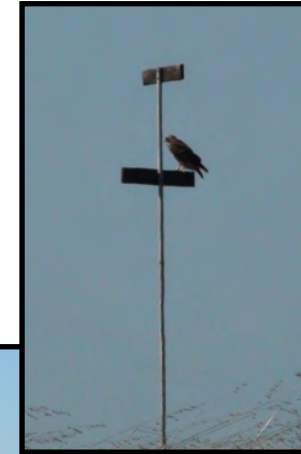
Photograph

6



7. Area C southeast slope facing northeast (August 3, 2020)

Hawk on raptor perch.



8. Area C southwest slope facing north (August 3, 2020)

Area C Slope Stability
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Photographs

7 & 8



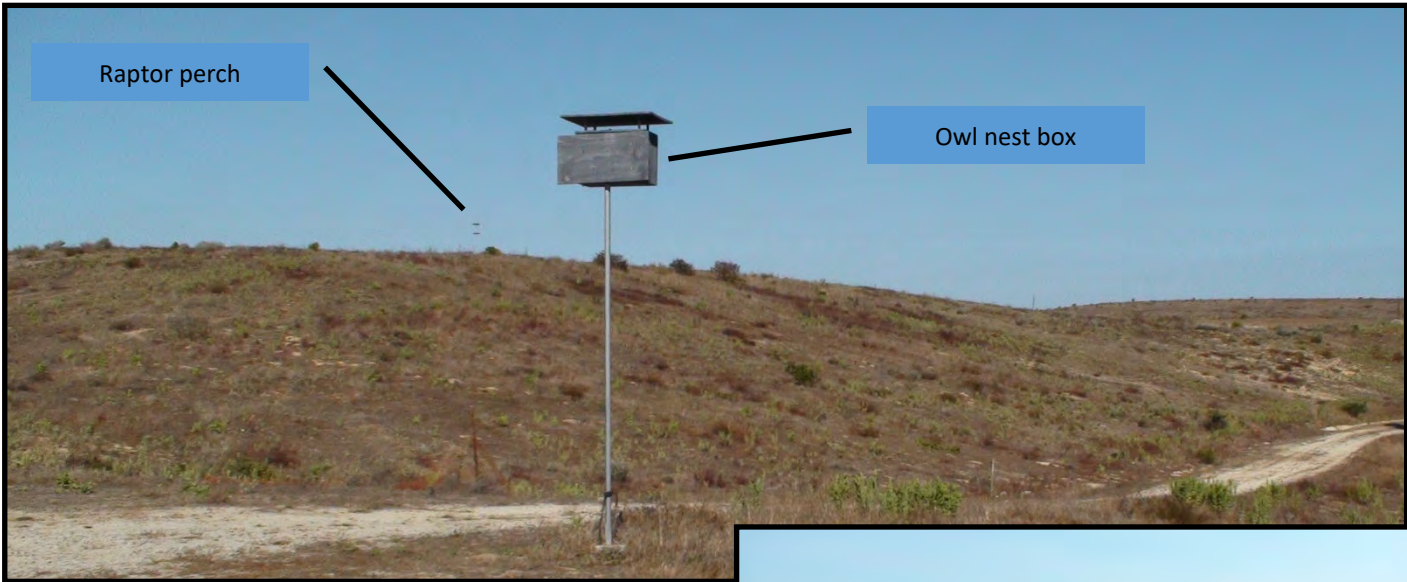
Area D southeast slope facing northeast (August 3, 2020)

Area D Slope Stability
OU2 Annual Landfills Inspection Report
Former Fort Ord, California

Ahtna

Photograph

9



10. Area E southwest slope looking west from Engineer Equipment Road (August 3, 2020)



11. Area E east slope facing south (August 3, 2020)

Area E Slope Stability
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Former Fort Ord, California



Photographs
10 & 11



Area F north slope facing east from perimeter access road (August 3, 2020)

Area F Slope Stability
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Photograph

12



13. Downdrain inlet (three 8-inch pipes) on west side of Area D (August 3, 2020)



14. Berm and brow ditch on west side of Area D (August 3, 2020)



15. Downdrain inlet (two 8-inch pipes) on east side of Area D (August 3, 2020)



16. Downdrain outlet (two 8-inch pipes) on east side of Area D (August 3, 2020)

Area D Downdrain Inlets and Outlets, and Berm

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Former Fort Ord, California

Ahtna

Photographs

13—16



17. Southeast side downdrain catch basin (three 8-inch pipes), August 3, 2020



18. Southeast side downdrain outlet (three 8-inch pipes), August 3, 2020



19. Northeast side downdrain catch basin (three 8-inch pipes), August 3, 2020



20. Northeast side downdrain transition apron (three 8-inch pipes), August 3, 2020

Area E Downdrain Inlets and Outlets, East Side

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Former Fort Ord, California

Ahtna

Photographs

17—20



21. Phase 1 area brow ditch discharge point in Phase 2 area (August 3, 2020)



22. Phase 2 area temporary drainage inlet (August 3, 2020)



23. Phase 1 area downdrain catch basin (three 8-inch pipes), August 3, 2020



24. West side subdrain outlet (two 6-inch pipes) above and downdrain outlet (three 8-inch pipes) below, August 3, 2020

Area E Downdrain Inlets and Outlets, West Side

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Former Fort Ord, California

Ahtna

Photographs

21—24



25. Northwest downdrain outlet (18-inch pipe), August 3, 2020



26. North central downdrain outlet (three 8-inch pipes), August 3, 2020



27. Subdrain downdrain outlet (one 8-inch pipe), August 3, 2020

Area F Downdrain Inlets and Outlets, North Side

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Former Fort Ord, California

Ahtna

Photographs

25—27



28. Southeast downdrain inlet (three 8-inch pipes), August 3, 2020



29. Southeast downdrain outlet (three 8-inch pipes), August 3, 2020



30. Southwest downdrain inlet (three 8-inch pipes), August 3, 2020



31. Southwest downdrain outlet (three 8-inch pipes), August 3, 2020

Area F Downdrain Inlets and Outlets, South Side

OU2 Annual Landfills Inspection Report
Former Fort Ord, California



Photographs

28—31



32. Eroded berm on south side of Area F, facing north from perimeter road (August 3, 2020)



33. Repaired berm on south side of Area F, facing east from perimeter road (October 30, 2020)

Area F South Side Berm

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Former Fort Ord, California

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Photographs

32 & 33



34. Area D western V-ditch outlet (August 3, 2020)



35. Area D western V-ditch discharge point (August 3, 2020)



36. Area D western V-ditch facing north (August 3, 2020)

Area D V-ditch

OU2 Annual Landfills Inspection Report
Former Fort Ord, California

Ahtna

Photographs

34—36



37. Area E eastern V-ditch facing north
(August 3, 2020)

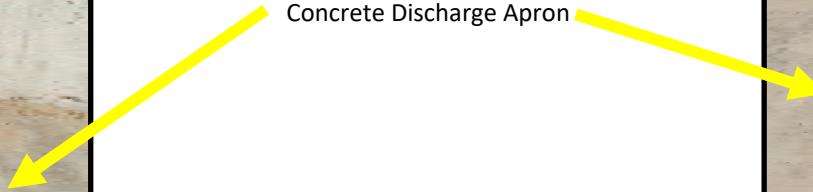


38. Area E eastern V-ditch concrete discharge apron facing west (August 3, 2020)



39. Area E eastern V-ditch facing south
(August 3, 2020)

Concrete Discharge Apron



Area E Eastern V-ditch
OU2 Annual Landfills Inspection Report
Former Fort Ord, California

Ahtna

Photographs

37—39



40. Area E southwestern V-ditch facing south
(August 3, 2020)



41. Area E central western V-ditch facing northwest (August 3, 2020)



42. Area E southwestern/central western V-ditch discharge point (August 3, 2020),
flows to infiltration basin

Area E Southwestern and Central Western V-ditches

OU2 Annual Landfills Inspection Report
Former Fort Ord, California



Photographs

40—42



43. Area E northern V-ditch, facing northeast (August 3, 2020)



45. Area E northern V-ditch discharge point to infiltration basin (August 3, 2020)



44. Area E northern V-ditch outlet to infiltration basin (August 3, 2020)



46. Infiltration basin at western tip of Area E (August 3, 2020)

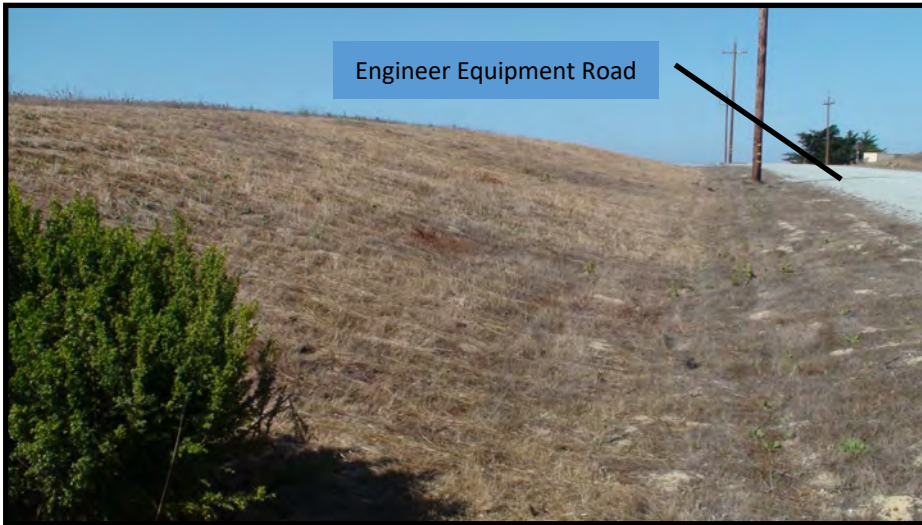
Area E Northern V-ditch and Infiltration Basin

OU2 Annual Landfills Inspection Report
Former Fort Ord, California



Photographs

43—46



47. Drainage swale a southeast Area C, facing northeast (August 3, 2020)



48. Drainage inlet from southeast Area C swale (August 3, 2020)



49. Drainage inlet from Engineer Equipment Road, southeast Area C
(August 3, 2020)



50. Drainage outlet, southwest Area C (August 3, 2020)

Area C Storm Drain Inlets and Outlets

OU2 Annual Landfills Inspection Report
Former Fort Ord, California

Ahtna

Photographs

47—50



Oak trees to be removed, north Area D perimeter road (August 3, 2020)

Invasive and Woody Shrubbery Control

OU2 Annual Landfills Inspection Report
Former Fort Ord, California

Ahtna

Photograph

51



Area B north slope looking east (August 3, 2020)

Area B Vegetative Cover

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Former Fort Ord, California

Ahtna

Photograph

52



53. Area C top deck facing northwest toward Area B
(August 3, 2020)



54. Area C top deck facing southeast toward Area E
(August 3, 2020)

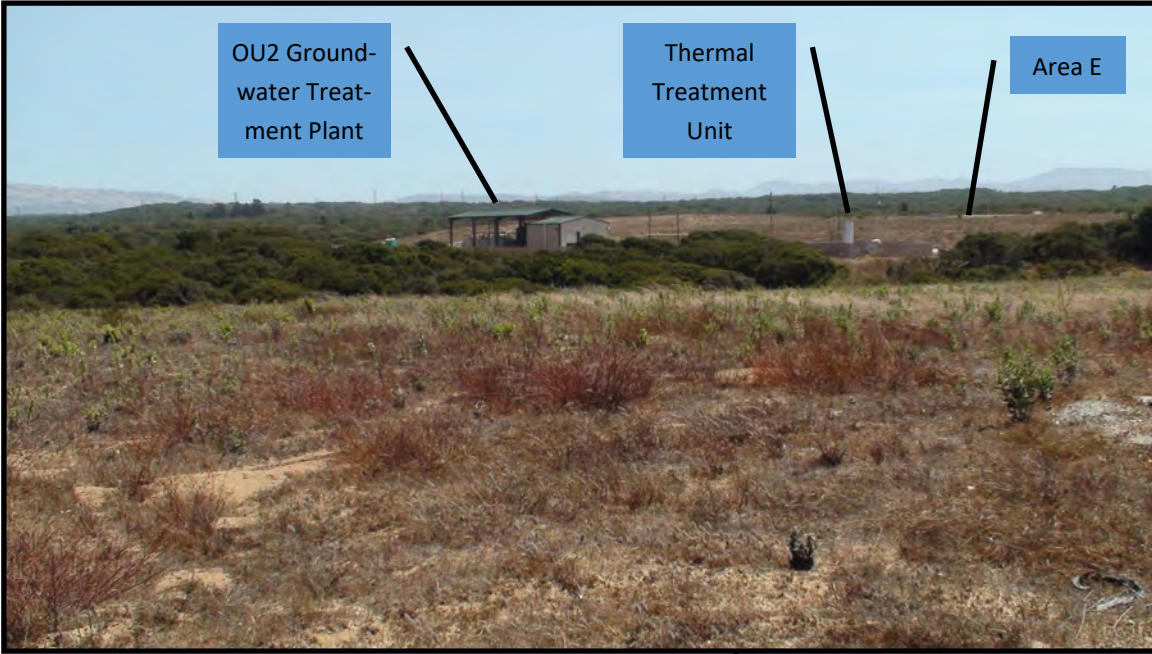
Area C Vegetative Cover

OU2 Annual Landfills Inspection Report
Former Fort Ord, California

Ahtna

Photographs

53 & 54



55. Southern Area D facing southeast toward Area E
(August 3, 2020)



56. Northern Area D, sparse vegetation in area of new OU2 ground-water treatment pipeline construction (August 3, 2020)

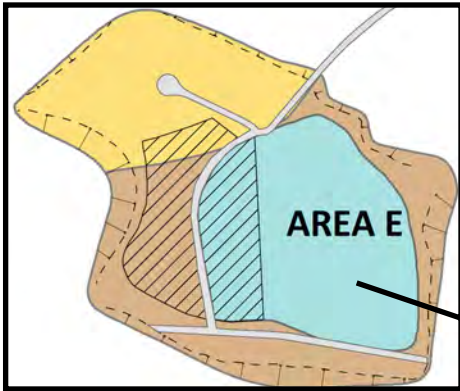
Area D Vegetative Cover

OU2 Annual Landfills Inspection Report
Former Fort Ord, California

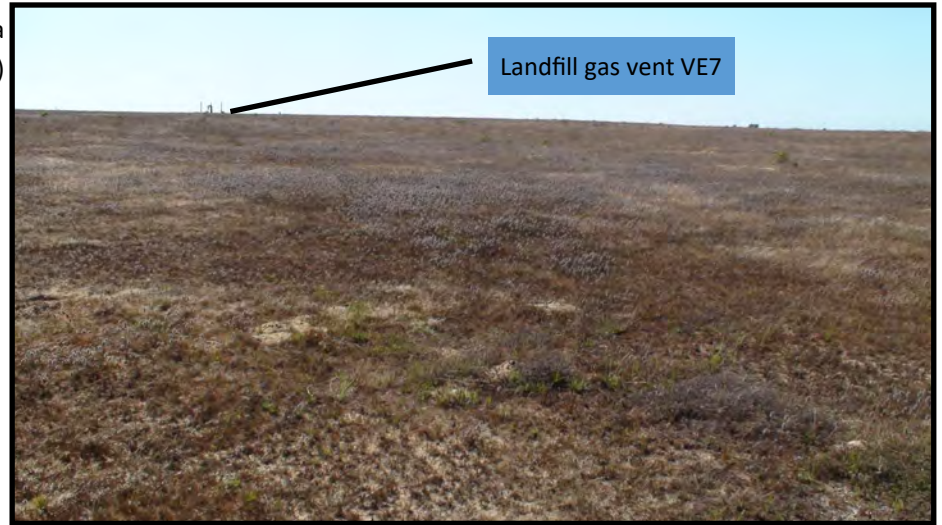
Ahtna

Photographs

55 & 56

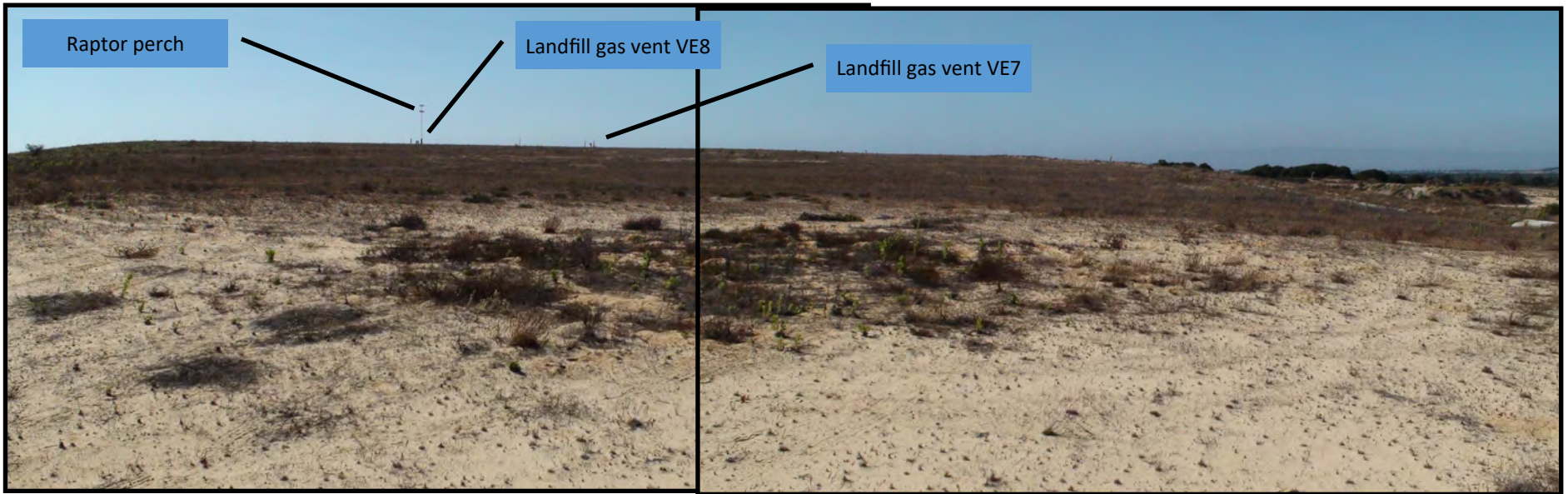


57. East central Phase 1 Expansion area facing west (August 3, 2020)



Phase 1 Expansion

Landfill gas vent VE7



58. Southeast Phase 1 Expansion area facing northwest (August 3, 2020)

Raptor perch

Landfill gas vent VE8

Landfill gas vent VE7

Eastern Area E (Phase 1 Expansion) Vegetative Cover

OU2 Annual Landfills Inspection Report
Former Fort Ord, California



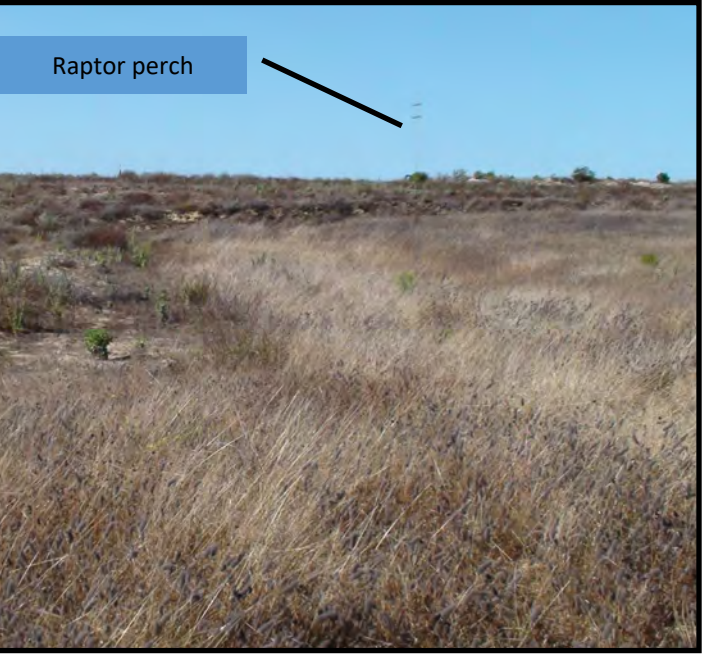
Photograph

57 & 58



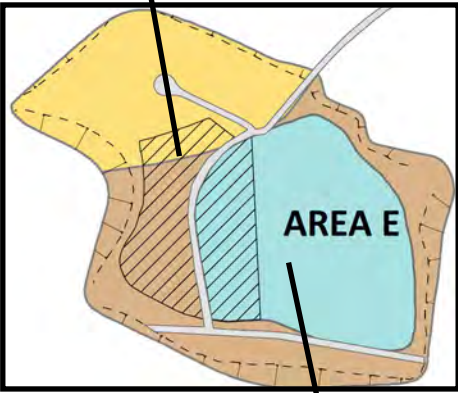
59. View of debris disposal area facing south from northern Phase 2 area (August 3, 2020)

Landfill gas vent VE1 and raptor perch



Raptor perch

Phase 2 Expansion



Phase 1 Expansion

60. View of Phase 2 tie-in trench facing north (August 3, 2020)

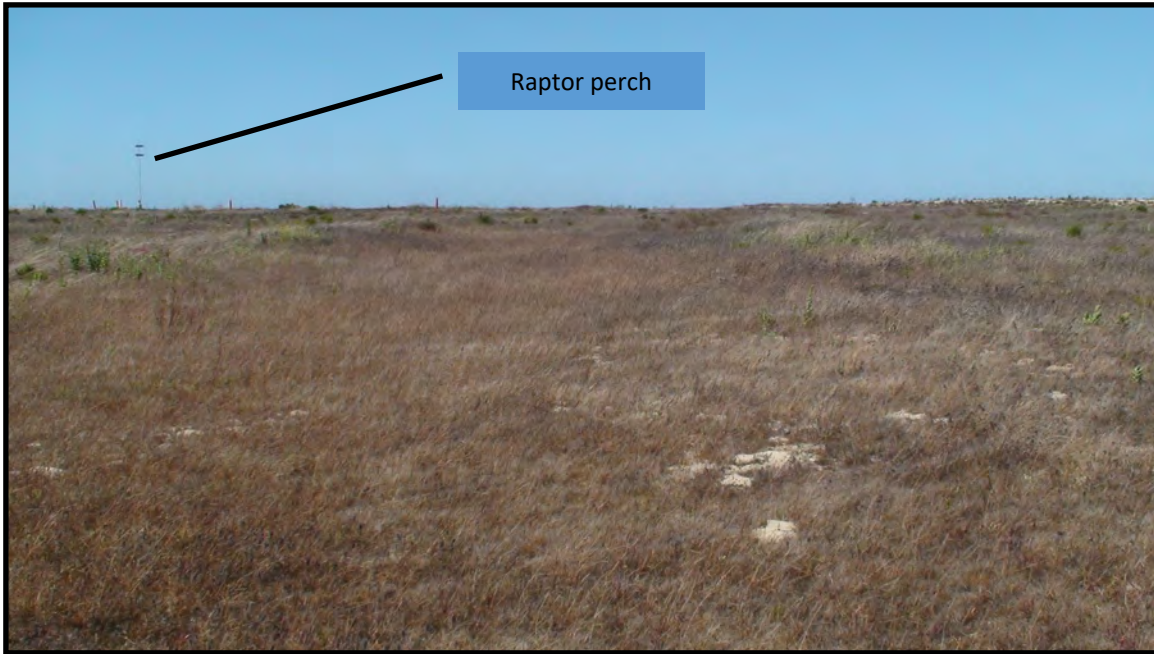
Western Area E (Phase 2 Expansion) Vegetative Cover

OU2 Annual Landfills Inspection Report
Former Fort Ord, California



Photographs

59 & 60



61. View from southern Area F facing northwest (August 3, 2020)



62. View from southern Area F facing northeast (August 3, 2020)

Area F Vegetative Cover

OU2 Annual Landfills Inspection Report
Former Fort Ord, California

Ahtna

Photographs

61 & 62



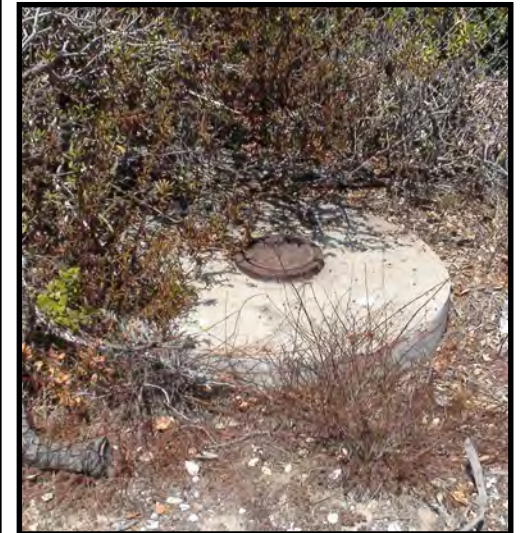
63. Area B Settlement Monitoring Plate SM-B1 (August 3, 2020)



64. Area C Settlement Monitoring Plate SM-C1 (August 3, 2020)



65. Area D Settlement Monitoring Plate SM-D1 (August 3, 2020)



66. Area D Survey Monument BM-D (August 3, 2020)

Areas B, C, and D Settlement Monitoring Plates

Area D Survey Monument

OU2 Annual Landfills Inspection Report

Former Fort Ord, California

Ahtna

Photographs

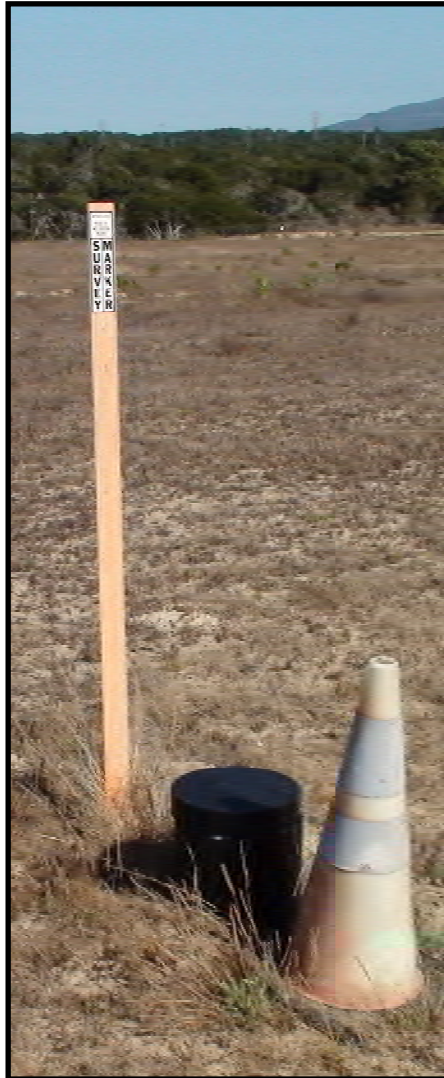
63—66



67. Area E Settlement Monitoring Plate
SM-E1 (August 3, 2020)



68. Area E Settlement Monitoring Plate
SM-E3 (August 3, 2020)



69. Area E Settlement Monitoring Plate
SM-E4 (August 3, 2020)



70. Area E Settlement Monitoring Plate
SM-E4 (August 3, 2020)

Area E Settlement Monitoring Plates

OU2 Annual Landfills Inspection Report
Former Fort Ord, California

Ahtna

Photographs

67—70



71. Area F Survey Monument BM-F
(August 3, 2020)



72. Area F Settlement Monitoring Plate SM-F1
(August 3, 2020)



73. Area F Settlement Monitoring Plate SM-F2
(August 3, 2020)

Area F Survey Monument and Settlement Monitoring Plates

OU2 Annual Landfills Inspection Report
Former Fort Ord, California

Ahtna

Photographs

71—73



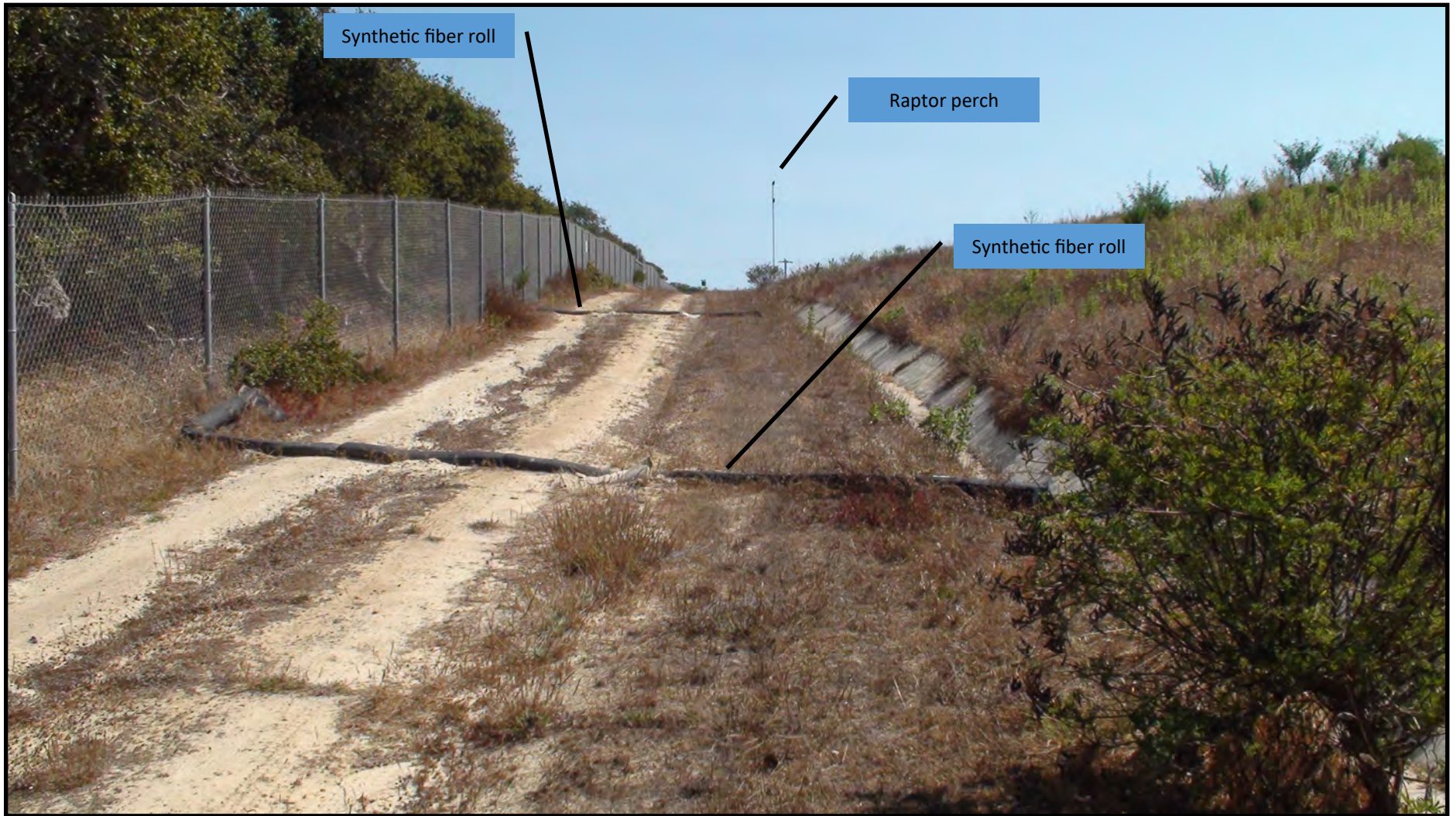
Area F Cover Settlement Undulations

OU2 Annual Landfills Inspection Report
Former Fort Ord, California

Ahtna

Photograph

74



Area E East Perimeter Service Road Erosion Control

OU2 Annual Landfills Inspection Report
Former Fort Ord, California

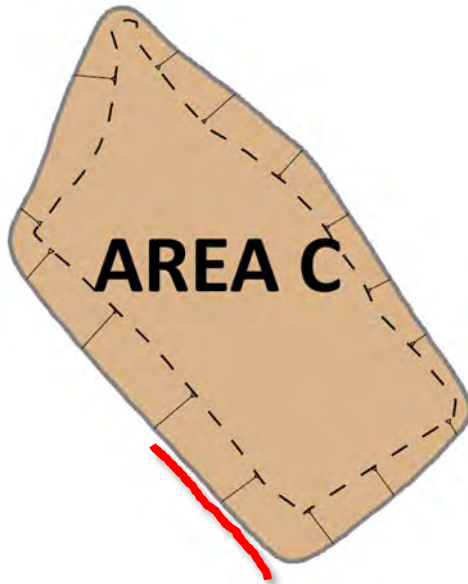
Ahtna

Photograph

75



76. Perimeter service road with erosion rills, southwest Area C facing north (August 3, 2020)



77. Perimeter service road repaired with rolling dips and rock-lined drainage swales, southwest Area C facing northwest (October 30, 2020)

Area C Southwest Perimeter Service Road

OU2 Annual Landfills Inspection Report
Former Fort Ord, California

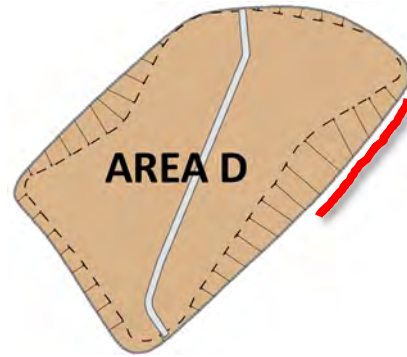
Ahtna

Photographs

76 & 77



Owl nest box



Owl nest box



78. Perimeter service road erosion rills, east Area D facing northeast (August 3, 2020)

79. Perimeter service road repaired with rolling dips and rock-lined drainage swales, east Area D facing north-east (October 30, 2020)

Area D Southeast Perimeter Service Road

OU2 Annual Landfills Inspection Report
Former Fort Ord, California

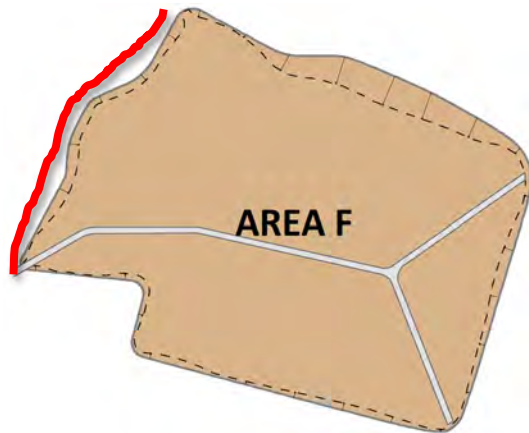
Ahtna

Photographs

78 & 79



80. Perimeter service road erosion rills, viewed from southwest Area F facing north (August 3, 2020)



81. Perimeter service road repaired with rolling dips and rock-lined drainage swales, viewed from southwest Area F facing north (October 30, 2020)

Area F West Perimeter Service Road

OU2 Annual Landfills Inspection Report
Former Fort Ord, California

Ahtna

Photograph Nos.

80 & 81

Appendix B

Landfills Quarterly Inspection Reports, Monterey County Department of Health

Closed Disposal Site Inspection Report (188)

Enforcement Agency:			Local Inspection ID:		
County of Monterey					
SWIS Facility File Number (99-xx-9999)		Inspection Date		Program Code	
27-AA-0015		11/25/2019		LEA Periodic	
Time In	10:39 AM	Time Out	11:35 AM	Inspection Time	54 MINUTES
Facility Name			Received By		
Fort Ord Sanitary Landfill					
Facility Location			Owner Name		
Fort Ord, Fort Ord 93933					
Inspector			Also Present (Name)		
ALVIN VOTRAN			ERIC SCHMIDT; THOMAS GHIGLIOTTO		

THE ABOVE FACILITY WAS INSPECTED FOR COMPLIANCE WITH APPLICABLE SECTIONS OF DIVISION 30 OF PUBLIC RESOURCES CODE (PRC) AND TITLE 14 AND TITLE 27 CALIFORNIA CODE OF REGULATIONS (CCR)

X	No Violations or Areas of Concern
----------	--

Inspection Report Comments:												
<p>CLOSED DISPOSAL SITE QUARTERLY INSPECTION REPORT FOR NOVEMBER 2019. WEATHER: SUNNY, 57F, WIND: 6 MPH NORTHWEST.</p> <p>HYDRO-SEEDING WERE COMPLETED THE WEEK PRIOR TO THIS INSPECTION DATE (11/25/2019). OPERATOR STATED STAFF CLEANED-UP V DITCHES AND OWL BOXES. V DITCHES WERE FREE OF LITTER AND BRUSH.</p> <p>SITE WAS SECURE.</p> <p>EAST SIDE OF AREA E HAD MINOR EROSION. OPERATOR STATED THAT AHTNA WILL PLAN TO REPAIR EROSION. WOOD CHIPS WILL BE INCORPORATED TO REPAIR VEGETATIVE COVER. OPERATOR PLAN TO RE-SEED AREA F EROSION AFTER RAIN (REQUIRE WET CONDITIONS)</p> <p>GAS READING FOR PROBE 13 F:</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 50%;">12 FEET</td> <td style="width: 50%;">32 FEET</td> </tr> <tr> <td>GAS %</td> <td>GAS %</td> </tr> <tr> <td>CH4 0.0</td> <td>CH4 0.0</td> </tr> <tr> <td>CO2 1.6</td> <td>CO2 4.4</td> </tr> <tr> <td>O2 19.0</td> <td>O2 15.7</td> </tr> <tr> <td>BAL 79.4</td> <td>BAL 80.0</td> </tr> </table> <p>NO VIOLATIONS OR AREAS OF CONCERN WERE OBSERVED AT TIME OF INSPECTION.</p>	12 FEET	32 FEET	GAS %	GAS %	CH4 0.0	CH4 0.0	CO2 1.6	CO2 4.4	O2 19.0	O2 15.7	BAL 79.4	BAL 80.0
12 FEET	32 FEET											
GAS %	GAS %											
CH4 0.0	CH4 0.0											
CO2 1.6	CO2 4.4											
O2 19.0	O2 15.7											
BAL 79.4	BAL 80.0											

Closed Disposal Site Inspection Report (188)

Enforcement Agency:				Local Inspection ID:	
County of Monterey					
SWIS Facility File Number (99-xx-9999)		Inspection Date		Program Code	
27-AA-0015		3/16/2020		LEA Periodic	
Time In	1:58 PM	Time Out	2:36 PM	Inspection Time	38 MINUTES
Facility Name			Received By		
Fort Ord Sanitary Landfill					
Facility Location			Owner Name		
Fort Ord, Fort Ord 93933					
Inspector			Also Present (Name)		
ALVIN VOTRAN			THOMAS GHIGLIOTTO		

THE ABOVE FACILITY WAS INSPECTED FOR COMPLIANCE WITH APPLICABLE SECTIONS OF DIVISION 30 OF PUBLIC RESOURCES CODE (PRC) AND TITLE 14 AND TITLE 27 CALIFORNIA CODE OF REGULATIONS (CCR)

<input checked="" type="checkbox"/>	No Violations or Areas of Concern
-------------------------------------	--

Inspection Report Comments:
<p>CLOSED DISPOSAL SITE QUARTERLY INSPECTION FOR MARCH 2020. WEATHER: CLOUDY, 54 F.</p> <p>CONSENT TO INSPECT GIVEN BY THOMAS GHIGLIOTTO.</p> <p>SITE WAS SECURE. AT THE TIME OF INSPECTION, OBSERVED STAFF CONDUCTING SITE MAINTENANCE. CONTACT STATED THE FACILITY PLAN TO BRING MORE SOIL INTO AREA E. RAPTOR PERCHES AND OWL BOXES OBSERVED THROUGHOUT THE LANDFILL. SINCE THE LAST INSPECTION, EROSION IN AREA F WERE REPAIRED. AREA B WAS ACCESSIBLE AND OBSERVED AT TIME OF INSPECTION.</p> <p>NO VIOLATIONS OR AREAS OF CONCERN WERE OBSERVED AT TIME OF INSPECTION.</p>

Closed Disposal Site Inspection Report (188)

Enforcement Agency:			Local Inspection ID:		
County of Monterey					
SWIS Facility File Number (99-xx-9999)		Inspection Date		Program Code	
27-AA-0015		6/30/2020		LEA Periodic	
Time In		Time Out		Inspection Time	0
Facility Name			Received By		
Fort Ord Sanitary Landfill					
Facility Location			Owner Name		
Fort Ord, Fort Ord 93933					
Inspector			Also Present (Name)		
ALVIN VOTRAN					

THE ABOVE FACILITY WAS INSPECTED FOR COMPLIANCE WITH APPLICABLE SECTIONS OF DIVISION 30 OF PUBLIC RESOURCES CODE (PRC) AND TITLE 14 AND TITLE 27 CALIFORNIA CODE OF REGULATIONS (CCR)

<input checked="" type="checkbox"/>	No Violations or Areas of Concern
-------------------------------------	--

Inspection Report Comments:
<p>CALIFORNIA GOVERNOR GAVIN NEWSMAN PROCLAIMED A STATE OF EMERGENCY IN THE EXECUTIVE ORDER N-25-20 AS A RESULT OF THE THREAT COVID-19. MONTEREY COUNTY HEALTH OFFICER ISSUED A SHELTER IN PLACE ORDER EFFECTIVE 12:01 AM MARCH 18, 2020 AND REISSUED A SHELTER IN PLACE ORDER EFFECTIVE 12:01 AM MAY 4, 2020. THE ORDER IS IN EFFECT UNTIL FURTHER NOTICE.</p> <p>INSPECTION REPORT FOR JUNE 2020. THE LEA INSPECTOR HAS BEEN INFORMED TO SHELTER IN PLACE AND POSTPONE INSPECTIONS UNTIL FURTHER NOTICE. THE LEA HAS BEEN IN CONTACT WITH OPERATION TO ACQUIRE CURRENT OPERATING STATUS.</p> <p>OPERATED PROVIDED THE FOLLOWING UPDATES PERFORMED SINCE THE LAST INSPECTION:</p> <ul style="list-style-type: none"> -14 NEW RAPTOR PERCHES WERE INSTALLED AT KEY LOCATIONS AROUND THE LANDFILL; -ANNUAL VOC MONITORING OF COMPLIANCE PROBES WERE DONE IN EARLY JUNE; -ANNUAL THERMAL TREATMENT UNIT SOURCE TEST WAS DONE IN EARLY JUNE; -ANNUAL EXTRACTION LEG SAMPLING WAS DONE IN EARLY JUNE; <p>THE PERIMETER ROAD REPAIRS ARE CONTINUING TO HOLD UP WELL. GOPHER POPULATIONS ARE CONTINUING TO BE CONTROLLED BY THE BARN OWLS.</p> <p>ALL ESSENTIAL SERVICES (MAINTENANCE) CONTINUE TO BE OPERATIONAL.</p> <p>NO VIOLATIONS OR AREAS OF CONCERN OBSERVED.</p>

Closed Disposal Site Inspection Report (188)

Enforcement Agency:			Local Inspection ID:		
County of Monterey					
SWIS Facility File Number (99-xx-9999)		Inspection Date		Program Code	
27-AA-0015		9/25/2020		LEA Periodic	
Time In	9:34 AM	Time Out	10:22 AM	Inspection Time	48 MINUTES
Facility Name			Received By		
Fort Ord Sanitary Landfill					
Facility Location			Owner Name		
Fort Ord, Fort Ord 93933					
Inspector			Also Present (Name)		
ALVIN VOTRAN			ANGELINE HSU, ERIC SCHMIDT, DEREK LIEBERMAN, MELIS		

THE ABOVE FACILITY WAS INSPECTED FOR COMPLIANCE WITH APPLICABLE SECTIONS OF DIVISION 30 OF PUBLIC RESOURCES CODE (PRC) AND TITLE 14 AND TITLE 27 CALIFORNIA CODE OF REGULATIONS (CCR)

<input checked="" type="checkbox"/>	No Violations or Areas of Concern
-------------------------------------	--

Inspection Report Comments:
<p>CALIFORNIA GOVERNOR GAVIN NEWSMAN PROCLAIMED A STATE OF EMERGENCY IN THE EXECUTIVE ORDER N-25-20 AS A RESULT OF THE THREAT COVID-19. GOVERNOR EXPANDS THE CLOSURE OF INDOOR OPERATIONS IN MONTEREY COUNTY ON JULY 13, 2020. MONTEREY COUNTY HEALTH OFFICER ISSUED A SHELTER IN PLACE ORDER EFFECTIVE 12:01 AM ON MARCH 18, 2020 AND REISSUED A SHELTER IN PLACE ORDER EFFECTIVE 12:01 AM ON MAY 4, 2020. THE ORDER IS IN EFFECT UNTIL FURTHER NOTICE.</p> <p>INSPECTION REPORT FOR SEPTEMBER 2020. WEATHER: 64 F AND SUNNY. THE LEA INSPECTOR HAS RESUMED LEA INSPECTIONS AS OF JUNE 24, 2020.</p> <p>DURING THE INSPECTION, INSPECTORS WERE GUIDED THROUGH THE INSPECTION BY ERIC SCHMIDT. OPERATOR STATED THAT THE CLOSED LANDFILL WAS MOWED PRIOR TO THE INSPECTION. ONLY MINOR MOWING WERE COMPLETED AND TO PLAN MINIMUM MOWING FOR FUTURE MOWING TO PROMOTE NATIVE PLANTS. MOWING WILL BE COMPLETED ON A ROTATIONAL BASIS (ONCE EVERY 3 YEARS). OPERATOR STATED TREES WERE TRIMMED ALONG PERIMETER FENCE LINES.</p> <p>OPERATOR STATED THAT 14 FALCON PERCHES WERE INSTALLED. INSPECTORS OBSERVED 5 BIRDS OF PREY ON-SITE.</p> <p>SAMPLED MONITORING PROBE SGP-14F.</p> <p>12 FEET - CH4 0.0%, CO2 1.6%, O2 18.7%, AND BALANCE 79.7% 32 FEET - CH4 0.0%, CO2 4.7%, O2 15.1%, AND BALANCE 80.1%</p> <p>THE REPAIRS TO EROSION IN AREA F INCLUDED SUB-DRAINS INSTALLED UNDERGROUND PRIOR TO THIS INSPECTION.</p> <p>OPERATOR STATED THAT THE MINOR EROSION TO THE ACCESS ROADS IN AREA F AND D WILL PLAN TO BE GRADED. THE OPERATOR PLAN WINTERIZATION IN APPROXIMATELY 1.5 MONTHS FROM THIS INSPECTION DATE.</p> <p>NO VIOLATIONS OR AREAS OF CONCERN WERE OBSERVED AT TIME OF INSPECTION.</p>

Appendix C

ARB Independent Contractor Program Certification for Best Environmental

**State of California
AIR RESOURCES BOARD**

EXECUTIVE ORDER I-20-001

**Approval of Independent Contractor Pursuant to
California Code of Regulations, title 17, section 91207**

Best Environmental

WHEREAS, the California Air Resources Board (CARB), pursuant to California Health and Safety Code, section 41512, has established the procedures contained in California Code of Regulations, title 17, section 91200 and following, to allow the use of independent testers for compliance tests required by CARB;

WHEREAS, it has been determined that Best Environmental meets the requirements of CARB for performing CARB Test Methods 1, 2, 3, 4, 5, 8, 11, 17, 100 (CO, CO₂, NO_x, O₂, SO₂, THC), and U.S. Environmental Protection Agency (U.S. EPA) Test Methods 15A, 201A, and 202 pursuant to Cal. Code Regs., tit. 17, § 91200 and following, when the following conditions are met:

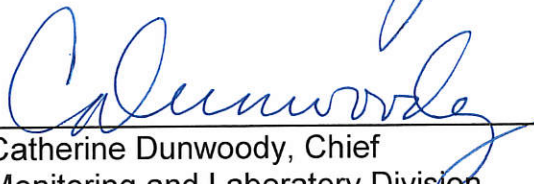
1. Best Environmental permanently marks or engraves an identification number on the body of each of its pitot tubes in accordance with section 2.1 of CARB Test Method 2;
2. Best Environmental calibrates its differential pressure gauges after each test series in accordance with section 2.2 of CARB Test Method 2, and establishes and maintains a log of the calibrations;
3. Best Environmental calibrates its pitot tubes in accordance with section 4.1 of CARB Test Method 2, and establishes and maintains a log of the calibrations;
4. Best Environmental uses a filter holder and filter support in accordance with section 2.1.5 of CARB Test Method 5;
5. Best Environmental calibrates its metering system in accordance with section 5.3 of CARB Test Method 5, and establishes and maintains a log of the calibrations;
6. Best Environmental installs and uses a small surge tank between the pump and rate meter in accordance with section 6.1.6 of U.S. EPA Test Method 15A; and
7. Best Environmental locks its sample storage areas or seals its sample containers when they are not being processed;

WHEREAS, CARB Executive Officer, pursuant to California Health and Safety Code Section 39516, issued Executive Order G-02-008, delegating to the Chief of CARB Monitoring and Laboratory Division (MLD) the authority to approve independent testers in accordance with Cal. Code Regs., tit. 17, § 91200 and following.

NOW, THEREFORE, I, Catherine Dunwoody, Chief of MLD, order that Best Environmental is granted approval from the date of execution of this Executive Order through June 30, 2023, to perform the test methods identified above, subject to compliance with Cal. Code Regs., tit. 17, § 91200 and following.

BE IT FURTHER ORDERED that during the approved period, the Executive Officer or his or her authorized representative may field audit one or more tests performed pursuant to this Executive Order for each test method identified above.

Executed at Sacramento, California this 8th day of June 2020.



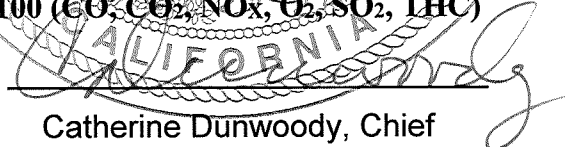
Catherine Dunwoody, Chief
Monitoring and Laboratory Division

State of California
California Air Resources Board
Approved Independent Contractor

Best Environmental

This is to certify that the company listed above has been approved by the California Air Resources Board to conduct compliance testing pursuant to California Code of Regulations, title 17, section 91207, through June 30, 2023, for the test methods listed below:

CARB Source Test Methods:
1, 2, 3, 4, 5, 8, 11, 17
100 (CO, CO₂, NO_x, O₂, SO₂, THC)



Catherine Dunwoody, Chief
Monitoring and Laboratory Division

State of California
California Air Resources Board
Approved Independent Contractor

Best Environmental

This is to certify that the company listed above has been approved by the California Air Resources Board to conduct compliance testing pursuant to California Code of Regulations, title 17, section 91207, through June 30, 2023 for the test methods listed below:

U.S. EPA Source Test Methods:
15A, 201A, 202


Catherine Dunwoody, Chief
Monitoring and Laboratory Division

Appendix D

TTU Source Testing Emission Report, 2020

Source Test Report

FORMER FORT ORD

Monterey Bay, CA

Thermal Treatment Unit

Serving-Landfill Gas Collection System

NO_x, CO, NMOC DRE, VOC and Sulfur Emission Results

Test Date: June 4, 2020

Report Date: July 10, 2020

Performed and Reported by:

BEST ENVIRONMENTAL
339 Stealth Court
Livermore, CA 94551
Phone: (925) 455-9474
Fax: (925) 455-9479
Email: bestair@best-enviro.com

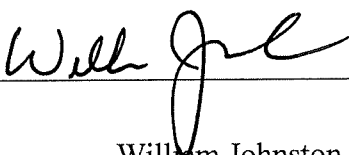
Prepared For:

Ahtna Environmental Inc.
296 12th Street
Marina, CA 93933
Attn: Mr. Eric Schmidt

REVIEW AND CERTIFICATION

Team Leader:

The work performed herein was conducted under my supervision, and I certify that the details and results contained within this report are to the best of my knowledge an authentic and accurate representation of the test program. If this report is submitted for compliance purposes it should only be reproduced in its entirety. If there are any questions concerning this report, please call the Team Leader or Reviewer at (925) 455-9474.



William Johnston
Project Manager

Reviewer:

I have reviewed this report for presentation and accuracy of content, and hereby certify that to the best of my knowledge the information is complete and correct.



Basim (Bobby) Asfour
Principal

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SECTION 1. INTRODUCTION

1.1. Test Purpose

Best Environmental (BE) was contracted by Ahtna Environmental Inc. (Ahtna), to perform NO_x, CO, NMOC DRE, VOC and sulfur emissions testing on a Thermal Treatment Unit (TTU) serving a landfill gas collection system. The purpose of the source test is to determine if the TTU is operating within specification.

1.2. Test Location

The testing was conducted at the influent landfill gas (LFG) source (referred to in this report as “inlet”) and at the outlet of the TTU located at the Former Fort Ord Landfill, Monterey Bay, California.

1.3. Test Date

Testing was conducted on June 4, 2020.

1.4. Test Parameter and Methods

The following emission parameters were measured.

Parameter	Methods
NO _x , CO, O ₂ & CO ₂	EPA Methods 7E, 10 & 3A
Outlet Total Hydrocarbons, methane & Speciated VOC	EPA Method 25A & TO-15
Inlet NMOC & Speciated VOC	ASTM D-1945 & EPA Method TO-15
Inlet Total Reduced Sulfurs	ASTM D-5504
Landfill Gas HHV & Outlet Volumetric Flow Rate	ASTM D-1945 & EPA Method 19

1.5. Sampling and Observing Personnel

Sampling was performed by Burt Kusich and Bill Johnston of BE. Ahtna personnel were present to coordinate and assist with the testing.

1.6. Other Important Background Information

The TTU destroys organic vapors extracted from the adjacent landfill. Source testing of the TTU was previously performed on May 7, 2019.

SECTION 2. SUMMARY OF RESULTS

2.1. Emission Results

Table 2.1 present the Average Test Results. Triplicate 40-minute runs were performed for all test parameters with the flare operating at typical conditions. Individual run results are presented in Table 1 located on page 8. Testing was conducted according to approved Environmental Protection Agency (EPA) test methods.

Table 2.1
Average Test Results
TTU

Parameter	AVERAGE	Allowable Emissions
Inlet Flow Rate, SCFM	95	N.A.
NO _x , lbs/MMBtu	0.044	0.06
CO, lbs/MMBtu	<0.0016	0.40
THC, lbs/MMBtu	0.0007	0.03
NMOC, Destruction Efficiency	98.3%	98%
Inlet total sulfur, grs/100scf as H ₂ S	0.028	50
Outlet SO ₂ , ppm (calculated)	0.05	2000

2.2. Allowable Emissions

See Table 2.1 above. The test results show that the TTU meets all outlet emission specifications. The TO-15 (speciated VOC) analytical results as well as the results of the ASTM-1945 (fixed gases & NMOC) and the ASTM D-5504 (total reduced sulfurs) lab results can be found in Appendix B. The full analytical report with Electronic Comprehensive Validation Package (eCVP) and be found in a separate PDF.

2.3. Process Data

The following operational data was recorded during each run.

Parameter	TTU Temp., °F	LFG Flow, scfm
Run # 1	1,650	94
Run # 2	1,647	96
Run # 3	1,651	95

2.4. Comments: Discussion of Quality Assurance and Errors

Quality assurance procedures listed in the above referenced test methods and referenced in the Source Test Plan were performed and documented. The QA/QC procedures are described in Section 4.3 of the report. Documentation of the QA/QC is provided in Appendix A, B & E.

NMOC is assumed equal to total non-methane hydrocarbons at both the influent and effluent locations.

The LFG higher heating values (HHV) were calculated from the ASTM D-1945 analytical results and were used for the EPA Method 19 stack flow rate determination. Two samples of the LFG were analyzed, the average result of the two samples were used for the EPA Method 19 calculations. These calculations can be found in Appendix A.

SECTION 3. SOURCE OPERATION

3.1. Process Description

Ahtna operates one landfill gas fired thermal treatment unit (TTU) at the Operable Unit 2 (OU2) landfill located at Former Fort Ord, California. The TTU is used as a control device for the treatment of landfill gas (mainly methane, carbon dioxide and nitrogen) that is generated from the decomposition of waste. The gas is collected in a network of interconnected pipes from several extraction wells that draw a vacuum on the vapors in the landfill. The vapors are treated to remove condensate and particulate material. The gas is combusted in the TTU that operates at a controlled exhaust temperature. The flare is exhausted directly to the atmosphere and operates 60-70 hours every other week.

3.2. Flow Diagram

A digital image of the test locations can be found in Appendix F.

3.3. Process and Control Operating Parameters

The TTU operated at ~1,649 °F and ~95 SCFM during the testing, according to the system monitoring devices.

3.4. Operating Parameters

The TTU was operating normally during the test periods.

3.5. Testing or Process Interruptions and Changes

There were no testing or process interruptions during the test series.

SECTION 4. SAMPLING AND ANALYSIS PROCEDURES

4.1. Port Location

Emissions from the TTU outlet were sampled via two ports (90° apart) located on the circular stack >5 stack diameters downstream from the nearest disturbance (bend or junction) and <1 stack diameter upstream from the exit. The sample ports were accessed using a 40-foot boom-lift.

The dimensional cross-section of the outlet stack is 46-inches (Area SQFT =11.541)

The undiluted LFG sampled was collected via a single port tap located on the flame arrestor. The sample port was accessed from ground level near the TTU.

4.2. Point Description/Labeling – Ports/Stack

The stack outlet ports were not labeled but were designated as facing south and west. Only the west port was accessed for this test series.

4.3. Method Description, Equipment, Sampling, Analysis and QA/QC

Sampling and analytical procedures of the methods were followed as published in the BAAQMD Manual of Procedures, CARB Stationary Source Test Methods Volume I and the EPA “Quality Assurance Handbook for Air Pollution Measurement Systems” Volume III, US EPA 600/4-77-027b.

The following is an overview of the Testing Performed

Parameter	Location	Methods	Duration	# of Runs
NO _x , CO, O ₂ & CO ₂	Exhaust	EPA 7E, 10 & 3A	40 mins	3
NMOC	Exhaust	EPA 25A	40 mins	3
Speciated VOC	Exhaust	EPA TO-15	5 mins	1
Flow Rate, DSCFM	Exhaust	EPA 19	40 mins	3
Flow Rate, DSCFM	Inlet	Dedicated Flow Meter	-	3
Speciated VOC NMOC, C ₁ -C ₆ +, O ₂ , CO ₂ , N ₂ , BTU Total Reduced Sulfurs	Inlet	EPA TO-15 ASTM D-1945 ASTM D-5504	5 mins	2

EPA Methods 7E, 3A, & 10. A sample is extracted from the exhaust stack conditioned and analyzed by continuous monitoring gas analyzers in a test van. The sampling system consists of a stainless steel sample probe, heated Teflon sample line, glass-fiber particulate filter, glass moisture-condensation knockouts, Teflon sample transfer tubing, diaphragm pump and a stainless steel/Teflon manifold and flow control system. A constant sample and calibration gas supply pressure of 5 PSI is provided to each analyzer to avoid pressure variable response errors. The entire sampling system is leak checked before and after the sampling program. The BE sampling and analytical system is checked for linearity with zero, mid and high span calibrations, and is checked for system bias at the

beginning and end of each test run. System bias is determined by pulling calibration gas through the entire sampling system. Individual test run calibrations will use the calibration gas that most closely matches the stack gas effluent. The calibration gases will be selected to fall approximately within the following instrument ranges; 80 to 100 percent for the high calibration, 40 to 60 percent for the mid range and zero. Zero and calibration drift values and system bias will be determined for each test run. A stratification check is performed on the source during the first test run.

EPA Methods 7E, 10 & 3A met the following QA/QC method requirements:

System Criteria

Instrument Linearity	≤ 2% Calibration Span or ±0.5 diff.
Instrument Bias	≤ 5% Calibration Span or ±0.5 diff.
NO ₂ Converter Efficiency	≥ 90%
System Response Time	≤ 2 minutes

Test Criteria

Instrument Zero Drift	≤ 3% Calibration Span or ±0.5 diff.
Instrument Span Drift	≤ 3% Calibration Span or ±0.5 diff.

EPA 25A (THC by FID) is an accepted method for the determination of THC. A flame ionization detector (FID) total hydrocarbon continuous monitor is used for the sampling. The sampling and calibrations are performed through an all heated sample line connected directly to the THC analyzer without the removal of moisture. The FID in the analyzer is heated to 185 °C. The calibration gases are selected to fall within the following instrument ranges; 80 to 90 percent for the high calibration, 45 to 55 percent for the mid range calibration, 25 to 35 percent for the low range calibration and zero. Zero and mid calibration drift values are determined for each test run. A methane cut is performed by passing stack gas through activated charcoal scrubbing out non-methane organic compounds allowing the stack methane concentration to be determined.

EPA Method 25A met the following QA/QC method requirements:

System Criteria

Instrument Linearity	≤ 5% Calibration Gas Conc.
----------------------	----------------------------

Test Criteria

Instrument Zero Drift	≤ 3% Span Range
Instrument Span Drift	≤ 3% Span Range

Instrumentation: The following continuous emission monitors were used.

Instrument	Analyte	Principle
CAI Model 601P	O ₂	Paramagnetic
CAI Model 600	CO ₂	NDIR
CAI Model 600CLD	NO _x	Chemiluminescence
TECO Model 48i	CO	GFC IR analyzer
CAI Model 300M	THC/CH ₄	FID

All calibration gases are EPA Protocol #1 rated or is traceable to the National Institute of Standards and Technology. The analyzer data recording system consists of multi-channel strip chart recorders supported by a computer Data Acquisition System (DAS).

EPA Method TO-15 & D-5504 analysis is used to determine concentrations of Organic and inorganic compounds including sulfurs compounds. Inlet and/or outlet gases are filled into tedlar bags corresponding to the test program. The bags are labeled respectively then sent to a laboratory and analyzed for speciated compounds using GC/MS (gas chromatography/mass specrometer) and GC/SCD (gas chromatography/Sulfur Chemiluminescence Detector) within 24 hours.

EPA Method ASTM D-1945 analysis is used to determine the composition of gaseous fuels (e.g. Methane, fixed gases & BTU Content). Inlet gases are filled into a tedlar bag; the bag is labeled respectively then sent to a laboratory and analyzed for fixed gases, methane and C₁-C₆ using GC/FID (gas chromatography/flame ionization detector). Each compound has calorific values that are used to calculate the BTU combustion factors.

EPA Method 19 is used to determine stack gas volumetric flow rates using oxygen based F-factors. F-factors are ratios of combustion gas volumes generated from heat input. The heating value of the fuel in BTU per cubic foot is determined from lab analysis of the fuel gas samples using ASTM D-1945 gas chromatography analytical procedures. Total fuel consumption for the flare is monitored on the systems control panel. During each test run gas readings and samples were taken and used for determining the stack flow rate. The total cubic feet per hour of fuel multiplied times the BTU/cf provides million BTU per hour (MMBtu/hr) heat input. The heat input in MMBtu/hr is multiplied by the F-factor (DSCF/MMBtu) and adjusted for the measured oxygen content of the source to determine volumetric flow rate. The flow rates are used to determine stack emission rates.

TABLE #1
Fort Ord
NOx, CO, CH₄, VOC & SOx Test Results
TTU

TEST	1	2	3	AVERAGE	LIMIT
Test Location	Outlet	Outlet	Outlet		
Test Date	6/4/20	6/4/20	6/4/20		
Test Time	1130-1210	1220-1300	1314-1354		
Standard Temp., °F	68	68	68		
Flare Temp., °F	1,650	1,647	1,651	1,649	
Fuel F-Factor, DSCF/MMBtu @ 68°F	9,865	9,865	9,865	9,865	
Inlet Methane (CH ₄) Content, %	36.80	36.90	38.00	37.23	
Inlet Fuel Flow Rate, DSCFM	94	96	95	95	
Heat Input, MMBtu/hr	2.22	2.26	2.26	2.25	
Outlet Flow Rate, DSCFM (M19)	813	836	866	838	
Outlet Emissions					
O ₂ , %	11.67	11.74	12.06	11.82	
NOx, ppm	16.47	16.35	15.79	16.20	
NOx, lbs/hr	0.096	0.098	0.098	0.097	
NOx, lbs/day	2.30	2.35	2.35	2.33	
NOx, lbs/MMBtu	0.044	0.044	0.044	0.044	0.06
CO, ppm	<1.0	<1.0	<1.0	<1.0	
CO, lbs/hr	<0.0035	<0.0036	<0.0038	<0.0037	
CO, lbs/day	<0.085	<0.087	<0.091	<0.088	
CO, lbs/MMBtu	<0.0016	<0.0016	<0.0017	<0.0016	0.40
THC, ppm as methane	<1.0	<1.0	<1.0	<1.00	
CH ₄ , ppm	<1.0	<1.0	<1.0	<1.00	
CH ₄ , lbs/hr	<0.0020	<0.0021	<0.0022	<0.0021	
NMOC, ppm as methane	<1.0	<1.0	<1.0	<1.0	
NMOC, ppm @ 3% O ₂ as Methane	<1.9	<2.0	<2.0	<2.0	
NMOC, ppm @ 3% O ₂ as Hexane	<0.32	<0.33	<0.34	<0.33	
NMOC, lbs/hr as methane	<0.011	<0.011	<0.012	<0.011	
NMOC, lbs/day as methane	<0.261	<0.269	<0.28	<0.27	
NMOC, lbs/MMBtu as methane	<0.0008	<0.0008	<0.0009	<0.0008	0.03
Inlet Emissions					
Inlet NMOC, ppm as methane ¹	440	440	440	440	
Inlet NMOC, lbs/hr as methane	0.555	0.567	0.561	0.561	
NMOC, Destruction Efficiency %	98.04%	98.02%	97.93%	98.00%	98%
Landfill Gas Sulfur Content					
Inlet TRS as H ₂ S, ppm	0.451	0.442	N.M.	0.45	
Inlet TRS as H₂S, gr/100dscf	0.028	0.028	N.M.	0.028	50
Inlet Total Sulfur as SO ₂ , lbs/hr	0.00042	0.00042	N.M.	0.00042	
Outlet SO₂, ppm (Calculated)	0.052	0.051	N.M.	0.051	2000

¹ Inlet NMOC is the average of TTU-FM-111 & 112
 CH₄ was not measured separately due to low measured THC concentrations.
 THC is assumed equal to CH₄ & VOC for calculation purposes.

WHERE:

MW = Molecular Weight
 DSCFM = Dry Standard Cubic Feet Per Minute
 ppm = Parts Per Million Concentration
 lbs/hr = Pound Per Hour Emission Rate
 CO = Carbon Monoxide (MW = 28)
 NOx = Oxides of Nitrogen as NO₂ (MW = 46)
 THC = Total Hydrocarbons as Methane (MW = 16)
 SO₂ = Sulfur Dioxide (MW = 64)
 H₂S = Hydrogen Sulfide (MW = 32)
 lbs/MMBtu = Pounds per million BTU
 g/scf = grams per standard cubic foot of inlet gas
 gr/100scf = grains per 100 standard cubic foot of inlet gas
 NMOC = Total Non-Methane Hydrocarbons as Methane (MW = 16) CH₄
 NMOC = Total Non-Methane Hydrocarbons as Hexane (MW = 86.18) C₆H₁₄

CALCULATIONS:

lbs/hr = ppm * MW * DSCFM * 60 / 385E6 (Tstd 68°F)
 lbs/day = lbs/hr * 24
 Removal Efficiency = (inlet lbs/hr-outlet lbs/hr) / Inlet lbs/hr
 ppm @ 3% O₂ = ppm * 17.9 / (20.9 - stack O₂)
 lbs/MMBtu = Fd * M.W.* ppm * 2.59E-9 * (20.9 / (20.9 - %O₂))
 ppm dry = ppm wet * (100 / (100 - H₂O%))
 g/scf = lbs/hr * 453 / (Inlet SCFM * 60)
 gr/100scf = ppm H₂S * 0.0626285
 SO₂ ppm (outlet) = lbs/hr / (DSCFM * M.W. * 60) * 385E6

APPENDICES

APPENDIX A – CALCULATIONS & NOMENCLATURE

APPENDIX B - LABORATORY REPORTS

APPENDIX C - FIELD DATA SHEETS

APPENDIX D - STRIP CHART RECORDS

APPENDIX E – CALIBRATION GAS CERTIFICATES

APPENDIX F – STACK DIAGRAMS

APPENDIX G – SAMPLING SYSTEM DIAGRAMS

APPENDIX H – SOURCE TEST PLAN

APPENDIX A
CALCULATIONS & NOMENCLATURE

Standard Abbreviations for Reports

Unit	Abbreviation	Unit	Abbreviation
billion	G	microgram	µg
Brake horsepower	bhp	milligram	mg
Brake horsepower hour	bhp-hr	milliliter	ml
British Thermal Unit	Btu	million	MM
capture efficiency	CE	minute	min
destruction efficiency	DE	Molecular Weight	M
Dry Standard Cubic Feet	DSCF	nanogram	ng
Dry Standard Cubic Feet per Minute	DSCFM	Parts per Billion	ppb
Dry Standard Cubic Meter	DSCM	Parts per Million	ppm
Dry Standard Cubic Meter per Minute	DSCMM	pennyweight per firkin	pw/fkn
grains per dry standard cubic foot	gr/DSCF	pound	lb
gram	g	pounds per hour	lbs/hr
grams per Brake horsepower hour	g/bhp-hr	pounds per million Btu	lbs/MMBtu
kilowatt	kW	second	sec
liter	l	Specific Volume, ft ³ /lb-mole	SV
Megawatts	MW	Thousand	k
meter	m	watt	W

Common Conversions / Calculations / Constants

- 1 gram = 15.432 grains
- 1 pound = 7000 grains
- grams per pound = 453.6
- bhp = 1.411 * Engine kW, (where Engine kW = Generator kW output / 0.95) @ 95% efficiency
- g/bhp-hr = 453*ppm*(MW / (385E6))* 0.00848 * f-factor * (20.9 / (20.9-O₂)); CARB
- g/bhp-hr = lbs/hr * 453.6 / bhp
- 2.59E-9 = Conversion factor for ppm to lbs/scf; EPA 40CFR60.45 @ 68°F
- Correction Multiplier for Standard Temperature = (460 + T_{std.} °F) / 528
- dscf / MMBTU @ 68°F = 8710 for Natural gas; EPA Method 19 @ 70° F = 8743 for Natural gas
- Btu/ft³@ 68°F = 1040 for Natural Gas; EPA Method 19 @ 70° F = 1044 for Natural gas
- lb/hr Part. Emission Rate = 0.00857 * gr/dscf * dscfm; EPA Method 5
- lbs/hr = ppm / SV x dscfm x M * 60; CARB Method 100; where SV ≈ 385E⁶ @ 68°F or ≈ 379E⁶ @ 60°F or ≈ 386E⁶ @ 70°F.
- Correction to 12% CO₂ = gr/dscf * 12% / stack CO₂%; EPA Method 5
- Correction to 3% O₂ = ppm * 17.9 / (20.9 - stack O₂ %); CARB Method 100
- Correction to 15% O₂ = ppm * 5.9 / (20.9 - stack O₂ %); CARB Method 100
- dscfm = Gas Fd * MMBtu/min * 20.9 / (20.9 - stack O₂ %); EPA Method 19
- lb/MMBtu @ 68°F = Fd * M * ppm * 2.59E-9 * 20.9 / (20.9 - stack O₂ %); EPA Method 19 @ 70° F = 2.58E-9

Standard Temperatures by District

EPA	68 °F	NSAPCD - Northern Sonoma	68 °F
CARB	68 °F	PCAPCD - Placer	68 °F
BAAQMD - Bay Area	70 °F	SLOCAPCD - San Luis Obispo	60 °F
SJVUAPCD - San Joaquin	60 °F	SMAQMD - Sacramento	68°F de facto
SCAQMD - South Coast	60 °F	SCAQMD - Shasta County	68 °F
MBUAPCD - Monterey Bay	68 °F	YSAPCD - Yolo-Solano	68 °F
FRAQMD - Feather River	68 °F	AADBAPC - Amador County	68 °F

CEM BIAS SYSTEM TEST SUMMARY SHEET

Facility: Fort Ord Date: 6/4/2020 Personnel: BJ, BK
 Location: TTU

	O ₂	CO ₂	NO _x	CO	THC	CH ₄	Comments
Analyzer	CAI 110		CAI	TECO	CAI		
Range	21.01		22.3	90.5	87.9		
Cal Value (zero)	0.00		0.00	0.00	0.00		
Cal Value (low)					23.79		
Cyl. #					CC258710		
Exp Date					6/23/23		
Cal Value (mid)	8.49	8.52	12.65	45.3	44.1		
Cyl. #	CC106440		DT14874	CC258415	CC92498		
Exp Date	10/8/27		12/2/22	1/31/28	4/24/28		
Cal Value (Hi)	21.01	8.52	22.30	90.50	87.90		
Cyl. #	SA4344	CC258415	DT9922	CC106440	AAL69415		
Exp Date	6/26/27	1/31/28	7-26-221	10/8/27	4/30/20		

CALIBRATION ERROR CHECK

zero cal (int)	0.0	0.0	0.0	0.0	-0.6		
% Linearity	0.0	-0.5	0.0	0.0	-0.7		<2% or +/-0.5diff.
low cal (int)					23.55		
% Linearity					-1.01		<2% or +/-0.5diff.
mid cal (int)	8.44	8.52	12.82	45.48	44.42		
% Linearity	-0.2	0.0	0.8	0.2	0.4		<2% or +/-0.5diff.
high cal (int)	21.00	8.52	22.55	90.35	87.61		
% Linearity	0.0	0.0	1.1	-0.2	-0.3		<2% or +/-0.5diff.

SYSTEM BIAS & DRIFT

Zero (int)	0.01	-0.05	0.00	0.04	-0.61		
Zero (ext)(i)	-0.02	0.19	0.00	-0.26	0.60		
% Bias	-0.12	2.81	0.00	-0.33	1.38		Limit (±5%) or +/-0.5diff.
Cal (int)	8.44	8.52	12.82	45.48	44.42		
Cal (ext) 1(i)	8.44	8.51	12.80	45.31	44.40		
% Bias	0.0	-0.1	-0.1	-0.2	0.0		Limit (±5%) or +/-0.5diff.
Zero (ext) 1(f)	-0.02	-0.05	0.00	-0.36	-0.52		1130-1210
Cal (ext) 1(f)	8.44	8.51	12.81	45.10	43.82		Run 1
Zero % Drift	0.0	-2.8	0.0	-0.1	-1.3		Limit (±3%) or +/-0.5diff.
Zero % Bias	-0.1	0.0	0.0	-0.4	0.1		Limit (±5%) or +/-0.5diff.
Cal % Drift	0.0	0.0	0.0	-0.2	-0.7		Limit (±3%) or +/-0.5diff.
Cal % Bias	0.0	-0.1	-0.1	-0.4	-0.7		Limit (±5%) or +/-0.5diff.
Average	11.61	7.53	16.67	-0.50	0.61		
Corr. Average	11.67	7.54	16.47	-0.19	0.58		
Zero (ext) 2(f)	-0.02	-0.05	0.00	-0.43	-0.16		1220-1300
Cal (ext) 2(f)	8.42	8.51	12.79	44.94	44.09		Run 2
Zero % Drift	0.0	0.0	0.0	-0.1	0.4		Limit (±3%) or +/-0.5diff.
Zero % Bias	-0.1	0.0	0.0	-0.5	0.5		Limit (±5%) or +/-0.5diff.
Cal % Drift	-0.1	0.0	-0.1	-0.2	0.3		Limit (±3%) or +/-0.5diff.
Cal % Bias	-0.1	-0.1	-0.1	-0.6	-0.4		Limit (±5%) or +/-0.5diff.
Average	11.66	7.47	16.54	-0.62	0.26		
Corr. Average	11.74	7.48	16.35	-0.22	0.60		
Zero (ext) 3(f)	-0.02	-0.05	0.00	-0.48	0.45		1314-1354
Cal (ext) 3(f)	8.42	8.51	12.79	44.84	45.12		Run 3
Zero % Drift	0.0	0.0	0.0	-0.1	0.7		Limit (±3%) or +/-0.5diff.
Zero % Bias	-0.2	0.0	0.0	-0.6	1.2		Limit (±5%) or +/-0.5diff.
Cal % Drift	0.0	0.0	0.0	-0.1	1.2		Limit (±3%) or +/-0.5diff.
Cal % Bias	-0.1	-0.1	-0.1	-0.7	0.8		Limit (±5%) or +/-0.5diff.
Average	11.97	7.18	15.96	-0.65	0.33		
Corr. Average	12.06	7.19	15.79	-0.20	0.18		

SYSTEM RESPONSE TIME = 40 sec

System Drift (Limit ± 3%) = 100 * External final cal - External Initial cal
 Cal Value (Hi)

System Bias (Limit ± 5%) = 100 * External cal - Internal cal
 Cal Value (Hi)

% Linearity (Limit ± 2%) = 100 * Span Value - Internal cal
 Cal Value (Hi)

Corrected Average = [Test Avg. - ((Zi+Zf) / 2)] * Span Gas Value / [(Si+Sf) / 2] - ((Zi+Zf) / 2)

EPA Method 25A (THC) QC
 Cal. Error = <5% cal. Value
 100 * (Cal Value - Cal Response) / Cal Value
 System Drift = <3% of Scale
 100 * (final cal - initial cal) / Range

NO₂ Converter Test

NO ₂ Cal Gas	NO ₂ Value	% of Efficiency	Cyl. #	Cyl. Exp. Date
6.176	5.72	92.62%	CC506665	07/31/22

**STACK GAS FLOW RATE DETERMINATION -- FUEL USAGE
EPA Method 19**

Facility: Fort Ord
 Unit: TTU
 Condition: Normal
 Date: 6/4/2020
 Personell: BJ, BK
 Time:

**1130-1210 1220-1300 1314-1354
 Run 1 Run 2 Run3**

Gross Calorific Value @ 68°F	393	393	393	Btu / ft ³
Stack Oxygen	11.67	11.74	12.06	%
Gas Fd-Factor @ 68°F	9,865	9,865	9,865	DSCF/MMBtu
Standard Temperature (°F)	60	60	60	°F

Corrected Fuel Rate (SCFM) @ 68°F	94	96	96	SCFM
Fuel Flowrate (SCFH)	5,640	5,760	5,760	SCFH
Million Btu per minute	0.037	0.038	0.038	MMBtu/min
Heat Input (MMBtu/hour)	2.2	2.3	2.3	MMBtu/Hr

Stack Gas Flow Rate	813	836	866	DSCFM
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WHERE:

Gas Fd-Factor = Fuel conversion factor (ratio of combustion gas volumes to heat inputs)
 MMBtu = Milion Btu
 Gross Caloric Value and the Gas Fd Fuel Factor is the average of sample TTU-FM-104 & 105

CALCULATIONS:

SCFM = CFM * 528 * (gas line PSIA) / 14.7 / (gas °F + 460)
 MMBtu/min = (SCFM * Btu/ft³) / 1,000,000
 DSCFM = Gas Fd-Factor * MMBtu/min * 20.9/ (20.9 - stack oxygen%)
 SCFH = SCFM * 60
 Heat Input = MMBtu/min * 60

Gross Caloric Value and the Gas Rd Fuel Fasctor is the Average of TTU-FM-104 & 105

FG-FACTOR CALCULATION

**Fort Ord Landfill
Landfill Gas
TTU-FM-112**

Test Date: 6-4-20

	Molecular Weight	Ideal Gas Specific Gravity, G _i	Ideal Gas Total Calorific Value, H _i	Compressibility Factor, Y _i	Specific Volume, ft ³ /lb	Composition Mole Fraction, x _i	Specific Gravity Fraction, x _i G _i	Calorific Value Fraction, x _i H _i	Compressibility Fraction, x _i Y _i	x _i MW	Weight Fraction, x _i MW / Σx _i MW	CARBON Weight Fraction	HYDROGE N Weight Fraction	OXYGEN Weight Fraction	NITROGE N Weight Fraction	SULFUR Weight Fraction	CHONS SUM	Specific Volume, ft ³ /lb
Helium	4.00	0.1382			96.65	0.0000	0.0000	0.0		0.0000	0.0000		0.0000				0.0000	
Hydrogen	2.02	0.0696	324.2		187.723	0.0000	0.0000	0.0		0.0000	0.0000		0.0000				0.0000	4.3424
Nitrogen	28.01	0.9671		0.0044	13.443	0.3300	0.3191		0.0015	9.2433	0.3230		0.3230	0.3230			0.3230	0.1454
Oxygen	32.00	1.1048		0.0073	11.819	0.0110	0.0122		0.0001	0.3520	0.0123		0.0000	0.0123			0.0000	0.0000
Carbon Monoxide	28.01	0.9671	320.5	0.0053	13.506	0.0000	0.0000	0.0		0.0000	0.0000	0.0000					0.0000	0.0000
Carbon Dioxide	44.01	1.5196		0.0197	8.548	0.2900	0.4407		0.0057	12.7629	0.4460	0.1217		0.3243			0.4460	3.8126
Methane	16.04	0.5539	1010.0	0.0116	23.852	0.3900	0.2160	393.9	0.0045	6.2556	0.2186	0.1637	0.0549				0.2186	5.2143
Ethane	30.01	1.0382	1769.7	0.0239	12.455	0.0000	0.0000	0.0		0.0000	0.0000	0.0000	0.0000				0.0000	0.0000
Propane	44.09	1.5226	2516.1	0.0344	8.365	0.0000	0.0000	0.0		0.0005	0.0000	0.0000	0.0000				0.0000	0.0002
Isobutane	58.12	2.0068	3251.9	0.0458	6.321	0.0000	0.0000	0.0		0.0007	0.0000	0.0000	0.0000				0.0000	0.0002
n-Butane	58.12	2.0068	3262.3	0.0478	6.321	0.0000	0.0000	0.0		0.0001	0.0000	0.0000	0.0000				0.0000	0.0000
Isopentane	72.14	2.4912	4000.9	0.0581	5.252	0.0000	0.0000	0.0		0.0000	0.0000	0.0000	0.0000				0.0000	0.0000
n-Pentane	72.14	2.4912	4008.9	0.0631	5.252	0.0000	0.0000	0.0		0.0000	0.0000	0.0000	0.0000				0.0000	0.0000
Hexanes	86.17	2.9755	4747.0	0.0800	4.398	0.0000	0.0000	0.0		0.0000	0.0000	0.0000	0.0000				0.0000	0.0000
Hydrogen Sulfide	34.08	1.1767	637.1	0.0253	11.23	0.0000	0.0000	0.0		0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000
Total						1.0210	0.9881	394.0	0.0118	28.6152	1.0000	0.2854	0.0550	0.3366	0.3230	0.0000	1.0000	13.51

0.988

13.514983 ft³/lb

394 Btu/ft³

388 Btu/ft³

5,325 Btu/lb

9,900 DSCF/MMBtu

DSCF/MMBtu = 10⁶ * ((3.64*%H₂) + (1.53*%C) + (0.57*%S) + (0.14*%N₂) - (0.46*%O₂)) / Btu/lb

1,721 DSCF/MMBtu

DSCF/MMBtu = 10⁶ * (0.321*%C) / Btu/lb

Specific Gravity (SG)

Specific Volume, (SV) ft³/lb

Gross Calorific Value (GCV) @ 60°F

Gross Calorific Value (GCV) @ 68°F

Gross Calorific Value (GCV)

Btu/lb = Btu/ft³ * ft³/lb

Gas Fd-Factor @ 68°F

DSCF/MMBtu = 10⁶ * ((3.64*%H₂) + (1.53*%C) + (0.57*%S) + (0.14*%N₂) - (0.46*%O₂)) / Btu/lb

Gas Fe-Factor @ 68°F

DSCF/MMBtu = 10⁶ * (0.321*%C) / Btu/lb

Fd-FACTOR CALCULATION

**Fort Ord Landfill
Landfill Gas
TTU-FM-111**

Test Date: 6-4-20

	Molecular Weight	Ideal Gas Specific Gravity, G _i	Ideal Gas Total Calorific Value, H _i	Compressibility Summation Factor, Y _i	Specific Volume, ft ³ /lb	Composition Mole Fraction, x _i	Specific Gravity Fraction, x _i G _i	Calorific Value Fraction, x _i H _i	Compressibility Fraction, x _i Y _i	x _i MW	Weight Fraction, x _i MW / Σx _i MW	CARBON N Weight Fraction	HYDROGE N Weight Fraction	OXYGEN Weight Fraction	NITROGE N Weight Fraction	SULFUR Weight Fraction	CHONS SUM	Specific Volume, ft ³ /lb
Helium	4.00	0.1382			96.65	0.00000	0.0000	0.0	0.0000	0.0000	0.0000		0.0000				0.0000	
Hydrogen	2.02	0.0696	324.2		187.723	0.00000	0.0000	0.0	0.0000	0.0000	0.0000		0.0000				0.0000	4.1799
Nitrogen	28.01	0.9671		0.0044	13.443	0.32000	0.3095		0.0014	8.9632	0.3109		0.0000	0.0084	0.3109		0.0084	0.0997
Oxygen	32.00	1.1048		0.0073	11.819	0.00760	0.0084		0.0001	0.2432	0.0084		0.0000	0.0000			0.0000	0.0000
Carbon Monoxide	28.01	0.9671	320.5	0.0053	13.506	0.00000	0.0000	0.0	0.0000	0.0000	0.0000		0.0000				0.0000	3.9151
Carbon Dioxide	44.01	1.5196		0.0197	8.548	0.30000	0.4559		0.0059	13.2030	0.4580		0.0559	0.3330			0.4580	5.3088
Methane	16.04	0.5539	1010.0	0.0116	23.852	0.40000	0.2216	404.0	0.0046	6.4160	0.2226		0.0000				0.2226	0.0000
Ethane	30.01	1.0382	1769.7	0.0239	12.455	0.00000	0.0000	0.0	0.0000	0.0000	0.0000		0.0000				0.0000	0.0000
Propane	44.09	1.5226	2516.1	0.0344	8.365	0.00001	0.0000	0.0	0.0000	0.0006	0.0000		0.0000				0.0000	0.0002
Isobutane	58.12	2.0068	3251.9	0.0458	6.321	0.00001	0.0000	0.0	0.0000	0.0007	0.0000		0.0000				0.0000	0.0002
n-Butane	58.12	2.0068	3262.3	0.0478	6.321	0.00000	0.0000	0.0	0.0000	0.0001	0.0000		0.0000				0.0000	0.0000
Isopentane	72.14	2.4912	4000.9	0.0581	5.252	0.00000	0.0000	0.0	0.0000	0.0000	0.0000		0.0000				0.0000	0.0000
n-Pentane	72.14	2.4912	4008.9	0.0631	5.252	0.00000	0.0000	0.0	0.0000	0.0000	0.0000		0.0000				0.0000	0.0000
Hexanes	86.17	2.9755	4747.0	0.0800	4.398	0.00000	0.0000	0.0	0.0000	0.0000	0.0000		0.0000				0.0000	0.0000
Hydrogen Sulfide	34.08	1.1767	637.1	0.0253	11.23	0.00000	0.0000	0.0	0.0000	0.0000	0.0000		0.0000			0.0000	0.0000	0.0000
Total						1.02763	0.9954	404.1	0.0120	28.8268	1.0000	29.17%	5.60%	34.15%	31.09%	0.00%	1.0000	13.50

Specific Gravity (SG) **0.995**

Specific Volume, (SV) ft³/lb **13.503763**

Gross Calorific Value (GCV) @ 60°F **404 Btu/ft³**

Gross Calorific Value (GCV) @ 68°F **398 Btu/ft³**

Gross Calorific Value (GCV) **5,457 Btu/lb**
 $Btu/lb = Btu/ft^3 * ft^3/lb$

Gas Fd-Factor @ 68°F **9,830 DSCF/MMBtu**

$DSCF/MMBtu = 10^6 * ((3.64 * \%H_2) + (1.53 * \%C) + (0.57 * \%S) + (0.14 * \%N_2) - (0.46 * \%O_2)) / Btu/lb$

Gas Fe-Factor @ 68°F **1,716 DSCF/MMBtu**

$DSCF/MMBtu = 10^6 * (0.321 * \%C) / Btu/lb$

**APPENDIX B
LAB REPORTS**



6/12/2020
Mr. Eric Schmidt
AHTNA
296 12th Street

Marina CA 93933

Project Name: FORT ORD - TTU
Project #:
Workorder #: 2006116B

Dear Mr. Eric Schmidt

The following report includes the data for the above referenced project for sample(s) received on 6/5/2020 at Air Toxics Ltd.

The data and associated QC analyzed by Modified ASTM D-1945 are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Eurofins Air Toxics Inc. for your air analysis needs. Eurofins Air Toxics Inc. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Brian Whittaker at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Brian Whittaker
Project Manager



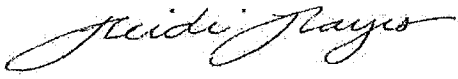
Air Toxics

WORK ORDER #: 2006116B

Work Order Summary

CLIENT:	Mr. Eric Schmidt AHTNA 296 12th Street Marina, CA 93933	BILL TO:	AP AHTNA Global, LLC 110 W 38th Ave Suite #200J Anchorage, AK 99503-5677
PHONE:	831-384-3735	P.O. #	PO21000164
FAX:		PROJECT #	FORT ORD - TTU
DATE RECEIVED:	06/05/2020	CONTACT:	Brian Whittaker
DATE COMPLETED:	06/11/2020		

<u>FRACTION #</u>	<u>NAME</u>	<u>TEST</u>	<u>RECEIPT VAC./PRES.</u>	<u>FINAL PRESSURE</u>
01A	TTU-FM-111	Modified ASTM D-1945	Tedlar Bag	Tedlar Bag
02A	TTU-FM-112	Modified ASTM D-1945	Tedlar Bag	Tedlar Bag
02AA	TTU-FM-112 Lab Duplicate	Modified ASTM D-1945	Tedlar Bag	Tedlar Bag
03A	Lab Blank	Modified ASTM D-1945	NA	NA
04A	LCS	Modified ASTM D-1945	NA	NA
04AA	LCSD	Modified ASTM D-1945	NA	NA

CERTIFIED BY: 
 Technical Director

DATE: 06/12/20

Certification numbers: AZ Licensure AZ0775, FL NELAP – E87680, LA NELAP – 02089, NH NELAP - 209218, NJ NELAP - CA016, NY NELAP - 11291, TX NELAP - T104704434-18-13, UT NELAP – CA009332019-11, VA NELAP - 460197, WA NELAP - C935

Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)

Accreditation number: CA300005-011, Effective date: 10/18/2019, Expiration date: 10/17/2020.

Eurofins Air Toxics, LLC certifies that the test results contained in this report meet all requirements of the NELAC standards

This report shall not be reproduced, except in full, without the written approval of Eurofins Air Toxics, LLC.

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630

(916) 985-1000 . (800) 985-5955 . FAX (916) 351-8279

LABORATORY NARRATIVE
DoD QSM - ASTM D1945
AHTNA
Workorder# 2006116B

Two 1 Liter Tedlar Bag samples were received on June 05, 2020. The laboratory performed analysis via modified ASTM Method D-1945 for Methane and fixed gases in natural gas using GC/FID or GC/TCD. The method involves direct injection of 1.0 mL of sample.

On the analytical column employed for this analysis, Oxygen coelutes with Argon. The corresponding peak is quantitated as Oxygen.

Method modifications taken to run these samples are summarized in the table below. Specific project requirements may over-ride the EATL modifications.

<i>Requirement</i>	<i>ASTM D1945</i>	<i>ATL Modifications</i>
Reference Standard	Concentration should not be < half of nor differ by more than 2 X the concentration of the sample. Run 2 consecutive checks; must agree within 1%.	A minimum of 5-point calibration curve is performed. Quantitation is based on average Response Factor with an acceptance criterion of %RSD <= 15%. All target analytes must be within the linear range of calibration (with the exception of O2, N2, and C6+
Sample Injection Volume	0.50 mL to achieve Methane linearity.	1.0 mL.
Sample analysis	Equilibrate samples to 20-50° F. above source temperature at field sampling	No heating of samples is performed.
Sample calculation	Response factor is calculated using peak height for C5 and lighter compounds.	Peak areas are used for all target analytes to quantitate concentrations.
Normalization	Sum of original values should not differ from 100.0% by more than 1.0%.	Sum of original values may range between 85-115%. Normalization of data not performed.

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

As per project specific client request the laboratory has reported estimated values for target compound hits that are below the Reporting Limit but greater than the Limit of Detection.

The recoveries for Carbon Dioxide in the LCS and LCSD exceeded In-house generated control limits.

Methane, Ethane, Ethene and C6+ were manually integrated in samples TTU-FM-111, TTU-FM-112 and TTU-FM-112 Lab Duplicate.

Propane was manually integrated in sample TTU-FM-112 Lab Duplicate.

A Limit of Detection (LOD) study is not maintained for Nitrogen and Oxygen therefore the laboratory has reported estimated values for these compounds that are below the Reporting Limit but greater than the Method Detection Limit.

C6+ and NMOC reference to Methane are not within the DoD scope of accreditation.

A Limit of Detection (LOD) study is not maintained for non-standard compounds therefore C6+ and NMOC were reported as estimated values below the Reporting Limit but greater than the Method Detection Limit.

Definition of Data Qualifying Flags

Seven qualifiers may have been used on the data analysis sheets and indicate as follows:

B - Compound present in laboratory blank greater than reporting limit.

J - Estimated value.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the detection limit.

M - Reported value may be biased due to apparent matrix interferences.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue



Air Toxics

Summary of Detected Compounds
NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1945

Client Sample ID: TTU-FM-111

Lab ID#: 2006116B-01A

Compound	Rpt. Limit (%)	Rpt. Limit (ppmv)	Amount (%)	Amount (ppmv)
Oxygen	0.10	1000	0.76	7600
Nitrogen	0.10	1000	32	320000
Methane	0.00010	1.0	40	400000
Carbon Dioxide	0.010	100	30	300000
Ethane	0.0010	10	0.00018 J	1.8 J
Propane	0.0010	10	0.0013	13
Isobutane	0.0010	10	0.0012	12
Butane	0.0010	10	0.00024 J	2.4 J
C6+	0.010	100	0.0058 J	58 J
NMOC ref. to Methane (MW=16)	0.010	100	0.043	430

Client Sample ID: TTU-FM-112

Lab ID#: 2006116B-02A

Compound	Rpt. Limit (%)	Rpt. Limit (ppmv)	Amount (%)	Amount (ppmv)
Oxygen	0.10	1000	1.1	11000
Nitrogen	0.10	1000	33	330000
Methane	0.00010	1.0	39	390000
Carbon Dioxide	0.010	100	29	290000
Ethane	0.0010	10	0.00015 J	1.5 J
Propane	0.0010	10	0.0012	12
Isobutane	0.0010	10	0.0012	12
Butane	0.0010	10	0.00024 J	2.4 J
C6+	0.010	100	0.0062 J	62 J
NMOC ref. to Methane (MW=16)	0.010	100	0.045	450

Client Sample ID: TTU-FM-112 Lab Duplicate

Lab ID#: 2006116B-02AA

Compound	Rpt. Limit (%)	Rpt. Limit (ppmv)	Amount (%)	Amount (ppmv)
Oxygen	0.10	1000	1.1	11000
Nitrogen	0.10	1000	33	330000
Methane	0.00010	1.0	39	390000



Air Toxics

Summary of Detected Compounds
NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1945

Client Sample ID: TTU-FM-112 Lab Duplicate

Lab ID#: 2006116B-02AA

Carbon Dioxide	0.010	100	29	290000
Ethane	0.0010	10	0.00016 J	1.6 J
Propane	0.0010	10	0.0012	12
Isobutane	0.0010	10	0.0012	12
Butane	0.0010	10	0.00023 J	2.3 J
----- C6+	0.010	100	0.0060 J	60 J
NMOC ref. to Methane (MW=16)	0.010	100	0.043	430



Air Toxics

Client Sample ID: TTU-FM-111

Lab ID#: 2006116B-01A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1945

File Name:	10060522	Date of Extraction: NA	Date of Collection: 6/4/20 2:00:00 PM
Dil. Factor:	1.00	Date of Analysis: 6/5/20 03:39 PM	

Compound	Rpt. Limit (%)	Rpt. Limit (ppmv)	Amount (%)	Amount (ppmv)
Oxygen	0.10	1000	0.76	7600
Nitrogen	0.10	1000	32	320000
Carbon Monoxide	0.010	100	Not Detected U	Not Detected U
Methane	0.00010	1.0	40	400000
Carbon Dioxide	0.010	100	30	300000
Ethane	0.0010	10	0.00018 J	1.8 J
Ethene	0.0010	10	Not Detected U	Not Detected U
Acetylene	0.0010	10	Not Detected U	Not Detected U
Propane	0.0010	10	0.0013	13
Isobutane	0.0010	10	0.0012	12
Butane	0.0010	10	0.00024 J	2.4 J
Neopentane	0.0010	10	Not Detected U	Not Detected U
Isopentane	0.0010	10	Not Detected U	Not Detected U
Pentane	0.0010	10	Not Detected U	Not Detected U
C6+	0.010	100	0.0058 J	58 J
NMOC ref. to Methane (MW=16)	0.010	100	0.043	430

U = The analyte was not detected above the LOD.

J = Estimated value.

Container Type: 1 Liter Tedlar Bag



Air Toxics

Client Sample ID: TTU-FM-112

Lab ID#: 2006116B-02A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1945

File Name:	10060523	Date of Extraction: NA	Date of Collection: 6/4/20 2:00:00 PM
Dil. Factor:	1.00	Date of Analysis: 6/5/20 04:10 PM	

Compound	Rpt. Limit (%)	Rpt. Limit (ppmv)	Amount (%)	Amount (ppmv)
Oxygen	0.10	1000	1.1	11000
Nitrogen	0.10	1000	33	330000
Carbon Monoxide	0.010	100	Not Detected U	Not Detected U
Methane	0.00010	1.0	39	390000
Carbon Dioxide	0.010	100	29	290000
Ethane	0.0010	10	0.00015 J	1.5 J
Ethene	0.0010	10	Not Detected U	Not Detected U
Acetylene	0.0010	10	Not Detected U	Not Detected U
Propane	0.0010	10	0.0012	12
Isobutane	0.0010	10	0.0012	12
Butane	0.0010	10	0.00024 J	2.4 J
Neopentane	0.0010	10	Not Detected U	Not Detected U
Isopentane	0.0010	10	Not Detected U	Not Detected U
Pentane	0.0010	10	Not Detected U	Not Detected U
C6+	0.010	100	0.0062 J	62 J
NMOC ref. to Methane (MW=16)	0.010	100	0.045	450

U = The analyte was not detected above the LOD.

J = Estimated value.

Container Type: 1 Liter Tedlar Bag



Air Toxics

Client Sample ID: TTU-FM-112 Lab Duplicate

Lab ID#: 2006116B-02AA

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1945

File Name:	10060524	Date of Extraction:	NA	Date of Collection:	6/4/20 2:00:00 PM
Dil. Factor:	1.00	Date of Analysis: 6/5/20 04:32 PM			

Compound	Rpt. Limit (%)	Rpt. Limit (ppmv)	Amount (%)	Amount (ppmv)
Oxygen	0.10	1000	1.1	11000
Nitrogen	0.10	1000	33	330000
Carbon Monoxide	0.010	100	Not Detected U	Not Detected U
Methane	0.00010	1.0	39	390000
Carbon Dioxide	0.010	100	29	290000
Ethane	0.0010	10	0.00016 J	1.6 J
Ethene	0.0010	10	Not Detected U	Not Detected U
Acetylene	0.0010	10	Not Detected U	Not Detected U
Propane	0.0010	10	0.0012	12
Isobutane	0.0010	10	0.0012	12
Butane	0.0010	10	0.00023 J	2.3 J
Neopentane	0.0010	10	Not Detected U	Not Detected U
Isopentane	0.0010	10	Not Detected U	Not Detected U
Pentane	0.0010	10	Not Detected U	Not Detected U
C6+	0.010	100	0.0060 J	60 J
NMOC ref. to Methane (MW=16)	0.010	100	0.043	430

U = The analyte was not detected above the LOD.

J = Estimated value.

Container Type: 1 Liter Tedlar Bag



Air Toxics

Client Sample ID: Lab Blank

Lab ID#: 2006116B-03A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1945

File Name:	10060504a	Date of Extraction: NA	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 6/4/20 10:57 PM	

Compound	Rpt. Limit (%)	Rpt. Limit (ppmv)	Amount (%)	Amount (ppmv)
Oxygen	0.10	1000	0.012 J	120 J
Nitrogen	0.10	1000	Not Detected U	Not Detected U
Carbon Monoxide	0.010	100	Not Detected U	Not Detected U
Methane	0.00010	1.0	Not Detected U	Not Detected U
Carbon Dioxide	0.010	100	Not Detected U	Not Detected U
Ethane	0.0010	10	Not Detected U	Not Detected U
Ethene	0.0010	10	Not Detected U	Not Detected U
Acetylene	0.0010	10	Not Detected U	Not Detected U
Propane	0.0010	10	Not Detected U	Not Detected U
Isobutane	0.0010	10	Not Detected U	Not Detected U
Butane	0.0010	10	Not Detected U	Not Detected U
Neopentane	0.0010	10	Not Detected U	Not Detected U
Isopentane	0.0010	10	Not Detected U	Not Detected U
Pentane	0.0010	10	Not Detected U	Not Detected U
C6+	0.010	100	Not Detected U	Not Detected U
NMOC ref. to Methane (MW=16)	0.010	100	Not Detected U	Not Detected U

J = Estimated value.

U = The analyte was not detected above the LOD.

Container Type: NA - Not Applicable



Air Toxics

Client Sample ID: LCS

Lab ID#: 2006116B-04A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1945

File Name:	10060502a	Date of Extraction: NA	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 6/4/20 10:09 PM	

Compound	%Recovery	Method Limits
Oxygen	98	92-108
Nitrogen	97	95-102
Carbon Monoxide	94	86-96
Methane	103	92-116
Carbon Dioxide	104	96-100
-----	-----	-----
Ethane	99	94-110
Ethene	100	91-113
Acetylene	98	93-107
Propane	99	94-109
Isobutane	102	96-112
-----	-----	-----
Butane	100	92-111
Neopentane	102	89-115
Isopentane	106	84-122
Pentane	102	92-113
C6+	100	94-110
-----	-----	-----

Container Type: NA - Not Applicable



Air Toxics

Client Sample ID: LCSD

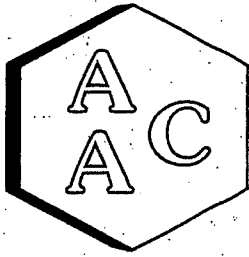
Lab ID#: 2006116B-04AA

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1945

File Name:	10060528a	Date of Extraction: NA	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 6/5/20 06:09 PM	

Compound	%Recovery	Method Limits
Oxygen	98	92-108
Nitrogen	97	95-102
Carbon Monoxide	94	86-96
Methane	107	92-116
Carbon Dioxide	104	96-100
Ethane	103	94-110
Ethene	104	91-113
Acetylene	101	93-107
Propane	103	94-109
Isobutane	105	96-112
Butane	104	92-111
Neopentane	106	89-115
Isopentane	110	84-122
Pentane	106	92-113
C6+	105	94-110

Container Type: NA - Not Applicable



Atmospheric Analysis & Consulting, Inc.

CLIENT : Eurofins Air Toxics
PROJECT NAME : FFO, Marina CA
AAC PROJECT NO. : 200965
REPORT DATE : 06/10/2020

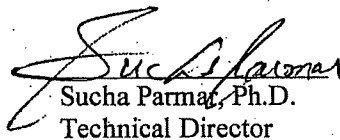
On June 5, 2020, Atmospheric Analysis & Consulting, Inc. received two (2) Tedlar Bags for Total Reduced Sulfur analysis by ASTM D-5504. Upon receipt, the samples were assigned unique Laboratory ID numbers as follows:

Client ID	Lab No.
TTU-FM-111S	200965-8741
TTU-FM-112S	200965-8742

This analysis is performed in accordance with AAC's Quality Manual. For detailed information pertaining to specific EPA, NCASI, ASTM and SCAQMD accreditations (Methods & Analytes), please visit our website at www.aaclab.com.

I certify that this data is technically accurate, complete, and in compliance with the terms and conditions of the contract. No problems were encountered during receiving, preparation, and/or analysis of these samples. The Technical Director or his/her designee, as verified by the following signature, has authorized release of the data.

If you have any questions or require further explanation of data results, please contact the undersigned.


Sucha Parmar, Ph.D.
Technical Director

This report consists of 26 pages.





SAMPLE RECEIPT / LOG-IN REPORT

Client Name: Eurofins
Project Name: Fort ORD-TTU
AAC Project No.: 200965

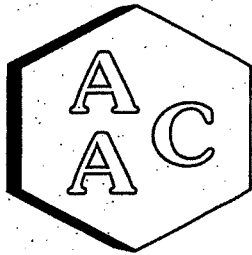
Sampled By: Client
Received By: G. Ruelas
Turn Around Time: Normal (10days)
Lab Due Date: 06/12/2020
Final Due Date: 06/19/2020

<u>Sample Receipt Date</u> Time	<u>Clients ID</u>	<u>Sampling Date/Time</u>	<u>Sample #</u>	<u>Matrix</u>	<u>Analysis Requested</u>
06/05/2020 0930	TTU-FM-111S	06/04/52020 1400	8741	Tedlar Bag	ASTM D5504
06/05/2020 0930	TTU-FM-112S	06/04/52020 1400	8742	Tedlar Bag	ASTM D5504

REMARKS:

Total Samples: 2

Results



Atmospheric Analysis & Consulting, Inc.

LABORATORY ANALYSIS REPORT

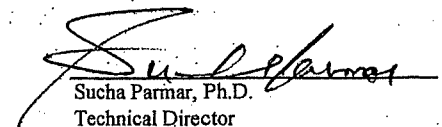
CLIENT : Eurofins
PROJECT NO. : 200965
MATRIX : AIR
UNITS : ppmV

SAMPLING DATE : 06/04/2020
RECEIVING DATE : 06/05/2020
ANALYSIS DATE : 06/05/2020
REPORT DATE : 06/10/2020

Total Reduced Sulfur Compounds Analysis by ASTM D-5504

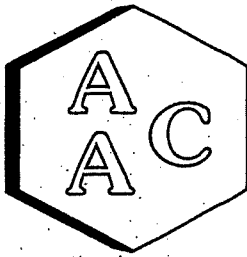
Client ID	TTU-FM-111S	TTU-FM-112S
AAC ID	200965-8741	200965-8742
Analyte	Result	Result
Hydrogen Sulfide	0.451	0.442
COS / SO ₂	< 0.050	< 0.050
Methyl Mercaptan	< 0.050	< 0.050
Ethyl Mercaptan	< 0.050	< 0.050
Dimethyl Sulfide	< 0.050	< 0.050
Carbon Disulfide	< 0.050	< 0.050
Isopropyl Mercaptan	< 0.050	< 0.050
tert-Butyl Mercaptan	< 0.050	< 0.050
n-Propyl Mercaptan	< 0.050	< 0.050
Methylethylsulfide	< 0.050	< 0.050
sec-Butyl Mercaptan / Thiophene	< 0.050	< 0.050
iso-Butyl Mercaptan	< 0.050	< 0.050
Diethyl Sulfide	< 0.050	< 0.050
n-Butyl Mercaptan	< 0.050	< 0.050
Dimethyl Disulfide	< 0.050	< 0.050
2-Methylthiophene	< 0.050	< 0.050
3-Methylthiophene	< 0.050	< 0.050
Tetrahydrothiophene	< 0.050	< 0.050
Bromothiophene	< 0.050	< 0.050
Thiophenol	< 0.050	< 0.050
Diethyl Disulfide	< 0.050	< 0.050
Total Unidentified Sulfur	< 0.050	< 0.050
Total Reduced Sulfurs	0.451	0.442

All unidentified compound's concentrations expressed in terms of H₂S (TRS does not include COS and SO₂)
 Sample Reporting Limit (SRL) is equal to Reporting Limit x Canister Dil. Fac. x Analysis Dil. Fac.


 Sucha Parmar, Ph.D.
 Technical Director



QA/QC Summary



Atmospheric Analysis & Consulting, Inc.

Quality Control/Quality Assurance Report ASTM D-5504

Date Analyzed: 6/5/2020
Analyst: DL
Units: ppbV

Instrument ID: SCD#10
Calb. Date: 4/20/2020

Opening Calibration Verification Standard

523.0 ppbV H₂S (SSI192)

H ₂ S	Resp. (area)	Result	% Rec *	% RPD ****
Initial	4610	509	97.4	1.8
Duplicate	4766	527	100.7	1.5
Triplicate	4713	521	99.6	0.4

547.3 ppbV H₂S (SSI192)

MeSH	Resp. (area)	Result	% Rec *	% RPD ****
Initial	5822	536	97.8	0.1
Duplicate	5844	538	98.2	0.3
Triplicate	5814	535	97.7	0.2

535.8 ppbV H₂S (SSI192)

DMS	Resp. (area)	Result	% Rec *	% RPD ****
Initial	6452	518	96.7	0.8
Duplicate	6657	534	99.7	2.3
Triplicate	6412	515	96.1	1.5

Method Blank

Analyte	Result
H ₂ S	<PQL
MeSH	<PQL
DMS	<PQL

Duplicate Analysis

Sample ID 200723-7730

Analyte	Sample Result	Duplicate Result	Mean	% RPD ***
H ₂ S	<PQL	<PQL	0.0	0.0
MeSH	<PQL	<PQL	0.0	0.0
DMS	<PQL	<PQL	0.0	0.0

Matrix Spike & Duplicate

Sample ID 200723-7730 x10

Analyte	Sample Conc.	Spike Added	MS Result	MSD Result	MS % Rec **	MSD % Rec **	% RPD ***
H ₂ S	<PQL	261.5	251.4	252.5	96.1	96.5	0.4
MeSH	<PQL	273.8	259.5	274.4	94.8	100.2	5.6
DMS	<PQL	267.9	258.3	272.7	96.4	101.8	5.4

Closing Calibration Verification Standard

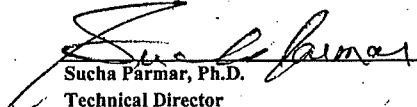
Analyte	Std. Conc.	Result	% Rec **
H ₂ S	523.0	568.4	108.7
MeSH	547.5	553.8	101.1
DMS	535.8	533.3	99.5

* Must be 95-105%, ** Must be 90-110%, *** Must be < 10%, **** Must be < 5% RPD from Mean result.

H₂S: PQL = 10.0 ppbV, MDL = 1.60 ppbV

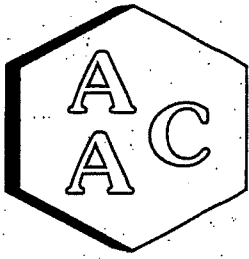
MeSH: PQL = 10.0 ppbV, MDL = 1.60 ppbV

DMS: PQL = 10.0 ppbV, MDL = 1.60 ppbV


 Sucha Parmar, Ph.D.
 Technical Director



Raw Data



Atmospheric Analysis & Consulting, Inc.

CLIENT : Eurofins Air Toxics
PROJECT NAME : FFO, Marina CA
AAC PROJECT NO. : 200965
REPORT DATE : 06/10/2020

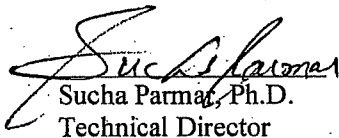
On June 5, 2020, Atmospheric Analysis & Consulting, Inc. received two (2) Tedlar Bags for Total Reduced Sulfur analysis by ASTM D-5504. Upon receipt, the samples were assigned unique Laboratory ID numbers as follows:

Client ID	Lab No.
TTU-FM-111S	200965-8741
TTU-FM-112S	200965-8742

This analysis is performed in accordance with AAC's Quality Manual. For detailed information pertaining to specific EPA, NCASI, ASTM and SCAQMD accreditations (Methods & Analytes), please visit our website at www.aaclab.com.

I certify that this data is technically accurate, complete, and in compliance with the terms and conditions of the contract. No problems were encountered during receiving, preparation, and/or analysis of these samples. The Technical Director or his/her designee, as verified by the following signature, has authorized release of the data.

If you have any questions or require further explanation of data results, please contact the undersigned.


Sucha Parmar, Ph.D.
Technical Director

This report consists of 26 pages.





SAMPLE RECEIPT / LOG-IN REPORT

Client Name: Eurofins
Project Name: Fort ORD-TTU
AAC Project No.: 200965

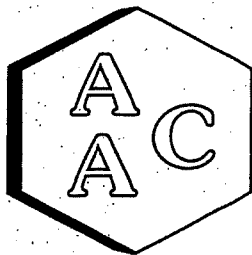
Sampled By: Client
Received By: G. Ruelas
Turn Around Time: Normal (10days)
Lab Due Date: 06/12/2020
Final Due Date: 06/19/2020

<u>Sample Receipt Date Time</u>	<u>Clients ID</u>	<u>Sampling Date/Time</u>	<u>Sample #</u>	<u>Matrix</u>	<u>Analysis Requested</u>
06/05/2020 0930	TTU-FM-111S	06/04/52020 1400	8741	Tedlar Bag	ASTM D5504
06/05/2020 0930	TTU-FM-112S	06/04/52020 1400	8742	Tedlar Bag	ASTM D5504

REMARKS:

Total Samples: 2

Results



Atmospheric Analysis & Consulting, Inc.

LABORATORY ANALYSIS REPORT

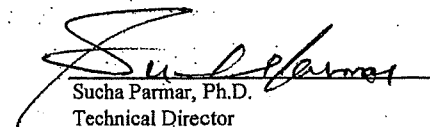
CLIENT : Eurofins
PROJECT NO. : 200965
MATRIX : AIR
UNITS : ppmV

SAMPLING DATE : 06/04/2020
RECEIVING DATE : 06/05/2020
ANALYSIS DATE : 06/05/2020
REPORT DATE : 06/10/2020

Total Reduced Sulfur Compounds Analysis by ASTM D-5504

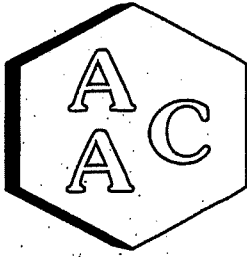
Client ID	TTU-FM-111S	TTU-FM-112S
AAC ID	200965-8741	200965-8742
Analyte	Result	Result
Hydrogen Sulfide	0.451	0.442
COS / SO ₂	< 0.050	< 0.050
Methyl Mercaptan	< 0.050	< 0.050
Ethyl Mercaptan	< 0.050	< 0.050
Dimethyl Sulfide	< 0.050	< 0.050
Carbon Disulfide	< 0.050	< 0.050
Isopropyl Mercaptan	< 0.050	< 0.050
tert-Butyl Mercaptan	< 0.050	< 0.050
n-Propyl Mercaptan	< 0.050	< 0.050
Methylethylsulfide	< 0.050	< 0.050
sec-Butyl Mercaptan / Thiophene	< 0.050	< 0.050
iso-Butyl Mercaptan	< 0.050	< 0.050
Diethyl Sulfide	< 0.050	< 0.050
n-Butyl Mercaptan	< 0.050	< 0.050
Dimethyl Disulfide	< 0.050	< 0.050
2-Methylthiophene	< 0.050	< 0.050
3-Methylthiophene	< 0.050	< 0.050
Tetrahydrothiophene	< 0.050	< 0.050
Bromothiophene	< 0.050	< 0.050
Thiophenol	< 0.050	< 0.050
Diethyl Disulfide	< 0.050	< 0.050
Total Unidentified Sulfur	< 0.050	< 0.050
Total Reduced Sulfurs	0.451	0.442

All unidentified compound's concentrations expressed in terms of H₂S (TRS does not include COS and SO₂)
Sample Reporting Limit (SRL) is equal to Reporting Limit x Canister Dil. Fac. x Analysis Dil. Fac.


Sucha Parinar, Ph.D.
Technical Director



QA/QC Summary



Atmospheric Analysis & Consulting, Inc.

Quality Control/Quality Assurance Report ASTM D-5504

Date Analyzed: 6/5/2020
Analyst: DL
Units: ppbV

Instrument ID: SCD#10
Calb. Date: 4/20/2020

Opening Calibration Verification Standard

523.0 ppbV H₂S (SS1192)

H ₂ S	Resp. (area)	Result	% Rec *	% RPD ****
Initial	4610	509	97.4	1.8
Duplicate	4766	527	100.7	1.5
Triplicate	4713	521	99.6	0.4

547.5 ppbV H₂S (SS1192)

MeSH	Resp. (area)	Result	% Rec *	% RPD ****
Initial	5822	536	97.8	0.1
Duplicate	5844	538	98.2	0.3
Triplicate	5814	535	97.7	0.2

535.8 ppbV H₂S (SS1192)

DMS	Resp. (area)	Result	% Rec *	% RPD ****
Initial	6452	518	96.7	0.8
Duplicate	6657	534	99.7	2.3
Triplicate	6412	515	96.1	1.5

Method Blank

Analyte	Result
H ₂ S	<PQL
MeSH	<PQL
DMS	<PQL

Duplicate Analysis

Sample ID 200723-7730

Analyte	Sample Result	Duplicate Result	Mean	% RPD ***
H ₂ S	<PQL	<PQL	0.0	0.0
MeSH	<PQL	<PQL	0.0	0.0
DMS	<PQL	<PQL	0.0	0.0

Matrix Spike & Duplicate

Sample ID 200723-7730 x10

Analyte	Sample Conc.	Spike Added	MS Result	MSD Result	MS % Rec **	MSD % Rec **	% RPD ***
H ₂ S	<PQL	261.5	251.4	252.5	96.1	96.5	0.4
MeSH	<PQL	273.8	259.5	274.4	94.8	100.2	5.6
DMS	<PQL	267.9	258.3	272.7	96.4	101.8	5.4

Closing Calibration Verification Standard

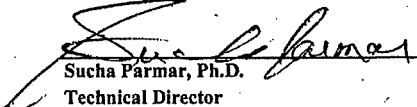
Analyte	Std. Conc.	Result	% Rec **
H ₂ S	523.0	568.4	108.7
MeSH	547.5	553.8	101.1
DMS	535.8	533.3	99.5

* Must be 95-105%, ** Must be 90-110%, *** Must be < 10%, **** Must be < 5% RPD from Mean result.

H₂S: PQL = 10.0 ppbV, MDL = 1.60 ppbV

MeSH: PQL = 10.0 ppbV, MDL = 1.60 ppbV

DMS: PQL = 10.0 ppbV, MDL = 1.60 ppbV

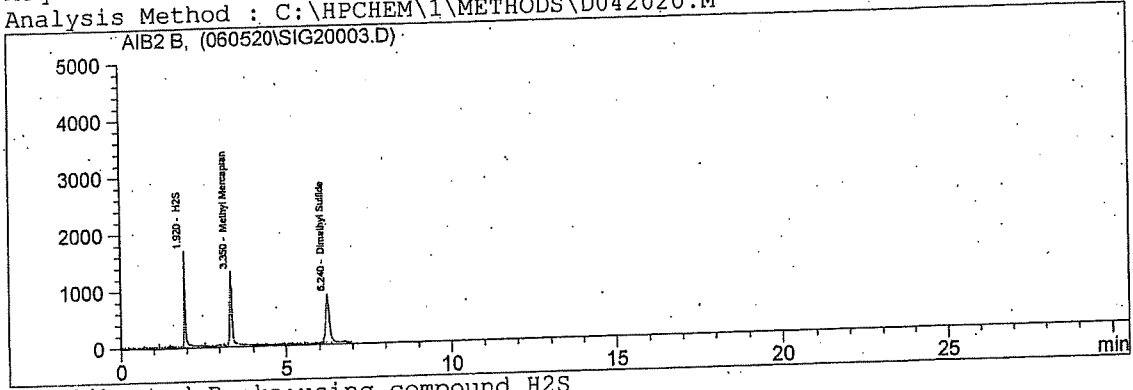

 Sucha Parmar, Ph.D.
 Technical Director



Raw Data

Customized Report: D5504

Injection Date : 6/5/2020 6:20:14 AM Seq. Line : 3
 Sample Name : CCV 500 ppbV dp H2S/MeSH/DMS (SS1192x40)
 Inj. Vol. : Manually
 Multiplier : 1.00
 Dilution : 1.00
 Acq Operator : DL
 Acq. Instrument : GC/SCD #10
 Acq. Method : ASTM5504.M
 Analysis Method : C:\HPCHEM\1\METHODS\D042020.M



Uncalibrated Peaks:using compound H2S

Ret Time [min]	Area	Amount [ppbV]	Name
1.920	4766	526.748	H2S
0.000	0	0.000	COS / SO2
3.350	5844	537.634	Methyl Mercaptan
0.000	0	0.000	Ethyl Mercaptan
6.240	6657	534.346	Dimethyl Sulfide
0.000	0	0.000	Carbon Disulfide
0.000	0	0.000	Iso-propyl Mercaptan
0.000	0	0.000	Tert-butyl Mercaptan
0.000	0	0.000	N-propyl Mercaptan
0.000	0	0.000	Methyl Ethyl Sulfide
0.000	0	0.000	Sec-butyl Mercaptan / Thiophene
0.000	0	0.000	Iso-butyl Mercaptan
0.000	0	0.000	Diethyl Sulfide
0.000	0	0.000	N-butyl Mercaptan
0.000	0	0.000	Dimethyl Disulfide
0.000	0	0.000	Bromothiophene
0.000	0	0.000	2-Methylthiophene
0.000	0	0.000	3-Methylthiophene
0.000	0	0.000	Tetrahydrothiophene
0.000	0	0.000	Diethyl Disulfide
0.000	0	0.000	Thiophenol

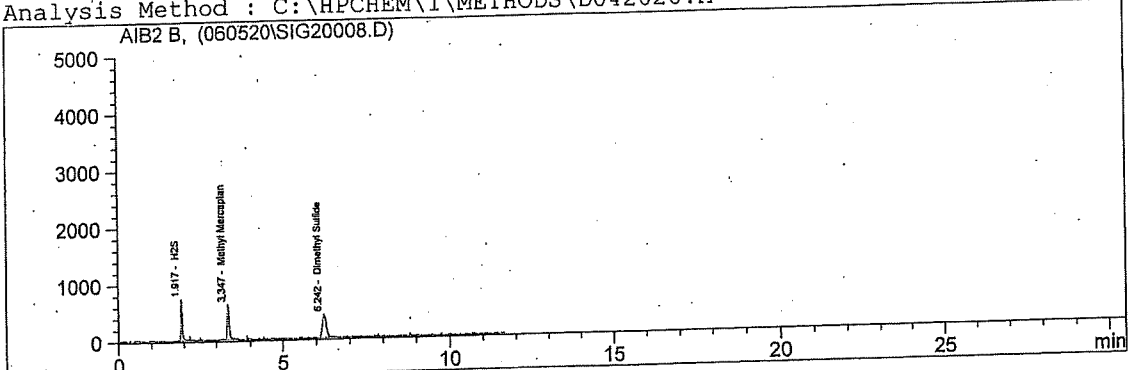
Totals: 1598.728

*** End of Report ***

W
4/15/20

Customized Report: D5504

Injection Date : 6/5/2020 7:36:03 AM Seq. Line : 8
 Sample Name : 200723-7730 MS H2S/MeSH/DMS (SS1192x80)
 Inj. Vol. : Manually
 Multiplier : 1.00
 Dilution : ~~5.00~~
 Acq Operator : DL *DL*
 Acq. Instrument : GC/SCD #10
 Acq. Method : ASTM5504.M
 Analysis Method : C:\HPCHEM\1\METHODS\D042020.M



Uncalibrated Peaks: using compound H2S

Ret Time [min]	Area	Amount [ppbV]	Name
1.917	2274	1256.866	H2S / 5
0.000	0	0.000	COS / SO2 18
3.347	2821	1297.661	Methyl Mercaptan 15
0.000	0	0.000	Ethyl Mercaptan
6.242	3218	1291.597	Dimethyl Sulfide 16
0.000	0	0.000	Carbon Disulfide
0.000	0	0.000	Iso-propyl Mercaptan
0.000	0	0.000	Tert-butyl Mercaptan
0.000	0	0.000	N-propyl Mercaptan
0.000	0	0.000	Methyl Ethyl Sulfide
0.000	0	0.000	Sec-butyl Mercaptan / Thiophene
0.000	0	0.000	Iso-butyl Mercaptan
0.000	0	0.000	Diethyl Sulfide
0.000	0	0.000	N-butyl Mercaptan
0.000	0	0.000	Dimethyl Disulfide
0.000	0	0.000	Bromothiophene
0.000	0	0.000	2-Methylthiophene
0.000	0	0.000	3-Methylthiophene
0.000	0	0.000	Tetrahydrothiophene
0.000	0	0.000	Diethyl Disulfide
0.000	0	0.000	Thiophenol

Totals: 3846.123

*** End of Report ***

Calibration Summary

SCAQMD 307.91 / ASTM D-5504 INITIAL CALIBRATION SUMMARY

Analysis Date: 4/20/2020
Analyst: DL

Standard ID: SS1192
Concentration: 20.92
Units: ppm
Instrument: SCD #10

CALIBRATION CURVE RAW DATA:

Hydrogen Sulfide								
H ₂ S Standard Concentration (ppbV)	Retention Time (min)	Response (Area)	% RPD from Mean (< 5%)	Std Deviation (Area)	Standard Concentration ppbV	Mean Response (Area)	Calculated Concentration (From Mean) ppbV	Mean % Recovery (+/- 5%)
0.0	0.000	0	0.0					
0.0	0.000	0	0.0	0	0.0	0	0.0	0.0
0.0	0.000	0	0.0					
10.5	1.931	95	0.7					
10.5	1.923	94	0.4	1	10.5	94	10.4	99.7
10.5	1.923	94	0.4					
261.5	1.928	2325	1.2					
261.5	1.928	2262	1.5	32	261.5	2297	253.9	97.1
261.5	1.931	2304	0.3					
1046.0	1.930	9344	0.3					
1046.0	1.930	9266	0.5	41	1046.0	9312	1029.2	98.4
1046.0	1.930	9326	0.2					
2615.0	1.932	22752	2.0					
2615.0	1.928	23609	1.7	432	2615.0	23213	2565.5	98.1
2615.0	1.928	23279	0.3					
5230.0	1.930	47307	0.6					
5230.0	1.928	47838	0.5	266	5230.0	47579	5258.5	100.5
5230.0	1.930	47593	0.0					

Avg. Ret. 1.929

Calibration Verification Check Standards:

Check Standard Concentration: 523.0 ppbV

Linear Slope:

X = Y /

9.0481

R2 value:

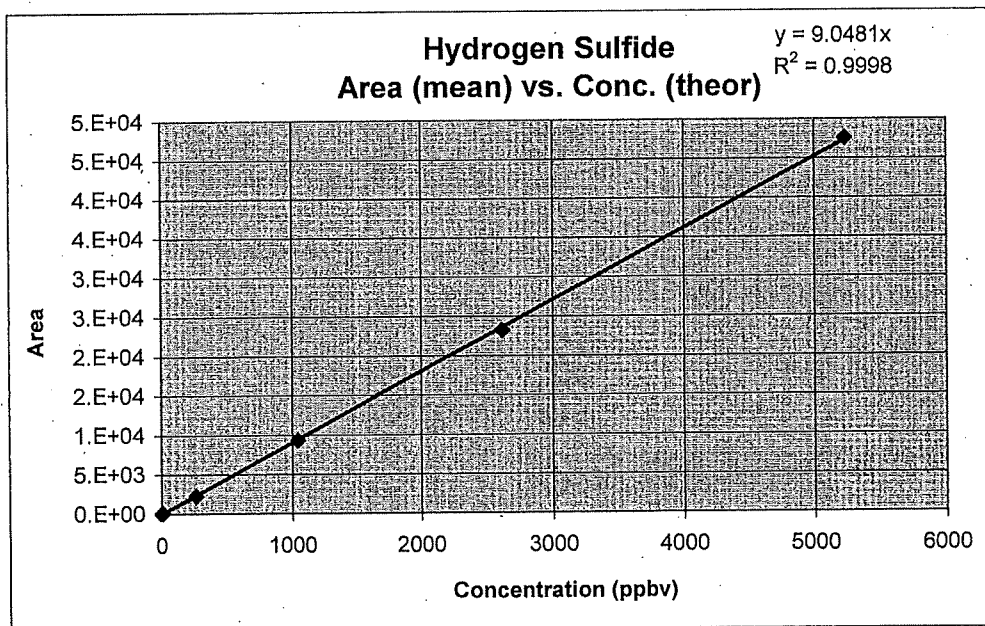
0.9998

Must be > 0.990

H ₂ S	Resp. (Area)	Result (ppbV)	% Rec *	% RPD
Initial	4670	516.1	98.7	0.6
Duplicate	4660	515.0	98.5	0.8
Triplicate	4758	525.9	100.5	1.3

* All CV's must have +/- 5 % Recovery and < 5% RPD from the Mean

SCAQMD 307.91/ASTM D-5504 INITIAL CALIBRATION SUMMARY



SCAQMD 307.91 / ASTM D-5504 INITIAL CALIBRATION SUMMARY

Analysis Date: 4/20/2020
Analyst: DL

Standard ID: SS1192
Concentration: 21.90
Units: ppm
Instrument: SCD #10

CALIBRATION CURVE RAW DATA:

Methyl Mercaptan								
MeSH Standard Concentration (ppbV)	Retention Time (min)	Response (Area)	% RPD from Mean (< 5%)	Std Deviation (Area)	Standard Concentration ppbV	Mean Response (Area)	Calculated Concentration (From Mean) ppbV	Mean % Recovery (+/- 5%)
0.0	0.000	0	0.0					
0.0	0.000	0	0.0	0	0.0	0	0.0	0.0
0.0	0.000	0	0.0					
11.0	3.344	112	4.0					
11.0	3.348	117	0.3	5	11.0	117	10.7	98.0
11.0	3.340	121	3.7					
273.8	3.351	2991	0.2					
273.8	3.351	2926	1.9	55	273.8	2984	274.5	100.3
273.8	3.351	3035	1.7					
1095.0	3.355	11676	1.1					
1095.0	3.351	12000	1.6	171	1095.0	11806	1086.1	99.2
1095.0	3.348	11743	0.5					
2737.5	3.349	29862	0.2					
2737.5	3.351	29947	0.5	193	2737.5	29796	2741.0	100.1
2737.5	3.353	29579	0.7					

Avg. Ret. 3.349

Calibration Verification Check Standards:

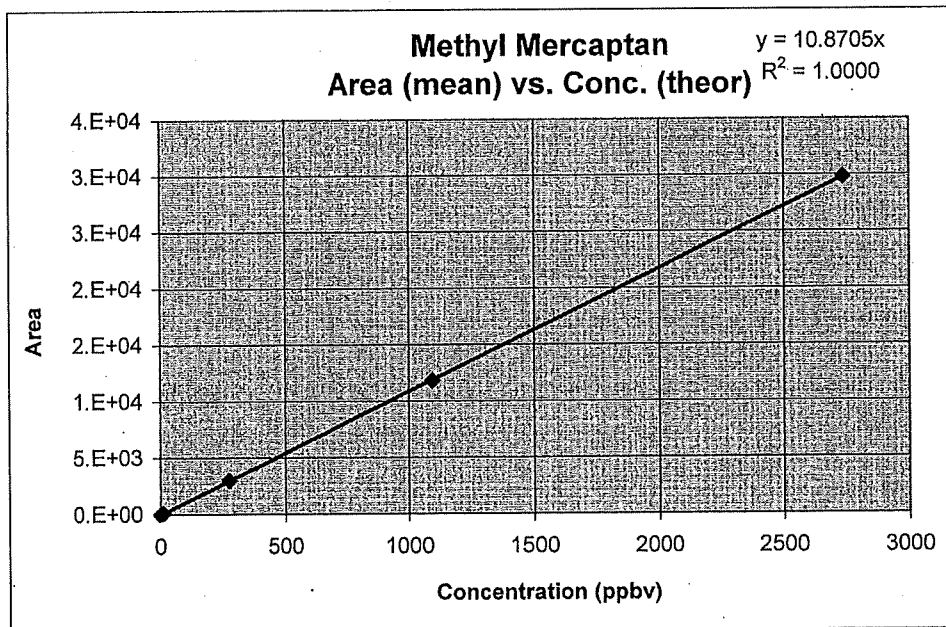
Check Standard Concentration: 547.5 ppbV

MeSH	Resp. (Area)	Result (ppbV)	% Rec *	% RPD
Initial	5756	529.5	96.7	1.2
Duplicate	5932	545.7	99.7	1.8
Triplicate	5787	532.4	97.2	0.7

* All CV's must have +/- 5% Recovery and < 5% RPD from the Mean

Linear Slope: X = Y / 10.8705
R2 value: 1.0000 Must be > 0.990

SCAQMD 307.91/ASTM D-5504 INITIAL CALIBRATION SUMMARY



SCAQMD 307.91 / ASTM D-5504 INITIAL CALIBRATION SUMMARY

Analysis Date: 4/20/2020
Analyst: DL

Standard ID: SS1192
Concentration: 21.43
Units: ppm
Instrument: SCD #10

CALIBRATION CURVE RAW DATA:

Dimethyl Sulfide								
DMS Standard Concentration (ppbV)	Retention Time (min)	Response (Area)	% RPD from Mean (< 5%)	Std Deviation (Area)	Standard Concentration ppbV	Mean Response (Area)	Calculated Concentration (From Mean) ppbV	Mean % Recovery (+/- 5 %)
0.0	0.000	0	0.0					
0.0	0.000	0	0.0	0	0.0	0	0.0	0.0
0.0	0.000	0	0.0					
10.7	6.236	131	2.0					
10.7	6.198	135	1.0	2	10.7	134	10.7	100.1
10.7	6.235	135	1.0					
267.9	6.235	3353	0.1					
267.9	6.230	3315	1.0	32	267.9	3349	268.8	100.3
267.9	6.246	3378	0.9					
1071.5	6.230	13606	0.3					
1071.5	6.233	13544	0.2	35	1071.5	13566	1088.9	101.6
1071.5	6.238	13547	0.1					
2678.8	6.240	33367	0.2					
2678.8	6.237	33687	1.2	447	2678.8	33286	2671.7	99.7
2678.8	6.235	32804	1.4					

Avg. Ret. 6.233

Calibration Verification Check Standards:

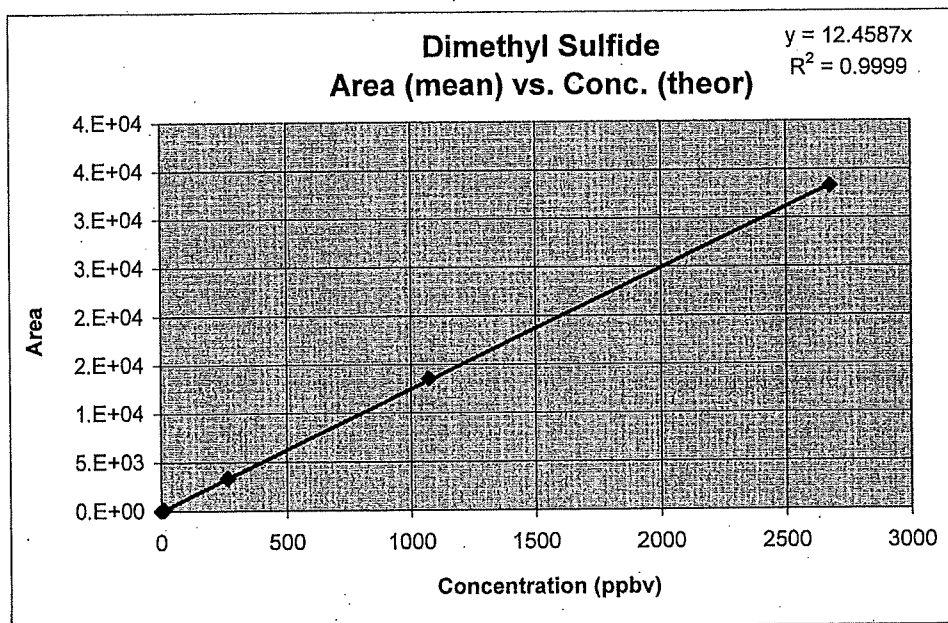
Check Standard Concentration: 535.8 ppbV

Linear Slope: X = Y / 12.4587
R2 value: 0.9999 Must be > 0.990

DMS	Resp. (Area)	Result (ppbV)	% Rec *	% RPD
Initial	6480	520.1	97.1	1.0
Duplicate	6761	542.7	101.3	3.3
Triplicate	6402	513.9	95.9	2.2

* All CV's must have +/- 5 % Recovery and < 5% RPD from the Mean

SCAQMD 307.91/ASTM D-5504 INITIAL CALIBRATION SUMMARY





eurofins

Air Toxics

6/15/2020
Mr. Eric Schmidt
AHTNA
296 12th Street

Marina CA 93933

Project Name: Fort Ord-TTU
Project #:
Workorder #: 2006216

Dear Mr. Eric Schmidt

The following report includes the data for the above referenced project for sample(s) received on 6/8/2020 at Air Toxics Ltd.

The data and associated QC analyzed by TO-15 are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Eurofins Air Toxics Inc. for your air analysis needs. Eurofins Air Toxics Inc. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Brian Whittaker at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Brian Whittaker
Project Manager



Air Toxics

WORK ORDER #: 2006216

Work Order Summary

CLIENT: Mr. Eric Schmidt
 AHTNA
 296 12th Street
 Marina, CA 93933

BILL TO: AP
 AHTNA Global, LLC
 110 W 38th Ave
 Suite #200J
 Anchorage, AK 99503-5677

PHONE: 831-384-3735

FAX:

DATE RECEIVED: 06/08/2020


DATE COMPLETED: 06/15/2020

P.O. # PO21000164

PROJECT # Fort Ord-TTU

CONTACT: Brian Whittaker

<u>FRACTION #</u>	<u>NAME</u>	<u>TEST</u>	<u>RECEIPT VAC./PRES.</u>	<u>FINAL PRESSURE</u>
01A	TTU-D-114	TO-15	5.3 "Hg	5.2 psi
01AA	TTU-D-114 Lab Duplicate	TO-15	5.3 "Hg	5.2 psi
02A	TTU-EF-115	TO-15	3.7 "Hg	5 psi
03A	TTU-ET-116	TO-15	4.5 "Hg	5 psi
04A	TTU-VF-117	TO-15	4.9 "Hg	5 psi
05A	Lab Blank	TO-15	NA	NA
06A	CCV	TO-15	NA	NA
06B	CCV	TO-15	NA	NA
07A	LCS	TO-15	NA	NA
07AA	LCSD	TO-15	NA	NA

CERTIFIED BY: 
 Technical Director

DATE: 06/15/20

Certification numbers: AZ Licensure AZ0775, FL NELAP – E87680, LA NELAP – 02089, NH NELAP - 209219, NJ NELAP - CA016, NY NELAP - 11291, TX NELAP - T104704434-19-14, UT NELAP – CA009332019-11, VA NELAP - 460197, WA NELAP - C935

Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)

Accreditation number: CA300005-013, Effective date: 10/18/2019, Expiration date: 10/17/2020.

Eurofins Air Toxics, LLC certifies that the test results contained in this report meet all requirements of the NELAC standards

This report shall not be reproduced, except in full, without the written approval of Eurofins Air Toxics, LLC.

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630
 (916) 985-1000 . (800) 985-5955 . FAX (916) 351-8279

LABORATORY NARRATIVE
DoD QSM - TO-15
AHTNA
Workorder# 2006216

Four 6 Liter Summa Canister (100% Certified) samples were received on June 08, 2020. The laboratory performed analysis via EPA Method TO-15 using GC/MS in the full scan mode.

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

As per project specific client request the laboratory has reported estimated values for target compound hits that are below the Reporting Limit but greater than the Limit of Detection (LOD). Concentrations that are below the level at which the canister was certified may be false positives.

Samples were analyzed in one analytical batch on instrument MSD-14 on 6/12/20. The initial continuing calibration verification (CCV) for the batch is reported as lab fraction 06A and the ending CCV is reported as lab fraction 06B.

Dilution was performed on all samples due to matrix interference.

Ethanol and Propylbenzene were manually integrated in sample TTU-D-114.

Propylbenzene was manually integrated in sample TTU-D-114 Lab Duplicate.

Definition of Data Qualifying Flags

Eight qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

J - Estimated value.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit, LOD, or MDL value. See data page for project specific U-flag definition.

UJ- Non-detected compound associated with low bias in the CCV

N - The identification is based on presumptive evidence.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue

EPA METHOD TO-15 GC/MS
Fort Ord-TTU

Client ID:	TTU-D-114	Date/Time Analyzed:	6/12/20 04:01 PM
Lab ID:	2006216-01A	Dilution Factor:	3.28
Date/Time Collected:	6/4/20 02:10 PM	Instrument/Filename:	msd14.i / 14061210
Media:	6 Liter Summa Canister (100% Certified)		

Compound	CAS#	MDL (ppbv)	LOD (ppbv)	Rpt. Limit (ppbv)	Amount (ppbv)
1,1-Dichloroethane	75-34-3	3.4	9.8	16	Not Detected U
1,1-Dichloroethene	75-35-4	3.2	9.8	16	Not Detected U
1,2,4-Trimethylbenzene	95-63-6	1.7	9.8	16	130
1,2-Dichlorobenzene	95-50-1	3.5	9.8	16	47
1,2-Dichloroethane	107-06-2	4.2	9.8	16	Not Detected U
1,2-Dichloropropane	78-87-5	4.6	9.8	16	Not Detected U
1,3,5-Trimethylbenzene	108-67-8	2.2	9.8	16	10 J
1,3-Dichlorobenzene	541-73-1	3.1	9.8	16	Not Detected U
1,4-Dichlorobenzene	106-46-7	3.2	9.8	16	56
1,4-Dioxane	123-91-1	20	49	66	Not Detected U
2,2,4-Trimethylpentane	540-84-1	2.9	9.8	16	32
2-Butanone (Methyl Ethyl Ketone)	78-93-3	19	49	66	Not Detected U
2-Hexanone	591-78-6	15	49	66	Not Detected U
2-Propanol	67-63-0	18	49	66	Not Detected U
3-Chloropropene	107-05-1	15	49	66	Not Detected U
4-Ethyltoluene	622-96-8	2.4	9.8	16	12 J
4-Methyl-2-pentanone	108-10-1	8.3	9.8	16	Not Detected U
Acetone	67-64-1	24	49	66	52 J
Benzene	71-43-2	2.5	9.8	16	35
Bromomethane	74-83-9	19	49	66	Not Detected U
Carbon Disulfide	75-15-0	16	49	66	Not Detected U
Carbon Tetrachloride	56-23-5	4.1	9.8	16	Not Detected U
Chlorobenzene	108-90-7	2.1	9.8	16	92
Chloroethane	75-00-3	24	49	66	Not Detected U



Air Toxics

EPA METHOD TO-15 GC/MS
Fort Ord-TTU

Client ID:	TTU-D-114	Date/Time Analyzed:	6/12/20 04:01 PM
Lab ID:	2006216-01A	Dilution Factor:	3.28
Date/Time Collected:	6/4/20 02:10 PM	Instrument/Filename:	msd14.1 / 14061210
Media:	6 Liter Summa Canister (100% Certified)		

Compound	CAS#	MDL (ppbv)	LOD (ppbv)	Rpt. Limit (ppbv)	Amount (ppbv)
Chloroform	67-66-3	2.6	9.8	16	Not Detected U
Chloromethane	74-87-3	21	49	66	Not Detected U
cis-1,2-Dichloroethene	156-59-2	2.6	9.8	16	Not Detected U
Cumene	98-82-8	2.5	9.8	16	24
Cyclohexane	110-82-7	3.5	9.8	16	160
Ethanol	64-17-5	32	49	66	67
Ethyl Benzene	100-41-4	3.1	9.8	16	20
Freon 11	75-69-4	2.2	9.8	16	Not Detected U
Freon 113	76-13-1	3.9	9.8	16	Not Detected U
Freon 114	76-14-2	3.2	9.8	16	370
Freon 12	75-71-8	2.1	9.8	16	Not Detected U
Heptane	142-82-5	5.8	9.8	16	400
Hexane	110-54-3	3.7	9.8	16	150
m,p-Xylene	108-38-3	3.3	9.8	16	17
Methyl tert-butyl ether	1634-04-4	2.5	9.8	16	Not Detected U
Methylene Chloride	75-09-2	25	49	66	Not Detected U
o-Xylene	95-47-6	2.6	9.8	16	Not Detected U
Propylbenzene	103-65-1	2.0	9.8	16	55
Styrene	100-42-5	2.3	9.8	16	Not Detected U
Tetrachloroethene	127-18-4	5.0	9.8	16	Not Detected U
Tetrahydrofuran	109-99-9	4.7	9.8	16	Not Detected U
Toluene	108-88-3	3.0	9.8	16	Not Detected U
trans-1,2-Dichloroethene	156-60-5	5.0	9.8	16	Not Detected U
Trichloroethene	79-01-6	3.0	9.8	16	Not Detected U



Air Toxics

EPA METHOD TO-15 GC/MS
Fort Ord-TTU

Client ID: TTU-D-114	Date/Time Analyzed: 6/12/20 04:01 PM
Lab ID: 2006216-01A	Dilution Factor: 3.28
Date/Time Collected: 6/4/20 02:10 PM	Instrument/Filename: msd14.i / 14061210
Media: 6 Liter Summa Canister (100% Certified)	

Compound	CAS#	MDL (ppbv)	LOD (ppbv)	Rpt. Limit (ppbv)	Amount (ppbv)
Vinyl Chloride	75-01-4	5.8	9.8	16	87

U = The analyte was not detected above the LOD.
J = Estimated value.
D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	65-142	103
4-Bromofluorobenzene	460-00-4	90-111	100
Toluene-d8	2037-26-5	85-116	103



Air Toxics

EPA METHOD TO-15 GC/MS
Fort Ord-TTU

Client ID:	TTU-D-114 Lab Duplicate	Date/Time Analyzed:	6/12/20 04:26 PM
Lab ID:	2006216-01AA	Dilution Factor:	3.28
Date/Time Collected:	6/4/20 02:10 PM	Instrument/Filename:	msd14.i / 14061211
Media:	6 Liter Summa Canister (100% Certified)		

Compound	CAS#	MDL (ppbv)	LOD (ppbv)	Rpt. Limit (ppbv)	Amount (ppbv)
1,1-Dichloroethane	75-34-3	3.4	9.8	16	Not Detected U
1,1-Dichloroethene	75-35-4	3.2	9.8	16	Not Detected U
1,2,4-Trimethylbenzene	95-63-6	1.7	9.8	16	130
1,2-Dichlorobenzene	95-50-1	3.5	9.8	16	43
1,2-Dichloroethane	107-06-2	4.2	9.8	16	Not Detected U
1,2-Dichloropropane	78-87-5	4.6	9.8	16	Not Detected U
1,3,5-Trimethylbenzene	108-67-8	2.2	9.8	16	10 J
1,3-Dichlorobenzene	541-73-1	3.1	9.8	16	Not Detected U
1,4-Dichlorobenzene	106-46-7	3.2	9.8	16	63
1,4-Dioxane	123-91-1	20	49	66	Not Detected U
2,2,4-Trimethylpentane	540-84-1	2.9	9.8	16	32
2-Butanone (Methyl Ethyl Ketone)	78-93-3	19	49	66	Not Detected U
2-Hexanone	591-78-6	15	49	66	Not Detected U
2-Propanol	67-63-0	18	49	66	Not Detected U
3-Chloropropene	107-05-1	15	49	66	Not Detected U
4-Ethyltoluene	622-96-8	2.4	9.8	16	14 J
4-Methyl-2-pentanone	108-10-1	8.3	9.8	16	Not Detected U
Acetone	67-64-1	24	49	66	Not Detected U
Benzene	71-43-2	2.5	9.8	16	34
Bromomethane	74-83-9	19	49	66	Not Detected U
Carbon Disulfide	75-15-0	16	49	66	Not Detected U
Carbon Tetrachloride	56-23-5	4.1	9.8	16	Not Detected U
Chlorobenzene	108-90-7	2.1	9.8	16	95
Chloroethane	75-00-3	24	49	66	Not Detected U



Air Toxics

EPA METHOD TO-15 GC/MS
Fort Ord-TTU

Client ID:	TTU-D-114 Lab Duplicate	Date/Time Analyzed:	6/12/20 04:26 PM
Lab ID:	2006216-01AA	Dilution Factor:	3.28
Date/Time Collected:	6/4/20 02:10 PM	Instrument/Filename:	msd14.1 / 14061211
Media:	6 Liter Summa Canister (100% Certified)		

Compound	CAS#	MDL (ppbv)	LOD (ppbv)	Rpt. Limit (ppbv)	Amount (ppbv)
Chloroform	67-66-3	2.6	9.8	16	Not Detected U
Chloromethane	74-87-3	21	49	66	Not Detected U
cis-1,2-Dichloroethene	156-59-2	2.6	9.8	16	Not Detected U
Cumene	98-82-8	2.5	9.8	16	22
Cyclohexane	110-82-7	3.5	9.8	16	160
Ethanol	64-17-5	32	49	66	Not Detected U
Ethyl Benzene	100-41-4	3.1	9.8	16	22
Freon 11	75-69-4	2.2	9.8	16	Not Detected U
Freon 113	76-13-1	3.9	9.8	16	Not Detected U
Freon 114	76-14-2	3.2	9.8	16	370
Freon 12	75-71-8	2.1	9.8	16	Not Detected U
Heptane	142-82-5	5.8	9.8	16	390
Hexane	110-54-3	3.7	9.8	16	160
m,p-Xylene	108-38-3	3.3	9.8	16	18
Methyl tert-butyl ether	1634-04-4	2.5	9.8	16	Not Detected U
Methylene Chloride	75-09-2	25	49	66	Not Detected U
o-Xylene	95-47-6	2.6	9.8	16	Not Detected U
Propylbenzene	103-65-1	2.0	9.8	16	59
Styrene	100-42-5	2.3	9.8	16	Not Detected U
Tetrachloroethene	127-18-4	5.0	9.8	16	Not Detected U
Tetrahydrofuran	109-99-9	4.7	9.8	16	Not Detected U
Toluene	108-88-3	3.0	9.8	16	11 J
trans-1,2-Dichloroethene	156-60-5	5.0	9.8	16	Not Detected U
Trichloroethene	79-01-6	3.0	9.8	16	Not Detected U



Air Toxics

EPA METHOD TO-15 GC/MS
Fort Ord-TTU

Client ID:	TTU-D-114 Lab Duplicate	Date/Time Analyzed:	6/12/20 04:26 PM
Lab ID:	2006216-01AA	Dilution Factor:	3.28
Date/Time Collected:	6/4/20 02:10 PM	Instrument/Filename:	msd14.i / 14061211
Media:	6 Liter Summa Canister (100% Certified)		

Compound	CAS#	MDL (ppbv)	LOD (ppbv)	Rpt. Limit (ppbv)	Amount (ppbv)
Vinyl Chloride	75-01-4	5.8	9.8	16	89

U = The analyte was not detected above the LOD.
J = Estimated value.
D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	65-142	102
4-Bromofluorobenzene	460-00-4	90-111	101
Toluene-d8	2037-26-5	85-116	102

EPA METHOD TO-15 GC/MS
 Fort Ord-TTU

Client ID:	TTU-EF-115	Date/Time Analyzed:	6/12/20 04:54 PM
Lab ID:	2006216-02A	Dilution Factor:	3.06
Date/Time Collected:	6/5/20 12:56 PM	Instrument/Filename:	msd14.i / 14061212
Media:	6 Liter Summa Canister (100% Certified)		

Compound	CAS#	MDL (ppbv)	LOD (ppbv)	Rpt. Limit (ppbv)	Amount (ppbv)
1,1-Dichloroethane	75-34-3	3.2	9.2	15	31
1,1-Dichloroethene	75-35-4	3.0	9.2	15	Not Detected U
1,2,4-Trimethylbenzene	95-63-6	1.6	9.2	15	490
1,2-Dichlorobenzene	95-50-1	3.3	9.2	15	18
1,2-Dichloroethane	107-06-2	3.9	9.2	15	Not Detected U
1,2-Dichloropropane	78-87-5	4.3	9.2	15	Not Detected U
1,3,5-Trimethylbenzene	108-67-8	2.0	9.2	15	72
1,3-Dichlorobenzene	541-73-1	2.9	9.2	15	Not Detected U
1,4-Dichlorobenzene	106-46-7	3.0	9.2	15	230
1,4-Dioxane	123-91-1	18	46	61	Not Detected U
2,2,4-Trimethylpentane	540-84-1	2.7	9.2	15	380
2-Butanone (Methyl Ethyl Ketone)	78-93-3	18	46	61	410
2-Hexanone	591-78-6	14	46	61	Not Detected U
2-Propanol	67-63-0	17	46	61	Not Detected U
3-Chloropropene	107-05-1	14	46	61	Not Detected U
4-Ethyltoluene	622-96-8	2.2	9.2	15	74
4-Methyl-2-pentanone	108-10-1	7.7	9.2	15	67
Acetone	67-64-1	23	46	61	1800
Benzene	71-43-2	2.3	9.2	15	130
Bromomethane	74-83-9	18	46	61	Not Detected U
Carbon Disulfide	75-15-0	15	46	61	Not Detected U
Carbon Tetrachloride	56-23-5	3.8	9.2	15	Not Detected U
Chlorobenzene	108-90-7	1.9	9.2	15	110
Chloroethane	75-00-3	23	46	61	Not Detected U



Air Toxics

EPA METHOD TO-15 GC/MS
Fort Ord-TTU

Client ID:	TTU-EF-115	Date/Time Analyzed:	6/12/20 04:54 PM
Lab ID:	2006216-02A	Dilution Factor:	3.06
Date/Time Collected:	6/5/20 12:56 PM	Instrument/Filename:	msd14.i / 14061212
Media:	6 Liter Summa Canister (100% Certified)		

Compound	CAS#	MDL (ppbv)	LOD (ppbv)	Rpt. Limit (ppbv)	Amount (ppbv)
Chloroform	67-66-3	2.5	9.2	15	Not Detected U
Chloromethane	74-87-3	19	46	61	Not Detected U
cis-1,2-Dichloroethene	156-59-2	2.4	9.2	15	57
Cumene	98-82-8	2.3	9.2	15	110
Cyclohexane	110-82-7	3.3	9.2	15	210
Ethanol	64-17-5	30	46	61	Not Detected U
Ethyl Benzene	100-41-4	2.9	9.2	15	510
Freon 11	75-69-4	2.1	9.2	15	Not Detected U
Freon 113	76-13-1	3.6	9.2	15	Not Detected U
Freon 114	76-14-2	3.0	9.2	15	140
Freon 12	75-71-8	1.9	9.2	15	270
Heptane	142-82-5	5.4	9.2	15	710
Hexane	110-54-3	3.4	9.2	15	310
m,p-Xylene	108-38-3	3.1	9.2	15	300
Methyl tert-butyl ether	1634-04-4	2.4	9.2	15	Not Detected U
Methylene Chloride	75-09-2	24	46	61	Not Detected U
o-Xylene	95-47-6	2.5	9.2	15	26
Propylbenzene	103-65-1	1.9	9.2	15	120
Styrene	100-42-5	2.1	9.2	15	Not Detected U
Tetrachloroethene	127-18-4	4.6	9.2	15	Not Detected U
Tetrahydrofuran	109-99-9	4.4	9.2	15	140
Toluene	108-88-3	2.8	9.2	15	22
trans-1,2-Dichloroethene	156-60-5	4.7	9.2	15	Not Detected U
Trichloroethene	79-01-6	2.8	9.2	15	12 J



Air Toxics

EPA METHOD TO-15 GC/MS
Fort Ord-TTU

Client ID:	TTU-EF-115	Date/Time Analyzed:	6/12/20 04:54 PM
Lab ID:	2006216-02A	Dilution Factor:	3.06
Date/Time Collected:	6/5/20 12:56 PM	Instrument/Filename:	msd14.1 / 14061212
Media:	6 Liter Summa Canister (100% Certified)		

Compound	CAS#	MDL (ppbv)	LOD (ppbv)	Rpt. Limit (ppbv)	Amount (ppbv)
Vinyl Chloride	75-01-4	5.4	9.2	15	240

U = The analyte was not detected above the LOD.
J = Estimated value.
D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	65-142	101
4-Bromofluorobenzene	460-00-4	90-111	106
Toluene-d8	2037-26-5	85-116	106



Air Toxics

EPA METHOD TO-15 GC/MS
Fort Ord-TTU

Client ID: TTU-ET-116	Date/Time Analyzed: 6/12/20 05:17 PM
Lab ID: 2006216-03A	Dilution Factor: 3.16
Date/Time Collected: 6/4/20 02:18 PM	Instrument/Filename: msd14.1 / 14061213
Media: 6 Liter Summa Canister (100% Certified)	

Compound	CAS#	MDL (ppbv)	LOD (ppbv)	Rpt. Limit (ppbv)	Amount (ppbv)
1,1-Dichloroethane	75-34-3	3.2	9.5	16	Not Detected U
1,1-Dichloroethene	75-35-4	3.1	9.5	16	Not Detected U
1,2,4-Trimethylbenzene	95-63-6	1.7	9.5	16	29
1,2-Dichlorobenzene	95-50-1	3.4	9.5	16	Not Detected U
1,2-Dichloroethane	107-06-2	4.0	9.5	16	Not Detected U
1,2-Dichloropropane	78-87-5	4.4	9.5	16	Not Detected U
1,3,5-Trimethylbenzene	108-67-8	2.1	9.5	16	Not Detected U
1,3-Dichlorobenzene	541-73-1	3.0	9.5	16	Not Detected U
1,4-Dichlorobenzene	106-46-7	3.1	9.5	16	45
1,4-Dioxane	123-91-1	19	47	63	Not Detected U
2,2,4-Trimethylpentane	540-84-1	2.8	9.5	16	130
2-Butanone (Methyl Ethyl Ketone)	78-93-3	18	47	63	Not Detected U
2-Hexanone	591-78-6	15	47	63	Not Detected U
2-Propanol	67-63-0	17	47	63	Not Detected U
3-Chloropropene	107-05-1	14	47	63	Not Detected U
4-Ethyltoluene	622-96-8	2.3	9.5	16	Not Detected U
4-Methyl-2-pentanone	108-10-1	8.0	9.5	16	Not Detected U
Acetone	67-64-1	24	47	63	Not Detected U
Benzene	71-43-2	2.4	9.5	16	22
Bromomethane	74-83-9	18	47	63	Not Detected U
Carbon Disulfide	75-15-0	16	47	63	Not Detected U
Carbon Tetrachloride	56-23-5	4.0	9.5	16	Not Detected U
Chlorobenzene	108-90-7	2.0	9.5	16	12 J
Chloroethane	75-00-3	24	47	63	Not Detected U



Air Toxics

EPA METHOD TO-15 GC/MS
Fort Ord-TTU

Client ID:	TTU-ET-116	Date/Time Analyzed:	6/12/20 05:17 PM
Lab ID:	2006216-03A	Dilution Factor:	3.16
Date/Time Collected:	6/4/20 02:18 PM	Instrument/Filename:	msd14.i / 14061213
Media:	6 Liter Summa Canister (100% Certified)		

Compound	CAS#	MDL (ppbv)	LOD (ppbv)	Rpt. Limit (ppbv)	Amount (ppbv)
Chloroform	67-66-3	2.6	9.5	16	Not Detected U
Chloromethane	74-87-3	20	47	63	Not Detected U
cis-1,2-Dichloroethene	156-59-2	2.5	9.5	16	27
Cumene	98-82-8	2.4	9.5	16	70
Cyclohexane	110-82-7	3.4	9.5	16	220
Ethanol	64-17-5	31	47	63	Not Detected U
Ethyl Benzene	100-41-4	3.0	9.5	16	13 J
Freon 11	75-69-4	2.1	9.5	16	Not Detected U
Freon 113	76-13-1	3.7	9.5	16	Not Detected U
Freon 114	76-14-2	3.1	9.5	16	61
Freon 12	75-71-8	2.0	9.5	16	Not Detected U
Heptane	142-82-5	5.6	9.5	16	400
Hexane	110-54-3	3.6	9.5	16	160
m,p-Xylene	108-38-3	3.2	9.5	16	22
Methyl tert-butyl ether	1634-04-4	2.4	9.5	16	Not Detected U
Methylene Chloride	75-09-2	24	47	63	Not Detected U
o-Xylene	95-47-6	2.6	9.5	16	Not Detected U
Propylbenzene	103-65-1	2.0	9.5	16	Not Detected U
Styrene	100-42-5	2.2	9.5	16	Not Detected U
Tetrachloroethene	127-18-4	4.8	9.5	16	Not Detected U
Tetrahydrofuran	109-99-9	4.6	9.5	16	32
Toluene	108-88-3	2.9	9.5	16	24
trans-1,2-Dichloroethene	156-60-5	4.9	9.5	16	Not Detected U
Trichloroethene	79-01-6	2.9	9.5	16	Not Detected U



Air Toxics

EPA METHOD TO-15 GC/MS
Fort Ord-TTU

Client ID: TTU-ET-116	Date/Time Analyzed: 6/12/20 05:17 PM
Lab ID: 2006216-03A	Dilution Factor: 3.16
Date/Time Collected: 6/4/20 02:18 PM	Instrument/Filename: msd14.i / 14061213
Media: 6 Liter Summa Canister (100% Certified)	

Compound	CAS#	MDL (ppbv)	LOD (ppbv)	Rpt. Limit (ppbv)	Amount (ppbv)
Vinyl Chloride	75-01-4	5.6	9.5	16	88

U = The analyte was not detected above the LOD.
J = Estimated value.
D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	65-142	98
4-Bromofluorobenzene	460-00-4	90-111	102
Toluene-d8	2037-26-5	85-116	101



Air Toxics

EPA METHOD TO-15 GC/MS
Fort Ord-TTU

Client ID:	TTU-VF-117	Date/Time Analyzed:	6/12/20 05:47 PM
Lab ID:	2006216-04A	Dilution Factor:	3.20
Date/Time Collected:	6/5/20 12:30 PM	Instrument/Filename:	msd14.i / 14061214
Media:	6 Liter Summa Canister (100% Certified)		

Compound	CAS#	MDL (ppbv)	LOD (ppbv)	Rpt. Limit (ppbv)	Amount (ppbv)
1,1-Dichloroethane	75-34-3	3.3	9.6	16	Not Detected U
1,1-Dichloroethene	75-35-4	3.2	9.6	16	Not Detected U
1,2,4-Trimethylbenzene	95-63-6	1.7	9.6	16	640
1,2-Dichlorobenzene	95-50-1	3.4	9.6	16	16
1,2-Dichloroethane	107-06-2	4.1	9.6	16	Not Detected U
1,2-Dichloropropane	78-87-5	4.5	9.6	16	Not Detected U
1,3,5-Trimethylbenzene	108-67-8	2.1	9.6	16	71
1,3-Dichlorobenzene	541-73-1	3.0	9.6	16	Not Detected U
1,4-Dichlorobenzene	106-46-7	3.1	9.6	16	210
1,4-Dioxane	123-91-1	19	48	64	Not Detected U
2,2,4-Trimethylpentane	540-84-1	2.8	9.6	16	520
2-Butanone (Methyl Ethyl Ketone)	78-93-3	19	48	64	99
2-Hexanone	591-78-6	15	48	64	Not Detected U
2-Propanol	67-63-0	18	48	64	Not Detected U
3-Chloropropene	107-05-1	14	48	64	Not Detected U
4-Ethyltoluene	622-96-8	2.3	9.6	16	110
4-Methyl-2-pentanone	108-10-1	8.1	9.6	16	Not Detected U
Acetone	67-64-1	24	48	64	580
Benzene	71-43-2	2.4	9.6	16	130
Bromomethane	74-83-9	18	48	64	Not Detected U
Carbon Disulfide	75-15-0	16	48	64	Not Detected U
Carbon Tetrachloride	56-23-5	4.0	9.6	16	Not Detected U
Chlorobenzene	108-90-7	2.0	9.6	16	85
Chloroethane	75-00-3	24	48	64	Not Detected U



Air Toxics

EPA METHOD TO-15 GC/MS
Fort Ord-TTU

Client ID:	TTU-VF-117	Date/Time Analyzed:	6/12/20 05:47 PM
Lab ID:	2006216-04A	Dilution Factor:	3.20
Date/Time Collected:	6/5/20 12:30 PM	Instrument/Filename:	msd14.1 / 14061214
Media:	6 Liter Summa Canister (100% Certified)		

Compound	CAS#	MDL (ppbv)	LOD (ppbv)	Rpt. Limit (ppbv)	Amount (ppbv)
Chloroform	67-66-3	2.6	9.6	16	Not Detected U
Chloromethane	74-87-3	20	48	64	Not Detected U
cis-1,2-Dichloroethene	156-59-2	2.5	9.6	16	16
Cumene	98-82-8	2.4	9.6	16	170
Cyclohexane	110-82-7	3.4	9.6	16	280
Ethanol	64-17-5	31	48	64	Not Detected U
Ethyl Benzene	100-41-4	3.0	9.6	16	870
Freon 11	75-69-4	2.2	9.6	16	Not Detected U
Freon 113	76-13-1	3.8	9.6	16	Not Detected U
Freon 114	76-14-2	3.1	9.6	16	170
Freon 12	75-71-8	2.0	9.6	16	350
Heptane	142-82-5	5.7	9.6	16	810
Hexane	110-54-3	3.6	9.6	16	480
m,p-Xylene	108-38-3	3.3	9.6	16	500
Methyl tert-butyl ether	1634-04-4	2.5	9.6	16	Not Detected U
Methylene Chloride	75-09-2	25	48	64	Not Detected U
o-Xylene	95-47-6	2.6	9.6	16	43
Propylbenzene	103-65-1	2.0	9.6	16	210
Styrene	100-42-5	2.2	9.6	16	Not Detected U
Tetrachloroethene	127-18-4	4.9	9.6	16	Not Detected U
Tetrahydrofuran	109-99-9	4.6	9.6	16	50
Toluene	108-88-3	3.0	9.6	16	26
trans-1,2-Dichloroethene	156-60-5	4.9	9.6	16	Not Detected U
Trichloroethene	79-01-6	3.0	9.6	16	Not Detected U



Air Toxics

EPA METHOD TO-15 GC/MS
Fort Ord-TTU

Client ID:	TTU-VF-117	Date/Time Analyzed:	6/12/20 05:47 PM
Lab ID:	2006216-04A	Dilution Factor:	3.20
Date/Time Collected:	6/5/20 12:30 PM	Instrument/Filename:	msd14.1 / 14061214
Media:	6 Liter Summa Canister (100% Certified)		

Compound	CAS#	MDL (ppbv)	LOD (ppbv)	Rpt. Limit (ppbv)	Amount (ppbv)
Vinyl Chloride	75-01-4	5.6	9.6	16	180

U = The analyte was not detected above the LOD.
D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	65-142	100
4-Bromofluorobenzene	460-00-4	90-111	103
Toluene-d8	2037-26-5	85-116	107



Air Toxics

EPA METHOD TO-15 GC/MS
Fort Ord-TTU

Client ID:	Lab Blank	Date/Time Analyzed:	6/12/20 01:27 PM
Lab ID:	2006216-05A	Dilution Factor:	1.00
Date/Time Collected:	NA - Not Applicable	Instrument/Filename:	msd14.i / 14061207c
Media:	NA - Not Applicable		

Compound	CAS#	MDL (ppbv)	LOD (ppbv)	Rpt. Limit (ppbv)	Amount (ppbv)
1,1-Dichloroethane	75-34-3	1.0	3.0	5.0	Not Detected U
1,1-Dichloroethene	75-35-4	0.99	3.0	5.0	Not Detected U
1,2,4-Trimethylbenzene	95-63-6	0.53	3.0	5.0	Not Detected U
1,2-Dichlorobenzene	95-50-1	1.1	3.0	5.0	Not Detected U
1,2-Dichloroethane	107-06-2	1.3	3.0	5.0	Not Detected U
1,2-Dichloropropane	78-87-5	1.4	3.0	5.0	Not Detected U
1,3,5-Trimethylbenzene	108-67-8	0.67	3.0	5.0	Not Detected U
1,3-Dichlorobenzene	541-73-1	0.94	3.0	5.0	Not Detected U
1,4-Dichlorobenzene	106-46-7	0.98	3.0	5.0	Not Detected U
1,4-Dioxane	123-91-1	6.0	15	20	Not Detected U
2,2,4-Trimethylpentane	540-84-1	0.89	3.0	5.0	Not Detected U
2-Butanone (Methyl Ethyl Ketone)	78-93-3	5.9	15	20	Not Detected U
2-Hexanone	591-78-6	4.7	15	20	Not Detected U
2-Propanol	67-63-0	5.5	15	20	Not Detected U
3-Chloropropene	107-05-1	4.5	15	20	Not Detected U
4-Ethyltoluene	622-96-8	0.72	3.0	5.0	Not Detected U
4-Methyl-2-pentanone	108-10-1	2.5	3.0	5.0	Not Detected U
Acetone	67-64-1	7.4	15	20	Not Detected U
Benzene	71-43-2	0.75	3.0	5.0	Not Detected U
Bromomethane	74-83-9	5.8	15	20	Not Detected U
Carbon Disulfide	75-15-0	5.0	15	20	Not Detected U
Carbon Tetrachloride	56-23-5	1.2	3.0	5.0	Not Detected U
Chlorobenzene	108-90-7	0.63	3.0	5.0	Not Detected U
Chloroethane	75-00-3	7.5	15	20	Not Detected U



Air Toxics

EPA METHOD TO-15 GC/MS
Fort Ord-TTU

Client ID:	Lab Blank	Date/Time Analyzed:	6/12/20 01:27 PM
Lab ID:	2006216-05A	Dilution Factor:	1.00
Date/Time Collected:	NA - Not Applicable	Instrument/Filename:	msd14.i / 14061207c
Media:	NA - Not Applicable		

Compound	CAS#	MDL (ppbv)	LOD (ppbv)	Rpt. Limit (ppbv)	Amount (ppbv)
Chloroform	67-66-3	0.81	3.0	5.0	Not Detected U
Chloromethane	74-87-3	6.3	15	20	Not Detected U
cis-1,2-Dichloroethene	156-59-2	0.78	3.0	5.0	Not Detected U
Cumene	98-82-8	0.75	3.0	5.0	Not Detected U
Cyclohexane	110-82-7	1.1	3.0	5.0	Not Detected U
Ethanol	64-17-5	9.7	15	20	Not Detected U
Ethyl Benzene	100-41-4	0.95	3.0	5.0	Not Detected U
Freon 11	75-69-4	0.68	3.0	5.0	Not Detected U
Freon 113	76-13-1	1.2	3.0	5.0	Not Detected U
Freon 114	76-14-2	0.97	3.0	5.0	Not Detected U
Freon 12	75-71-8	0.63	3.0	5.0	Not Detected U
Heptane	142-82-5	1.8	3.0	5.0	Not Detected U
Hexane	110-54-3	1.1	3.0	5.0	Not Detected U
m,p-Xylene	108-38-3	1.0	3.0	5.0	Not Detected U
Methyl tert-butyl ether	1634-04-4	0.77	3.0	5.0	Not Detected U
Methylene Chloride	75-09-2	7.7	15	20	Not Detected U
o-Xylene	95-47-6	0.81	3.0	5.0	Not Detected U
Propylbenzene	103-65-1	0.62	3.0	5.0	Not Detected U
Styrene	100-42-5	0.69	3.0	5.0	Not Detected U
Tetrachloroethene	127-18-4	1.5	3.0	5.0	Not Detected U
Tetrahydrofuran	109-99-9	1.4	3.0	5.0	Not Detected U
Toluene	108-88-3	0.93	3.0	5.0	Not Detected U
trans-1,2-Dichloroethene	156-60-5	1.5	3.0	5.0	Not Detected U
Trichloroethene	79-01-6	0.93	3.0	5.0	Not Detected U

EPA METHOD TO-15 GC/MS
Fort Ord-TTU

Client ID:	Lab Blank	Date/Time Analyzed:	6/12/20 01:27 PM
Lab ID:	2006216-05A	Dilution Factor:	1.00
Date/Time Collected:	NA - Not Applicable	Instrument/Filename:	msd14.i / 14061207c
Media:	NA - Not Applicable		

Compound	CAS#	MDL (ppbv)	LOD (ppbv)	Rpt. Limit (ppbv)	Amount (ppbv)
Vinyl Chloride	75-01-4	1.8	3.0	5.0	Not Detected U

U = The analyte was not detected above the LOD.
D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	65-142	98
4-Bromofluorobenzene	460-00-4	90-111	93
Toluene-d8	2037-26-5	85-116	100



Air Toxics

EPA METHOD TO-15 GC/MS
Fort Ord-TTU

Client ID: CCV	Date/Time Analyzed: 6/12/20 11:04 AM
Lab ID: 2006216-06A	Dilution Factor: 1.00
Date/Time Collected: NA - Not Applicable	Instrument/Filename: msd14.1 / 14061202a
Media: NA - Not Applicable	

Compound	CAS#	%Recovery
1,1-Dichloroethane	75-34-3	98
1,1-Dichloroethene	75-35-4	100
1,2,4-Trimethylbenzene	95-63-6	84
1,2-Dichlorobenzene	95-50-1	93
1,2-Dichloroethane	107-06-2	100
1,2-Dichloropropane	78-87-5	99
1,3,5-Trimethylbenzene	108-67-8	91
1,3-Dichlorobenzene	541-73-1	91
1,4-Dichlorobenzene	106-46-7	95
1,4-Dioxane	123-91-1	97
2,2,4-Trimethylpentane	540-84-1	99
2-Butanone (Methyl Ethyl Ketone)	78-93-3	100
2-Hexanone	591-78-6	96
2-Propanol	67-63-0	92
3-Chloropropene	107-05-1	104
4-Ethyltoluene	622-96-8	97
4-Methyl-2-pentanone	108-10-1	100
Acetone	67-64-1	97
Benzene	71-43-2	96
Bromomethane	74-83-9	101
Carbon Disulfide	75-15-0	101
Carbon Tetrachloride	56-23-5	98
Chlorobenzene	108-90-7	98
Chloroethane	75-00-3	100



Air Toxics

EPA METHOD TO-15 GC/MS
Fort Ord-TTU

Client ID:	CCV	Date/Time Analyzed:	6/12/20 11:04 AM
Lab ID:	2006216-06A	Dilution Factor:	1.00
Date/Time Collected:	NA - Not Applicable	Instrument/Filename:	msd14.i / 14061202a
Media:	NA - Not Applicable		

Compound	CAS#	%Recovery
Chloroform	67-66-3	99
Chloromethane	74-87-3	98
cis-1,2-Dichloroethene	156-59-2	101
Cumene	98-82-8	100
Cyclohexane	110-82-7	96
Ethanol	64-17-5	91
Ethyl Benzene	100-41-4	91
Freon 11	75-69-4	101
Freon 113	76-13-1	101
Freon 114	76-14-2	97
Freon 12	75-71-8	99
Heptane	142-82-5	96
Hexane	110-54-3	96
m,p-Xylene	108-38-3	94
Methyl tert-butyl ether	1634-04-4	100
Methylene Chloride	75-09-2	101
o-Xylene	95-47-6	89
Propylbenzene	103-65-1	95
Styrene	100-42-5	100
Tetrachloroethene	127-18-4	96
Tetrahydrofuran	109-99-9	99
Toluene	108-88-3	94
trans-1,2-Dichloroethene	156-60-5	101
Trichloroethene	79-01-6	95



Air Toxics

EPA METHOD TO-15 GC/MS
Fort Ord-TTU

Client ID:	CCV	Date/Time Analyzed:	6/12/20 11:04 AM
Lab ID:	2006216-06A	Dilution Factor:	1.00
Date/Time Collected:	NA - Not Applicable	Instrument/Filename:	msd14.1 / 14061202a
Media:	NA - Not Applicable		

Compound	CAS#	%Recovery
Vinyl Chloride	75-01-4	98

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	65-142	95
4-Bromofluorobenzene	460-00-4	90-111	100
Toluene-d8	2037-26-5	85-116	103



Air Toxics

EPA METHOD TO-15 GC/MS
Fort Ord-TTU

Client ID:	CCV	Date/Time Analyzed:	6/12/20 06:15 PM
Lab ID:	2006216-06B	Dilution Factor:	1.00
Date/Time Collected:	NA - Not Applicable	Instrument/Filename:	msd14.i / 14061215a
Media:	NA - Not Applicable		

Compound	CAS#	%Recovery
1,1-Dichloroethane	75-34-3	106
1,1-Dichloroethene	75-35-4	102
1,2,4-Trimethylbenzene	95-63-6	93
1,2-Dichlorobenzene	95-50-1	98
1,2-Dichloroethane	107-06-2	101
1,2-Dichloropropane	78-87-5	98
1,3,5-Trimethylbenzene	108-67-8	96
1,3-Dichlorobenzene	541-73-1	95
1,4-Dichlorobenzene	106-46-7	99
1,4-Dioxane	123-91-1	98
2,2,4-Trimethylpentane	540-84-1	104
2-Butanone (Methyl Ethyl Ketone)	78-93-3	107
2-Hexanone	591-78-6	104
2-Propanol	67-63-0	99
3-Chloropropene	107-05-1	114
4-Ethyltoluene	622-96-8	105
4-Methyl-2-pentanone	108-10-1	103
Acetone	67-64-1	103
Benzene	71-43-2	100
Bromomethane	74-83-9	104
Carbon Disulfide	75-15-0	104
Carbon Tetrachloride	56-23-5	101
Chlorobenzene	108-90-7	101
Chloroethane	75-00-3	104



Air Toxics

EPA METHOD TO-15 GC/MS
Fort Ord-TTU

Client ID:	CCV	Date/Time Analyzed:	6/12/20 06:15 PM
Lab ID:	2006216-06B	Dilution Factor:	1.00
Date/Time Collected:	NA - Not Applicable	Instrument/Filename:	msd14.i / 14061215a
Media:	NA - Not Applicable		

Compound	CAS#	%Recovery
Chloroform	67-66-3	104
Chloromethane	74-87-3	107
cis-1,2-Dichloroethene	156-59-2	109
Cumene	98-82-8	104
Cyclohexane	110-82-7	103
Ethanol	64-17-5	98
Ethyl Benzene	100-41-4	94
Freon 11	75-69-4	108
Freon 113	76-13-1	106
Freon 114	76-14-2	104
Freon 12	75-71-8	104
Heptane	142-82-5	98
Hexane	110-54-3	101
m,p-Xylene	108-38-3	98
Methyl tert-butyl ether	1634-04-4	104
Methylene Chloride	75-09-2	105
o-Xylene	95-47-6	91
Propylbenzene	103-65-1	100
Styrene	100-42-5	103
Tetrachloroethene	127-18-4	96
Tetrahydrofuran	109-99-9	106
Toluene	108-88-3	94
trans-1,2-Dichloroethene	156-60-5	110
Trichloroethene	79-01-6	97

EPA METHOD TO-15 GC/MS
Fort Ord-TTU

Client ID:	CCV	Date/Time Analyzed:	6/12/20 06:15 PM
Lab ID:	2006216-06B	Dilution Factor:	1.00
Date/Time Collected:	NA - Not Applicable	Instrument/Filename:	msd14.i / 14061215a
Media:	NA - Not Applicable		

Compound	CAS#	%Recovery
Vinyl Chloride	75-01-4	100

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	65-142	103
4-Bromofluorobenzene	460-00-4	90-111	99
Toluene-d8	2037-26-5	85-116	100



Air Toxics

EPA METHOD TO-15 GC/MS
Fort Ord-TTU

Client ID:	LCS	Date/Time Analyzed:	6/12/20 11:28 AM
Lab ID:	2006216-07A	Dilution Factor:	1.00
Date/Time Collected:	NA - Not Applicable	Instrument/Filename:	msd14.i / 14061203a
Media:	NA - Not Applicable		

Compound	CAS#	%Recovery
1,1-Dichloroethane	75-34-3	103
1,1-Dichloroethene	75-35-4	106
1,2,4-Trimethylbenzene	95-63-6	93
1,2-Dichlorobenzene	95-50-1	101
1,2-Dichloroethane	107-06-2	100
1,2-Dichloropropane	78-87-5	104
1,3,5-Trimethylbenzene	108-67-8	98
1,3-Dichlorobenzene	541-73-1	99
1,4-Dichlorobenzene	106-46-7	103
1,4-Dioxane	123-91-1	104
2,2,4-Trimethylpentane	540-84-1	104
2-Butanone (Methyl Ethyl Ketone)	78-93-3	108
2-Hexanone	591-78-6	100
2-Propanol	67-63-0	92
3-Chloropropene	107-05-1	105
4-Ethyltoluene	622-96-8	106
4-Methyl-2-pentanone	108-10-1	107
Acetone	67-64-1	110
Benzene	71-43-2	99
Bromomethane	74-83-9	107
Carbon Disulfide	75-15-0	106
Carbon Tetrachloride	56-23-5	101
Chlorobenzene	108-90-7	101
Chloroethane	75-00-3	109

* % Recovery is calculated using unrounded analytical results.

EPA METHOD TO-15 GC/MS
Fort Ord-TTU

Client ID: LCS	Date/Time Analyzed: 6/12/20 11:28 AM
Lab ID: 2006216-07A	Dilution Factor: 1.00
Date/Time Collected: NA - Not Applicable	Instrument/Filename: msd14.i / 14061203a
Media: NA - Not Applicable	

Compound	CAS#	%Recovery
Chloroform	67-66-3	103
Chloromethane	74-87-3	106
cis-1,2-Dichloroethene	156-59-2	101
Cumene	98-82-8	104
Cyclohexane	110-82-7	101
Ethanol	64-17-5	99
Ethyl Benzene	100-41-4	94
Freon 11	75-69-4	108
Freon 113	76-13-1	105
Freon 114	76-14-2	106
Freon 12	75-71-8	103
Heptane	142-82-5	102
Hexane	110-54-3	104
m,p-Xylene	108-38-3	98
Methyl tert-butyl ether	1634-04-4	101
Methylene Chloride	75-09-2	106
o-Xylene	95-47-6	95
Propylbenzene	103-65-1	101
Styrene	100-42-5	105
Tetrachloroethene	127-18-4	95
Tetrahydrofuran	109-99-9	106
Toluene	108-88-3	96
trans-1,2-Dichloroethene	156-60-5	113
Trichloroethene	79-01-6	99

* % Recovery is calculated using unrounded analytical results.

EPA METHOD TO-15 GC/MS
Fort Ord-TTU

Client ID:	LCS	Date/Time Analyzed:	6/12/20 11:28 AM
Lab ID:	2006216-07A	Dilution Factor:	1.00
Date/Time Collected:	NA - Not Applicable	Instrument/Filename:	msd14.1 / 14061203a
Media:	NA - Not Applicable		

Compound	CAS#	%Recovery
Vinyl Chloride	75-01-4	103

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	65-142	103
4-Bromofluorobenzene	460-00-4	90-111	100
Toluene-d8	2037-26-5	85-116	100

* % Recovery is calculated using unrounded analytical results.



Air Toxics

EPA METHOD TO-15 GC/MS
Fort Ord-TTU

Client ID:	LCSD	Date/Time Analyzed:	6/12/20 11:53 AM
Lab ID:	2006216-07AA	Dilution Factor:	1.00
Date/Time Collected:	NA - Not Applicable	Instrument/Filename:	msd14.1 / 14061204a
Media:	NA - Not Applicable		

Compound	CAS#	%Recovery
1,1-Dichloroethane	75-34-3	100
1,1-Dichloroethene	75-35-4	104
1,2,4-Trimethylbenzene	95-63-6	95
1,2-Dichlorobenzene	95-50-1	99
1,2-Dichloroethane	107-06-2	98
1,2-Dichloropropane	78-87-5	105
1,3,5-Trimethylbenzene	108-67-8	98
1,3-Dichlorobenzene	541-73-1	98
1,4-Dichlorobenzene	106-46-7	107
1,4-Dioxane	123-91-1	104
2,2,4-Trimethylpentane	540-84-1	103
2-Butanone (Methyl Ethyl Ketone)	78-93-3	106
2-Hexanone	591-78-6	105
2-Propanol	67-63-0	93
3-Chloropropene	107-05-1	112
4-Ethyltoluene	622-96-8	106
4-Methyl-2-pentanone	108-10-1	106
Acetone	67-64-1	105
Benzene	71-43-2	100
Bromomethane	74-83-9	108
Carbon Disulfide	75-15-0	106
Carbon Tetrachloride	56-23-5	102
Chlorobenzene	108-90-7	104
Chloroethane	75-00-3	110

* % Recovery is calculated using unrounded analytical results.



Air Toxics

EPA METHOD TO-15 GC/MS
Fort Ord-TTU

Client ID: LCSD	Date/Time Analyzed: 6/12/20 11:53 AM
Lab ID: 2006216-07AA	Dilution Factor: 1.00
Date/Time Collected: NA - Not Applicable	Instrument/Filename: msd14.i / 14061204a
Media: NA - Not Applicable	

Compound	CAS#	%Recovery
Chloroform	67-66-3	102
Chloromethane	74-87-3	105
cis-1,2-Dichloroethene	156-59-2	97
Cumene	98-82-8	104
Cyclohexane	110-82-7	100
Ethanol	64-17-5	97
Ethyl Benzene	100-41-4	95
Freon 11	75-69-4	108
Freon 113	76-13-1	103
Freon 114	76-14-2	103
Freon 12	75-71-8	104
Heptane	142-82-5	100
Hexane	110-54-3	105
m,p-Xylene	108-38-3	99
Methyl tert-butyl ether	1634-04-4	102
Methylene Chloride	75-09-2	106
o-Xylene	95-47-6	95
Propylbenzene	103-65-1	101
Styrene	100-42-5	106
Tetrachloroethene	127-18-4	101
Tetrahydrofuran	109-99-9	105
Toluene	108-88-3	94
trans-1,2-Dichloroethene	156-60-5	114
Trichloroethene	79-01-6	99

* % Recovery is calculated using unrounded analytical results.



Air Toxics

EPA METHOD TO-15 GC/MS
Fort Ord-TTU

Client ID: LCSD	Date/Time Analyzed: 6/12/20 11:53 AM
Lab ID: 2006216-07AA	Dilution Factor: 1.00
Date/Time Collected: NA - Not Applicable	Instrument/Filename: msd14.i / 14061204a
Media: NA - Not Applicable	

Compound	CAS#	%Recovery
Vinyl Chloride	75-01-4	101

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	65-142	98
4-Bromofluorobenzene	460-00-4	90-111	101
Toluene-d8	2037-26-5	85-116	101

* % Recovery is calculated using unrounded analytical results.

APPENDIX C
FIELD DATA SHEETS

DAS CONTINUOUS EMISSIONS MONITORING DATA SHEET

Facility: Fort Ord
 Location: TTU
 Observers: _____
 Expected Run Time = **40 min**

Run #: CEC
 Barometric: 29.81
 Personnel: BJ, BK
 Std. Temp: 68

Date: 06/04/20
 Leak ✓ : OK
 Strat. ✓ : OK

Cylinder #s: _____

Analyte	O2	CO2	Nox	CO	THC				
Analyzer	CAI	Rosem	CAI 600	TECO 48	CAI				
Range	21.01	8.52	22.30	90.50	87.90				
Span Value	8.49	8.52	12.65	45.30	44.10				
Time									
Comments:									
	10:57	0.09	-0.03	5.77	-0.45	-0.31			
	10:58	0.02	-0.04	0.00	0.04	-1.57			Unit #
	10:59	0.01	-0.04	0.00	0.04	-1.21			
	11:00	0.01	-0.05	0.00	0.04	-0.61			
	11:01	21.00	9.00	0.00	23.99	40.37			Operating Conditions
	11:02	8.40	12.78	0.00	83.64	85.40			
	11:03	8.43	12.79	0.00	90.51	87.35			
	11:04	8.44	12.79	0.00	90.35	87.61			Fuel
	11:05	0.75	1.07	17.85	37.98	63.39			
	11:06	0.00	-0.04	22.53	-0.13	18.45			
	11:07	-0.01	-0.04	22.55	-0.32	23.48			
	11:08	-0.01	-0.04	22.56	-0.34	23.55			
	11:09	0.00	-0.05	14.85	-0.33	26.66			
	11:10	0.00	-0.05	12.81	-0.30	44.27			
	11:11	0.00	-0.05	12.82	-0.31	44.42			
	11:12	-0.01	-0.05	12.82	-0.32	44.31			
	11:13	4.43	8.41	2.02	32.72	22.98			
	11:14	4.48	8.52	0.00	45.48	-0.12			
	11:15	4.48	8.51	0.00	45.39	-0.88			
	11:16	0.62	0.47	4.35	17.81	0.12			
	11:17	0.12	-0.05	5.72	-0.27	0.31			
	11:18	0.12	-0.05	5.72	-0.27	0.14			NOx Converter

DAS CONTINUOUS EMISSIONS MONITORING DATA SHEET

Facility: Fort Ord
 Location: TTU
 Observers: _____
 Expected Run Time = 40 min

Run #: 1
 Barometric: 29.81
 Personnel: BJ, BK
 Std. Temp: 68

Date: 06/04/20
 Leak ✓ : OK
 Strat. ✓ : OK

Cylinder #s: _____

Analyte	O2	CO2	Nox	CO	THC				
Analyzer	CAI	Rosem	CAI 600	TECO 48i	CAI				
Range	21.01	8.52	22.30	90.50	87.90				
Span Value	8.49	8.52	12.65	45.30	44.10				
Time					Comments:				
	11:30	11.51	7.63	16.87	-0.4	-0.4			
	11:31	11.80	7.36	16.25	-0.4	-0.4			Unit #
	11:32	11.77	7.38	16.22	-0.4	-0.4			
	11:33	11.45	7.67	16.87	-0.5	-0.5			
	11:34	11.63	7.52	16.59	-0.5	-0.3			Operating Conditions
	11:35	11.75	7.40	16.23	-0.4	-0.3			
	11:36	11.38	7.74	17.01	-0.5	-0.2			
	11:37	11.57	7.58	16.73	-0.5	-0.2			Fuel
	11:38	11.71	7.44	16.39	-0.5	-0.1			
	11:39	11.59	7.55	16.49	-0.5	-0.2			
	11:40	11.65	7.51	16.65	-0.5	-0.2			
	11:41	11.58	7.57	16.59	-0.5	-0.2			
	11:42	11.37	7.75	17.17	-0.5	-0.2			
	11:43	11.27	7.84	17.30	-0.5	0.1			
	11:44	11.30	7.82	17.34	-0.5	0.4			
	11:45	11.57	7.58	16.92	-0.5	0.6			
	11:46	11.74	7.41	16.46	-0.5	1.8			
	11:47	11.75	7.41	16.54	-0.5	1.7			
	11:48	11.74	7.41	16.32	-0.5	1.4			
	11:49	11.45	7.68	16.92	-0.5	1.2			
	11:50	11.86	7.32	16.23	-0.5	1.0			
	11:51	11.85	7.32	16.24	-0.5	0.9			
	11:52	11.68	7.46	16.41	-0.5	0.8			
	11:53	11.88	7.30	16.30	-0.6	0.8			
	11:54	11.87	7.30	16.08	-0.5	0.8			
	11:55	11.99	7.19	15.95	-0.6	0.8			
	11:56	11.47	7.64	16.62	-0.5	0.7			
	11:57	11.12	7.96	17.55	-0.5	0.9			
	11:58	11.23	7.88	17.60	-0.5	1.1			
	11:59	11.75	7.42	16.56	-0.5	1.1			
	12:00	11.80	7.36	16.48	-0.5	1.3			
	12:01	12.04	7.14	16.01	-0.6	1.3			
	12:02	11.85	7.31	16.28	-0.6	1.4			
	12:03	11.58	7.55	16.67	-0.6	1.3			
	12:04	11.28	7.82	17.25	-0.6	1.2			
	12:05	11.49	7.63	17.02	-0.5	1.3			
	12:06	11.53	7.60	16.77	-0.5	1.2			
	12:07	11.28	7.82	17.26	-0.6	1.3			
	12:08	11.51	7.62	16.91	-0.5	1.1			
	12:09	11.70	7.45	16.72	-0.5	0.9			
ZERO f	11:25	-0.02	0.19	0.00	-0.3	0.6			
SPAN f	11:27	8.44	8.51	12.80	45.3	44.4			
Average		11.61	7.53	16.67	-0.5	0.6			
ZERO f	12:15	-0.02	-0.05	0.00	-0.4	-0.5			
SPAN f	12:17	8.44	8.51	12.81	45.1	43.8			
Zero Drift %		0.0%	-2.8%	0.0%	-0.1%	-1.3%			
Span Drift %		0.0%	0.0%	0.0%	-0.2%	-0.7%			
Corr. Avg.		11.67	7.54	16.47	-0.2	0.6			

Corrected Average = [Test Avg. - ((Zi+Zf) / 2)] * Span Gas Value / [((Si+Sf) / 2) - ((Zi+Zf) / 2)]

Zero Drift % = 100 * (Zf - Zi) / Instrument Range

Span Drift % = 100 * (Sf - Si) / Instrument Range

DAS CONTINUOUS EMISSIONS MONITORING DATA SHEET

Facility: Fort Ord
 Location: TTU
 Observers: _____
 Expected Run Time = **40 min**

Run #: **2**
 Barometric: **29.81**
 Personnel: **BJ, BK**
 Std. Temp: **68**

Date: **06/04/20**
 Leak ✓ : **OK**
 Strat. ✓ : **OK**

Cylinder #s:

Analyte	O2	CO2	Nox	CO	THC			
Analyzer	CAI	Rosem	CAI 600	TECO 48i	CAI			
Range	21.01	9	22	91	88			
Span Value	8.49	8.52	12.7	45.3	44.1			
Time						Comments:		
	12:20	11.49	7.62	17.11	-0.5	-0.1		
	12:21	11.67	7.46	16.67	-0.6	-0.1		Unit #
	12:22	11.64	7.48	16.65	-0.6	-0.3		
	12:27	11.48	7.64	16.87	-0.6	-1.0		
	12:28	11.62	7.51	16.58	-0.6	-1.0		Operating Conditions
	12:29	11.83	7.32	16.21	-0.6	-0.5		
	12:30	11.66	7.48	16.57	-0.6	0.4		
	12:31	11.76	7.38	16.38	-0.6	0.5		Fuel
	12:32	11.72	7.43	16.42	-0.6	0.4		
	12:33	11.61	7.51	16.52	-0.6	0.5		
	12:34	11.39	7.71	17.11	-0.6	0.7		
	12:35	11.23	7.84	17.27	-0.6	0.8		
	12:36	11.47	7.65	17.05	-0.6	0.7		
	12:37	11.95	7.21	16.00	-0.6	0.7		
	12:38	11.79	7.34	16.10	-0.6	0.8		
	12:39	11.47	7.64	17.02	-0.6	0.8		
	12:40	11.64	7.48	16.57	-0.7	0.8		
	12:41	11.51	7.60	16.80	-0.6	0.8		
	12:42	11.55	7.56	16.72	-0.7	0.8		
	12:43	11.76	7.39	16.54	-0.7	0.8		
	12:44	11.91	7.24	16.04	-0.6	1.0		
	12:45	11.64	7.48	16.50	-0.7	1.0		
	12:46	11.80	7.35	16.27	-0.6	0.1		
	12:47	11.63	7.48	16.47	-0.6	0.1		
	12:48	11.42	7.69	17.09	-0.6	0.0		
	12:49	11.78	7.37	16.34	-0.6	0.1		
	12:50	11.95	7.21	16.00	-0.6	0.1		
	12:51	11.83	7.32	16.29	-0.6	0.1		
	12:52	12.15	7.03	15.58	-0.6	0.0		
	12:53	11.91	7.23	15.92	-0.6	0.0		
	12:54	11.42	7.68	16.93	-0.6	0.0		
	12:55	11.54	7.58	16.78	-0.6	0.0		
	12:56	11.58	7.53	16.56	-0.6	0.2		
	12:57	11.39	7.71	17.16	-0.7	0.1		
	12:58	11.80	7.35	16.33	-0.7	0.1		
	12:59	11.81	7.33	16.16	-0.7	0.1		
ZERO I	12:15	-0.02	-0.05	0.00	-0.4	-0.5		
SPAN I	12:17	8.44	8.51	12.81	45.1	43.8		
Average		11.66	7.47	16.54	-0.6	0.3		
ZERO f	13:09	-0.02	-0.05	0.00	-0.4	-0.2		
SPAN f	13:11	8.42	8.51	12.79	44.9	44.1		
Zero Drift %		0.0%	0.0%	0.0%	-0.1%	0.4%		
Span Drift %		-0.1%	0.0%	-0.1%	-0.2%	0.3%		
Corr. Avg.		11.74	7.48	16.35	-0.2	0.6		

Corrected Average = [Test Avg. - ((Zi+Zf) / 2)] * Span Gas Value / [(Si+Sf) / 2 - ((Zi+Zf) / 2)]

Zero Drift % = 100 * (Zf - Zi) / Instrument Range

Span Drift % = 100 * (Sf - Si) / Instrument Range

DAS CONTINUOUS EMISSIONS MONITORING DATA SHEET

Facility: Fort Ord
 Location: TTU
 Observers: _____
 Expected Run Time = 40 min

Run #: 3
 Barometric: 29.81
 Personnel: BJ, BK
 Std. Temp: 68

Date: 06/04/20
 Leak ✓ : OK
 Strat. ✓ : OK

Cylinder #s: _____

Analyte	O2	CO2	Nox	CO	THC				
Analyzer	CAI	Rosem	CAI 600	TECO 48	CAI				
Range	21.01	8.52	22.30	90.50	87.90				
Span Value	8.49	8.52	12.65	45.30	44.10				
Time		Comments:							
	13:14	12.33	6.85	15.19	-0.5	0.4			
	13:15	12.17	6.99	15.41	-0.6	0.4			Unit #
	13:16	12.01	7.13	15.76	-0.6	0.4			
	13:17	11.61	7.48	16.44	-0.6	0.4			
	13:18	11.38	7.70	17.07	-0.6	0.3			Operating Conditions
	13:19	11.51	7.60	17.09	-0.7	0.4			
	13:20	11.99	7.17	16.12	-0.7	0.5			
	13:21	12.16	7.02	15.65	-0.6	0.4			Fuel
	13:22	12.10	7.06	15.59	-0.7	0.3			
	13:23	11.68	7.43	16.38	-0.7	0.4			
	13:24	11.58	7.53	16.73	-0.7	0.4			
	13:25	12.01	7.16	16.04	-0.7	0.3			
	13:26	12.09	7.06	15.53	-0.6	0.4			
	13:27	11.85	7.28	16.20	-0.7	0.5			
	13:28	11.95	7.19	16.03	-0.7	0.6			
	13:29	12.00	7.15	15.85	-0.6	0.7			
	13:30	11.97	7.17	16.00	-0.7	0.8			
	13:31	11.86	7.27	16.14	-0.7	0.7			
	13:32	11.68	7.44	16.63	-0.7	0.7			
	13:33	12.14	7.03	15.81	-0.7	0.9			
	13:34	11.94	7.19	15.83	-0.6	0.8			
	13:35	12.14	7.04	15.82	-0.7	0.7			
	13:36	12.01	7.12	15.71	-0.6	0.7			
	13:37	11.62	7.50	16.73	-0.7	0.5			
	13:38	11.99	7.16	15.99	-0.6	0.3			
	13:39	12.14	7.03	15.66	-0.7	0.2			
	13:40	11.99	7.15	15.80	-0.7	0.1			
	13:41	11.97	7.17	15.88	-0.7	0.1			
	13:42	12.03	7.13	15.89	-0.7	0.0			
	13:43	11.90	7.23	16.06	-0.7	0.0			
	13:44	12.18	6.99	15.58	-0.7	0.1			
	13:45	12.00	7.14	15.85	-0.6	0.2			
	13:46	11.91	7.23	16.33	-0.6	0.0			
	13:47	12.38	6.80	15.21	-0.6	0.0			
	13:48	12.27	6.90	15.39	-0.7	0.0			
	13:49	12.13	7.01	15.53	-0.7	-0.1			
	13:50	11.84	7.26	16.08	-0.7	-0.1			
	13:51	11.88	7.24	16.09	-0.7	-0.1			
	13:52	12.02	7.12	15.89	-0.7	0.0			
	13:53	12.22	6.94	15.43	-0.6	0.1			
ZERO f	13:09	-0.02	-0.05	0.00	-0.4	-0.2			
SPAN f	13:11	8.42	8.51	12.79	44.9	44.1			
Average		11.97	7.18	15.96	-0.7	0.3			
ZERO f	14:00	-0.02	-0.05	0.00	-0.5	0.5			
SPAN f	14:02	8.42	8.51	12.79	44.8	45.1			
Zero Drift %		0.0%	0.0%	0.0%	-0.1%	0.7%			
Span Drift %		0.0%	0.0%	0.0%	-0.1%	1.2%			
Corr. Avg.		12.06	7.19	15.79	-0.2	0.2			

Corrected Average = [Test Avg. - ((Zi+Zf) / 2)] * Span Gas Value / [((Si+Sf) / 2) - ((Zi+Zf) / 2)]

Zero Drift % = 100 * (Zf - Zi) / Instrument Range

Span Drift % = 100 * (Sf - Si) / Instrument Range

CEMS CALIBRATION SHEET

Facility: Fort Ord Date: 6-4-20 Personnel: BJ, BIC
 Location: TTY Barometric Pressure: 29.81

	O ₂	CO ₂	NO _x	CO	THC	Comments
Analyzer	CA-1	Rosemount	CA-1	Teco		
Range	25	20	25	100	100	
Cal Value (low)					23.79	
Cyl. #					CC 258710	
Expiration					6-23-23	
Cal Value (mid)	8.49		12.65	45.3	44.1	
Cyl. #	CC 106440		DT 14874	CC 258415	CC 92498	
Expiration	10-8-27		12-2-22	1-31-28	4-24-28	NO2
Cal Value (Hi)	21.01	8.52	22.3	90.5	87.9	6.176
Cyl #	SK 4344	CC 258415	DT 9922	CC 106440	AA 69415	CC 506665
Expiration	6-26-27	1-31-28	7-26-22	10-8-27	4-30-20 4-24-28	7-31-22

	Start	Stop	Temp	Flow
Run 1	1130	1210	1650	94
Run 2	1220	1300	1647	96
Run 3	1314	1354	1651	95

CH₄ 37%

but In
 Bag samples collected @ 1354 & 1400

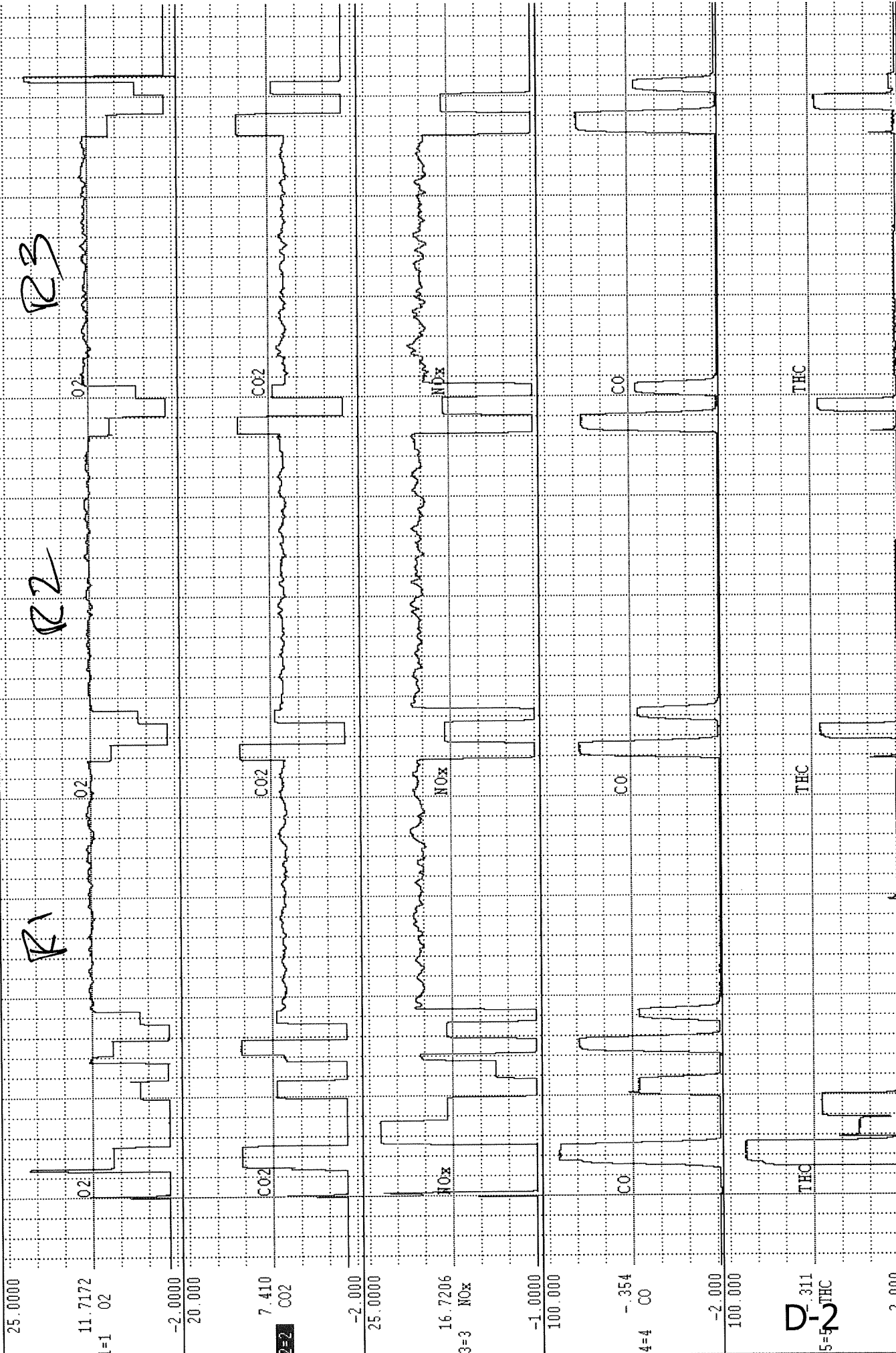
Calculations

$$\% \text{ Linearity (Limit } \pm 2\%) = 100 * \frac{\text{Span Value} - \text{Internal cal}}{\text{Span Range}}$$

$$\text{Zero and Calibration Drift} = 100 * \frac{(\text{Cfb} - \text{Cib})}{\text{range}}$$

$$\text{Cbc} = \frac{(\text{Cib} + \text{Cfb})}{2} \text{ for cal gas}$$

APPENDIX D
STRIP CHART RECORDS



APPENDIX E
CALIBRATION GAS CERTIFICATES

CERTIFICATE OF ANALYSIS

Grade of Product: EPA Protocol

Part Number: E02NI99E15WC004	Reference Number: 48-401550094-1
Cylinder Number: CC506665	Cylinder Volume: 144.0 Cubic Feet
Laboratory: 124 - Los Angeles (SAP) - CA	Cylinder Pressure: 2015 PSIG
PGVP Number: B32019	Valve Outlet: 660
Gas Code: NO2,BALN	Certification Date: Jul 31, 2019

Expiration Date: Jul 31, 2022

Certification performed in accordance with "EPA Traceability Protocol for Assay and Certification of Gaseous Calibration Standards (May 2012)" document EPA 600/R-12/531, using the assay procedures listed. Analytical Methodology does not require correction for analytical interference. This cylinder has a total analytical uncertainty as stated below with a confidence level of 95%. There are no significant impurities which affect the use of this calibration mixture. All concentrations are on a volume/volume basis unless otherwise noted.

Do Not Use This Cylinder below 100 psig, i.e. 0.7 megapascals.

ANALYTICAL RESULTS					
Component	Requested Concentration	Actual Concentration	Protocol Method	Total Relative Uncertainty	Assay Dates
NITROGEN DIOXIDE	6.000 PPM	6.176 PPM	G1	+/- 2.1% NIST Traceable	07/24/2019, 07/31/2019
NITROGEN	Balance				

CALIBRATION STANDARDS						
Type	Lot ID	Cylinder No	Concentration	Uncertainty	Expiration Date	
GMIS	401206803104	CC511311	9.690 PPM NITROGEN DIOXIDE/NITROGEN	+/- 2.1%	May 02, 2022	
PRM	12386	D685025	9.91 PPM NITROGEN DIOXIDE/AIR	+/- 2.0%	Feb 20, 2020	

The SRM, PRM or RGM noted above is only in reference to the GMIS used in the assay and not part of the analysis.

ANALYTICAL EQUIPMENT		
Instrument/Make/Model	Analytical Principle	Last Multipoint Calibration
MKS FTIR NO2 018335821	FTIR	Jul 10, 2019

Triad Data Available Upon Request



 Approved for Release



DocNumber: 255416



Praxair Distribution, Inc.
 5700 S. Alameda Street
 Los Angeles CA 90058
 Tel: 323-585-2154
 Fax: 714-542-6689
 PGVP ID: F22019

CERTIFICATE OF ANALYSIS / EPA PROTOCOL GAS

Customer & Order Information

BEST ENVIRONMENTAL SERVICES
 339 STEALTH CT
 LIVERMORE CA 94551

Certificate Issuance Date: 07/26/2019
 Praxair Order Number: 81760937
 Part Number: NI NO22ME-AS
 Customer PO Number: 9002

Fill Date: 07/15/2019
 Lot Number: 70086919508
 Cylinder Style & Outlet: AS CGA 660
 Cylinder Pressure and Volume: 2000 psig 140 ft³

Certified Concentration

Expiration Date:	07/26/2022	NIST Traceable
Cylinder Number:	DT0009922	Expanded Uncertainty
22.2 ppm	Nitric oxide	± 1.0 %
Balance	Nitrogen	

ProSpec EZ Cert



For Reference Only: NOx 22.3 ppm

Certification Information: Certification Date: 07/26/2019 Term: 36 Months Expiration Date: 07/26/2022

This cylinder was certified according to the 2012 EPA Traceability Protocol, Document #EPA-600/R-12/531, using Procedure G1.
 Do Not Use this Standard if Pressure is less than 100 PSIG.

Analytical Data:

(R=Reference Standard, Z=Zero Gas, C=Gas Candidate)

1. **Component:** Nitric oxide
 Requested Concentration: 22 ppm
 Certified Concentration: 22.2 ppm
 Instrument Used: Thermo Electron 42i-LS S/N 1030645077
 Analytical Method: Chemiluminescence
 Last Multipoint Calibration: 07/12/2019

Reference Standard: Type / Cylinder #: GMIS / CC457197
 Concentration / Uncertainty: 19.91 ppm ±0.666%
 Expiration Date: 03/26/2022
Traceable to: SRM # / Sample # / Cylinder #: APEX1161149 / N/A / APEX1161149
 SRM Concentration / Uncertainty: 20.03 ppm / ± 0.10 ppm
 SRM Expiration Date: 01/27/2020

First Analysis Data:				Date
Z: 0	R: 19.91	C: 22.1	Conc: 22.1	07/19/2019
R: 19.9	Z: 0	C: 22.1	Conc: 22.1	
Z: 0	C: 22.1	R: 19.92	Conc: 22.1	
UOM: ppm			Mean Test Assay:	22.1 ppm

Second Analysis Data:				Date
Z: 0	R: 19.91	C: 22.3	Conc: 22.3	07/26/2019
R: 19.9	Z: 0	C: 22.2	Conc: 22.2	
Z: 0	C: 22.3	R: 19.89	Conc: 22.3	
UOM: ppm			Mean Test Assay:	22.3 ppm

Analyzed By

Henry Koung

Certified By

Leeanna Flores

DocNumber: 294287



Praxair Distribution, Inc.
5700 S. Alameda Street
Los Angeles CA 90058
Tel: 323-585-2154
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CERTIFICATE OF ANALYSIS / EPA PROTOCOL GAS

Customer & Order Information

BEST ENVIRONMENTAL SERVICES
339 STEALTH CT
LIVERMORE CA 94551

Certificate Issuance Date: 12/05/2019
Praxair Order Number: 90475480
Part Number: NI NO12.5ME-AS
Customer PO Number: 9035

Fill Date: 11/11/2019
Lot Number: 70086961507
Cylinder Style & Outlet: AS CGA 660
Cylinder Pressure and Volume: 2000 psig 140 ft3

Certified Concentration

Expiration Date:	12/02/2022	NIST Traceable
Cylinder Number:	DT0014874	Expanded Uncertainty
12.61 ppm	Nitric oxide	± 0.7 %
Balance	Nitrogen	

ProSpec EZ Cert



For Reference Only: NOx 12.65 ppm

Certification Information: Certification Date: 12/02/2019 Term: 36 Months Expiration Date: 12/02/2022

This cylinder was certified according to the 2012 EPA Traceability Protocol, Document #EPA-600/R-12/531, using Procedure G1.
Do Not Use this Standard if Pressure is less than 100 PSIG.

Analytical Data: (R=Reference Standard, Z=Zero Gas, C=Gas Candidate)

1. Component: Nitric oxide
Requested Concentration: 12.5 ppm
Certified Concentration: 12.61 ppm
Instrument Used: Thermo Electron 42i-LS S/N 1030645077
Analytical Method: Chemiluminescence
Last Multipoint Calibration: 11/15/2019

Reference Standard: Type / Cylinder #: GMS / DT0008711
Concentration / Uncertainty: 20.03 ppm ±0.662%
Expiration Date: 10/04/2022
Traceable to: SRM # / Sample # / Cylinder #: PRM#APEX1161149 / N/A / APEX1161149
SRM Concentration / Uncertainty: 20.03 ppm / ±0.10 ppm
SRM Expiration Date: 01/27/2020

First Analysis Data:				Date	
Z:	0	R:	20	C: 12.58	Conc: 12.6
R:	20	Z:	0	C: 12.59	Conc: 12.61
Z:	0	C:	12.58	R: 20	Conc: 12.6
UOM: ppm				Mean Test Assay: 12.6 ppm	

Second Analysis Data:				Date	
Z:	0	R:	20	C: 12.6	Conc: 12.62
R:	20	Z:	0	C: 12.61	Conc: 12.63
Z:	0	C:	12.61	R: 20	Conc: 12.63
UOM: ppm				Mean Test Assay: 12.63 ppm	

Analyzed By

Henry Koung

Certified By

Leanna Flores



CERTIFICATE OF ANALYSIS / EPA PROTOCOL GAS

Customer & Order Information

BEST ENVIRONMENTAL SERVICES
339 STEALTH CT
LIVERMORE CA 94551

Certificate Issuance Date: 01/31/2020
Praxair Order Number: 96209625
Part Number: NI CD8.5CO1E-AS
Customer PO Number: 9055

Fill Date: 01/24/2020
Lot Number: 70086002404
Cylinder Style & Outlet: AS CGA 350
Cylinder Pressure and Volume: 2000 psig 140 ft3

Certified Concentration

Expiration Date:	01/31/2028	NIST Traceable
Cylinder Number:	CC258415	Expanded Uncertainty
8.52 %	Carbon dioxide	± 0.6 %
45.3 ppm	Carbon monoxide	± 0.5 %
4.50 %	Oxygen	± 0.5 %
Balance	Nitrogen	

ProSpec EZ Cert



Certification Information:

Certification Date: 01/31/2020 Term: 96 Months Expiration Date: 01/31/2028

This cylinder was certified according to the 2012 EPA Traceability Protocol, Document #EPA-600/R-12/531, using Procedure G1.

Do Not Use this Standard if Pressure is less than 100 PSIG.

CO2 responses have been corrected for Oxygen IR Broadening effect. CO responses have been corrected for CO2 interference. O2 responses have been corrected for CO2 interference.

Analytical Data:

(R=Reference Standard, Z=Zero Gas, C=Gas Candidate)

1. Component: Carbon dioxide
Requested Concentration: 8.5 %
Certified Concentration: 8.52 %
Instrument Used: Horiba VIA-510 S/N 20C194WK
Analytical Method: NDIR
Last Multipoint Calibration: 01/24/2020

First Analysis Data:				Date
Z:	0	R:	14	C: 8.53 Conc: 8.53
R:	14	Z:	0	C: 8.52 Conc: 8.52
Z:	0	C:	8.53	R: 14.01 Conc: 8.53
UOM:	%			Mean Test Assay: 8.52 %

Reference Standard: Type / Cylinder #: GMIS / CC164230
Concentration / Uncertainty: 14.00 % ±0.265%
Expiration Date: 04/16/2027
Traceable to: SRM # / Sample # / Cylinder #: SRM 1675b / 6-F-51 / CAL014538
SRM Concentration / Uncertainty: 13.963% / ±0.034%
SRM Expiration Date: 05/16/2022

Second Analysis Data:				Date
Z:	0	R:	0	C: 0 Conc: 0
R:	0	Z:	0	C: 0 Conc: 0
Z:	0	C:	0	R: 0 Conc: 0
UOM:	%			Mean Test Assay: %

2. Component: Carbon monoxide
Requested Concentration: 45 ppm
Certified Concentration: 45.3 ppm
Instrument Used: Horiba VIA-510 S/N 576876015
Analytical Method: NDIR
Last Multipoint Calibration: 01/31/2020

First Analysis Data:				Date
Z:	0	R:	48.9	C: 45.3 Conc: 45.3
R:	48.9	Z:	0	C: 45.3 Conc: 45.3
Z:	0	C:	45.1	R: 48.8 Conc: 45.1
UOM:	ppm			Mean Test Assay: 45.3 ppm

Reference Standard: Type / Cylinder #: GMIS / CC188812
Concentration / Uncertainty: 48.9 ppm ±0.431%
Expiration Date: 12/06/2025
Traceable to: SRM # / Sample # / Cylinder #: SRM 1678c / 04-L-41 / FF18402
SRM Concentration / Uncertainty: 49.136 PPM / ±0.065PPM
SRM Expiration Date: 02/04/2021

Second Analysis Data:				Date
Z:	0	R:	0	C: 0 Conc: 0
R:	0	Z:	0	C: 0 Conc: 0
Z:	0	C:	0	R: 0 Conc: 0
UOM:	ppm			Mean Test Assay: ppm

3. Component: Oxygen
Requested Concentration: 4.5 %
Certified Concentration: 4.50 %
Instrument Used: OXYMAT 5E
Analytical Method: Paramagnetic
Last Multipoint Calibration: 01/24/2020

First Analysis Data:				Date
Z:	0	R:	5	C: 4.5 Conc: 4.5
R:	5	Z:	0	C: 4.51 Conc: 4.51
Z:	0	C:	4.51	R: 5.01 Conc: 4.51
UOM:	%			Mean Test Assay: 4.5 %

Reference Standard: Type / Cylinder #: GMIS / CC138810
Concentration / Uncertainty: 5.00 % ±0.234%
Expiration Date: 12/14/2026
Traceable to: SRM # / Sample # / Cylinder #: SRM 2658a / 72-D-28 / CAL016862
SRM Concentration / Uncertainty: 9.918% / ±0.022%
SRM Expiration Date: 02/03/2024

Second Analysis Data:				Date
Z:	0	R:	0	C: 0 Conc: 0
R:	0	Z:	0	C: 0 Conc: 0
Z:	0	C:	0	R: 0 Conc: 0
UOM:	%			Mean Test Assay: %

Analyzed By

Jose Vasquez

Certified By

Jenna Lockman



CERTIFICATE OF ANALYSIS / EPA PROTOCOL GAS

Customer & Order Information

BEST ENVIRONMENTAL SERVICES
339 STEALTH CT
LIVERMORE CA 94551

Certificate Issuance Date: 06/26/2019

Praxair Order Number: 78636615

Part Number: NI CD7CO8E-AS

Customer PO Number: 8987

Fill Date: 06/18/2019

Lot Number: 70086916903

Cylinder Style & Outlet: AS

CGA 590

Cylinder Pressure and Volume: 2000 psig 140 ft3

Certified Concentration

Expiration Date:	06/26/2027	NIST Traceable	
Cylinder Number:	SA4344	Expanded Uncertainty	
6.92 %	Carbon dioxide	± 0.3 %	
17.76 ppm	Carbon monoxide	± 0.3 %	
21.01 %	Oxygen	± 0.1 %	
Balance	Nitrogen		

ProSpec EZ Cert



Certification Information:

Certification Date: 06/26/2019

Term: 96 Months

Expiration Date: 06/26/2027

This cylinder was certified according to the 2012 EPA Traceability Protocol, Document #EPA-600/R-12/531, using Procedure G1.

Do Not Use this Standard if Pressure is less than 100 PSIG.

CO2 responses have been corrected for Oxygen IR Broadening effect. O2 responses have been corrected for CO2 interference.

Analytical Data:

(R=Reference Standard, Z=Zero Gas, C=Gas Candidate)

1. Component: Carbon dioxide
Requested Concentration: 7 %
Certified Concentration: 6.92 %
Instrument Used: Horiba VIA-510 S/N 20C194WK
Analytical Method: NDIR
Last Multipoint Calibration: 06/11/2019

First Analysis Data:				Date			
Z:	0	R:	6.96	C:	6.92	Conc:	6.91
R:	6.96	Z:	0	C:	6.92	Conc:	6.91
Z:	0	C:	6.94	R:	6.98	Conc:	6.93
UOM: %				Mean Test Assay: 6.92 %			

Reference Standard: Type / Cylinder #: GMIS / CC243762
Concentration / Uncertainty: 6.96 % ± 0.208%
Expiration Date: 06/07/2023
Traceable to: SRM # / Sample # / Cylinder #: SRM 1674b / 7-H-07 / FF10631
SRM Concentration / Uncertainty: 6.944% / ± 0.013%
SRM Expiration Date: 06/17/2019

Second Analysis Data:				Date			
Z:	0	R:	0	C:	0	Conc:	0
R:	0	Z:	0	C:	0	Conc:	0
Z:	0	C:	0	R:	0	Conc:	0
UOM: %				Mean Test Assay: %			

2. Component: Carbon monoxide
Requested Concentration: 17 ppm
Certified Concentration: 17.76 ppm
Instrument Used: MKS Multigas 2031 FTIR
Analytical Method: FTIR
Last Multipoint Calibration: 06/03/2019

First Analysis Data:				Date			
Z:	0	R:	24.635	C:	17.797	Conc:	17.75
R:	24.593	Z:	0	C:	17.827	Conc:	17.78
Z:	0	C:	17.812	R:	24.618	Conc:	17.76
UOM: ppm				Mean Test Assay: 17.76 ppm			

Reference Standard: Type / Cylinder #: GMIS / CC74739
Concentration / Uncertainty: 24.55 ppm ± 0.21%
Expiration Date: 11/09/2025
Traceable to: SRM # / Sample # / Cylinder #: SRM 2635a / 58-E-34 / FF10666
SRM Concentration / Uncertainty: 24.512 PPM / ± 0.029 PPM
SRM Expiration Date: 03/28/2021

Second Analysis Data:				Date			
Z:	0	R:	0	C:	0	Conc:	0
R:	0	Z:	0	C:	0	Conc:	0
Z:	0	C:	0	R:	0	Conc:	0
UOM: ppm				Mean Test Assay: ppm			

3. Component: Oxygen
Requested Concentration: 21 %
Certified Concentration: 21.01 %
Instrument Used: OXYMAT 5E
Analytical Method: Paramagnetic
Last Multipoint Calibration: 06/12/2019

First Analysis Data:				Date			
Z:	0	R:	20.88	C:	21.02	Conc:	21
R:	20.88	Z:	0	C:	21.02	Conc:	21
Z:	0	C:	21.04	R:	20.9	Conc:	21.02
UOM: %				Mean Test Assay: 21.01 %			

Reference Standard: Type / Cylinder #: GMIS / CC506521
Concentration / Uncertainty: 20.87 % ± 0.108%
Expiration Date: 12/14/2026
Traceable to: SRM # / Sample # / Cylinder #: SRM 2659a / 71-E-19 / FF22331
SRM Concentration / Uncertainty: 20.863% / ± 0.021%
SRM Expiration Date: 08/23/2021

Second Analysis Data:				Date			
Z:	0	R:	0	C:	0	Conc:	0
R:	0	Z:	0	C:	0	Conc:	0
Z:	0	C:	0	R:	0	Conc:	0
UOM: %				Mean Test Assay: %			

Analyzed By

Jose Vasquez

Certified By

Jenna Lockman



CERTIFICATE OF ANALYSIS / EPA PROTOCOL GAS

Customer & Order Information

BEST ENVIRONMENTAL SERVICES
339 STEALTH CT
LIVERMORE CA 94551

Certificate Issuance Date: 10/08/2019
Praxair Order Number: 87642411
Part Number: NI CD12.5CO3EAS
Customer PO Number: 9022

Fill Date: 10/03/2019
Lot Number: 70086927605
Cylinder Style & Outlet: AS CGA 590
Cylinder Pressure and Volume: 2000 psig 140 ft3

Certified Concentration

Expiration Date:	10/08/2027	NIST Traceable
Cylinder Number:	CC106440	Expanded Uncertainty
12.55 %	Carbon dioxide	± 0.4 %
90.5 ppm	Carbon monoxide	± 0.4 %
8.49 %	Oxygen	± 0.4 %
Balance	Nitrogen	

ProSpec EZ Cert



Certification Information:

Certification Date: 10/08/2019 Term: 96 Months Expiration Date: 10/08/2027

This cylinder was certified according to the 2012 EPA Traceability Protocol, Document #EPA-600/R-12/531, using Procedure G1.
Do Not Use this Standard if Pressure is less than 100 PSIG.

CO responses have been corrected for CO2 interference. CO responses have been corrected for O2 interference. CO2 responses have been corrected for Oxygen IR Broadening effect.
O2 responses have been corrected for CO2 interference.

Analytical Data:

(R=Reference Standard, Z=Zero Gas, C=Gas Candidate)

1. Component: Carbon dioxide
Requested Concentration: 12.5 %
Certified Concentration: 12.55 %
Instrument Used: Horiba VIA-510 S/N 20C194WK
Analytical Method: NDIR
Last Multipoint Calibration: 09/18/2019

First Analysis Data:				Date				
Z:	0	R:	14	C:	12.56	Conc:	12.55	10/08/2019
R:	14.01	Z:	0	C:	12.56	Conc:	12.55	
Z:	0	C:	12.56	R:	14.01	Conc:	12.55	
UOM:	%	Mean Test Assay:		12.55 %				

Reference Standard: Type / Cylinder #: GMIS / CC164230
Concentration / Uncertainty: 14.00 % ±0.265%
Expiration Date: 04/16/2027
Traceable to: SRM # / Sample # / Cylinder #: SRM 1675b / 6-F-51 / CAL014538
SRM Concentration / Uncertainty: 13.963% / ±0.034%
SRM Expiration Date: 05/16/2022

Second Analysis Data:				Date				
Z:	0	R:	0	C:	0	Conc:	0	
R:	0	Z:	0	C:	0	Conc:	0	
Z:	0	C:	0	R:	0	Conc:	0	
UOM:	%	Mean Test Assay:		%				

2. Component: Carbon monoxide
Requested Concentration: 90 ppm
Certified Concentration: 90.5 ppm
Instrument Used: Horiba VIA-510 S/N 576876015
Analytical Method: NDIR
Last Multipoint Calibration: 09/19/2019

First Analysis Data:				Date				
Z:	0	R:	98.4	C:	90.4	Conc:	90.5	10/08/2019
R:	98.4	Z:	0	C:	90.4	Conc:	90.5	
Z:	0	C:	90.6	R:	98.2	Conc:	90.7	
UOM:	ppm	Mean Test Assay:		90.5 ppm				

Reference Standard: Type / Cylinder #: GMIS / DT0017975
Concentration / Uncertainty: 98.4 ppm ±0.413%
Expiration Date: 05/24/2027
Traceable to: SRM # / Sample # / Cylinder #: SRM 1679c / 3-I-45 / FF28593
SRM Concentration / Uncertainty: 98.40 PPM / ±0.40 PPM
SRM Expiration Date: 01/28/2020

Second Analysis Data:				Date				
Z:	0	R:	0	C:	0	Conc:	0	
R:	0	Z:	0	C:	0	Conc:	0	
Z:	0	C:	0	R:	0	Conc:	0	
UOM:	ppm	Mean Test Assay:		ppm				

3. Component: Oxygen
Requested Concentration: 8.5 %
Certified Concentration: 8.49 %
Instrument Used: OXYMAT 5E
Analytical Method: Paramagnetic
Last Multipoint Calibration: 09/18/2019

First Analysis Data:				Date				
Z:	0	R:	9.88	C:	8.49	Conc:	8.49	10/08/2019
R:	9.87	Z:	0	C:	8.49	Conc:	8.49	
Z:	0	C:	8.48	R:	9.87	Conc:	8.48	
UOM:	%	Mean Test Assay:		8.49 %				

Reference Standard: Type / Cylinder #: NTRM / DT0010384
Concentration / Uncertainty: 9.875 % ±0.4%
Expiration Date: 11/18/2022
Traceable to: SRM # / Sample # / Cylinder #: NTRM / 170701 / NTRM DT0010384
SRM Concentration / Uncertainty: 9.875% / ±0.040%
SRM Expiration Date: 11/18/2022

Second Analysis Data:				Date				
Z:	0	R:	0	C:	0	Conc:	0	
R:	0	Z:	0	C:	0	Conc:	0	
Z:	0	C:	0	R:	0	Conc:	0	
UOM:	%	Mean Test Assay:		%				

Analyzed By

Jenna Lockman

Certified By

Jose Vasquez



Making our planet more productive

DocNumber: 304671



Praxair Distribution, Inc.
5700 S. Alameda Street
Los Angeles CA 90058
Tel: 323-585-2154
Fax: 714-542-6689
PGVP ID: F22020

CERTIFICATE OF ANALYSIS / EPA PROTOCOL GAS

Customer & Order Information

BEST ENVIRONMENTAL SERVICES
339 STEALTH CT
LIVERMORE CA 94551

Certificate Issuance Date: 04/24/2020
Praxair Order Number: 14021599
Part Number: EV AIPR29ME-AS
Customer PO Number: 9075

Fill Date: 04/20/2020
Lot Number: 70086011111
Cylinder Style & Outlet: AS CGA 590
Cylinder Pressure and Volume: 2000 psig 140 ft3

Certified Concentration

Table with 3 columns: Field, Value, and Note. Includes Expiration Date (04/24/2028), Cylinder Number (AAL069415), Concentration (29.3 ppm Propane), and Balance (Air).

ProSpec EZ Cert



Certification Information:

Certification Date: 04/24/2020 Term: 96 Months Expiration Date: 04/24/2028

This cylinder was certified according to the 2012 EPA Traceability Protocol, Document #EPA-600/R-12/531, using Procedure G1.

Do Not Use this Standard if Pressure is less than 100 PSIG.

Analytical Data:

(R=Reference Standard, Z=Zero Gas, C=Gas Candidate)

1. Component: Propane
Requested Concentration: 29 ppm
Certified Concentration: 29.3 ppm
Instrument Used: Horiba FIA-510, 851135122
Analytical Method: FID Total Hydrocarbon Analyzer
Last Multipoint Calibration: 04/21/2020

Reference Standard: Type / Cylinder #: GMIS / SA14294
Concentration / Uncertainty: 50.42 ppm ±0.259%
Expiration Date: 07/06/2023
Traceable to: SRM # / Sample # / Cylinder #: SRM 1667b / 83-J-17 / CALD17783
SRM Concentration / Uncertainty: 48.83 PPM / ±0.11 PPM
SRM Expiration Date: 08/17/2017

Table with 4 columns: Component, Value, Component, Value. Shows results for Z, R, C, and Mean Test Assay (29.3 ppm).

Table with 4 columns: Component, Value, Component, Value. Shows results for Z, R, C, and Mean Test Assay (ppm).

Analyzed By: Jose Vasquez

Certified By: Jenna Lockman

Handwritten note: THC 87.9 ppm



DocNumber: 304670

CERTIFICATE OF ANALYSIS / EPA PROTOCOL GAS

Customer & Order Information

BEST ENVIRONMENTAL SERVICES
339 STEALTH CT
LIVERMORE CA 94551

Certificate Issuance Date: 04/24/2020

Praxair Order Number: 14021424

Part Number: AI PR15ME-AS

Customer PO Number: 9074

Fill Date: 04/20/2020

Lot Number: 70086011110

Cylinder Style & Outlet: AS

CGA 590

Cylinder Pressure and Volume: 2000 psig 140 ft3

Certified Concentration

Expiration Date:	04/24/2028	NIST Traceable
Cylinder Number:	CC92498	Expanded Uncertainty
14.7 ppm	Propane	± 0.9 %
Balance	Air	

ProSpec EZ Cert



Certification Information:

Certification Date: 04/24/2020

Term: 96 Months

Expiration Date: 04/24/2028

This cylinder was certified according to the 2012 EPA Traceability Protocol, Document #EPA-600/R-12/531, using Procedure G1.

Do Not Use this Standard if Pressure is less than 100 PSIG.

Analytical Data:

(R=Reference Standard, Z=Zero Gas, C=Gas Candidate)

1. Component: Propane

Requested Concentration: 15 ppm
 Certified Concentration: 14.7 ppm
 Instrument Used: Horiba FIA-510, 851135122
 Analytical Method: FID Total Hydrocarbon Analyzer
 Last Multipoint Calibration: 04/21/2020

First Analysis Data:				Date			
Z:	0	R:	27.7	C:	40.8	Conc:	14.7
R:	27.7	Z:	0	C:	41	Conc:	14.7
Z:	0	C:	40.8	R:	27.6	Conc:	14.7
UOM:	ppm	Mean Test Assay:	14.7	ppm			

Reference Standard: Type / Cylinder #: GMIS / CC130474

Concentration / Uncertainty: 9.952 ppm ±0.35%

Expiration Date: 10/16/2023

Traceable to: SRM # / Sample # / Cylinder #: SRM 1666b / 84-K-35 / FF10676

SRM Concentration / Uncertainty: 9.888 PPM / ±0.032 PPM

SRM Expiration Date: 10/05/2019

Second Analysis Data:				Date			
Z:	0	R:	0	C:	0	Conc:	0
R:	0	Z:	0	C:	0	Conc:	0
Z:	0	C:	0	R:	0	Conc:	0
UOM:	ppm	Mean Test Assay:		ppm			

Analyzed By

Jose Vasquez

Certified By

Jenna Lockman

THE 44.1 ppm



Praxair
 5700 South Alameda Street
 Los Angeles, CA 90058
 Tel: (323) 585-2154 Fax: (714) 542-6689
 PGVPID: F22015

DocNumber: 000081233

CERTIFICATE OF ANALYSIS / EPA PROTOCOL GAS

Customer & Order Information:

BEST ENVIRONMENTAL SERVICE
 339 STEALTH CT
 LIVERMORE CA 945510

Praxair Order Number: 31495995
 Customer P. O. Number: 8520
 Customer Reference Number:

Fill Date: 6/19/2015
 Part Number: EV AIPR8ME-AS
 Lot Number: 109517001
 Cylinder Style & Outlet: AS CGA 590
 Cylinder Pressure & Volume: 2000 psig 140 cu. ft.

Certified Concentration:

Expiration Date:	6/23/2023	NIST Traceable
Cylinder Number:	CC258710	Analytical Uncertainty:
7.93 ppm	PROPANE	± 0.4 %
Balance	AIR	

Certification Information: Certification Date: 6/23/2015 Term: 96 Months Expiration Date: 6/23/2023

This cylinder was certified according to the 2012 EPA Traceability Protocol, Document #EPA-600/R-12/531, using Procedure G1. Do Not Use this Standard if Pressure is less than 100 PSIG.

Analytical Data: (R=Reference Standard, Z=Zero Gas, C=Gas Candidate)

1. Component: PROPANE

Requested Concentration: 8 ppm
 Certified Concentration: 7.93 ppm
 Instrument Used: HORIBA, FIA-510, 851135122
 Analytical Method: Flame Ionization
 Last Multipoint Calibration: 5/25/2015

Reference Standard Type: GMIS
 Ref. Std. Cylinder #: CC135033
 Ref. Std. Conc: 10.08 ppm
 Ref. Std. Traceable to SRM #: 1666b
 SRM Sample #: 84-K-35
 SRM Cylinder #: FF10676

First Analysis Data:		Date: 6/23/2015	
Z: 0	R: 27.67	C: 21.78	Conc: 7.932
R: 27.68	Z: 0	C: 21.78	Conc: 7.932
Z: 0	C: 21.78	R: 27.68	Conc: 7.932
UOM: ppm	Mean Test Assay: 7.932 ppm		

Second Analysis Data:		Date:	
Z: 0	R: 0	C: 0	Conc: 0
R: 0	Z: 0	C: 0	Conc: 0
Z: 0	C: 0	R: 0	Conc: 0
UOM: ppm	Mean Test Assay: 0 ppm		

Analyzed by:

Ying Yu

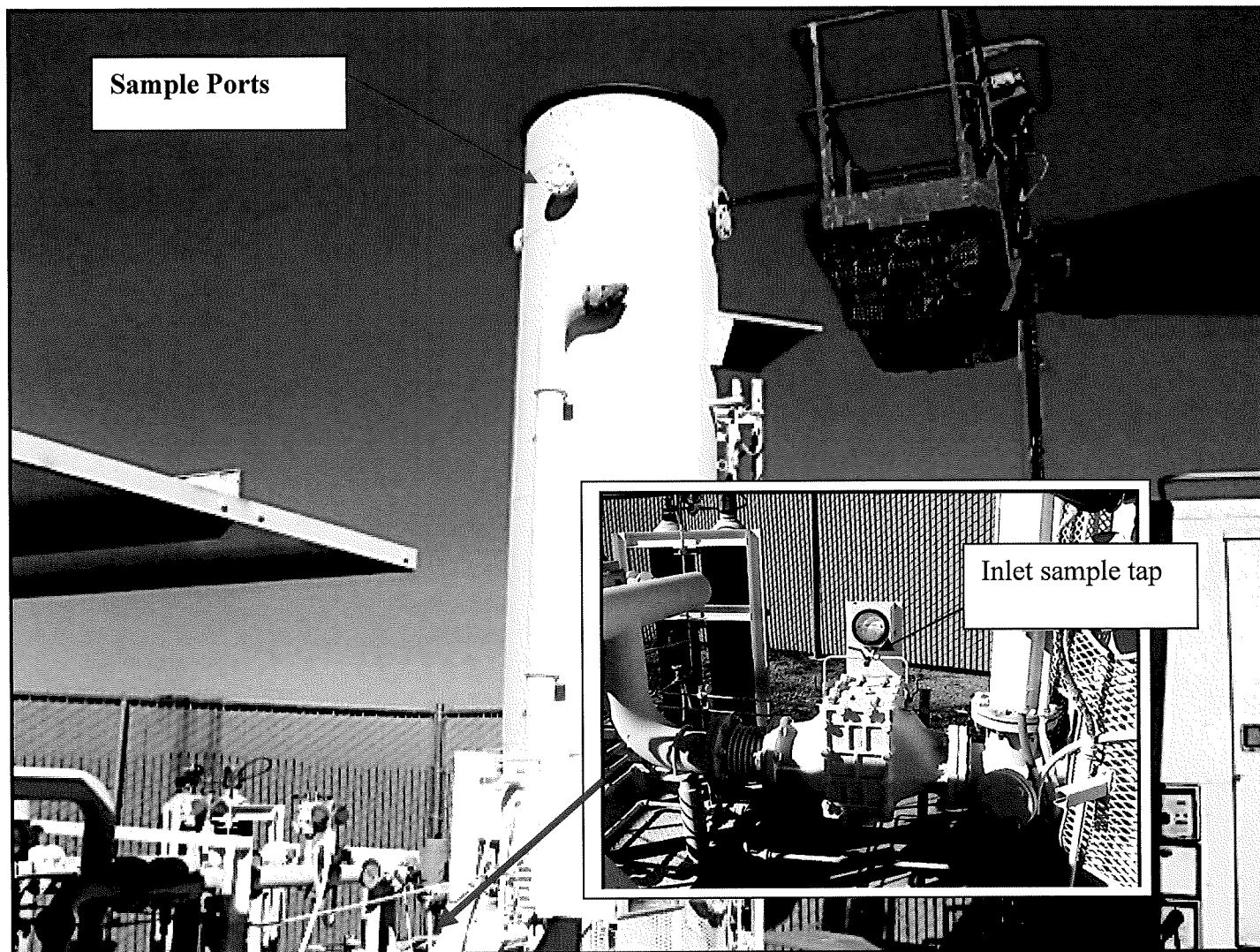
Certified by:

Jack Fu

THC
23.79 ppm

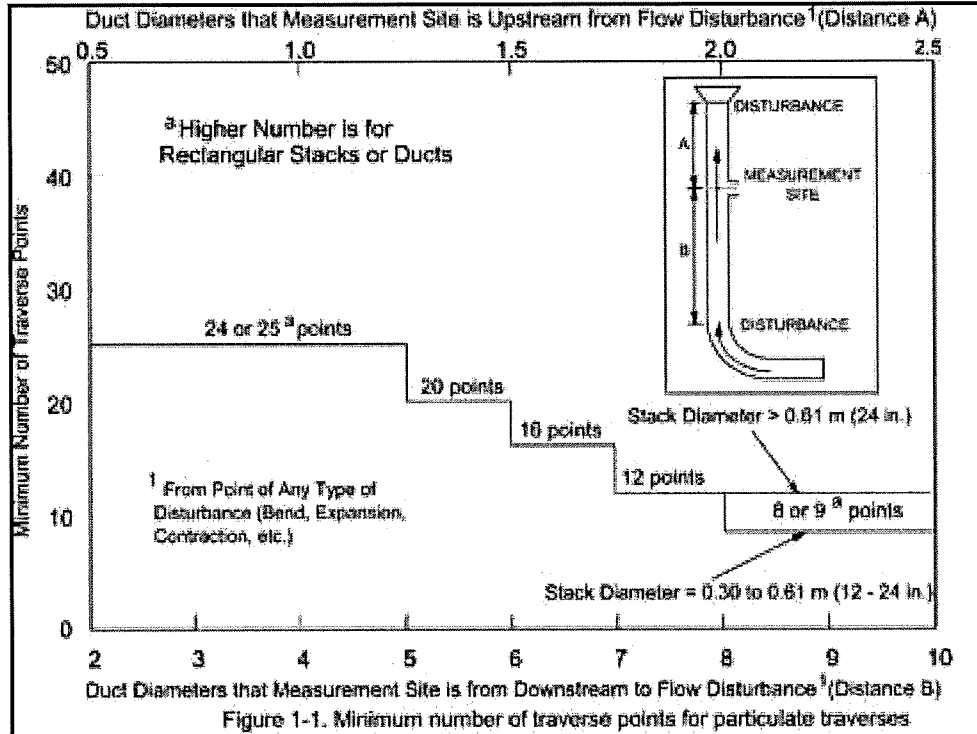
APPENDIX F
STACK DIAGRAMS

Former Fort Ord TTU

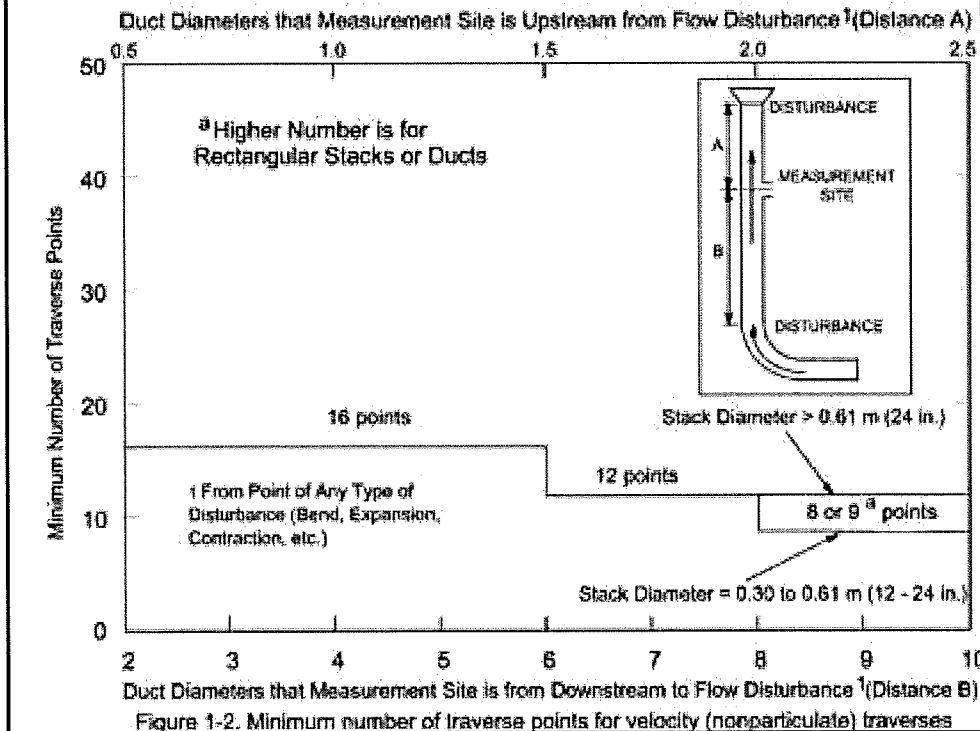


APPENDIX G
SAMPLING SYSTEM DIAGRAMS

EPA METHOD 1



* * * * *



EPA METHOD 1

TABLE 1-1 CROSS-SECTION LAYOUT FOR RECTANGULAR STACKS

Number of tranverse points layout	Matrix
9	3×3
12	4×3
16	4×4
20	5×4
25	5×5
30	6×5
36	6×6
42	7×6
49	7×7

TABLE 1-2—LOCATION OF TRAVERSE POINTS IN CIRCULAR STACKS

[Percent of stack diameter from inside wall to traverse point]

Traverse point number on a diameter	Number of traverse points on a diameter												
	2	4	6	8	10	12	14	16	18	20	22	24	
1	14.6	6.7	4.4	3.2	2.6	2.1	1.8	1.6	1.4	1.3	1.1	1.1	
2	85.4	25.0	14.6	10.5	8.2	6.7	5.7	4.9	4.4	3.9	3.5	3.2	
3		75.0	29.6	19.4	14.6	11.8	9.9	8.5	7.5	6.7	6.0	5.5	
4		93.3	70.4	32.3	22.6	17.7	14.6	12.5	10.9	9.7	8.7	7.9	
5			85.4	67.7	34.2	25.0	20.1	16.9	14.6	12.9	11.6	10.5	
6			95.6	80.6	65.8	35.6	26.9	22.0	18.8	16.5	14.6	13.2	
7				89.5	77.4	64.4	36.6	28.3	23.6	20.4	18.0	16.1	
8				96.8	85.4	75.0	63.4	37.5	29.6	25.0	21.8	19.4	
9					91.8	82.3	73.1	62.5	38.2	30.6	26.2	23.0	
10					97.4	88.2	79.9	71.7	61.8	38.8	31.5	27.2	
11						93.3	85.4	78.0	70.4	61.2	39.3	32.3	
12							97.9	90.1	83.1	76.4	69.4	60.7	39.8
13								94.3	87.5	81.2	75.0	68.5	60.2
14								98.2	91.5	85.4	79.6	73.8	67.7
15									95.1	89.1	83.5	78.2	72.8
16									98.4	92.5	87.1	82.0	77.0
17										95.6	90.3	85.4	80.6
18										98.6	93.3	88.4	83.9
19											96.1	91.3	86.8
20											98.7	94.0	89.5
21												96.5	92.1
22												98.9	94.5
23													96.8
24													98.9

EPA METHOD 1

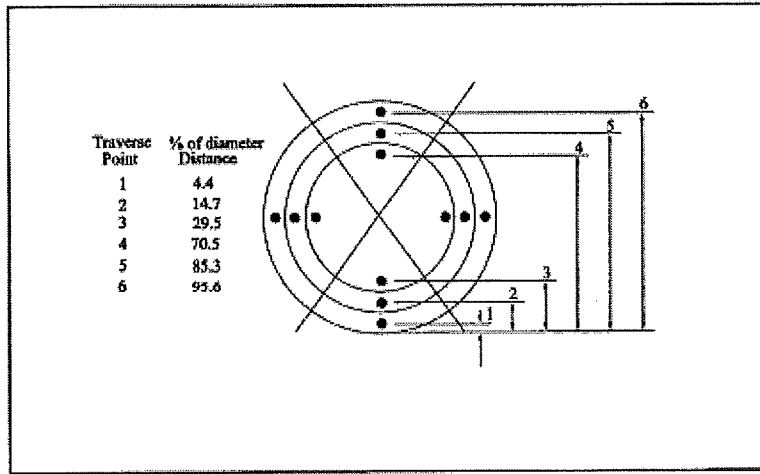


Figure 1-3. Example showing circular stack cross section divided into 12 equal areas, with location of traverse points.

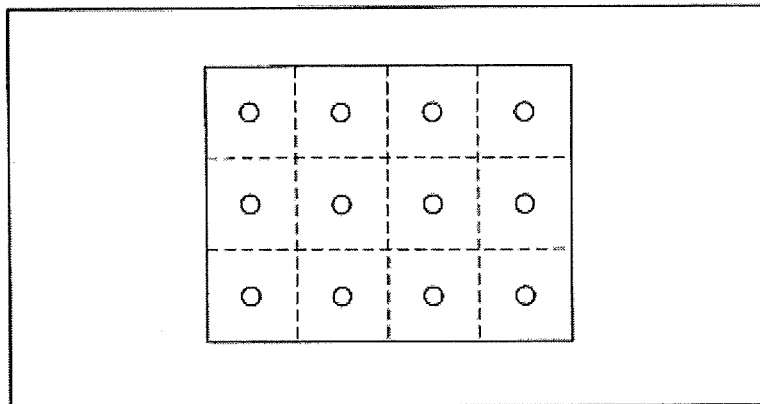
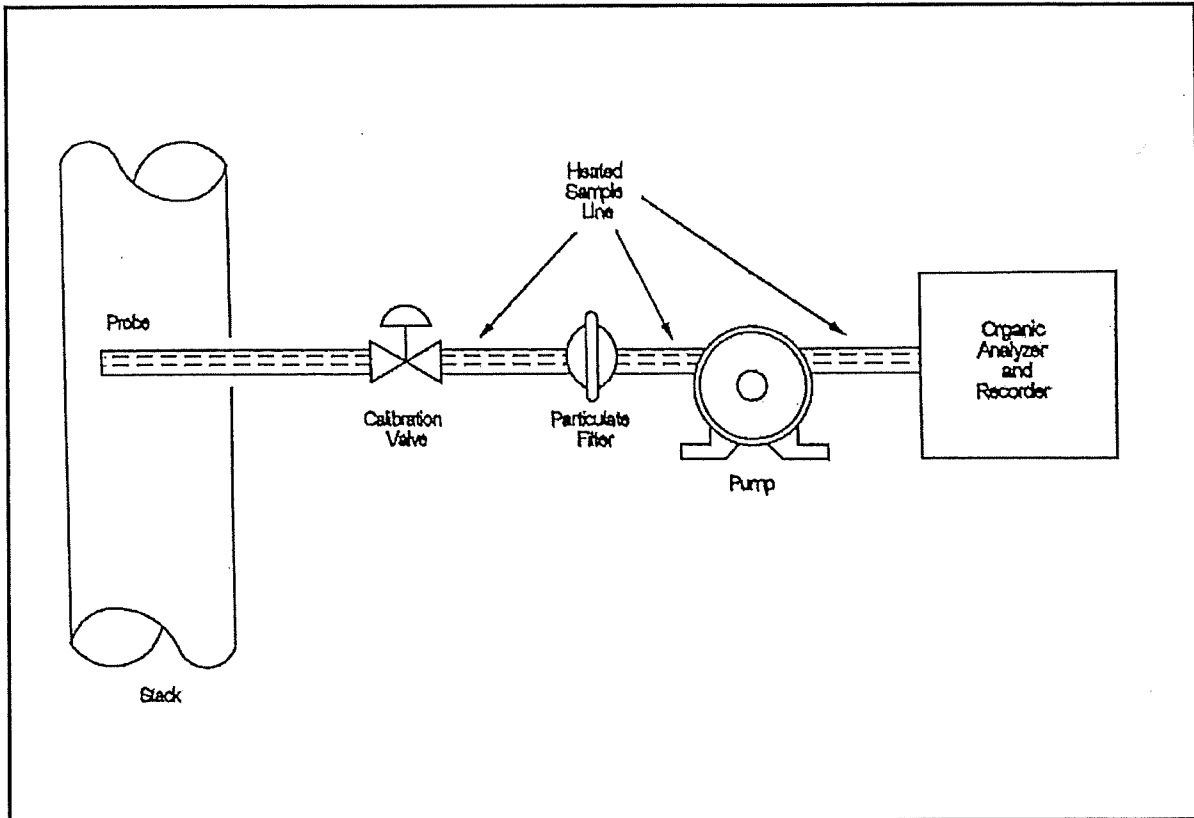


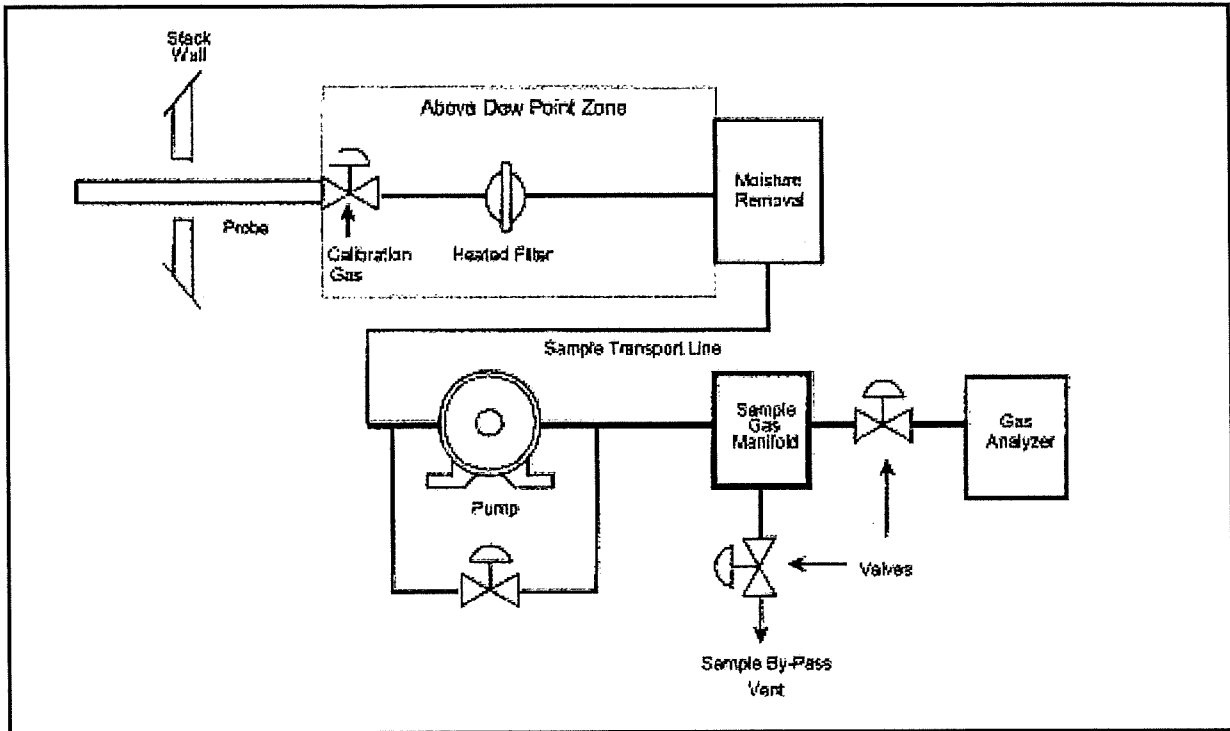
Figure 1-4. Example showing rectangular stack cross section divided into 12 equal areas, with traverse points at centroid of each area.

EPA Method 25A



Organic Concentration Measurement System

EPA Methods 3A, 6C, 7E & 10



CEM Sampling Train

APPENDIX H
SOURCE TEST PLAN

Source Test Protocol

**Former Fort Ord
Monterey, CA**

Thermal Treatment Unit (TTU)

Prepared For:

Ahtna Global, LLC
9699 Blue Larkspur Lane, Suite 203
Monterey, California, 93940
Attn: Eric Schmidt

Prepared By:

BEST ENVIRONMENTAL
339 Stealth Court
Livermore, CA 94551
Phone (925) 455-9474
Fax (925) 455-9479
Email: bestair@best-enviro.com

Date Issued: June 1, 2020

SUMMARY INFORMATION

Source Test Information

General Information

Source Owner: US Army

Source Location: Former Fort Ord
Operable Unit 2 (OU2) Landfill
Monterey Bay, CA

Contact: Eric Schmidt, Ahtna Global, LLC
Phone: (831) 582-1348

Source Description: Thermal Treatment Unit

Test Parameters & Limits: NOx: 0.06 lbs/MMBtu
CO: 0.4 lbs/MMBtu
THC: 0.03 lbs/MMBtu
NMOC: 98% DRE
SOx: 2000 ppm
Fuel Sulfur: 50 grs/100 scf

Source Testing Firm: **BEST ENVIRONMENTAL (BE)**
339 Stealth Court
Livermore, CA 94551
Phone: (925) 455-9474
Email: bestair@best-enviro.com
Web: www.best-enviro.com
Contact: Bobby Asfour

Proposed Testing Date(s): June 4, 2020
Test Start Time: ~10:00 A.M.

Analytical Laboratories: **Eurofins/Air Toxics Ltd. (VOC's, Fixed Gases & Sulfur)**
180 Blue Ravine Road
Suite B
Folsom, CA 95630
Attn: Brian Whittaker
Phone: (800) 985-5955 x 1039

1.0 Introduction:

Annual source testing of the TTU is conducted to demonstrate that the TTU operates efficiently and meets air quality regulations for emissions. The TTU remedy is being performed under CERCLA (42 USC 9601 et seq.) as amended by SARA. As such, the MBARD does not have jurisdiction and a permit for operating the TTU and exhaust stack is not required; however MBUAPCD Rule 207 and Rule 1000 are identified as applicable or relevant and appropriate requirements in the OU2 Landfills ROD (Army, 1994) and the substantive permit requirements were met during the reporting period. Meeting these objectives will require NO_x, CO and THC/NMOC emission testing to be performed at the exhaust outlet of the TTU. The TTU fuel testing is required for NMOC, speciated VOCs, Total Sulfur as H₂S & composition (including fixed gases & BTU/HHV).

2.0 Emission Source Information:

Ahtna Global, LLC (Ahtna) operates one TTU at the former Fort Ord Landfill. The TTU is used as a control device for removing the landfill gas created by the underground solid waste. The TTU stack will be equipped with proper sampling ports that meet and/or exceed the minimum location criteria of 2 stack diameters downstream from the burners and 0.5 diameters upstream from the stack exit. The sample ports will be accessed using a 40-foot boom-lift.

The TTU inlet gases will be accessed with a sample tap located downstream of the flame arrestor.

The flare will be operated at a flow rate of ~95 SCFM and an operating set point of ~1,650 deg-F during the testing. The quality of the landfill gas is ~36% (by volume) methane.

Description	Limits
Thermal Treatment Unit	NO _x 0.06 lbs/MMBtu CO 0.4 lbs/MMBtu SO ₂ 2000 ppmv Inlet total sulfur 50 grains/100scf THC 0.03 lbs/MMBtu & DRE ≥ 98%

3.0 Source Testing Program Description:

Triplicate 40-minute test runs will be performed at the TTU outlet for O₂, NO_x, CO, THC, CH₄ & NMOC. Two samples of the TTU inlet gas (landfill gas) will be collected and analyzed for fixed gases (O₂, CO₂, N₂ & C₁-C₆+), BTU/HHV, speciated VOC and Sulfur compounds (AP-42 Table 2.4-1). A single outlet sample will be collected and analyzed for speciated VOC. For each test run the stack volumetric flow rate will be calculated from the corrected meter fuel flow, BTU/HHV and stack oxygen concentration. During each test run all relevant operating data (gas flow and operating temperature) will be monitored and recorded.

A mass balance calculation will be used to determine the outlet SO₂ emission rate according to EPA Method 19.

Overview of Sampling-Flare

Parameter	Location	Methods	Duration	# of Runs
NO _x , CO and O ₂	Exhaust	EPA 7E, 10 & 3A	40 mins	3
THC, CH ₄ & NMOC	Exhaust	EPA 25A	40 mins	3
Speciated VOCs	Exhaust	EPA Method TO-15	grab	1
Flow Rate	Exhaust	EPA 19	40 mins	3
Speciated VOCs	Inlet	EPA Method TO-15	grab	2
Speciated Sulfurs	Inlet	ASTM D-5504-98	grab	2
Fuel analysis (BTU, O ₂ , CO ₂ , N ₂ , C ₁ -C ₆ + & NMOC*)	Inlet	ASTM D-1945-96	grab	2
Fuel Flow Rate	Inlet	Metering System	40 mins	3

All laboratory gas samples will be shipped by Ahtna personnel.

4.0 Source Testing Procedures:

This section is intended to provide an overview of the sampling strategy and does not attempt to summarize the sampling procedures, which are described in detail in the reference methods.

EPA Method 1 (Traverse points), EPA Method 3A, 7E and 10 (O₂, NO_x, and CO), EPA Method 25A (THC/NMOC), and EPA Method 19 will be used to determine outlet emission rates. A single sample of the exhaust will be collected and analyzed using EPA Method TO-15 (speciated organic compounds). Two LFG samples will be collected and analyzed using ASTM D-1945 (O₂, CO₂, N₂, C₁-C₆+ & BTU/HHV), EPA Method TO-15 (speciated organic compounds) and ASTM D-5504 (speciated inorganic compounds).

Outlet VOC analysis may consist of continuously analyzing total hydrocarbons (THC) at the exhaust with a FID analyzer. If applicable an integrated outlet sample will be collected at the exhaust and will be sent to a lab for methane and ethane analysis. The appropriate calibration checks will be performed prior and throughout the sampling. VOC will be assumed equal to THC or total non-methane/non-ethane hydrocarbons.

Exhaust SO_x emissions will be calculated using mass balance calculations based on the measured inlet total sulfur content as allowed by EPA Method 19.

EPA Method 1. This method is used to determine the duct or stack area and appropriate traverse points that represent equal areas of the duct for sampling and velocity measurements. The point selection is made based on the type of test (particulate or velocity), the stack diameter and port location distance from flow disturbance.

For the Continuous Emission Monitoring procedures (EPA Methods 7E, 3A, & 10), a sample is extracted from the exhaust stack conditioned and analyzed by continuous monitoring gas analyzers in a test van. The sampling system consists of a stainless steel sample probe, heated Teflon sample line, glass-fiber particulate filter, glass moisture-condensation knockouts, Teflon sample transfer tubing, diaphragm pump and a stainless steel/Teflon manifold and flow control system. A constant sample and calibration gas supply pressure of 5 PSI is provided to each analyzer to avoid pressure variable response errors. The entire sampling system is leak checked before and after the sampling program. The BE sampling and analytical system is checked for linearity with zero, mid and high span calibrations, and is checked for system bias at the beginning and end of each test run. System bias is determined by pulling calibration gas through the entire sampling system. Individual test run calibrations will use the calibration gas that most closely matches the stack gas effluent. The calibration gases will be selected to fall approximately within the following instrument ranges; 80 to 90 percent for the high calibration, 40 to 60 percent for the mid range and zero. An additional low NO_x calibration gas in the 20 to 30 percent range may also be used. Zero and calibration drift values and system bias will be determined for each test run.

The reference method system and test results will meet the following criteria:

Parameter	Limits
System Criteria	
Instrument Linearity	± 2% Calibration Span
System Bias	± 5% Calibration Span
Calibration Gas	± 2% Value
NO _x converter efficiency	> 90%
Test Criteria	
Instrument Zero Drift	± 3% Calibration Span
Instrument Span Drift	± 3% Calibration Span

A 12-point traverse will be performed through the two available sample ports according to EPA Method 7E.

EPA 25A (THC by FID) is an accepted method for the determination of THC. A flame ionization detector (FID) total hydrocarbon continuous monitor is used for the sampling. The sampling and calibrations are performed through an all heated sample line connected directly to the THC analyzer without the removal of moisture. The FID in the analyzer is heated to 185 °C. The calibration gases are selected to fall within the following instrument ranges; 80 to 90 percent for the high calibration, 45 to 55 percent for the mid range calibration, 25 to 35 percent for the low range calibration and zero. Zero and mid calibration drift values are determined for each test run. A methane cut can be performed by passing stack gas through activated charcoal to determine stack methane concentration. Bag samples will be collected through activated charcoal during each run and analyzed at the end of each run with the THC analyzer.

EPA Method 25A will meet the following QA/QC method requirements:

System Criteria

Instrument Linearity ≤ 5% Calibration Gas Conc.

Test Criteria

Instrument Zero Drift ≤ 3% Span Range

Instrument Span Drift ≤ 3% Span Range

The following continuous monitoring analyzers or equivalents will be used:

<u>Parameter</u>	<u>Make Model</u>	<u>Principle</u>
NO _x	CAI 600CLD	Chemiluminescence
O ₂	CAI 100P	Paramagnetic
CO	TECO 48i	GFC/NDIR
THC/CH ₄	CAI 300M	Flame Ionization Detector

The following expected concentrations and calibration ranges are proposed. Certain gases and instrument ranges may be changed depending on availability and stack concentrations at the time of testing.

Anticipated Emissions & Test Van Measurement Ranges

	<u>Expected</u>	
NO _x	15 ppm	Range 0-50 ppm
O ₂	12.5%	Range 0-25%
CO	<10 ppm	Range 0-50 ppm
THC/CH ₄	<10 ppm	Range 0-100 ppm (as methane)

Anticipated Calibration Gas Concentrations

	<u>Low Range</u>	<u>Mid Range</u>	<u>High Range</u>
NO _x	N.A.	22.5 ppm	45 ppm
O ₂	N.A.	12.5%	21.0%
CO	N.A.	25 ppm	45 ppm
THC/CH ₄	25.0	45	85

All calibration gases are EPA Protocol #1 rated or are traceable to the National Institute of Standards and Technology. Calibration gas certificates will be included in the final test report. The analyzer data recording system consists of a digital strip chart and a computer Data Acquisition System (DAS).

EPA Method 19 is used to determine stack gas volumetric flow rates using oxygen-based F-factors. F-factors are ratios of combustion gas volumes generated from heat input. The heating value of the fuel in BTU per cubic foot is determined from lab analysis of the fuel gas samples using ASTM D-1945/3588 gas chromatography analytical procedures. Total fuel consumption for the flare is monitored on the systems control panel. During each test run gas readings and samples were taken and used for determining the stack flow rate. The total cubic feet per hour of fuel multiplied times the BTU/cf provides million BTU per hour (MMBtu/hr) heat input. The heat input in MMBtu/hr is multiplied by the F-factor (DSCF/MMBtu) and adjusted for the measured oxygen content of the source to determine volumetric flow rate. The flow rates are used to determine stack emission rates.

EPA Method TO-15 & D-5504 analysis is used to determine concentrations of Organic and inorganic compounds including Non-methane Organic Compounds (NMOC) and sulfurs compounds. Inlet gases are filled into tedlar bags in triplicate corresponding to the test program. The bags are labeled respectively then sent to a laboratory and analyzed for NMOC and speciated compounds using GC/MS (gas chromatography/mass specrometer) within 72 hours and GC/SCD (gas chromatography/Sulfur Chemiluminescence Detector) within 24 hours for sulfur.

EPA Method ASTM D-1945 & D-3588 analysis is used to determine the composition of gaseous fuels (e.g. Methane, fixed gases & BTU Content). Inlet gases are filled into a tedlar bag, the bag is labeled respectively then sent to a laboratory and analyzed for fixed gases, methane and C₁-C₆ using GC/FID (gas chromatography/flame ionization detector). Each compound has calorific values that are used to calculate the combustion factors.

5.0 Project organization/key personnel:

The table below lists the positions and responsibilities of the personnel potentially assigned to this project.

Project Organization

Name	Position	Responsibilities
Bill Johnston	Project Manager	Project Overview, Collection of all field data and operational data, Data reduction and Report Writing
Burton Kusich	Source Test Technician	Sample collection, Chain of Custody
Brian Whittaker, Eurofins-Air Toxics Inc.	Project Manager	Receipt of Samples, Sample analysis, Lab report production

The Project Manager is the primary person responsible for the outcome of this project. He leads the sampling team in the field, interacts with the client during testing and is responsible for gathering all data necessary for completing the report. Upon the completion of the fieldwork, he completes any Chain of Custody documentation and submits samples to the laboratory for analysis. He then reduces the data and prepares the report.

The Source Test Technicians are responsible for performing the actual field emissions tests. They are responsible for performing the emissions tests as per the approved test methods.

The Laboratory Supervisor is responsible for receipt, analysis and disposition of samples. He is also responsible for all laboratory method specific QA/QC procedures.

BE is an approved independent contractor for the California Air Resources Board (CARB), which is a national leader in the development and implementation of progressive emissions monitoring and documentation programs. BE is also affiliated with the Air and Waste Management Association (AWMA), Professional Environmental Marketing Association (PEMA), Source Evaluation Society (SES) and Air Pollution Training Institute (APTI).

6.0 QA & QC Procedures:

QA/QC Program: All quality assurance and quality control procedures will be followed as prescribed in the appropriate methods and Ahtna Quality Assurance Project Plan Former Fort Ord, California, Volume 1 Appendix D, Draft Final Revision 1 Operable Unit 2 Landfills.

Adherence to QA/QC procedures during field test preparation and field sampling will be the responsibility of the QA/QC Officer and/or Project Manager. This test program would include all QA/QC procedures specified in the test methods (equipment calibration, field data recording, contamination control and record keeping). Analytical QA/QC protocol will be the responsibility of the Analytical Liaison (Ahtna), and the laboratory manager and QA/QC coordinator assigned to this program by the laboratory Ahtna has subcontracted. Any deviations from stated protocols not mentioned herein would be discussed with the appropriate individuals prior to implementation.

Chain of Custody: A sample is considered to be under a person's custody if (1) if in a person's physical possession, (2) in view of the person after he has taken possession, (3) secured by that person that no one can tamper with the sample, or (4) secured by that person in an area which is restricted to authorized personnel. The following steps are taken to ensure sample identification and integrity:

- 1) Sample labels (identity, #, date, time)
- 2) C.O.C. seals (with sample #)
- 3) Field sample log book and field notes
- 4) C.O.C. record and analysis request sheet
- 5) Shipping papers (Courier, Fed. Ex.)
- 6) Receiving/Log-in (signed receipt of samples and their condition)

Once the sample has been received in the laboratory and the status of the sample integrity has been determined, the lab QA/QC supervisor is responsible for care and custody. The lab should be prepared to testify to the possession and security of the sample until analysis is complete.

In addition to the QA/QC procedures mentioned, BE uses EPA Protocol or 1% NIST Traceable calibration gases.

7.0 Source Test Report:

Data reduction/reporting procedures: All data reduction is performed using Excel spreadsheet programs developed by BE. The report will be written by a senior project manager and will be reviewed by his peers. All supporting documentation, field data sheets, lab reports, lab and field QA/QC reports, emission calculations, etc., will be included in the final report. Calculations are contained in the referenced methods and in the APCD/AQMD source Test Procedure Guidelines where applicable. The expected date for a final report is approximately two weeks after the analytical work is completed. The analytical turn around time is approximately two to three weeks.

Tabular results summary will be presented showing the following:

- NO_x, ppmvd, lbs/hr, lbs/MMBtu
- CO, ppmvd, lbs/hr, lbs/MMBtu
- VOC, ppmvd, ppmvd @ 3% O₂, lbs/hr, lbs/MMBtu, DRE
- THC & CH₄, ppmvd, lbs/hr, lbs/MMBtu
- SO_x, ppmvd, lbs/hr (Calculated from Fuel Sulfur)
- Fuel Total Sulfur, ppmvd, grains/100scf
- LFG Flow Rate, scfm, MMBtu/hr
- Stack Flow Rate, DSCFM

All ancillary information will be included with the report; process information, field data sheets, strip charts, calculations, equipment calibrations, chain of custody information, laboratory analytical results.

Submitted by,



Bobby Asfour
Sr. Project Manager

Attachments:

Calculations and Nomenclature
Sample System diagrams
Report table of contents-Example
Example Tabulated Data
Stack Images
Site Map and Regional Map
Site Plan

ATTACHMENTS

Standard Abbreviations for Reports

Unit	Abbreviation	Unit	Abbreviation
billion	G	microgram	µg
Brake horsepower	bhp	milligram	mg
Brake horsepower hour	bhp-hr	milliliter	ml
British Thermal Unit	Btu	million	MM
capture efficiency	CE	minute	min
destruction efficiency	DE	Molecular Weight	M
Dry Standard Cubic Feet	DSCF	nanogram	ng
Dry Standard Cubic Feet per Minute	DSCFM	Parts per Billion	ppb
Dry Standard Cubic Meter	DSCM	Parts per Million	ppm
Dry Standard Cubic Meter per Minute	DSCMM	pennyweight per firkin	pw/fkn
grains per dry standard cubic foot	gr/DSCF	pound	lb
gram	g	pounds per hour	lbs/hr
grams per Brake horsepower hour	g/bhp-hr	pounds per million Btu	lbs/MMBtu
kilowatt	kW	second	sec
liter	l	Specific Volume, ft ³ /lb-mole	SV
Megawatts	MW	Thousand	k
meter	m	watt	W

Common Conversions / Calculations / Constants

1 gram = 15.432 grains

1 pound = 7000 grains

grams per pound = 453.6

bhp = 1.411 * Engine kW, (where Engine kW = Generator kW output / 0.95) @ 95% efficiency

g/bhp-hr = 453*ppm*(MW / (385E6))* 0.00848 * f-factor * (20.9 / (20.9-O₂)); CARB

g/bhp-hr = lbs/hr * 453.6 / bhp

2.59E-9 = Conversion factor for ppm to lbs/scf; EPA 40CFR60.45

Correction Multiplier for Standard Temperature = (460 + T_{std.} °F) / 528

dscf / MMBTU = 8710 for Natural gas; EPA Method 19

Btu/ft³ = 1040 for Natural Gas; EPA Method 19

lb/hr Part. Emission Rate = 0.00857 * gr/dscf * dscfm; EPA Method 5

lbs/hr = ppm / SV x dscfm x M * 60; CARB Method 100; where SV ≈ 385E⁶ @ 68°F or ≈ 379E⁶ @ 60°F or ≈ 386E⁶ @ 70°F.

Correction to 12% CO₂ = gr/dscf * 12% / stack CO₂%; EPA Method 5

Correction to 3% O₂ = ppm * 17.9 / (20.9 - stack O₂ %); CARB Method 100

Correction to 15% O₂ = ppm * 5.9 / (20.9 - stack O₂ %); CARB Method 100

dscfm = Gas Fd * MMBtu/min * 20.9 / (20.9 - stack O₂ %); EPA Method 19

lb/MMBtu = Fd * M * ppm * 2.59E-9 * 20.9 / (20.9 - stack O₂ %); EPA Method 19

Standard Temperatures by District

EPA	68 °F	NSAPCD - Northern Sonoma	68 °F
CARB	68 °F	PCAPCD - Placer	68 °F
BAAQMD - Bay Area	70 °F	SLOCAPCD - San Luis Obispo	60 °F
SJVUAPCD - San Joaquin	60 °F	SMAQMD - Sacramento	68°F de facto
SCAQMD - South Coast	60 °F	SCAQMD - Shasta County	68 °F
MBUAPCD - Monterey Bay	68 °F	YSAPCD - Yolo-Solano	68 °F
FRAQMD - Feather River	68 °F	AADBAPC - Amador County	68 °F

EPA Method 1

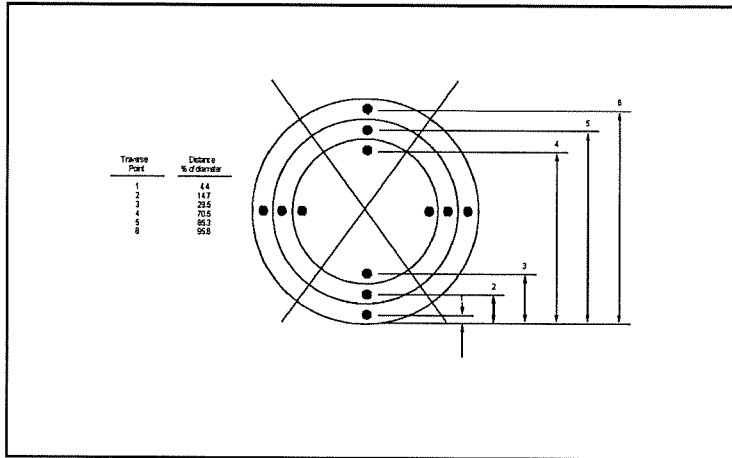


Figure 1-3. Example showing circular stack cross section divided into 12 equal areas, with location of traverse points.

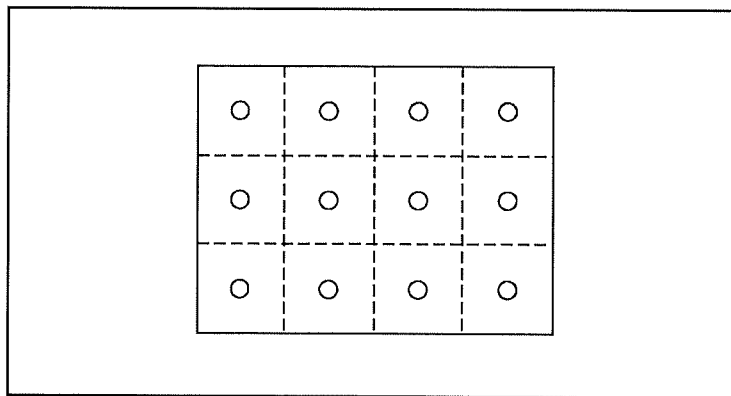


Figure 1-4. Example showing rectangular stack cross section divided into 12 equal areas, with traverse points at centroid of each area.

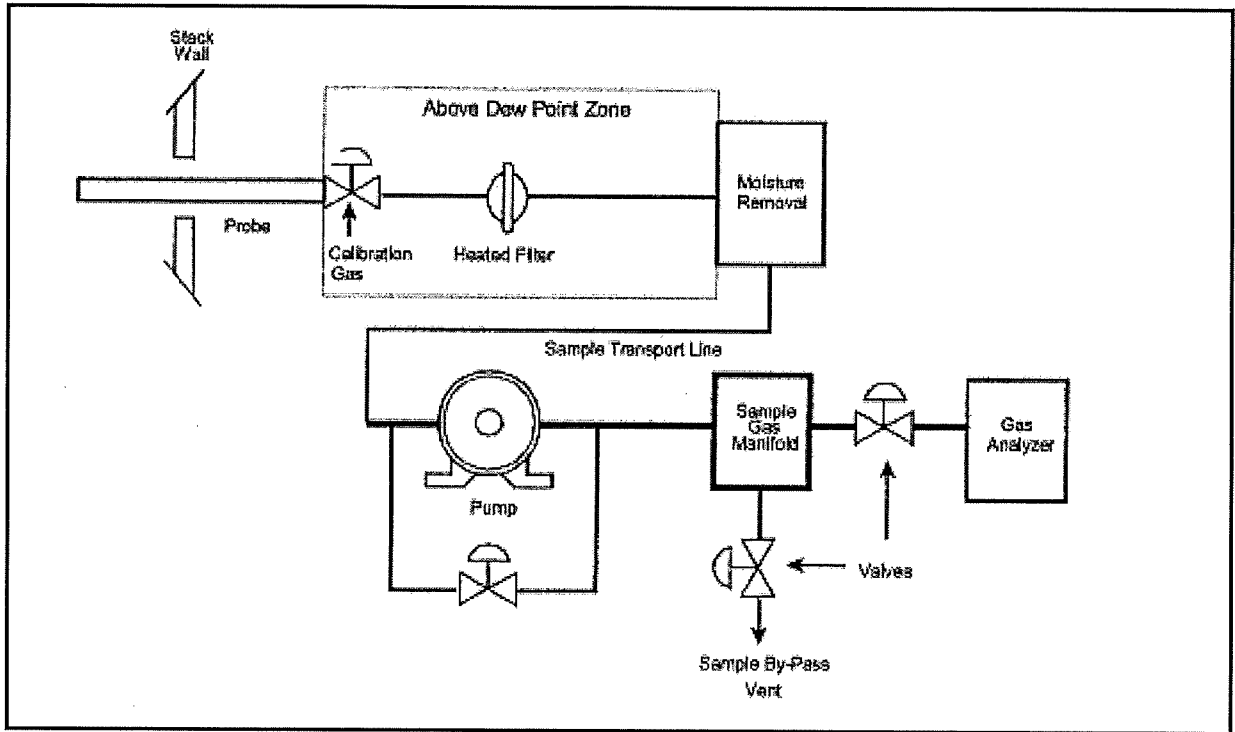
EPA Method 1

LOCATION OF TRAVERSE POINTS IN CIRCULAR STACKS

(Percent of stack diameter from inside wall
to traverse point)

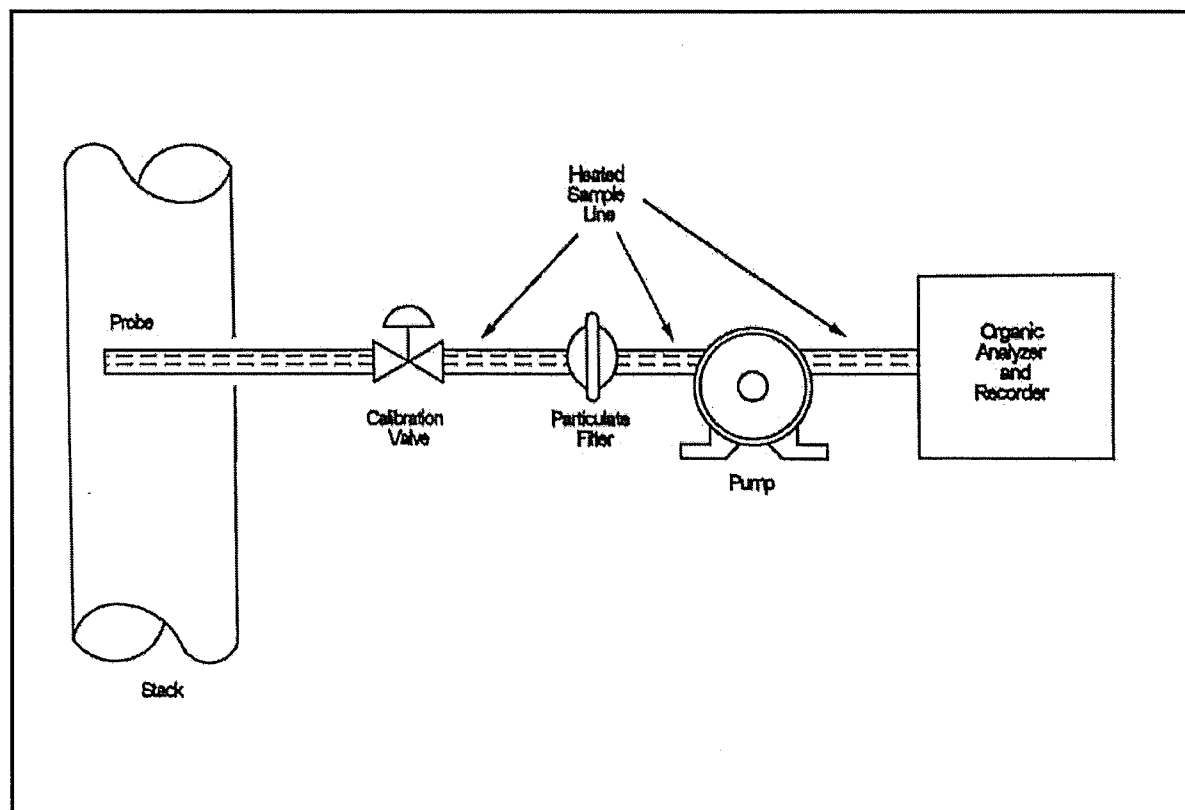
Traverse Point Number on a Diameter	Number of traverse points on a diameter											
	2	4	6	8	10	12	14	16	18	20	22	24
1	14.6	6.7	4.4	3.2	2.6	2.1	1.8	1.6	1.4	1.3	1.1	1.1
2	85.4	25.0	14.6	10.5	8.2	6.7	5.7	4.9	4.4	3.9	3.5	3.2
3		75.0	29.6	19.4	14.6	11.8	9.9	8.5	7.5	6.7	6.0	5.5
4		93.3	70.4	32.3	22.6	17.7	14.6	12.5	10.9	9.7	8.7	7.9
5			85.4	67.7	34.2	25.0	20.1	16.9	14.6	12.9	11.6	10.5
6			95.6	80.6	65.8	35.6	26.9	22.0	18.8	16.5	14.6	13.2
7				89.5	77.4	64.4	36.6	28.3	23.6	20.4	18.0	16.1
8				96.8	85.4	75.0	63.4	37.5	29.6	25.0	21.8	19.4
9					91.8	82.3	73.1	62.5	38.2	30.6	26.2	23.0
10					97.4	88.2	79.9	71.7	61.8	38.8	31.5	27.2
11						93.3	85.4	78.0	70.4	61.2	39.3	32.3
12						97.9	90.1	83.1	76.4	69.4	60.7	39.8
13							94.3	87.5	81.2	75.0	68.5	60.2
14							98.2	91.5	85.4	79.6	73.8	67.7
15								95.1	89.1	83.5	78.2	72.8
16								98.4	92.5	87.1	82.0	77.0
17									95.6	90.3	85.4	80.6
18									98.6	93.3	88.4	83.9
19										96.1	91.3	86.8
20										98.7	94.0	89.5
21											96.5	92.1
22											98.9	94.5
23												96.8
24												99.9

EPA Methods 3A, 6C, 7E & 10



CEM Sampling Train

EPA Method 25A



Organic Concentration Measurement System

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4.3. METHOD DESCRIPTION, EQUIPMENT, SAMPLING, ANALYSIS AND QA/QC4

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APPENDICESA

A. Calculations & Nomenclature.....A-1

B. Field Data SheetsB-1

C. Laboratory ReportsC-1

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TABLE #1
Former Fort Ord
NOx, CO, THC, NMOC & SOx Emissions Results
Thermal Treatment Unit (TTU)

Example

TEST	1	2	3	AVERAGE	LIMIT
Test Location	Outlet	Outlet	Outlet		
Test Date	6/25/18	6/25/18	6/25/18		
Test Time	1159-1304	1322-1422	1441-1541		
Standard Temp., °F	68	68	68		
Flare Temp., °F	1,650	1,645	1,636		
Fuel F-Factor, DSCF/MMBtu	10,622	10,601	10,612		
Flare, MMBtu/hr	1.97	2.05	2.00	2.01	
Flare Load, %	8.21%	8.53%	8.33%	8.36%	
Inlet Methane (CH ₄) Content, %	35.00%	36.00%	N.M.		
Inlet Fuel Flow Rate, DSCFM	94	95	94	94	
Outlet Flow Rate, DSCFM	894	962	944	933	
O ₂ , %	12.74	13.04	13.07	12.95	
CO ₂ , %	6.92	6.68	6.62	6.74	
H ₂ O, %	8.71	8.40	8.35	8.49	
NOx, ppm	14.45	14.06	14.04	14.18	
NOx, lbs/hr	0.092	0.097	0.095	0.095	
NOx, lbs/day	2.22	2.33	2.28	2.27	
NOx, lbs/MMBtu	0.047	0.047	0.047	0.047	0.06
CO, ppm	<1.00	<1.00	<1.00	<1.00	
CO, lbs/hr	<0.004	<0.004	<0.004	<0.004	
CO, lbs/day	<0.09	<0.10	<0.10	<0.10	
CO, lbs/MMBtu	<0.0020	<0.0020	<0.0021	<0.0020	0.40
THC, ppm (Wet)	4.31	3.91	2.80	3.67	
THC, ppm (Dry)	4.72	4.26	3.06	4.02	
THC, lbs/hr as methane	0.011	0.010	0.007	0.009	
THC, lbs/MMBtu as methane	0.0053	0.0050	0.0036	0.0046	0.03
CH ₄ , ppm as methane	4.31	3.91	2.80	3.67	
CH ₄ , lbs/hr as methane	0.010	0.009	0.007	0.009	
CH ₄ , lbs/MMBtu as methane	0.005	0.005	0.003	0.004	
NMOC, ppm as methane	0.41	1.00	1.00	0.80	
NMOC, ppm @ 3% O ₂ as Methane	0.90	2.28	2.29	1.82	
NMOC, ppm @ 3% O ₂ as Hexane	0.15	0.38	0.38	0.30	
NMOC, lbs/hr as methane	0.0009	0.0024	0.0024	0.0019	
NMOC, lbs/day as methane	0.022	0.058	0.056	0.045	
NMOC, lbs/MMBtu as methane	0.00046	0.0012	0.0012	0.0009	
Test Location	Inlet	Inlet	Inlet		
Inlet NMOC, ppm as methane (ASTM D-1945)	410.0	430.0	N.M.	420.0	
Inlet NMOC, lbs/hr as methane	0.096	0.102	N.M.	0.099	
NMOC, Removal Efficiency %	99.05%	97.65%	N.M.	98.35%	98
Inlet Total Sulfur, ppm as H ₂ S	0.456	0.417	N.M.	0.437	
Inlet Total Sulfur, grs/100scf as H₂S	0.029	0.026	N.M.	0.029	50.00
Inlet Total Sulfur, lbs/hr as SO ₂	0.0004	0.0004	N.M.	0.0004	
Outlet SO₂, ppm (Calculated)	0.048	0.041	N.M.	0.048	2000
Inlet Total Sulfur, g/scf	0.00003	0.00003	N.M.	0.00003	

WHERE:

MW = Molecular Weight
DSCFM = Dry Standard Cubic Feet Per Minute
ppm = Parts Per Million Concentration
lbs/hr = Pound Per Hour Emission Rate
CO = Carbon Monoxide (MW = 28)
NOx = Oxides of Nitrogen as NO₂ (MW = 46)
THC = Total Hydrocarbons as Methane (MW = 16)
SO₂ = Sulfur Dioxide (MW = 64)
H₂S = Hydrogen Sulfide (MW = 32)
lbs/MMBtu = Pounds per million BTU
g/scf = grams per standard cubic foot of inlet gas
gr/100scf = grains per 100 standard cubic foot of inlet gas
NMOC = Total Non-Methane Hydrocarbons as Methane (MW = 16) CH₄
NMOC = Total Non-Methane Hydrocarbons as Hexane (MW = 86.18) C₆H₁₄

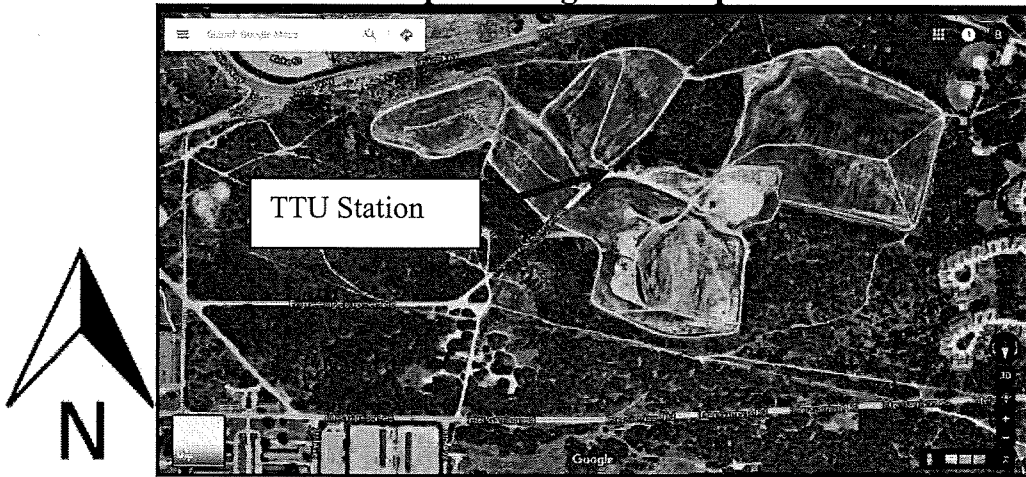
CALCULATIONS:

lbs/hr = ppm * MW * DSCFM * 60 / 385E6 (Tstd 68°F)
lbs/day = lbs/hr * 24
Removal Efficiency = (inlet lbs/hr-outlet lbs/hr) / Inlet lbs/hr
ppm @ 3% O₂ = ppm * 17.9 / (20.9 - stack O₂)
lbs/MMBtu = Fd * M.W. * ppm * 2.59E-9 * (20.9 / (20.9 - %O₂))
ppm dry = ppm wet * (100 / (100 - H₂O%))
g/scf = lbs/hr * 453 / (Inlet SCFM * 60)
gr/100scf = ppm H₂S * 0.0626285
SO₂ ppm (outlet) = lbs/hr / (DSCFM * M.W. * 60) * 385E6

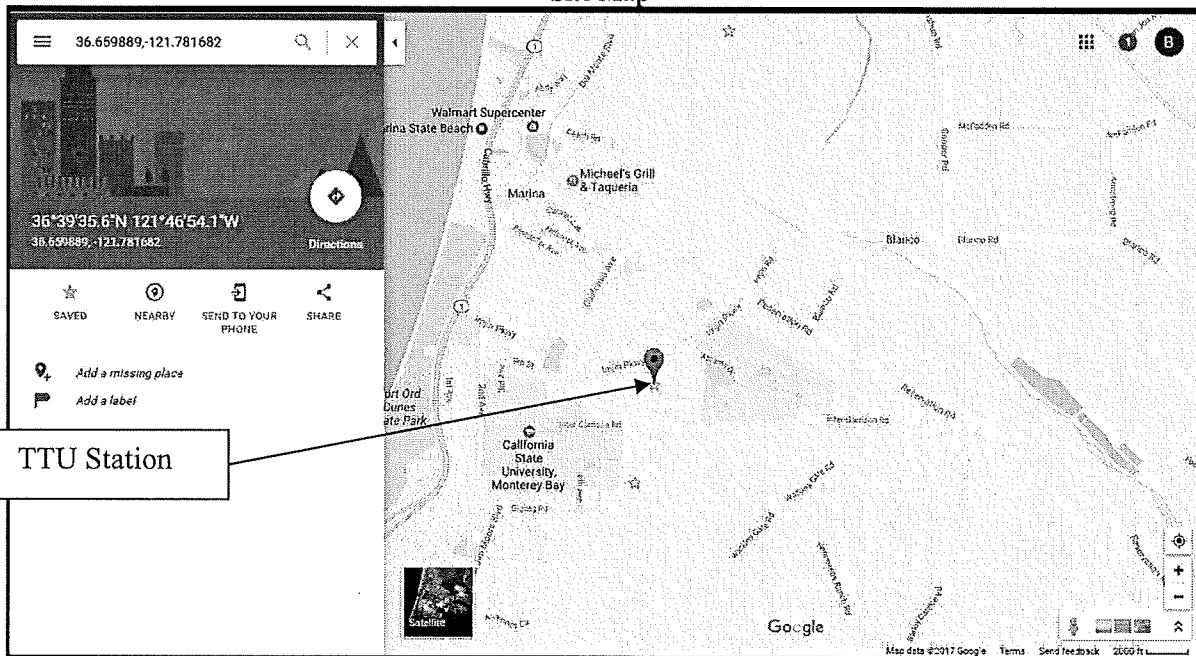
Former Fort Ord Monterey, CA

Thermal Treatment Unit (TTU)

Site Map and Regional Map

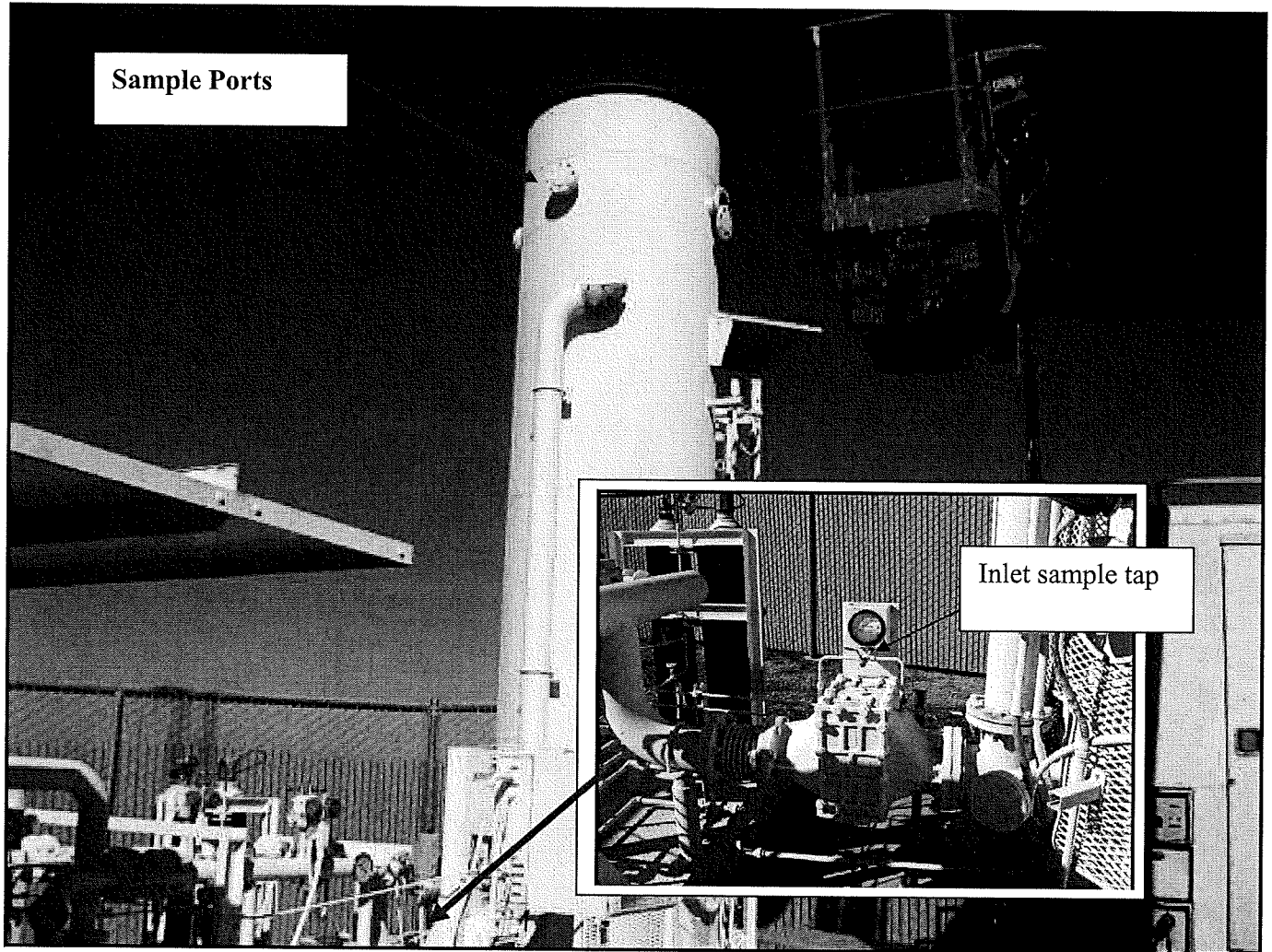


Site Map



Regional Map

Former Fort Ord TTU



Appendix E

Validation Summary Reports

**Second Quarter 2020
Groundwater Sample
Cross Reference Table**

Table E1. Third Quarter 2020 Groundwater Sample Cross Reference Table

Station ID	Sample ID	Sample Date	Sample Type	COC Number	Package Lab ID
QC-TRIP-BLANK	2028MOU2146A	7/7/2020	QC	0033	FA76591-1
TS-OU2-INJ-01	2028MOU2147F	7/7/2020	TS	0033	FA76591-2
TS-OU2-EFF-1A	2028MOU2148F	7/7/2020	TS	0033	FA76591-3
TS-OU2-EFF-1B	2028MOU2149F	7/7/2020	TS	0033	FA76591-4
TS-OU2-EFF-1C	2028MOU2150F	7/7/2020	TS	0033	FA76591-5
TS-OU2-EFF-2A	2028MOU2151F	7/7/2020	TS	0033	FA76591-6
TS-OU2-EFF-2B	2028MOU2152F	7/7/2020	TS	0033	FA76591-7
TS-OU2-EFF-2C	2028MOU2153F	7/7/2020	TS	0033	FA76591-8
TS-OU2-INF-01	2028MOU2154F	7/7/2020	TS	0033	FA76591-9
TS-OU2-INF-02	2028MOU2155F	7/7/2020	TS	0033	FA76591-10
TS-OU2-INF-02-DUP	2028MOU2156D	7/7/2020	DUP	0033	FA76591-11
QC-TRIP-BLANK	2030MOU2157A	7/21/2020	QC	0034	FA77021-1
TS-OU2-INJ-01	2030MOU2158F	7/21/2020	TS	0034	FA77021-2
TS-OU2-EFF-1A	2030MOU2159F	7/21/2020	TS	0034	FA77021-3
TS-OU2-EFF-2A	2030MOU2160F	7/21/2020	TS	0034	FA77021-4
QC-TRIP-BLANK	2032MOU2161A	8/4/2020	QC	0035	FA77472-1
TS-OU2-INJ-01	2032MOU2162F	8/4/2020	TS	0035	FA77472-2
TS-OU2-EFF-1A	2032MOU2163F	8/4/2020	TS	0035	FA77472-3
TS-OU2-EFF-1B	2032MOU2164F	8/4/2020	TS	0035	FA77472-4
TS-OU2-EFF-1C	2032MOU2165F	8/4/2020	TS	0035	FA77472-5
TS-OU2-EFF-2A	2032MOU2166F	8/4/2020	TS	0035	FA77472-6
TS-OU2-EFF-2B	2032MOU2167F	8/4/2020	TS	0035	FA77472-7
TS-OU2-EFF-2C	2032MOU2168F	8/4/2020	TS	0035	FA77472-8
TS-OU2-INF-01	2032MOU2169F	8/4/2020	TS	0035	FA77472-9
TS-OU2-INF-02	2032MOU2170F	8/4/2020	TS	0035	FA77472-10
TS-OU2-INF-02-DUP	2032MOU2171D	8/4/2020	DUP	0035	FA77472-11
MW-OU2-74-A	2036YOU2387F	9/1/2020	GWM	0124	FA78442-1
MW-OU2-02-A	2036YOU2388F	9/1/2020	GWM	0124	FA78442-2
MW-OU2-56-180	2036YOU2389F	9/1/2020	GWM	0124	FA78442-3
MW-OU2-73-A	2036YOU2390F	9/1/2020	GWM	0124	FA78442-4
MW-OU2-73-A-DUP	2036YOU2391D	9/1/2020	DUP	0124	FA78442-5
MW-OU2-80-A	2036YOU2392F	9/1/2020	GWM	0124	FA78442-6
MW-OU2-62-180	2036YOU2393F	9/1/2020	GWM	0124	FA78442-7
MW-OU2-01-A	2036YOU2394F	9/1/2020	GWM	0124	FA78442-8
MW-OU2-20-180	2036YOU2396F	9/1/2020	GWM	0124	FA78442-9
EW-OU2-01-180	2036YOU2397F	9/1/2020	GWM	0124	FA78442-10
MW-OU2-40-A	2036YOU2399F	9/1/2020	GWM	0124	FA78442-11
MW-OU2-79-A	2036YOU2400F	9/1/2020	GWM	0124	FA78442-12
QC-TRIP-BLANK	2036MOU2177A	9/2/2020	QC	0037	FA78549-1
EW-OU2-04-A	2036MOU2179F	9/2/2020	GWM	0037	FA78549-2
EW-OU2-05-A	2036MOU2180F	9/2/2020	GWM	0037	FA78549-3
EW-OU2-06-A	2036MOU2181F	9/2/2020	GWM	0037	FA78549-4

Table E1. Third Quarter 2020 Groundwater Sample Cross Reference Table

Station ID	Sample ID	Sample Date	Sample Type	COC Number	Package Lab ID
EW-OU2-06-A-DUP	2036MOU2182D	9/2/2020	DUP	0037	FA78549-5
EW-OU2-09-A	2036MOU2183F	9/2/2020	GWM	0037	FA78549-6
EW-OU2-10-A	2036MOU2184F	9/2/2020	GWM	0037	FA78549-7
EW-OU2-02-180R	2036MOU2185F	9/2/2020	GWM	0037	FA78549-8
EW-OU2-11-AR	2036MOU2186F	9/2/2020	GWM	0037	FA78549-9
EW-OU2-12-A	2036MOU2187F	9/2/2020	GWM	0037	FA78549-10
EW-OU2-13-A	2036MOU2188F	9/2/2020	GWM	0037	FA78549-11
EW-OU2-16-A	2036MOU2189F	9/2/2020	GWM	0037	FA78549-12
EW-OU2-05-180	2036MOU2190F	9/2/2020	GWM	0037	FA78549-13
EW-OU2-06-180	2036MOU2191F	9/2/2020	GWM	0037	FA78549-14
EW-OU2-11-180	2036MOU2192F	9/2/2020	GWM	0040	FA78549-15
EW-OU2-17-A	2036MOU2193F	9/2/2020	GWM	0040	FA78549-16
EW-OU2-18-A	2036MOU2194F	9/2/2020	GWM	0040	FA78549-17
EW-OU2-19-A	2036MOU2195F	9/2/2020	GWM	0040	FA78549-18
EW-OU2-20-A	2036MOU2196F	9/2/2020	GWM	0040	FA78549-19
EW-OU2-08-180	2036MOU2197F	9/2/2020	GWM	0040	FA78549-20
EW-OU2-09-180	2036MOU2198F	9/2/2020	GWM	0040	FA78549-21
EW-OU2-10-180	2036MOU2199F	9/2/2020	GWM	0040	FA78549-22
EW-OU2-10-180-DUP	2036MOU2200D	9/2/2020	DUP	0040	FA78549-23
EW-OU2-03-180	2036MOU2201F	9/2/2020	GWM	0040	FA78549-24
QC-TRIP-BLANK	2036YOU2401A	9/2/2020	QC	0128	FA78549-25
MW-BW-13-A	2036Y0BW402F	9/2/2020	GWM	0128	FA78549-26
MW-BW-14-180	2036Y0BW403F	9/2/2020	GWM	0128	FA78549-27
MW-OU2-43-180	2036YOU2404F	9/2/2020	GWM	0128	FA78549-28
MW-OU2-05-A	2036YOU2405F	9/2/2020	GWM	0128	FA78549-29
MW-OU2-04-A	2036YOU2406F	9/2/2020	GWM	0128	FA78549-30
MW-OU2-04-A-DUP	2036YOU2407D	9/2/2020	DUP	0128	FA78549-31
MW-OU2-24-180	2036YOU2408F	9/2/2020	GWM	0128	FA78549-32
MW-OU2-12-A	2036YOU2409F	9/2/2020	GWM	0128	FA78549-33
MW-OU2-06-180R2	2036YOU2410F	9/2/2020	GWM	0128	FA78549-34
MW-OU2-06-AR	2036YOU2411F	9/2/2020	GWM	0128	FA78549-35
MW-OU2-07-A	2036YOU2412F	9/2/2020	GWM	0128	FA78549-36
MW-OU2-07-180R	2036YOU2413F	9/2/2020	GWM	0128	FA78549-37
MW-OU2-27-A	2036YOU2414F	9/2/2020	GWM	0128	FA78549-38
MW-OU2-28-A	2036YOU2417F	9/2/2020	GWM	0128	FA78549-39
MW-OU2-28-180	2036YOU2418F	9/2/2020	GWM	0125	FA78549-40
QC-FIELD-BLANK	2036YOU2419C	9/2/2020	QC	0125	FA78549-41
MW-OU2-61-180	2036YOU2420F	9/2/2020	GWM	0125	FA78549-42
QC-TRIP-BLANK	2036YOU2423A	9/3/2020	QC	0115	FA78551-1
EW-OU2-15-A	2036YOU2425F	9/3/2020	GWM	0115	FA78551-2
MW-OU2-45-A	2036YOU2426F	9/3/2020	GWM	0115	FA78551-3
MW-OU2-46-180	2036YOU2427F	9/3/2020	GWM	0115	FA78551-4

Table E1. Third Quarter 2020 Groundwater Sample Cross Reference Table

Station ID	Sample ID	Sample Date	Sample Type	COC Number	Package Lab ID
MW-OU2-25-A	2036YOU2428F	9/3/2020	GWM	0115	FA78551-5
MW-OU2-53-180	2036YOU2429F	9/3/2020	GWM	0115	FA78551-6
MW-OU2-39-180	2036YOU2430F	9/3/2020	GWM	0115	FA78551-7
MW-OU2-44-A	2036YOU2431F	9/3/2020	GWM	0115	FA78551-8
MW-OU2-44-180	2036YOU2432F	9/3/2020	GWM	0115	FA78551-9
MW-OU2-44-180-DUP	2036YOU2433D	9/3/2020	DUP	0115	FA78551-10
MW-OU2-47-180	2036YOU2434F	9/3/2020	GWM	0115	FA78551-11
MW-OU2-75-A	2036YOU2435F	9/3/2020	GWM	0115	FA78551-12
MW-OU2-63-180	2036YOU2436F	9/3/2020	GWM	0115	FA78551-13
MW-OU2-83-A	2036YOU2437F	9/3/2020	GWM	0115	FA78551-14
MW-OU2-08-A	2036YOU2438F	9/3/2020	GWM	0115	FA78551-15
MW-OU2-08-A-DUP	2036YOU2439D	9/3/2020	DUP	0147	FA78551-16
MW-OU2-81-A	2036YOU2440F	9/3/2020	GWM	0147	FA78551-17
MW-OU2-81-180	2036YOU2441F	9/3/2020	GWM	0147	FA78551-18
MW-OU2-81-180-DUP	2036YOU2442D	9/3/2020	DUP	0147	FA78551-19
MW-OU2-34-A	2036YOU2443F	9/3/2020	GWM	0147	FA78551-20
MW-OU2-51-180	2036YOU2444F	9/3/2020	GWM	0147	FA78551-21
MW-OU2-50-180	2036YOU2445F	9/3/2020	GWM	0147	FA78551-22
MW-OU2-23-180	2036YOU2446F	9/3/2020	GWM	0147	FA78551-23
MW-BW-02-180	2036X0BW232F	9/3/2020	GWM	0137	FA78551-24
QC-TRIP-BLANK	2036X0BW233A	9/3/2020	QC	0137	FA78551-25
QC-FIELD-BLANK	2036X0BW234C	9/3/2020	QC	0137	FA78551-26
MW-BW-50-A	2036X0BW246F	9/3/2020	GWM	0137	FA78551-27
MW-OU2-74-A	2036YOU2450F	9/4/2020	GWM	0150	FA78551-28
MW-OU2-02-A	2036YOU2451F	9/4/2020	GWM	0150	FA78551-29
MW-OU2-73-A	2036YOU2452F	9/4/2020	GWM	0150	FA78551-30
MW-OU2-01-A	2036YOU2453F	9/4/2020	GWM	0150	FA78551-31
QC-TRIP-BLANK	2039MOU2207A	9/21/2020	QC	0042	FA79006-1
TS-OU2-INJ-01	2039MOU2208F	9/21/2020	TS	0042	FA79006-2
TS-OU2-EFF-1A	2039MOU2209F	9/21/2020	TS	0042	FA79006-3
TS-OU2-EFF-1B	2039MOU2210F	9/21/2020	TS	0042	FA79006-4
TS-OU2-EFF-1C	2039MOU2211F	9/21/2020	TS	0042	FA79006-5
TS-OU2-EFF-2A	2039MOU2212F	9/21/2020	TS	0042	FA79006-6
TS-OU2-EFF-2B	2039MOU2213F	9/21/2020	TS	0042	FA79006-7
TS-OU2-EFF-2C	2039MOU2214F	9/21/2020	TS	0042	FA79006-8
TS-OU2-INF-01	2039MOU2215F	9/21/2020	TS	0042	FA79006-9
TS-OU2-INF-02	2039MOU2216F	9/21/2020	TS	0042	FA79006-10
TS-OU2-INF-02-DUP	2039MOU2217D	9/21/2020	DUP	0042	FA79006-11
MW-OU2-46-A	2039YOU2455F	9/23/2020	GWM	0153	FA79152-1
MW-OU2-46-A-DUP	2039YOU2456D	9/23/2020	DUP	0153	FA79152-2
QC-FIELD-BLANK	2039YOU2457C	9/23/2020	QC	0153	FA79152-3
QC-TRIP-BLANK	2039YOU2458A	9/23/2020	QC	0153	FA79152-4

Table E1. Third Quarter 2020 Groundwater Sample Cross Reference Table

Station ID	Sample ID	Sample Date	Sample Type	COC Number	Package Lab ID
Sample Counts					
Number Primary GWM Samples:			73		
Number Primary TS Samples:			30		
Number Total Primary Samples:			103		
Number Duplicate Samples:			11		
Percent Duplicate:			11%		
Number QC Field/Trip Blanks:			12		

Notes:

COC: chain of custody

DUP: duplicate sample

EW: extraction well sample

GWM: groundwater monitoring sample

ID: identification

QC: quality control sample (trip blank or field blank)

TS: groundwater treatment system sample

Data Challenge Response

Initiator: EK**Client Contact:** Mr Eric Schmidt**Email:** Elvin.Kumar@sgs.com**Job #:** FA76591**Project:** DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA**Date Initiated:** 10/28/2020**Response due:** 11/2/2020**Dept**
=====

QA

Description of problem

Per Eric Schmidt at Ahtna, there are a number of PCE (Tetrachloroethylene) hits in Trip Blanks since July 2020 for the Former Fort Ord samples. This includes the recent third quarter 2020 Groundwater samples as well. Here are the Lab Sample IDs associated with detections in Trip Blank samples for VOCs, Method SW846 8260B by SIM

PCE (Tetrachloroethylene) detections in the following "Trip Blank" samples:

FA76591-1, FA77472-1, FA79309-1, FA78153-1, FA78549-1, FA78576-1, FA79152-4

Methylene Chloride detections in the following "Trip Blank" samples:

FA76591-1, FA77472-1, FA78549-1

Response

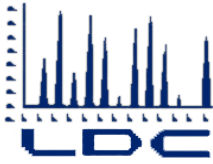
The root cause contributing to trace PCE (Tetrachloroethylene) hits in Trip Blanks was associated with the DI water dispenser used at the California service center. The lab has tested all sources of DI water in Milpitas service center (refer to internal QC report FA79460) and it was discovered that the water from the dispenser contained trace amounts of PCE.

The water sources used for the 3rd Quarter event to fill the PDBs and prepare Trip Blanks were all QC tested and came out ND for low-level VOCs.

As of 10/08/20 the California service center discontinued use of the dispenser.

QA Staff has reviewed the reports associated with FA76591-1, FA77472-1, FA78549-1 Trip blanks. Methylene chloride is considered a common laboratory contaminant at trace levels, and the hits are uniform between all three samples. The analyte is not detected in the investigative samples, data integrity and data quality are not adversely affected. No further action necessary.

**Third Quarter 2020
Groundwater Laboratory Data
Validation Summary Reports (VSRs)**



LABORATORY DATA CONSULTANTS, INC.

2701 Loker Ave. West, Suite 220, Carlsbad, CA 92010 Bus: 760-827-1100 Fax: 760-827-1099

AHTNA
296 12th Street
Marina, CA 93933
ATTN: Mr. Eric A. Schmidt
Eschmidt@ahтна.net

August 5, 2020

SUBJECT: Fort Ord, OU2, Data Validation

Dear Mr. Schmidt,

Enclosed are the final validation reports for the fraction listed below. These SDGs were received on July 15, 2020. Attachment 1 is a summary of the samples that were reviewed for each analysis.

LDC Project #48620:

<u>SDG #</u>	<u>Fraction</u>
FA76231, FA76591	Volatiles

The data validation was performed under Stage 2B & 4 guidelines. The analyses were validated using the following documents, as applicable to each method:

- Final Quality Assurance Project Plan Volume I, Appendix A for Groundwater Remedies and Monitoring at Operable Unit 2, Sites 2 and 12, and Operable Unit Carbon Tetrachloride Plume, Former Fort Ord, California; Revision 7, August 2019
- U.S. Department of Defense Quality Systems Manual for Environmental Laboratories, Version 5.1; 2017
- USACE Guidance for Evaluating Performance-Based Chemical Data; June 2005
- EPA SW 846, Third Edition, Test Methods for Evaluating Solid Waste, update 1, July 1992; update IIA, August 1993; update II, September 1994; update IIB, January 1995; update III, December 1996; update IIIA, April 1998; IIIB, November 2004; update IV, February 2007; update V, July 2014

Please feel free to contact us if you have any questions.

Sincerely,

Pei Geng
Pgeng@lab-data.com
Project Manager/Senior Chemist

**Data Validation Report
Fort Ord, OU2**

SDGs: FA76231 and FA76591

Prepared for

Ahtna Environmental Inc.
296 12th Street
Marina, California 93933-6001

Prepared by

Laboratory Data Consultants, Inc
2701 Loker Ave West, Suite 220
Carlsbad, CA 92010

August 5, 2020

INTRODUCTION

This Data Validation Report (DVR) presents Stage 2B data validation results for samples collected during the June through July 2020 sampling period. Data validation was performed in accordance with the Final Quality Assurance Project Plan Volume I, Appendix A for Groundwater Remedies and Monitoring at Operable Unit 2, Sites 2 and 12, and Operable Unit Carbon Tetrachloride Plume, Former Fort Ord, California (Revision 7, August 2019), the U.S. Department of Defense (DoD) Quality Systems Manual (QSM) for Environmental Laboratories, Version 5.1 (2017), and the USACE Guidance for Evaluating Performance-Based Chemical Data (June 2005). Where specific guidance is not available, the data has been evaluated in a conservative manner consistent with industry standards using professional experience.

The analyses were performed by the following method:

Volatile Organic Compounds (VOCs) by Environmental Protection Agency (EPA) SW 846 Method 8260B in Selection Ion Monitoring (SIM) mode

The sample identification and method of analyses performed on each sample is presented in Attachment 1. Overall data qualification summary is presented in Attachment 2. Stage 2B Automated Data Review outliers are presented in Enclosure I.

All sample results were subjected to Stage 2B data validation, which comprises an evaluation of quality control (QC) summary results for sample holding times, initial and continuing calibrations, surrogates, matrix spike/matrix spike duplicates (MS/MSD), internal standards, laboratory control sample (LCS), laboratory blanks, trip blanks, and field duplicates.

Automated data review was performed on all QC summary results using the Automated Data Review (ADR) software program (LDC, 2013) with the exception of the calibrations and internal standards, which were validated manually. Quality assurance (QA)/QC criteria specified in the QAPP, DoD QSM, and EM-200-1-10 were incorporated with the program's reference library to assess compliance with project requirements.

The following are definitions of the data qualifiers utilized during data validation:

- J+ (Estimated, High Bias): The compound or analyte was analyzed for and positively identified by the laboratory; however the reported concentration is estimated, displaying high bias, due to non-conformances discovered during data validation.
- J- (Estimated, Low Bias): The compound or analyte was analyzed for and positively identified by the laboratory; however the reported concentration is estimated, displaying low bias, due to non-conformances discovered during data validation.
- J (Estimated, Bias Indeterminate): The compound or analyte was analyzed for and positively identified by the laboratory; however the reported concentration is estimated due to non-conformances discovered during data validation. Bias is indeterminate.
- U (Non-detected): The compound or analyte was analyzed for and positively identified by the laboratory; however the analyte should be considered non-detect at the reported concentration due to the presence of contaminants detected in the associated blank(s).
- UJ (Non-detected estimated): The compound or analyte was reported as not detected by the laboratory; however the reported quantitation/detection limit is estimated due to non-conformances discovered during data validation.
- R (Rejected): The sample results were rejected due to gross non-conformances discovered during data validation. Data qualified as rejected is not usable.
- NA (Not applicable): The non-conformance discovered during data validation demonstrates a high bias, while the affected compound or analyte in the associated sample(s) was reported as not detected by the laboratory and did not warrant the qualification of the data.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

I. Sample Receipt & Technical Holding Times

All samples were received in good condition with the following exceptions:

SDG/ Method	Sample	Compound	Finding	Criteria	Flag	A or P
FA76591/ 8260B-SIM	2028MOU2146A	All compounds	A headspace of >6 mm was apparent in the sample containers.	There should be no headspace in the sample containers.	J- (all detects) UJ (all non-detects)	A

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures upon receipt by the laboratory met validation criteria with the exception of one cooler in SDG FA76231 that was reported at 8.0°C. No data was qualified based on the cooler temperature.

All technical holding time requirements were met.

II. Instrument Performance Check

Instrument performance was checked at the frequency required by the method.

All criteria for the instrument performance check were met.

III. Initial Calibration and Initial Calibration Verification

All criteria for the initial calibration and initial calibration verifications of the method were met.

IV. Continuing Calibration

All criteria for the continuing calibration verifications of the method were met.

V. Laboratory Blanks

Laboratory blanks were performed as required by the method. No contaminant concentrations were detected in the laboratory blanks.

VI. Field Blanks

Two trip blanks were collected and analyzed for VOCs. One trip blank had detections for methylene chloride and tetrachloroethene. The associated sample results were qualified as non-detected (U) due to trip blank contamination as applicable. The sample results that were not detected or were significantly greater than the concentrations found in the trip blank were not qualified. The trip blank outlier reports are presented in Enclosures I and II.

VII. Surrogates

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VIII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) sample analysis was performed on associated project samples. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

IX. Laboratory Control Samples

Laboratory control samples (LCS) were analyzed as required by the method. Percent recoveries (%R) were within QC limits.

X. Field Duplicates

One field duplicate pair was collected and analyzed for VOCs. All RPDs were within QC limits. The field duplicate result comparisons are provided in Enclosure I

XI. Internal Standards

All internal standard areas and retention times were within QC limits.

XII. Compound Quantitation

The laboratory reporting limits were evaluated. All laboratory reporting limits met the specified requirements.

All compounds reported below the limit of quantitation (LOQ) as detected by the laboratory were qualified as detected estimated (J). The details regarding the qualification of data are provided in Enclosures I and II.

XIII. Overall Assessment of Data

The analysis was conducted within all specifications of the method. No results were rejected in these SDGs.

Due to sample headspace, data were qualified as estimated in one sample.

Due to results below the LOQ, data were qualified as estimated in thirteen samples.

Due to trip blank contamination, data were qualified as not detected in five samples.

The quality control criteria reviewed, other than those discussed above, were met and are considered acceptable.

Data flags are summarized and are presented as Attachment 2.

Attachment 1

Sample Cross Reference

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
23-Jun-2020	2026MOU2134A	FA76231-1	TB	5030B	EPA8260-SIM	Stage 2B
23-Jun-2020	2026MOU2135F	FA76231-2	N	5030B	EPA8260-SIM	Stage 2B
23-Jun-2020	2026MOU2135FMS	FA76231-2MS	MS	5030B	EPA8260-SIM	Stage 2B
23-Jun-2020	2026MOU2135FMSD	FA76231-2MSD	MSD	5030B	EPA8260-SIM	Stage 2B
23-Jun-2020	2026MOU2136F	FA76231-3	N	5030B	EPA8260-SIM	Stage 2B
23-Jun-2020	2026MOU2137F	FA76231-4	N	5030B	EPA8260-SIM	Stage 2B
07-Jul-2020	2028MOU2146A	FA76591-1	TB	5030B	EPA8260-SIM	Stage 2B
07-Jul-2020	2028MOU2147F	FA76591-2	N	5030B	EPA8260-SIM	Stage 2B
07-Jul-2020	2028MOU2147FMS	FA76591-2MS	MS	5030B	EPA8260-SIM	Stage 2B
07-Jul-2020	2028MOU2147FMSD	FA76591-2MSD	MSD	5030B	EPA8260-SIM	Stage 2B
07-Jul-2020	2028MOU2148F	FA76591-3	N	5030B	EPA8260-SIM	Stage 4
07-Jul-2020	2028MOU2149F	FA76591-4	N	5030B	EPA8260-SIM	Stage 4
07-Jul-2020	2028MOU2150F	FA76591-5	N	5030B	EPA8260-SIM	Stage 2B
07-Jul-2020	2028MOU2151F	FA76591-6	N	5030B	EPA8260-SIM	Stage 2B
07-Jul-2020	2028MOU2152F	FA76591-7	N	5030B	EPA8260-SIM	Stage 2B
07-Jul-2020	2028MOU2153F	FA76591-8	N	5030B	EPA8260-SIM	Stage 2B
07-Jul-2020	2028MOU2154F	FA76591-9	N	5030B	EPA8260-SIM	Stage 2B
07-Jul-2020	2028MOU2155F	FA76591-10	N	5030B	EPA8260-SIM	Stage 2B
07-Jul-2020	2028MOU2156D	FA76591-11	FD	5030B	EPA8260-SIM	Stage 2B

Attachment 2
Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: FA76231, FA76591

Laboratory: ACTO

EDD Filename: PrepFA76231ACTO, PrepFA76591ACTO

eQAPP Name: FtOrd_UFP_QAPP_Rev7

SDG: FA76231

Method Category: VOA
Method: EPA8260-SIM **Matrix:** AQ

6/23/2020 9:55:00

Sample ID: 2026MOU2135F **Collected:** AM **Analysis Type:** 1RES **Dilution:** 1.00

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,1-DICHLOROETHANE	0.48	J	0.25	LOD	0.50	LOQ	ug/L	J	RI
CHLOROFORM	0.35	J	0.25	LOD	0.50	LOQ	ug/L	J	RI
1,2-DICHLOROETHANE	0.17	J	0.25	LOD	0.50	LOQ	ug/L	J	RI

6/23/2020 9:59:00

Sample ID: 2026MOU2136F **Collected:** AM **Analysis Type:** 1RES **Dilution:** 1.00

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,1-DICHLOROETHANE	0.40	J	0.25	LOD	0.50	LOQ	ug/L	J	RI
1,2-DICHLOROETHANE	0.15	J	0.25	LOD	0.50	LOQ	ug/L	J	RI
CHLOROFORM	0.31	J	0.25	LOD	0.50	LOQ	ug/L	J	RI
TETRACHLOROETHYLENE	0.15	J	0.25	LOD	0.50	LOQ	ug/L	J	RI

6/23/2020 10:05:00

Sample ID: 2026MOU2137F **Collected:** AM **Analysis Type:** 1RES **Dilution:** 1.00

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,1-DICHLOROETHANE	0.41	J	0.25	LOD	0.50	LOQ	ug/L	J	RI
1,2-DICHLOROETHANE	0.14	J	0.25	LOD	0.50	LOQ	ug/L	J	RI
CHLOROFORM	0.31	J	0.25	LOD	0.50	LOQ	ug/L	J	RI
TETRACHLOROETHYLENE	0.12	J	0.25	LOD	0.50	LOQ	ug/L	J	RI

SDG: FA76591

Method Category: VOA
Method: EPA8260-SIM **Matrix:** AQ

6/27/2020 8:37:00 AM

Sample ID: 2028MOU2146A **Collected:** 7/7/2020 8:37:00 AM **Analysis Type:** 1RES **Dilution:** 1.00

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,1-DICHLOROETHANE	0.50	U	0.25	LOD	0.50	LOQ	ug/L	UJ	Headspace
1,2-DICHLOROPROPANE	0.50	U	0.25	LOD	0.50	LOQ	ug/L	UJ	Headspace
BENZENE	0.50	U	0.25	LOD	0.50	LOQ	ug/L	UJ	Headspace

* denotes a non-reportable result

Project Name and Number: 21065.000.01.0000 - DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA

7/31/2020 9:55:23 AM

ADR version 1.9.0.325

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Data Qualifier Summary

Lab Reporting Batch ID: FA76231, FA76591

Laboratory: ACTO

EDD Filename: PrepFA76231ACTO, PrepFA76591ACTO

eQAPP Name: FtOrd_UFP_QAPP_Rev7

SDG: FA76591

Method Category: VOA
Method: EPA8260-SIM **Matrix:** AQ

Sample ID: 2028MOU2146A **Collected:** 7/7/2020 8:37:00 AM **Analysis Type:** 1RES **Dilution:** 1.00

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CARBON TETRACHLORIDE	0.50	U	0.25	LOD	0.50	LOQ	ug/L	UJ	Headspace
CHLOROFORM	0.50	U	0.25	LOD	0.50	LOQ	ug/L	UJ	Headspace
CIS-1,2-DICHLOROETHYLENE	0.50	U	0.25	LOD	0.50	LOQ	ug/L	UJ	Headspace
METHYLENE CHLORIDE	2.7		0.50	LOD	2.0	LOQ	ug/L	J-	Headspace
TETRACHLOROETHYLENE	2.3		0.25	LOD	0.50	LOQ	ug/L	J-	Headspace
Trichloroethylene	0.50	U	0.25	LOD	0.50	LOQ	ug/L	UJ	Headspace
VINYL CHLORIDE	0.10	U	0.050	LOD	0.10	LOQ	ug/L	UJ	Headspace
1,2-DICHLOROETHANE	0.50	U	0.25	LOD	0.50	LOQ	ug/L	UJ	Headspace

Sample ID: 2028MOU2147F **Collected:** 7/7/2020 8:42:00 AM **Analysis Type:** 1RES **Dilution:** 1.00

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DICHLOROETHANE	0.19	J	0.25	LOD	0.50	LOQ	ug/L	J	RI
CHLOROFORM	0.38	J	0.25	LOD	0.50	LOQ	ug/L	J	RI

Sample ID: 2028MOU2148F **Collected:** 7/7/2020 8:46:00 AM **Analysis Type:** 1RES **Dilution:** 1.00

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,1-DICHLOROETHANE	0.43	J	0.25	LOD	0.50	LOQ	ug/L	J	RI
1,2-DICHLOROETHANE	0.16	J	0.25	LOD	0.50	LOQ	ug/L	J	RI
CHLOROFORM	0.30	J	0.25	LOD	0.50	LOQ	ug/L	J	RI
TETRACHLOROETHYLENE	0.20	J	0.25	LOD	0.50	LOQ	ug/L	U	Tb

Sample ID: 2028MOU2149F **Collected:** 7/7/2020 8:50:00 AM **Analysis Type:** 1RES **Dilution:** 1.00

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,1-DICHLOROETHANE	0.47	J	0.25	LOD	0.50	LOQ	ug/L	J	RI
1,2-DICHLOROETHANE	0.16	J	0.25	LOD	0.50	LOQ	ug/L	J	RI
CHLOROFORM	0.35	J	0.25	LOD	0.50	LOQ	ug/L	J	RI
Trichloroethylene	0.41	J	0.25	LOD	0.50	LOQ	ug/L	J	RI

* denotes a non-reportable result

Project Name and Number: 21065.000.01.0000 - DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA

7/31/2020 9:55:23 AM

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Data Qualifier Summary

Lab Reporting Batch ID: FA76231, FA76591

Laboratory: ACTO

EDD Filename: PrepFA76231ACTO, PrepFA76591ACTO

eQAPP Name: FtOrd_UFP_QAPP_Rev7

SDG: FA76591

Method Category: VOA
Method: EPA8260-SIM **Matrix:** AQ

Sample ID:2028MOU2150F **Collected:**7/7/2020 8:54:00 AM **Analysis Type:**1RES **Dilution:** 1.00

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DICHLOROETHANE	0.19	J	0.25	LOD	0.50	LOQ	ug/L	J	RI
CHLOROFORM	0.42	J	0.25	LOD	0.50	LOQ	ug/L	J	RI

Sample ID:2028MOU2151F **Collected:**7/7/2020 9:00:00 AM **Analysis Type:**1RES **Dilution:** 1.00

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,1-DICHLOROETHANE	0.43	J	0.25	LOD	0.50	LOQ	ug/L	J	RI
1,2-DICHLOROETHANE	0.16	J	0.25	LOD	0.50	LOQ	ug/L	J	RI
CHLOROFORM	0.30	J	0.25	LOD	0.50	LOQ	ug/L	J	RI
TETRACHLOROETHYLENE	0.17	J	0.25	LOD	0.50	LOQ	ug/L	U	Tb

Sample ID:2028MOU2152F **Collected:**7/7/2020 9:04:00 AM **Analysis Type:**1RES **Dilution:** 1.00

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,1-DICHLOROETHANE	0.47	J	0.25	LOD	0.50	LOQ	ug/L	J	RI
1,2-DICHLOROETHANE	0.18	J	0.25	LOD	0.50	LOQ	ug/L	J	RI
CHLOROFORM	0.35	J	0.25	LOD	0.50	LOQ	ug/L	J	RI

Sample ID:2028MOU2153F **Collected:**7/7/2020 9:10:00 AM **Analysis Type:**1RES **Dilution:** 1.00

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DICHLOROETHANE	0.20	J	0.25	LOD	0.50	LOQ	ug/L	J	RI
CHLOROFORM	0.38	J	0.25	LOD	0.50	LOQ	ug/L	J	RI

Sample ID:2028MOU2154F **Collected:**7/7/2020 9:14:00 AM **Analysis Type:**1RES **Dilution:** 1.00

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DICHLOROETHANE	0.11	J	0.25	LOD	0.50	LOQ	ug/L	J	RI
CHLOROFORM	0.29	J	0.25	LOD	0.50	LOQ	ug/L	J	RI
TETRACHLOROETHYLENE	1.1		0.25	LOD	0.50	LOQ	ug/L	U	Tb

* denotes a non-reportable result

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Data Qualifier Summary

Lab Reporting Batch ID: FA76231, FA76591

Laboratory: ACTO

EDD Filename: PrepFA76231ACTO, PrepFA76591ACTO

eQAPP Name: FtOrd_UFP_QAPP_Rev7

SDG: FA76591

Method Category: VOA

Method: EPA8260-SIM

Matrix: AQ

Sample ID:2028MOU2155F

Collected:7/7/2020 9:18:00 AM Analysis Type:1RES

Dilution: 1.00

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,1-DICHLOROETHANE	0.40	J	0.25	LOD	0.50	LOQ	ug/L	J	RI
1,2-DICHLOROETHANE	0.23	J	0.25	LOD	0.50	LOQ	ug/L	J	RI
CHLOROFORM	0.27	J	0.25	LOD	0.50	LOQ	ug/L	J	RI
TETRACHLOROETHYLENE	0.82		0.25	LOD	0.50	LOQ	ug/L	U	Tb

Sample ID:2028MOU2156D

Collected:7/7/2020 9:23:00 AM Analysis Type:1RES

Dilution: 1.00

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,1-DICHLOROETHANE	0.42	J	0.25	LOD	0.50	LOQ	ug/L	J	RI
1,2-DICHLOROETHANE	0.23	J	0.25	LOD	0.50	LOQ	ug/L	J	RI
CHLOROFORM	0.28	J	0.25	LOD	0.50	LOQ	ug/L	J	RI
TETRACHLOROETHYLENE	0.79		0.25	LOD	0.50	LOQ	ug/L	U	Tb

* denotes a non-reportable result

Project Name and Number: 21065.000.01.0000 - DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA

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Data Qualifier Summary

Lab Reporting Batch ID: FA76231, FA76591

Laboratory: ACTO

EDD Filename: PrepFA76231ACTO, PrepFA76591ACTO

eQAPP Name: FtOrd_UFP_QAPP_Rev7

Reason Code Legend

<i>Reason Code</i>	<i>Description</i>
Headspace	Preservation
Preservation	Preservation
RI	Reporting Limit Trace Value
Tb	Trip Blank Contamination

* denotes a non-reportable result

Project Name and Number: 21065.000.01.0000 - DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA

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Enclosure I

Stage 2B ADR Outliers

(Including Manual Review Outliers)

Quality Control Outlier Reports

FA76231

Reporting Limit Outliers

Lab Reporting Batch ID: FA76231

Laboratory: ACTO

EDD Filename: FA76231ACTO

eQAPP Name: FtOrd_UFP_QAPP_Rev7

Method: EPA8260-SIM

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
2026MOU2135F	1,1-DICHLOROETHANE	J	0.48	0.50	LOQ	ug/L	J (all detects)
	1,2-DICHLOROETHANE	J	0.17	0.50	LOQ	ug/L	
	CHLOROFORM	J	0.35	0.50	LOQ	ug/L	
2026MOU2136F	1,1-DICHLOROETHANE	J	0.40	0.50	LOQ	ug/L	J (all detects)
	1,2-DICHLOROETHANE	J	0.15	0.50	LOQ	ug/L	
	CHLOROFORM	J	0.31	0.50	LOQ	ug/L	
	TETRACHLOROETHYLENE	J	0.15	0.50	LOQ	ug/L	
2026MOU2137F	1,1-DICHLOROETHANE	J	0.41	0.50	LOQ	ug/L	J (all detects)
	1,2-DICHLOROETHANE	J	0.14	0.50	LOQ	ug/L	
	CHLOROFORM	J	0.31	0.50	LOQ	ug/L	
	TETRACHLOROETHYLENE	J	0.12	0.50	LOQ	ug/L	

LDC #: 48620A1b

VALIDATION COMPLETENESS WORKSHEET

Date: 07/30/20

SDG #: FA76231

ADR

Page: 1 of 1

Laboratory: SGS North America, Inc.

Reviewer: *[Signature]*

2nd Reviewer: *[Signature]*

METHOD: GC/MS Volatiles (EPA SW 846 Method 8260B)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Sample receipt/Technical holding times	N / N	Cooler Temp = 8.0 °C
II.	GC/MS Instrument performance check	A	
III.	Initial calibration/ICV	A / A	ICV = 15% AM r2 ICV = 20%
IV.	Continuing calibration	A	CV = 20/50%
V.	Laboratory Blanks	N	
VI.	Field blanks	N	TB = 1
VII.	Surrogate spikes	N	
VIII.	Matrix spike/Matrix spike duplicates	N	
IX.	Laboratory control samples	N	
X.	Field duplicates	N	
XI.	Internal standards	N/A	
XII.	Compound quantitation RL/LOQ/LODs	N	
XIII.	Target compound identification	N	
XIV.	System performance	N	
XV.	Overall assessment of data	N	

Note: A = Acceptable
 N = Not provided/applicable
 SW = See worksheet

ND = No compounds detected
 R = Rinsate
 FB = Field blank

D = Duplicate
 TB = Trip blank
 EB = Equipment blank

SB=Source blank
 OTHER:

	Client ID	Lab ID	Matrix	Date
1	2026MOU2134 <i>A</i>	FA76231-1	Water	06/23/20
2	2026MOU2135F	FA76231-2	Water	06/23/20
3	2026MOU2136F	FA76231-3	Water	06/23/20
4	2026MOU2137F	FA76231-4	Water	06/23/20
5	2026MOU2135FMS	FA76231-2MS	Water	06/23/20
6	2026MOU2135FMSD	FA76231-2MSD	Water	06/23/20
7				
8				
9				

Notes:

-	VO 2336-MB				

Quality Control Outlier Reports

FA76591

Trip Blank Outlier Report

Lab Reporting Batch ID: FA76591

Laboratory: ACTO

EDD Filename: PrepFA76591ACTO

eQAPP Name: FtOrd_UFP_QAPP_Rev7

Method: EPA8260-SIM
Matrix: AQ

Trip Blank Sample ID	Collected Date	Analyte	Result	Associated Samples
2028MOU2146A(1RES)	7/7/2020 8:37:00 AM	METHYLENE CHLORIDE TETRACHLOROETHYLENE	2.7 ug/L 2.3 ug/L	2028MOU2147F 2028MOU2148F 2028MOU2149F 2028MOU2150F 2028MOU2151F 2028MOU2152F 2028MOU2153F 2028MOU2154F 2028MOU2155F 2028MOU2156D

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
2028MOU2148F(1RES)	TETRACHLOROETHYLENE	0.20 ug/L	0.20U ug/L
2028MOU2151F(1RES)	TETRACHLOROETHYLENE	0.17 ug/L	0.17U ug/L
2028MOU2154F(1RES)	TETRACHLOROETHYLENE	1.1 ug/L	1.1U ug/L
2028MOU2155F(1RES)	TETRACHLOROETHYLENE	0.82 ug/L	0.82U ug/L
2028MOU2156D(1RES)	TETRACHLOROETHYLENE	0.79 ug/L	0.79U ug/L

Reporting Limit Outliers

Lab Reporting Batch ID: FA76591

Laboratory: ACTO

EDD Filename: FA76591ACTO

eQAPP Name: FtOrd_UFP_QAPP_Rev7

Method: EPA8260-SIM

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
2028MOU2147F	1,2-DICHLOROETHANE CHLOROFORM	J	0.19	0.50	LOQ	ug/L	J (all detects)
		J	0.38	0.50	LOQ	ug/L	
2028MOU2148F	1,1-DICHLOROETHANE 1,2-DICHLOROETHANE CHLOROFORM TETRACHLOROETHYLENE	J	0.43	0.50	LOQ	ug/L	J (all detects)
		J	0.16	0.50	LOQ	ug/L	
		J	0.30	0.50	LOQ	ug/L	
		J	0.20	0.50	LOQ	ug/L	
2028MOU2149F	1,1-DICHLOROETHANE 1,2-DICHLOROETHANE CHLOROFORM Trichloroethylene	J	0.47	0.50	LOQ	ug/L	J (all detects)
		J	0.16	0.50	LOQ	ug/L	
		J	0.35	0.50	LOQ	ug/L	
		J	0.41	0.50	LOQ	ug/L	
2028MOU2150F	1,2-DICHLOROETHANE CHLOROFORM	J	0.19	0.50	LOQ	ug/L	J (all detects)
		J	0.42	0.50	LOQ	ug/L	
2028MOU2151F	1,1-DICHLOROETHANE 1,2-DICHLOROETHANE CHLOROFORM TETRACHLOROETHYLENE	J	0.43	0.50	LOQ	ug/L	J (all detects)
		J	0.16	0.50	LOQ	ug/L	
		J	0.30	0.50	LOQ	ug/L	
		J	0.17	0.50	LOQ	ug/L	
2028MOU2152F	1,1-DICHLOROETHANE 1,2-DICHLOROETHANE CHLOROFORM	J	0.47	0.50	LOQ	ug/L	J (all detects)
		J	0.18	0.50	LOQ	ug/L	
		J	0.35	0.50	LOQ	ug/L	
2028MOU2153F	1,2-DICHLOROETHANE CHLOROFORM	J	0.20	0.50	LOQ	ug/L	J (all detects)
		J	0.38	0.50	LOQ	ug/L	
2028MOU2154F	1,2-DICHLOROETHANE CHLOROFORM	J	0.11	0.50	LOQ	ug/L	J (all detects)
		J	0.29	0.50	LOQ	ug/L	
2028MOU2155F	1,1-DICHLOROETHANE 1,2-DICHLOROETHANE CHLOROFORM	J	0.40	0.50	LOQ	ug/L	J (all detects)
		J	0.23	0.50	LOQ	ug/L	
		J	0.27	0.50	LOQ	ug/L	
2028MOU2156D	1,1-DICHLOROETHANE 1,2-DICHLOROETHANE CHLOROFORM	J	0.42	0.50	LOQ	ug/L	J (all detects)
		J	0.23	0.50	LOQ	ug/L	
		J	0.28	0.50	LOQ	ug/L	

Field Duplicate RPD Report

Lab Reporting Batch ID: FA76591

Laboratory: ACTO

EDD Filename: FA76591ACTO

eQAPP Name: FtOrd_UFP_QAPP_Rev7

Method: EPA8260-SIM

Matrix: AQ

Analyte	Concentration (ug/L)		Sample RPD	eQAPP RPD	Flag
	2028MOU2155F	2028MOU2156D			
1,1-DICHLOROETHANE	0.40	0.42	5	30.00	No Qualifiers Applied
1,2-DICHLOROETHANE	0.23	0.23	0	30.00	
CHLOROFORM	0.27	0.28	4	30.00	
CIS-1,2-DICHLOROETHYLENE	1.2	1.3	8	30.00	
TETRACHLOROETHYLENE	0.82	0.79	4	30.00	
Trichloroethylene	5.5	5.5	0	30.00	

LDC #: 48620B1b

VALIDATION COMPLETENESS WORKSHEET

Date: 07/26/20

SDG #: FA76591

ADR/Stage 4

Page: 1 of 1

Laboratory: SGS North America, Inc.

Reviewer: *SM*

2nd Reviewer: *KIC*

METHOD: GC/MS Volatiles (EPA SW 846 Method 8260B-SIM)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Sample receipt/Technical holding times	SW/N	
II.	GC/MS Instrument performance check	A	
III.	Initial calibration/ICV	A/A	ICV ≤ 20%
IV.	Continuing calibration	A	CCV ≤ 20/50%
V.	Laboratory Blanks	N	Not reviewed for ADR validation.
VI.	Field blanks		
VII.	Surrogate spikes		Not reviewed for ADR validation.
VIII.	Matrix spike/Matrix spike duplicates		Not reviewed for ADR validation.
IX.	Laboratory control samples		Not reviewed for ADR validation.
X.	Field duplicates		
XI.	Internal standards	A	Not reviewed for ADR validation.
XII.	Compound quantitation RL/LOQ/LODs	N	Not reviewed for ADR validation.
XIII.	Target compound identification		Not reviewed for ADR validation.
XIV.	System performance		Not reviewed for ADR validation.
XV.	Overall assessment of data		Not reviewed for ADR validation.

Note: A = Acceptable
N = Not provided/applicable
SW = See worksheet

ND = No compounds detected
R = Rinsate
FB = Field blank

D = Duplicate
TB = Trip blank
EB = Equipment blank

SB=Source blank
OTHER:

** Indicates sample underwent Stage 4 validation

	Client ID	Lab ID	Matrix	Date
1	2028MOU2146A	FA76591-1	Water	07/07/20
2	2028MOU2147F	FA76591-2	Water	07/07/20
3	2028MOU2148F**	FA76591-3**	Water	07/07/20
4	2028MOU2149F**	FA76591-4**	Water	07/07/20
5	2028MOU2150F	FA76591-5	Water	07/07/20
6	2028MOU2151F	FA76591-6	Water	07/07/20
7	2028MOU2152F	FA76591-7	Water	07/07/20
8	2028MOU2153F	FA76591-8	Water	07/07/20
9	2028MOU2154F	FA76591-9	Water	07/07/20
10	2028MOU2155F	FA76591-10	Water	07/07/20
11	2028MOU2156D	FA76591-11	Water	07/07/20
12	2028MOU2147FMS	FA76591-2MS	Water	07/07/20
13	2028MOU2147FMSD	FA76591-2MSD	Water	07/07/20
14				

VO 2328-MD

Enclosure II

Stage 4 Data Validation Reports

**Laboratory Data Consultants, Inc.
Data Validation Report**

Project/Site Name: Fort Ord, OU2
LDC Report Date: August 4, 2020
Parameters: Volatiles
Validation Level: Stage 4
Laboratory: SGS North America, Inc.
Sample Delivery Group (SDG): FA76591

Sample Identification	Laboratory Sample Identification	Matrix	Collection Date
2028MOU2148F	FA76591-3	Water	07/07/20
2028MOU2149F	FA76591-4	Water	07/07/20

Introduction

This Data Validation Report (DVR) presents data validation findings and results for the associated samples listed on the cover page. Data validation was performed in accordance with the Final Quality Assurance Project Plan Volume I, Appendix A for Groundwater Remedies and Monitoring at Operable Unit 2, Sites 2 and 12, and Operable Unit Carbon Tetrachloride Plume, Former Fort Ord, California (Revision 7, August 2019), the U.S. Department of Defense (DoD) Quality Systems Manual (QSM) for Environmental Laboratories, Version 5.1 (2017), and the USACE Guidance for Evaluating Performance-Based Chemical Data (June 2005). Where specific guidance was not available, the data has been evaluated in a conservative manner consistent with industry standards using professional experience.

The analyses were performed by the following method:

Volatile Organic Compounds (VOCs) by Environmental Protection Agency (EPA) SW 846 Method 8260B in Selected Ion Monitoring (SIM) mode

All sample results were subjected to Stage 4 data validation, which is comprised of the quality control (QC) summary forms as well as the raw data, to confirm sample quantitation and identification.

The following are definitions of the data qualifiers utilized during data validation:

- J+ (Estimated, High Bias): The compound or analyte was analyzed for and positively identified by the laboratory; however the reported concentration is estimated, displaying high bias, due to non-conformances discovered during data validation.
- J- (Estimated, Low Bias): The compound or analyte was analyzed for and positively identified by the laboratory; however the reported concentration is estimated, displaying low bias, due to non-conformances discovered during data validation.
- J (Estimated, Bias Indeterminate): The compound or analyte was analyzed for and positively identified by the laboratory; however the reported concentration is estimated due to non-conformances discovered during data validation. Bias is indeterminate.
- U (Non-detected): The compound or analyte was analyzed for and positively identified by the laboratory; however the compound or analyte should be considered non-detected at the reported concentration due to the presence of contaminants detected in the associated blank(s).
- UU (Non-detected estimated): The compound or analyte was reported as not detected by the laboratory; however the reported quantitation/detection limit is estimated due to non-conformances discovered during data validation.
- R (Rejected): The sample results were rejected due to gross non-conformances discovered during data validation. Data qualified as rejected is not usable.
- NA (Not Applicable): The non-conformance discovered during data validation demonstrates a high bias, while the affected compound or analyte in the associated sample(s) was reported as not detected by the laboratory and did not warrant the qualification of the data.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

I. Sample Receipt and Technical Holding Times

All samples were received in good condition and cooler temperatures upon receipt met validation criteria.

All technical holding time requirements were met.

II. GC/MS Instrument Performance Check

A bromofluorobenzene (BFB) tune was performed at 12 hour intervals.

All ion abundance requirements were met.

III. Initial Calibration and Initial Calibration Verification

An initial calibration was performed as required by the method.

For compounds where average relative response factors (RRFs) were utilized, the percent relative standard deviations (%RSD) were less than or equal to 15.0%.

In the case where the laboratory used a calibration curve to evaluate the compounds, all coefficients of determination (r^2) were greater than or equal to 0.990.

Average relative response factors (RRF) for all compounds were within validation criteria.

The percent differences (%D) of the initial calibration verification (ICV) standard were less than or equal to 20.0% for all compounds.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

The percent differences (%D) were less than or equal to 20.0% for all compounds.

The percent differences (%D) of the ending continuing calibration verifications (CCVs) were less than or equal to 50.0% for all compounds.

All of the continuing calibration relative response factors (RRF) were within validation criteria.

V. Laboratory Blanks

Laboratory blanks were analyzed as required by the method. No contaminants were found in the laboratory blanks.

VI. Field Blanks

Sample 2028MOU2146A was identified as a trip blank. No contaminants were found with the following exceptions:

Blank ID	Collection Date	Compound	Concentration	Associated Samples
2028MOU2146A	07/07/20	Methylene chloride Tetrachloroethene	2.7 ug/L 2.3 ug/L	All samples in SDG FA76591

Sample concentrations were compared to concentrations detected in the field blanks. The sample concentrations were either not detected or were significantly greater (>10X for common contaminants, >5X for other contaminants) than the concentrations found in the associated field blanks with the following exceptions:

Sample	Compound	Reported Concentration	Modified Final Concentration
2028MOU2148F	Tetrachloroethene	0.20 ug/L	0.20U ug/L

VII. Surrogates

Surrogates were added to all samples as required by the method. All surrogate recoveries (%R) were within QC limits.

VIII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) sample analysis was performed on an associated project sample. Percent recoveries (%R) were within QC limits. Relative percent differences (RPD) were within QC limits.

IX. Laboratory Control Samples

Laboratory control samples (LCS) were analyzed as required by the method. Percent recoveries (%R) were within QC limits.

X. Field Duplicates

No field duplicates were identified in this SDG.

XI. Internal Standards

All internal standard areas and retention times were within QC limits.

XII. Compound Quantitation

All compound quantitations met validation criteria.

All compounds reported below the limit of quantitation (LOQ) were qualified as follows:

Sample	Finding	Flag	A or P
2028MOU2148F 2028MOU2149F	All compounds reported below the LOQ.	J (all detects)	A

XIII. Target Compound Identifications

All target compound identifications met validation criteria.

XIV. System Performance

The system performance was acceptable.

XV. Overall Assessment of Data

The analysis was conducted within all specifications of the method. No results were rejected in this SDG.

Due to results below the LOQ, data were qualified as estimated in two samples.

Due to laboratory blank contamination, data were qualified as not detected in one sample.

The quality control criteria reviewed, other than those discussed above, were met and are considered acceptable.

**Fort Ord, OU2
Volatiles - Data Qualification Summary - SDG FA76591**

Sample	Compound	Flag	A or P	Reason
2028MOU2148F 2028MOU2149F	All compounds reported below the LOQ.	J (all detects)	A	Compound quantitation

**Fort Ord, OU2
Volatiles - Laboratory Blank Data Qualification Summary - SDG FA76591**

Sample	Compound	Modified Final Concentration	A or P
2028MOU2148F	Tetrachloroethene	0.20U ug/L	A

**Fort Ord, OU2
Volatiles - Field Blank Data Qualification Summary - SDG FA76591**

No Sample Data Qualified in this SDG

LDC #: 48620B1b

VALIDATION COMPLETENESS WORKSHEET

Date: 07/20/20

SDG #: FA76591

ADR (Stage 4)

Page: 1 of 1

Laboratory: SGS North America, Inc.

Reviewer: SVY

2nd Reviewer: KIL

METHOD: GC/MS Volatiles (EPA SW 846 Method 8260B-SIM)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Sample receipt/Technical holding times	A / A	
II.	GC/MS Instrument performance check	A	
III.	Initial calibration/ICV	A / A	ICV = 15% r ² ICV = 20%
IV.	Continuing calibration	A	CV = 20/50%
V.	Laboratory Blanks	A	Not reviewed for ADR validation.
VI.	Field blanks	SW	TB = 1
VII.	Surrogate spikes	A	Not reviewed for ADR validation.
VIII.	Matrix spike/Matrix spike duplicates	A	Not reviewed for ADR validation.
IX.	Laboratory control samples	A	Not reviewed for ADR validation. <i>CS</i>
X.	Field duplicates	N	
XI.	Internal standards	A	Not reviewed for ADR validation.
XII.	Compound quantitation RL/LOQ/LODs	A	Not reviewed for ADR validation.
XIII.	Target compound identification	A	Not reviewed for ADR validation.
XIV.	System performance	A	Not reviewed for ADR validation.
XV.	Overall assessment of data	A	Not reviewed for ADR validation.

Note: A = Acceptable ND = No compounds detected D = Duplicate SB=Source blank
 N = Not provided/applicable R = Rinsate TB = Trip blank OTHER:
 SW = See worksheet FB = Field blank EB = Equipment blank

** Indicates sample underwent Stage 4 validation

	Client ID	Lab ID	Matrix	Date
1	2028MOU2146A	FA76591-1	Water	07/07/20
2	2028MOU2147F	FA76591-2	Water	07/07/20
3	2028MOU2148F**	FA76591-3**	Water	07/07/20
4	2028MOU2149F**	FA76591-4**	Water	07/07/20
5	2028MOU2150F	FA76591-5	Water	07/07/20
6	2028MOU2151F	FA76591-6	Water	07/07/20
7	2028MOU2152F	FA76591-7	Water	07/07/20
8	2028MOU2153F	FA76591-8	Water	07/07/20
9	2028MOU2154F	FA76591-9	Water	07/07/20
10	2028MOU2155F	FA76591-10	Water	07/07/20
11	2028MOU2156D	FA76591-11	Water	07/07/20
12	2028MOU2147FMS	FA76591-2MS	Water	07/07/20
13	2028MOU2147FMSD	FA76591-2MSD	Water	07/07/20
14				

- V02338 - MB

(11 cpds)₁

LDC #: 48620 B1B

VALIDATION FINDINGS CHECKLIST

Page: 1 of 2
 Reviewer: JVG
 2nd Reviewer: JVG

Method: Volatiles (EPA SW 846 Method 8260B-SIM)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
Were all technical holding times met?	/			
Was cooler temperature criteria met?	/			
II. GC/MS Instrument performance check (Not required)				
Were the BFB performance results reviewed and found to be within the specified criteria?	/			
Were all samples analyzed within the 12 hour clock criteria?	/			
IIIa. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	/			
Were all percent relative standard deviations (%RSD) \leq 15% and relative response factors (RRF) $>$ 0.05??	/			
Was a curve fit used for evaluation? If yes, did the initial calibration meet the curve fit acceptance criteria of \geq 0.990?	/			
IIIb. Initial Calibration Verification				
Was an initial calibration verification standard analyzed after each initial calibration for each instrument?	/			
Were all percent difference (%D) \leq 20%?	/			
IV. Continuing calibration				
Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?	/			
Were all percent differences (%D) $<$ 20% and relative response factors (RRF) \geq 0.05?	/			
V. Laboratory Blanks				
Was a laboratory blank associated with every sample in this SDG?	/			
Was a laboratory blank analyzed at least once every 12 hours for each matrix and concentration?	/			
Was there contamination in the laboratory blanks?			/	
VI. Field blanks				
Were field blanks identified in this SDG?	/			
Were target compounds detected in the field blanks?	/			
VII. Surrogate spikes				
Were all surrogate percent recovery (%R) within QC limits?	/			
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?			/	
VIII. Matrix spike/Matrix spike duplicates				
Were matrix spike (MS) and matrix spike duplicate (MSD) analyzed in this SDG?	/			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?	/			

LDC #: 48620 B1b

VALIDATION FINDINGS CHECKLIST

Page: 2 of 2
Reviewer: JVG
2nd Reviewer: [Signature]

Validation Area	Yes	No	NA	Findings/Comments
IX. Laboratory control samples				
Was an LCS analyzed per analytical batch?	/			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	/			
X. Field duplicates				
Were field duplicate pairs identified in this SDG?		/		
Were target compounds detected in the field duplicates?			/	
XI. Internal standards				
Were internal standard area counts within -50% or +100% of the associated calibration standard?	/			
Were retention times within + 30 seconds of the associated calibration standard?	/			
XII. Compound quantitation				
Did the laboratory LOQs/RLs meet the QAPP LOQs/RLs?	/			
Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the compound?	/			
Were compound quantitation and RLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	/			
XIII. Target compound identification				
Were relative retention times (RRT's) within + 0.06 RRT units of the standard?	/			
Did compound spectra meet specified EPA "Functional Guidelines" criteria?	/			
Were chromatogram peaks verified and accounted for?	/			
XIV. System performance				
System performance was found to be acceptable.	/			
XV. Overall assessment of data				
Overall assessment of data was found to be acceptable.	/			

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

METHOD: GC/MS VOA (EPA SW 846 Method 8260B-SIM)

The Relative Response Factor (RRF), average RRF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

$$RRF = (A_x)(C_{is}) / (A_{is})(C_x)$$

average RRF = sum of the RRFs/number of standards

$$\%RSD = 100 * (S/X)$$

A_x = Area of Compound

C_x = Concentration of compound,

S = Standard deviation of the RRFs,

A_{is} = Area of associated internal standard

C_{is} = Concentration of internal standard

X = Mean of the RRFs

#	Standard ID	Calibration Date	Compound (IS)	Reported RRF (RRF 5.0 std)	Recalculated RRF (RRF 5.0 std)	Reported Average RRF (Initial)	Recalculated Average RRF (Initial)	Reported %RSD	Recalculated %RSD
1	ICAL GCMSO	06/12/20	Trichloroethene (FBZ)	0.469	0.469	0.488	0.488	9.71	9.65
			Tetrachloroethene (CBZ)	0.620	0.620	0.640	0.640	6.60	6.60

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

METHOD: GC/MS VOA (EPA SW 846 Method 8260B-SIM)

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the compounds identified below using the following calculation:

$$\% \text{ Difference} = 100 * (\text{ave. RRF} - \text{RRF}) / \text{ave. RRF}$$

$$\text{RRF} = (\text{Ax})(\text{Cis}) / (\text{Ais})(\text{Cx})$$

Where:

ave. RRF = initial calibration average RRF

RRF = continuing calibration RRF

Ax = Area of compound,

Cx = Concentration of compound,

Ais = Area of associated internal standard

Cis = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (IS)	Average RRF (Initial)	Reported RRF (CC)	Recalculated RRF (CC)	Reported % D	Recalculated %D
1	O60843 GCMSO	07/08/20	Trichloroethene (FBZ)	0.488	0.484	0.484	0.8	0.8
			Tetrachloroethene (CBZ)	0.640	0.632	0.634	0.9	0.9

LDC #: 48620 B16

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Page: 1 of 1
 Reviewer: JVG
 2nd reviewer: JLL

METHOD: GC/MS VOA (EPA SW 846 Method 8260B-SIM)

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
 SS = Surrogate Spiked

Sample ID: # 3

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane					
1,2-Dichloroethane-d4	5.00	5.96	167	167	0
Toluene-d8	↓	5.04	101	101	↓
Bromofluorobenzene					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane					
1,2-Dichloroethane-d4					
Toluene-d8					
Bromofluorobenzene					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane					
1,2-Dichloroethane-d4					
Toluene-d8					
Bromofluorobenzene					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane					
1,2-Dichloroethane-d4					
Toluene-d8					
Bromofluorobenzene					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane					
1,2-Dichloroethane-d4					
Toluene-d8					
Bromofluorobenzene					

LDC #: 45620 B14

VALIDATION FINDINGS WORKSHEET

Matrix Spike/Matrix Spike Duplicates Results Verification

Page: 1 of 1
 Reviewer: JVG
 2nd Reviewer: KLK

METHOD: GC/MS VOA (EPA SW 846 Method 8260B-SIM)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * (SSC - SC)/SA

Where: SSC = Spiked sample concentration
 SA = Spike added

SC = Sample concentration

RPD = |MSC - MSC| * 2 / (MSC + MSDC)

MSC = Matrix spike concentration

MSDC = Matrix spike duplicate concentration

MS/MSD sample: 12/13

Compound	Spike Added (ug/L)		Sample Concentration (ug/L)	Spiked Sample Concentration (ug/L)		Matrix Spike		Matrix Spike Duplicate		MS/MSD	
	MS	MSD		MS	MSD	Percent Recovery		Percent Recovery		RPD	
						Reported	Recalc	Reported	Recalc	Reported	Recalculated
1,4-Dioxane											
1,2,3-TCP											
Benzene	25.0	25.0	0	24.6	26.4	98	98	106	106	7	7
TCE	↓	↓	↓	22.8	25.0	91	91	100	100	9	9

Comments: Refer to Matrix Spike/Matrix Spike Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 98620 B16

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample Results Verification

Page: 1 of 1
 Reviewer: JVG
 2nd Reviewer: KAC

METHOD: GC/MS VOA (EPA SW 846 Method 8260B-SIM)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the laboratory control sample and laboratory control sample duplicate (if applicable) were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * SSC/SA

Where: SSC = Spiked sample concentration
 SA = Spike added

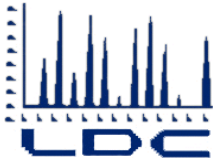
RPD = | LCSC - LCSDC | * 2 / (LCSC + LCSDC)

LCSC = Laboratory control sample concentration LCSDC = Laboratory control sample duplicate concentration

LCS ID: V02728-BS

Compound	Spike Added (ug/L)		Spiked Sample Concentration (ug/L)		LCS		LCSD		LCS/LCSD	
	LCS	LCSD	LCS	LCSD	Percent Recovery		Percent Recovery		RPD	
					Reported	Recalc.	Reported	Recalc.	Reported	Recalculated
1,4-Dioxane										
1,2,3-TCP										
Benzene	5.0	NA	5.4	NA	108	108				
TCE	↓	↓	5.5	↓	110	110				

Comments: Refer to Laboratory Control Sample findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.



LABORATORY DATA CONSULTANTS, INC.

2701 Loker Ave. West, Suite 220, Carlsbad, CA 92010 Bus: 760-827-1100 Fax: 760-827-1099

AHTNA
296 12th Street
Marina, CA 93933
ATTN: Mr. Eric A. Schmidt
Eschmidt@ahтна.net

September 29, 2020

SUBJECT: Fort Ord, OU2, Data Validation

Dear Mr. Schmidt,

Enclosed are the final validation reports for the fraction listed below. These SDGs were received on September 3, 2020. Attachment 1 is a summary of the samples that were reviewed for each analysis.

LDC Project #49030:

<u>SDG #</u>	<u>Fraction</u>
FA77021, FA77472	Volatiles

The data validation was performed under Stage 2B & 4 guidelines. The analyses were validated using the following documents, as applicable to each method:

- Final Quality Assurance Project Plan Volume I, Appendix A for Groundwater Remedies and Monitoring at Operable Unit 2, Sites 2 and 12, and Operable Unit Carbon Tetrachloride Plume, Former Fort Ord, California; Revision 7, August 2019
- U.S. Department of Defense Quality Systems Manual for Environmental Laboratories, Version 5.1; 2017
- USACE Guidance for Evaluating Performance-Based Chemical Data; June 2005
- EPA SW 846, Third Edition, Test Methods for Evaluating Solid Waste, update 1, July 1992; update IIA, August 1993; update II, September 1994; update IIB, January 1995; update III, December 1996; update IIIA, April 1998; IIIB, November 2004; update IV, February 2007; update V, July 2014

Please feel free to contact us if you have any questions.

Sincerely,

Pei Geng
Pgeng@lab-data.com
Project Manager/Senior Chemist

**Data Validation Report
Fort Ord, OU2**

SDGs: FA77021 and FA77472

Prepared for

Ahtna Environmental Inc.
296 12th Street
Marina, California 93933-6001

Prepared by

Laboratory Data Consultants, Inc
2701 Loker Ave West, Suite 220
Carlsbad, CA 92010

September 29, 2020

INTRODUCTION

This Data Validation Report (DVR) presents Stage 2B and Stage 4 data validation results for samples collected during the June 2020 sampling period. Data validation was performed in accordance with the Final Quality Assurance Project Plan Volume I, Appendix A for Groundwater Remedies and Monitoring at Operable Unit 2, Sites 2 and 12, and Operable Unit Carbon Tetrachloride Plume, Former Fort Ord, California (Revision 7, August 2019), the U.S. Department of Defense (DoD) Quality Systems Manual (QSM) for Environmental Laboratories, Version 5.1 (2017), and the USACE Guidance for Evaluating Performance-Based Chemical Data (June 2005). Where specific guidance is not available, the data has been evaluated in a conservative manner consistent with industry standards using professional experience.

The analyses were performed by the following method:

Volatile Organic Compounds (VOCs) by Environmental Protection Agency (EPA) SW 846 Method 8260B in Selection Ion Monitoring (SIM) mode

The sample identification and method of analyses performed on each sample is presented in Attachment 1. Overall data qualification summary is presented in Attachment 2. Stage 2B Automated Data Review outliers are presented in Enclosure I. DVRs for samples on which Stage 4 validation was performed are presented in Enclosure II.

All sample results were subjected to Stage 2B data validation, which comprises an evaluation of quality control (QC) summary results for sample holding times, initial and continuing calibrations, surrogates, matrix spike/matrix spike duplicates (MS/MSD), internal standards, laboratory control sample (LCS), laboratory blanks, trip blanks, and field duplicates. Approximately 20 percent of samples were subjected to Stage 4 evaluation as indicated in Attachment 1, which comprises a review of the QC summary forms as well as the raw data, to confirm sample quantitation and identification.

Automated data review was performed on all QC summary results using the Automated Data Review (ADR) software program (LDC, 2013) with the exception of the calibrations and internal standards, which were validated manually. Quality assurance (QA)/QC criteria specified in the QAPP, DoD QSM, and EM-200-1-10 were incorporated with the program's reference library to assess compliance with project requirements.

The following are definitions of the data qualifiers utilized during data validation:

- J+ (Estimated, High Bias): The compound or analyte was analyzed for and positively identified by the laboratory; however the reported concentration is estimated, displaying high bias, due to non-conformances discovered during data validation.
- J- (Estimated, Low Bias): The compound or analyte was analyzed for and positively identified by the laboratory; however the reported concentration is estimated, displaying low bias, due to non-conformances discovered during data validation.
- J (Estimated, Bias Indeterminate): The compound or analyte was analyzed for and positively identified by the laboratory; however the reported concentration is estimated due to non-conformances discovered during data validation. Bias is indeterminate.
- U (Non-detected): The compound or analyte was analyzed for and positively identified by the laboratory; however the analyte should be considered non-detect at the reported concentration due to the presence of contaminants detected in the associated blank(s).
- UJ (Non-detected estimated): The compound or analyte was reported as not detected by the laboratory; however the reported quantitation/detection limit is estimated due to non-conformances discovered during data validation.
- R (Rejected): The sample results were rejected due to gross non-conformances discovered during data validation. Data qualified as rejected is not usable.
- NA (Not applicable): The non-conformance discovered during data validation demonstrates a high bias, while the affected compound or analyte in the associated sample(s) was reported as not detected by the laboratory and did not warrant the qualification of the data.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

I. Sample Receipt & Technical Holding Times

All samples were received in good condition with the following exceptions:

SDG/ Method	Sample	Compound	Finding	Criteria	Flag	A or P
FA77472/ 8260B-SIM	2032MOU2161A	All compounds	A headspace of >6 mm was apparent in the sample vials.	There should be no headspace in the sample vials.	J- (all detects) UJ (all non-detects)	A

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures upon receipt by the laboratory met validation criteria.

All technical holding time requirements were met.

II. Instrument Performance Check

Instrument performance was checked at the frequency required by the method.

All criteria for the instrument performance check were met.

III. Initial Calibration and Initial Calibration Verification

All criteria for the initial calibration and initial calibration verifications of the method were met.

IV. Continuing Calibration

All criteria for the continuing calibration verifications of the method were met.

V. Laboratory Blanks

Laboratory blanks were performed as required by the method. No contaminant concentrations were detected in the laboratory blanks.

VI. Field Blanks

Two trip blanks were collected and analyzed for VOCs. One trip blank had detections for methylene chloride and tetrachloroethene. The associated sample results were qualified as non-detected (U) due to trip blank contamination as applicable. The sample results that were not detected or were significantly greater than the concentrations found in the trip blank were not qualified. The trip blank outlier reports are presented in Enclosures I and II.

VII. Surrogates

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VIII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) sample analysis was performed on associated project samples. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

IX. Laboratory Control Samples

Laboratory control samples (LCS) were analyzed as required by the method. Percent recoveries (%R) were within QC limits.

X. Field Duplicates

One field duplicate pair was collected and analyzed for VOCs. All RPs were within QC limits. The field duplicate result comparisons are provided in Enclosure I.

XI. Internal Standards

All internal standard areas and retention times were within QC limits.

XII. Compound Quantitation

The laboratory reporting limits were evaluated. All laboratory reporting limits met the specified requirements.

All compounds reported below the limit of quantitation (LOQ) as detected by the laboratory were qualified as detected estimated (J). The details regarding the qualification of data are provided in Enclosures I and II.

XIII. Overall Assessment of Data

The analysis was conducted within all specifications of the method. No results were rejected in these SDGs.

Due to headspace, data were qualified as estimated in one sample.

Due to results below the LOQ, data were qualified as estimated in fourteen samples.

Due to trip blank contamination, data were qualified as not detected in four samples.

The quality control criteria reviewed, other than those discussed above, were met and are considered acceptable.

Data flags are summarized and are presented as Attachment 2.

Attachment 1
Sample Cross Reference

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
21-Jul-2020	2030MOU2157A	FA77021-1	TB	5030B	EPA8260-SIM	Stage 2B
21-Jul-2020	2030MOU2158F	FA77021-2	N	5030B	EPA8260-SIM	Stage 2B
21-Jul-2020	2030MOU2159F	FA77021-3	N	5030B	EPA8260-SIM	Stage 2B
21-Jul-2020	2030MOU2160F	FA77021-4	N	5030B	EPA8260-SIM	Stage 2B
04-Aug-2020	2032MOU2161A	FA77472-1	TB	5030B	EPA8260-SIM	Stage 2B
04-Aug-2020	2032MOU2162F	FA77472-2	N	5030B	EPA8260-SIM	Stage 2B
04-Aug-2020	2032MOU2162FMS	FA77472-2MS	MS	5030B	EPA8260-SIM	Stage 2B
04-Aug-2020	2032MOU2162FMSD	FA77472-2MSD	MSD	5030B	EPA8260-SIM	Stage 2B
04-Aug-2020	2032MOU2163F	FA77472-3	N	5030B	EPA8260-SIM	Stage 4
04-Aug-2020	2032MOU2164F	FA77472-4	N	5030B	EPA8260-SIM	Stage 2B
04-Aug-2020	2032MOU2165F	FA77472-5	N	5030B	EPA8260-SIM	Stage 2B
04-Aug-2020	2032MOU2166F	FA77472-6	N	5030B	EPA8260-SIM	Stage 2B
04-Aug-2020	2032MOU2167F	FA77472-7	N	5030B	EPA8260-SIM	Stage 4
04-Aug-2020	2032MOU2168F	FA77472-8	N	5030B	EPA8260-SIM	Stage 2B
04-Aug-2020	2032MOU2169F	FA77472-9	N	5030B	EPA8260-SIM	Stage 2B
04-Aug-2020	2032MOU2170F	FA77472-10	N	5030B	EPA8260-SIM	Stage 2B
04-Aug-2020	2032MOU2170FMS	FA77472-10MS	MS	5030B	EPA8260-SIM	Stage 2B
04-Aug-2020	2032MOU2170FMSD	FA77472-10MSD	MSD	5030B	EPA8260-SIM	Stage 2B
04-Aug-2020	2032MOU2171D	FA77472-11	FD	5030B	EPA8260-SIM	Stage 2B

Attachment 2
Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: FA77021, FA77472

Laboratory: ACTO

EDD Filename: PrepFA77021ACTO, PrepFA77472ACTO

eQAPP Name: FtOrd_UFP_QAPP_Rev7

SDG: FA77021

Method Category: VOA

Method: EPA8260-SIM

Matrix: AQ

Sample ID:2030MOU2158F **Collected:**7/21/2020 8:38:00 **Analysis Type:**1RES **Dilution:** 1.00

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHLOROFORM	0.39	J	0.25	LOD	0.50	LOQ	ug/L	J	RI
1,2-DICHLOROETHANE	0.19	J	0.25	LOD	0.50	LOQ	ug/L	J	RI

Sample ID:2030MOU2159F **Collected:**7/21/2020 8:43:00 **Analysis Type:**1RES **Dilution:** 1.00

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,1-DICHLOROETHANE	0.43	J	0.25	LOD	0.50	LOQ	ug/L	J	RI
CHLOROFORM	0.32	J	0.25	LOD	0.50	LOQ	ug/L	J	RI
TETRACHLOROETHYLENE	0.24	J	0.25	LOD	0.50	LOQ	ug/L	J	RI

Sample ID:2030MOU2160F **Collected:**7/21/2020 8:48:00 **Analysis Type:**1RES **Dilution:** 1.00

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,1-DICHLOROETHANE	0.43	J	0.25	LOD	0.50	LOQ	ug/L	J	RI
CHLOROFORM	0.31	J	0.25	LOD	0.50	LOQ	ug/L	J	RI
TETRACHLOROETHYLENE	0.21	J	0.25	LOD	0.50	LOQ	ug/L	J	RI

SDG: FA77472

Method Category: VOA

Method: EPA8260-SIM

Matrix: AQ

Sample ID:2032MOU2161A **Collected:**8/4/2020 8:05:00 **Analysis Type:**1RES **Dilution:** 1.00

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,1-DICHLOROETHANE	0.50	U	0.25	LOD	0.50	LOQ	ug/L	UJ	Headspace
1,2-DICHLOROPROPANE	0.50	U	0.25	LOD	0.50	LOQ	ug/L	UJ	Headspace
BENZENE	0.50	U	0.25	LOD	0.50	LOQ	ug/L	UJ	Headspace
CARBON TETRACHLORIDE	0.50	U	0.25	LOD	0.50	LOQ	ug/L	UJ	Headspace
CHLOROFORM	0.50	U	0.25	LOD	0.50	LOQ	ug/L	UJ	Headspace
CIS-1,2-DICHLOROETHYLENE	0.50	U	0.25	LOD	0.50	LOQ	ug/L	UJ	Headspace

* denotes a non-reportable result

Project Name and Number: -DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA

9/25/2020 13:29:09

ADR version 1.9.0.325

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Data Qualifier Summary

Lab Reporting Batch ID: FA77021, FA77472

Laboratory: ACTO

EDD Filename: PrepFA77021ACTO, PrepFA77472ACTO

eQAPP Name: FtOrd_UFP_QAPP_Rev7

SDG: FA77472

Method Category: VOA

Method: EPA8260-SIM

Matrix: AQ

Sample ID:2032MOU2161A **Collected:**8/4/2020 8:05:00 **Analysis Type:**1RES **Dilution:** 1.00

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	1.5	J	0.50	LOD	2.0	LOQ	ug/L	J	RI, Headspace
TETRACHLOROETHYLENE	0.14	J	0.25	LOD	0.50	LOQ	ug/L	J	RI, Headspace
Trichloroethylene	0.50	U	0.25	LOD	0.50	LOQ	ug/L	UJ	Headspace
VINYL CHLORIDE	0.10	U	0.050	LOD	0.10	LOQ	ug/L	UJ	Headspace
1,2-DICHLOROETHANE	0.50	U	0.25	LOD	0.50	LOQ	ug/L	UJ	Headspace

Sample ID:2032MOU2162F **Collected:**8/4/2020 8:09:00 **Analysis Type:**1RES **Dilution:** 1.00

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,1-DICHLOROETHANE	0.42	J	0.25	LOD	0.50	LOQ	ug/L	J	RI
1,2-DICHLOROETHANE	0.16	J	0.25	LOD	0.50	LOQ	ug/L	J	RI
CHLOROFORM	0.32	J	0.25	LOD	0.50	LOQ	ug/L	J	RI

Sample ID:2032MOU2163F **Collected:**8/4/2020 9:15:00 **Analysis Type:**1RES **Dilution:** 1.00

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,1-DICHLOROETHANE	0.30	J	0.25	LOD	0.50	LOQ	ug/L	J	RI
1,2-DICHLOROETHANE	0.12	J	0.25	LOD	0.50	LOQ	ug/L	J	RI
CHLOROFORM	0.25	J	0.25	LOD	0.50	LOQ	ug/L	J	RI
TETRACHLOROETHYLENE	0.19	J	0.25	LOD	0.50	LOQ	ug/L	U	Tb

Sample ID:2032MOU2164F **Collected:**8/4/2020 9:19:00 **Analysis Type:**1RES **Dilution:** 1.00

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,1-DICHLOROETHANE	0.39	J	0.25	LOD	0.50	LOQ	ug/L	J	RI
1,2-DICHLOROETHANE	0.14	J	0.25	LOD	0.50	LOQ	ug/L	J	RI
CHLOROFORM	0.31	J	0.25	LOD	0.50	LOQ	ug/L	J	RI
Trichloroethylene	0.45	J	0.25	LOD	0.50	LOQ	ug/L	J	RI

* denotes a non-reportable result

Project Name and Number: - DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA

9/25/2020 13:29:09

ADR version 1.9.0.325

Page 2 of 5

Data Qualifier Summary

Lab Reporting Batch ID: FA77021, FA77472

Laboratory: ACTO

EDD Filename: PrepFA77021ACTO, PrepFA77472ACTO

eQAPP Name: FtOrd_UFP_QAPP_Rev7

SDG: FA77472

Method Category: VOA
Method: EPA8260-SIM **Matrix:** AQ

Sample ID:2032MOU2165F **Collected:**8/4/2020 9:23:00 **Analysis Type:**1RES **Dilution:** 1.00

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,1-DICHLOROETHANE	0.48	J	0.25	LOD	0.50	LOQ	ug/L	J	RI
1,2-DICHLOROETHANE	0.16	J	0.25	LOD	0.50	LOQ	ug/L	J	RI
CHLOROFORM	0.36	J	0.25	LOD	0.50	LOQ	ug/L	J	RI

Sample ID:2032MOU2166F **Collected:**8/4/2020 9:28:00 **Analysis Type:**1RES **Dilution:** 1.00

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,1-DICHLOROETHANE	0.33	J	0.25	LOD	0.50	LOQ	ug/L	J	RI
1,2-DICHLOROETHANE	0.14	J	0.25	LOD	0.50	LOQ	ug/L	J	RI
CHLOROFORM	0.27	J	0.25	LOD	0.50	LOQ	ug/L	J	RI
TETRACHLOROETHYLENE	0.15	J	0.25	LOD	0.50	LOQ	ug/L	U	Tb

Sample ID:2032MOU2167F **Collected:**8/4/2020 9:32:00 **Analysis Type:**1RES **Dilution:** 1.00

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,1-DICHLOROETHANE	0.40	J	0.25	LOD	0.50	LOQ	ug/L	J	RI
1,2-DICHLOROETHANE	0.16	J	0.25	LOD	0.50	LOQ	ug/L	J	RI
CHLOROFORM	0.32	J	0.25	LOD	0.50	LOQ	ug/L	J	RI

Sample ID:2032MOU2168F **Collected:**8/4/2020 9:37:00 **Analysis Type:**1RES **Dilution:** 1.00

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,1-DICHLOROETHANE	0.43	J	0.25	LOD	0.50	LOQ	ug/L	J	RI
1,2-DICHLOROETHANE	0.18	J	0.25	LOD	0.50	LOQ	ug/L	J	RI
CHLOROFORM	0.32	J	0.25	LOD	0.50	LOQ	ug/L	J	RI

Sample ID:2032MOU2169F **Collected:**8/4/2020 9:42:00 **Analysis Type:**1RES **Dilution:** 1.00

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,1-DICHLOROETHANE	0.28	J	0.25	LOD	0.50	LOQ	ug/L	J	RI
CHLOROFORM	0.27	J	0.25	LOD	0.50	LOQ	ug/L	J	RI

* denotes a non-reportable result

Project Name and Number: - DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA

9/25/2020 13:29:09

ADR version 1.9.0.325

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Data Qualifier Summary

Lab Reporting Batch ID: FA77021, FA77472

Laboratory: ACTO

EDD Filename: PrepFA77021ACTO, PrepFA77472ACTO

eQAPP Name: FtOrd_UFP_QAPP_Rev7

SDG: FA77472

Method Category: VOA

Method: EPA8260-SIM

Matrix: AQ

Sample ID: 2032MOU2169F

Collected: 8/4/2020 9:42:00

Analysis Type: 1RES

Dilution: 1.00

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
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Sample ID: 2032MOU2170F

Collected: 8/4/2020 9:46:00

Analysis Type: 1RES

Dilution: 1.00

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,1-DICHLOROETHANE	0.30	J	0.25	LOD	0.50	LOQ	ug/L	J	RI
1,2-DICHLOROETHANE	0.20	J	0.25	LOD	0.50	LOQ	ug/L	J	RI
CHLOROFORM	0.25	J	0.25	LOD	0.50	LOQ	ug/L	J	RI
TETRACHLOROETHYLENE	0.63		0.25	LOD	0.50	LOQ	ug/L	U	Tb

Sample ID: 2032MOU2171D

Collected: 8/4/2020 9:50:00

Analysis Type: 1RES

Dilution: 1.00

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,1-DICHLOROETHANE	0.29	J	0.25	LOD	0.50	LOQ	ug/L	J	RI
1,2-DICHLOROETHANE	0.21	J	0.25	LOD	0.50	LOQ	ug/L	J	RI
CHLOROFORM	0.25	J	0.25	LOD	0.50	LOQ	ug/L	J	RI
TETRACHLOROETHYLENE	0.65		0.25	LOD	0.50	LOQ	ug/L	U	Tb

* denotes a non-reportable result

Project Name and Number: - DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA

9/25/2020 13:29:09

ADR version 1.9.0.325

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Data Qualifier Summary

Lab Reporting Batch ID: FA77021, FA77472

Laboratory: ACTO

EDD Filename: PrepFA77021ACTO, PrepFA77472ACTO

eQAPP Name: FtOrd_UFP_QAPP_Rev7

Reason Code Legend

<i>Reason Code</i>	<i>Description</i>
Headspace	Preservation
Preservation	Preservation
RI	Reporting Limit Trace Value
Tb	Trip Blank Contamination

* denotes a non-reportable result

Project Name and Number: - DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA

9/25/2020 13:29:09

ADR version 1.9.0.325

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Enclosure I
Stage 2B ADR Outliers
(Including Manual Review Outliers)

Quality Control Outlier Reports

FA77021

Reporting Limit Outliers

Lab Reporting Batch ID: FA77021

Laboratory: ACTO

EDD Filename: FA77021ACTO

eQAPP Name: FtOrd_UFP_QAPP_Rev7

Method: EPA8260-SIM

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
2030MOU2158F	1,2-DICHLOROETHANE	J	0.19	0.50	LOQ	ug/L	J (all detects)
	CHLOROFORM	J	0.39	0.50	LOQ	ug/L	
2030MOU2159F	1,1-DICHLOROETHANE	J	0.43	0.50	LOQ	ug/L	J (all detects)
	CHLOROFORM	J	0.32	0.50	LOQ	ug/L	
	TETRACHLOROETHYLENE	J	0.24	0.50	LOQ	ug/L	
2030MOU2160F	1,1-DICHLOROETHANE	J	0.43	0.50	LOQ	ug/L	J (all detects)
	CHLOROFORM	J	0.31	0.50	LOQ	ug/L	
	TETRACHLOROETHYLENE	J	0.21	0.50	LOQ	ug/L	

LDC #: 49030A1b

VALIDATION COMPLETENESS WORKSHEET

Date: 09/18/20

SDG #: FA77021

ADR

Page: 1 of 1

Laboratory: SGS North America, Inc.

Reviewer: *SM*

2nd Reviewer: *KCK*

METHOD: GC/MS Volatiles (EPA SW 846 Method 8260B)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Sample receipt/Technical holding times	N / N	
II.	GC/MS Instrument performance check	A	
III.	Initial calibration/ICV	A/A	ICV = 15% ✓ ICV = 20%
IV.	Continuing calibration	A	CV = 20/50%
V.	Laboratory Blanks	N	
VI.	Field blanks	N	
VII.	Surrogate spikes	N	
VIII.	Matrix spike/Matrix spike duplicates	N	
IX.	Laboratory control samples	N	
X.	Field duplicates	N	
XI.	Internal standards	✓ A	
XII.	Compound quantitation RL/LOQ/LODs	N	
XIII.	Target compound identification	N	
XIV.	System performance	N	
XV.	Overall assessment of data	N	

Note: A = Acceptable
N = Not provided/applicable
SW = See worksheet

ND = No compounds detected
R = Rinsate
FB = Field blank

D = Duplicate
TB = Trip blank
EB = Equipment blank

SB=Source blank
OTHER:

	Client ID	Lab ID	Matrix	Date
1	2030MOU2157A	FA77021-1	Water	07/21/20
2	2030MOU2158F	FA77021-2	Water	07/21/20
3	2030MOU2159F	FA77021-3	Water	07/21/20
4	2030MOU2160F	FA77021-4	Water	07/21/20
5				
6				
7				
8				
9				

Notes:

	V02342 - MB				

Quality Control Outlier Reports

FA77472

Trip Blank Outlier Report

Lab Reporting Batch ID: FA77472

Laboratory: ACTO

EDD Filename: FA77472ACTO

eQAPP Name: FtOrd_UFP_QAPP_Rev7

Method: EPA8260-SIM

Matrix: AQ

Trip Blank Sample ID	Collected Date	Analyte	Result	Associated Samples
2032MOU2161A(1RES)	8/4/2020 8:05:00	METHYLENE CHLORIDE TETRACHLOROETHYLENE	1.5 ug/L 0.14 ug/L	2032MOU2162F 2032MOU2163F 2032MOU2164F 2032MOU2165F 2032MOU2166F 2032MOU2167F 2032MOU2168F 2032MOU2169F 2032MOU2170F 2032MOU2171D

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
2032MOU2163F(1RES)	TETRACHLOROETHYLENE	0.19 ug/L	0.19U ug/L
2032MOU2166F(1RES)	TETRACHLOROETHYLENE	0.15 ug/L	0.15U ug/L
2032MOU2170F(1RES)	TETRACHLOROETHYLENE	0.63 ug/L	0.63U ug/L
2032MOU2171D(1RES)	TETRACHLOROETHYLENE	0.65 ug/L	0.65U ug/L

Field Duplicate RPD Report

Lab Reporting Batch ID: FA77472

Laboratory: ACTO

EDD Filename: FA77472ACTO

eQAPP Name: FtOrd_UFP_QAPP_Rev7

Method: EPA8260-SIM

Matrix: AQ

Analyte	Concentration (ug/L)		Sample RPD	eQAPP RPD	Flag
	2032MOU2170F	2032MOU2171D			
1,1-DICHLOROETHANE	0.30	0.29	3	30.00	No Qualifiers Applied
1,2-DICHLOROETHANE	0.20	0.21	5	30.00	
CHLOROFORM	0.25	0.25	0	30.00	
CIS-1,2-DICHLOROETHYLENE	1.1	1.1	0	30.00	
TETRACHLOROETHYLENE	0.63	0.65	3	30.00	
Trichloroethylene	4.9	4.8	2	30.00	

Reporting Limit Outliers

Lab Reporting Batch ID: FA77472

Laboratory: ACTO

EDD Filename: FA77472ACTO

eQAPP Name: FtOrd_UFP_QAPP_Rev7

Method: EPA8260-SIM
Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
2032MOU2161A	METHYLENE CHLORIDE	J	1.5	2.0	LOQ	ug/L	J (all detects)
	TETRACHLOROETHYLENE	J	0.14	0.50	LOQ	ug/L	
2032MOU2162F	1,1-DICHLOROETHANE	J	0.42	0.50	LOQ	ug/L	J (all detects)
	1,2-DICHLOROETHANE	J	0.16	0.50	LOQ	ug/L	
	CHLOROFORM	J	0.32	0.50	LOQ	ug/L	
2032MOU2163F	1,1-DICHLOROETHANE	J	0.30	0.50	LOQ	ug/L	J (all detects)
	1,2-DICHLOROETHANE	J	0.12	0.50	LOQ	ug/L	
	CHLOROFORM	J	0.25	0.50	LOQ	ug/L	
	TETRACHLOROETHYLENE	J	0.19	0.50	LOQ	ug/L	
2032MOU2164F	1,1-DICHLOROETHANE	J	0.39	0.50	LOQ	ug/L	J (all detects)
	1,2-DICHLOROETHANE	J	0.14	0.50	LOQ	ug/L	
	CHLOROFORM	J	0.31	0.50	LOQ	ug/L	
	Trichloroethylene	J	0.45	0.50	LOQ	ug/L	
2032MOU2165F	1,1-DICHLOROETHANE	J	0.48	0.50	LOQ	ug/L	J (all detects)
	1,2-DICHLOROETHANE	J	0.16	0.50	LOQ	ug/L	
	CHLOROFORM	J	0.36	0.50	LOQ	ug/L	
2032MOU2166F	1,1-DICHLOROETHANE	J	0.33	0.50	LOQ	ug/L	J (all detects)
	1,2-DICHLOROETHANE	J	0.14	0.50	LOQ	ug/L	
	CHLOROFORM	J	0.27	0.50	LOQ	ug/L	
	TETRACHLOROETHYLENE	J	0.15	0.50	LOQ	ug/L	
2032MOU2167F	1,1-DICHLOROETHANE	J	0.40	0.50	LOQ	ug/L	J (all detects)
	1,2-DICHLOROETHANE	J	0.16	0.50	LOQ	ug/L	
	CHLOROFORM	J	0.32	0.50	LOQ	ug/L	
2032MOU2168F	1,1-DICHLOROETHANE	J	0.43	0.50	LOQ	ug/L	J (all detects)
	1,2-DICHLOROETHANE	J	0.18	0.50	LOQ	ug/L	
	CHLOROFORM	J	0.32	0.50	LOQ	ug/L	
2032MOU2169F	1,1-DICHLOROETHANE	J	0.28	0.50	LOQ	ug/L	J (all detects)
	CHLOROFORM	J	0.27	0.50	LOQ	ug/L	
2032MOU2170F	1,1-DICHLOROETHANE	J	0.30	0.50	LOQ	ug/L	J (all detects)
	1,2-DICHLOROETHANE	J	0.20	0.50	LOQ	ug/L	
	CHLOROFORM	J	0.25	0.50	LOQ	ug/L	
2032MOU2171D	1,1-DICHLOROETHANE	J	0.29	0.50	LOQ	ug/L	J (all detects)
	1,2-DICHLOROETHANE	J	0.21	0.50	LOQ	ug/L	
	CHLOROFORM	J	0.25	0.50	LOQ	ug/L	

LDC #: 49030B1b
 SDG #: FA77472
 Laboratory: SGS North America, Inc.

VALIDATION COMPLETENESS WORKSHEET

ADR/Stage 4

Date: 9/18/20
 Page: 1 of 2
 Reviewer: JVB
 2nd Reviewer: KCC

METHOD: GC/MS Volatiles (EPA SW 846 Method 8260B-SIM)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Sample receipt/Technical holding times	SW, N	
II.	GC/MS Instrument performance check	A	
III.	Initial calibration/ICV	A, A	ICAL $\leq 15\%$ ✓ ICV $\leq 20\%$
IV.	Continuing calibration	A	CCV $\leq 20\%$ (50%)
V.	Laboratory Blanks	N	Not reviewed for ADR validation.
VI.	Field blanks		
VII.	Surrogate spikes		Not reviewed for ADR validation.
VIII.	Matrix spike/Matrix spike duplicates		Not reviewed for ADR validation.
IX.	Laboratory control samples		Not reviewed for ADR validation.
X.	Field duplicates		
XI.	Internal standards	A	Not reviewed for ADR validation.
XII.	Compound quantitation RL/LOQ/LODs	N	Not reviewed for ADR validation.
XIII.	Target compound identification		Not reviewed for ADR validation.
XIV.	System performance		Not reviewed for ADR validation.
XV.	Overall assessment of data		Not reviewed for ADR validation.

Note: A = Acceptable ND = No compounds detected D = Duplicate SB=Source blank
 N = Not provided/applicable R = Rinsate TB = Trip blank OTHER:
 SW = See worksheet FB = Field blank EB = Equipment blank

** Indicates sample underwent Stage 4 validation

	Client ID	Lab ID	Matrix	Date
1	2032MOU2161A	FA77472-1	Water	08/04/20
2	2032MOU2162F	FA77472-2	Water	08/04/20
3	2032MOU2163F**	FA77472-3**	Water	08/04/20
4	2032MOU2164F	FA77472-4	Water	08/04/20
5	2032MOU2165F	FA77472-5	Water	08/04/20
6	2032MOU2166F	FA77472-6	Water	08/04/20
7	2032MOU2167F**	FA77472-7**	Water	08/04/20
8	2032MOU2168F	FA77472-8	Water	08/04/20
9	2032MOU2169F	FA77472-9	Water	08/04/20
10	2032MOU2170F	FA77472-10	Water	08/04/20
11	2032MOU2171D	FA77472-11	Water	08/04/20
12	2032MOU2162FMS	FA77472-2MS	Water	08/04/20
13	2032MOU2162FMMSD	FA77472-2MSD	Water	08/04/20
14	2032MOU2170FMS	FA77472-10MS	Water	08/04/20

LDC #: 49030B1b **VALIDATION COMPLETENESS WORKSHEET**
 SDG #: FA77472 **ADR/Stage 4**
 Laboratory: SGS North America, Inc.

Date: 9/18/20
 Page: 2 of 2
 Reviewer: JVB
 2nd Reviewer: KK

METHOD: GC/MS Volatiles (EPA SW 846 Method 8260B-SIM)

	Client ID	Lab ID	Matrix	Date
15	2032MOU2170FMSD	FA77472-10MSD	Water	08/04/20
16				
17				
18				

Notes:

Enclosure II

Stage 4 Data Validation Reports

Laboratory Data Consultants, Inc. Data Validation Report

Project/Site Name: Fort Ord, OU2
LDC Report Date: September 21, 2020
Parameters: Volatiles
Validation Level: Stage 4
Laboratory: SGS North America, Inc.
Sample Delivery Group (SDG): FA77472

Sample Identification	Laboratory Sample Identification	Matrix	Collection Date
2032MOU2163F	FA77472-3	Water	08/04/20
2032MOU2167F	FA77472-7	Water	08/04/20

Introduction

This Data Validation Report (DVR) presents data validation findings and results for the associated samples listed on the cover page. Data validation was performed in accordance with the Final Quality Assurance Project Plan Volume I, Appendix A for Groundwater Remedies and Monitoring at Operable Unit 2, Sites 2 and 12, and Operable Unit Carbon Tetrachloride Plume, Former Fort Ord, California (Revision 7, August 2019), the U.S. Department of Defense (DoD) Quality Systems Manual (QSM) for Environmental Laboratories, Version 5.1 (2017), and the USACE Guidance for Evaluating Performance-Based Chemical Data (June 2005). Where specific guidance was not available, the data has been evaluated in a conservative manner consistent with industry standards using professional experience.

The analyses were performed by the following method:

Volatile Organic Compounds (VOCs) by Environmental Protection Agency (EPA) SW 846 Method 8260B in Selected Ion Monitoring (SIM) mode

All sample results were subjected to Stage 4 data validation, which is comprised of the quality control (QC) summary forms as well as the raw data, to confirm sample quantitation and identification.

The following are definitions of the data qualifiers utilized during data validation:

- J+ (Estimated, High Bias): The compound or analyte was analyzed for and positively identified by the laboratory; however the reported concentration is estimated, displaying high bias, due to non-conformances discovered during data validation.
- J- (Estimated, Low Bias): The compound or analyte was analyzed for and positively identified by the laboratory; however the reported concentration is estimated, displaying low bias, due to non-conformances discovered during data validation.
- J (Estimated, Bias Indeterminate): The compound or analyte was analyzed for and positively identified by the laboratory; however the reported concentration is estimated due to non-conformances discovered during data validation. Bias is indeterminate.
- U (Non-detected): The compound or analyte was analyzed for and positively identified by the laboratory; however the compound or analyte should be considered non-detected at the reported concentration due to the presence of contaminants detected in the associated blank(s).
- UJ (Non-detected estimated): The compound or analyte was reported as not detected by the laboratory; however the reported quantitation/detection limit is estimated due to non-conformances discovered during data validation.
- R (Rejected): The sample results were rejected due to gross non-conformances discovered during data validation. Data qualified as rejected is not usable.
- NA (Not Applicable): The non-conformance discovered during data validation demonstrates a high bias, while the affected compound or analyte in the associated sample(s) was reported as not detected by the laboratory and did not warrant the qualification of the data.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

I. Sample Receipt and Technical Holding Times

All samples were received in good condition and cooler temperatures upon receipt met validation criteria.

All technical holding time requirements were met.

II. GC/MS Instrument Performance Check

A bromofluorobenzene (BFB) tune was performed at 12 hour intervals.

All ion abundance requirements were met.

III. Initial Calibration and Initial Calibration Verification

An initial calibration was performed as required by the method.

For compounds where average relative response factors (RRFs) were utilized, the percent relative standard deviations (%RSD) were less than or equal to 15.0%.

In the case where the laboratory used a calibration curve to evaluate the compounds, all coefficients of determination (r^2) were greater than or equal to 0.990.

Average relative response factors (RRF) for all compounds were within validation criteria.

The percent differences (%D) of the initial calibration verification (ICV) standard were less than or equal to 20.0% for all compounds.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

The percent differences (%D) were less than or equal to 20.0% for all compounds.

The percent differences (%D) of the ending continuing calibration verifications (CCVs) were less than or equal to 50.0% for all compounds.

All of the continuing calibration relative response factors (RRF) were within validation criteria.

V. Laboratory Blanks

Laboratory blanks were analyzed as required by the method. No contaminants were found in the laboratory blanks.

VI. Field Blanks

Sample 2032MOU2161A was identified as a trip blank. No contaminants were found with the following exceptions:

Blank ID	Collection Date	Compound	Concentration	Associated Samples
2032MOU2161A	08/04/20	Methylene chloride Tetrachloroethene	1.5 ug/L 0.14 ug/L	All samples in SDG FA77472

Sample concentrations were compared to concentrations detected in the field blanks. The sample concentrations were either not detected or were significantly greater (>10X for common contaminants, >5X for other contaminants) than the concentrations found in the associated field blanks with the following exceptions:

Sample	Compound	Reported Concentration	Modified Final Concentration
2032MOU2163F	Tetrachloroethene	0.19 ug/L	0.19U ug/L

VII. Surrogates

Surrogates were added to all samples as required by the method. All surrogate recoveries (%R) were within QC limits.

VIII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) sample analysis was performed on an associated project sample. Percent recoveries (%R) were within QC limits. Relative percent differences (RPD) were within QC limits.

IX. Laboratory Control Samples

Laboratory control samples (LCS) were analyzed as required by the method. Percent recoveries (%R) were within QC limits.

X. Field Duplicates

No field duplicates were identified in this SDG.

XI. Internal Standards

All internal standard areas and retention times were within QC limits.

XII. Compound Quantitation

All compound quantitations met validation criteria.

All compounds reported below the limit of quantitation (LOQ) were qualified as follows:

Sample	Finding	Flag	A or P
2032MOU2163F 2032MOU2167F	All compounds reported below the LOQ.	J (all detects)	A

XIII. Target Compound Identifications

All target compound identifications met validation criteria.

XIV. System Performance

The system performance was acceptable.

XV. Overall Assessment of Data

The analysis was conducted within all specifications of the method. No results were rejected in this SDG.

Due to results below the LOQ, data were qualified as estimated in two samples.

Due to laboratory blank contamination, data were qualified as not detected in one sample.

The quality control criteria reviewed, other than those discussed above, were met and are considered acceptable.

**Fort Ord, OU2
Volatiles - Data Qualification Summary - SDG FA77472**

Sample	Compound	Flag	A or P	Reason
2032MOU2163F 2032MOU2167F	All compounds reported below the LOQ.	J (all detects)	A	Compound quantitation

**Fort Ord, OU2
Volatiles - Laboratory Blank Data Qualification Summary - SDG FA77472**

Sample	Compound	Modified Final Concentration	A or P
2032MOU2163F	Tetrachloroethene	0.19U ug/L	A

**Fort Ord, OU2
Volatiles - Field Blank Data Qualification Summary - SDG FA77472**

No Sample Data Qualified in this SDG

LDC #: 49030B1b

VALIDATION COMPLETENESS WORKSHEET

Date: 09/18/20

SDG #: FA77472

ADR/Stage 4

Page: 1 of 2

Laboratory: SGS North America, Inc.

Reviewer: JG
2nd Reviewer: J

METHOD: GC/MS Volatiles (EPA SW 846 Method 8260B-SIM)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Sample receipt/Technical holding times	A/A	
II.	GC/MS Instrument performance check	A	
III.	Initial calibration/ICV	A/A	ICAL \leq 15% \checkmark ICV \leq 20%
IV.	Continuing calibration	A	COV \leq 20/50%
V.	Laboratory Blanks	A	Not reviewed for ADR validation.
VI.	Field blanks	SW	TB = 1
VII.	Surrogate spikes	A	Not reviewed for ADR validation.
VIII.	Matrix spike/Matrix spike duplicates	A	Not reviewed for ADR validation.
IX.	Laboratory control samples	A	Not reviewed for ADR validation. LCS
X.	Field duplicates	N	
XI.	Internal standards	A	Not reviewed for ADR validation.
XII.	Compound quantitation RL/LOQ/LODs	A	Not reviewed for ADR validation.
XIII.	Target compound identification	A	Not reviewed for ADR validation.
XIV.	System performance	A	Not reviewed for ADR validation.
XV.	Overall assessment of data	A	Not reviewed for ADR validation.

Note: A = Acceptable
N = Not provided/applicable
SW = See worksheet

ND = No compounds detected
R = Rinsate
FB = Field blank

D = Duplicate
TB = Trip blank
EB = Equipment blank

SB=Source blank
OTHER:

** Indicates sample underwent Stage 4 validation

	Client ID	Lab ID	Matrix	Date
1	2032MOU2164A	FA77472-1	Water	08/04/20
2	2032MOU2162F	FA77472-2	Water	08/04/20
3	2032MOU2163F**	FA77472-3**	Water	08/04/20
4	2032MOU2164F	FA77472-4	Water	08/04/20
5	2032MOU2165F	FA77472-5	Water	08/04/20
6	2032MOU2166F	FA77472-6	Water	08/04/20
7	2032MOU2167F**	FA77472-7**	Water	08/04/20
8	2032MOU2168F	FA77472-8	Water	08/04/20
9	2032MOU2169F	FA77472-9	Water	08/04/20
10	2032MOU2170F	FA77472-10	Water	08/04/20
11	2032MOU2171D	FA77472-11	Water	08/04/20
12	2032MOU2162FMS	FA77472-2MS	Water	08/04/20
13	2032MOU2162FMSD	FA77472-2MSD	Water	08/04/20
14	2032MOU2170FMS	FA77472-10MS	Water	08/04/20

LDC #: 49030B1b

VALIDATION COMPLETENESS WORKSHEET

Date: 09/18/20

SDG #: FA77472

ADR/Stage 4

Page: 2 of 2

Laboratory: SGS North America, Inc.

Reviewer: SVB

2nd Reviewer: [Signature]

METHOD: GC/MS Volatiles (EPA SW 846 Method 8260B-SIM)

	Client ID	Lab ID	Matrix	Date
15	2032MOU2170FMSD	FA77472-10MSD	Water	08/04/20
16				
17				
18				

Notes:

-	V02343 - MB					

(short list)

Method: Volatiles (EPA SW 846 Method 8260B)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
Were all technical holding times met?	/			
Was cooler temperature criteria met?	/			
II. GC/MS Instrument performance check				
Were the BFB performance results reviewed and found to be within the specified criteria?	/			
Were all samples analyzed within the 12 hour clock criteria?	/			
IIIa. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	/			
Were all percent relative standard deviations (%RSD) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	/			
Was a curve fit used for evaluation? If yes, did the initial calibration meet the curve fit acceptance criteria of > 0.990?	/			
Were all percent relative standard deviations (%RSD) ≤ 30%/15% and relative response factors (RRF) ≥ 0.05?	/			
IIIb. Initial Calibration Verification				
Was an initial calibration verification standard analyzed after each initial calibration for each instrument?	/			
Were all percent differences (%D) < 20%?	/			
IV. Continuing calibration				
Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?	/			
Were all percent differences (%D) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	/			
Were all percent differences (%D) ≤ 20% and relative response factors (RRF) ≥ 0.05?	/			
V. Laboratory Blanks				
Was a laboratory blank associated with every sample in this SDG?	/			
Was a laboratory blank analyzed at least once every 12 hours for each matrix and concentration?	/			
Was there contamination in the laboratory blanks?		/		
VI. Field blanks				
Were field blanks were identified in this SDG?	/			
Were target compounds detected in the field blanks?	/			
VII. Surrogate spikes				
Were all surrogate percent recovery (%R) within QC limits?	/			
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?			/	

Validation Area	Yes	No	NA	Findings/Comments
VIII. Matrix spike/Matrix spike duplicates				
Were matrix spike (MS) and matrix spike duplicate (MSD) analyzed in this SDG?	/			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?	/			
IX. Laboratory control samples				
Was an LCS analyzed per analytical batch?	/			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	/			
X. Field duplicates				
Were field duplicate pairs identified in this SDG?	.	/		
Were target compounds detected in the field duplicates?			/	
XI. Internal standards				
Were internal standard area counts within -50% to +100% of the associated calibration standard?	/			
Were retention times within + 30 seconds of the associated calibration standard?	/			
XII. Compound quantitation				
Did the laboratory LOQs/RLs meet the QAPP LOQs/RLs?	/			
Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the compound?	/			
Were compound quantitation and RLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	/			
XIII. Target compound identification				
Were relative retention times (RRT's) within + 0.06 RRT units of the standard?	/			
Did compound spectra meet specified EPA "Functional Guidelines" criteria?	/			
Were chromatogram peaks verified and accounted for?	/			
XIV. System performance				
System performance was found to be acceptable.	/			
XV. Overall assessment of data				
Overall assessment of data was found to be acceptable.	/			

TARGET COMPOUND WORKSHEET

METHOD: VOA

A. Chloromethane	AA. Tetrachloroethene	AAA. 1,3,5-Trimethylbenzene	AAAA. Ethyl tert-butyl ether	A1. 1,3-Butadiene	A2.
B. Bromomethane	BB. 1,1,2,2-Tetrachloroethane	BBB. 4-Chlorotoluene	BBBB. tert-Amyl methyl ether	B1. Hexane	B2.
C. Vinyl chloride	CC. Toluene	CCC. tert-Butylbenzene	CCCC. 1-Chlorohexane	C1. Heptane	C2.
D. Chloroethane	DD. Chlorobenzene	DDD. 1,2,4-Trimethylbenzene	DDDD. Isopropyl alcohol	D1. Propylene	D2.
E. Methylene chloride	EE. Ethylbenzene	EEE. sec-Butylbenzene	EEEE. Acetonitrile	E1. Freon 11	E2.
F. Acetone	FF. Styrene	FFF. 1,3-Dichlorobenzene	FFFF. Acrolein	F1. Freon 12	F2.
G. Carbon disulfide	GG. Xylenes, total	GGG. p-Isopropyltoluene	GGGG. Acrylonitrile	G1. Freon 113	G2.
H. 1,1-Dichloroethene	HH. Vinyl acetate	HHH. 1,4-Dichlorobenzene	HHHH. 1,4-Dioxane	H1. Freon 114	H2.
I. 1,1-Dichloroethane	II. 2-Chloroethylvinyl ether	III. n-Butylbenzene	IIII. Isobutyl alcohol	I1. 2-Nitropropane	I2.
J. 1,2-Dichloroethene, total	JJ. Dichlorodifluoromethane	JJJ. 1,2-Dichlorobenzene	JJJJ. Methacrylonitrile	J1. Dimethyl disulfide	J2.
K. Chloroform	KK. Trichlorofluoromethane	KKK. 1,2,4-Trichlorobenzene	KKKK. Propionitrile	K1. 2,3-Dimethyl pentane	K2.
L. 1,2-Dichloroethane	LL. Methyl-tert-butyl ether	LLL. Hexachlorobutadiene	LLLL. Ethyl ether	L1. 2,4-Dimethyl pentane	L2.
M. 2-Butanone	MM. 1,2-Dibromo-3-chloropropane	MMM. Naphthalene	MMMM. Benzyl chloride	M1. 3,3-Dimethyl pentane	M2.
N. 1,1,1-Trichloroethane	NN. Methyl ethyl ketone	NNN. 1,2,3-Trichlorobenzene	NNNN. Iodomethane	N1. 2-Methylpentane	N2.
O. Carbon tetrachloride	OO. 2,2-Dichloropropane	OOO. 1,3,5-Trichlorobenzene	OOOO. 1,1-Difluoroethane	O1. 3-Methylpentane	O2.
P. Bromodichloromethane	PP. Bromochloromethane	PPP. trans-1,2-Dichloroethene	PPPP. Tetrahydrofuran	P1. 3-Ethylpentane	P2.
Q. 1,2-Dichloropropane	QQ. 1,1-Dichloropropene	QQQ. cis-1,2-Dichloroethene	QQQQ. Methyl acetate	Q1. 2,2-Dimethylpentane	Q2.
R. cis-1,3-Dichloropropene	RR. Dibromomethane	RRR. m,p-Xylenes	RRRR. Ethyl acetate	R1. 2,2,3-Trimethylbutane	R2.
S. Trichloroethene	SS. 1,3-Dichloropropane	SSS. o-Xylene	SSSS. Cyclohexane	S1. 2,2,4-Trimethylpentane	S2.
T. Dibromochloromethane	TT. 1,2-Dibromoethane	TTT. 1,1,2-Trichloro-1,2,2-trifluoroethane	TTTT. Methylcyclohexane	T1. 2-Methylhexane	T2.
U. 1,1,2-Trichloroethane	UU. 1,1,1,2-Tetrachloroethane	UUU. 1,2-Dichlorotetrafluoroethane	UUUU. Allyl chloride	U1. Nonanal	U2.
V. Benzene	VV. Isopropylbenzene	VVV. 4-Ethyltoluene	VVVV. Methyl methacrylate	V1. 2-Methylnaphthalene	V2.
W. trans-1,3-Dichloropropene	WW. Bromobenzene	WWW. Ethanol	WWWW. Ethyl methacrylate	W1. Methanol	W2.
X. Bromoform	XX. 1,2,3-Trichloropropane	XXX. Di-isopropyl ether	XXXX. cis-1,4-Dichloro-2-butene	X1. 1,2,3-Trimethylbenzene	X2.
Y. 4-Methyl-2-pentanone	YY. n-Propylbenzene	YYY. tert-Butanol	YYYY. trans-1,4-Dichloro-2-butene	Y1. 2-Propanol	Y2.
Z. 2-Hexanone	ZZ. 2-Chlorotoluene	ZZZ. tert-Butyl alcohol	ZZZZ. Pentachloroethane	Z1.	Z2.

LDC #: 49030 B1b

VALIDATION FINDINGS WORKSHEET

Field Blanks

Page: 1 of 1
Reviewer: JVG

METHOD: GC/MS VOA (EPA SW 846 Method 8260 B-SIM)

N N/A Were field blanks identified in this SDG?
 N N/A Were target compounds detected in the field blanks?

Blank units: ug/L Associated sample units: ug/L

Sampling date: _____

Field blank type: (circle one) Field Blank / Rinsate / Trip Blank / Other: _____ Associated Samples: All

Compound	Blank ID	Sample Identification							
	1	16x/5x		3					
E	1.5	15							
AA	0.14	0.7		0.19/u					

Blank units: _____ Associated sample units: _____

Sampling date: _____

Field blank type: (circle one) Field Blank / Rinsate / Trip Blank / Other: _____ Associated Samples: _____

Compound	Blank ID	Sample Identification							

Common contaminants such as Methylene chloride, Acetone, 2-Butanone and Carbon disulfide that were detected in samples within ten times the associated field blank concentration were qualified as not detected, "U". Other contaminants within five times the field blank concentration were also qualified as not detected, "U".

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

METHOD: GC/MS VOA (EPA SW 846 Method 8260B-SIM)

The Relative Response Factor (RRF), average RRF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

$$RRF = (A_x)(C_{is}) / (A_{is})(C_x)$$

average RRF = sum of the RRFs/number of standards

$$\%RSD = 100 * (S/X)$$

 A_x = Area of Compound C_x = Concentration of compound,

S= Standard deviation of the RRFs,

 A_{is} = Area of associated internal standard C_{is} = Concentration of internal standard

X = Mean of the RRFs

#	Standard ID	Calibration Date	Compound (IS)	Reported RRF (RRF 5.0 std)	Recalculated RRF (RRF 5.0 std)	Reported Average RRF (Initial)	Recalculated Average RRF (Initial)	Reported %RSD	Recalculated %RSD
1	ICAL GCMS12	06/08/20	Trichloroethene (FBZ)	0.469	0.469	0.488	0.488	9.71	9.65
			Tetrachloroethene (CBZ)	0.620	0.620	0.640	0.640	6.60	6.60

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

METHOD: GC/MS VOA (EPA SW 846 Method 8260B-SIM)

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the compounds identified below using the following calculation:

$$\% \text{ Difference} = 100 * (\text{ave. RRF} - \text{RRF}) / \text{ave. RRF}$$

$$\text{RRF} = (\text{Ax})(\text{Cis}) / (\text{Ais})(\text{Cx})$$

Where:

ave. RRF = initial calibration average RRF

RRF = continuing calibration RRF

Ax = Area of compound,

Cx = Concentration of compound,

Ais = Area of associated internal standard

Cis = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (IS)	Average RRF (Initial)	Reported RRF (CC)	Recalculated RRF (CC)	Reported % D	Recalculated %D
1	O60961	08/06/20	Trichloroethene (FBZ)	0.488	0.444	0.444	9.0	9.0
			Tetrachloroethene (CBZ)	0.640	0.558	0.558	12.8	12.8

LDC #: 49030 B1b

VALIDATION FINDINGS WORKSHEET Surrogate Results Verification

Page: 1 of 1
Reviewer: JVG

METHOD: GC/MS VOA (EPA SW 846 Method 8260B) *(sim)*

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: $SF/SS * 100$

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: # 3

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane					
1,2-Dichloroethane-d4	5.0	5.25	105	105	0
Toluene-d8	↓	4.90	98	98	↓
Bromofluorobenzene					

Sample ID: _____

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane					
1,2-Dichloroethane-d4					
Toluene-d8					
Bromofluorobenzene					

Sample ID: _____

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane					
1,2-Dichloroethane-d4					
Toluene-d8					
Bromofluorobenzene					

LDC #: 49030 B1b

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates Results Verification

Page: 1 of 1
 Reviewer: JVG

METHOD: GC/MS VOA (EPA SW 846 Method 8260B) *SIM*

The percent recoveries (%R) and Relative Percent Difference (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * (SSC - SC)/SA

Where: SSC = Spiked sample concentration
 SA = Spike added
 SC = Sample concentration

MSC = Matrix spike concentration
 MSDC = Matrix spike duplicate concentration

RPD = | MSC - MSDC | * 2 / (MSC + MSDC)

MS/MSD sample: 12 / 13

Compound	Spike Added (ug/L)		Sample Concentration (ug/L)	Spiked Sample Concentration (ug/L)		Matrix Spike		Matrix Spike Duplicate		MS/MSD	
	MS	MSD		MS	MSD	Percent Recovery		Percent Recovery		RPD	
						Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
1,1-Dichloroethene											
Trichloroethene	25.0	25.0	0	25.6	22.6	102	102	90	90	12	12
Benzene	L	L	L	26.7	23.8	107	107	95	95	11	11
Toluene											
Chlorobenzene											

Comments: _____

LDC #: 49036 B1b

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample Results Verification

Page: 1 of 1
Reviewer: JVGMETHOD: GC/MS VOA (EPA SW 846 Method 8260B) S/M

The percent recoveries (%R) and Relative Percent Difference (RPD) of the laboratory control sample and laboratory control sample duplicate (if applicable) were recalculated for the compounds identified below using the following calculation:

% Recovery = $100 * SSC/SA$ Where: SSC = Spiked sample concentration
SA = Spike addedRPD = $|LCS - LCSD| * 2 / (LCS + LCSD)$

LCS = Laboratory control sample concentration LCSD = Laboratory control sample duplicate concentration

LCS ID: V02343-B5

Compound	Spike Added (ug/L)		Spiked Sample Concentration (ug/L)		LCS		LCSD		LCS/LCSD	
	LCS	LCSD	LCS	LCSD	Percent Recovery		Percent Recovery		RPD	
					Reported	Recalc.	Reported	Recalc.	Reported	Recalculated
1,1-Dichloroethene										
Trichloroethene	5.0	NA	4.9	NA	88	88				
Benzene	↓	↓	4.3	↓	86	86				
Toluene										
Chlorobenzene										

Comments: _____

LDC #: 49030810

VALIDATION FINDINGS WORKSHEET

Sample Calculation Verification

Page: 1 of 1
Reviewer: JVG

METHOD: GC/MS VOA (EPA SW 846 Method 8260B) S/M

Y N N/A
Y N N/A

Were all reported results recalculated and verified for all level IV samples?

Were all recalculated results for detected target compounds agree within 10.0% of the reported results?

$$\text{Concentration} = \frac{(A_x)(I_s)(DF)}{(A_{is})(RRF)(V_o)(\%S)}$$

A_x = Area of the characteristic ion (EICP) for the compound to be measured

A_{is} = Area of the characteristic ion (EICP) for the specific internal standard

I_s = Amount of internal standard added in nanograms (ng)

RRF = Relative response factor of the calibration standard.

V_o = Volume or weight of sample pruged in milliliters (ml) or grams (g).

Df = Dilution factor.

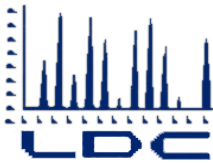
%S = Percent solids, applicable to soils and solid matrices only.

Example:

Sample I.D. 3, TCE

$$\text{Conc.} = \frac{(89099)(5.0)}{(290763)(0.458)} = 3.14 \approx 3.1 \mu\text{g/L}$$

#	Sample ID	Compound	Reported Concentration ($\mu\text{g/L}$)	Calculated Concentration ($\mu\text{g/L}$)	Qualification
	3	TCE	3.1	3.1	—



LABORATORY DATA CONSULTANTS, INC.

2701 Loker Ave. West, Suite 220, Carlsbad, CA 92010 Bus: 760-827-1100 Fax: 760-827-1099

AHTNA
296 12th Street
Marina, CA 93933
ATTN: Mr. Eric A. Schmidt
Eschmidt@ahtna.net

October 20, 2020

SUBJECT: Fort Ord, OU2, Data Validation

Dear Mr. Schmidt,

Enclosed are the final validation reports for the fractions listed below. These SDGs were received on September 29, 2020. Attachment 1 is a summary of the samples that were reviewed for each analysis.

LDC Project #49260:

<u>SDG #</u>	<u>Fraction</u>
FA78442, FA78549 FA78551, FA79006	Volatiles, Metals

The data validation was performed under Stage 2B & 4 guidelines. The analyses were validated using the following documents, as applicable to each method:

- Final Quality Assurance Project Plan Volume I, Appendix A for Groundwater Remedies and Monitoring at Operable Unit 2, Sites 2 and 12, and Operable Unit Carbon Tetrachloride Plume, Former Fort Ord, California; Revision 7, August 2019
- U.S. Department of Defense Quality Systems Manual for Environmental Laboratories, Version 5.1; 2017
- USACE Guidance for Evaluating Performance-Based Chemical Data; June 2005
- EPA SW 846, Third Edition, Test Methods for Evaluating Solid Waste, update 1, July 1992; update IIA, August 1993; update II, September 1994; update IIB, January 1995; update III, December 1996; update IIIA, April 1998; IIIB, November 2004; update IV, February 2007; update V, July 2014

Please feel free to contact us if you have any questions.

Sincerely,

Pei Geng
Pgeng@lab-data.com
Project Manager/Senior Chemist

**Data Validation Report
Fort Ord, OU2**

SDGs: FA78442, FA78549, FA78551 and FA79006

Prepared for

Ahtna Environmental Inc.
296 12th Street
Marina, California 93933-6001

Prepared by

Laboratory Data Consultants, Inc
2701 Loker Ave West, Suite 220
Carlsbad, CA 92010

October 19, 2020

INTRODUCTION

This Data Validation Report (DVR) presents Stage 2B and Stage 4 data validation results for samples collected during the September 2020 sampling period. Data validation was performed in accordance with the Final Quality Assurance Project Plan Volume I, Appendix A for Groundwater Remedies and Monitoring at Operable Unit 2, Sites 2 and 12, and Operable Unit Carbon Tetrachloride Plume, Former Fort Ord, California (Revision 7, August 2019), the U.S. Department of Defense (DoD) Quality Systems Manual (QSM) for Environmental Laboratories, Version 5.1 (2017), and the USACE Guidance for Evaluating Performance-Based Chemical Data (June 2005). Where specific guidance is not available, the data has been evaluated in a conservative manner consistent with industry standards using professional experience.

The analyses were performed by the following method:

Volatile Organic Compounds (VOCs) by Environmental Protection Agency (EPA) SW 846 Method 8260B in Selection Ion Monitoring (SIM) mode
Dissolved Metals by EPA SW 846 Method 6010C

The sample identification and method of analyses performed on each sample is presented in Attachment 1. Overall data qualification summary is presented in Attachment 2. Stage 2B Automated Data Review outliers are presented in Enclosure I. DVRs for samples on which Stage 4 validation was performed are presented in Enclosure II.

All sample results were subjected to Stage 2B data validation, which comprises an evaluation of quality control (QC) summary results for sample holding times, initial and continuing calibrations, surrogates, matrix spike/matrix spike duplicates (MS/MSD), internal standards, laboratory control sample (LCS), laboratory blanks, trip blanks, field blanks, and field duplicates. Approximately 10 percent of samples were subjected to Stage 4 evaluation as indicated in Attachment 1, which comprises a review of the QC summary forms as well as the raw data, to confirm sample quantitation and identification.

Automated data review was performed on all QC summary results using the Automated Data Review (ADR) software program (LDC, 2013) with the exception of the calibrations and internal standards, which were validated manually. Quality assurance (QA)/QC criteria specified in the QAPP, DoD QSM, and EM-200-1-10 were incorporated with the program's reference library to assess compliance with project requirements.

The following are definitions of the data qualifiers utilized during data validation:

- J+ (Estimated, High Bias): The compound or analyte was analyzed for and positively identified by the laboratory; however the reported concentration is estimated, displaying high bias, due to non-conformances discovered during data validation.
- J- (Estimated, Low Bias): The compound or analyte was analyzed for and positively identified by the laboratory; however the reported concentration is estimated, displaying low bias, due to non-conformances discovered during data validation.
- J (Estimated, Bias Indeterminate): The compound or analyte was analyzed for and positively identified by the laboratory; however the reported concentration is estimated due to non-conformances discovered during data validation. Bias is indeterminate.
- U (Non-detected): The compound or analyte was analyzed for and positively identified by the laboratory; however the analyte should be considered non-detect at the reported concentration due to the presence of contaminants detected in the associated blank(s).
- UJ (Non-detected estimated): The compound or analyte was reported as not detected by the laboratory; however the reported quantitation/detection limit is estimated due to non-conformances discovered during data validation.
- R (Rejected): The sample results were rejected due to gross non-conformances discovered during data validation. Data qualified as rejected is not usable.
- NA (Not applicable): The non-conformance discovered during data validation demonstrates a high bias, while the affected compound or analyte in the associated sample(s) was reported as not detected by the laboratory and did not warrant the qualification of the data.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

I. Sample Receipt & Technical Holding Times

All samples were received in good condition and cooler temperatures upon receipt met validation criteria.

All technical holding time requirements were met.

II. Instrument Performance Check

Instrument performance was checked at the frequency required by each method.

All criteria for the instrument performance check were met.

III. Initial Calibration and Initial Calibration Verification

All criteria for the initial calibration and initial calibration verifications of each method were met.

IV. Continuing Calibration

All criteria for the continuing calibration verifications of each method were met.

V. Laboratory Blanks

Laboratory blanks were performed as required by the method. No contaminant concentrations were detected in the laboratory blanks reviewed by the ADR software program with the exception of two blanks for methylene chloride. The associated sample results were qualified as non-detected (U) due to laboratory blank contamination as applicable. The sample results that were not detected or were significantly greater than the concentrations found in the associated blanks were not qualified. The details regarding the qualification of data are provided in Enclosure I.

VI. Field Blanks

Five trip blanks were collected and analyzed for VOCs. One trip blank had detections for methylene chloride and tetrachloroethylene. The associated sample results were qualified as non-detected (U) due to trip blank contamination as applicable. The sample results that were not detected or were significantly greater than the concentrations found in the trip blank were not qualified. The laboratory indicated that the trip blank was contaminated with tetrachloroethylene due to problems when the trip blanks were produced and no tetrachloroethylene results were qualified. The trip blank outlier reports are presented in Enclosures I and II.

Two field blanks were collected and analyzed for VOCs. No contaminants were found.

VII. Surrogates

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits with the exception of several samples for VOCs. The associated sample results were qualified as detected estimated (J-/J+) or non-detected estimated (UJ) as applicable. No data were qualified due to high %Rs when the associated sample results were non-detected. The details regarding the qualification of data are provided in Enclosures I and II.

VIII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) sample analysis was performed on associated project samples. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the exception of several MS/MSD pairs for several VOCs. No data were qualified due to high %Rs when the associated sample results were non-detected. The associated sample results were qualified as detected estimated (J+) as applicable. The details regarding the qualification of data are provided in Enclosures I and II.

IX. Laboratory Control Samples

Laboratory control samples (LCS) were analyzed as required by the method. Percent recoveries (%R) were within QC limits.

X. Field Duplicates

Eight field duplicate pairs were collected and analyzed for VOCs. All RPDs were within QC limits. The field duplicate result comparisons are provided in Enclosures I and II.

XI. Internal Standards

All internal standard areas and retention times were within QC limits.

XII. Compound Quantitation

The laboratory reporting limits were evaluated. All laboratory reporting limits met the specified requirements.

All compounds reported below the limit of quantitation (LOQ) as detected by the laboratory were qualified as detected estimated (J). The details regarding the qualification of data are provided in Enclosures I and II.

XIII. Overall Assessment of Data

The analysis was conducted within all specifications of the method. No results were rejected in these SDGs.

Due to surrogate %R, data were qualified as estimated in eleven samples.

Due to MS/MSD %R, data were qualified as estimated in three samples.

Due to results below the LOQ, data were qualified as estimated in sixty-eight samples.

Due to method blank contamination, data were qualified as not detected in one sample.

Due to trip blank contamination, data were qualified as not detected in one sample.

The quality control criteria reviewed, other than those discussed above, were met and are considered acceptable.

Data flags are summarized and are presented as Attachment 2.

Attachment 1

Sample Cross Reference

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
01-Sep-2020	2036YOU2387F	FA78442-1	N	5030B	EPA8260-SIM	Stage 2B
01-Sep-2020	2036YOU2397F	FA78442-10	N	5030B	EPA8260-SIM	Stage 2B
01-Sep-2020	2036YOU2399F	FA78442-11	N	5030B	EPA8260-SIM	Stage 2B
01-Sep-2020	2036YOU2400F	FA78442-12	N	5030B	EPA8260-SIM	Stage 2B
01-Sep-2020	2036YOU2388F	FA78442-2	N	5030B	EPA8260-SIM	Stage 2B
01-Sep-2020	2036YOU2389F	FA78442-3	N	5030B	EPA8260-SIM	Stage 2B
01-Sep-2020	2036YOU2389FMS	FA78442-3MS	MS	5030B	EPA8260-SIM	Stage 2B
01-Sep-2020	2036YOU2389FMSD	FA78442-3MSD	MSD	5030B	EPA8260-SIM	Stage 2B
01-Sep-2020	2036YOU2390F	FA78442-4	N	5030B	EPA8260-SIM	Stage 2B
01-Sep-2020	2036YOU2391D	FA78442-5	FD	5030B	EPA8260-SIM	Stage 2B
01-Sep-2020	2036YOU2392F	FA78442-6	N	5030B	EPA8260-SIM	Stage 2B
01-Sep-2020	2036YOU2393F	FA78442-7	N	5030B	EPA8260-SIM	Stage 2B
01-Sep-2020	2036YOU2394F	FA78442-8	N	5030B	EPA8260-SIM	Stage 2B
01-Sep-2020	2036YOU2396F	FA78442-9	N	5030B	EPA8260-SIM	Stage 2B
02-Sep-2020	2036MOU2177A	FA78549-1	TB	5030B	EPA8260-SIM	Stage 2B
02-Sep-2020	2036MOU2187F	FA78549-10	N	5030B	EPA8260-SIM	Stage 4
02-Sep-2020	2036MOU2188F	FA78549-11	N	5030B	EPA8260-SIM	Stage 4
02-Sep-2020	2036MOU2189F	FA78549-12	N	5030B	EPA8260-SIM	Stage 4
02-Sep-2020	2036MOU2190F	FA78549-13	N	5030B	EPA8260-SIM	Stage 4
02-Sep-2020	2036MOU2191F	FA78549-14	N	5030B	EPA8260-SIM	Stage 2B
02-Sep-2020	2036MOU2192F	FA78549-15	N	5030B	EPA8260-SIM	Stage 2B
02-Sep-2020	2036MOU2193F	FA78549-16	N	5030B	EPA8260-SIM	Stage 2B
02-Sep-2020	2036MOU2193FMS	FA78549-16MS	MS	5030B	EPA8260-SIM	Stage 2B
02-Sep-2020	2036MOU2193FMSD	FA78549-16MSD	MSD	5030B	EPA8260-SIM	Stage 2B
02-Sep-2020	2036MOU2194F	FA78549-17	N	5030B	EPA8260-SIM	Stage 2B
02-Sep-2020	2036MOU2195F	FA78549-18	N	5030B	EPA8260-SIM	Stage 2B

N = Normal Sample
FD = Field Duplicate
TB = Trip Blank
MS = Matrix Spike
MSD = Matrix Spike Duplicate
FB = Field Blank

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
02-Sep-2020	2036MOU2196F	FA78549-19	N	5030B	EPA8260-SIM	Stage 2B
02-Sep-2020	2036MOU2179F	FA78549-2	N	5030B	EPA8260-SIM	Stage 4
02-Sep-2020	2036MOU2197F	FA78549-20	N	5030B	EPA8260-SIM	Stage 2B
02-Sep-2020	2036MOU2198F	FA78549-21	N	5030B	EPA8260-SIM	Stage 2B
02-Sep-2020	2036MOU2199F	FA78549-22	N	5030B	EPA8260-SIM	Stage 2B
02-Sep-2020	2036MOU2200D	FA78549-23	FD	5030B	EPA8260-SIM	Stage 2B
02-Sep-2020	2036MOU2201F	FA78549-24	N	5030B	EPA8260-SIM	Stage 2B
02-Sep-2020	2036YOU2401A	FA78549-25	TB	5030B	EPA8260-SIM	Stage 2B
02-Sep-2020	2036Y0BW402F	FA78549-26	N	5030B	EPA8260-SIM	Stage 2B
02-Sep-2020	2036Y0BW403F	FA78549-27	N	5030B	EPA8260-SIM	Stage 2B
02-Sep-2020	2036YOU2404F	FA78549-28	N	5030B	EPA8260-SIM	Stage 2B
02-Sep-2020	2036YOU2405F	FA78549-29	N	5030B	EPA8260-SIM	Stage 2B
02-Sep-2020	2036MOU2179FMS	FA78549-2MS	MS	5030B	EPA8260-SIM	Stage 4
02-Sep-2020	2036MOU2179FMSD	FA78549-2MSD	MSD	5030B	EPA8260-SIM	Stage 4
02-Sep-2020	2036MOU2180F	FA78549-3	N	5030B	EPA8260-SIM	Stage 4
02-Sep-2020	2036YOU2406F	FA78549-30	N	5030B	EPA8260-SIM	Stage 2B
02-Sep-2020	2036YOU2407D	FA78549-31	FD	5030B	EPA8260-SIM	Stage 2B
02-Sep-2020	2036YOU2408F	FA78549-32	N	5030B	EPA8260-SIM	Stage 2B
02-Sep-2020	2036YOU2409F	FA78549-33	N	5030B	EPA8260-SIM	Stage 2B
02-Sep-2020	2036YOU2410F	FA78549-34	N	5030B	EPA8260-SIM	Stage 2B
02-Sep-2020	2036YOU2411F	FA78549-35	N	5030B	EPA8260-SIM	Stage 2B
02-Sep-2020	2036YOU2412F	FA78549-36	N	5030B	EPA8260-SIM	Stage 2B
02-Sep-2020	2036YOU2413F	FA78549-37	N	5030B	EPA8260-SIM	Stage 2B
02-Sep-2020	2036YOU2414F	FA78549-38	N	5030B	EPA8260-SIM	Stage 2B
02-Sep-2020	2036YOU2417F	FA78549-39	N	5030B	EPA8260-SIM	Stage 2B
02-Sep-2020	2036MOU2181F	FA78549-4	N	5030B	EPA8260-SIM	Stage 4

N = Normal Sample
FD = Field Duplicate
TB = Trip Blank
MS = Matrix Spike
MSD = Matrix Spike Duplicate
FB = Field Blank

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
02-Sep-2020	2036YOU2418F	FA78549-40	N	5030B	EPA8260-SIM	Stage 2B
02-Sep-2020	2036YOU2419C	FA78549-41	FB	5030B	EPA8260-SIM	Stage 2B
02-Sep-2020	2036YOU2420F	FA78549-42	N	5030B	EPA8260-SIM	Stage 2B
02-Sep-2020	2036MOU2182D	FA78549-5	FD	5030B	EPA8260-SIM	Stage 2B
02-Sep-2020	2036MOU2183F	FA78549-6	N	5030B	EPA8260-SIM	Stage 2B
02-Sep-2020	2036MOU2184F	FA78549-7	N	5030B	EPA8260-SIM	Stage 4
02-Sep-2020	2036MOU2185F	FA78549-8	N	5030B	EPA8260-SIM	Stage 4
02-Sep-2020	2036MOU2186F	FA78549-9	N	5030B	EPA8260-SIM	Stage 4
03-Sep-2020	2036YOU2423A	FA78551-1	TB	5030B	EPA8260-SIM	Stage 2B
03-Sep-2020	2036YOU2433D	FA78551-10	FD	5030B	EPA8260-SIM	Stage 2B
03-Sep-2020	2036YOU2434F	FA78551-11	N	5030B	EPA8260-SIM	Stage 2B
03-Sep-2020	2036YOU2435F	FA78551-12	N	5030B	EPA8260-SIM	Stage 2B
03-Sep-2020	2036YOU2435FMS	FA78551-12MS	MS	5030B	EPA8260-SIM	Stage 2B
03-Sep-2020	2036YOU2435FMSD	FA78551-12MSD	MSD	5030B	EPA8260-SIM	Stage 2B
03-Sep-2020	2036YOU2436F	FA78551-13	N	5030B	EPA8260-SIM	Stage 2B
03-Sep-2020	2036YOU2437F	FA78551-14	N	5030B	EPA8260-SIM	Stage 2B
03-Sep-2020	2036YOU2438F	FA78551-15	N	5030B	EPA8260-SIM	Stage 2B
03-Sep-2020	2036YOU2438FMS	FA78551-15MS	MS	5030B	EPA8260-SIM	Stage 2B
03-Sep-2020	2036YOU2438FMSD	FA78551-15MSD	MSD	5030B	EPA8260-SIM	Stage 2B
03-Sep-2020	2036YOU2439D	FA78551-16	FD	5030B	EPA8260-SIM	Stage 2B
03-Sep-2020	2036YOU2439DMS	FA78551-16MS	MS	5030B	EPA8260-SIM	Stage 2B
03-Sep-2020	2036YOU2439DMSD	FA78551-16MSD	MSD	5030B	EPA8260-SIM	Stage 2B
03-Sep-2020	2036YOU2440F	FA78551-17	N	5030B	EPA8260-SIM	Stage 2B
03-Sep-2020	2036YOU2441F	FA78551-18	N	5030B	EPA8260-SIM	Stage 2B
03-Sep-2020	2036YOU2442D	FA78551-19	FD	5030B	EPA8260-SIM	Stage 2B
03-Sep-2020	2036YOU2423AMS	FA78551-1MS	MS	5030B	EPA8260-SIM	Stage 2B

N = Normal Sample
FD = Field Duplicate
TB = Trip Blank

MS = Matrix Spike
MSD = Matrix Spike Duplicate
FB = Field Blank

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
03-Sep-2020	2036YOU2423AMSD	FA78551-1MSD	MSD	5030B	EPA8260-SIM	Stage 2B
03-Sep-2020	2036YOU2425F	FA78551-2	N	5030B	EPA8260-SIM	Stage 2B
03-Sep-2020	2036YOU2443F	FA78551-20	N	5030B	EPA8260-SIM	Stage 2B
03-Sep-2020	2036YOU2444F	FA78551-21	N	5030B	EPA8260-SIM	Stage 2B
03-Sep-2020	2036YOU2445F	FA78551-22	N	5030B	EPA8260-SIM	Stage 2B
03-Sep-2020	2036YOU2446F	FA78551-23	N	5030B	EPA8260-SIM	Stage 2B
03-Sep-2020	2036X0BW232F	FA78551-24	N	5030B	EPA8260-SIM	Stage 2B
03-Sep-2020	2036X0BW233A	FA78551-25	TB	5030B	EPA8260-SIM	Stage 2B
03-Sep-2020	2036X0BW234C	FA78551-26	FB	5030B	EPA8260-SIM	Stage 2B
03-Sep-2020	2036X0BW246F	FA78551-27	N	5030B	EPA8260-SIM	Stage 2B
04-Sep-2020	2036YOU2450F	FA78551-28F	N	3010A	EPA6010D	Stage 4
04-Sep-2020	2036YOU2451F	FA78551-29F	N	3010A	EPA6010D	Stage 2B
03-Sep-2020	2036YOU2426F	FA78551-3	N	5030B	EPA8260-SIM	Stage 2B
04-Sep-2020	2036YOU2452F	FA78551-30F	N	3010A	EPA6010D	Stage 2B
04-Sep-2020	2036YOU2453F	FA78551-31F	N	3010A	EPA6010D	Stage 2B
03-Sep-2020	2036YOU2427F	FA78551-4	N	5030B	EPA8260-SIM	Stage 2B
03-Sep-2020	2036YOU2428F	FA78551-5	N	5030B	EPA8260-SIM	Stage 2B
03-Sep-2020	2036YOU2429F	FA78551-6	N	5030B	EPA8260-SIM	Stage 2B
03-Sep-2020	2036YOU2430F	FA78551-7	N	5030B	EPA8260-SIM	Stage 2B
03-Sep-2020	2036YOU2430FMS	FA78551-7MS	MS	5030B	EPA8260-SIM	Stage 2B
03-Sep-2020	2036YOU2430FMSD	FA78551-7MSD	MSD	5030B	EPA8260-SIM	Stage 2B
03-Sep-2020	2036YOU2431F	FA78551-8	N	5030B	EPA8260-SIM	Stage 2B
03-Sep-2020	2036YOU2432F	FA78551-9	N	5030B	EPA8260-SIM	Stage 2B
21-Sep-2020	2039MOU2207A	FA79006-1	TB	5030B	EPA8260-SIM	S2AVE
21-Sep-2020	2039MOU2216F	FA79006-10	N	5030B	EPA8260-SIM	S2AVE
21-Sep-2020	2039MOU2217D	FA79006-11	FD	5030B	EPA8260-SIM	S2AVE

N = Normal Sample
FD = Field Duplicate
TB = Trip Blank
MS = Matrix Spike
MSD = Matrix Spike Duplicate
FB = Field Blank

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
21-Sep-2020	2039MOU2208F	FA79006-2	N	5030B	EPA8260-SIM	S2AVE
21-Sep-2020	2039MOU2209F	FA79006-3	N	5030B	EPA8260-SIM	S2AVE
21-Sep-2020	2039MOU2210F	FA79006-4	N	5030B	EPA8260-SIM	S2AVE
21-Sep-2020	2039MOU2211F	FA79006-5	N	5030B	EPA8260-SIM	S2AVE
21-Sep-2020	2039MOU2212F	FA79006-6	N	5030B	EPA8260-SIM	S2AVE
21-Sep-2020	2039MOU2213F	FA79006-7	N	5030B	EPA8260-SIM	S2AVE
21-Sep-2020	2039MOU2214F	FA79006-8	N	5030B	EPA8260-SIM	S2AVE
21-Sep-2020	2039MOU2215F	FA79006-9	N	5030B	EPA8260-SIM	S2AVE
21-Sep-2020	2039MOU2215FMS	FA79006-9MS	MS	5030B	EPA8260-SIM	S2AVE
21-Sep-2020	2039MOU2215FMSD	FA79006-9MSD	MSD	5030B	EPA8260-SIM	S2AVE

N = Normal Sample
FD = Field Duplicate
TB = Trip Blank

MS = Matrix Spike
MSD = Matrix Spike Duplicate
FB = Field Blank

Attachment 2
Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: FA78442, FA78549, FA78551,

Laboratory: ACTO

EDD Filename: FA78442ACTO, FA78549ACTO,
FA78551ACTO, FA79006ACTO

eQAPP Name: FtOrd_UFP_QAPP_Rev8

SDG: FA78442

Method Category: VOA

Method: EPA8260-SIM

Matrix: AQ

9/1/2020 10:23:00

Sample ID:2036YOU2387F

Collected:AM

Analysis Type:1RES

Dilution: 1.00

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TETRACHLOROETHYLENE	0.34	J	0.25	LOD	0.50	LOQ	ug/L	J	RI

9/1/2020 10:40:00

Sample ID:2036YOU2388F

Collected:AM

Analysis Type:1RES

Dilution: 1.00

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DICHLOROPROPANE	0.20	J	0.25	LOD	0.50	LOQ	ug/L	J	RI

9/1/2020 10:55:00

Sample ID:2036YOU2389F

Collected:AM

Analysis Type:1RES

Dilution: 1.00

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHLOROFORM	0.31	J	0.25	LOD	0.50	LOQ	ug/L	J	RI, Surr
CIS-1,2-DICHLOROETHYLENE	2.0		0.25	LOD	0.50	LOQ	ug/L	J+	Surr
TETRACHLOROETHYLENE	1.6		0.25	LOD	0.50	LOQ	ug/L	J+	Surr
Trichloroethylene	7.0		0.25	LOD	0.50	LOQ	ug/L	J+	Surr

9/1/2020 11:10:00

Sample ID:2036YOU2390F

Collected:AM

Analysis Type:1RES

Dilution: 1.00

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,1-DICHLOROETHANE	2.7		0.25	LOD	0.50	LOQ	ug/L	J+	Surr
1,2-DICHLOROETHANE	0.51		0.25	LOD	0.50	LOQ	ug/L	J+	Surr
BENZENE	0.25	J	0.25	LOD	0.50	LOQ	ug/L	J	RI, Surr
CIS-1,2-DICHLOROETHYLENE	1.0		0.25	LOD	0.50	LOQ	ug/L	J+	Surr
TETRACHLOROETHYLENE	1.9		0.25	LOD	0.50	LOQ	ug/L	J+	Surr
VINYL CHLORIDE	5.2		0.050	LOD	0.10	LOQ	ug/L	J+	Surr

9/1/2020 11:15:00

Sample ID:2036YOU2391D

Collected:AM

Analysis Type:1RES

Dilution: 1.00

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,1-DICHLOROETHANE	2.7		0.25	LOD	0.50	LOQ	ug/L	J+	Surr
1,2-DICHLOROETHANE	0.51		0.25	LOD	0.50	LOQ	ug/L	J+	Surr

* denotes a non-reportable result

Project Name and Number: 21065 - DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA

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Data Qualifier Summary

Lab Reporting Batch ID: FA78442, FA78549, FA78551,

Laboratory: ACTO

EDD Filename: FA78442ACTO, FA78549ACTO,
FA78551ACTO, FA79006ACTO

eQAPP Name: FtOrd_UFP_QAPP_Rev8

SDG: FA78442

Method Category: VOA

Method: EPA8260-SIM

Matrix: AQ

Sample ID:2036YOU2391D		9/1/2020 11:15:00 Collected:AM			Analysis Type:1RES			Dilution: 1.00		
Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code	
BENZENE	0.24	J	0.25	LOD	0.50	LOQ	ug/L	J	RI, Surr	
CIS-1,2-DICHLOROETHYLENE	0.99		0.25	LOD	0.50	LOQ	ug/L	J+	Surr	
TETRACHLOROETHYLENE	1.9		0.25	LOD	0.50	LOQ	ug/L	J+	Surr	
VINYL CHLORIDE	5.4		0.050	LOD	0.10	LOQ	ug/L	J+	Surr	

Sample ID:2036YOU2392F		9/1/2020 11:35:00 Collected:AM			Analysis Type:1RES			Dilution: 1.00		
Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code	
1,1-DICHLOROETHANE	0.39	J	0.25	LOD	0.50	LOQ	ug/L	J	RI, Surr	
TETRACHLOROETHYLENE	2.3		0.25	LOD	0.50	LOQ	ug/L	J+	Surr	
Trichloroethylene	0.27	J	0.25	LOD	0.50	LOQ	ug/L	J	RI, Surr	

Sample ID:2036YOU2393F		9/1/2020 11:47:00 Collected:AM			Analysis Type:1RES			Dilution: 1.00		
Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code	
CIS-1,2-DICHLOROETHYLENE	0.37	J	0.25	LOD	0.50	LOQ	ug/L	J	RI, Surr	
TETRACHLOROETHYLENE	0.28	J	0.25	LOD	0.50	LOQ	ug/L	J	RI, Surr	
Trichloroethylene	3.1		0.25	LOD	0.50	LOQ	ug/L	J+	Surr	

Sample ID:2036YOU2394F		9/1/2020 12:04:00 Collected:PM			Analysis Type:1RES			Dilution: 1.00		
Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code	
1,1-DICHLOROETHANE	0.17	J	0.25	LOD	0.50	LOQ	ug/L	J	RI	
CHLOROFORM	0.20	J	0.25	LOD	0.50	LOQ	ug/L	J	RI	

Sample ID:2036YOU2396F		Collected:9/1/2020 2:24:00 PM			Analysis Type:1RES			Dilution: 1.00		
Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code	
CHLOROFORM	0.20	J	0.25	LOD	0.50	LOQ	ug/L	J	RI	

* denotes a non-reportable result

Project Name and Number: 21065 - DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA

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Data Qualifier Summary

Lab Reporting Batch ID: FA78442, FA78549, FA78551,

Laboratory: ACTO

EDD Filename: FA78442ACTO, FA78549ACTO,
FA78551ACTO, FA79006ACTO

eQAPP Name: FtOrd_UFP_QAPP_Rev8

SDG: FA78442

Method Category: VOA

Method: EPA8260-SIM

Matrix: AQ

Sample ID: 2036YOU2397F

Collected: 9/1/2020 2:38:00 PM **Analysis Type:** 1RES

Dilution: 1.00

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHLOROFORM	0.20	J	0.25	LOD	0.50	LOQ	ug/L	J	RI
TETRACHLOROETHYLENE	0.11	J	0.25	LOD	0.50	LOQ	ug/L	J	RI

Sample ID: 2036YOU2399F

Collected: 9/1/2020 3:08:00 PM **Analysis Type:** 1RES

Dilution: 1.00

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,1-DICHLOROETHANE	0.16	J	0.25	LOD	0.50	LOQ	ug/L	J	RI
1,2-DICHLOROPROPANE	0.16	J	0.25	LOD	0.50	LOQ	ug/L	J	RI
TETRACHLOROETHYLENE	0.42	J	0.25	LOD	0.50	LOQ	ug/L	J	RI

Sample ID: 2036YOU2400F

Collected: 9/1/2020 3:27:00 PM **Analysis Type:** 1RES

Dilution: 1.00

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CIS-1,2-DICHLOROETHYLENE	0.25	J	0.25	LOD	0.50	LOQ	ug/L	J	RI
TETRACHLOROETHYLENE	0.11	J	0.25	LOD	0.50	LOQ	ug/L	J	RI

SDG: FA78549

Method Category: VOA

Method: EPA8260-SIM

Matrix: AQ

Sample ID: 2036MOU2179F

Collected: 9/2/2020 9:31:00 AM **Analysis Type:** 1RES

Dilution: 1.00

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,1-DICHLOROETHANE	0.37	J	0.25	LOD	0.50	LOQ	ug/L	J	RI, Ms
CHLOROFORM	0.25	J	0.25	LOD	0.50	LOQ	ug/L	J	RI

Sample ID: 2036MOU2180F

Collected: 9/2/2020 9:39:00 AM **Analysis Type:** 1RES

Dilution: 1.00

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,1-DICHLOROETHANE	0.46	J	0.25	LOD	0.50	LOQ	ug/L	J	RI

* denotes a non-reportable result

Project Name and Number: 21065 - DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA

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Data Qualifier Summary

Lab Reporting Batch ID: FA78442, FA78549, FA78551,

Laboratory: ACTO

EDD Filename: FA78442ACTO, FA78549ACTO,
FA78551ACTO, FA79006ACTO

eQAPP Name: FtOrd_UFP_QAPP_Rev8

SDG: FA78549

Method Category: VOA

Method: EPA8260-SIM

Matrix: AQ

Sample ID: 2036MOU2180F

Collected: 9/2/2020 9:39:00 AM **Analysis Type:** 1RES

Dilution: 1.00

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DICHLOROETHANE	0.30	J	0.25	LOD	0.50	LOQ	ug/L	J	RI
1,2-DICHLOROPROPANE	0.10	J	0.25	LOD	0.50	LOQ	ug/L	J	RI
CHLOROFORM	0.37	J	0.25	LOD	0.50	LOQ	ug/L	J	RI

Sample ID: 2036MOU2181F

Collected: 9/2/2020 9:52:00 AM **Analysis Type:** 1RES

Dilution: 1.00

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,1-DICHLOROETHANE	0.19	J	0.25	LOD	0.50	LOQ	ug/L	J	RI
CHLOROFORM	0.30	J	0.25	LOD	0.50	LOQ	ug/L	J	RI
TETRACHLOROETHYLENE	0.27	J	0.25	LOD	0.50	LOQ	ug/L	J	RI

Sample ID: 2036MOU2182D

Collected: 9/2/2020 9:58:00 AM **Analysis Type:** 1RES

Dilution: 1.00

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,1-DICHLOROETHANE	0.19	J	0.25	LOD	0.50	LOQ	ug/L	J	RI
CHLOROFORM	0.30	J	0.25	LOD	0.50	LOQ	ug/L	J	RI
TETRACHLOROETHYLENE	0.28	J	0.25	LOD	0.50	LOQ	ug/L	J	RI

9/2/2020 10:17:00

Sample ID: 2036MOU2183F

Collected: AM

Analysis Type: 1RES

Dilution: 1.00

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TETRACHLOROETHYLENE	0.17	J	0.25	LOD	0.50	LOQ	ug/L	J	RI
Trichloroethylene	0.14	J	0.25	LOD	0.50	LOQ	ug/L	J	RI
VINYL CHLORIDE	0.051	J	0.050	LOD	0.10	LOQ	ug/L	J	RI

9/2/2020 10:31:00

Sample ID: 2036MOU2184F

Collected: AM

Analysis Type: 1RES

Dilution: 1.00

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,1-DICHLOROETHANE	0.25	J	0.25	LOD	0.50	LOQ	ug/L	J	RI
VINYL CHLORIDE	0.053	J	0.050	LOD	0.10	LOQ	ug/L	J	RI

* denotes a non-reportable result

Project Name and Number: 21065 - DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA

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Data Qualifier Summary

Lab Reporting Batch ID: FA78442, FA78549, FA78551,

Laboratory: ACTO

EDD Filename: FA78442ACTO, FA78549ACTO,
FA78551ACTO, FA79006ACTO

eQAPP Name: FtOrd_UFP_QAPP_Rev8

SDG: FA78549

Method Category: VOA

Method: EPA8260-SIM

Matrix: AQ

9/2/2020 10:38:00
Sample ID: 2036MOU2185F **Collected:** AM **Analysis Type:** 1RES **Dilution:** 1.00

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,1-DICHLOROETHANE	0.21	J	0.25	LOD	0.50	LOQ	ug/L	J	RI
CHLOROFORM	0.39	J	0.25	LOD	0.50	LOQ	ug/L	J	RI
TETRACHLOROETHYLENE	0.32	J	0.25	LOD	0.50	LOQ	ug/L	J	RI

9/2/2020 10:47:00
Sample ID: 2036MOU2186F **Collected:** AM **Analysis Type:** 1RES **Dilution:** 1.00

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DICHLOROETHANE	0.30	J	0.25	LOD	0.50	LOQ	ug/L	J	RI
1,2-DICHLOROPROPANE	0.12	J	0.25	LOD	0.50	LOQ	ug/L	J	RI
CHLOROFORM	0.22	J	0.25	LOD	0.50	LOQ	ug/L	J	RI

9/2/2020 10:57:00
Sample ID: 2036MOU2187F **Collected:** AM **Analysis Type:** 1RES **Dilution:** 1.00

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DICHLOROPROPANE	0.36	J	0.25	LOD	0.50	LOQ	ug/L	J	RI

9/2/2020 11:05:00
Sample ID: 2036MOU2188F **Collected:** AM **Analysis Type:** 1RES **Dilution:** 1.00

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,1-DICHLOROETHANE	1.5		0.25	LOD	0.50	LOQ	ug/L	J+	Surr
1,2-DICHLOROETHANE	4.1		0.25	LOD	0.50	LOQ	ug/L	J+	Surr
1,2-DICHLOROPROPANE	0.17	J	0.25	LOD	0.50	LOQ	ug/L	J	RI, Surr
CHLOROFORM	0.66		0.25	LOD	0.50	LOQ	ug/L	J+	Surr
CIS-1,2-DICHLOROETHYLENE	2.0		0.25	LOD	0.50	LOQ	ug/L	J+	Surr
TETRACHLOROETHYLENE	2.1		0.25	LOD	0.50	LOQ	ug/L	J+	Surr
Trichloroethylene	5.9		0.25	LOD	0.50	LOQ	ug/L	J+	Surr

* denotes a non-reportable result

Project Name and Number: 21065 - DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA

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Data Qualifier Summary

Lab Reporting Batch ID: FA78442, FA78549, FA78551,

Laboratory: ACTO

EDD Filename: FA78442ACTO, FA78549ACTO,
FA78551ACTO, FA79006ACTO

eQAPP Name: FtOrd_UFP_QAPP_Rev8

SDG: FA78549

Method Category: VOA

Method: EPA8260-SIM

Matrix: AQ

9/2/2020 11:18:00
Collected: AM Analysis Type: 1RES Dilution: 1.00

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZENE	0.15	J	0.25	LOD	0.50	LOQ	ug/L	J	RI
CHLOROFORM	0.28	J	0.25	LOD	0.50	LOQ	ug/L	J	RI

9/2/2020 11:25:00
Collected: AM Analysis Type: 1RES Dilution: 1.00

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHLOROFORM	0.19	J	0.25	LOD	0.50	LOQ	ug/L	J	RI
CIS-1,2-DICHLOROETHYLENE	0.36	J	0.25	LOD	0.50	LOQ	ug/L	J	RI
TETRACHLOROETHYLENE	0.34	J	0.25	LOD	0.50	LOQ	ug/L	J	RI

9/2/2020 11:34:00
Collected: AM Analysis Type: 1RES Dilution: 1.00

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,1-DICHLOROETHANE	0.18	J	0.25	LOD	0.50	LOQ	ug/L	J	RI
1,2-DICHLOROPROPANE	0.12	J	0.25	LOD	0.50	LOQ	ug/L	J	RI
CHLOROFORM	0.38	J	0.25	LOD	0.50	LOQ	ug/L	J	RI

9/2/2020 11:44:00
Collected: AM Analysis Type: 1RES Dilution: 1.00

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DICHLOROPROPANE	0.12	J	0.25	LOD	0.50	LOQ	ug/L	J	RI
CARBON TETRACHLORIDE	0.12	J	0.25	LOD	0.50	LOQ	ug/L	J	RI
CHLOROFORM	0.42	J	0.25	LOD	0.50	LOQ	ug/L	J	RI

9/2/2020 11:52:00
Collected: AM Analysis Type: 1RES Dilution: 1.00

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DICHLOROETHANE	0.12	J	0.25	LOD	0.50	LOQ	ug/L	J	RI
CIS-1,2-DICHLOROETHYLENE	0.43	J	0.25	LOD	0.50	LOQ	ug/L	J	RI
Trichloroethylene	9.5		0.25	LOD	0.50	LOQ	ug/L	J+	Ms

* denotes a non-reportable result

Project Name and Number: 21065 - DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA

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Data Qualifier Summary

Lab Reporting Batch ID: FA78442, FA78549, FA78551,

Laboratory: ACTO

EDD Filename: FA78442ACTO, FA78549ACTO,
FA78551ACTO, FA79006ACTO

eQAPP Name: FtOrd_UFP_QAPP_Rev8

SDG: FA78549

Method Category: VOA

Method: EPA8260-SIM

Matrix: AQ

9/2/2020 12:02:00
Sample ID: 2036MOU2194F **Collected:** PM **Analysis Type:** 1RES **Dilution:** 1.00

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DICHLOROPROPANE	0.26	J	0.25	LOD	0.50	LOQ	ug/L	J	RI
BENZENE	0.18	J	0.25	LOD	0.50	LOQ	ug/L	J	RI
METHYLENE CHLORIDE	1.6	J	0.50	LOD	2.0	LOQ	ug/L	U	Tb

9/2/2020 12:08:00
Sample ID: 2036MOU2195F **Collected:** PM **Analysis Type:** 1RES **Dilution:** 1.00

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZENE	0.23	J	0.25	LOD	0.50	LOQ	ug/L	J	RI
CHLOROFORM	0.24	J	0.25	LOD	0.50	LOQ	ug/L	J	RI

9/2/2020 12:26:00
Sample ID: 2036MOU2196F **Collected:** PM **Analysis Type:** 1RES **Dilution:** 1.00

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DICHLOROPROPANE	0.24	J	0.25	LOD	0.50	LOQ	ug/L	J	RI
BENZENE	0.17	J	0.25	LOD	0.50	LOQ	ug/L	J	RI

9/2/2020 1:47:00 PM
Sample ID: 2036MOU2197F **Collected:** 9/2/2020 1:47:00 PM **Analysis Type:** 1RES **Dilution:** 1.00

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHLOROFORM	0.13	J	0.25	LOD	0.50	LOQ	ug/L	J	RI
CIS-1,2-DICHLOROETHYLENE	0.21	J	0.25	LOD	0.50	LOQ	ug/L	J	RI
TETRACHLOROETHYLENE	0.22	J	0.25	LOD	0.50	LOQ	ug/L	J	RI

9/2/2020 1:57:00 PM
Sample ID: 2036MOU2198F **Collected:** 9/2/2020 1:57:00 PM **Analysis Type:** 1RES **Dilution:** 1.00

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Trichloroethylene	0.17	J	0.25	LOD	0.50	LOQ	ug/L	J	RI

* denotes a non-reportable result

Project Name and Number: 21065 - DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA

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Data Qualifier Summary

Lab Reporting Batch ID: FA78442, FA78549, FA78551,

Laboratory: ACTO

EDD Filename: FA78442ACTO, FA78549ACTO,
FA78551ACTO, FA79006ACTO

eQAPP Name: FtOrd_UFP_QAPP_Rev8

SDG: FA78549

Method Category: VOA

Method: EPA8260-SIM

Matrix: AQ

Sample ID: 2036MOU2199F

Collected: 9/2/2020 2:15:00 PM **Analysis Type:** 1RES

Dilution: 1.00

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,1-DICHLOROETHANE	0.16	J	0.25	LOD	0.50	LOQ	ug/L	J	RI
CHLOROFORM	0.36	J	0.25	LOD	0.50	LOQ	ug/L	J	RI

Sample ID: 2036MOU2200D

Collected: 9/2/2020 2:22:00 PM **Analysis Type:** 1RES

Dilution: 1.00

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,1-DICHLOROETHANE	0.16	J	0.25	LOD	0.50	LOQ	ug/L	J	RI
CHLOROFORM	0.36	J	0.25	LOD	0.50	LOQ	ug/L	J	RI

Sample ID: 2036MOU2201F

Collected: 9/2/2020 2:31:00 PM **Analysis Type:** 1RES

Dilution: 1.00

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CARBON TETRACHLORIDE	0.12	J	0.25	LOD	0.50	LOQ	ug/L	J	RI
CHLOROFORM	0.16	J	0.25	LOD	0.50	LOQ	ug/L	J	RI
TETRACHLOROETHYLENE	0.47	J	0.25	LOD	0.50	LOQ	ug/L	J	RI

Sample ID: 2036Y0BW402F

Collected: 9/2/2020 8:26:00 AM **Analysis Type:** 1RES

Dilution: 1.00

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHLOROFORM	0.37	J	0.25	LOD	0.50	LOQ	ug/L	J	RI
TETRACHLOROETHYLENE	0.12	J	0.25	LOD	0.50	LOQ	ug/L	J	RI

Sample ID: 2036Y0BW403F

Collected: 9/2/2020 8:38:00 AM **Analysis Type:** 1RES

Dilution: 1.00

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,1-DICHLOROETHANE	0.11	J	0.25	LOD	0.50	LOQ	ug/L	J	RI
CHLOROFORM	0.25	J	0.25	LOD	0.50	LOQ	ug/L	J	RI

* denotes a non-reportable result

Project Name and Number: 21065 - DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA

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Data Qualifier Summary

Lab Reporting Batch ID: FA78442, FA78549, FA78551,

Laboratory: ACTO

EDD Filename: FA78442ACTO, FA78549ACTO,
FA78551ACTO, FA79006ACTO

eQAPP Name: FtOrd_UFP_QAPP_Rev8

SDG: FA78549

Method Category: VOA

Method: EPA8260-SIM

Matrix: AQ

Sample ID: 2036YOU2404F

Collected: 9/2/2020 9:14:00 AM **Analysis Type:** 1RES

Dilution: 1.00

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHLOROFORM	0.20	J	0.25	LOD	0.50	LOQ	ug/L	J	RI
TETRACHLOROETHYLENE	0.13	J	0.25	LOD	0.50	LOQ	ug/L	J	RI

Sample ID: 2036YOU2405F

Collected: 9/2/2020 9:48:00 AM **Analysis Type:** 1RES

Dilution: 1.00

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHLOROFORM	0.18	J	0.25	LOD	0.50	LOQ	ug/L	J	RI

Sample ID: 2036YOU2409F

Collected: 9/2/2020 11:27:00 AM

Analysis Type: 1RES

Dilution: 1.00

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,1-DICHLOROETHANE	0.41	J	0.25	LOD	0.50	LOQ	ug/L	J	RI
1,2-DICHLOROETHANE	0.20	J	0.25	LOD	0.50	LOQ	ug/L	J	RI
TETRACHLOROETHYLENE	0.35	J	0.25	LOD	0.50	LOQ	ug/L	J	RI

Sample ID: 2036YOU2413F

Collected: 9/2/2020 12:35:00 PM

Analysis Type: 1RES

Dilution: 1.00

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHLOROFORM	0.27	J	0.25	LOD	0.50	LOQ	ug/L	J	RI

Sample ID: 2036YOU2414F

Collected: 9/2/2020 1:44:00 PM **Analysis Type:** 1RES

Dilution: 1.00

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,1-DICHLOROETHANE	0.34	J	0.25	LOD	0.50	LOQ	ug/L	J	RI

Sample ID: 2036YOU2417F

Collected: 9/2/2020 2:23:00 PM **Analysis Type:** 1RES

Dilution: 1.00

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHLOROFORM	0.31	J	0.25	LOD	0.50	LOQ	ug/L	J	RI

* denotes a non-reportable result

Project Name and Number: 21065 - DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA

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Data Qualifier Summary

Lab Reporting Batch ID: FA78442, FA78549, FA78551,

Laboratory: ACTO

EDD Filename: FA78442ACTO, FA78549ACTO,
FA78551ACTO, FA79006ACTO

eQAPP Name: FtOrd_UFP_QAPP_Rev8

SDG: FA78549

Method Category: VOA

Method: EPA8260-SIM

Matrix: AQ

Sample ID: 2036YOU2418F

Collected: 9/2/2020 2:33:00 PM **Analysis Type:** 1RES

Dilution: 1.00

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHLOROFORM	0.23	J	0.25	LOD	0.50	LOQ	ug/L	J	RI
CIS-1,2-DICHLOROETHYLENE	0.23	J	0.25	LOD	0.50	LOQ	ug/L	J	RI
TETRACHLOROETHYLENE	0.40	J	0.25	LOD	0.50	LOQ	ug/L	J	RI

Sample ID: 2036YOU2419C

Collected: 9/2/2020 2:45:00 PM **Analysis Type:** 1RES

Dilution: 1.00

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
VINYL CHLORIDE	0.10	U	0.050	LOD	0.10	LOQ	ug/L	UJ	Surr

Sample ID: 2036YOU2420F

Collected: 9/2/2020 3:13:00 PM **Analysis Type:** 1RES

Dilution: 1.00

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Trichloroethylene	0.35	J	0.25	LOD	0.50	LOQ	ug/L	J	RI

SDG: FA78551

Method Category: VOA

Method: EPA8260-SIM

Matrix: AQ

Sample ID: 2036X0BW234C

Collected: 9/3/2020 8:20:00 AM **Analysis Type:** 1RES

Dilution: 1.00

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,1-DICHLOROETHANE	0.50	U	0.25	LOD	0.50	LOQ	ug/L	UJ	Surr
1,2-DICHLOROPROPANE	0.50	U	0.25	LOD	0.50	LOQ	ug/L	UJ	Surr
BENZENE	0.50	U	0.25	LOD	0.50	LOQ	ug/L	UJ	Surr
CARBON TETRACHLORIDE	0.50	U	0.25	LOD	0.50	LOQ	ug/L	UJ	Surr
CHLOROFORM	0.50	U	0.25	LOD	0.50	LOQ	ug/L	UJ	Surr
CIS-1,2-DICHLOROETHYLENE	0.50	U	0.25	LOD	0.50	LOQ	ug/L	UJ	Surr
METHYLENE CHLORIDE	2.0	U	0.50	LOD	2.0	LOQ	ug/L	UJ	Surr
TETRACHLOROETHYLENE	0.50	U	0.25	LOD	0.50	LOQ	ug/L	UJ	Surr
Trichloroethylene	0.50	U	0.25	LOD	0.50	LOQ	ug/L	UJ	Surr

* denotes a non-reportable result

Project Name and Number: 21065 - DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA

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Data Qualifier Summary

Lab Reporting Batch ID: FA78442, FA78549, FA78551,

Laboratory: ACTO

EDD Filename: FA78442ACTO, FA78549ACTO,
FA78551ACTO, FA79006ACTO

eQAPP Name: FtOrd_UFP_QAPP_Rev8

SDG: FA78551

Method Category: VOA

Method: EPA8260-SIM

Matrix: AQ

Sample ID:2036X0BW234C

Collected:9/3/2020 8:20:00 AM **Analysis Type:**1RES

Dilution: 1.00

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
VINYL CHLORIDE	0.10	U	0.050	LOD	0.10	LOQ	ug/L	UJ	Surr
1,2-DICHLOROETHANE	0.50	U	0.25	LOD	0.50	LOQ	ug/L	UJ	Surr

Sample ID:2036YOU2425F

Collected:9/3/2020 7:53:00 AM **Analysis Type:**1RES

Dilution: 1.00

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHLOROFORM	0.28	J	0.25	LOD	0.50	LOQ	ug/L	J	RI

Sample ID:2036YOU2426F

Collected:9/3/2020 8:03:00 AM **Analysis Type:**1RES

Dilution: 1.00

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHLOROFORM	0.27	J	0.25	LOD	0.50	LOQ	ug/L	J	RI

Sample ID:2036YOU2428F

Collected:9/3/2020 8:55:00 AM **Analysis Type:**1RES

Dilution: 1.00

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DICHLOROPROPANE	0.21	J	0.25	LOD	0.50	LOQ	ug/L	J	RI
TETRACHLOROETHYLENE	0.43	J	0.25	LOD	0.50	LOQ	ug/L	J	RI

Sample ID:2036YOU2429F

Collected:9/3/2020 9:12:00 AM **Analysis Type:**1RES

Dilution: 1.00

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,1-DICHLOROETHANE	0.33	J	0.25	LOD	0.50	LOQ	ug/L	J	RI
CARBON TETRACHLORIDE	0.20	J	0.25	LOD	0.50	LOQ	ug/L	J	RI

Sample ID:2036YOU2430F

Collected:9/3/2020 9:24:00 AM **Analysis Type:**1RES

Dilution: 1.00

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,1-DICHLOROETHANE	0.43	J	0.25	LOD	0.50	LOQ	ug/L	J	RI
CHLOROFORM	0.49	J	0.25	LOD	0.50	LOQ	ug/L	J	RI

* denotes a non-reportable result

Project Name and Number: 21065 - DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA

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Data Qualifier Summary

Lab Reporting Batch ID: FA78442, FA78549, FA78551,

Laboratory: ACTO

EDD Filename: FA78442ACTO, FA78549ACTO,
FA78551ACTO, FA79006ACTO

eQAPP Name: FtOrd_UFP_QAPP_Rev8

SDG: FA78551

Method Category: VOA

Method: EPA8260-SIM

Matrix: AQ

Sample ID:2036YOU2430F

Collected:9/3/2020 9:24:00 AM **Analysis Type:**1RES

Dilution: 1.00

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CIS-1,2-DICHLOROETHYLENE	0.32	J	0.25	LOD	0.50	LOQ	ug/L	J	RI
TETRACHLOROETHYLENE	0.30	J	0.25	LOD	0.50	LOQ	ug/L	J	RI

Sample ID:2036YOU2432F

Collected:9/3/2020 9:56:00 AM **Analysis Type:**1RES

Dilution: 1.00

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TETRACHLOROETHYLENE	0.37	J	0.25	LOD	0.50	LOQ	ug/L	J	RI

9/3/2020 10:00:00

Sample ID:2036YOU2433D

Collected:AM

Analysis Type:1RES

Dilution: 1.00

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TETRACHLOROETHYLENE	0.38	J	0.25	LOD	0.50	LOQ	ug/L	J	RI

9/3/2020 10:20:00

Sample ID:2036YOU2434F

Collected:AM

Analysis Type:1RES

Dilution: 1.00

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Trichloroethylene	0.47	J	0.25	LOD	0.50	LOQ	ug/L	J	RI

9/3/2020 10:33:00

Sample ID:2036YOU2435F

Collected:AM

Analysis Type:1RES

Dilution: 1.00

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CIS-1,2-DICHLOROETHYLENE	0.35	J	0.25	LOD	0.50	LOQ	ug/L	J	RI

9/3/2020 10:55:00

Sample ID:2036YOU2437F

Collected:AM

Analysis Type:1RES

Dilution: 1.00

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DICHLOROETHANE	0.21	J	0.25	LOD	0.50	LOQ	ug/L	J	RI

* denotes a non-reportable result

Project Name and Number: 21065 - DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA

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Data Qualifier Summary

Lab Reporting Batch ID: FA78442, FA78549, FA78551,

Laboratory: ACTO

EDD Filename: FA78442ACTO, FA78549ACTO,
FA78551ACTO, FA79006ACTO

eQAPP Name: FtOrd_UFP_QAPP_Rev8

SDG: FA78551

Method Category: VOA

Method: EPA8260-SIM

Matrix: AQ

9/3/2020 11:09:00									
Sample ID:2036YOU2438F			Collected:AM		Analysis Type:1RES			Dilution: 1.00	
Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	1.0	J	0.50	LOD	2.0	LOQ	ug/L	J	RI

9/3/2020 11:14:00									
Sample ID:2036YOU2439D			Collected:AM		Analysis Type:1DIL1			Dilution: 2.00	
Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,1-DICHLOROETHANE	20.7		0.50	LOD	1.0	LOQ	ug/L	J+	Ms

9/3/2020 11:14:00									
Sample ID:2036YOU2439D			Collected:AM		Analysis Type:1RES			Dilution: 1.00	
Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	1.0	J	0.50	LOD	2.0	LOQ	ug/L	J	RI

9/3/2020 11:25:00									
Sample ID:2036YOU2440F			Collected:AM		Analysis Type:1RES			Dilution: 1.00	
Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DICHLOROETHANE	0.47	J	0.25	LOD	0.50	LOQ	ug/L	J	RI

9/3/2020 11:34:00									
Sample ID:2036YOU2441F			Collected:AM		Analysis Type:1RES			Dilution: 1.00	
Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHLOROFORM	0.20	J	0.25	LOD	0.50	LOQ	ug/L	J	RI

9/3/2020 11:39:00									
Sample ID:2036YOU2442D			Collected:AM		Analysis Type:1RES			Dilution: 1.00	
Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHLOROFORM	0.20	J	0.25	LOD	0.50	LOQ	ug/L	J	RI

* denotes a non-reportable result

Project Name and Number: 21065 - DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA

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Data Qualifier Summary

Lab Reporting Batch ID: FA78442, FA78549, FA78551,

Laboratory: ACTO

EDD Filename: FA78442ACTO, FA78549ACTO,
FA78551ACTO, FA79006ACTO

eQAPP Name: FtOrd_UFP_QAPP_Rev8

SDG: FA78551

Method Category: VOA

Method: EPA8260-SIM

Matrix: AQ

Sample ID:2036YOU2444F

Collected:9/3/2020 2:30:00 PM **Analysis Type:**1RES

Dilution: 1.00

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TETRACHLOROETHYLENE	0.28	J	0.25	LOD	0.50	LOQ	ug/L	J	RI

SDG: FA79006

Method Category: VOA

Method: EPA8260-SIM

Matrix: AQ

Sample ID:2039MOU2210F

Collected:9/21/2020 1:28:00 **Analysis Type:**1RES

Dilution: 1.00

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,1-DICHLOROETHANE	0.48	J	0.25	LOD	0.50	LOQ	ug/L	J	RI
CHLOROFORM	0.35	J	0.25	LOD	0.50	LOQ	ug/L	J	RI
1,2-DICHLOROETHANE	0.16	J	0.25	LOD	0.50	LOQ	ug/L	J	RI

Sample ID:2039MOU2211F

Collected:9/21/2020 1:32:00 **Analysis Type:**1RES

Dilution: 1.00

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DICHLOROETHANE	0.20	J	0.25	LOD	0.50	LOQ	ug/L	J	RI
CHLOROFORM	0.43	J	0.25	LOD	0.50	LOQ	ug/L	J	RI

Sample ID:2039MOU2213F

Collected:9/21/2020 1:42:00 **Analysis Type:**1RES

Dilution: 1.00

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,1-DICHLOROETHANE	0.49	J	0.25	LOD	0.50	LOQ	ug/L	J	RI
1,2-DICHLOROETHANE	0.17	J	0.25	LOD	0.50	LOQ	ug/L	J	RI
CHLOROFORM	0.36	J	0.25	LOD	0.50	LOQ	ug/L	J	RI

Sample ID:2039MOU2214F

Collected:9/21/2020 1:46:00 **Analysis Type:**1RES

Dilution: 1.00

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DICHLOROETHANE	0.21	J	0.25	LOD	0.50	LOQ	ug/L	J	RI

* denotes a non-reportable result

Project Name and Number: 21065 - DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA

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Data Qualifier Summary

Lab Reporting Batch ID: FA78442, FA78549, FA78551,

Laboratory: ACTO

EDD Filename: FA78442ACTO, FA78549ACTO,
FA78551ACTO, FA79006ACTO

eQAPP Name: FtOrd_UFP_QAPP_Rev8

SDG: FA79006

Method Category: VOA

Method: EPA8260-SIM

Matrix: AQ

9/21/2020 1:46:00
Sample ID:2039MOU2214F **Collected:**PM **Analysis Type:**1RES **Dilution:** 1.00

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHLOROFORM	0.41	J	0.25	LOD	0.50	LOQ	ug/L	J	RI
Trichloroethylene	0.17	J	0.25	LOD	0.50	LOQ	ug/L	J	RI

9/21/2020 1:50:00
Sample ID:2039MOU2215F **Collected:**PM **Analysis Type:**1RES **Dilution:** 1.00

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,1-DICHLOROETHANE	0.55		0.25	LOD	0.50	LOQ	ug/L	J+	Surr
1,2-DICHLOROETHANE	0.11	J	0.25	LOD	0.50	LOQ	ug/L	J	RI, Surr
CHLOROFORM	0.32	J	0.25	LOD	0.50	LOQ	ug/L	J	RI, Surr
CIS-1,2-DICHLOROETHYLENE	1.5		0.25	LOD	0.50	LOQ	ug/L	J+	Surr
METHYLENE CHLORIDE	0.94	JB	0.50	LOD	2.0	LOQ	ug/L	UJ	Mb, Surr
TETRACHLOROETHYLENE	1.0		0.25	LOD	0.50	LOQ	ug/L	J+	Surr
Trichloroethylene	4.6		0.25	LOD	0.50	LOQ	ug/L	J+	Surr

9/21/2020 1:55:00
Sample ID:2039MOU2216F **Collected:**PM **Analysis Type:**1RES **Dilution:** 1.00

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,1-DICHLOROETHANE	0.44	J	0.25	LOD	0.50	LOQ	ug/L	J	RI, Surr
1,2-DICHLOROETHANE	0.26	J	0.25	LOD	0.50	LOQ	ug/L	J	RI, Surr
CHLOROFORM	0.29	J	0.25	LOD	0.50	LOQ	ug/L	J	RI, Surr
CIS-1,2-DICHLOROETHYLENE	1.2		0.25	LOD	0.50	LOQ	ug/L	J+	Surr
TETRACHLOROETHYLENE	0.80		0.25	LOD	0.50	LOQ	ug/L	J+	Surr
Trichloroethylene	5.5		0.25	LOD	0.50	LOQ	ug/L	J+	Surr

9/21/2020 2:00:00
Sample ID:2039MOU2217D **Collected:**PM **Analysis Type:**1RES **Dilution:** 1.00

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,1-DICHLOROETHANE	0.44	J	0.25	LOD	0.50	LOQ	ug/L	J	RI, Surr
1,2-DICHLOROETHANE	0.25	J	0.25	LOD	0.50	LOQ	ug/L	J	RI, Surr
CHLOROFORM	0.29	J	0.25	LOD	0.50	LOQ	ug/L	J	RI, Surr

* denotes a non-reportable result

Project Name and Number: 21065 - DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA

10/16/2020 2:45:19 PM

ADR version 1.9.0.325

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Data Qualifier Summary

Lab Reporting Batch ID: FA78442, FA78549, FA78551,

Laboratory: ACTO

EDD Filename: FA78442ACTO, FA78549ACTO,
FA78551ACTO, FA79006ACTO

eQAPP Name: FtOrd_UFP_QAPP_Rev8

SDG: FA79006

Method Category: VOA

Method: EPA8260-SIM

Matrix: AQ

9/21/2020 2:00:00

Sample ID: 2039MOU2217D

Collected: PM

Analysis Type: 1RES

Dilution: 1.00

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CIS-1,2-DICHLOROETHYLENE	1.2		0.25	LOD	0.50	LOQ	ug/L	J+	Surr
TETRACHLOROETHYLENE	0.80		0.25	LOD	0.50	LOQ	ug/L	J+	Surr
Trichloroethylene	5.5		0.25	LOD	0.50	LOQ	ug/L	J+	Surr

* denotes a non-reportable result

Project Name and Number: 21065 - DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA

10/16/2020 2:45:19 PM

ADR version 1.9.0.325

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Data Qualifier Summary

Lab Reporting Batch ID: FA78442, FA78549, FA78551,

EDD Filename: FA78442ACTO, FA78549ACTO,
FA78551ACTO, FA79006ACTO

Laboratory: ACTO
eQAPP Name: FtOrd_UFP_QAPP_Rev8

Reason Code Legend

<i>Reason Code</i>	<i>Description</i>
Mb	Method Blank Contamination
Ms	Matrix Spike Upper Estimation
RI	Reporting Limit Trace Value
Surr	Surrogate/Tracer Recovery Lower Estimation
Surr	Surrogate/Tracer Recovery Upper Estimation
Tb	Trip Blank Contamination

* denotes a non-reportable result

Project Name and Number: 21065 - DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA

10/16/2020 2:45:19 PM

ADR version 1.9.0.325

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Enclosure I
Stage 2B ADR Outliers
(Including Manual Review Outliers)

Quality Control Outlier Reports

FA78442

Surrogate Outlier Report

Lab Reporting Batch ID: FA78442

Laboratory: ACTO

EDD Filename: FA78442ACTO

eQAPP Name: FtOrd_UFP_QAPP_Rev8

Method: EPA8260-SIM

Matrix: AQ

<i>Sample ID (Analysis Type)</i>	<i>Surrogate</i>	<i>Sample % Recovery</i>	<i>% Recovery Limits</i>	<i>Affected Compounds</i>	<i>Flag</i>
2036YOU2389F (1RES)	1,2-DICHLOROETHANE-D4	119	81.00-118.00	All Target Analytes	J+ (all detects)
2036YOU2390F (1RES)	1,2-DICHLOROETHANE-D4	119	81.00-118.00	All Target Analytes	J+(all detects)
2036YOU2391D (1RES)	1,2-DICHLOROETHANE-D4	120	81.00-118.00	All Target Analytes	J+(all detects)
2036YOU2392F (1RES)	1,2-DICHLOROETHANE-D4	121	81.00-118.00	All Target Analytes	J+(all detects)
2036YOU2393F (1RES)	1,2-DICHLOROETHANE-D4	121	81.00-118.00	All Target Analytes	J+(all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: FA78442

Laboratory: ACTO

EDD Filename: FA78442ACTO

eQAPP Name: FtOrd_UFP_QAPP_Rev8

Method: EPA8260-SIM

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
2036YOU2387F	TETRACHLOROETHYLENE	J	0.34	0.50	LOQ	ug/L	J (all detects)
2036YOU2388F	1,2-DICHLOROPROPANE	J	0.20	0.50	LOQ	ug/L	J (all detects)
2036YOU2389F	CHLOROFORM	J	0.31	0.50	LOQ	ug/L	J (all detects)
2036YOU2390F	BENZENE	J	0.25	0.50	LOQ	ug/L	J (all detects)
2036YOU2391D	BENZENE	J	0.24	0.50	LOQ	ug/L	J (all detects)
2036YOU2392F	1,1-DICHLOROETHANE Trichloroethylene	J J	0.39 0.27	0.50 0.50	LOQ LOQ	ug/L ug/L	J (all detects)
2036YOU2393F	CIS-1,2-DICHLOROETHYLENE TETRACHLOROETHYLENE	J J	0.37 0.28	0.50 0.50	LOQ LOQ	ug/L ug/L	J (all detects)
2036YOU2394F	1,1-DICHLOROETHANE CHLOROFORM	J J	0.17 0.20	0.50 0.50	LOQ LOQ	ug/L ug/L	J (all detects)
2036YOU2396F	CHLOROFORM	J	0.20	0.50	LOQ	ug/L	J (all detects)
2036YOU2397F	CHLOROFORM TETRACHLOROETHYLENE	J J	0.20 0.11	0.50 0.50	LOQ LOQ	ug/L ug/L	J (all detects)
2036YOU2399F	1,1-DICHLOROETHANE 1,2-DICHLOROPROPANE TETRACHLOROETHYLENE	J J J	0.16 0.16 0.42	0.50 0.50 0.50	LOQ LOQ LOQ	ug/L ug/L ug/L	J (all detects)
2036YOU2400F	CIS-1,2-DICHLOROETHYLENE TETRACHLOROETHYLENE	J J	0.25 0.11	0.50 0.50	LOQ LOQ	ug/L ug/L	J (all detects)

Field Duplicate RPD Report

Lab Reporting Batch ID: FA78442

Laboratory: ACTO

EDD Filename: FA78442ACTO

eQAPP Name: FtOrd_UFP_QAPP_Rev8

Method: EPA8260-SIM

Matrix: AQ

Analyte	Concentration (ug/L)		Sample RPD	eQAPP RPD	Flag
	2036YOU2390F	2036YOU2391D			
1,1-DICHLOROETHANE	2.7	2.7	0	30.00	No Qualifiers Applied
1,2-DICHLOROETHANE	0.51	0.51	0	30.00	
BENZENE	0.25	0.24	4	30.00	
CIS-1,2-DICHLOROETHYLENE	1.0	0.99	1	30.00	
TETRACHLOROETHYLENE	1.9	1.9	0	30.00	
VINYL CHLORIDE	5.2	5.4	4	30.00	

LDC #: 49260A1b

VALIDATION COMPLETENESS WORKSHEET

SDG #: FA78442

ADR

Laboratory: SGS North America, Inc.

Date: 10/14/20

Page: 1 of 7

Reviewer: F7

2nd Reviewer: KK

METHOD: GC/MS Volatiles (EPA SW 846 Method 8260B)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Sample receipt/Technical holding times	A, Δ	
II.	GC/MS Instrument performance check	A	
III.	Initial calibration/ICV	A, Δ	% PSD = 15, 12 1CV ≤ 20
IV.	Continuing calibration <i>tending</i>	Δ	CV ≤ 20/50
V.	Laboratory Blanks	N	
VI.	Field blanks	N	
VII.	Surrogate spikes	N	
VIII.	Matrix spike/Matrix spike duplicates	N	
IX.	Laboratory control samples	N	
X.	Field duplicates	N	
XI.	Internal standards	Δ	
XII.	Compound quantitation RL/LOQ/LODs	N	
XIII.	Target compound identification	N	
XIV.	System performance	N	
XV.	Overall assessment of data	N	

Note: A = Acceptable
N = Not provided/applicable
SW = See worksheet

ND = No compounds detected
R = Rinsate
FB = Field blank

D = Duplicate
TB = Trip blank
EB = Equipment blank

SB=Source blank
OTHER:

	Client ID	Lab ID	Matrix	Date
1	2036YOU2387F	FA78442-1	Water	09/01/20
2	2036YOU2388F	FA78442-2	Water	09/01/20
3	2036YOU2389F	FA78442-3	Water	09/01/20
4	2036YOU2390F	FA78442-4	Water	09/01/20
5	2036YOU2391D	FA78442-5	Water	09/01/20
6	2036YOU2392F	FA78442-6	Water	09/01/20
7	2036YOU2393F	FA78442-7	Water	09/01/20
8	2036YOU2394F	FA78442-8	Water	09/01/20
9	2036YOU2396F	FA78442-9	Water	09/01/20
10	2036YOU2397F	FA78442-10	Water	09/01/20
11	2036YOU2399F	FA78442-11	Water	09/01/20
12	2036YOU2400F	FA78442-12	Water	09/01/20
13	2036YOU2389FMS	FA78442-3MS	Water	09/01/20
14	2036YOU2389FMSD	FA78442-3MSD	Water	09/01/20

102353

VZ 2409

VZ 2412

Quality Control Outlier Reports

FA78549

Trip Blank Outlier Report

Lab Reporting Batch ID: FA78549

Laboratory: ACTO

EDD Filename: FA78549ACTO

eQAPP Name: FtOrd_UFP_QAPP_Rev8

Method: EPA8260-SIM
Matrix: AQ

Trip Blank Sample ID	Collected Date	Analyte	Result	Associated Samples
2036MOU2177A(1RES)	9/2/2020 9:20:00 AM	METHYLENE CHLORIDE TETRACHLOROETHYLENE	2.6 ug/L 2.1 ug/L	2036MOU2179F 2036MOU2180F 2036MOU2181F 2036MOU2182D 2036MOU2183F 2036MOU2184F 2036MOU2185F 2036MOU2186F 2036MOU2187F 2036MOU2188F 2036MOU2189F 2036MOU2190F 2036MOU2191F 2036MOU2192F 2036MOU2193F 2036MOU2194F 2036MOU2195F 2036MOU2196F 2036MOU2197F 2036MOU2198F 2036MOU2199F 2036MOU2200D 2036MOU2201F 2036Y0BW402F 2036Y0BW403F 2036YOU2404F 2036YOU2405F 2036YOU2406F 2036YOU2407D 2036YOU2408F 2036YOU2409F 2036YOU2410F 2036YOU2411F 2036YOU2412F 2036YOU2413F 2036YOU2414F 2036YOU2417F 2036YOU2418F 2036YOU2419C 2036YOU2420F

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
2036MOU2194F(1RES)	METHYLENE CHLORIDE	1.6 ug/L	1.6U ug/L

Surrogate Outlier Report

Lab Reporting Batch ID: FA78549

Laboratory: ACTO

EDD Filename: FA78549ACTO

eQAPP Name: FtOrd_UFP_QAPP_Rev8

Method: EPA8260-SIM

Matrix: AQ

<i>Sample ID (Analysis Type)</i>	<i>Surrogate</i>	<i>Sample % Recovery</i>	<i>% Recovery Limits</i>	<i>Affected Compounds</i>	<i>Flag</i>
2036MOU2188F (1RES)	1,2-DICHLOROETHANE-D4	120	81.00-118.00	All Target Analytes	J+ (all detects)
2036YOU2419C (1RES)	TOLUENE-D8	74	89.00-112.00	All Target Analytes	J-(all detects) UJ(all non-detects)
2036YOU2420F (1REA1)	1,2-DICHLOROETHANE-D4	119	81.00-118.00	All Target Analytes	J+(all detects)

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: FA78549

Laboratory: ACTO

EDD Filename: FA78549ACTO

eQAPP Name: FtOrd_UFP_QAPP_Rev8

Method: EPA8260-SIM

Matrix: AQ

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
2036MOU2179FMS 2036MOU2179FMSD (2036MOU2179F)	1,1-DICHLOROETHANE 1,2-DICHLOROPROPANE BENZENE METHYLENE CHLORIDE	128 125 123 127	128 125 123 130	77.00-125.00 78.00-122.00 79.00-120.00 74.00-124.00	- - - -	1,1-DICHLOROETHANE 1,2-DICHLOROPROPANE BENZENE METHYLENE CHLORIDE	J+ (all detects)
2036MOU2193FMS (2036MOU2193F)	Trichloroethylene	124	-	79.00-123.00	-	Trichloroethylene	J+(all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: FA78549

Laboratory: ACTO

EDD Filename: FA78549ACTO

eQAPP Name: FtOrd_UFP_QAPP_Rev8

Method: EPA8260-SIM
Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
2036MOU2179F	1,1-DICHLOROETHANE CHLOROFORM	J	0.37	0.50	LOQ	ug/L	J (all detects)
		J	0.25	0.50	LOQ	ug/L	
2036MOU2180F	1,1-DICHLOROETHANE 1,2-DICHLOROETHANE 1,2-DICHLOROPROPANE CHLOROFORM	J	0.46	0.50	LOQ	ug/L	J (all detects)
		J	0.30	0.50	LOQ	ug/L	
		J	0.10	0.50	LOQ	ug/L	
		J	0.37	0.50	LOQ	ug/L	
2036MOU2181F	1,1-DICHLOROETHANE CHLOROFORM TETRACHLOROETHYLENE	J	0.19	0.50	LOQ	ug/L	J (all detects)
		J	0.30	0.50	LOQ	ug/L	
		J	0.27	0.50	LOQ	ug/L	
2036MOU2182D	1,1-DICHLOROETHANE CHLOROFORM TETRACHLOROETHYLENE	J	0.19	0.50	LOQ	ug/L	J (all detects)
		J	0.30	0.50	LOQ	ug/L	
		J	0.28	0.50	LOQ	ug/L	
2036MOU2183F	TETRACHLOROETHYLENE Trichloroethylene VINYL CHLORIDE	J	0.17	0.50	LOQ	ug/L	J (all detects)
		J	0.14	0.50	LOQ	ug/L	
		J	0.051	0.10	LOQ	ug/L	
2036MOU2184F	1,1-DICHLOROETHANE VINYL CHLORIDE	J	0.25	0.50	LOQ	ug/L	J (all detects)
		J	0.053	0.10	LOQ	ug/L	
2036MOU2185F	1,1-DICHLOROETHANE CHLOROFORM TETRACHLOROETHYLENE	J	0.21	0.50	LOQ	ug/L	J (all detects)
		J	0.39	0.50	LOQ	ug/L	
		J	0.32	0.50	LOQ	ug/L	
2036MOU2186F	1,2-DICHLOROETHANE 1,2-DICHLOROPROPANE CHLOROFORM	J	0.30	0.50	LOQ	ug/L	J (all detects)
		J	0.12	0.50	LOQ	ug/L	
		J	0.22	0.50	LOQ	ug/L	
2036MOU2187F	1,2-DICHLOROPROPANE	J	0.36	0.50	LOQ	ug/L	J (all detects)
2036MOU2188F	1,2-DICHLOROPROPANE	J	0.17	0.50	LOQ	ug/L	J (all detects)
2036MOU2189F	BENZENE CHLOROFORM	J	0.15	0.50	LOQ	ug/L	J (all detects)
		J	0.28	0.50	LOQ	ug/L	
2036MOU2190F	CHLOROFORM CIS-1,2-DICHLOROETHYLENE TETRACHLOROETHYLENE	J	0.19	0.50	LOQ	ug/L	J (all detects)
		J	0.36	0.50	LOQ	ug/L	
		J	0.34	0.50	LOQ	ug/L	
2036MOU2191F	1,1-DICHLOROETHANE 1,2-DICHLOROPROPANE CHLOROFORM	J	0.18	0.50	LOQ	ug/L	J (all detects)
		J	0.12	0.50	LOQ	ug/L	
		J	0.38	0.50	LOQ	ug/L	
2036MOU2192F	1,2-DICHLOROPROPANE CARBON TETRACHLORIDE CHLOROFORM	J	0.12	0.50	LOQ	ug/L	J (all detects)
		J	0.12	0.50	LOQ	ug/L	
		J	0.42	0.50	LOQ	ug/L	
2036MOU2193F	1,2-DICHLOROETHANE CIS-1,2-DICHLOROETHYLENE	J	0.12	0.50	LOQ	ug/L	J (all detects)
		J	0.43	0.50	LOQ	ug/L	
2036MOU2194F	1,2-DICHLOROPROPANE BENZENE METHYLENE CHLORIDE	J	0.26	0.50	LOQ	ug/L	J (all detects)
		J	0.18	0.50	LOQ	ug/L	
		J	1.6	2.0	LOQ	ug/L	
2036MOU2195F	BENZENE CHLOROFORM	J	0.23	0.50	LOQ	ug/L	J (all detects)
		J	0.24	0.50	LOQ	ug/L	
2036MOU2196F	1,2-DICHLOROPROPANE BENZENE	J	0.24	0.50	LOQ	ug/L	J (all detects)
		J	0.17	0.50	LOQ	ug/L	
2036MOU2197F	CHLOROFORM CIS-1,2-DICHLOROETHYLENE TETRACHLOROETHYLENE	J	0.13	0.50	LOQ	ug/L	J (all detects)
		J	0.21	0.50	LOQ	ug/L	
		J	0.22	0.50	LOQ	ug/L	

Reporting Limit Outliers

Lab Reporting Batch ID: FA78549

Laboratory: ACTO

EDD Filename: FA78549ACTO

eQAPP Name: FtOrd_UFP_QAPP_Rev8

Method: EPA8260-SIM

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
2036MOU2198F	Trichloroethylene	J	0.17	0.50	LOQ	ug/L	J (all detects)
2036MOU2199F	1,1-DICHLOROETHANE CHLOROFORM	J	0.16	0.50	LOQ	ug/L	J (all detects)
		J	0.36	0.50	LOQ	ug/L	
2036MOU2200D	1,1-DICHLOROETHANE CHLOROFORM	J	0.16	0.50	LOQ	ug/L	J (all detects)
		J	0.36	0.50	LOQ	ug/L	
2036MOU2201F	CARBON TETRACHLORIDE CHLOROFORM TETRACHLOROETHYLENE	J	0.12	0.50	LOQ	ug/L	J (all detects)
		J	0.16	0.50	LOQ	ug/L	
		J	0.47	0.50	LOQ	ug/L	
2036Y0BW402F	CHLOROFORM TETRACHLOROETHYLENE	J	0.37	0.50	LOQ	ug/L	J (all detects)
		J	0.12	0.50	LOQ	ug/L	
2036Y0BW403F	1,1-DICHLOROETHANE CHLOROFORM	J	0.11	0.50	LOQ	ug/L	J (all detects)
		J	0.25	0.50	LOQ	ug/L	
2036YOU2404F	CHLOROFORM TETRACHLOROETHYLENE	J	0.20	0.50	LOQ	ug/L	J (all detects)
		J	0.13	0.50	LOQ	ug/L	
2036YOU2405F	CHLOROFORM	J	0.18	0.50	LOQ	ug/L	J (all detects)
2036YOU2409F	1,1-DICHLOROETHANE 1,2-DICHLOROETHANE TETRACHLOROETHYLENE	J	0.41	0.50	LOQ	ug/L	J (all detects)
		J	0.20	0.50	LOQ	ug/L	
		J	0.35	0.50	LOQ	ug/L	
2036YOU2413F	CHLOROFORM	J	0.27	0.50	LOQ	ug/L	J (all detects)
2036YOU2414F	1,1-DICHLOROETHANE	J	0.34	0.50	LOQ	ug/L	J (all detects)
2036YOU2417F	CHLOROFORM	J	0.31	0.50	LOQ	ug/L	J (all detects)
2036YOU2418F	CHLOROFORM CIS-1,2-DICHLOROETHYLENE TETRACHLOROETHYLENE	J	0.23	0.50	LOQ	ug/L	J (all detects)
		J	0.23	0.50	LOQ	ug/L	
		J	0.40	0.50	LOQ	ug/L	
2036YOU2420F	Trichloroethylene	J	0.35	0.50	LOQ	ug/L	J (all detects)

Field Duplicate RPD Report

Lab Reporting Batch ID: FA78549

Laboratory: ACTO

EDD Filename: FA78549ACTO

eQAPP Name: FtOrd_UFP_QAPP_Rev8

Method: EPA8260-SIM

Matrix: AQ

Analyte	Concentration (ug/L)		Sample RPD	eQAPP RPD	Flag
	2036MOU2199F	2036MOU2200D			
1,1-DICHLOROETHANE	0.16	0.16	0	30.00	No Qualifiers Applied
CHLOROFORM	0.36	0.36	0	30.00	
CIS-1,2-DICHLOROETHYLENE	1.1	1.1	0	30.00	
TETRACHLOROETHYLENE	0.89	0.90	1	30.00	
Trichloroethylene	7.6	7.6	0	30.00	
Analyte	Concentration (ug/L)		Sample RPD	eQAPP RPD	Flag
	2036YOU2406F	2036YOU2407D			
1,1-DICHLOROETHANE	0.70	0.72	3	30.00	No Qualifiers Applied
1,2-DICHLOROETHANE	0.61	0.63	3	30.00	
CIS-1,2-DICHLOROETHYLENE	1.3	1.3	0	30.00	
TETRACHLOROETHYLENE	1.2	1.2	0	30.00	
Trichloroethylene	2.6	2.6	0	30.00	
Analyte	Concentration (ug/L)		Sample RPD	eQAPP RPD	Flag
	2036MOU2181F	2036MOU2182D			
1,1-DICHLOROETHANE	0.19	0.19	0	30.00	No Qualifiers Applied
CHLOROFORM	0.30	0.30	0	30.00	
CIS-1,2-DICHLOROETHYLENE	0.57	0.60	5	30.00	
TETRACHLOROETHYLENE	0.27	0.28	4	30.00	
Trichloroethylene	3.1	3.2	3	30.00	

LDC #: 49260B1b
 SDG #: FA78549
 Laboratory: SGS North America, Inc.

VALIDATION COMPLETENESS WORKSHEET
 ADR/Stage 4

Date: 10/14/20
 Page: 2 of 2
 Reviewer: FJ
 2nd Reviewer: KR

METHOD: GC/MS Volatiles (EPA SW 846 Method 8260B-SIM)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Sample receipt/Technical holding times	A/A	
II.	GC/MS Instrument performance check	A	
III.	Initial calibration/ICV	A/A	$\%RSD \leq 15, r^2$ $ICV \leq 20$
IV.	Continuing calibration <i>ending</i>	A	$OCV \leq 20/50$
V.	Laboratory Blanks	N	Not reviewed for ADR validation.
VI.	Field blanks		
VII.	Surrogate spikes		Not reviewed for ADR validation.
VIII.	Matrix spike/Matrix spike duplicates		Not reviewed for ADR validation.
IX.	Laboratory control samples		Not reviewed for ADR validation.
X.	Field duplicates		
XI.	Internal standards	A	Not reviewed for ADR validation.
XII.	Compound quantitation RL/LOQ/LODs	N	Not reviewed for ADR validation.
XIII.	Target compound identification		Not reviewed for ADR validation.
XIV.	System performance		Not reviewed for ADR validation.
XV.	Overall assessment of data		Not reviewed for ADR validation.

Note: A = Acceptable ND = No compounds detected D = Duplicate SB=Source blank
 N = Not provided/applicable R = Rinsate TB = Trip blank OTHER:
 SW = See worksheet FB = Field blank EB = Equipment blank

** Indicates sample underwent Stage 4 validation

	Client ID	Lab ID	Matrix	Date
1	2036MOU2177A	FA78549-1	Water	09/02/20
2	2036MOU2179F**	FA78549-2**	Water	09/02/20
3	2036MOU2180F**	FA78549-3**	Water	09/02/20
4	2036MOU2181F**	FA78549-4**	Water	09/02/20
5	2036MOU2182D	FA78549-5	Water	09/02/20
6	2036MOU2183F	FA78549-6	Water	09/02/20
7	2036MOU2184F**	FA78549-7**	Water	09/02/20
8	2036MOU2185F**	FA78549-8**	Water	09/02/20
9	2036MOU2186F**	FA78549-9**	Water	09/02/20
10	2036MOU2187F**	FA78549-10**	Water	09/02/20
11	2036MOU2188F**	FA78549-11**	Water	09/02/20
12	2036MOU2189F**	FA78549-12**	Water	09/02/20
13	2036MOU2190F**	FA78549-13**	Water	09/02/20
14	2036MOU2191F	FA78549-14	Water	09/02/20

LDC #: 49260B1b

VALIDATION COMPLETENESS WORKSHEET

SDG #: FA78549

ADR/Stage 4

Laboratory: SGS North America, Inc.

Date: 10/14/20

Page: 2 of 2

Reviewer: [Signature]

2nd Reviewer: [Signature]

METHOD: GC/MS Volatiles (EPA SW 846 Method 8260B-SIM)

15	2036MOU2192F	FA78549-15	Water	09/02/20
16	2036MOU2193F	FA78549-16	Water	09/02/20
17	2036MOU2194F	FA78549-17	Water	09/02/20
18	2036MOU2195F	FA78549-18	Water	09/02/20
19	2036MOU2196F	FA78549-19	Water	09/02/20
20	2036MOU2197F	FA78549-20	Water	09/02/20
21	2036MOU2198F	FA78549-21	Water	09/02/20
22	2036MOU2199F	FA78549-22	Water	09/02/20
23	2036MOU2200D	FA78549-23	Water	09/02/20
24	2036MOU2201F	FA78549-24	Water	09/02/20
25	2036YOU2401A	FA78549-25	Water	09/02/20
26	2036Y0BW402F	FA78549-26	Water	09/02/20
27	2036Y0BW403F	FA78549-27	Water	09/02/20
28	2036YOU2404F	FA78549-28	Water	09/02/20
29	2036YOU2405F	FA78549-29	Water	09/02/20
30	2036YOU2406F	FA78549-30	Water	09/02/20
31	2036YOU2407D	FA78549-31	Water	09/02/20
32	2036YOU2408F	FA78549-32	Water	09/02/20
33	2036YOU2409F	FA78549-33	Water	09/02/20
34	2036YOU2410F	FA78549-34	Water	09/02/20
35	2036YOU2411F	FA78549-35	Water	09/02/20
36	2036YOU2412F	FA78549-36	Water	09/02/20
37	2036YOU2413F	FA78549-37	Water	09/02/20
38	2036YOU2414F	FA78549-38	Water	09/02/20
39	2036YOU2417F	FA78549-39	Water	09/02/20
40	2036YOU2418F	FA78549-40	Water	09/02/20
41	2036YOU2419C	FA78549-41	Water	09/02/20
42	2036YOU2420F	FA78549-42	Water	09/02/20
43	2036MOU2179FMS	FA78549-2MS	Water	09/02/20
44	2036MOU2179FMMSD	FA78549-2MSD	Water	09/02/20
45	2036MOU2193FMS	FA78549-16MS	Water	09/02/20
46	2036MOU2193FMMSD	FA78549-16MSD	Water	09/02/20
47				
48				
49				

Quality Control Outlier Reports

FA78551

Method Blank Outlier Report

Lab Reporting Batch ID: FA78551

Laboratory: ACTO

EDD Filename: FA78551ACTO

eQAPP Name: FtOrd_UFP_QAPP_Rev8

Method: EPA8260-SIM
Matrix: AQ

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
VZ2419-MB	9/15/2020 2:55:00 PM	METHYLENE CHLORIDE	1.1 ug/L	2036YOU2423A 2036YOU2425F 2036YOU2426F 2036YOU2427F 2036YOU2428F 2036YOU2429F 2036YOU2430F 2036YOU2431F 2036YOU2432F 2036YOU2433D 2036YOU2434F 2036YOU2435F 2036YOU2436F 2036YOU2437F 2036YOU2440F 2036YOU2442D 2036YOU2443F 2036YOU2444F 2036YOU2445F

Surrogate Outlier Report

Lab Reporting Batch ID: FA78551

Laboratory: ACTO

EDD Filename: FA78551ACTO

eQAPP Name: FtOrd_UFP_QAPP_Rev8

Method: EPA8260-SIM

Matrix: AQ

Sample ID (Analysis Type)	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
2036X0BW234C (1RES)	TOLUENE-D8	79	89.00-112.00	All Target Analytes	J- (all detects) UJ (all non-detects)
2036YOU2423A (1REA1)	1,2-DICHLOROETHANE-D4	120	81.00-118.00	All Target Analytes	J+(all detects)
2036YOU2425F (1REA1)	1,2-DICHLOROETHANE-D4	120	81.00-118.00	All Target Analytes	J+(all detects)
2036YOU2426F (1REA1)	1,2-DICHLOROETHANE-D4	121	81.00-118.00	All Target Analytes	J+(all detects)
2036YOU2427F (1REA1)	1,2-DICHLOROETHANE-D4	122	81.00-118.00	All Target Analytes	J+(all detects)
2036YOU2428F (1REA1)	1,2-DICHLOROETHANE-D4	121	81.00-118.00	All Target Analytes	J+(all detects)
2036YOU2429F (1REA1)	1,2-DICHLOROETHANE-D4	124	81.00-118.00	All Target Analytes	J+(all detects)
2036YOU2430F (1REA1)	1,2-DICHLOROETHANE-D4	125	81.00-118.00	All Target Analytes	J+(all detects)
2036YOU2431F (1REA1)	1,2-DICHLOROETHANE-D4	124	81.00-118.00	All Target Analytes	J+(all detects)
2036YOU2432F (1REA1)	1,2-DICHLOROETHANE-D4	123	81.00-118.00	All Target Analytes	J+(all detects)
2036YOU2433D (1REA1)	1,2-DICHLOROETHANE-D4	124	81.00-118.00	All Target Analytes	J+(all detects)
2036YOU2434F (1REA1)	1,2-DICHLOROETHANE-D4	125	81.00-118.00	All Target Analytes	J+(all detects)
2036YOU2435F (1REA1)	1,2-DICHLOROETHANE-D4	126	81.00-118.00	All Target Analytes	J+(all detects)
2036YOU2436F (1REA1)	1,2-DICHLOROETHANE-D4	126	81.00-118.00	All Target Analytes	J+(all detects)
2036YOU2437F (1REA1)	1,2-DICHLOROETHANE-D4	127	81.00-118.00	All Target Analytes	J+(all detects)
2036YOU2440F (1REA1)	1,2-DICHLOROETHANE-D4	128	81.00-118.00	All Target Analytes	J+(all detects)
2036YOU2442D (1REA1)	1,2-DICHLOROETHANE-D4	128	81.00-118.00	All Target Analytes	J+(all detects)
2036YOU2443F (1REA1)	1,2-DICHLOROETHANE-D4	128	81.00-118.00	All Target Analytes	J+(all detects)
2036YOU2444F (1REA1)	1,2-DICHLOROETHANE-D4	127	81.00-118.00	All Target Analytes	J+(all detects)
2036YOU2445F (1REA1)	1,2-DICHLOROETHANE-D4	128	81.00-118.00	All Target Analytes	J+(all detects)

Project Name and Number: 21065 - Fort Ord Groundwater Monitoring

10/16/2020 2:13:01 PM

ADR version 1.9.0.325

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Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: FA78551

Laboratory: ACTO

EDD Filename: FA78551ACTO

eQAPP Name: FtOrd_UFP_QAPP_Rev8

Method: EPA8260-SIM

Matrix: AQ

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
2036YOU2439DMS (2036YOU2439D)	1,1-DICHLOROETHANE	127	-	77.00-125.00	-	1,1-DICHLOROETHANE	J+ (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: FA78551

Laboratory: ACTO

EDD Filename: FA78551ACTO

eQAPP Name: FtOrd_UFP_QAPP_Rev8

Method: EPA8260-SIM

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
2036YOU2425F	CHLOROFORM	J	0.28	0.50	LOQ	ug/L	J (all detects)
2036YOU2426F	CHLOROFORM	J	0.27	0.50	LOQ	ug/L	J (all detects)
2036YOU2428F	1,2-DICHLOROPROPANE	J	0.21	0.50	LOQ	ug/L	J (all detects)
	TETRACHLOROETHYLENE	J	0.43	0.50	LOQ	ug/L	
2036YOU2429F	1,1-DICHLOROETHANE	J	0.33	0.50	LOQ	ug/L	J (all detects)
	CARBON TETRACHLORIDE	J	0.20	0.50	LOQ	ug/L	
2036YOU2430F	1,1-DICHLOROETHANE	J	0.43	0.50	LOQ	ug/L	J (all detects)
	CHLOROFORM	J	0.49	0.50	LOQ	ug/L	
	CIS-1,2-DICHLOROETHYLENE	J	0.32	0.50	LOQ	ug/L	
	TETRACHLOROETHYLENE	J	0.30	0.50	LOQ	ug/L	
2036YOU2432F	TETRACHLOROETHYLENE	J	0.37	0.50	LOQ	ug/L	J (all detects)
2036YOU2433D	TETRACHLOROETHYLENE	J	0.38	0.50	LOQ	ug/L	J (all detects)
2036YOU2434F	Trichloroethylene	J	0.47	0.50	LOQ	ug/L	J (all detects)
2036YOU2435F	CIS-1,2-DICHLOROETHYLENE	J	0.35	0.50	LOQ	ug/L	J (all detects)
2036YOU2437F	1,2-DICHLOROETHANE	J	0.21	0.50	LOQ	ug/L	J (all detects)
2036YOU2438F	METHYLENE CHLORIDE	J	1.0	2.0	LOQ	ug/L	J (all detects)
2036YOU2439D	METHYLENE CHLORIDE	J	1.0	2.0	LOQ	ug/L	J (all detects)
2036YOU2440F	1,2-DICHLOROETHANE	J	0.47	0.50	LOQ	ug/L	J (all detects)
2036YOU2441F	CHLOROFORM	J	0.20	0.50	LOQ	ug/L	J (all detects)
2036YOU2442D	CHLOROFORM	J	0.20	0.50	LOQ	ug/L	J (all detects)
2036YOU2444F	TETRACHLOROETHYLENE	J	0.28	0.50	LOQ	ug/L	J (all detects)

Field Duplicate RPD Report

Lab Reporting Batch ID: FA78551

Laboratory: ACTO

EDD Filename: FA78551ACTO

eQAPP Name: FtOrd_UFP_QAPP_Rev8

Method: EPA8260-SIM

Matrix: AQ

Analyte	Concentration (ug/L)		Sample RPD	eQAPP RPD	Flag
	2036YOU2432F	2036YOU2433D			
CHLOROFORM	0.75	0.72	4	30.00	No Qualifiers Applied
CIS-1,2-DICHLOROETHYLENE	2.6	2.5	4	30.00	
TETRACHLOROETHYLENE	0.37	0.38	3	30.00	
Trichloroethylene	13.3	13.1	2	30.00	

Analyte	Concentration (ug/L)		Sample RPD	eQAPP RPD	Flag
	2036YOU2438F	2036YOU2439D			
1,1-DICHLOROETHANE	21.6	20.7	4	30.00	No Qualifiers Applied
1,2-DICHLOROETHANE	1.4	1.5	7	30.00	
1,2-DICHLOROPROPANE	0.65	0.66	2	30.00	
CHLOROFORM	3.1	3.1	0	30.00	
CIS-1,2-DICHLOROETHYLENE	5.7	5.7	0	30.00	
METHYLENE CHLORIDE	1.0	1.0	0	30.00	
TETRACHLOROETHYLENE	6.6	7.1	7	30.00	
Trichloroethylene	6.4	6.5	2	30.00	
VINYL CHLORIDE	0.31	0.31	0	30.00	

Analyte	Concentration (ug/L)		Sample RPD	eQAPP RPD	Flag
	2036YOU2441F	2036YOU2442D			
CHLOROFORM	0.20	0.20	0	30.00	No Qualifiers Applied
Trichloroethylene	3.7	3.6	3	30.00	

METHOD: GC/MS Volatiles (EPA SW 846 Method 8260B)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Sample receipt/Technical holding times	A, Δ	
II.	GC/MS Instrument performance check	Δ	
III.	Initial calibration/ICV	A, A	% PSD = 15, 1" ICV = 20
IV.	Continuing calibration <i>ending</i>	Δ	CW = 20/50
V.	Laboratory Blanks	N	
VI.	Field blanks	N	
VII.	Surrogate spikes	N	
VIII.	Matrix spike/Matrix spike duplicates	N	
IX.	Laboratory control samples	N	
X.	Field duplicates	N	
XI.	Internal standards	Δ	
XII.	Compound quantitation RL/LOQ/LODs	N	
XIII.	Target compound identification	N	
XIV.	System performance	N	
XV.	Overall assessment of data	N	

Note: A = Acceptable ND = No compounds detected D = Duplicate SB=Source blank
 N = Not provided/applicable R = Rinsate TB = Trip blank OTHER:
 SW = See worksheet FB = Field blank EB = Equipment blank

	Client ID	Lab ID	Matrix	Date
1	2036YOU2423A	FA78551-1	Water	09/03/20
2	2036YOU2425F	FA78551-2	Water	09/03/20
3	2036YOU2426F	FA78551-3	Water	09/03/20
4	2036YOU2427F	FA78551-4	Water	09/03/20
5	2036YOU2428F	FA78551-5	Water	09/03/20
6	2036YOU2429F	FA78551-6	Water	09/03/20
7	2036YOU2430F	FA78551-7	Water	09/03/20
8	2036YOU2431F	FA78551-8	Water	09/03/20
9	2036YOU2432F	FA78551-9	Water	09/03/20
10	2036YOU2433D	FA78551-10	Water	09/03/20
11	2036YOU2434F	FA78551-11	Water	09/03/20
12	2036YOU2435F	FA78551-12	Water	09/03/20
13	2036YOU2436F	FA78551-13	Water	09/03/20
14	2036YOU2437F	FA78551-14	Water	09/03/20

LDC #: 49260C1b

VALIDATION COMPLETENESS WORKSHEET

SDG #: FA78551

ADR

Laboratory: SGS North America, Inc.

Date: 10/14/20

Page: 2 of 2

Reviewer: PF

2nd Reviewer: KR

METHOD: GC/MS Volatiles (EPA SW 846 Method 8260B)

	Client ID	Lab ID	Matrix	Date
15	2036YOU2438F	FA78551-15	Water	09/03/20
16	2036YOU2439D	FA78551-16	Water	09/03/20
17	2036YOU2440F	FA78551-17	Water	09/03/20
18	2036YOU2441F	FA78551-18	Water	09/03/20
19	2036YOU2442D	FA78551-19	Water	09/03/20
20	2036YOU2443F	FA78551-20	Water	09/03/20
21	2036YOU2444F	FA78551-21	Water	09/03/20
22	2036YOU2445F	FA78551-22	Water	09/03/20
23	2036YOU2446F	FA78551-23	Water	09/03/20
24	2036X0BW232F	FA78551-24	Water	09/03/20
25	2036X0BW233A	FA78551-25	Water	09/03/20
26	2036X0BW234C	FA78551-26	Water	09/03/20
27	2036X0BW246F	FA78551-27	Water	09/03/20
28	2036YOU2423AMS	FA78551-1MS	Water	09/03/20
29	2036YOU2423AMSD	FA78551-1MSD	Water	09/03/20
30	2036YOU2430FMS	FA78551-7MS	Water	09/03/20
31	2036YOU2430FMSD	FA78551-7MSD	Water	09/03/20
32	2036YOU2435FMS	FA78551-12MS	Water	09/03/20
33	2036YOU2435FMSD	FA78551-12MSD	Water	09/03/20
34	2036YOU2438FMS	FA78551-15MS	Water	09/03/20
35	2036YOU2438FMSD	FA78551-15MSD	Water	09/03/20
36	2036YOU2439DMS	FA78551-16MS	Water	09/03/20
37	2036YOU2439DMSD	FA78551-16MSD	Water	09/03/20
38				
39				
40				

Notes:

1	V02358	5	VZ2419 (E)	1-14, 17, 19-22
2	V02359			
3	V02363			
4	VZ2418 (E)			

LDC #: 49260C4b
 SDG #: FA78551
 Laboratory: SGS North America, Inc.

VALIDATION COMPLETENESS WORKSHEET
 ADR/Stage 4

Date: 10/14/20
 Page: 1 of 1
 Reviewer: KK
 2nd Reviewer: [Signature]

METHOD: Dissolved Metals (EPA SW 846 Method 6010C)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Sample receipt/Technical holding times	A / N	
II.	Instrument Calibration	A	
III.	ICP Interference Check Sample (ICS) Analysis	A	
IV.	Laboratory Blanks	A	ICB/CCB only
V.	Field Blanks	N	
VI.	Matrix Spike/Matrix Spike Duplicates	N	Not reviewed for ADR validation.
VII.	Duplicate sample analysis	N	Not reviewed for ADR validation.
VIII.	Serial Dilution	N	Not performed
IX.	Laboratory control samples	N	Not reviewed for ADR validation.
X.	Field Duplicates	N	Not reviewed for ADR validation.
XI.	Sample Result Verification	N	Not reviewed for ADR validation.
XII.	Overall Assessment of Data	N	

Note: A = Acceptable ND = No compounds detected D = Duplicate SB=Source blank
 N = Not provided/applicable R = Rinsate TB = Trip blank OTHER:
 SW = See worksheet FB = Field blank EB = Equipment blank

** Indicates sample underwent Stage 4 validation

	Client ID	Lab ID	Matrix	Date
1	2036YOU2450F**	FA78551-28**	Water	09/04/20
2	2036YOU2451F	FA78551-29	Water	09/04/20
3	2036YOU2452F	FA78551-30	Water	09/04/20
4	2036YOU2453F	FA78551-31	Water	09/04/20
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14				
15				

Notes: _____

Quality Control Outlier Reports

FA79006

Method Blank Outlier Report

Lab Reporting Batch ID: FA79006

Laboratory: ACTO

EDD Filename: FA79006ACTO

eQAPP Name: FtOrd_UFP_QAPP_Rev8

Method: EPA8260-SIM
Matrix: AQ

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
VO2366-MB	9/22/2020 4:29:00 PM	METHYLENE CHLORIDE	0.66 ug/L	2039MOU2207A 2039MOU2208F 2039MOU2209F 2039MOU2210F 2039MOU2211F 2039MOU2212F 2039MOU2213F 2039MOU2214F 2039MOU2215F 2039MOU2216F 2039MOU2217D

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
2039MOU2215F(1RES)	METHYLENE CHLORIDE	0.94 ug/L	0.94U ug/L

Surrogate Outlier Report

Lab Reporting Batch ID: FA79006

Laboratory: ACTO

EDD Filename: FA79006ACTO

eQAPP Name: FtOrd_UFP_QAPP_Rev8

Method: EPA8260-SIM

Matrix: AQ

<i>Sample ID (Analysis Type)</i>	<i>Surrogate</i>	<i>Sample % Recovery</i>	<i>% Recovery Limits</i>	<i>Affected Compounds</i>	<i>Flag</i>
2039MOU2215F (1RES)	1,2-DICHLOROETHANE-D4	120	81.00-118.00	All Target Analytes	J+ (all detects)
2039MOU2216F (1RES)	1,2-DICHLOROETHANE-D4	122	81.00-118.00	All Target Analytes	J+(all detects)
2039MOU2217D (1RES)	1,2-DICHLOROETHANE-D4	124	81.00-118.00	All Target Analytes	J+(all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: FA79006

Laboratory: ACTO

EDD Filename: FA79006ACTO

eQAPP Name: FtOrd_UFP_QAPP_Rev8

Method: EPA8260-SIM

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
2039MOU2210F	1,1-DICHLOROETHANE	J	0.48	0.50	LOQ	ug/L	J (all detects)
	1,2-DICHLOROETHANE	J	0.16	0.50	LOQ	ug/L	
	CHLOROFORM	J	0.35	0.50	LOQ	ug/L	
2039MOU2211F	1,2-DICHLOROETHANE	J	0.20	0.50	LOQ	ug/L	J (all detects)
	CHLOROFORM	J	0.43	0.50	LOQ	ug/L	
2039MOU2213F	1,1-DICHLOROETHANE	J	0.49	0.50	LOQ	ug/L	J (all detects)
	1,2-DICHLOROETHANE	J	0.17	0.50	LOQ	ug/L	
	CHLOROFORM	J	0.36	0.50	LOQ	ug/L	
2039MOU2214F	1,2-DICHLOROETHANE	J	0.21	0.50	LOQ	ug/L	J (all detects)
	CHLOROFORM	J	0.41	0.50	LOQ	ug/L	
	Trichloroethylene	J	0.17	0.50	LOQ	ug/L	
2039MOU2215F	1,2-DICHLOROETHANE	J	0.11	0.50	LOQ	ug/L	J (all detects)
	CHLOROFORM	J	0.32	0.50	LOQ	ug/L	
	METHYLENE CHLORIDE	JB	0.94	2.0	LOQ	ug/L	
2039MOU2216F	1,1-DICHLOROETHANE	J	0.44	0.50	LOQ	ug/L	J (all detects)
	1,2-DICHLOROETHANE	J	0.26	0.50	LOQ	ug/L	
	CHLOROFORM	J	0.29	0.50	LOQ	ug/L	
2039MOU2217D	1,1-DICHLOROETHANE	J	0.44	0.50	LOQ	ug/L	J (all detects)
	1,2-DICHLOROETHANE	J	0.25	0.50	LOQ	ug/L	
	CHLOROFORM	J	0.29	0.50	LOQ	ug/L	

Field Duplicate RPD Report

Lab Reporting Batch ID: FA79006

Laboratory: ACTO

EDD Filename: FA79006ACTO

eQAPP Name: FtOrd_UFP_QAPP_Rev8

Method: EPA8260-SIM

Matrix: AQ

Analyte	Concentration (ug/L)		Sample RPD	eQAPP RPD	Flag
	2039MOU2216F	2039MOU2217D			
1,1-DICHLOROETHANE	0.44	0.44	0	30.00	No Qualifiers Applied
1,2-DICHLOROETHANE	0.26	0.25	4	30.00	
CHLOROFORM	0.29	0.29	0	30.00	
CIS-1,2-DICHLOROETHYLENE	1.2	1.2	0	30.00	
TETRACHLOROETHYLENE	0.80	0.80	0	30.00	
Trichloroethylene	5.5	5.5	0	30.00	

LDC #: 49260D1b

VALIDATION COMPLETENESS WORKSHEET

SDG #: FA79006

ADR

Laboratory: SGS North America, Inc.

Date: 10/14/20

Page: 1 of 1

Reviewer: [Signature]

2nd Reviewer: [Signature]

METHOD: GC/MS Volatiles (EPA SW 846 Method 8260B)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Sample receipt/Technical holding times	A/Δ	
II.	GC/MS Instrument performance check	Δ	
III.	Initial calibration/ICV	A/Δ	% PSD ≤ 15, R ² ICV ≤ 20
IV.	Continuing calibration <i>ending</i>	Δ	CCV ≤ 20/50
V.	Laboratory Blanks	N	
VI.	Field blanks	N	
VII.	Surrogate spikes	N	
VIII.	Matrix spike/Matrix spike duplicates	N	
IX.	Laboratory control samples	N	
X.	Field duplicates	N	
XI.	Internal standards	Δ	
XII.	Compound quantitation RL/LOQ/LODs	N	
XIII.	Target compound identification	N	
XIV.	System performance	N	
XV.	Overall assessment of data	N	

Note: A = Acceptable
N = Not provided/applicable
SW = See worksheet

ND = No compounds detected
R = Rinsate
FB = Field blank

D = Duplicate
TB = Trip blank
EB = Equipment blank

SB=Source blank
OTHER:

	Client ID	Lab ID	Matrix	Date
1	2039MOU2207A	FA79006-1	Water	09/21/20
2	2039MOU2208F	FA79006-2	Water	09/21/20
3	2039MOU2209F	FA79006-3	Water	09/21/20
4	2039MOU2210F	FA79006-4	Water	09/21/20
5	2039MOU2211F	FA79006-5	Water	09/21/20
6	2039MOU2212F	FA79006-6	Water	09/21/20
7	2039MOU2213F	FA79006-7	Water	09/21/20
8	2039MOU2214F	FA79006-8	Water	09/21/20
9	2039MOU2215F	FA79006-9	Water	09/21/20
10	2039MOU2216F	FA79006-10	Water	09/21/20
11	2039MOU2217D	FA79006-11	Water	09/21/20
12	2039MOU2215FMS	FA79006-9MS	Water	09/21/20
13	2039MOU2215FMSD	FA79006-9MSD	Water	09/21/20
14	N 02364			

Enclosure II

Stage 4 Data Validation Reports

Laboratory Data Consultants, Inc. Data Validation Report

Project/Site Name: Fort Ord, OU2
LDC Report Date: October 14, 2020
Parameters: Volatiles
Validation Level: Stage 4
Laboratory: SGS North America, Inc.
Sample Delivery Group (SDG): FA78549

Sample Identification	Laboratory Sample Identification	Matrix	Collection Date
2036MOU2179F	FA78549-2	Water	09/02/20
2036MOU2180F	FA78549-3	Water	09/02/20
2036MOU2181F	FA78549-4	Water	09/02/20
2036MOU2184F	FA78549-7	Water	09/02/20
2036MOU2185F	FA78549-8	Water	09/02/20
2036MOU2186F	FA78549-9	Water	09/02/20
2036MOU2187F	FA78549-10	Water	09/02/20
2036MOU2188F	FA78549-11	Water	09/02/20
2036MOU2189F	FA78549-12	Water	09/02/20
2036MOU2190F	FA78549-13	Water	09/02/20
2036MOU2179FMS	FA78549-2MS	Water	09/02/20
2036MOU2179FMDS	FA78549-2MSD	Water	09/02/20

Introduction

This Data Validation Report (DVR) presents data validation findings and results for the associated samples listed on the cover page. Data validation was performed in accordance with the Final Quality Assurance Project Plan Volume I, Appendix A for Groundwater Remedies and Monitoring at Operable Unit 2, Sites 2 and 12, and Operable Unit Carbon Tetrachloride Plume, Former Fort Ord, California (Revision 7, August 2019), the U.S. Department of Defense (DoD) Quality Systems Manual (QSM) for Environmental Laboratories, Version 5.1 (2017), and the USACE Guidance for Evaluating Performance-Based Chemical Data (June 2005). Where specific guidance was not available, the data has been evaluated in a conservative manner consistent with industry standards using professional experience.

The analyses were performed by the following method:

Volatile Organic Compounds (VOCs) by Environmental Protection Agency (EPA) SW 846 Method 8260B in Selected Ion Monitoring (SIM) mode

All sample results were subjected to Stage 4 data validation, which is comprised of the quality control (QC) summary forms as well as the raw data, to confirm sample quantitation and identification.

The following are definitions of the data qualifiers utilized during data validation:

- J+ (Estimated, High Bias): The compound or analyte was analyzed for and positively identified by the laboratory; however the reported concentration is estimated, displaying high bias, due to non-conformances discovered during data validation.
- J- (Estimated, Low Bias): The compound or analyte was analyzed for and positively identified by the laboratory; however the reported concentration is estimated, displaying low bias, due to non-conformances discovered during data validation.
- J (Estimated, Bias Indeterminate): The compound or analyte was analyzed for and positively identified by the laboratory; however the reported concentration is estimated due to non-conformances discovered during data validation. Bias is indeterminate.
- U (Non-detected): The compound or analyte was analyzed for and positively identified by the laboratory; however the compound or analyte should be considered non-detected at the reported concentration due to the presence of contaminants detected in the associated blank(s).
- UJ (Non-detected estimated): The compound or analyte was reported as not detected by the laboratory; however the reported quantitation/detection limit is estimated due to non-conformances discovered during data validation.
- R (Rejected): The sample results were rejected due to gross non-conformances discovered during data validation. Data qualified as rejected is not usable.
- NA (Not Applicable): The non-conformance discovered during data validation demonstrates a high bias, while the affected compound or analyte in the associated sample(s) was reported as not detected by the laboratory and did not warrant the qualification of the data.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

I. Sample Receipt and Technical Holding Times

All samples were received in good condition and cooler temperatures upon receipt met validation criteria.

All technical holding time requirements were met.

II. GC/MS Instrument Performance Check

A bromofluorobenzene (BFB) tune was performed at 12 hour intervals.

All ion abundance requirements were met.

III. Initial Calibration and Initial Calibration Verification

An initial calibration was performed as required by the method.

For compounds where average relative response factors (RRFs) were utilized, the percent relative standard deviations (%RSD) were less than or equal to 15.0%.

In the case where the laboratory used a calibration curve to evaluate the compounds, all coefficients of determination (r^2) were greater than or equal to 0.990.

Average relative response factors (RRF) for all compounds were within validation criteria.

The percent differences (%D) of the initial calibration verification (ICV) standard were less than or equal to 20.0% for all compounds.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

The percent differences (%D) were less than or equal to 20.0% for all compounds.

The percent differences (%D) of the ending continuing calibration verifications (CCVs) were less than or equal to 50.0% for all compounds.

All of the continuing calibration relative response factors (RRF) were within validation criteria.

V. Laboratory Blanks

Laboratory blanks were analyzed as required by the method. No contaminants were found in the laboratory blanks.

VI. Field Blanks

Samples 2036MOU2177A and 2036YOU2401A were identified as trip blanks. No contaminants were found with the following exceptions:

Blank ID	Collection Date	Compound	Concentration	Associated Samples
2036MOU2177A	09/02/20	Methylene chloride Tetrachloroethene	2.6 ug/L 2.1 ug/L	All samples in SDG FA78549

Sample 2036YOU2419C was identified as a field blank. No contaminants were found.

The laboratory indicated that the trip blank was contaminated with tetrachloroethene due to problems when the trip blanks were produced and no data was qualified.

Sample concentrations were compared to concentrations detected in the laboratory blanks. The sample concentrations were either not detected or were significantly greater (>10X for common contaminants, >5X for other contaminants) than the concentrations found in the associated laboratory blanks.

VII. Surrogates

Surrogates were added to all samples as required by the method. All surrogate recoveries (%R) were within QC limits with the following exceptions:

Sample	Surrogate	%R (Limits)	Affected Compound	Flag	A or P
2036MOU2188F	1,2-Dichloroethane-d4	120 (81-118)	All compounds	J+ (all detects)	A

VIII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) sample analysis was performed on an associated project sample. Percent recoveries (%R) were within QC limits with the following exceptions:

Spike ID (Associated Samples)	Compound	MS (%R) (Limits)	MSD (%R) (Limits)	Flag	A or P
2036MOU2179FMS/MSD (2036MOU2179F)	Benzene 1,2-Dichloropropane Methylene chloride	123 (79-120) 125 (78-122) 127 (74-124)	123 (79-120) 125 (78-122) 130 (74-124)	NA	-
2036MOU2179FMS/MSD (2036MOU2179F)	1,1-Dichloroethane	128 (77-125)	128 (77-125)	J+ (all detects)	A

Relative percent differences (RPD) were within QC limits.

IX. Laboratory Control Samples

Laboratory control samples (LCS) were analyzed as required by the method. Percent recoveries (%R) were within QC limits.

X. Field Duplicates

Samples 2036MOU2181F and 2036MOU2182D were identified as field duplicates. No results were detected in any of the samples with the following exceptions:

Compound	Concentration (ug/L)		RPD (Limits)
	2036MOU2181F	2036MOU2182D	
Chloroform	0.30	0.30	0 (≤30)
1,1-Dichloroethane	0.19	0.19	0 (≤30)
cis-1,2-Dichloroethene	0.57	0.60	5 (≤30)
Tetrachloroethene	0.27	0.28	4 (≤30)
Trichloroethene	3.1	3.2	3 (≤30)

XI. Internal Standards

All internal standard areas and retention times were within QC limits.

XII. Compound Quantitation

All compound quantitations met validation criteria.

All compounds reported below the limit of quantitation (LOQ) were qualified as follows:

Sample	Finding	Flag	A or P
2036MOU2179F 2036MOU2180F 2036MOU2181F 2036MOU2184F 2036MOU2185F 2036MOU2186F 2036MOU2187F 2036MOU2188F 2036MOU2189F 2036MOU2190F	All compounds reported below the LOQ.	J (all detects)	A

XIII. Target Compound Identifications

All target compound identifications met validation criteria.

XIV. System Performance

The system performance was acceptable.

XV. Overall Assessment of Data

The analysis was conducted within all specifications of the method. No results were rejected in this SDG.

Due to surrogate %R, MS/MD %R, and results below the LOQ, data were qualified as estimated in ten samples.

The quality control criteria reviewed, other than those discussed above, were met and are considered acceptable.

**Fort Ord, OU2
Volatiles - Data Qualification Summary - SDG FA78549**

Sample	Compound	Flag*	A or P	Reason
2036MOU2188F	All compounds	J+ (all detects)	A	Surrogates (%R)
2036MOU2179F	1,1-Dichloroethane	J+ (all detects)	A	Matrix spike/Matrix spike duplicate (%R)
2036MOU2179F 2036MOU2180F 2036MOU2181F 2036MOU2184F 2036MOU2185F 2036MOU2186F 2036MOU2187F 2036MOU2188F 2036MOU2189F 2036MOU2190F	All compounds reported below the LOQ.	J (all detects)	A	Compound quantitation

* A non-biased (J) flag will always supersede biased (J+ or J-) flags since it is not possible to assess the direction of the potential bias.

**Fort Ord, OU2
Volatiles - Laboratory Blank Data Qualification Summary - SDG FA78549**

No Sample Data Qualified in this SDG

**Fort Ord, OU2
Volatiles - Field Blank Data Qualification Summary - SDG FA78549**

No Sample Data Qualified in this SDG

LDC #: 49260B1b
 SDG #: FA78549
 Laboratory: SGS North America, Inc.

VALIDATION COMPLETENESS WORKSHEET
 ADR (Stage 4)

Date: 10/14/20
 Page: 1 of 2
 Reviewer: [Signature]
 2nd Reviewer: [Signature]

METHOD: GC/MS Volatiles (EPA SW 846 Method 8260B-SIM)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Sample receipt/Technical holding times	A/A	
II.	GC/MS Instrument performance check	A	
III.	Initial calibration/ICV	A/A	% RSD ≤ 15, r ² ICV ≤ 20
IV.	Continuing calibration <i>tending</i>	A	CCV ≤ 20/50
V.	Laboratory Blanks	A SW	Not reviewed for ADR validation. FB = 1, 2, 5 FB = 4
VI.	Field blanks	SW	TB = 1, 2, 5 FB = 4
VII.	Surrogate spikes	SW	Not reviewed for ADR validation.
VIII.	Matrix spike/Matrix spike duplicates	SW	Not reviewed for ADR validation.
IX.	Laboratory control samples	A	Not reviewed for ADR validation. LC
X.	Field duplicates	SW	D = 4, 5
XI.	Internal standards	A	Not reviewed for ADR validation.
XII.	Compound quantitation RL/LOQ/LODs	A	Not reviewed for ADR validation.
XIII.	Target compound identification	A	Not reviewed for ADR validation.
XIV.	System performance	A	Not reviewed for ADR validation.
XV.	Overall assessment of data	A	Not reviewed for ADR validation.

Note: A = Acceptable ND = No compounds detected D = Duplicate SB=Source blank
 N = Not provided/applicable R = Rinsate TB = Trip blank OTHER:
 SW = See worksheet FB = Field blank EB = Equipment blank

** Indicates sample underwent Stage 4 validation

	Client ID	Lab ID	Matrix	Date
1+	2036MOU2177A TB	FA78549-1	Water	09/02/20
2	2036MOU2179F**	FA78549-2**	Water	09/02/20
3	2036MOU2180F**	FA78549-3**	Water	09/02/20
4	2036MOU2181F** D	FA78549-4**	Water	09/02/20
5	2036MOU2182D D	FA78549-5	Water	09/02/20
6	2036MOU2183F	FA78549-6	Water	09/02/20
7	2036MOU2184F**	FA78549-7**	Water	09/02/20
8	2036MOU2185F**	FA78549-8**	Water	09/02/20
9	2036MOU2186F**	FA78549-9**	Water	09/02/20
10	2036MOU2187F**	FA78549-10**	Water	09/02/20
11	2036MOU2188F**	FA78549-11**	Water	09/02/20
12	2036MOU2189F**	FA78549-12**	Water	09/02/20
13	2036MOU2190F**	FA78549-13**	Water	09/02/20
14	2036MOU2191F	FA78549-14	Water	09/02/20

LDC #: 49260B1b

VALIDATION COMPLETENESS WORKSHEET

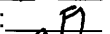
SDG #: FA78549

ADR/Stage 4

Laboratory: SGS North America, Inc.

Date: 10/14/20

Page: 2 of 2

Reviewer: 2nd Reviewer: 

METHOD: GC/MS Volatiles (EPA SW 846 Method 8260B-SIM)

	Client ID	Lab ID	Matrix	Date
15	2036MOU2192F	FA78549-15	Water	09/02/20
16	2036MOU2193F	FA78549-16	Water	09/02/20
17	2036MOU2194F	FA78549-17	Water	09/02/20
18	2036MOU2195F	FA78549-18	Water	09/02/20
19	2036MOU2196F	FA78549-19	Water	09/02/20
20	2036MOU2197F	FA78549-20	Water	09/02/20
21	2036MOU2198F	FA78549-21	Water	09/02/20
22	2036MOU2199F	FA78549-22	Water	09/02/20
23	2036MOU2200D	FA78549-23	Water	09/02/20
24	2036MOU2201F	FA78549-24	Water	09/02/20
25	2036YOU2401A	FA78549-25	Water	09/02/20
26	2036Y0BW402F	FA78549-26	Water	09/02/20
27	2036Y0BW403F	FA78549-27	Water	09/02/20
28	2036YOU2404F	FA78549-28	Water	09/02/20
29	2036YOU2405F	FA78549-29	Water	09/02/20
30	2036YOU2406F	FA78549-30	Water	09/02/20
31	2036YOU2407D	FA78549-31	Water	09/02/20
32	2036YOU2408F	FA78549-32	Water	09/02/20
33	2036YOU2409F	FA78549-33	Water	09/02/20
34	2036YOU2410F	FA78549-34	Water	09/02/20
35	2036YOU2411F	FA78549-35	Water	09/02/20
36	2036YOU2412F	FA78549-36	Water	09/02/20
37	2036YOU2413F	FA78549-37	Water	09/02/20
38	2036YOU2414F	FA78549-38	Water	09/02/20
39	2036YOU2417F	FA78549-39	Water	09/02/20
40	2036YOU2418F	FA78549-40	Water	09/02/20
41	2036YOU2419C	FA78549-41	Water	09/02/20
42	2036YOU2420F	FA78549-42	Water	09/02/20
43	2036MOU2179FMS	FA78549-2MS	Water	09/02/20
44	2036MOU2179FMMSD	FA78549-2MSD	Water	09/02/20
45	2036MOU2193FMS	FA78549-16MS	Water	09/02/20
46	2036MOU2193FMMSD	FA78549-16MSD	Water	09/02/20
47	102354	Y22418 (E)		
48	Y22417			
49	102360			

Method: Volatiles (EPA SW 846 Method 8260**b**)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
Were all technical holding times met?	/			
Was cooler temperature criteria met?	/			
II. GC/MS Instrument performance check				
Were the BFB performance results reviewed and found to be within the specified criteria?	/			
Were all samples analyzed within the 12 hour clock criteria?	/			
IIIa. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	/			
Were all percent relative standard deviations (%RSD) ≤ 15% and relative response factors (RRF) within method criteria?	/			
Was a curve fit used for evaluation? If yes, did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?	/			
IIIb. Initial Calibration Verification				
Was an initial calibration verification standard analyzed after each initial calibration for each instrument?	/			
Were all percent differences (%D) ≤ 20%?	/			
IV. Continuing calibration				
Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?	/			
Were all percent differences (%D) ≤ 20% and relative response factors (RRF) within method criteria?	/			
Were all percent differences (%D) ≤ 50% for closing calibration verifications?	/			
V. Laboratory Blanks				
Was a laboratory blank associated with every sample in this SDG?	/			
Was a laboratory blank analyzed at least once every 12 hours for each matrix and concentration?	/			
Was there contamination in the laboratory blanks?		/		
VI. Field blanks				
Were field blanks were identified in this SDG?	/			
Were target compounds detected in the field blanks?	/			
VII. Surrogate spikes				
Were all surrogate percent recovery (%R) within QC limits?	/			
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?	✓		NA	
VIII. Matrix spike/Matrix spike duplicates				
Were matrix spike (MS) and matrix spike duplicate (MSD) analyzed in this SDG?	/			

Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?				
IX. Laboratory control samples				
Was an LCS analyzed per analytical batch?				
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?				
X. Field duplicates				
Were field duplicate pairs identified in this SDG?				
Were target compounds detected in the field duplicates?				
XI. Internal standards				
Were internal standard area counts within -50% to +100% of the associated calibration standard?				
Were retention times within + 30 seconds of the associated calibration standard?				
XII. Compound quantitation				
Did the laboratory LOQs/RLs meet the QAPP LOQs/RLs?				
Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the compound?				
Were compound quantitation and RLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?				
XIII. Target compound identification				
Were relative retention times (RRT's) within + 0.06 RRT units of the standard?				
Did compound spectra meet specified EPA "Functional Guidelines" criteria?				
Were chromatogram peaks verified and accounted for?				
XIV. System performance				
System performance was found to be acceptable.				
XV. Overall assessment of data				
Overall assessment of data was found to be acceptable.				

TARGET COMPOUND WORKSHEET

METHOD: VOA

A. Chloromethane	AA. Tetrachloroethene	AAA. 1,3,5-Trimethylbenzene	AAAA. Ethyl tert-butyl ether	A1. 1,3-Butadiene
B. Bromomethane	BB. 1,1,2,2-Tetrachloroethane	BBB. 4-Chlorotoluene	BBBB. tert-Amyl methyl ether	B1. Hexane
C. Vinyl chloride	CC. Toluene	CCC. tert-Butylbenzene	CCCC. 1-Chlorohexane	C1. Heptane
D. Chloroethane	DD. Chlorobenzene	DDD. 1,2,4-Trimethylbenzene	DDDD. Isopropyl alcohol	D1. Propylene
E. Methylene chloride	EE. Ethylbenzene	EEE. sec-Butylbenzene	EEEE. Acetonitrile	E1. Freon 11
F. Acetone	FF. Styrene	FFF. 1,3-Dichlorobenzene	FFFF. Acrolein	F1. Freon 12
G. Carbon disulfide	GG. Xylenes, total	GGG. p-Isopropyltoluene	GGGG. Acrylonitrile	G1. Freon 113
H. 1,1-Dichloroethene	HH. Vinyl acetate	HHH. 1,4-Dichlorobenzene	HHHH. 1,4-Dioxane	H1. Freon 114
I. 1,1-Dichloroethane	II. 2-Chloroethylvinyl ether	III. n-Butylbenzene	IIII. Isobutyl alcohol	I1. 2-Nitropropane
J. 1,2-Dichloroethene, total	JJ. Dichlorodifluoromethane	JJJ. 1,2-Dichlorobenzene	JJJJ. Methacrylonitrile	J1. Dimethyl disulfide
K. Chloroform	KK. Trichlorofluoromethane	KKK. 1,2,4-Trichlorobenzene	KKKK. Propionitrile	K1. 2,3-Dimethyl pentane
L. 1,2-Dichloroethane	LL. Methyl-tert-butyl ether	LLL. Hexachlorobutadiene	LLLL. Ethyl ether	L1. 2,4-Dimethyl pentane
M. 2-Butanone	MM. 1,2-Dibromo-3-chloropropane	MMM. Naphthalene	MMMM. Benzyl chloride	M1. 3,3-Dimethyl pentane
N. 1,1,1-Trichloroethane	NN. Methyl ethyl ketone	NNN. 1,2,3-Trichlorobenzene	NNNN. Iodomethane	N1. 2-Methylpentane
O. Carbon tetrachloride	OO. 2,2-Dichloropropane	OOO. 1,3,5-Trichlorobenzene	OOOO. 1,1-Difluoroethane	O1. 3-Methylpentane
P. Bromodichloromethane	PP. Bromochloromethane	PPP. trans-1,2-Dichloroethene	PPPP. Tetrahydrofuran	P1. 3-Ethylpentane
Q. 1,2-Dichloropropane	QQ. 1,1-Dichloropropene	QQQ. cis-1,2-Dichloroethene	QQQQ. Methyl acetate	Q1. 2,2-Dimethylpentane
R. cis-1,3-Dichloropropene	RR. Dibromomethane	RRR. m,p-Xylenes	RRRR. Ethyl acetate	R1. 2,2,3-Trimethylbutane
S. Trichloroethene	SS. 1,3-Dichloropropane	SSS. o-Xylene	SSSS. Cyclohexane	S1. 2,2,4-Trimethylpentane
T. Dibromochloromethane	TT. 1,2-Dibromoethane	TTT. 1,1,2-Trichloro-1,2,2-trifluoroethane	TTTT. Methyl cyclohexane	T1. 2-Methylhexane
U. 1,1,2-Trichloroethane	UU. 1,1,1,2-Tetrachloroethane	UUU. 1,2-Dichlorotetrafluoroethane	UUUU. Allyl chloride	U1. Nonanal
V. Benzene	VV. Isopropylbenzene	VVV. 4-Ethyltoluene	VVVV. Methyl methacrylate	V1. 2-Methylnaphthalene
W. trans-1,3-Dichloropropene	WW. Bromobenzene	WWW. Ethanol	WWWW. Ethyl methacrylate	W1. Methanol
X. Bromoform	XX. 1,2,3-Trichloropropane	XXX. Di-isopropyl ether	XXXX. cis-1,4-Dichloro-2-butene	X1. 1,2,3-Trimethylbenzene
Y. 4-Methyl-2-pentanone	YY. n-Propylbenzene	YYY. tert-Butanol	YYYY. trans-1,4-Dichloro-2-butene	Y1. 2-Propanol
Z. 2-Hexanone	ZZ. 2-Chlorotoluene	ZZZ. tert-Butyl alcohol	ZZZZ. Pentachloroethane	Z1.

LDC #: 49260B1b

VALIDATION FINDINGS WORKSHEET Field Blanks

Page: 1 of 1
Reviewer: FT

METHOD: GC/MS VOA (EPA SW 846 Method 8260 ^B)

Y N N/A Were field blanks identified in this SDG?
Y N N/A Were target compounds detected in the field blanks?

Blank units: ug/L Associated sample units: ug/L

Sampling date: 9/2/20

Field blank type: (circle one) Field Blank / Rinsate / Trip Blank / Other: TB Associated Samples: 2-4, 7-13

Compound	Blank ID	Sample Identification								
		3	4	7	8	9	10	11	12	13
E	2.6	-	-							
AA	2.1	0.50U	0.27U	0.10U	0.52U	0.11U	4.2U	2.1U	2.2U	0.34U
Add Text: Lab indicated that the TB was contaminated due to problems when the trip blanks were produced and no data was qualified										

Blank units: _____ Associated sample units: _____

Sampling date: _____

Field blank type: (circle one) Field Blank / Rinsate / Trip Blank / Other: _____ Associated Samples: _____

Compound	Blank ID	Sample Identification								

CIRCLED RESULTS WERE NOT QUALIFIED. ALL RESULTS NOT CIRCLED WERE QUALIFIED BY THE FOLLOWING STATEMENT:
Common contaminants such as Methylene chloride, Acetone, 2-Butanone and Carbon disulfide that were detected in samples within ten times the associated field blank concentration were qualified as not detected, "U". Other contaminants within five times the field blank concentration were also qualified as not detected, "U".

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates

METHOD : GC/MS VOA (EPA SW 846 Method 8260B)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

- Y N N/A Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.
- Y N N/A Was a MS/MSD analyzed every 20 samples of each matrix?
- Y N N/A Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?

#	MS/MSD ID	Compound	MS %R (Limits)	MSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
	43, 44	V	123 (79-120)	123 (79-120)	()	✓	J ⁺ det / A ND
		I	128 (77-125)	128 (77-125)	()	↓	Det
		Q	125 (78-122)	125 (78-122)	()	↓	ND
		E	127 (74-124)	130 (74-124)	()	↓	ND
			()	()	()		
			()	()	()		
			()	()	()		
			()	()	()		
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			()	()	()		

VALIDATION FINDINGS WORKSHEET
Field Duplicates

METHOD: GCMS VOA (EPA SW 846 Method 8260B)

Y N N/A
Y N N/A

Were field duplicate pairs identified in this SDG?
Were target compounds detected in the field duplicate pairs?

Compound	Concentration (<u>ug/L</u>)		RPD (≤ <u>30</u>) %	QUAL
	<u>4</u>	<u>5</u>		
<u>K</u>	<u>0.30</u>	<u>0.30</u>	<u>0</u>	/
<u>I</u>	<u>0.19</u>	<u>0.19</u>	<u>0</u>	
<u>QQQ</u>	<u>0.57</u>	<u>0.60</u>	<u>5</u>	
<u>AA</u>	<u>0.27</u>	<u>0.28</u>	<u>4</u>	
<u>S</u>	<u>3.1</u>	<u>3.2</u>	<u>3</u>	

Compound	Concentration ()		RPD (≤ %)	QUAL

Compound	Concentration ()		RPD (≤ %)	QUAL

Compound	Concentration ()		RPD (≤ %)	QUAL

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

METHOD: GC/MS VOA (EPA SW 846 Method 8260) B

The Relative Response Factor (RRF), average RRF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

$$RRF = (A_x)(C_{is}) / (A_{is})(C_x)$$

average RRF = sum of the RRFs/number of standards

$$\%RSD = 100 * (S/X)$$

A_x = Area of compound,

C_x = Concentration of compound,

S = Standard deviation of the RRFs

X = Mean of the RRFs

A_{is} = Area of associated internal standard

C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Reported	Recalc	Reported	Recalc	Reported	Recalc
				RRF (5.0 std)	RRF (5.0 std)	Average RRF (initial)	Average RRF (initial)	%RSD	%RSD
1	ICAL GCMSO	9/8/20	K (1st internal standard)	0.769	0.769	0.761	0.761	5.63	5.63
			AA (2nd internal standard)	su	curve				
			(3rd internal standard)						
			(4th internal standard)						
2			(1st internal standard)						
			(2nd internal standard)						
			(3rd internal standard)						
			(4th internal standard)						
3			(1st internal standard)						
			(2nd internal standard)						
			(3rd internal standard)						
			(4th internal standard)						
4			(1st internal standard)						
			(2nd internal standard)						
			(3rd internal standard)						
			(4th internal standard)						

LDC #: 49260B1b

Validation Findings Worksheet
Initial Calibration Calculation Verification

Page: 1 of 1
 Reviewer: PT

Method: GC/MS 8260B SIM

Date	Instrument/Column	Compound	Level	(Y) Response	(X) Conc.	(X ²) Conc.
9/8/2020	GCMSO	AA	1	0.00902	0.02	0.0004
			2	0.055	0.10	0.01
			3	0.1968	0.40	0.16
			4	0.52	1.00	1
			5	0.936	2.00	4
			6	1.443	3.00	9
			7	1.92	4.00	16

Regression Output

			Reported
Constant	c =	0.0000	0
Std Err of Y Est			
R Squared		0.99969	0.9994
Degrees of Freedom			
	a =	b =	
X Coefficient(s)	4.86130E-01	-1.8122E-03	a= 0.48599
Std Err of Coef.			b= -0.00171
Correlation Coefficient		0.999843	0.9999
Coefficient of Determination (r ²)	r ²	0.999686	

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

METHOD: GC/MS VOA (EPA SW 846 Method 8260 B)

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the compounds identified below using the following calculation:

% Difference = $100 * (\text{ave. RRF} - \text{RRF}) / \text{ave. RRF}$
 $\text{RRF} = (A_x)(C_{is}) / (A_{is})(C_x)$

Where: ave. RRF = initial calibration average RRF
 RRF = continuing calibration RRF
 A_x = Area of compound,
 C_x = Concentration of compound,
 A_{is} = Area of associated internal standard
 C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference internal Standard)	Average RRF (initial) /	Reported RRF (CC)	Recalculated RRF (CC)	Reported %D	Recalculated %D
1	ccv 805	9/10/20	K (IS1)	0.76%	0.756	0.756	0.7	0.7
			AA (9) (IS2)	10.0	9.130	9.130	8.7	8.7
			(IS3)					
			(IS4)					
			(IS5)					
2			(IS1)					
			(IS2)					
			(IS3)					
			(IS4)					
			(IS5)					
3			(IS1)					
			(IS2)					
			(IS3)					
			(IS4)					
			(IS5)					

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 4926031b

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Page: 1 of 1
 Reviewer: FT

METHOD: GC/MS VOA (EPA SW 846 Method 8260 B)

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
 SS = Surrogate Spiked

Sample ID: #2

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane					
1,2-Dichloroethane-d4	5.0	5.60	112	112	0
Toluene-d8	↓	5.11	102	102	0
Bromofluorobenzene					

Sample ID: _____

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane					
1,2-Dichloroethane-d4					
Toluene-d8					
Bromofluorobenzene					

Sample ID: _____

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane					
1,2-Dichloroethane-d4					
Toluene-d8					
Bromofluorobenzene					

Sample ID: _____

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane					
1,2-Dichloroethane-d4					
Toluene-d8					
Bromofluorobenzene					

Sample ID: _____

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane					
1,2-Dichloroethane-d4					
Toluene-d8					
Bromofluorobenzene					

LDC #: 49260B1b

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates Results Verification

Page: 1 of 1
 Reviewer: FT

METHOD: GC/MS VOA (EPA Method 8260 β)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = $100 * (SSC - SC) / SA$

Where: SSC = Spiked sample concentration
 SA = Spike added

SC = Sample concentration

RPD = $|MSC - MSC| * 2 / (MSC + MSDC)$

MSC = Matrix spike concentration

MSDC = Matrix spike duplicate concentration

MS/MSD sample: 43 + 44

Compound	Spike Added (ug/L)		Sample Concentration (ug/L)	Spiked Sample Concentration (ug/L)		Matrix Spike		Matrix Spike Duplicate		MS/MSD	
	MS	MSD		MS	MSD	Percent Recovery		Percent Recovery		RPD	
						Reported	Recalc	Reported	Recalc	Reported	Recalculated
1,1-Dichloroethene											
Trichloroethene	100	100	1.9	114	115	112	112	113	113	1	1
Benzene	↓	↓	ND	123	123	123	123	123	123	0	0
Toluene											
Chlorobenzene											

Comments: Refer to Matrix Spike/Matrix Spike Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 49260 B1b

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample Results Verification

Page: 1 of 1
 Reviewer: FT

METHOD: GC/MS VOA (EPA Method 8260 B)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the laboratory control sample and laboratory control sample duplicate (if applicable) were recalculated for the compounds identified below using the following calculation:

% Recovery = $100 * SSC/SA$

Where: SSC = Spiked sample concentration
 SA = Spike added

RPD = $| LCSC - LCSDC | * 2 / (LCSC + LCSDC)$

LCSC = Laboratory control sample concentration LCSDC = Laboratory control sample duplicate concentration

LCS ID: VO 2354 W5

Compound	Spike Added (ug/L)		Spiked Sample Concentration (ug/L)		LCS		LCSD		LCS/LCSD	
	LCS	LCSD	LCS	LCSD	Percent Recovery		Percent Recovery		RPD	
					Reported	Recalc.	Reported	Recalc.	Reported	Recalculated
1,1-Dichloroethene										
Trichloroethene	5	NA	5.4	5.6	112	112				
Benzene	5	↓	5.8	5.8	116	116				
Toluene										
Chlorobenzene										

Comments: Refer to Laboratory Control Sample findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

**Laboratory Data Consultants, Inc.
Data Validation Report**

Project/Site Name: Fort Ord, OU2
LDC Report Date: October 15, 2020
Parameters: Dissolved Metals
Validation Level: Stage 4
Laboratory: SGS North America, Inc.
Sample Delivery Group (SDG): FA78551

Sample Identification	Laboratory Sample Identification	Matrix	Collection Date
2036YOU2450F	FA78551-28	Water	09/04/20

Introduction

This Data Validation Report (DVR) presents data validation findings and results for the associated samples listed on the cover page. Data validation was performed in accordance with the Final Quality Assurance Project Plan Volume I, Appendix A for Groundwater Remedies and Monitoring at Operable Unit 2, Sites 2 and 12, and Operable Unit Carbon Tetrachloride Plume, Former Fort Ord, California (Revision 7, August 2019), the U.S. Department of Defense (DoD) Quality Systems Manual (QSM) for Environmental Laboratories, Version 5.1 (2017), and the USACE Guidance for Evaluating Performance-Based Chemical Data (June 2005). Where specific guidance was not available, the data has been evaluated in a conservative manner consistent with industry standards using professional experience.

The analyses were performed by the following method:

Antimony, Copper, and Lead by Environmental Protection Agency (EPA) SW 846 Method 6010C

All sample results were subjected to Stage 4 evaluation, which is comprised of the quality control (QC) summary forms as well as the raw data, to confirm sample quantitation and identification.

The following are definitions of the data qualifiers utilized during data validation:

- J+ (Estimated, High Bias): The compound or analyte was analyzed for and positively identified by the laboratory; however the reported concentration is estimated, displaying high bias, due to non-conformances discovered during data validation.
- J- (Estimated, Low Bias): The compound or analyte was analyzed for and positively identified by the laboratory; however the reported concentration is estimated, displaying low bias, due to non-conformances discovered during data validation.
- J (Estimated, Bias Indeterminate): The compound or analyte was analyzed for and positively identified by the laboratory; however the reported concentration is estimated due to non-conformances discovered during data validation. Bias is indeterminate.
- U (Non-detected): The compound or analyte was analyzed for and positively identified by the laboratory; however the compound or analyte should be considered non-detected at the reported concentration due to the presence of contaminants detected in the associated blank(s).
- UJ (Non-detected estimated): The compound or analyte was reported as not detected by the laboratory; however the reported quantitation/detection limit is estimated due to non-conformances discovered during data validation.
- R (Rejected): The sample results were rejected due to gross non-conformances discovered during data validation. Data qualified as rejected is not usable.
- NA (Not Applicable): The non-conformance discovered during data validation demonstrates a high bias, while the affected compound or analyte in the associated sample(s) was reported as not detected by the laboratory and did not warrant the qualification of the data.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

I. Sample Receipt and Technical Holding Times

All samples were received in good condition.

All technical holding time requirements were met.

II. Instrument Calibration

Initial and continuing calibrations were performed as required by the method.

The initial calibration verification (ICV) and continuing calibration verification (CCV) standards were within QC limits.

III. ICP Interference Check Sample Analysis

The frequency of interference check sample (ICS) analysis was met. All criteria were within QC limits.

IV. Laboratory Blanks

Laboratory blanks were analyzed as required by the methods. No contaminants were found in the laboratory blanks.

V. Field Blanks

No field blanks were identified in this SDG.

VI. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

VII. Duplicate Sample Analysis

The laboratory has indicated that there were no duplicate (DUP) analyses specified for the samples in this SDG, and therefore duplicate analyses were not performed for this SDG.

VIII. Serial Dilution

Serial dilution was not performed for this SDG.

IX. Laboratory Control Samples

Laboratory control samples (LCS) were analyzed as required by the method. Percent recoveries (%R) were within QC limits.

X. Field Duplicates

No field duplicates were identified in this SDG.

XI. Sample Result Verification

All sample result verifications were acceptable.

XII. Overall Assessment of Data

The analysis was conducted within all specifications of the method. No results were rejected in this SDG.

The quality control criteria reviewed were met and are considered acceptable.

**Fort Ord, OU2
Dissolved Metals - Data Qualification Summary - SDG FA78551**

No Sample Data Qualified in this SDG

**Fort Ord, OU2
Dissolved Metals - Laboratory Blank Data Qualification Summary - SDG FA78551**

No Sample Data Qualified in this SDG

**Fort Ord, OU2
Dissolved Metals - Field Blank Data Qualification Summary - SDG FA78551**

No Sample Data Qualified in this SDG

LDC #: 49260C4b
 SDG #: FA78551
 Laboratory: SGS North America, Inc.

VALIDATION COMPLETENESS WORKSHEET
 ADR/Stage 4

Date: 10/14/20
 Page: 1 of 1
 Reviewer: KK
 2nd Reviewer: [Signature]

METHOD: Dissolved Metals (EPA SW 846 Method 6010C)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Sample receipt/Technical holding times	A / A	
II.	Instrument Calibration	A	
III.	ICP Interference Check Sample (ICS) Analysis	A	
IV.	Laboratory Blanks	A	
V.	Field Blanks	N	
VI.	Matrix Spike/Matrix Spike Duplicates	N	
VII.	Duplicate sample analysis	N	
VIII.	Serial Dilution	N	Not performed
IX.	Laboratory control samples	A	LCS
X.	Field Duplicates	N	
XI.	Sample Result Verification	A	
XII.	Overall Assessment of Data	A	

Note: A = Acceptable ND = No compounds detected D = Duplicate SB=Source blank
 N = Not provided/applicable R = Rinsate TB = Trip blank OTHER:
 SW = See worksheet FB = Field blank EB = Equipment blank

** Indicates sample underwent Stage 4 validation

	Client ID	Lab ID	Matrix	Date
1	2036YOU2450F**	FA78551-28**	Water	09/04/20
2	2036YOU2451F	FA78551-29	Water	09/04/20
3	2036YOU2452F	FA78551-30	Water	09/04/20
4	2036YOU2453F	FA78551-31	Water	09/04/20
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				

Notes: _____

METHOD: Trace Metals (EPA SW 846 Methods 6010/6020/7000)				
Validation Area	Yes	No	NA	Comments
I. Technical holding times				
Were all technical holding times met?	Yes			
Were all water samples preserved to a pH of <2.	Yes			
II. ICP-MS Tune				
Were mass resolutions within 0.1 amu for all isotopes in the tuning solution?			NA	
Were %RSDs of isotopes in the tuning solution ≤5%?			NA	
III. Calibration				
Were all instruments calibrated daily?	Yes			
Were the proper standards used?	Yes			
Were all initial and continuing calibration verifications within the 90-110% (80-120% for mercury) QC limits?	Yes			
Were the low level standard checks within 70-130%?	Yes			
Were all initial calibration correlation coefficients within limits as specified by the method?			NA	
IV. Blanks				
Was a method blank associated with every sample in this SDG?	Yes			
Was there contamination in the method blanks?		No		
Was there contamination in the initial and continuing calibration blanks?		No		
V. Interference Check Sample				
Were the interference check samples performed daily?	Yes			
Were the AB solution recoveries within 80-120%?	Yes			
VI. Matrix Spike/Matrix Spike Duplicates/Laboratory Duplicates				
Were MS/MSD recoveries with the QC limits? (If the sample concentration exceeded the spike concentration by a factor of 4, no action was taken.)		No		
Were the MS/MSD or laboratory duplicate relative percent differences (RPDs) within the QC limits?			NA	
VII. Laboratory Control Samples				
Was a LCS analyzed for each batch in the SDG?	Yes			
Were the LCS recoveries and RPDs (if applicable) within QC limits?	Yes			

METHOD: Trace Metals (EPA SW 846 Methods 6010/6020/7000)				
Validation Area	Yes	No	NA	Comments
VIII. Internal Standards				
Were all percent recoveries within the 30-120% (60-125% for EPA Method 200.8) QC limits?			NA	
If the recoveries were outside the limits, was a reanalysis performed?			NA	
IX. Serial Dilution				
Were all percent differences <10%?			NA	
Was there evidence of negative interference? If yes, professional judgement will be used to qualify the data.			NA	
X. Sample Result Verification				
Were all reporting limits adjusted to reflect sample dilutions?	Yes			
Were all soil samples dry weight corrected?			NA	
XI. Overall Assessment of Data				
Was the overall assessment of the data found to be acceptable?	Yes			
XII. Field Duplicates				
Were field duplicates identified in this SDG?		No		
Were target analytes detected in the field duplicates?			NA	
XIII. Field Blanks				
Were field blanks identified in this SDG?		No		
Were target analytes detected in the field blanks?			NA	

METHOD: Trace Metals (EPA SW 846 Methods 6010/6020/7000)

An initial calibration verification (ICV), continuing calibration verification (CCV), low level calibration check (LLCC), and interference check sample (ICSAB) percent recovery (%R) was recalculated for each type of analysis using the following formula:

$$\%R = (\text{Found}/\text{True}) \times 100$$

Found = concentration of each analyte measured in the analysis

True = concentration of each analyte in the source

Standard ID	Type of Analysis	Element	Found (ug/L)	True (ug/L)	Recalculated %R	Reported %R	Acceptable (Y/N)
ICV	ICP	Sb	2150	2000	107.5	107.5	Y
CCV	ICP	Cu	2020	2000	101	101	Y
LLCC	ICP	Pb	4.8	5	96	96	Y
ICSAB	ICP	Cu	537	500	107.4	107.4	Y
ICV	ICP-MS						
CCV	ICP-MS						
LLCC	ICP-MS						
ICSAB	ICP-MS						
ICV	CVAA						
CCV	CVAA						

ICP-MS Tune	QC Parameter	Mass	Actual	Required
	Mass Axis			± 0.1 amu
	%RSD			≤ 5%

METHOD: Trace Metals (EPA SW 846 Methods 6010/6020/7000)

Percent recoveries (%R) for the laboratory control sample (LCS), matrix spike (MS), and post digestion spike (PDS) were recalculated using the following formula:

$$\%R = (\text{Found}/\text{True}) \times 100$$

Found = concentration of each analyte measured in the analysis. For the MS calculation, Found = SSR (Spiked Sample Result) - SR (Sample Result)

True = concentration of each analyte in the source

The sample and duplicate relative percent difference (RPD) was recalculated using the following formula:

$$\text{RPD} = (\text{Absolute value}(S-D) \times 200) / (S+D)$$

S = Original sample concentration

D = Duplicate sample concentration

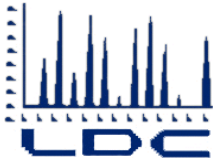
The serial dilution percent difference (%D) was recalculated using the following formula.

$$\%D = (\text{Absolute value}(I - \text{SDR})) \times 100 / (I)$$

I = Initial sample result

SDR = Serial dilution result (with a 5x dilution applied)

Sample ID	Type of Analysis	Element	Found/S/I	True/D/SDR	Recalculated %R/RPD/%D	Reported %R/RPD/%D	Acceptable (Y/N)
LCS	LCS	Pb	480	500	96	96	Y
	MS						
	Duplicate						
	PDS						
	Serial dilution						



LABORATORY DATA CONSULTANTS, INC.

2701 Loker Ave. West, Suite 220, Carlsbad, CA 92010 Bus: 760-827-1100 Fax: 760-827-1099

AHTNA
296 12th Street
Marina, CA 93933
ATTN: Mr. Eric A. Schmidt
Eschmidt@ahтна.net

November 9, 2020

SUBJECT: Fort Ord, OU2, Data Validation

Dear Mr. Schmidt,

Enclosed is the final validation report for the fraction listed below. This SDG was received on October 19, 2020. Attachment 1 is a summary of the samples that were reviewed for analysis.

LDC Project #49433:

<u>SDG #</u>	<u>Fraction</u>
FA79152	Volatiles

The data validation was performed under Stage 2B & 4 guidelines. The analyses were validated using the following documents, as applicable to each method:

- Final Quality Assurance Project Plan Volume I, Appendix A for Groundwater Remedies and Monitoring at Operable Unit 2, Sites 2 and 12, and Operable Unit Carbon Tetrachloride Plume, Former Fort Ord, California; Revision 7, August 2019
- U.S. Department of Defense Quality Systems Manual for Environmental Laboratories, Version 5.1; 2017
- USACE Guidance for Evaluating Performance-Based Chemical Data; June 2005
- EPA SW 846, Third Edition, Test Methods for Evaluating Solid Waste, update 1, July 1992; update IIA, August 1993; update II, September 1994; update IIB, January 1995; update III, December 1996; update IIIA, April 1998; IIIB, November 2004; update IV, February 2007; update V, July 2014

Please feel free to contact us if you have any questions.

Sincerely,

Pei Geng
Pgeng@lab-data.com
Project Manager/Senior Chemist

**Data Validation Report
Fort Ord, OU2**

SDG: FA79152

Prepared for

Ahtna Environmental Inc.
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Marina, California 93933-6001

Prepared by

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November 9, 2020

INTRODUCTION

This Data Validation Report (DVR) presents Stage 2B and Stage 4 data validation results for samples collected during the September 2020 sampling period. Data validation was performed in accordance with the Final Quality Assurance Project Plan Volume I, Appendix A for Groundwater Remedies and Monitoring at Operable Unit 2, Sites 2 and 12, and Operable Unit Carbon Tetrachloride Plume, Former Fort Ord, California (Revision 7, August 2019), the U.S. Department of Defense (DoD) Quality Systems Manual (QSM) for Environmental Laboratories, Version 5.1 (2017), and the USACE Guidance for Evaluating Performance-Based Chemical Data (June 2005). Where specific guidance is not available, the data has been evaluated in a conservative manner consistent with industry standards using professional experience.

The analyses were performed by the following method:

Volatile Organic Compounds (VOCs) by Environmental Protection Agency (EPA) SW 846 Method 8260B in Selection Ion Monitoring (SIM) mode

The sample identification and method of analyses performed on each sample is presented in Attachment 1. Overall data qualification summary is presented in Attachment 2. Stage 2B Automated Data Review outliers are presented in Enclosure I. DVRs for samples on which Stage 4 validation was performed are presented in Enclosure II.

All sample results were subjected to Stage 2B data validation, which comprises an evaluation of quality control (QC) summary results for sample holding times, initial and continuing calibrations, surrogates, matrix spike/matrix spike duplicates (MS/MSD), internal standards, laboratory control sample (LCS), laboratory blanks, trip blanks, field blanks, and field duplicates. Approximately 10 percent of samples were subjected to Stage 4 evaluation as indicated in Attachment 1, which comprises a review of the QC summary forms as well as the raw data, to confirm sample quantitation and identification.

Automated data review was performed on all QC summary results using the Automated Data Review (ADR) software program (LDC, 2013) with the exception of the calibrations and internal standards, which were validated manually. Quality assurance (QA)/QC criteria specified in the QAPP, DoD QSM, and EM-200-1-10 were incorporated with the program's reference library to assess compliance with project requirements.

The following are definitions of the data qualifiers utilized during data validation:

- J+ (Estimated, High Bias): The compound or analyte was analyzed for and positively identified by the laboratory; however the reported concentration is estimated, displaying high bias, due to non-conformances discovered during data validation.
- J- (Estimated, Low Bias): The compound or analyte was analyzed for and positively identified by the laboratory; however the reported concentration is estimated, displaying low bias, due to non-conformances discovered during data validation.
- J (Estimated, Bias Indeterminate): The compound or analyte was analyzed for and positively identified by the laboratory; however the reported concentration is estimated due to non-conformances discovered during data validation. Bias is indeterminate.
- U (Non-detected): The compound or analyte was analyzed for and positively identified by the laboratory; however the analyte should be considered non-detect at the reported concentration due to the presence of contaminants detected in the associated blank(s).
- UJ (Non-detected estimated): The compound or analyte was reported as not detected by the laboratory; however the reported quantitation/detection limit is estimated due to non-conformances discovered during data validation.
- R (Rejected): The sample results were rejected due to gross non-conformances discovered during data validation. Data qualified as rejected is not usable.
- NA (Not applicable): The non-conformance discovered during data validation demonstrates a high bias, while the affected compound or analyte in the associated sample(s) was reported as not detected by the laboratory and did not warrant the qualification of the data.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

I. Sample Receipt & Technical Holding Times

All samples were received in good condition and cooler temperatures upon receipt met validation criteria.

All technical holding time requirements were met with the exception of one sample for VOCs. The associated sample results were qualified as non-detected estimated (UJ) as applicable. The details regarding the qualification of data are provided in Enclosure I.

II. Instrument Performance Check

Instrument performance was checked at the frequency required by the method.

All criteria for the instrument performance check were met.

III. Initial Calibration and Initial Calibration Verification

All criteria for the initial calibration and initial calibration verifications of the method were met.

IV. Continuing Calibration

All criteria for the continuing calibration verifications of the method were met.

V. Laboratory Blanks

Laboratory blanks were performed as required by the method. No contaminant concentrations were detected in the laboratory blanks reviewed by the ADR software program with the exception of one blank for methylene chloride. The associated sample results were not detected or were significantly greater than the concentrations found in the blanks, therefore no data were qualified. The details are presented in Enclosure I.

VI. Field Blanks

One trip blank was collected and analyzed for VOCs. The trip blank had detections for tetrachloroethylene. The laboratory indicated that the trip blank was contaminated with tetrachloroethylene due to problems when the trip blanks were produced and no tetrachloroethylene results were qualified. The trip blank outlier reports are presented in Enclosures I and II.

One field blank was collected and analyzed for VOCs. No contaminants were found.

VII. Surrogates

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VIII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) sample analysis was performed on associated project samples. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

IX. Laboratory Control Samples

Laboratory control samples (LCS) were analyzed as required by the method. Percent recoveries (%R) were within QC limits.

X. Field Duplicates

One field duplicate pair was collected and analyzed for VOCs. All RPDs were within QC limits. The field duplicate result comparisons are provided in Enclosures I and II.

XI. Internal Standards

All internal standard areas and retention times were within QC limits.

XII. Compound Quantitation

The laboratory reporting limits were evaluated. All laboratory reporting limits met the specified requirements.

All compounds reported below the limit of quantitation (LOQ) as detected by the laboratory were qualified as detected estimated (J). The details regarding the qualification of data are provided in Enclosure I.

XIII. Overall Assessment of Data

The analysis was conducted within all specifications of the method. No results were rejected in this SDG.

Due to holding time exceedances, data were qualified as estimated in one sample.

Due to results below the LOQ, data were qualified as estimated in one sample.

The quality control criteria reviewed, as discussed above, were met and are considered acceptable.

Data flags are summarized and are presented as Attachment 2.

Attachment 1
Sample Cross Reference

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
23-Sep-2020	2039YOU2455F	FA79152-1	N	5030B	EPA8260-SIM	Stage 4
23-Sep-2020	2039YOU2455FMS	FA79152-1MS	MS	5030B	EPA8260-SIM	Stage 4
23-Sep-2020	2039YOU2455FMSD	FA79152-1MSD	MSD	5030B	EPA8260-SIM	Stage 4
23-Sep-2020	2039YOU2456D	FA79152-2	FD	5030B	EPA8260-SIM	Stage 2B
24-Sep-2020	2039YOU2457C	FA79152-3	FB	5030B	EPA8260-SIM	Stage 2B
24-Sep-2020	2039YOU2458A	FA79152-4	TB	5030B	EPA8260-SIM	Stage 2B

Attachment 2
Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: FA79152

Laboratory: ACTO

EDD Filename: FA79152ACTO

eQAPP Name: FtOrd_UFP_QAPP_Rev8

Method Category: VOA
Method: EPA8260-SIM **Matrix:** AQ

9/23/2020 3:10:00
Sample ID: 2039YOU2455F **Collected:** PM **Analysis Type:** 1RES **Dilution:** 1.00

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Trichloroethylene	0.48	J	0.25	LOD	0.50	LOQ	ug/L	J	RI

9/24/2020 10:15:00
Sample ID: 2039YOU2458A **Collected:** AM **Analysis Type:** 1RES **Dilution:** 1.00

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,1-DICHLOROETHANE	0.50	U	0.25	LOD	0.50	LOQ	ug/L	UJ	StoA
1,2-DICHLOROETHANE	0.50	U	0.25	LOD	0.50	LOQ	ug/L	UJ	StoA
1,2-DICHLOROPROPANE	0.50	U	0.25	LOD	0.50	LOQ	ug/L	UJ	StoA
BENZENE	0.50	U	0.25	LOD	0.50	LOQ	ug/L	UJ	StoA
CARBON TETRACHLORIDE	0.50	U	0.25	LOD	0.50	LOQ	ug/L	UJ	StoA
CHLOROFORM	0.50	U	0.25	LOD	0.50	LOQ	ug/L	UJ	StoA
CIS-1,2-DICHLOROETHYLENE	0.50	U	0.25	LOD	0.50	LOQ	ug/L	UJ	StoA
METHYLENE CHLORIDE	2.0	U	0.50	LOD	2.0	LOQ	ug/L	UJ	StoA
TETRACHLOROETHYLENE	3.9		0.25	LOD	0.50	LOQ	ug/L	J-	StoA
Trichloroethylene	0.50	U	0.25	LOD	0.50	LOQ	ug/L	UJ	StoA
VINYL CHLORIDE	0.10	U	0.050	LOD	0.10	LOQ	ug/L	UJ	StoA

* denotes a non-reportable result

Project Name and Number: 21065 - Fort Ord Groundwater Monitoring

Data Qualifier Summary

Lab Reporting Batch ID: FA79152

Laboratory: ACTO

EDD Filename: FA79152ACTO

eQAPP Name: FtOrd_UFP_QAPP_Rev8

Reason Code Legend

<i>Reason Code</i>	<i>Description</i>
Mb	Method Blank Contamination
RI	Reporting Limit Trace Value
StoA	Sampling to Analysis Estimation

* denotes a non-reportable result

Project Name and Number: 21065 - Fort Ord Groundwater Monitoring

11/6/2020 10:46:58 PM

ADR version 1.9.0.325

Page 2 of 2

Enclosure I

Stage 2B ADR Outliers

(Including Manual Review Outliers)

Quality Control Outlier Reports

FA79152

QC Outlier Report: HoldingTimes

Lab Reporting Batch ID: FA79152
EDD Filename: FA79152ACTO

Laboratory: ACTO
eQAPP Name: FtOrd_UFP_QAPP_Rev8

Method: EPA8260-SIM Preparation Method: 5030B
Matrix: AQ

<i>Sample ID</i>	<i>Type</i>	<i>Actual</i>	<i>Criteria</i>	<i>Units</i>	<i>Flag</i>
2039YOU2458A (1RES)	Sampling To Analysis	15.00	14.00	DAYS	J- (all detects) UJ (all non-detects)

Method Blank Outlier Report

Lab Reporting Batch ID: FA79152

Laboratory: ACTO

EDD Filename: FA79152ACTO

eQAPP Name: FtOrd_UFP_QAPP_Rev8

Method: EPA8260-SIM
Matrix: AQ

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
VZ2433-MB	10/7/2020 2:58:00 PM	METHYLENE CHLORIDE	0.71 ug/L	2039YOU2455F 2039YOU2456D 2039YOU2457C

Trip Blank Outlier Report

Lab Reporting Batch ID: FA79152
EDD Filename: PrepFA79152ACTO

Laboratory: ACTO
eQAPP Name: FtOrd_UFP_QAPP_Rev8

Method: EPA8260-SIM
Matrix: AQ

Trip Blank Sample ID	Collected Date	Analyte	Result	Associated Samples
2039YOU2458A(1RES)	9/24/2020 10:15:00 AM	TETRACHLOROETHYLENE	3.9 ug/L	2039YOU2455F 2039YOU2456D 2039YOU2457C

Reporting Limit Outliers

Lab Reporting Batch ID: FA79152

Laboratory: ACTO

EDD Filename: FA79152ACTO

eQAPP Name: FtOrd_UFP_QAPP_Rev8

Method: EPA8260-SIM

Matrix: AQ

<i>SampleID</i>	<i>Analyte</i>	<i>Lab Qual</i>	<i>Result</i>	<i>Reporting Limit</i>	<i>RL Type</i>	<i>Units</i>	<i>Flag</i>
2039YOU2455F	Trichloroethylene	J	0.48	0.50	LOQ	ug/L	J (all detects)

Field Duplicate RPD Report

Lab Reporting Batch ID: FA79152

Laboratory: ACTO

EDD Filename: FA79152ACTO

eQAPP Name: FtOrd_UFP_QAPP_Rev8

Method: EPA8260-SIM

Matrix: AQ

Analyte	Concentration (ug/L)		Sample RPD	eQAPP RPD	Flag
	2039YOU2455F	2039YOU2456D			
1,1-DICHLOROETHANE	0.74	0.78	5	30.00	No Qualifiers Applied
CHLOROFORM	0.73	0.77	5	30.00	
TETRACHLOROETHYLENE	1.9	2.1	10	30.00	
Trichloroethylene	0.48	0.51	6	30.00	

LDC #: 49433A1b
 SDG #: FA79152
 Laboratory: SGS North America, Inc.

VALIDATION COMPLETENESS WORKSHEET
 ADR/Stage 4

Date: 10/24/20
 Page: 1 of 1
 Reviewer: [Signature]
 2nd Reviewer: [Signature]

METHOD: GC/MS Volatiles (EPA SW 846 Method 8260B-SIM)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Sample receipt/Technical holding times	A / SW	#4: HT out
II.	GC/MS Instrument performance check	A	
III.	Initial calibration/ICV	A/A	RSD ≤ 15% . y = 12% ≤ 20%
IV.	Continuing calibration / [Signature]	A	CCV ≤ 20% / 20%
V.	Laboratory Blanks	SW	Not reviewed for ADR validation. FB=1. FB=2
VI.	Field blanks	SW	TB=1. FB=3
VII.	Surrogate spikes	N	Not reviewed for ADR validation.
VIII.	Matrix spike/Matrix spike duplicates	↓	Not reviewed for ADR validation.
IX.	Laboratory control samples	↓	Not reviewed for ADR validation.
X.	Field duplicates	↓	
XI.	Internal standards	A	Not reviewed for ADR validation.
XII.	Compound quantitation RL/LOQ/LODs	N	Not reviewed for ADR validation.
XIII.	Target compound identification	↓	Not reviewed for ADR validation.
XIV.	System performance	↓	Not reviewed for ADR validation.
XV.	Overall assessment of data	↓	Not reviewed for ADR validation.

Note: A = Acceptable *ND = No compounds detected D = Duplicate SB=Source blank
 N = Not provided/applicable R = Rinsate TB = Trip blank OTHER:
 SW = See worksheet FB = Field blank EB = Equipment blank

** Indicates sample underwent Stage 4 validation

	Client ID	Lab ID	Matrix	Date
1	2039YOU2455F**	FA79152-1**	Water	09/23/20
2	2039YOU2456D	FA79152-2	Water	09/23/20
3	2039YOU2457C	FA79152-3	Water	09/24/20
4	2039YOU2458A	FA79152-4	Water	09/24/20
5	2039YOU2455FMS	FA79152-1MS	Water	09/23/20
6	2039YOU2455FMDS	FA79152-1MSD	Water	09/23/20
7				
8				
9				

Notes:

12/2/37					

TARGET COMPOUND WORKSHEET

METHOD: VOA

A. Chloromethane	AA. Tetrachloroethene	AAA. 1,3,5-Trimethylbenzene	AAAA. Ethyl tert-butyl ether	A1. 1,3-Butadiene
B. Bromomethane	BB. 1,1,2,2-Tetrachloroethane	BBB. 4-Chlorotoluene	BBBB. tert-Amyl methyl ether	B1. Hexane
C. Vinyl chloride	CC. Toluene	CCC. tert-Butylbenzene	CCCC. 1-Chlorohexane	C1. Heptane
D. Chloroethane	DD. Chlorobenzene	DDD. 1,2,4-Trimethylbenzene	DDDD. Isopropyl alcohol	D1. Propylene
E. Methylene chloride	EE. Ethylbenzene	EEE. sec-Butylbenzene	EEEE. Acetonitrile	E1. Freon 11
F. Acetone	FF. Styrene	FFF. 1,3-Dichlorobenzene	FFFF. Acrolein	F1. Freon 12
G. Carbon disulfide	GG. Xylenes, total	GGG. p-Isopropyltoluene	GGGG. Acrylonitrile	G1. Freon 113
H. 1,1-Dichloroethene	HH. Vinyl acetate	HHH. 1,4-Dichlorobenzene	HHHH. 1,4-Dioxane	H1. Freon 114
I. 1,1-Dichloroethane	II. 2-Chloroethylvinyl ether	III. n-Butylbenzene	IIII. Isobutyl alcohol	I1. 2-Nitropropane
J. 1,2-Dichloroethene, total	JJ. Dichlorodifluoromethane	JJJ. 1,2-Dichlorobenzene	JJJJ. Methacrylonitrile	J1. Dimethyl disulfide
K. Chloroform	KK. Trichlorofluoromethane	KKK. 1,2,4-Trichlorobenzene	KKKK. Propionitrile	K1. 2,3-Dimethyl pentane
L. 1,2-Dichloroethane	LL. Methyl-tert-butyl ether	LLL. Hexachlorobutadiene	LLLL. Ethyl ether	L1. 2,4-Dimethyl pentane
M. 2-Butanone	MM. 1,2-Dibromo-3-chloropropane	MMM. Naphthalene	MMMM. Benzyl chloride	M1. 3,3-Dimethyl pentane
N. 1,1,1-Trichloroethane	NN. Methyl ethyl ketone	NNN. 1,2,3-Trichlorobenzene	NNNN. Iodomethane	N1. 2-Methylpentane
O. Carbon tetrachloride	OO. 2,2-Dichloropropane	OOO. 1,3,5-Trichlorobenzene	OOOO. 1,1-Difluoroethane	O1. 3-Methylpentane
P. Bromodichloromethane	PP. Bromochloromethane	PPP. trans-1,2-Dichloroethene	PPPP. Tetrahydrofuran	P1. 3-Ethylpentane
Q. 1,2-Dichloropropane	QQ. 1,1-Dichloropropene	QQQ. cis-1,2-Dichloroethene	QQQQ. Methyl acetate	Q1. 2,2-Dimethylpentane
R. cis-1,3-Dichloropropene	RR. Dibromomethane	RRR. m,p-Xylenes	RRRR. Ethyl acetate	R1. 2,2,3-Trimethylbutane
S. Trichloroethene	SS. 1,3-Dichloropropane	SSS. o-Xylene	SSSS. Cyclohexane	S1. 2,2,4-Trimethylpentane
T. Dibromochloromethane	TT. 1,2-Dibromoethane	TTT. 1,1,2-Trichloro-1,2,2-trifluoroethane	TTTT. Methylcyclohexane	T1. 2-Methylhexane
U. 1,1,2-Trichloroethane	UU. 1,1,1,2-Tetrachloroethane	UUU. 1,2-Dichlorotetrafluoroethane	UUUU. Allyl chloride	U1. Nonanal
V. Benzene	VV. Isopropylbenzene	VVV. 4-Ethyltoluene	VVVV. Methyl methacrylate	V1. 2-Methylnaphthalene
W. trans-1,3-Dichloropropene	WW. Bromobenzene	WWW. Ethanol	WWWWW. Ethyl methacrylate	W1. Methanol
X. Bromoform	XX. 1,2,3-Trichloropropane	XXX. Di-isopropyl ether	XXXX. cis-1,4-Dichloro-2-butene	X1. 1,2,3-Trimethylbenzene
Y. 4-Methyl-2-pentanone	YY. n-Propylbenzene	YYY. tert-Butanol	YYYY. trans-1,4-Dichloro-2-butene	Y1.
Z. 2-Hexanone	ZZ. 2-Chlorotoluene	ZZZ. tert-Butyl alcohol	ZZZZ. Pentachloroethane	Z1.

LDC # 19/2016

VALIDATION FINDINGS WORKSHEET Field Blanks

Page: 1 of 1
Reviewer: [Signature]

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

Y N N/A Were field blanks identified in this SDG?

Y N N/A Were target compounds detected in the field blanks?

Blank units: MPL Associated sample units: MPL

Sampling date: 9/27/20

Field blank type: (circle one) Field Blank / Rinsate / Trip Blank / Other: _____ Associated Samples: No. all text

Compound	Blank ID	Sample Identification							
	<u>4</u>								
Acetone									
Methylene chloride									
Chloroform									
<u>AA</u>	<u>AA 39</u>	<u>- Lab indicated that FB was contaminated with AA due to problems when the FB was produced and no data was qualified.</u>							

Blank units: _____ Associated sample units: _____

Sampling date: _____

Field blank type: (circle one) Field Blank / Rinsate / Trip Blank / Other: _____ Associated Samples: _____

Compound	Blank ID	Sample Identification							
Acetone									
Methylene chloride									

CIRCLED RESULTS WERE NOT QUALIFIED. ALL RESULTS NOT CIRCLED WERE QUALIFIED BY THE FOLLOWING STATEMENT:
Common contaminants such as Methylene chloride, Acetone, 2-Butanone and Carbon disulfide that were detected in samples within ten times the associated field blank concentration were qualified as not detected, "U". Other contaminants within five times the field blank concentration were also qualified as not detected, "U".

Enclosure II

Stage 4 Data Validation Reports

Laboratory Data Consultants, Inc. Data Validation Report

Project/Site Name: Fort Ord, OU2
LDC Report Date: October 26, 2020
Parameters: Volatiles
Validation Level: Stage 4
Laboratory: SGS North America, Inc.
Sample Delivery Group (SDG): FA79152

Sample Identification	Laboratory Sample Identification	Matrix	Collection Date
2039YOU2455F	FA79152-1	Water	09/23/20
2039YOU2455FMS	FA79152-1MS	Water	09/23/20
2039YOU2455FMSD	FA79152-1MSD	Water	09/23/20

Introduction

This Data Validation Report (DVR) presents data validation findings and results for the associated samples listed on the cover page. Data validation was performed in accordance with the Final Quality Assurance Project Plan Volume I, Appendix A for Groundwater Remedies and Monitoring at Operable Unit 2, Sites 2 and 12, and Operable Unit Carbon Tetrachloride Plume, Former Fort Ord, California (Revision 7, August 2019), the U.S. Department of Defense (DoD) Quality Systems Manual (QSM) for Environmental Laboratories, Version 5.1 (2017), and the USACE Guidance for Evaluating Performance-Based Chemical Data (June 2005). Where specific guidance was not available, the data has been evaluated in a conservative manner consistent with industry standards using professional experience.

The analyses were performed by the following method:

Volatile Organic Compounds (VOCs) by Environmental Protection Agency (EPA) SW 846 Method 8260B in Selected Ion Monitoring (SIM) mode

All sample results were subjected to Stage 4 data validation, which is comprised of the quality control (QC) summary forms as well as the raw data, to confirm sample quantitation and identification.

The following are definitions of the data qualifiers utilized during data validation:

- J+ (Estimated, High Bias): The compound or analyte was analyzed for and positively identified by the laboratory; however the reported concentration is estimated, displaying high bias, due to non-conformances discovered during data validation.
- J- (Estimated, Low Bias): The compound or analyte was analyzed for and positively identified by the laboratory; however the reported concentration is estimated, displaying low bias, due to non-conformances discovered during data validation.
- J (Estimated, Bias Indeterminate): The compound or analyte was analyzed for and positively identified by the laboratory; however the reported concentration is estimated due to non-conformances discovered during data validation. Bias is indeterminate.
- U (Non-detected): The compound or analyte was analyzed for and positively identified by the laboratory; however the compound or analyte should be considered non-detected at the reported concentration due to the presence of contaminants detected in the associated blank(s).
- UJ (Non-detected estimated): The compound or analyte was reported as not detected by the laboratory; however the reported quantitation/detection limit is estimated due to non-conformances discovered during data validation.
- R (Rejected): The sample results were rejected due to gross non-conformances discovered during data validation. Data qualified as rejected is not usable.
- NA (Not Applicable): The non-conformance discovered during data validation demonstrates a high bias, while the affected compound or analyte in the associated sample(s) was reported as not detected by the laboratory and did not warrant the qualification of the data.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

I. Sample Receipt and Technical Holding Times

All samples were received in good condition and cooler temperatures upon receipt met validation criteria.

All technical holding time requirements were met.

II. GC/MS Instrument Performance Check

A bromofluorobenzene (BFB) tune was performed at 12 hour intervals.

All ion abundance requirements were met.

III. Initial Calibration and Initial Calibration Verification

An initial calibration was performed as required by the method.

For compounds where average relative response factors (RRFs) were utilized, the percent relative standard deviations (%RSD) were less than or equal to 15.0%.

In the case where the laboratory used a calibration curve to evaluate the compounds, all coefficients of determination (r^2) were greater than or equal to 0.990.

Average relative response factors (RRF) for all compounds were within validation criteria.

The percent differences (%D) of the initial calibration verification (ICV) standard were less than or equal to 20.0% for all compounds.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

The percent differences (%D) were less than or equal to 20.0% for all compounds.

The percent differences (%D) of the ending continuing calibration verifications (CCVs) were less than or equal to 50.0% for all compounds.

All of the continuing calibration relative response factors (RRF) were within validation criteria.

V. Laboratory Blanks

Laboratory blanks were analyzed as required by the method. No contaminants were found in the laboratory blanks with the following exceptions:

Blank ID	Analysis Date	Compound	Concentration	Associated Samples
VZ2433-MB	10/07/20	Methylene chloride	0.71 ug/L	All samples in SDG FA79152

Sample concentrations were compared to concentrations detected in the laboratory blanks. The sample concentrations were either not detected or were significantly greater (>10X for common contaminants, >5X for other contaminants) than the concentrations found in the associated laboratory blanks.

VI. Field Blanks

Sample 2039YOU2458A was identified as a trip blank. No contaminants were found with the following exceptions:

Blank ID	Collection Date	Compound	Concentration	Associated Samples
2039YOU2458A	09/24/20	Tetrachloroethene	3.9 ug/L	No associated samples in this SDG

The laboratory indicated that the trip blank was contaminated with tetrachloroethene due to problems when the trip blank was produced and no data was qualified.

Sample 2039YOU2457C was identified as a field blank. No contaminants were found.

VII. Surrogates

Surrogates were added to all samples as required by the method. All surrogate recoveries (%R) were within QC limits.

VIII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) sample analysis was performed on an associated project sample. Percent recoveries (%R) were within QC limits. Relative percent differences (RPD) were within QC limits.

IX. Laboratory Control Samples

Laboratory control samples (LCS) were analyzed as required by the method. Percent recoveries (%R) were within QC limits.

X. Field Duplicates

Samples 2039YOU2455F and 2039YOU2456D were identified as field duplicates. No results were detected in any of the samples with the following exceptions:

Compound	Concentration (ug/L)		RPD (Limits)
	2039YOU2455F	2039YOU2456D	
Chloroform	0.73	0.77	5 (≤30)
1,1-Dichloroethane	0.74	0.78	5 (≤30)
Tetrachloroethene	1.9	2.1	10 (≤30)
Trichloroethene	0.48	0.51	6 (≤30)

XI. Internal Standards

All internal standard areas and retention times were within QC limits.

XII. Compound Quantitation

All compound quantitations met validation criteria.

All compounds reported below the limit of quantitation (LOQ) were qualified as follows:

Sample	Finding	Flag	A or P
2039YOU2455F	All compounds reported below the LOQ.	J (all detects)	A

XIII. Target Compound Identifications

All target compound identifications met validation criteria.

XIV. System Performance

The system performance was acceptable.

XV. Overall Assessment of Data

The analysis was conducted within all specifications of the method. No results were rejected in this SDG.

Due to results below the LOQ, data were qualified as estimated in one sample.

The quality control criteria reviewed, other than those discussed above, were met and are considered acceptable.

**Fort Ord, OU2
Volatiles - Data Qualification Summary - SDG FA79152**

Sample	Compound	Flag*	A or P	Reason
2039YOU2455F	All compounds reported below the LOQ.	J (all detects)	A	Compound quantitation

**Fort Ord, OU2
Volatiles - Laboratory Blank Data Qualification Summary - SDG FA79152**

No Sample Data Qualified in this SDG

**Fort Ord, OU2
Volatiles - Field Blank Data Qualification Summary - SDG FA79152**

No Sample Data Qualified in this SDG

LDC #: 49433A1b
 SDG #: FA79152
 Laboratory: SGS North America, Inc.

VALIDATION COMPLETENESS WORKSHEET

Stage 4

Date: 10/26/20
 Page: 1 of 1
 Reviewer: [Signature]
 2nd Reviewer: [Signature]

METHOD: GC/MS Volatiles (EPA SW 846 Method 8260B-SIM)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Sample receipt/Technical holding times	A	
II.	GC/MS Instrument performance check	A	
III.	Initial calibration/ICV	A/A	RSD ≤ 15% χ^2 1CV ≤ 20%
IV.	Continuing calibration	A	CCV ≤ 20/50%
V.	Laboratory Blanks	W	
VI.	Field blanks	W	FB = 1. FB = 3 FB = 3
VII.	Surrogate spikes	A	
VIII.	Matrix spike/Matrix spike duplicates	A	
IX.	Laboratory control samples	A	LCS
X.	Field duplicates	W	D = 1 + 2
XI.	Internal standards	A	
XII.	Compound quantitation RL/LOQ/LODs	A	
XIII.	Target compound identification	A	
XIV.	System performance	A	
XV.	Overall assessment of data	A	

Note: A = Acceptable ND = No compounds detected D = Duplicate SB=Source blank
 N = Not provided/applicable R = Rinsate TB = Trip blank OTHER:
 SW = See worksheet FB = Field blank EB = Equipment blank

** Indicates sample underwent Stage 4 validation

	Client ID	Lab ID	Matrix	Date
1	2039YOU2455F**	FA79152-1**	Water	09/23/20
2	2039YOU2456D	FA79152-2	Water	09/23/20
3	2039YOU2457C	FA79152-3	Water	09/24/20
4	2039YOU2458A	FA79152-4	Water	09/24/20
5	2039YOU2455FMS	FA79152-1MS	Water	09/23/20
6	2039YOU2455FMDS	FA79152-1MSD	Water	09/23/20
7				
8				
9				

Notes:

Method: Volatiles (EPA SW 846 Method 8260B)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
Were all technical holding times met?	/			
Was cooler temperature criteria met?	/			
II. GC/MS Instrument performance check				
Were the BFB performance results reviewed and found to be within the specified criteria?	/			
Were all samples analyzed within the 12 hour clock criteria?	/			
IIIa. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	/			
Were all percent relative standard deviations (%RSD) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	/			
Was a curve fit used for evaluation? If yes, did the initial calibration meet the curve fit acceptance criteria of > 0.990 ?	/			
Were all percent relative standard deviations (%RSD) $\leq 30\%/15\%$ and relative response factors (RRF) ≥ 0.05 ?	/			
IIIb. Initial Calibration Verification				
Was an initial calibration verification standard analyzed after each initial calibration for each instrument?	/			
Were all percent differences (%D) $\leq 20\%$?	/			
IV. Continuing calibration				
Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?	/			
Were all percent differences (%D) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	/			
Were all percent differences (%D) $\leq 20\%$ and relative response factors (RRF) ≥ 0.05 ?	/			
V. Laboratory Blanks				
Was a laboratory blank associated with every sample in this SDG?	/			
Was a laboratory blank analyzed at least once every 12 hours for each matrix and concentration?	/			
Was there contamination in the laboratory blanks?	/			
VI. Field blanks				
Were field blanks were identified in this SDG?	/			
Were target compounds detected in the field blanks?	/			
VII. Surrogate spikes				
Were all surrogate percent recovery (%R) within QC limits?	/			
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?			/	

Validation Area	Yes	No	NA	Findings/Comments
VIII. Matrix spike/Matrix spike duplicates				
Were matrix spike (MS) and matrix spike duplicate (MSD) analyzed in this SDG?	/			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?	/			
IX. Laboratory control samples				
Was an LCS analyzed per analytical batch?	/			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	/			
X. Field duplicates				
Were field duplicate pairs identified in this SDG?	/			
Were target compounds detected in the field duplicates?	/			
XI. Internal standards				
Were internal standard area counts within -50% to +100% of the associated calibration standard?	/			
Were retention times within + 30 seconds of the associated calibration standard?	/			
XII. Compound quantitation				
Did the laboratory LOQs/RLs meet the QAPP LOQs/RLs?	/			
Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the compound?	/			
Were compound quantitation and RLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	/			
XIII. Target compound identification				
Were relative retention times (RRT's) within + 0.06 RRT units of the standard?	/			
Did compound spectra meet specified EPA "Functional Guidelines" criteria?	/			
Were chromatogram peaks verified and accounted for?	/			
XIV. System performance				
System performance was found to be acceptable.	/			
XV. Overall assessment of data				
Overall assessment of data was found to be acceptable.	/			

TARGET COMPOUND WORKSHEET

METHOD: VOA

A. Chloromethane	AA. Tetrachloroethene	AAA. 1,3,5-Trimethylbenzene	AAAA. Ethyl tert-butyl ether	A1. 1,3-Butadiene
B. Bromomethane	BB. 1,1,2,2-Tetrachloroethane	BBB. 4-Chlorotoluene	BBBB. tert-Amyl methyl ether	B1. Hexane
C. Vinyl chloride	CC. Toluene	CCC. tert-Butylbenzene	CCCC. 1-Chlorohexane	C1. Heptane
D. Chloroethane	DD. Chlorobenzene	DDD. 1,2,4-Trimethylbenzene	DDDD. Isopropyl alcohol	D1. Propylene
E. Methylene chloride	EE. Ethylbenzene	EEE. sec-Butylbenzene	EEEE. Acetonitrile	E1. Freon 11
F. Acetone	FF. Styrene	FFF. 1,3-Dichlorobenzene	FFFF. Acrolein	F1. Freon 12
G. Carbon disulfide	GG. Xylenes, total	GGG. p-Isopropyltoluene	GGGG. Acrylonitrile	G1. Freon 113
H. 1,1-Dichloroethene	HH. Vinyl acetate	HHH. 1,4-Dichlorobenzene	HHHH. 1,4-Dioxane	H1. Freon 114
I. 1,1-Dichloroethane	II. 2-Chloroethylvinyl ether	III. n-Butylbenzene	IIII. Isobutyl alcohol	I1. 2-Nitropropane
J. 1,2-Dichloroethene, total	JJ. Dichlorodifluoromethane	JJJ. 1,2-Dichlorobenzene	JJJJ. Methacrylonitrile	J1. Dimethyl disulfide
K. Chloroform	KK. Trichlorofluoromethane	KKK. 1,2,4-Trichlorobenzene	KKKK. Propionitrile	K1. 2,3-Dimethyl pentane
L. 1,2-Dichloroethane	LL. Methyl-tert-butyl ether	LLL. Hexachlorobutadiene	LLLL. Ethyl ether	L1. 2,4-Dimethyl pentane
M. 2-Butanone	MM. 1,2-Dibromo-3-chloropropane	MMM. Naphthalene	MMMM. Benzyl chloride	M1. 3,3-Dimethyl pentane
N. 1,1,1-Trichloroethane	NN. Methyl ethyl ketone	NNN. 1,2,3-Trichlorobenzene	NNNN. Iodomethane	N1. 2-Methylpentane
O. Carbon tetrachloride	OO. 2,2-Dichloropropane	OOO. 1,3,5-Trichlorobenzene	OOOO. 1,1-Difluoroethane	O1. 3-Methylpentane
P. Bromodichloromethane	PP. Bromochloromethane	PPP. trans-1,2-Dichloroethene	PPPP. Tetrahydrofuran	P1. 3-Ethylpentane
Q. 1,2-Dichloropropane	QQ. 1,1-Dichloropropene	QQQ. cis-1,2-Dichloroethene	QQQQ. Methyl acetate	Q1. 2,2-Dimethylpentane
R. cis-1,3-Dichloropropene	RR. Dibromomethane	RRR. m,p-Xylenes	RRRR. Ethyl acetate	R1. 2,2,3- Trimethylbutane
S. Trichloroethene	SS. 1,3-Dichloropropane	SSS. o-Xylene	SSSS. Cyclohexane	S1. 2,2,4-Trimethylpentane
T. Dibromochloromethane	TT. 1,2-Dibromoethane	TTT. 1,1,2-Trichloro-1,2,2-trifluoroethane	TTTT. Methylcyclohexane	T1. 2-Methylhexane
U. 1,1,2-Trichloroethane	UU. 1,1,1,2-Tetrachloroethane	UUU. 1,2-Dichlorotetrafluoroethane	UUUU. Allyl chloride	U1. Nonanal
V. Benzene	VV. Isopropylbenzene	VVV. 4-Ethyltoluene	VVVV. Methyl methacrylate	V1. 2-Methylnaphthalene
W. trans-1,3-Dichloropropene	WW. Bromobenzene	WWW. Ethanol	WWWW. Ethyl methacrylate	W1. Methanol
X. Bromoform	XX. 1,2,3-Trichloropropane	XXX. Di-isopropyl ether	XXXX. cis-1,4-Dichloro-2-butene	X1. 1,2,3-Trimethylbenzene
Y. 4-Methyl-2-pentanone	YY. n-Propylbenzene	YYY. tert-Butanol	YYYY. trans-1,4-Dichloro-2-butene	Y1. 2-Propanol
Z. 2-Hexanone	ZZ. 2-Chlorotoluene	ZZZ. tert-Butyl alcohol	ZZZZ. Pentachloroethane	Z1.

VALIDATION FINDINGS WORKSHEET

Blanks

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

- Y N N/A Was a method blank associated with every sample in this SDG?
- Y N N/A Was a method blank analyzed at least once every 12 hours for each matrix and concentration?
- X N N/A Was there contamination in the method blanks? If yes, please see the qualifications below.

Blank analysis date: 10/7/20

Conc. units: ug/L Associated Samples: A1

Compound	Blank ID	Sample Identification							
	<u>V22433-MB</u>								
Methylene chloride	<u>0.7'</u>								
Acetone									

Blank analysis date: _____

Conc. units: _____ Associated Samples: _____

Compound	Blank ID	Sample Identification							
Methylene chloride									
Acetone									

All results were qualified using the criteria stated below except those circled.

Note: Common contaminants such as Methylene chloride, Acetone, 2-Butanone, Carbon disulfide and TICs that were detected in samples within ten times the associated method blank concentration were qualified as not detected, "U". Other contaminants within five times the method blank concentration were also qualified as not detected, "U".

VALIDATION FINDINGS WORKSHEET
Field Blanks

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

Y N N/A Were field blanks identified in this SDG?

Y N N/A Were target compounds detected in the field blanks?

Blank units: µg/L Associated sample units: µg/L

Sampling date: 9/24/20 9/24/20

Field blank type: (circle one) Field Blank / Rinsate / Trip Blank / Other: _____ Associated Samples: No. all text

Compound	Blank ID	Sample Identification							
	<u>4</u>								
Acetone									
Methylene chloride									
Chloroform									
<u>AA</u>	<u>4.3.9</u>	<u>- Lab indicated that FB was contaminated with AA due to problems when the FB was produced and no data was qualified.</u>							

Blank units: _____ Associated sample units: _____

Sampling date: _____

Field blank type: (circle one) Field Blank / Rinsate / Trip Blank / Other: _____ Associated Samples: _____

Compound	Blank ID	Sample Identification							
Acetone									
Methylene chloride									

CIRCLED RESULTS WERE NOT QUALIFIED. ALL RESULTS NOT CIRCLED WERE QUALIFIED BY THE FOLLOWING STATEMENT:
Common contaminants such as Methylene chloride, Acetone, 2-Butanone and Carbon disulfide that were detected in samples within ten times the associated field blank concentration were qualified as not detected, "U". Other contaminants within five times the field blank concentration were also qualified as not detected, "U".

VALIDATION FINDINGS WORKSHEET
Field Duplicates**METHOD:** GCMS VOA (EPA Method 8260B)

Compound	Concentration (ug/L)		(<30) RPD
	1	2	
K	0.73	0.77	5
I	0.74	0.78	5
AA	1.9	2.1	10
S	0.48	0.51	6

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

The Relative Response Factor (RRF), average RRF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

RRF = $(A_x)(C_{is}) / (A_{is})(C_x)$
 average RRF = sum of the RRFs/number of standards
 %RSD = $100 * (S/X)$

A_x = Area of compound,
 C_x = Concentration of compound,
 S = Standard deviation of the RRFs
 X = Mean of the RRFs

A_{is} = Area of associated internal standard
 C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Reported	Recalculated	Reported	Recalculated	Reported	Recalculated
				RRF (10 std)	RRF (10 std)	Average RRF (initial)	Average RRF (initial)	%RSD	%RSD
1	10AZ (2)	10/1/20	S (1st internal standard)	0.494	0.494	0.479	0.479	3.10	3.13
			AA (2nd internal standard)	0.549	0.549	0.546	0.546	4.31	4.28
			(3rd internal standard)						
			(4th internal standard)						
2			(1st internal standard)						
			(2nd internal standard)						
			(3rd internal standard)						
			(4th internal standard)						
3			(1st internal standard)						
			(2nd internal standard)						
			(3rd internal standard)						
			(4th internal standard)						
4			(1st internal standard)						
			(2nd internal standard)						
			(3rd internal standard)						
			(4th internal standard)						

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the compounds identified below using the following calculation:

% Difference = $100 * (\text{ave. RRF} - \text{RRF}) / \text{ave. RRF}$
 $\text{RRF} = (A_x)(C_{is}) / (A_{is})(C_x)$

Where: ave. RRF = initial calibration average RRF
 RRF = continuing calibration RRF
 A_x = Area of compound, A_{is} = Area of associated internal standard
 C_x = Concentration of compound, C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference internal Standard)	Average RRF (initial)	Reported RRF (CC)	Recalculated RRF (CC)	Reported %D	Recalculated %D
1	26696	10/7/20	S (1st internal standard)	0.479	0.452	0.452	5.6	5.6
			AA (2nd internal standard)	0.546	0.587	0.587	7.5	7.5
			(3rd internal standard)					
			(4th internal standard)					
2			(1st internal standard)					
			(2nd internal standard)					
			(3rd internal standard)					
			(4th internal standard)					
3			(1st internal standard)					
			(2nd internal standard)					
			(3rd internal standard)					
			(4th internal standard)					
4			(1st internal standard)					
			(2nd internal standard)					
			(3rd internal standard)					
			(4th internal standard)					

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: $SF/SS * 100$

Where: SF = Surrogate Found
 SS = Surrogate Spiked

Sample ID: 1

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane					
1,2-Dichloroethane-d4	5.0	5.38	108	108	
Toluene-d8	1	5.31	106	106	
Bromofluorobenzene					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane					
1,2-Dichloroethane-d4					
Toluene-d8					
Bromofluorobenzene					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane					
1,2-Dichloroethane-d4					
Toluene-d8					
Bromofluorobenzene					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane					
1,2-Dichloroethane-d4					
Toluene-d8					
Bromofluorobenzene					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane					
1,2-Dichloroethane-d4					
Toluene-d8					
Bromofluorobenzene					

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates Results Verification

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * (SSC - SC)/SA

Where: SSC = Spiked sample concentration
 SA = Spike added

SC = Sample concentration

RPD = | MSC - MSC | * 2 / (MSC + MSDC)

MSC = Matrix spike concentration

MSDC = Matrix spike duplicate concentration

MS/MSD sample: 5/6

Compound	Spike Added (<u>µg</u>)		Sample Concentration (<u>µg/l</u>)	Spiked Sample Concentration (<u>µg/l</u>)		Matrix Spike		Matrix Spike Duplicate		MS/MSD	
	MS	MSD		MS	MSD	Percent Recovery		Percent Recovery		RPD	
						Reported	Recalc	Reported	Recalc	Reported	Recalculated
1,1-Dichloroethene											
Trichloroethene	<u>50</u>	<u>50</u>	<u>0.48</u>	<u>51.5</u>	<u>49.2</u>	<u>102</u>	<u>102</u>	<u>97</u>	<u>97</u>	<u>5</u>	<u>5</u>
Benzene	<u>↓</u>	<u>↓</u>	<u>ND</u>	<u>50.0</u>	<u>47.9</u>	<u>100</u>	<u>100</u>	<u>96</u>	<u>96</u>	<u>4</u>	<u>4</u>
Toluene											
Chlorobenzene											

Comments: Refer to Matrix Spike/Matrix Spike Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 19432A16

VALIDATION FINDINGS WORKSHEET Laboratory Control Sample Results Verification

Page: 1 of 1
Reviewer: 9

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the laboratory control sample and laboratory control sample duplicate (if applicable) were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * SSC/SA

Where: SSC = Spiked sample concentration
SA = Spike added

RPD = | LCSC - LCSDC | * 2 / (LCSC + LCSDC)

LCSC = Laboratory control sample concentration LCSDC = Laboratory control sample duplicate concentration

LCS ID: 122433

Compound	Spike Added (<u>100</u>)		Spiked Sample Concentration (<u>100</u>)		LCS		LCSD		LCS/LCSD	
	LCS	LCSD	LCS	LCSD	Percent Recovery		Percent Recovery		RPD	
					Reported	Recalc.	Reported	Recalc.	Reported	Recalculated
1,1-Dichloroethene										
Trichloroethene	<u>5</u>	<u>NA</u>	<u>4.7</u>	<u>NA</u>	<u>94</u>					
Benzene	<u>↓</u>	<u>↓</u>	<u>4.7</u>	<u>↓</u>	<u>94</u>	<u>94</u>				
Toluene										
Chlorobenzene										

Comments: Refer to Laboratory Control Sample findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

**Third Quarter 2020
Groundwater Data
SGS Laboratory Reports**

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

e-Hardcopy 2.0
Automated Report

Technical Report for

Ahtna Global, LLC

DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA

21065.000.01.0000

SGS Job Number: FA76591

Sampling Date: 07/07/20

Report to:

**Ahtna Global, LLC
9699 Blue Larkspur Lane Suite 203
Monterey, CA 93940
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hdillon@ahtna.net; eschmidt@ahtna.net;
ATTN: Derek Lieberman**

Total number of pages in report: 152



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

A handwritten signature in black ink that reads 'Caitlin Brice'.

**Caitlin Brice, M.S.
General Manager**

Client Service contact: Elvin Kumar 407-425-6700

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

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Test results relate only to samples analyzed.

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Sample Summary

Ahtna Global, LLC

Job No: FA76591

DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA
 Project No: 21065.000.01.0000

Sample Number	Collected		Received	Matrix		Client Sample ID
	Date	Time By		Code	Type	
FA76591-1	07/07/20	08:37 MF	07/08/20	AQ	Trip Blank Water	2028MOU2146A
FA76591-2	07/07/20	08:42 MF	07/08/20	AQ	Ground Water	2028MOU2147F
FA76591-3	07/07/20	08:46 MF	07/08/20	AQ	Ground Water	2028MOU2148F
FA76591-4	07/07/20	08:50 MF	07/08/20	AQ	Ground Water	2028MOU2149F
FA76591-5	07/07/20	08:54 MF	07/08/20	AQ	Ground Water	2028MOU2150F
FA76591-6	07/07/20	09:00 MF	07/08/20	AQ	Ground Water	2028MOU2151F
FA76591-7	07/07/20	09:04 MF	07/08/20	AQ	Ground Water	2028MOU2152F
FA76591-8	07/07/20	09:10 MF	07/08/20	AQ	Ground Water	2028MOU2153F
FA76591-9	07/07/20	09:14 MF	07/08/20	AQ	Ground Water	2028MOU2154F
FA76591-10	07/07/20	09:18 MF	07/08/20	AQ	Ground Water	2028MOU2155F
FA76591-11	07/07/20	09:23 MF	07/08/20	AQ	Ground Water	2028MOU2156D

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: Ahtna Global, LLC

Job No: FA76591

Site: DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina,

Report Date 7/13/2020 3:15:18

10 Sample(s), 1 Trip Blank(s) and 0 Field Blank(s) were collected on 07/07/2020 and were received at SGS North America Inc - Orlando on 07/08/2020 properly preserved, at 3.7 Deg. C and intact. These Samples received an SGS Orlando job number of FA76591. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section. Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

MS Volatiles By Method SW846 8260B BY SIM

Matrix: AQ

Batch ID: VO2338

All samples were analyzed within the recommended method holding time.

Sample(s) FA76591-2MS, FA76591-2MSD were used as the QC samples indicated.

All method blanks for this batch meet method specific criteria.

FA76591-1: Sample vial(s) contained bubbles greater than 6mm; reported results are considered minimum values.

FA76591-1: Sample vial(s) contained bubbles greater than 6mm; reported results are considered minimum values. Confirmation run.

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

Narrative prepared by:

Ariel Hartney, Client Services (*Signature on file*)

Summary of Hits

Job Number: FA76591
Account: Ahtna Global, LLC
Project: DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA
Collected: 07/07/20



Lab Sample ID	Client Sample ID	Result/ Analyte	LOQ	LOD	Units	Method	
FA76591-1	2028MOU2146A						
		Methylene Chloride ^a	2.7	2.0	0.50	ug/l	SW846 8260B BY SIM
		Tetrachloroethylene ^a	2.3	0.50	0.25	ug/l	SW846 8260B BY SIM
FA76591-2	2028MOU2147F						
		Chloroform	0.38 J	0.50	0.25	ug/l	SW846 8260B BY SIM
		1,1-Dichloroethane	0.51	0.50	0.25	ug/l	SW846 8260B BY SIM
		1,2-Dichloroethane	0.19 J	0.50	0.25	ug/l	SW846 8260B BY SIM
		cis-1,2-Dichloroethylene	1.3	0.50	0.25	ug/l	SW846 8260B BY SIM
FA76591-3	2028MOU2148F						
		Chloroform	0.30 J	0.50	0.25	ug/l	SW846 8260B BY SIM
		1,1-Dichloroethane	0.43 J	0.50	0.25	ug/l	SW846 8260B BY SIM
		1,2-Dichloroethane	0.16 J	0.50	0.25	ug/l	SW846 8260B BY SIM
		cis-1,2-Dichloroethylene	1.6	0.50	0.25	ug/l	SW846 8260B BY SIM
		Tetrachloroethylene	0.20 J	0.50	0.25	ug/l	SW846 8260B BY SIM
		Trichloroethylene	3.5	0.50	0.25	ug/l	SW846 8260B BY SIM
FA76591-4	2028MOU2149F						
		Chloroform	0.35 J	0.50	0.25	ug/l	SW846 8260B BY SIM
		1,1-Dichloroethane	0.47 J	0.50	0.25	ug/l	SW846 8260B BY SIM
		1,2-Dichloroethane	0.16 J	0.50	0.25	ug/l	SW846 8260B BY SIM
		cis-1,2-Dichloroethylene	1.9	0.50	0.25	ug/l	SW846 8260B BY SIM
		Trichloroethylene	0.41 J	0.50	0.25	ug/l	SW846 8260B BY SIM
FA76591-5	2028MOU2150F						
		Chloroform	0.42 J	0.50	0.25	ug/l	SW846 8260B BY SIM
		1,1-Dichloroethane	0.59	0.50	0.25	ug/l	SW846 8260B BY SIM
		1,2-Dichloroethane	0.19 J	0.50	0.25	ug/l	SW846 8260B BY SIM
		cis-1,2-Dichloroethylene	1.3	0.50	0.25	ug/l	SW846 8260B BY SIM
FA76591-6	2028MOU2151F						
		Chloroform	0.30 J	0.50	0.25	ug/l	SW846 8260B BY SIM
		1,1-Dichloroethane	0.43 J	0.50	0.25	ug/l	SW846 8260B BY SIM
		1,2-Dichloroethane	0.16 J	0.50	0.25	ug/l	SW846 8260B BY SIM
		cis-1,2-Dichloroethylene	1.6	0.50	0.25	ug/l	SW846 8260B BY SIM
		Tetrachloroethylene	0.17 J	0.50	0.25	ug/l	SW846 8260B BY SIM
		Trichloroethylene	4.1	0.50	0.25	ug/l	SW846 8260B BY SIM

Summary of Hits

Job Number: FA76591
Account: Ahtna Global, LLC
Project: DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA
Collected: 07/07/20



Lab Sample ID	Client Sample ID	Result/ Analyte	LOQ	LOD	Units	Method	
FA76591-7	2028MOU2152F						
		Chloroform	0.35 J	0.50	0.25	ug/l	SW846 8260B BY SIM
		1,1-Dichloroethane	0.47 J	0.50	0.25	ug/l	SW846 8260B BY SIM
		1,2-Dichloroethane	0.18 J	0.50	0.25	ug/l	SW846 8260B BY SIM
		cis-1,2-Dichloroethylene	1.8	0.50	0.25	ug/l	SW846 8260B BY SIM
		Trichloroethylene	0.89	0.50	0.25	ug/l	SW846 8260B BY SIM
FA76591-8	2028MOU2153F						
		Chloroform	0.38 J	0.50	0.25	ug/l	SW846 8260B BY SIM
		1,1-Dichloroethane	0.51	0.50	0.25	ug/l	SW846 8260B BY SIM
		1,2-Dichloroethane	0.20 J	0.50	0.25	ug/l	SW846 8260B BY SIM
		cis-1,2-Dichloroethylene	1.3	0.50	0.25	ug/l	SW846 8260B BY SIM
FA76591-9	2028MOU2154F						
		Chloroform	0.29 J	0.50	0.25	ug/l	SW846 8260B BY SIM
		1,1-Dichloroethane	0.55	0.50	0.25	ug/l	SW846 8260B BY SIM
		1,2-Dichloroethane	0.11 J	0.50	0.25	ug/l	SW846 8260B BY SIM
		cis-1,2-Dichloroethylene	1.8	0.50	0.25	ug/l	SW846 8260B BY SIM
		Tetrachloroethylene	1.1	0.50	0.25	ug/l	SW846 8260B BY SIM
		Trichloroethylene	4.4	0.50	0.25	ug/l	SW846 8260B BY SIM
FA76591-10	2028MOU2155F						
		Chloroform	0.27 J	0.50	0.25	ug/l	SW846 8260B BY SIM
		1,1-Dichloroethane	0.40 J	0.50	0.25	ug/l	SW846 8260B BY SIM
		1,2-Dichloroethane	0.23 J	0.50	0.25	ug/l	SW846 8260B BY SIM
		cis-1,2-Dichloroethylene	1.2	0.50	0.25	ug/l	SW846 8260B BY SIM
		Tetrachloroethylene	0.82	0.50	0.25	ug/l	SW846 8260B BY SIM
		Trichloroethylene	5.5	0.50	0.25	ug/l	SW846 8260B BY SIM
FA76591-11	2028MOU2156D						
		Chloroform	0.28 J	0.50	0.25	ug/l	SW846 8260B BY SIM
		1,1-Dichloroethane	0.42 J	0.50	0.25	ug/l	SW846 8260B BY SIM
		1,2-Dichloroethane	0.23 J	0.50	0.25	ug/l	SW846 8260B BY SIM
		cis-1,2-Dichloroethylene	1.3	0.50	0.25	ug/l	SW846 8260B BY SIM
		Tetrachloroethylene	0.79	0.50	0.25	ug/l	SW846 8260B BY SIM
		Trichloroethylene	5.5	0.50	0.25	ug/l	SW846 8260B BY SIM

(a) Sample vial(s) contained bubbles greater than 6mm; reported results are considered minimum values.

Sample Results

Report of Analysis

SGS North America Inc.

Report of Analysis

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Client Sample ID:	2028MOU2146A		
Lab Sample ID:	FA76591-1	Date Sampled:	07/07/20
Matrix:	AQ - Trip Blank Water	Date Received:	07/08/20
Method:	SW846 8260B BY SIM	Percent Solids:	n/a
Project:	DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	O60846.D	1	07/08/20 13:38	AB	n/a	n/a	VO2338
Run #2 ^b	O60859.D	1	07/08/20 18:51	AB	n/a	n/a	VO2338

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
71-43-2	Benzene	0.25 U	0.50	0.25	0.10	ug/l	
56-23-5	Carbon Tetrachloride	0.25 U	0.50	0.25	0.10	ug/l	
67-66-3	Chloroform	0.25 U	0.50	0.25	0.10	ug/l	
75-34-3	1,1-Dichloroethane	0.25 U	0.50	0.25	0.10	ug/l	
107-06-2	1,2-Dichloroethane	0.25 U	0.50	0.25	0.10	ug/l	
156-59-2	cis-1,2-Dichloroethylene	0.25 U	0.50	0.25	0.10	ug/l	
78-87-5	1,2-Dichloropropane	0.25 U	0.50	0.25	0.10	ug/l	
75-09-2	Methylene Chloride	2.7	2.0	0.50	0.50	ug/l	
127-18-4	Tetrachloroethylene	2.3	0.50	0.25	0.10	ug/l	
79-01-6	Trichloroethylene	0.25 U	0.50	0.25	0.10	ug/l	
75-01-4	Vinyl Chloride	0.050 U	0.10	0.050	0.050	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	105%	112%	74-125%
2037-26-5	Toluene-D8	101%	96%	88-111%

(a) Sample vial(s) contained bubbles greater than 6mm; reported results are considered minimum values.

(b) Sample vial(s) contained bubbles greater than 6mm; reported results are considered minimum values.

Confirmation run.

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
 LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

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Report of Analysis

Client Sample ID:	2028MOU2147F		
Lab Sample ID:	FA76591-2	Date Sampled:	07/07/20
Matrix:	AQ - Ground Water	Date Received:	07/08/20
Method:	SW846 8260B BY SIM	Percent Solids:	n/a
Project:	DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	O60847.D	1	07/08/20 14:02	AB	n/a	n/a	VO2338
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
71-43-2	Benzene	0.25 U	0.50	0.25	0.10	ug/l	
56-23-5	Carbon Tetrachloride	0.25 U	0.50	0.25	0.10	ug/l	
67-66-3	Chloroform	0.38	0.50	0.25	0.10	ug/l	J
75-34-3	1,1-Dichloroethane	0.51	0.50	0.25	0.10	ug/l	
107-06-2	1,2-Dichloroethane	0.19	0.50	0.25	0.10	ug/l	J
156-59-2	cis-1,2-Dichloroethylene	1.3	0.50	0.25	0.10	ug/l	
78-87-5	1,2-Dichloropropane	0.25 U	0.50	0.25	0.10	ug/l	
75-09-2	Methylene Chloride	0.50 U	2.0	0.50	0.50	ug/l	
127-18-4	Tetrachloroethylene	0.25 U	0.50	0.25	0.10	ug/l	
79-01-6	Trichloroethylene	0.25 U	0.50	0.25	0.10	ug/l	
75-01-4	Vinyl Chloride	0.050 U	0.10	0.050	0.050	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	107%		74-125%
2037-26-5	Toluene-D8	100%		88-111%

U = Not detected

LOD = Limit of Detection

J = Indicates an estimated value

LOQ = Limit of Quantitation

DL = Detection Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

SGS North America Inc.

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Client Sample ID:	2028MOU2148F		
Lab Sample ID:	FA76591-3	Date Sampled:	07/07/20
Matrix:	AQ - Ground Water	Date Received:	07/08/20
Method:	SW846 8260B BY SIM	Percent Solids:	n/a
Project:	DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	O60848.D	1	07/08/20 14:25	AB	n/a	n/a	VO2338
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
71-43-2	Benzene	0.25 U	0.50	0.25	0.10	ug/l	
56-23-5	Carbon Tetrachloride	0.25 U	0.50	0.25	0.10	ug/l	
67-66-3	Chloroform	0.30	0.50	0.25	0.10	ug/l	J
75-34-3	1,1-Dichloroethane	0.43	0.50	0.25	0.10	ug/l	J
107-06-2	1,2-Dichloroethane	0.16	0.50	0.25	0.10	ug/l	J
156-59-2	cis-1,2-Dichloroethylene	1.6	0.50	0.25	0.10	ug/l	
78-87-5	1,2-Dichloropropane	0.25 U	0.50	0.25	0.10	ug/l	
75-09-2	Methylene Chloride	0.50 U	2.0	0.50	0.50	ug/l	
127-18-4	Tetrachloroethylene	0.20	0.50	0.25	0.10	ug/l	J
79-01-6	Trichloroethylene	3.5	0.50	0.25	0.10	ug/l	
75-01-4	Vinyl Chloride	0.050 U	0.10	0.050	0.050	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	107%		74-125%
2037-26-5	Toluene-D8	101%		88-111%

U = Not detected

LOD = Limit of Detection

J = Indicates an estimated value

LOQ = Limit of Quantitation

DL = Detection Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

SGS North America Inc.

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Client Sample ID:	2028MOU2149F		
Lab Sample ID:	FA76591-4	Date Sampled:	07/07/20
Matrix:	AQ - Ground Water	Date Received:	07/08/20
Method:	SW846 8260B BY SIM	Percent Solids:	n/a
Project:	DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	O60849.D	1	07/08/20 14:49	AB	n/a	n/a	VO2338
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
71-43-2	Benzene	0.25 U	0.50	0.25	0.10	ug/l	
56-23-5	Carbon Tetrachloride	0.25 U	0.50	0.25	0.10	ug/l	
67-66-3	Chloroform	0.35	0.50	0.25	0.10	ug/l	J
75-34-3	1,1-Dichloroethane	0.47	0.50	0.25	0.10	ug/l	J
107-06-2	1,2-Dichloroethane	0.16	0.50	0.25	0.10	ug/l	J
156-59-2	cis-1,2-Dichloroethylene	1.9	0.50	0.25	0.10	ug/l	
78-87-5	1,2-Dichloropropane	0.25 U	0.50	0.25	0.10	ug/l	
75-09-2	Methylene Chloride	0.50 U	2.0	0.50	0.50	ug/l	
127-18-4	Tetrachloroethylene	0.25 U	0.50	0.25	0.10	ug/l	
79-01-6	Trichloroethylene	0.41	0.50	0.25	0.10	ug/l	J
75-01-4	Vinyl Chloride	0.050 U	0.10	0.050	0.050	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	109%		74-125%
2037-26-5	Toluene-D8	99%		88-111%

U = Not detected

LOD = Limit of Detection

J = Indicates an estimated value

LOQ = Limit of Quantitation

DL = Detection Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

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Client Sample ID:	2028MOU2150F		
Lab Sample ID:	FA76591-5	Date Sampled:	07/07/20
Matrix:	AQ - Ground Water	Date Received:	07/08/20
Method:	SW846 8260B BY SIM	Percent Solids:	n/a
Project:	DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	O60850.D	1	07/08/20 15:13	AB	n/a	n/a	VO2338
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
71-43-2	Benzene	0.25 U	0.50	0.25	0.10	ug/l	
56-23-5	Carbon Tetrachloride	0.25 U	0.50	0.25	0.10	ug/l	
67-66-3	Chloroform	0.42	0.50	0.25	0.10	ug/l	J
75-34-3	1,1-Dichloroethane	0.59	0.50	0.25	0.10	ug/l	
107-06-2	1,2-Dichloroethane	0.19	0.50	0.25	0.10	ug/l	J
156-59-2	cis-1,2-Dichloroethylene	1.3	0.50	0.25	0.10	ug/l	
78-87-5	1,2-Dichloropropane	0.25 U	0.50	0.25	0.10	ug/l	
75-09-2	Methylene Chloride	0.50 U	2.0	0.50	0.50	ug/l	
127-18-4	Tetrachloroethylene	0.25 U	0.50	0.25	0.10	ug/l	
79-01-6	Trichloroethylene	0.25 U	0.50	0.25	0.10	ug/l	
75-01-4	Vinyl Chloride	0.050 U	0.10	0.050	0.050	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	109%		74-125%
2037-26-5	Toluene-D8	99%		88-111%

U = Not detected

LOD = Limit of Detection

J = Indicates an estimated value

LOQ = Limit of Quantitation

DL = Detection Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

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Client Sample ID:	2028MOU2151F		
Lab Sample ID:	FA76591-6	Date Sampled:	07/07/20
Matrix:	AQ - Ground Water	Date Received:	07/08/20
Method:	SW846 8260B BY SIM	Percent Solids:	n/a
Project:	DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	O60853.D	1	07/08/20 16:25	AB	n/a	n/a	VO2338
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
71-43-2	Benzene	0.25 U	0.50	0.25	0.10	ug/l	
56-23-5	Carbon Tetrachloride	0.25 U	0.50	0.25	0.10	ug/l	
67-66-3	Chloroform	0.30	0.50	0.25	0.10	ug/l	J
75-34-3	1,1-Dichloroethane	0.43	0.50	0.25	0.10	ug/l	J
107-06-2	1,2-Dichloroethane	0.16	0.50	0.25	0.10	ug/l	J
156-59-2	cis-1,2-Dichloroethylene	1.6	0.50	0.25	0.10	ug/l	
78-87-5	1,2-Dichloropropane	0.25 U	0.50	0.25	0.10	ug/l	
75-09-2	Methylene Chloride	0.50 U	2.0	0.50	0.50	ug/l	
127-18-4	Tetrachloroethylene	0.17	0.50	0.25	0.10	ug/l	J
79-01-6	Trichloroethylene	4.1	0.50	0.25	0.10	ug/l	
75-01-4	Vinyl Chloride	0.050 U	0.10	0.050	0.050	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	108%		74-125%
2037-26-5	Toluene-D8	99%		88-111%

U = Not detected

LOD = Limit of Detection

J = Indicates an estimated value

LOQ = Limit of Quantitation

DL = Detection Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

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Client Sample ID:	2028MOU2152F		
Lab Sample ID:	FA76591-7	Date Sampled:	07/07/20
Matrix:	AQ - Ground Water	Date Received:	07/08/20
Method:	SW846 8260B BY SIM	Percent Solids:	n/a
Project:	DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	O60854.D	1	07/08/20 16:49	AB	n/a	n/a	VO2338
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
71-43-2	Benzene	0.25 U	0.50	0.25	0.10	ug/l	
56-23-5	Carbon Tetrachloride	0.25 U	0.50	0.25	0.10	ug/l	
67-66-3	Chloroform	0.35	0.50	0.25	0.10	ug/l	J
75-34-3	1,1-Dichloroethane	0.47	0.50	0.25	0.10	ug/l	J
107-06-2	1,2-Dichloroethane	0.18	0.50	0.25	0.10	ug/l	J
156-59-2	cis-1,2-Dichloroethylene	1.8	0.50	0.25	0.10	ug/l	
78-87-5	1,2-Dichloropropane	0.25 U	0.50	0.25	0.10	ug/l	
75-09-2	Methylene Chloride	0.50 U	2.0	0.50	0.50	ug/l	
127-18-4	Tetrachloroethylene	0.25 U	0.50	0.25	0.10	ug/l	
79-01-6	Trichloroethylene	0.89	0.50	0.25	0.10	ug/l	
75-01-4	Vinyl Chloride	0.050 U	0.10	0.050	0.050	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	110%		74-125%
2037-26-5	Toluene-D8	99%		88-111%

U = Not detected

LOD = Limit of Detection

J = Indicates an estimated value

LOQ = Limit of Quantitation

DL = Detection Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

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Client Sample ID:	2028MOU2153F		
Lab Sample ID:	FA76591-8	Date Sampled:	07/07/20
Matrix:	AQ - Ground Water	Date Received:	07/08/20
Method:	SW846 8260B BY SIM	Percent Solids:	n/a
Project:	DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	O60855.D	1	07/08/20 17:13	AB	n/a	n/a	VO2338
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
71-43-2	Benzene	0.25 U	0.50	0.25	0.10	ug/l	
56-23-5	Carbon Tetrachloride	0.25 U	0.50	0.25	0.10	ug/l	
67-66-3	Chloroform	0.38	0.50	0.25	0.10	ug/l	J
75-34-3	1,1-Dichloroethane	0.51	0.50	0.25	0.10	ug/l	
107-06-2	1,2-Dichloroethane	0.20	0.50	0.25	0.10	ug/l	J
156-59-2	cis-1,2-Dichloroethylene	1.3	0.50	0.25	0.10	ug/l	
78-87-5	1,2-Dichloropropane	0.25 U	0.50	0.25	0.10	ug/l	
75-09-2	Methylene Chloride	0.50 U	2.0	0.50	0.50	ug/l	
127-18-4	Tetrachloroethylene	0.25 U	0.50	0.25	0.10	ug/l	
79-01-6	Trichloroethylene	0.25 U	0.50	0.25	0.10	ug/l	
75-01-4	Vinyl Chloride	0.050 U	0.10	0.050	0.050	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	110%		74-125%
2037-26-5	Toluene-D8	99%		88-111%

U = Not detected

LOD = Limit of Detection

J = Indicates an estimated value

LOQ = Limit of Quantitation

DL = Detection Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	2028MOU2154F		
Lab Sample ID:	FA76591-9	Date Sampled:	07/07/20
Matrix:	AQ - Ground Water	Date Received:	07/08/20
Method:	SW846 8260B BY SIM	Percent Solids:	n/a
Project:	DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	O60856.D	1	07/08/20 17:38	AB	n/a	n/a	VO2338
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
71-43-2	Benzene	0.25 U	0.50	0.25	0.10	ug/l	
56-23-5	Carbon Tetrachloride	0.25 U	0.50	0.25	0.10	ug/l	
67-66-3	Chloroform	0.29	0.50	0.25	0.10	ug/l	J
75-34-3	1,1-Dichloroethane	0.55	0.50	0.25	0.10	ug/l	
107-06-2	1,2-Dichloroethane	0.11	0.50	0.25	0.10	ug/l	J
156-59-2	cis-1,2-Dichloroethylene	1.8	0.50	0.25	0.10	ug/l	
78-87-5	1,2-Dichloropropane	0.25 U	0.50	0.25	0.10	ug/l	
75-09-2	Methylene Chloride	0.50 U	2.0	0.50	0.50	ug/l	
127-18-4	Tetrachloroethylene	1.1	0.50	0.25	0.10	ug/l	
79-01-6	Trichloroethylene	4.4	0.50	0.25	0.10	ug/l	
75-01-4	Vinyl Chloride	0.050 U	0.10	0.050	0.050	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	111%		74-125%
2037-26-5	Toluene-D8	99%		88-111%

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
 LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

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Client Sample ID:	2028MOU2155F	
Lab Sample ID:	FA76591-10	Date Sampled: 07/07/20
Matrix:	AQ - Ground Water	Date Received: 07/08/20
Method:	SW846 8260B BY SIM	Percent Solids: n/a
Project:	DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	O60857.D	1	07/08/20 18:02	AB	n/a	n/a	VO2338
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
71-43-2	Benzene	0.25 U	0.50	0.25	0.10	ug/l	
56-23-5	Carbon Tetrachloride	0.25 U	0.50	0.25	0.10	ug/l	
67-66-3	Chloroform	0.27	0.50	0.25	0.10	ug/l	J
75-34-3	1,1-Dichloroethane	0.40	0.50	0.25	0.10	ug/l	J
107-06-2	1,2-Dichloroethane	0.23	0.50	0.25	0.10	ug/l	J
156-59-2	cis-1,2-Dichloroethylene	1.2	0.50	0.25	0.10	ug/l	
78-87-5	1,2-Dichloropropane	0.25 U	0.50	0.25	0.10	ug/l	
75-09-2	Methylene Chloride	0.50 U	2.0	0.50	0.50	ug/l	
127-18-4	Tetrachloroethylene	0.82	0.50	0.25	0.10	ug/l	
79-01-6	Trichloroethylene	5.5	0.50	0.25	0.10	ug/l	
75-01-4	Vinyl Chloride	0.050 U	0.10	0.050	0.050	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	113%		74-125%
2037-26-5	Toluene-D8	97%		88-111%

U = Not detected

LOD = Limit of Detection

J = Indicates an estimated value

LOQ = Limit of Quantitation

DL = Detection Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

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Client Sample ID:	2028MOU2156D		
Lab Sample ID:	FA76591-11	Date Sampled:	07/07/20
Matrix:	AQ - Ground Water	Date Received:	07/08/20
Method:	SW846 8260B BY SIM	Percent Solids:	n/a
Project:	DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	O60858.D	1	07/08/20 18:26	AB	n/a	n/a	VO2338
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
71-43-2	Benzene	0.25 U	0.50	0.25	0.10	ug/l	
56-23-5	Carbon Tetrachloride	0.25 U	0.50	0.25	0.10	ug/l	
67-66-3	Chloroform	0.28	0.50	0.25	0.10	ug/l	J
75-34-3	1,1-Dichloroethane	0.42	0.50	0.25	0.10	ug/l	J
107-06-2	1,2-Dichloroethane	0.23	0.50	0.25	0.10	ug/l	J
156-59-2	cis-1,2-Dichloroethylene	1.3	0.50	0.25	0.10	ug/l	
78-87-5	1,2-Dichloropropane	0.25 U	0.50	0.25	0.10	ug/l	
75-09-2	Methylene Chloride	0.50 U	2.0	0.50	0.50	ug/l	
127-18-4	Tetrachloroethylene	0.79	0.50	0.25	0.10	ug/l	
79-01-6	Trichloroethylene	5.5	0.50	0.25	0.10	ug/l	
75-01-4	Vinyl Chloride	0.050 U	0.10	0.050	0.050	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	113%		74-125%
2037-26-5	Toluene-D8	97%		88-111%

U = Not detected

LOD = Limit of Detection

J = Indicates an estimated value

LOQ = Limit of Quantitation

DL = Detection Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody
- QC Evaluation: DOD QSM5.x Limits

Project Information:										Analysis Requested									
Project Location: Former Fort Ord, CA					Sampler/s: MARK FISLER					VOCs 8260 - SIM Metals 6010 C Chloride 9056A					Turn Around Time Laboratory Sample Delivery Group #: _____ Custody Seal: _____ Temp (°C): _____				
Project Name: OVR GWTP					Report To: Derek Lieberman														
Project Number: 21065.000.01.0000 (TASK 4.0)					E-Mail: dlieberman@ahтна.net														
Sampling Event/Site: COMPLIANCE					Laboratory: SGS														
Lab Number	Sample Collection		Matrix			Number of Preserved Bottles										Notes			
	Sample Number/Description	Date	Time	Water	Soil	Other	Total # of Bottles	FFC	HNO ₃	H ₂ SO ₄	NaOH	MeOH	NaHSO ₄	None	Other				
1	2028MOU2146A	7/7/20	0837	X			2	2								X	STD TRIP BLANK		
2	2028MOU2147F		0842	X			3	3								X	72 HR		
3	2028MOU2148F		0846	X			3	3								X	STD		
4	2028MOU2149F		0850	X			3	3								X	STD		
5	2028MOU2150F		0854	X			3	3								X	STD		
6	2028MOU2151F		0900	X			3	3								X	STD		
7	2028MOU2152F		0904	X			3	3								X	STD		
8	2028MOU2153F		0910	X			3	3								X	STD		
9	2028MOU2154F		0914	X			3	3								X	STD		
10	2028MOU2155F		0918	X			3	3								X	STD		
11	2028MOU2156D	↓	0923	X			3	3								X	STD		
Turnaround Time: _____: Standard _____: 3-5 Day Rush _____: 48 Hour Rush _____: 24 Hour Rush										Shipment: _____ Method: _____ Tracking ID: _____									
Comments:										INITIAL ASSESSMENT <u>AK</u> LABEL VERIFICATION <u>3.7</u>									
Relinquished By: <u>[Signature]</u>										Date/Time: 7/8/20 1330									
Relinquished By: Fed Ex										Date/Time: 7/8/20 9:30									
Received By: <u>[Signature]</u>										Date/Time: 7/8/20 9:30									

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SGS Sample Receipt Summary

Job Number: FA76591

Client: AHTNA

Project: OU2 GWTP

Date / Time Received: 7/8/2020 9:30:00 AM

Delivery Method: FedEx

Airbill #s: 791060375072

Therm ID: IR 1;

Therm CF: -0.8;

of Coolers: 1

Cooler Temps (Raw Measured) °C: Cooler 1: (4.5);

Cooler Temps (Corrected) °C: Cooler 1: (3.7);

Cooler Information

Y or N

- 1. Custody Seals Present
- 2. Custody Seals Intact
- 3. Temp criteria achieved
- 4. Cooler temp verification IR Gun
- 5. Cooler media Ice (Bag)

Sample Information

Y or N N/A

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

Trip Blank Information

Y or N N/A

- 1. Trip Blank present / cooler
 - 2. Trip Blank listed on COC
- W or S N/A
- 3. Type Of TB Received

Misc. Information

Number of Encores: 25-Gram _____ 5-Gram _____
 Test Strip Lot #: pH 0-3 230315
 Residual Chlorine Test Strip Lot #: _____

Number of 5035 Field Kits: _____
 pH 10-12 219813A

Number of Lab Filtered Metals: _____
 Other: (Specify) _____

Comments

SM001
Rev. Date 05/24/17

Technician: ADAMK

Date: 7/8/2020 9:30:00 AM

Reviewer: PH

Date: 7/9/2020

FA76591: Chain of Custody

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QC Evaluation: DOD QSM5.x Limits

Job Number: FA76591
Account: Ahtna Global, LLC
Project: DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA
Collected: 07/07/20

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
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VO2338 SW846 8260B BY SIM

VO2338-BS	71-43-2	Benzene	BSP	REC	108	%	79-120
VO2338-BS	56-23-5	Carbon Tetrachloride	BSP	REC	112	%	72-136
VO2338-BS	67-66-3	Chloroform	BSP	REC	106	%	79-124
VO2338-BS	75-34-3	1,1-Dichloroethane	BSP	REC	104	%	77-125
VO2338-BS	107-06-2	1,2-Dichloroethane	BSP	REC	100	%	73-128
VO2338-BS	156-59-2	cis-1,2-Dichloroethylene	BSP	REC	104	%	78-123
VO2338-BS	78-87-5	1,2-Dichloropropane	BSP	REC	108	%	78-122
VO2338-BS	75-09-2	Methylene Chloride	BSP	REC	100	%	74-124
VO2338-BS	127-18-4	Tetrachloroethylene	BSP	REC	110	%	74-129
VO2338-BS	79-01-6	Trichloroethylene	BSP	REC	110	%	79-123
VO2338-BS	75-01-4	Vinyl Chloride	BSP	REC	106	%	58-137
VO2338-BS	17060-07-0	1,2-Dichloroethane-D4	BSP	SURR	99	%	81-118
VO2338-BS	2037-26-5	Toluene-D8	BSP	SURR	99	%	89-112
FA76591-2MS	71-43-2	Benzene	MS	REC	98	%	79-120
FA76591-2MS	56-23-5	Carbon Tetrachloride	MS	REC	99	%	72-136
FA76591-2MS	67-66-3	Chloroform	MS	REC	97	%	79-124
FA76591-2MS	75-34-3	1,1-Dichloroethane	MS	REC	97	%	77-125
FA76591-2MS	107-06-2	1,2-Dichloroethane	MS	REC	94	%	73-128
FA76591-2MS	156-59-2	cis-1,2-Dichloroethylene	MS	REC	92	%	78-123
FA76591-2MS	78-87-5	1,2-Dichloropropane	MS	REC	100	%	78-122
FA76591-2MS	75-09-2	Methylene Chloride	MS	REC	99	%	74-124
FA76591-2MS	127-18-4	Tetrachloroethylene	MS	REC	100	%	74-129
FA76591-2MS	79-01-6	Trichloroethylene	MS	REC	91	%	79-123
FA76591-2MS	75-01-4	Vinyl Chloride	MS	REC	122	%	58-137
FA76591-2MS	17060-07-0	1,2-Dichloroethane-D4	MS	SURR	111	%	81-118
FA76591-2MS	2037-26-5	Toluene-D8	MS	SURR	94	%	89-112
FA76591-2MSD	71-43-2	Benzene	MSD	REC	106	%	79-120
FA76591-2MSD	71-43-2	Benzene	MSD	RPD	7	%	20
FA76591-2MSD	56-23-5	Carbon Tetrachloride	MSD	REC	107	%	72-136
FA76591-2MSD	56-23-5	Carbon Tetrachloride	MSD	RPD	8	%	20
FA76591-2MSD	67-66-3	Chloroform	MSD	REC	104	%	79-124
FA76591-2MSD	67-66-3	Chloroform	MSD	RPD	7	%	20
FA76591-2MSD	75-34-3	1,1-Dichloroethane	MSD	REC	104	%	77-125
FA76591-2MSD	75-34-3	1,1-Dichloroethane	MSD	RPD	7	%	20
FA76591-2MSD	107-06-2	1,2-Dichloroethane	MSD	REC	101	%	73-128
FA76591-2MSD	107-06-2	1,2-Dichloroethane	MSD	RPD	7	%	20
FA76591-2MSD	156-59-2	cis-1,2-Dichloroethylene	MSD	REC	100	%	78-123
FA76591-2MSD	156-59-2	cis-1,2-Dichloroethylene	MSD	RPD	7	%	20
FA76591-2MSD	78-87-5	1,2-Dichloropropane	MSD	REC	107	%	78-122
FA76591-2MSD	78-87-5	1,2-Dichloropropane	MSD	RPD	6	%	20
FA76591-2MSD	75-09-2	Methylene Chloride	MSD	REC	106	%	74-124
FA76591-2MSD	75-09-2	Methylene Chloride	MSD	RPD	7	%	20

* Sample used for QC is not from job FA76591

QC Evaluation: DOD QSM5.x Limits

Job Number: FA76591
Account: Ahtna Global, LLC
Project: DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA
Collected: 07/07/20

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
FA76591-2MSD	127-18-4	Tetrachloroethylene	MSD	REC	107	%	74-129
FA76591-2MSD	127-18-4	Tetrachloroethylene	MSD	RPD	7	%	20
FA76591-2MSD	79-01-6	Trichloroethylene	MSD	REC	100	%	79-123
FA76591-2MSD	79-01-6	Trichloroethylene	MSD	RPD	9	%	20
FA76591-2MSD	75-01-4	Vinyl Chloride	MSD	REC	124	%	58-137
FA76591-2MSD	75-01-4	Vinyl Chloride	MSD	RPD	1	%	20
FA76591-2MSD	17060-07-0	1,2-Dichloroethane-D4	MSD	SURR	111	%	81-118
FA76591-2MSD	2037-26-5	Toluene-D8	MSD	SURR	95	%	89-112
VO2338-MB	17060-07-0	1,2-Dichloroethane-D4	MB	SURR	105	%	81-118
VO2338-MB	2037-26-5	Toluene-D8	MB	SURR	102	%	89-112
FA76591-1	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	105	%	81-118
FA76591-1	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	112	%	81-118
FA76591-1	2037-26-5	Toluene-D8	SAMP	SURR	101	%	89-112
FA76591-1	2037-26-5	Toluene-D8	SAMP	SURR	96	%	89-112
FA76591-2	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	107	%	81-118
FA76591-2	2037-26-5	Toluene-D8	SAMP	SURR	100	%	89-112
FA76591-3	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	107	%	81-118
FA76591-3	2037-26-5	Toluene-D8	SAMP	SURR	101	%	89-112
FA76591-4	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	109	%	81-118
FA76591-4	2037-26-5	Toluene-D8	SAMP	SURR	99	%	89-112
FA76591-5	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	109	%	81-118
FA76591-5	2037-26-5	Toluene-D8	SAMP	SURR	99	%	89-112
FA76591-6	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	108	%	81-118
FA76591-6	2037-26-5	Toluene-D8	SAMP	SURR	99	%	89-112
FA76591-7	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	110	%	81-118
FA76591-7	2037-26-5	Toluene-D8	SAMP	SURR	99	%	89-112
FA76591-8	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	110	%	81-118
FA76591-8	2037-26-5	Toluene-D8	SAMP	SURR	99	%	89-112
FA76591-9	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	111	%	81-118
FA76591-9	2037-26-5	Toluene-D8	SAMP	SURR	99	%	89-112
FA76591-10	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	113	%	81-118
FA76591-10	2037-26-5	Toluene-D8	SAMP	SURR	97	%	89-112
FA76591-11	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	113	%	81-118
FA76591-11	2037-26-5	Toluene-D8	SAMP	SURR	97	%	89-112

* Sample used for QC is not from job FA76591

MS Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Instrument Performance Checks (BFB)
- Internal Standard Area Summaries
- Surrogate Recovery Summaries
- Initial and Continuing Calibration Summaries
- Run Sequence Reports

Method Blank Summary**Job Number:** FA76591**Account:** AHTNACAS Ahtna Global, LLC**Project:** DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VO2338-MB	O60845.D	1	07/08/20	AB	n/a	n/a	VO2338

The QC reported here applies to the following samples:**Method:** SW846 8260B BY SIM

FA76591-1, FA76591-2, FA76591-3, FA76591-4, FA76591-5, FA76591-6, FA76591-7, FA76591-8, FA76591-9, FA76591-10, FA76591-11

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	0.50	0.10	ug/l	
56-23-5	Carbon Tetrachloride	ND	0.50	0.10	ug/l	
67-66-3	Chloroform	ND	0.50	0.10	ug/l	
75-34-3	1,1-Dichloroethane	ND	0.50	0.10	ug/l	
107-06-2	1,2-Dichloroethane	ND	0.50	0.10	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	0.50	0.10	ug/l	
78-87-5	1,2-Dichloropropane	ND	0.50	0.10	ug/l	
75-09-2	Methylene Chloride	ND	2.0	0.50	ug/l	
127-18-4	Tetrachloroethylene	ND	0.50	0.10	ug/l	
79-01-6	Trichloroethylene	ND	0.50	0.10	ug/l	
75-01-4	Vinyl Chloride	ND	0.10	0.050	ug/l	

CAS No.	Surrogate Recoveries	Limits	
17060-07-0	1,2-Dichloroethane-D4	105%	74-125%
2037-26-5	Toluene-D8	102%	88-111%

Blank Spike Summary**Job Number:** FA76591**Account:** AHTNACAS Ahtna Global, LLC**Project:** DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VO2338-BS	O60844.D	1	07/08/20	AB	n/a	n/a	VO2338

The QC reported here applies to the following samples:**Method:** SW846 8260B BY SIM

FA76591-1, FA76591-2, FA76591-3, FA76591-4, FA76591-5, FA76591-6, FA76591-7, FA76591-8, FA76591-9, FA76591-10, FA76591-11

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
71-43-2	Benzene	5	5.4	108	81-122
56-23-5	Carbon Tetrachloride	5	5.6	112	76-136
67-66-3	Chloroform	5	5.3	106	80-124
75-34-3	1,1-Dichloroethane	5	5.2	104	81-122
107-06-2	1,2-Dichloroethane	5	5.0	100	75-125
156-59-2	cis-1,2-Dichloroethylene	5	5.2	104	78-120
78-87-5	1,2-Dichloropropane	5	5.4	108	76-124
75-09-2	Methylene Chloride	5	5.0	100	69-135
127-18-4	Tetrachloroethylene	5	5.5	110	76-135
79-01-6	Trichloroethylene	5	5.5	110	81-126
75-01-4	Vinyl Chloride	5	5.3	106	69-159

CAS No.	Surrogate Recoveries	BSP	Limits
17060-07-0	1,2-Dichloroethane-D4	99%	74-125%
2037-26-5	Toluene-D8	99%	88-111%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary**Job Number:** FA76591**Account:** AHTNACAS Ahtna Global, LLC**Project:** DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA76591-2MS	O60851.D	5	07/08/20	AB	n/a	n/a	VO2338
FA76591-2MSD	O60852.D	5	07/08/20	AB	n/a	n/a	VO2338
FA76591-2	O60847.D	1	07/08/20	AB	n/a	n/a	VO2338

The QC reported here applies to the following samples:**Method:** SW846 8260B BY SIM

FA76591-1, FA76591-2, FA76591-3, FA76591-4, FA76591-5, FA76591-6, FA76591-7, FA76591-8, FA76591-9, FA76591-10, FA76591-11

CAS No.	Compound	FA76591-2 ug/l	Spike Q ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	0.50 U	25	24.6	98	25	26.4	106	7	81-122/14
56-23-5	Carbon Tetrachloride	0.50 U	25	24.7	99	25	26.8	107	8	76-136/23
67-66-3	Chloroform	0.38 J	25	24.6	97	25	26.4	104	7	80-124/15
75-34-3	1,1-Dichloroethane	0.51	25	24.8	97	25	26.6	104	7	81-122/15
107-06-2	1,2-Dichloroethane	0.19 J	25	23.8	94	25	25.5	101	7	75-125/14
156-59-2	cis-1,2-Dichloroethylene	1.3	25	24.4	92	25	26.2	100	7	78-120/15
78-87-5	1,2-Dichloropropane	0.50 U	25	25.1	100	25	26.7	107	6	76-124/14
75-09-2	Methylene Chloride	2.0 U	25	24.7	99	25	26.5	106	7	69-135/16
127-18-4	Tetrachloroethylene	0.50 U	25	24.9	100	25	26.8	107	7	76-135/16
79-01-6	Trichloroethylene	0.50 U	25	22.8	91	25	25.0	100	9	81-126/15
75-01-4	Vinyl Chloride	0.10 U	25	30.5	122	25	30.9	124	1	69-159/18

CAS No.	Surrogate Recoveries	MS	MSD	FA76591-2	Limits
17060-07-0	1,2-Dichloroethane-D4	111%	111%	107%	74-125%
2037-26-5	Toluene-D8	94%	95%	100%	88-111%

* = Outside of Control Limits.

Instrument Performance Check (BFB)**Job Number:** FA76591**Account:** AHTNACAS Ahtna Global, LLC**Project:** DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA**Sample:** VO2337-BFB**Injection Date:** 07/02/20**Lab File ID:** O60817.D**Injection Time:** 08:25**Instrument ID:** GCMSO

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	158784	31.2	Pass
75	30.0 - 60.0% of mass 95	238571	46.8	Pass
95	Base peak, 100% relative abundance	509461	100.0	Pass
96	5.0 - 9.0% of mass 95	34768	6.82	Pass
173	Less than 2.0% of mass 174	2676	0.53 (0.67) ^a	Pass
174	50.0 - 100.0% of mass 95	398016	78.1	Pass
175	5.0 - 9.0% of mass 174	30053	5.90 (7.55) ^a	Pass
176	95.0 - 101.0% of mass 174	392512	77.0 (98.6) ^a	Pass
177	5.0 - 9.0% of mass 176	22248	4.37 (5.67) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VO2337-IC2337	O60820.D	07/02/20	10:49	02:24	Initial cal 1
VO2337-IC2337	O60821.D	07/02/20	11:12	02:47	Initial cal 2
VO2337-IC2337	O60822.D	07/02/20	11:37	03:12	Initial cal 3
VO2337-IC2337	O60823.D	07/02/20	12:00	03:35	Initial cal 4
VO2337-ICC2337	O60824.D	07/02/20	12:24	03:59	Initial cal 5
VO2337-IC2337	O60825.D	07/02/20	12:48	04:23	Initial cal 6
VO2337-IC2337	O60826.D	07/02/20	13:12	04:47	Initial cal 7
VO2337-ICV2337	O60828.D	07/02/20	14:01	05:36	Initial cal verification 5
VO2337-BS	O60829.D	07/02/20	14:26	06:01	Blank Spike
VO2337-MB	O60830.D	07/02/20	14:51	06:26	Method Blank
ZZZZZZ	O60831.D	07/02/20	15:15	06:50	(unrelated sample)
FA76463-2	O60832.D	07/02/20	15:39	07:14	(used for QC only; not part of job FA76591)
ZZZZZZ	O60833.D	07/02/20	16:03	07:38	(unrelated sample)
ZZZZZZ	O60834.D	07/02/20	16:27	08:02	(unrelated sample)
ZZZZZZ	O60835.D	07/02/20	16:50	08:25	(unrelated sample)
ZZZZZZ	O60836.D	07/02/20	17:15	08:50	(unrelated sample)
FA76463-2MS	O60837.D	07/02/20	17:38	09:13	Matrix Spike
FA76463-2MSD	O60838.D	07/02/20	18:03	09:38	Matrix Spike Duplicate
VO2337-ECC2337	O60839.D	07/02/20	18:26	10:01	Ending cal 5

Instrument Performance Check (BFB)**Job Number:** FA76591**Account:** AHTNACAS Ahtna Global, LLC**Project:** DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA**Sample:** VO2338-BFB**Injection Date:** 07/08/20**Lab File ID:** O60842.D**Injection Time:** 12:07**Instrument ID:** GCMSO

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	148632	30.8	Pass
75	30.0 - 60.0% of mass 95	246976	51.2	Pass
95	Base peak, 100% relative abundance	482155	100.0	Pass
96	5.0 - 9.0% of mass 95	34987	7.26	Pass
173	Less than 2.0% of mass 174	2684	0.56 (0.65) ^a	Pass
174	50.0 - 100.0% of mass 95	413568	85.8	Pass
175	5.0 - 9.0% of mass 174	27901	5.79 (6.75) ^a	Pass
176	95.0 - 101.0% of mass 174	399339	82.8 (96.6) ^a	Pass
177	5.0 - 9.0% of mass 176	26784	5.56 (6.71) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VO2338-CC2337	O60843.D	07/08/20	12:26	00:19	Continuing cal 5
VO2338-BS	O60844.D	07/08/20	12:50	00:43	Blank Spike
VO2338-MB	O60845.D	07/08/20	13:14	01:07	Method Blank
FA76591-1	O60846.D	07/08/20	13:38	01:31	2028MOU2146A
FA76591-2	O60847.D	07/08/20	14:02	01:55	2028MOU2147F
FA76591-3	O60848.D	07/08/20	14:25	02:18	2028MOU2148F
FA76591-4	O60849.D	07/08/20	14:49	02:42	2028MOU2149F
FA76591-5	O60850.D	07/08/20	15:13	03:06	2028MOU2150F
FA76591-2MS	O60851.D	07/08/20	15:38	03:31	Matrix Spike
FA76591-2MSD	O60852.D	07/08/20	16:01	03:54	Matrix Spike Duplicate
FA76591-6	O60853.D	07/08/20	16:25	04:18	2028MOU2151F
FA76591-7	O60854.D	07/08/20	16:49	04:42	2028MOU2152F
FA76591-8	O60855.D	07/08/20	17:13	05:06	2028MOU2153F
FA76591-9	O60856.D	07/08/20	17:38	05:31	2028MOU2154F
FA76591-10	O60857.D	07/08/20	18:02	05:55	2028MOU2155F
FA76591-11	O60858.D	07/08/20	18:26	06:19	2028MOU2156D
FA76591-1	O60859.D	07/08/20	18:51	06:44	2028MOU2146A
VO2338-ECC2337	O60860.D	07/08/20	19:15	07:08	Ending cal 5

Internal Standard Area Summary

Job Number: FA76591
Account: AHTNACAS Ahtna Global, LLC
Project: DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA

Check Std: VO2338-CC2337	Injection Date: 07/08/20
Lab File ID: O60843.D	Injection Time: 12:26
Instrument ID: GCMSO	Method: SW846 8260B BY SIM

	IS 1 AREA	RT	IS 2 AREA	RT
Initial Cal ^a	347161	7.35	227073	10.45
Check Std ^b	335583	7.35	220810	10.45
Upper Limit ^c	671166	7.52	441620	10.62
Lower Limit ^d	167792	7.18	110405	10.28

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT
VO2338-BS	326742	7.35	210729	10.45
VO2338-MB	280445	7.35	178033	10.45
FA76591-1 ^e	265918	7.35	169780	10.45
FA76591-2	243931	7.35	158047	10.45
FA76591-3	234217	7.35	150168	10.45
FA76591-4	224223	7.35	146763	10.45
FA76591-5	214594	7.35	138887	10.45
FA76591-2MS	251937	7.35	166568	10.45
FA76591-2MSD	262041	7.35	172540	10.45
FA76591-6	225407	7.35	146186	10.45
FA76591-7	207356	7.35	135386	10.45
FA76591-8	198978	7.35	129328	10.45
FA76591-9	192805	7.35	125761	10.45
FA76591-10	185297	7.35	122411	10.45
FA76591-11	181136	7.35	120570	10.45
FA76591-1 ^f	186577	7.35	121651	10.45
VO2338-ECC2337243522	7.35	165943	10.45	

IS 1 = Fluorobenzene
IS 2 = Chlorobenzene-D5

- (a) Initial Cal is: VO2337-ICC2337 O60824.D 07/02/20 12:24
- (b) Check Std Limit = -50 to + 100% of initial cal area.
- (c) Upper Limit = + 100% of check standard area; Retention time + 0.167 minutes.
- (d) Lower Limit = -50% of check standard area; Retention time -0.167 minutes.
- (e) Sample vial(s) contained bubbles greater than 6mm; reported results are considered minimum values.
- (f) Sample vial(s) contained bubbles greater than 6mm; reported results are considered minimum values.
Confirmation run.

Surrogate Recovery Summary

Job Number: FA76591

Account: AHTNACAS Ahtna Global, LLC

Project: DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA

Method: SW846 8260B BY SIM	Matrix: AQ
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Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2
FA76591-1	O60859.D	112	96
FA76591-1	O60846.D	105	101
FA76591-2	O60847.D	107	100
FA76591-3	O60848.D	107	101
FA76591-4	O60849.D	109	99
FA76591-5	O60850.D	109	99
FA76591-6	O60853.D	108	99
FA76591-7	O60854.D	110	99
FA76591-8	O60855.D	110	99
FA76591-9	O60856.D	111	99
FA76591-10	O60857.D	113	97
FA76591-11	O60858.D	113	97
FA76591-2MS	O60851.D	111	94
FA76591-2MSD	O60852.D	111	95
VO2338-BS	O60844.D	99	99
VO2338-MB	O60845.D	105	102

Surrogate Compounds	Recovery Limits
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S1 = 1,2-Dichloroethane-D4	74-125%
S2 = Toluene-D8	88-111%

Initial Calibration Summary

Job Number: FA76591 **Sample:** VO2337-ICC2337
Account: AHTNACAS Ahtna Global, LLC **Lab FileID:** O60824.D
Project: DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA

Response Factor Report MSVOA12

Method : C:\msdchem\2\methods\SIMCL070220.M (RTE Integrator)
 Title : Standard Methods 6200B
 Last Update : Thu Jul 02 13:33:54 2020
 Response via : Initial Calibration

Calibration Files

1 =O60820.D 2 =O60821.D 3 =O60822.D 4 =O60823.D
 5 =O60824.D 6 =O60825.D 7 =O60826.D

Compound	1	2	3	4	5	6	7	Avg	%RSD
1) I Fluorobenzene	-----ISTD-----								
2) Vinyl Chloride	0.447	0.443	0.505	0.510	0.493	0.492	0.468	0.480	5.67
3) Chloromethane	2.049	0.850	0.836	0.839	0.778	0.759	0.720	0.976	48.76
	---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9998								
	Response Ratio = 0.00000 + 0.85655 *A + -0.03398 *A^2								
4) 1,1-Dichloroethen	0.640	0.567	0.517	0.619	0.595	0.748	0.603	0.613	11.71
5) Methylene Chlorid	2.003	1.114	1.005	1.004	0.997	0.978	0.937	1.148	33.16
	---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9998								
	Response Ratio = 0.00000 + 1.05346 *A + -0.02825 *A^2								
6) trans-1,2-Dichlor	0.705	0.618	0.601	0.644	0.684	0.685	0.670	0.658	5.82
7) 1,1-Dichloroethan	2.259	0.769	0.744	0.799	0.830	0.830	0.805	1.005	55.09
	---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9994								
	Response Ratio = 0.00000 + 0.83985 *A + -0.00742 *A^2								
8) cis-1,2-Dichloroe	0.517	0.409	0.405	0.436	0.460	0.464	0.459	0.450	8.50
9) Chloroform	0.868	0.748	0.739	0.798	0.824	0.829	0.810	0.802	5.69
10) Carbon Tetrachlor	0.525	0.441	0.408	0.470	0.521	0.544	0.536	0.492	10.67
11) 1,1,1-Trichloroet	0.631	0.504	0.496	0.560	0.608	0.628	0.621	0.578	10.14
12) Benzene	4.086	1.315	1.260	1.329	1.394	1.402	1.380	1.738	59.64
	---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9996								
	Response Ratio = 0.00000 + 1.38012 *A + 0.00181 *A^2								
13)S 1,2-Dichloroethan	0.377	0.374	0.381	0.363	0.359	0.360	0.355	0.367	2.69
14) 1,2-Dichloroethan	1.260	0.566	0.586	0.621	0.622	0.618	0.607	0.697	35.71
	---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9999								
	Response Ratio = 0.00000 + 0.63295 *A + -0.00602 *A^2								
15) Trichloroethene	0.555	0.433	0.426	0.469	0.503	0.514	0.514	0.488	9.71
16) 1,2-Dichloropropa	0.464	0.444	0.445	0.466	0.472	0.487	0.471	0.464	3.35
17) cis-1,3-Dichlorop	0.521	0.432	0.462	0.516	0.545	0.570	0.577	0.518	10.44
18) I Chlorobenzene-d5	-----ISTD-----								
19)S Toluene-d8	1.249	1.225	1.206	1.198	1.172	1.190	1.192	1.205	2.11
20) trans-1,3-Dichlor	0.718	0.623	0.687	0.780	0.815	0.845	0.867	0.762	11.74
21) Tetrachloroethene	0.696	0.602	0.575	0.620	0.660	0.665	0.662	0.640	6.60
22) 1,4-Dichlorobenze	1.208	1.086	1.151	1.233	1.289	1.326	1.327	1.231	7.37
23) 1,2-Dibromo-3-Chl	0.271	0.209	0.204	0.230	0.243	0.258	0.259	0.239	10.79

(#) = Out of Range

6.7.1
6

Initial Calibration Verification

Job Number: FA76591

Sample: VO2337-ICV2337

Account: AHTNACAS Ahtna Global, LLC

Lab FileID: O60828.D

Project: DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA

Evaluate Continuing Calibration Report

Data File : C:\msdchem\2\data\070220\O60828.D Vial: 9
 Acq On : 2 Jul 2020 2:01 pm Operator: amandab
 Sample : ICV2337-5 Inst : MSVOA12
 Misc : MS46657,VO2337,,,,, Multiplr: 1.00
 MS Integration Params: rteint.p

Method : C:\msdchem\2\methods\SIMCL070220.M (RTE Integrator)
 Title : Standard Methods 6200B
 Last Update : Thu Jul 02 13:33:54 2020
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	Fluorobenzene	1.000	1.000	0.0	102	0.00	7.35
2	Vinyl Chloride	0.480	0.456	5.0	95	0.00	2.91
	----- Amount	Calc.	%Drift	-----			
3	Chloromethane	10.000	8.765	12.3	92	0.00	2.81
	----- AvgRF	CCRF	%Dev	-----			
4	1,1-Dichloroethene	0.613	0.581	5.2	100	0.00	4.09
	----- Amount	Calc.	%Drift	-----			
5	Methylene Chloride	10.000	9.668	3.3	99	0.00	4.70
	----- AvgRF	CCRF	%Dev	-----			
6	trans-1,2-Dichloroethene	0.658	0.651	1.1	98	0.00	4.87
	----- Amount	Calc.	%Drift	-----			
7	1,1-Dichloroethane	10.000	9.799	2.0	100	0.00	5.51
	----- AvgRF	CCRF	%Dev	-----			
8	cis-1,2-Dichloroethene	0.450	0.447	0.7	99	0.00	6.07
9	Chloroform	0.802	0.796	0.7	99	0.00	6.33
10	Carbon Tetrachloride	0.492	0.491	0.2	97	0.00	6.51
11	1,1,1-Trichloroethane	0.578	0.574	0.7	97	0.00	6.58
	----- Amount	Calc.	%Drift	-----			
12	Benzene	10.000	10.048	-0.5	102	0.00	6.94
	----- AvgRF	CCRF	%Dev	-----			
13 S	1,2-Dichloroethane-d4	0.367	0.362	1.4	103	0.00	7.08
	----- Amount	Calc.	%Drift	-----			
14	1,2-Dichloroethane	10.000	9.924	0.8	101	0.00	7.14
	----- AvgRF	CCRF	%Dev	-----			
15	Trichloroethene	0.488	0.503	-3.1	102	0.00	7.52
16	1,2-Dichloropropane	0.464	0.478	-3.0	104	0.00	8.04
17	cis-1,3-Dichloropropene	0.518	0.557	-7.5	105	0.00	8.71
18 I	Chlorobenzene-d5	1.000	1.000	0.0	102	0.00	10.45
19 S	Toluene-d8	1.205	1.190	1.2	103	0.00	8.90
20	trans-1,3-Dichloropropene	0.762	0.846	-11.0	106	0.00	9.34
21	Tetrachloroethene	0.640	0.632	1.3	98	0.00	9.34

Initial Calibration Verification

Job Number: FA76591

Sample: VO2337-ICV2337

Account: AHTNACAS Ahtna Global, LLC

Lab FileID: O60828.D

Project: DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA

22	1,4-Dichlorobenzene	1.231	1.296	-5.3	102	0.00	12.83
23	1,2-Dibromo-3-Chloropropa	0.239	0.245	-2.5	103	0.00	14.04

(#) = Out of Range

SPCC's out = 0 CCC's out = 0

O60824.D SIMCL070220.M

Thu Jul 02 14:26:14 2020

Continuing Calibration Summary

Job Number: FA76591

Sample: VO2338-CC2337

Account: AHTNACAS Ahtna Global, LLC

Lab FileID: O60843.D

Project: DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA

Evaluate Continuing Calibration Report

Data File : C:\msdchem\2\data\070820\O60843.D Vial: 1
 Acq On : 8 Jul 2020 12:26 pm Operator: amandab
 Sample : CC2337-5 Inst : MSVOA12
 Misc : MS46689,VO2338,,,,, Multiplr: 1.00
 MS Integration Params: rteint.p

Method : C:\msdchem\2\methods\SIMCL070220.M (RTE Integrator)
 Title : Standard Methods 6200B
 Last Update : Thu Jul 02 13:33:54 2020
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	Fluorobenzene	1.000	1.000	0.0	97	0.00	7.35
2	Vinyl Chloride	0.480	0.519	-8.1	102	-0.01	2.90
	----- Amount	Calc.	%Drift	-----			
3	Chloromethane	10.000	9.833	1.7	96	0.00	2.80
	----- AvgRF	CCRF	%Dev	-----			
4	1,1-Dichloroethene	0.613	0.552	10.0	90	0.00	4.09
	----- Amount	Calc.	%Drift	-----			
5	Methylene Chloride	10.000	9.534	4.7	92	0.00	4.70
	----- AvgRF	CCRF	%Dev	-----			
6	trans-1,2-Dichloroethene	0.658	0.654	0.6	92	0.00	4.87
	----- Amount	Calc.	%Drift	-----			
7	1,1-Dichloroethane	10.000	9.700	3.0	93	0.00	5.51
	----- AvgRF	CCRF	%Dev	-----			
8	cis-1,2-Dichloroethene	0.450	0.442	1.8	93	0.00	6.07
9	Chloroform	0.802	0.798	0.5	94	0.00	6.33
10	Carbon Tetrachloride	0.492	0.502	-2.0	93	0.00	6.50
11	1,1,1-Trichloroethane	0.578	0.590	-2.1	94	0.00	6.58
	----- Amount	Calc.	%Drift	-----			
12	Benzene	10.000	9.731	2.7	93	0.00	6.94
	----- AvgRF	CCRF	%Dev	-----			
13 S	1,2-Dichloroethane-d4	0.367	0.362	1.4	97	0.00	7.07
	----- Amount	Calc.	%Drift	-----			
14	1,2-Dichloroethane	10.000	9.595	4.0	93	0.00	7.14
	----- AvgRF	CCRF	%Dev	-----			
15	Trichloroethene	0.488	0.484	0.8	93	0.00	7.51
16	1,2-Dichloropropane	0.464	0.463	0.2	95	0.00	8.04
17	cis-1,3-Dichloropropene	0.518	0.533	-2.9	94	0.00	8.71
18 I	Chlorobenzene-d5	1.000	1.000	0.0	97	0.00	10.45
19 S	Toluene-d8	1.205	1.168	3.1	97	0.00	8.90
20	trans-1,3-Dichloropropene	0.762	0.788	-3.4	94	0.00	9.34
21	Tetrachloroethene	0.640	0.634	0.9	93	0.00	9.34

Continuing Calibration Summary

Job Number: FA76591

Sample: VO2338-ECC2337

Account: AHTNACAS Ahtna Global, LLC

Lab FileID: O60860.D

Project: DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA

Evaluate Continuing Calibration Report

Data File : C:\msdchem\2\data\070820\O60860.D

Vial: 18

Acq On : 8 Jul 2020 7:15 pm

Operator: amandab

Sample : ECC2337-5

Inst : MSVOA12

Misc : MS46689,VO2338,,,,,

Multiplr: 1.00

MS Integration Params: rteint.p

Method : C:\msdchem\2\methods\SIMCL070220.M (RTE Integrator)

Title : Standard Methods 6200B

Last Update : Thu Jul 02 13:33:54 2020

Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min

Max. RRF Dev : 50% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	Fluorobenzene	1.000	1.000	0.0	70	0.00	7.35
2	Vinyl Chloride	0.480	0.557	-16.0	79	0.00	2.91
	----- Amount	Calc.	%Drift	-----			
3	Chloromethane	10.000	11.248	-12.5	79	0.00	2.80
	----- AvgRF	CCRF	%Dev	-----			
4	1,1-Dichloroethene	0.613	0.614	-0.2	72	0.00	4.09
	----- Amount	Calc.	%Drift	-----			
5	Methylene Chloride	10.000	10.834	-8.3	76	0.00	4.70
	----- AvgRF	CCRF	%Dev	-----			
6	trans-1,2-Dichloroethene	0.658	0.695	-5.6	71	0.00	4.87
	----- Amount	Calc.	%Drift	-----			
7	1,1-Dichloroethane	10.000	10.438	-4.4	73	0.00	5.51
	----- AvgRF	CCRF	%Dev	-----			
8	cis-1,2-Dichloroethene	0.450	0.450	0.0	69	0.00	6.07
9	Chloroform	0.802	0.843	-5.1	72	0.00	6.33
10	Carbon Tetrachloride	0.492	0.512	-4.1	69	0.00	6.50
11	1,1,1-Trichloroethane	0.578	0.609	-5.4	70	0.00	6.58
	----- Amount	Calc.	%Drift	-----			
12	Benzene	10.000	10.083	-0.8	70	0.00	6.94
	----- AvgRF	CCRF	%Dev	-----			
13 S	1,2-Dichloroethane-d4	0.367	0.371	-1.1	73	0.00	7.07
	----- Amount	Calc.	%Drift	-----			
14	1,2-Dichloroethane	10.000	10.397	-4.0	73	0.00	7.14
	----- AvgRF	CCRF	%Dev	-----			
15	Trichloroethene	0.488	0.510	-4.5	71	0.00	7.52
16	1,2-Dichloropropane	0.464	0.485	-4.5	72	0.00	8.04
17	cis-1,3-Dichloropropene	0.518	0.505	2.5	65	0.00	8.71
18 I	Chlorobenzene-d5	1.000	1.000	0.0	73	0.00	10.45
19 S	Toluene-d8	1.205	1.099	8.8	68	0.00	8.90
20	trans-1,3-Dichloropropene	0.762	0.746	2.1	67	0.00	9.34
21	Tetrachloroethene	0.640	0.646	-0.9	72	0.00	9.34

Continuing Calibration Summary

Job Number: FA76591

Sample: VO2338-ECC2337

Account: AHTNACAS Ahtna Global, LLC

Lab FileID: O60860.D

Project: DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA

22	1,4-Dichlorobenzene	1.231	1.267	-2.9	72	0.00	12.83
23	1,2-Dibromo-3-Chloropropa	0.239	0.223	6.7	67	0.00	14.04

(#) = Out of Range

SPCC's out = 0 CCC's out = 0

O60824.D SIMCL070220.M

Thu Jul 09 07:41:25 2020

Run Sequence Report**Job Number:** FA76591**Account:** AHTNACAS Ahtna Global, LLC**Project:** DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA**Run ID:** VO2337**Method:** SW846 8260B BY SIM **Instrument ID:** GCMSO

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
VO2337-BFB	O60817.D	07/02/20 08:25	n/a	BFB Tune
VO2337-IC2337	O60820.D	07/02/20 10:49	n/a	Initial cal 1
VO2337-IC2337	O60821.D	07/02/20 11:12	n/a	Initial cal 2
VO2337-IC2337	O60822.D	07/02/20 11:37	n/a	Initial cal 3
VO2337-IC2337	O60823.D	07/02/20 12:00	n/a	Initial cal 4
VO2337-ICC2337	O60824.D	07/02/20 12:24	n/a	Initial cal 5
VO2337-IC2337	O60825.D	07/02/20 12:48	n/a	Initial cal 6
VO2337-IC2337	O60826.D	07/02/20 13:12	n/a	Initial cal 7
VO2337-ICV2337	O60828.D	07/02/20 14:01	n/a	Initial cal verification 5
VO2337-BS	O60829.D	07/02/20 14:26	n/a	Blank Spike
VO2337-MB	O60830.D	07/02/20 14:51	n/a	Method Blank
ZZZZZZ	O60831.D	07/02/20 15:15	n/a	(unrelated sample)
FA76463-2	O60832.D	07/02/20 15:39	n/a	(used for QC only; not part of job FA76591)
ZZZZZZ	O60833.D	07/02/20 16:03	n/a	(unrelated sample)
ZZZZZZ	O60834.D	07/02/20 16:27	n/a	(unrelated sample)
ZZZZZZ	O60835.D	07/02/20 16:50	n/a	(unrelated sample)
ZZZZZZ	O60836.D	07/02/20 17:15	n/a	(unrelated sample)
FA76463-2MS	O60837.D	07/02/20 17:38	n/a	Matrix Spike
FA76463-2MSD	O60838.D	07/02/20 18:03	n/a	Matrix Spike Duplicate
VO2337-ECC2337	O60839.D	07/02/20 18:26	n/a	Ending cal 5

Run Sequence Report**Job Number:** FA76591**Account:** AHTNACAS Ahtna Global, LLC**Project:** DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA**Run ID:** VO2338**Method:** SW846 8260B BY SIM **Instrument ID:** GCMSO

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
VO2338-BFB	O60842.D	07/08/20 12:07	n/a	BFB Tune
VO2338-CC2337	O60843.D	07/08/20 12:26	n/a	Continuing cal 5
VO2338-BS	O60844.D	07/08/20 12:50	n/a	Blank Spike
VO2338-MB	O60845.D	07/08/20 13:14	n/a	Method Blank
FA76591-1	O60846.D	07/08/20 13:38	n/a	2028MOU2146A
FA76591-2	O60847.D	07/08/20 14:02	n/a	2028MOU2147F
FA76591-3	O60848.D	07/08/20 14:25	n/a	2028MOU2148F
FA76591-4	O60849.D	07/08/20 14:49	n/a	2028MOU2149F
FA76591-5	O60850.D	07/08/20 15:13	n/a	2028MOU2150F
FA76591-2MS	O60851.D	07/08/20 15:38	n/a	Matrix Spike
FA76591-2MSD	O60852.D	07/08/20 16:01	n/a	Matrix Spike Duplicate
FA76591-6	O60853.D	07/08/20 16:25	n/a	2028MOU2151F
FA76591-7	O60854.D	07/08/20 16:49	n/a	2028MOU2152F
FA76591-8	O60855.D	07/08/20 17:13	n/a	2028MOU2153F
FA76591-9	O60856.D	07/08/20 17:38	n/a	2028MOU2154F
FA76591-10	O60857.D	07/08/20 18:02	n/a	2028MOU2155F
FA76591-11	O60858.D	07/08/20 18:26	n/a	2028MOU2156D
FA76591-1	O60859.D	07/08/20 18:51	n/a	2028MOU2146A
VO2338-ECC2337	O60860.D	07/08/20 19:15	n/a	Ending cal 5

MS Volatiles

Raw Data

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\070820\
Data File : O60846.D
Acq On : 8 Jul 2020 1:38 pm
Operator : amandab
Sample : FA76591-1 Inst : MSVOA12
Misc : MS46689,VO2338,,,,,
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jul 08 14:04:24 2020
Quant Method : C:\msdchem\2\methods\SIMCL070220.M
Quant Title : Standard Methods 6200B
QLast Update : Thu Jul 02 13:33:54 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.346	96	265918	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.447	117	169780	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.074	65	102398	5.24	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	104.80%	
19) Toluene-d8	8.896	98	206435	5.05	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	101.00%	
Target Compounds						
3) Chloromethane	2.803	50	26431	0.58	ug/L	99
5) Methylene Chloride	4.703	49	147348	2.67	ug/L	98
21) Tetrachloroethene	9.343	166	50971	2.35	ug/L	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

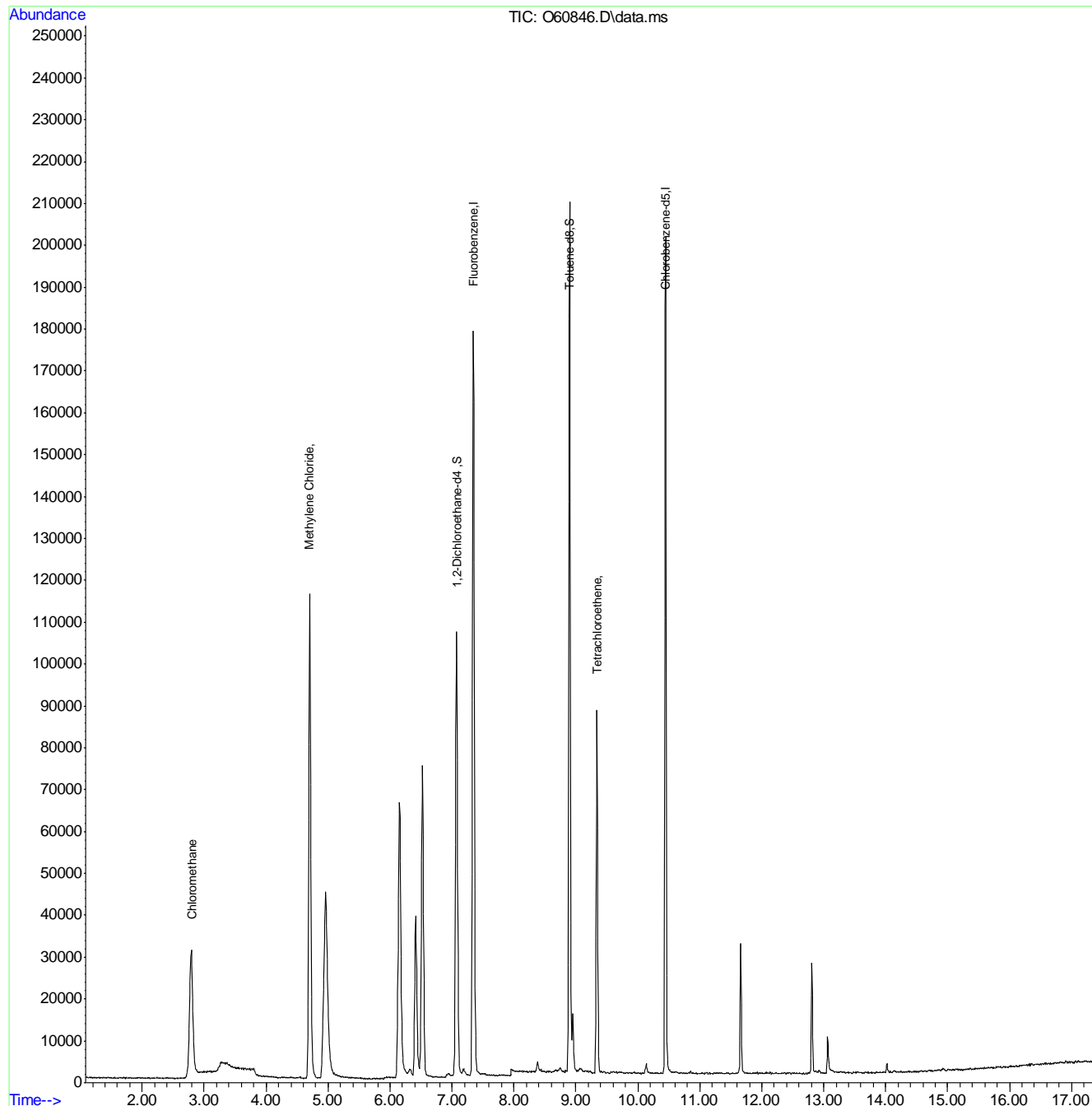
7.1.1
7

Quantitation Report (QT Reviewed)

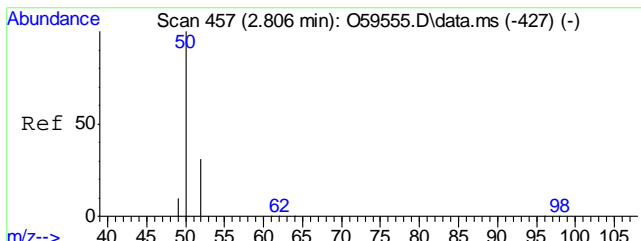
Data Path : C:\msdchem\2\data\070820\
 Data File : O60846.D
 Acq On : 8 Jul 2020 1:38 pm
 Operator : amandab
 Sample : FA76591-1
 Misc : MS46689,VO2338,,,,,
 ALS Vial : 4 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Jul 08 14:04:24 2020
 Quant Method : C:\msdchem\2\methods\SIMCL070220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jul 02 13:33:54 2020
 Response via : Initial Calibration

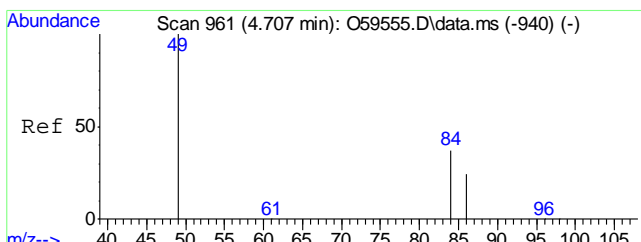
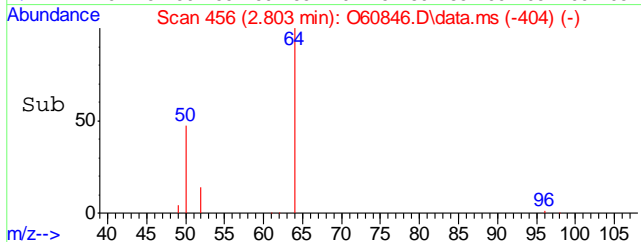
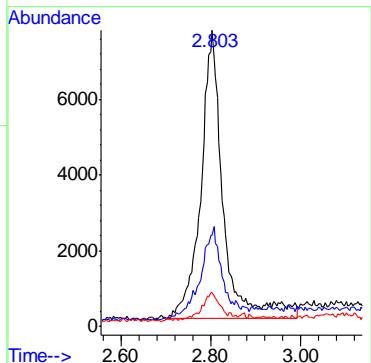
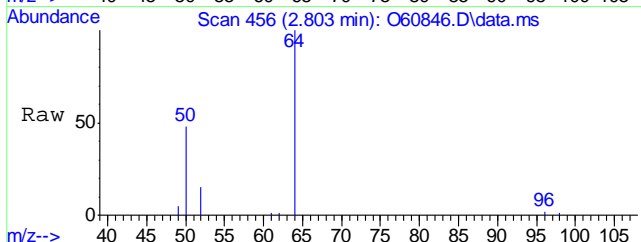


7.1.1
7



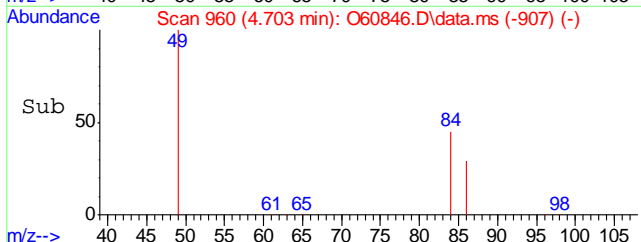
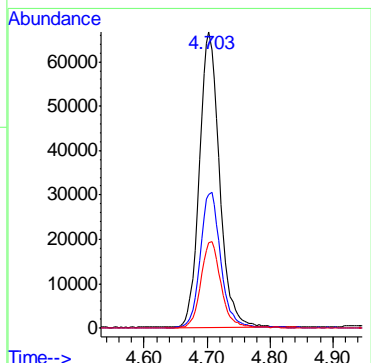
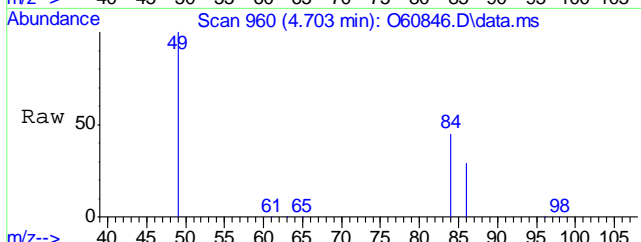
#3
 Chloromethane
 Concen: 0.58 ug/L
 RT: 2.803 min Scan# 456
 Delta R.T. -0.003 min
 Lab File: O60846.D
 Acq: 8 Jul 2020 1:38 pm

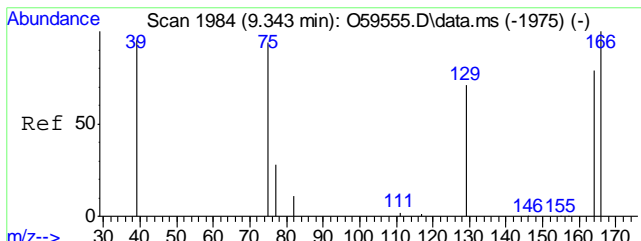
Tgt Ion	Resp	Lower	Upper
50	26431		
52	29.0	8.5	48.5
49	8.9	0.0	29.8



#5
 Methylene Chloride
 Concen: 2.67 ug/L
 RT: 4.703 min Scan# 960
 Delta R.T. 0.000 min
 Lab File: O60846.D
 Acq: 8 Jul 2020 1:38 pm

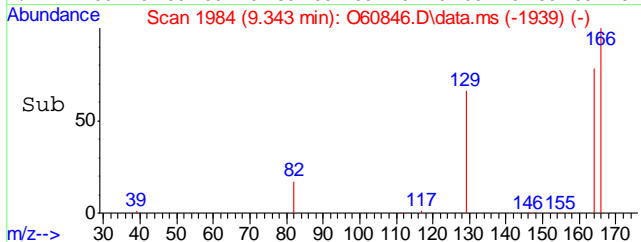
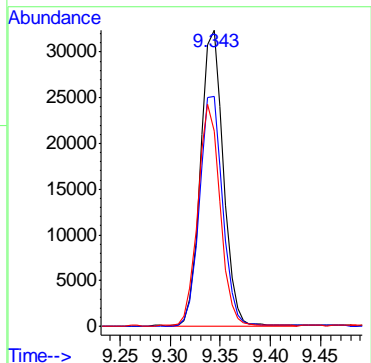
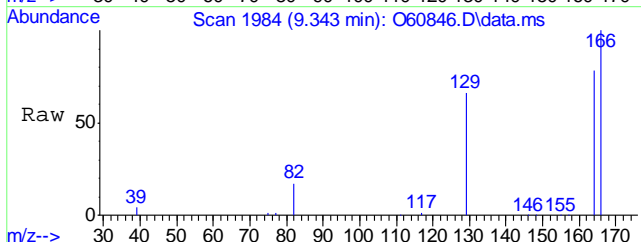
Tgt Ion	Resp	Lower	Upper
49	147348		
84	45.2	17.1	77.1
86	28.7	0.0	59.3





#21
Tetrachloroethene
Concen: 2.35 ug/L
RT: 9.343 min Scan# 1984
Delta R.T. 0.000 min
Lab File: O60846.D
Acq: 8 Jul 2020 1:38 pm

Tgt Ion	Resp	Lower	Upper
166	50971		
164	77.6	48.3	108.3
129	65.7	39.5	99.5



7.1.1
7



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\070820\
 Data File : O60859.D
 Acq On : 8 Jul 2020 6:51 pm
 Operator : amandab
 Sample : FA76591-1 Inst : MSVOA12
 Misc : MS46689,VO2338,,,,,
 ALS Vial : 17 Sample Multiplier: 1

Quant Time: Jul 09 07:40:05 2020
 Quant Method : C:\msdchem\2\methods\SIMCL070220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jul 02 13:33:54 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.346	96	186577	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.447	117	121651	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.074	65	76823	5.61	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	112.20%	
19) Toluene-d8	8.900	98	141273	4.82	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	96.40%	
Target Compounds						
3) Chloromethane	2.803	50	22366	0.70	ug/L	99
5) Methylene Chloride	4.703	49	116569	3.01	ug/L	98
21) Tetrachloroethene	9.343	166	40729	2.62	ug/L	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

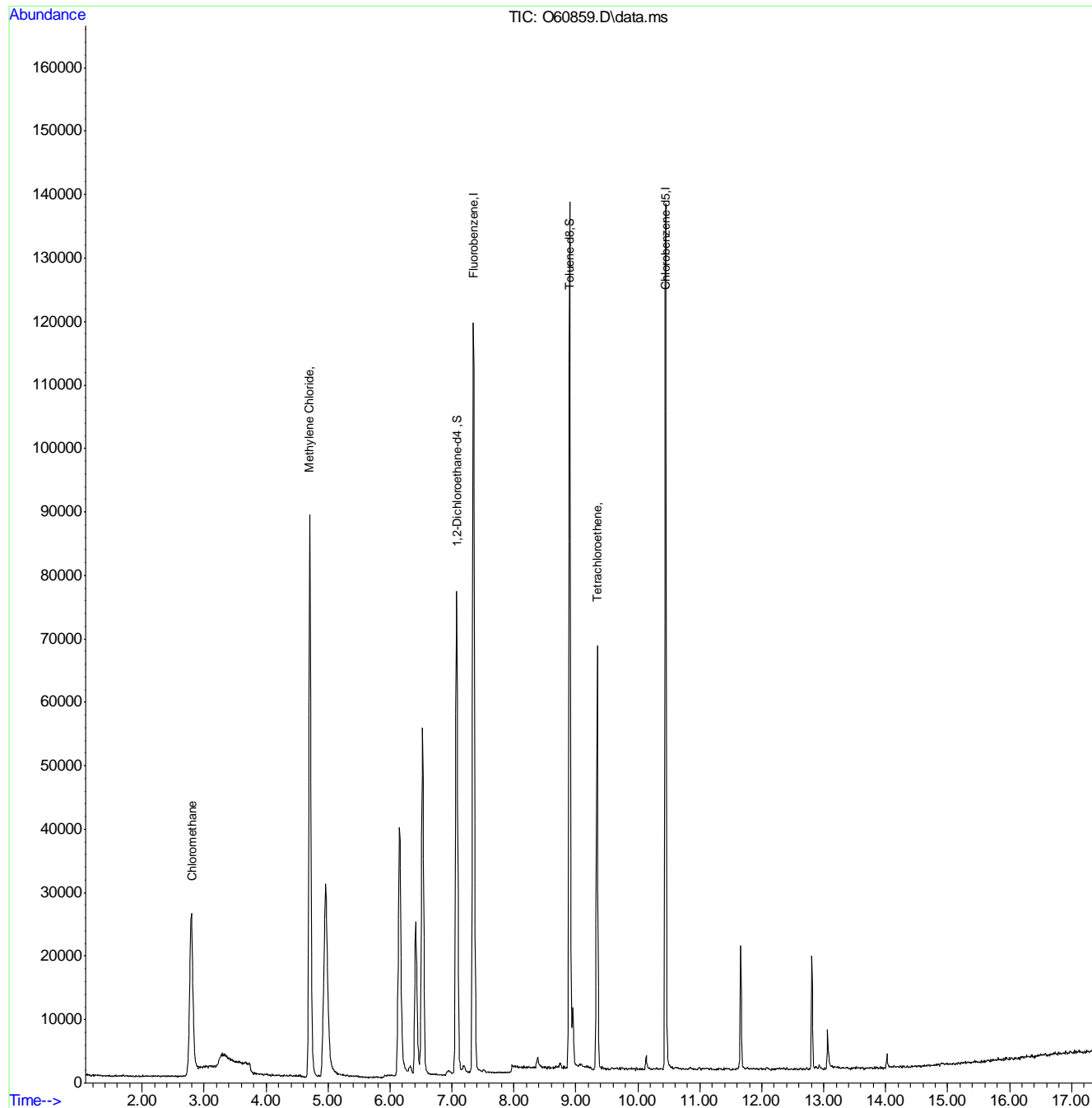
7.12
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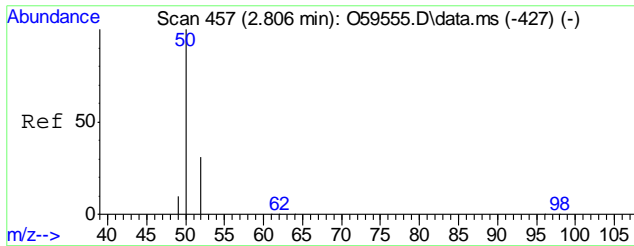
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\070820\
Data File : O60859.D
Acq On : 8 Jul 2020 6:51 pm
Operator : amandab
Sample : FA76591-1
Misc : MS46689,VO2338,,,,,
ALS Vial : 17 Sample Multiplier: 1

Inst : MSVOA12

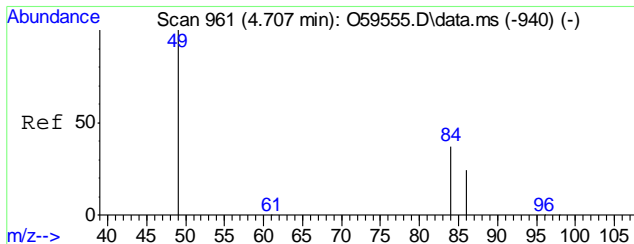
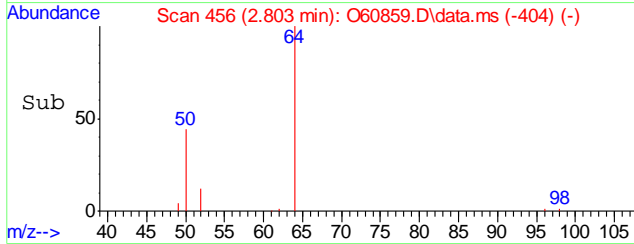
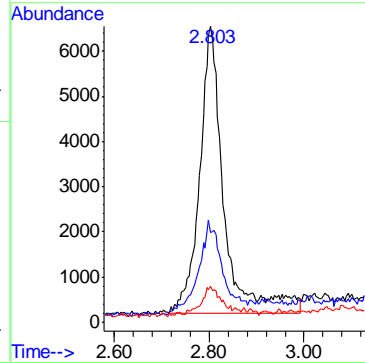
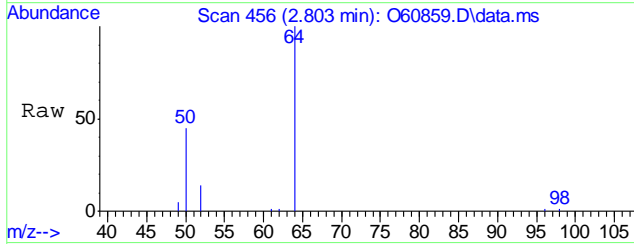
Quant Time: Jul 09 07:40:05 2020
Quant Method : C:\msdchem\2\methods\SIMCL070220.M
Quant Title : Standard Methods 6200B
QLast Update : Thu Jul 02 13:33:54 2020
Response via : Initial Calibration





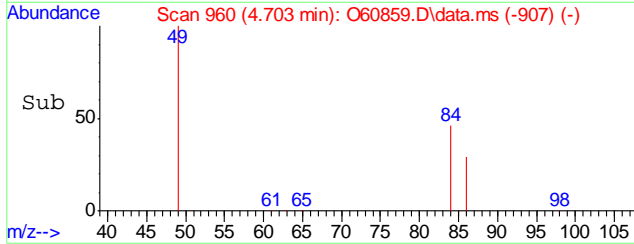
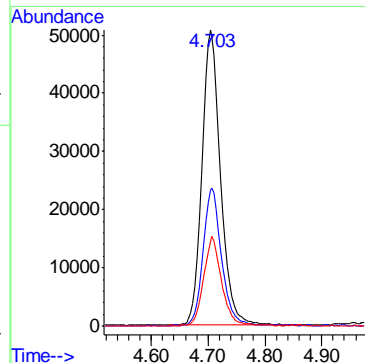
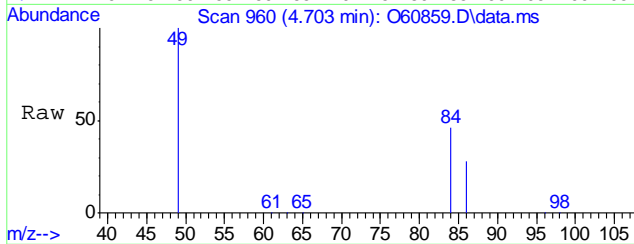
#3
 Chloromethane
 Concen: 0.70 ug/L
 RT: 2.803 min Scan# 456
 Delta R.T. -0.003 min
 Lab File: O60859.D
 Acq: 8 Jul 2020 6:51 pm

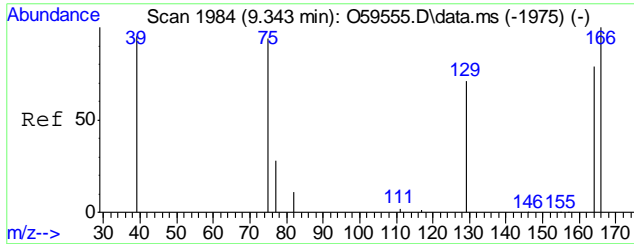
Tgt Ion	Resp	Lower	Upper
50	22366		
52	28.1	8.5	48.5
49	9.4	0.0	29.8



#5
 Methylene Chloride
 Concen: 3.01 ug/L
 RT: 4.703 min Scan# 960
 Delta R.T. 0.000 min
 Lab File: O60859.D
 Acq: 8 Jul 2020 6:51 pm

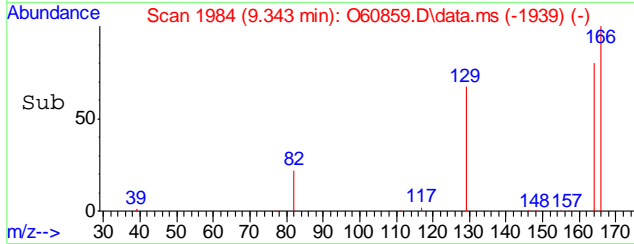
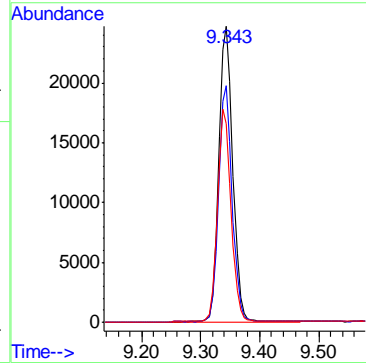
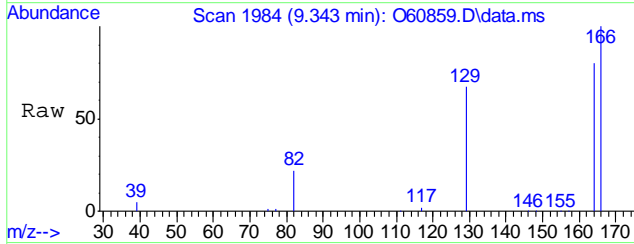
Tgt Ion	Resp	Lower	Upper
49	116569		
84	45.8	17.1	77.1
86	28.4	0.0	59.3





#21
 Tetrachloroethene
 Concen: 2.62 ug/L
 RT: 9.343 min Scan# 1984
 Delta R.T. 0.000 min
 Lab File: O60859.D
 Acq: 8 Jul 2020 6:51 pm

Tgt Ion	Ratio	Lower	Upper
166	100		
164	80.1	48.3	108.3
129	67.1	39.5	99.5



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\070820\
Data File : O60847.D
Acq On : 8 Jul 2020 2:02 pm
Operator : amandab
Sample : FA76591-2 Inst : MSVOA12
Misc : MS46689,VO2338,,,,,
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jul 08 14:20:27 2020
Quant Method : C:\msdchem\2\methods\SIMCL070220.M
Quant Title : Standard Methods 6200B
QLast Update : Thu Jul 02 13:33:54 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.346	96	243931	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.447	117	158047	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.074	65	96044	5.36	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	107.20%	
19) Toluene-d8	8.896	98	190765	5.01	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	100.20%	
Target Compounds						
7) 1,1-Dichloroethane	5.506	63	20927	0.51	ug/L	100
8) cis-1,2-Dichloroethene	6.066	96	27622	1.26	ug/L	96
9) Chloroform	6.327	83	14853	0.38	ug/L	89
14) 1,2-Dichloroethane	7.139	62	5921	0.19	ug/L	94

(#) = qualifier out of range (m) = manual integration (+) = signals summed

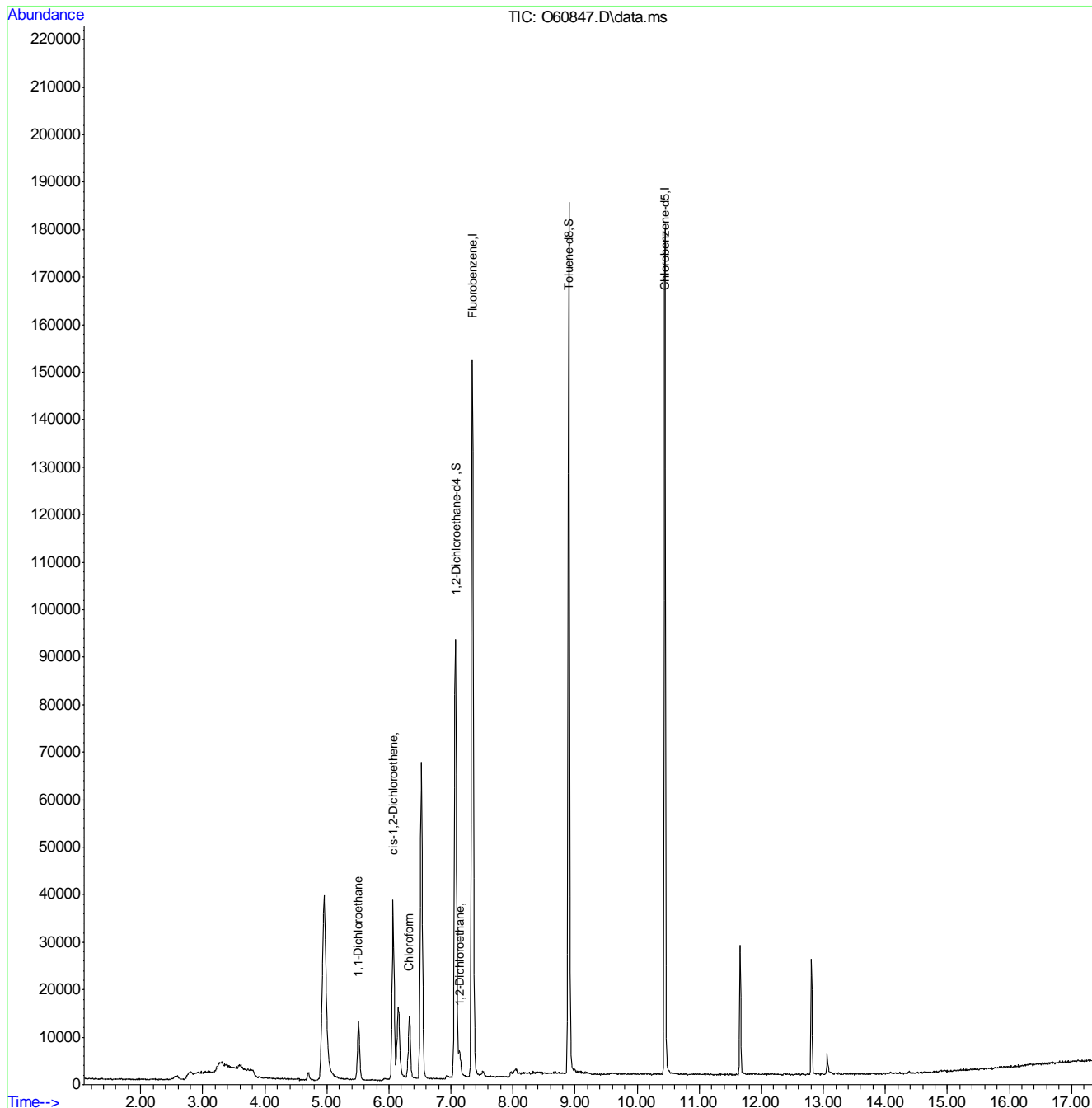
7.1.3
7

Quantitation Report (QT Reviewed)

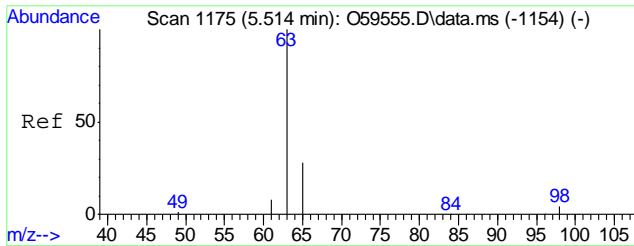
Data Path : C:\msdchem\2\data\070820\
Data File : O60847.D
Acq On : 8 Jul 2020 2:02 pm
Operator : amandab
Sample : FA76591-2
Misc : MS46689,VO2338,,,,,
ALS Vial : 5 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Jul 08 14:20:27 2020
Quant Method : C:\msdchem\2\methods\SIMCL070220.M
Quant Title : Standard Methods 6200B
QLast Update : Thu Jul 02 13:33:54 2020
Response via : Initial Calibration

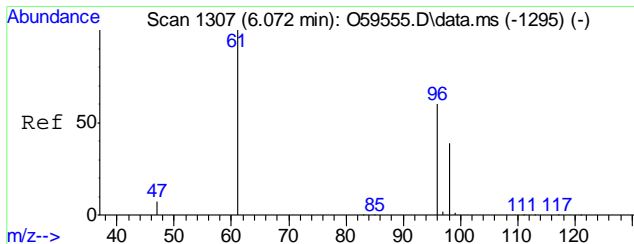
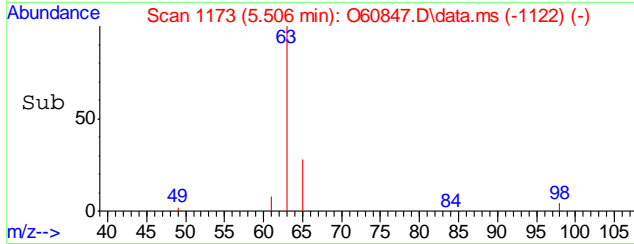
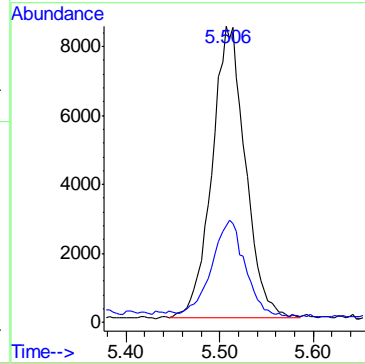
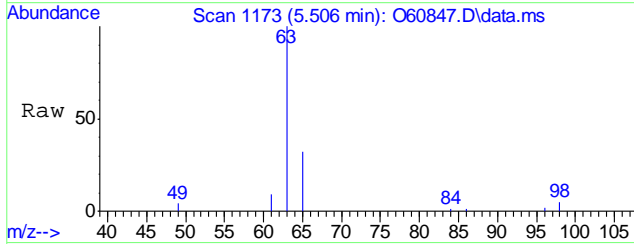


7.1.3
7



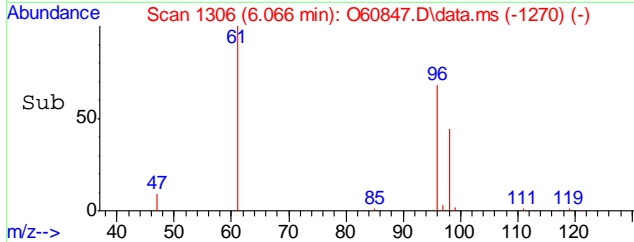
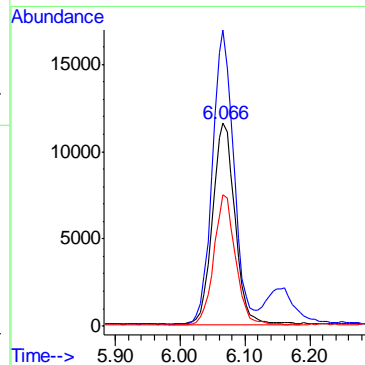
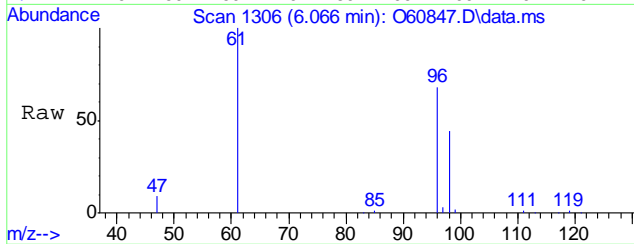
#7
 1,1-Dichloroethane
 Concen: 0.51 ug/L
 RT: 5.506 min Scan# 1173
 Delta R.T. -0.008 min
 Lab File: O60847.D
 Acq: 8 Jul 2020 2:02 pm

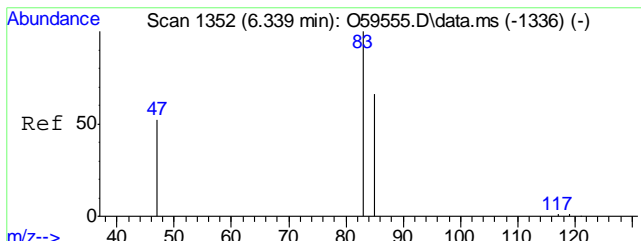
Tgt Ion	Resp	Lower	Upper
63	20927	100	
65	30.9	0.7	60.7



#8
 cis-1,2-Dichloroethene
 Concen: 1.26 ug/L
 RT: 6.066 min Scan# 1306
 Delta R.T. -0.006 min
 Lab File: O60847.D
 Acq: 8 Jul 2020 2:02 pm

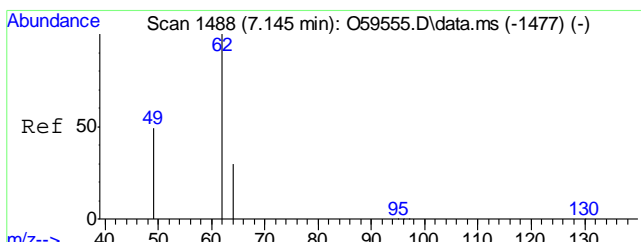
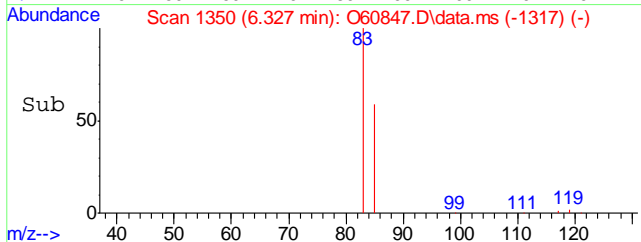
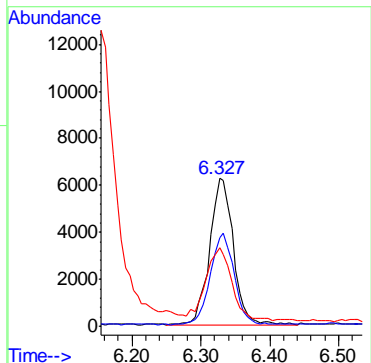
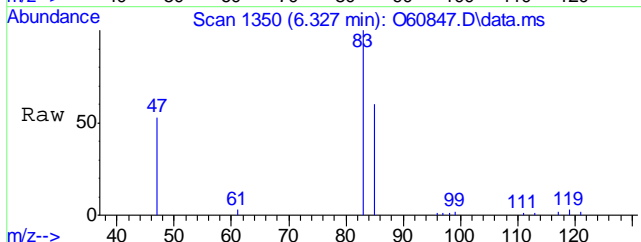
Tgt Ion	Resp	Lower	Upper
96	27622	100	
61	146.0	110.0	170.0
98	64.7	34.1	94.1





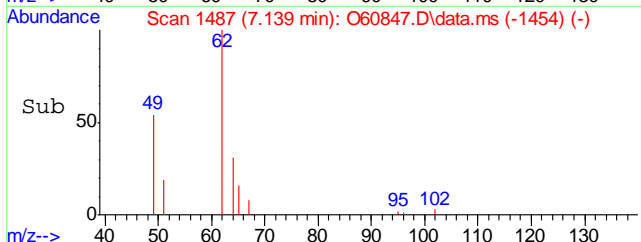
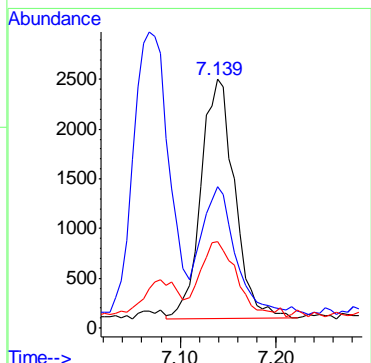
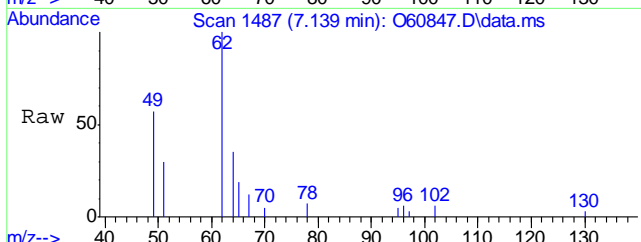
#9
 Chloroform
 Concen: 0.38 ug/L
 RT: 6.327 min Scan# 1350
 Delta R.T. -0.006 min
 Lab File: O60847.D
 Acq: 8 Jul 2020 2:02 pm

Tgt Ion	Resp	Lower	Upper
83	14853		
85	59.1	34.7	94.7
47	49.8	9.0	69.0



#14
 1,2-Dichloroethane
 Concen: 0.19 ug/L
 RT: 7.139 min Scan# 1487
 Delta R.T. -0.006 min
 Lab File: O60847.D
 Acq: 8 Jul 2020 2:02 pm

Tgt Ion	Resp	Lower	Upper
62	5921		
49	52.4	17.8	77.8
64	29.0	1.3	61.3



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\070820\
Data File : O60848.D
Acq On : 8 Jul 2020 2:25 pm
Operator : amandab
Sample : FA76591-3 Inst : MSVOA12
Misc : MS46689,VO2338,,,,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jul 08 14:43:47 2020
Quant Method : C:\msdchem\2\methods\SIMCL070220.M
Quant Title : Standard Methods 6200B
QLast Update : Thu Jul 02 13:33:54 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Fluorobenzene	7.346	96	234217	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.447	117	150168	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.073	65	92107	5.36	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	107.20%	
19) Toluene-d8	8.900	98	182944	5.06	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	101.20%	
Target Compounds						
						Qvalue
3) Chloromethane	2.795	50	3846	0.10	ug/L	83
7) 1,1-Dichloroethane	5.510	63	16790	0.43	ug/L	99
8) cis-1,2-Dichloroethene	6.072	96	33031	1.57	ug/L	98
9) Chloroform	6.333	83	11184	0.30	ug/L	94
14) 1,2-Dichloroethane	7.145	62	4714	0.16	ug/L	96
15) Trichloroethene	7.518	95	79056	3.46	ug/L	98
21) Tetrachloroethene	9.343	166	3881m	0.20	ug/L	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

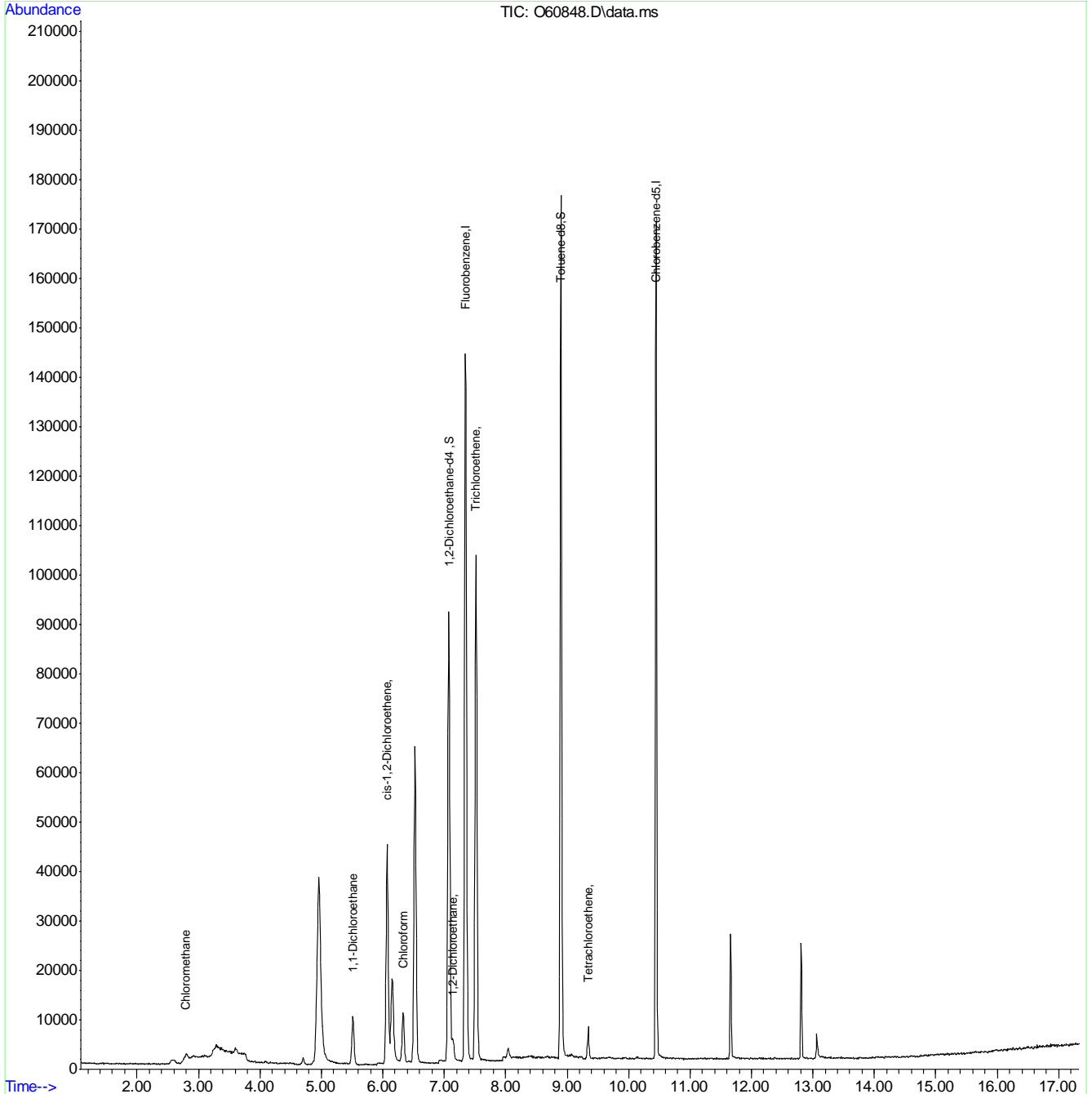
7.14
7

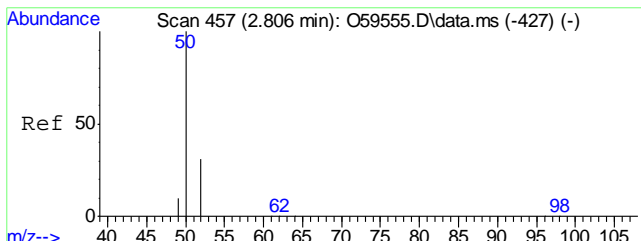
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\070820\
 Data File : O60848.D
 Acq On : 8 Jul 2020 2:25 pm
 Operator : amandab
 Sample : FA76591-3
 Misc : MS46689,VO2338,,,,,
 ALS Vial : 6 Sample Multiplier: 1

Inst : MSVOA12

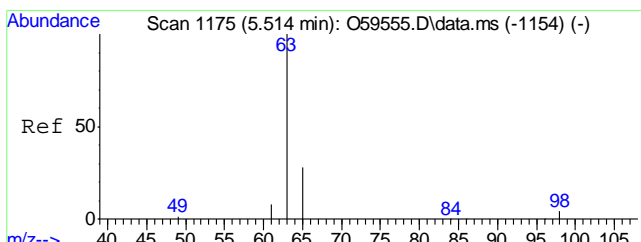
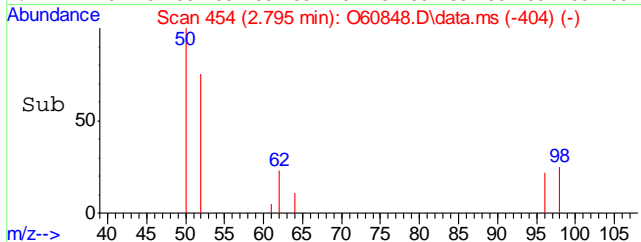
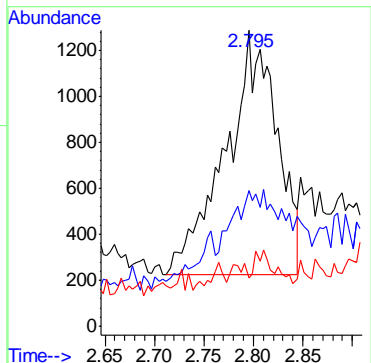
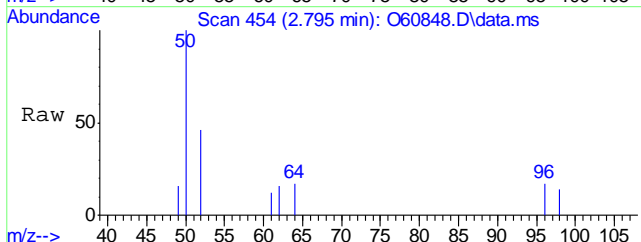
Quant Time: Jul 08 14:43:47 2020
 Quant Method : C:\msdchem\2\methods\SIMCL070220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jul 02 13:33:54 2020
 Response via : Initial Calibration





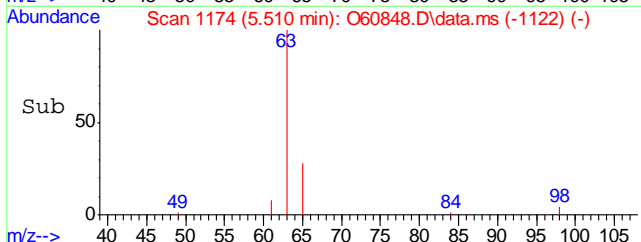
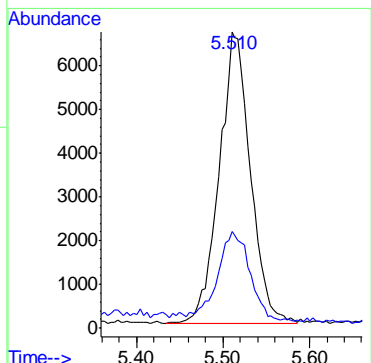
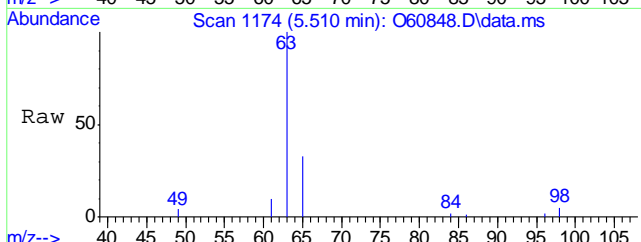
#3
 Chloromethane
 Concen: 0.10 ug/L
 RT: 2.795 min Scan# 454
 Delta R.T. -0.011 min
 Lab File: O60848.D
 Acq: 8 Jul 2020 2:25 pm

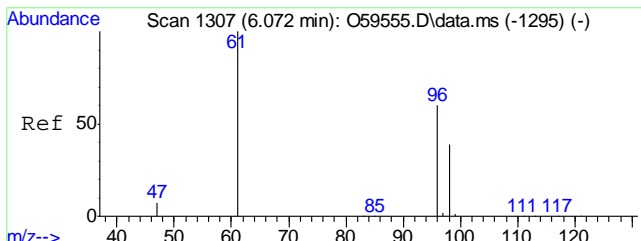
Tgt Ion	Resp	Lower	Upper
50	100		
52	37.4	8.5	48.5
49	3.4	0.0	29.8



#7
 1,1-Dichloroethane
 Concen: 0.43 ug/L
 RT: 5.510 min Scan# 1174
 Delta R.T. -0.004 min
 Lab File: O60848.D
 Acq: 8 Jul 2020 2:25 pm

Tgt Ion	Resp	Lower	Upper
63	100		
65	30.2	0.7	60.7

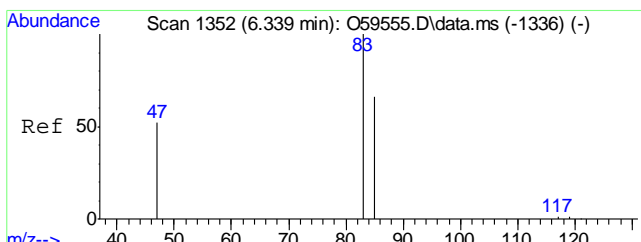
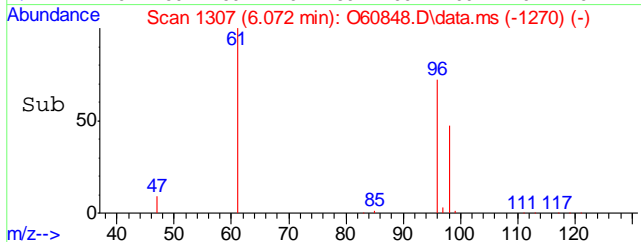
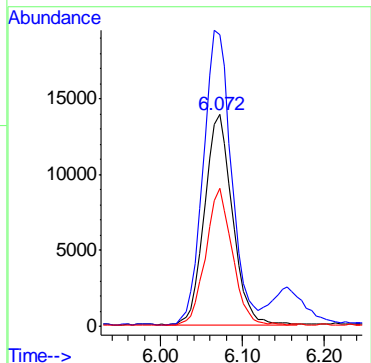
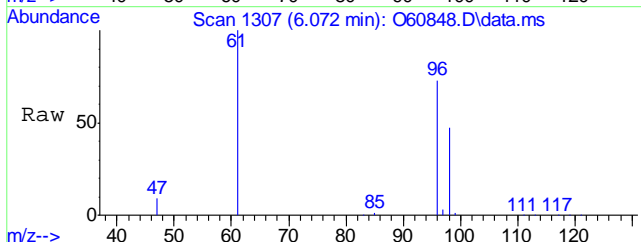




#8
 cis-1,2-Dichloroethene
 Concen: 1.57 ug/L
 RT: 6.072 min Scan# 1307
 Delta R.T. -0.000 min
 Lab File: O60848.D
 Acq: 8 Jul 2020 2:25 pm

Tgt Ion: 96 Resp: 33031

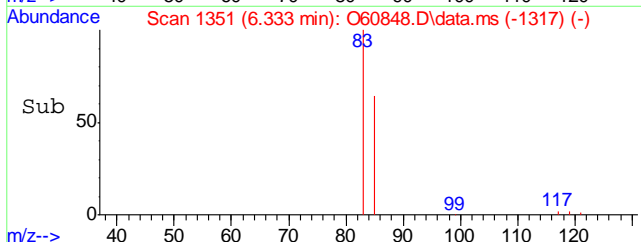
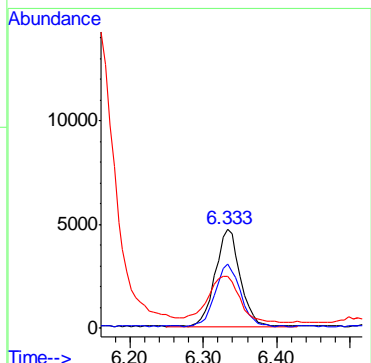
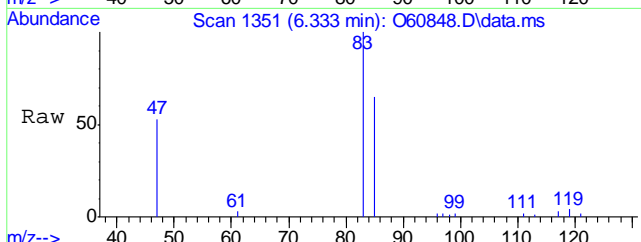
Ion	Ratio	Lower	Upper
96	100		
61	137.9	110.0	170.0
98	65.1	34.1	94.1

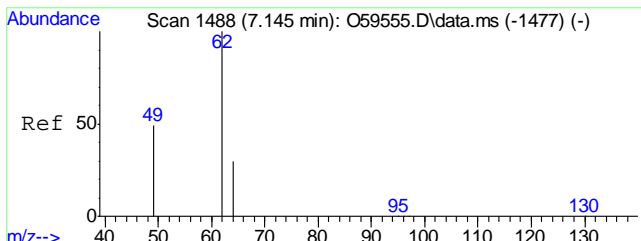


#9
 Chloroform
 Concen: 0.30 ug/L
 RT: 6.333 min Scan# 1351
 Delta R.T. -0.000 min
 Lab File: O60848.D
 Acq: 8 Jul 2020 2:25 pm

Tgt Ion: 83 Resp: 11184

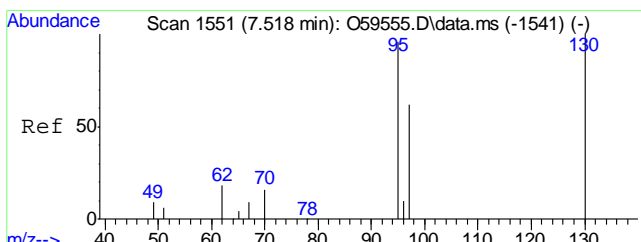
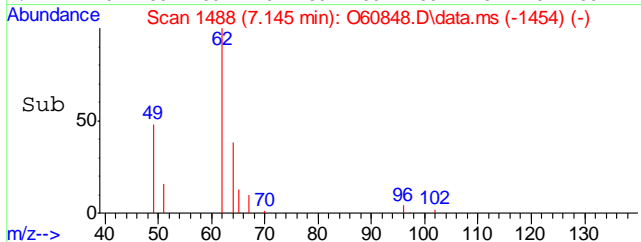
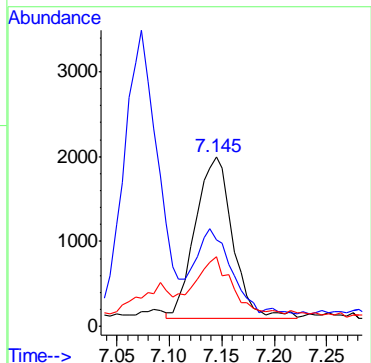
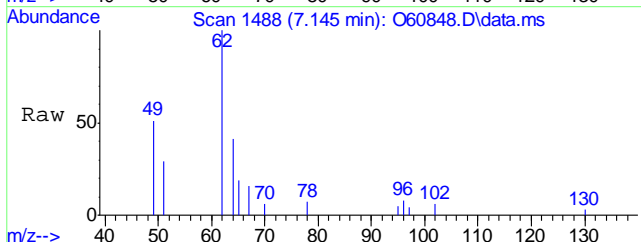
Ion	Ratio	Lower	Upper
83	100		
85	64.0	34.7	94.7
47	47.2	9.0	69.0





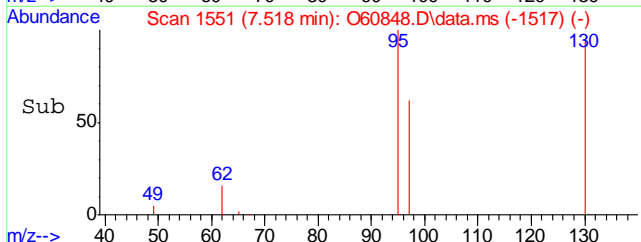
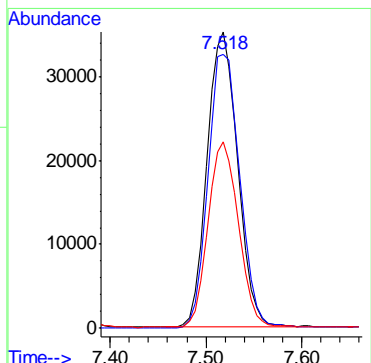
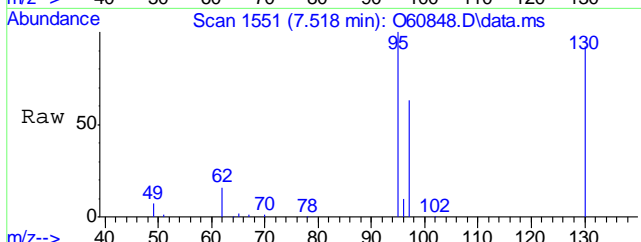
#14
1,2-Dichloroethane
Concen: 0.16 ug/L
RT: 7.145 min Scan# 1488
Delta R.T. -0.000 min
Lab File: O60848.D
Acq: 8 Jul 2020 2:25 pm

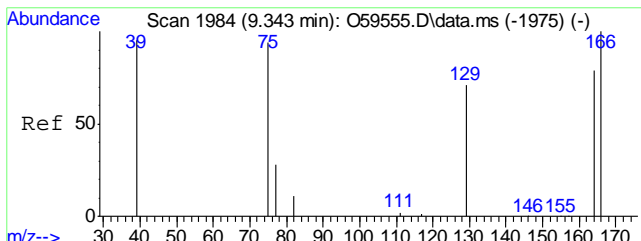
Tgt Ion	Resp	Lower	Upper
62	4714		
49	46.0	17.8	77.8
64	34.5	1.3	61.3



#15
Trichloroethene
Concen: 3.46 ug/L
RT: 7.518 min Scan# 1551
Delta R.T. -0.000 min
Lab File: O60848.D
Acq: 8 Jul 2020 2:25 pm

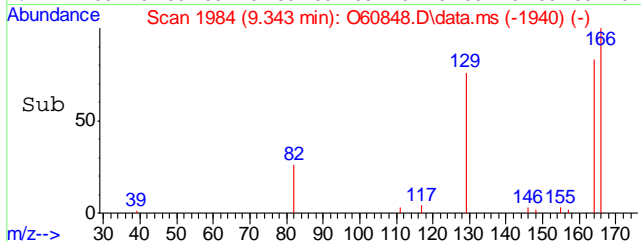
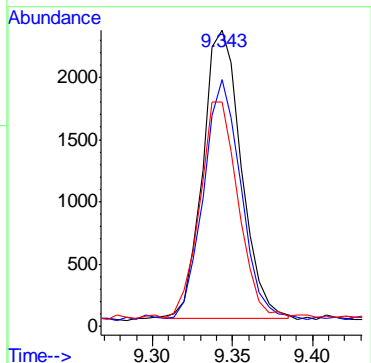
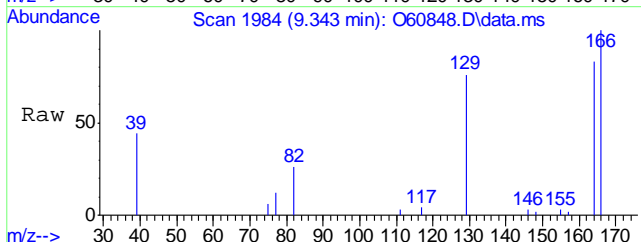
Tgt Ion	Resp	Lower	Upper
95	79056		
130	92.5	63.4	123.4
97	62.7	35.0	95.0





#21
 Tetrachloroethene
 Concen: 0.20 ug/L m
 RT: 9.343 min Scan# 1984
 Delta R.T. 0.000 min
 Lab File: O60848.D
 Acq: 8 Jul 2020 2:25 pm

Tgt Ion	Resp	Lower	Upper
166	3881		
166	100		
164	83.4	48.3	108.3
129	75.7	39.5	99.5



7.1.4
7

Manual Integration Approval Summary

Sample Number: FA76591-3 **Method:** SW846 8260B BY SIM
Lab FileID: O60848.D **Analyst approved:** 07/08/20 14:45 Amanda Bacsko
Injection Time: 07/08/20 14:25 **Supervisor approved:** 07/09/20 08:47 Melissa Mangual

Parameter	CAS	Sig#	R.T. (min.)	Reason
Tetrachloroethylene	127-18-4		9.34	Poor instrument integration

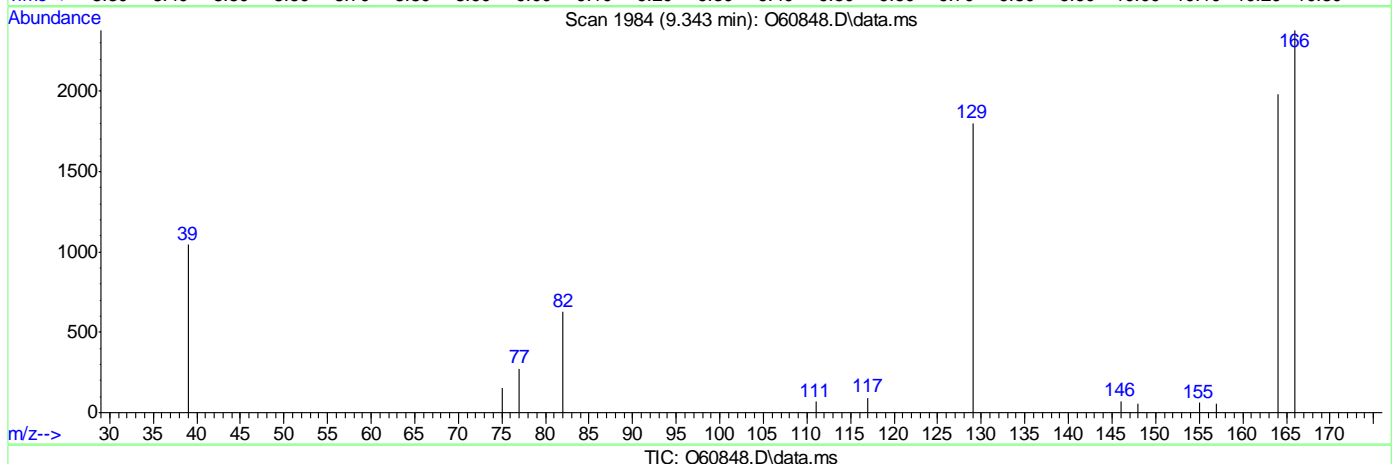
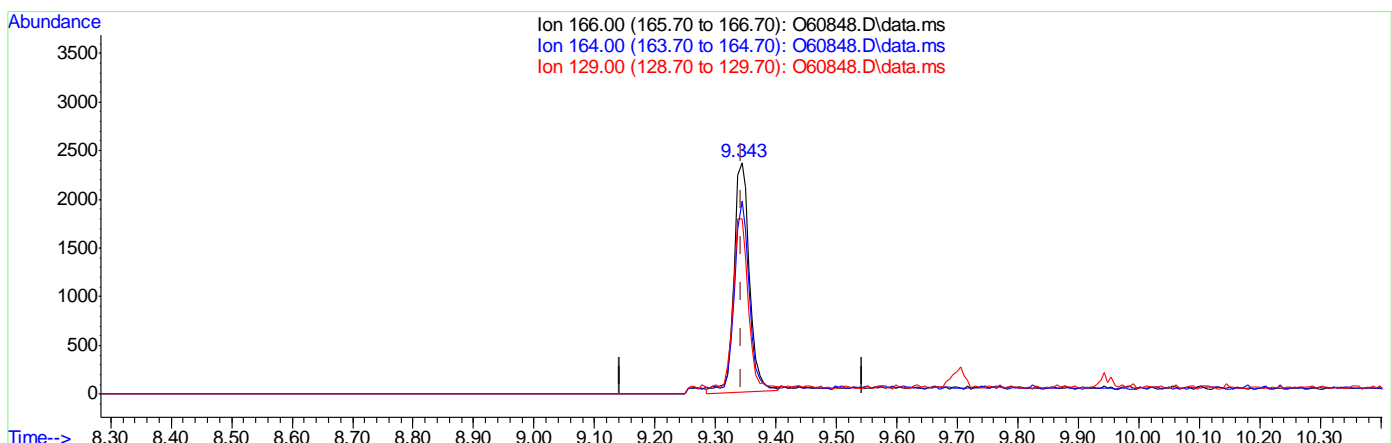
7.1.4.1

7

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\070820\
Data File : O60848.D
Acq On : 8 Jul 2020 2:25 pm
Operator : amandab
Sample : FA76591-3 Inst : MSVOA12
Misc : MS46689,VO2338,,,,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jul 08 14:43:23 2020
Quant Method : C:\msdchem\2\methods\SIMCL070220.M
Quant Title : Standard Methods 6200B
QLast Update : Thu Jul 02 13:33:54 2020
Response via : Initial Calibration



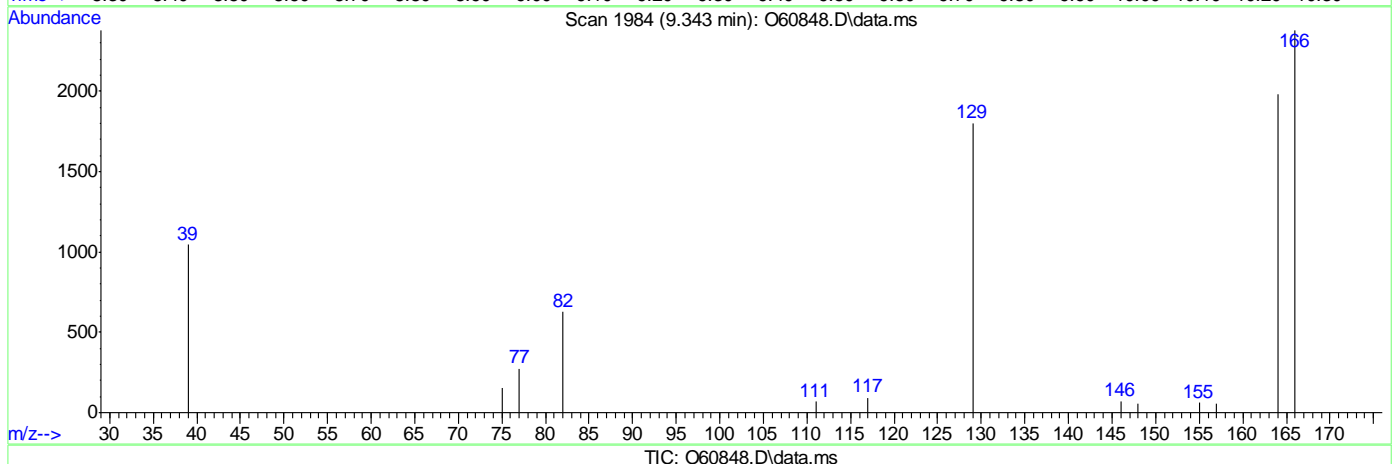
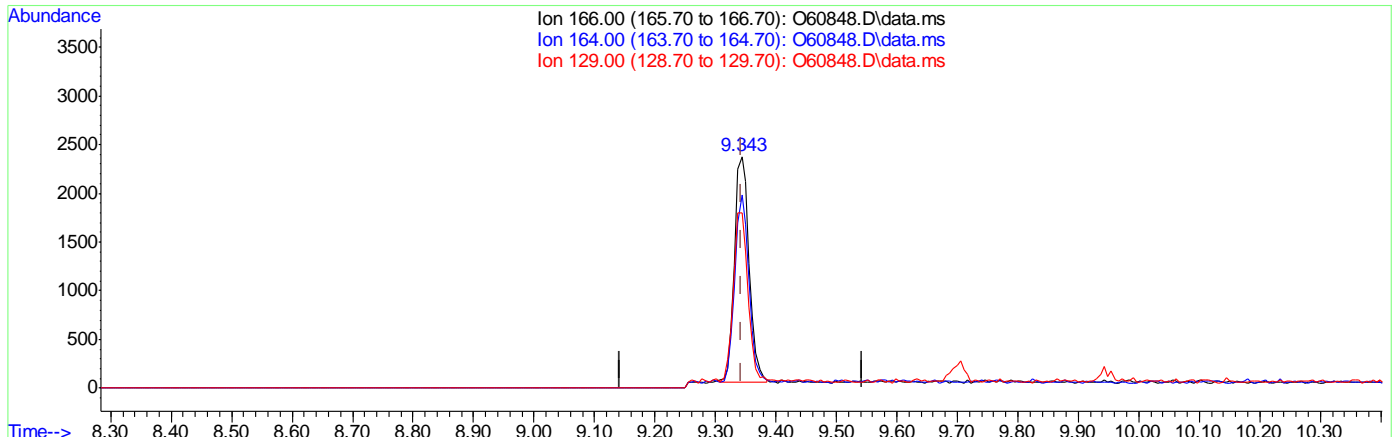
(21) Tetrachloroethene ()
9.343min (+0.000) 0.22ug/L
response 4174
Ion Exp% Act%
166.00 100 100
164.00 78.30 82.14
129.00 69.50 74.19
0.00 0.00 0.00

7.1.4.2
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\070820\
Data File : O60848.D
Acq On : 8 Jul 2020 2:25 pm
Operator : amandab
Sample : FA76591-3 Inst : MSVOA12
Misc : MS46689,VO2338,,,,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jul 08 14:43:23 2020
Quant Method : C:\msdchem\2\methods\SIMCL070220.M
Quant Title : Standard Methods 6200B
QLast Update : Thu Jul 02 13:33:54 2020
Response via : Initial Calibration



(21) Tetrachloroethene ()
9.343min (+0.000) 0.20ug/L m
response 3881
Ion Exp% Act%
166.00 100 100
164.00 78.30 83.43
129.00 69.50 75.74
0.00 0.00 0.00

7.1.4.3
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\070820\
Data File : O60849.D
Acq On : 8 Jul 2020 2:49 pm
Operator : amandab
Sample : FA76591-4 Inst : MSVOA12
Misc : MS46689,VO2338,,,,,
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jul 08 15:07:26 2020
Quant Method : C:\msdchem\2\methods\SIMCL070220.M
Quant Title : Standard Methods 6200B
QLast Update : Thu Jul 02 13:33:54 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.346	96	224223	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.447	117	146763	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.074	65	89486	5.44	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	108.80%	
19) Toluene-d8	8.896	98	174788	4.94	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	98.80%	
Target Compounds						
3) Chloromethane	2.795	50	6359	0.17	ug/L	92
7) 1,1-Dichloroethane	5.510	63	17785	0.47	ug/L	95
8) cis-1,2-Dichloroethene	6.066	96	38538	1.91	ug/L	98
9) Chloroform	6.333	83	12664	0.35	ug/L	93
14) 1,2-Dichloroethane	7.133	62	4638	0.16	ug/L	93
15) Trichloroethene	7.518	95	8935	0.41	ug/L	96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

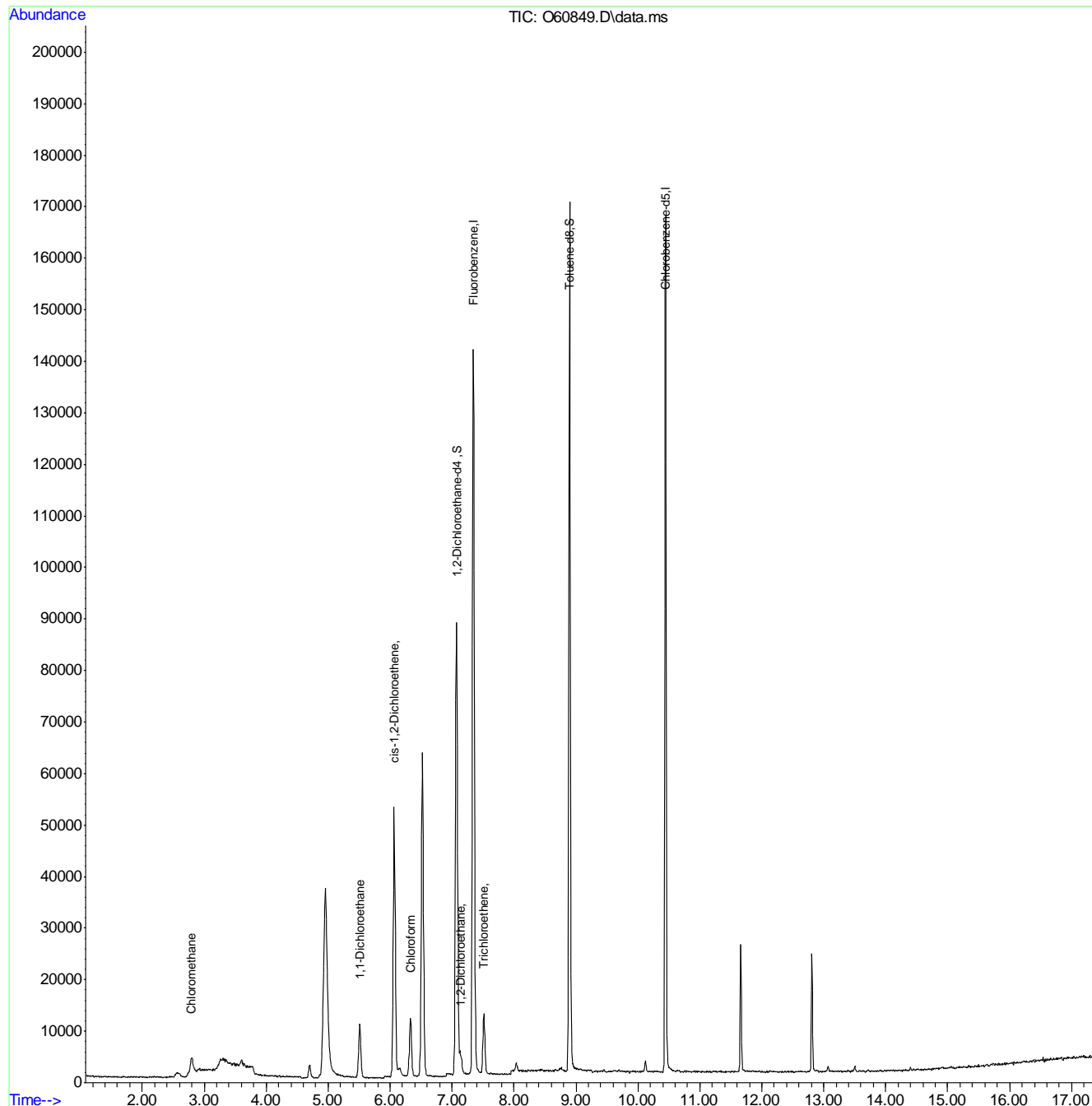
7.15
7

Quantitation Report (QT Reviewed)

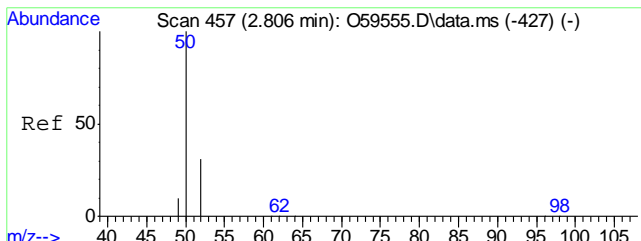
Data Path : C:\msdchem\2\data\070820\
 Data File : O60849.D
 Acq On : 8 Jul 2020 2:49 pm
 Operator : amandab
 Sample : FA76591-4
 Misc : MS46689,VO2338,,,,,
 ALS Vial : 7 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Jul 08 15:07:26 2020
 Quant Method : C:\msdchem\2\methods\SIMCL070220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jul 02 13:33:54 2020
 Response via : Initial Calibration

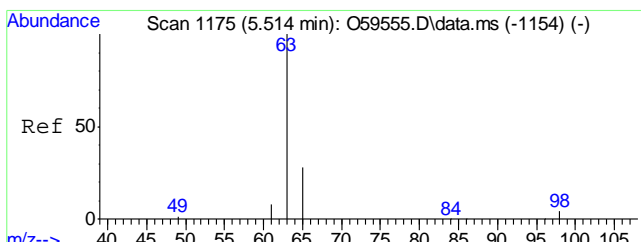
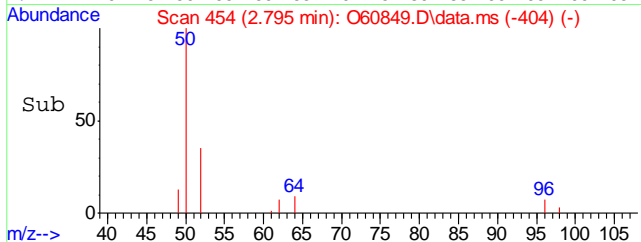
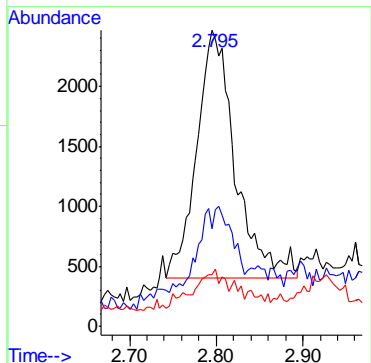
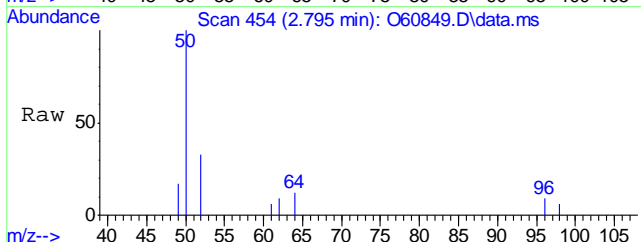


7.15
7



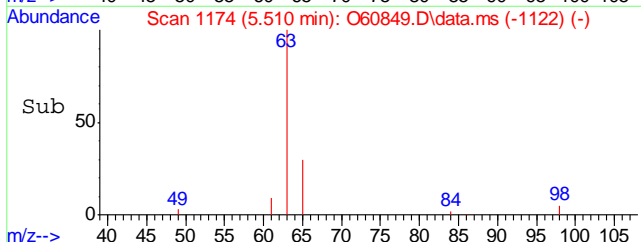
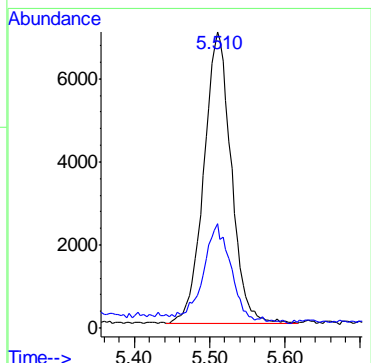
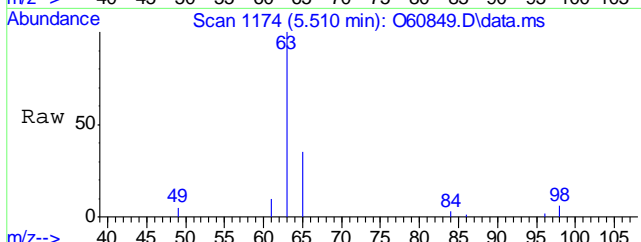
#3
 Chloromethane
 Concen: 0.17 ug/L
 RT: 2.795 min Scan# 454
 Delta R.T. -0.011 min
 Lab File: O60849.D
 Acq: 8 Jul 2020 2:49 pm

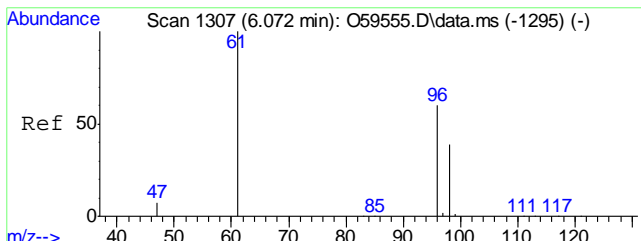
Tgt Ion	Resp	Lower	Upper
50	100		
52	24.6	8.5	48.5
49	13.4	0.0	29.8



#7
 1,1-Dichloroethane
 Concen: 0.47 ug/L
 RT: 5.510 min Scan# 1174
 Delta R.T. -0.004 min
 Lab File: O60849.D
 Acq: 8 Jul 2020 2:49 pm

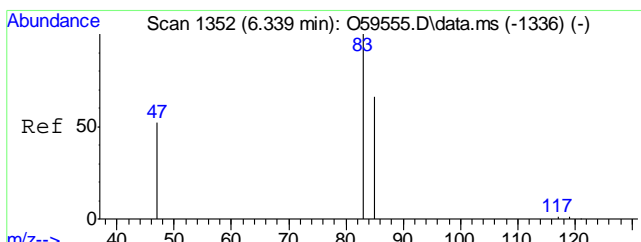
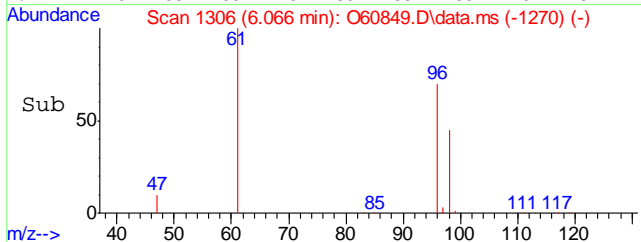
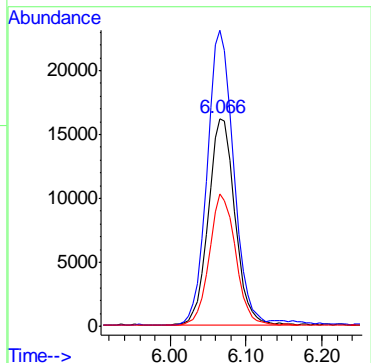
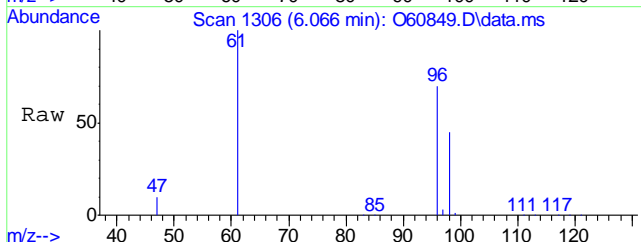
Tgt Ion	Resp	Lower	Upper
63	100		
65	33.5	0.7	60.7





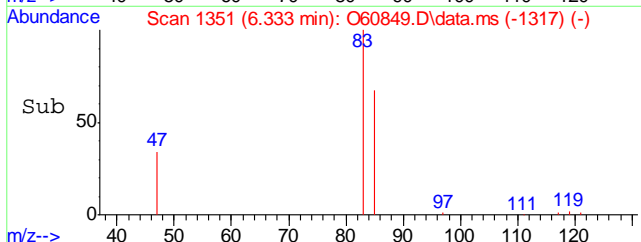
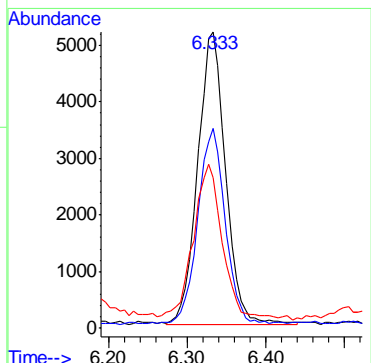
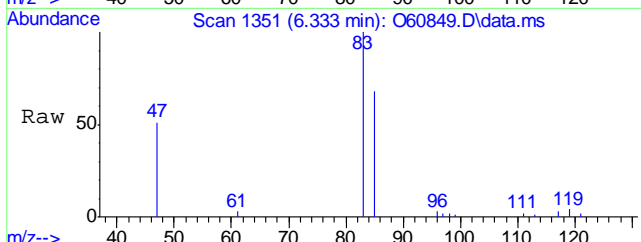
#8
 cis-1,2-Dichloroethene
 Concen: 1.91 ug/L
 RT: 6.066 min Scan# 1306
 Delta R.T. -0.006 min
 Lab File: O60849.D
 Acq: 8 Jul 2020 2:49 pm

Tgt Ion	Resp	Lower	Upper
96	38538		
96	100		
61	142.5	110.0	170.0
98	63.3	34.1	94.1

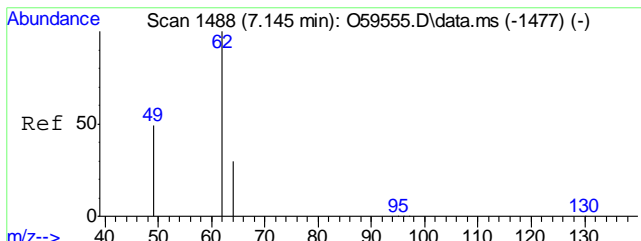


#9
 Chloroform
 Concen: 0.35 ug/L
 RT: 6.333 min Scan# 1351
 Delta R.T. -0.000 min
 Lab File: O60849.D
 Acq: 8 Jul 2020 2:49 pm

Tgt Ion	Resp	Lower	Upper
83	12664		
83	100		
85	66.7	34.7	94.7
47	47.8	9.0	69.0

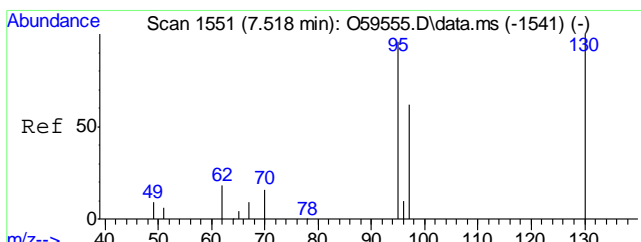
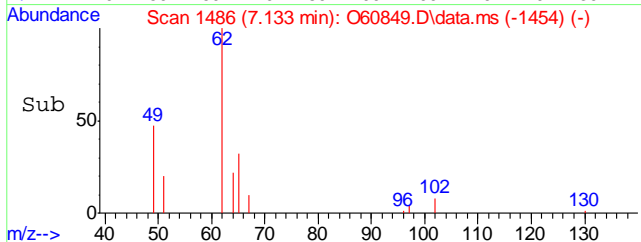
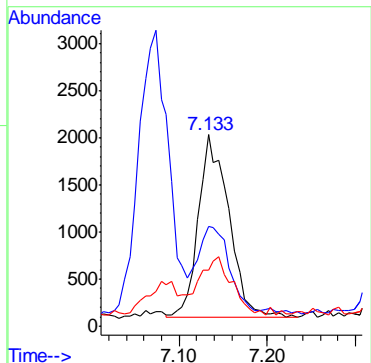
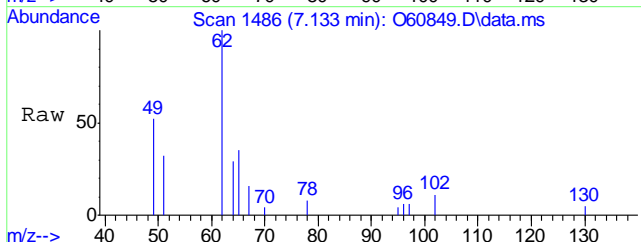


7.15
7



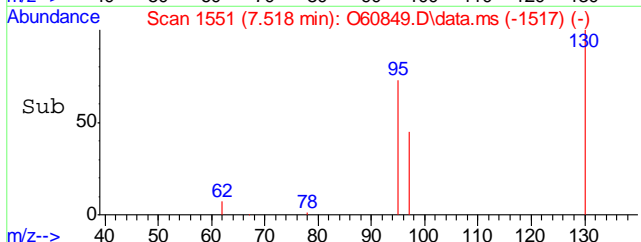
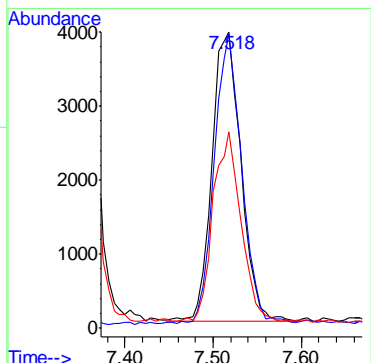
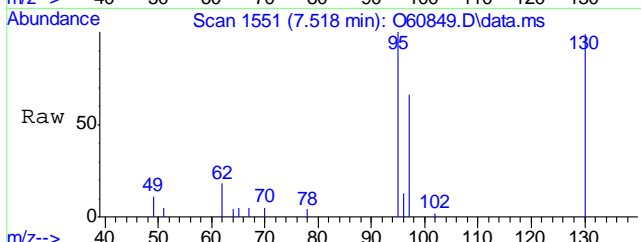
#14
1,2-Dichloroethane
Concen: 0.16 ug/L
RT: 7.133 min Scan# 1486
Delta R.T. -0.012 min
Lab File: O60849.D
Acq: 8 Jul 2020 2:49 pm

Tgt Ion	Resp	Lower	Upper
62	4638		
49	46.7	17.8	77.8
64	23.1	1.3	61.3



#15
Trichloroethene
Concen: 0.41 ug/L
RT: 7.518 min Scan# 1551
Delta R.T. 0.000 min
Lab File: O60849.D
Acq: 8 Jul 2020 2:49 pm

Tgt Ion	Resp	Lower	Upper
95	8935		
130	99.8	63.4	123.4
97	65.2	35.0	95.0



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\070820\
 Data File : O60850.D
 Acq On : 8 Jul 2020 3:13 pm
 Operator : amandab
 Sample : FA76591-5 Inst : MSVOA12
 Misc : MS46689,VO2338,,,,,
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jul 09 07:36:37 2020
 Quant Method : C:\msdchem\2\methods\SIMCL070220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jul 02 13:33:54 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.346	96	214594	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.447	117	138887	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.074	65	85812	5.45	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	109.00%	
19) Toluene-d8	8.900	98	165735	4.95	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	99.00%	
Target Compounds						
3) Chloromethane	2.799	50	8955	0.24	ug/L	98
7) 1,1-Dichloroethane	5.514	63	21186	0.59	ug/L	99
8) cis-1,2-Dichloroethene	6.066	96	25473	1.32	ug/L	96
9) Chloroform	6.339	83	14347	0.42	ug/L	94
14) 1,2-Dichloroethane	7.145	62	5178	0.19	ug/L	96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

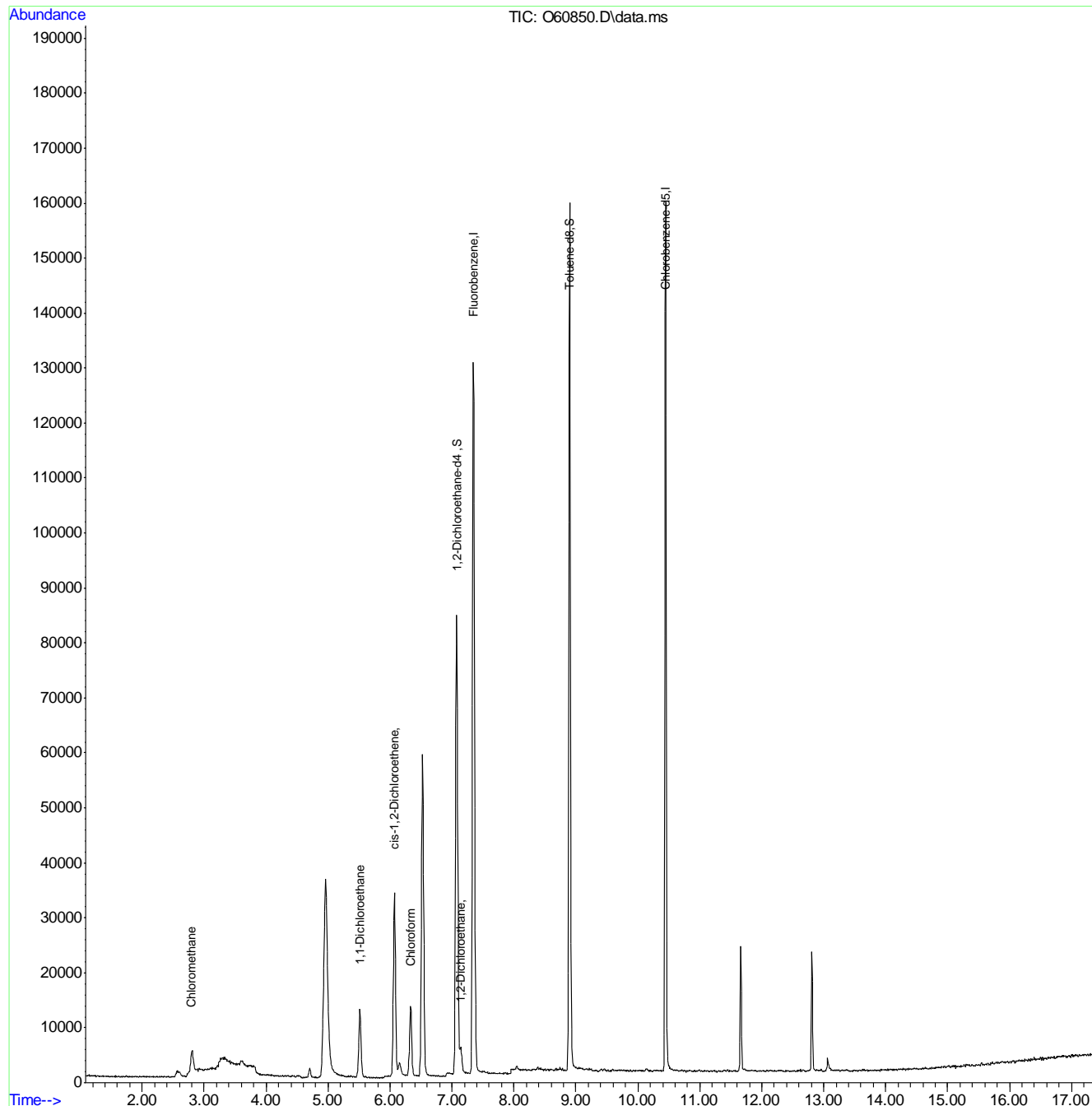
7.1.6
7

Quantitation Report (QT Reviewed)

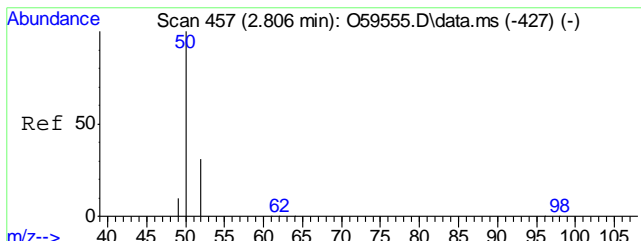
Data Path : C:\msdchem\2\data\070820\
 Data File : O60850.D
 Acq On : 8 Jul 2020 3:13 pm
 Operator : amandab
 Sample : FA76591-5
 Misc : MS46689,VO2338,,,,,
 ALS Vial : 8 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Jul 09 07:36:37 2020
 Quant Method : C:\msdchem\2\methods\SIMCL070220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jul 02 13:33:54 2020
 Response via : Initial Calibration

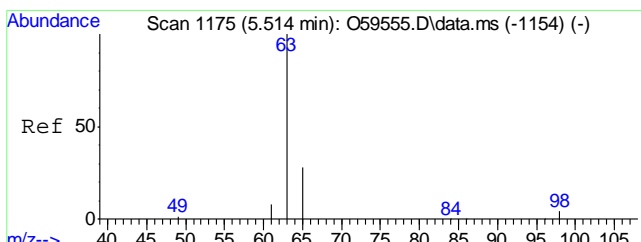
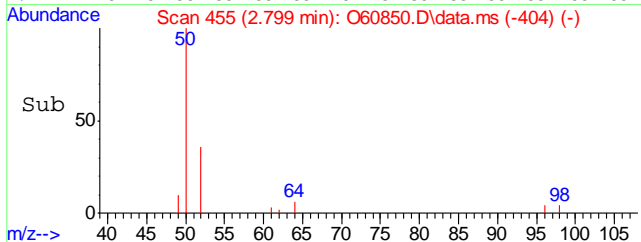
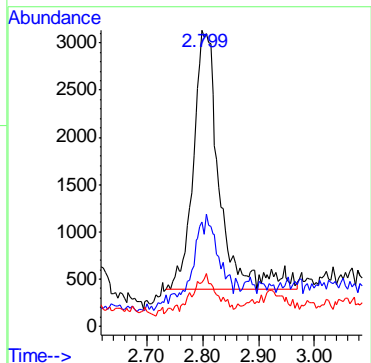
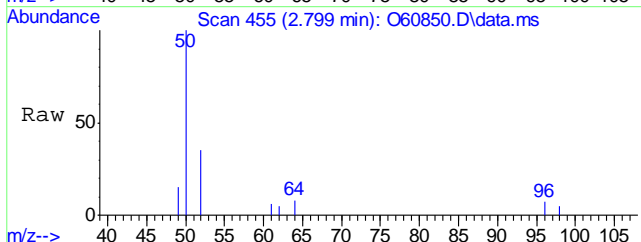


7.1.6
7



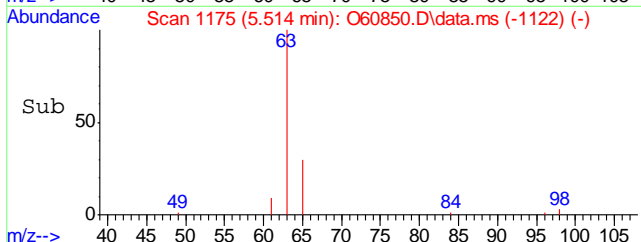
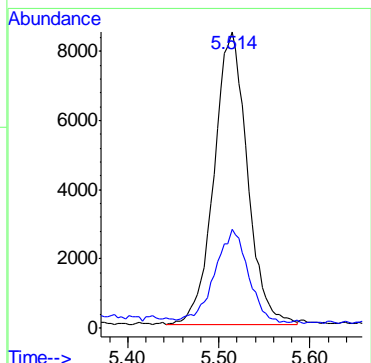
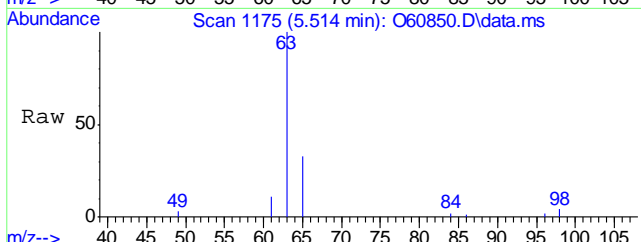
#3
 Chloromethane
 Concen: 0.24 ug/L
 RT: 2.799 min Scan# 455
 Delta R.T. -0.007 min
 Lab File: O60850.D
 Acq: 8 Jul 2020 3:13 pm

Tgt Ion	Resp	Lower	Upper
50	100		
52	28.1	8.5	48.5
49	11.4	0.0	29.8

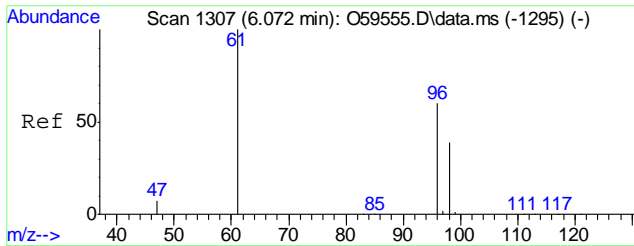


#7
 1,1-Dichloroethane
 Concen: 0.59 ug/L
 RT: 5.514 min Scan# 1175
 Delta R.T. 0.000 min
 Lab File: O60850.D
 Acq: 8 Jul 2020 3:13 pm

Tgt Ion	Resp	Lower	Upper
63	100		
65	31.1	0.7	60.7

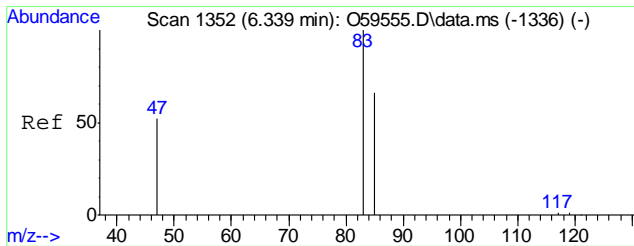
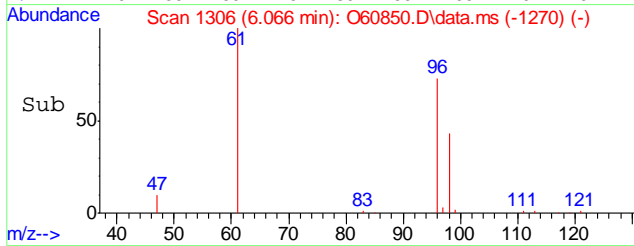
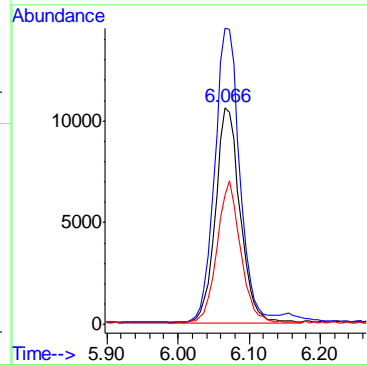
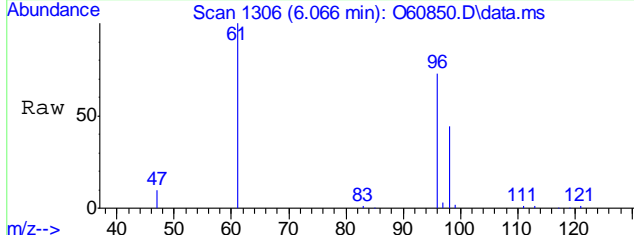


7.1.6
 7



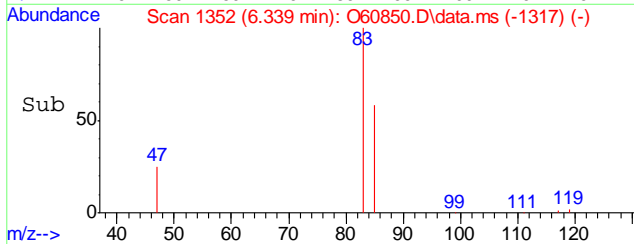
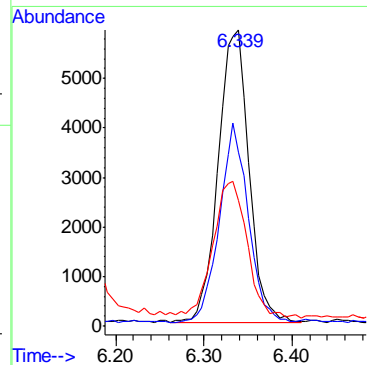
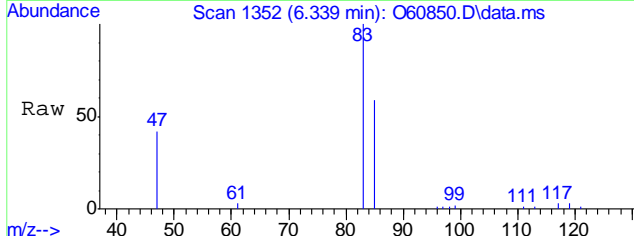
#8
 cis-1,2-Dichloroethene
 Concen: 1.32 ug/L
 RT: 6.066 min Scan# 1306
 Delta R.T. -0.006 min
 Lab File: O60850.D
 Acq: 8 Jul 2020 3:13 pm

Tgt Ion	Resp	Lower	Upper
96	25473		
96	100		
61	136.5	110.0	170.0
98	59.4	34.1	94.1

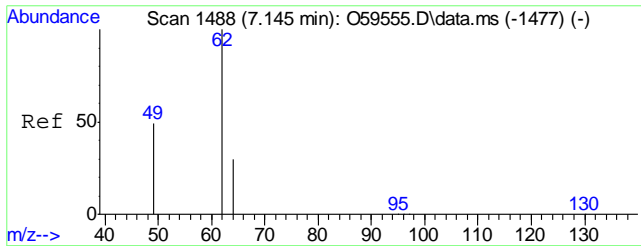


#9
 Chloroform
 Concen: 0.42 ug/L
 RT: 6.339 min Scan# 1352
 Delta R.T. 0.006 min
 Lab File: O60850.D
 Acq: 8 Jul 2020 3:13 pm

Tgt Ion	Resp	Lower	Upper
83	14347		
83	100		
85	58.2	34.7	94.7
47	40.0	9.0	69.0

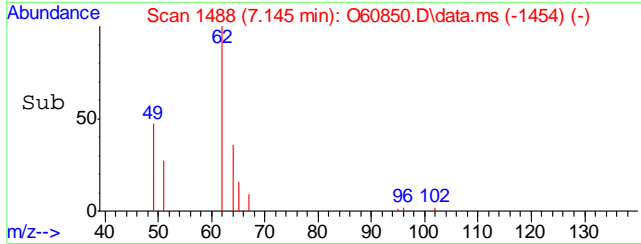
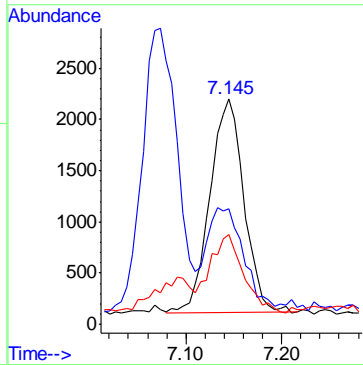
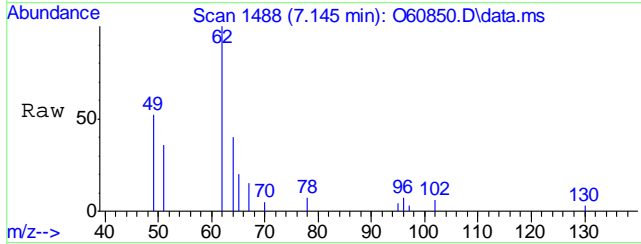


7.1.6
7



#14
 1,2-Dichloroethane
 Concen: 0.19 ug/L
 RT: 7.145 min Scan# 1488
 Delta R.T. -0.000 min
 Lab File: O60850.D
 Acq: 8 Jul 2020 3:13 pm

Tgt Ion	Resp	Lower	Upper
62	100		
49	46.6	17.8	77.8
64	35.5	1.3	61.3



7.1.6
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\070820\
 Data File : O60853.D
 Acq On : 8 Jul 2020 4:25 pm
 Operator : amandab
 Sample : FA76591-6 Inst : MSVOA12
 Misc : MS46689,VO2338,,,,,
 ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jul 09 07:37:12 2020
 Quant Method : C:\msdchem\2\methods\SIMCL070220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jul 02 13:33:54 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.346	96	225407	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.447	117	146186	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.074	65	89450	5.40	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	108.00%	
19) Toluene-d8	8.900	98	174623	4.96	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	99.20%	
Target Compounds						
						Qvalue
3) Chloromethane	2.795	50	5412	0.14	ug/L	82
7) 1,1-Dichloroethane	5.514	63	16316	0.43	ug/L	95
8) cis-1,2-Dichloroethene	6.072	96	31613	1.56	ug/L	99
9) Chloroform	6.333	83	10834	0.30	ug/L	89
14) 1,2-Dichloroethane	7.145	62	4554	0.16	ug/L	97
15) Trichloroethene	7.518	95	90454	4.11	ug/L	99
21) Tetrachloroethene	9.343	166	3221m	0.17	ug/L	

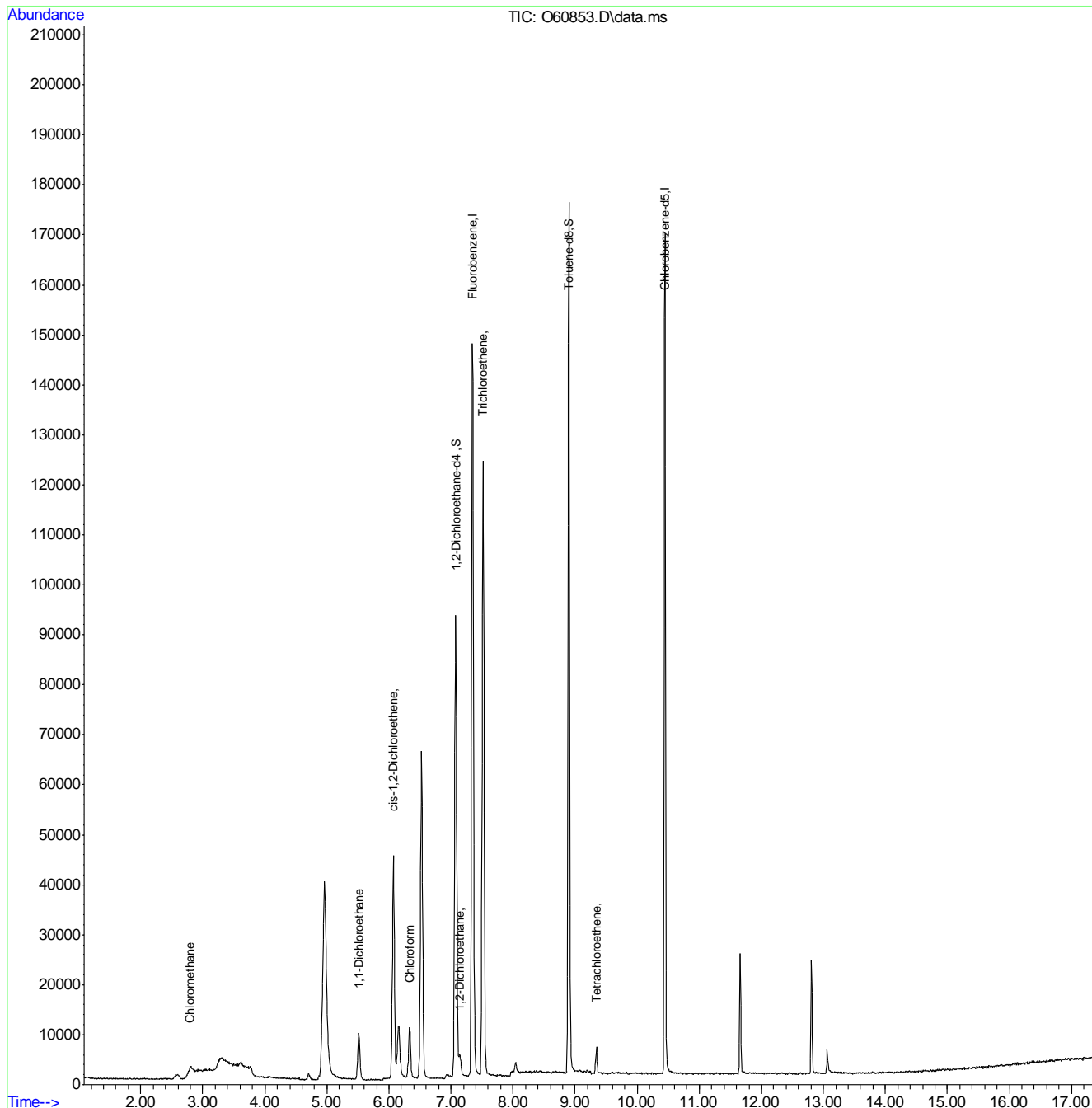
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

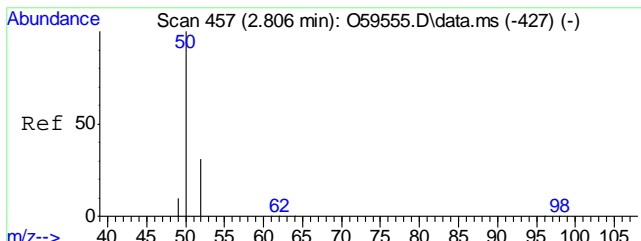
Data Path : C:\msdchem\2\data\070820\
 Data File : O60853.D
 Acq On : 8 Jul 2020 4:25 pm
 Operator : amandab
 Sample : FA76591-6
 Misc : MS46689,VO2338,,,,,
 ALS Vial : 11 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Jul 09 07:37:12 2020
 Quant Method : C:\msdchem\2\methods\SIMCL070220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jul 02 13:33:54 2020
 Response via : Initial Calibration

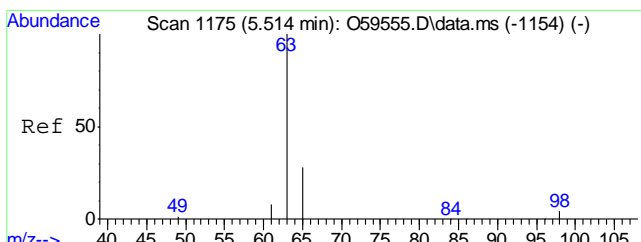
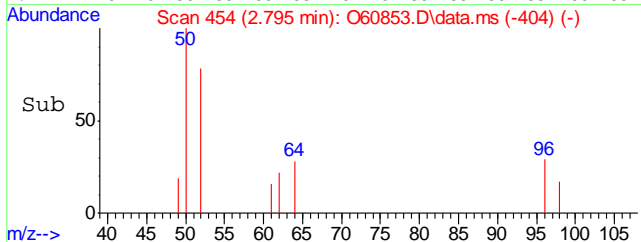
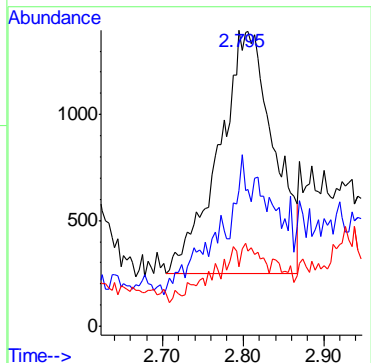
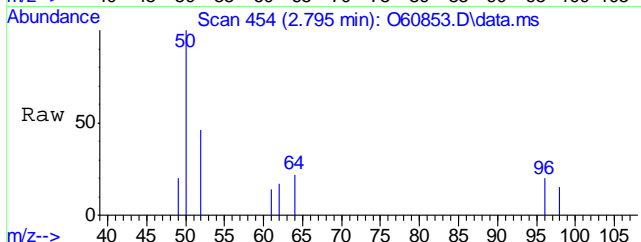


7.17
7



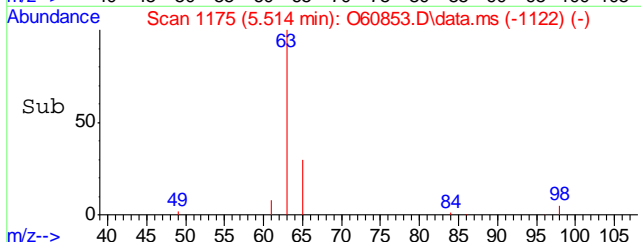
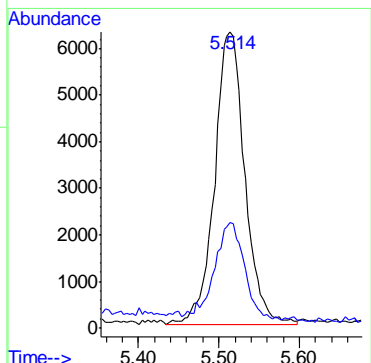
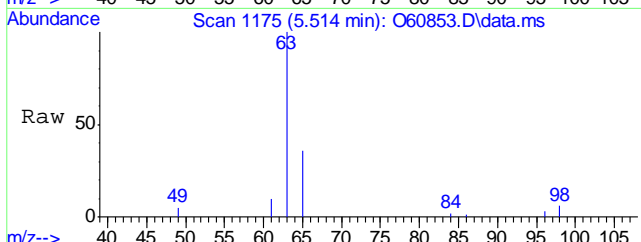
#3
Chloromethane
Concen: 0.14 ug/L
RT: 2.795 min Scan# 454
Delta R.T. -0.011 min
Lab File: O60853.D
Acq: 8 Jul 2020 4:25 pm

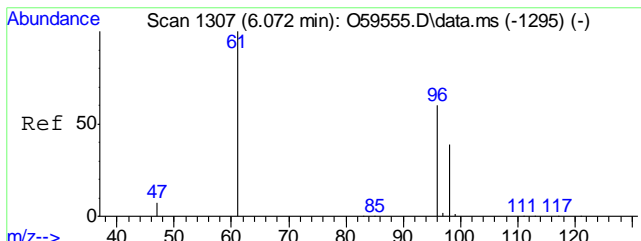
Tgt Ion	Resp	Lower	Upper
50	5412		
52	40.7	8.5	48.5
49	11.0	0.0	29.8



#7
1,1-Dichloroethane
Concen: 0.43 ug/L
RT: 5.514 min Scan# 1175
Delta R.T. -0.000 min
Lab File: O60853.D
Acq: 8 Jul 2020 4:25 pm

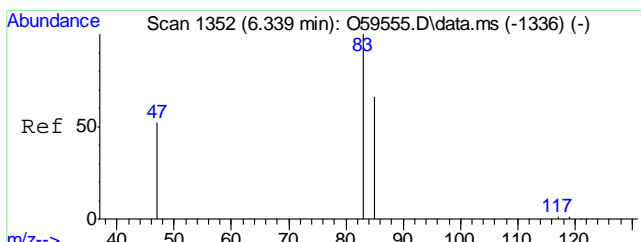
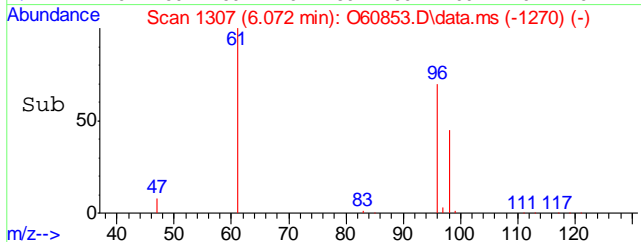
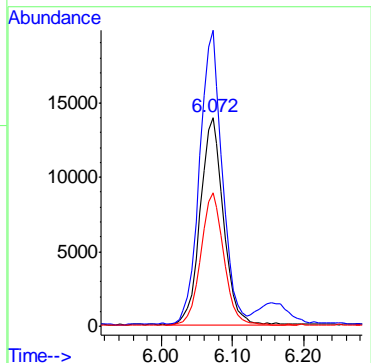
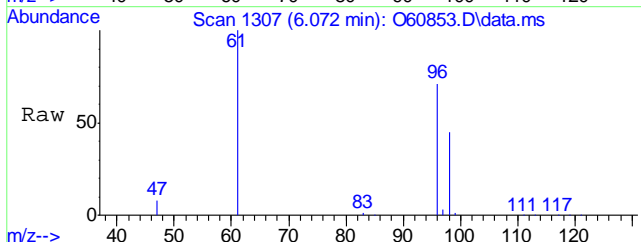
Tgt Ion	Resp	Lower	Upper
63	16316		
65	33.4	0.7	60.7





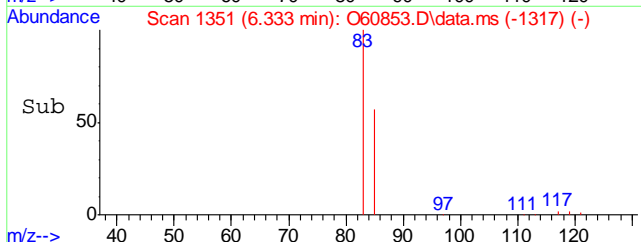
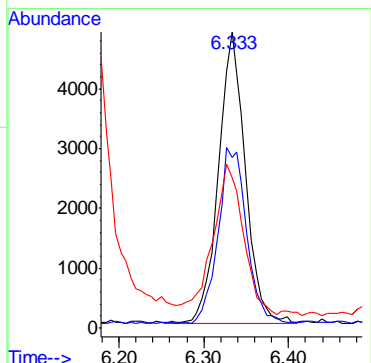
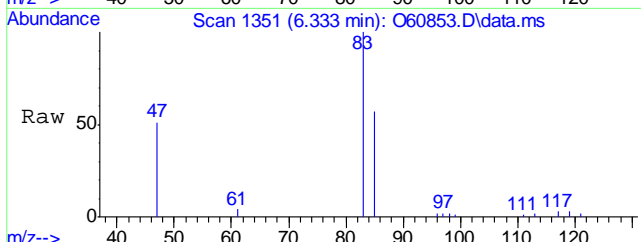
#8
 cis-1,2-Dichloroethene
 Concen: 1.56 ug/L
 RT: 6.072 min Scan# 1307
 Delta R.T. 0.000 min
 Lab File: O60853.D
 Acq: 8 Jul 2020 4:25 pm

Tgt Ion	Resp	Lower	Upper
96	31613		
96	100		
61	141.6	110.0	170.0
98	63.9	34.1	94.1

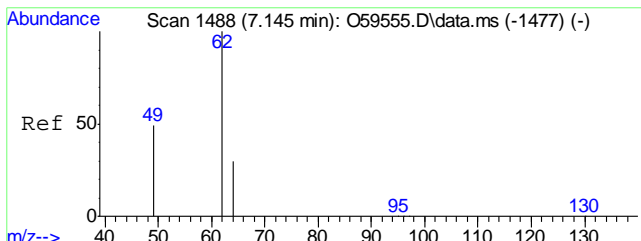


#9
 Chloroform
 Concen: 0.30 ug/L
 RT: 6.333 min Scan# 1351
 Delta R.T. -0.000 min
 Lab File: O60853.D
 Acq: 8 Jul 2020 4:25 pm

Tgt Ion	Resp	Lower	Upper
83	10834		
83	100		
85	56.6	34.7	94.7
47	46.4	9.0	69.0

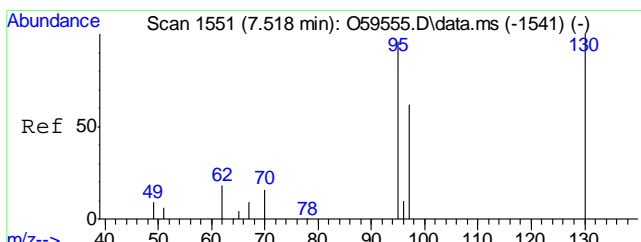
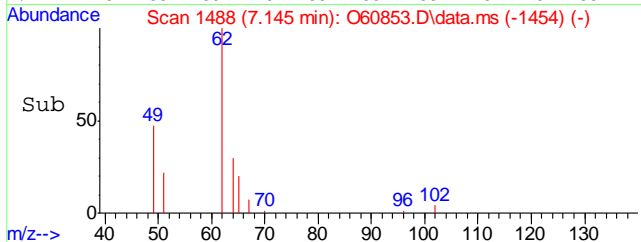
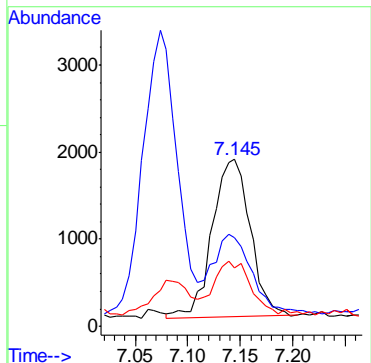
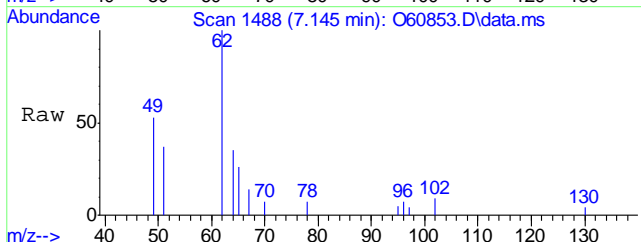


7.17
7



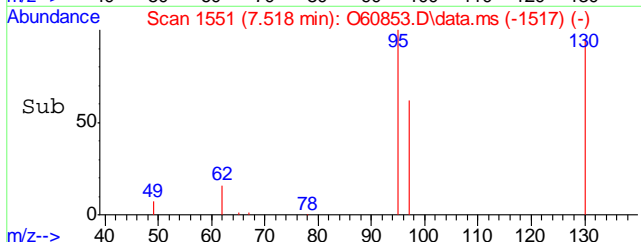
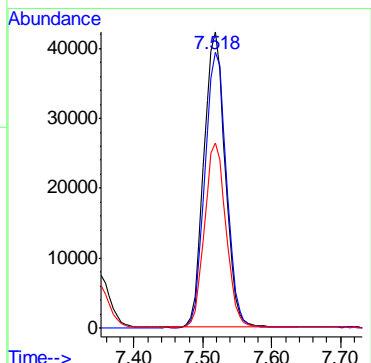
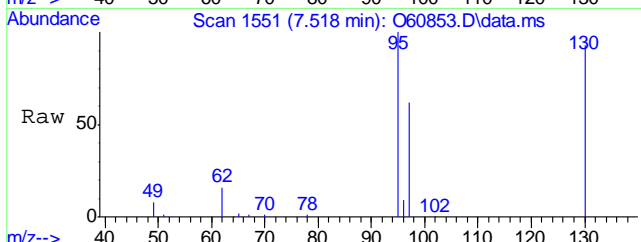
#14
 1,2-Dichloroethane
 Concen: 0.16 ug/L
 RT: 7.145 min Scan# 1488
 Delta R.T. -0.000 min
 Lab File: O60853.D
 Acq: 8 Jul 2020 4:25 pm

Tgt Ion	Resp	Lower	Upper
62	4554		
49	46.5	17.8	77.8
64	28.8	1.3	61.3



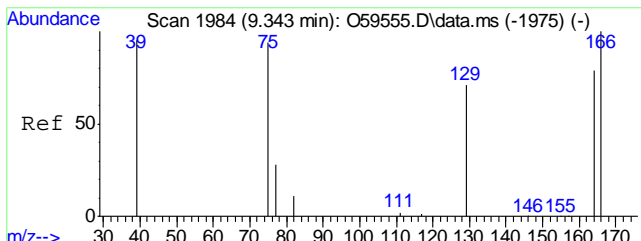
#15
 Trichloroethene
 Concen: 4.11 ug/L
 RT: 7.518 min Scan# 1551
 Delta R.T. 0.000 min
 Lab File: O60853.D
 Acq: 8 Jul 2020 4:25 pm

Tgt Ion	Resp	Lower	Upper
95	90454		
130	93.2	63.4	123.4
97	62.3	35.0	95.0



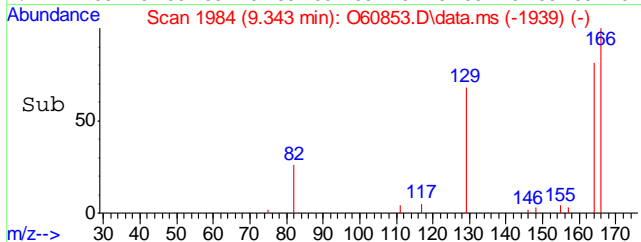
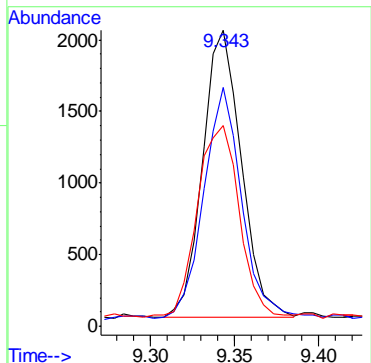
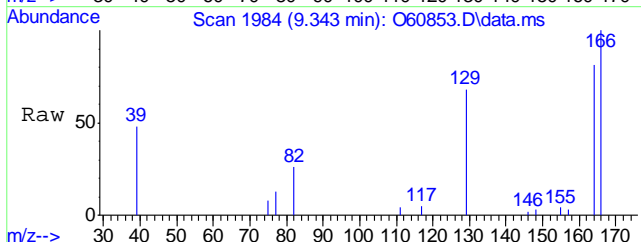
7.17





#21
 Tetrachloroethene
 Concen: 0.17 ug/L m
 RT: 9.343 min Scan# 1984
 Delta R.T. 0.000 min
 Lab File: O60853.D
 Acq: 8 Jul 2020 4:25 pm

Tgt Ion	Resp	Lower	Upper
166	100		
164	80.7	48.3	108.3
129	67.8	39.5	99.5



7.1.7
7

Manual Integration Approval Summary

Sample Number: FA76591-6 **Method:** SW846 8260B BY SIM
Lab FileID: O60853.D **Analyst approved:** 07/09/20 07:43 Amanda Bacsko
Injection Time: 07/08/20 16:25 **Supervisor approved:** 07/09/20 08:47 Melissa Mangual

Parameter	CAS	Sig#	R.T. (min.)	Reason
Tetrachloroethylene	127-18-4		9.34	Poor instrument integration

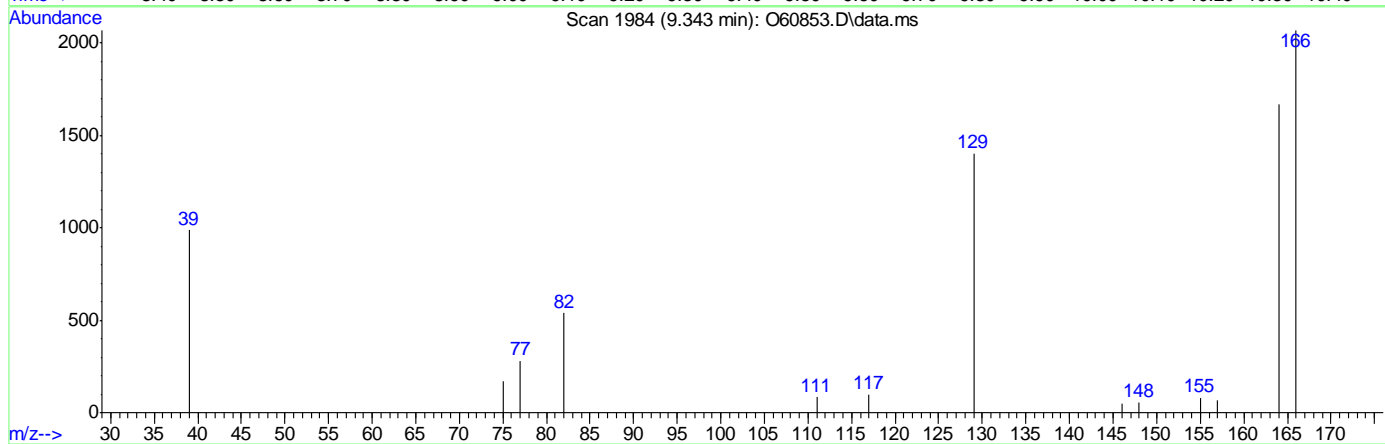
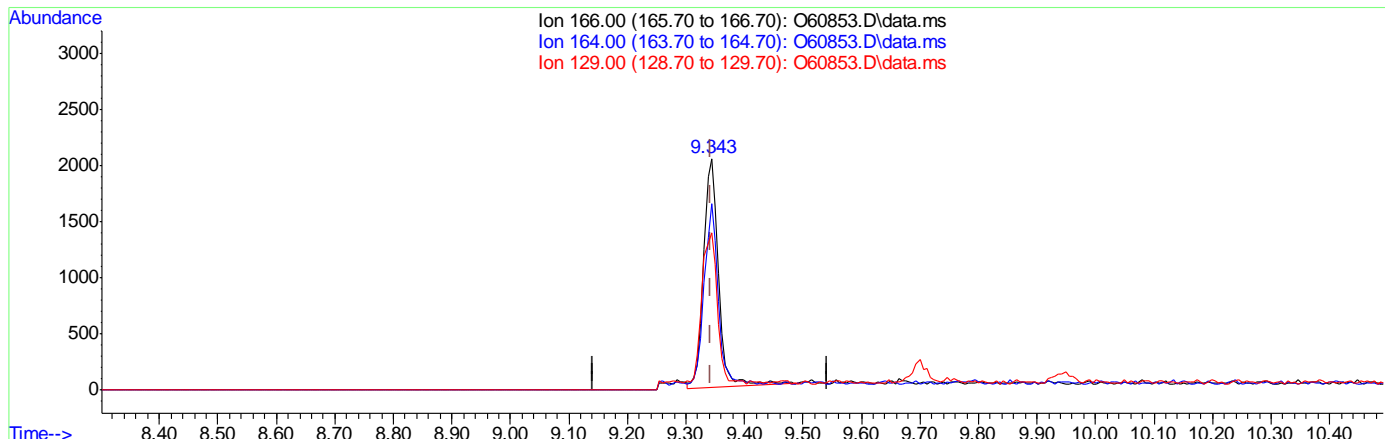
7.1.7.1

7

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\070820\
 Data File : O60853.D
 Acq On : 8 Jul 2020 4:25 pm
 Operator : amandab
 Sample : FA76591-6 Inst : MSVOA12
 Misc : MS46689,VO2338,,,,,
 ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jul 09 07:33:26 2020
 Quant Method : C:\msdchem\2\methods\SIMCL070220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jul 02 13:33:54 2020
 Response via : Initial Calibration



(21) Tetrachloroethene ()
 9.343min (+0.000) 0.19ug/L
 response 3568

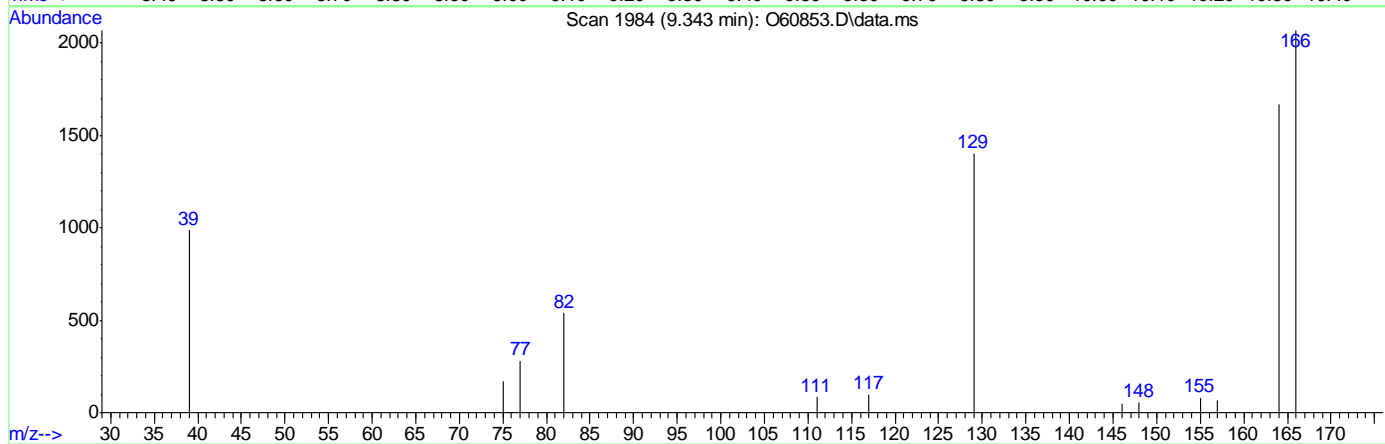
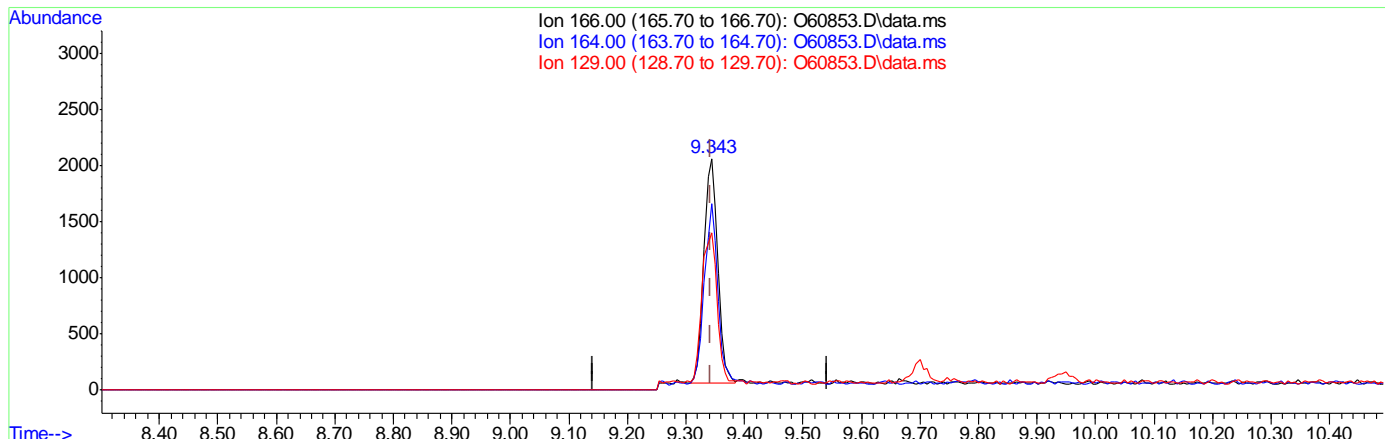
Ion	Exp%	Act%
166.00	100	100
164.00	78.30	80.42
129.00	69.50	67.02
0.00	0.00	0.00

7.1.7.2
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\070820\
 Data File : O60853.D
 Acq On : 8 Jul 2020 4:25 pm
 Operator : amandab
 Sample : FA76591-6 Inst : MSVOA12
 Misc : MS46689,VO2338,,,,,
 ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jul 09 07:33:26 2020
 Quant Method : C:\msdchem\2\methods\SIMCL070220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jul 02 13:33:54 2020
 Response via : Initial Calibration



(21) Tetrachloroethene ()
 9.343min (+0.000) 0.17ug/L m
 response 3221

Ion	Exp%	Act%
166.00	100	100
164.00	78.30	80.70
129.00	69.50	67.78
0.00	0.00	0.00

7.1.7.3
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\070820\
Data File : O60854.D
Acq On : 8 Jul 2020 4:49 pm
Operator : amandab
Sample : FA76591-7 Inst : MSVOA12
Misc : MS46689,VO2338,,,,,
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jul 09 07:37:43 2020
Quant Method : C:\msdchem\2\methods\SIMCL070220.M
Quant Title : Standard Methods 6200B
QLast Update : Thu Jul 02 13:33:54 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.346	96	207356	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.447	117	135386	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.074	65	84047	5.52	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	110.40%	
19) Toluene-d8	8.900	98	160919	4.93	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	98.60%	
Target Compounds						
3) Chloromethane	2.799	50	10026	0.28	ug/L	98
7) 1,1-Dichloroethane	5.514	63	16501	0.47	ug/L	96
8) cis-1,2-Dichloroethene	6.072	96	32712	1.75	ug/L	98
9) Chloroform	6.339	83	11596	0.35	ug/L	92
14) 1,2-Dichloroethane	7.145	62	4628	0.18	ug/L	92
15) Trichloroethene	7.518	95	17953	0.89	ug/L	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.18
7

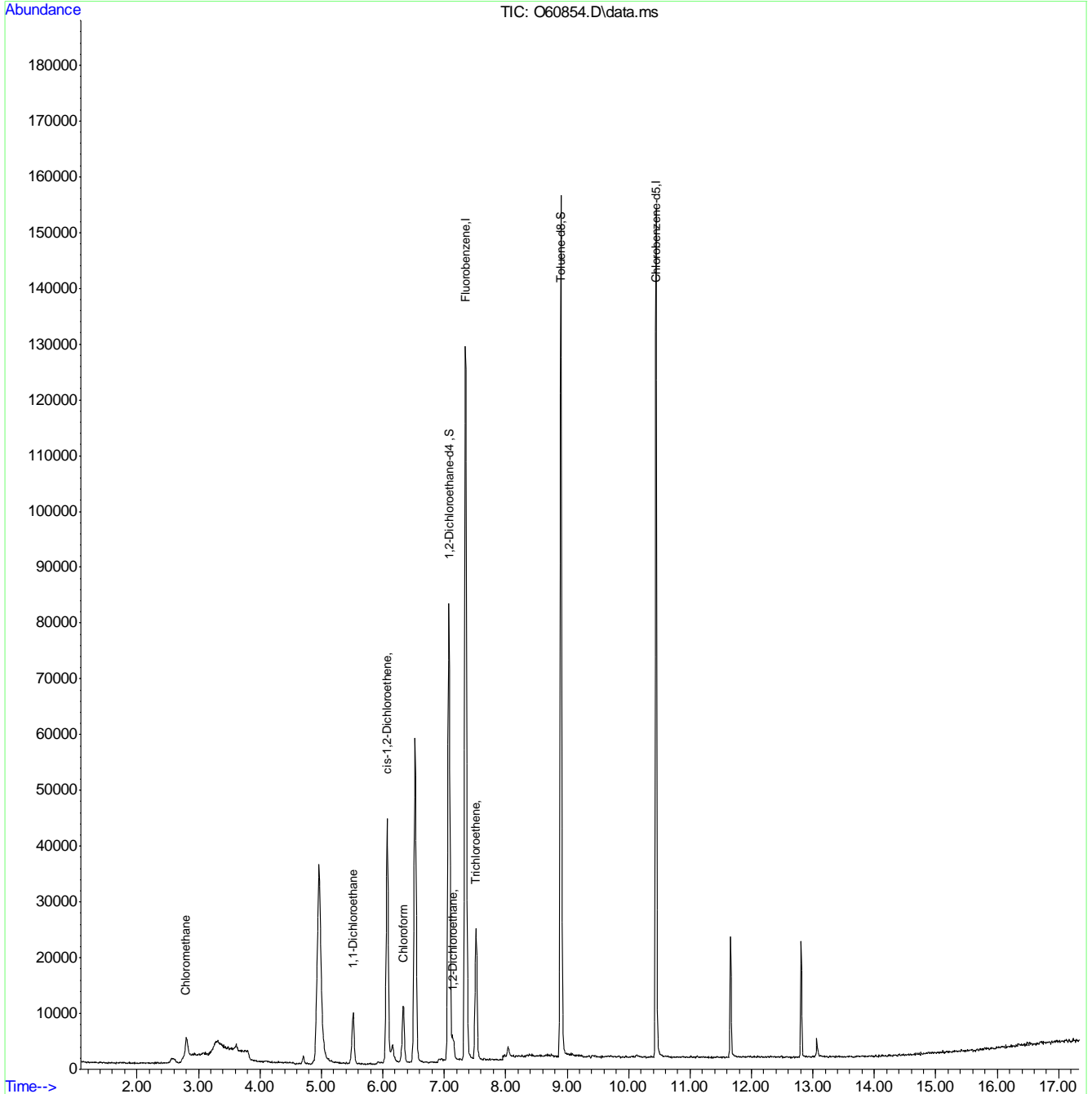


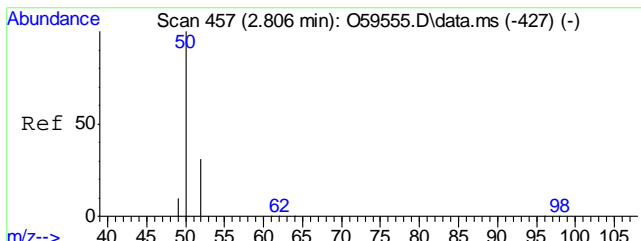
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\070820\
Data File : O60854.D
Acq On : 8 Jul 2020 4:49 pm
Operator : amandab
Sample : FA76591-7
Misc : MS46689,VO2338,,,,,
ALS Vial : 12 Sample Multiplier: 1

Inst : MSVOA12

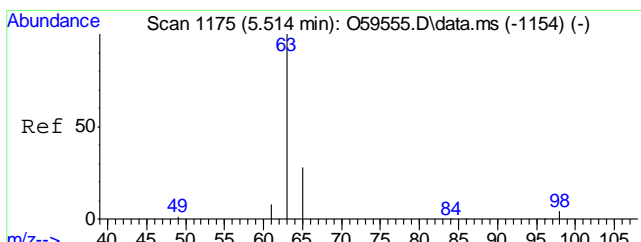
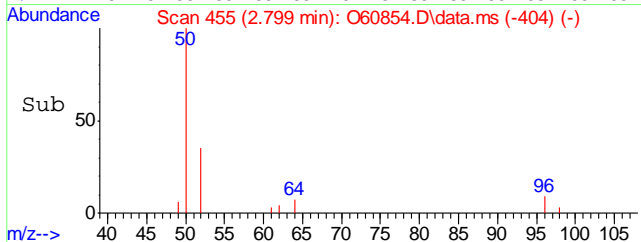
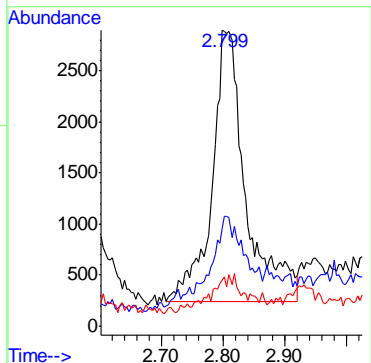
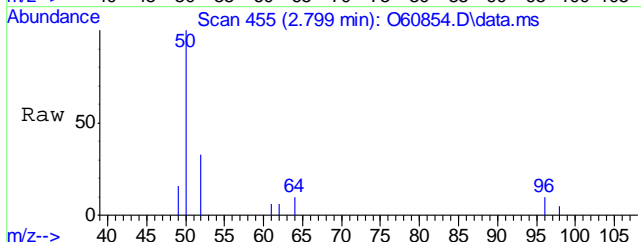
Quant Time: Jul 09 07:37:43 2020
Quant Method : C:\msdchem\2\methods\SIMCL070220.M
Quant Title : Standard Methods 6200B
QLast Update : Thu Jul 02 13:33:54 2020
Response via : Initial Calibration





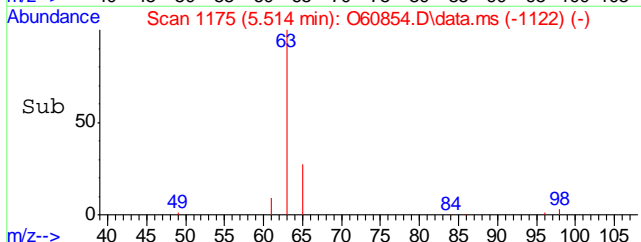
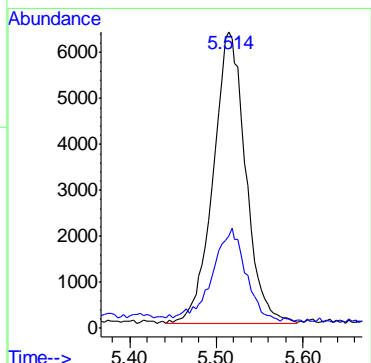
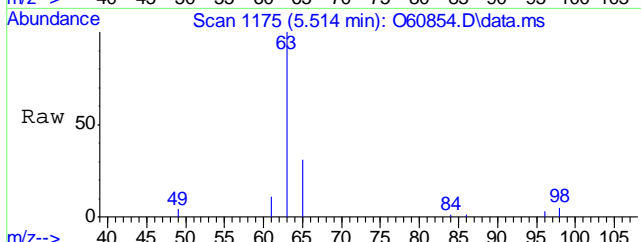
#3
 Chloromethane
 Concen: 0.28 ug/L
 RT: 2.799 min Scan# 455
 Delta R.T. -0.007 min
 Lab File: O60854.D
 Acq: 8 Jul 2020 4:49 pm

Tgt Ion	Resp	Lower	Upper
50	10026		
52	28.2	8.5	48.5
49	11.4	0.0	29.8

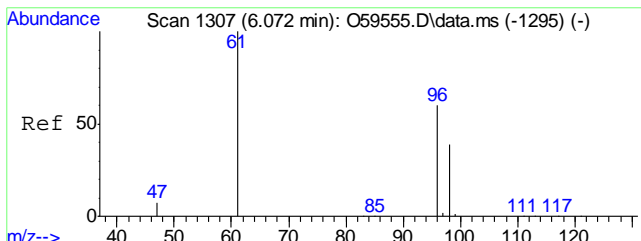


#7
 1,1-Dichloroethane
 Concen: 0.47 ug/L
 RT: 5.514 min Scan# 1175
 Delta R.T. -0.000 min
 Lab File: O60854.D
 Acq: 8 Jul 2020 4:49 pm

Tgt Ion	Resp	Lower	Upper
63	16501		
65	28.8	0.7	60.7

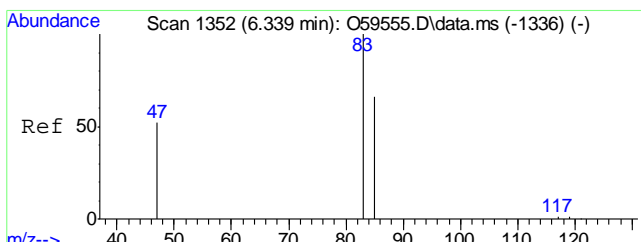
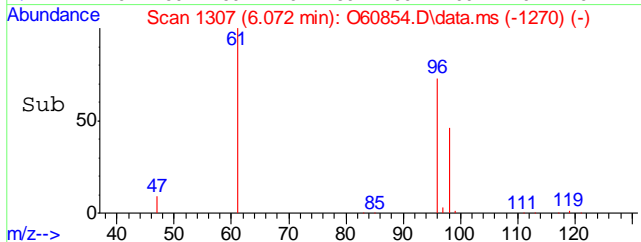
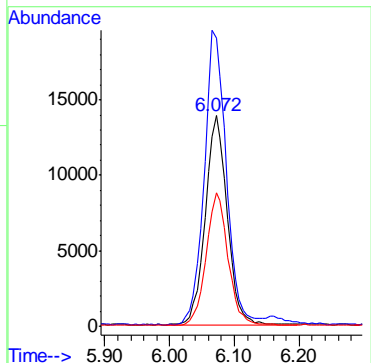
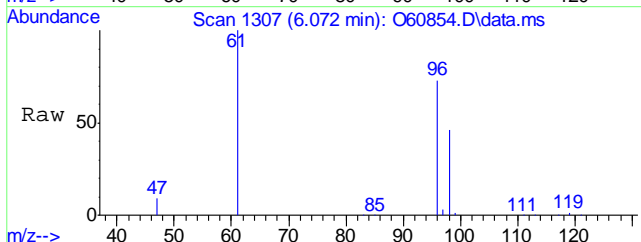


7.1.8
7



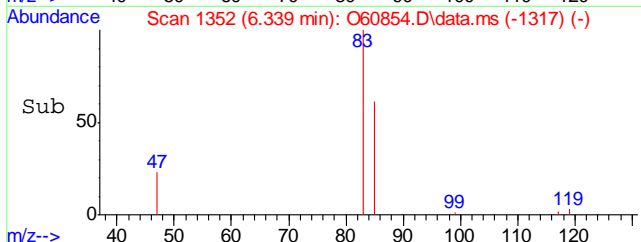
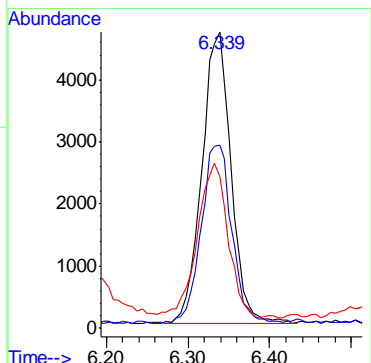
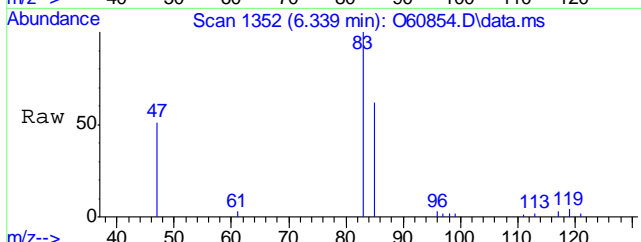
#8
 cis-1,2-Dichloroethene
 Concen: 1.75 ug/L
 RT: 6.072 min Scan# 1307
 Delta R.T. -0.000 min
 Lab File: O60854.D
 Acq: 8 Jul 2020 4:49 pm

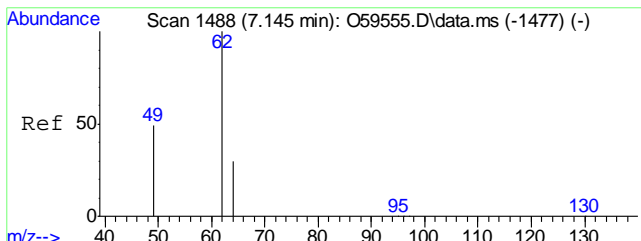
Tgt Ion	Resp	Lower	Upper
96	32712		
96	100		
61	137.0	110.0	170.0
98	63.2	34.1	94.1



#9
 Chloroform
 Concen: 0.35 ug/L
 RT: 6.339 min Scan# 1352
 Delta R.T. 0.006 min
 Lab File: O60854.D
 Acq: 8 Jul 2020 4:49 pm

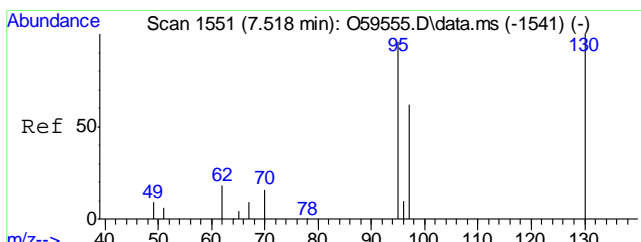
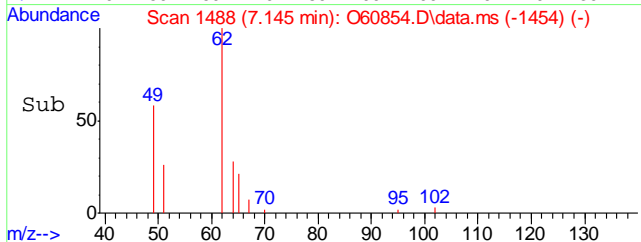
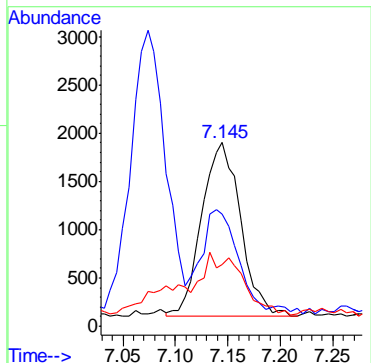
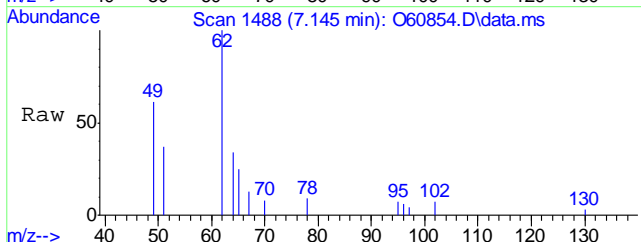
Tgt Ion	Resp	Lower	Upper
83	11596		
83	100		
85	60.8	34.7	94.7
47	47.2	9.0	69.0





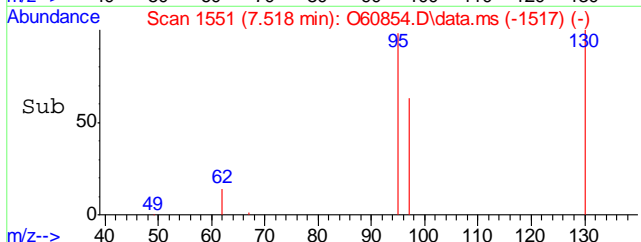
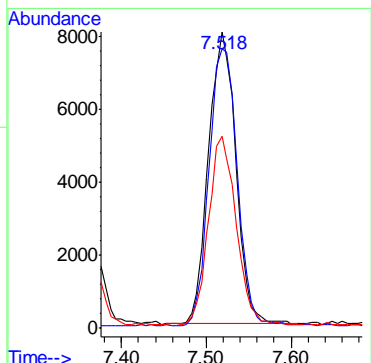
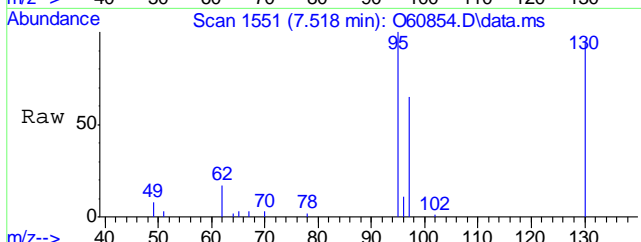
#14
1,2-Dichloroethane
Concen: 0.18 ug/L
RT: 7.145 min Scan# 1488
Delta R.T. -0.000 min
Lab File: O60854.D
Acq: 8 Jul 2020 4:49 pm

Tgt Ion	Resp	Lower	Upper
62	4628		
49	54.5	17.8	77.8
64	28.4	1.3	61.3



#15
Trichloroethene
Concen: 0.89 ug/L
RT: 7.518 min Scan# 1551
Delta R.T. 0.000 min
Lab File: O60854.D
Acq: 8 Jul 2020 4:49 pm

Tgt Ion	Resp	Lower	Upper
95	17953		
130	94.8	63.4	123.4
97	64.7	35.0	95.0



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\070820\
Data File : O60855.D
Acq On : 8 Jul 2020 5:13 pm
Operator : amandab
Sample : FA76591-8 Inst : MSVOA12
Misc : MS46689,VO2338,,,,,
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jul 09 07:38:07 2020
Quant Method : C:\msdchem\2\methods\SIMCL070220.M
Quant Title : Standard Methods 6200B
QLast Update : Thu Jul 02 13:33:54 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Fluorobenzene	7.346	96	198978	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.447	117	129328	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.074	65	80404	5.50	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	110.00%	
19) Toluene-d8	8.900	98	154033	4.94	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	98.80%	
Target Compounds						
						Qvalue
3) Chloromethane	2.803	50	11912	0.35	ug/L	96
7) 1,1-Dichloroethane	5.514	63	17096	0.51	ug/L	97
8) cis-1,2-Dichloroethene	6.066	96	23371	1.30	ug/L	98
9) Chloroform	6.333	83	12135	0.38	ug/L	90
14) 1,2-Dichloroethane	7.145	62	4961	0.20	ug/L	95

(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.1.9
7

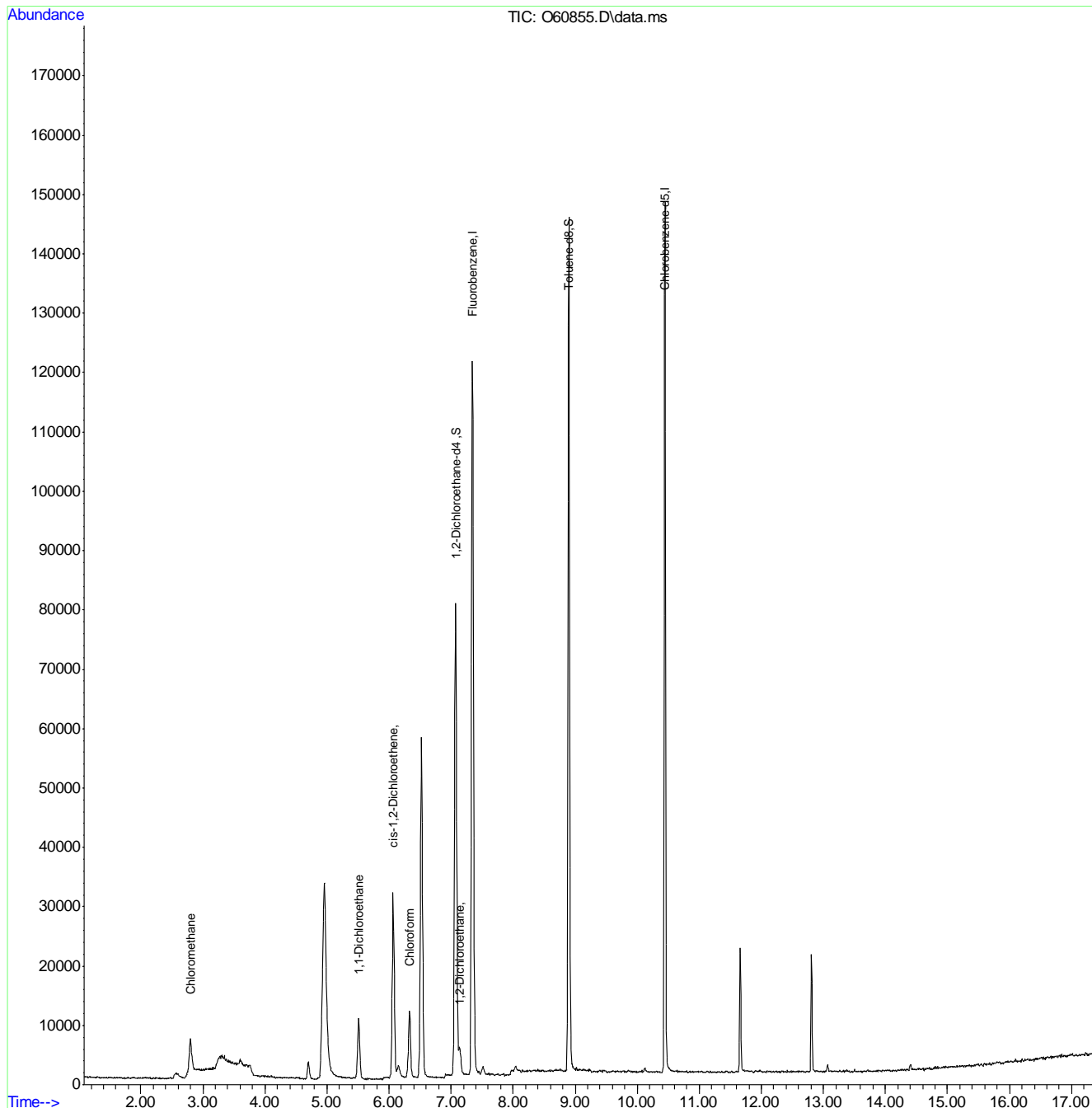


Quantitation Report (QT Reviewed)

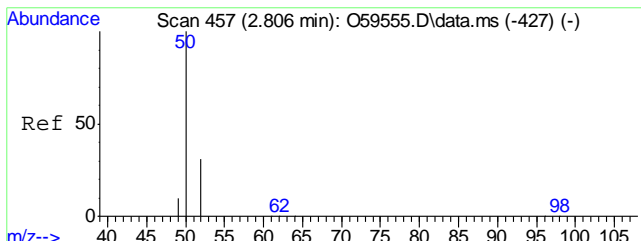
Data Path : C:\msdchem\2\data\070820\
 Data File : O60855.D
 Acq On : 8 Jul 2020 5:13 pm
 Operator : amandab
 Sample : FA76591-8
 Misc : MS46689,VO2338,,,,,
 ALS Vial : 13 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Jul 09 07:38:07 2020
 Quant Method : C:\msdchem\2\methods\SIMCL070220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jul 02 13:33:54 2020
 Response via : Initial Calibration

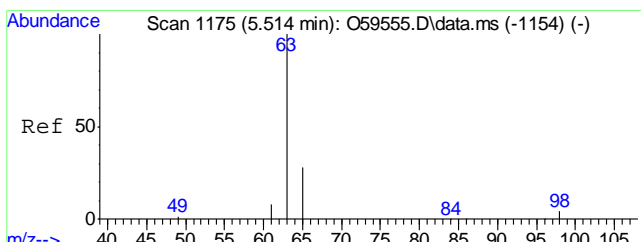
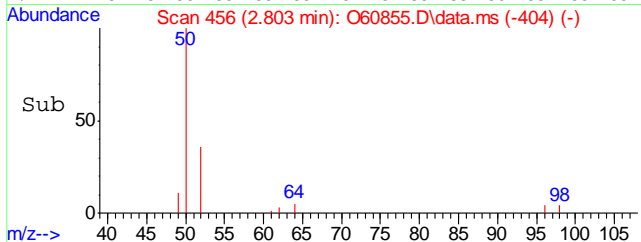
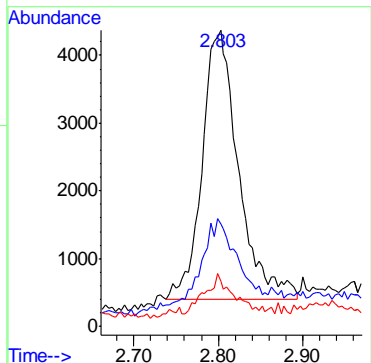
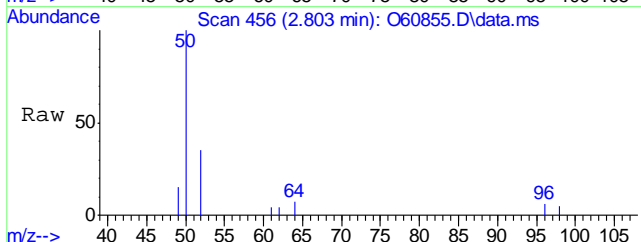


7.19
7



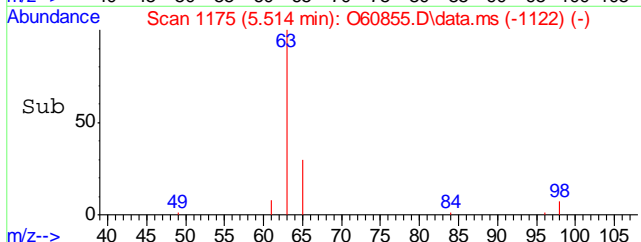
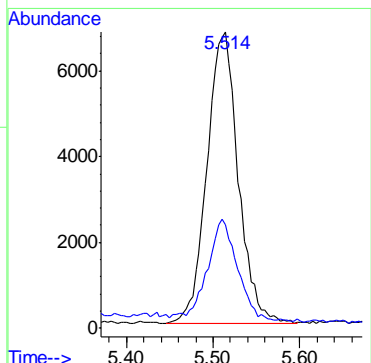
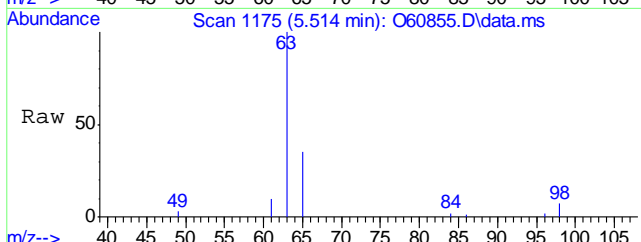
#3
 Chloromethane
 Concen: 0.35 ug/L
 RT: 2.803 min Scan# 456
 Delta R.T. -0.003 min
 Lab File: O60855.D
 Acq: 8 Jul 2020 5:13 pm

Tgt Ion	Resp	Lower	Upper
50	11912		
52	30.2	8.5	48.5
49	12.1	0.0	29.8

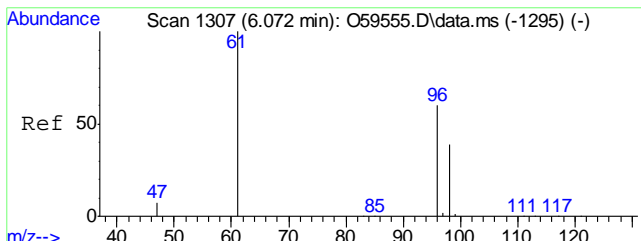


#7
 1,1-Dichloroethane
 Concen: 0.51 ug/L
 RT: 5.514 min Scan# 1175
 Delta R.T. -0.000 min
 Lab File: O60855.D
 Acq: 8 Jul 2020 5:13 pm

Tgt Ion	Resp	Lower	Upper
63	17096		
65	32.5	0.7	60.7

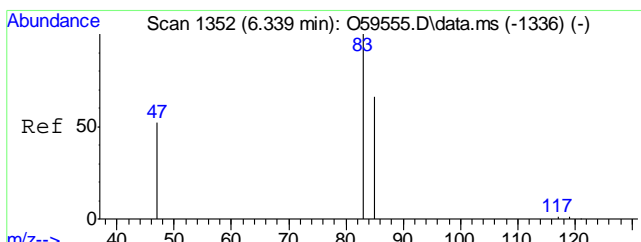
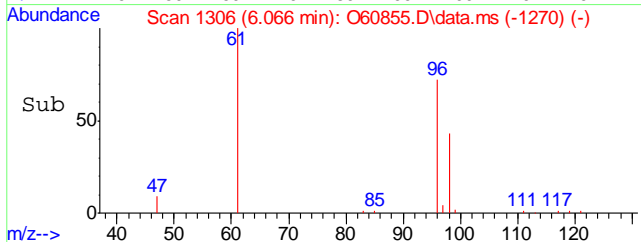
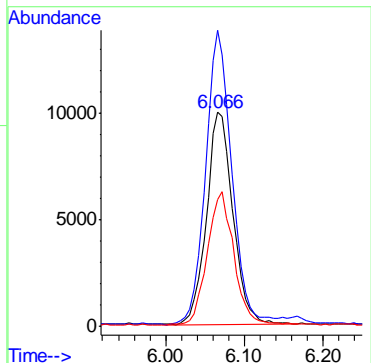
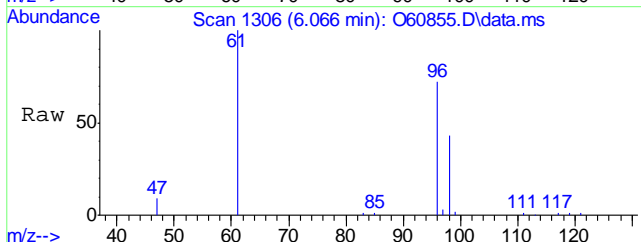


7.19
7



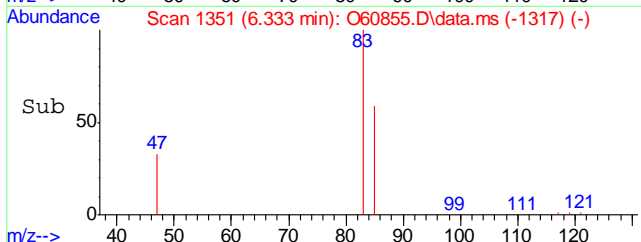
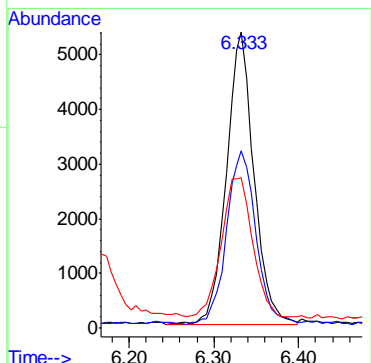
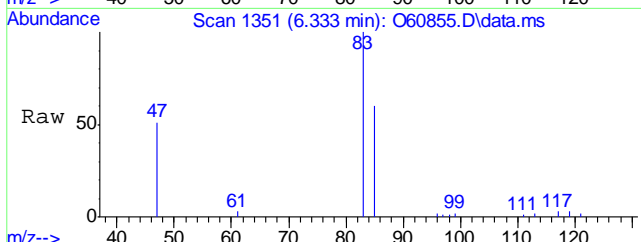
#8
 cis-1,2-Dichloroethene
 Concen: 1.30 ug/L
 RT: 6.066 min Scan# 1306
 Delta R.T. -0.006 min
 Lab File: O60855.D
 Acq: 8 Jul 2020 5:13 pm

Tgt Ion	Resp	Lower	Upper
96	23371		
96	100		
61	139.1	110.0	170.0
98	59.2	34.1	94.1

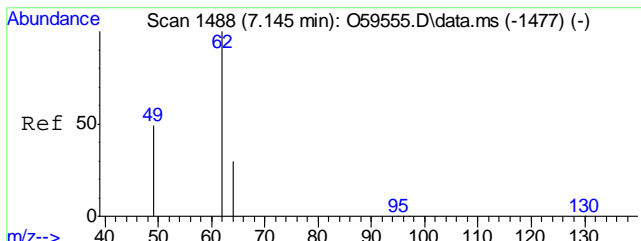


#9
 Chloroform
 Concen: 0.38 ug/L
 RT: 6.333 min Scan# 1351
 Delta R.T. -0.000 min
 Lab File: O60855.D
 Acq: 8 Jul 2020 5:13 pm

Tgt Ion	Resp	Lower	Upper
83	12135		
83	100		
85	58.8	34.7	94.7
47	47.7	9.0	69.0

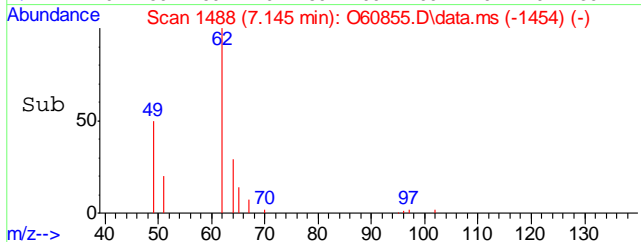
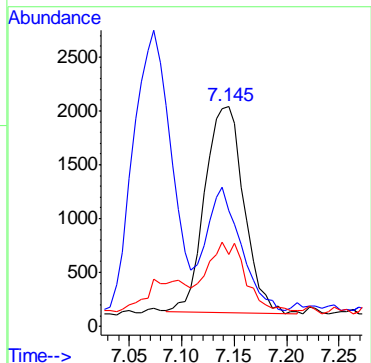
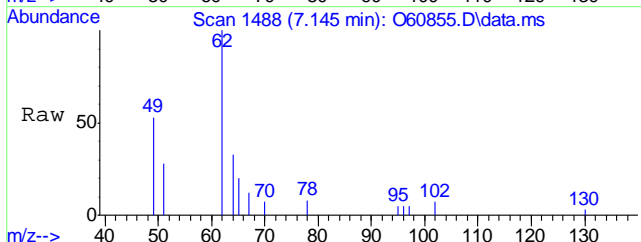


7.1.9
7



#14
 1,2-Dichloroethane
 Concen: 0.20 ug/L
 RT: 7.145 min Scan# 1488
 Delta R.T. -0.000 min
 Lab File: O60855.D
 Acq: 8 Jul 2020 5:13 pm

Tgt Ion	Resp	Lower	Upper
62	4961		
49	44.7	17.8	77.8
64	27.7	1.3	61.3



7.19
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\070820\
Data File : O60856.D
Acq On : 8 Jul 2020 5:38 pm
Operator : amandab
Sample : FA76591-9 Inst : MSVOA12
Misc : MS46689,VO2338,,,,,
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jul 09 07:38:36 2020
Quant Method : C:\msdchem\2\methods\SIMCL070220.M
Quant Title : Standard Methods 6200B
QLast Update : Thu Jul 02 13:33:54 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.346	96	192805	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.447	117	125761	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.073	65	78640	5.56	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	111.20%	
19) Toluene-d8	8.900	98	149306	4.93	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	98.60%	
Target Compounds						
						Qvalue
3) Chloromethane	2.806	50	9319	0.28	ug/L	95
7) 1,1-Dichloroethane	5.514	63	17859	0.55	ug/L	97
8) cis-1,2-Dichloroethene	6.072	96	30497	1.76	ug/L	98
9) Chloroform	6.333	83	9005	0.29	ug/L	90
14) 1,2-Dichloroethane	7.145	62	2666	0.11	ug/L	96
15) Trichloroethene	7.518	95	83171	4.42	ug/L	97
16) 1,2-Dichloropropane	8.043	63	1317m	0.07	ug/L	
21) Tetrachloroethene	9.343	166	17827	1.11	ug/L	99
22) 1,4-Dichlorobenzene	12.827	146	3557	0.11	ug/L	93

(#) = qualifier out of range (m) = manual integration (+) = signals summed

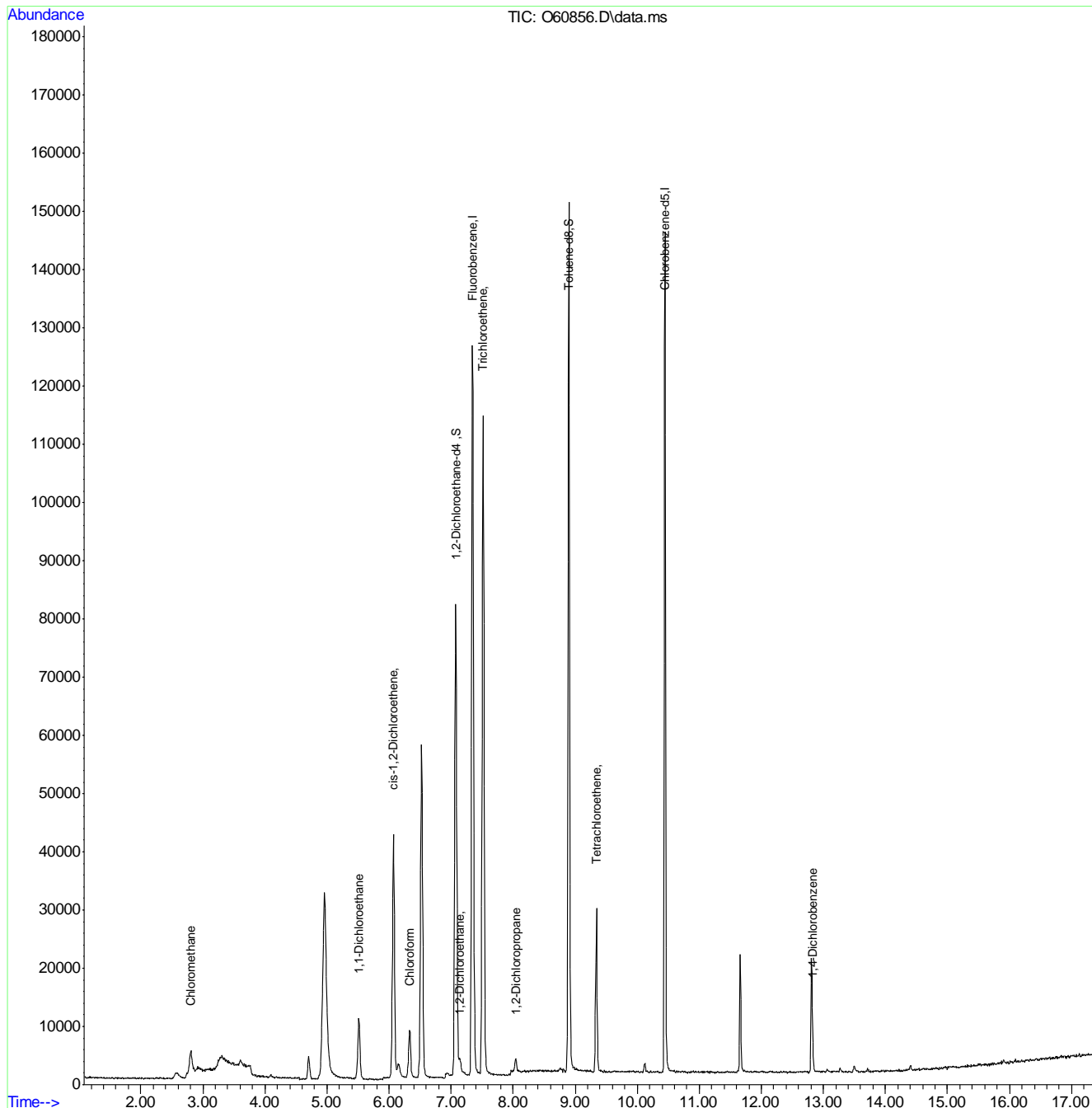
7.1.10
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\070820\
 Data File : O60856.D
 Acq On : 8 Jul 2020 5:38 pm
 Operator : amandab
 Sample : FA76591-9
 Misc : MS46689,VO2338,,,,,
 ALS Vial : 14 Sample Multiplier: 1

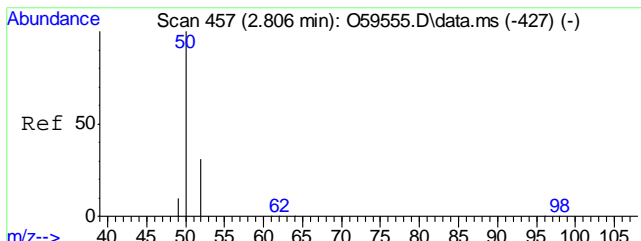
Inst : MSVOA12

Quant Time: Jul 09 07:38:36 2020
 Quant Method : C:\msdchem\2\methods\SIMCL070220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jul 02 13:33:54 2020
 Response via : Initial Calibration



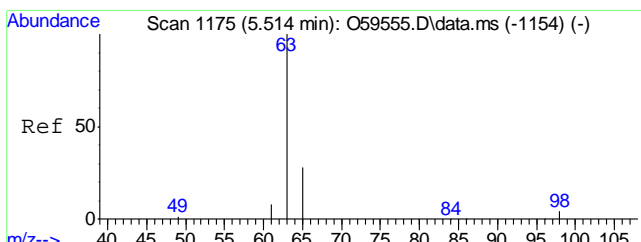
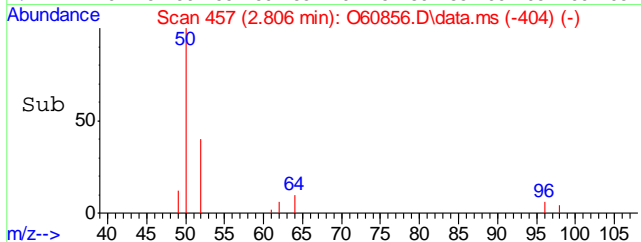
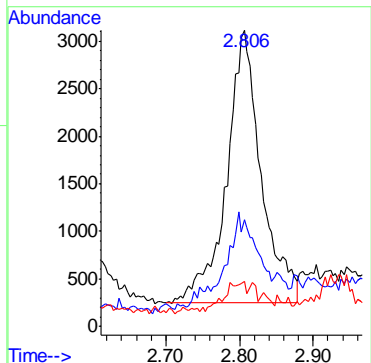
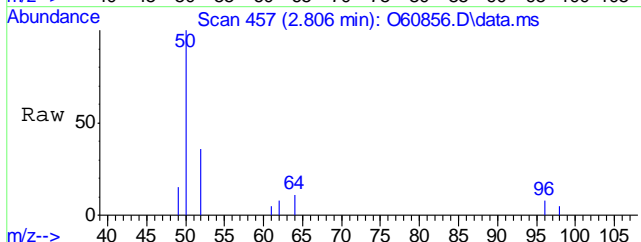
7.1.10
7





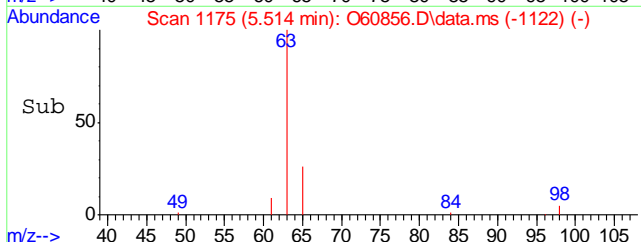
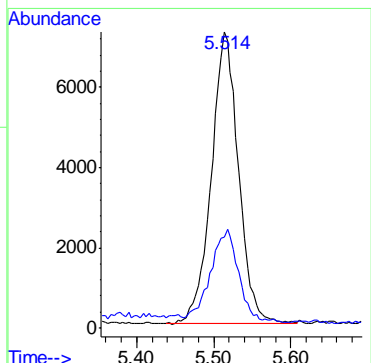
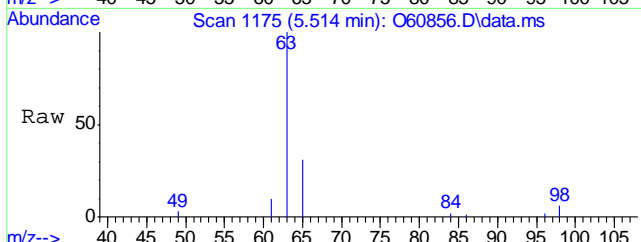
#3
 Chloromethane
 Concen: 0.28 ug/L
 RT: 2.806 min Scan# 457
 Delta R.T. 0.000 min
 Lab File: O60856.D
 Acq: 8 Jul 2020 5:38 pm

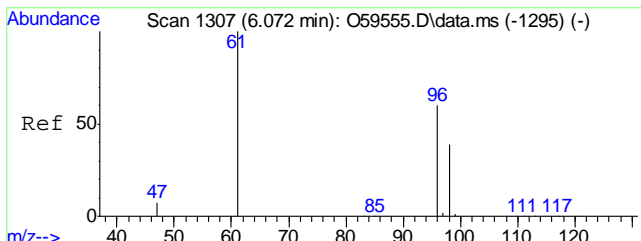
Tgt Ion	Resp	Lower	Upper
50	9319		
52	30.9	8.5	48.5
49	11.5	0.0	29.8



#7
 1,1-Dichloroethane
 Concen: 0.55 ug/L
 RT: 5.514 min Scan# 1175
 Delta R.T. -0.000 min
 Lab File: O60856.D
 Acq: 8 Jul 2020 5:38 pm

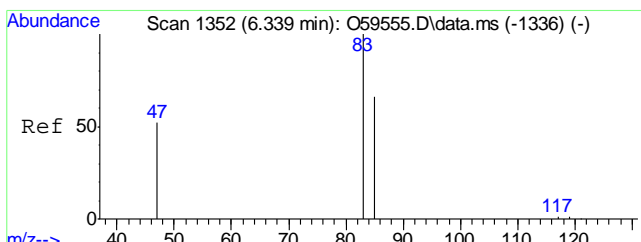
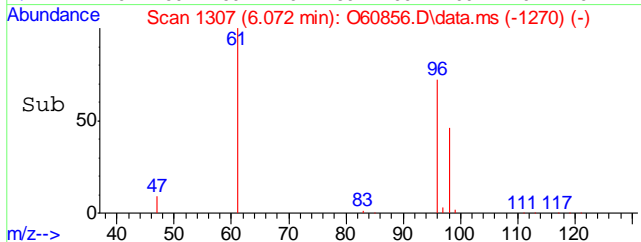
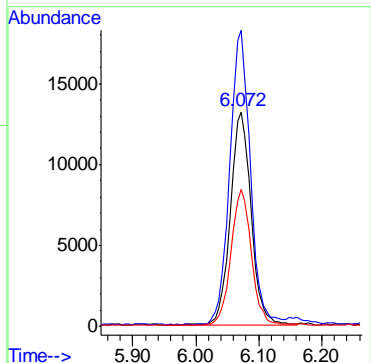
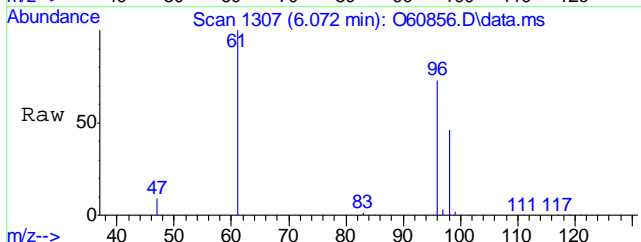
Tgt Ion	Resp	Lower	Upper
63	17859		
65	29.0	0.7	60.7





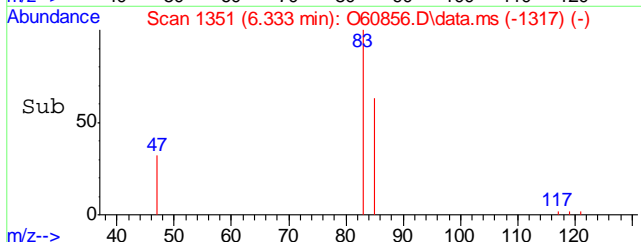
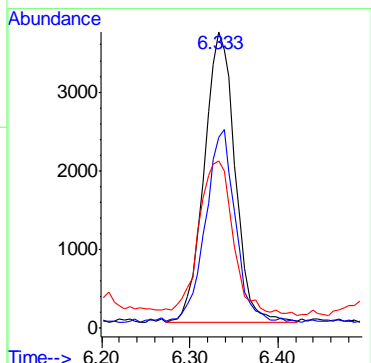
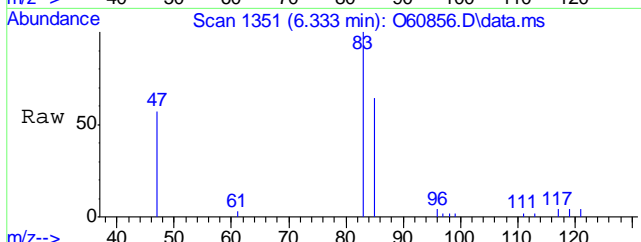
#8
 cis-1,2-Dichloroethene
 Concen: 1.76 ug/L
 RT: 6.072 min Scan# 1307
 Delta R.T. -0.000 min
 Lab File: O60856.D
 Acq: 8 Jul 2020 5:38 pm

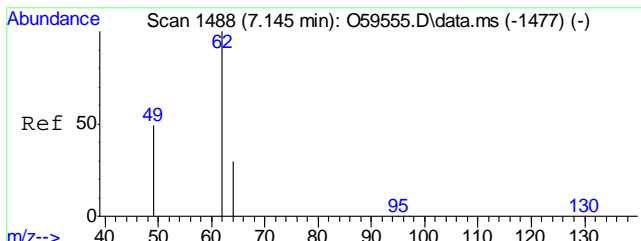
Tgt Ion	Resp	Lower	Upper
96	30497		
96	100		
61	137.7	110.0	170.0
98	63.5	34.1	94.1



#9
 Chloroform
 Concen: 0.29 ug/L
 RT: 6.333 min Scan# 1351
 Delta R.T. -0.000 min
 Lab File: O60856.D
 Acq: 8 Jul 2020 5:38 pm

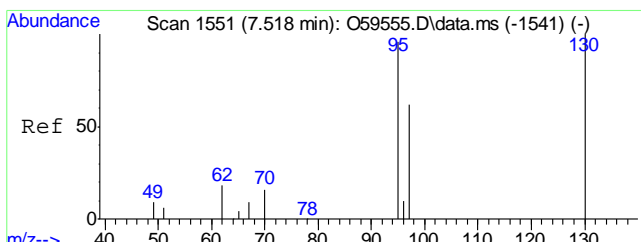
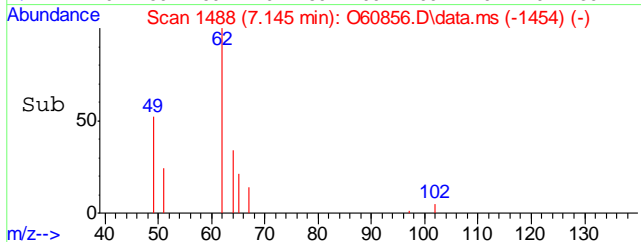
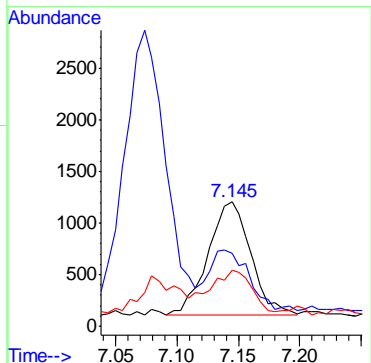
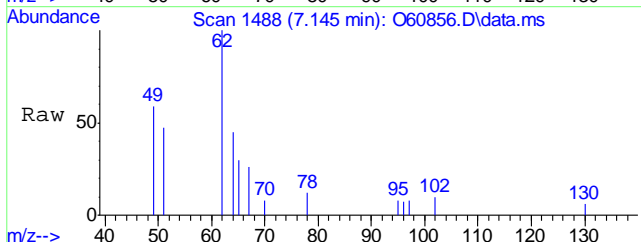
Tgt Ion	Resp	Lower	Upper
83	9005		
83	100		
85	63.4	34.7	94.7
47	53.4	9.0	69.0





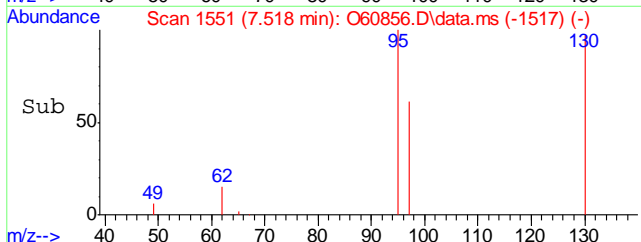
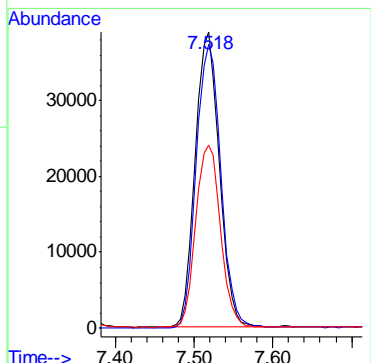
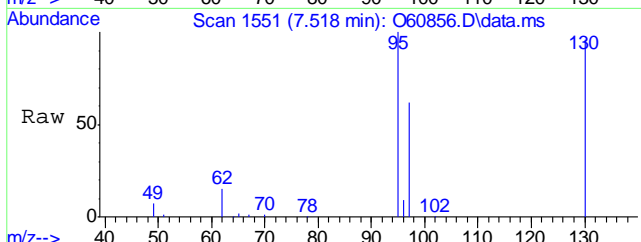
#14
1,2-Dichloroethane
Concen: 0.11 ug/L
RT: 7.145 min Scan# 1488
Delta R.T. -0.000 min
Lab File: O60856.D
Acq: 8 Jul 2020 5:38 pm

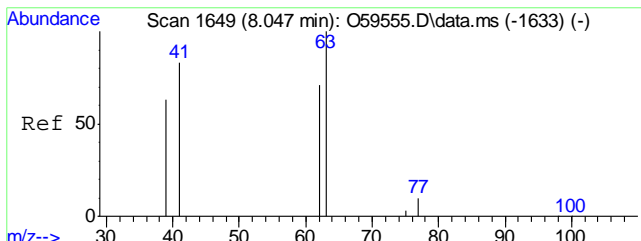
Tgt Ion	Resp	Lower	Upper
62	2666		
49	51.7	17.8	77.8
64	32.2	1.3	61.3



#15
Trichloroethene
Concen: 4.42 ug/L
RT: 7.518 min Scan# 1551
Delta R.T. -0.000 min
Lab File: O60856.D
Acq: 8 Jul 2020 5:38 pm

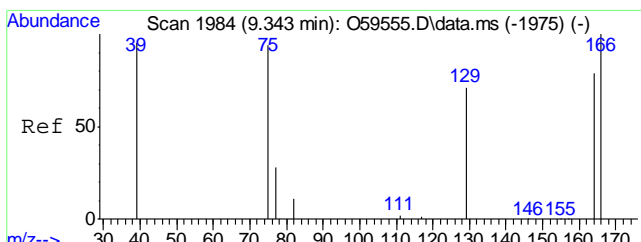
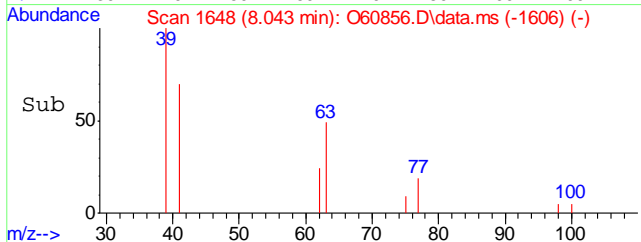
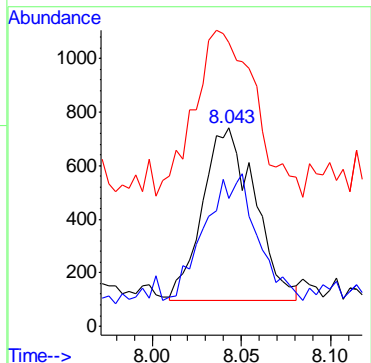
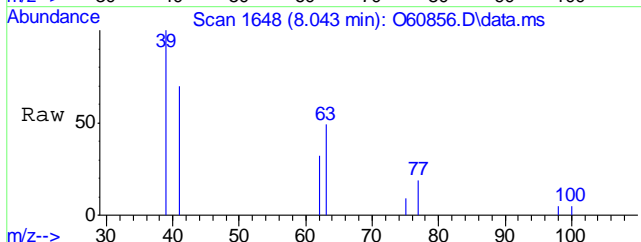
Tgt Ion	Resp	Lower	Upper
95	83171		
130	95.7	63.4	123.4
97	61.5	35.0	95.0





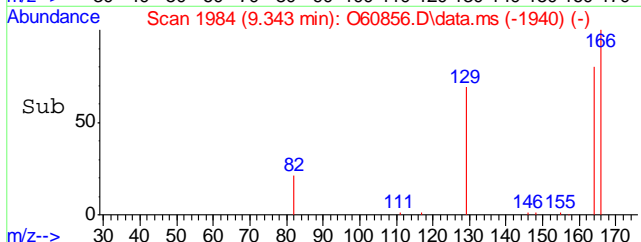
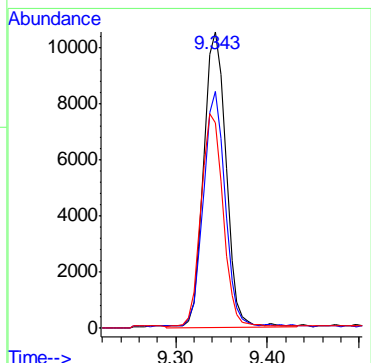
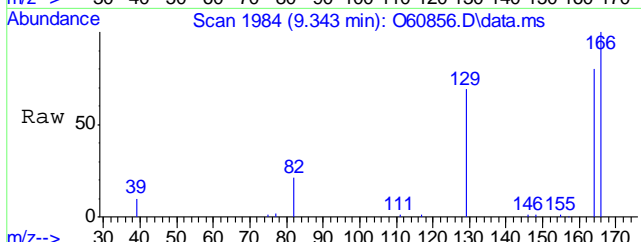
#16
 1,2-Dichloropropane
 Concen: 0.07 ug/L m
 RT: 8.043 min Scan# 1648
 Delta R.T. 0.000 min
 Lab File: O60856.D
 Acq: 8 Jul 2020 5:38 pm

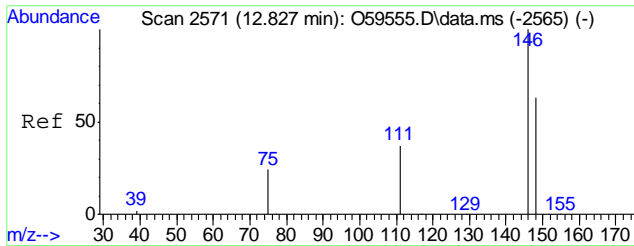
Tgt Ion	Resp	Lower	Upper
63	1317		
62	64.9	41.3	101.3
41	143.0	50.0	110.0#



#21
 Tetrachloroethene
 Concen: 1.11 ug/L
 RT: 9.343 min Scan# 1984
 Delta R.T. 0.000 min
 Lab File: O60856.D
 Acq: 8 Jul 2020 5:38 pm

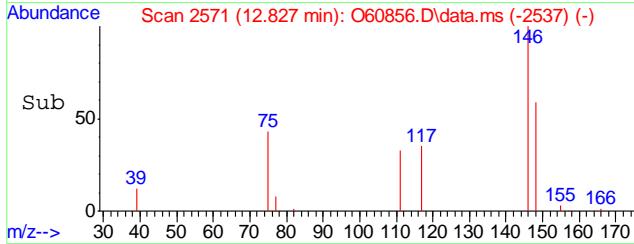
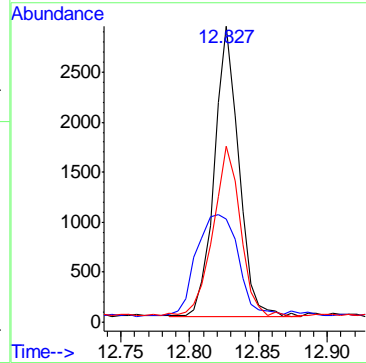
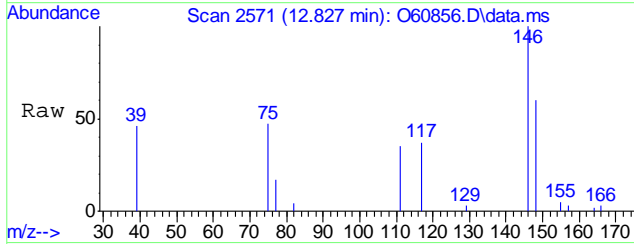
Tgt Ion	Resp	Lower	Upper
166	17827		
164	80.0	48.3	108.3
129	69.3	39.5	99.5





#22
 1,4-Dichlorobenzene
 Concen: 0.11 ug/L
 RT: 12.827 min Scan# 2571
 Delta R.T. -0.000 min
 Lab File: O60856.D
 Acq: 8 Jul 2020 5:38 pm

Tgt Ion	Ratio	Lower	Upper
146	100		
111	33.1	17.1	57.1
148	58.6	43.6	83.6



7.1.10
7

Manual Integration Approval Summary

Sample Number: FA76591-9 **Method:** SW846 8260B BY SIM
Lab FileID: O60856.D **Analyst approved:** 07/09/20 07:43 Amanda Bacsko
Injection Time: 07/08/20 17:38 **Supervisor approved:** 07/09/20 08:47 Melissa Mangual

Parameter	CAS	Sig#	R.T. (min.)	Reason
1,2-Dichloropropane	78-87-5		8.04	Poor instrument integration

7.1.10.1

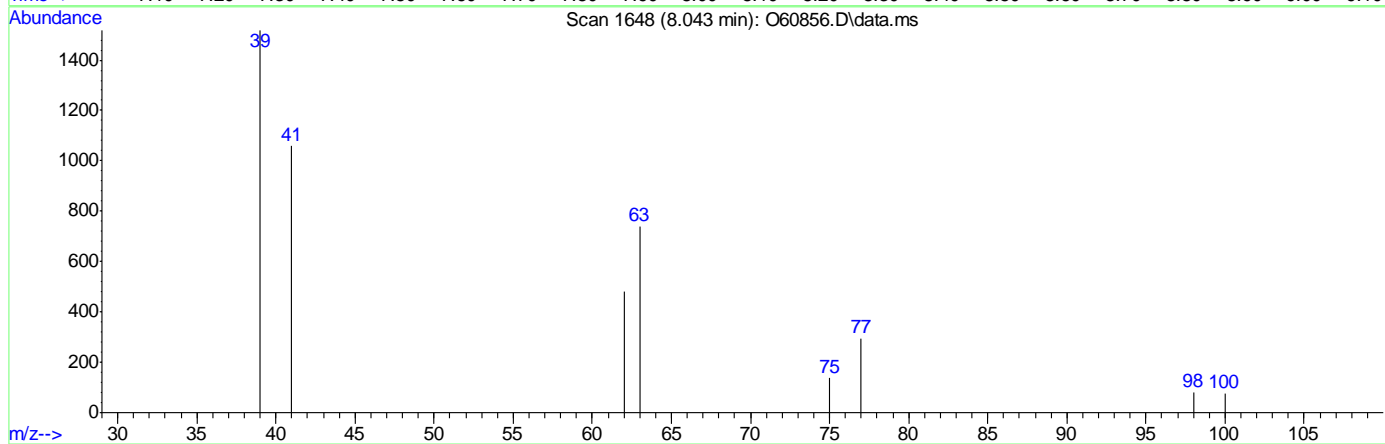
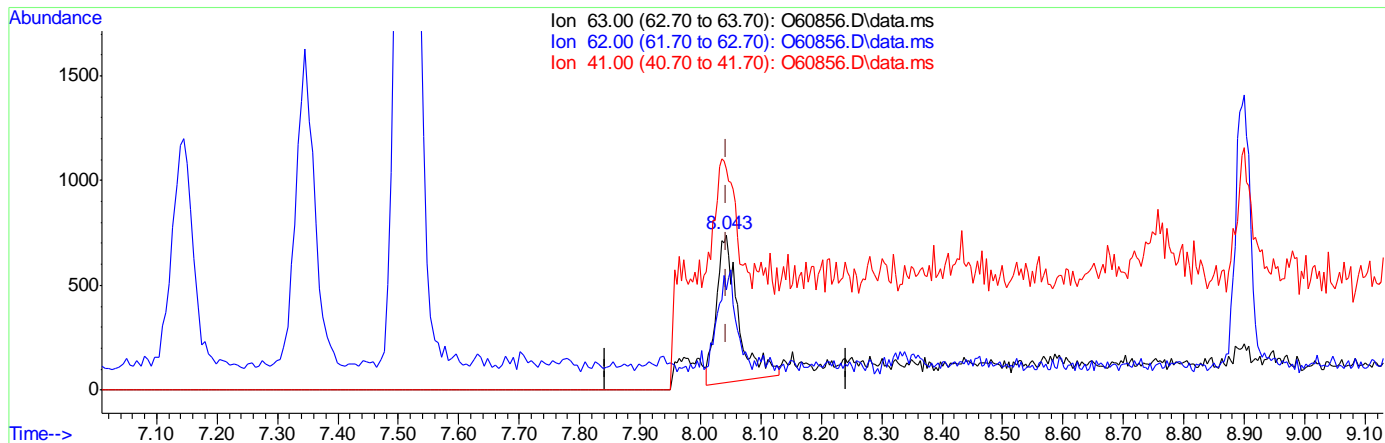
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\070820\
 Data File : O60856.D
 Acq On : 8 Jul 2020 5:38 pm
 Operator : amandab
 Sample : FA76591-9
 Misc : MS46689,VO2338,,,,,
 ALS Vial : 14 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Jul 09 07:33:32 2020
 Quant Method : C:\msdchem\2\methods\SIMCL070220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jul 02 13:33:54 2020
 Response via : Initial Calibration



(16) 1,2-Dichloropropane
 8.043min (+0.000) 0.10ug/L
 response 1783

Ion	Exp%	Act%
63.00	100	100
62.00	71.30	59.94
41.00	80.00	92.27
0.00	0.00	0.00

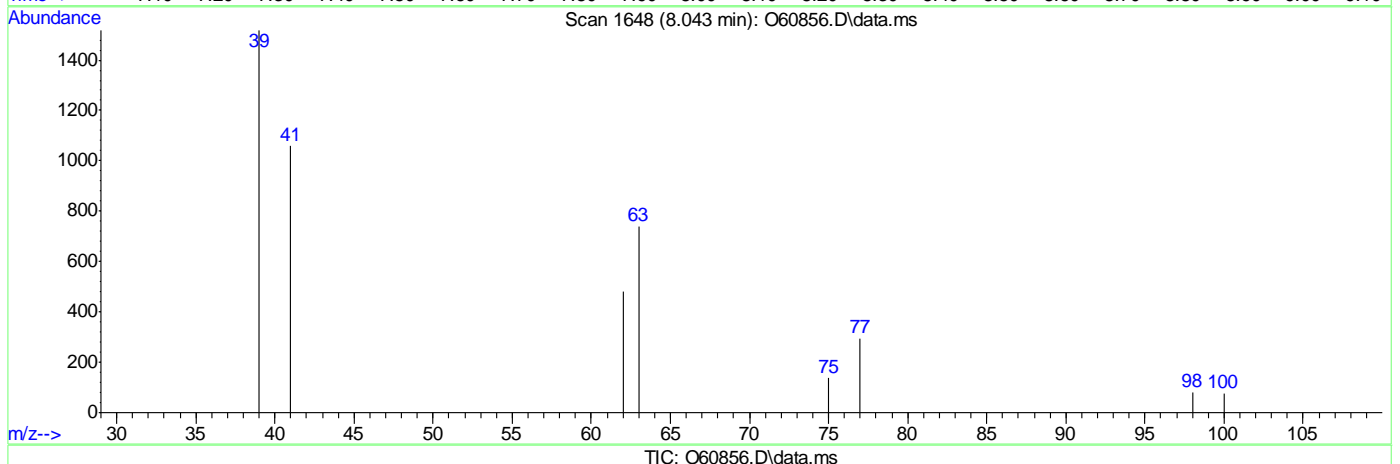
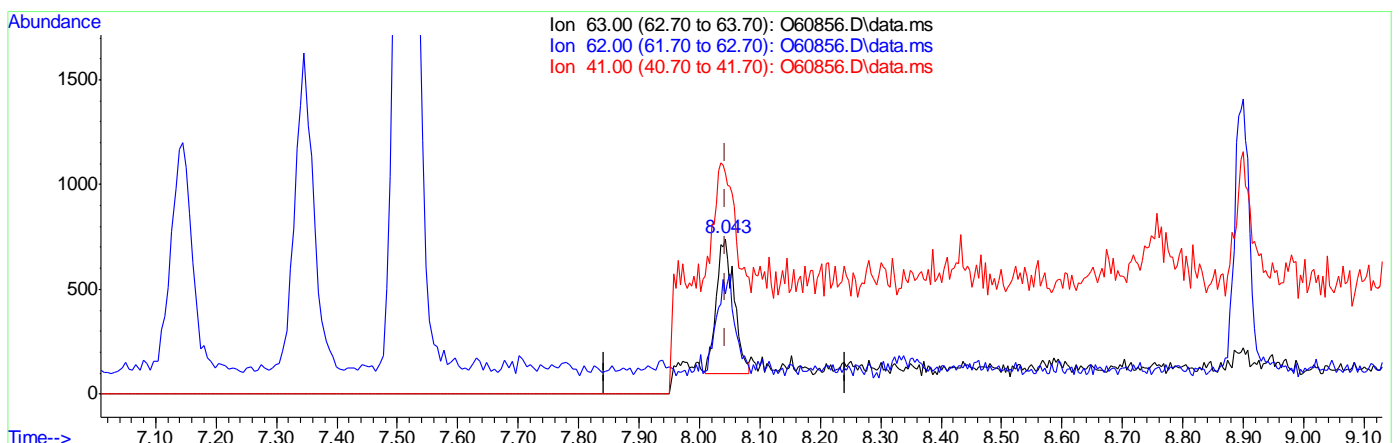
7.1.102
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\070820\
Data File : O60856.D
Acq On : 8 Jul 2020 5:38 pm
Operator : amandab
Sample : FA76591-9
Misc : MS46689,VO2338,,,,,
ALS Vial : 14 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Jul 09 07:33:32 2020
Quant Method : C:\msdchem\2\methods\SIMCL070220.M
Quant Title : Standard Methods 6200B
QLast Update : Thu Jul 02 13:33:54 2020
Response via : Initial Calibration



(16) 1,2-Dichloropropane
8.043min (+0.000) 0.07ug/L m
response 1317
Ion Exp% Act%
63.00 100 100
62.00 71.30 64.86
41.00 80.00 142.97#
0.00 0.00 0.00

7.1.10.3
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\070820\
Data File : O60857.D
Acq On : 8 Jul 2020 6:02 pm
Operator : amandab
Sample : FA76591-10 Inst : MSVOA12
Misc : MS46689,VO2338,,,,,
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jul 09 07:39:27 2020
Quant Method : C:\msdchem\2\methods\SIMCL070220.M
Quant Title : Standard Methods 6200B
QLast Update : Thu Jul 02 13:33:54 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.346	96	185297	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.447	117	122411	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.074	65	76558	5.63	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	112.60%	
19) Toluene-d8	8.900	98	143662	4.87	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	97.40%	
Target Compounds						
3) Chloromethane	2.803	50	9720	0.31	ug/L	93
7) 1,1-Dichloroethane	5.510	63	12308	0.40	ug/L	100
8) cis-1,2-Dichloroethene	6.072	96	20592	1.23	ug/L	98
9) Chloroform	6.339	83	8117	0.27	ug/L	93
14) 1,2-Dichloroethane	7.145	62	5465	0.23	ug/L	99
15) Trichloroethene	7.518	95	99387	5.50	ug/L	96
21) Tetrachloroethene	9.343	166	12795	0.82	ug/L	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.1.11
7

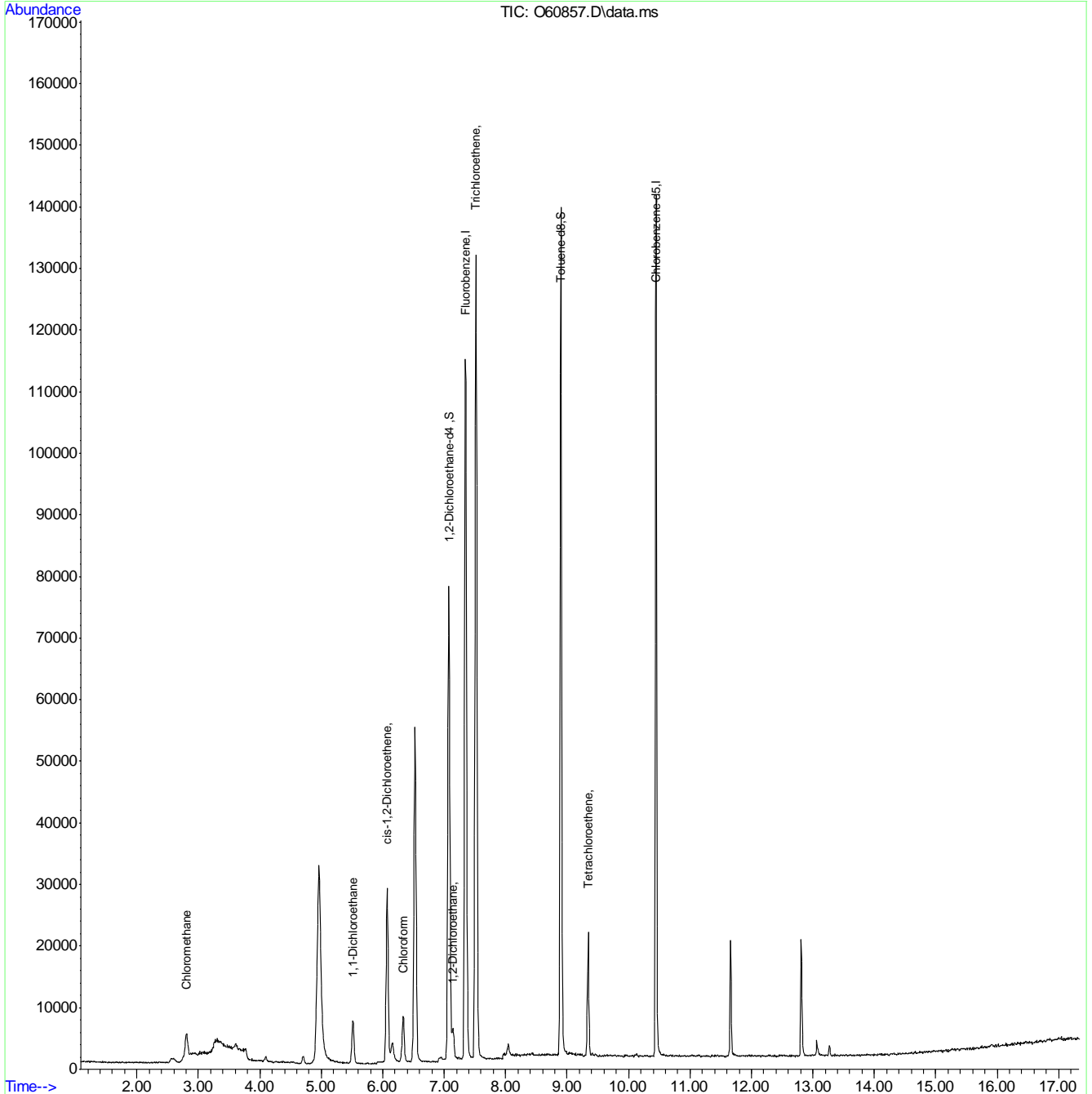


Quantitation Report (QT Reviewed)

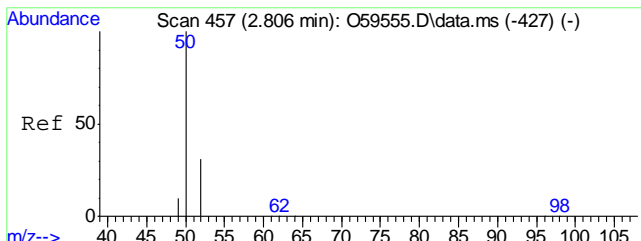
Data Path : C:\msdchem\2\data\070820\
 Data File : O60857.D
 Acq On : 8 Jul 2020 6:02 pm
 Operator : amandab
 Sample : FA76591-10
 Misc : MS46689,VO2338,,,,,
 ALS Vial : 15 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Jul 09 07:39:27 2020
 Quant Method : C:\msdchem\2\methods\SIMCL070220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jul 02 13:33:54 2020
 Response via : Initial Calibration

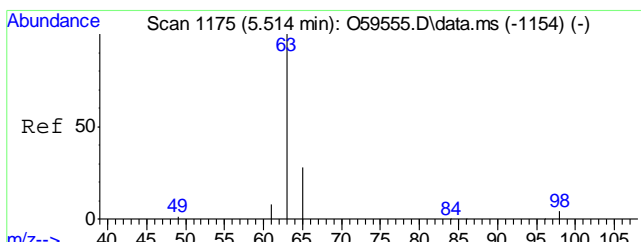
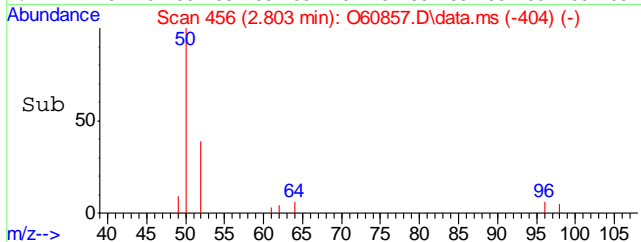
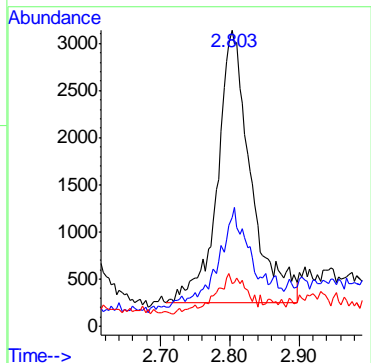
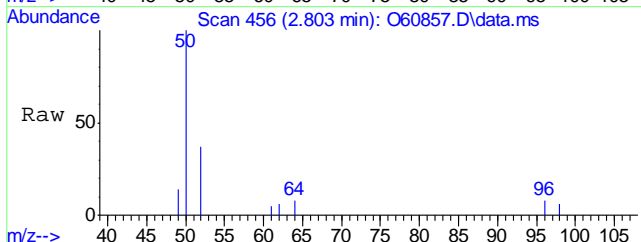


7.1.11
7



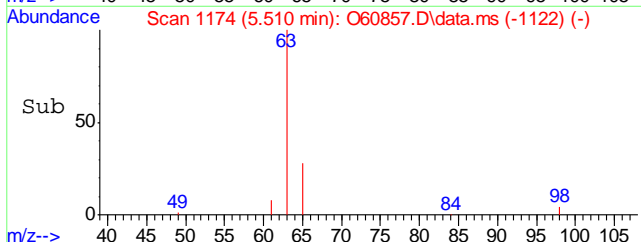
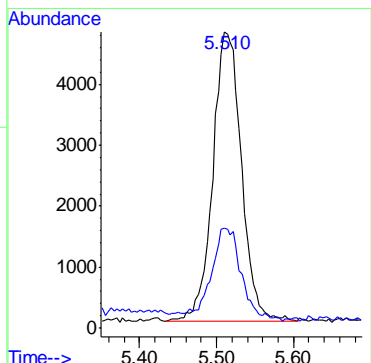
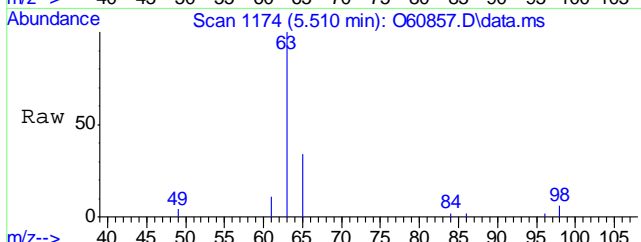
#3
 Chloromethane
 Concen: 0.31 ug/L
 RT: 2.803 min Scan# 456
 Delta R.T. -0.003 min
 Lab File: O60857.D
 Acq: 8 Jul 2020 6:02 pm

Tgt Ion	Resp	Lower	Upper
50	100		
52	33.1	8.5	48.5
49	10.2	0.0	29.8

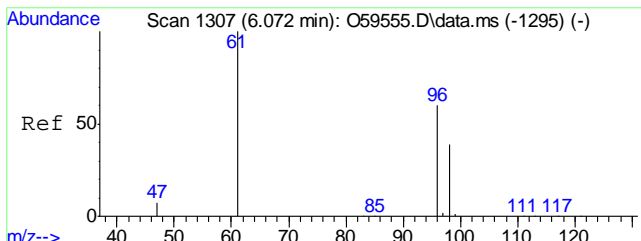


#7
 1,1-Dichloroethane
 Concen: 0.40 ug/L
 RT: 5.510 min Scan# 1174
 Delta R.T. -0.004 min
 Lab File: O60857.D
 Acq: 8 Jul 2020 6:02 pm

Tgt Ion	Resp	Lower	Upper
63	100		
65	30.8	0.7	60.7

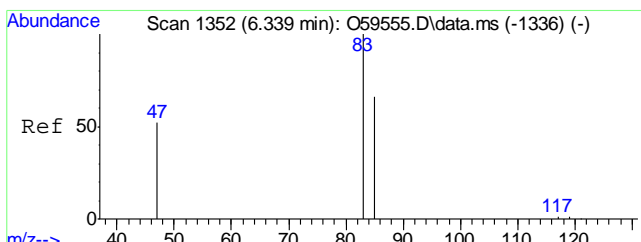
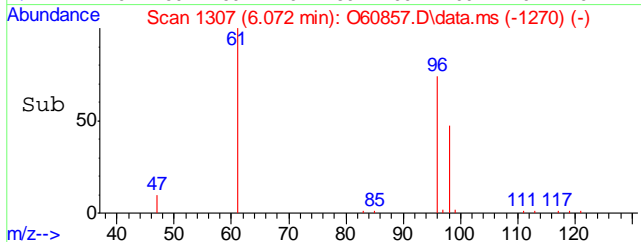
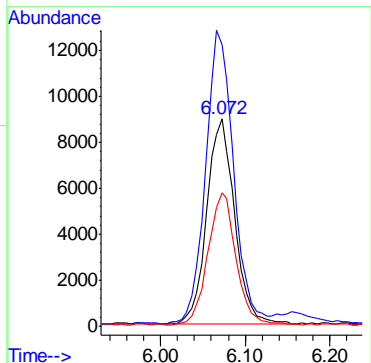
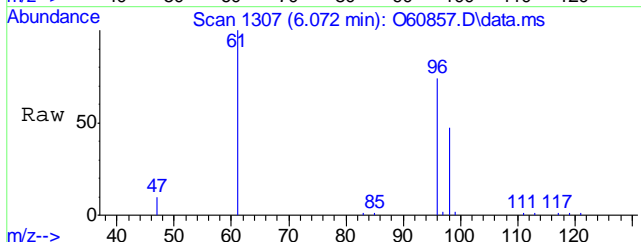


7.1.11
7



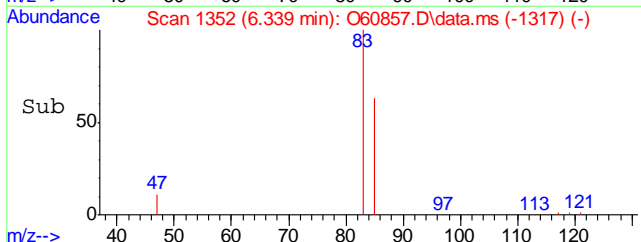
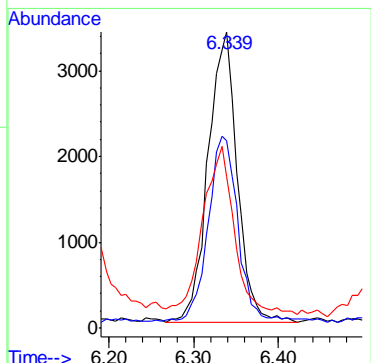
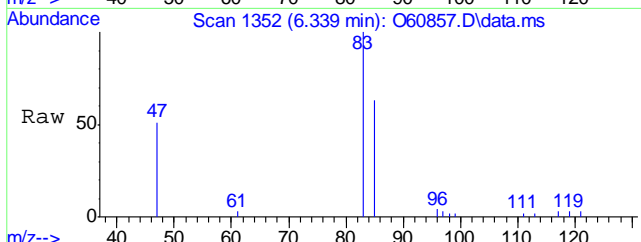
#8
 cis-1,2-Dichloroethene
 Concen: 1.23 ug/L
 RT: 6.072 min Scan# 1307
 Delta R.T. 0.000 min
 Lab File: O60857.D
 Acq: 8 Jul 2020 6:02 pm

Tgt Ion	Resp	Lower	Upper
96	20592		
96	100		
61	135.7	110.0	170.0
98	64.1	34.1	94.1



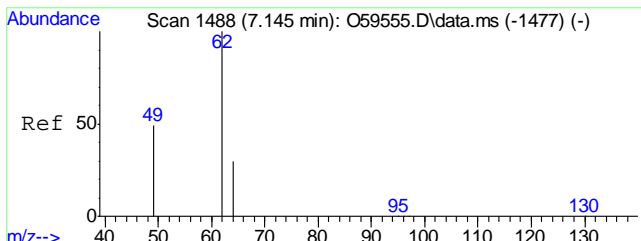
#9
 Chloroform
 Concen: 0.27 ug/L
 RT: 6.339 min Scan# 1352
 Delta R.T. 0.006 min
 Lab File: O60857.D
 Acq: 8 Jul 2020 6:02 pm

Tgt Ion	Resp	Lower	Upper
83	8117		
83	100		
85	61.9	34.7	94.7
47	47.5	9.0	69.0



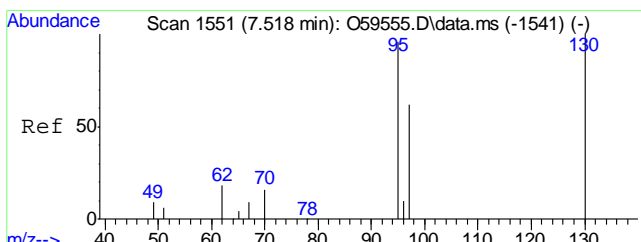
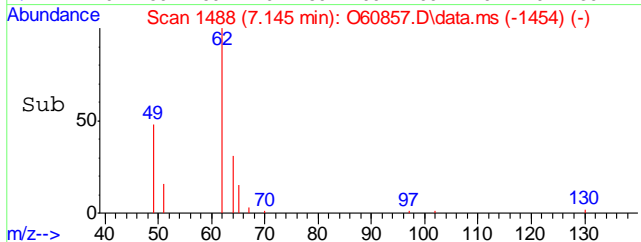
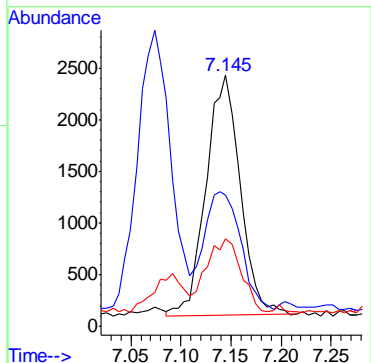
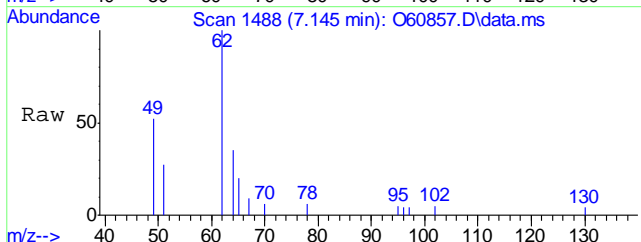
7.1.11
7





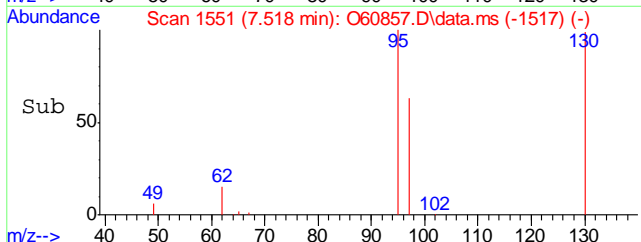
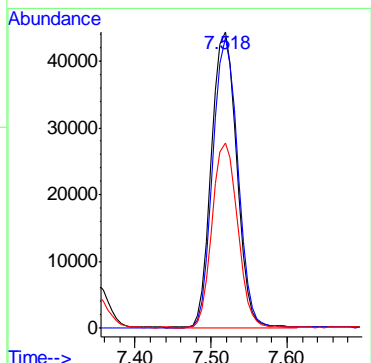
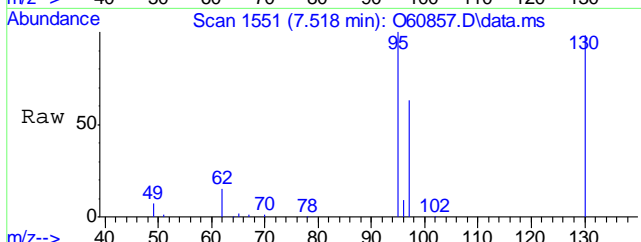
#14
1,2-Dichloroethane
Concen: 0.23 ug/L
RT: 7.145 min Scan# 1488
Delta R.T. -0.000 min
Lab File: O60857.D
Acq: 8 Jul 2020 6:02 pm

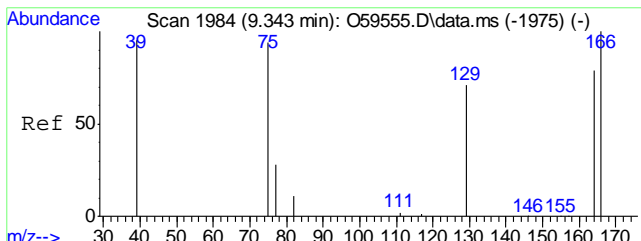
Tgt Ion	Resp	Lower	Upper
62	5465		
49	47.3	17.8	77.8
64	30.9	1.3	61.3



#15
Trichloroethene
Concen: 5.50 ug/L
RT: 7.518 min Scan# 1551
Delta R.T. 0.000 min
Lab File: O60857.D
Acq: 8 Jul 2020 6:02 pm

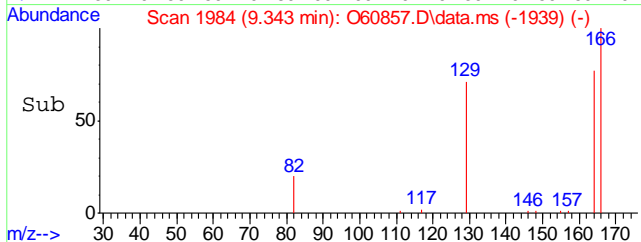
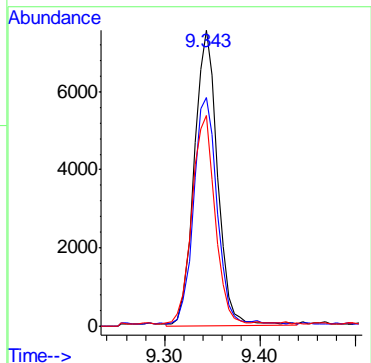
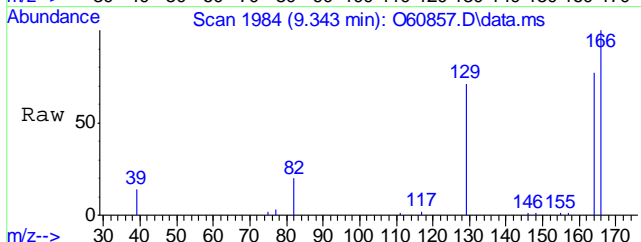
Tgt Ion	Resp	Lower	Upper
95	99387		
130	98.1	63.4	123.4
97	62.5	35.0	95.0





#21
 Tetrachloroethene
 Concen: 0.82 ug/L
 RT: 9.343 min Scan# 1984
 Delta R.T. 0.000 min
 Lab File: O60857.D
 Acq: 8 Jul 2020 6:02 pm

Tgt Ion	Resp	Lower	Upper
166	12795		
166	100		
164	76.9	48.3	108.3
129	70.8	39.5	99.5



7.1.11
7



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\070820\
Data File : O60858.D
Acq On : 8 Jul 2020 6:26 pm
Operator : amandab
Sample : FA76591-11 Inst : MSVOA12
Misc : MS46689,VO2338,,,,,
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Jul 09 07:39:50 2020
Quant Method : C:\msdchem\2\methods\SIMCL070220.M
Quant Title : Standard Methods 6200B
QLast Update : Thu Jul 02 13:33:54 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.346	96	181136	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.447	117	120570	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.074	65	74925	5.63	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	112.60%	
19) Toluene-d8	8.900	98	140482	4.84	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	96.80%	
Target Compounds						
3) Chloromethane	2.803	50	5616	0.18	ug/L	97
7) 1,1-Dichloroethane	5.518	63	12726	0.42	ug/L	94
8) cis-1,2-Dichloroethene	6.072	96	21002	1.29	ug/L	90
9) Chloroform	6.333	83	8110	0.28	ug/L	91
14) 1,2-Dichloroethane	7.139	62	5167	0.23	ug/L	89
15) Trichloroethene	7.518	95	97896	5.54	ug/L	96
21) Tetrachloroethene	9.343	166	12124	0.79	ug/L	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.1.12
7

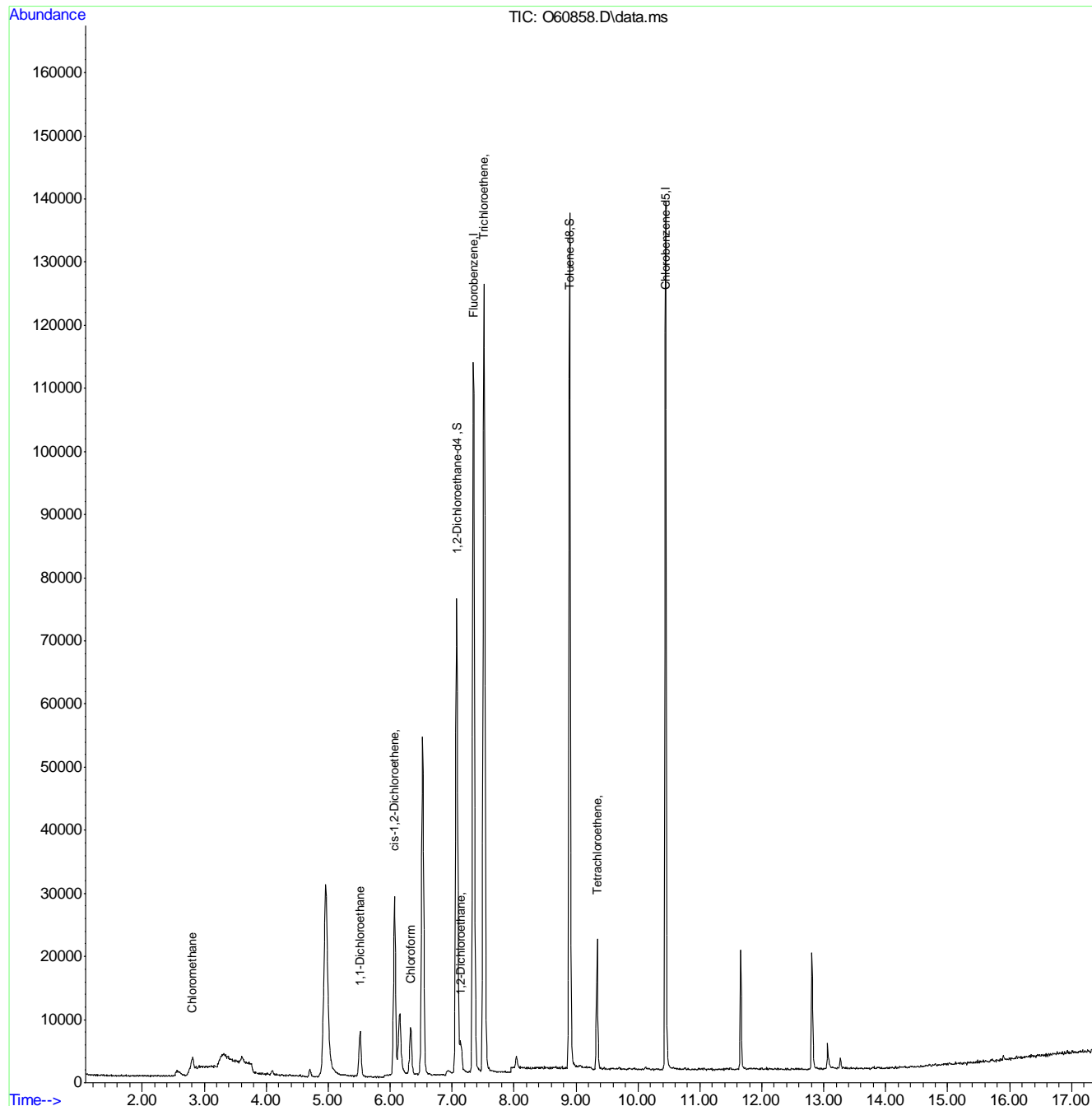


Quantitation Report (QT Reviewed)

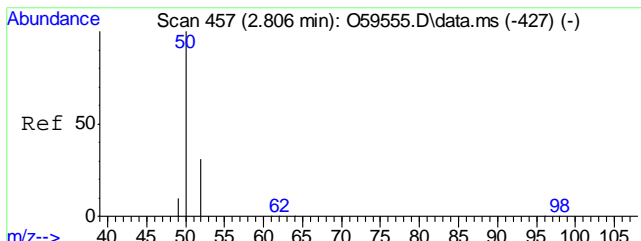
Data Path : C:\msdchem\2\data\070820\
 Data File : O60858.D
 Acq On : 8 Jul 2020 6:26 pm
 Operator : amandab
 Sample : FA76591-11
 Misc : MS46689,VO2338,,,,,
 ALS Vial : 16 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Jul 09 07:39:50 2020
 Quant Method : C:\msdchem\2\methods\SIMCL070220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jul 02 13:33:54 2020
 Response via : Initial Calibration

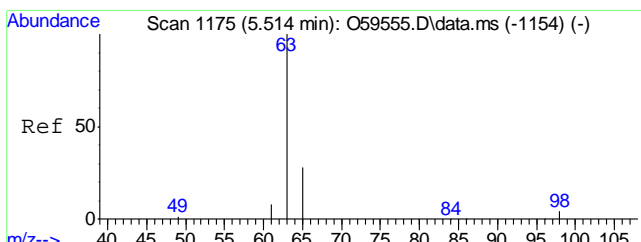
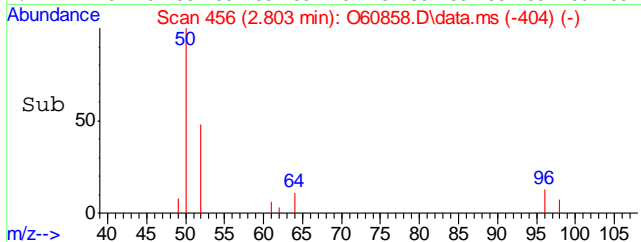
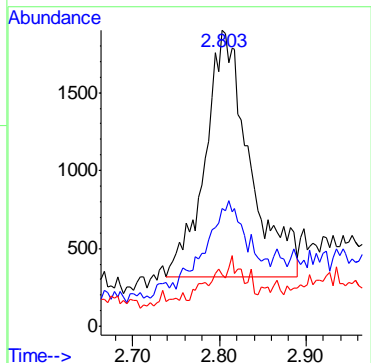
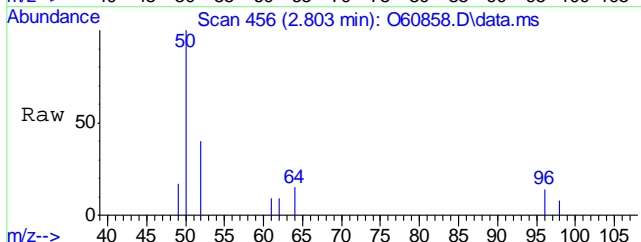


7.1.12
7



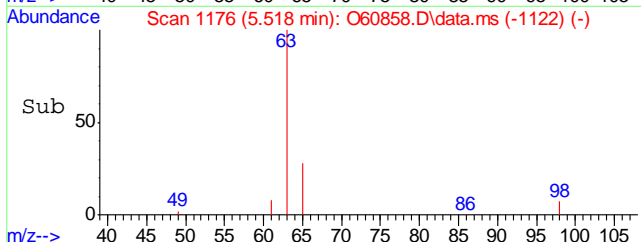
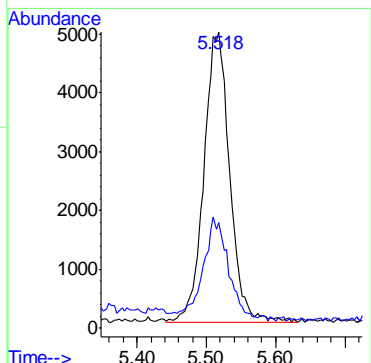
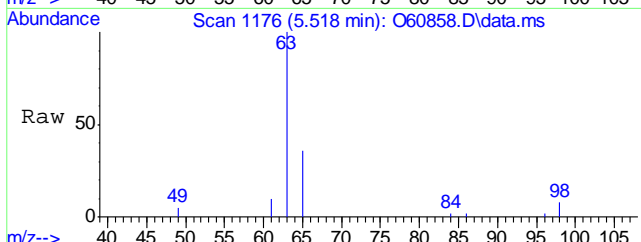
#3
Chloromethane
Concen: 0.18 ug/L
RT: 2.803 min Scan# 456
Delta R.T. -0.003 min
Lab File: O60858.D
Acq: 8 Jul 2020 6:26 pm

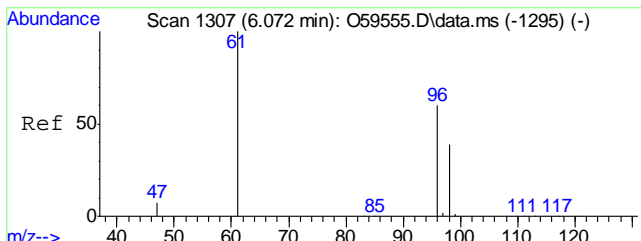
Tgt Ion	Resp	Lower	Upper
50	100		
52	30.0	8.5	48.5
49	10.6	0.0	29.8



#7
1,1-Dichloroethane
Concen: 0.42 ug/L
RT: 5.518 min Scan# 1176
Delta R.T. 0.004 min
Lab File: O60858.D
Acq: 8 Jul 2020 6:26 pm

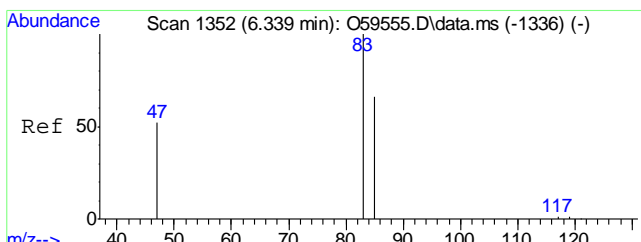
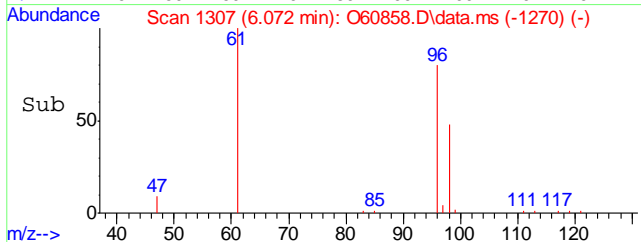
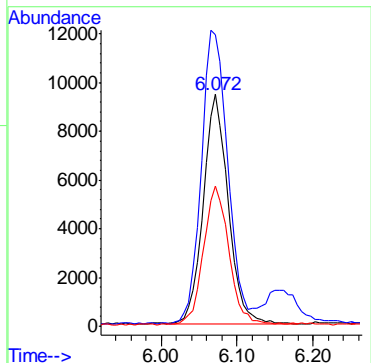
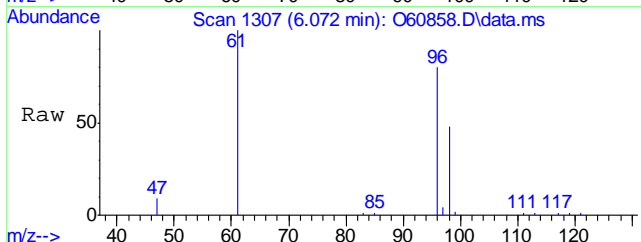
Tgt Ion	Resp	Lower	Upper
63	100		
65	33.7	0.7	60.7





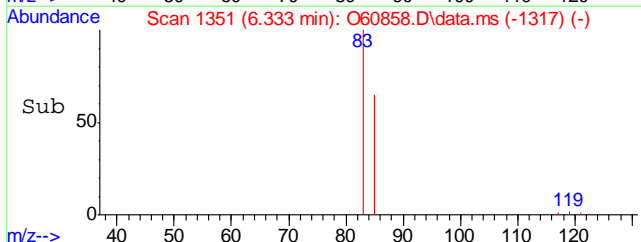
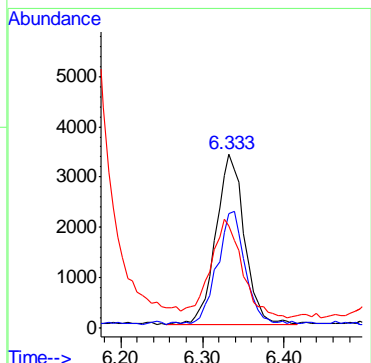
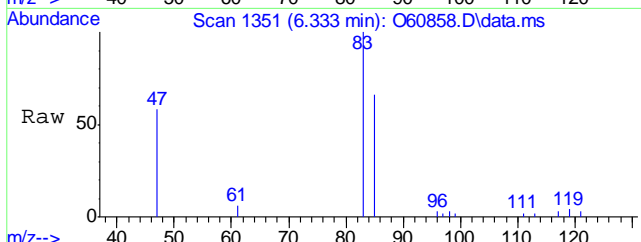
#8
 cis-1,2-Dichloroethene
 Concen: 1.29 ug/L
 RT: 6.072 min Scan# 1307
 Delta R.T. 0.000 min
 Lab File: O60858.D
 Acq: 8 Jul 2020 6:26 pm

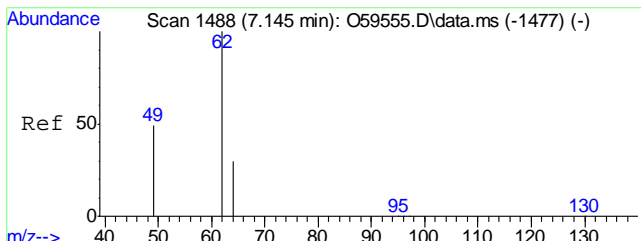
Tgt Ion	Resp	Lower	Upper
96	21002		
96	100		
61	125.6	110.0	170.0
98	60.0	34.1	94.1



#9
 Chloroform
 Concen: 0.28 ug/L
 RT: 6.333 min Scan# 1351
 Delta R.T. -0.000 min
 Lab File: O60858.D
 Acq: 8 Jul 2020 6:26 pm

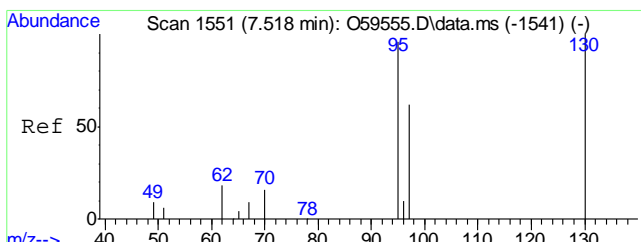
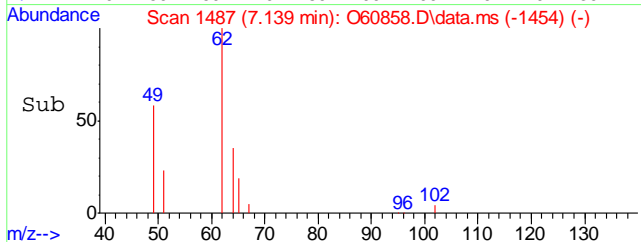
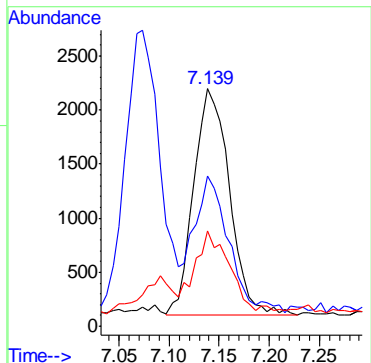
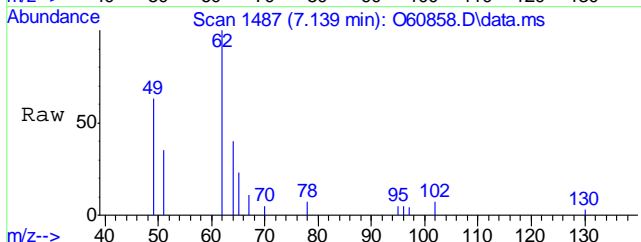
Tgt Ion	Resp	Lower	Upper
83	8110		
83	100		
85	65.4	34.7	94.7
47	52.3	9.0	69.0





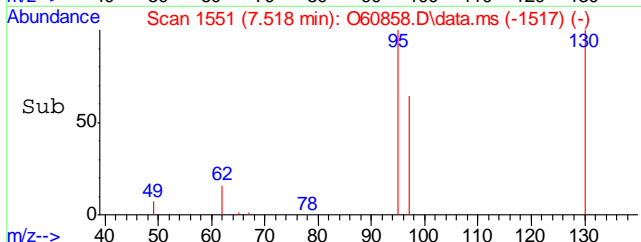
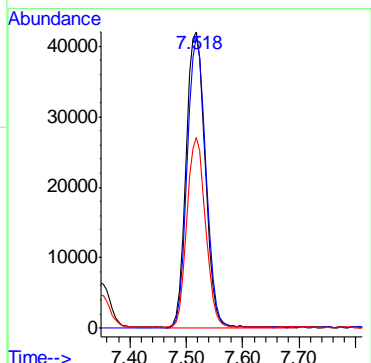
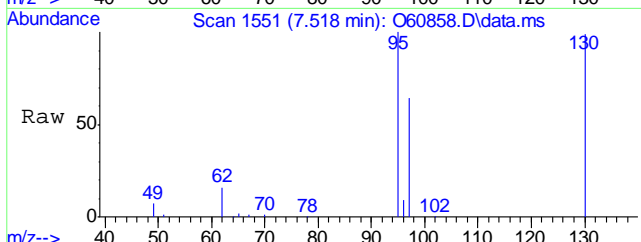
#14
 1,2-Dichloroethane
 Concen: 0.23 ug/L
 RT: 7.139 min Scan# 1487
 Delta R.T. -0.006 min
 Lab File: O60858.D
 Acq: 8 Jul 2020 6:26 pm

Tgt Ion	Resp	Lower	Upper
62	100		
49	57.8	17.8	77.8
64	34.6	1.3	61.3



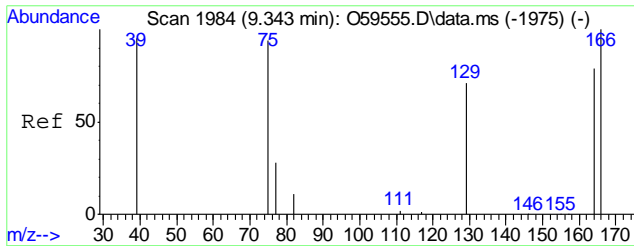
#15
 Trichloroethene
 Concen: 5.54 ug/L
 RT: 7.518 min Scan# 1551
 Delta R.T. 0.000 min
 Lab File: O60858.D
 Acq: 8 Jul 2020 6:26 pm

Tgt Ion	Resp	Lower	Upper
95	100		
130	98.6	63.4	123.4
97	64.3	35.0	95.0



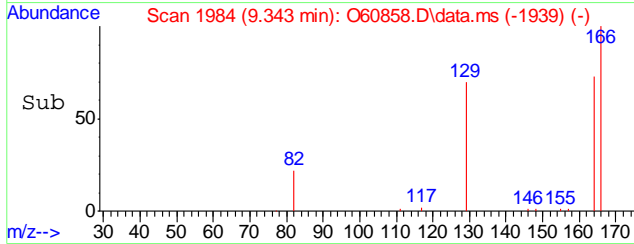
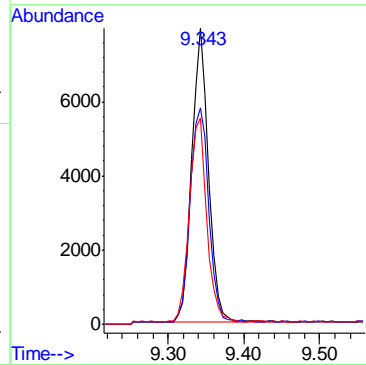
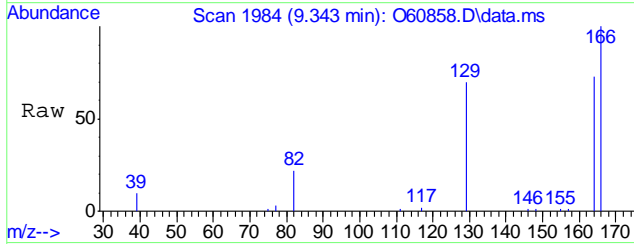
7.1.12
7





#21
 Tetrachloroethene
 Concen: 0.79 ug/L
 RT: 9.343 min Scan# 1984
 Delta R.T. 0.000 min
 Lab File: O60858.D
 Acq: 8 Jul 2020 6:26 pm

Tgt Ion	Resp	Lower	Upper
166	12124		
166	100		
164	73.1	48.3	108.3
129	69.1	39.5	99.5



7.1.12
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\070820\
 Data File : O60845.D
 Acq On : 8 Jul 2020 1:14 pm
 Operator : amandab
 Sample : MB Inst : MSVOA12
 Misc : MS46689,VO2338,,,,,
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jul 08 14:04:09 2020
 Quant Method : C:\msdchem\2\methods\SIMCL070220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jul 02 13:33:54 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.346	96	280445	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.447	117	178033	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.074	65	107594	5.23	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	104.60%	
19) Toluene-d8	8.900	98	219686	5.12	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	102.40%	

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

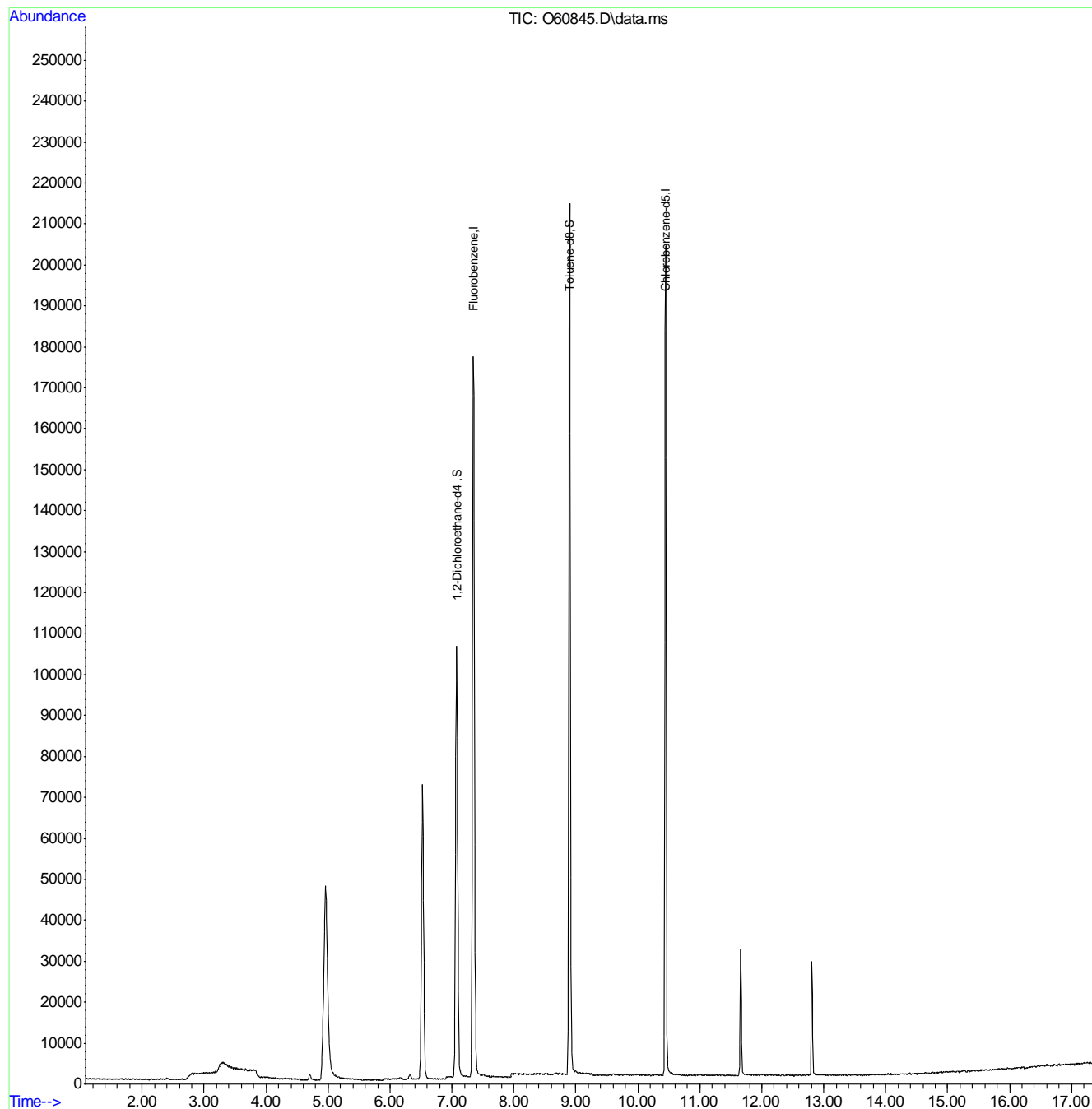
7.2.1
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\070820\
Data File : O60845.D
Acq On : 8 Jul 2020 1:14 pm
Operator : amandab
Sample : MB
Misc : MS46689,VO2338,,,,,
ALS Vial : 3 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Jul 08 14:04:09 2020
Quant Method : C:\msdchem\2\methods\SIMCL070220.M
Quant Title : Standard Methods 6200B
QLast Update : Thu Jul 02 13:33:54 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\070820\
 Data File : O60844.D
 Acq On : 8 Jul 2020 12:50 pm
 Operator : amandab
 Sample : BS Inst : MSVOA12
 Misc : MS46689,VO2338,,,,,
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 08 13:08:00 2020
 Quant Method : C:\msdchem\2\methods\SIMCL070220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jul 02 13:33:54 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.346	96	326742	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.447	117	210729	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.068	65	118209	4.93	ug/L	-0.01
Spiked Amount	5.000	Range 74 - 125	Recovery	=	98.60%	
19) Toluene-d8	8.896	98	252043	4.96	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	99.20%	
Target Compounds						
						Qvalue
2) Vinyl Chloride	2.897	62	167505	5.34	ug/L	99
3) Chloromethane	2.795	50	238999	4.43	ug/L	100
4) 1,1-Dichloroethene	4.085	61	202300	5.05	ug/L	99
5) Methylene Chloride	4.696	49	336900	5.03	ug/L	98
6) trans-1,2-Dichloroethene	4.862	61	230835	5.37	ug/L	97
7) 1,1-Dichloroethane	5.506	63	283374	5.21	ug/L	100
8) cis-1,2-Dichloroethene	6.066	96	153532	5.22	ug/L	99
9) Chloroform	6.327	83	275476	5.25	ug/L	98
10) Carbon Tetrachloride	6.505	117	179029	5.57	ug/L	99
11) 1,1,1-Trichloroethane	6.570	97	206425	5.46	ug/L	99
12) Benzene	6.937	78	484598	5.37	ug/L	100
14) 1,2-Dichloroethane	7.139	62	206617	5.04	ug/L	99
15) Trichloroethene	7.512	95	174952	5.49	ug/L	99
16) 1,2-Dichloropropane	8.040	63	164848	5.44	ug/L	99
17) cis-1,3-Dichloropropene	8.707	75	181740	5.37	ug/L	99
20) trans-1,3-Dichloropropene	9.343	75	179112	5.58	ug/L	99
21) Tetrachloroethene	9.337	166	147521	5.47	ug/L	95
22) 1,4-Dichlorobenzene	12.827	146	278926	5.37	ug/L	99
23) 1,2-Dibromo-3-Chloropr...	14.037	75	50055	4.96	ug/L	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

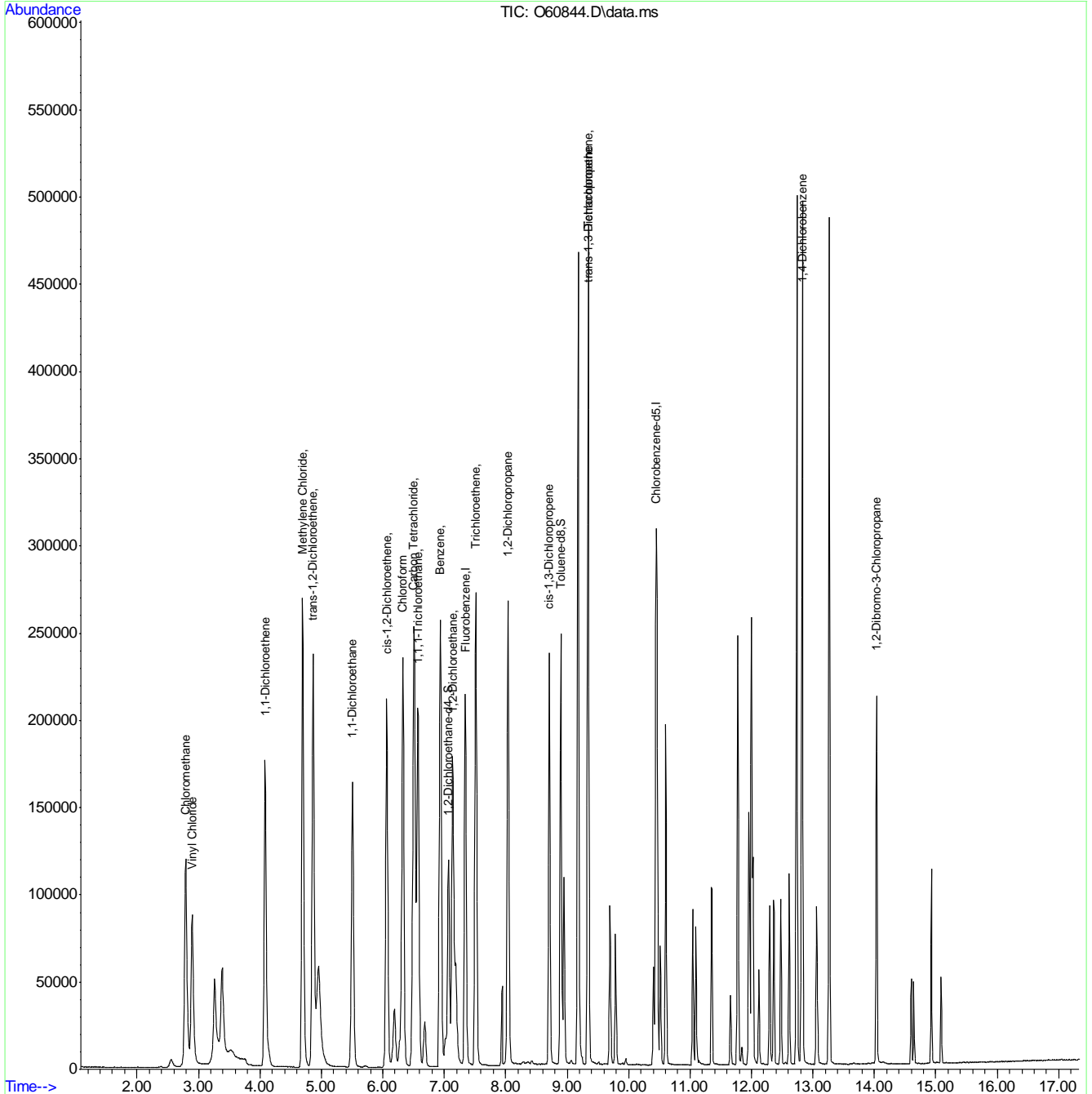
7.3.1
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\070820\
 Data File : O60844.D
 Acq On : 8 Jul 2020 12:50 pm
 Operator : amandab
 Sample : BS
 Misc : MS46689,VO2338,,,,,
 ALS Vial : 2 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Jul 08 13:08:00 2020
 Quant Method : C:\msdchem\2\methods\SIMCL070220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jul 02 13:33:54 2020
 Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\070820\
 Data File : O60851.D
 Acq On : 8 Jul 2020 3:38 pm
 Operator : amandab
 Sample : FA76591-2MS,5X Inst : MSVOA12
 Misc : MS46689,VO2338,,,,,5
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jul 09 07:33:22 2020
 Quant Method : C:\msdchem\2\methods\SIMCL070220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jul 02 13:33:54 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
Internal Standards							
1) Fluorobenzene	7.346	96	251937	5.00	ug/L	0.00	
18) Chlorobenzene-d5	10.447	117	166568	5.00	ug/L	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.074	65	102963	5.57	ug/L	0.00	
Spiked Amount	5.000	Range 74 - 125	Recovery	=	111.40%		
19) Toluene-d8	8.900	98	188314	4.69	ug/L	0.00	
Spiked Amount	5.000	Range 88 - 111	Recovery	=	93.80%		
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.912	62	147610	6.11	ug/L		98
3) Chloromethane	2.807	50	217613	5.26	ug/L		99
4) 1,1-Dichloroethene	4.092	61	146947	4.76	ug/L		97
5) Methylene Chloride	4.703	49	254782	4.93	ug/L		100
6) trans-1,2-Dichloroethene	4.869	61	166020	5.01	ug/L		97
7) 1,1-Dichloroethane	5.514	63	208056	4.96	ug/L		99
8) cis-1,2-Dichloroethene	6.072	96	110542	4.87	ug/L		100
9) Chloroform	6.333	83	199156	4.93	ug/L		98
10) Carbon Tetrachloride	6.511	117	122684	4.95	ug/L		97
11) 1,1,1-Trichloroethane	6.576	97	141975	4.87	ug/L		97
12) Benzene	6.943	78	343060	4.93	ug/L		100
14) 1,2-Dichloroethane	7.145	62	150269	4.75	ug/L		100
15) Trichloroethene	7.518	95	112300	4.57	ug/L		99
16) 1,2-Dichloropropane	8.043	63	117481	5.02	ug/L		96
17) cis-1,3-Dichloropropene	8.711	75	115516	4.43	ug/L		96
20) trans-1,3-Dichloropropene	9.343	75	114057	4.49	ug/L		96
21) Tetrachloroethene	9.343	166	106133	4.98	ug/L		99
22) 1,4-Dichlorobenzene	12.827	146	199905	4.87	ug/L		99
23) 1,2-Dibromo-3-Chloropr...	14.038	75	31440	3.94	ug/L		95

(#) = qualifier out of range (m) = manual integration (+) = signals summed

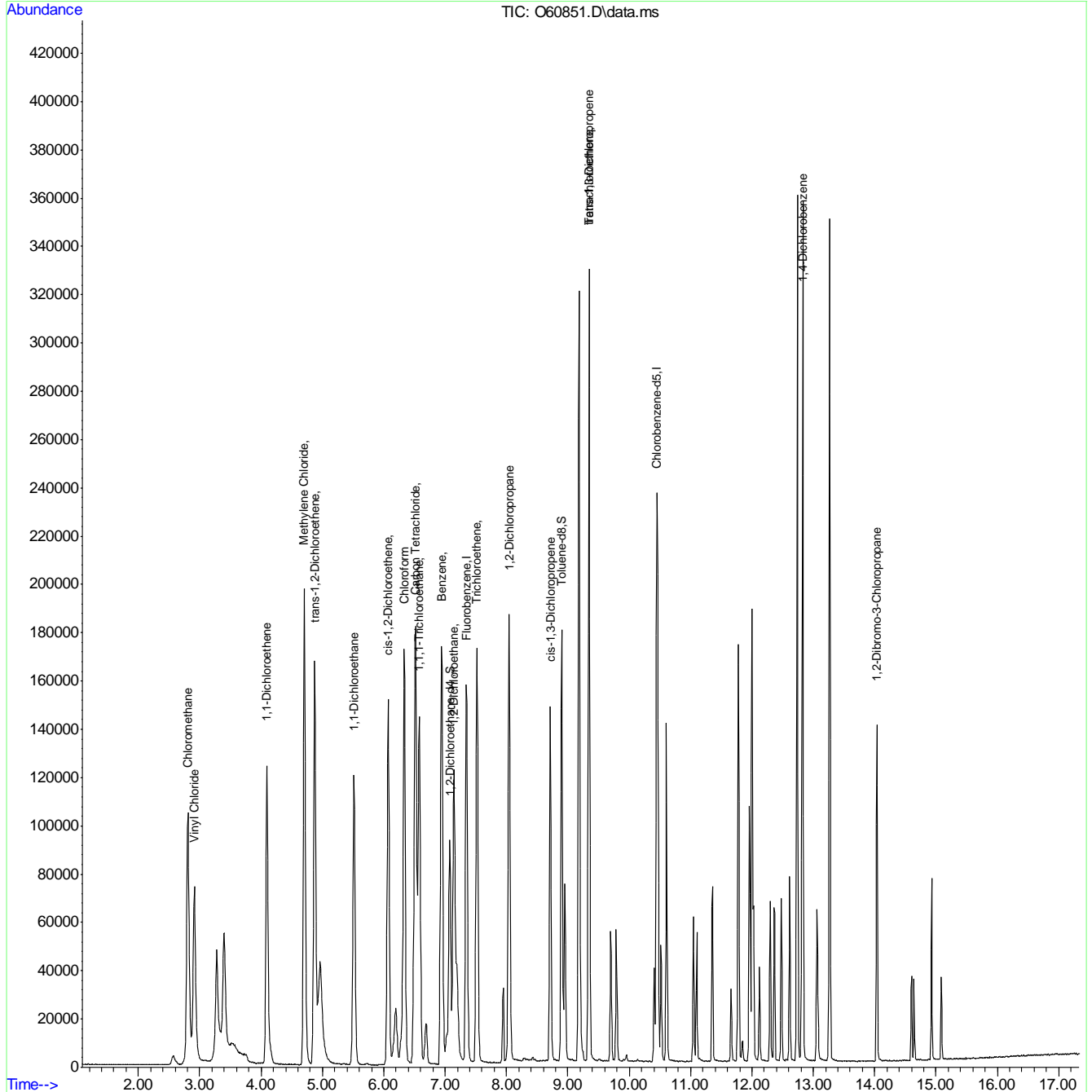
7.4.1
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\070820\
 Data File : O60851.D
 Acq On : 8 Jul 2020 3:38 pm
 Operator : amandab
 Sample : FA76591-2MS,5X
 Misc : MS46689,VO2338,,,,,5
 ALS Vial : 9 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Jul 09 07:33:22 2020
 Quant Method : C:\msdchem\2\methods\SIMCL070220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jul 02 13:33:54 2020
 Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\070820\
 Data File : O60852.D
 Acq On : 8 Jul 2020 4:01 pm
 Operator : amandab
 Sample : FA76591-2MSD,5X Inst : MSVOA12
 Misc : MS46689,VO2338,,,,,5
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jul 09 07:33:24 2020
 Quant Method : C:\msdchem\2\methods\SIMCL070220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jul 02 13:33:54 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.346	96	262041	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.447	117	172540	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.074	65	106809	5.55	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	111.00%	
19) Toluene-d8	8.900	98	197199	4.74	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	94.80%	
Target Compounds						
						Qvalue
2) Vinyl Chloride	2.908	62	155136	6.17	ug/L	99
3) Chloromethane	2.803	50	227583	5.29	ug/L	99
4) 1,1-Dichloroethene	4.089	61	163236	5.08	ug/L	96
5) Methylene Chloride	4.700	49	283869	5.29	ug/L	97
6) trans-1,2-Dichloroethene	4.869	61	185999	5.39	ug/L	99
7) 1,1-Dichloroethane	5.514	63	231930	5.32	ug/L	99
8) cis-1,2-Dichloroethene	6.066	96	123596	5.24	ug/L	96
9) Chloroform	6.333	83	221897	5.28	ug/L	98
10) Carbon Tetrachloride	6.511	117	138523	5.37	ug/L	98
11) 1,1,1-Trichloroethane	6.576	97	161471	5.33	ug/L	98
12) Benzene	6.943	78	382615	5.28	ug/L	100
14) 1,2-Dichloroethane	7.139	62	167295	5.09	ug/L	99
15) Trichloroethene	7.518	95	127597	4.99	ug/L	96
16) 1,2-Dichloropropane	8.044	63	129997	5.35	ug/L	97
17) cis-1,3-Dichloropropene	8.711	75	130684	4.82	ug/L	99
20) trans-1,3-Dichloropropene	9.343	75	129009	4.91	ug/L	96
21) Tetrachloroethene	9.343	166	118449	5.36	ug/L	99
22) 1,4-Dichlorobenzene	12.827	146	223450	5.26	ug/L	98
23) 1,2-Dibromo-3-Chloropr...	14.038	75	35564	4.31	ug/L	96

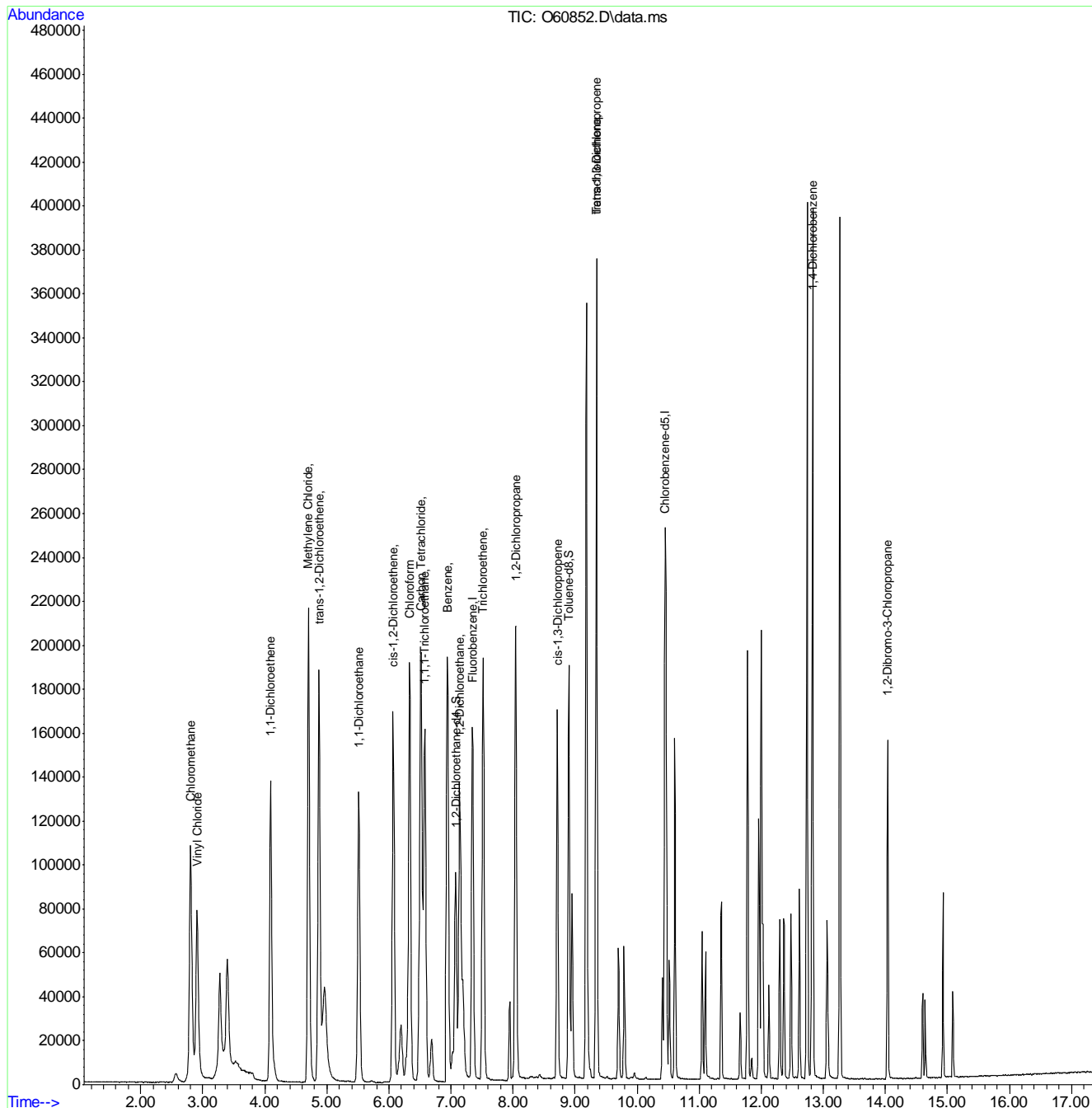
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\070820\
 Data File : O60852.D
 Acq On : 8 Jul 2020 4:01 pm
 Operator : amandab
 Sample : FA76591-2MSD,5X
 Misc : MS46689,VO2338,,,,,5
 ALS Vial : 10 Sample Multiplier: 1

Inst : MSVOA12

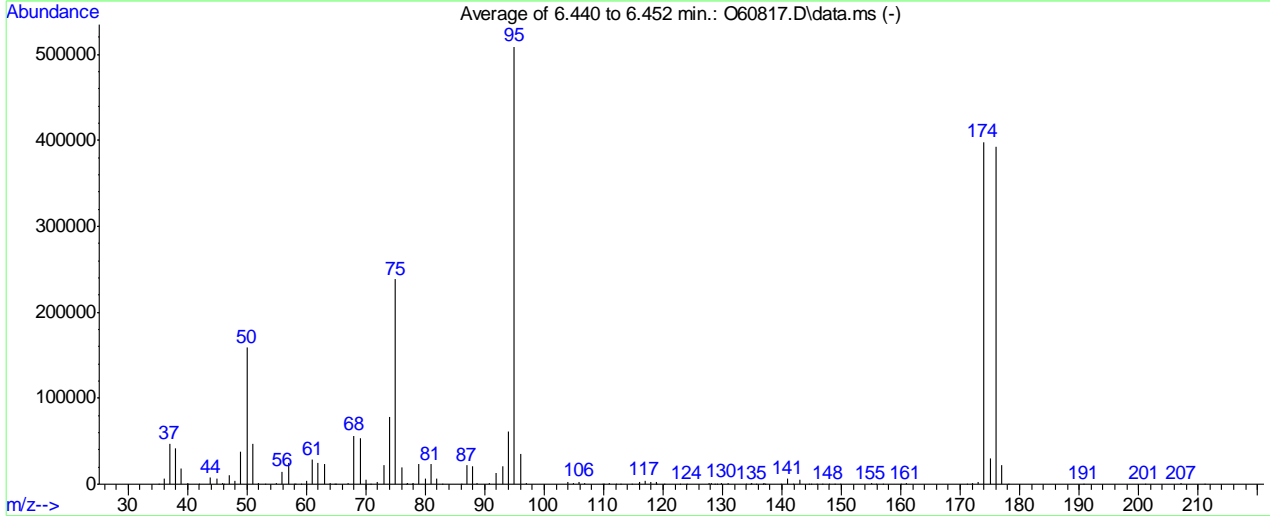
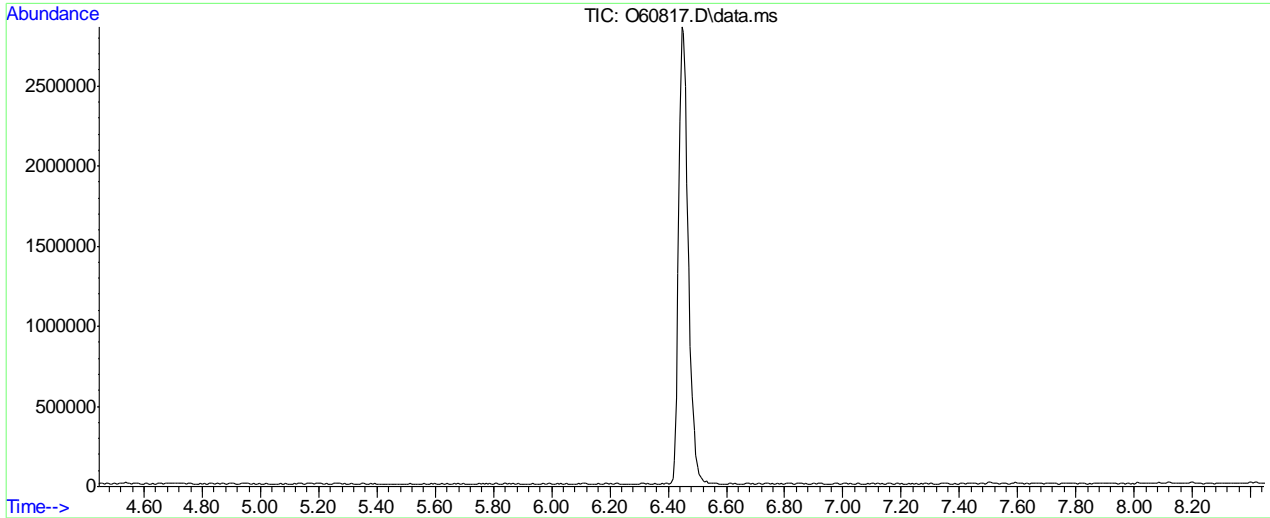
Quant Time: Jul 09 07:33:24 2020
 Quant Method : C:\msdchem\2\methods\SIMCL070220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jul 02 13:33:54 2020
 Response via : Initial Calibration



7.4.2
7

Methods: SW-846 8260B
 Data File : C:\msdchem\2\data\070220\O60817.D Vial: 100
 Acq On : 2 Jul 2020 8:25 am Operator: amandab
 Sample : BFB Inst : MSVOA12
 Misc : MS46601,VO2337,,,,, Multiplr: 1.00
 MS Integration Params: rteint.p

Method : C:\msdchem\2\methods\SIMCL070220.M (RTE Integrator)
 Title : Standard Methods 6200B

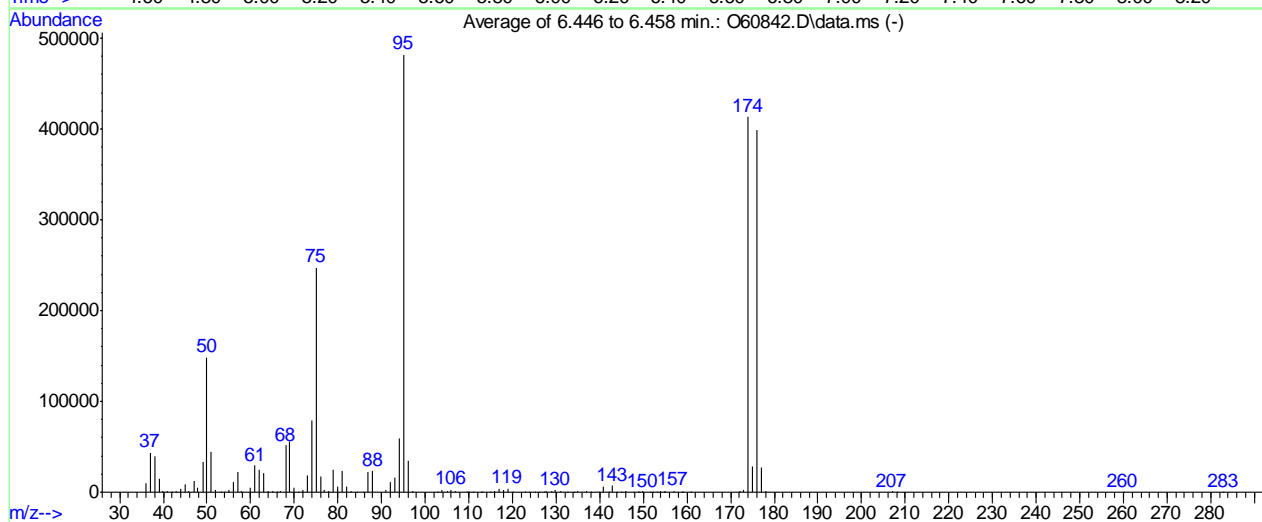
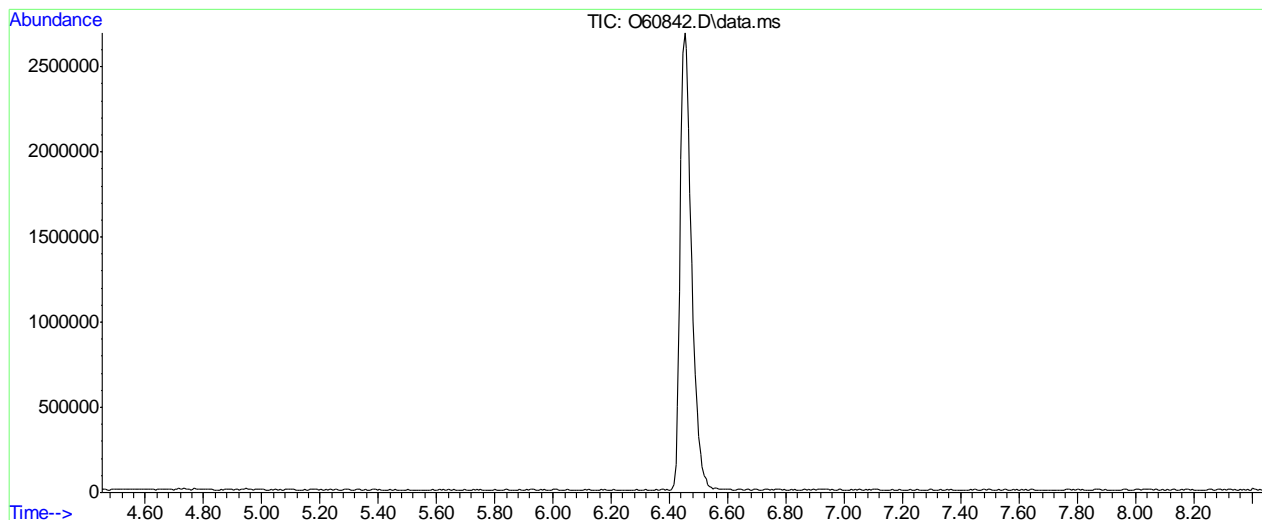


AutoFind: Scans 468, 469, 470; Background Corrected with Scan 460

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	31.2	158784	PASS
75	95	30	60	46.8	238571	PASS
95	95	100	100	100.0	509461	PASS
96	95	5	9	6.8	34768	PASS
173	174	0.00	2	0.7	2676	PASS
174	95	50	100	78.1	398016	PASS
175	174	5	9	7.6	30053	PASS
176	174	95	101	98.6	392512	PASS
177	176	5	9	5.7	22248	PASS

Methods: SW-846 8260B
 Data File : C:\msdchem\2\data\070820\O60842.D Vial: 100
 Acq On : 8 Jul 2020 12:07 pm Operator: amandab
 Sample : BFB Inst : MSVOA12
 Misc : MS46657,VO2338,,,,, Multiplr: 1.00
 MS Integration Params: rteint.p

Method : C:\msdchem\2\methods\SIMCL070220.M (RTE Integrator)
 Title : Standard Methods 6200B



AutoFind: Scans 469, 470, 471; Background Corrected with Scan 460

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	30.8	148632	PASS
75	95	30	60	51.2	246976	PASS
95	95	100	100	100.0	482155	PASS
96	95	5	9	7.3	34987	PASS
173	174	0.00	2	0.6	2684	PASS
174	95	50	100	85.8	413568	PASS
175	174	5	9	6.7	27901	PASS
176	174	95	101	96.6	399339	PASS
177	176	5	9	6.7	26784	PASS

O60842.D SIMCL070220.M Wed Jul 08 12:17:50 2020

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\070220\
 Data File : O60820.D
 Acq On : 2 Jul 2020 10:49 am
 Operator : amandab
 Sample : IC2337-1 Inst : MSVOA12
 Misc : MS46657,VO2337,,,,,
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 02 11:32:38 2020
 Quant Method : C:\msdchem\2\methods\SIMCL070220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jun 18 12:40:46 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.346	96	389489	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.441	117	246974	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.068	65	146743	4.91	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	98.20%	
19) Toluene-d8	8.896	98	308482	5.63	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	112.60%#	
Target Compounds						
						Qvalue
2) Vinyl Chloride	2.908	62	3479	0.06	ug/L	94
3) Chloromethane	2.806	50	15964	0.15	ug/L	99
4) 1,1-Dichloroethene	4.092	61	4983	0.10	ug/L	97
5) Methylene Chloride	4.699	49	15605	0.14	ug/L	99
6) trans-1,2-Dichloroethene	4.869	61	5491	0.09	ug/L	99
7) 1,1-Dichloroethane	5.514	63	17594	0.23	ug/L	97
8) cis-1,2-Dichloroethene	6.066	96	4029	0.10	ug/L	85
9) Chloroform	6.333	83	6760	0.09	ug/L	88
10) Carbon Tetrachloride	6.511	117	4090	0.09	ug/L	97
11) 1,1,1-Trichloroethane	6.576	97	4913	0.10	ug/L	85
12) Benzene	6.937	78	31827	0.26	ug/L	99
14) 1,2-Dichloroethane	7.139	62	9816	0.17	ug/L	96
15) Trichloroethene	7.512	95	4327	0.10	ug/L	92
16) 1,2-Dichloropropane	8.043	63	3612m	0.08	ug/L	
17) cis-1,3-Dichloropropene	8.711	75	4058	0.09	ug/L	87
20) trans-1,3-Dichloropropene	9.343	75	3545	0.11	ug/L	91
21) Tetrachloroethene	9.337	166	3437m	0.11	ug/L	
22) 1,4-Dichlorobenzene	12.827	146	5966	0.10	ug/L	96
23) 1,2-Dibromo-3-Chloropr...	14.032	75	1337m	0.13	ug/L	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

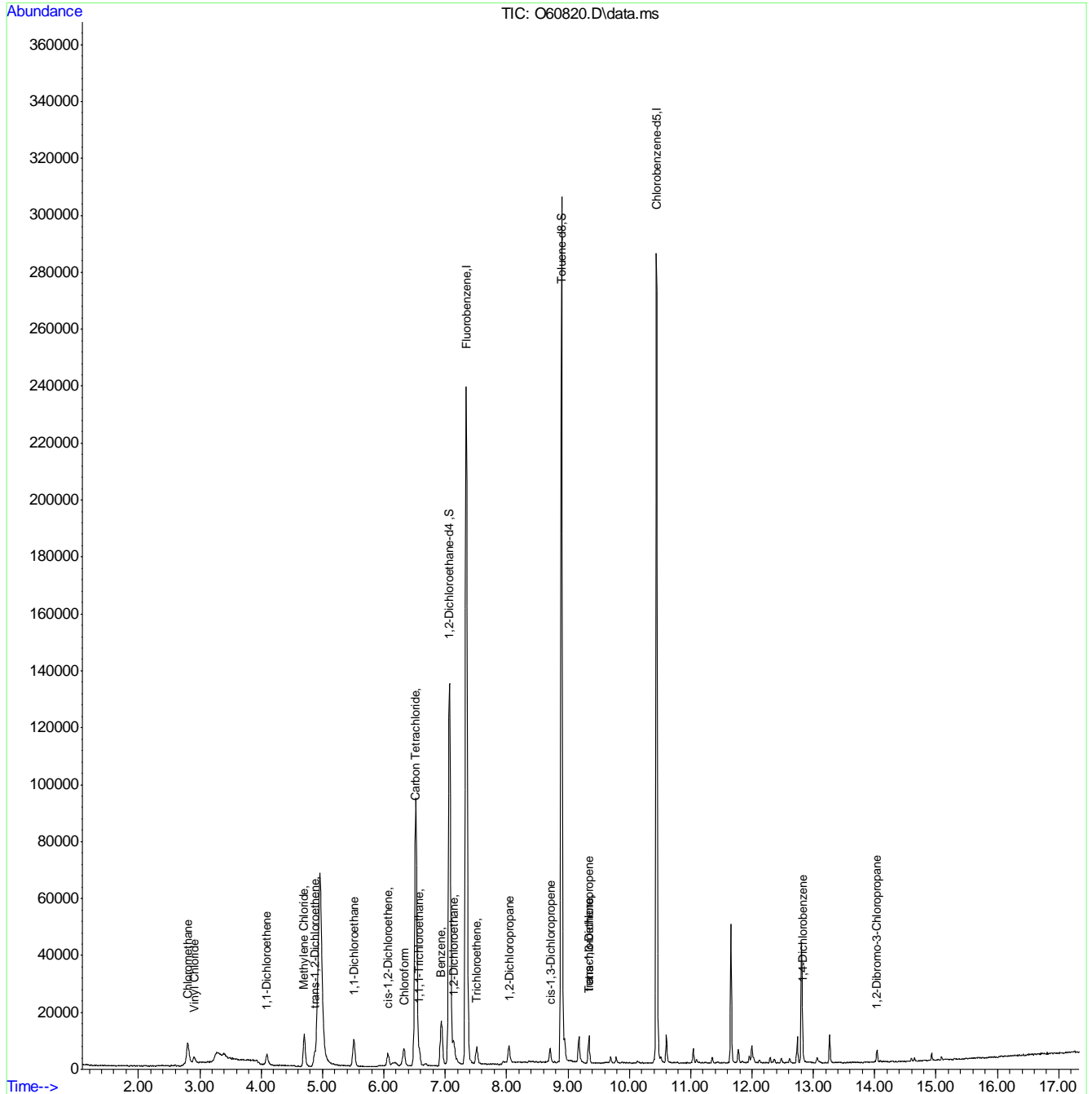
7.6.1
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\070220\
 Data File : O60820.D
 Acq On : 2 Jul 2020 10:49 am
 Operator : amandab
 Sample : IC2337-1
 Misc : MS46657,VO2337,,,,,
 ALS Vial : 1 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Jul 02 11:32:38 2020
 Quant Method : C:\msdchem\2\methods\SIMCL070220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jun 18 12:40:46 2020
 Response via : Initial Calibration



Manual Integration Approval Summary

Sample Number: VO2337-IC2337 **Method:** SW846 8260B BY SIM
Lab FileID: O60820.D **Analyst approved:** 07/02/20 14:27 Amanda Bacsko
Injection Time: 07/02/20 10:49 **Supervisor approved:** 07/06/20 08:23 Melissa Mangual

Parameter	CAS	Sig#	R.T. (min.)	Reason
1,2-Dichloropropane	78-87-5		8.04	Poor instrument integration
Tetrachloroethylene	127-18-4		9.34	Poor instrument integration
1,2-Dibromo-3-chloropropane	96-12-8		14.03	Missed peak

7.6.1.1

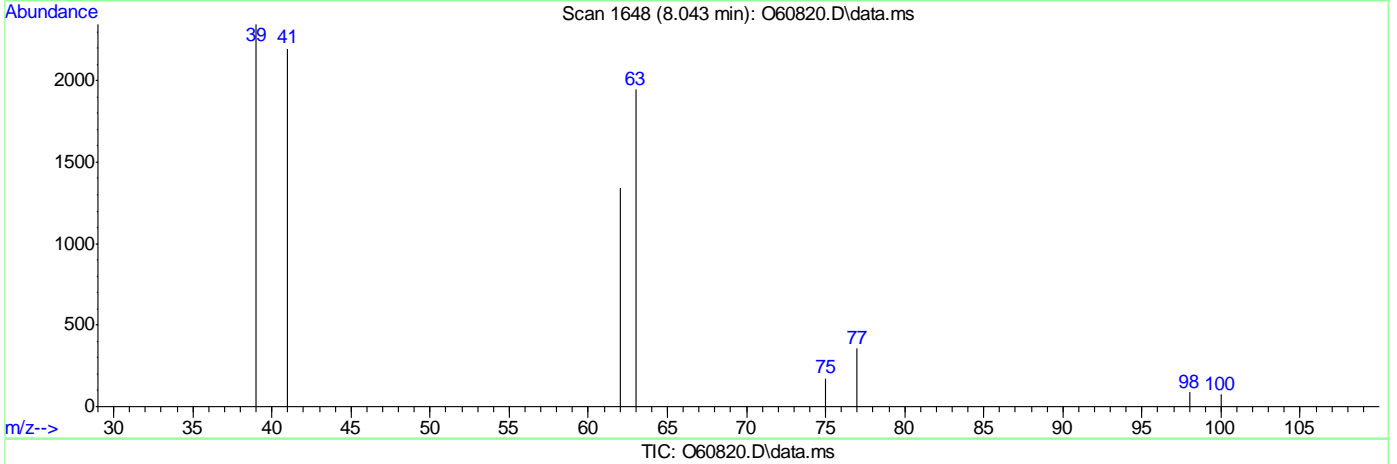
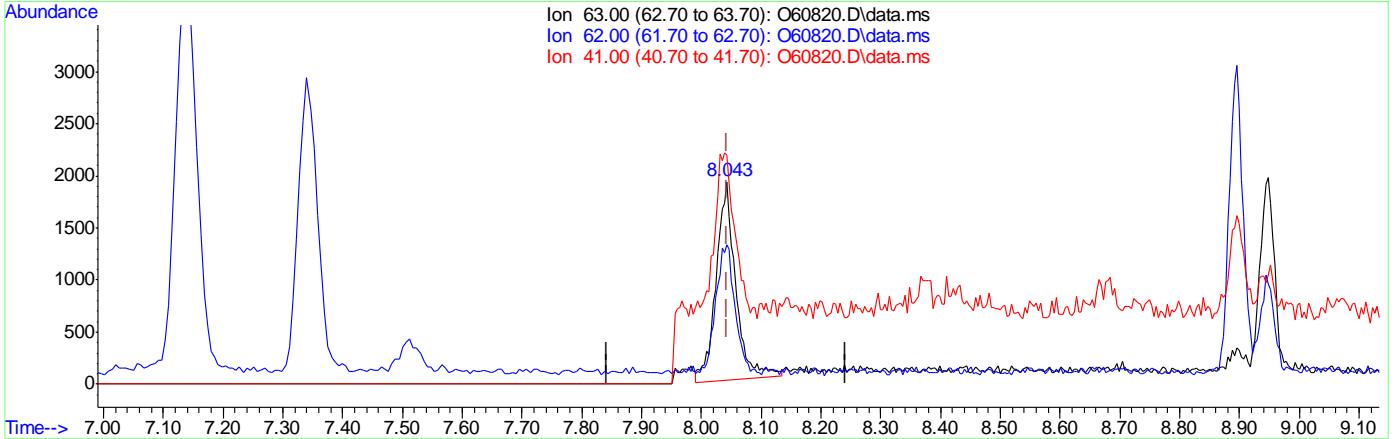
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\070220\
 Data File : O60820.D
 Acq On : 2 Jul 2020 10:49 am
 Operator : amandab
 Sample : IC2337-1
 Misc : MS46657,VO2337,,,,,
 ALS Vial : 1 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Jul 02 11:31:39 2020
 Quant Method : C:\msdchem\2\methods\SIMCL070220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jun 18 12:40:46 2020
 Response via : Initial Calibration



(16) 1,2-Dichloropropane
 8.043min (+0.000) 0.10ug/L
 response 4270

Ion	Exp%	Act%
63.00	100	100
62.00	72.70	68.16
41.00	92.50	80.16
0.00	0.00	0.00

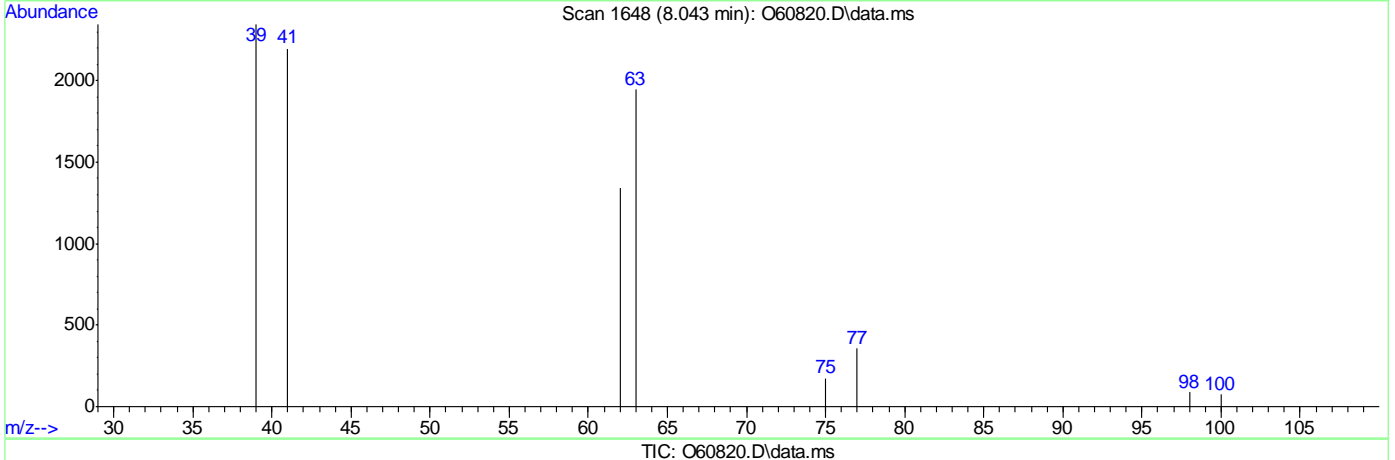
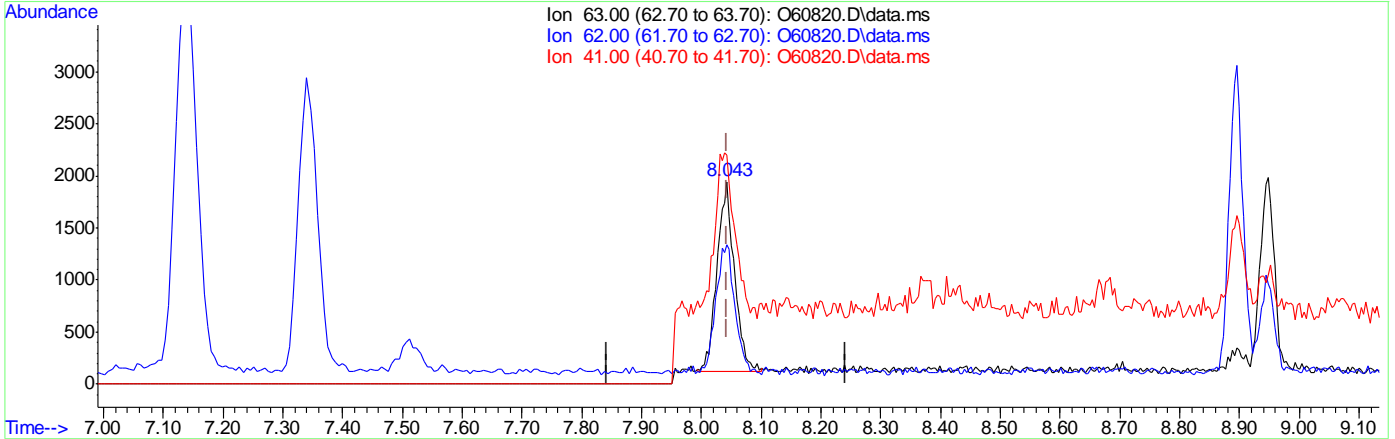
7.6.12
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\070220\
 Data File : O60820.D
 Acq On : 2 Jul 2020 10:49 am
 Operator : amandab
 Sample : IC2337-1
 Misc : MS46657,VO2337,,,,,
 ALS Vial : 1 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Jul 02 11:31:39 2020
 Quant Method : C:\msdchem\2\methods\SIMCL070220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jun 18 12:40:46 2020
 Response via : Initial Calibration



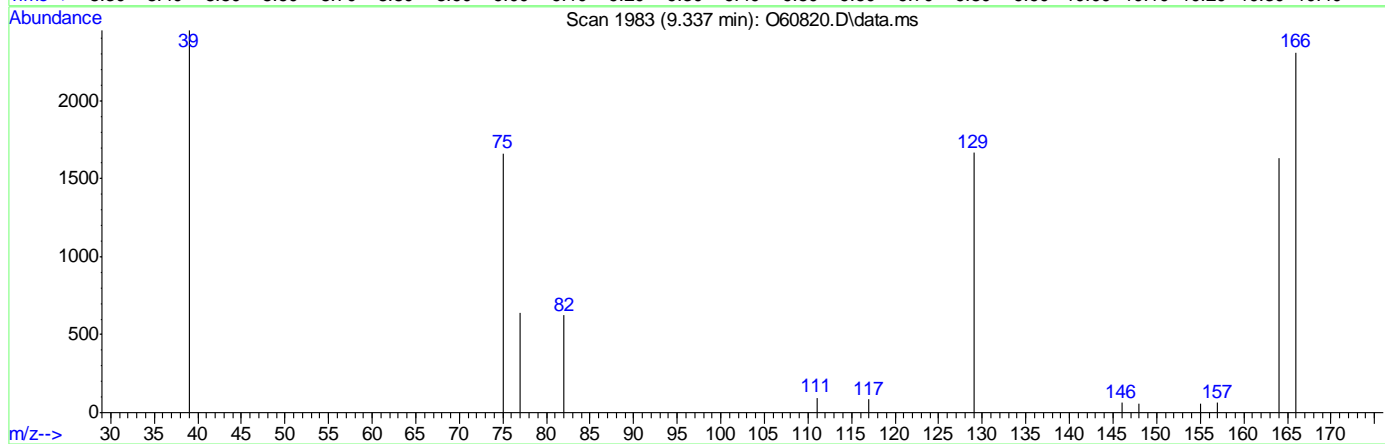
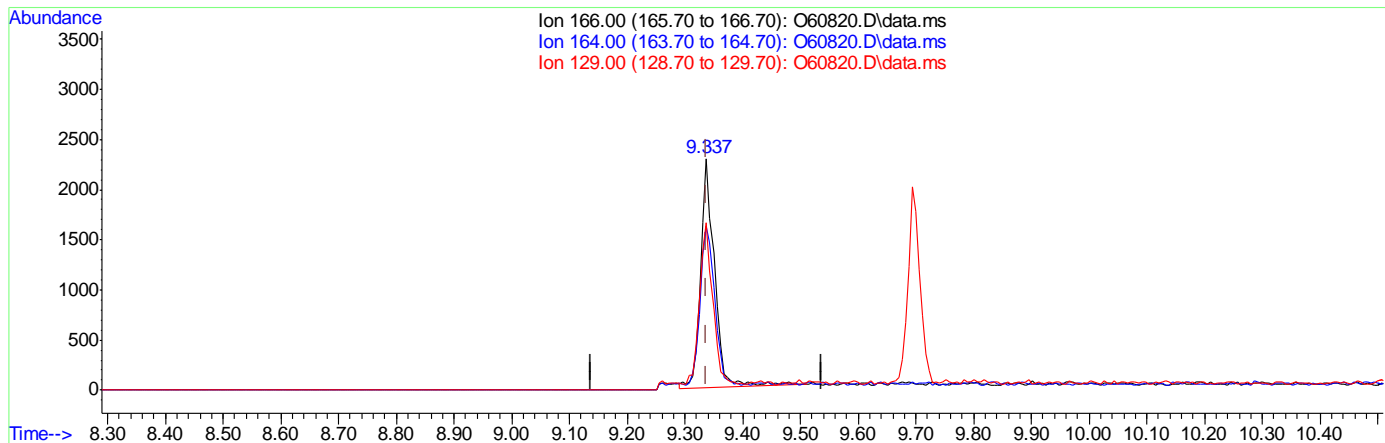
(16) 1,2-Dichloropropane
 8.043min (+0.000) 0.08ug/L m
 response 3612

Ion	Exp%	Act%
63.00	100	100
62.00	72.70	68.91
41.00	92.50	112.74
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\070220\
 Data File : O60820.D
 Acq On : 2 Jul 2020 10:49 am
 Operator : amandab
 Sample : IC2337-1 Inst : MSVOA12
 Misc : MS46657,VO2337,,,,,
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 02 11:31:39 2020
 Quant Method : C:\msdchem\2\methods\SIMCL070220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jun 18 12:40:46 2020
 Response via : Initial Calibration



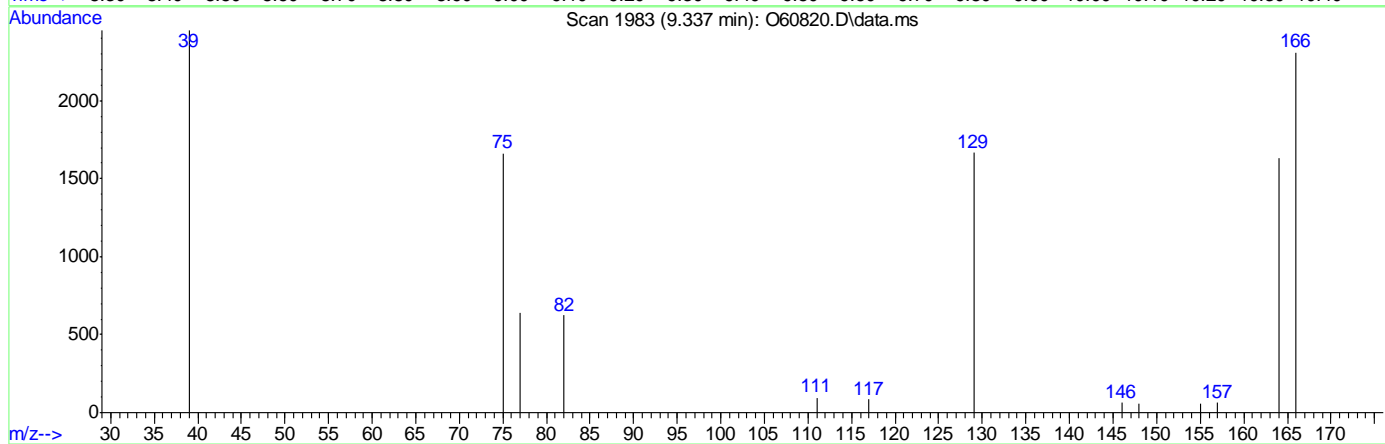
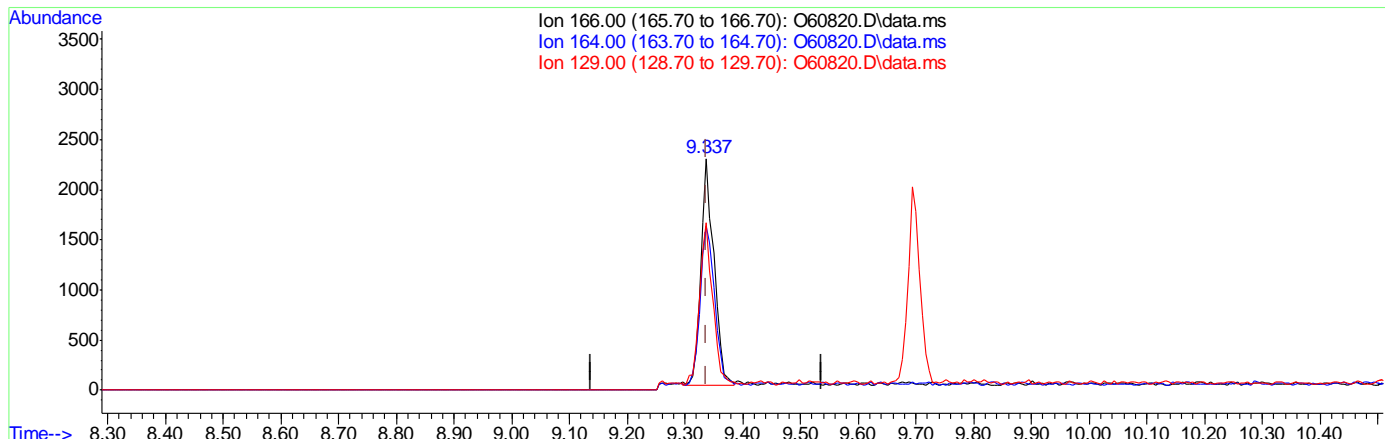
(21) Tetrachloroethene ()
 9.337min (+0.000) 0.12ug/L
 response 3771

Ion	Exp%	Act%
166.00	100	100
164.00	79.80	69.27
129.00	73.70	70.96
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\070220\
 Data File : O60820.D
 Acq On : 2 Jul 2020 10:49 am
 Operator : amandab
 Sample : IC2337-1 Inst : MSVOA12
 Misc : MS46657,VO2337,,,,,
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 02 11:31:39 2020
 Quant Method : C:\msdchem\2\methods\SIMCL070220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jun 18 12:40:46 2020
 Response via : Initial Calibration



(21) Tetrachloroethene ()
 9.337min (+0.000) 0.11ug/L m
 response 3437

Ion	Exp%	Act%
166.00	100	100
164.00	79.80	70.62
129.00	73.70	72.05
0.00	0.00	0.00

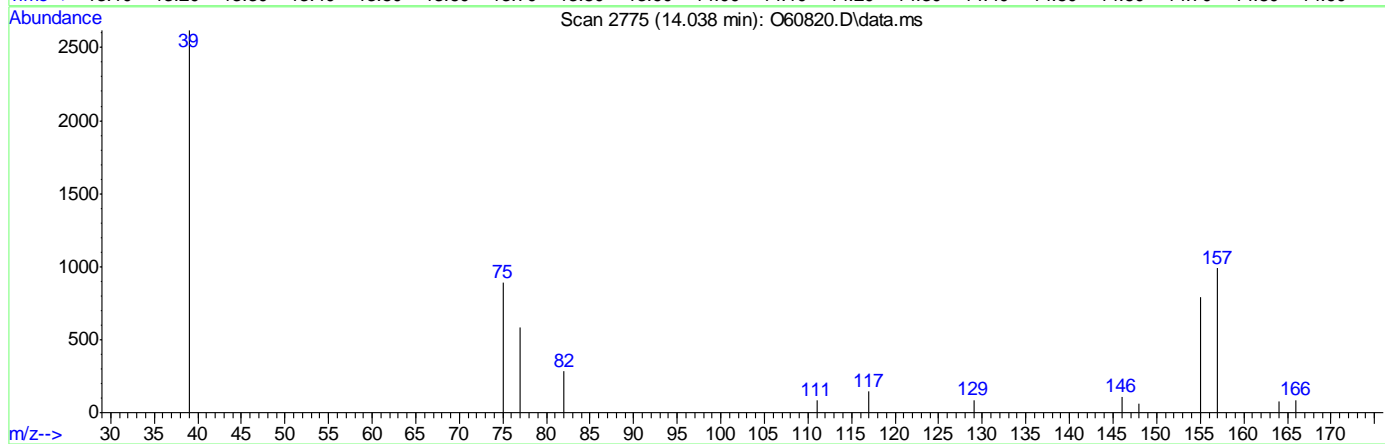
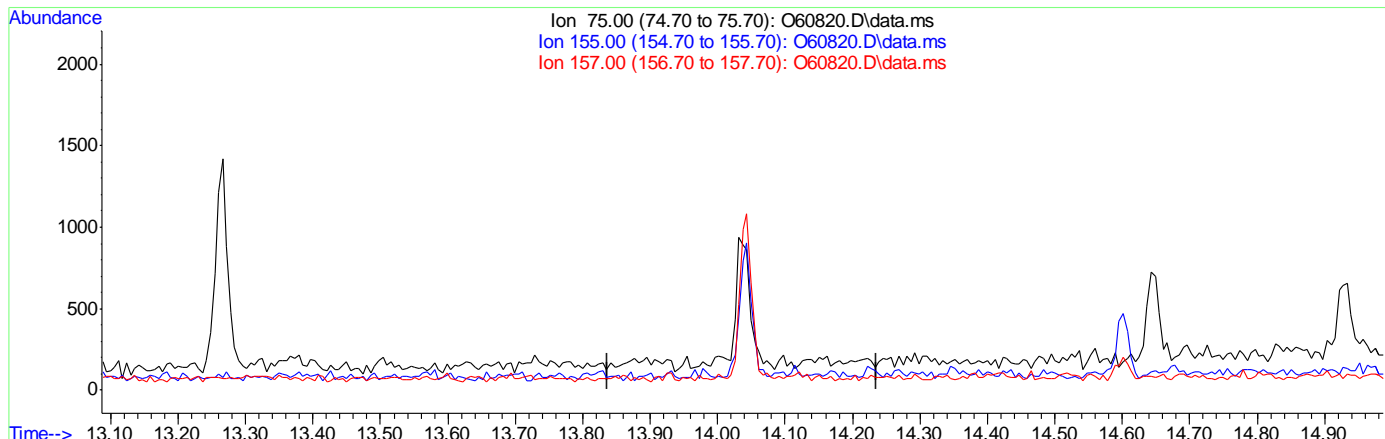
7.6.1.5
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\070220\
 Data File : O60820.D
 Acq On : 2 Jul 2020 10:49 am
 Operator : amandab
 Sample : IC2337-1
 Misc : MS46657,VO2337,,,,,
 ALS Vial : 1 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Jul 02 11:31:39 2020
 Quant Method : C:\msdchem\2\methods\SIMCL070220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jun 18 12:40:46 2020
 Response via : Initial Calibration



(23) 1,2-Dibromo-3-Chloropropane

14.037min (-14.037) 0.00ug/L

response 0

Ion	Exp%	Act%
75.00	100	0.00
155.00	91.70	0.00#
157.00	113.30	0.00#
0.00	0.00	0.00

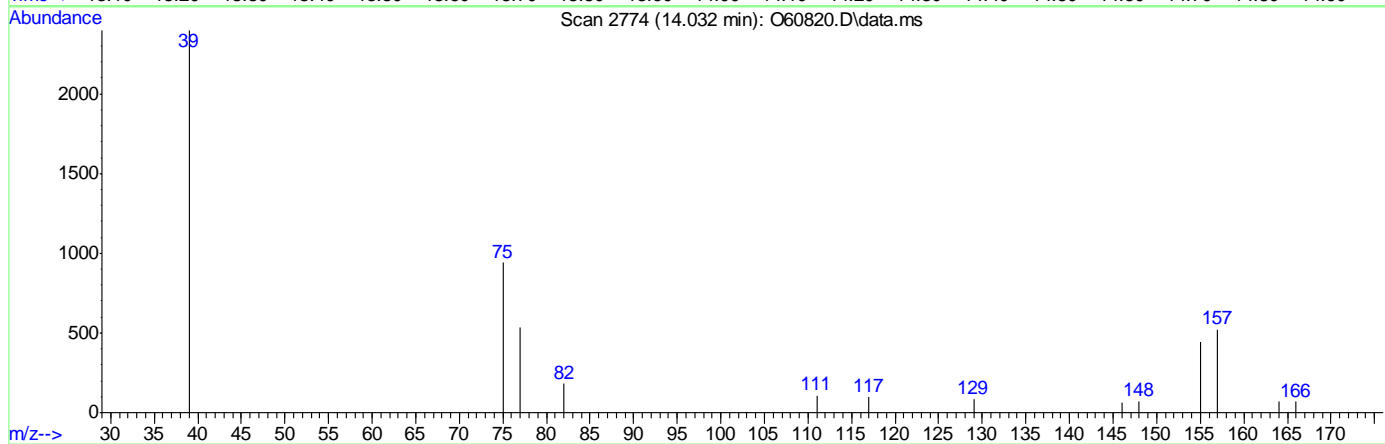
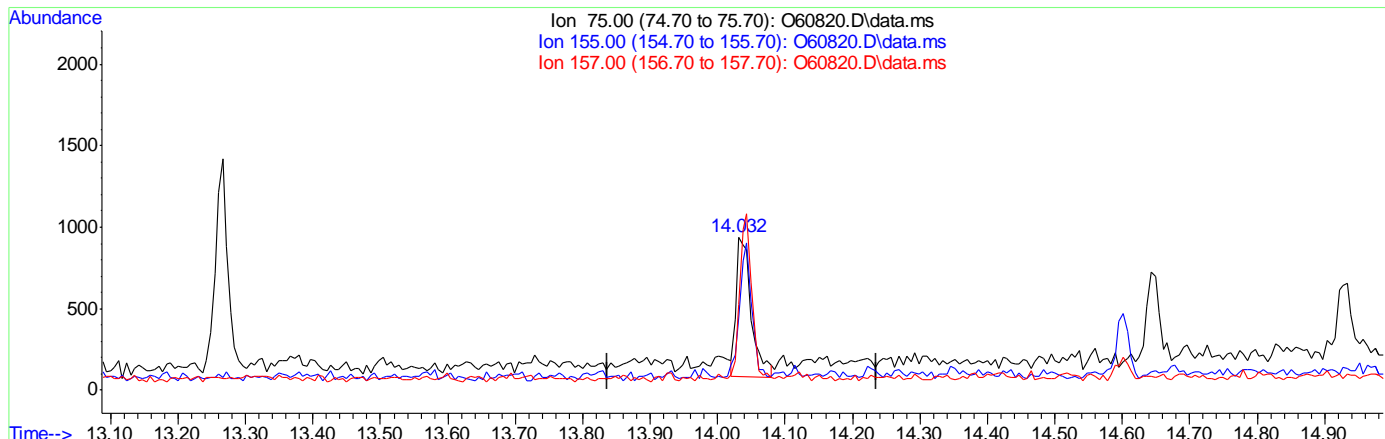
7.6.1.6
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\070220\
 Data File : O60820.D
 Acq On : 2 Jul 2020 10:49 am
 Operator : amandab
 Sample : IC2337-1
 Misc : MS46657,VO2337,,,,,
 ALS Vial : 1 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Jul 02 11:31:39 2020
 Quant Method : C:\msdchem\2\methods\SIMCL070220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jun 18 12:40:46 2020
 Response via : Initial Calibration



(23) 1,2-Dibromo-3-Chloropropane

14.032min (-0.005) 0.13ug/L m

response 1337

Ion	Exp%	Act%
75.00	100	100
155.00	91.70	47.18#
157.00	113.30	55.69#
0.00	0.00	0.00

7.6.1.7
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\070220\
 Data File : O60821.D
 Acq On : 2 Jul 2020 11:12 am
 Operator : amandab
 Sample : IC2337-2 Inst : MSVOA12
 Misc : MS46657,VO2337,,,,,
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 02 11:31:41 2020
 Quant Method : C:\msdchem\2\methods\SIMCL070220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jun 18 12:40:46 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.346	96	317197	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.447	117	203515	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.074	65	118591	4.88	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	97.60%	
19) Toluene-d8	8.900	98	249331	5.52	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	110.40%	
Target Compounds						
						Qvalue
2) Vinyl Chloride	2.908	62	14066	0.28	ug/L	98
3) Chloromethane	2.803	50	26961	0.31	ug/L	95
4) 1,1-Dichloroethene	4.092	61	17981	0.44	ug/L	95
5) Methylene Chloride	4.703	49	35330	0.39	ug/L	99
6) trans-1,2-Dichloroethene	4.869	61	19601	0.39	ug/L	98
7) 1,1-Dichloroethane	5.518	63	24380	0.39	ug/L	100
8) cis-1,2-Dichloroethene	6.072	96	12981	0.40	ug/L	99
9) Chloroform	6.333	83	23723	0.40	ug/L	99
10) Carbon Tetrachloride	6.511	117	14000	0.40	ug/L	93
11) 1,1,1-Trichloroethane	6.576	97	15978	0.39	ug/L	97
12) Benzene	6.943	78	41706	0.41	ug/L	96
14) 1,2-Dichloroethane	7.145	62	17966	0.38	ug/L	94
15) Trichloroethene	7.512	95	13724	0.39	ug/L	96
16) 1,2-Dichloropropane	8.040	63	14068	0.40	ug/L	93
17) cis-1,3-Dichloropropene	8.711	75	13707	0.39	ug/L	93
20) trans-1,3-Dichloropropene	9.343	75	12674	0.46	ug/L	94
21) Tetrachloroethene	9.343	166	12250	0.46	ug/L	94
22) 1,4-Dichlorobenzene	12.827	146	22111	0.43	ug/L	99
23) 1,2-Dibromo-3-Chloropr...	14.038	75	4256	0.51	ug/L #	84

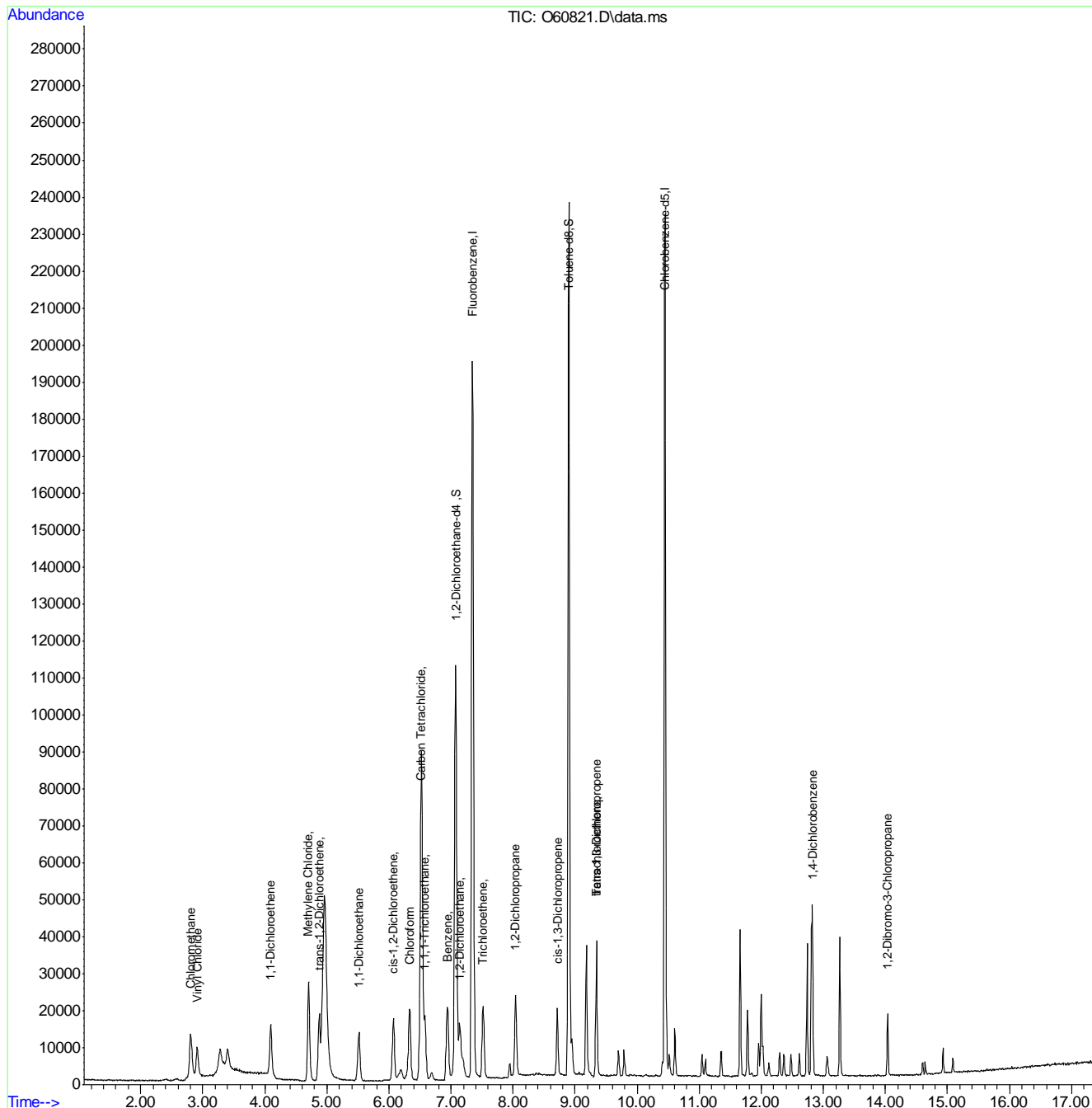
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\070220\
 Data File : 060821.D
 Acq On : 2 Jul 2020 11:12 am
 Operator : amandab
 Sample : IC2337-2
 Misc : MS46657,VO2337,,,,,
 ALS Vial : 2 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Jul 02 11:31:41 2020
 Quant Method : C:\msdchem\2\methods\SIMCL070220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jun 18 12:40:46 2020
 Response via : Initial Calibration



7.6.2
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\070220\
 Data File : O60822.D
 Acq On : 2 Jul 2020 11:37 am
 Operator : amandab
 Sample : IC2337-3 Inst : MSVOA12
 Misc : MS46657,VO2337,,,,,
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jul 02 12:00:29 2020
 Quant Method : C:\msdchem\2\methods\SIMCL070220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jun 18 12:40:46 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.346	96	313328	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.447	117	202873	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.073	65	119301	4.97	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	99.40%	
19) Toluene-d8	8.900	98	244756	5.44	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	108.80%	
Target Compounds						
						Qvalue
2) Vinyl Chloride	2.908	62	63310	1.30	ug/L	98
3) Chloromethane	2.810	50	104776	1.22	ug/L	99
4) 1,1-Dichloroethene	4.092	61	64750	1.59	ug/L	98
5) Methylene Chloride	4.703	49	125986	1.41	ug/L	99
6) trans-1,2-Dichloroethene	4.873	61	75293	1.52	ug/L	97
7) 1,1-Dichloroethane	5.514	63	93208	1.53	ug/L	99
8) cis-1,2-Dichloroethene	6.072	96	50766	1.57	ug/L	97
9) Chloroform	6.333	83	92648	1.58	ug/L	97
10) Carbon Tetrachloride	6.510	117	51180	1.46	ug/L	99
11) 1,1,1-Trichloroethane	6.576	97	62134	1.51	ug/L	99
12) Benzene	6.943	78	157953	1.58	ug/L	95
14) 1,2-Dichloroethane	7.139	62	73424	1.57	ug/L	99
15) Trichloroethene	7.518	95	53331	1.54	ug/L	99
16) 1,2-Dichloropropane	8.043	63	55712	1.61	ug/L	94
17) cis-1,3-Dichloropropene	8.711	75	57846	1.65	ug/L	95
20) trans-1,3-Dichloropropene	9.343	75	55743	2.00	ug/L	91
21) Tetrachloroethene	9.343	166	46656	1.75	ug/L	94
22) 1,4-Dichlorobenzene	12.827	146	93363	1.80	ug/L	99
23) 1,2-Dibromo-3-Chloropr...	14.037	75	16558	1.94	ug/L	88

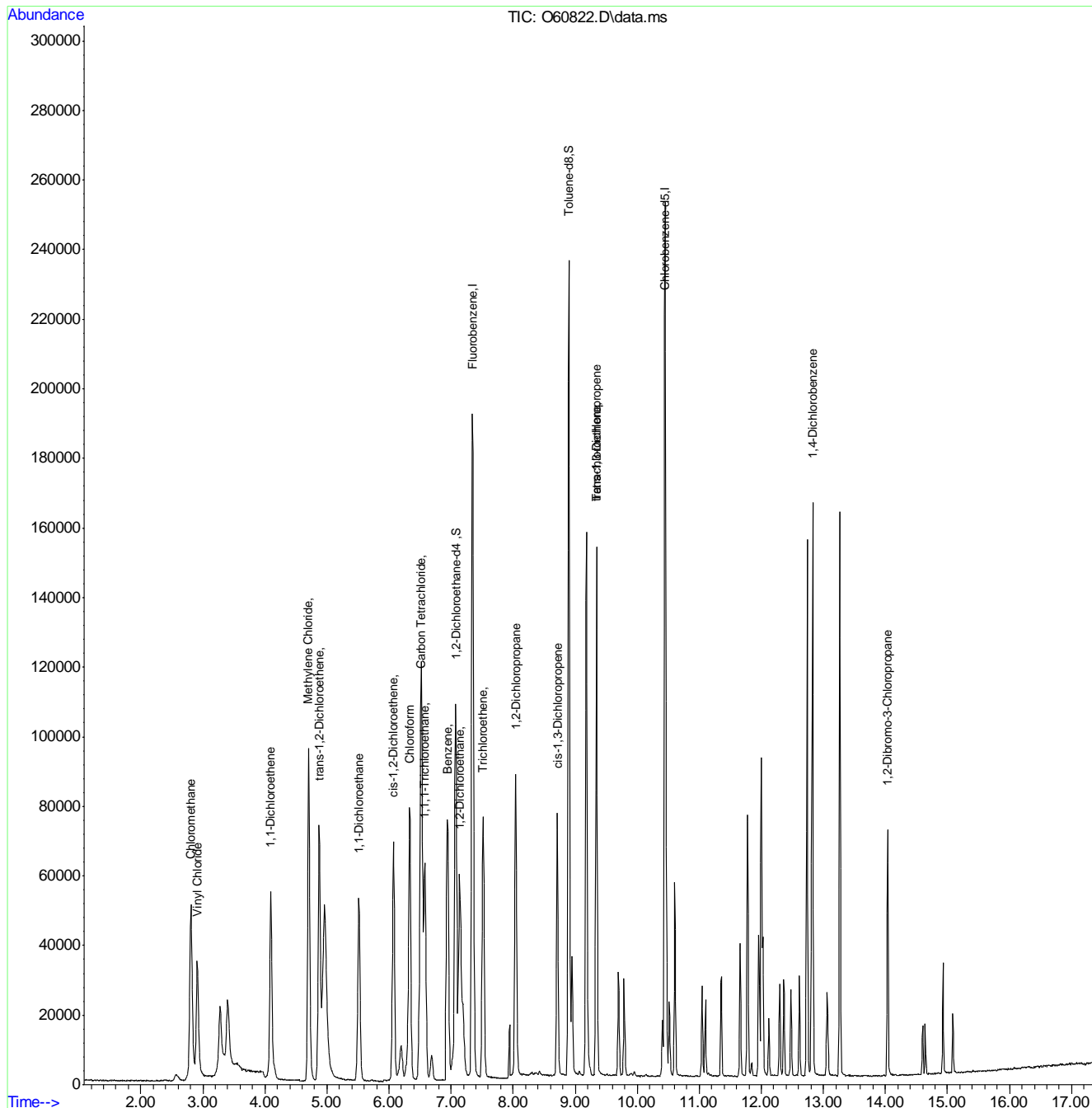
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\070220\
 Data File : O60822.D
 Acq On : 2 Jul 2020 11:37 am
 Operator : amandab
 Sample : IC2337-3
 Misc : MS46657,VO2337,,,,,
 ALS Vial : 3 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Jul 02 12:00:29 2020
 Quant Method : C:\msdchem\2\methods\SIMCL070220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jun 18 12:40:46 2020
 Response via : Initial Calibration



7.6.3
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\070220\
 Data File : O60823.D
 Acq On : 2 Jul 2020 12:00 pm
 Operator : amandab
 Sample : IC2337-4 Inst : MSVOA12
 Misc : MS46657,VO2337,,,,,
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jul 02 12:41:48 2020
 Quant Method : C:\msdchem\2\methods\SIMCL070220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jun 18 12:40:46 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.346	96	323353	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.447	117	208446	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.074	65	117522	4.74	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	94.80%	
19) Toluene-d8	8.900	98	249740	5.40	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	108.00%	
Target Compounds						
						Qvalue
2) Vinyl Chloride	2.908	62	164816	3.36	ug/L	99
3) Chloromethane	2.806	50	271206	3.13	ug/L	99
4) 1,1-Dichloroethene	4.092	61	200116	4.58	ug/L	96
5) Methylene Chloride	4.703	49	324702	3.59	ug/L	97
6) trans-1,2-Dichloroethene	4.873	61	208146	4.07	ug/L	96
7) 1,1-Dichloroethane	5.514	63	258339	4.12	ug/L	100
8) cis-1,2-Dichloroethene	6.072	96	141028	4.23	ug/L	99
9) Chloroform	6.333	83	258042	4.29	ug/L	97
10) Carbon Tetrachloride	6.511	117	152041	4.18	ug/L	99
11) 1,1,1-Trichloroethane	6.576	97	181114	4.24	ug/L	97
12) Benzene	6.943	78	429742	4.17	ug/L	96
14) 1,2-Dichloroethane	7.145	62	200868	4.18	ug/L	97
15) Trichloroethene	7.518	95	151681	4.21	ug/L	99
16) 1,2-Dichloropropane	8.043	63	150689	4.21	ug/L	93
17) cis-1,3-Dichloropropene	8.711	75	166811	4.50	ug/L	93
20) trans-1,3-Dichloropropene	9.343	75	162498	5.39	ug/L	91
21) Tetrachloroethene	9.343	166	129313	4.69	ug/L	97
22) 1,4-Dichlorobenzene	12.827	146	257076	4.78	ug/L	99
23) 1,2-Dibromo-3-Chloropr...	14.038	75	48010	5.23	ug/L	96

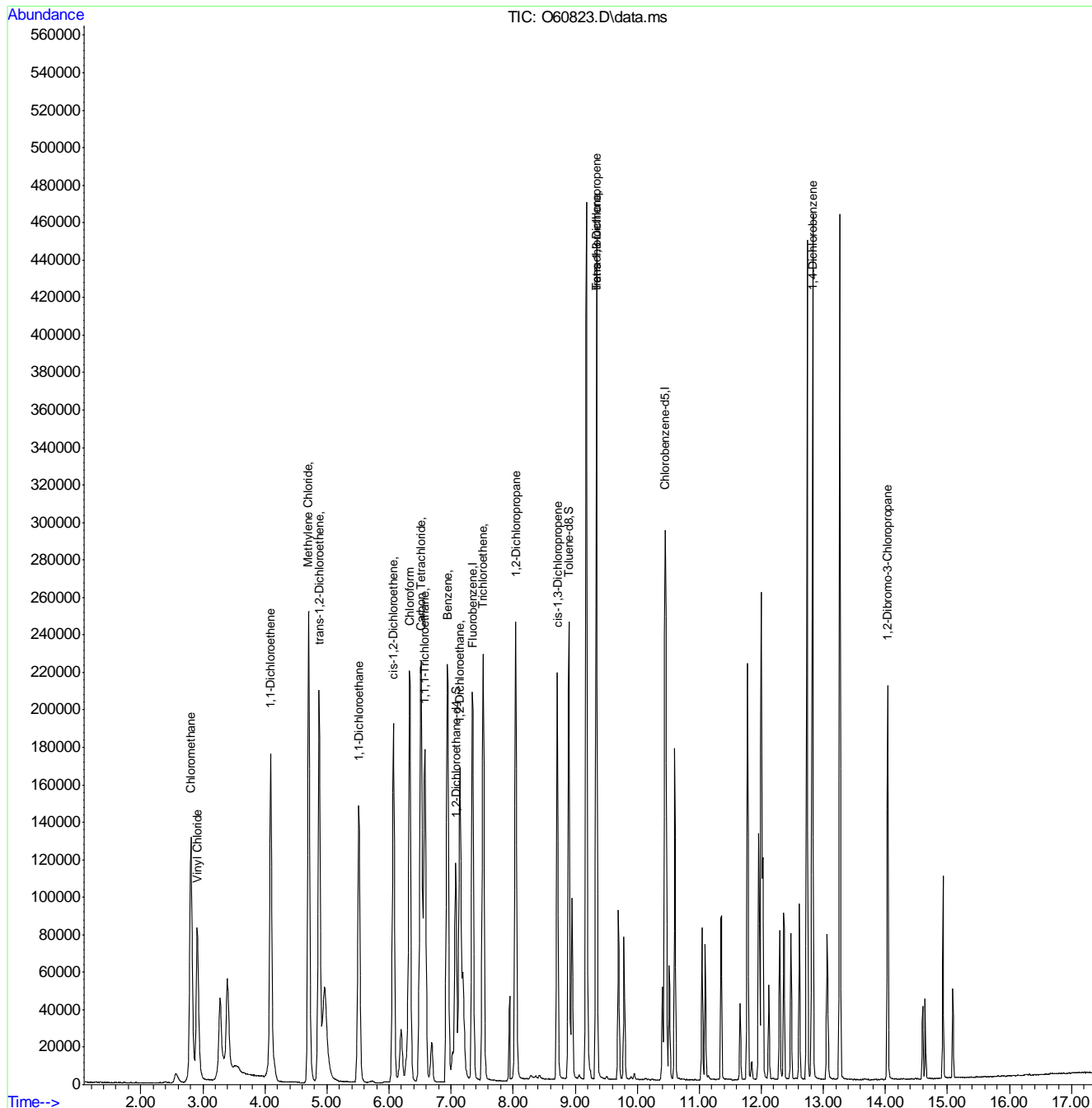
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\070220\
 Data File : O60823.D
 Acq On : 2 Jul 2020 12:00 pm
 Operator : amandab
 Sample : IC2337-4
 Misc : MS46657,VO2337,,,,,
 ALS Vial : 4 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Jul 02 12:41:48 2020
 Quant Method : C:\msdchem\2\methods\SIMCL070220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jun 18 12:40:46 2020
 Response via : Initial Calibration



7.6.4
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\070220\
 Data File : O60824.D
 Acq On : 2 Jul 2020 12:24 pm
 Operator : amandab
 Sample : ICC2337-5 Inst : MSVOA12
 Misc : MS46657,VO2337,,,,,
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jul 02 12:42:25 2020
 Quant Method : C:\msdchem\2\methods\SIMCL070220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jun 18 12:40:46 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.346	96	347161	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.447	117	227073	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.079	65	124704	4.69	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	93.80%	
19) Toluene-d8	8.900	98	266156	5.28	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	105.60%	
Target Compounds						
						Qvalue
2) Vinyl Chloride	2.912	62	342556	6.75	ug/L	98
3) Chloromethane	2.806	50	540358	6.04	ug/L	100
4) 1,1-Dichloroethene	4.092	61	412988	8.38	ug/L	97
5) Methylene Chloride	4.703	49	692135	7.41	ug/L	96
6) trans-1,2-Dichloroethene	4.873	61	474585	8.65	ug/L	95
7) 1,1-Dichloroethane	5.514	63	576155	8.62	ug/L	100
8) cis-1,2-Dichloroethene	6.072	96	319533	8.94	ug/L	99
9) Chloroform	6.333	83	572237	8.90	ug/L	96
10) Carbon Tetrachloride	6.511	117	361935	9.12	ug/L	99
11) 1,1,1-Trichloroethane	6.576	97	422152	9.08	ug/L	96
12) Benzene	6.943	78	967597	8.77	ug/L	97
14) 1,2-Dichloroethane	7.145	62	432160	8.43	ug/L	97
15) Trichloroethene	7.518	95	349429	8.91	ug/L	98
16) 1,2-Dichloropropane	8.043	63	328028	8.56	ug/L	92
17) cis-1,3-Dichloropropene	8.711	75	378743	9.16	ug/L	92
20) trans-1,3-Dichloropropene	9.343	75	370210	10.49	ug/L	88
21) Tetrachloroethene	9.343	166	299619	9.86	ug/L	97
22) 1,4-Dichlorobenzene	12.827	146	585384	9.81	ug/L	99
23) 1,2-Dibromo-3-Chloropr...	14.038	75	110425	10.35	ug/L	95

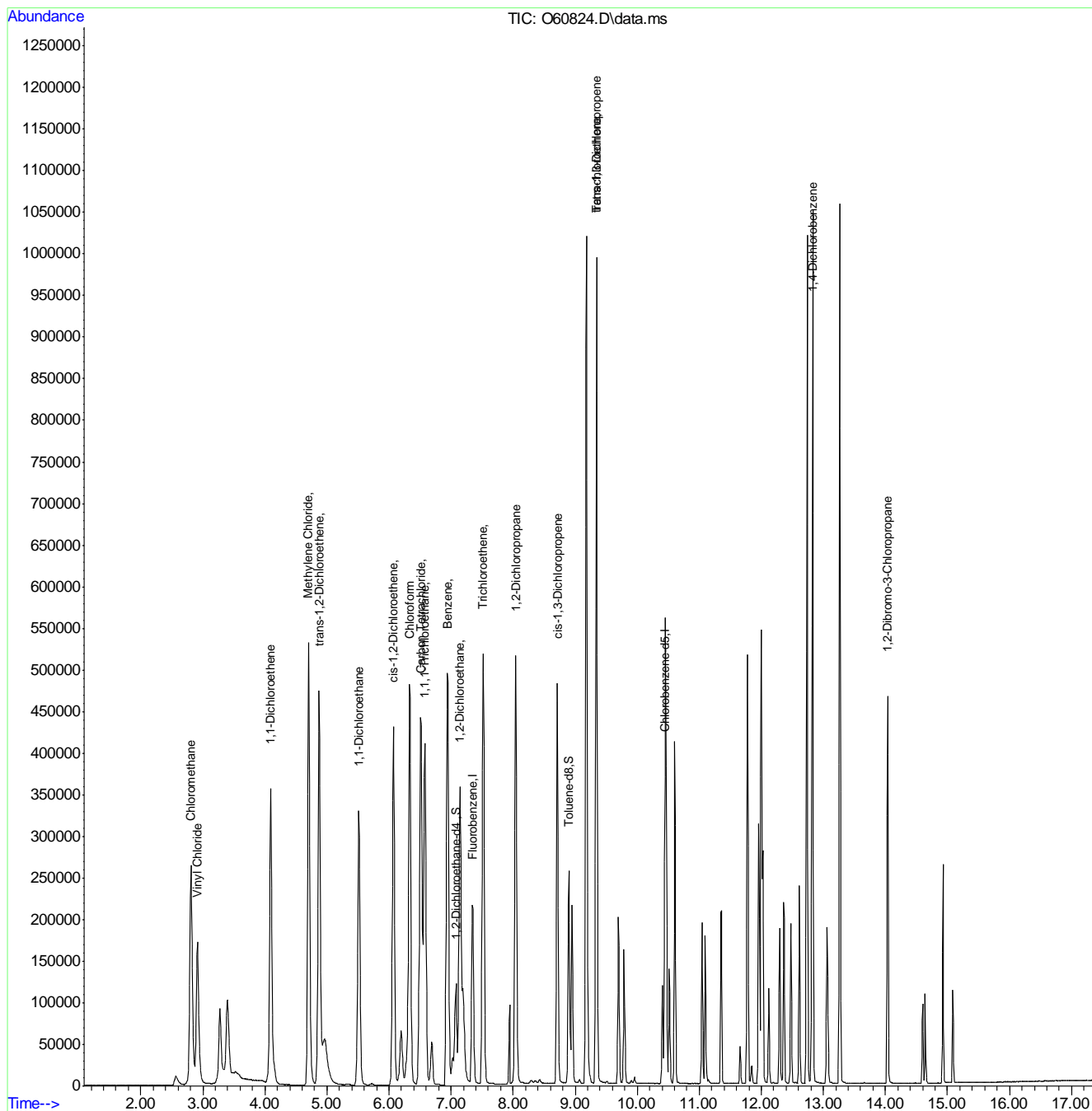
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\070220\
 Data File : O60824.D
 Acq On : 2 Jul 2020 12:24 pm
 Operator : amandab
 Sample : ICC2337-5
 Misc : MS46657,VO2337,,,,,
 ALS Vial : 5 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Jul 02 12:42:25 2020
 Quant Method : C:\msdchem\2\methods\SIMCL070220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jun 18 12:40:46 2020
 Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\070220\
 Data File : O60825.D
 Acq On : 2 Jul 2020 12:48 pm
 Operator : amandab
 Sample : IC2337-6 Inst : MSVOA12
 Misc : MS46657,VO2337,,,,,
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jul 02 13:31:57 2020
 Quant Method : C:\msdchem\2\methods\SIMCL070220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jun 18 12:40:46 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.346	96	369277	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.447	117	240614	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.080	65	133031	4.70	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	94.00%	
19) Toluene-d8	8.900	98	286301	5.36	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	107.20%	
Target Compounds						
						Qvalue
2) Vinyl Chloride	2.908	62	545360	10.55	ug/L	99
3) Chloromethane	2.807	50	840467	9.22	ug/L	99
4) 1,1-Dichloroethene	4.089	61	828982	14.64	ug/L	97
5) Methylene Chloride	4.703	49	1083192	11.39	ug/L	94
6) trans-1,2-Dichloroethene	4.869	61	758916	12.99	ug/L	96
7) 1,1-Dichloroethane	5.514	63	920034	13.05	ug/L	100
8) cis-1,2-Dichloroethene	6.072	96	514305	13.56	ug/L	98
9) Chloroform	6.333	83	917949	13.48	ug/L	96
10) Carbon Tetrachloride	6.511	117	602232	14.04	ug/L	100
11) 1,1,1-Trichloroethane	6.576	97	695481	13.86	ug/L	97
12) Benzene	6.943	78	1553138	13.26	ug/L	96
14) 1,2-Dichloroethane	7.145	62	685169	12.66	ug/L	97
15) Trichloroethene	7.518	95	569135	13.47	ug/L	99
16) 1,2-Dichloropropane	8.044	63	539390	13.25	ug/L	92
17) cis-1,3-Dichloropropene	8.711	75	631495	13.84	ug/L	91
20) trans-1,3-Dichloropropene	9.343	75	609953	15.32	ug/L	87
21) Tetrachloroethene	9.343	166	480366	14.75	ug/L	99
22) 1,4-Dichlorobenzene	12.827	146	956841	14.87	ug/L	99
23) 1,2-Dibromo-3-Chloropr...	14.038	75	186456	15.51	ug/L	95

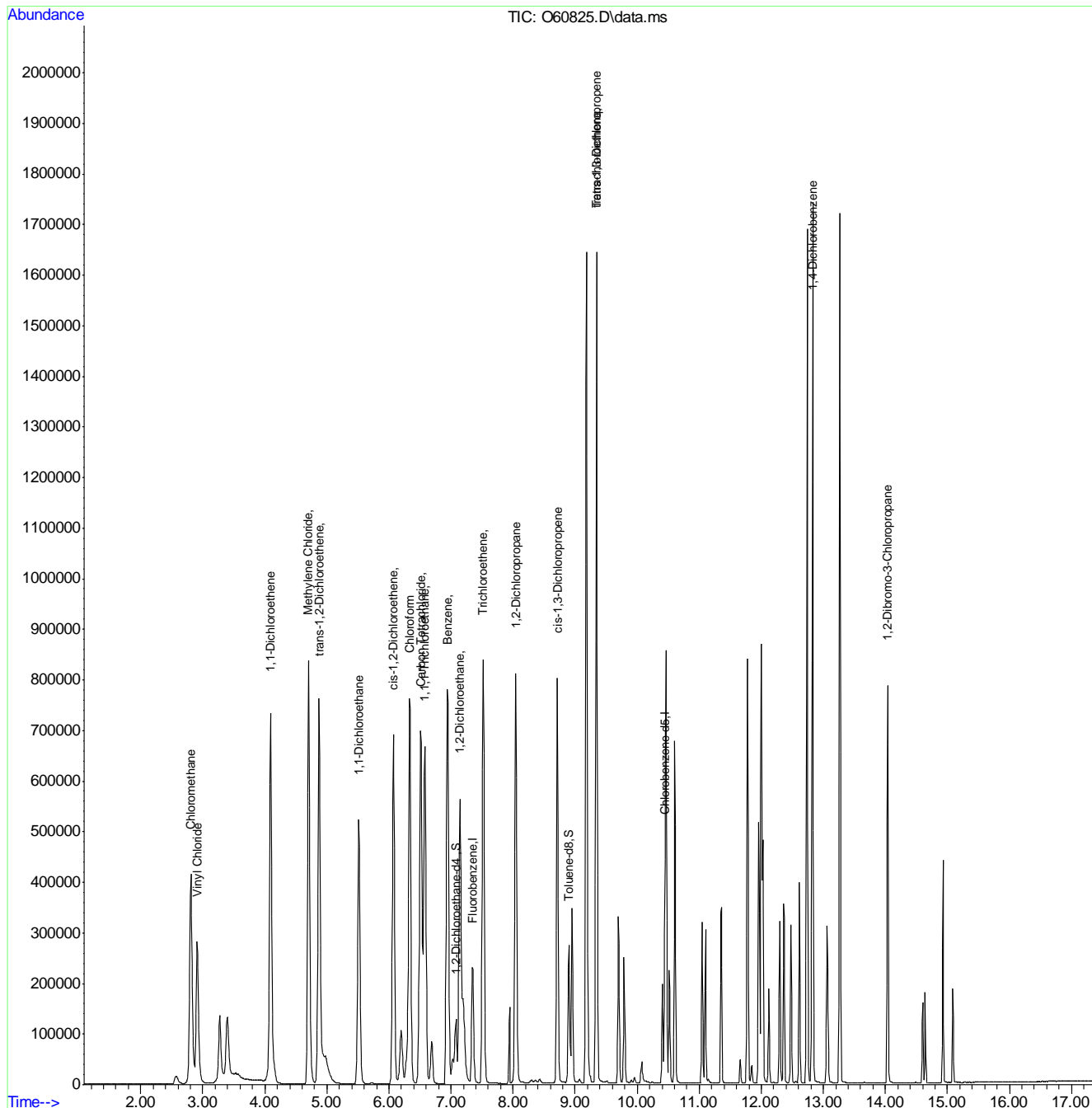
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\070220\
 Data File : O60825.D
 Acq On : 2 Jul 2020 12:48 pm
 Operator : amandab
 Sample : IC2337-6
 Misc : MS46657,VO2337,,,,,
 ALS Vial : 6 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Jul 02 13:31:57 2020
 Quant Method : C:\msdchem\2\methods\SIMCL070220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jun 18 12:40:46 2020
 Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\070220\
 Data File : O60826.D
 Acq On : 2 Jul 2020 1:12 pm
 Operator : amandab
 Sample : IC2337-7 Inst : MSVOA12
 Misc : MS46657,VO2337,,,,,
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jul 02 13:31:59 2020
 Quant Method : C:\msdchem\2\methods\SIMCL070220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jun 18 12:40:46 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.352	96	401950	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.447	117	262656	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.074	65	142864	4.64	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	92.80%	
19) Toluene-d8	8.900	98	313066	5.37	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	107.40%	
Target Compounds						
						Qvalue
2) Vinyl Chloride	2.912	62	752084	13.93	ug/L	99
3) Chloromethane	2.810	50	1157566	12.16	ug/L	100
4) 1,1-Dichloroethene	4.092	61	969326	15.56	ug/L	93
5) Methylene Chloride	4.703	49	1506574	15.19	ug/L	94
6) trans-1,2-Dichloroethene	4.873	61	1076513	16.91	ug/L	92
7) 1,1-Dichloroethane	5.514	63	1293839	16.97	ug/L	99
8) cis-1,2-Dichloroethene	6.072	96	738784	17.93	ug/L	96
9) Chloroform	6.333	83	1302915	17.65	ug/L	96
10) Carbon Tetrachloride	6.511	117	861150	18.21	ug/L	99
11) 1,1,1-Trichloroethane	6.576	97	998609	18.07	ug/L	96
12) Benzene	6.943	78	2219019	17.45	ug/L	96
14) 1,2-Dichloroethane	7.145	62	976392	16.69	ug/L	97
15) Trichloroethene	7.518	95	826541	17.76	ug/L	98
16) 1,2-Dichloropropane	8.047	63	757699	17.13	ug/L	91
17) cis-1,3-Dichloropropene	8.715	75	927871	18.10	ug/L	87
20) trans-1,3-Dichloropropene	9.343	75	910947	19.82	ug/L	86
21) Tetrachloroethene	9.343	166	695436	19.35	ug/L	98
22) 1,4-Dichlorobenzene	12.827	146	1393746	19.52	ug/L	99
23) 1,2-Dibromo-3-Chloropr...	14.038	75	272499	19.78	ug/L	96

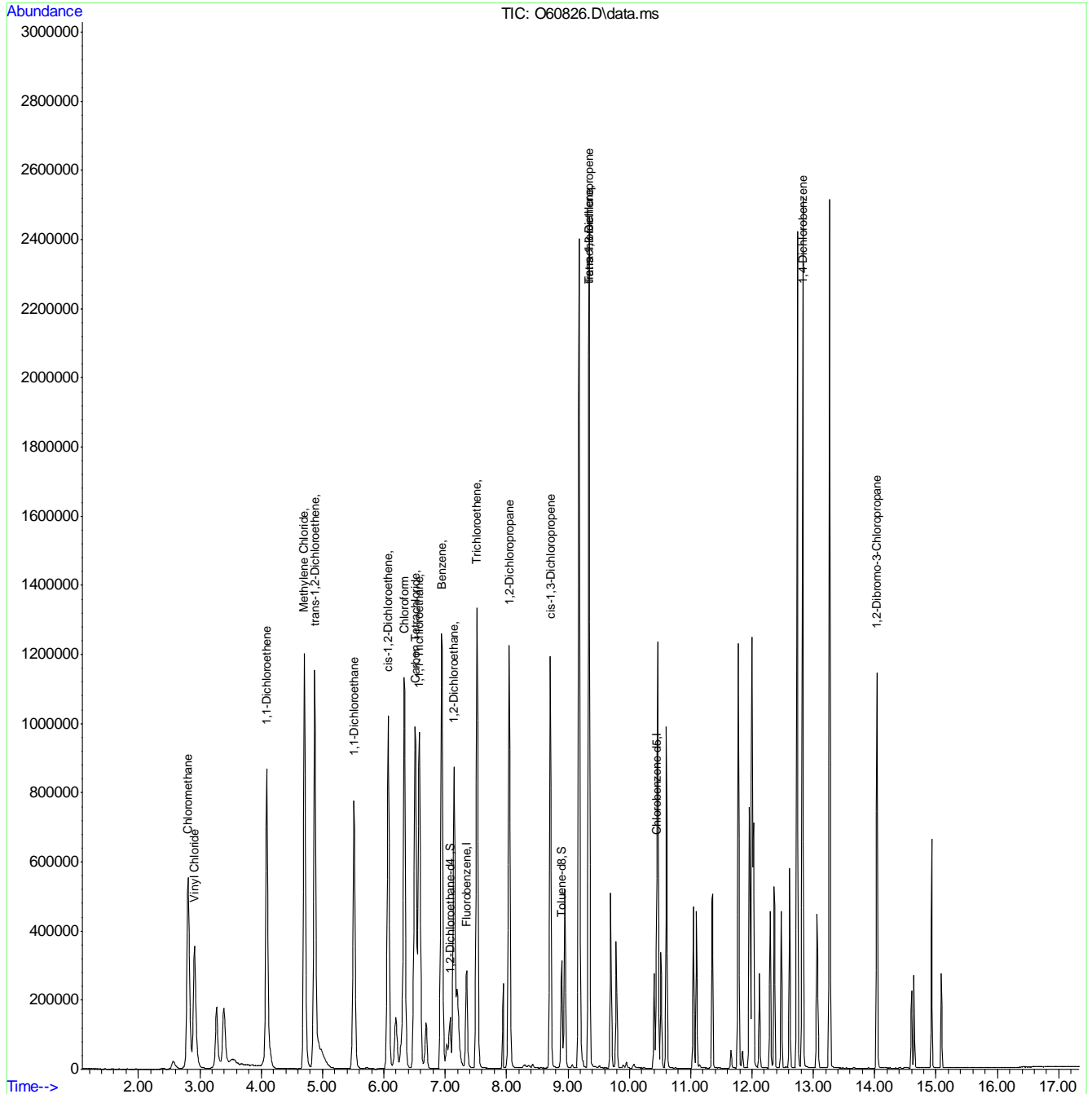
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\070220\
 Data File : O60826.D
 Acq On : 2 Jul 2020 1:12 pm
 Operator : amandab
 Sample : IC2337-7
 Misc : MS46657,VO2337,,,,,
 ALS Vial : 7 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Jul 02 13:31:59 2020
 Quant Method : C:\msdchem\2\methods\SIMCL070220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jun 18 12:40:46 2020
 Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\070220\
 Data File : O60828.D
 Acq On : 2 Jul 2020 2:01 pm
 Operator : amandab
 Sample : ICV2337-5 Inst : MSVOA12
 Misc : MS46657,VO2337,,,,,
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jul 02 14:44:46 2020
 Quant Method : C:\msdchem\2\methods\SIMCL070220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jul 02 13:33:54 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
Internal Standards							
1) Fluorobenzene	7.346	96	355647	5.00	ug/L	0.00	
18) Chlorobenzene-d5	10.447	117	231381	5.00	ug/L	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.080	65	128583	4.92	ug/L	0.00	
Spiked Amount	5.000	Range 74 - 125	Recovery	=	98.40%		
19) Toluene-d8	8.900	98	275271	4.94	ug/L	0.00	
Spiked Amount	5.000	Range 88 - 111	Recovery	=	98.80%		
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.912	62	324266	9.50	ug/L		99
3) Chloromethane	2.807	50	496889	8.77	ug/L		99
4) 1,1-Dichloroethene	4.092	61	413565	9.49	ug/L		99
5) Methylene Chloride	4.703	49	686897	9.67	ug/L		98
6) trans-1,2-Dichloroethene	4.869	61	462947	9.89	ug/L		100
7) 1,1-Dichloroethane	5.514	63	575207	9.80	ug/L		98
8) cis-1,2-Dichloroethene	6.072	96	317678	9.92	ug/L		98
9) Chloroform	6.333	83	566057	9.92	ug/L		98
10) Carbon Tetrachloride	6.511	117	349481	9.98	ug/L		99
11) 1,1,1-Trichloroethane	6.576	97	408571	9.93	ug/L		98
12) Benzene	6.943	78	988965	10.05	ug/L		99
14) 1,2-Dichloroethane	7.145	62	438371	9.92	ug/L		99
15) Trichloroethene	7.518	95	357956	10.32	ug/L		98
16) 1,2-Dichloropropane	8.043	63	339688	10.29	ug/L		99
17) cis-1,3-Dichloropropene	8.711	75	396503	10.77	ug/L		99
20) trans-1,3-Dichloropropene	9.343	75	391489	11.10	ug/L		99
21) Tetrachloroethene	9.343	166	292424	9.87	ug/L		98
22) 1,4-Dichlorobenzene	12.827	146	599822	10.53	ug/L		99
23) 1,2-Dibromo-3-Chloropr...	14.038	75	113372	10.24	ug/L		97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

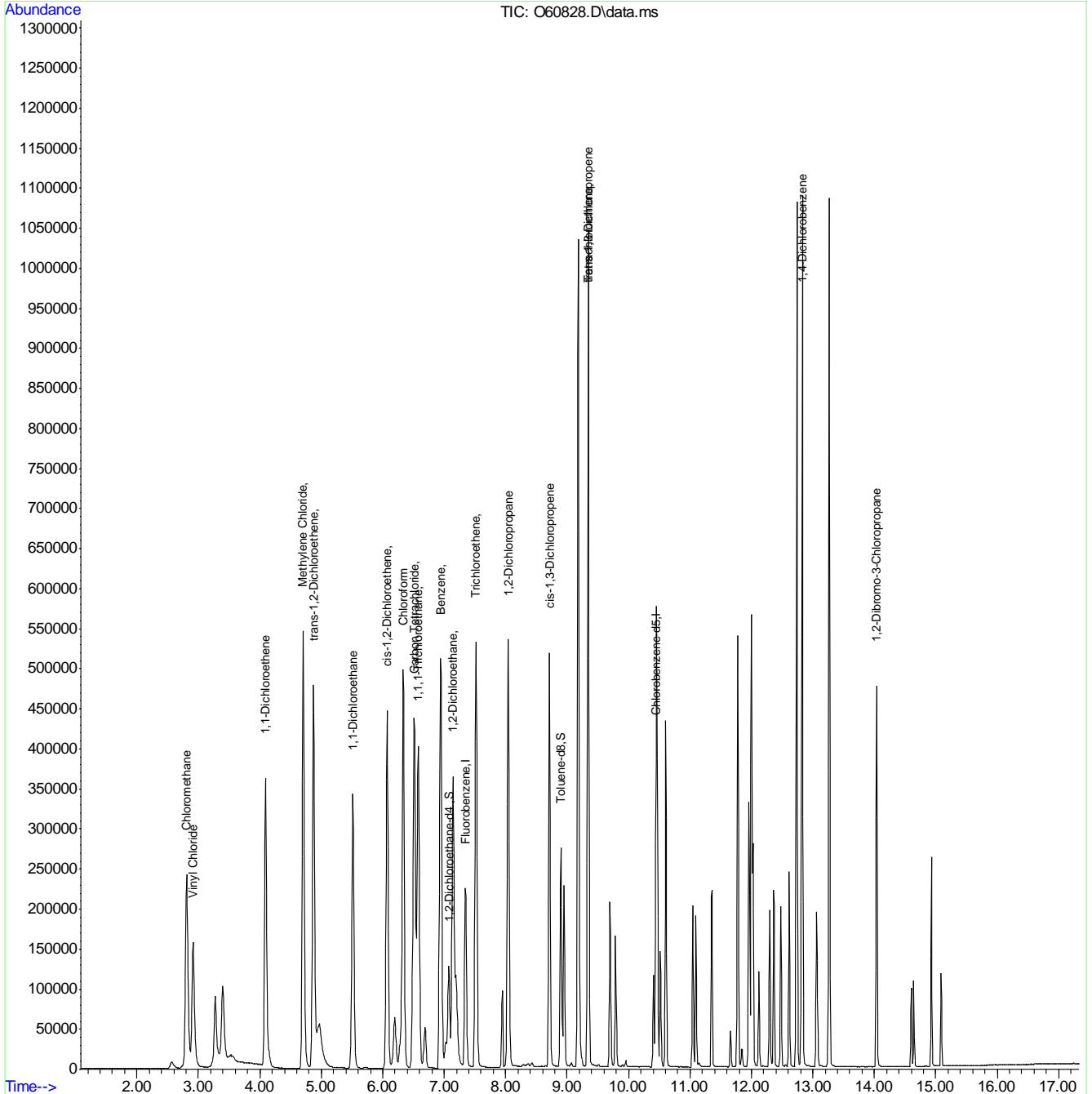
7.6.8

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\070220\
 Data File : O60828.D
 Acq On : 2 Jul 2020 2:01 pm
 Operator : amandab
 Sample : ICV2337-5
 Misc : MS46657,VO2337,,,,,
 ALS Vial : 9 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Jul 02 14:44:46 2020
 Quant Method : C:\msdchem\2\methods\SIMCL070220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jul 02 13:33:54 2020
 Response via : Initial Calibration



8'9'7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\070820\
 Data File : O60843.D
 Acq On : 8 Jul 2020 12:26 pm
 Operator : amandab
 Sample : CC2337-5 Inst : MSVOA12
 Misc : MS46689,VO2338,,,,,
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 08 12:44:30 2020
 Quant Method : C:\msdchem\2\methods\SIMCL070220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jul 02 13:33:54 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.346	96	335583	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.447	117	220810	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.074	65	121504	4.93	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	98.60%	
19) Toluene-d8	8.896	98	257997	4.85	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	97.00%	
Target Compounds						
						Qvalue
2) Vinyl Chloride	2.901	62	348541	10.82	ug/L	100
3) Chloromethane	2.799	50	521200	9.83	ug/L	99
4) 1,1-Dichloroethene	4.089	61	370489	9.01	ug/L	99
5) Methylene Chloride	4.699	49	639621	9.53	ug/L	99
6) trans-1,2-Dichloroethene	4.865	61	438664	9.93	ug/L	99
7) 1,1-Dichloroethane	5.510	63	537394	9.70	ug/L	99
8) cis-1,2-Dichloroethene	6.066	96	296900	9.83	ug/L	98
9) Chloroform	6.333	83	535293	9.94	ug/L	99
10) Carbon Tetrachloride	6.505	117	336772	10.19	ug/L	99
11) 1,1,1-Trichloroethane	6.576	97	396225	10.21	ug/L	99
12) Benzene	6.943	78	903695	9.73	ug/L	97
14) 1,2-Dichloroethane	7.139	62	400187	9.60	ug/L	99
15) Trichloroethene	7.512	95	324638	9.92	ug/L	98
16) 1,2-Dichloropropane	8.040	63	310984	9.98	ug/L	99
17) cis-1,3-Dichloropropene	8.711	75	357665	10.30	ug/L	97
20) trans-1,3-Dichloropropene	9.343	75	347906	10.34	ug/L	99
21) Tetrachloroethene	9.343	166	280025	9.91	ug/L	99
22) 1,4-Dichlorobenzene	12.827	146	542913	9.98	ug/L	100
23) 1,2-Dibromo-3-Chloropr...	14.038	75	108827	10.30	ug/L	96

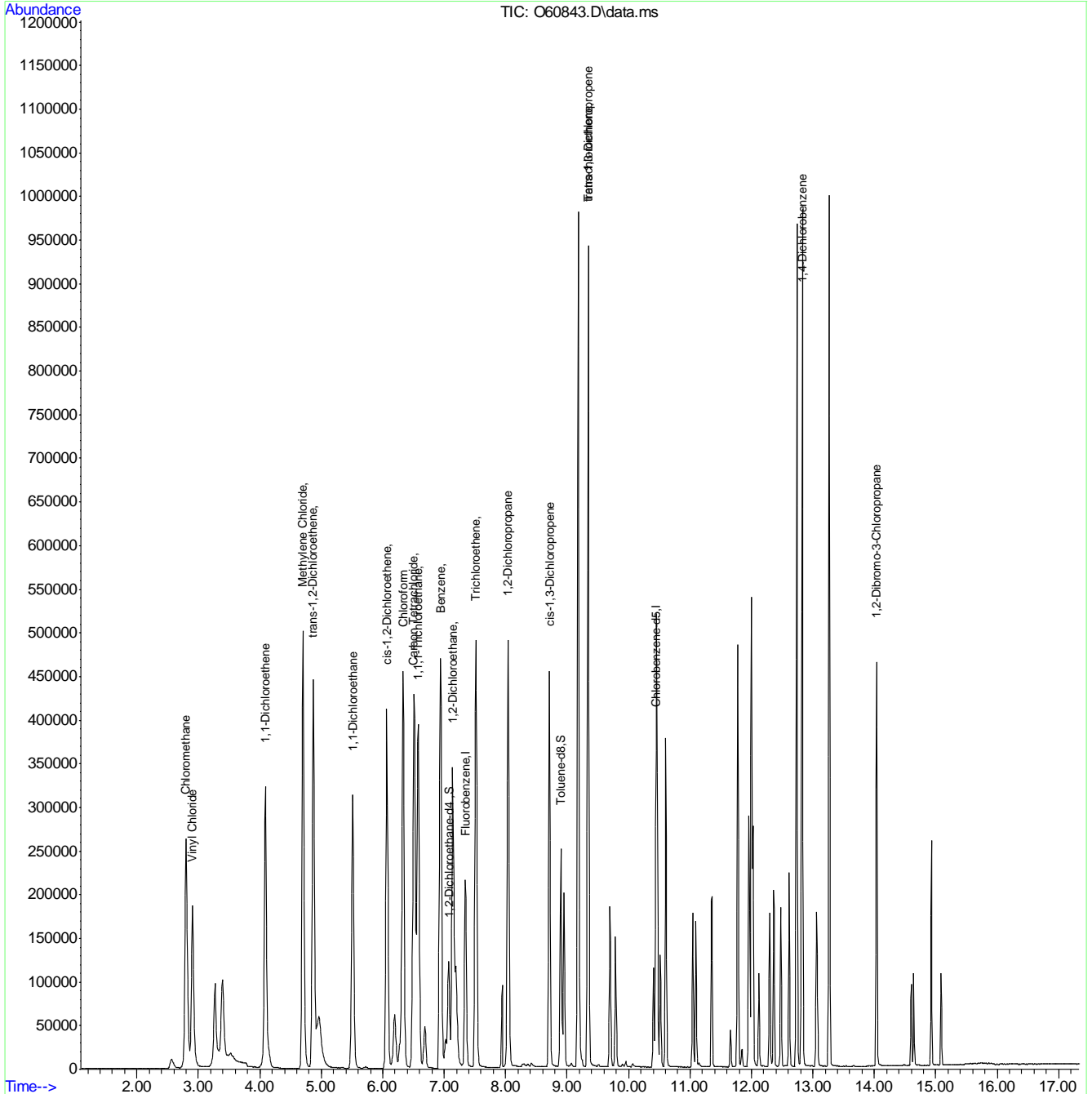
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\070820\
 Data File : O60843.D
 Acq On : 8 Jul 2020 12:26 pm
 Operator : amandab
 Sample : CC2337-5
 Misc : MS46689,VO2338,,,,,
 ALS Vial : 1 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Jul 08 12:44:30 2020
 Quant Method : C:\msdchem\2\methods\SIMCL070220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jul 02 13:33:54 2020
 Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\070820\
 Data File : O60860.D
 Acq On : 8 Jul 2020 7:15 pm
 Operator : amandab
 Sample : ECC2337-5 Inst : MSVOA12
 Misc : MS46689,VO2338,,,,,
 ALS Vial : 18 Sample Multiplier: 1

Quant Time: Jul 09 07:33:40 2020
 Quant Method : C:\msdchem\2\methods\SIMCL070220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jul 02 13:33:54 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.346	96	243522	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.447	117	165943	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.073	65	90448	5.06	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	101.20%	
19) Toluene-d8	8.900	98	182313	4.56	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	91.20%	
Target Compounds						
						Qvalue
2) Vinyl Chloride	2.908	62	271396	11.61	ug/L	100
3) Chloromethane	2.803	50	427364	11.25	ug/L	99
4) 1,1-Dichloroethene	4.088	61	299288	10.03	ug/L	98
5) Methylene Chloride	4.703	49	523565	10.83	ug/L	99
6) trans-1,2-Dichloroethene	4.869	61	338640	10.57	ug/L	99
7) 1,1-Dichloroethane	5.510	63	419078	10.44	ug/L	99
8) cis-1,2-Dichloroethene	6.072	96	218957	9.99	ug/L	98
9) Chloroform	6.333	83	410754	10.51	ug/L	99
10) Carbon Tetrachloride	6.505	117	249604	10.41	ug/L	98
11) 1,1,1-Trichloroethane	6.576	97	296481	10.53	ug/L	97
12) Benzene	6.943	78	679533	10.08	ug/L	100
14) 1,2-Dichloroethane	7.145	62	314177	10.40	ug/L	97
15) Trichloroethene	7.518	95	248466	10.46	ug/L	99
16) 1,2-Dichloropropane	8.043	63	236332	10.46	ug/L	98
17) cis-1,3-Dichloropropene	8.711	75	245740	9.75	ug/L	98
20) trans-1,3-Dichloropropene	9.343	75	247521	9.79	ug/L	97
21) Tetrachloroethene	9.343	166	214356	10.09	ug/L	99
22) 1,4-Dichlorobenzene	12.827	146	420560	10.29	ug/L	99
23) 1,2-Dibromo-3-Chloropr...	14.037	75	74012	9.32	ug/L	99

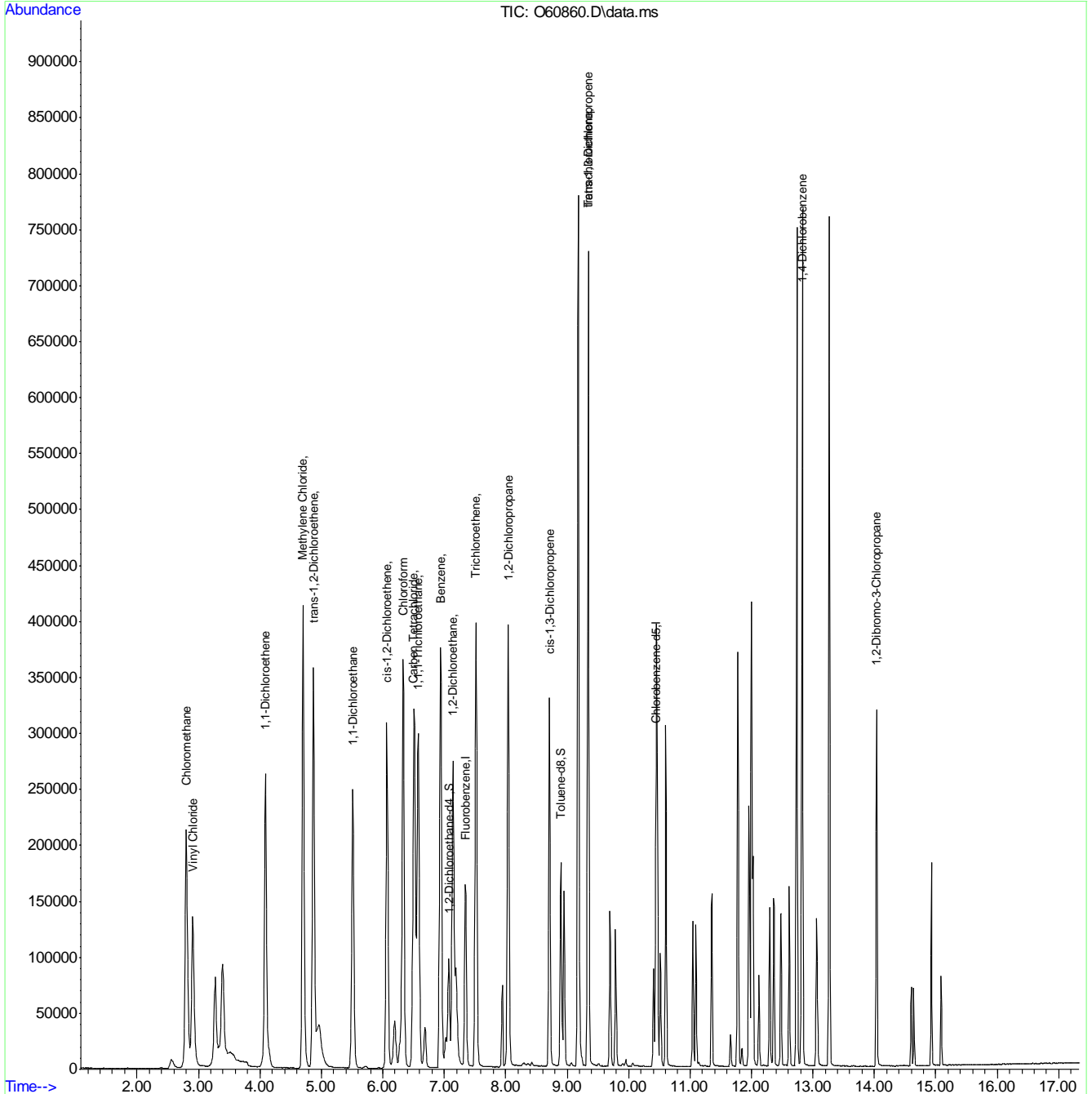
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\070820\
 Data File : O60860.D
 Acq On : 8 Jul 2020 7:15 pm
 Operator : amandab
 Sample : ECC2337-5
 Misc : MS46689,VO2338,,,,,
 ALS Vial : 18 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Jul 09 07:33:40 2020
 Quant Method : C:\msdchem\2\methods\SIMCL070220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jul 02 13:33:54 2020
 Response via : Initial Calibration



SGS -ORLANDO

MSVOA12-O-ANALYSIS LOG

Date:	7/2/2020
COLUMN TYPE:	RTX VMS
DETECTOR:	5975 MSD
INSTRUMENT:	MSVOA12-O
PURGE PRESSURE:	8.4PSI
PURGE VOLUME:	5 mL
ANALYST:	AMANDAB

METHODS*:	SIMCLM
METHOD FILE:	SIMCL070220.m
CALIB. DATE:	7/2/2020
EM VOLTAGE:	1565V
BFB RESPONSE	6545625
RUN ID:	VO2337

BFB:	V25845C
ICAL/CC:	V25832 V25843
ISTD/SUR:	V25863
ICV/QC:	V25849 V25844

PH LOT1-12 :230814
ph lot 0.0-3.0 : 220416a
KI PAPER LOT:030317
SAMPLE ID VERIFIED BY:
AB
DATE VERIFIED: 07/02/20

Data File	Sample ID	DIL.	VIAL #	MATRIX	ALS POS.	SAMPLE METHOD	MANUALLY INTEGRATED PEAK RATIONAL, PEAK #	PH	CL ?	RR	COMMENTS
O60815	BLK	NA	NA	w	1	ACQ_SIMCL		NA	NA		✓
O60816	BLK	NA	NA	w	2	ACQ_SIMCL		NA	NA		✓
O60817	BFB	NA	NA	w	100	BFB		NA	NA		Passed autofind 2ul
O60818	CC2335-5	NA	NA	w	1	ACQ_SIMCL		NA	NA		x 50ul->50mL
O60819	CC2335-5	NA	NA	w	1	ACQ_SIMCL		NA	NA		x 50ul->50mL
O60820	IC2337-1	NA	NA	w	1	ACQ_SIMCL	#16.21 (Pli) #23 (MP)	NA	NA		1ul->100mL ✓
O60821	IC2337-2	NA	NA	w	2	ACQ_SIMCL		NA	NA		5ul->100mL ✓
O60822	IC2337-3	NA	NA	w	3	ACQ_SIMCL		NA	NA		10ul->50mL ✓
O60823	IC2337-4	NA	NA	w	4	ACQ_SIMCL		NA	NA		25ul->50mL ✓
O60824	IC2337-5	NA	NA	w	5	ACQ_SIMCL		NA	NA		50ul->50mL ✓
O60825	IC2337-6	NA	NA	w	6	ACQ_SIMCL		NA	NA		75ul->50mL ✓
O60826	IC2337-7	NA	NA	w	7	ACQ_SIMCL		NA	NA		100ul->50mL ✓
O60827	BLK	NA	NA	w	8	ACQ_SIMCL		NA	NA		ND ✓
O60828	ICV2337-5	NA	NA	w	9	ACQ_SIMCL		NA	NA		50ul->50mL ✓
O60829	BS	NA	NA	w	1	ACQ_SIMCL		NA	NA		20ul->vial ✓
O60830	MB	NA	NA	w	2	ACQ_SIMCL		NA	NA		✓ ND
O60831	FA76463-1		2	w	3	ACQ_SIMCL	All vials arrived with bubbles > 6mm	1	N		✓
O60832	FA76463-2		1	w	4	ACQ_SIMCL		1	N		✓
O60833	FA76463-3		1	w	5	ACQ_SIMCL	#21 (Pli)	1	N		✓
O60834	FA76463-4		1	w	6	ACQ_SIMCL		1	N		✓
O60835	FA76463-5		1	w	7	ACQ_SIMCL		1	N		✓
O60836	FA76463-6		1	w	8	ACQ_SIMCL		1	N		✓
O60837	FA76463-2MS	5X	2	w	9	ACQ_SIMCL	10 mL (-) 50 mL	1	N		20ul->vial ✓
O60838	FA76463-2MSD	5X	2	w	10	ACQ_SIMCL	10 mL (-) 50 mL	1	N		20ul->vial ✓
O60839	ECC2337-5	NA	NA	w	11	ACQ_SIMCL		NA	NA		50ul->50mL ✓

* For NELAC purposes, Method 8260 includes analytes by SOP MS005 Matrix: Designate "W" for Water "S" for soil, "O" for Oil, "Liq" for Non-aqueous Liquid, and "TCLP" or "SPLP" for Leachate.
Manual Integration Rational SOP QA029: MP Missed Peak, OP Overlapping Peak, SP Split Peak, PDB Poorly Defined Baseline, BR Baseline Ripple, Pli Poor Instrument

Analyst's Signature: _____

1 of 1

VO2337.MS 040918

SGS -ORLANDO

MSVOA12-O-ANALYSIS LOG

Date:	7/8/2020
COLUMN TYPE:	RTX VMS
DETECTOR:	5975 MSD
INSTRUMENT:	MSVOA12-O
PURGE PRESSURE:	8.4 PSI
PURGE VOLUME:	5 mL
ANALYST:	AMANDAB

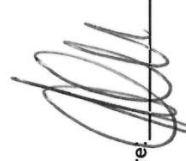
METHODS:*	SIMCLm
METHOD FILE:	SIMCL070220.m
CALIB. DATE:	7/2/2020
EM VOLTAGE:	1565V
BFB RESPONSE	7273867
RUN ID:	VO2338

BFB:	V25845C
ICAL/CC:	V25832 V25843
ISTD/SUR:	V25863
ICV/QC:	V25849 V25844

PH LOT1-12 :230814
ph lot 0.0-3.0 : 220416a
KI PAPER LOT:030317
SAMPLE ID VERIFIED BY:
AB
DATE VERIFIED: 07/08/20

Data File	Sample ID	DIL.	VIAL #	MATRIX	ALS POS.	SAMPLE METHOD	MANUALLY INTEGRATED PEAK RATIONAL, PEAK #	PH	CL	RR	COMMENTS
O60840	BLK	NA	NA	w	1	ACQ_SIMCL		NA	NA		✓
O60841	BLK	NA	NA	w	2	ACQ_SIMCL		NA	NA		✓
O60842	BFB	NA	NA	w	100	BFB		NA	NA		Passed autofind 2uL
O60843	CC2337-5	NA	NA	w	1	ACQ_SIMCL		NA	NA		50uL->50mL ✓
O60844	BS	NA	NA	w	2	ACQ_SIMCL		NA	NA		20uL->vial ✓
O60845	MB	NA	NA	w	3	ACQ_SIMCL		NA	NA		✓ ND
O60846	FA76591-1		1	w	4	ACQ_SIMCL	All vials bubbles > 6mm	1	N	1X	✓ MEC/tetra hits
O60847	FA76591-2		1	w	5	ACQ_SIMCL		1	N		✓
O60848	FA76591-3		1	w	6	ACQ_SIMCL	#21 (PIL)	1	N		✓
O60849	FA76591-4		1	w	7	ACQ_SIMCL		1	N		✓
O60850	FA76591-5		1	w	8	ACQ_SIMCL		1	N		✓
O60851	FA76591-2MS	5X	1	w	9	ACQ_SIMCL	10 mL (-) 50 mL	1	N		20uL->vial ✓
O60852	FA76591-2MSD	5X	1	w	10	ACQ_SIMCL	10 mL (-) 50 mL	1	N		20uL->vial ✓
O60853	FA76591-6		1	w	11	ACQ_SIMCL	#21 (PIL)	1	N		✓
O60854	FA76591-7		1	w	12	ACQ_SIMCL		1	N		✓
O60855	FA76591-8		1	w	13	ACQ_SIMCL		1	N		✓
O60856	FA76591-9		1	w	14	ACQ_SIMCL	#16 (PIL)	1	N		✓
O60857	FA76591-10		1	w	15	ACQ_SIMCL		1	N		✓
O60858	FA76591-11		1	w	16	ACQ_SIMCL		1	N		✓
O60859	FA76591-1		2	w	17	ACQ_SIMCL	All vials bubbles > 6mm	1	N		✓ CF
O60860	ECC2337-5	NA	NA	w	18	ACQ_SIMCL		NA	NA		50uL->50mL ✓

* For NELAC purposes, Method 8260 includes analytes by SOP MS005 Matrix: Designate "W" for Water "S" for soil, "O" for Oil, "Liq" for Non-aqueous Liquid, and "TCLP" or "SPLP" for Leachate.
Manual Integration Rational SOP QA029; MP Missed Peak, OP Overlapping Peak, SP Split Peak, PDB Poorly Defined Baseline, BR Baseline Ripple, PII Poor Instrument

Analyst's Signature: 

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

e-Hardcopy 2.0
Automated Report

Technical Report for

Ahtna Global, LLC

DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA

21065.000.01.0000

SGS Job Number: FA77021

Sampling Date: 07/21/20

Report to:

Ahtna Global, LLC
9699 Blue Larkspur Lane Suite 203
Monterey, CA 93940
dlieberman@ahtna.net; mfisher@ahtna.net;
hdillon@ahtna.net; eschmidt@ahtna.net;
ATTN: Derek Lieberman

Total number of pages in report: **112**



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

A handwritten signature in black ink that reads "Caitlin Brice".

Caitlin Brice, M.S.
General Manager

Client Service contact: Elvin Kumar 407-425-6700

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

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Test results relate only to samples analyzed.

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Sample Summary

Ahtna Global, LLC

Job No: FA77021

DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA
Project No: 21065.000.01.0000

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
FA77021-1	07/21/20	08:32 MF	07/22/20	AQ	Trip Blank Water	2030MOU2157A
FA77021-2	07/21/20	08:38 MF	07/22/20	AQ	Ground Water	2030MOU2158F
FA77021-3	07/21/20	08:43 MF	07/22/20	AQ	Ground Water	2030MOU2159F
FA77021-4	07/21/20	08:48 MF	07/22/20	AQ	Ground Water	2030MOU2160F

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: Ahtna Global, LLC

Job No: FA77021

Site: DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina,

Report Date 7/27/2020 2:03:59

3 Sample(s), 1 Trip Blank(s) and 0 Field Blank(s) were collected on 07/21/2020 and were received at SGS North America Inc - Orlando on 07/22/2020 properly preserved, at 2.4 Deg. C and intact. These Samples received an SGS Orlando job number of FA77021. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section. Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

MS Volatiles By Method SW846 8260B BY SIM

Matrix: AQ

Batch ID: VO2342

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

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

Narrative prepared by:

Ariel Hartney, Client Services (signature on file)

Summary of Hits

Job Number: FA77021
Account: Ahtna Global, LLC
Project: DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA
Collected: 07/21/20

Lab Sample ID	Client Sample ID	Result/ Qual	LOQ	LOD	Units	Method
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FA77021-1 **2030MOU2157A**

No hits reported in this sample.

FA77021-2 **2030MOU2158F**

Chloroform	0.39 J	0.50	0.25	ug/l	SW846 8260B BY SIM
1,1-Dichloroethane	0.53	0.50	0.25	ug/l	SW846 8260B BY SIM
1,2-Dichloroethane	0.19 J	0.50	0.25	ug/l	SW846 8260B BY SIM
cis-1,2-Dichloroethylene	1.3	0.50	0.25	ug/l	SW846 8260B BY SIM

FA77021-3 **2030MOU2159F**

Chloroform	0.32 J	0.50	0.25	ug/l	SW846 8260B BY SIM
1,1-Dichloroethane	0.43 J	0.50	0.25	ug/l	SW846 8260B BY SIM
cis-1,2-Dichloroethylene	1.5	0.50	0.25	ug/l	SW846 8260B BY SIM
Tetrachloroethylene	0.24 J	0.50	0.25	ug/l	SW846 8260B BY SIM
Trichloroethylene	3.6	0.50	0.25	ug/l	SW846 8260B BY SIM

FA77021-4 **2030MOU2160F**

Chloroform	0.31 J	0.50	0.25	ug/l	SW846 8260B BY SIM
1,1-Dichloroethane	0.43 J	0.50	0.25	ug/l	SW846 8260B BY SIM
cis-1,2-Dichloroethylene	1.5	0.50	0.25	ug/l	SW846 8260B BY SIM
Tetrachloroethylene	0.21 J	0.50	0.25	ug/l	SW846 8260B BY SIM
Trichloroethylene	4.3	0.50	0.25	ug/l	SW846 8260B BY SIM

Sample Results

Report of Analysis

SGS North America Inc.

Report of Analysis

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Client Sample ID:	2030MOU2157A		
Lab Sample ID:	FA77021-1	Date Sampled:	07/21/20
Matrix:	AQ - Trip Blank Water	Date Received:	07/22/20
Method:	SW846 8260B BY SIM	Percent Solids:	n/a
Project:	DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	O60950.D	1	07/23/20 12:01	SP	n/a	n/a	VO2342
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
71-43-2	Benzene	0.25 U	0.50	0.25	0.10	ug/l	
56-23-5	Carbon Tetrachloride	0.25 U	0.50	0.25	0.10	ug/l	
67-66-3	Chloroform	0.25 U	0.50	0.25	0.10	ug/l	
75-34-3	1,1-Dichloroethane	0.25 U	0.50	0.25	0.10	ug/l	
107-06-2	1,2-Dichloroethane	0.25 U	0.50	0.25	0.10	ug/l	
156-59-2	cis-1,2-Dichloroethylene	0.25 U	0.50	0.25	0.10	ug/l	
78-87-5	1,2-Dichloropropane	0.25 U	0.50	0.25	0.10	ug/l	
75-09-2	Methylene Chloride	0.50 U	2.0	0.50	0.50	ug/l	
127-18-4	Tetrachloroethylene	0.25 U	0.50	0.25	0.10	ug/l	
79-01-6	Trichloroethylene	0.25 U	0.50	0.25	0.10	ug/l	
75-01-4	Vinyl Chloride	0.050 U	0.10	0.050	0.050	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	109%		74-125%
2037-26-5	Toluene-D8	99%		88-111%

U = Not detected

LOD = Limit of Detection

J = Indicates an estimated value

LOQ = Limit of Quantitation

DL = Detection Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

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Client Sample ID:	2030MOU2158F		
Lab Sample ID:	FA77021-2	Date Sampled:	07/21/20
Matrix:	AQ - Ground Water	Date Received:	07/22/20
Method:	SW846 8260B BY SIM	Percent Solids:	n/a
Project:	DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	O60951.D	1	07/23/20 12:25	SP	n/a	n/a	VO2342
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
71-43-2	Benzene	0.25 U	0.50	0.25	0.10	ug/l	
56-23-5	Carbon Tetrachloride	0.25 U	0.50	0.25	0.10	ug/l	
67-66-3	Chloroform	0.39	0.50	0.25	0.10	ug/l	J
75-34-3	1,1-Dichloroethane	0.53	0.50	0.25	0.10	ug/l	
107-06-2	1,2-Dichloroethane	0.19	0.50	0.25	0.10	ug/l	J
156-59-2	cis-1,2-Dichloroethylene	1.3	0.50	0.25	0.10	ug/l	
78-87-5	1,2-Dichloropropane	0.25 U	0.50	0.25	0.10	ug/l	
75-09-2	Methylene Chloride	0.50 U	2.0	0.50	0.50	ug/l	
127-18-4	Tetrachloroethylene	0.25 U	0.50	0.25	0.10	ug/l	
79-01-6	Trichloroethylene	0.25 U	0.50	0.25	0.10	ug/l	
75-01-4	Vinyl Chloride	0.050 U	0.10	0.050	0.050	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	113%		74-125%
2037-26-5	Toluene-D8	98%		88-111%

U = Not detected

LOD = Limit of Detection

J = Indicates an estimated value

LOQ = Limit of Quantitation

DL = Detection Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

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Client Sample ID:	2030MOU2159F		
Lab Sample ID:	FA77021-3	Date Sampled:	07/21/20
Matrix:	AQ - Ground Water	Date Received:	07/22/20
Method:	SW846 8260B BY SIM	Percent Solids:	n/a
Project:	DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	O60952.D	1	07/23/20 12:49	SP	n/a	n/a	VO2342
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
71-43-2	Benzene	0.25 U	0.50	0.25	0.10	ug/l	
56-23-5	Carbon Tetrachloride	0.25 U	0.50	0.25	0.10	ug/l	
67-66-3	Chloroform	0.32	0.50	0.25	0.10	ug/l	J
75-34-3	1,1-Dichloroethane	0.43	0.50	0.25	0.10	ug/l	J
107-06-2	1,2-Dichloroethane	0.25 U	0.50	0.25	0.10	ug/l	
156-59-2	cis-1,2-Dichloroethylene	1.5	0.50	0.25	0.10	ug/l	
78-87-5	1,2-Dichloropropane	0.25 U	0.50	0.25	0.10	ug/l	
75-09-2	Methylene Chloride	0.50 U	2.0	0.50	0.50	ug/l	
127-18-4	Tetrachloroethylene	0.24	0.50	0.25	0.10	ug/l	J
79-01-6	Trichloroethylene	3.6	0.50	0.25	0.10	ug/l	
75-01-4	Vinyl Chloride	0.050 U	0.10	0.050	0.050	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	115%		74-125%
2037-26-5	Toluene-D8	98%		88-111%

U = Not detected

LOD = Limit of Detection

J = Indicates an estimated value

LOQ = Limit of Quantitation

DL = Detection Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

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Client Sample ID:	2030MOU2160F		
Lab Sample ID:	FA77021-4	Date Sampled:	07/21/20
Matrix:	AQ - Ground Water	Date Received:	07/22/20
Method:	SW846 8260B BY SIM	Percent Solids:	n/a
Project:	DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	O60953.D	1	07/23/20 13:13	SP	n/a	n/a	VO2342
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
71-43-2	Benzene	0.25 U	0.50	0.25	0.10	ug/l	
56-23-5	Carbon Tetrachloride	0.25 U	0.50	0.25	0.10	ug/l	
67-66-3	Chloroform	0.31	0.50	0.25	0.10	ug/l	J
75-34-3	1,1-Dichloroethane	0.43	0.50	0.25	0.10	ug/l	J
107-06-2	1,2-Dichloroethane	0.25 U	0.50	0.25	0.10	ug/l	
156-59-2	cis-1,2-Dichloroethylene	1.5	0.50	0.25	0.10	ug/l	
78-87-5	1,2-Dichloropropane	0.25 U	0.50	0.25	0.10	ug/l	
75-09-2	Methylene Chloride	0.50 U	2.0	0.50	0.50	ug/l	
127-18-4	Tetrachloroethylene	0.21	0.50	0.25	0.10	ug/l	J
79-01-6	Trichloroethylene	4.3	0.50	0.25	0.10	ug/l	
75-01-4	Vinyl Chloride	0.050 U	0.10	0.050	0.050	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	114%		74-125%
2037-26-5	Toluene-D8	97%		88-111%

U = Not detected

LOD = Limit of Detection

J = Indicates an estimated value

LOQ = Limit of Quantitation

DL = Detection Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody
- QC Evaluation: DOD QSM5.x Limits

Ahtna

CHAIN OF CUSTODY

WATER / SOIL

Chain of Custody #: 0034

Carbon Copies: White - Laboratory Yellow - Ahtna

Project Information:										Analysis Requested			Lab Sample Receipt				
Project Location: Former Fort Ord, CA			Sampler/s: MARK FISLER							FA77021			TURN AROUND TIME		Laboratory Sample Delivery		
Project Name: 002 GWTP (TASK 4.0)			Report To: Derek Lieberman												Group #:		
Project Number: 21065.000.01.0000			E-Mail: dlieberman@ehtna.net												Custody Seal:		
Sampling Event/Site: COMPLIANCE PT.			Laboratory: SGS												Temp (°C):		
Lab Number	Sample Collection		Matrix			Number of Preserved Bottles								VOCs 8260 - SIM	Metals 6010 C	Chloride 9056A	Notes
	Sample Number/Description	Date	Time	Water	Soil	Other	Total # of Bottles	HCl	HNO ₃	H ₂ SO ₄	NaOH	MeOH	NaHSO ₄				
1	2030M0U2157F	7/21/20	0832	X			2	2								X	SGP TRIP BLANK
2	2030M0U2158F		0838	X			3	3								X	72 ML
3	2030M0U2159F		0843	X			3	3								X	STD
4	2030M0U2160F		0848	X			3	3								X	STD
Turnaround Time: Standard 3-5 Day Rush 48 Hour Rush 24 Hour Rush										Shipment Method:		Initial Assessment: AG		Final Assessment: AG			
Comments:										2.4							
Chain of Custody Tracking:																	
Relinquished By: <i>[Signature]</i>				Date/Time: 7-21-20 1310				Received By: <i>[Signature]</i>				Date/Time: 07/22/20 9:30					
Relinquished By:				Date/Time:				Received By:				Date/Time:					
Relinquished By:				Date/Time:				Received By Laboratory:				Date/Time:					

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FA77021: Chain of Custody

Page 1 of 2



SGS Sample Receipt Summary

Job Number: FA77021

Client: AHTNA

Project: OU2 GWTP

Date / Time Received: 7/22/2020 9:30:00 AM

Delivery Method: FedEx

Airbill #s: 791060375083

Therm ID: IR 1;

Therm CF: -0.2;

of Coolers: 1

Cooler Temps (Raw Measured) °C: Cooler 1: (2.6);

Cooler Temps (Corrected) °C: Cooler 1: (2.4);

Cooler Information

Y or N

- 1. Custody Seals Present
- 2. Custody Seals Intact
- 3. Temp criteria achieved
- 4. Cooler temp verification IR Gun
- 5. Cooler media Ice (Bag)

Sample Information

Y or N N/A

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

Trip Blank Information

Y or N N/A

- 1. Trip Blank present / cooler
 - 2. Trip Blank listed on COC
- W or S N/A
- 3. Type Of TB Received

Misc. Information

Number of Encores: 25-Gram _____ 5-Gram _____
 Test Strip Lot #: pH 0-3 230315
 Residual Chlorine Test Strip Lot #: _____

Number of 5035 Field Kits: _____
 pH 10-12 219813A

Number of Lab Filtered Metals: _____
 Other: (Specify) _____

Comments

SM001
Rev. Date 05/24/17

Technician: AKARIG

Date: 7/22/2020 9:30:00 AM

Reviewer: PH

Date: 7/23/2020

FA77021: Chain of Custody

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5.1
5

QC Evaluation: DOD QSM5.x Limits

Job Number: FA77021
Account: Ahtna Global, LLC
Project: DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA
Collected: 07/21/20

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
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VO2342 SW846 8260B BY SIM

VO2342-BS	71-43-2	Benzene	BSP	REC	92	%	79-120
VO2342-BS	56-23-5	Carbon Tetrachloride	BSP	REC	98	%	72-136
VO2342-BS	67-66-3	Chloroform	BSP	REC	94	%	79-124
VO2342-BS	75-34-3	1,1-Dichloroethane	BSP	REC	90	%	77-125
VO2342-BS	107-06-2	1,2-Dichloroethane	BSP	REC	90	%	73-128
VO2342-BS	156-59-2	cis-1,2-Dichloroethylene	BSP	REC	90	%	78-123
VO2342-BS	78-87-5	1,2-Dichloropropane	BSP	REC	94	%	78-122
VO2342-BS	75-09-2	Methylene Chloride	BSP	REC	90	%	74-124
VO2342-BS	127-18-4	Tetrachloroethylene	BSP	REC	94	%	74-129
VO2342-BS	79-01-6	Trichloroethylene	BSP	REC	96	%	79-123
VO2342-BS	75-01-4	Vinyl Chloride	BSP	REC	130	%	58-137
VO2342-BS	17060-07-0	1,2-Dichloroethane-D4	BSP	SURR	102	%	81-118
VO2342-BS	2037-26-5	Toluene-D8	BSP	SURR	96	%	89-112
FA76970-1AMS	71-43-2	Benzene	MS	REC	97	%	79-120
FA76970-1AMS	56-23-5	Carbon Tetrachloride	MS	REC	99	%	72-136
FA76970-1AMS	67-66-3	Chloroform	MS	REC	98	%	79-124
FA76970-1AMS	75-34-3	1,1-Dichloroethane	MS	REC	98	%	77-125
FA76970-1AMS	107-06-2	1,2-Dichloroethane	MS	REC	96	%	73-128
FA76970-1AMS	156-59-2	cis-1,2-Dichloroethylene	MS	REC	91	%	78-123
FA76970-1AMS	78-87-5	1,2-Dichloropropane	MS	REC	101	%	78-122
FA76970-1AMS	75-09-2	Methylene Chloride	MS	REC	100	%	74-124
FA76970-1AMS	127-18-4	Tetrachloroethylene	MS	REC	89	%	74-129
FA76970-1AMS	79-01-6	Trichloroethylene	MS	REC	106	%	79-123
FA76970-1AMS	75-01-4	Vinyl Chloride	MS	REC	136	%	58-137
FA76970-1AMS	17060-07-0	1,2-Dichloroethane-D4	MS	SURR	105	%	81-118
FA76970-1AMS	2037-26-5	Toluene-D8	MS	SURR	87	%	89-112
FA76970-1AMSD	71-43-2	Benzene	MSD	REC	101	%	79-120
FA76970-1AMSD	71-43-2	Benzene	MSD	RPD	3	%	20
FA76970-1AMSD	56-23-5	Carbon Tetrachloride	MSD	REC	103	%	72-136
FA76970-1AMSD	56-23-5	Carbon Tetrachloride	MSD	RPD	5	%	20
FA76970-1AMSD	67-66-3	Chloroform	MSD	REC	101	%	79-124
FA76970-1AMSD	67-66-3	Chloroform	MSD	RPD	2	%	20
FA76970-1AMSD	75-34-3	1,1-Dichloroethane	MSD	REC	102	%	77-125
FA76970-1AMSD	75-34-3	1,1-Dichloroethane	MSD	RPD	3	%	20
FA76970-1AMSD	107-06-2	1,2-Dichloroethane	MSD	REC	98	%	73-128
FA76970-1AMSD	107-06-2	1,2-Dichloroethane	MSD	RPD	2	%	20
FA76970-1AMSD	156-59-2	cis-1,2-Dichloroethylene	MSD	REC	95	%	78-123
FA76970-1AMSD	156-59-2	cis-1,2-Dichloroethylene	MSD	RPD	4	%	20
FA76970-1AMSD	78-87-5	1,2-Dichloropropane	MSD	REC	105	%	78-122
FA76970-1AMSD	78-87-5	1,2-Dichloropropane	MSD	RPD	3	%	20
FA76970-1AMSD	75-09-2	Methylene Chloride	MSD	REC	100	%	74-124
FA76970-1AMSD	75-09-2	Methylene Chloride	MSD	RPD	0	%	20

* Sample used for QC is not from job FA77021

5.2
5

QC Evaluation: DOD QSM5.x Limits

Job Number: FA77021
Account: Ahtna Global, LLC
Project: DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA
Collected: 07/21/20

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
FA76970-1AMSD	127-18-4	Tetrachloroethylene	MSD	REC	93	%	74-129
FA76970-1AMSD	127-18-4	Tetrachloroethylene	MSD	RPD	4	%	20
FA76970-1AMSD	79-01-6	Trichloroethylene	MSD	REC	108	%	79-123
FA76970-1AMSD	79-01-6	Trichloroethylene	MSD	RPD	2	%	20
FA76970-1AMSD	75-01-4	Vinyl Chloride	MSD	REC	128	%	58-137
FA76970-1AMSD	75-01-4	Vinyl Chloride	MSD	RPD	6	%	20
FA76970-1AMSD	17060-07-0	1,2-Dichloroethane-D4	MSD	SURR	112	%	81-118
FA76970-1AMSD	2037-26-5	Toluene-D8	MSD	SURR	89	%	89-112
VO2342-MB	17060-07-0	1,2-Dichloroethane-D4	MB	SURR	112	%	81-118
VO2342-MB	2037-26-5	Toluene-D8	MB	SURR	100	%	89-112
FA77021-1	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	109	%	81-118
FA77021-1	2037-26-5	Toluene-D8	SAMP	SURR	99	%	89-112
FA77021-2	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	113	%	81-118
FA77021-2	2037-26-5	Toluene-D8	SAMP	SURR	98	%	89-112
FA77021-3	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	115	%	81-118
FA77021-3	2037-26-5	Toluene-D8	SAMP	SURR	98	%	89-112
FA77021-4	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	114	%	81-118
FA77021-4	2037-26-5	Toluene-D8	SAMP	SURR	97	%	89-112

* Sample used for QC is not from job FA77021

5.2
5

MS Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Instrument Performance Checks (BFB)
- Internal Standard Area Summaries
- Surrogate Recovery Summaries
- Initial and Continuing Calibration Summaries
- Run Sequence Reports

Method Blank Summary**Job Number:** FA77021**Account:** AHTNACAS Ahtna Global, LLC**Project:** DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VO2342-MB	O60946.D	1	07/23/20	SP	n/a	n/a	VO2342

The QC reported here applies to the following samples:**Method:** SW846 8260B BY SIM

FA77021-1, FA77021-2, FA77021-3, FA77021-4

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	0.50	0.10	ug/l	
56-23-5	Carbon Tetrachloride	ND	0.50	0.10	ug/l	
67-66-3	Chloroform	ND	0.50	0.10	ug/l	
75-34-3	1,1-Dichloroethane	ND	0.50	0.10	ug/l	
107-06-2	1,2-Dichloroethane	ND	0.50	0.10	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	0.50	0.10	ug/l	
78-87-5	1,2-Dichloropropane	ND	0.50	0.10	ug/l	
75-09-2	Methylene Chloride	ND	2.0	0.50	ug/l	
127-18-4	Tetrachloroethylene	ND	0.50	0.10	ug/l	
79-01-6	Trichloroethylene	ND	0.50	0.10	ug/l	
75-01-4	Vinyl Chloride	ND	0.10	0.050	ug/l	

CAS No.	Surrogate Recoveries	Limits	
17060-07-0	1,2-Dichloroethane-D4	112%	74-125%
2037-26-5	Toluene-D8	100%	88-111%

Blank Spike Summary**Job Number:** FA77021**Account:** AHTNACAS Ahtna Global, LLC**Project:** DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VO2342-BS	O60944.D	1	07/23/20	SP	n/a	n/a	VO2342

The QC reported here applies to the following samples:**Method:** SW846 8260B BY SIM

FA77021-1, FA77021-2, FA77021-3, FA77021-4

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
71-43-2	Benzene	5	4.6	92	81-122
56-23-5	Carbon Tetrachloride	5	4.9	98	76-136
67-66-3	Chloroform	5	4.7	94	80-124
75-34-3	1,1-Dichloroethane	5	4.5	90	81-122
107-06-2	1,2-Dichloroethane	5	4.5	90	75-125
156-59-2	cis-1,2-Dichloroethylene	5	4.5	90	78-120
78-87-5	1,2-Dichloropropane	5	4.7	94	76-124
75-09-2	Methylene Chloride	5	4.5	90	69-135
127-18-4	Tetrachloroethylene	5	4.7	94	76-135
79-01-6	Trichloroethylene	5	4.8	96	81-126
75-01-4	Vinyl Chloride	5	6.5	130	69-159

CAS No.	Surrogate Recoveries	BSP	Limits
17060-07-0	1,2-Dichloroethane-D4	102%	74-125%
2037-26-5	Toluene-D8	96%	88-111%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA77021
Account: AHTNACAS Ahtna Global, LLC
Project: DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA76970-1AMS	O60954.D	10	07/23/20	SP	n/a	n/a	VO2342
FA76970-1AMSD	O60955.D	10	07/23/20	SP	n/a	n/a	VO2342

The QC reported here applies to the following samples:

Method: SW846 8260B BY SIM

FA77021-1, FA77021-2, FA77021-3, FA77021-4

CAS No.	Compound	ug/l	Spike Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene			50	54.2	97	50	55.9	101	3	81-122/14
56-23-5	Carbon Tetrachloride			50	49.3	99	50	51.7	103	5	76-136/23
67-66-3	Chloroform			50	51.6	98	50	52.9	101	2	80-124/15
75-34-3	1,1-Dichloroethane			50	49.1	98	50	50.8	102	3	81-122/15
107-06-2	1,2-Dichloroethane			50	47.9	96	50	48.9	98	2	75-125/14
156-59-2	cis-1,2-Dichloroethylene			50	47.0	91	50	48.9	95	4	78-120/15
78-87-5	1,2-Dichloropropane			50	50.6	101	50	52.4	105	3	76-124/14
75-09-2	Methylene Chloride			50	49.8	100	50	49.8	100	0	69-135/16
127-18-4	Tetrachloroethylene			50	44.4	89	50	46.4	93	4	76-135/16
79-01-6	Trichloroethylene			50	53.2	106	50	54.1	108	2	81-126/15
75-01-4	Vinyl Chloride			50	68.8	136	50	64.8	128	6	69-159/18

CAS No.	Surrogate Recoveries	MS	MSD	Limits
17060-07-0	1,2-Dichloroethane-D4	105%	112%	74-125%
2037-26-5	Toluene-D8	87%*	89%	88-111%

* = Outside of Control Limits.

Instrument Performance Check (BFB)**Job Number:** FA77021**Account:** AHTNACAS Ahtna Global, LLC**Project:** DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA**Sample:** VO2337-BFB**Injection Date:** 07/02/20**Lab File ID:** O60817.D**Injection Time:** 08:25**Instrument ID:** GCMSO

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	158784	31.2	Pass
75	30.0 - 60.0% of mass 95	238571	46.8	Pass
95	Base peak, 100% relative abundance	509461	100.0	Pass
96	5.0 - 9.0% of mass 95	34768	6.82	Pass
173	Less than 2.0% of mass 174	2676	0.53 (0.67) ^a	Pass
174	50.0 - 100.0% of mass 95	398016	78.1	Pass
175	5.0 - 9.0% of mass 174	30053	5.90 (7.55) ^a	Pass
176	95.0 - 101.0% of mass 174	392512	77.0 (98.6) ^a	Pass
177	5.0 - 9.0% of mass 176	22248	4.37 (5.67) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VO2337-IC2337	O60820.D	07/02/20	10:49	02:24	Initial cal 1
VO2337-IC2337	O60821.D	07/02/20	11:12	02:47	Initial cal 2
VO2337-IC2337	O60822.D	07/02/20	11:37	03:12	Initial cal 3
VO2337-IC2337	O60823.D	07/02/20	12:00	03:35	Initial cal 4
VO2337-ICC2337	O60824.D	07/02/20	12:24	03:59	Initial cal 5
VO2337-IC2337	O60825.D	07/02/20	12:48	04:23	Initial cal 6
VO2337-IC2337	O60826.D	07/02/20	13:12	04:47	Initial cal 7
VO2337-ICV2337	O60828.D	07/02/20	14:01	05:36	Initial cal verification 5
VO2337-BS	O60829.D	07/02/20	14:26	06:01	Blank Spike
VO2337-MB	O60830.D	07/02/20	14:51	06:26	Method Blank
ZZZZZZ	O60831.D	07/02/20	15:15	06:50	(unrelated sample)
FA76463-2	O60832.D	07/02/20	15:39	07:14	(used for QC only; not part of job FA77021)
ZZZZZZ	O60833.D	07/02/20	16:03	07:38	(unrelated sample)
ZZZZZZ	O60834.D	07/02/20	16:27	08:02	(unrelated sample)
ZZZZZZ	O60835.D	07/02/20	16:50	08:25	(unrelated sample)
ZZZZZZ	O60836.D	07/02/20	17:15	08:50	(unrelated sample)
FA76463-2MS	O60837.D	07/02/20	17:38	09:13	Matrix Spike
FA76463-2MSD	O60838.D	07/02/20	18:03	09:38	Matrix Spike Duplicate
VO2337-ECC2337	O60839.D	07/02/20	18:26	10:01	Ending cal 5

Instrument Performance Check (BFB)**Job Number:** FA77021**Account:** AHTNACAS Ahtna Global, LLC**Project:** DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA**Sample:** VO2342-BFB**Injection Date:** 07/23/20**Lab File ID:** O60941.D**Injection Time:** 08:07**Instrument ID:** GCMSO

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	125613	30.6	Pass
75	30.0 - 60.0% of mass 95	198315	48.2	Pass
95	Base peak, 100% relative abundance	411093	100.0	Pass
96	5.0 - 9.0% of mass 95	28245	6.87	Pass
173	Less than 2.0% of mass 174	1416	0.34 (0.41) ^a	Pass
174	50.0 - 100.0% of mass 95	342635	83.3	Pass
175	5.0 - 9.0% of mass 174	23211	5.65 (6.77) ^a	Pass
176	95.0 - 101.0% of mass 174	330752	80.5 (96.5) ^a	Pass
177	5.0 - 9.0% of mass 176	22981	5.59 (6.95) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VO2342-CC2337	O60942.D	07/23/20	08:34	00:27	Continuing cal 5
VO2342-BS	O60944.D	07/23/20	09:35	01:28	Blank Spike
VO2342-MB	O60946.D	07/23/20	10:26	02:19	Method Blank
ZZZZZZ	O60947.D	07/23/20	10:50	02:43	(unrelated sample)
FA77021-1	O60950.D	07/23/20	12:01	03:54	2030MOU2157A
FA77021-2	O60951.D	07/23/20	12:25	04:18	2030MOU2158F
FA77021-3	O60952.D	07/23/20	12:49	04:42	2030MOU2159F
FA77021-4	O60953.D	07/23/20	13:13	05:06	2030MOU2160F
FA76970-1AMS	O60954.D	07/23/20	13:37	05:30	Matrix Spike
FA76970-1AMSD	O60955.D	07/23/20	14:01	05:54	Matrix Spike Duplicate
VO2342-ECC2337	O60956.D	07/23/20	14:25	06:18	Ending cal 5

Internal Standard Area Summary

Job Number: FA77021
Account: AHTNACAS Ahtna Global, LLC
Project: DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA

Check Std: VO2342-CC2337	Injection Date: 07/23/20
Lab File ID: O60942.D	Injection Time: 08:34
Instrument ID: GCMSO	Method: SW846 8260B BY SIM

	IS 1 AREA	RT	IS 2 AREA	RT
Initial Cal ^a	347161	7.35	227073	10.45
Check Std ^b	308379	7.35	204005	10.44
Upper Limit ^c	616758	7.52	408010	10.61
Lower Limit ^d	154190	7.18	102003	10.27

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT
VO2342-BS	251245	7.35	163478	10.45
VO2342-MB	193659	7.35	122714	10.45
ZZZZZZ	183888	7.35	119998	10.45
FA77021-1	192493	7.34	122070	10.45
FA77021-2	173235	7.35	111584	10.45
FA77021-3	169817	7.35	110685	10.45
FA77021-4	163079	7.35	107494	10.45
FA76970-1AMS	203381	7.35	149778	10.45
FA76970-1AMSD	230660	7.35	166723	10.45
VO2342-ECC2337270443		7.35	175328	10.45

IS 1 = Fluorobenzene
IS 2 = Chlorobenzene-D5

- (a) Initial Cal is: VO2337-ICC2337 O60824.D 07/02/20 12:24
- (b) Check Std Limit = -50 to + 100% of initial cal area.
- (c) Upper Limit = + 100% of check standard area; Retention time + 0.167 minutes.
- (d) Lower Limit = -50% of check standard area; Retention time -0.167 minutes.

6.5.1
6

Surrogate Recovery Summary

Job Number: FA77021

Account: AHTNACAS Ahtna Global, LLC

Project: DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA

Method: SW846 8260B BY SIM

Matrix: AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2
FA77021-1	O60950.D	109	99
FA77021-2	O60951.D	113	98
FA77021-3	O60952.D	115	98
FA77021-4	O60953.D	114	97
FA76970-1AMS	O60954.D	105	87*
FA76970-1AMSD	O60955.D	112	89
VO2342-BS	O60944.D	102	96
VO2342-MB	O60946.D	112	100

Surrogate Compounds

Recovery Limits

S1 = 1,2-Dichloroethane-D4

74-125%

S2 = Toluene-D8

88-111%

Initial Calibration Summary

Job Number: FA77021 **Sample:** VO2337-ICC2337
Account: AHTNACAS Ahtna Global, LLC **Lab FileID:** O60824.D
Project: DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA

Response Factor Report MSVOA12

Method : C:\msdchem\2\methods\SIMCL070220.M (RTE Integrator)
 Title : Standard Methods 6200B
 Last Update : Thu Jul 02 13:33:54 2020
 Response via : Initial Calibration

Calibration Files

1 =O60820.D 2 =O60821.D 3 =O60822.D 4 =O60823.D
 5 =O60824.D 6 =O60825.D 7 =O60826.D

Compound	1	2	3	4	5	6	7	Avg	%RSD
1) I Fluorobenzene	-----ISTD-----								
2) Vinyl Chloride	0.447	0.443	0.505	0.510	0.493	0.492	0.468	0.480	5.67
3) Chloromethane	2.049	0.850	0.836	0.839	0.778	0.759	0.720	0.976	48.76
	---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9998 Response Ratio = 0.00000 + 0.85655 *A + -0.03398 *A^2								
4) 1,1-Dichloroethen	0.640	0.567	0.517	0.619	0.595	0.748	0.603	0.613	11.71
5) Methylene Chlorid	2.003	1.114	1.005	1.004	0.997	0.978	0.937	1.148	33.16
	---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9998 Response Ratio = 0.00000 + 1.05346 *A + -0.02825 *A^2								
6) trans-1,2-Dichlor	0.705	0.618	0.601	0.644	0.684	0.685	0.670	0.658	5.82
7) 1,1-Dichloroethan	2.259	0.769	0.744	0.799	0.830	0.830	0.805	1.005	55.09
	---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9994 Response Ratio = 0.00000 + 0.83985 *A + -0.00742 *A^2								
8) cis-1,2-Dichloroe	0.517	0.409	0.405	0.436	0.460	0.464	0.459	0.450	8.50
9) Chloroform	0.868	0.748	0.739	0.798	0.824	0.829	0.810	0.802	5.69
10) Carbon Tetrachlor	0.525	0.441	0.408	0.470	0.521	0.544	0.536	0.492	10.67
11) 1,1,1-Trichloroet	0.631	0.504	0.496	0.560	0.608	0.628	0.621	0.578	10.14
12) Benzene	4.086	1.315	1.260	1.329	1.394	1.402	1.380	1.738	59.64
	---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9996 Response Ratio = 0.00000 + 1.38012 *A + 0.00181 *A^2								
13)S 1,2-Dichloroethan	0.377	0.374	0.381	0.363	0.359	0.360	0.355	0.367	2.69
14) 1,2-Dichloroethan	1.260	0.566	0.586	0.621	0.622	0.618	0.607	0.697	35.71
	---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9999 Response Ratio = 0.00000 + 0.63295 *A + -0.00602 *A^2								
15) Trichloroethene	0.555	0.433	0.426	0.469	0.503	0.514	0.514	0.488	9.71
16) 1,2-Dichloropropa	0.464	0.444	0.445	0.466	0.472	0.487	0.471	0.464	3.35
17) cis-1,3-Dichlorop	0.521	0.432	0.462	0.516	0.545	0.570	0.577	0.518	10.44
18) I Chlorobenzene-d5	-----ISTD-----								
19)S Toluene-d8	1.249	1.225	1.206	1.198	1.172	1.190	1.192	1.205	2.11
20) trans-1,3-Dichlor	0.718	0.623	0.687	0.780	0.815	0.845	0.867	0.762	11.74
21) Tetrachloroethene	0.696	0.602	0.575	0.620	0.660	0.665	0.662	0.640	6.60
22) 1,4-Dichlorobenze	1.208	1.086	1.151	1.233	1.289	1.326	1.327	1.231	7.37
23) 1,2-Dibromo-3-Chl	0.271	0.209	0.204	0.230	0.243	0.258	0.259	0.239	10.79

(#) = Out of Range

SIMCL070220.M Thu Jul 02 14:25:45 2020

6.7.1
6

Initial Calibration Verification

Job Number: FA77021

Sample: VO2337-ICV2337

Account: AHTNACAS Ahtna Global, LLC

Lab FileID: O60828.D

Project: DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA

Evaluate Continuing Calibration Report

Data File : C:\msdchem\2\data\070220\O60828.D Vial: 9
 Acq On : 2 Jul 2020 2:01 pm Operator: amandab
 Sample : ICV2337-5 Inst : MSVOA12
 Misc : MS46657,VO2337,,,,, Multiplr: 1.00
 MS Integration Params: rteint.p

Method : C:\msdchem\2\methods\SIMCL070220.M (RTE Integrator)
 Title : Standard Methods 6200B
 Last Update : Thu Jul 02 13:33:54 2020
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	Fluorobenzene	1.000	1.000	0.0	102	0.00	7.35
2	Vinyl Chloride	0.480	0.456	5.0	95	0.00	2.91
	----- Amount	Calc.	%Drift	-----			
3	Chloromethane	10.000	8.765	12.3	92	0.00	2.81
	----- AvgRF	CCRF	%Dev	-----			
4	1,1-Dichloroethene	0.613	0.581	5.2	100	0.00	4.09
	----- Amount	Calc.	%Drift	-----			
5	Methylene Chloride	10.000	9.668	3.3	99	0.00	4.70
	----- AvgRF	CCRF	%Dev	-----			
6	trans-1,2-Dichloroethene	0.658	0.651	1.1	98	0.00	4.87
	----- Amount	Calc.	%Drift	-----			
7	1,1-Dichloroethane	10.000	9.799	2.0	100	0.00	5.51
	----- AvgRF	CCRF	%Dev	-----			
8	cis-1,2-Dichloroethene	0.450	0.447	0.7	99	0.00	6.07
9	Chloroform	0.802	0.796	0.7	99	0.00	6.33
10	Carbon Tetrachloride	0.492	0.491	0.2	97	0.00	6.51
11	1,1,1-Trichloroethane	0.578	0.574	0.7	97	0.00	6.58
	----- Amount	Calc.	%Drift	-----			
12	Benzene	10.000	10.048	-0.5	102	0.00	6.94
	----- AvgRF	CCRF	%Dev	-----			
13 S	1,2-Dichloroethane-d4	0.367	0.362	1.4	103	0.00	7.08
	----- Amount	Calc.	%Drift	-----			
14	1,2-Dichloroethane	10.000	9.924	0.8	101	0.00	7.14
	----- AvgRF	CCRF	%Dev	-----			
15	Trichloroethene	0.488	0.503	-3.1	102	0.00	7.52
16	1,2-Dichloropropane	0.464	0.478	-3.0	104	0.00	8.04
17	cis-1,3-Dichloropropene	0.518	0.557	-7.5	105	0.00	8.71
18 I	Chlorobenzene-d5	1.000	1.000	0.0	102	0.00	10.45
19 S	Toluene-d8	1.205	1.190	1.2	103	0.00	8.90
20	trans-1,3-Dichloropropene	0.762	0.846	-11.0	106	0.00	9.34
21	Tetrachloroethene	0.640	0.632	1.3	98	0.00	9.34

Initial Calibration Verification

Job Number: FA77021

Sample: VO2337-ICV2337

Account: AHTNACAS Ahtna Global, LLC

Lab FileID: O60828.D

Project: DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA

22	1,4-Dichlorobenzene	1.231	1.296	-5.3	102	0.00	12.83
23	1,2-Dibromo-3-Chloropropa	0.239	0.245	-2.5	103	0.00	14.04

(#) = Out of Range

SPCC's out = 0 CCC's out = 0

O60824.D SIMCL070220.M

Thu Jul 02 14:26:14 2020

Continuing Calibration Summary

Job Number: FA77021

Sample: VO2342-CC2337

Account: AHTNACAS Ahtna Global, LLC

Lab FileID: O60942.D

Project: DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\Je...-2020\VO2342\O60942.d Vial: 1
 Acq On : 23 Jul 2020 8:34 am Operator: stutip
 Sample : cc2337-5 Inst : MSVOA12
 Misc : MS46775,VO2342,,,,, Multiplr: 1.00
 MS Integration Params: rteint.p

Method : C:\msdchem\1\methods\SIMCL070220.M (RTE Integrator)
 Title : Standard Methods 6200B
 Last Update : Thu Jul 02 13:33:54 2020
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	% Dev	Area%	Dev(min)	R.T.
1 I	Fluorobenzene	1.000	1.000	0.0	89	0.00	7.35
2	Vinyl Chloride	0.480	0.495	-3.1	89	0.00	2.91
	----- True	Calc.	% Drift	-----			
3	Chloromethane	10.000	9.845	1.5	89	0.00	2.80
	----- AvgRF	CCRF	% Dev	-----			
4	1,1-Dichloroethene	0.613	0.620	-1.1	93	0.00	4.09
	----- True	Calc.	% Drift	-----			
5	Methylene Chloride	10.000	10.320	-3.2	92	0.00	4.70
	----- AvgRF	CCRF	% Dev	-----			
6	trans-1,2-Dichloroethene	0.658	0.692	-5.2	90	0.00	4.87
	----- True	Calc.	% Drift	-----			
7	1,1-Dichloroethane	10.000	10.299	-3.0	91	0.00	5.51
	----- AvgRF	CCRF	% Dev	-----			
8	cis-1,2-Dichloroethene	0.450	0.476	-5.8	92	0.00	6.07
9	Chloroform	0.802	0.857	-6.9	92	0.00	6.33
10	Carbon Tetrachloride	0.492	0.565	-14.8	96	0.00	6.51
11	1,1,1-Trichloroethane	0.578	0.651	-12.6	95	0.00	6.58
	----- True	Calc.	% Drift	-----			
12	Benzene	10.000	10.350	-3.5	91	0.00	6.94
	----- AvgRF	CCRF	% Dev	-----			
13 S	1,2-Dichloroethane-d4	0.367	0.359	2.2	89	0.00	7.07
	----- True	Calc.	% Drift	-----			
14	1,2-Dichloroethane	10.000	10.327	-3.3	91	0.00	7.14
	----- AvgRF	CCRF	% Dev	-----			
15	Trichloroethene	0.488	0.525	-7.6	93	0.00	7.51
16	1,2-Dichloropropane	0.464	0.487	-5.0	92	0.00	8.04
17	cis-1,3-Dichloropropene	0.518	0.569	-9.8	93	0.00	8.71
18 I	Chlorobenzene-d5	1.000	1.000	0.0	90	0.00	10.44
19 S	Toluene-d8	1.205	1.157	4.0	89	0.00	8.90
20	trans-1,3-Dichloropropene	0.762	0.846	-11.0	93	0.00	9.34
21	Tetrachloroethene	0.640	0.670	-4.7	91	0.00	9.34

Continuing Calibration Summary

Job Number: FA77021

Sample: VO2342-CC2337

Account: AHTNACAS Ahtna Global, LLC

Lab FileID: O60942.D

Project: DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA

22	1,4-Dichlorobenzene	1.231	1.302	-5.8	91	0.00	12.83
23	1,2-Dibromo-3-Chloropropa	0.239	0.252	-5.4	93	0.00	14.04

(#) = Out of Range

SPCC's out = 0 CCC's out = 0

O60824.D SIMCL070220.M

Fri Jul 24 02:22:49 2020

Continuing Calibration Summary

Job Number: FA77021

Sample: VO2342-ECC2337

Account: AHTNACAS Ahtna Global, LLC

Lab FileID: O60956.D

Project: DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\Je...-2020\VO2342\O60956.d Vial: 14
 Acq On : 23 Jul 2020 2:25 pm Operator: stutip
 Sample : ecc2337-5 Inst : MSVOA12
 Misc : MS46775,VO2342,,,,, Multiplr: 1.00
 MS Integration Params: rteint.p

Method : C:\msdchem\1\methods\SIMCL070220.M (RTE Integrator)
 Title : Standard Methods 6200B
 Last Update : Thu Jul 02 13:33:54 2020
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 50% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	Fluorobenzene	1.000	1.000	0.0	78	0.00	7.35
2	Vinyl Chloride	0.480	0.563	-17.3	89	0.00	2.90
	----- True	Calc.	% Drift	-----			
3	Chloromethane	10.000	11.374	-13.7	89	0.00	2.80
	----- AvgRF	CCRF	% Dev	-----			
4	1,1-Dichloroethene	0.613	0.729	-18.9	95	0.00	4.09
	----- True	Calc.	% Drift	-----			
5	Methylene Chloride	10.000	11.898	-19.0	92	0.00	4.70
	----- AvgRF	CCRF	% Dev	-----			
6	trans-1,2-Dichloroethene	0.658	0.796	-21.0	91	0.00	4.87
	----- True	Calc.	% Drift	-----			
7	1,1-Dichloroethane	10.000	11.780	-17.8	91	0.00	5.51
	----- AvgRF	CCRF	% Dev	-----			
8	cis-1,2-Dichloroethene	0.450	0.534	-18.7	90	0.00	6.07
9	Chloroform	0.802	0.974	-21.4	92	0.00	6.33
10	Carbon Tetrachloride	0.492	0.622	-26.4	93	0.00	6.51
11	1,1,1-Trichloroethane	0.578	0.726	-25.6	93	0.00	6.58
	----- True	Calc.	% Drift	-----			
12	Benzene	10.000	11.557	-15.6	89	0.00	6.94
	----- AvgRF	CCRF	% Dev	-----			
13 S	1,2-Dichloroethane-d4	0.367	0.361	1.6	78	0.00	7.07
	----- True	Calc.	% Drift	-----			
14	1,2-Dichloroethane	10.000	11.614	-16.1	90	0.00	7.14
	----- AvgRF	CCRF	% Dev	-----			
15	Trichloroethene	0.488	0.588	-20.5	91	0.00	7.51
16	1,2-Dichloropropane	0.464	0.549	-18.3	91	0.00	8.04
17	cis-1,3-Dichloropropene	0.518	0.610	-17.8	87	0.00	8.71
18 I	Chlorobenzene-d5	1.000	1.000	0.0	77	0.00	10.45
19 S	Toluene-d8	1.205	1.157	4.0	76	0.00	8.90
20	trans-1,3-Dichloropropene	0.762	0.933	-22.4	88	0.00	9.34
21	Tetrachloroethene	0.640	0.748	-16.9	88	0.00	9.34

Continuing Calibration Summary

Job Number: FA77021

Sample: VO2342-ECC2337

Account: AHTNACAS Ahtna Global, LLC

Lab FileID: O60956.D

Project: DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA

22	1,4-Dichlorobenzene	1.231	1.461	-18.7	88	0.00	12.83
23	1,2-Dibromo-3-Chloropropa	0.239	0.280	-17.2	89	0.00	14.04

(#) = Out of Range

SPCC's out = 0 CCC's out = 0

O60824.D SIMCL070220.M

Fri Jul 24 02:46:11 2020

Run Sequence Report**Job Number:** FA77021**Account:** AHTNACAS Ahtna Global, LLC**Project:** DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA

Run ID: VO2337	Method: SW846 8260B BY SIM	Instrument ID: GCMSO
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Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
VO2337-BFB	O60817.D	07/02/20 08:25	n/a	BFB Tune
VO2337-IC2337	O60820.D	07/02/20 10:49	n/a	Initial cal 1
VO2337-IC2337	O60821.D	07/02/20 11:12	n/a	Initial cal 2
VO2337-IC2337	O60822.D	07/02/20 11:37	n/a	Initial cal 3
VO2337-IC2337	O60823.D	07/02/20 12:00	n/a	Initial cal 4
VO2337-ICC2337	O60824.D	07/02/20 12:24	n/a	Initial cal 5
VO2337-IC2337	O60825.D	07/02/20 12:48	n/a	Initial cal 6
VO2337-IC2337	O60826.D	07/02/20 13:12	n/a	Initial cal 7
VO2337-ICV2337	O60828.D	07/02/20 14:01	n/a	Initial cal verification 5
VO2337-BS	O60829.D	07/02/20 14:26	n/a	Blank Spike
VO2337-MB	O60830.D	07/02/20 14:51	n/a	Method Blank
ZZZZZZ	O60831.D	07/02/20 15:15	n/a	(unrelated sample)
FA76463-2	O60832.D	07/02/20 15:39	n/a	(used for QC only; not part of job FA77021)
ZZZZZZ	O60833.D	07/02/20 16:03	n/a	(unrelated sample)
ZZZZZZ	O60834.D	07/02/20 16:27	n/a	(unrelated sample)
ZZZZZZ	O60835.D	07/02/20 16:50	n/a	(unrelated sample)
ZZZZZZ	O60836.D	07/02/20 17:15	n/a	(unrelated sample)
FA76463-2MS	O60837.D	07/02/20 17:38	n/a	Matrix Spike
FA76463-2MSD	O60838.D	07/02/20 18:03	n/a	Matrix Spike Duplicate
VO2337-ECC2337	O60839.D	07/02/20 18:26	n/a	Ending cal 5

Run Sequence Report**Job Number:** FA77021**Account:** AHTNACAS Ahtna Global, LLC**Project:** DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA

Run ID: VO2342	Method: SW846 8260B BY SIM	Instrument ID: GCMSO
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Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
VO2342-BFB	O60941.D	07/23/20 08:07	n/a	BFB Tune
VO2342-CC2337	O60942.D	07/23/20 08:34	n/a	Continuing cal 5
VO2342-BS	O60944.D	07/23/20 09:35	n/a	Blank Spike
VO2342-MB	O60946.D	07/23/20 10:26	n/a	Method Blank
ZZZZZZ	O60947.D	07/23/20 10:50	n/a	(unrelated sample)
FA77021-1	O60950.D	07/23/20 12:01	n/a	2030MOU2157A
FA77021-2	O60951.D	07/23/20 12:25	n/a	2030MOU2158F
FA77021-3	O60952.D	07/23/20 12:49	n/a	2030MOU2159F
FA77021-4	O60953.D	07/23/20 13:13	n/a	2030MOU2160F
FA76970-1AMS	O60954.D	07/23/20 13:37	n/a	Matrix Spike
FA76970-1AMSD	O60955.D	07/23/20 14:01	n/a	Matrix Spike Duplicate
VO2342-ECC2337	O60956.D	07/23/20 14:25	n/a	Ending cal 5

MS Volatiles

Raw Data

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\JULY 2020\07-24-2020\VO2342\
Data File : O60950.d
Acq On : 23 Jul 2020 12:01 pm
Operator : stutip
Sample : fa77021-1 Inst : MSVOA12
Misc : MS46803,VO2342,,,,,
ALS Vial : 8 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\SIMCL070220.M
Quant Results File: SIMCL070220.RES
Quant Time: Jul 24 02:20:54 2020
Quant Title : Standard Methods 6200B
QLast Update : Thu Jul 02 13:33:54 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.340	96	192493	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.447	117	122070	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.068	65	77259	5.47	ug/L	-0.01
Spiked Amount	5.000	Range 74 - 125	Recovery	=	109.40%	
19) Toluene-d8	8.896	98	145296	4.94	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	98.80%	
Target Compounds						Qvalue

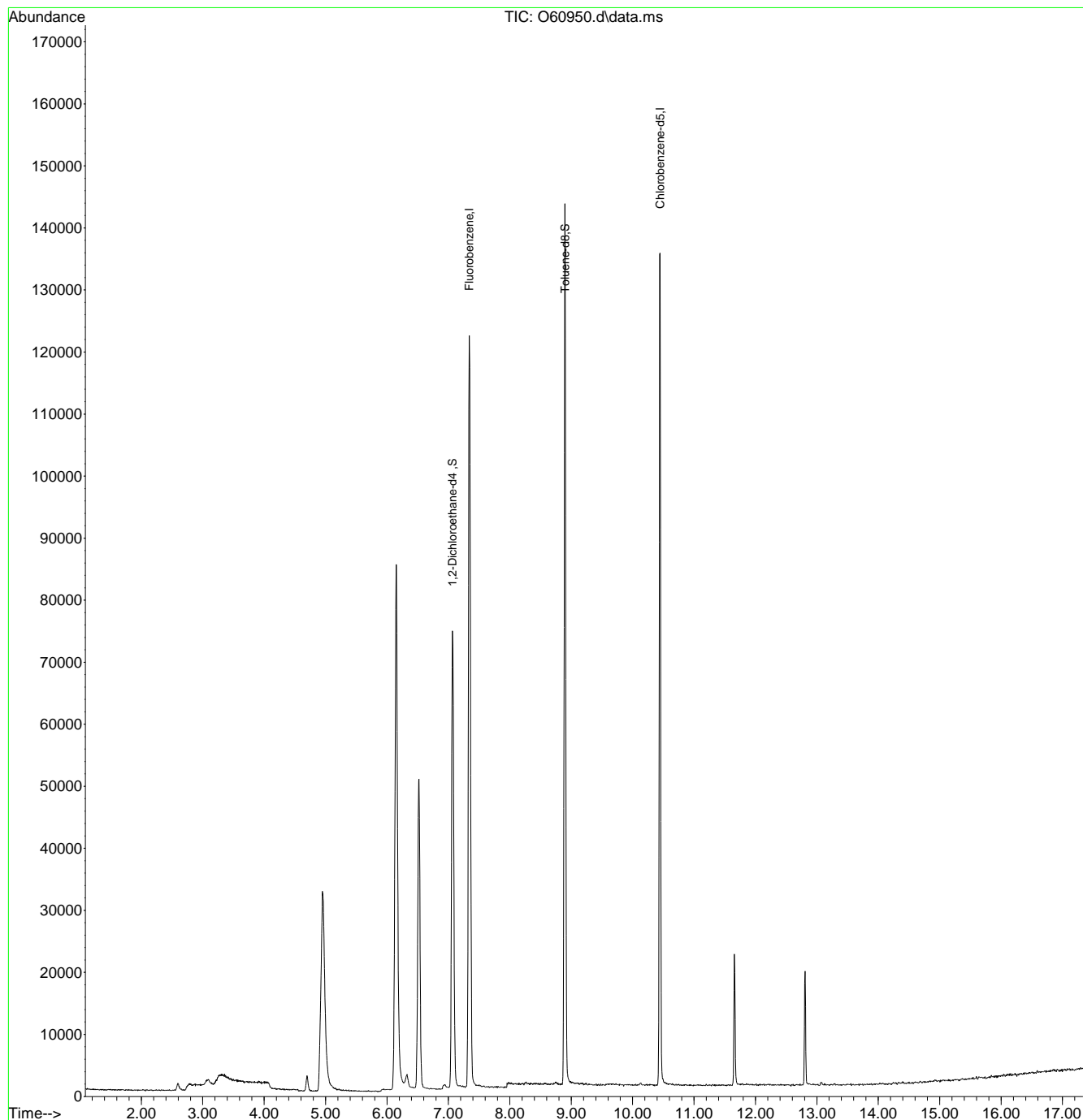
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.1.1
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\JULY 2020\07-24-2020\VO2342\
Data File : O60950.d
Acq On : 23 Jul 2020 12:01 pm
Operator : stutip
Sample : fa77021-1 Inst : MSVOA12
Misc : MS46803,VO2342,,,,,
ALS Vial : 8 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\SIMCL070220.M
Quant Results File: SIMCL070220.RES
Quant Time: Jul 24 02:20:54 2020
Quant Title : Standard Methods 6200B
QLast Update : Thu Jul 02 13:33:54 2020
Response via : Initial Calibration



7.1.1
7



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\JULY 2020\07-24-2020\VO2342\
Data File : O60951.d
Acq On : 23 Jul 2020 12:25 pm
Operator : stutip
Sample : fa77021-2 Inst : MSVOA12
Misc : MS46803,VO2342,,,,,
ALS Vial : 9 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\SIMCL070220.M
Quant Results File: SIMCL070220.RES
Quant Time: Jul 24 02:20:57 2020
Quant Title : Standard Methods 6200B
QLast Update : Thu Jul 02 13:33:54 2020
Response via : Initial Calibration

Table with 7 columns: Compound, R.T., QIon, Response, Conc, Units, Dev(Min). Rows include Internal Standards (Fluorobenzene, Chlorobenzene-d5), System Monitoring Compounds (1,2-Dichloroethane-d4, Toluene-d8), and Target Compounds (1,1-Dichloroethane, cis-1,2-Dichloroethene, Chloroform, 1,2-Dichloroethane).

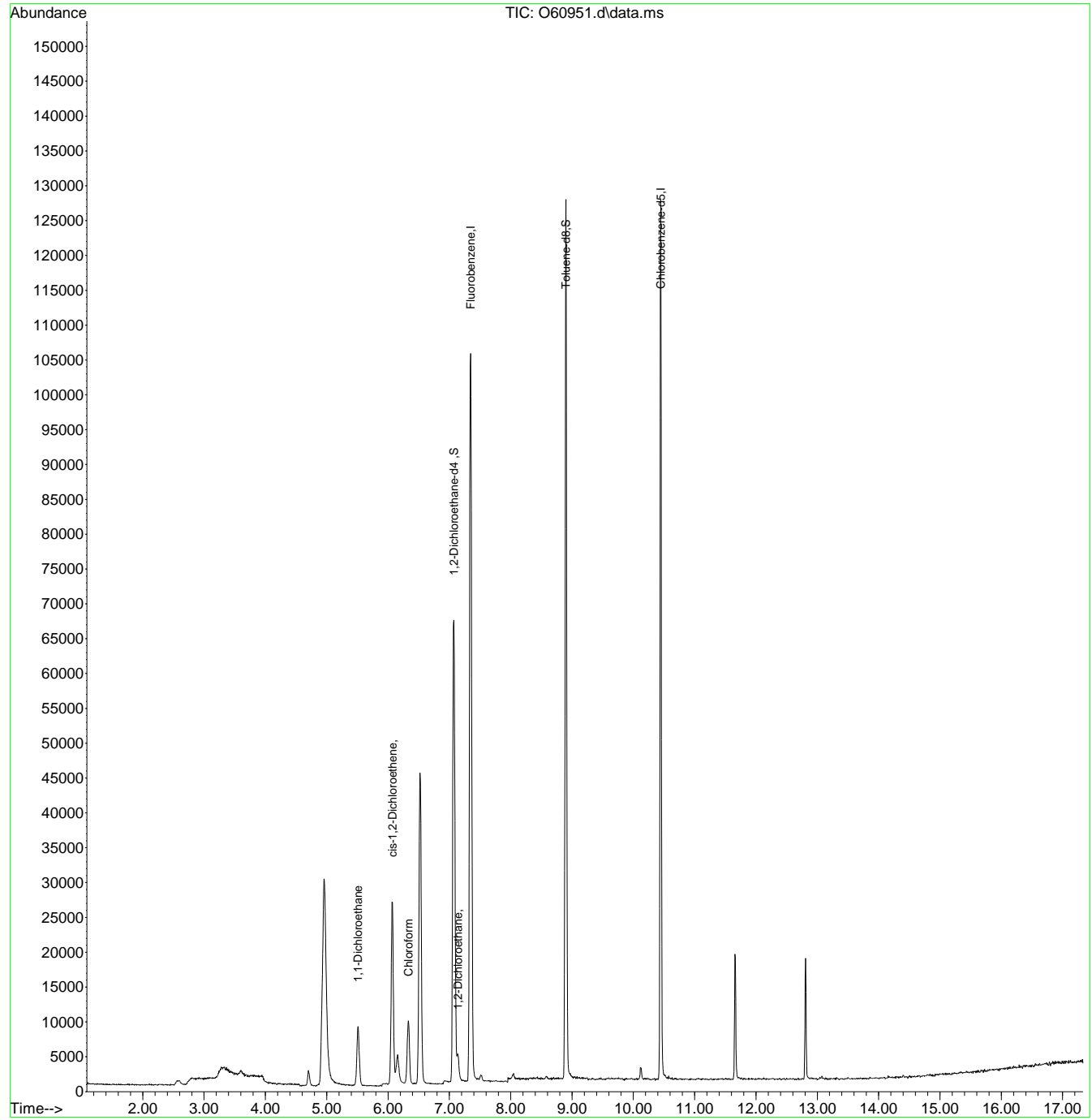
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.12
7

Quantitation Report (QT Reviewed)

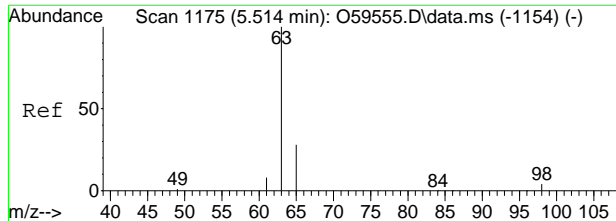
Data Path : C:\msdchem\1\data\JenniferF\JULY 2020\07-24-2020\VO2342\
Data File : O60951.d
Acq On : 23 Jul 2020 12:25 pm
Operator : stutip
Sample : fa77021-2 Inst : MSVOA12
Misc : MS46803,VO2342,,,,,
ALS Vial : 9 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\SIMCL070220.M
Quant Results File: SIMCL070220.RES
Quant Time: Jul 24 02:20:57 2020
Quant Title : Standard Methods 6200B
QLast Update : Thu Jul 02 13:33:54 2020
Response via : Initial Calibration



7.12
7

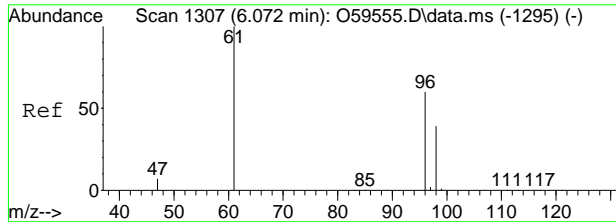
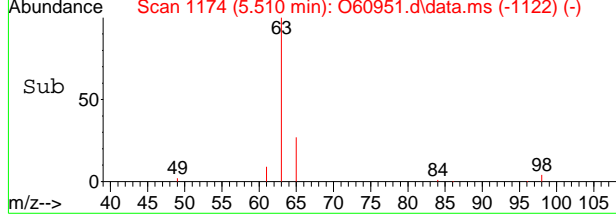
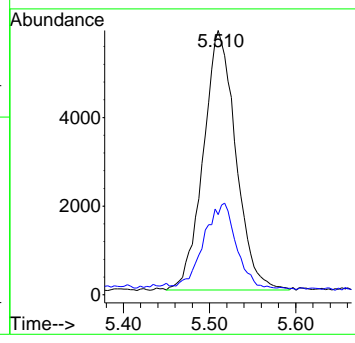
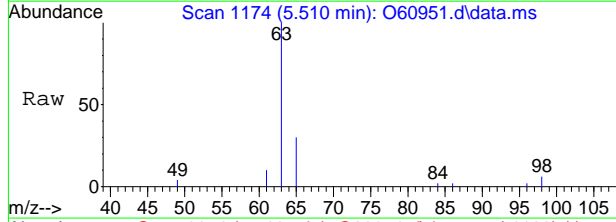




#7
 1,1-Dichloroethane
 Concen: 0.53 ug/L
 RT: 5.510 min Scan# 1174
 Delta R.T. -0.004 min
 Lab File: O60951.d
 Acq: 23 Jul 2020 12:25 pm

Tgt Ion: 63 Resp: 15314

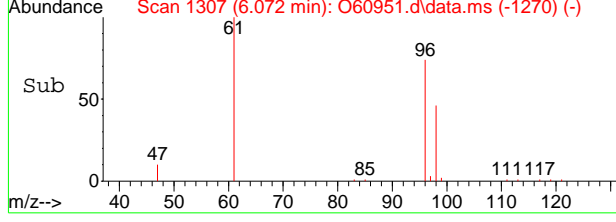
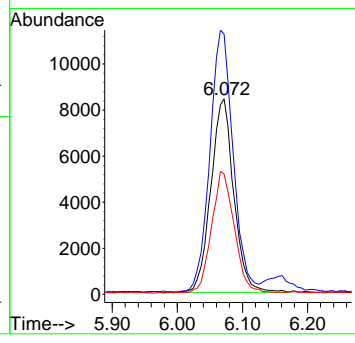
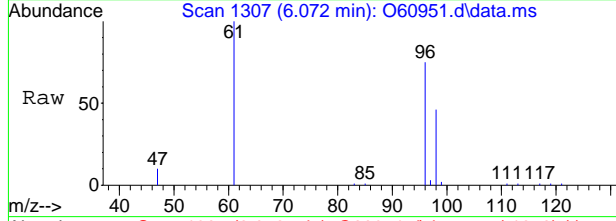
Ion	Ratio	Lower	Upper
63	100		
65	28.4	0.7	60.7



#8
 cis-1,2-Dichloroethene
 Concen: 1.32 ug/L
 RT: 6.072 min Scan# 1307
 Delta R.T. -0.000 min
 Lab File: O60951.d
 Acq: 23 Jul 2020 12:25 pm

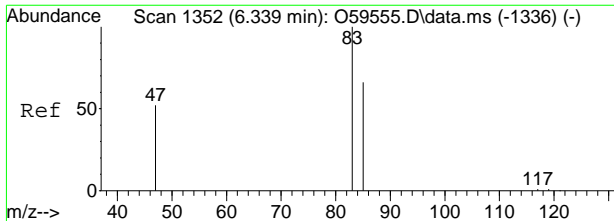
Tgt Ion: 96 Resp: 20560

Ion	Ratio	Lower	Upper
96	100		
61	133.1	110.0	170.0
98	61.3	34.1	94.1

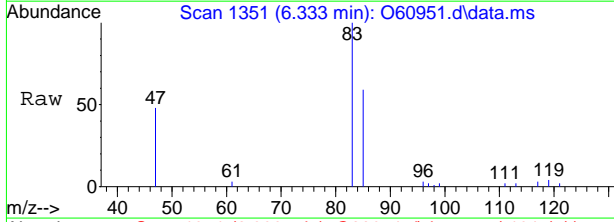


7.12
7



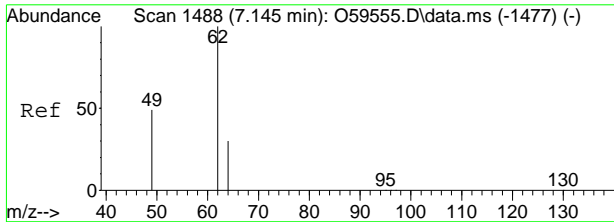
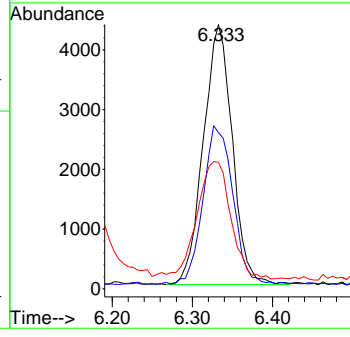
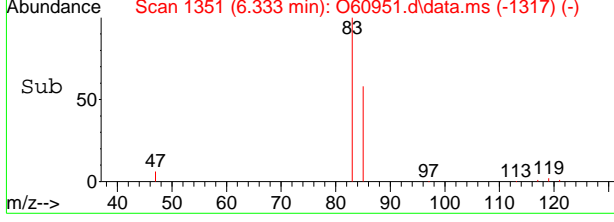


#9
 Chloroform
 Concen: 0.39 ug/L
 RT: 6.333 min Scan# 1351
 Delta R.T. -0.000 min
 Lab File: O60951.d
 Acq: 23 Jul 2020 12:25 pm

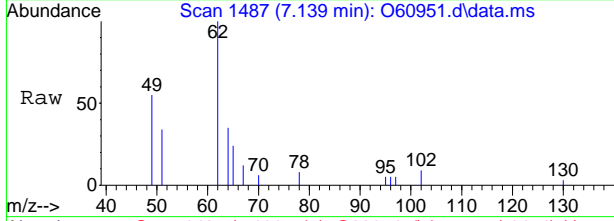


Tgt Ion: 83 Resp: 10925

Ion	Ratio	Lower	Upper
83	100		
85	57.9	34.7	94.7
47	44.7	9.0	69.0

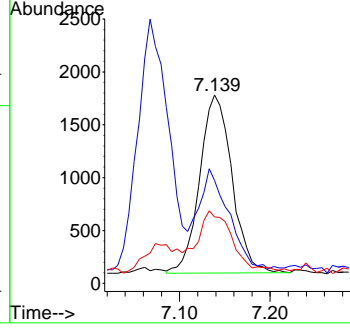
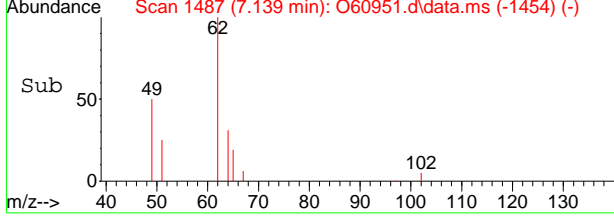


#14
 1,2-Dichloroethane
 Concen: 0.19 ug/L
 RT: 7.139 min Scan# 1487
 Delta R.T. -0.006 min
 Lab File: O60951.d
 Acq: 23 Jul 2020 12:25 pm



Tgt Ion: 62 Resp: 4170

Ion	Ratio	Lower	Upper
62	100		
49	48.2	17.8	77.8
64	30.3	1.3	61.3



7.12
7



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\JULY 2020\07-24-2020\VO2342\
Data File : O60952.d
Acq On : 23 Jul 2020 12:49 pm
Operator : stutip
Sample : fa77021-3 Inst : MSVOA12
Misc : MS46803,VO2342,,,,,
ALS Vial : 10 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\SIMCL070220.M
Quant Results File: SIMCL070220.RES
Quant Time: Jul 24 02:30:56 2020
Quant Title : Standard Methods 6200B
QLast Update : Thu Jul 02 13:33:54 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Fluorobenzene	7.346	96	169817	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.447	117	110685	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.073	65	71686	5.75	ug/L	0.00
Spiked Amount	5.000	Range	74 - 125	Recovery	=	115.00%
19) Toluene-d8	8.900	98	130417	4.89	ug/L	0.00
Spiked Amount	5.000	Range	88 - 111	Recovery	=	97.80%
Target Compounds						
						Qvalue
3) Chloromethane	2.803	50	14439	0.50	ug/L	99
7) 1,1-Dichloroethane	5.510	63	12298	0.43	ug/L	97
8) cis-1,2-Dichloroethene	6.066	96	23626	1.55	ug/L	98
9) Chloroform	6.333	83	8788	0.32	ug/L	93
15) Trichloroethene	7.512	95	59626	3.60	ug/L	97
21) Tetrachloroethene	9.343	166	3444m	0.24	ug/L	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

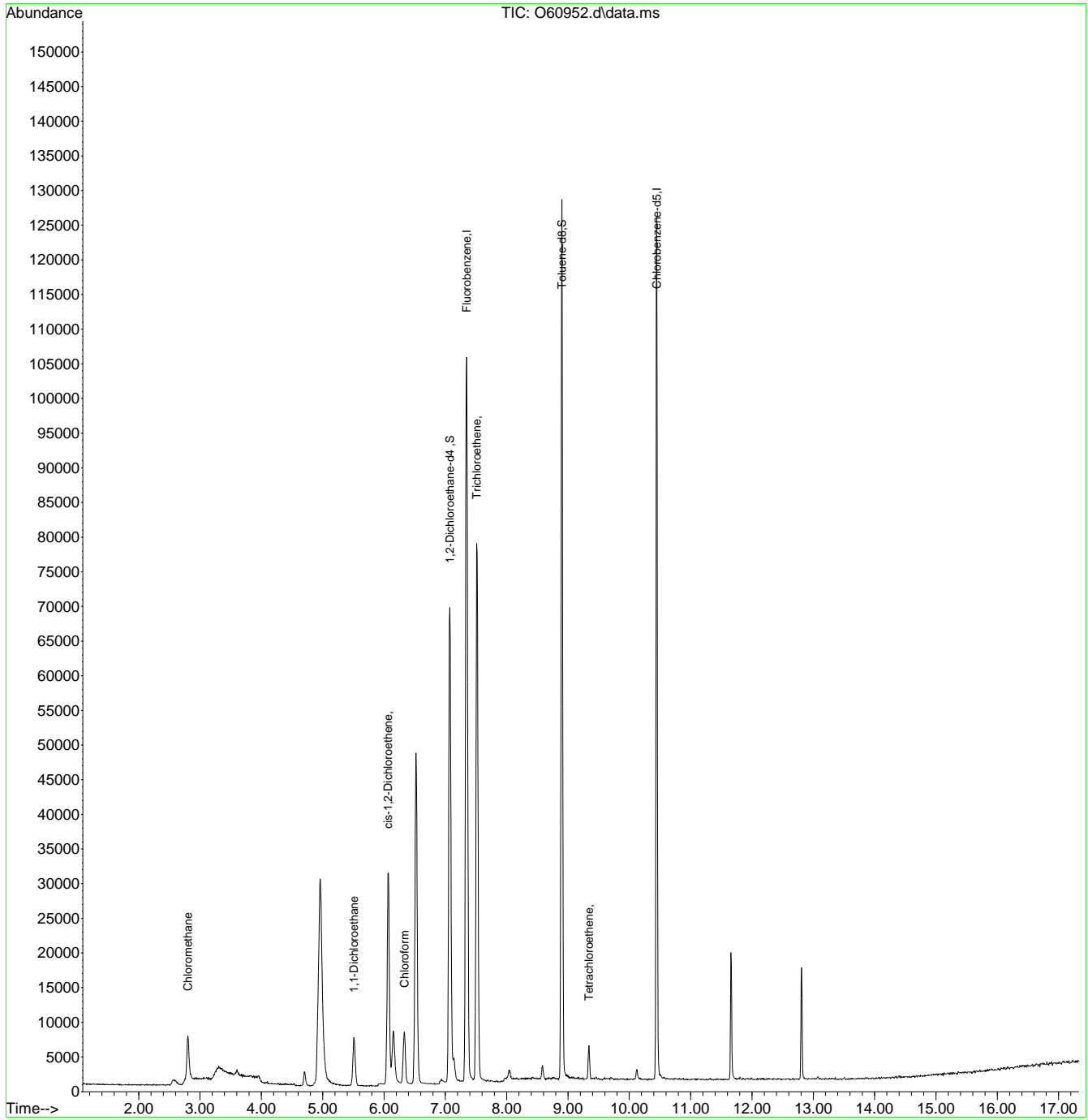
7.1.3
7



Quantitation Report (QT Reviewed)

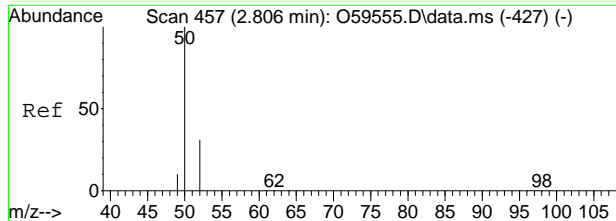
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Data File : O60952.d
Acq On : 23 Jul 2020 12:49 pm
Operator : stutip
Sample : fa77021-3 Inst : MSVOA12
Misc : MS46803,VO2342,,,,,
ALS Vial : 10 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\SIMCL070220.M
Quant Results File: SIMCL070220.RES
Quant Time: Jul 24 02:30:56 2020
Quant Title : Standard Methods 6200B
QLast Update : Thu Jul 02 13:33:54 2020
Response via : Initial Calibration



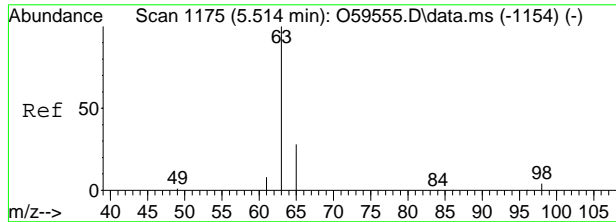
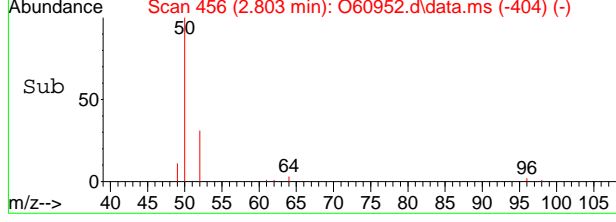
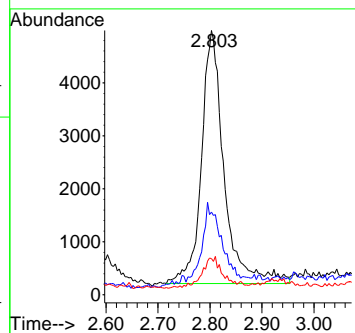
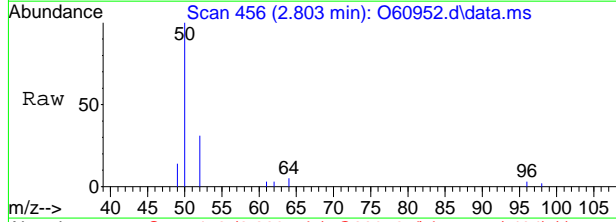
7.1.3
7





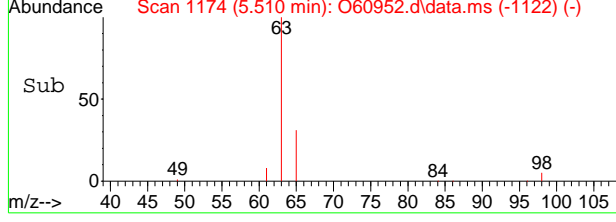
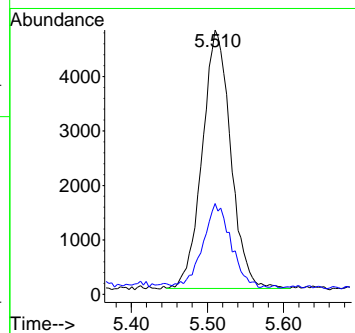
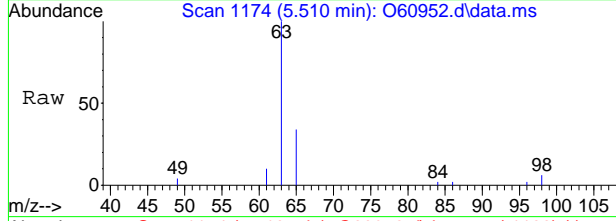
#3
Chloromethane
Concen: 0.50 ug/L
RT: 2.803 min Scan# 456
Delta R.T. -0.003 min
Lab File: O60952.d
Acq: 23 Jul 2020 12:49 pm

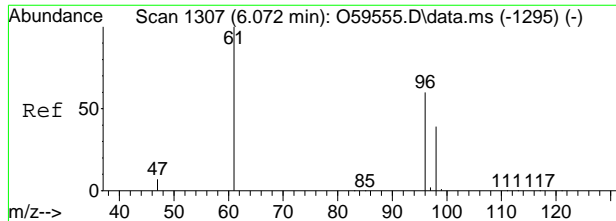
Tgt Ion	Resp	Lower	Upper
50	14439		
52	28.4	8.5	48.5
49	11.4	0.0	29.8



#7
1,1-Dichloroethane
Concen: 0.43 ug/L
RT: 5.510 min Scan# 1174
Delta R.T. -0.004 min
Lab File: O60952.d
Acq: 23 Jul 2020 12:49 pm

Tgt Ion	Resp	Lower	Upper
63	12298		
65	32.4	0.7	60.7

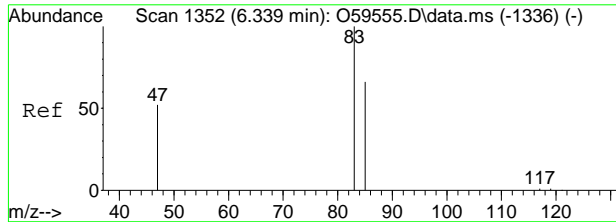
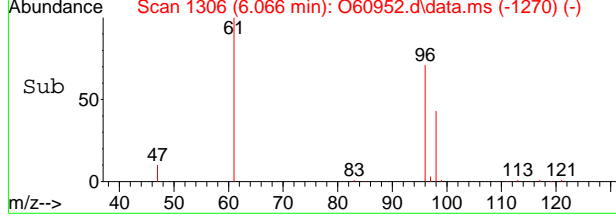
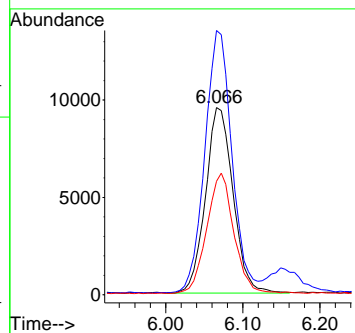
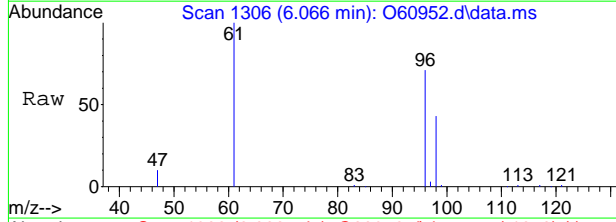




#8
 cis-1,2-Dichloroethene
 Concen: 1.55 ug/L
 RT: 6.066 min Scan# 1306
 Delta R.T. -0.006 min
 Lab File: O60952.d
 Acq: 23 Jul 2020 12:49 pm

Tgt Ion: 96 Resp: 23626

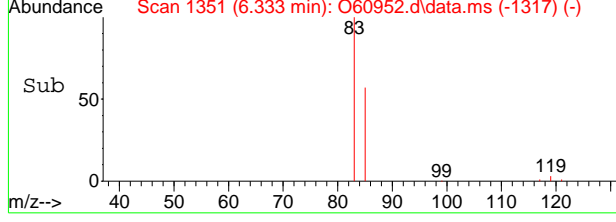
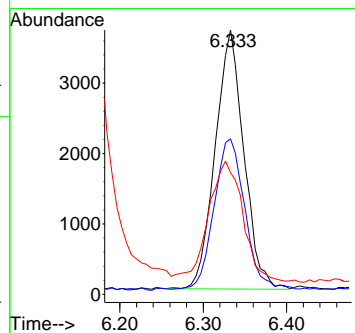
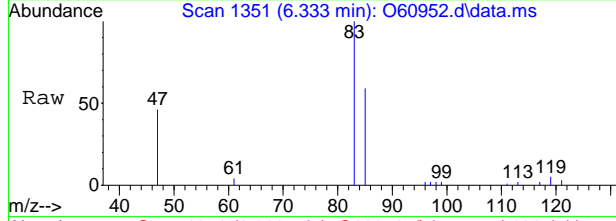
Ion	Ratio	Lower	Upper
96	100		
61	141.5	110.0	170.0
98	60.6	34.1	94.1

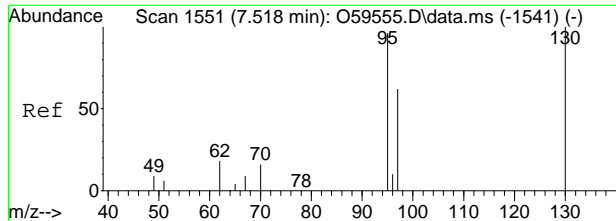


#9
 Chloroform
 Concen: 0.32 ug/L
 RT: 6.333 min Scan# 1351
 Delta R.T. -0.000 min
 Lab File: O60952.d
 Acq: 23 Jul 2020 12:49 pm

Tgt Ion: 83 Resp: 8788

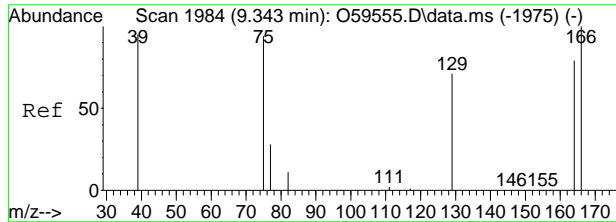
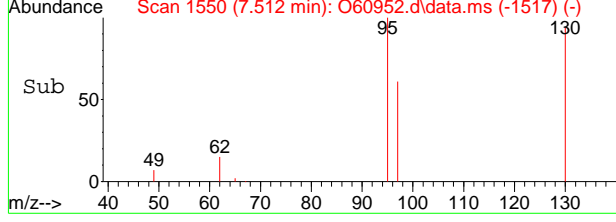
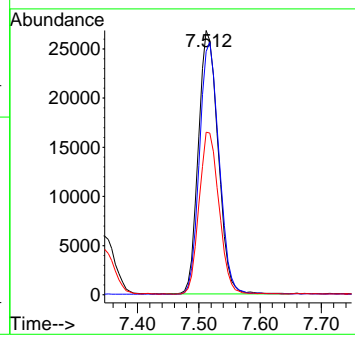
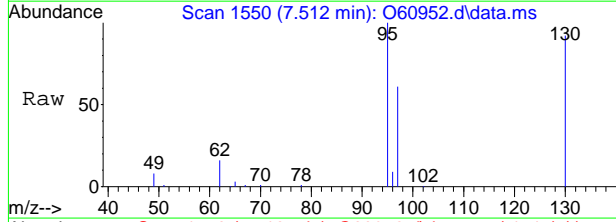
Ion	Ratio	Lower	Upper
83	100		
85	57.8	34.7	94.7
47	41.8	9.0	69.0





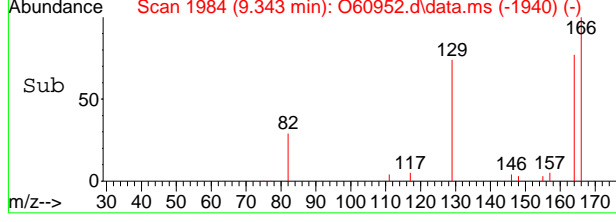
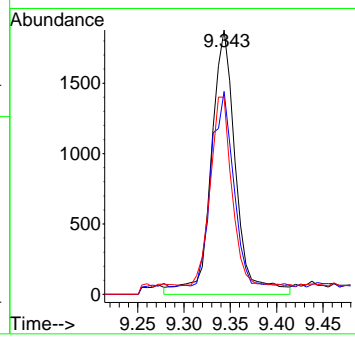
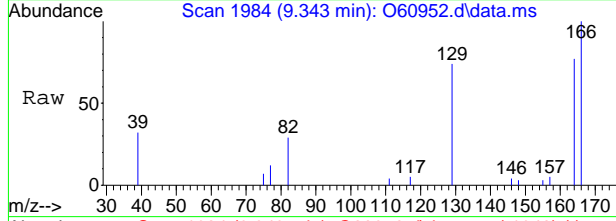
#15
 Trichloroethene
 Concen: 3.60 ug/L
 RT: 7.512 min Scan# 1550
 Delta R.T. -0.006 min
 Lab File: O60952.d
 Acq: 23 Jul 2020 12:49 pm

Tgt Ion	Resp	Lower	Upper
95	59626		
130	92.1	63.4	123.4
97	61.4	35.0	95.0



#21
 Tetrachloroethene
 Concen: 0.24 ug/L m
 RT: 9.343 min Scan# 1984
 Delta R.T. 0.000 min
 Lab File: O60952.d
 Acq: 23 Jul 2020 12:49 pm

Tgt Ion	Resp	Lower	Upper
166	3444		
164	76.7	48.3	108.3
129	74.5	39.5	99.5



7.1.3
7



Manual Integration Approval Summary

Sample Number: FA77021-3 **Method:** SW846 8260B BY SIM
Lab FileID: O60952.D **Analyst approved:** 07/24/20 03:17 Jennifer Ferreira
Injection Time: 07/23/20 12:49 **Supervisor approved:** 07/24/20 08:39 Melissa Mangual

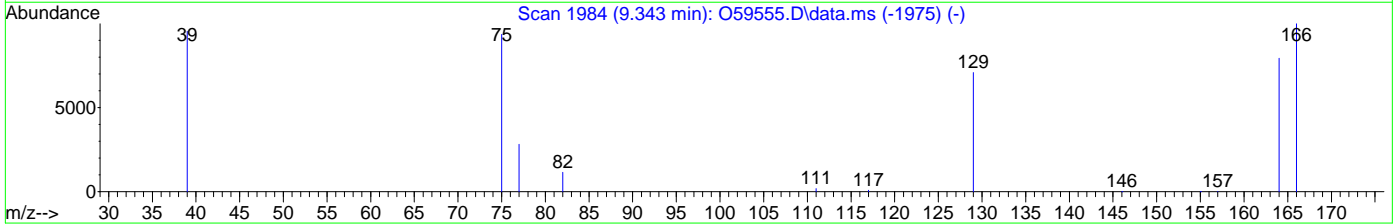
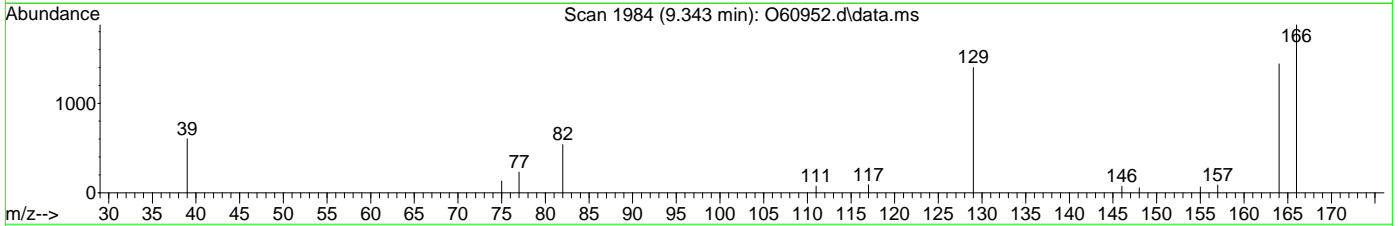
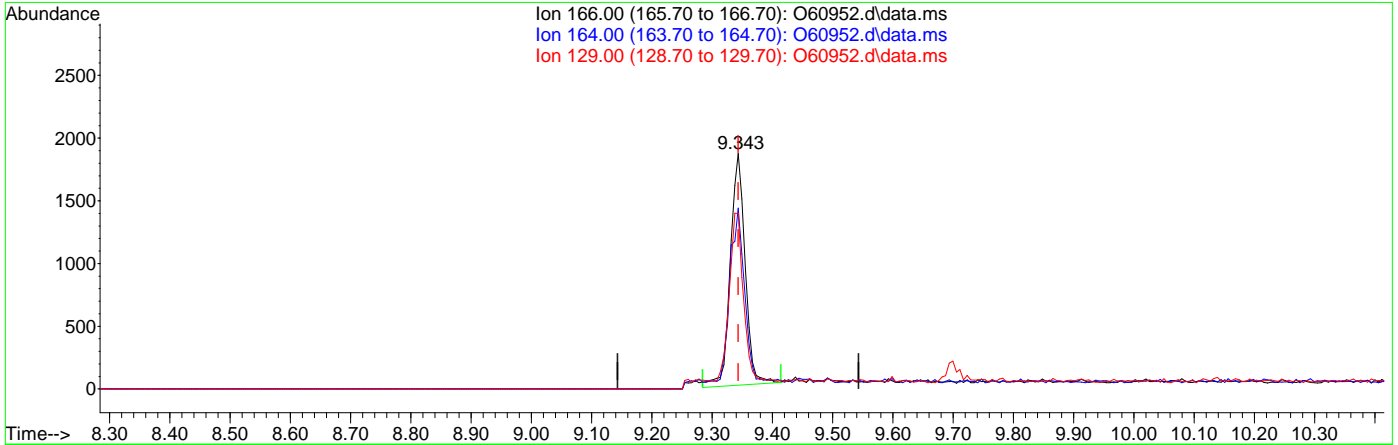
Parameter	CAS	Sig#	R.T. (min.)	Reason
Tetrachloroethylene	127-18-4		9.34	Poor instrument integration

7.1.3.1
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\JULY 2020\07-24-2020\VO2342\
 Data File : O60952.d
 Acq On : 23 Jul 2020 12:49 pm
 Operator :
 Sample : fa77021-3 Inst : MSVOA12
 Misc : MS46803,VO2342,,,,,
 ALS Vial : 10 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\SIMCL070220.M
 Quant Results File: SIMCL070220.RES
 Quant Time: Jul 24 02:21:00 2020
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jul 02 13:33:54 2020
 Response via : Initial Calibration



TIC: O60952.d\data.ms

(21) Tetrachloroethene ()

9.343min (+0.000) 0.22ug/L

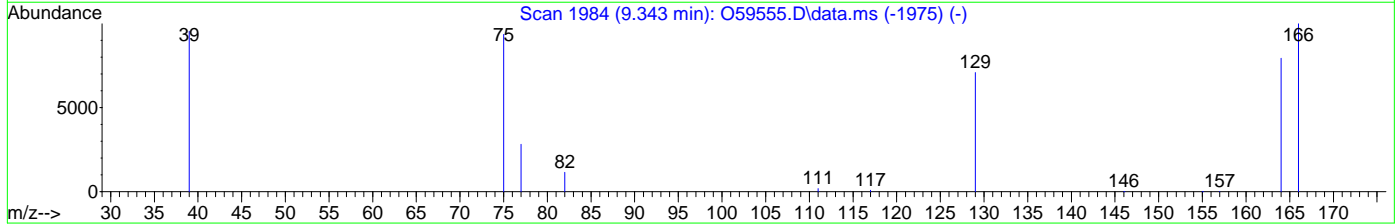
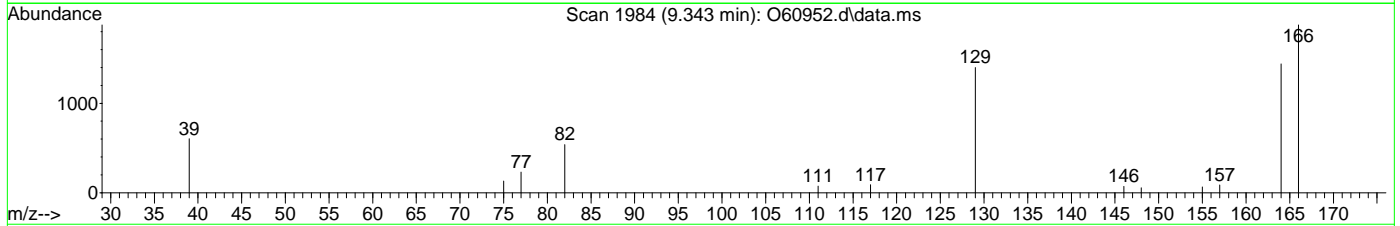
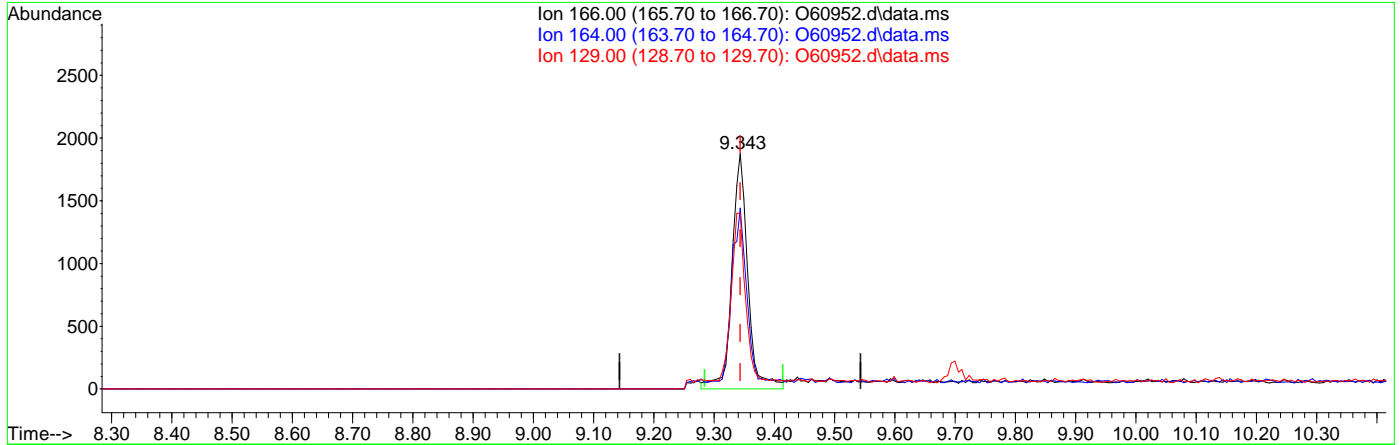
response 3166

Ion	Exp%	Act%
166.00	100	100
164.00	78.30	76.00
129.00	69.50	72.82
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\JULY 2020\07-24-2020\VO2342\
 Data File : O60952.d
 Acq On : 23 Jul 2020 12:49 pm
 Operator :
 Sample : fa77021-3 Inst : MSVOA12
 Misc : MS46803,VO2342,,,,,
 ALS Vial : 10 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\SIMCL070220.M
 Quant Results File: SIMCL070220.RES
 Quant Time: Jul 24 02:21:00 2020
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jul 02 13:33:54 2020
 Response via : Initial Calibration



TIC: O60952.d\data.ms

(21) Tetrachloroethene ()

9.343min (+0.000) 0.24ug/L m

response 3444

Ion	Exp%	Act%
166.00	100	100
164.00	78.30	76.73
129.00	69.50	74.49
0.00	0.00	0.00

7.1.3.3
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\JULY 2020\07-24-2020\VO2342\
Data File : O60953.d
Acq On : 23 Jul 2020 1:13 pm
Operator : stutip
Sample : fa77021-4 Inst : MSVOA12
Misc : MS46803,VO2342,,,,,
ALS Vial : 11 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\SIMCL070220.M
Quant Results File: SIMCL070220.RES
Quant Time: Jul 24 02:31:49 2020
Quant Title : Standard Methods 6200B
QLast Update : Thu Jul 02 13:33:54 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Fluorobenzene	7.346	96	163079	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.447	117	107494	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.074	65	68524	5.72	ug/L	0.00
Spiked Amount	5.000	Range	74 - 125	Recovery	=	114.40%
19) Toluene-d8	8.900	98	125507	4.85	ug/L	0.00
Spiked Amount	5.000	Range	88 - 111	Recovery	=	97.00%
Target Compounds						
						Qvalue
7) 1,1-Dichloroethane	5.514	63	11869	0.43	ug/L	90
8) cis-1,2-Dichloroethene	6.072	96	22072	1.50	ug/L	97
9) Chloroform	6.333	83	8167	0.31	ug/L	94
15) Trichloroethene	7.518	95	68598	4.31	ug/L	97
21) Tetrachloroethene	9.343	166	2858m	0.21	ug/L	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

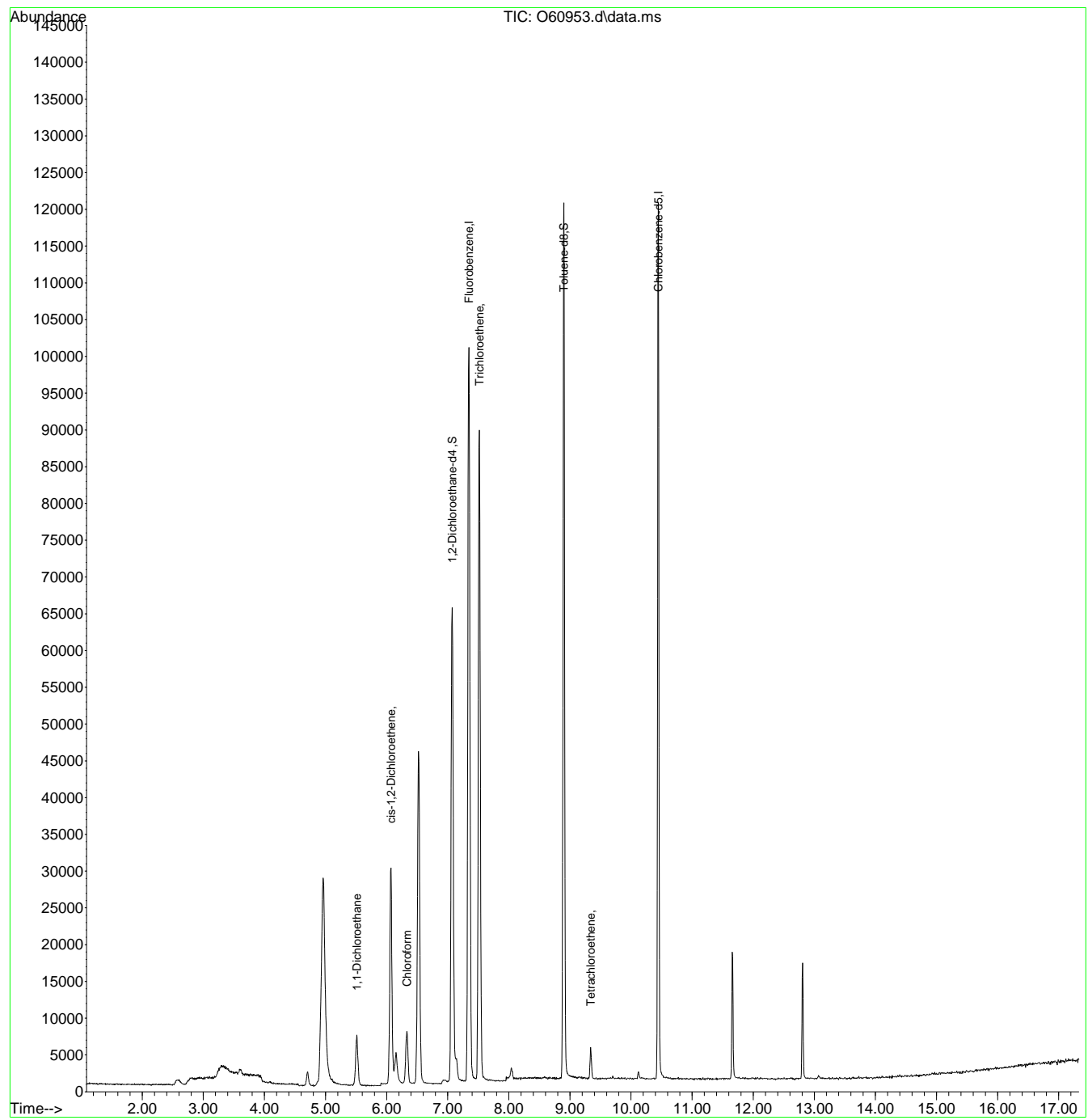
7.14
7



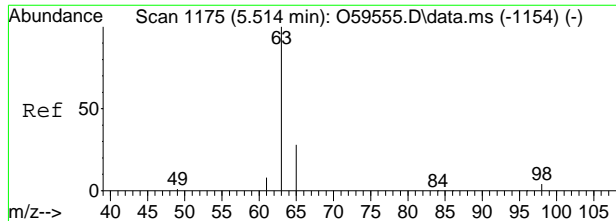
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\JULY 2020\07-24-2020\VO2342\
Data File : O60953.d
Acq On : 23 Jul 2020 1:13 pm
Operator : stutip
Sample : fa77021-4 Inst : MSVOA12
Misc : MS46803,VO2342,,,,,
ALS Vial : 11 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\SIMCL070220.M
Quant Results File: SIMCL070220.RES
Quant Time: Jul 24 02:31:49 2020
Quant Title : Standard Methods 6200B
QLast Update : Thu Jul 02 13:33:54 2020
Response via : Initial Calibration



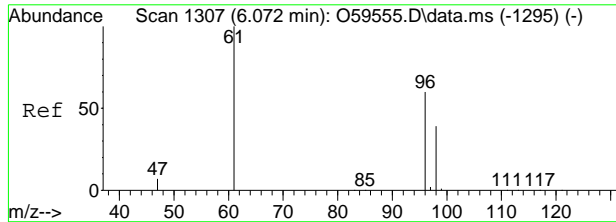
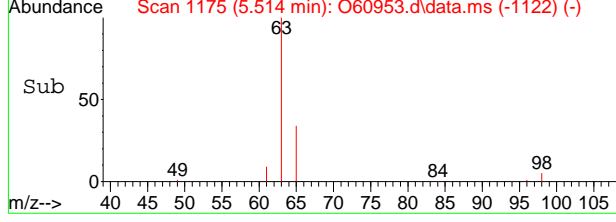
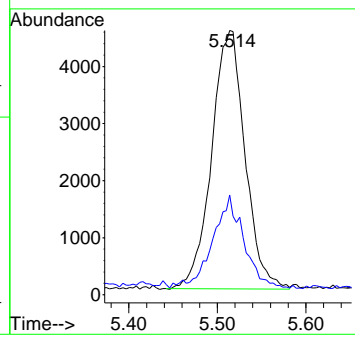
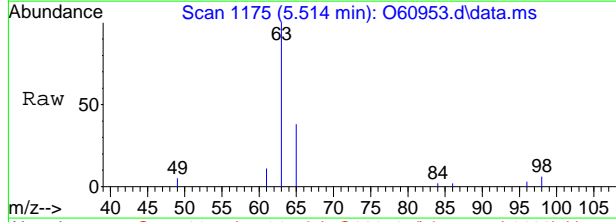
7.1.4
7



#7
 1,1-Dichloroethane
 Concen: 0.43 ug/L
 RT: 5.514 min Scan# 1175
 Delta R.T. -0.000 min
 Lab File: O60953.d
 Acq: 23 Jul 2020 1:13 pm

Tgt Ion: 63 Resp: 11869

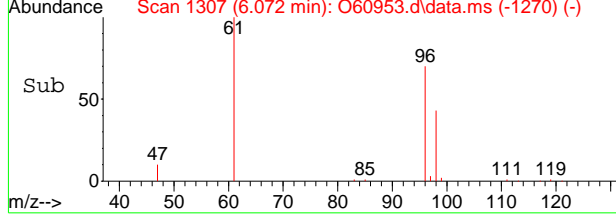
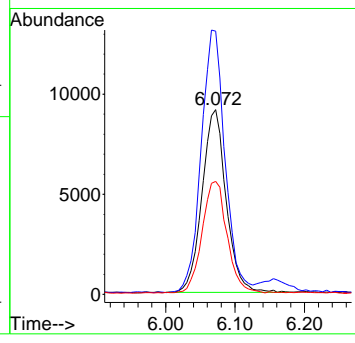
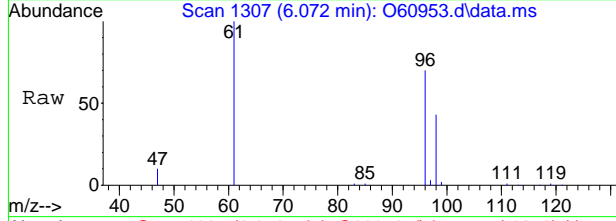
Ion	Ratio	Lower	Upper
63	100		
65	36.0	0.7	60.7

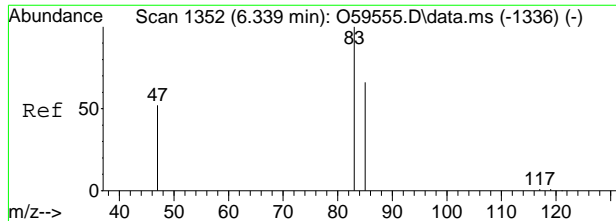


#8
 cis-1,2-Dichloroethene
 Concen: 1.50 ug/L
 RT: 6.072 min Scan# 1307
 Delta R.T. -0.000 min
 Lab File: O60953.d
 Acq: 23 Jul 2020 1:13 pm

Tgt Ion: 96 Resp: 22072

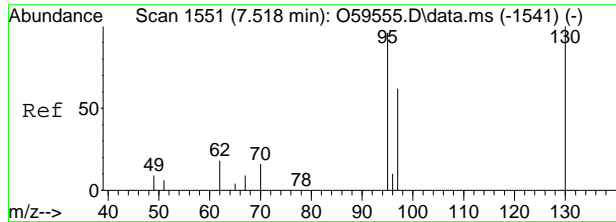
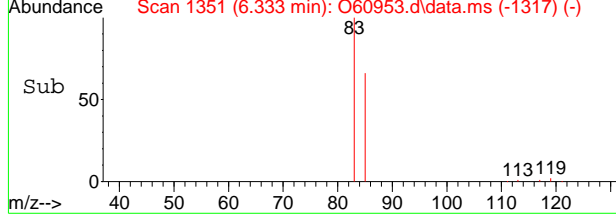
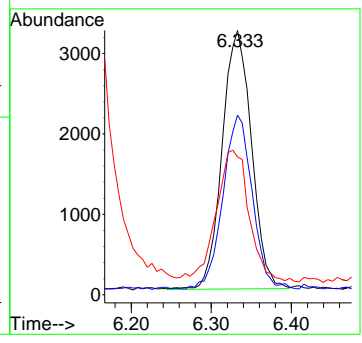
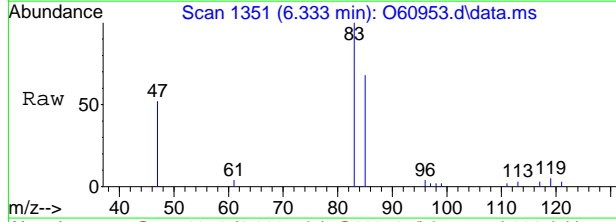
Ion	Ratio	Lower	Upper
96	100		
61	143.0	110.0	170.0
98	60.8	34.1	94.1





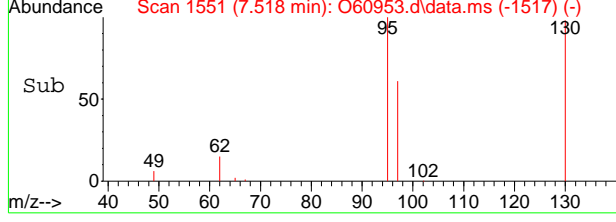
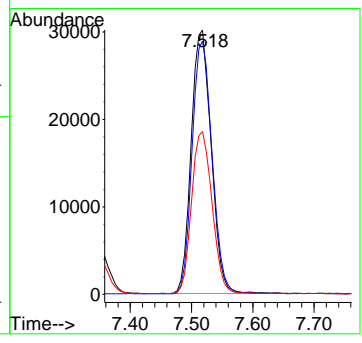
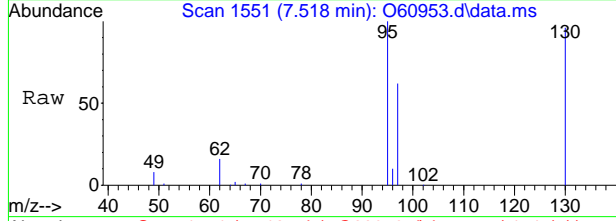
#9
 Chloroform
 Concen: 0.31 ug/L
 RT: 6.333 min Scan# 1351
 Delta R.T. -0.000 min
 Lab File: O60953.d
 Acq: 23 Jul 2020 1:13 pm

Tgt Ion	Resp	Lower	Upper
83	8167		
85	66.6	34.7	94.7
47	47.0	9.0	69.0



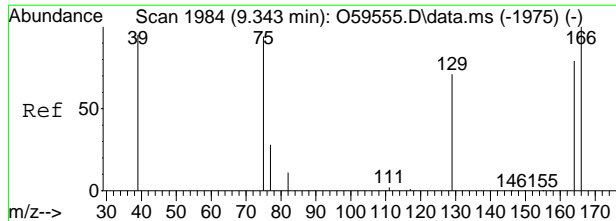
#15
 Trichloroethene
 Concen: 4.31 ug/L
 RT: 7.518 min Scan# 1551
 Delta R.T. 0.000 min
 Lab File: O60953.d
 Acq: 23 Jul 2020 1:13 pm

Tgt Ion	Resp	Lower	Upper
95	68598		
130	95.9	63.4	123.4
97	61.5	35.0	95.0



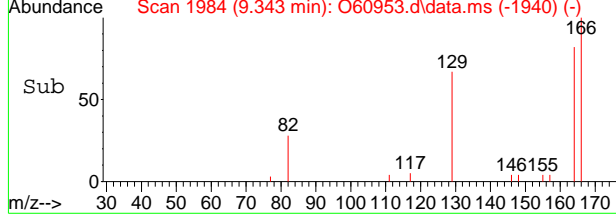
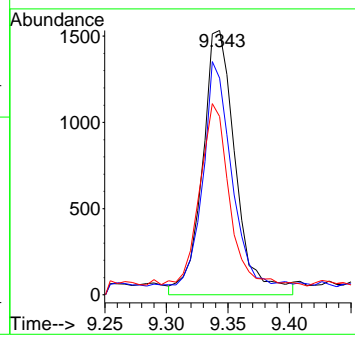
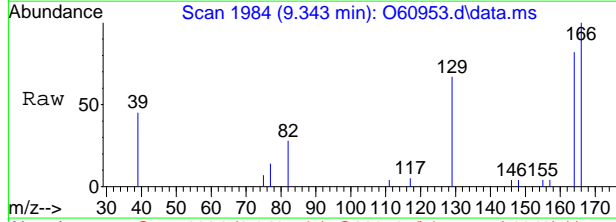
7.14





#21
 Tetrachloroethene
 Concen: 0.21 ug/L m
 RT: 9.343 min Scan# 1984
 Delta R.T. 0.000 min
 Lab File: O60953.d
 Acq: 23 Jul 2020 1:13 pm

Tgt Ion	Ratio	Lower	Upper
166	100		
164	81.9	48.3	108.3
129	67.4	39.5	99.5



7.1.4
7



Manual Integration Approval Summary

Sample Number: FA77021-4 **Method:** SW846 8260B BY SIM
Lab FileID: O60953.D **Analyst approved:** 07/24/20 03:17 Jennifer Ferreira
Injection Time: 07/23/20 13:13 **Supervisor approved:** 07/24/20 08:39 Melissa Mangual

Parameter	CAS	Sig#	R.T. (min.)	Reason
Tetrachloroethylene	127-18-4		9.34	Poor instrument integration

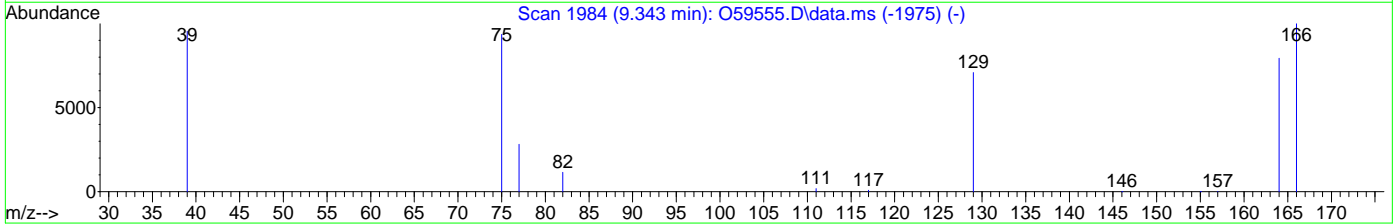
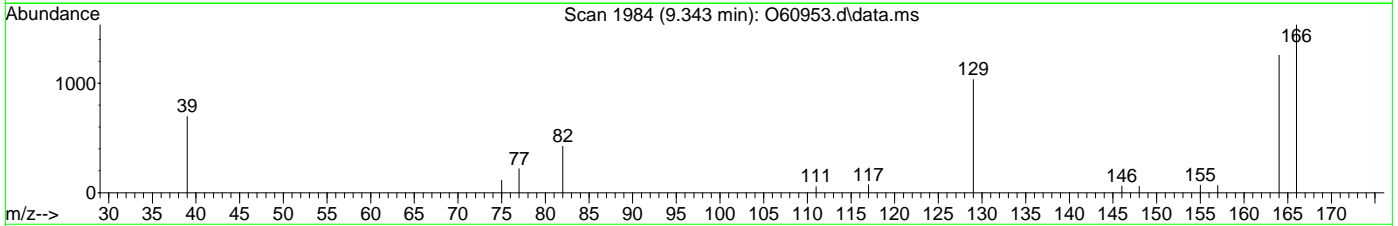
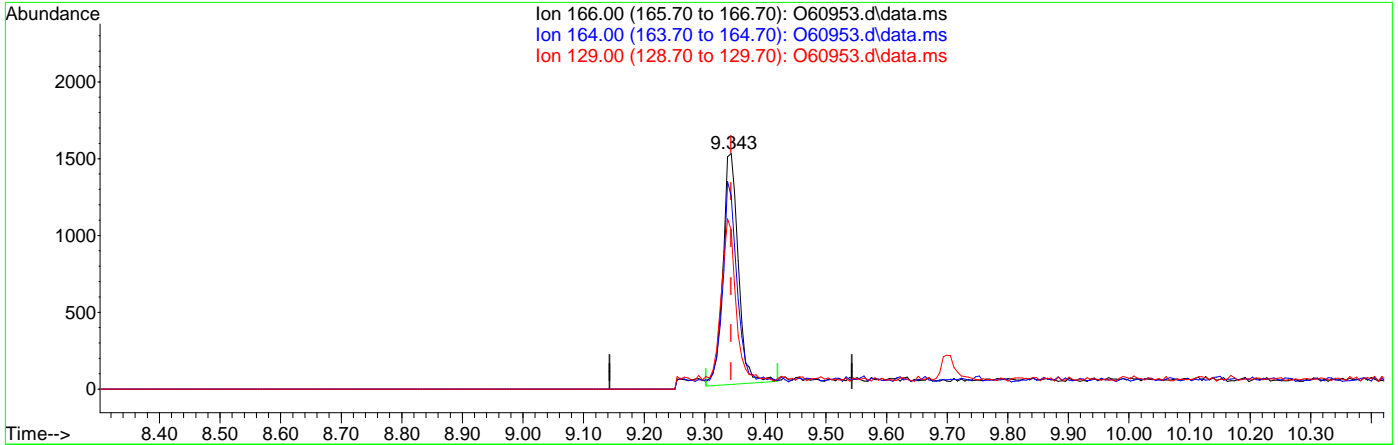
7.1.4.1

7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\JULY 2020\07-24-2020\VO2342\
 Data File : O60953.d
 Acq On : 23 Jul 2020 1:13 pm
 Operator :
 Sample : fa77021-4 Inst : MSVOA12
 Misc : MS46803,VO2342,,,,,
 ALS Vial : 11 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\SIMCL070220.M
 Quant Results File: SIMCL070220.RES
 Quant Time: Jul 24 02:21:03 2020
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jul 02 13:33:54 2020
 Response via : Initial Calibration



TIC: O60953.d\data.ms

(21) Tetrachloroethene ()

9.343min (+0.000) 0.19ug/L

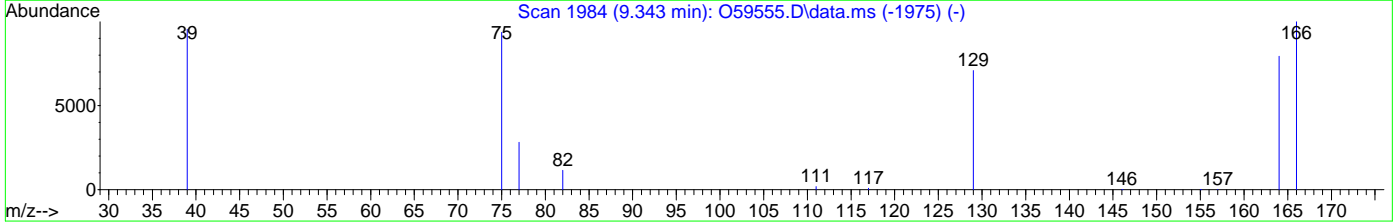
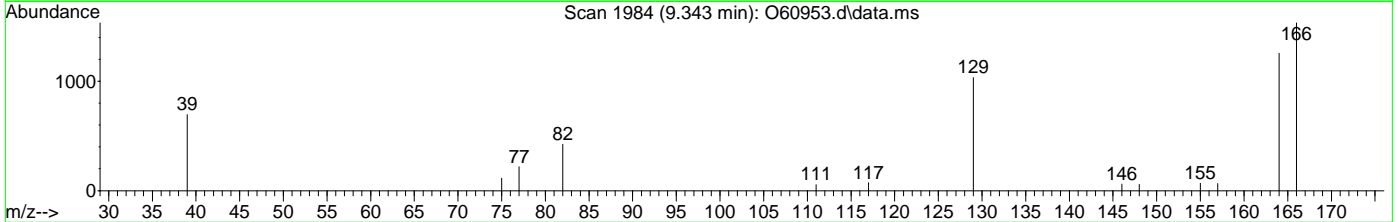
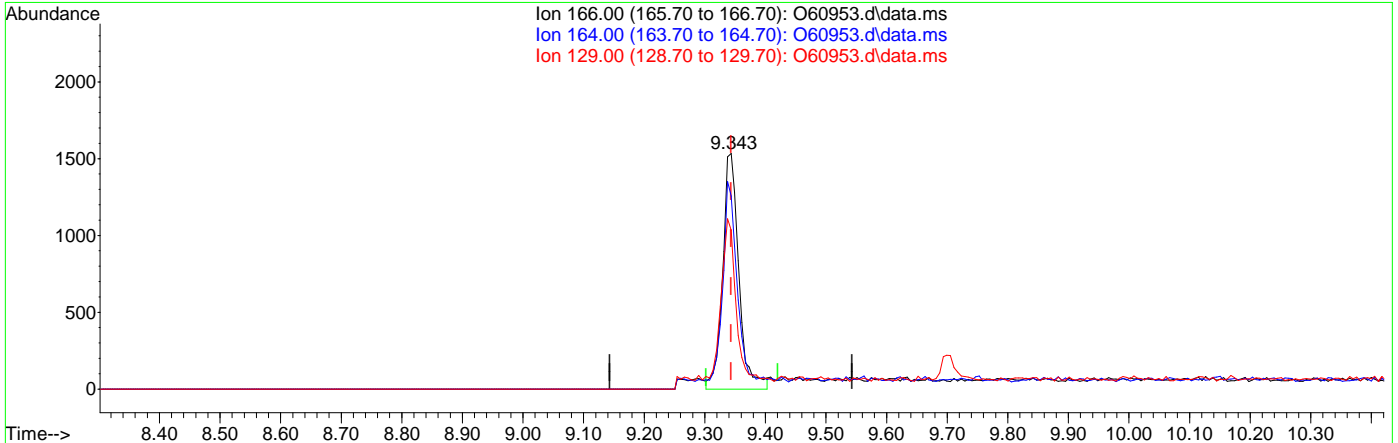
response 2679

Ion	Exp%	Act%
166.00	100	100
164.00	78.30	80.93
129.00	69.50	65.09
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\JULY 2020\07-24-2020\VO2342\
 Data File : O60953.d
 Acq On : 23 Jul 2020 1:13 pm
 Operator :
 Sample : fa77021-4 Inst : MSVOA12
 Misc : MS46803,VO2342,,,,,
 ALS Vial : 11 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\SIMCL070220.M
 Quant Results File: SIMCL070220.RES
 Quant Time: Jul 24 02:21:03 2020
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jul 02 13:33:54 2020
 Response via : Initial Calibration



TIC: O60953.d\data.ms

(21) Tetrachloroethene ()

9.343min (+0.000) 0.21ug/L m

response 2858

Ion	Exp%	Act%
166.00	100	100
164.00	78.30	81.94
129.00	69.50	67.41
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\JULY 2020\07-24-2020\VO2342\
 Data File : O60946.d
 Acq On : 23 Jul 2020 10:26 am
 Operator : stutip
 Sample : mb Inst : MSVOA12
 Misc : MS46775,VO2342,,,,,
 ALS Vial : 4 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\SIMCL070220.M
 Quant Results File: SIMCL070220.RES
 Quant Time: Jul 24 02:26:51 2020
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jul 02 13:33:54 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Fluorobenzene	7.346	96	193659	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.447	117	122714	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.074	65	79627	5.60	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	112.00%	
19) Toluene-d8	8.896	98	148129	5.01	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	100.20%	
Target Compounds						Qvalue

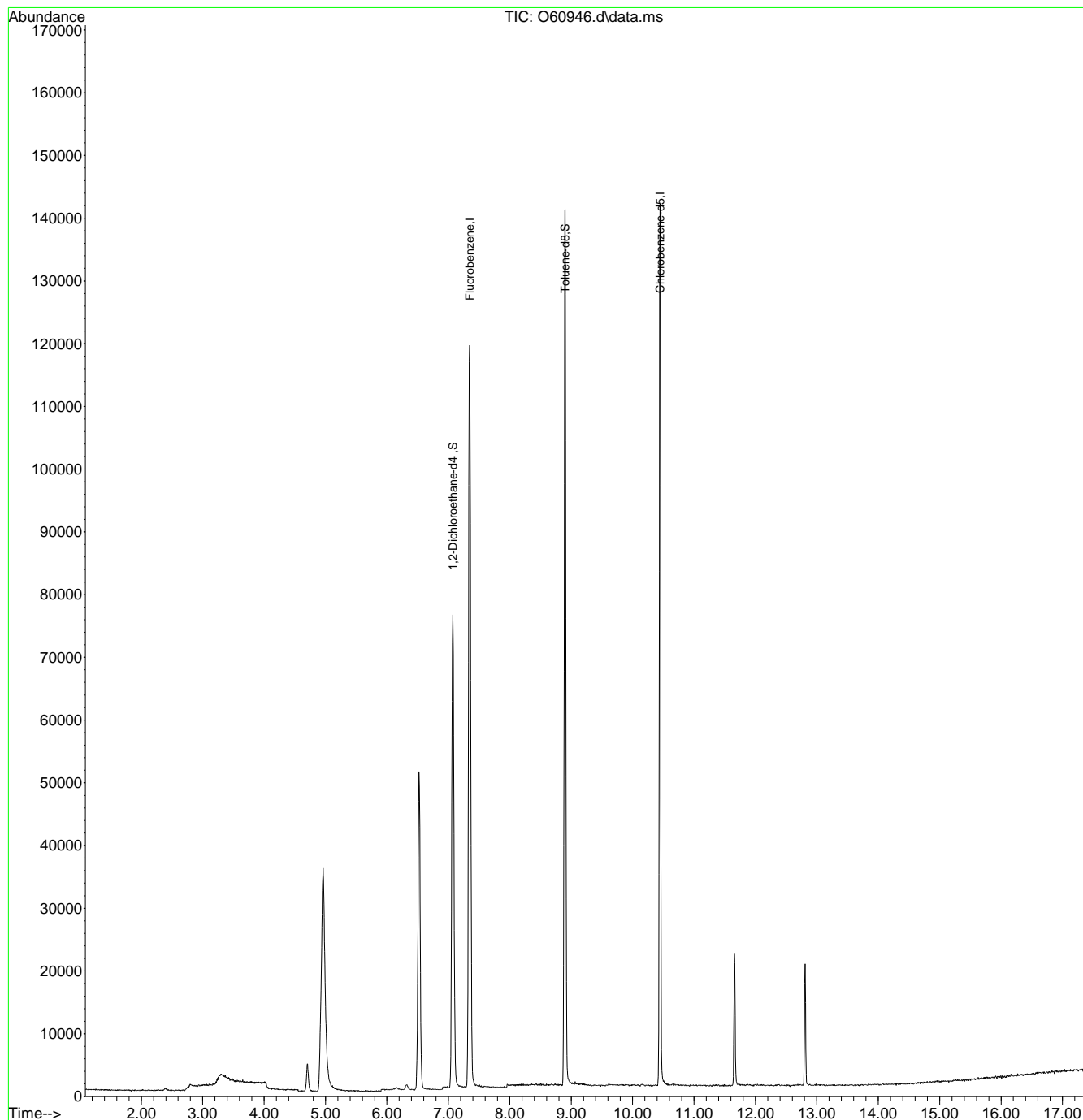
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.2.1
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\JULY 2020\07-24-2020\VO2342\
Data File : O60946.d
Acq On : 23 Jul 2020 10:26 am
Operator : stutip
Sample : mb Inst : MSVOA12
Misc : MS46775,VO2342,,,,,
ALS Vial : 4 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\SIMCL070220.M
Quant Results File: SIMCL070220.RES
Quant Time: Jul 24 02:26:51 2020
Quant Title : Standard Methods 6200B
QLast Update : Thu Jul 02 13:33:54 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\JULY 2020\07-24-2020\VO2342\
 Data File : O60944.d
 Acq On : 23 Jul 2020 9:35 am
 Operator : stutip
 Sample : bs Inst : MSVOA12
 Misc : MS46775,VO2342,,,,,
 ALS Vial : 2 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\SIMCL070220.M
 Quant Results File: SIMCL070220.RES
 Quant Time: Jul 24 02:25:28 2020
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jul 02 13:33:54 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
Internal Standards							
1) Fluorobenzene	7.346	96	251245	5.00	ug/L	0.00	
18) Chlorobenzene-d5	10.447	117	163478	5.00	ug/L	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.073	65	94518m	5.12	ug/L	0.00	
Spiked Amount	5.000	Range 74 - 125	Recovery	=	102.40%		
19) Toluene-d8	8.896	98	189803	4.82	ug/L	0.00	
Spiked Amount	5.000	Range 88 - 111	Recovery	=	96.40%		
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.908	62	157327	6.53	ug/L		99
3) Chloromethane	2.803	50	236000	5.75	ug/L		100
4) 1,1-Dichloroethene	4.088	61	158922	5.16	ug/L		98
5) Methylene Chloride	4.699	49	231232	4.48	ug/L		99
6) trans-1,2-Dichloroethene	4.869	61	153608	4.65	ug/L		100
7) 1,1-Dichloroethane	5.510	63	190454	4.55	ug/L		100
8) cis-1,2-Dichloroethene	6.066	96	102095	4.51	ug/L		99
9) Chloroform	6.333	83	189262	4.69	ug/L		98
10) Carbon Tetrachloride	6.504	117	122355	4.95	ug/L		98
11) 1,1,1-Trichloroethane	6.576	97	139314	4.80	ug/L		98
12) Benzene	6.937	78	320017m	4.61	ug/L		
14) 1,2-Dichloroethane	7.139	62	141642	4.49	ug/L		99
15) Trichloroethene	7.512	95	118106	4.82	ug/L		97
16) 1,2-Dichloropropane	8.040	63	110615	4.74	ug/L		98
17) cis-1,3-Dichloropropene	8.711	75	119469	4.59	ug/L		96
20) trans-1,3-Dichloropropene	9.343	75	119455	4.79	ug/L		100
21) Tetrachloroethene	9.343	166	99289	4.74	ug/L		99
22) 1,4-Dichlorobenzene	12.827	146	191482	4.76	ug/L		100
23) 1,2-Dibromo-3-Chloropr...	14.037	75	33657	4.30	ug/L		98

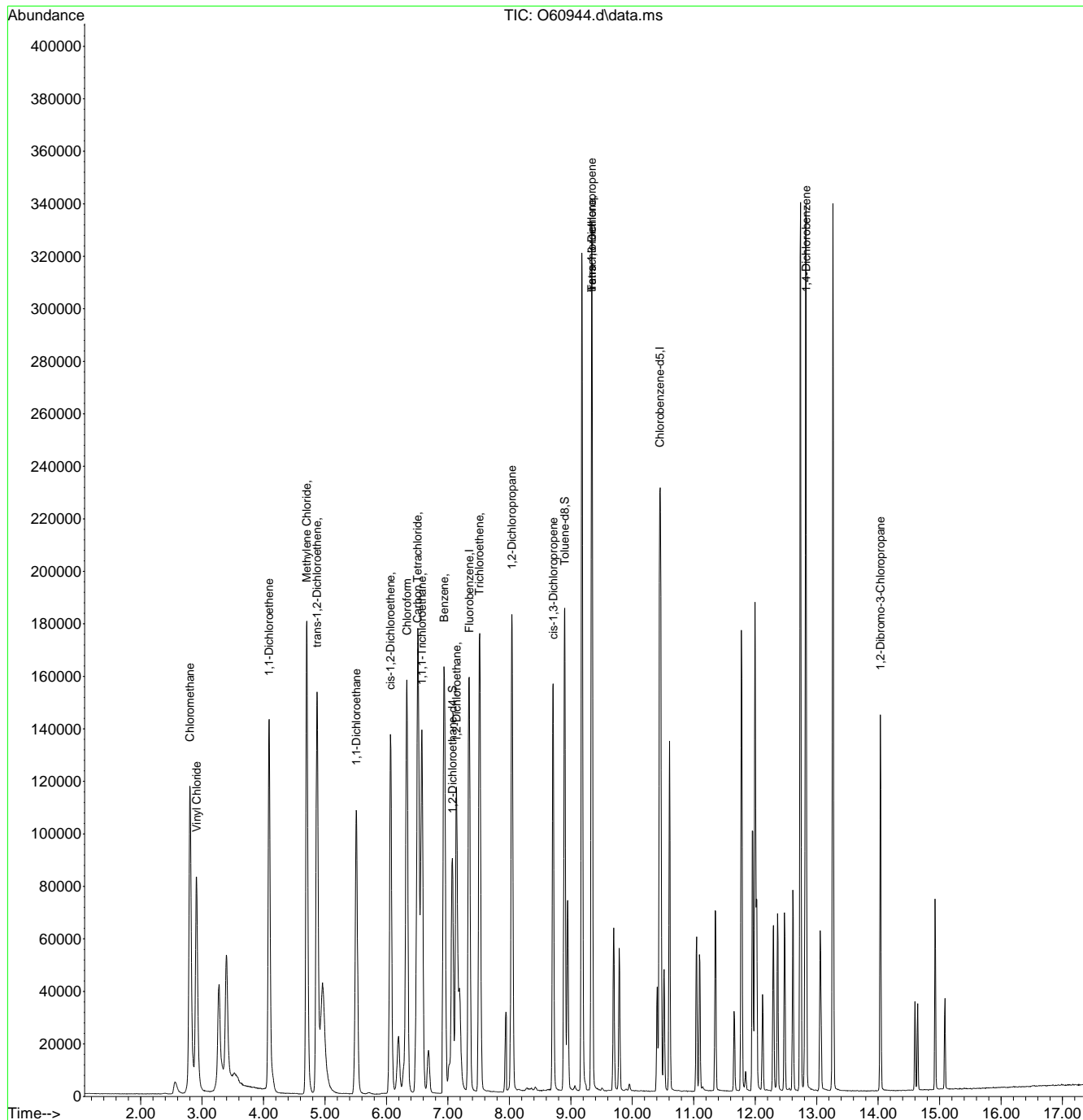
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.3.1
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\JULY 2020\07-24-2020\VO2342\
 Data File : O60944.d
 Acq On : 23 Jul 2020 9:35 am
 Operator : stutip
 Sample : bs Inst : MSVOA12
 Misc : MS46775,VO2342,,,,,
 ALS Vial : 2 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\SIMCL070220.M
 Quant Results File: SIMCL070220.RES
 Quant Time: Jul 24 02:25:28 2020
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jul 02 13:33:54 2020
 Response via : Initial Calibration



7.3.1
7

Manual Integration Approval Summary

Sample Number: VO2342-BS **Method:** SW846 8260B BY SIM
Lab FileID: O60944.D **Analyst approved:** 07/24/20 03:06 Jennifer Ferreira
Injection Time: 07/23/20 09:35 **Supervisor approved:** 07/24/20 08:26 Melissa Mangual

Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzene	71-43-2		6.94	Poor instrument integration
1,2-Dichloroethane-D4	17060-07-0		7.07	Overlapping peak

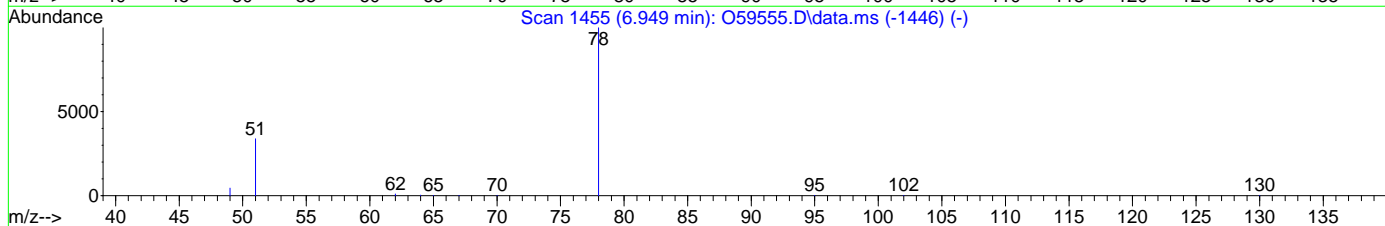
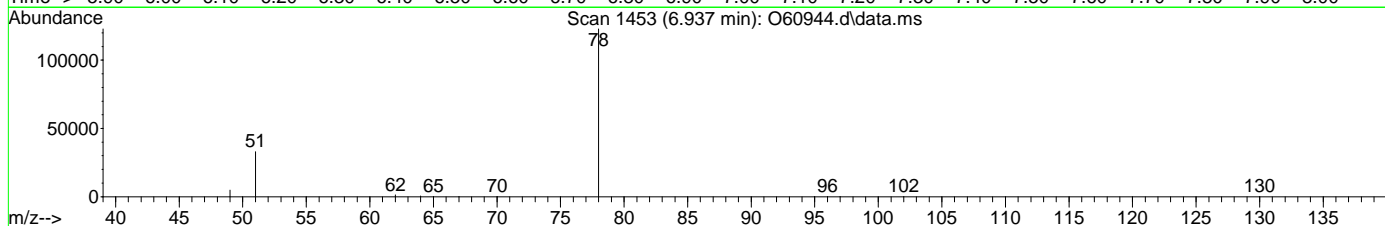
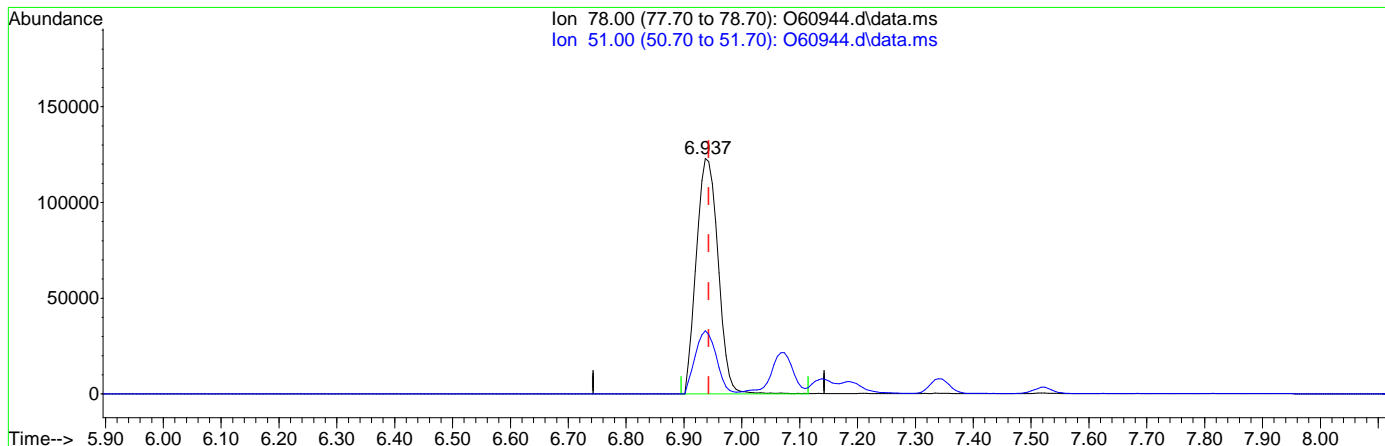
7.3.1.1

7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\JULY 2020\07-24-2020\VO2342\
 Data File : O60944.d
 Acq On : 23 Jul 2020 9:35 am
 Operator : stutip
 Sample : bs Inst : MSVOA12
 Misc : MS46775,VO2342,,,,,
 ALS Vial : 2 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\SIMCL070220.M
 Quant Results File: SIMCL070220.RES
 Quant Time: Jul 24 02:20:36 2020
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jul 02 13:33:54 2020
 Response via : Initial Calibration



TIC: O60944.d\data.ms

(12) Benzene ()
 6.937min (-0.006) 4.65ug/L
 response 323187

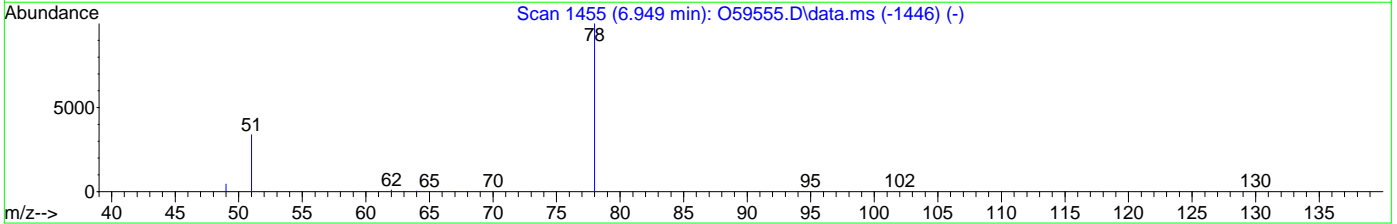
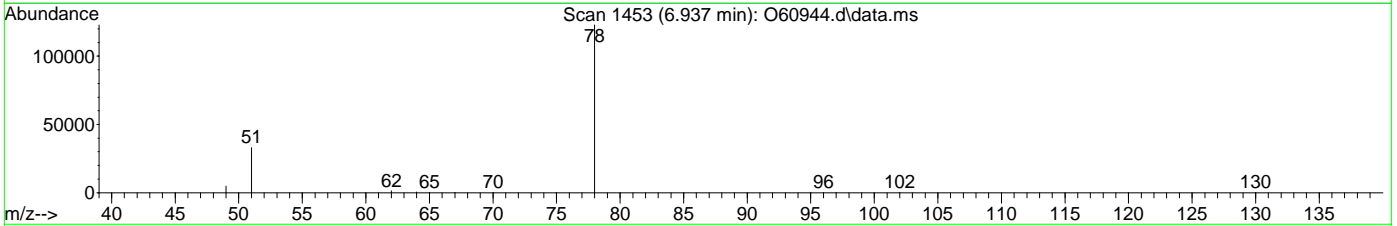
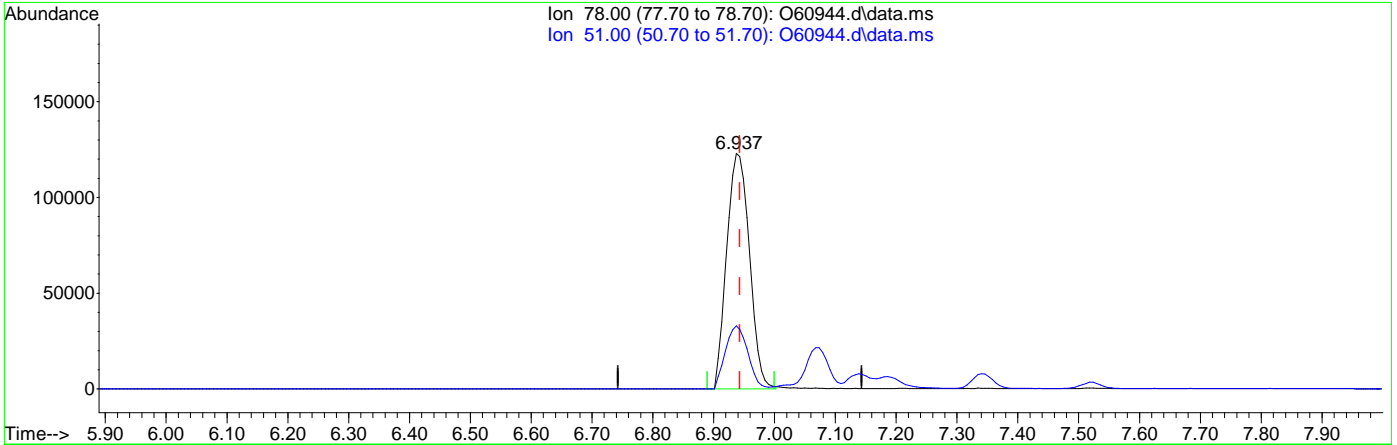
Ion	Exp%	Act%
78.00	100	100
51.00	26.90	26.88
0.00	0.00	0.00
0.00	0.00	0.00

7.3.12
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\JULY 2020\07-24-2020\VO2342\
 Data File : O60944.d
 Acq On : 23 Jul 2020 9:35 am
 Operator : stutip
 Sample : bs Inst : MSVOA12
 Misc : MS46775,VO2342,,,,,
 ALS Vial : 2 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\SIMCL070220.M
 Quant Results File: SIMCL070220.RES
 Quant Time: Jul 24 02:20:36 2020
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jul 02 13:33:54 2020
 Response via : Initial Calibration



TIC: O60944.d\data.ms

(12) Benzene ()

6.937min (-0.006) 4.61ug/L m

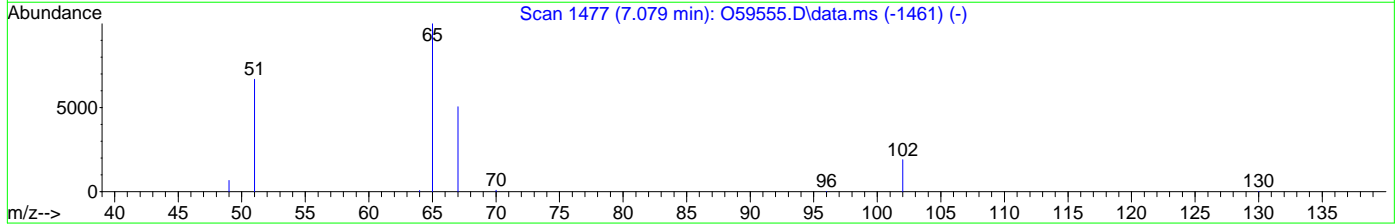
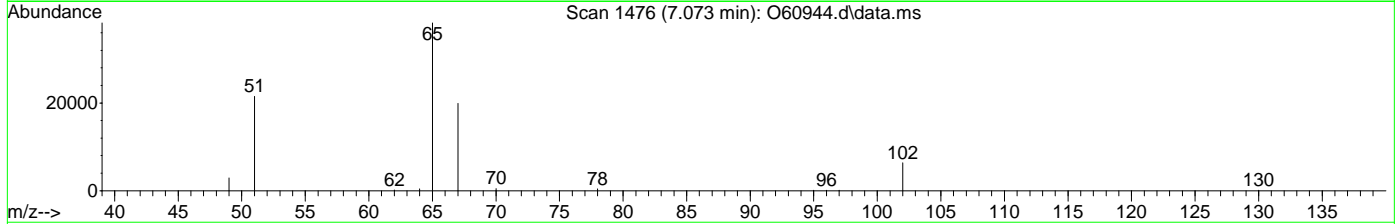
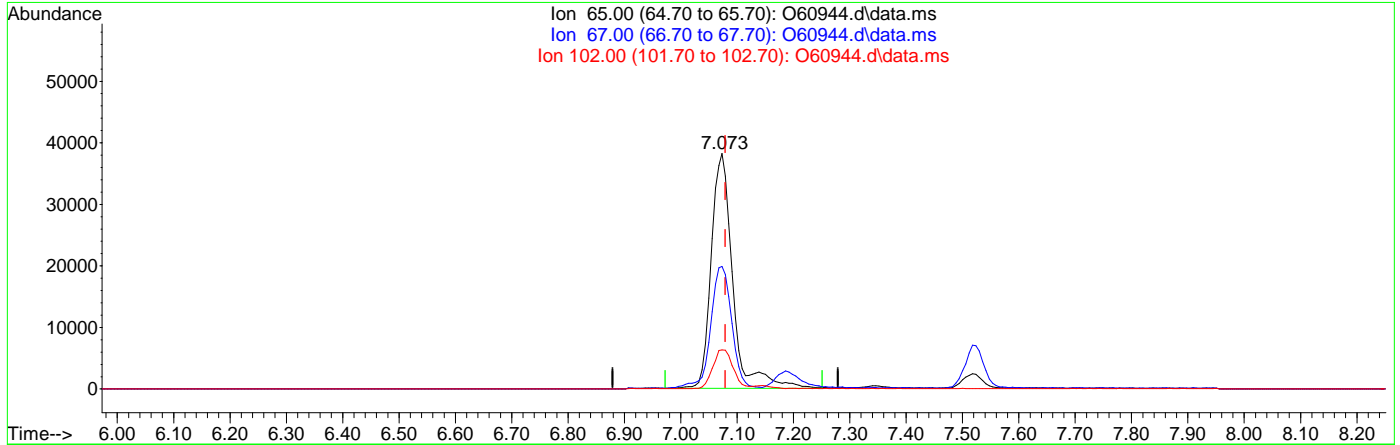
response 320017

Ion	Exp%	Act%
78.00	100	100
51.00	26.90	26.88
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\JULY 2020\07-24-2020\VO2342\
 Data File : O60944.d
 Acq On : 23 Jul 2020 9:35 am
 Operator : stutip
 Sample : bs Inst : MSVOA12
 Misc : MS46775,VO2342,,,,,
 ALS Vial : 2 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\SIMCL070220.M
 Quant Results File: SIMCL070220.RES
 Quant Time: Jul 24 02:20:36 2020
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jul 02 13:33:54 2020
 Response via : Initial Calibration



TIC: O60944.d\data.ms

(13) 1,2-Dichloroethane-d4 (S)

7.073min (-0.006) 5.54ug/L

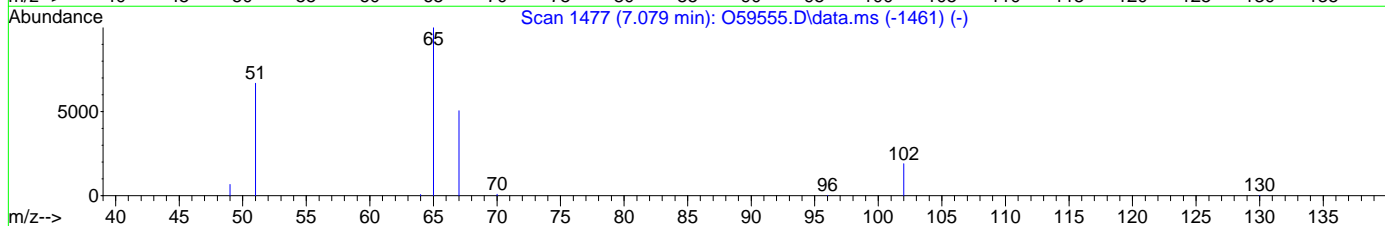
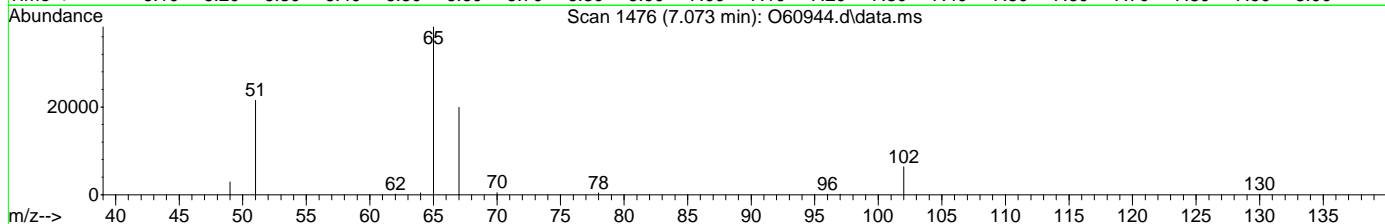
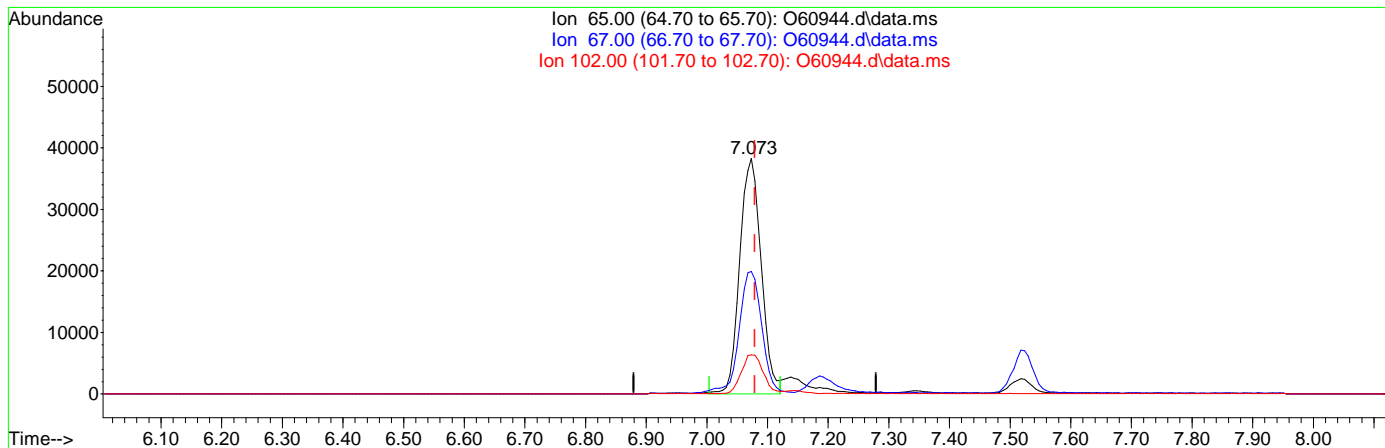
response 102245

Ion	Exp%	Act%
65.00	100	100
67.00	52.80	51.82
102.00	16.90	16.39
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\JULY 2020\07-24-2020\VO2342\
 Data File : O60944.d
 Acq On : 23 Jul 2020 9:35 am
 Operator : stutip
 Sample : bs Inst : MSVOA12
 Misc : MS46775,VO2342,,,,,
 ALS Vial : 2 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\SIMCL070220.M
 Quant Results File: SIMCL070220.RES
 Quant Time: Jul 24 02:20:36 2020
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jul 02 13:33:54 2020
 Response via : Initial Calibration



TIC: O60944.d\data.ms

(13) 1,2-Dichloroethane-d4 (S)

7.073min (-0.006) 5.12ug/L m

response 94518

Ion	Exp%	Act%
65.00	100	100
67.00	52.80	52.00
102.00	16.90	16.54
0.00	0.00	0.00

7.3.1.5
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\072320\
 Data File : O60954.D
 Acq On : 23 Jul 2020 1:37 pm
 Operator : stutip
 Sample : fa76970-1ams,10 Inst : MSVOA12
 Misc : MS46775,VO2342,,,,,10
 ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jul 24 07:37:19 2020
 Quant Method : C:\msdchem\2\methods\SIMCL070220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jul 02 13:33:54 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
Internal Standards							
1) Fluorobenzene	7.346	96	203381	5.00	ug/L	0.00	
18) Chlorobenzene-d5	10.447	117	149778	5.00	ug/L	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.074	65	78755	5.27	ug/L	0.00	
Spiked Amount	5.000	Range 74 - 125	Recovery	=	105.40%		
19) Toluene-d8	8.900	98	157853	4.37	ug/L	0.00	
Spiked Amount	5.000	Range 88 - 111	Recovery	=	87.40%#		
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.905	62	134338	6.88	ug/L		99
3) Chloromethane	2.799	50	206241	6.23	ug/L		100
4) 1,1-Dichloroethene	4.089	61	118413	4.75	ug/L		97
5) Methylene Chloride	4.699	49	207696	4.98	ug/L		98
6) trans-1,2-Dichloroethene	4.869	61	132097	4.94	ug/L		99
7) 1,1-Dichloroethane	5.510	63	166364	4.91	ug/L		99
8) cis-1,2-Dichloroethene	6.066	96	86121	4.70	ug/L		98
9) Chloroform	6.327	83	168444	5.16	ug/L		98
10) Carbon Tetrachloride	6.505	117	98724	4.93	ug/L		97
11) 1,1,1-Trichloroethane	6.576	97	116486	4.95	ug/L		98
12) Benzene	6.937	78	304899	5.42	ug/L		99
14) 1,2-Dichloroethane	7.139	62	122081	4.79	ug/L		99
15) Trichloroethene	7.518	95	105566	5.32	ug/L	#	83
16) 1,2-Dichloropropane	8.043	63	95571	5.06	ug/L		100
17) cis-1,3-Dichloropropene	8.711	75	91569	4.35	ug/L		98
20) trans-1,3-Dichloropropene	9.343	75	90204	3.95	ug/L		100
21) Tetrachloroethene	9.343	166	85064	4.44	ug/L		99
22) 1,4-Dichlorobenzene	12.827	146	558683	15.15	ug/L		100
23) 1,2-Dibromo-3-Chloropr...	14.038	75	32629	4.55	ug/L		94

(#) = qualifier out of range (m) = manual integration (+) = signals summed

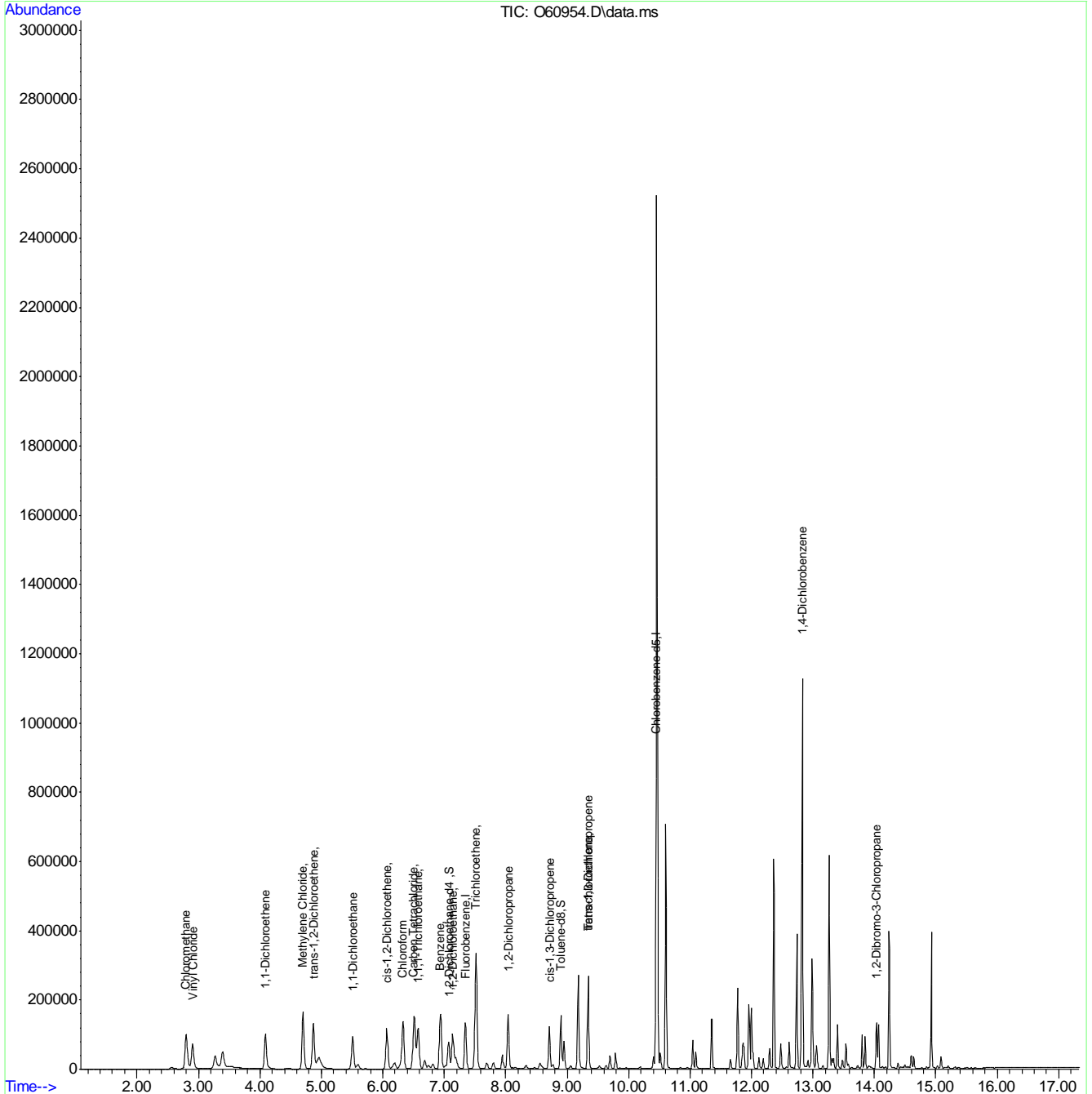
7.4.1
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\072320\
 Data File : O60954.D
 Acq On : 23 Jul 2020 1:37 pm
 Operator : stutip
 Sample : fa76970-1ams,10
 Misc : MS46775,VO2342,,,,,10
 ALS Vial : 12 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Jul 24 07:37:19 2020
 Quant Method : C:\msdchem\2\methods\SIMCL070220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jul 02 13:33:54 2020
 Response via : Initial Calibration

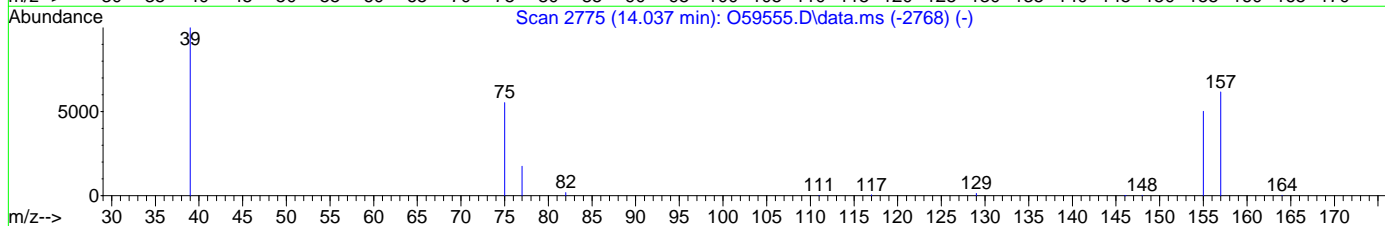
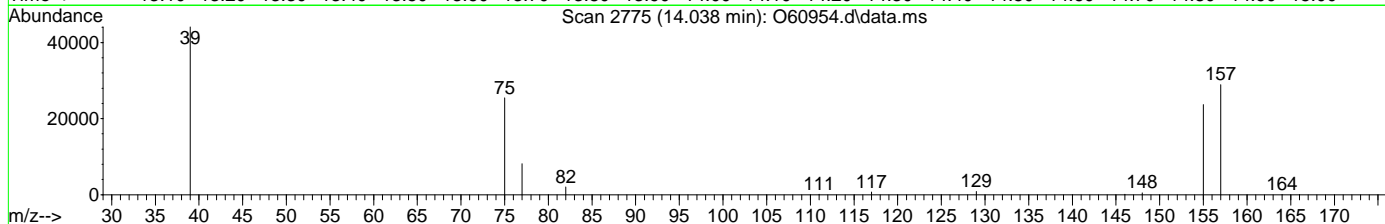
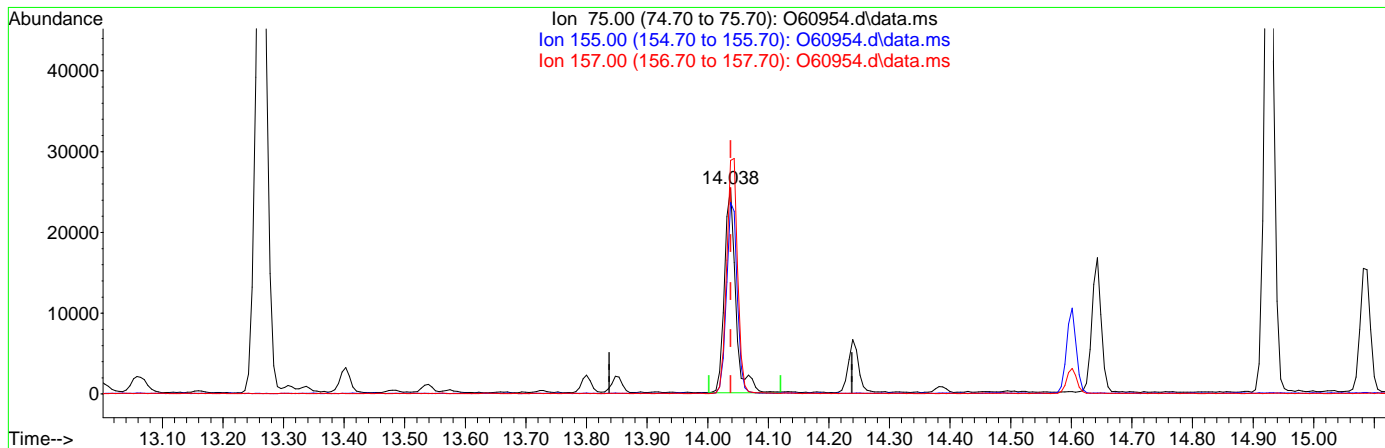


7.4.1
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\JULY 2020\07-24-2020\VO2342\
 Data File : O60954.d
 Acq On : 23 Jul 2020 1:37 pm
 Operator :
 Sample : fa76970-1ms,10 Inst : MSVOA12
 Misc : MS46803,VO2342,,,,,10
 ALS Vial : 12 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\SIMCL070220.M
 Quant Results File: SIMCL070220.RES
 Quant Time: Jul 24 02:21:06 2020
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jul 02 13:33:54 2020
 Response via : Initial Calibration



TIC: O60954.d\data.ms

(23) 1,2-Dibromo-3-Chloropropane

14.038min (-0.000) 4.55ug/L

response 32629

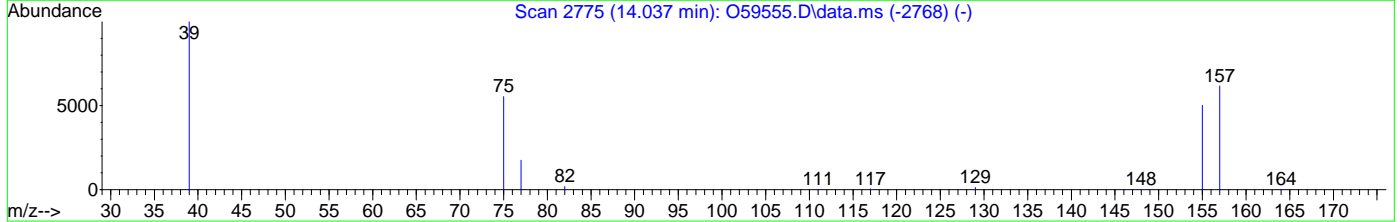
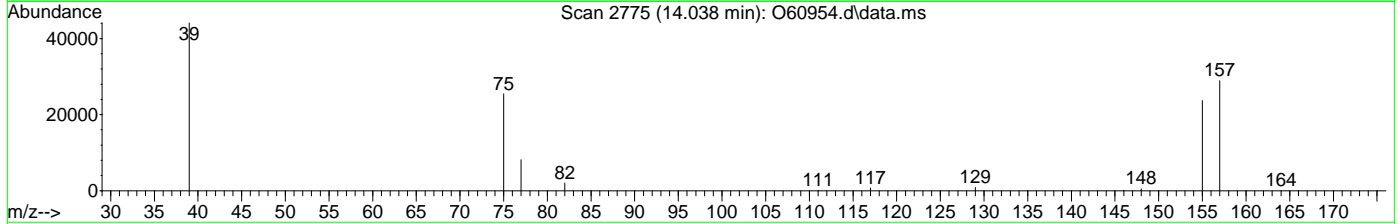
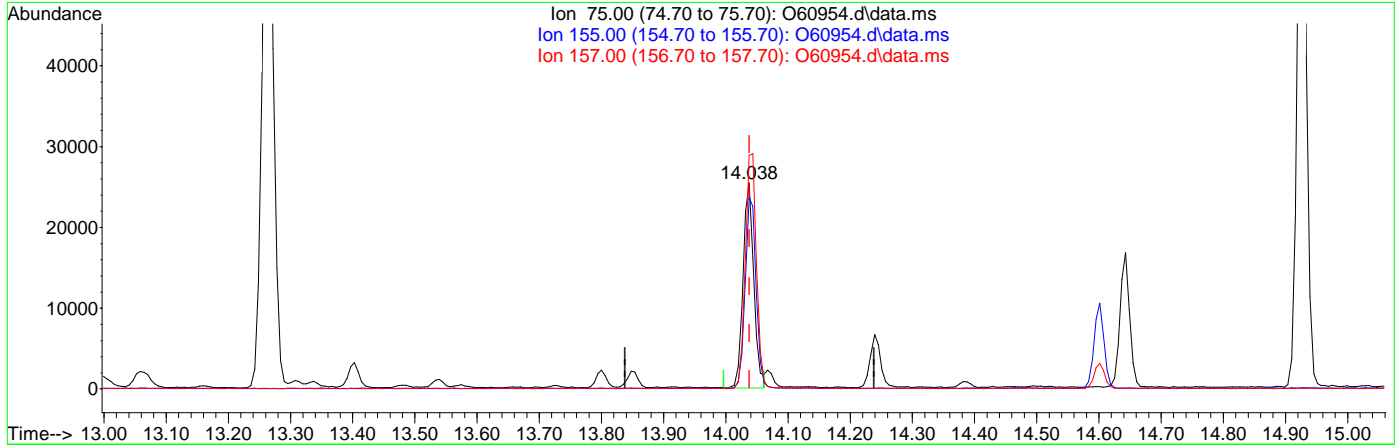
Ion	Exp%	Act%
75.00	100	100
155.00	87.30	93.14
157.00	108.50	113.88
0.00	0.00	0.00

7.4.1.1
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\JULY 2020\07-24-2020\VO2342\
 Data File : O60954.d
 Acq On : 23 Jul 2020 1:37 pm
 Operator :
 Sample : fa76970-1ms,10 Inst : MSVOA12
 Misc : MS46803,VO2342,,,,,10
 ALS Vial : 12 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\SIMCL070220.M
 Quant Results File: SIMCL070220.RES
 Quant Time: Jul 24 02:21:06 2020
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jul 02 13:33:54 2020
 Response via : Initial Calibration



TIC: O60954.d\data.ms

(23) 1,2-Dibromo-3-Chloropropane
 14.038min (-0.000) 4.29ug/L m
 response 30729

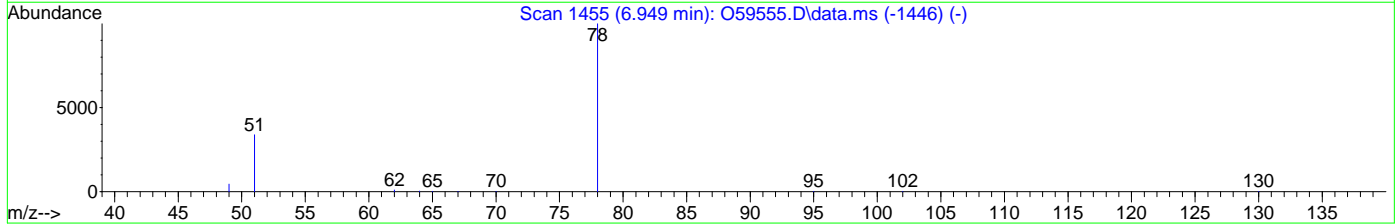
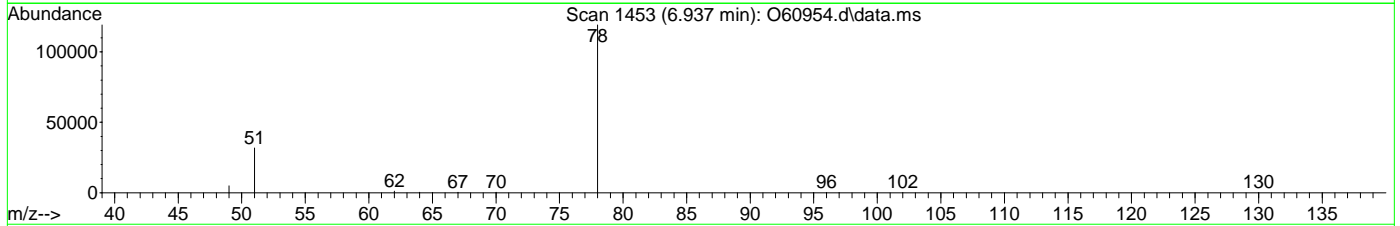
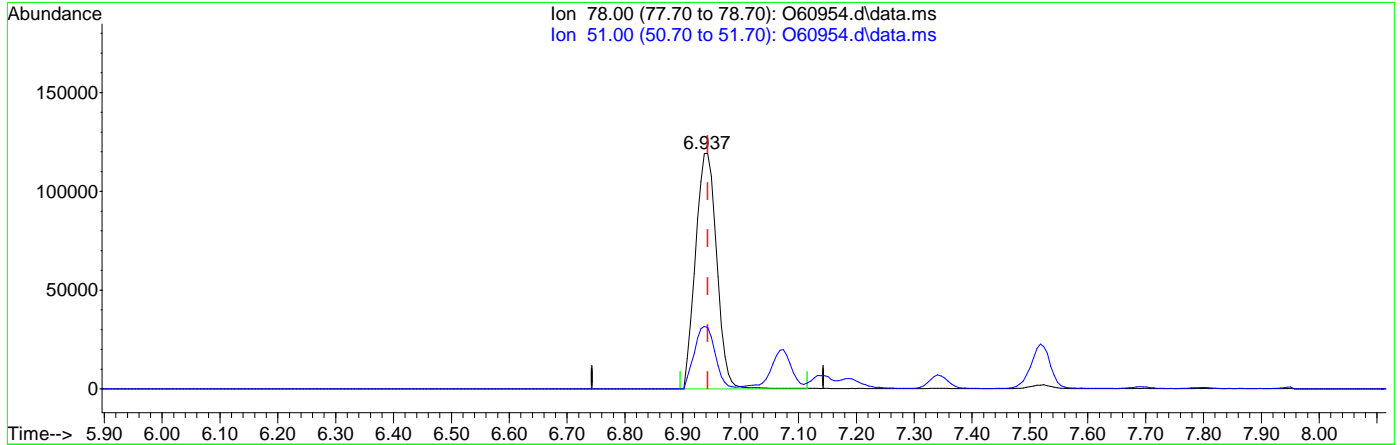
Ion	Exp%	Act%
75.00	100	100
155.00	87.30	93.00
157.00	108.50	113.50
0.00	0.00	0.00

7.4.1.2
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\JULY 2020\07-24-2020\VO2342\
 Data File : O60954.d
 Acq On : 23 Jul 2020 1:37 pm
 Operator :
 Sample : fa76970-1ms,10 Inst : MSVOA12
 Misc : MS46803,VO2342,,,,,10
 ALS Vial : 12 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\SIMCL070220.M
 Quant Results File: SIMCL070220.RES
 Quant Time: Jul 24 02:32:59 2020
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jul 02 13:33:54 2020
 Response via : Initial Calibration



TIC: O60954.d\data.ms

(12) Benzene ()

6.937min (-0.006) 5.42ug/L

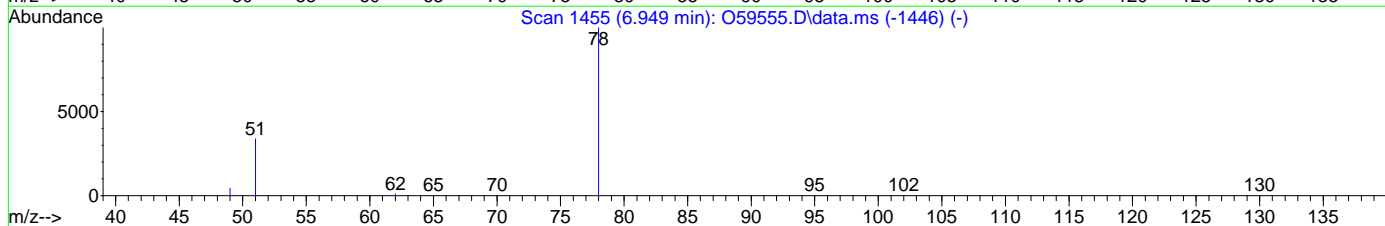
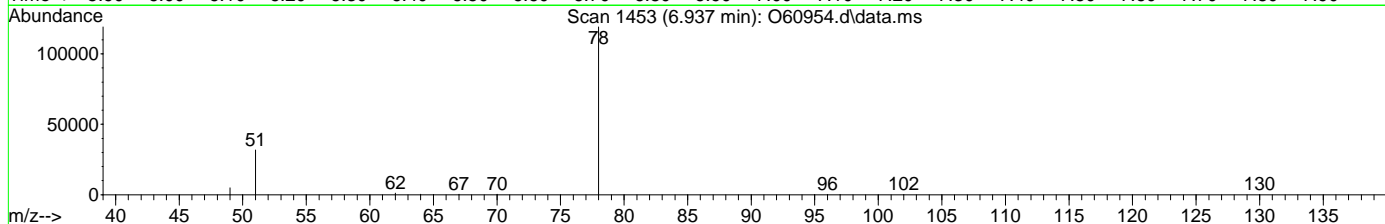
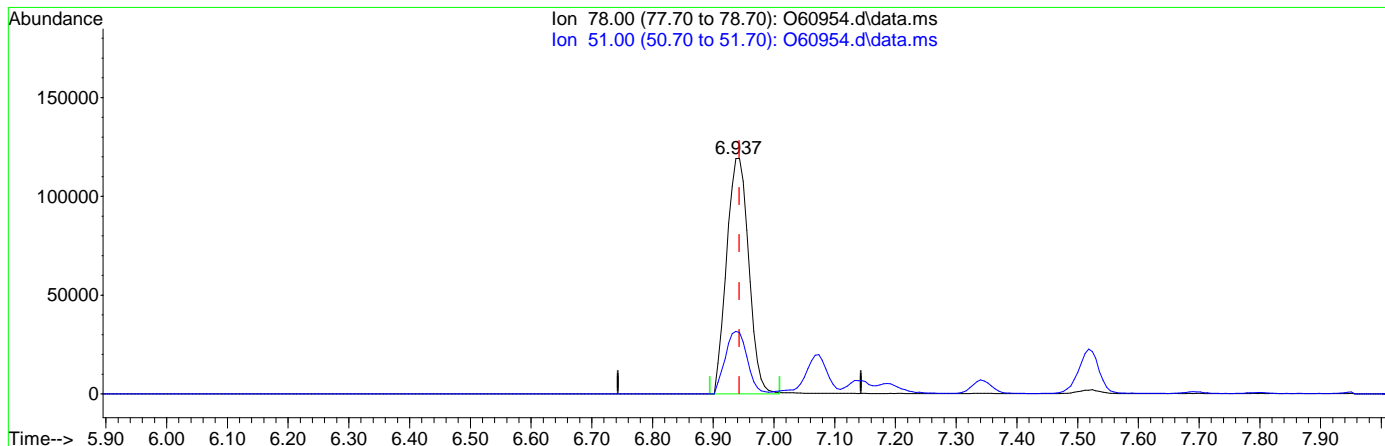
response 304899

Ion	Exp%	Act%
78.00	100	100
51.00	26.90	26.58
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\JULY 2020\07-24-2020\VO2342\
 Data File : O60954.d
 Acq On : 23 Jul 2020 1:37 pm
 Operator :
 Sample : fa76970-1ms,10 Inst : MSVOA12
 Misc : MS46803,VO2342,,,,,10
 ALS Vial : 12 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\SIMCL070220.M
 Quant Results File: SIMCL070220.RES
 Quant Time: Jul 24 02:32:59 2020
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jul 02 13:33:54 2020
 Response via : Initial Calibration



TIC: O60954.d\data.ms

(12) Benzene ()
 6.937min (-0.006) 5.37ug/L m
 response 302131

Ion	Exp%	Act%
78.00	100	100
51.00	26.90	26.58
0.00	0.00	0.00
0.00	0.00	0.00

7.4.1.4
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\072320\
 Data File : O60955.D
 Acq On : 23 Jul 2020 2:01 pm
 Operator : stutip
 Sample : fa76970-1amsd,10 Inst : MSVOA12
 Misc : MS46775,VO2342,,,,,10
 ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jul 24 07:37:21 2020
 Quant Method : C:\msdchem\2\methods\SIMCL070220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jul 02 13:33:54 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
Internal Standards							
1) Fluorobenzene	7.346	96	230660	5.00	ug/L	0.00	
18) Chlorobenzene-d5	10.447	117	166723	5.00	ug/L	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.074	65	95066	5.61	ug/L	0.00	
Spiked Amount	5.000	Range 74 - 125	Recovery	=	112.20%		
19) Toluene-d8	8.900	98	179635	4.47	ug/L	0.00	
Spiked Amount	5.000	Range 88 - 111	Recovery	=	89.40%		
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.905	62	143502	6.48	ug/L		98
3) Chloromethane	2.799	50	220443	5.85	ug/L		100
4) 1,1-Dichloroethene	4.092	61	179368	6.35	ug/L		99
5) Methylene Chloride	4.703	49	235531	4.98	ug/L		96
6) trans-1,2-Dichloroethene	4.869	61	152809	5.03	ug/L		99
7) 1,1-Dichloroethane	5.514	63	195025	5.08	ug/L		97
8) cis-1,2-Dichloroethene	6.072	96	101477	4.89	ug/L		99
9) Chloroform	6.333	83	195953	5.29	ug/L		99
10) Carbon Tetrachloride	6.511	117	117454	5.17	ug/L		98
11) 1,1,1-Trichloroethane	6.576	97	137743	5.16	ug/L		98
12) Benzene	6.943	78	356536	5.59	ug/L		99
14) 1,2-Dichloroethane	7.139	62	141381	4.89	ug/L		99
15) Trichloroethene	7.512	95	121651	5.41	ug/L		87
16) 1,2-Dichloropropane	8.044	63	112100	5.24	ug/L		99
17) cis-1,3-Dichloropropene	8.711	75	112484	4.71	ug/L		100
20) trans-1,3-Dichloropropene	9.343	75	110038	4.33	ug/L		99
21) Tetrachloroethene	9.343	166	98972	4.64	ug/L		100
22) 1,4-Dichlorobenzene	12.827	146	609842	14.85	ug/L		100
23) 1,2-Dibromo-3-Chloropr...	14.038	75	37854	4.74	ug/L		92

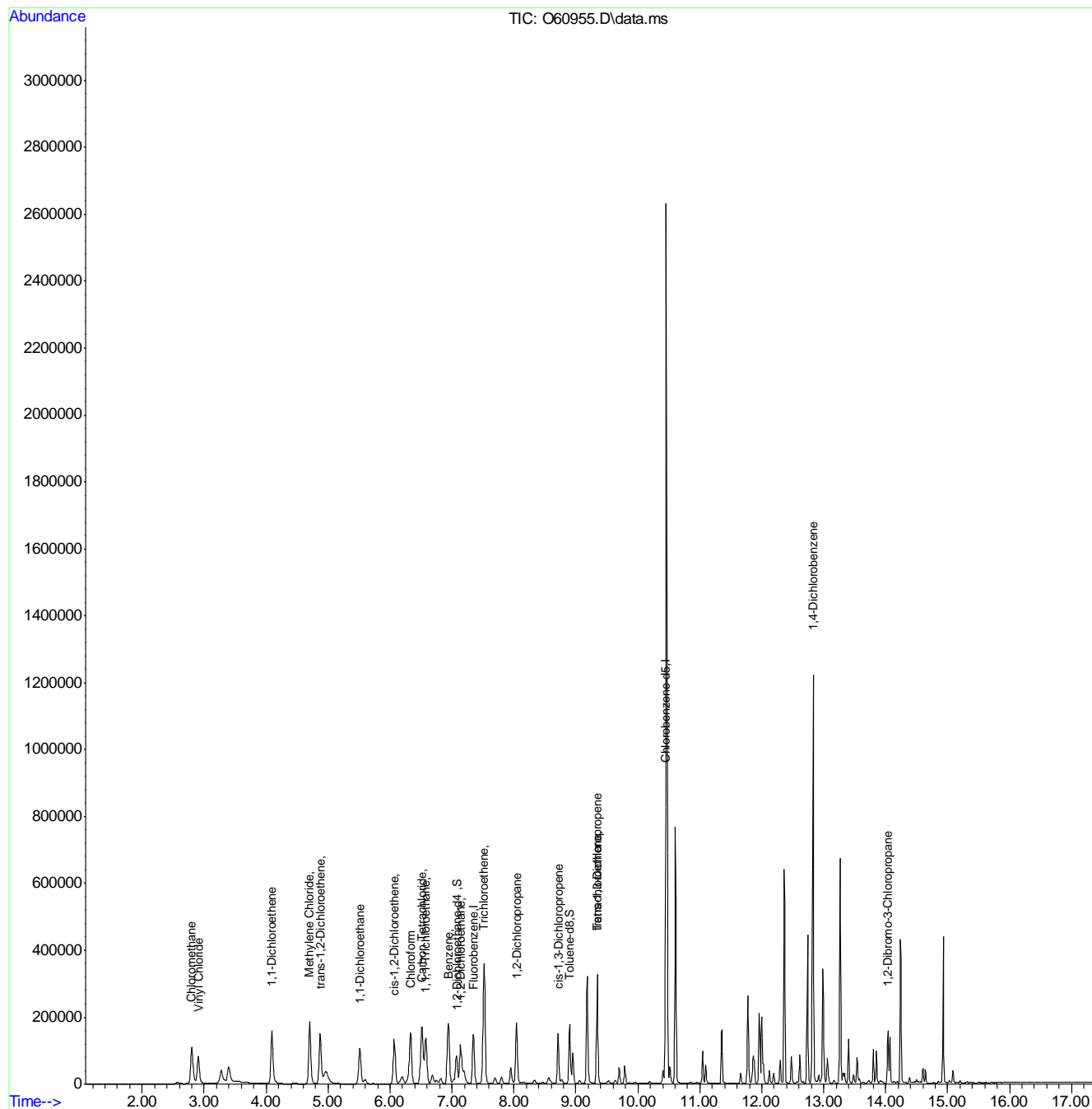
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\072320\
 Data File : O60955.D
 Acq On : 23 Jul 2020 2:01 pm
 Operator : stutip
 Sample : fa76970-1amsd,10
 Misc : MS46775,VO2342,,,,,10
 ALS Vial : 13 Sample Multiplier: 1

Inst : MSVOA12

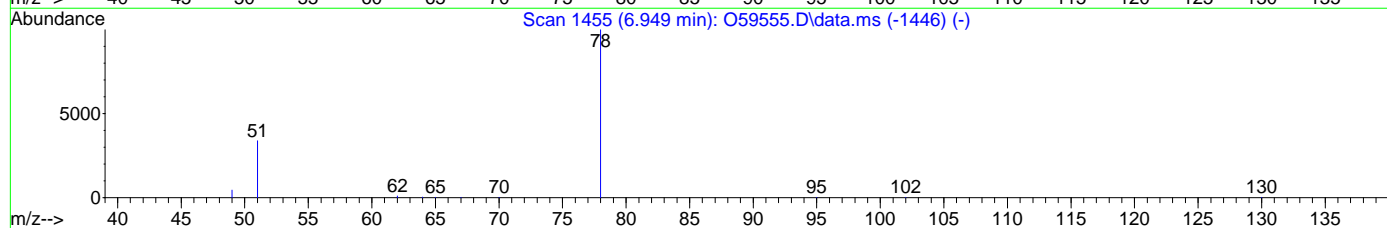
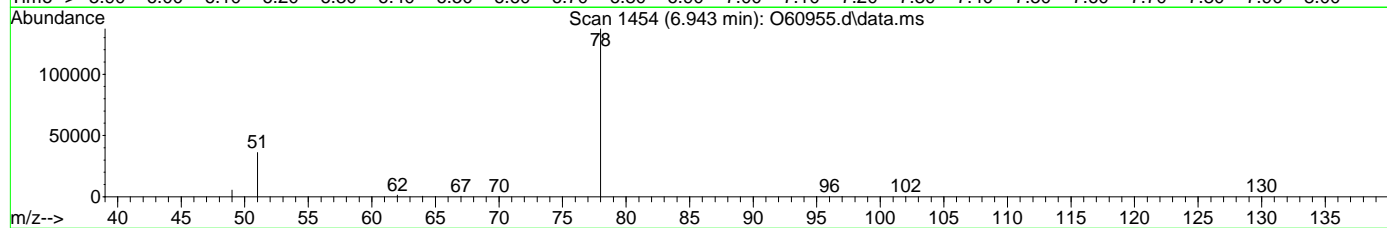
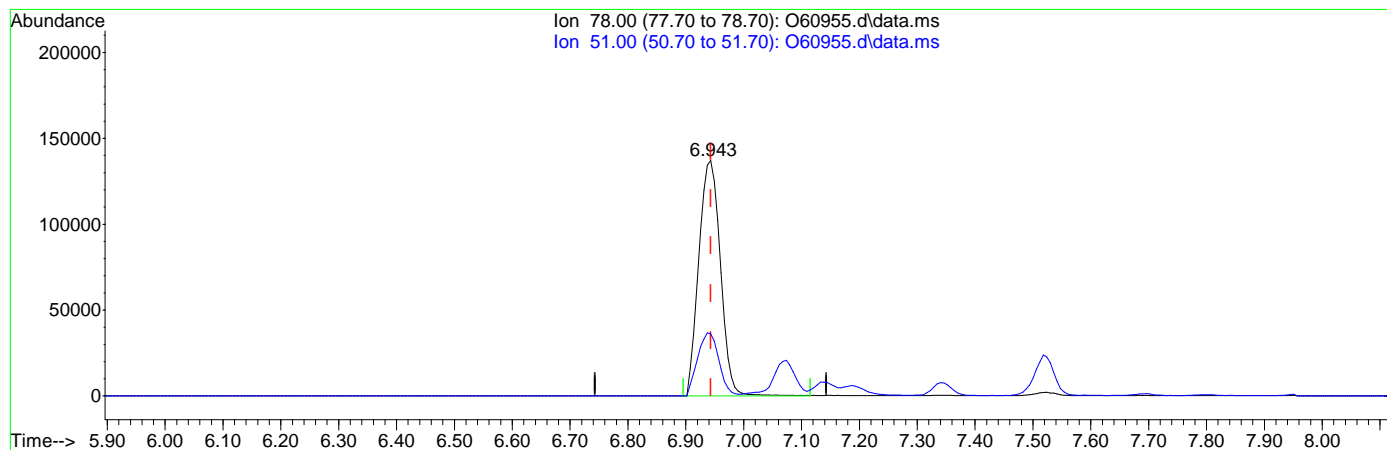
Quant Time: Jul 24 07:37:21 2020
 Quant Method : C:\msdchem\2\methods\SIMCL070220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jul 02 13:33:54 2020
 Response via : Initial Calibration



Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\JULY 2020\07-24-2020\VO2342\
 Data File : O60955.d
 Acq On : 23 Jul 2020 2:01 pm
 Operator :
 Sample : fa76970-1msd,10 Inst : MSVOA12
 Misc : MS46803,VO2342,,,,,10
 ALS Vial : 13 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\SIMCL070220.M
 Quant Results File: SIMCL070220.RES
 Quant Time: Jul 24 02:21:09 2020
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jul 02 13:33:54 2020
 Response via : Initial Calibration



TIC: O60955.d\data.ms

(12) Benzene ()

6.943min (+0.000) 5.59ug/L

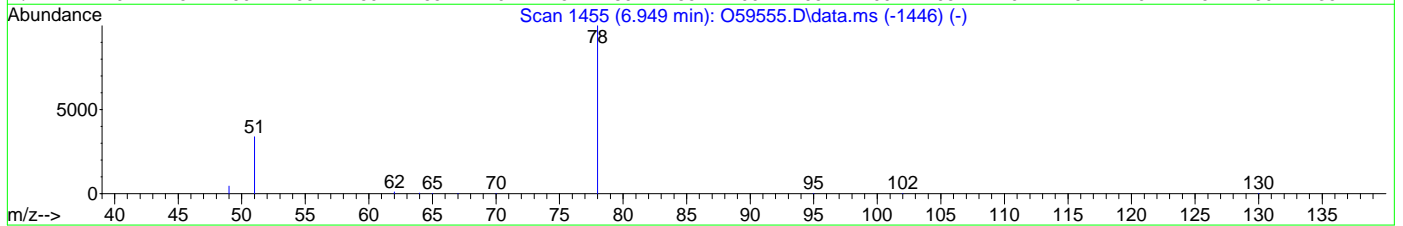
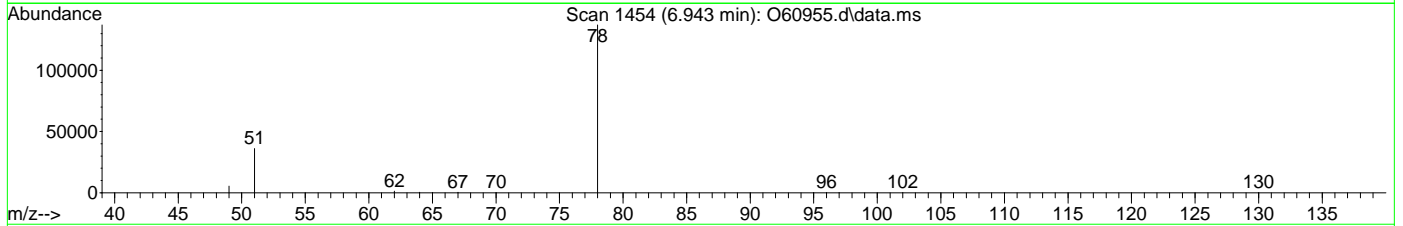
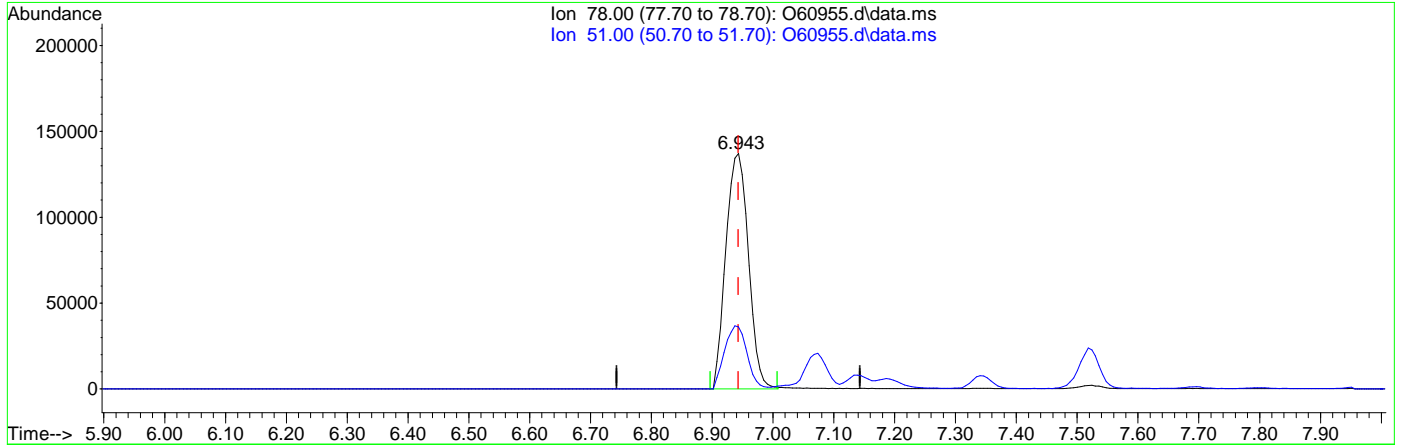
response 356536

Ion	Exp%	Act%
78.00	100	100
51.00	26.90	26.36
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\JULY 2020\07-24-2020\VO2342\
 Data File : O60955.d
 Acq On : 23 Jul 2020 2:01 pm
 Operator :
 Sample : fa76970-1msd,10 Inst : MSVOA12
 Misc : MS46803,VO2342,,,,,10
 ALS Vial : 13 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\SIMCL070220.M
 Quant Results File: SIMCL070220.RES
 Quant Time: Jul 24 02:21:09 2020
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jul 02 13:33:54 2020
 Response via : Initial Calibration



TIC: O60955.d\data.ms

(12) Benzene ()

6.943min (+0.000) 5.54ug/L m

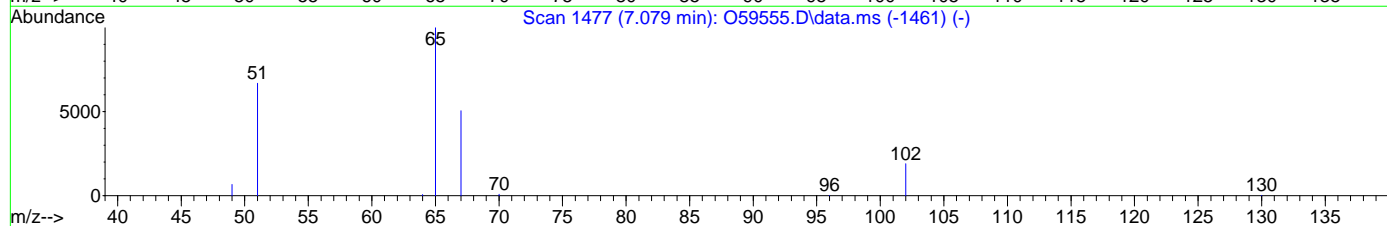
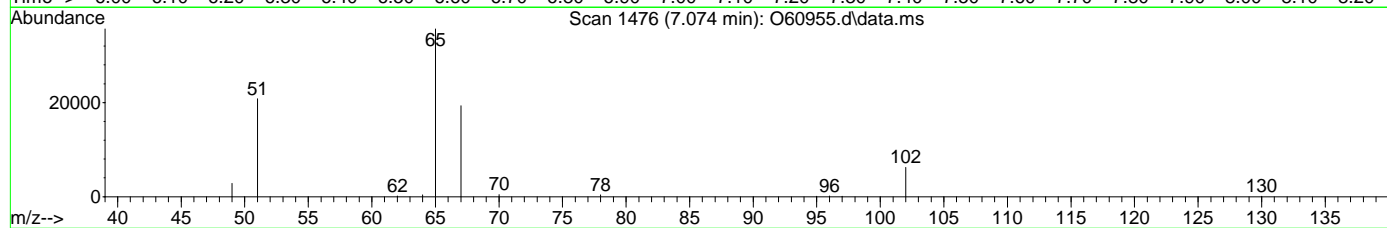
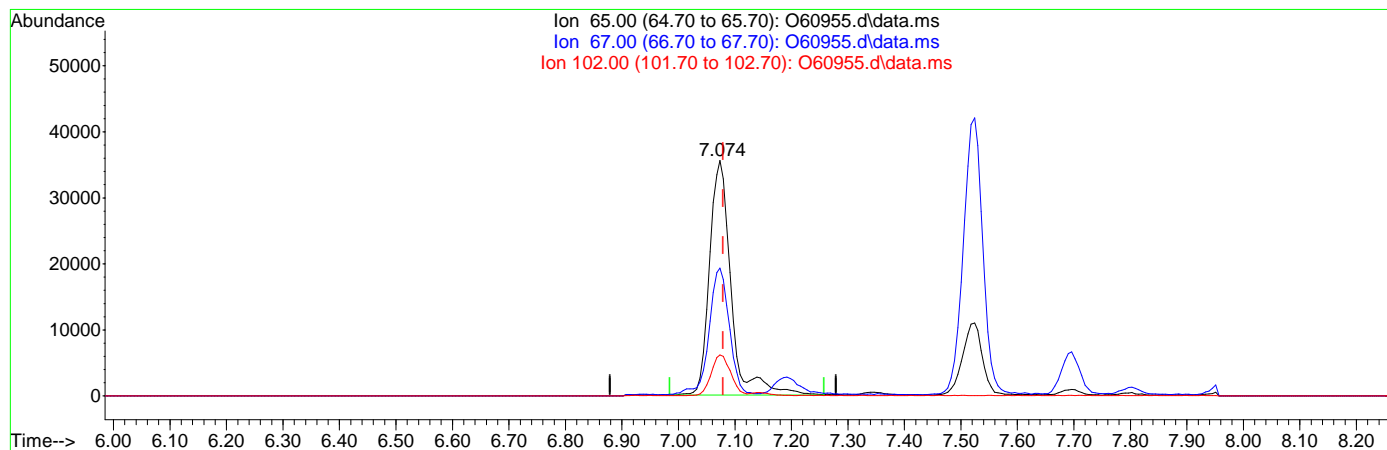
response 353458

Ion	Exp%	Act%
78.00	100	100
51.00	26.90	26.36
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\JULY 2020\07-24-2020\VO2342\
 Data File : O60955.d
 Acq On : 23 Jul 2020 2:01 pm
 Operator :
 Sample : fa76970-1msd,10 Inst : MSVOA12
 Misc : MS46803,VO2342,,,,,10
 ALS Vial : 13 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\SIMCL070220.M
 Quant Results File: SIMCL070220.RES
 Quant Time: Jul 24 02:21:09 2020
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jul 02 13:33:54 2020
 Response via : Initial Calibration



TIC: O60955.d\data.ms

(13) 1,2-Dichloroethane-d4 (S)

7.074min (-0.005) 5.61ug/L

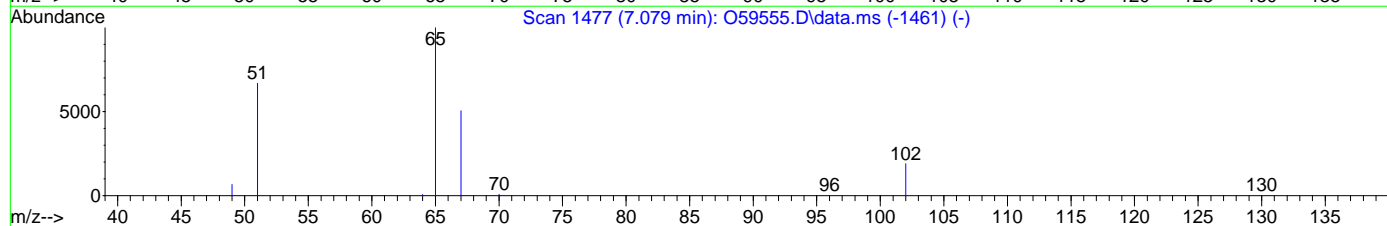
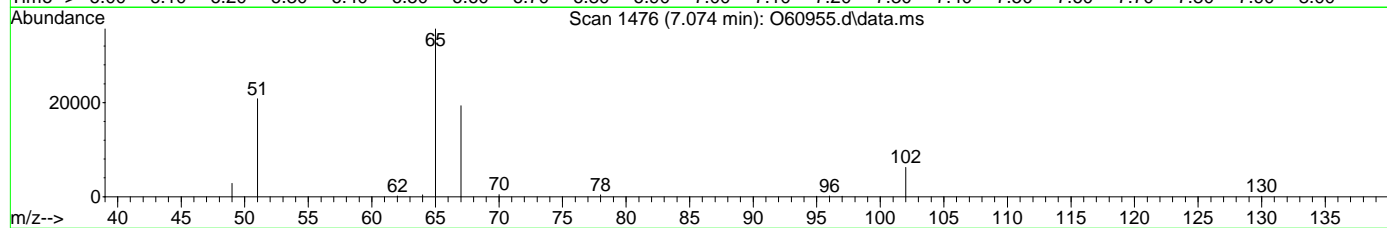
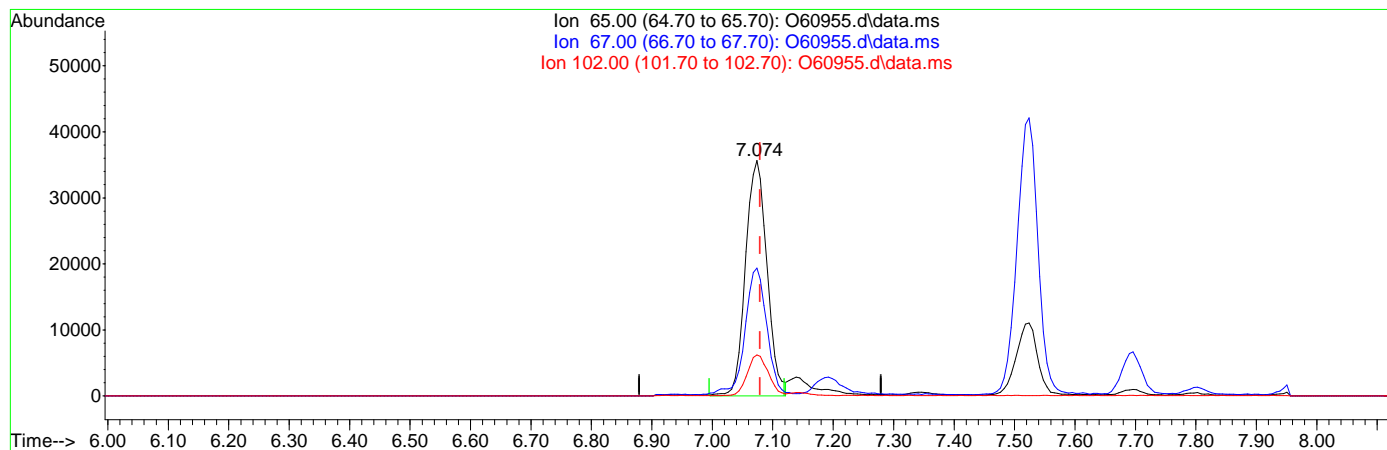
response 95066

Ion	Exp%	Act%
65.00	100	100
67.00	52.80	53.72
102.00	16.90	17.29
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\JULY 2020\07-24-2020\VO2342\
 Data File : O60955.d
 Acq On : 23 Jul 2020 2:01 pm
 Operator :
 Sample : fa76970-1msd,10 Inst : MSVOA12
 Misc : MS46803,VO2342,,,,,10
 ALS Vial : 13 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\SIMCL070220.M
 Quant Results File: SIMCL070220.RES
 Quant Time: Jul 24 02:21:09 2020
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jul 02 13:33:54 2020
 Response via : Initial Calibration



TIC: O60955.d\data.ms

(13) 1,2-Dichloroethane-d4 (S)

7.074min (-0.005) 5.20ug/L m

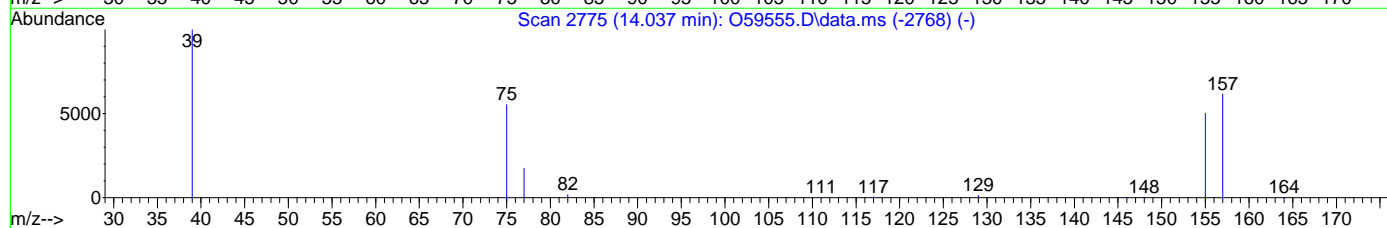
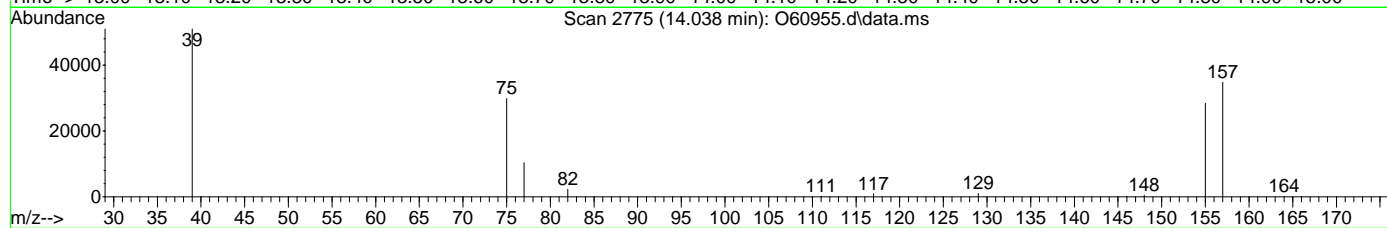
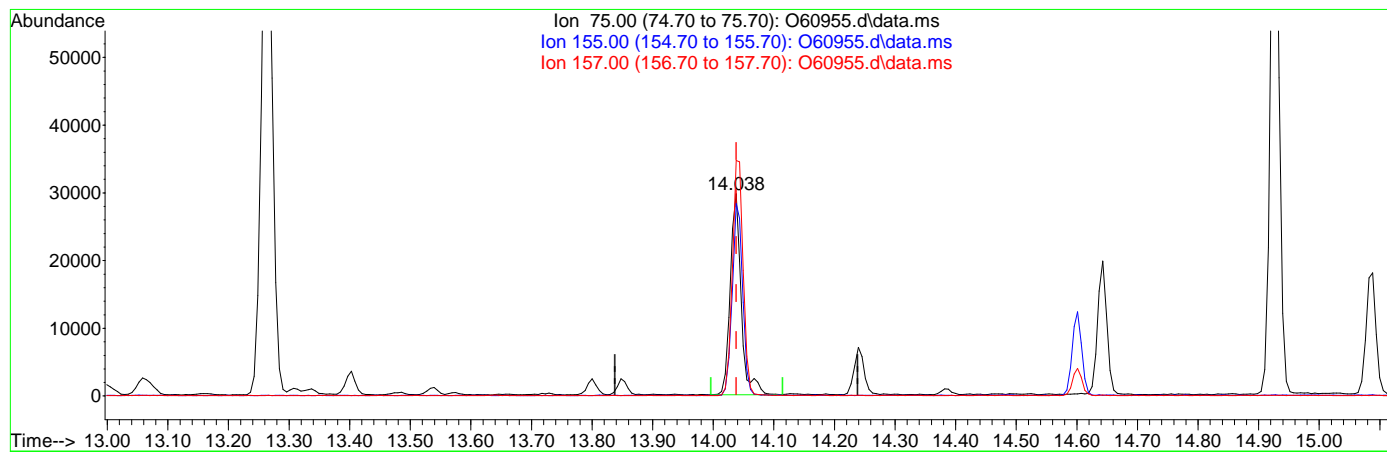
response 88107

Ion	Exp%	Act%
65.00	100	100
67.00	52.80	54.25
102.00	16.90	17.43
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\JULY 2020\07-24-2020\VO2342\
 Data File : O60955.d
 Acq On : 23 Jul 2020 2:01 pm
 Operator :
 Sample : fa76970-1msd,10 Inst : MSVOA12
 Misc : MS46803,VO2342,,,,,10
 ALS Vial : 13 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\SIMCL070220.M
 Quant Results File: SIMCL070220.RES
 Quant Time: Jul 24 02:21:09 2020
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jul 02 13:33:54 2020
 Response via : Initial Calibration



TIC: O60955.d\data.ms

(23) 1,2-Dibromo-3-Chloropropane

14.038min (-0.000) 4.74ug/L

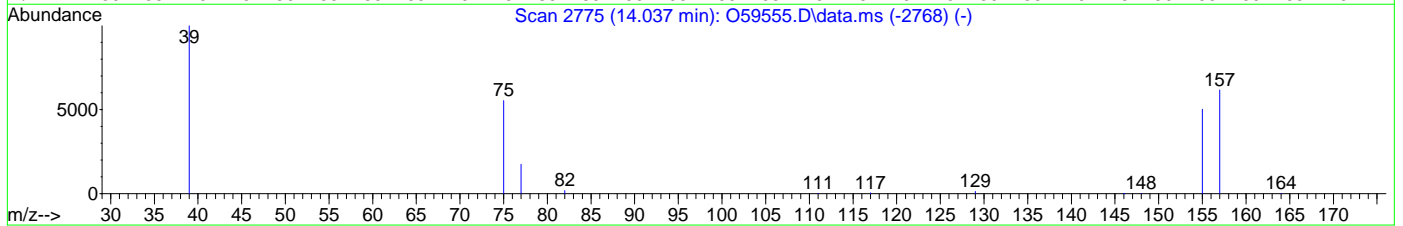
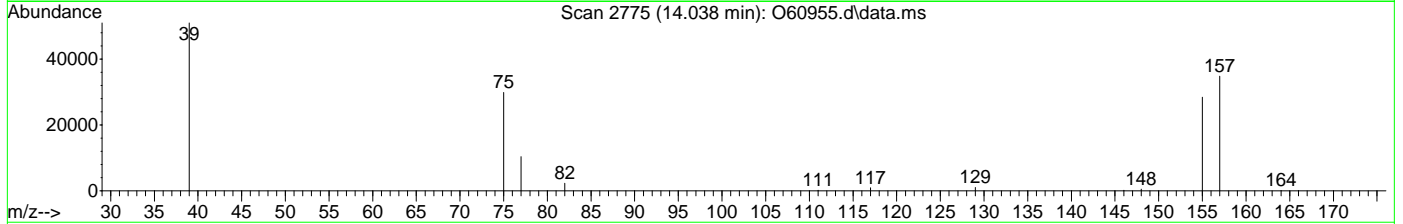
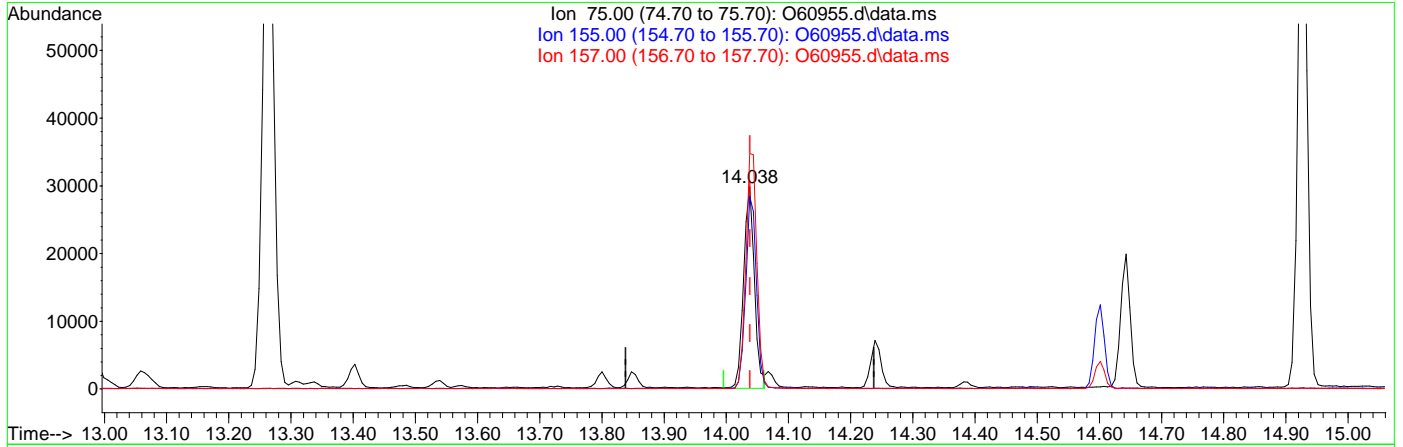
response 37854

Ion	Exp%	Act%
75.00	100	100
155.00	87.30	95.43
157.00	108.50	117.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\JULY 2020\07-24-2020\VO2342\
 Data File : O60955.d
 Acq On : 23 Jul 2020 2:01 pm
 Operator :
 Sample : fa76970-1msd,10 Inst : MSVOA12
 Misc : MS46803,VO2342,,,,,10
 ALS Vial : 13 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\SIMCL070220.M
 Quant Results File: SIMCL070220.RES
 Quant Time: Jul 24 02:21:09 2020
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jul 02 13:33:54 2020
 Response via : Initial Calibration



TIC: O60955.d\data.ms

(23) 1,2-Dibromo-3-Chloropropane

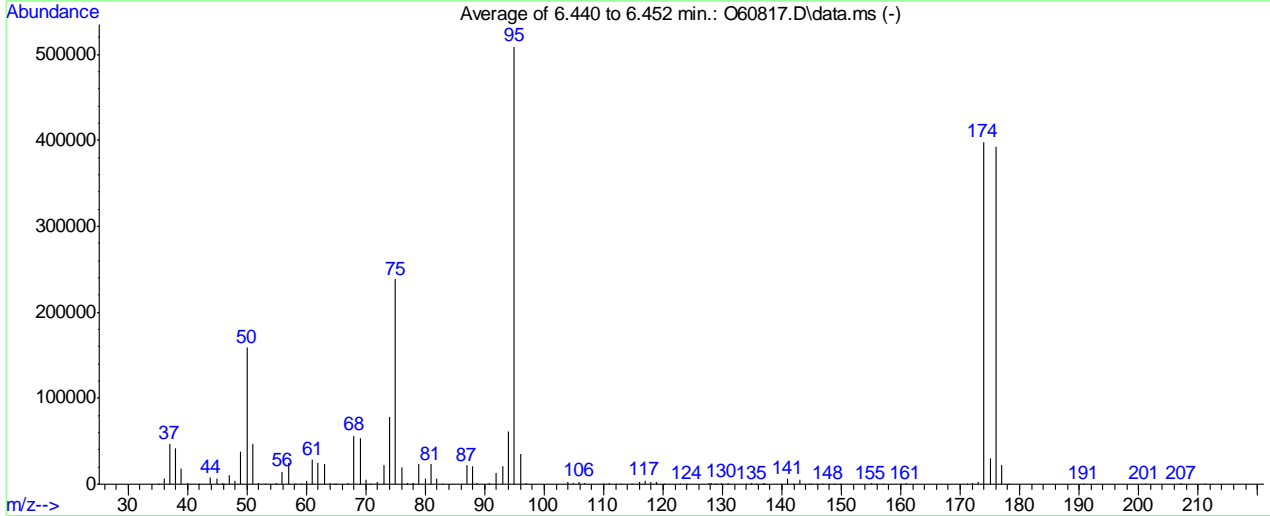
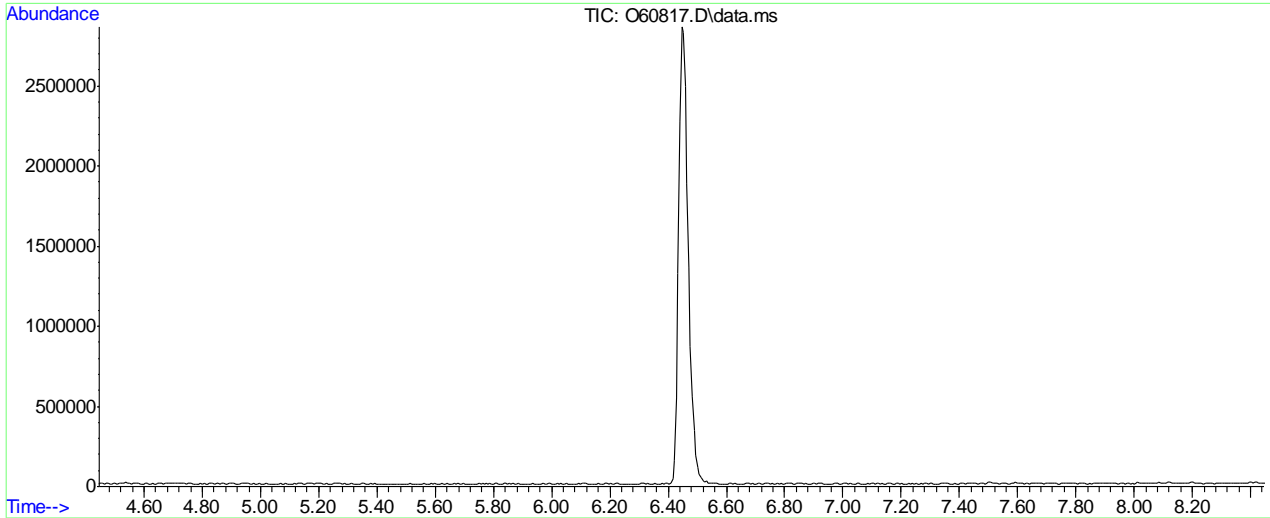
14.038min (-0.000) 4.51ug/L m

response 35948

Ion	Exp%	Act%
75.00	100	100
155.00	87.30	95.18
157.00	108.50	116.56
0.00	0.00	0.00

Methods: SW-846 8260B
 Data File : C:\msdchem\2\data\070220\O60817.D Vial: 100
 Acq On : 2 Jul 2020 8:25 am Operator: amandab
 Sample : BFB Inst : MSVOA12
 Misc : MS46601,VO2337,,,,, Multiplr: 1.00
 MS Integration Params: rteint.p

Method : C:\msdchem\2\methods\SIMCL070220.M (RTE Integrator)
 Title : Standard Methods 6200B



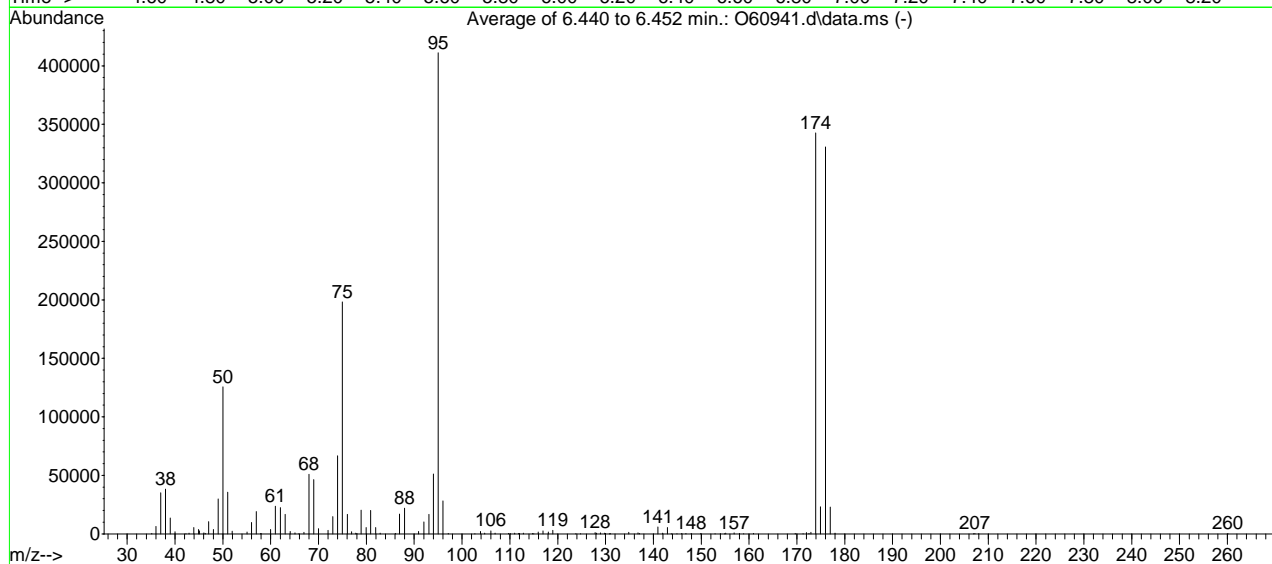
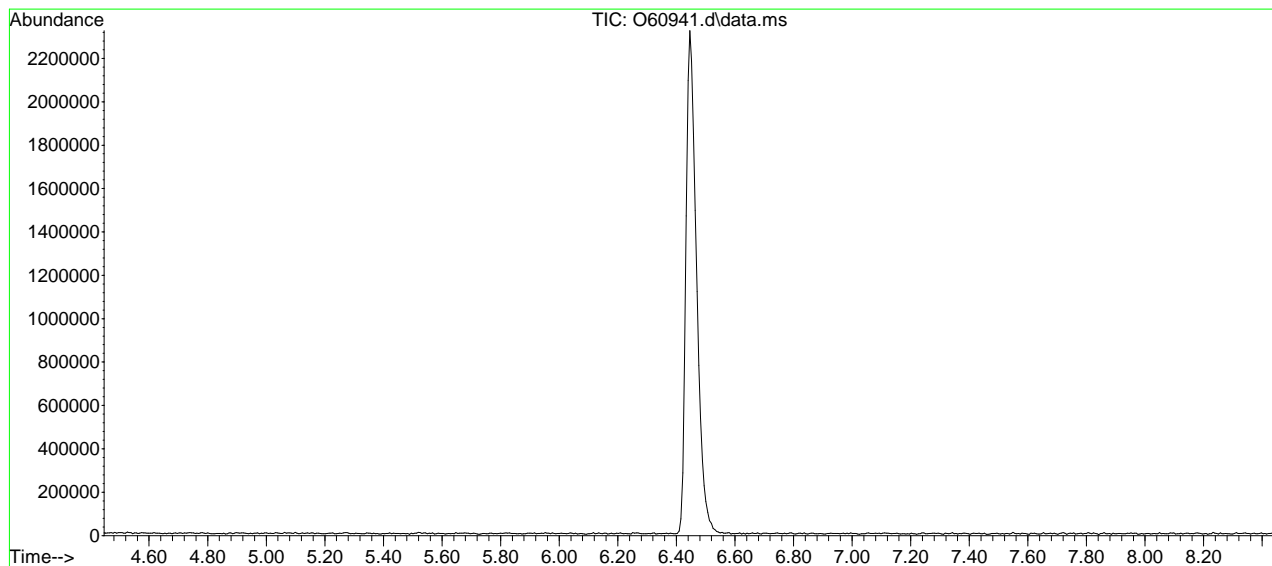
AutoFind: Scans 468, 469, 470; Background Corrected with Scan 460

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	31.2	158784	PASS
75	95	30	60	46.8	238571	PASS
95	95	100	100	100.0	509461	PASS
96	95	5	9	6.8	34768	PASS
173	174	0.00	2	0.7	2676	PASS
174	95	50	100	78.1	398016	PASS
175	174	5	9	7.6	30053	PASS
176	174	95	101	98.6	392512	PASS
177	176	5	9	5.7	22248	PASS

Methods: SW-846 8260B

Data File : C:\msdchem\1\data\Je...-2020\VO2342\O60941.d Vial: 100
 Acq On : 23 Jul 2020 8:07 am Operator: stutip
 Sample : BFB Inst : MSVOA12
 Misc : MS46775,VO2342,,,,, Multiplr: 1.00
 MS Integration Params: rteint.p

Method : C:\msdchem\1\methods\SIMCL070220.M (RTE Integrator)
 Title : Standard Methods 6200B



AutoFind: Scans 468, 469, 470; Background Corrected with Scan 460

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	30.6	125613	PASS
75	95	30	60	48.2	198315	PASS
95	95	100	100	100.0	411093	PASS
96	95	5	9	6.9	28245	PASS
173	174	0.00	2	0.4	1416	PASS
174	95	50	100	83.3	342635	PASS
175	174	5	9	6.8	23211	PASS
176	174	95	101	96.5	330752	PASS
177	176	5	9	6.9	22981	PASS

O60941.d SIMCL070220.M Fri Jul 24 02:21:34 2020

Quantitation Report (QT Reviewed)

Melissa Mangual
07/06/20 08:23

Data Path : C:\msdchem\2\data\070220\
 Data File : O60820.D
 Acq On : 2 Jul 2020 10:49 am
 Operator : amandab
 Sample : IC2337-1 Inst : MSVOA12
 Misc : MS46657,VO2337,,,,,
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 02 11:32:38 2020
 Quant Method : C:\msdchem\2\methods\SIMCL070220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jun 18 12:40:46 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
Internal Standards							
1) Fluorobenzene	7.346	96	389489	5.00	ug/L	0.00	
18) Chlorobenzene-d5	10.441	117	246974	5.00	ug/L	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.068	65	146743	4.91	ug/L	0.00	
Spiked Amount	5.000	Range 74 - 125	Recovery	=	98.20%		
19) Toluene-d8	8.896	98	308482	5.63	ug/L	0.00	
Spiked Amount	5.000	Range 88 - 111	Recovery	=	112.60%#		
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.908	62	3479	0.06	ug/L		94
3) Chloromethane	2.806	50	15964	0.15	ug/L		99
4) 1,1-Dichloroethene	4.092	61	4983	0.10	ug/L		97
5) Methylene Chloride	4.699	49	15605	0.14	ug/L		99
6) trans-1,2-Dichloroethene	4.869	61	5491	0.09	ug/L		99
7) 1,1-Dichloroethane	5.514	63	17594	0.23	ug/L		97
8) cis-1,2-Dichloroethene	6.066	96	4029	0.10	ug/L		85
9) Chloroform	6.333	83	6760	0.09	ug/L		88
10) Carbon Tetrachloride	6.511	117	4090	0.09	ug/L		97
11) 1,1,1-Trichloroethane	6.576	97	4913	0.10	ug/L		85
12) Benzene	6.937	78	31827	0.26	ug/L		99
14) 1,2-Dichloroethane	7.139	62	9816	0.17	ug/L		96
15) Trichloroethene	7.512	95	4327	0.10	ug/L		92
16) 1,2-Dichloropropane	8.043	63	3612m	0.08	ug/L		
17) cis-1,3-Dichloropropene	8.711	75	4058	0.09	ug/L		87
20) trans-1,3-Dichloropropene	9.343	75	3545	0.11	ug/L		91
21) Tetrachloroethene	9.337	166	3437m	0.11	ug/L		
22) 1,4-Dichlorobenzene	12.827	146	5966	0.10	ug/L		96
23) 1,2-Dibromo-3-Chloropr...	14.032	75	1337m	0.13	ug/L		

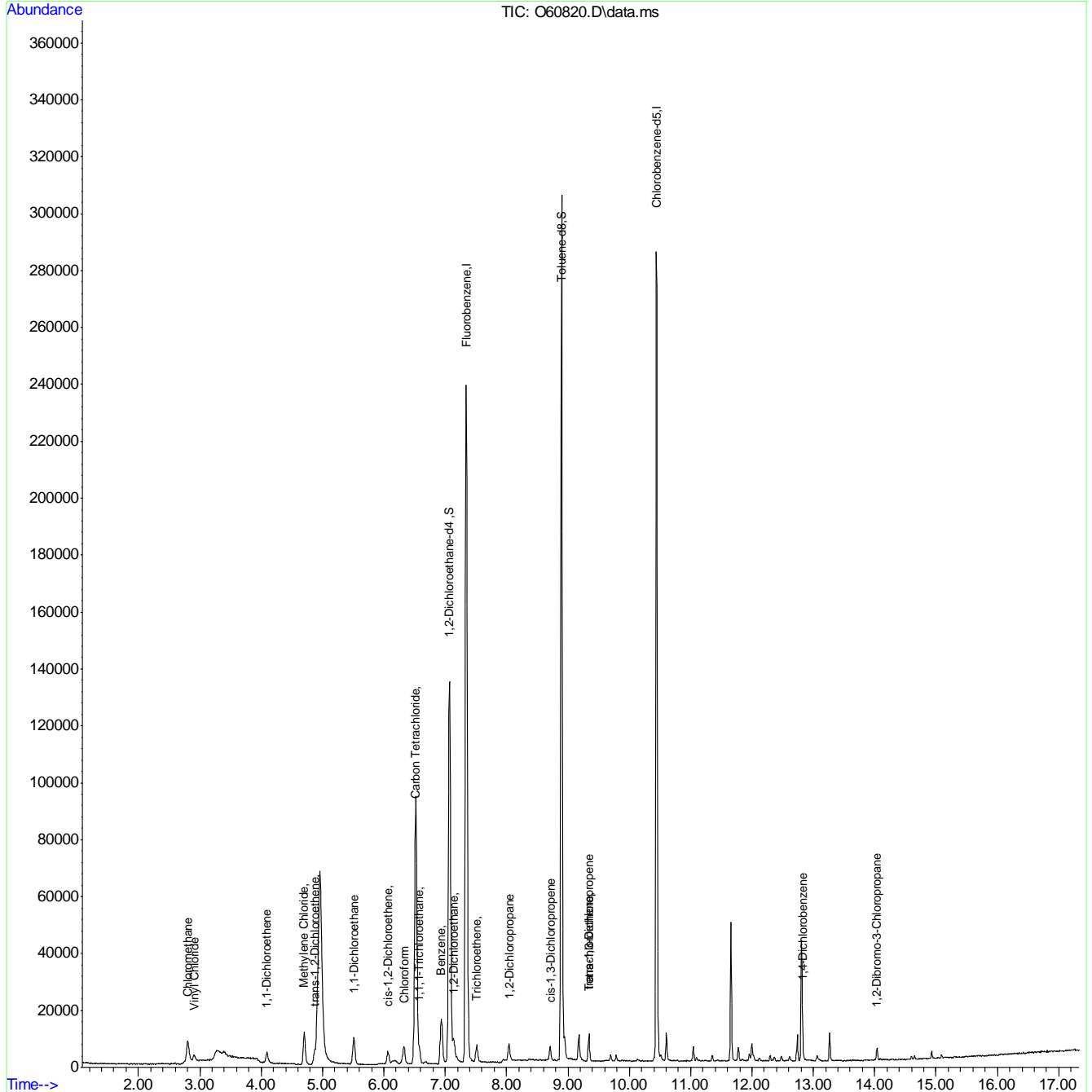
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\070220\
 Data File : O60820.D
 Acq On : 2 Jul 2020 10:49 am
 Operator : amandab
 Sample : IC2337-1
 Misc : MS46657,VO2337,,,,,
 ALS Vial : 1 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Jul 02 11:32:38 2020
 Quant Method : C:\msdchem\2\methods\SIMCL070220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jun 18 12:40:46 2020
 Response via : Initial Calibration



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Manual Integration Approval Summary

Sample Number: VO2337-IC2337 **Method:** SW846 8260B BY SIM
Lab FileID: O60820.D **Analyst approved:** 07/02/20 14:27 Amanda Bacsko
Injection Time: 07/02/20 10:49 **Supervisor approved:** 07/06/20 08:23 Melissa Mangual

Parameter	CAS	Sig#	R.T. (min.)	Reason
1,2-Dichloropropane	78-87-5		8.04	Poor instrument integration
Tetrachloroethylene	127-18-4		9.34	Poor instrument integration
1,2-Dibromo-3-chloropropane	96-12-8		14.03	Missed peak

7.6.1.1

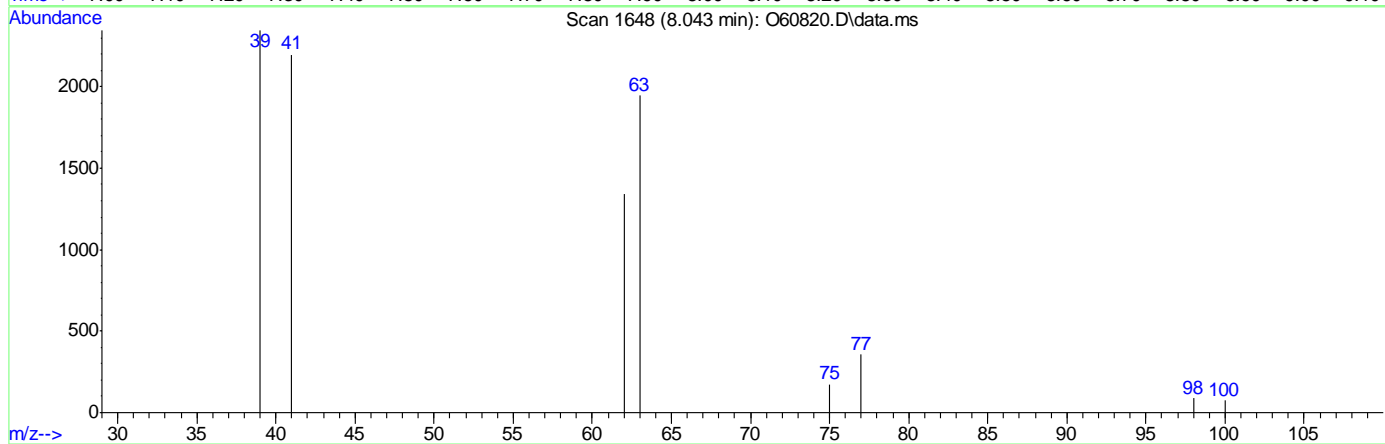
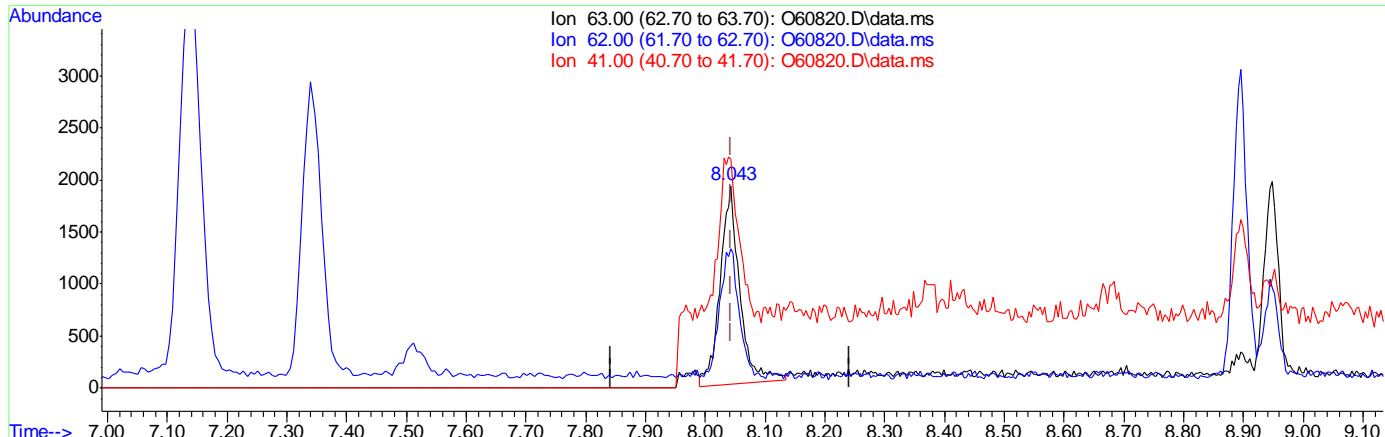
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\070220\
 Data File : O60820.D
 Acq On : 2 Jul 2020 10:49 am
 Operator : amandab
 Sample : IC2337-1
 Misc : MS46657,VO2337,,,,,
 ALS Vial : 1 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Jul 02 11:31:39 2020
 Quant Method : C:\msdchem\2\methods\SIMCL070220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jun 18 12:40:46 2020
 Response via : Initial Calibration



(16) 1,2-Dichloropropane
 8.043min (+0.000) 0.10ug/L
 response 4270

Ion	Exp%	Act%
63.00	100	100
62.00	72.70	68.16
41.00	92.50	80.16
0.00	0.00	0.00

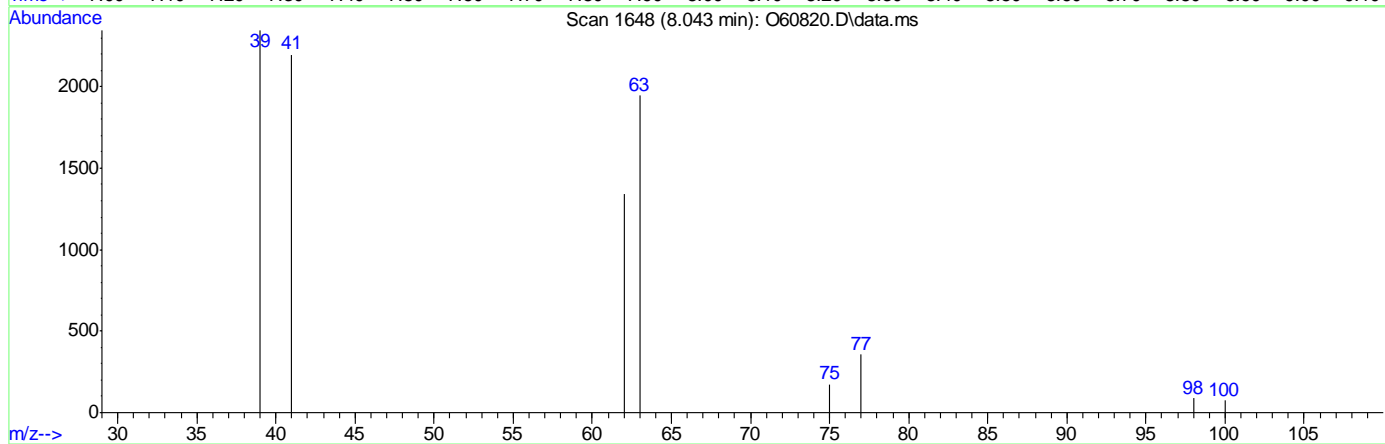
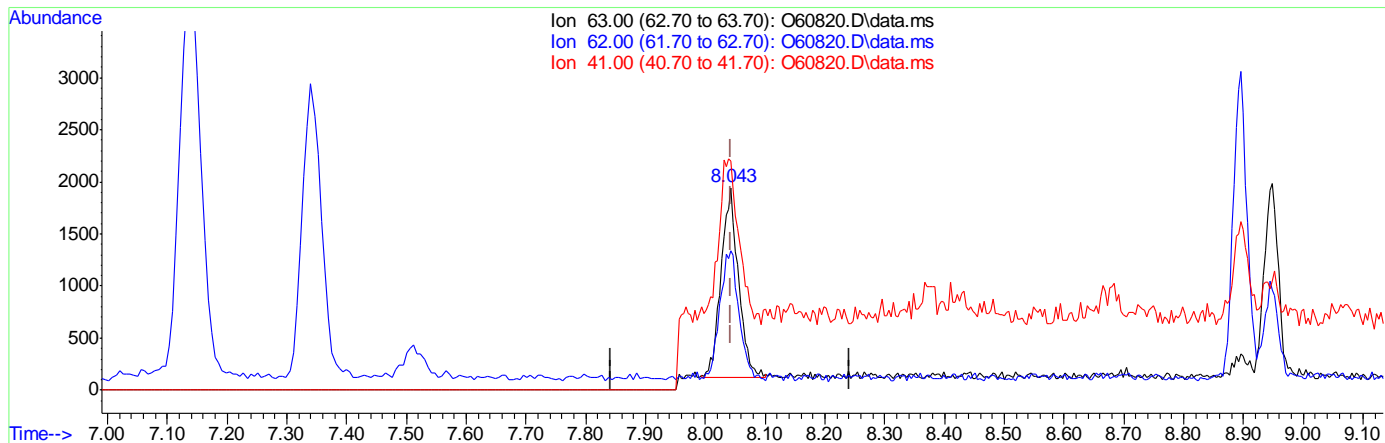
7.6.1.2
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\070220\
 Data File : O60820.D
 Acq On : 2 Jul 2020 10:49 am
 Operator : amandab
 Sample : IC2337-1
 Misc : MS46657,VO2337,,,,,
 ALS Vial : 1 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Jul 02 11:31:39 2020
 Quant Method : C:\msdchem\2\methods\SIMCL070220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jun 18 12:40:46 2020
 Response via : Initial Calibration



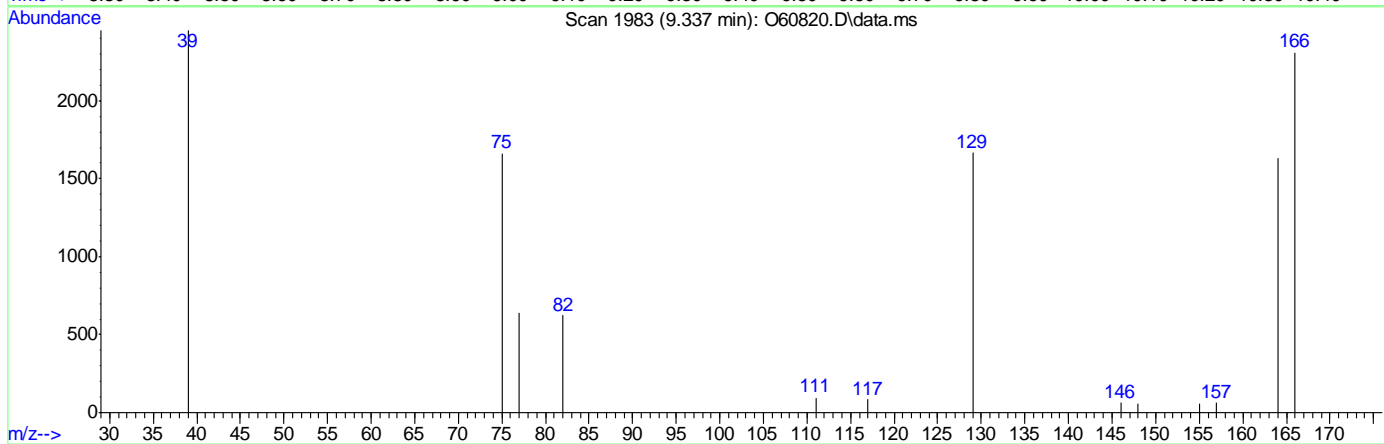
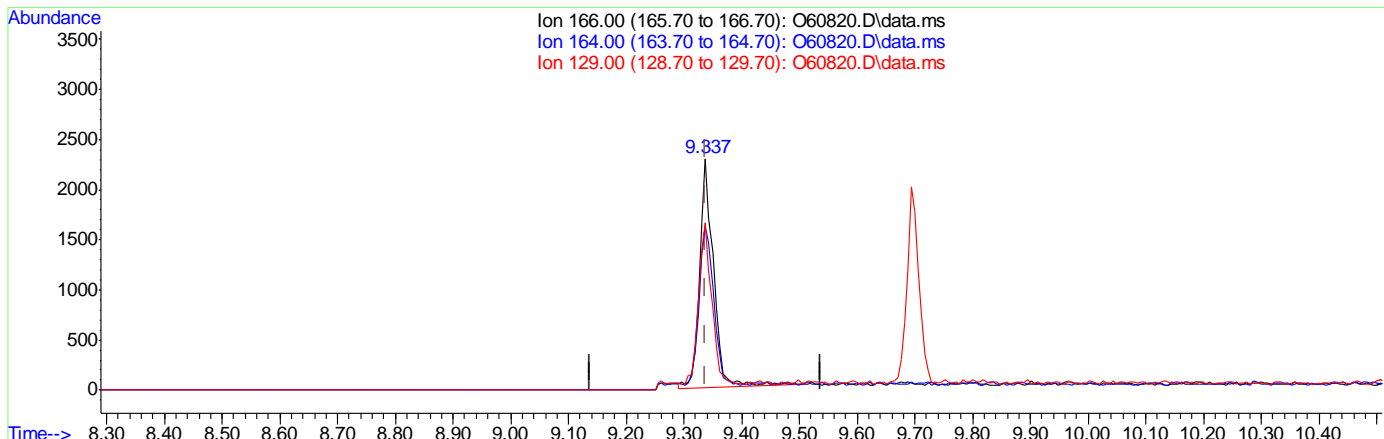
(16) 1,2-Dichloropropane
 8.043min (+0.000) 0.08ug/L m
 response 3612

Ion	Exp%	Act%
63.00	100	100
62.00	72.70	68.91
41.00	92.50	112.74
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\070220\
 Data File : O60820.D
 Acq On : 2 Jul 2020 10:49 am
 Operator : amandab
 Sample : IC2337-1 Inst : MSVOA12
 Misc : MS46657,VO2337,,,,,
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 02 11:31:39 2020
 Quant Method : C:\msdchem\2\methods\SIMCL070220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jun 18 12:40:46 2020
 Response via : Initial Calibration



(21) Tetrachloroethene ()
 9.337min (+0.000) 0.12ug/L
 response 3771

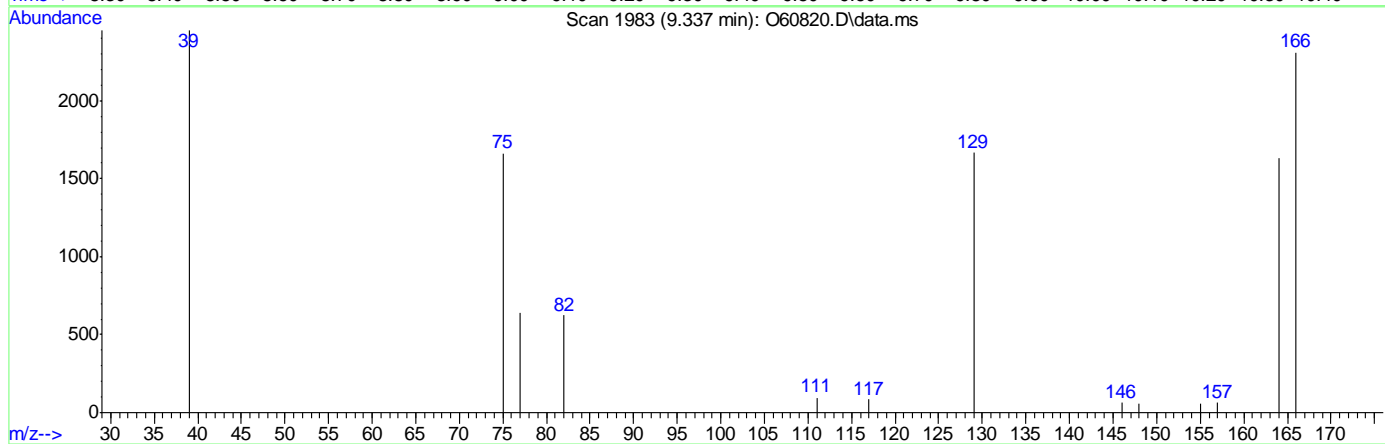
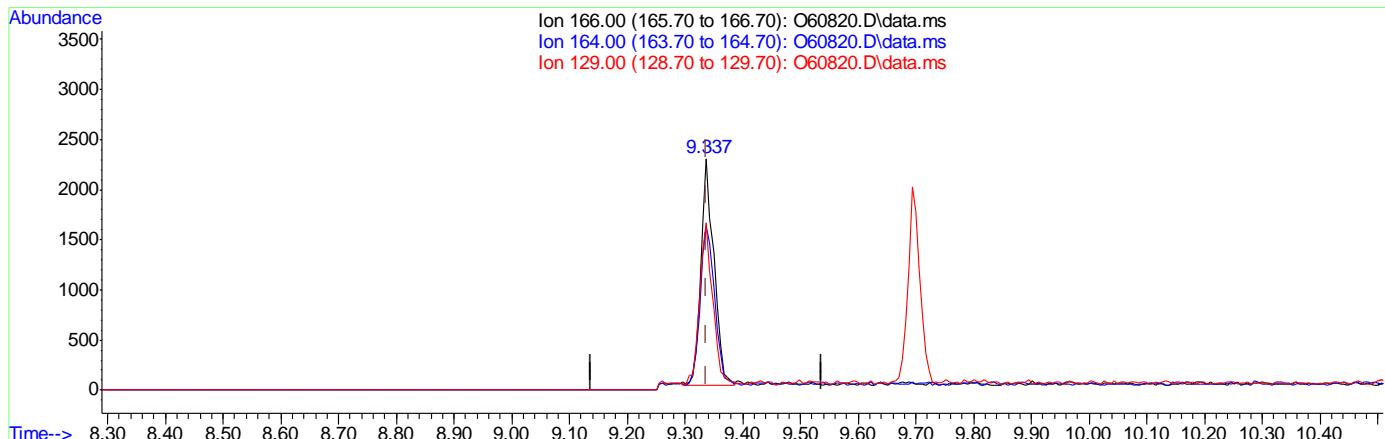
Ion	Exp%	Act%
166.00	100	100
164.00	79.80	69.27
129.00	73.70	70.96
0.00	0.00	0.00

7.6.1.4
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\070220\
 Data File : O60820.D
 Acq On : 2 Jul 2020 10:49 am
 Operator : amandab
 Sample : IC2337-1 Inst : MSVOA12
 Misc : MS46657,VO2337,,,,,
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 02 11:31:39 2020
 Quant Method : C:\msdchem\2\methods\SIMCL070220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jun 18 12:40:46 2020
 Response via : Initial Calibration



(21) Tetrachloroethene ()

9.337min (+0.000) 0.11ug/L m

response 3437

Ion	Exp%	Act%
166.00	100	100
164.00	79.80	70.62
129.00	73.70	72.05
0.00	0.00	0.00

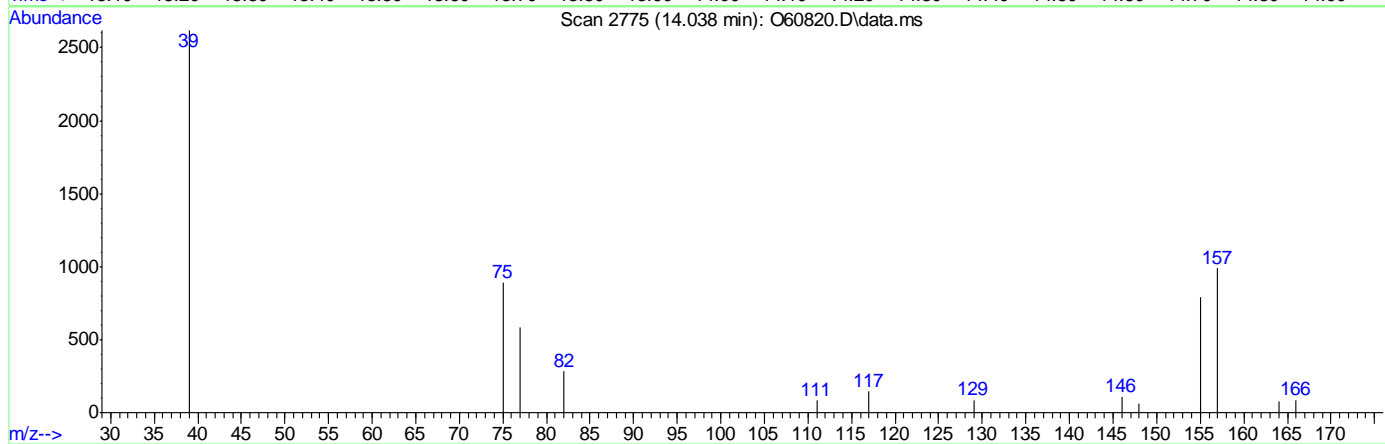
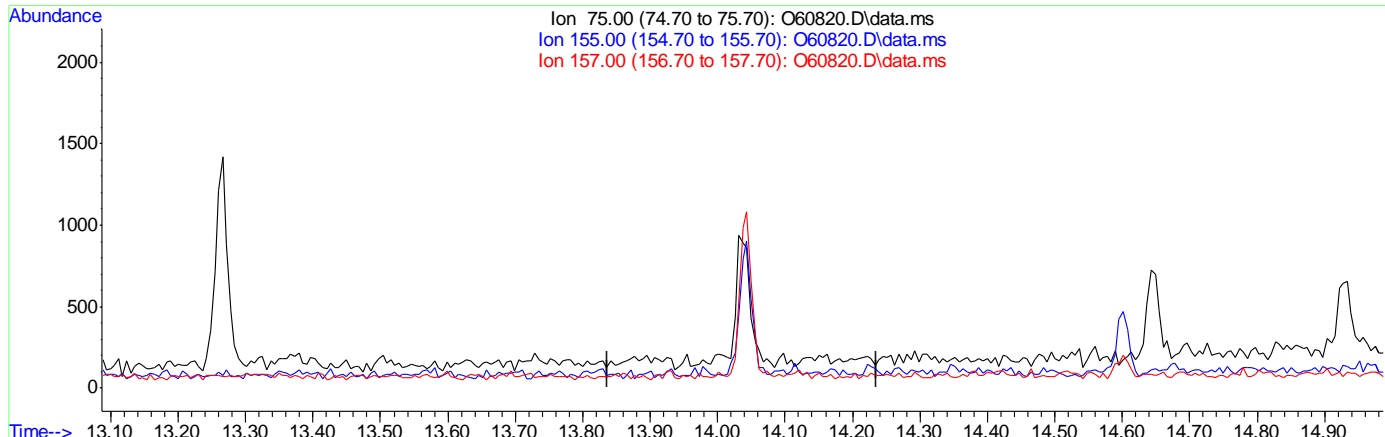
7.6.1.5
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\070220\
 Data File : O60820.D
 Acq On : 2 Jul 2020 10:49 am
 Operator : amandab
 Sample : IC2337-1
 Misc : MS46657,VO2337,,,,,
 ALS Vial : 1 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Jul 02 11:31:39 2020
 Quant Method : C:\msdchem\2\methods\SIMCL070220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jun 18 12:40:46 2020
 Response via : Initial Calibration



(23) 1,2-Dibromo-3-Chloropropane

14.037min (-14.037) 0.00ug/L

response 0

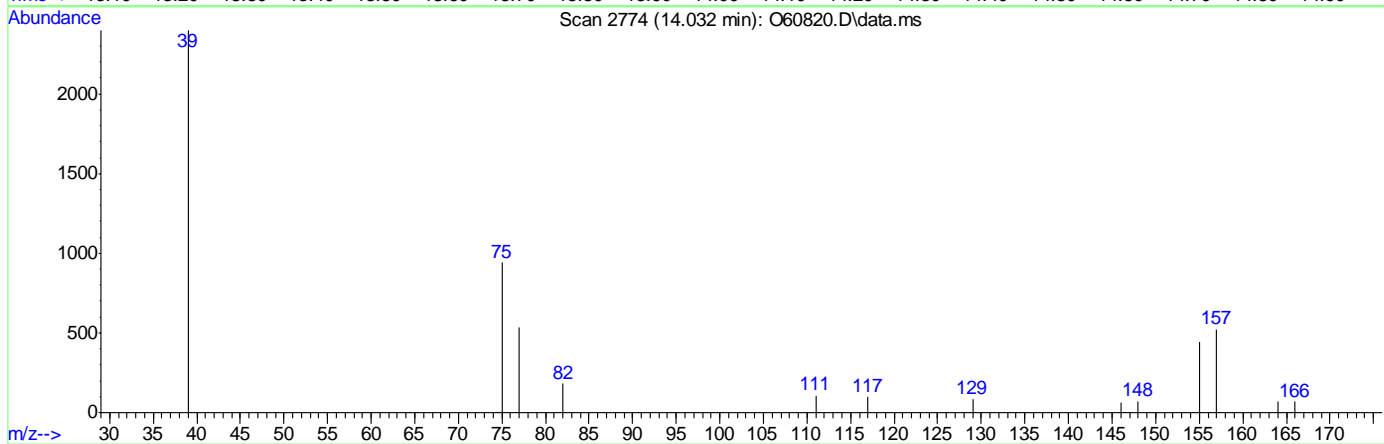
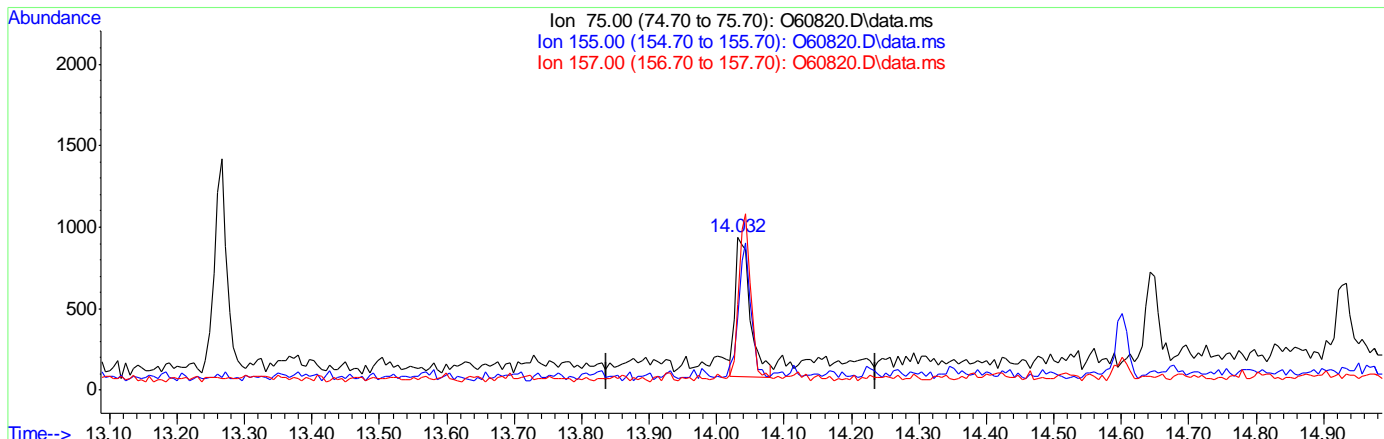
Ion	Exp%	Act%
75.00	100	0.00
155.00	91.70	0.00#
157.00	113.30	0.00#
0.00	0.00	0.00

7.6.1.6
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\070220\
 Data File : O60820.D
 Acq On : 2 Jul 2020 10:49 am
 Operator : amandab
 Sample : IC2337-1 Inst : MSVOA12
 Misc : MS46657,VO2337,,,,,
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 02 11:31:39 2020
 Quant Method : C:\msdchem\2\methods\SIMCL070220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jun 18 12:40:46 2020
 Response via : Initial Calibration



(23) 1,2-Dibromo-3-Chloropropane

14.032min (-0.005) 0.13ug/L m

response 1337

Ion	Exp%	Act%
75.00	100	100
155.00	91.70	47.18#
157.00	113.30	55.69#
0.00	0.00	0.00

7.6.1.7
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\070220\
 Data File : O60821.D
 Acq On : 2 Jul 2020 11:12 am
 Operator : amandab
 Sample : IC2337-2 Inst : MSVOA12
 Misc : MS46657,VO2337,,,,,
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 02 11:31:41 2020
 Quant Method : C:\msdchem\2\methods\SIMCL070220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jun 18 12:40:46 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.346	96	317197	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.447	117	203515	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.074	65	118591	4.88	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	97.60%	
19) Toluene-d8	8.900	98	249331	5.52	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	110.40%	
Target Compounds						
						Qvalue
2) Vinyl Chloride	2.908	62	14066	0.28	ug/L	98
3) Chloromethane	2.803	50	26961	0.31	ug/L	95
4) 1,1-Dichloroethene	4.092	61	17981	0.44	ug/L	95
5) Methylene Chloride	4.703	49	35330	0.39	ug/L	99
6) trans-1,2-Dichloroethene	4.869	61	19601	0.39	ug/L	98
7) 1,1-Dichloroethane	5.518	63	24380	0.39	ug/L	100
8) cis-1,2-Dichloroethene	6.072	96	12981	0.40	ug/L	99
9) Chloroform	6.333	83	23723	0.40	ug/L	99
10) Carbon Tetrachloride	6.511	117	14000	0.40	ug/L	93
11) 1,1,1-Trichloroethane	6.576	97	15978	0.39	ug/L	97
12) Benzene	6.943	78	41706	0.41	ug/L	96
14) 1,2-Dichloroethane	7.145	62	17966	0.38	ug/L	94
15) Trichloroethene	7.512	95	13724	0.39	ug/L	96
16) 1,2-Dichloropropane	8.040	63	14068	0.40	ug/L	93
17) cis-1,3-Dichloropropene	8.711	75	13707	0.39	ug/L	93
20) trans-1,3-Dichloropropene	9.343	75	12674	0.46	ug/L	94
21) Tetrachloroethene	9.343	166	12250	0.46	ug/L	94
22) 1,4-Dichlorobenzene	12.827	146	22111	0.43	ug/L	99
23) 1,2-Dibromo-3-Chloropr...	14.038	75	4256	0.51	ug/L #	84

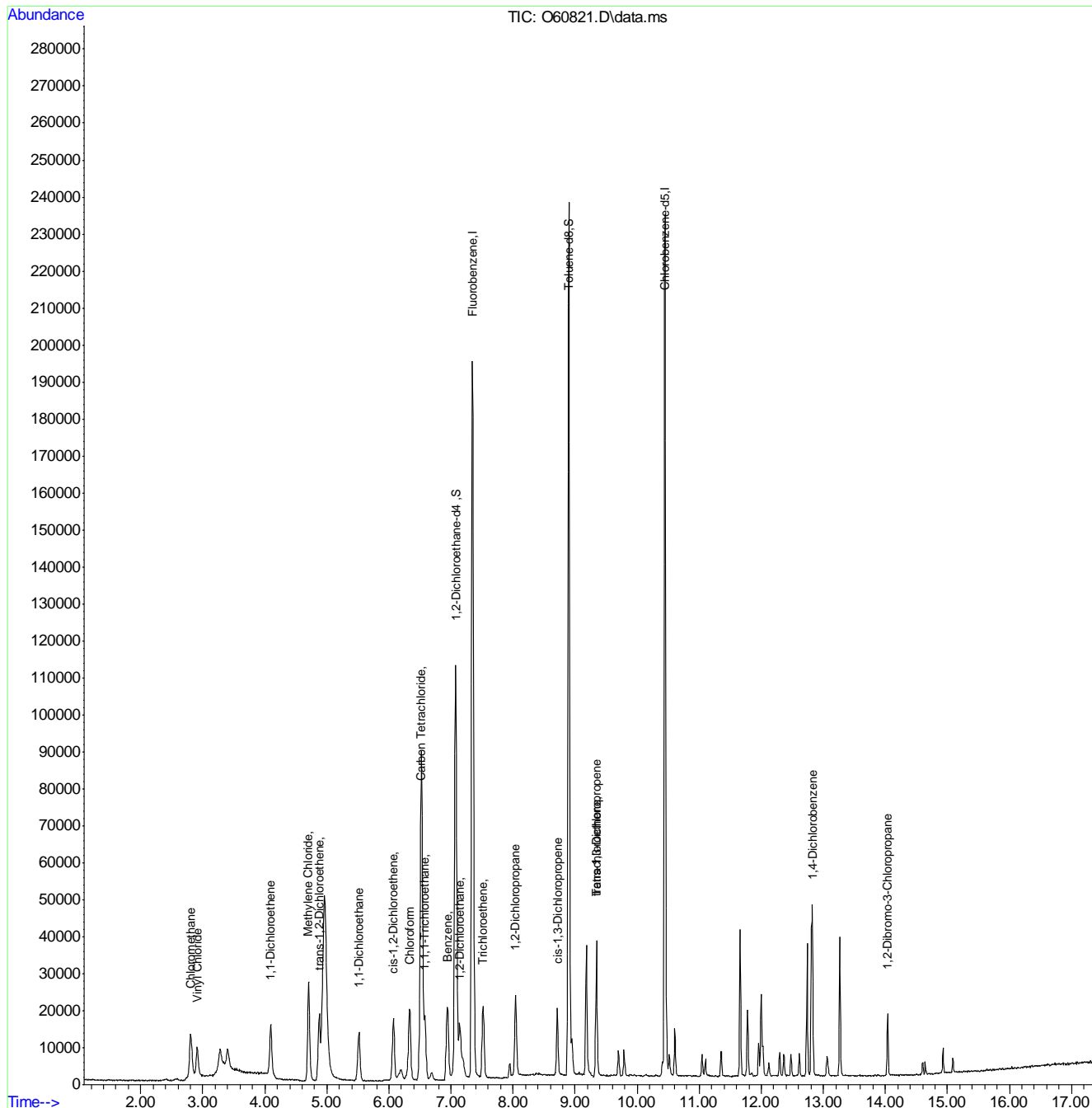
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\070220\
 Data File : 060821.D
 Acq On : 2 Jul 2020 11:12 am
 Operator : amandab
 Sample : IC2337-2
 Misc : MS46657,VO2337,,,,,
 ALS Vial : 2 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Jul 02 11:31:41 2020
 Quant Method : C:\msdchem\2\methods\SIMCL070220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jun 18 12:40:46 2020
 Response via : Initial Calibration



7.6.2
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\070220\
 Data File : O60822.D
 Acq On : 2 Jul 2020 11:37 am
 Operator : amandab
 Sample : IC2337-3 Inst : MSVOA12
 Misc : MS46657,VO2337,,,,,
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jul 02 12:00:29 2020
 Quant Method : C:\msdchem\2\methods\SIMCL070220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jun 18 12:40:46 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.346	96	313328	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.447	117	202873	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.073	65	119301	4.97	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	99.40%	
19) Toluene-d8	8.900	98	244756	5.44	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	108.80%	
Target Compounds						
						Qvalue
2) Vinyl Chloride	2.908	62	63310	1.30	ug/L	98
3) Chloromethane	2.810	50	104776	1.22	ug/L	99
4) 1,1-Dichloroethene	4.092	61	64750	1.59	ug/L	98
5) Methylene Chloride	4.703	49	125986	1.41	ug/L	99
6) trans-1,2-Dichloroethene	4.873	61	75293	1.52	ug/L	97
7) 1,1-Dichloroethane	5.514	63	93208	1.53	ug/L	99
8) cis-1,2-Dichloroethene	6.072	96	50766	1.57	ug/L	97
9) Chloroform	6.333	83	92648	1.58	ug/L	97
10) Carbon Tetrachloride	6.510	117	51180	1.46	ug/L	99
11) 1,1,1-Trichloroethane	6.576	97	62134	1.51	ug/L	99
12) Benzene	6.943	78	157953	1.58	ug/L	95
14) 1,2-Dichloroethane	7.139	62	73424	1.57	ug/L	99
15) Trichloroethene	7.518	95	53331	1.54	ug/L	99
16) 1,2-Dichloropropane	8.043	63	55712	1.61	ug/L	94
17) cis-1,3-Dichloropropene	8.711	75	57846	1.65	ug/L	95
20) trans-1,3-Dichloropropene	9.343	75	55743	2.00	ug/L	91
21) Tetrachloroethene	9.343	166	46656	1.75	ug/L	94
22) 1,4-Dichlorobenzene	12.827	146	93363	1.80	ug/L	99
23) 1,2-Dibromo-3-Chloropr...	14.037	75	16558	1.94	ug/L	88

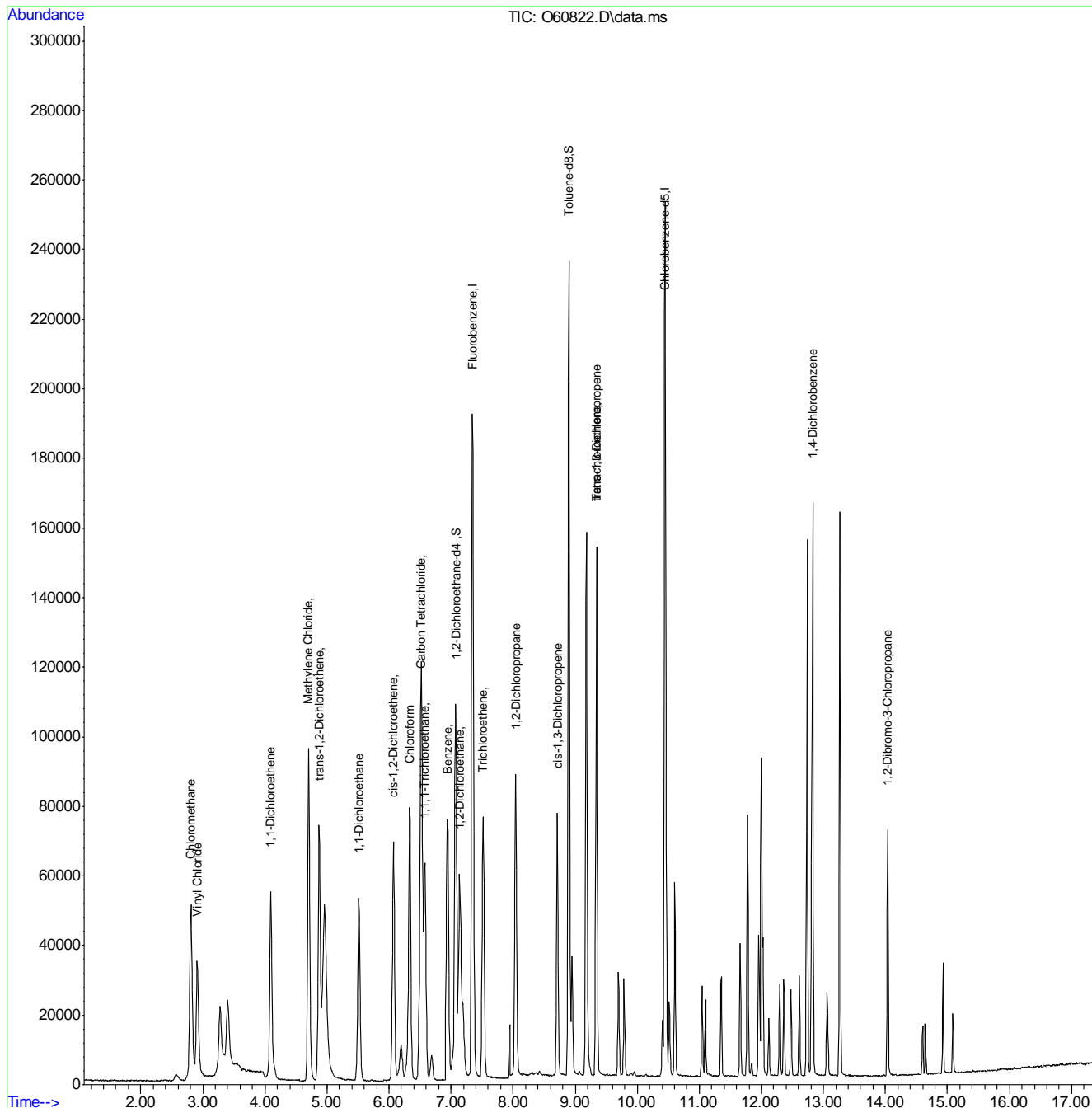
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\070220\
 Data File : O60822.D
 Acq On : 2 Jul 2020 11:37 am
 Operator : amandab
 Sample : IC2337-3
 Misc : MS46657,VO2337,,,,,
 ALS Vial : 3 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Jul 02 12:00:29 2020
 Quant Method : C:\msdchem\2\methods\SIMCL070220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jun 18 12:40:46 2020
 Response via : Initial Calibration



7.6.3
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\070220\
 Data File : O60823.D
 Acq On : 2 Jul 2020 12:00 pm
 Operator : amandab
 Sample : IC2337-4 Inst : MSVOA12
 Misc : MS46657,VO2337,,,,,
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jul 02 12:41:48 2020
 Quant Method : C:\msdchem\2\methods\SIMCL070220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jun 18 12:40:46 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.346	96	323353	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.447	117	208446	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.074	65	117522	4.74	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	94.80%	
19) Toluene-d8	8.900	98	249740	5.40	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	108.00%	
Target Compounds						
						Qvalue
2) Vinyl Chloride	2.908	62	164816	3.36	ug/L	99
3) Chloromethane	2.806	50	271206	3.13	ug/L	99
4) 1,1-Dichloroethene	4.092	61	200116	4.58	ug/L	96
5) Methylene Chloride	4.703	49	324702	3.59	ug/L	97
6) trans-1,2-Dichloroethene	4.873	61	208146	4.07	ug/L	96
7) 1,1-Dichloroethane	5.514	63	258339	4.12	ug/L	100
8) cis-1,2-Dichloroethene	6.072	96	141028	4.23	ug/L	99
9) Chloroform	6.333	83	258042	4.29	ug/L	97
10) Carbon Tetrachloride	6.511	117	152041	4.18	ug/L	99
11) 1,1,1-Trichloroethane	6.576	97	181114	4.24	ug/L	97
12) Benzene	6.943	78	429742	4.17	ug/L	96
14) 1,2-Dichloroethane	7.145	62	200868	4.18	ug/L	97
15) Trichloroethene	7.518	95	151681	4.21	ug/L	99
16) 1,2-Dichloropropane	8.043	63	150689	4.21	ug/L	93
17) cis-1,3-Dichloropropene	8.711	75	166811	4.50	ug/L	93
20) trans-1,3-Dichloropropene	9.343	75	162498	5.39	ug/L	91
21) Tetrachloroethene	9.343	166	129313	4.69	ug/L	97
22) 1,4-Dichlorobenzene	12.827	146	257076	4.78	ug/L	99
23) 1,2-Dibromo-3-Chloropr...	14.038	75	48010	5.23	ug/L	96

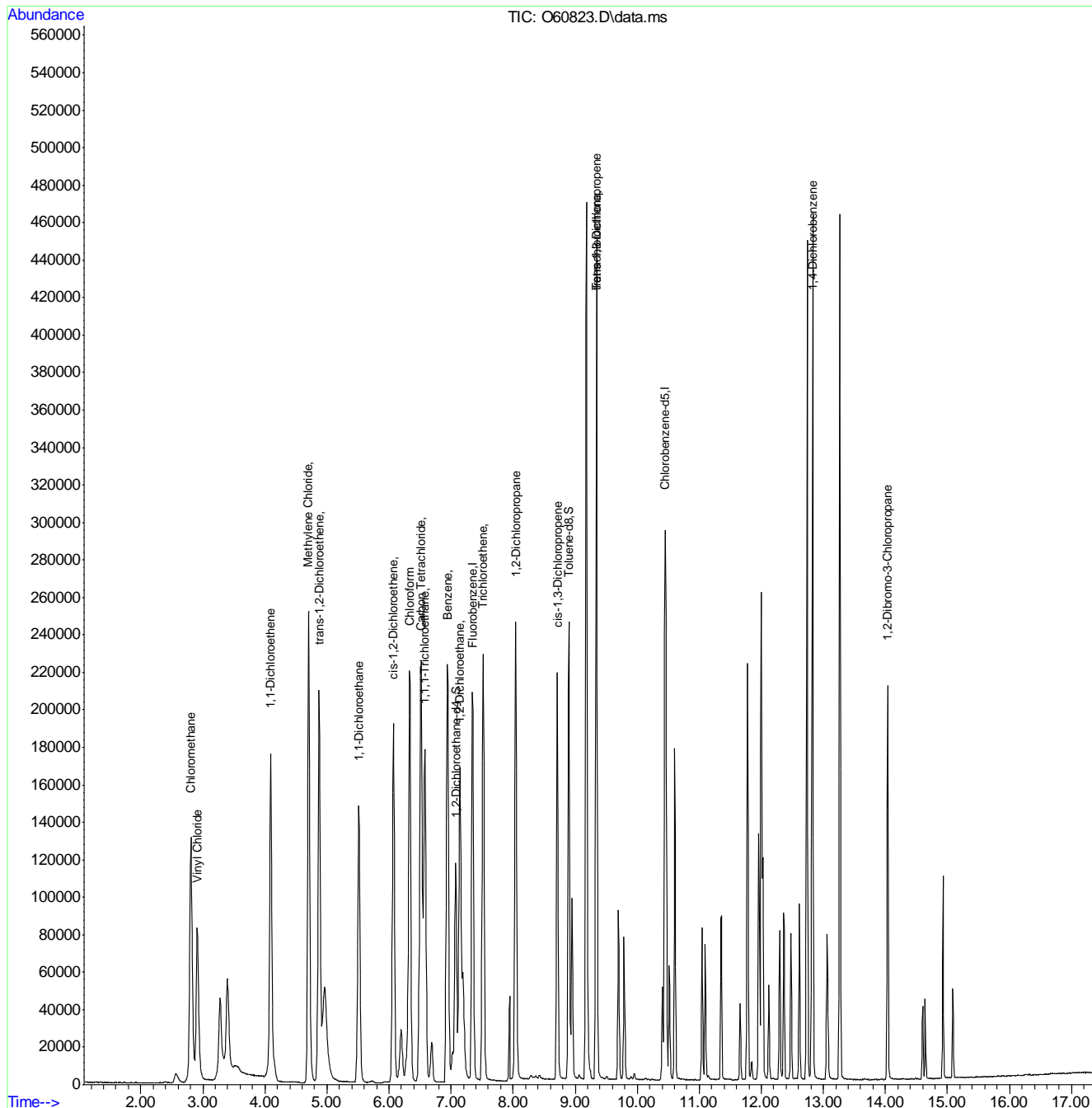
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\070220\
 Data File : O60823.D
 Acq On : 2 Jul 2020 12:00 pm
 Operator : amandab
 Sample : IC2337-4
 Misc : MS46657,VO2337,,,,,
 ALS Vial : 4 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Jul 02 12:41:48 2020
 Quant Method : C:\msdchem\2\methods\SIMCL070220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jun 18 12:40:46 2020
 Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\070220\
 Data File : O60824.D
 Acq On : 2 Jul 2020 12:24 pm
 Operator : amandab
 Sample : ICC2337-5 Inst : MSVOA12
 Misc : MS46657,VO2337,,,,,
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jul 02 12:42:25 2020
 Quant Method : C:\msdchem\2\methods\SIMCL070220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jun 18 12:40:46 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.346	96	347161	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.447	117	227073	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.079	65	124704	4.69	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	93.80%	
19) Toluene-d8	8.900	98	266156	5.28	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	105.60%	
Target Compounds						
						Qvalue
2) Vinyl Chloride	2.912	62	342556	6.75	ug/L	98
3) Chloromethane	2.806	50	540358	6.04	ug/L	100
4) 1,1-Dichloroethene	4.092	61	412988	8.38	ug/L	97
5) Methylene Chloride	4.703	49	692135	7.41	ug/L	96
6) trans-1,2-Dichloroethene	4.873	61	474585	8.65	ug/L	95
7) 1,1-Dichloroethane	5.514	63	576155	8.62	ug/L	100
8) cis-1,2-Dichloroethene	6.072	96	319533	8.94	ug/L	99
9) Chloroform	6.333	83	572237	8.90	ug/L	96
10) Carbon Tetrachloride	6.511	117	361935	9.12	ug/L	99
11) 1,1,1-Trichloroethane	6.576	97	422152	9.08	ug/L	96
12) Benzene	6.943	78	967597	8.77	ug/L	97
14) 1,2-Dichloroethane	7.145	62	432160	8.43	ug/L	97
15) Trichloroethene	7.518	95	349429	8.91	ug/L	98
16) 1,2-Dichloropropane	8.043	63	328028	8.56	ug/L	92
17) cis-1,3-Dichloropropene	8.711	75	378743	9.16	ug/L	92
20) trans-1,3-Dichloropropene	9.343	75	370210	10.49	ug/L	88
21) Tetrachloroethene	9.343	166	299619	9.86	ug/L	97
22) 1,4-Dichlorobenzene	12.827	146	585384	9.81	ug/L	99
23) 1,2-Dibromo-3-Chloropr...	14.038	75	110425	10.35	ug/L	95

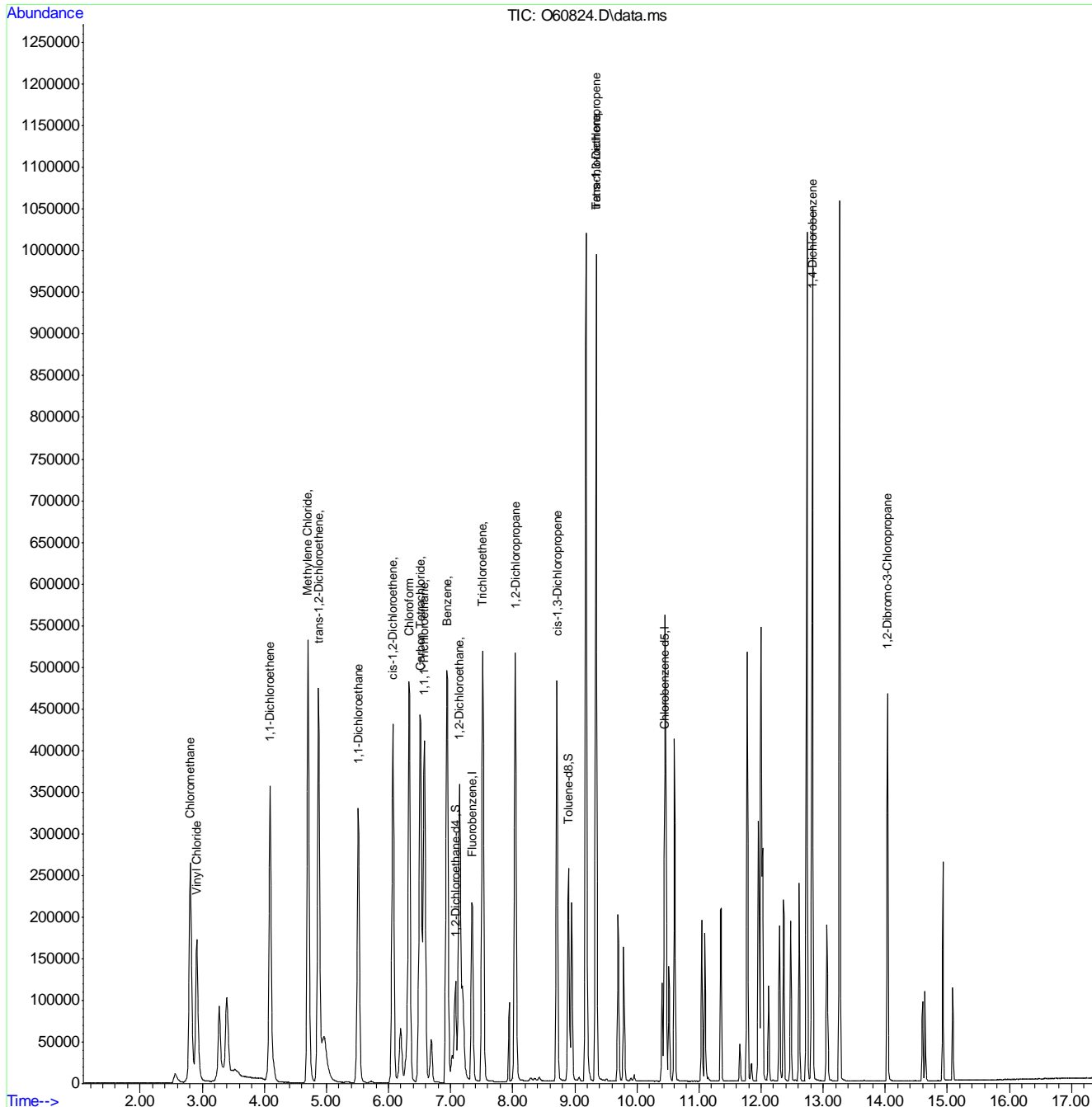
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\070220\
 Data File : O60824.D
 Acq On : 2 Jul 2020 12:24 pm
 Operator : amandab
 Sample : ICC2337-5
 Misc : MS46657,VO2337,,,,,
 ALS Vial : 5 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Jul 02 12:42:25 2020
 Quant Method : C:\msdchem\2\methods\SIMCL070220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jun 18 12:40:46 2020
 Response via : Initial Calibration



7.6.5
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\070220\
 Data File : O60825.D
 Acq On : 2 Jul 2020 12:48 pm
 Operator : amandab
 Sample : IC2337-6 Inst : MSVOA12
 Misc : MS46657,VO2337,,,,,
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jul 02 13:31:57 2020
 Quant Method : C:\msdchem\2\methods\SIMCL070220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jun 18 12:40:46 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.346	96	369277	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.447	117	240614	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.080	65	133031	4.70	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	94.00%	
19) Toluene-d8	8.900	98	286301	5.36	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	107.20%	
Target Compounds						
						Qvalue
2) Vinyl Chloride	2.908	62	545360	10.55	ug/L	99
3) Chloromethane	2.807	50	840467	9.22	ug/L	99
4) 1,1-Dichloroethene	4.089	61	828982	14.64	ug/L	97
5) Methylene Chloride	4.703	49	1083192	11.39	ug/L	94
6) trans-1,2-Dichloroethene	4.869	61	758916	12.99	ug/L	96
7) 1,1-Dichloroethane	5.514	63	920034	13.05	ug/L	100
8) cis-1,2-Dichloroethene	6.072	96	514305	13.56	ug/L	98
9) Chloroform	6.333	83	917949	13.48	ug/L	96
10) Carbon Tetrachloride	6.511	117	602232	14.04	ug/L	100
11) 1,1,1-Trichloroethane	6.576	97	695481	13.86	ug/L	97
12) Benzene	6.943	78	1553138	13.26	ug/L	96
14) 1,2-Dichloroethane	7.145	62	685169	12.66	ug/L	97
15) Trichloroethene	7.518	95	569135	13.47	ug/L	99
16) 1,2-Dichloropropane	8.044	63	539390	13.25	ug/L	92
17) cis-1,3-Dichloropropene	8.711	75	631495	13.84	ug/L	91
20) trans-1,3-Dichloropropene	9.343	75	609953	15.32	ug/L	87
21) Tetrachloroethene	9.343	166	480366	14.75	ug/L	99
22) 1,4-Dichlorobenzene	12.827	146	956841	14.87	ug/L	99
23) 1,2-Dibromo-3-Chloropr...	14.038	75	186456	15.51	ug/L	95

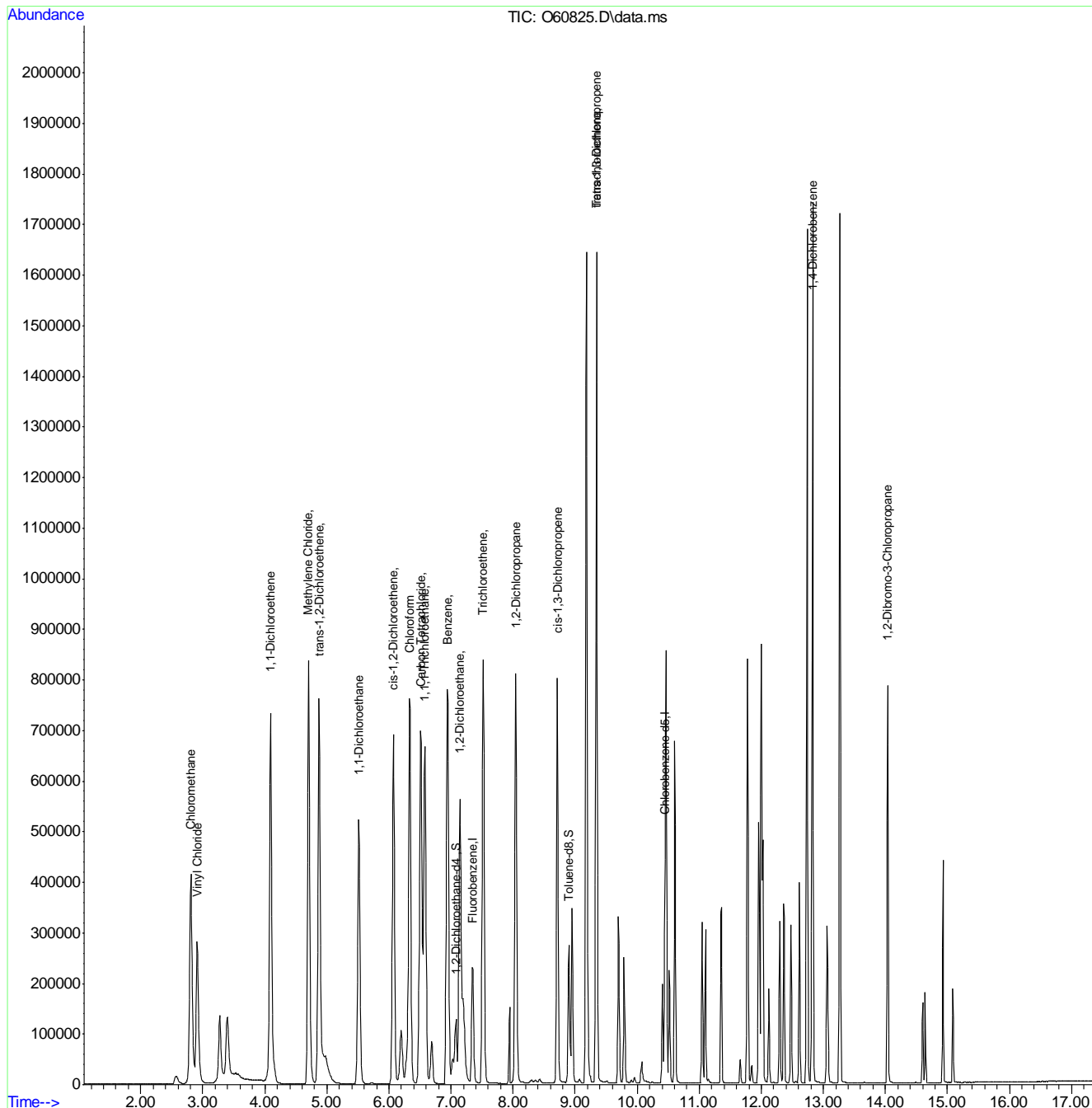
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\070220\
 Data File : O60825.D
 Acq On : 2 Jul 2020 12:48 pm
 Operator : amandab
 Sample : IC2337-6
 Misc : MS46657,VO2337,,,,,
 ALS Vial : 6 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Jul 02 13:31:57 2020
 Quant Method : C:\msdchem\2\methods\SIMCL070220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jun 18 12:40:46 2020
 Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\070220\
 Data File : O60826.D
 Acq On : 2 Jul 2020 1:12 pm
 Operator : amandab
 Sample : IC2337-7 Inst : MSVOA12
 Misc : MS46657,VO2337,,,,,
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jul 02 13:31:59 2020
 Quant Method : C:\msdchem\2\methods\SIMCL070220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jun 18 12:40:46 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.352	96	401950	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.447	117	262656	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.074	65	142864	4.64	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	92.80%	
19) Toluene-d8	8.900	98	313066	5.37	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	107.40%	
Target Compounds						
						Qvalue
2) Vinyl Chloride	2.912	62	752084	13.93	ug/L	99
3) Chloromethane	2.810	50	1157566	12.16	ug/L	100
4) 1,1-Dichloroethene	4.092	61	969326	15.56	ug/L	93
5) Methylene Chloride	4.703	49	1506574	15.19	ug/L	94
6) trans-1,2-Dichloroethene	4.873	61	1076513	16.91	ug/L	92
7) 1,1-Dichloroethane	5.514	63	1293839	16.97	ug/L	99
8) cis-1,2-Dichloroethene	6.072	96	738784	17.93	ug/L	96
9) Chloroform	6.333	83	1302915	17.65	ug/L	96
10) Carbon Tetrachloride	6.511	117	861150	18.21	ug/L	99
11) 1,1,1-Trichloroethane	6.576	97	998609	18.07	ug/L	96
12) Benzene	6.943	78	2219019	17.45	ug/L	96
14) 1,2-Dichloroethane	7.145	62	976392	16.69	ug/L	97
15) Trichloroethene	7.518	95	826541	17.76	ug/L	98
16) 1,2-Dichloropropane	8.047	63	757699	17.13	ug/L	91
17) cis-1,3-Dichloropropene	8.715	75	927871	18.10	ug/L	87
20) trans-1,3-Dichloropropene	9.343	75	910947	19.82	ug/L	86
21) Tetrachloroethene	9.343	166	695436	19.35	ug/L	98
22) 1,4-Dichlorobenzene	12.827	146	1393746	19.52	ug/L	99
23) 1,2-Dibromo-3-Chloropr...	14.038	75	272499	19.78	ug/L	96

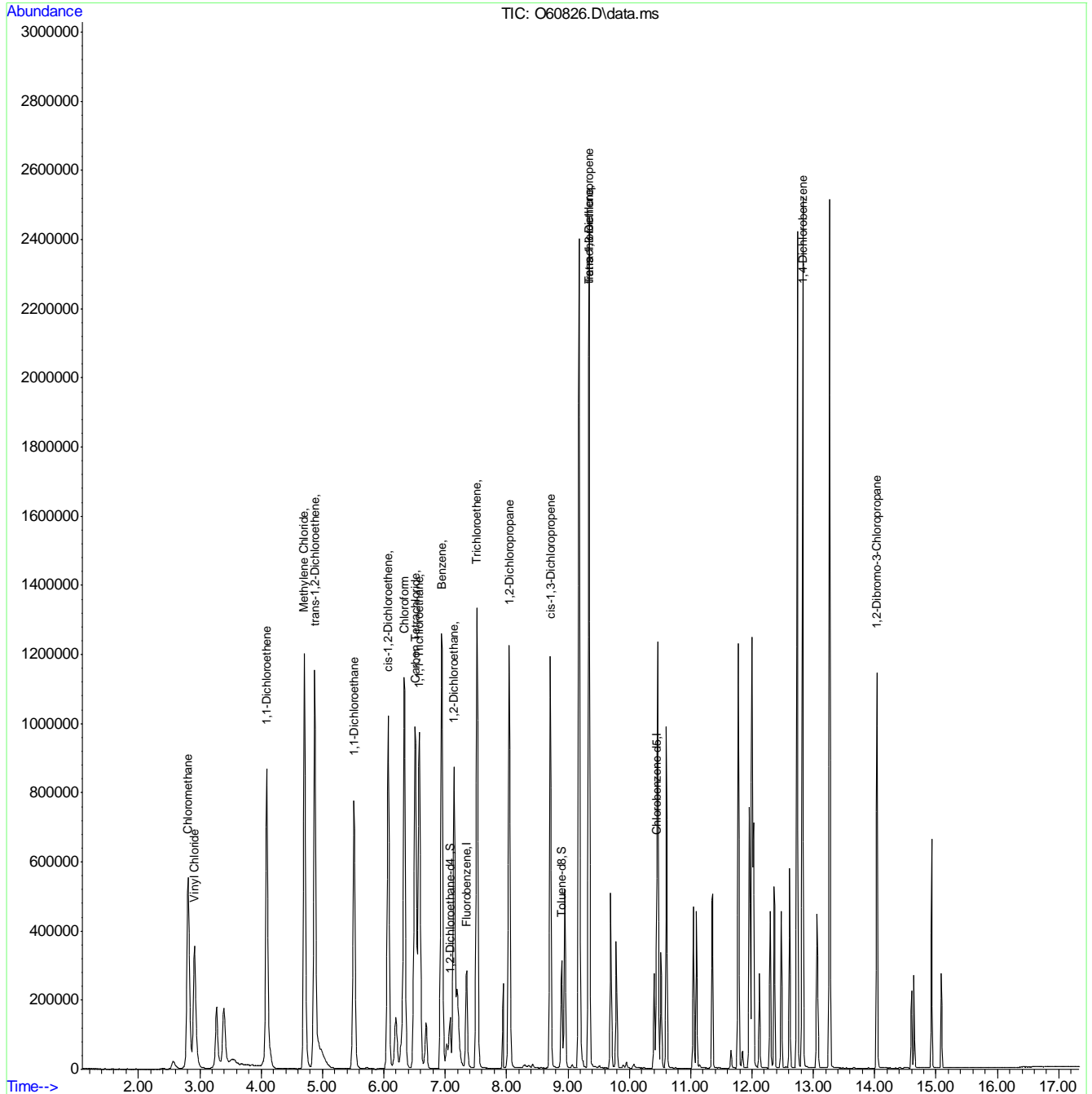
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\070220\
 Data File : O60826.D
 Acq On : 2 Jul 2020 1:12 pm
 Operator : amandab
 Sample : IC2337-7
 Misc : MS46657,VO2337,,,,,
 ALS Vial : 7 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Jul 02 13:31:59 2020
 Quant Method : C:\msdchem\2\methods\SIMCL070220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jun 18 12:40:46 2020
 Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\070220\
 Data File : O60828.D
 Acq On : 2 Jul 2020 2:01 pm
 Operator : amandab
 Sample : ICV2337-5 Inst : MSVOA12
 Misc : MS46657,VO2337,,,,,
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jul 02 14:44:46 2020
 Quant Method : C:\msdchem\2\methods\SIMCL070220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jul 02 13:33:54 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.346	96	355647	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.447	117	231381	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.080	65	128583	4.92	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	98.40%	
19) Toluene-d8	8.900	98	275271	4.94	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	98.80%	
Target Compounds						
						Qvalue
2) Vinyl Chloride	2.912	62	324266	9.50	ug/L	99
3) Chloromethane	2.807	50	496889	8.77	ug/L	99
4) 1,1-Dichloroethene	4.092	61	413565	9.49	ug/L	99
5) Methylene Chloride	4.703	49	686897	9.67	ug/L	98
6) trans-1,2-Dichloroethene	4.869	61	462947	9.89	ug/L	100
7) 1,1-Dichloroethane	5.514	63	575207	9.80	ug/L	98
8) cis-1,2-Dichloroethene	6.072	96	317678	9.92	ug/L	98
9) Chloroform	6.333	83	566057	9.92	ug/L	98
10) Carbon Tetrachloride	6.511	117	349481	9.98	ug/L	99
11) 1,1,1-Trichloroethane	6.576	97	408571	9.93	ug/L	98
12) Benzene	6.943	78	988965	10.05	ug/L	99
14) 1,2-Dichloroethane	7.145	62	438371	9.92	ug/L	99
15) Trichloroethene	7.518	95	357956	10.32	ug/L	98
16) 1,2-Dichloropropane	8.043	63	339688	10.29	ug/L	99
17) cis-1,3-Dichloropropene	8.711	75	396503	10.77	ug/L	99
20) trans-1,3-Dichloropropene	9.343	75	391489	11.10	ug/L	99
21) Tetrachloroethene	9.343	166	292424	9.87	ug/L	98
22) 1,4-Dichlorobenzene	12.827	146	599822	10.53	ug/L	99
23) 1,2-Dibromo-3-Chloropr...	14.038	75	113372	10.24	ug/L	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

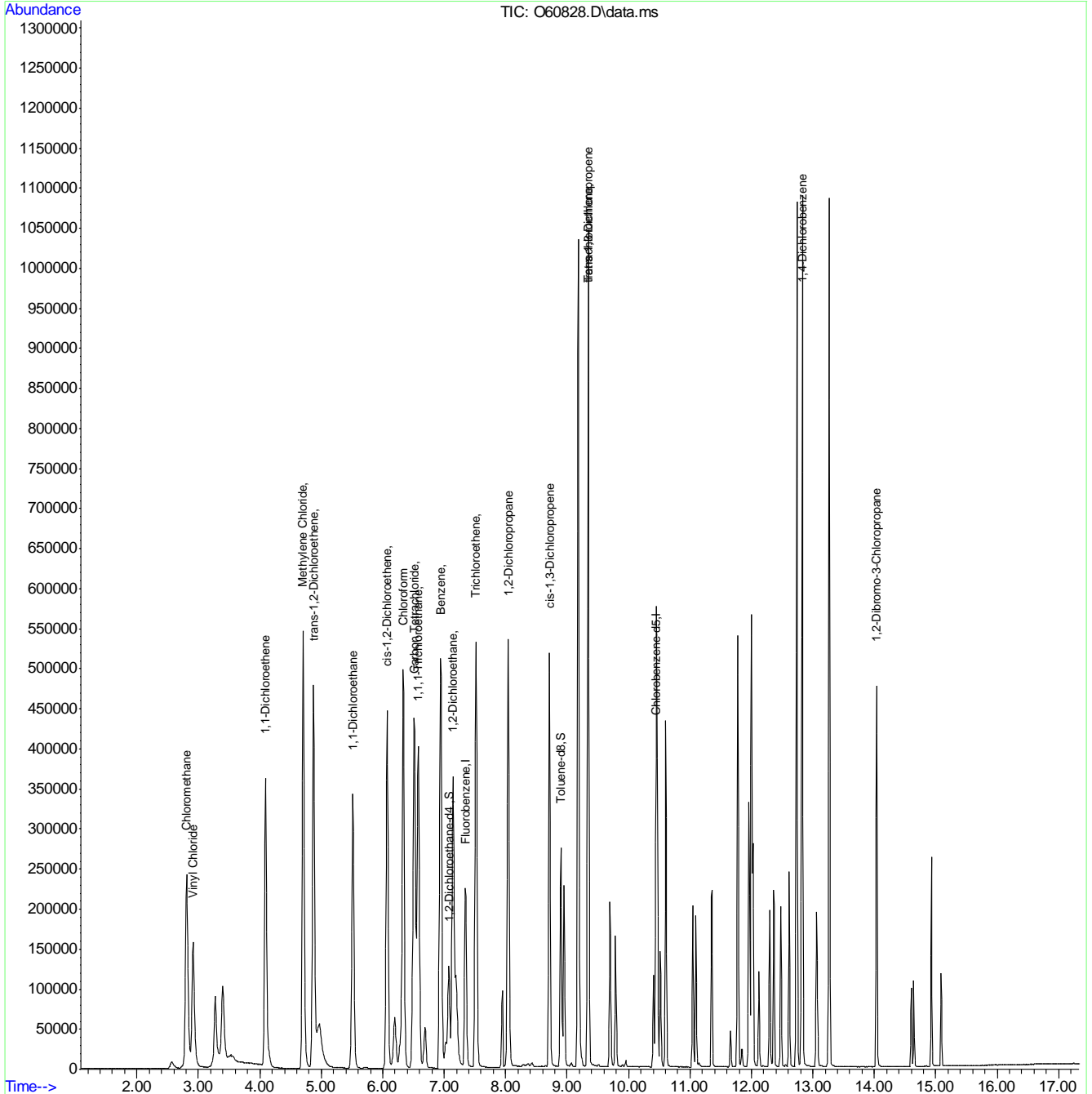
7.6.8

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\070220\
 Data File : O60828.D
 Acq On : 2 Jul 2020 2:01 pm
 Operator : amandab
 Sample : ICV2337-5
 Misc : MS46657,VO2337,,,,,
 ALS Vial : 9 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Jul 02 14:44:46 2020
 Quant Method : C:\msdchem\2\methods\SIMCL070220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jul 02 13:33:54 2020
 Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\JULY 2020\07-24-2020\VO2342\
 Data File : O60942.d
 Acq On : 23 Jul 2020 8:34 am
 Operator : stutip
 Sample : cc2337-5 Inst : MSVOA12
 Misc : MS46775,VO2342,,,,,
 ALS Vial : 1 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\SIMCL070220.M
 Quant Results File: SIMCL070220.RES
 Quant Time: Jul 24 02:20:30 2020
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jul 02 13:33:54 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
Internal Standards							
1) Fluorobenzene	7.346	96	308379	5.00	ug/L	0.00	
18) Chlorobenzene-d5	10.441	117	204005	5.00	ug/L	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.074	65	110785	4.89	ug/L	0.00	
Spiked Amount	5.000	Range 74 - 125	Recovery	=	97.80%		
19) Toluene-d8	8.896	98	236073	4.80	ug/L	0.00	
Spiked Amount	5.000	Range 88 - 111	Recovery	=	96.00%		
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.908	62	305481	10.32	ug/L		98
3) Chloromethane	2.803	50	479465	9.84	ug/L		99
4) 1,1-Dichloroethene	4.089	61	382460	10.12	ug/L		99
5) Methylene Chloride	4.699	49	633407	10.32	ug/L		98
6) trans-1,2-Dichloroethene	4.865	61	426678	10.52	ug/L		99
7) 1,1-Dichloroethane	5.510	63	523781	10.30	ug/L		99
8) cis-1,2-Dichloroethene	6.066	96	293608	10.57	ug/L		97
9) Chloroform	6.327	83	528557	10.68	ug/L		99
10) Carbon Tetrachloride	6.511	117	348310	11.47	ug/L		99
11) 1,1,1-Trichloroethane	6.576	97	401564	11.26	ug/L		97
12) Benzene	6.937	78	883377	10.35	ug/L		99
14) 1,2-Dichloroethane	7.139	62	395230	10.33	ug/L		100
15) Trichloroethene	7.512	95	323992	10.77	ug/L		98
16) 1,2-Dichloropropane	8.040	63	300625	10.50	ug/L		99
17) cis-1,3-Dichloropropene	8.711	75	350946	10.99	ug/L		95
20) trans-1,3-Dichloropropene	9.343	75	345222	11.10	ug/L		97
21) Tetrachloroethene	9.337	166	273353	10.47	ug/L		93
22) 1,4-Dichlorobenzene	12.827	146	531113	10.57	ug/L		99
23) 1,2-Dibromo-3-Chloropr...	14.038	75	103012	10.55	ug/L		99

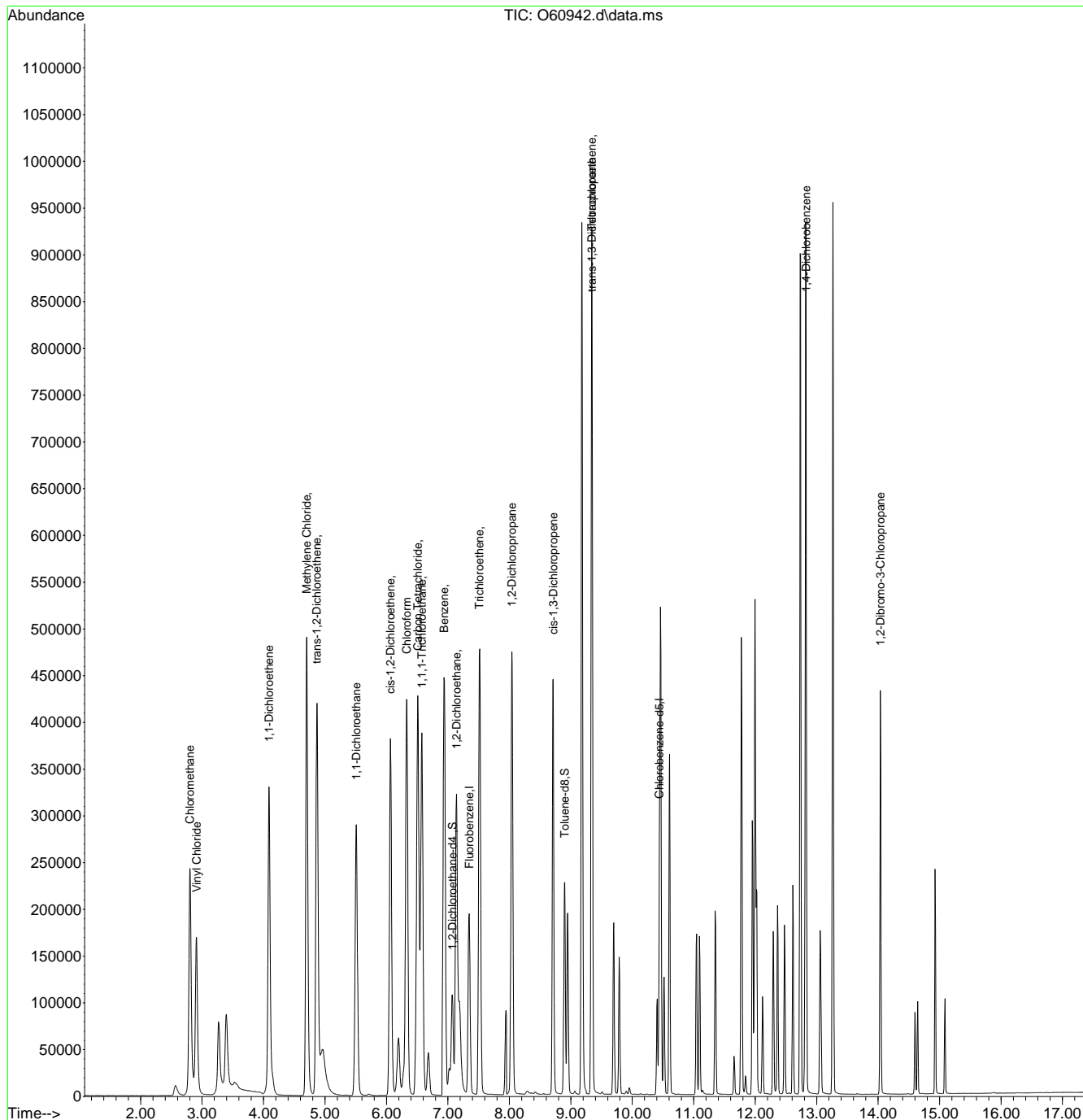
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.6.9
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\JULY 2020\07-24-2020\VO2342\
 Data File : O60942.d
 Acq On : 23 Jul 2020 8:34 am
 Operator : stutip
 Sample : cc2337-5 Inst : MSVOA12
 Misc : MS46775,VO2342,,,,,
 ALS Vial : 1 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\SIMCL070220.M
 Quant Results File: SIMCL070220.RES
 Quant Time: Jul 24 02:20:30 2020
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jul 02 13:33:54 2020
 Response via : Initial Calibration



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Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\JULY 2020\07-24-2020\VO2342\
 Data File : O60956.d
 Acq On : 23 Jul 2020 2:25 pm
 Operator : stutip
 Sample : ecc2337-5 Inst : MSVOA12
 Misc : MS46775,VO2342,,,,,
 ALS Vial : 14 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\SIMCL070220.M
 Quant Results File: SIMCL070220.RES
 Quant Time: Jul 24 02:36:56 2020
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jul 02 13:33:54 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
Internal Standards							
1) Fluorobenzene	7.346	96	270443	5.00	ug/L	0.00	
18) Chlorobenzene-d5	10.447	117	175328	5.00	ug/L	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.074	65	97530	4.91	ug/L	0.00	
Spiked Amount	5.000	Range 74 - 125	Recovery	=	98.20%		
19) Toluene-d8	8.900	98	202925	4.80	ug/L	0.00	
Spiked Amount	5.000	Range 88 - 111	Recovery	=	96.00%		
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.905	62	304481	11.73	ug/L		98
3) Chloromethane	2.803	50	479405	11.37	ug/L		99
4) 1,1-Dichloroethene	4.089	61	394162	11.90	ug/L		99
5) Methylene Chloride	4.699	49	634672	11.90	ug/L		98
6) trans-1,2-Dichloroethene	4.869	61	430529	12.10	ug/L		98
7) 1,1-Dichloroethane	5.510	63	523981	11.78	ug/L		99
8) cis-1,2-Dichloroethene	6.066	96	288897	11.86	ug/L		99
9) Chloroform	6.333	83	526995	12.14	ug/L		99
10) Carbon Tetrachloride	6.511	117	336552	12.64	ug/L		99
11) 1,1,1-Trichloroethane	6.576	97	392874	12.56	ug/L		98
12) Benzene	6.937	78	865307m	11.56	ug/L		
14) 1,2-Dichloroethane	7.139	62	388817	11.61	ug/L		99
15) Trichloroethene	7.512	95	318304	12.07	ug/L		99
16) 1,2-Dichloropropane	8.043	63	296981	11.83	ug/L		99
17) cis-1,3-Dichloropropene	8.711	75	330131	11.79	ug/L		96
20) trans-1,3-Dichloropropene	9.343	75	327157	12.24	ug/L		96
21) Tetrachloroethene	9.337	166	262388	11.69	ug/L		94
22) 1,4-Dichlorobenzene	12.827	146	512317	11.87	ug/L		100
23) 1,2-Dibromo-3-Chloropr...	14.038	75	98237	11.71	ug/L		97

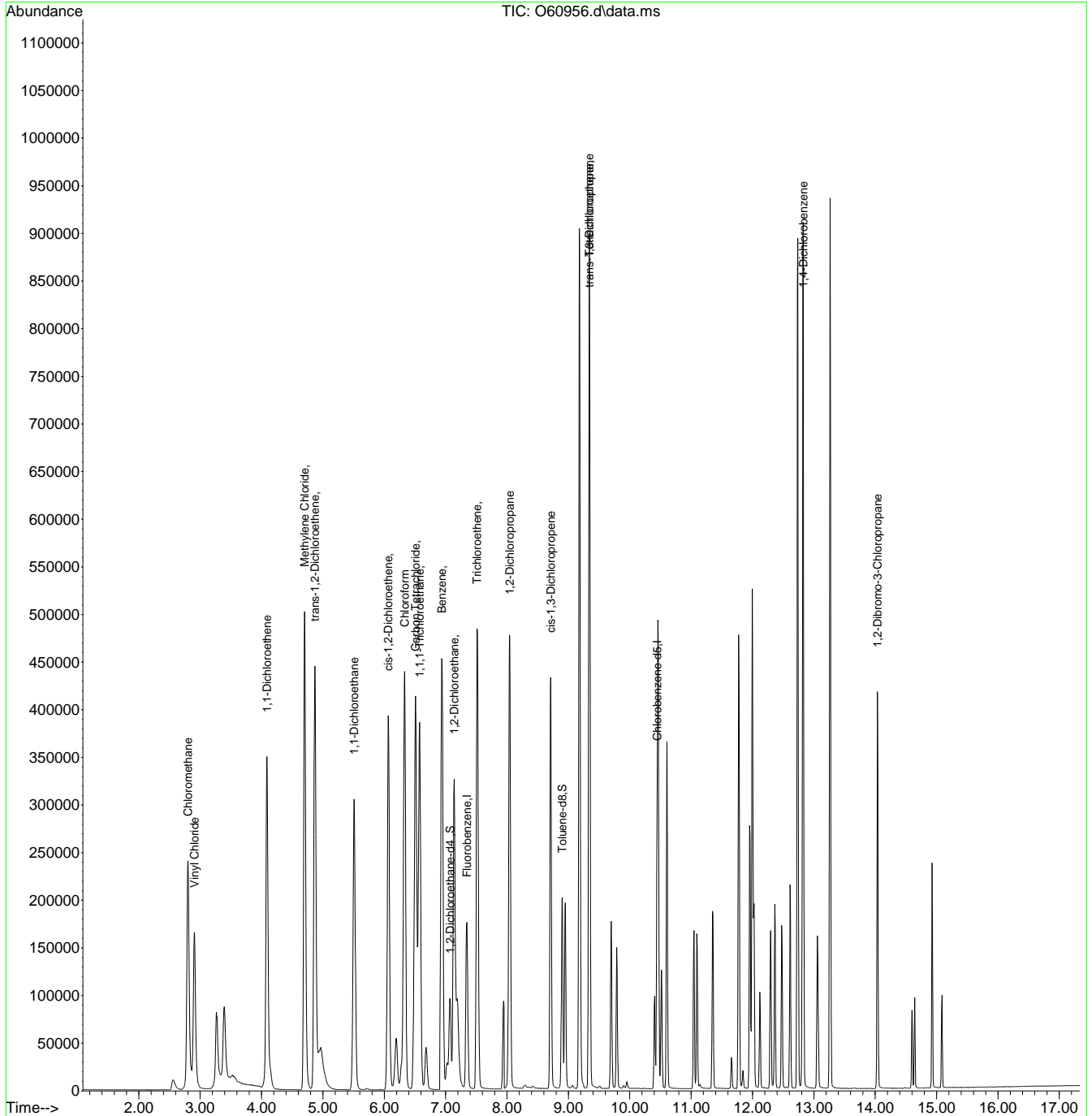
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.6.10
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\JULY 2020\07-24-2020\VO2342\
 Data File : O60956.d
 Acq On : 23 Jul 2020 2:25 pm
 Operator : stutip
 Sample : ecc2337-5 Inst : MSVOA12
 Misc : MS46775,VO2342,,,,,
 ALS Vial : 14 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\SIMCL070220.M
 Quant Results File: SIMCL070220.RES
 Quant Time: Jul 24 02:36:56 2020
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jul 02 13:33:54 2020
 Response via : Initial Calibration



7.6.10
7



Manual Integration Approval Summary

Sample Number: VO2342-ECC2337 **Method:** SW846 8260B BY SIM
Lab FileID: O60956.D **Analyst approved:** 07/24/20 03:06 Jennifer Ferreira
Injection Time: 07/23/20 14:25 **Supervisor approved:** 07/24/20 08:39 Melissa Mangual

Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzene	71-43-2		6.94	Poor instrument integration

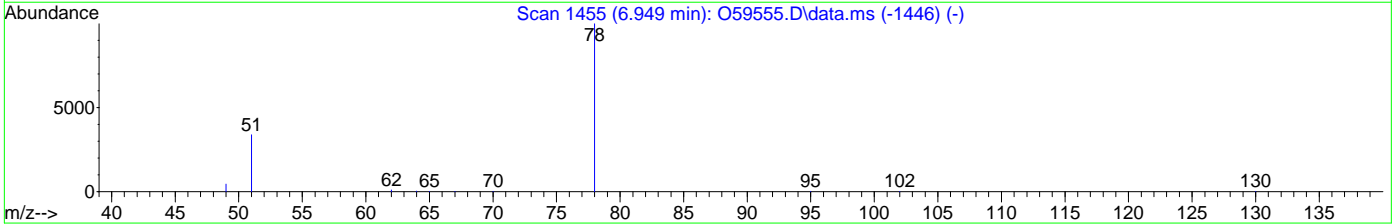
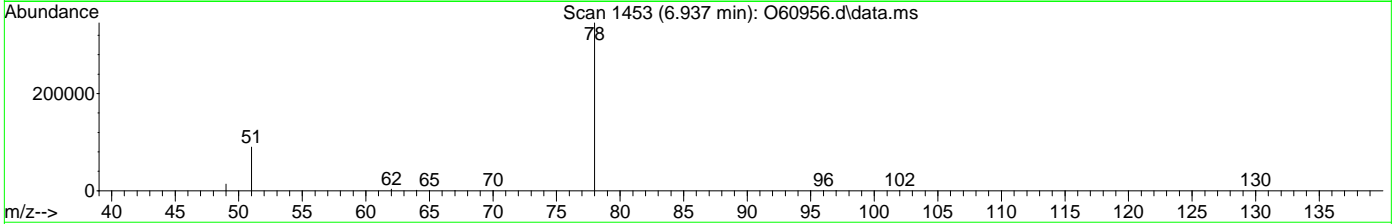
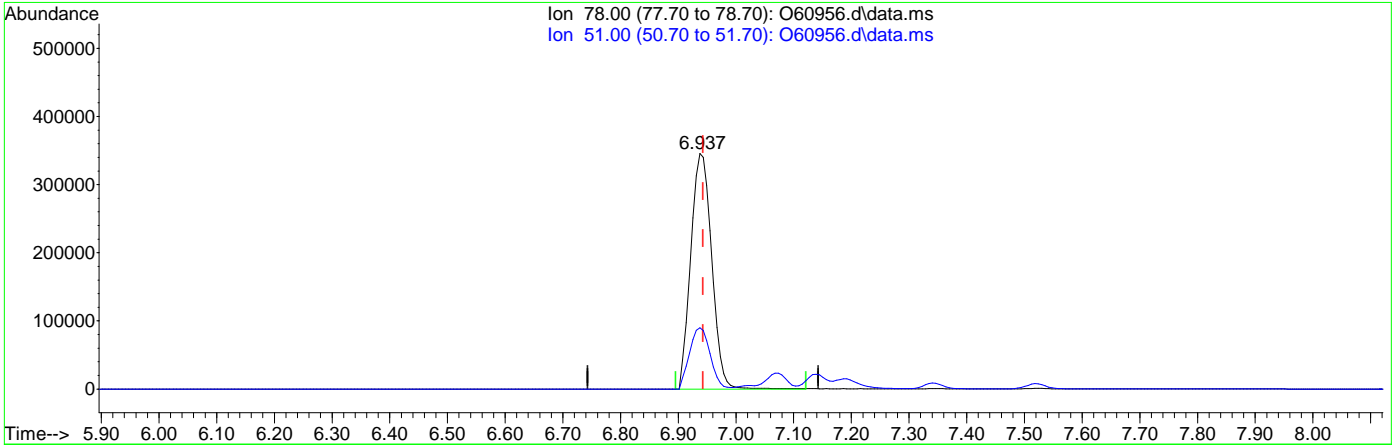
7.6.10.1

7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\JULY 2020\07-24-2020\VO2342\
 Data File : O60956.d
 Acq On : 23 Jul 2020 2:25 pm
 Operator :
 Sample : ecc2337-5 Inst : MSVOA12
 Misc : MS46775,VO2342,,,,,
 ALS Vial : 14 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\SIMCL070220.M
 Quant Results File: SIMCL070220.RES
 Quant Time: Jul 24 02:21:11 2020
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jul 02 13:33:54 2020
 Response via : Initial Calibration



TIC: O60956.d\data.ms

(12) Benzene ()

6.937min (-0.006) 11.62ug/L

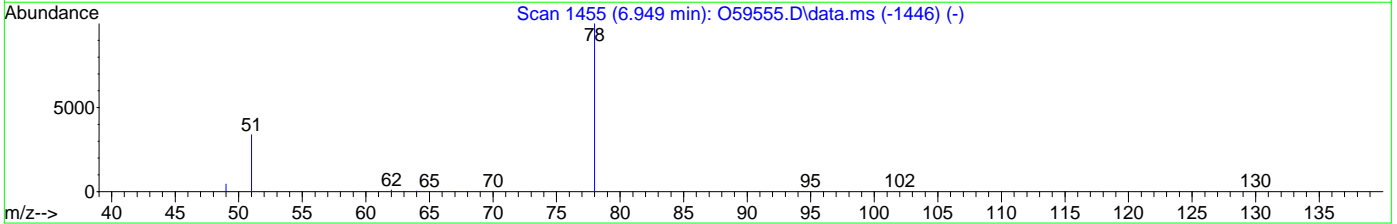
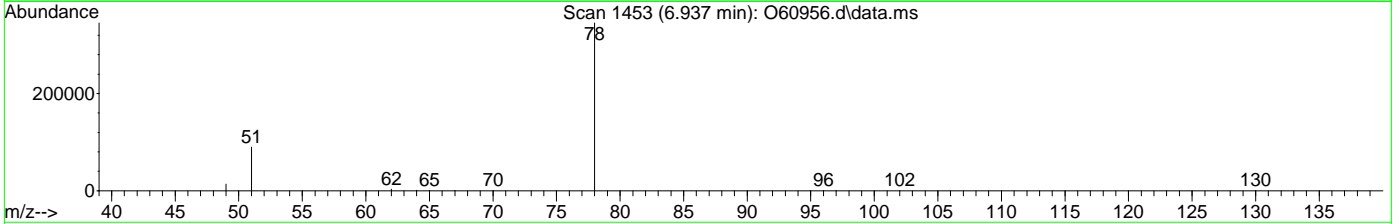
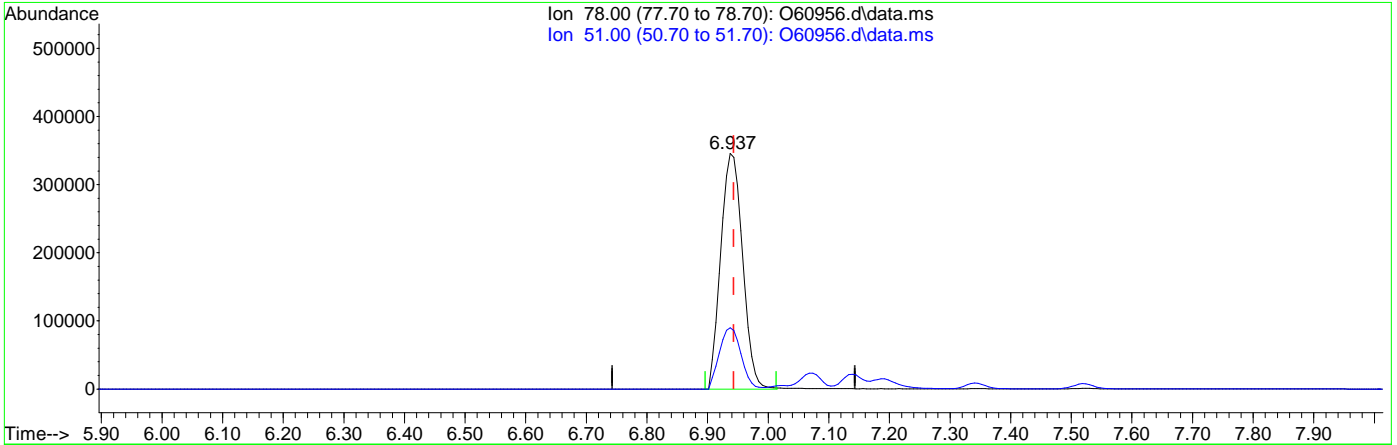
response 870298

Ion	Exp%	Act%
78.00	100	100
51.00	26.90	25.96
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\JULY 2020\07-24-2020\VO2342\
 Data File : O60956.d
 Acq On : 23 Jul 2020 2:25 pm
 Operator :
 Sample : ecc2337-5 Inst : MSVOA12
 Misc : MS46775,VO2342,,,,,
 ALS Vial : 14 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\SIMCL070220.M
 Quant Results File: SIMCL070220.RES
 Quant Time: Jul 24 02:21:11 2020
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jul 02 13:33:54 2020
 Response via : Initial Calibration



TIC: O60956.d\data.ms

(12) Benzene ()

6.937min (-0.006) 11.56ug/L m

response 865307

Ion	Exp%	Act%
78.00	100	100
51.00	26.90	25.96
0.00	0.00	0.00
0.00	0.00	0.00

SGS -ORLANDO

MSVOA12-O-ANALYSIS LOG

Date:	7/2/2020
COLUMN TYPE:	RTX VMS
DETECTOR:	5975 MSD
INSTRUMENT:	MSVOA12-O
PURGE PRESSURE:	8.4PSI
PURGE VOLUME:	5 mL
ANALYST:	AMANDAB

METHODS*:	SIMCLM
METHOD FILE:	SIMCL070220.m
CALIB. DATE:	7/2/2020
EM VOLTAGE:	1565V
BFB RESPONSE	6545625
RUN ID:	VO2337

BFB:	V25845C
ICAL/CC:	V25832 V25843
ISTD/SUR:	V25863
ICV/QC:	V25849 V25844

PH LOT1-12 :230814
ph lot 0.0-3.0 : 220416a
KI PAPER LOT:030317
SAMPLE ID VERIFIED BY:
AB
DATE VERIFIED: 07/02/20

Data File	Sample ID	DIL.	VIAL #	MATRIX	ALS POS.	SAMPLE METHOD	MANUALLY INTEGRATED PEAK RATIONAL, PEAK #	PH	CL ?	RR	COMMENTS
O60815	BLK	NA	NA	w	1	ACQ_SIMCL		NA	NA		✓
O60816	BLK	NA	NA	w	2	ACQ_SIMCL		NA	NA		✓
O60817	BFB	NA	NA	w	100	BFB		NA	NA		Passed autofind 2ul
O60818	CC2335-5	NA	NA	w	1	ACQ_SIMCL		NA	NA		x 50ul->50mL
O60819	CC2335-5	NA	NA	w	1	ACQ_SIMCL		NA	NA		x 50ul->50mL
O60820	IC2337-1	NA	NA	w	1	ACQ_SIMCL	#16.21 (Pli) #23 (MP)	NA	NA		1ul->100mL ✓
O60821	IC2337-2	NA	NA	w	2	ACQ_SIMCL		NA	NA		5ul->100mL ✓
O60822	IC2337-3	NA	NA	w	3	ACQ_SIMCL		NA	NA		10ul->50mL ✓
O60823	IC2337-4	NA	NA	w	4	ACQ_SIMCL		NA	NA		25ul->50mL ✓
O60824	IC2337-5	NA	NA	w	5	ACQ_SIMCL		NA	NA		50ul->50mL ✓
O60825	IC2337-6	NA	NA	w	6	ACQ_SIMCL		NA	NA		75ul->50mL ✓
O60826	IC2337-7	NA	NA	w	7	ACQ_SIMCL		NA	NA		100ul->50mL ✓
O60827	BLK	NA	NA	w	8	ACQ_SIMCL		NA	NA		ND ✓
O60828	ICV2337-5	NA	NA	w	9	ACQ_SIMCL		NA	NA		50ul->50mL ✓
O60829	BS	NA	NA	w	1	ACQ_SIMCL		NA	NA		20ul->vial ✓
O60830	MB	NA	NA	w	2	ACQ_SIMCL		NA	NA		✓ ND
O60831	FAT6463-1		2	w	3	ACQ_SIMCL	All vials arrived with bubbles > 6mm	1	N		✓
O60832	FAT6463-2		1	w	4	ACQ_SIMCL		1	N		✓
O60833	FAT6463-3		1	w	5	ACQ_SIMCL	#21 (Pli)	1	N		✓
O60834	FAT6463-4		1	w	6	ACQ_SIMCL		1	N		✓
O60835	FAT6463-5		1	w	7	ACQ_SIMCL		1	N		✓
O60836	FAT6463-6		1	w	8	ACQ_SIMCL		1	N		✓
O60837	FAT6463-2MS	5X	2	w	9	ACQ_SIMCL	10 mL (-) 50 mL	1	N		20ul->vial ✓
O60838	FAT6463-2MSD	5X	2	w	10	ACQ_SIMCL	10 mL (-) 50 mL	1	N		20ul->vial ✓
O60839	ECC2337-5	NA	NA	w	11	ACQ_SIMCL		NA	NA		50ul->50mL ✓

* For NELAC purposes, Method 8260 includes analytes by SOP MS005 Matrix: Designate "W" for Water "S" for soil, "O" for Oil, "Liq" for Non-aqueous Liquid, and "TCLP" or "SPLP" for Leachate.
Manual Integration Rational SOP QA029: MP Missed Peak, OP Overlapping Peak, SP Split Peak, PDB Poorly Defined Baseline, BR Baseline Ripple, Pli Poor Instrument

Analyst's Signature: _____

1 of 1

VO2337.MS 040918

SGS -ORLANDO

MSVOA12-O-ANALYSIS LOG

Date:	7/23/2020
COLUMN TYPE:	RTX VMS
DETECTOR:	5975 MSD
INSTRUMENT:	MSVOA12-O
PURGE PRESSURE:	8.4PSI
PURGE VOLUME:	5 mL
ANALYST:	stutip/amandab

METHODS*:	SIMCLm
METHOD FILE:	SIMCL070220.m
CALIB. DATE:	7/2/2020
EM VOLTAGE:	1565V
BFB RESPONSE	5871034
RUN ID:	VO2342

BFB:	V25845C
ICAL/JCC:	V25879 V25880
ISTD/SUR:	V25863
ICV/QC:	V25849 V25881
SAMPLE ID VERIFIED BY:	stutip
DATE VERIFIED:	07/24/20

Data File	Sample ID	DIL.	VIAL #	MATRIX	ALS POS.	SAMPLE METHOD	MANUALLY INTEGRATED PEAK RATIONAL, PEAK #	PH	CL	RR	COMMENTS
O60939	BLK	NA	NA	w	1	ACQ_SIMCL		NA	NA		✓
O60940	BLK	NA	NA	w	2	ACQ_SIMCL		NA	NA		✓
O60941	BFB	NA	NA	w	100	BFB		NA	NA		Passed autofind 2uL ✓
O60942	CC2337-5	NA	NA	w	1	ACQ_SIMCL		NA	NA		50uL->50mL, ND ✓
O60943	mb	NA	NA	w	2	ACQ_SIMCL	#12(Pil) #13(OP)	NA	NA		20uL->vial ✓
O60944	bs	NA	NA	w	3	ACQ_SIMCL		NA	NA		✓
O60945	mb	NA	NA	w	4	ACQ_SIMCL		NA	NA		ND ✓
O60946	mb	NA	NA	w	5	ACQ_SIMCL		NA	NA		ND ✓
O60947	fa76970-26a	1x	6	w	6	ACQ_SIMCL		NA	NA		✓
O60948	fa76970-22a,5	5x	3	w	7	ACQ_SIMCL	10ml-50ml	1	N		✓
O60949	fa76970-1a,10	10x	5	w	8	ACQ_SIMCL	1hs 5ml-50ml	1	N		✓
O60950	fa77021-1	1x	1	w	9	ACQ_SIMCL	5ml-50ml	1	N		ND ✓
O60951	fa77021-2	1x	1	w	10	ACQ_SIMCL	5ml-50ml	1	N		✓
O60952	fa77021-3	1x	1	w	11	ACQ_SIMCL	#21(Pil)	1	N		✓
O60953	fa77021-4	1x	1	w	12	ACQ_SIMCL	#21(Pil)	1	N		✓
O60954	fa76970-1ams,10	10x	5	w	13	ACQ_SIMCL	5ml-50ml	1	N		20uL->vial, SS fail low
O60955	fa76970-1amsd,10	10x	5	w	14	ACQ_SIMCL	5ml-50ml	1	N		20uL->vial ✓
O60956	ecc2337-5	NA	NA	w	15	ACQ_SIMCL	#12(Pil)	NA	NA		50uL->50mL ✓

* For NELAC purposes, Method 8260 includes analytes by SOP MS005 Matrix: Designate "W" for Water "S" for soil, "O" for Oil, "Liq" for Non-aqueous Liquid, and "TCLP" or "SPLP" for Leachate. Manual Integration Rational SOP QA029: MP Missed Peak, OP Overlapping Peak, SP Split Peak, PDB Poorly Defined Baseline, BR Baseline Ripple, PII Poor Instrument

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

e-Hardcopy 2.0
Automated Report

Technical Report for

Ahtna Global, LLC

DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA

SGS Job Number: FA77472

Sampling Date: 08/04/20

Report to:

Ahtna Global, LLC
9699 Blue Larkspur Lane Suite 203
Monterey, CA 93940
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ATTN: Derek Lieberman

Total number of pages in report: **172**



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

A handwritten signature in black ink that reads 'Caitlin Brice'.

Caitlin Brice, M.S.
General Manager

Client Service contact: Elvin Kumar 407-425-6700

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

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Test results relate only to samples analyzed.

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Sample Summary

Ahtna Global, LLC

Job No: FA77472

DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA

Sample Number	Collected		Received	Matrix		Client Sample ID
	Date	Time By		Code	Type	
FA77472-1	08/04/20	08:05 MF	08/05/20	AQ	Trip Blank Water	2032MOU2161A
FA77472-2	08/04/20	08:09 MF	08/05/20	AQ	Ground Water	2032MOU2162F
FA77472-3	08/04/20	09:15 MF	08/05/20	AQ	Ground Water	2032MOU2163F
FA77472-4	08/04/20	09:19 MF	08/05/20	AQ	Ground Water	2032MOU2164F
FA77472-5	08/04/20	09:23 MF	08/05/20	AQ	Ground Water	2032MOU2165F
FA77472-6	08/04/20	09:28 MF	08/05/20	AQ	Ground Water	2032MOU2166F
FA77472-7	08/04/20	09:32 MF	08/05/20	AQ	Ground Water	2032MOU2167F
FA77472-8	08/04/20	09:37 MF	08/05/20	AQ	Ground Water	2032MOU2168F
FA77472-9	08/04/20	09:42 MF	08/05/20	AQ	Ground Water	2032MOU2169F
FA77472-10	08/04/20	09:46 MF	08/05/20	AQ	Ground Water	2032MOU2170F
FA77472-11	08/04/20	09:50 MF	08/05/20	AQ	Ground Water	2032MOU2171D

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: Ahtna Global, LLC

Job No: FA77472

Site: DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina,

Report Date 8/11/2020 1:33:33

10 Sample(s), 1 Trip Blank(s) and 0 Field Blank(s) were collected on 08/04/2020 and were received at SGS North America Inc - Orlando on 08/05/2020 properly preserved, at 4.6 Deg. C and intact. These Samples received an SGS Orlando job number of FA77472. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section. Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

MS Volatiles By Method SW846 8260B BY SIM

Matrix: AQ

Batch ID: VO2343

All samples were analyzed within the recommended method holding time.

Sample(s) FA77472-2MS, FA77472-2MSD were used as the QC samples indicated.

All method blanks for this batch meet method specific criteria.

FA77472-1: Sample vial(s) contained bubbles greater than 6mm; reported results are considered minimum values.

Matrix: AQ

Batch ID: VO2344

All samples were analyzed within the recommended method holding time.

Sample(s) FA77472-10MS, FA77472-10MSD were used as the QC samples indicated.

All method blanks for this batch meet method specific criteria.

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

Narrative prepared by:

Ariel Hartney, Client Services (*Signature on file*)

Summary of Hits

Job Number: FA77472
Account: Ahtna Global, LLC
Project: DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA
Collected: 08/04/20



Lab Sample ID	Client Sample ID	Result/ Qual	LOQ	LOD	Units	Method
FA77472-1		2032MOU2161A				
Methylene Chloride ^a		1.5 J	2.0	0.50	ug/l	SW846 8260B BY SIM
Tetrachloroethylene ^a		0.14 J	0.50	0.25	ug/l	SW846 8260B BY SIM
FA77472-2		2032MOU2162F				
Chloroform		0.32 J	0.50	0.25	ug/l	SW846 8260B BY SIM
1,1-Dichloroethane		0.42 J	0.50	0.25	ug/l	SW846 8260B BY SIM
1,2-Dichloroethane		0.16 J	0.50	0.25	ug/l	SW846 8260B BY SIM
cis-1,2-Dichloroethylene		1.2	0.50	0.25	ug/l	SW846 8260B BY SIM
FA77472-3		2032MOU2163F				
Chloroform		0.25 J	0.50	0.25	ug/l	SW846 8260B BY SIM
1,1-Dichloroethane		0.30 J	0.50	0.25	ug/l	SW846 8260B BY SIM
1,2-Dichloroethane		0.12 J	0.50	0.25	ug/l	SW846 8260B BY SIM
cis-1,2-Dichloroethylene		1.3	0.50	0.25	ug/l	SW846 8260B BY SIM
Tetrachloroethylene		0.19 J	0.50	0.25	ug/l	SW846 8260B BY SIM
Trichloroethylene		3.1	0.50	0.25	ug/l	SW846 8260B BY SIM
FA77472-4		2032MOU2164F				
Chloroform		0.31 J	0.50	0.25	ug/l	SW846 8260B BY SIM
1,1-Dichloroethane		0.39 J	0.50	0.25	ug/l	SW846 8260B BY SIM
1,2-Dichloroethane		0.14 J	0.50	0.25	ug/l	SW846 8260B BY SIM
cis-1,2-Dichloroethylene		1.7	0.50	0.25	ug/l	SW846 8260B BY SIM
Trichloroethylene		0.45 J	0.50	0.25	ug/l	SW846 8260B BY SIM
FA77472-5		2032MOU2165F				
Chloroform		0.36 J	0.50	0.25	ug/l	SW846 8260B BY SIM
1,1-Dichloroethane		0.48 J	0.50	0.25	ug/l	SW846 8260B BY SIM
1,2-Dichloroethane		0.16 J	0.50	0.25	ug/l	SW846 8260B BY SIM
cis-1,2-Dichloroethylene		1.2	0.50	0.25	ug/l	SW846 8260B BY SIM
FA77472-6		2032MOU2166F				
Chloroform		0.27 J	0.50	0.25	ug/l	SW846 8260B BY SIM
1,1-Dichloroethane		0.33 J	0.50	0.25	ug/l	SW846 8260B BY SIM
1,2-Dichloroethane		0.14 J	0.50	0.25	ug/l	SW846 8260B BY SIM
cis-1,2-Dichloroethylene		1.4	0.50	0.25	ug/l	SW846 8260B BY SIM
Tetrachloroethylene		0.15 J	0.50	0.25	ug/l	SW846 8260B BY SIM
Trichloroethylene		3.8	0.50	0.25	ug/l	SW846 8260B BY SIM

Summary of Hits

Job Number: FA77472
Account: Ahtna Global, LLC
Project: DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA
Collected: 08/04/20



Lab Sample ID	Client Sample ID	Result/ Qual	LOQ	LOD	Units	Method
FA77472-7	2032MOU2167F					
Chloroform		0.32 J	0.50	0.25	ug/l	SW846 8260B BY SIM
1,1-Dichloroethane		0.40 J	0.50	0.25	ug/l	SW846 8260B BY SIM
1,2-Dichloroethane		0.16 J	0.50	0.25	ug/l	SW846 8260B BY SIM
cis-1,2-Dichloroethylene		1.6	0.50	0.25	ug/l	SW846 8260B BY SIM
Trichloroethylene		0.95	0.50	0.25	ug/l	SW846 8260B BY SIM
FA77472-8	2032MOU2168F					
Chloroform		0.32 J	0.50	0.25	ug/l	SW846 8260B BY SIM
1,1-Dichloroethane		0.43 J	0.50	0.25	ug/l	SW846 8260B BY SIM
1,2-Dichloroethane		0.18 J	0.50	0.25	ug/l	SW846 8260B BY SIM
cis-1,2-Dichloroethylene		1.2	0.50	0.25	ug/l	SW846 8260B BY SIM
FA77472-9	2032MOU2169F					
Chloroform		0.27 J	0.50	0.25	ug/l	SW846 8260B BY SIM
1,1-Dichloroethane		0.28 J	0.50	0.25	ug/l	SW846 8260B BY SIM
cis-1,2-Dichloroethylene		1.3	0.50	0.25	ug/l	SW846 8260B BY SIM
Tetrachloroethylene		0.86	0.50	0.25	ug/l	SW846 8260B BY SIM
Trichloroethylene		4.1	0.50	0.25	ug/l	SW846 8260B BY SIM
FA77472-10	2032MOU2170F					
Chloroform		0.25 J	0.50	0.25	ug/l	SW846 8260B BY SIM
1,1-Dichloroethane		0.30 J	0.50	0.25	ug/l	SW846 8260B BY SIM
1,2-Dichloroethane		0.20 J	0.50	0.25	ug/l	SW846 8260B BY SIM
cis-1,2-Dichloroethylene		1.1	0.50	0.25	ug/l	SW846 8260B BY SIM
Tetrachloroethylene		0.63	0.50	0.25	ug/l	SW846 8260B BY SIM
Trichloroethylene		4.9	0.50	0.25	ug/l	SW846 8260B BY SIM
FA77472-11	2032MOU2171D					
Chloroform		0.25 J	0.50	0.25	ug/l	SW846 8260B BY SIM
1,1-Dichloroethane		0.29 J	0.50	0.25	ug/l	SW846 8260B BY SIM
1,2-Dichloroethane		0.21 J	0.50	0.25	ug/l	SW846 8260B BY SIM
cis-1,2-Dichloroethylene		1.1	0.50	0.25	ug/l	SW846 8260B BY SIM
Tetrachloroethylene		0.65	0.50	0.25	ug/l	SW846 8260B BY SIM
Trichloroethylene		4.8	0.50	0.25	ug/l	SW846 8260B BY SIM

(a) Sample vial(s) contained bubbles greater than 6mm; reported results are considered minimum values.

Sample Results

Report of Analysis

SGS North America Inc.

Report of Analysis

Page 1 of 1

Client Sample ID:	2032MOU2161A		
Lab Sample ID:	FA77472-1	Date Sampled:	08/04/20
Matrix:	AQ - Trip Blank Water	Date Received:	08/05/20
Method:	SW846 8260B BY SIM	Percent Solids:	n/a
Project:	DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	O60965.D	1	08/06/20 10:38	AB	n/a	n/a	VO2343
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
71-43-2	Benzene	0.25 U	0.50	0.25	0.10	ug/l	
56-23-5	Carbon Tetrachloride	0.25 U	0.50	0.25	0.10	ug/l	
67-66-3	Chloroform	0.25 U	0.50	0.25	0.10	ug/l	
75-34-3	1,1-Dichloroethane	0.25 U	0.50	0.25	0.10	ug/l	
107-06-2	1,2-Dichloroethane	0.25 U	0.50	0.25	0.10	ug/l	
156-59-2	cis-1,2-Dichloroethylene	0.25 U	0.50	0.25	0.10	ug/l	
78-87-5	1,2-Dichloropropane	0.25 U	0.50	0.25	0.10	ug/l	
75-09-2	Methylene Chloride	1.5	2.0	0.50	0.50	ug/l	J
127-18-4	Tetrachloroethylene	0.14	0.50	0.25	0.10	ug/l	J
79-01-6	Trichloroethylene	0.25 U	0.50	0.25	0.10	ug/l	
75-01-4	Vinyl Chloride	0.050 U	0.10	0.050	0.050	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	103%		74-125%
2037-26-5	Toluene-D8	102%		88-111%

(a) Sample vial(s) contained bubbles greater than 6mm; reported results are considered minimum values.

U = Not detected

LOD = Limit of Detection

J = Indicates an estimated value

LOQ = Limit of Quantitation

DL = Detection Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Page 1 of 1

Client Sample ID:	2032MOU2162F		
Lab Sample ID:	FA77472-2	Date Sampled:	08/04/20
Matrix:	AQ - Ground Water	Date Received:	08/05/20
Method:	SW846 8260B BY SIM	Percent Solids:	n/a
Project:	DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	O60966.D	1	08/06/20 11:03	AB	n/a	n/a	VO2343
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
71-43-2	Benzene	0.25 U	0.50	0.25	0.10	ug/l	
56-23-5	Carbon Tetrachloride	0.25 U	0.50	0.25	0.10	ug/l	
67-66-3	Chloroform	0.32	0.50	0.25	0.10	ug/l	J
75-34-3	1,1-Dichloroethane	0.42	0.50	0.25	0.10	ug/l	J
107-06-2	1,2-Dichloroethane	0.16	0.50	0.25	0.10	ug/l	J
156-59-2	cis-1,2-Dichloroethylene	1.2	0.50	0.25	0.10	ug/l	
78-87-5	1,2-Dichloropropane	0.25 U	0.50	0.25	0.10	ug/l	
75-09-2	Methylene Chloride	0.50 U	2.0	0.50	0.50	ug/l	
127-18-4	Tetrachloroethylene	0.25 U	0.50	0.25	0.10	ug/l	
79-01-6	Trichloroethylene	0.25 U	0.50	0.25	0.10	ug/l	
75-01-4	Vinyl Chloride	0.050 U	0.10	0.050	0.050	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	103%		74-125%
2037-26-5	Toluene-D8	101%		88-111%

U = Not detected

LOD = Limit of Detection

J = Indicates an estimated value

LOQ = Limit of Quantitation

DL = Detection Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	2032MOU2163F		
Lab Sample ID:	FA77472-3	Date Sampled:	08/04/20
Matrix:	AQ - Ground Water	Date Received:	08/05/20
Method:	SW846 8260B BY SIM	Percent Solids:	n/a
Project:	DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	O60967.D	1	08/06/20 11:27	AB	n/a	n/a	VO2343
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
71-43-2	Benzene	0.25 U	0.50	0.25	0.10	ug/l	
56-23-5	Carbon Tetrachloride	0.25 U	0.50	0.25	0.10	ug/l	
67-66-3	Chloroform	0.25	0.50	0.25	0.10	ug/l	J
75-34-3	1,1-Dichloroethane	0.30	0.50	0.25	0.10	ug/l	J
107-06-2	1,2-Dichloroethane	0.12	0.50	0.25	0.10	ug/l	J
156-59-2	cis-1,2-Dichloroethylene	1.3	0.50	0.25	0.10	ug/l	
78-87-5	1,2-Dichloropropane	0.25 U	0.50	0.25	0.10	ug/l	
75-09-2	Methylene Chloride	0.50 U	2.0	0.50	0.50	ug/l	
127-18-4	Tetrachloroethylene	0.19	0.50	0.25	0.10	ug/l	J
79-01-6	Trichloroethylene	3.1	0.50	0.25	0.10	ug/l	
75-01-4	Vinyl Chloride	0.050 U	0.10	0.050	0.050	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	105%		74-125%
2037-26-5	Toluene-D8	98%		88-111%

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
 LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Page 1 of 1

Client Sample ID:	2032MOU2164F	Date Sampled:	08/04/20
Lab Sample ID:	FA77472-4	Date Received:	08/05/20
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B BY SIM		
Project:	DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	O60968.D	1	08/06/20 11:51	AB	n/a	n/a	VO2343
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
71-43-2	Benzene	0.25 U	0.50	0.25	0.10	ug/l	
56-23-5	Carbon Tetrachloride	0.25 U	0.50	0.25	0.10	ug/l	
67-66-3	Chloroform	0.31	0.50	0.25	0.10	ug/l	J
75-34-3	1,1-Dichloroethane	0.39	0.50	0.25	0.10	ug/l	J
107-06-2	1,2-Dichloroethane	0.14	0.50	0.25	0.10	ug/l	J
156-59-2	cis-1,2-Dichloroethylene	1.7	0.50	0.25	0.10	ug/l	
78-87-5	1,2-Dichloropropane	0.25 U	0.50	0.25	0.10	ug/l	
75-09-2	Methylene Chloride	0.50 U	2.0	0.50	0.50	ug/l	
127-18-4	Tetrachloroethylene	0.25 U	0.50	0.25	0.10	ug/l	
79-01-6	Trichloroethylene	0.45	0.50	0.25	0.10	ug/l	J
75-01-4	Vinyl Chloride	0.050 U	0.10	0.050	0.050	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	106%		74-125%
2037-26-5	Toluene-D8	99%		88-111%

U = Not detected

LOD = Limit of Detection

J = Indicates an estimated value

LOQ = Limit of Quantitation

DL = Detection Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Page 1 of 1

Client Sample ID:	2032MOU2165F		
Lab Sample ID:	FA77472-5	Date Sampled:	08/04/20
Matrix:	AQ - Ground Water	Date Received:	08/05/20
Method:	SW846 8260B BY SIM	Percent Solids:	n/a
Project:	DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	O60969.D	1	08/06/20 12:14	AB	n/a	n/a	VO2343
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
71-43-2	Benzene	0.25 U	0.50	0.25	0.10	ug/l	
56-23-5	Carbon Tetrachloride	0.25 U	0.50	0.25	0.10	ug/l	
67-66-3	Chloroform	0.36	0.50	0.25	0.10	ug/l	J
75-34-3	1,1-Dichloroethane	0.48	0.50	0.25	0.10	ug/l	J
107-06-2	1,2-Dichloroethane	0.16	0.50	0.25	0.10	ug/l	J
156-59-2	cis-1,2-Dichloroethylene	1.2	0.50	0.25	0.10	ug/l	
78-87-5	1,2-Dichloropropane	0.25 U	0.50	0.25	0.10	ug/l	
75-09-2	Methylene Chloride	0.50 U	2.0	0.50	0.50	ug/l	
127-18-4	Tetrachloroethylene	0.25 U	0.50	0.25	0.10	ug/l	
79-01-6	Trichloroethylene	0.25 U	0.50	0.25	0.10	ug/l	
75-01-4	Vinyl Chloride	0.050 U	0.10	0.050	0.050	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	108%		74-125%
2037-26-5	Toluene-D8	100%		88-111%

U = Not detected

LOD = Limit of Detection

J = Indicates an estimated value

LOQ = Limit of Quantitation

DL = Detection Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

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Client Sample ID:	2032MOU2166F		
Lab Sample ID:	FA77472-6	Date Sampled:	08/04/20
Matrix:	AQ - Ground Water	Date Received:	08/05/20
Method:	SW846 8260B BY SIM	Percent Solids:	n/a
Project:	DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	O60973.D	1	08/06/20 13:51	AB	n/a	n/a	VO2343
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
71-43-2	Benzene	0.25 U	0.50	0.25	0.10	ug/l	
56-23-5	Carbon Tetrachloride	0.25 U	0.50	0.25	0.10	ug/l	
67-66-3	Chloroform	0.27	0.50	0.25	0.10	ug/l	J
75-34-3	1,1-Dichloroethane	0.33	0.50	0.25	0.10	ug/l	J
107-06-2	1,2-Dichloroethane	0.14	0.50	0.25	0.10	ug/l	J
156-59-2	cis-1,2-Dichloroethylene	1.4	0.50	0.25	0.10	ug/l	
78-87-5	1,2-Dichloropropane	0.25 U	0.50	0.25	0.10	ug/l	
75-09-2	Methylene Chloride	0.50 U	2.0	0.50	0.50	ug/l	
127-18-4	Tetrachloroethylene	0.15	0.50	0.25	0.10	ug/l	J
79-01-6	Trichloroethylene	3.8	0.50	0.25	0.10	ug/l	
75-01-4	Vinyl Chloride	0.050 U	0.10	0.050	0.050	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	106%		74-125%
2037-26-5	Toluene-D8	101%		88-111%

U = Not detected

LOD = Limit of Detection

J = Indicates an estimated value

LOQ = Limit of Quantitation

DL = Detection Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

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Client Sample ID:	2032MOU2167F		
Lab Sample ID:	FA77472-7	Date Sampled:	08/04/20
Matrix:	AQ - Ground Water	Date Received:	08/05/20
Method:	SW846 8260B BY SIM	Percent Solids:	n/a
Project:	DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	O60974.D	1	08/06/20 14:15	AB	n/a	n/a	VO2343
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
71-43-2	Benzene	0.25 U	0.50	0.25	0.10	ug/l	
56-23-5	Carbon Tetrachloride	0.25 U	0.50	0.25	0.10	ug/l	
67-66-3	Chloroform	0.32	0.50	0.25	0.10	ug/l	J
75-34-3	1,1-Dichloroethane	0.40	0.50	0.25	0.10	ug/l	J
107-06-2	1,2-Dichloroethane	0.16	0.50	0.25	0.10	ug/l	J
156-59-2	cis-1,2-Dichloroethylene	1.6	0.50	0.25	0.10	ug/l	
78-87-5	1,2-Dichloropropane	0.25 U	0.50	0.25	0.10	ug/l	
75-09-2	Methylene Chloride	0.50 U	2.0	0.50	0.50	ug/l	
127-18-4	Tetrachloroethylene	0.25 U	0.50	0.25	0.10	ug/l	
79-01-6	Trichloroethylene	0.95	0.50	0.25	0.10	ug/l	
75-01-4	Vinyl Chloride	0.050 U	0.10	0.050	0.050	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	110%		74-125%
2037-26-5	Toluene-D8	101%		88-111%

U = Not detected

LOD = Limit of Detection

J = Indicates an estimated value

LOQ = Limit of Quantitation

DL = Detection Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

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Client Sample ID:	2032MOU2168F	Date Sampled:	08/04/20
Lab Sample ID:	FA77472-8	Date Received:	08/05/20
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B BY SIM		
Project:	DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	O60975.D	1	08/06/20 14:39	AB	n/a	n/a	VO2343
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
71-43-2	Benzene	0.25 U	0.50	0.25	0.10	ug/l	
56-23-5	Carbon Tetrachloride	0.25 U	0.50	0.25	0.10	ug/l	
67-66-3	Chloroform	0.32	0.50	0.25	0.10	ug/l	J
75-34-3	1,1-Dichloroethane	0.43	0.50	0.25	0.10	ug/l	J
107-06-2	1,2-Dichloroethane	0.18	0.50	0.25	0.10	ug/l	J
156-59-2	cis-1,2-Dichloroethylene	1.2	0.50	0.25	0.10	ug/l	
78-87-5	1,2-Dichloropropane	0.25 U	0.50	0.25	0.10	ug/l	
75-09-2	Methylene Chloride	0.50 U	2.0	0.50	0.50	ug/l	
127-18-4	Tetrachloroethylene	0.25 U	0.50	0.25	0.10	ug/l	
79-01-6	Trichloroethylene	0.25 U	0.50	0.25	0.10	ug/l	
75-01-4	Vinyl Chloride	0.050 U	0.10	0.050	0.050	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	110%		74-125%
2037-26-5	Toluene-D8	99%		88-111%

U = Not detected

LOD = Limit of Detection

J = Indicates an estimated value

LOQ = Limit of Quantitation

DL = Detection Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

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Client Sample ID:	2032MOU2169F		
Lab Sample ID:	FA77472-9	Date Sampled:	08/04/20
Matrix:	AQ - Ground Water	Date Received:	08/05/20
Method:	SW846 8260B BY SIM	Percent Solids:	n/a
Project:	DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	O60976.D	1	08/06/20 15:04	AB	n/a	n/a	VO2343
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
71-43-2	Benzene	0.25 U	0.50	0.25	0.10	ug/l	
56-23-5	Carbon Tetrachloride	0.25 U	0.50	0.25	0.10	ug/l	
67-66-3	Chloroform	0.27	0.50	0.25	0.10	ug/l	J
75-34-3	1,1-Dichloroethane	0.28	0.50	0.25	0.10	ug/l	J
107-06-2	1,2-Dichloroethane	0.25 U	0.50	0.25	0.10	ug/l	
156-59-2	cis-1,2-Dichloroethylene	1.3	0.50	0.25	0.10	ug/l	
78-87-5	1,2-Dichloropropane	0.25 U	0.50	0.25	0.10	ug/l	
75-09-2	Methylene Chloride	0.50 U	2.0	0.50	0.50	ug/l	
127-18-4	Tetrachloroethylene	0.86	0.50	0.25	0.10	ug/l	
79-01-6	Trichloroethylene	4.1	0.50	0.25	0.10	ug/l	
75-01-4	Vinyl Chloride	0.050 U	0.10	0.050	0.050	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	111%		74-125%
2037-26-5	Toluene-D8	98%		88-111%

U = Not detected

LOD = Limit of Detection

J = Indicates an estimated value

LOQ = Limit of Quantitation

DL = Detection Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

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Client Sample ID:	2032MOU2170F	Date Sampled:	08/04/20
Lab Sample ID:	FA77472-10	Date Received:	08/05/20
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B BY SIM		
Project:	DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	O60989.D	1	08/07/20 11:20	AB	n/a	n/a	VO2344
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
71-43-2	Benzene	0.25 U	0.50	0.25	0.10	ug/l	
56-23-5	Carbon Tetrachloride	0.25 U	0.50	0.25	0.10	ug/l	
67-66-3	Chloroform	0.25	0.50	0.25	0.10	ug/l	J
75-34-3	1,1-Dichloroethane	0.30	0.50	0.25	0.10	ug/l	J
107-06-2	1,2-Dichloroethane	0.20	0.50	0.25	0.10	ug/l	J
156-59-2	cis-1,2-Dichloroethylene	1.1	0.50	0.25	0.10	ug/l	
78-87-5	1,2-Dichloropropane	0.25 U	0.50	0.25	0.10	ug/l	
75-09-2	Methylene Chloride	0.50 U	2.0	0.50	0.50	ug/l	
127-18-4	Tetrachloroethylene	0.63	0.50	0.25	0.10	ug/l	
79-01-6	Trichloroethylene	4.9	0.50	0.25	0.10	ug/l	
75-01-4	Vinyl Chloride	0.050 U	0.10	0.050	0.050	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	110%		74-125%
2037-26-5	Toluene-D8	98%		88-111%

U = Not detected

LOD = Limit of Detection

J = Indicates an estimated value

LOQ = Limit of Quantitation

DL = Detection Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

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Client Sample ID:	2032MOU2171D	Date Sampled:	08/04/20
Lab Sample ID:	FA77472-11	Date Received:	08/05/20
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B BY SIM		
Project:	DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	O60990.D	1	08/07/20 11:43	AB	n/a	n/a	VO2344
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
71-43-2	Benzene	0.25 U	0.50	0.25	0.10	ug/l	
56-23-5	Carbon Tetrachloride	0.25 U	0.50	0.25	0.10	ug/l	
67-66-3	Chloroform	0.25	0.50	0.25	0.10	ug/l	J
75-34-3	1,1-Dichloroethane	0.29	0.50	0.25	0.10	ug/l	J
107-06-2	1,2-Dichloroethane	0.21	0.50	0.25	0.10	ug/l	J
156-59-2	cis-1,2-Dichloroethylene	1.1	0.50	0.25	0.10	ug/l	
78-87-5	1,2-Dichloropropane	0.25 U	0.50	0.25	0.10	ug/l	
75-09-2	Methylene Chloride	0.50 U	2.0	0.50	0.50	ug/l	
127-18-4	Tetrachloroethylene	0.65	0.50	0.25	0.10	ug/l	
79-01-6	Trichloroethylene	4.8	0.50	0.25	0.10	ug/l	
75-01-4	Vinyl Chloride	0.050 U	0.10	0.050	0.050	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	112%		74-125%
2037-26-5	Toluene-D8	99%		88-111%

U = Not detected

LOD = Limit of Detection

J = Indicates an estimated value

LOQ = Limit of Quantitation

DL = Detection Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody
- QC Evaluation: DOD QSM5.x Limits

Project Information:		Analysis Requested	
Project Location: <u>Former Fort Ord, CA</u>	Sampler/s: <u>MARK FISLEN</u>		
Project Name: <u>OU2 GWT</u>	Report To: <u>Derek Lieberman</u>		
Project Number: <u>21065.000.01.0000</u>	E-Mail: <u>dlieberman@ahntna.net</u>		
Sampling Event/Site: <u>COMPLIANCE IT</u>	Laboratory: <u>SGS</u>		

Lab Sample Receipt

Laboratory Sample Delivery

Group #: _____

Custody Seal: 4.6

Temp (°C): _____

Lab Number	Sample Number/Description	Sample Collection		Matrix			Number of Preserved Bottles										VOCs 8260 - SIM	Metals 6010 C	Chloride 9056A	Turn Around Time	Notes
		Date	Time	Water	Soil	Other	Total # of Bottles	HCl	HNO ₃	H ₂ SO ₄	NaOH	MeOH	NaHCO ₃	None	Other						
1	2032M0U2161A	8/4/20	0905	X			2	2											STD	TRIP BLANK	
2	2032M0U2162F		0809	X			3	3											72 HR	STD	
3	2032M0U2163F		0915	X			3	3											STD		
4	2032M0U2164F		0919	X			3	3											STD		
5	2032M0U2165F		0923	X			3	3											STD		
6	2032M0U2166F		0928	X			3	3											STD		
7	2032M0U2167F		0932	X			3	3											STD		
8	2032M0U2168F		0939	X			3	3											STD		
9	2032M0U2169F		0942	X			3	3											STD		
10	2032M0U2170F		0946	X			3	3											STD		
11	2032M0U2171D		0950	X			3	3											STD		

INITIAL ASSESSMENT B6

LABEL VERIFICATION A6

Turnaround Time: _____ : Standard _____ : 3-5 Day Rush _____ : 48 Hour Rush _____ : 24 Hour Rush _____

Shipment Method: _____ Tracking ID: _____

Comments:

Chain of Custody Tracking:

Relinquished By: <u>[Signature]</u>	Date/Time: <u>8/4/20 (1400)</u>	Received By: <u>[Signature]</u>	Date/Time: <u>08/05/20/10:00</u>
Relinquished By:	Date/Time:	Received By:	Date/Time:
Relinquished By:	Date/Time:	Received By Laboratory:	Date/Time:

5.1
5

SGS Sample Receipt Summary

Job Number: FA77472

Client: AHTNA

Project: OU2 GWTP

Date / Time Received: 8/5/2020 10:00:00 AM

Delivery Method: FedEx

Airbill #s: 791060382464

Therm ID: IR 1;

Therm CF: -0.2;

of Coolers: 1

Cooler Temps (Raw Measured) °C: Cooler 1: (4.8);

Cooler Temps (Corrected) °C: Cooler 1: (4.6);

Cooler Information

Y or N

- | | | |
|-----------------------------|-------------------------------------|--------------------------|
| 1. Custody Seals Present | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Custody Seals Intact | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 3. Temp criteria achieved | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 4. Cooler temp verification | <u>IR Gun</u> | |
| 5. Cooler media | <u>Ice (Bag)</u> | |

Sample Information

Y or N N/A

- | | | | |
|---|-------------------------------------|-------------------------------------|-------------------------------------|
| 1. Sample labels present on bottles | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| 2. Samples preserved properly | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| 3. Sufficient volume/containers recvd for analysis: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| 4. Condition of sample | <u>Intact</u> | | |
| 5. Sample recvd within HT | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| 6. Dates/Times/IDs on COC match Sample Label | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| 7. VOCs have headspace | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 8. Bottles received for unspecified tests | <input type="checkbox"/> | <input checked="" type="checkbox"/> | |
| 9. Compositing instructions clear | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 10. Voa Soil Kits/Jars received past 48hrs? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 11. % Solids Jar received? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 12. Residual Chlorine Present? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Trip Blank Information

Y or N N/A

- | | | | |
|--------------------------------|-------------------------------------|--------------------------|--------------------------|
| 1. Trip Blank present / cooler | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. Trip Blank listed on COC | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| | <u>W or S N/A</u> | | |
| 3. Type Of TB Received | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Misc. Information

Number of Encores: 25-Gram _____ 5-Gram _____ Number of 5035 Field Kits: _____ Number of Lab Filtered Metals: _____
 Test Strip Lot #: pH 0-3 230315 pH 10-12 219813A Other: (Specify) _____
 Residual Chlorine Test Strip Lot #: _____

Comments

SM001
Rev. Date 05/24/17

Technician: AKARIG

Date: 8/5/2020 10:00:00 AM

Reviewer: PH

Date: 8/5/2020

FA77472: Chain of Custody

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5.1
5

QC Evaluation: DOD QSM5.x Limits

Job Number: FA77472
Account: Ahtna Global, LLC
Project: DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA
Collected: 08/04/20

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
--------------	------	---------	-------------	-------------	--------	-------	--------

VO2343 SW846 8260B BY SIM

VO2343-BS	71-43-2	Benzene	BSP	REC	86	%	79-120
VO2343-BS	56-23-5	Carbon Tetrachloride	BSP	REC	98	%	72-136
VO2343-BS	67-66-3	Chloroform	BSP	REC	86	%	79-124
VO2343-BS	75-34-3	1,1-Dichloroethane	BSP	REC	82	%	77-125
VO2343-BS	107-06-2	1,2-Dichloroethane	BSP	REC	82	%	73-128
VO2343-BS	156-59-2	cis-1,2-Dichloroethylene	BSP	REC	86	%	78-123
VO2343-BS	78-87-5	1,2-Dichloropropane	BSP	REC	84	%	78-122
VO2343-BS	75-09-2	Methylene Chloride	BSP	REC	78	%	74-124
VO2343-BS	127-18-4	Tetrachloroethylene	BSP	REC	88	%	74-129
VO2343-BS	79-01-6	Trichloroethylene	BSP	REC	88	%	79-123
VO2343-BS	75-01-4	Vinyl Chloride	BSP	REC	92	%	58-137
VO2343-BS	17060-07-0	1,2-Dichloroethane-D4	BSP	SURR	105	%	81-118
VO2343-BS	2037-26-5	Toluene-D8	BSP	SURR	98	%	89-112
FA77472-2MS	71-43-2	Benzene	MS	REC	107	%	79-120
FA77472-2MS	56-23-5	Carbon Tetrachloride	MS	REC	116	%	72-136
FA77472-2MS	67-66-3	Chloroform	MS	REC	107	%	79-124
FA77472-2MS	75-34-3	1,1-Dichloroethane	MS	REC	103	%	77-125
FA77472-2MS	107-06-2	1,2-Dichloroethane	MS	REC	102	%	73-128
FA77472-2MS	156-59-2	cis-1,2-Dichloroethylene	MS	REC	102	%	78-123
FA77472-2MS	78-87-5	1,2-Dichloropropane	MS	REC	106	%	78-122
FA77472-2MS	75-09-2	Methylene Chloride	MS	REC	102	%	74-124
FA77472-2MS	127-18-4	Tetrachloroethylene	MS	REC	104	%	74-129
FA77472-2MS	79-01-6	Trichloroethylene	MS	REC	102	%	79-123
FA77472-2MS	75-01-4	Vinyl Chloride	MS	REC	120	%	58-137
FA77472-2MS	17060-07-0	1,2-Dichloroethane-D4	MS	SURR	101	%	81-118
FA77472-2MS	2037-26-5	Toluene-D8	MS	SURR	95	%	89-112
FA77472-2MSD	71-43-2	Benzene	MSD	REC	95	%	79-120
FA77472-2MSD	71-43-2	Benzene	MSD	RPD	11	%	20
FA77472-2MSD	56-23-5	Carbon Tetrachloride	MSD	REC	103	%	72-136
FA77472-2MSD	56-23-5	Carbon Tetrachloride	MSD	RPD	12	%	20
FA77472-2MSD	67-66-3	Chloroform	MSD	REC	95	%	79-124
FA77472-2MSD	67-66-3	Chloroform	MSD	RPD	12	%	20
FA77472-2MSD	75-34-3	1,1-Dichloroethane	MSD	REC	92	%	77-125
FA77472-2MSD	75-34-3	1,1-Dichloroethane	MSD	RPD	12	%	20
FA77472-2MSD	107-06-2	1,2-Dichloroethane	MSD	REC	91	%	73-128
FA77472-2MSD	107-06-2	1,2-Dichloroethane	MSD	RPD	11	%	20
FA77472-2MSD	156-59-2	cis-1,2-Dichloroethylene	MSD	REC	91	%	78-123
FA77472-2MSD	156-59-2	cis-1,2-Dichloroethylene	MSD	RPD	11	%	20
FA77472-2MSD	78-87-5	1,2-Dichloropropane	MSD	REC	94	%	78-122
FA77472-2MSD	78-87-5	1,2-Dichloropropane	MSD	RPD	12	%	20
FA77472-2MSD	75-09-2	Methylene Chloride	MSD	REC	91	%	74-124
FA77472-2MSD	75-09-2	Methylene Chloride	MSD	RPD	12	%	20

* Sample used for QC is not from job FA77472

QC Evaluation: DOD QSM5.x Limits

Job Number: FA77472
Account: Ahtna Global, LLC
Project: DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA
Collected: 08/04/20

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
FA77472-2MSD	127-18-4	Tetrachloroethylene	MSD	REC	94	%	74-129
FA77472-2MSD	127-18-4	Tetrachloroethylene	MSD	RPD	11	%	20
FA77472-2MSD	79-01-6	Trichloroethylene	MSD	REC	90	%	79-123
FA77472-2MSD	79-01-6	Trichloroethylene	MSD	RPD	12	%	20
FA77472-2MSD	75-01-4	Vinyl Chloride	MSD	REC	112	%	58-137
FA77472-2MSD	75-01-4	Vinyl Chloride	MSD	RPD	7	%	20
FA77472-2MSD	17060-07-0	1,2-Dichloroethane-D4	MSD	SURR	101	%	81-118
FA77472-2MSD	2037-26-5	Toluene-D8	MSD	SURR	97	%	89-112
VO2343-MB	17060-07-0	1,2-Dichloroethane-D4	MB	SURR	101	%	81-118
VO2343-MB	2037-26-5	Toluene-D8	MB	SURR	101	%	89-112
FA77472-1	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	103	%	81-118
FA77472-1	2037-26-5	Toluene-D8	SAMP	SURR	102	%	89-112
FA77472-2	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	103	%	81-118
FA77472-2	2037-26-5	Toluene-D8	SAMP	SURR	101	%	89-112
FA77472-3	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	105	%	81-118
FA77472-3	2037-26-5	Toluene-D8	SAMP	SURR	98	%	89-112
FA77472-4	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	106	%	81-118
FA77472-4	2037-26-5	Toluene-D8	SAMP	SURR	99	%	89-112
FA77472-5	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	108	%	81-118
FA77472-5	2037-26-5	Toluene-D8	SAMP	SURR	100	%	89-112
FA77472-6	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	106	%	81-118
FA77472-6	2037-26-5	Toluene-D8	SAMP	SURR	101	%	89-112
FA77472-7	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	110	%	81-118
FA77472-7	2037-26-5	Toluene-D8	SAMP	SURR	101	%	89-112
FA77472-8	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	110	%	81-118
FA77472-8	2037-26-5	Toluene-D8	SAMP	SURR	99	%	89-112
FA77472-9	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	111	%	81-118
FA77472-9	2037-26-5	Toluene-D8	SAMP	SURR	98	%	89-112
VO2344	SW846 8260B BY SIM						
VO2344-BS	71-43-2	Benzene	BSP	REC	92	%	79-120
VO2344-BS	56-23-5	Carbon Tetrachloride	BSP	REC	98	%	72-136
VO2344-BS	67-66-3	Chloroform	BSP	REC	92	%	79-124
VO2344-BS	75-34-3	1,1-Dichloroethane	BSP	REC	90	%	77-125
VO2344-BS	107-06-2	1,2-Dichloroethane	BSP	REC	88	%	73-128
VO2344-BS	156-59-2	cis-1,2-Dichloroethylene	BSP	REC	90	%	78-123
VO2344-BS	78-87-5	1,2-Dichloropropane	BSP	REC	94	%	78-122
VO2344-BS	75-09-2	Methylene Chloride	BSP	REC	88	%	74-124
VO2344-BS	127-18-4	Tetrachloroethylene	BSP	REC	92	%	74-129
VO2344-BS	79-01-6	Trichloroethylene	BSP	REC	94	%	79-123
VO2344-BS	75-01-4	Vinyl Chloride	BSP	REC	106	%	58-137
VO2344-BS	17060-07-0	1,2-Dichloroethane-D4	BSP	SURR	107	%	81-118
VO2344-BS	2037-26-5	Toluene-D8	BSP	SURR	96	%	89-112
FA77472-10MS	71-43-2	Benzene	MS	REC	92	%	79-120

* Sample used for QC is not from job FA77472

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QC Evaluation: DOD QSM5.x Limits

Job Number: FA77472
Account: Ahtna Global, LLC
Project: DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA
Collected: 08/04/20

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
FA77472-10MS	56-23-5	Carbon Tetrachloride	MS	REC	97	%	72-136
FA77472-10MS	67-66-3	Chloroform	MS	REC	93	%	79-124
FA77472-10MS	75-34-3	1,1-Dichloroethane	MS	REC	91	%	77-125
FA77472-10MS	107-06-2	1,2-Dichloroethane	MS	REC	90	%	73-128
FA77472-10MS	156-59-2	cis-1,2-Dichloroethylene	MS	REC	86	%	78-123
FA77472-10MS	78-87-5	1,2-Dichloropropane	MS	REC	95	%	78-122
FA77472-10MS	75-09-2	Methylene Chloride	MS	REC	95	%	74-124
FA77472-10MS	127-18-4	Tetrachloroethylene	MS	REC	90	%	74-129
FA77472-10MS	79-01-6	Trichloroethylene	MS	REC	83	%	79-123
FA77472-10MS	75-01-4	Vinyl Chloride	MS	REC	116	%	58-137
FA77472-10MS	17060-07-0	1,2-Dichloroethane-D4	MS	SURR	110	%	81-118
FA77472-10MS	2037-26-5	Toluene-D8	MS	SURR	93	%	89-112
FA77472-10MSD	71-43-2	Benzene	MSD	REC	97	%	79-120
FA77472-10MSD	71-43-2	Benzene	MSD	RPD	5	%	20
FA77472-10MSD	56-23-5	Carbon Tetrachloride	MSD	REC	102	%	72-136
FA77472-10MSD	56-23-5	Carbon Tetrachloride	MSD	RPD	5	%	20
FA77472-10MSD	67-66-3	Chloroform	MSD	REC	97	%	79-124
FA77472-10MSD	67-66-3	Chloroform	MSD	RPD	4	%	20
FA77472-10MSD	75-34-3	1,1-Dichloroethane	MSD	REC	95	%	77-125
FA77472-10MSD	75-34-3	1,1-Dichloroethane	MSD	RPD	5	%	20
FA77472-10MSD	107-06-2	1,2-Dichloroethane	MSD	REC	94	%	73-128
FA77472-10MSD	107-06-2	1,2-Dichloroethane	MSD	RPD	4	%	20
FA77472-10MSD	156-59-2	cis-1,2-Dichloroethylene	MSD	REC	90	%	78-123
FA77472-10MSD	156-59-2	cis-1,2-Dichloroethylene	MSD	RPD	4	%	20
FA77472-10MSD	78-87-5	1,2-Dichloropropane	MSD	REC	96	%	78-122
FA77472-10MSD	78-87-5	1,2-Dichloropropane	MSD	RPD	1	%	20
FA77472-10MSD	75-09-2	Methylene Chloride	MSD	REC	98	%	74-124
FA77472-10MSD	75-09-2	Methylene Chloride	MSD	RPD	3	%	20
FA77472-10MSD	127-18-4	Tetrachloroethylene	MSD	REC	94	%	74-129
FA77472-10MSD	127-18-4	Tetrachloroethylene	MSD	RPD	4	%	20
FA77472-10MSD	79-01-6	Trichloroethylene	MSD	REC	88	%	79-123
FA77472-10MSD	79-01-6	Trichloroethylene	MSD	RPD	4	%	20
FA77472-10MSD	75-01-4	Vinyl Chloride	MSD	REC	115	%	58-137
FA77472-10MSD	75-01-4	Vinyl Chloride	MSD	RPD	1	%	20
FA77472-10MSD	17060-07-0	1,2-Dichloroethane-D4	MSD	SURR	102	%	81-118
FA77472-10MSD	2037-26-5	Toluene-D8	MSD	SURR	93	%	89-112
VO2344-MB	17060-07-0	1,2-Dichloroethane-D4	MB	SURR	108	%	81-118
VO2344-MB	2037-26-5	Toluene-D8	MB	SURR	100	%	89-112
FA77472-10	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	110	%	81-118
FA77472-10	2037-26-5	Toluene-D8	SAMP	SURR	98	%	89-112
FA77472-11	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	112	%	81-118
FA77472-11	2037-26-5	Toluene-D8	SAMP	SURR	99	%	89-112

* Sample used for QC is not from job FA77472

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MS Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Instrument Performance Checks (BFB)
- Internal Standard Area Summaries
- Surrogate Recovery Summaries
- Initial and Continuing Calibration Summaries
- Run Sequence Reports

Method Blank Summary**Job Number:** FA77472**Account:** AHTNACAS Ahtna Global, LLC**Project:** DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VO2343-MB	O60963.D	1	08/06/20	AB	n/a	n/a	VO2343

The QC reported here applies to the following samples:**Method:** SW846 8260B BY SIM

FA77472-1, FA77472-2, FA77472-3, FA77472-4, FA77472-5, FA77472-6, FA77472-7, FA77472-8, FA77472-9

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	0.50	0.10	ug/l	
56-23-5	Carbon Tetrachloride	ND	0.50	0.10	ug/l	
67-66-3	Chloroform	ND	0.50	0.10	ug/l	
75-34-3	1,1-Dichloroethane	ND	0.50	0.10	ug/l	
107-06-2	1,2-Dichloroethane	ND	0.50	0.10	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	0.50	0.10	ug/l	
78-87-5	1,2-Dichloropropane	ND	0.50	0.10	ug/l	
75-09-2	Methylene Chloride	ND	2.0	0.50	ug/l	
127-18-4	Tetrachloroethylene	ND	0.50	0.10	ug/l	
79-01-6	Trichloroethylene	ND	0.50	0.10	ug/l	
75-01-4	Vinyl Chloride	ND	0.10	0.050	ug/l	

CAS No.	Surrogate Recoveries	Limits	
17060-07-0	1,2-Dichloroethane-D4	101%	74-125%
2037-26-5	Toluene-D8	101%	88-111%

Method Blank Summary**Job Number:** FA77472**Account:** AHTNACAS Ahtna Global, LLC**Project:** DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VO2344-MB	O60988.D	1	08/07/20	AB	n/a	n/a	VO2344

The QC reported here applies to the following samples:**Method:** SW846 8260B BY SIM

FA77472-10, FA77472-11

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	0.50	0.10	ug/l	
56-23-5	Carbon Tetrachloride	ND	0.50	0.10	ug/l	
67-66-3	Chloroform	ND	0.50	0.10	ug/l	
75-34-3	1,1-Dichloroethane	ND	0.50	0.10	ug/l	
107-06-2	1,2-Dichloroethane	ND	0.50	0.10	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	0.50	0.10	ug/l	
78-87-5	1,2-Dichloropropane	ND	0.50	0.10	ug/l	
75-09-2	Methylene Chloride	ND	2.0	0.50	ug/l	
127-18-4	Tetrachloroethylene	ND	0.50	0.10	ug/l	
79-01-6	Trichloroethylene	ND	0.50	0.10	ug/l	
75-01-4	Vinyl Chloride	ND	0.10	0.050	ug/l	

CAS No.	Surrogate Recoveries	Limits	
17060-07-0	1,2-Dichloroethane-D4	108%	74-125%
2037-26-5	Toluene-D8	100%	88-111%

Blank Spike Summary**Job Number:** FA77472**Account:** AHTNACAS Ahtna Global, LLC**Project:** DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VO2343-BS	O60964.D	1	08/06/20	AB	n/a	n/a	VO2343

The QC reported here applies to the following samples:**Method:** SW846 8260B BY SIM

FA77472-1, FA77472-2, FA77472-3, FA77472-4, FA77472-5, FA77472-6, FA77472-7, FA77472-8, FA77472-9

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
71-43-2	Benzene	5	4.3	86	81-122
56-23-5	Carbon Tetrachloride	5	4.9	98	76-136
67-66-3	Chloroform	5	4.3	86	80-124
75-34-3	1,1-Dichloroethane	5	4.1	82	81-122
107-06-2	1,2-Dichloroethane	5	4.1	82	75-125
156-59-2	cis-1,2-Dichloroethylene	5	4.3	86	78-120
78-87-5	1,2-Dichloropropane	5	4.2	84	76-124
75-09-2	Methylene Chloride	5	3.9	78	69-135
127-18-4	Tetrachloroethylene	5	4.4	88	76-135
79-01-6	Trichloroethylene	5	4.4	88	81-126
75-01-4	Vinyl Chloride	5	4.6	92	69-159

CAS No.	Surrogate Recoveries	BSP	Limits
17060-07-0	1,2-Dichloroethane-D4	105%	74-125%
2037-26-5	Toluene-D8	98%	88-111%

* = Outside of Control Limits.

Blank Spike Summary**Job Number:** FA77472**Account:** AHTNACAS Ahtna Global, LLC**Project:** DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VO2344-BS	O60987.D	1	08/07/20	AB	n/a	n/a	VO2344

The QC reported here applies to the following samples:**Method:** SW846 8260B BY SIM

FA77472-10, FA77472-11

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
71-43-2	Benzene	5	4.6	92	81-122
56-23-5	Carbon Tetrachloride	5	4.9	98	76-136
67-66-3	Chloroform	5	4.6	92	80-124
75-34-3	1,1-Dichloroethane	5	4.5	90	81-122
107-06-2	1,2-Dichloroethane	5	4.4	88	75-125
156-59-2	cis-1,2-Dichloroethylene	5	4.5	90	78-120
78-87-5	1,2-Dichloropropane	5	4.7	94	76-124
75-09-2	Methylene Chloride	5	4.4	88	69-135
127-18-4	Tetrachloroethylene	5	4.6	92	76-135
79-01-6	Trichloroethylene	5	4.7	94	81-126
75-01-4	Vinyl Chloride	5	5.3	106	69-159

CAS No.	Surrogate Recoveries	BSP	Limits
17060-07-0	1,2-Dichloroethane-D4	107%	74-125%
2037-26-5	Toluene-D8	96%	88-111%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA77472

Account: AHTNACAS Ahtna Global, LLC

Project: DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA77472-2MS	O60970.D	5	08/06/20	AB	n/a	n/a	VO2343
FA77472-2MSD	O60971.D	5	08/06/20	AB	n/a	n/a	VO2343
FA77472-2	O60966.D	1	08/06/20	AB	n/a	n/a	VO2343

The QC reported here applies to the following samples:

Method: SW846 8260B BY SIM

FA77472-1, FA77472-2, FA77472-3, FA77472-4, FA77472-5, FA77472-6, FA77472-7, FA77472-8, FA77472-9

CAS No.	Compound	FA77472-2 ug/l	Spike Q ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	0.50 U	25	26.7	107	25	23.8	95	11	81-122/14
56-23-5	Carbon Tetrachloride	0.50 U	25	28.9	116	25	25.7	103	12	76-136/23
67-66-3	Chloroform	0.32	J 25	27.1	107	25	24.1	95	12	80-124/15
75-34-3	1,1-Dichloroethane	0.42	J 25	26.2	103	25	23.3	92	12	81-122/15
107-06-2	1,2-Dichloroethane	0.16	J 25	25.7	102	25	23.0	91	11	75-125/14
156-59-2	cis-1,2-Dichloroethylene	1.2	25	26.8	102	25	24.0	91	11	78-120/15
78-87-5	1,2-Dichloropropane	0.50 U	25	26.5	106	25	23.6	94	12	76-124/14
75-09-2	Methylene Chloride	2.0 U	25	25.6	102	25	22.7	91	12	69-135/16
127-18-4	Tetrachloroethylene	0.50 U	25	26.0	104	25	23.4	94	11	76-135/16
79-01-6	Trichloroethylene	0.50 U	25	25.6	102	25	22.6	90	12	81-126/15
75-01-4	Vinyl Chloride	0.10 U	25	29.9	120	25	28.0	112	7	69-159/18

CAS No.	Surrogate Recoveries	MS	MSD	FA77472-2	Limits
17060-07-0	1,2-Dichloroethane-D4	101%	101%	103%	74-125%
2037-26-5	Toluene-D8	95%	97%	101%	88-111%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA77472
Account: AHTNACAS Ahtna Global, LLC
Project: DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA77472-10MS	O60991.D	5	08/07/20	AB	n/a	n/a	VO2344
FA77472-10MSD	O60992.D	5	08/07/20	AB	n/a	n/a	VO2344
FA77472-10	O60989.D	1	08/07/20	AB	n/a	n/a	VO2344

The QC reported here applies to the following samples:

Method: SW846 8260B BY SIM

FA77472-10, FA77472-11

CAS No.	Compound	FA77472-10		MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
		ug/l	Q							
71-43-2	Benzene	0.50 U	25	23.1	92	25	24.3	97	5	81-122/14
56-23-5	Carbon Tetrachloride	0.50 U	25	24.3	97	25	25.5	102	5	76-136/23
67-66-3	Chloroform	0.25 J	25	23.5	93	25	24.5	97	4	80-124/15
75-34-3	1,1-Dichloroethane	0.30 J	25	23.0	91	25	24.1	95	5	81-122/15
107-06-2	1,2-Dichloroethane	0.20 J	25	22.6	90	25	23.6	94	4	75-125/14
156-59-2	cis-1,2-Dichloroethylene	1.1	25	22.7	86	25	23.7	90	4	78-120/15
78-87-5	1,2-Dichloropropane	0.50 U	25	23.7	95	25	24.0	96	1	76-124/14
75-09-2	Methylene Chloride	2.0 U	25	23.7	95	25	24.4	98	3	69-135/16
127-18-4	Tetrachloroethylene	0.63	25	23.1	90	25	24.1	94	4	76-135/16
79-01-6	Trichloroethylene	4.9	25	25.7	83	25	26.8	88	4	81-126/15
75-01-4	Vinyl Chloride	0.10 U	25	29.0	116	25	28.8	115	1	69-159/18

CAS No.	Surrogate Recoveries	MS	MSD	FA77472-10	Limits
17060-07-0	1,2-Dichloroethane-D4	110%	102%	110%	74-125%
2037-26-5	Toluene-D8	93%	93%	98%	88-111%

* = Outside of Control Limits.

Instrument Performance Check (BFB)**Job Number:** FA77472**Account:** AHTNACAS Ahtna Global, LLC**Project:** DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA**Sample:** VO2337-BFB**Injection Date:** 07/02/20**Lab File ID:** O60817.D**Injection Time:** 08:25**Instrument ID:** GCMSO

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	158784	31.2	Pass
75	30.0 - 60.0% of mass 95	238571	46.8	Pass
95	Base peak, 100% relative abundance	509461	100.0	Pass
96	5.0 - 9.0% of mass 95	34768	6.82	Pass
173	Less than 2.0% of mass 174	2676	0.53 (0.67) ^a	Pass
174	50.0 - 100.0% of mass 95	398016	78.1	Pass
175	5.0 - 9.0% of mass 174	30053	5.90 (7.55) ^a	Pass
176	95.0 - 101.0% of mass 174	392512	77.0 (98.6) ^a	Pass
177	5.0 - 9.0% of mass 176	22248	4.37 (5.67) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VO2337-IC2337	O60820.D	07/02/20	10:49	02:24	Initial cal 1
VO2337-IC2337	O60821.D	07/02/20	11:12	02:47	Initial cal 2
VO2337-IC2337	O60822.D	07/02/20	11:37	03:12	Initial cal 3
VO2337-IC2337	O60823.D	07/02/20	12:00	03:35	Initial cal 4
VO2337-ICC2337	O60824.D	07/02/20	12:24	03:59	Initial cal 5
VO2337-IC2337	O60825.D	07/02/20	12:48	04:23	Initial cal 6
VO2337-IC2337	O60826.D	07/02/20	13:12	04:47	Initial cal 7
VO2337-ICV2337	O60828.D	07/02/20	14:01	05:36	Initial cal verification 5
VO2337-BS	O60829.D	07/02/20	14:26	06:01	Blank Spike
VO2337-MB	O60830.D	07/02/20	14:51	06:26	Method Blank
ZZZZZZ	O60831.D	07/02/20	15:15	06:50	(unrelated sample)
FA76463-2	O60832.D	07/02/20	15:39	07:14	(used for QC only; not part of job FA77472)
ZZZZZZ	O60833.D	07/02/20	16:03	07:38	(unrelated sample)
ZZZZZZ	O60834.D	07/02/20	16:27	08:02	(unrelated sample)
ZZZZZZ	O60835.D	07/02/20	16:50	08:25	(unrelated sample)
ZZZZZZ	O60836.D	07/02/20	17:15	08:50	(unrelated sample)
FA76463-2MS	O60837.D	07/02/20	17:38	09:13	Matrix Spike
FA76463-2MSD	O60838.D	07/02/20	18:03	09:38	Matrix Spike Duplicate
VO2337-ECC2337	O60839.D	07/02/20	18:26	10:01	Ending cal 5

Instrument Performance Check (BFB)**Job Number:** FA77472**Account:** AHTNACAS Ahtna Global, LLC**Project:** DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA**Sample:** VO2343-BFB**Injection Date:** 08/06/20**Lab File ID:** O60960.D**Injection Time:** 08:42**Instrument ID:** GCMSO

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	176661	30.0	Pass
75	30.0 - 60.0% of mass 95	280085	47.6	Pass
95	Base peak, 100% relative abundance	588629	100.0	Pass
96	5.0 - 9.0% of mass 95	39048	6.63	Pass
173	Less than 2.0% of mass 174	3088	0.52 (0.64) ^a	Pass
174	50.0 - 100.0% of mass 95	483179	82.1	Pass
175	5.0 - 9.0% of mass 174	34536	5.87 (7.15) ^a	Pass
176	95.0 - 101.0% of mass 174	475733	80.8 (98.5) ^a	Pass
177	5.0 - 9.0% of mass 176	31003	5.27 (6.52) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VO2343-CC2337	O60961.D	08/06/20	09:02	00:20	Continuing cal 5
VO2343-MB	O60963.D	08/06/20	09:51	01:09	Method Blank
VO2343-BS	O60964.D	08/06/20	10:14	01:32	Blank Spike
FA77472-1	O60965.D	08/06/20	10:38	01:56	2032MOU2161A
FA77472-2	O60966.D	08/06/20	11:03	02:21	2032MOU2162F
FA77472-3	O60967.D	08/06/20	11:27	02:45	2032MOU2163F
FA77472-4	O60968.D	08/06/20	11:51	03:09	2032MOU2164F
FA77472-5	O60969.D	08/06/20	12:14	03:32	2032MOU2165F
FA77472-2MS	O60970.D	08/06/20	12:38	03:56	Matrix Spike
FA77472-2MSD	O60971.D	08/06/20	13:03	04:21	Matrix Spike Duplicate
FA77472-6	O60973.D	08/06/20	13:51	05:09	2032MOU2166F
FA77472-7	O60974.D	08/06/20	14:15	05:33	2032MOU2167F
FA77472-8	O60975.D	08/06/20	14:39	05:57	2032MOU2168F
FA77472-9	O60976.D	08/06/20	15:04	06:22	2032MOU2169F
VO2343-ECC2337	O60979.D	08/06/20	16:16	07:34	Ending cal 5

Instrument Performance Check (BFB)**Job Number:** FA77472**Account:** AHTNACAS Ahtna Global, LLC**Project:** DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA**Sample:** VO2344-BFB**Injection Date:** 08/07/20**Lab File ID:** O60985.D**Injection Time:** 09:46**Instrument ID:** GCMSO

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	167893	28.5	Pass
75	30.0 - 60.0% of mass 95	269995	45.8	Pass
95	Base peak, 100% relative abundance	588885	100.0	Pass
96	5.0 - 9.0% of mass 95	40979	6.96	Pass
173	Less than 2.0% of mass 174	2551	0.43 (0.51) ^a	Pass
174	50.0 - 100.0% of mass 95	497963	84.6	Pass
175	5.0 - 9.0% of mass 174	37045	6.29 (7.44) ^a	Pass
176	95.0 - 101.0% of mass 174	474069	80.5 (95.2) ^a	Pass
177	5.0 - 9.0% of mass 176	30680	5.21 (6.47) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VO2344-CC2337	O60986.D	08/07/20	10:07	00:21	Continuing cal 5
VO2344-BS	O60987.D	08/07/20	10:31	00:45	Blank Spike
VO2344-MB	O60988.D	08/07/20	10:56	01:10	Method Blank
FA77472-10	O60989.D	08/07/20	11:20	01:34	2032MOU2170F
FA77472-11	O60990.D	08/07/20	11:43	01:57	2032MOU2171D
FA77472-10MS	O60991.D	08/07/20	12:08	02:22	Matrix Spike
FA77472-10MSD	O60992.D	08/07/20	12:31	02:45	Matrix Spike Duplicate
VO2344-ECC2337	O60993.D	08/07/20	12:55	03:09	Ending cal 5

Internal Standard Area Summary

Job Number: FA77472
Account: AHTNACAS Ahtna Global, LLC
Project: DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA

Check Std: VO2343-CC2337	Injection Date: 08/06/20
Lab File ID: O60961.D	Injection Time: 09:02
Instrument ID: GCMSO	Method: SW846 8260B BY SIM

	IS 1 AREA	RT	IS 2 AREA	RT
Initial Cal ^a	347161	7.35	227073	10.45
Check Std ^b	416989	7.34	290058	10.44
Upper Limit ^c	833978	7.51	580116	10.61
Lower Limit ^d	208495	7.17	145029	10.27

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT
VO2343-MB	351141	7.35	230919	10.45
VO2343-BS	362755	7.35	242260	10.45
FA77472-1 ^e	328207	7.35	214673	10.45
FA77472-2	306627	7.35	202825	10.45
FA77472-3	290363	7.35	197846	10.45
FA77472-4	272196	7.35	182463	10.45
FA77472-5	256042	7.35	169881	10.45
FA77472-2MS	284940	7.35	193915	10.45
FA77472-2MSD	288593	7.35	193494	10.45
FA77472-6	263809	7.35	172141	10.45
FA77472-7	245310	7.35	160633	10.45
FA77472-8	234838	7.35	156178	10.45
FA77472-9	221162	7.35	147369	10.45
VO2343-ECC2337259288	7.35	178733	10.45	

IS 1 = Fluorobenzene
IS 2 = Chlorobenzene-D5

- (a) Initial Cal is: VO2337-ICC2337 O60824.D 07/02/20 12:24
- (b) Check Std Limit = -50 to + 100% of initial cal area.
- (c) Upper Limit = + 100% of check standard area; Retention time + 0.167 minutes.
- (d) Lower Limit = -50% of check standard area; Retention time -0.167 minutes.
- (e) Sample vial(s) contained bubbles greater than 6mm; reported results are considered minimum values.

6.5.1
6

Internal Standard Area Summary

Job Number: FA77472
Account: AHTNACAS Ahtna Global, LLC
Project: DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA

Check Std: VO2344-CC2337	Injection Date: 08/07/20
Lab File ID: O60986.D	Injection Time: 10:07
Instrument ID: GCMSO	Method: SW846 8260B BY SIM

	IS 1 AREA	RT	IS 2 AREA	RT
Initial Cal ^a	347161	7.35	227073	10.45
Check Std ^b	418402	7.35	292954	10.45
Upper Limit ^c	836804	7.52	585908	10.62
Lower Limit ^d	209201	7.18	146477	10.28

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT
VO2344-BS	350026	7.35	233208	10.45
VO2344-MB	294679	7.35	193207	10.45
FA77472-10	270054	7.35	179541	10.45
FA77472-11	259322	7.35	170717	10.45
FA77472-10MS	295460	7.35	200470	10.45
FA77472-10MSD	307437	7.35	208929	10.45
VO2344-ECC2337340481	7.35	232487	10.45	

IS 1 = Fluorobenzene
IS 2 = Chlorobenzene-D5

- (a) Initial Cal is: VO2337-ICC2337 O60824.D 07/02/20 12:24
- (b) Check Std Limit = -50 to + 100% of initial cal area.
- (c) Upper Limit = + 100% of check standard area; Retention time + 0.167 minutes.
- (d) Lower Limit = -50% of check standard area; Retention time -0.167 minutes.

6.5.2
6

Surrogate Recovery Summary

Job Number: FA77472

Account: AHTNACAS Ahtna Global, LLC

Project: DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA

Method: SW846 8260B BY SIM	Matrix: AQ
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Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2
FA77472-1	O60965.D	103	102
FA77472-2	O60966.D	103	101
FA77472-3	O60967.D	105	98
FA77472-4	O60968.D	106	99
FA77472-5	O60969.D	108	100
FA77472-6	O60973.D	106	101
FA77472-7	O60974.D	110	101
FA77472-8	O60975.D	110	99
FA77472-9	O60976.D	111	98
FA77472-10	O60989.D	110	98
FA77472-11	O60990.D	112	99
FA77472-10MS	O60991.D	110	93
FA77472-10MSD	O60992.D	102	93
FA77472-2MS	O60970.D	101	95
FA77472-2MSD	O60971.D	101	97
VO2343-BS	O60964.D	105	98
VO2343-MB	O60963.D	101	101
VO2344-BS	O60987.D	107	96
VO2344-MB	O60988.D	108	100

Surrogate Compounds

Recovery Limits

S1 = 1,2-Dichloroethane-D4	74-125%
S2 = Toluene-D8	88-111%

6.6.1
6

Initial Calibration Summary

Job Number: FA77472 **Sample:** VO2337-ICC2337
Account: AHTNACAS Ahtna Global, LLC **Lab FileID:** O60824.D
Project: DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA

Response Factor Report MSVOA12

Method : C:\msdchem\2\methods\SIMCL070220.M (RTE Integrator)
 Title : Standard Methods 6200B
 Last Update : Thu Jul 02 13:33:54 2020
 Response via : Initial Calibration

Calibration Files

1 =O60820.D 2 =O60821.D 3 =O60822.D 4 =O60823.D
 5 =O60824.D 6 =O60825.D 7 =O60826.D

Compound	1	2	3	4	5	6	7	Avg	%RSD
1) I Fluorobenzene	-----ISTD-----								
2) Vinyl Chloride	0.447	0.443	0.505	0.510	0.493	0.492	0.468	0.480	5.67
3) Chloromethane	2.049	0.850	0.836	0.839	0.778	0.759	0.720	0.976	48.76
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9998									
Response Ratio = 0.00000 + 0.85655 *A + -0.03398 *A^2									
4) 1,1-Dichloroethen	0.640	0.567	0.517	0.619	0.595	0.748	0.603	0.613	11.71
5) Methylene Chlorid	2.003	1.114	1.005	1.004	0.997	0.978	0.937	1.148	33.16
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9998									
Response Ratio = 0.00000 + 1.05346 *A + -0.02825 *A^2									
6) trans-1,2-Dichlor	0.705	0.618	0.601	0.644	0.684	0.685	0.670	0.658	5.82
7) 1,1-Dichloroethan	2.259	0.769	0.744	0.799	0.830	0.830	0.805	1.005	55.09
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9994									
Response Ratio = 0.00000 + 0.83985 *A + -0.00742 *A^2									
8) cis-1,2-Dichloroe	0.517	0.409	0.405	0.436	0.460	0.464	0.459	0.450	8.50
9) Chloroform	0.868	0.748	0.739	0.798	0.824	0.829	0.810	0.802	5.69
10) Carbon Tetrachlor	0.525	0.441	0.408	0.470	0.521	0.544	0.536	0.492	10.67
11) 1,1,1-Trichloroet	0.631	0.504	0.496	0.560	0.608	0.628	0.621	0.578	10.14
12) Benzene	4.086	1.315	1.260	1.329	1.394	1.402	1.380	1.738	59.64
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9996									
Response Ratio = 0.00000 + 1.38012 *A + 0.00181 *A^2									
13)S 1,2-Dichloroethan	0.377	0.374	0.381	0.363	0.359	0.360	0.355	0.367	2.69
14) 1,2-Dichloroethan	1.260	0.566	0.586	0.621	0.622	0.618	0.607	0.697	35.71
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9999									
Response Ratio = 0.00000 + 0.63295 *A + -0.00602 *A^2									
15) Trichloroethene	0.555	0.433	0.426	0.469	0.503	0.514	0.514	0.488	9.71
16) 1,2-Dichloropropa	0.464	0.444	0.445	0.466	0.472	0.487	0.471	0.464	3.35
17) cis-1,3-Dichlorop	0.521	0.432	0.462	0.516	0.545	0.570	0.577	0.518	10.44
18) I Chlorobenzene-d5	-----ISTD-----								
19)S Toluene-d8	1.249	1.225	1.206	1.198	1.172	1.190	1.192	1.205	2.11
20) trans-1,3-Dichlor	0.718	0.623	0.687	0.780	0.815	0.845	0.867	0.762	11.74
21) Tetrachloroethene	0.696	0.602	0.575	0.620	0.660	0.665	0.662	0.640	6.60
22) 1,4-Dichlorobenze	1.208	1.086	1.151	1.233	1.289	1.326	1.327	1.231	7.37
23) 1,2-Dibromo-3-Chl	0.271	0.209	0.204	0.230	0.243	0.258	0.259	0.239	10.79

(#) = Out of Range

SIMCL070220.M Thu Jul 02 14:25:45 2020

6.7.1
6

Initial Calibration Verification

Job Number: FA77472

Sample: VO2337-ICV2337

Account: AHTNACAS Ahtna Global, LLC

Lab FileID: O60828.D

Project: DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA

Evaluate Continuing Calibration Report

Data File : C:\msdchem\2\data\070220\O60828.D Vial: 9
 Acq On : 2 Jul 2020 2:01 pm Operator: amandab
 Sample : ICV2337-5 Inst : MSVOA12
 Misc : MS46657,VO2337,,,,, Multiplr: 1.00
 MS Integration Params: rteint.p

Method : C:\msdchem\2\methods\SIMCL070220.M (RTE Integrator)
 Title : Standard Methods 6200B
 Last Update : Thu Jul 02 13:33:54 2020
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	Fluorobenzene	1.000	1.000	0.0	102	0.00	7.35
2	Vinyl Chloride	0.480	0.456	5.0	95	0.00	2.91
	----- Amount	Calc.	%Drift	-----			
3	Chloromethane	10.000	8.765	12.3	92	0.00	2.81
	----- AvgRF	CCRF	%Dev	-----			
4	1,1-Dichloroethene	0.613	0.581	5.2	100	0.00	4.09
	----- Amount	Calc.	%Drift	-----			
5	Methylene Chloride	10.000	9.668	3.3	99	0.00	4.70
	----- AvgRF	CCRF	%Dev	-----			
6	trans-1,2-Dichloroethene	0.658	0.651	1.1	98	0.00	4.87
	----- Amount	Calc.	%Drift	-----			
7	1,1-Dichloroethane	10.000	9.799	2.0	100	0.00	5.51
	----- AvgRF	CCRF	%Dev	-----			
8	cis-1,2-Dichloroethene	0.450	0.447	0.7	99	0.00	6.07
9	Chloroform	0.802	0.796	0.7	99	0.00	6.33
10	Carbon Tetrachloride	0.492	0.491	0.2	97	0.00	6.51
11	1,1,1-Trichloroethane	0.578	0.574	0.7	97	0.00	6.58
	----- Amount	Calc.	%Drift	-----			
12	Benzene	10.000	10.048	-0.5	102	0.00	6.94
	----- AvgRF	CCRF	%Dev	-----			
13 S	1,2-Dichloroethane-d4	0.367	0.362	1.4	103	0.00	7.08
	----- Amount	Calc.	%Drift	-----			
14	1,2-Dichloroethane	10.000	9.924	0.8	101	0.00	7.14
	----- AvgRF	CCRF	%Dev	-----			
15	Trichloroethene	0.488	0.503	-3.1	102	0.00	7.52
16	1,2-Dichloropropane	0.464	0.478	-3.0	104	0.00	8.04
17	cis-1,3-Dichloropropene	0.518	0.557	-7.5	105	0.00	8.71
18 I	Chlorobenzene-d5	1.000	1.000	0.0	102	0.00	10.45
19 S	Toluene-d8	1.205	1.190	1.2	103	0.00	8.90
20	trans-1,3-Dichloropropene	0.762	0.846	-11.0	106	0.00	9.34
21	Tetrachloroethene	0.640	0.632	1.3	98	0.00	9.34

Initial Calibration Verification

Job Number: FA77472

Sample: VO2337-ICV2337

Account: AHTNACAS Ahtna Global, LLC

Lab FileID: O60828.D

Project: DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA

22	1,4-Dichlorobenzene	1.231	1.296	-5.3	102	0.00	12.83
23	1,2-Dibromo-3-Chloropropa	0.239	0.245	-2.5	103	0.00	14.04

(#) = Out of Range

SPCC's out = 0 CCC's out = 0

O60824.D SIMCL070220.M

Thu Jul 02 14:26:14 2020

Continuing Calibration Summary

Job Number: FA77472

Sample: VO2343-CC2337

Account: AHTNACAS Ahtna Global, LLC

Lab FileID: O60961.D

Project: DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA

Evaluate Continuing Calibration Report

Data File : C:\msdchem\2\data\080620\O60961.D Vial: 1
 Acq On : 6 Aug 2020 9:02 am Operator: amandab
 Sample : CC2337-5 Inst : MSVOA12
 Misc : MS46803,VO2343,,,,, Multiplr: 1.00
 MS Integration Params: rteint.p

Method : C:\msdchem\2\methods\SIMCL070220.M (RTE Integrator)
 Title : Standard Methods 6200B
 Last Update : Thu Jul 02 13:33:54 2020
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	Fluorobenzene	1.000	1.000	0.0	120	0.00	7.34
2	Vinyl Chloride	0.480	0.384	20.0	94	-0.02	2.90
	----- Amount	Calc.	%Drift	-----			
3	Chloromethane	10.000	7.266	27.3#	91	-0.01	2.80
	----- AvgRF	CCRF	%Dev	-----			
4	1,1-Dichloroethene	0.613	0.503	17.9	102	0.00	4.08
	----- Amount	Calc.	%Drift	-----			
5	Methylene Chloride	10.000	8.290	17.1	101	0.00	4.70
	----- AvgRF	CCRF	%Dev	-----			
6	trans-1,2-Dichloroethene	0.658	0.590	10.3	104	-0.01	4.86
	----- Amount	Calc.	%Drift	-----			
7	1,1-Dichloroethane	10.000	8.766	12.3	105	0.00	5.51
	----- AvgRF	CCRF	%Dev	-----			
8	cis-1,2-Dichloroethene	0.450	0.414	8.0	108	-0.01	6.06
9	Chloroform	0.802	0.731	8.9	107	0.00	6.33
10	Carbon Tetrachloride	0.492	0.494	-0.4	114	0.00	6.50
11	1,1,1-Trichloroethane	0.578	0.571	1.2	113	0.00	6.57
	----- Amount	Calc.	%Drift	-----			
12	Benzene	10.000	8.964	10.4	107	0.00	6.94
	----- AvgRF	CCRF	%Dev	-----			
13 S	1,2-Dichloroethane-d4	0.367	0.357	2.7	119	-0.01	7.07
	----- Amount	Calc.	%Drift	-----			
14	1,2-Dichloroethane	10.000	8.776	12.2	105	-0.01	7.13
	----- AvgRF	CCRF	%Dev	-----			
15	Trichloroethene	0.488	0.444	9.0	106	0.00	7.51
16	1,2-Dichloropropane	0.464	0.409	11.9	104	0.00	8.04
17	cis-1,3-Dichloropropene	0.518	0.512	1.2	113	0.00	8.71
18 I	Chlorobenzene-d5	1.000	1.000	0.0	128	0.00	10.44
19 S	Toluene-d8	1.205	1.160	3.7	126	0.00	8.90
20	trans-1,3-Dichloropropene	0.762	0.718	5.8	112	0.00	9.34
21	Tetrachloroethene	0.640	0.558	12.8	108	0.00	9.34

Continuing Calibration Summary

Job Number: FA77472

Sample: VO2343-CC2337

Account: AHTNACAS Ahtna Global, LLC

Lab FileID: O60961.D

Project: DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA

22	1,4-Dichlorobenzene	1.231	1.082	12.1	107	0.00	12.83
23	1,2-Dibromo-3-Chloropropa	0.239	0.228	4.6	120	0.00	14.04

(#) = Out of Range

SPCC's out = 0 CCC's out = 0

O60824.D SIMCL070220.M

Thu Aug 06 09:25:31 2020

Continuing Calibration Summary

Job Number: FA77472

Sample: VO2343-ECC2337

Account: AHTNACAS Ahtna Global, LLC

Lab FileID: O60979.D

Project: DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA

Evaluate Continuing Calibration Report

Data File : C:\msdchem\2\data\080620\O60979.D

Vial: 19

Acq On : 6 Aug 2020 4:16 pm

Operator: amandab

Sample : ECC2337-5

Inst : MSVOA12

Misc : MS46912,VO2343,,,,,

Multiplr: 1.00

MS Integration Params: rteint.p

Method : C:\msdchem\2\methods\SIMCL070220.M (RTE Integrator)

Title : Standard Methods 6200B

Last Update : Thu Jul 02 13:33:54 2020

Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min

Max. RRF Dev : 50% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	Fluorobenzene	1.000	1.000	0.0	75	0.00	7.35
2	Vinyl Chloride	0.480	0.481	-0.2	73	0.00	2.92
	----- Amount	Calc.	%Drift	-----			
3	Chloromethane	10.000	9.697	3.0	74	0.00	2.81
	----- AvgRF	CCRF	%Dev	-----			
4	1,1-Dichloroethene	0.613	0.642	-4.7	81	0.00	4.09
	----- Amount	Calc.	%Drift	-----			
5	Methylene Chloride	10.000	10.930	-9.3	81	0.00	4.70
	----- AvgRF	CCRF	%Dev	-----			
6	trans-1,2-Dichloroethene	0.658	0.728	-10.6	80	0.00	4.87
	----- Amount	Calc.	%Drift	-----			
7	1,1-Dichloroethane	10.000	10.946	-9.5	81	0.00	5.51
	----- AvgRF	CCRF	%Dev	-----			
8	cis-1,2-Dichloroethene	0.450	0.475	-5.6	77	0.00	6.07
9	Chloroform	0.802	0.887	-10.6	80	0.00	6.33
10	Carbon Tetrachloride	0.492	0.562	-14.2	81	0.00	6.51
11	1,1,1-Trichloroethane	0.578	0.660	-14.2	81	0.00	6.58
	----- Amount	Calc.	%Drift	-----			
12	Benzene	10.000	10.836	-8.4	80	0.00	6.94
	----- AvgRF	CCRF	%Dev	-----			
13 S	1,2-Dichloroethane-d4	0.367	0.375	-2.2	78	0.00	7.07
	----- Amount	Calc.	%Drift	-----			
14	1,2-Dichloroethane	10.000	10.866	-8.7	81	0.00	7.14
	----- AvgRF	CCRF	%Dev	-----			
15	Trichloroethene	0.488	0.534	-9.4	79	0.00	7.52
16	1,2-Dichloropropane	0.464	0.494	-6.5	78	0.00	8.04
17	cis-1,3-Dichloropropene	0.518	0.532	-2.7	73	0.00	8.71
18 I	Chlorobenzene-d5	1.000	1.000	0.0	79	0.00	10.45
19 S	Toluene-d8	1.205	1.114	7.6	75	0.00	8.90
20	trans-1,3-Dichloropropene	0.762	0.772	-1.3	75	0.00	9.34
21	Tetrachloroethene	0.640	0.652	-1.9	78	0.00	9.34

Continuing Calibration Summary

Job Number: FA77472

Sample: VO2343-ECC2337

Account: AHTNACAS Ahtna Global, LLC

Lab FileID: O60979.D

Project: DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA

22	1,4-Dichlorobenzene	1.231	1.289	-4.7	79	0.00	12.83
23	1,2-Dibromo-3-Chloropropa	0.239	0.227	5.0	73	0.00	14.04

(#) = Out of Range

SPCC's out = 0 CCC's out = 0

O60824.D SIMCL070220.M

Fri Aug 07 08:04:02 2020

Continuing Calibration Summary**Job Number:** FA77472**Sample:** VO2344-CC2337**Account:** AHTNACAS Ahtna Global, LLC**Lab FileID:** O60986.D**Project:** DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA

Evaluate Continuing Calibration Report

Data File : C:\msdchem\2\data\080720\O60986.D Vial: 1
 Acq On : 7 Aug 2020 10:07 am Operator: amandab
 Sample : CC2337-5 Inst : MSVOA12
 Misc : MS46912,VO2344,,,,, Multiplr: 1.00
 MS Integration Params: rteint.p

Method : C:\msdchem\2\methods\SIMCL070220.M (RTE Integrator)
 Title : Standard Methods 6200B
 Last Update : Thu Jul 02 13:33:54 2020
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	Fluorobenzene	1.000	1.000	0.0	121	0.00	7.35
2	Vinyl Chloride	0.480	0.384	20.0	94	0.00	2.90
	----- Amount	Calc.	%Drift	-----			
3	Chloromethane	10.000	7.529	24.7#	94	0.00	2.80
	----- AvgRF	CCRF	%Dev	-----			
4	1,1-Dichloroethene	0.613	0.505	17.6	102	0.00	4.09
	----- Amount	Calc.	%Drift	-----			
5	Methylene Chloride	10.000	8.655	13.5	105	0.00	4.70
	----- AvgRF	CCRF	%Dev	-----			
6	trans-1,2-Dichloroethene	0.658	0.587	10.8	103	0.00	4.87
	----- Amount	Calc.	%Drift	-----			
7	1,1-Dichloroethane	10.000	8.812	11.9	106	0.00	5.51
	----- AvgRF	CCRF	%Dev	-----			
8	cis-1,2-Dichloroethene	0.450	0.392	12.9	103	0.00	6.07
9	Chloroform	0.802	0.717	10.6	105	0.00	6.33
10	Carbon Tetrachloride	0.492	0.458	6.9	106	0.00	6.51
11	1,1,1-Trichloroethane	0.578	0.542	6.2	107	0.00	6.58
	----- Amount	Calc.	%Drift	-----			
12	Benzene	10.000	8.899	11.0	106	0.00	6.94
	----- AvgRF	CCRF	%Dev	-----			
13 S	1,2-Dichloroethane-d4	0.367	0.356	3.0	120	0.00	7.07
	----- Amount	Calc.	%Drift	-----			
14	1,2-Dichloroethane	10.000	8.674	13.3	105	0.00	7.14
	----- AvgRF	CCRF	%Dev	-----			
15	Trichloroethene	0.488	0.437	10.5	105	0.00	7.51
16	1,2-Dichloropropane	0.464	0.404	12.9	103	0.00	8.04
17	cis-1,3-Dichloropropene	0.518	0.466	10.0	103	0.00	8.71
18 I	Chlorobenzene-d5	1.000	1.000	0.0	129	0.00	10.45
19 S	Toluene-d8	1.205	1.119	7.1	123	0.00	8.90
20	trans-1,3-Dichloropropene	0.762	0.661	13.3	105	0.00	9.34
21	Tetrachloroethene	0.640	0.521	18.6	102	0.00	9.34

Continuing Calibration Summary

Job Number: FA77472

Sample: VO2344-ECC2337

Account: AHTNACAS Ahtna Global, LLC

Lab FileID: O60993.D

Project: DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA

Evaluate Continuing Calibration Report

Data File : C:\msdchem\2\data\080720\O60993.D Vial: 8
 Acq On : 7 Aug 2020 12:55 pm Operator: amandab
 Sample : ECC2337-5 Inst : MSVOA12
 Misc : MS46912,VO2344,,,,, Multiplr: 1.00
 MS Integration Params: rteint.p

Method : C:\msdchem\2\methods\SIMCL070220.M (RTE Integrator)
 Title : Standard Methods 6200B
 Last Update : Thu Jul 02 13:33:54 2020
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 50% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	Fluorobenzene	1.000	1.000	0.0	98	0.00	7.35
2	Vinyl Chloride	0.480	0.468	2.5	93	0.00	2.90
	----- Amount	Calc.	%Drift	-----			
3	Chloromethane	10.000	9.344	6.6	93	0.00	2.80
	----- AvgRF	CCRF	%Dev	-----			
4	1,1-Dichloroethene	0.613	0.621	-1.3	102	0.00	4.08
	----- Amount	Calc.	%Drift	-----			
5	Methylene Chloride	10.000	10.562	-5.6	103	0.00	4.70
	----- AvgRF	CCRF	%Dev	-----			
6	trans-1,2-Dichloroethene	0.658	0.714	-8.5	102	0.00	4.87
	----- Amount	Calc.	%Drift	-----			
7	1,1-Dichloroethane	10.000	10.791	-7.9	105	0.00	5.51
	----- AvgRF	CCRF	%Dev	-----			
8	cis-1,2-Dichloroethene	0.450	0.467	-3.8	100	0.00	6.07
9	Chloroform	0.802	0.866	-8.0	103	0.00	6.33
10	Carbon Tetrachloride	0.492	0.551	-12.0	104	0.00	6.50
11	1,1,1-Trichloroethane	0.578	0.653	-13.0	105	0.00	6.58
	----- Amount	Calc.	%Drift	-----			
12	Benzene	10.000	10.656	-6.6	104	0.00	6.94
	----- AvgRF	CCRF	%Dev	-----			
13 S	1,2-Dichloroethane-d4	0.367	0.367	0.0	100	0.00	7.07
	----- Amount	Calc.	%Drift	-----			
14	1,2-Dichloroethane	10.000	10.511	-5.1	103	0.00	7.14
	----- AvgRF	CCRF	%Dev	-----			
15	Trichloroethene	0.488	0.524	-7.4	102	0.00	7.51
16	1,2-Dichloropropane	0.464	0.482	-3.9	100	0.00	8.04
17	cis-1,3-Dichloropropene	0.518	0.535	-3.3	96	0.00	8.71
18 I	Chlorobenzene-d5	1.000	1.000	0.0	102	0.00	10.45
19 S	Toluene-d8	1.205	1.109	8.0	97	0.00	8.90
20	trans-1,3-Dichloropropene	0.762	0.776	-1.8	97	0.00	9.34
21	Tetrachloroethene	0.640	0.635	0.8	98	0.00	9.34

Continuing Calibration Summary

Job Number: FA77472

Sample: VO2344-ECC2337

Account: AHTNACAS Ahtna Global, LLC

Lab FileID: O60993.D

Project: DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA

22	1,4-Dichlorobenzene	1.231	1.260	-2.4	100	0.00	12.83
23	1,2-Dibromo-3-Chloropropa	0.239	0.229	4.2	96	0.00	14.04

(#) = Out of Range

SPCC's out = 0 CCC's out = 0

O60824.D SIMCL070220.M

Fri Aug 07 14:10:05 2020

Run Sequence Report**Job Number:** FA77472**Account:** AHTNACAS Ahtna Global, LLC**Project:** DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA

Run ID: VO2337	Method: SW846 8260B BY SIM	Instrument ID: GCMSO
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Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
VO2337-BFB	O60817.D	07/02/20 08:25	n/a	BFB Tune
VO2337-IC2337	O60820.D	07/02/20 10:49	n/a	Initial cal 1
VO2337-IC2337	O60821.D	07/02/20 11:12	n/a	Initial cal 2
VO2337-IC2337	O60822.D	07/02/20 11:37	n/a	Initial cal 3
VO2337-IC2337	O60823.D	07/02/20 12:00	n/a	Initial cal 4
VO2337-ICC2337	O60824.D	07/02/20 12:24	n/a	Initial cal 5
VO2337-IC2337	O60825.D	07/02/20 12:48	n/a	Initial cal 6
VO2337-IC2337	O60826.D	07/02/20 13:12	n/a	Initial cal 7
VO2337-ICV2337	O60828.D	07/02/20 14:01	n/a	Initial cal verification 5
VO2337-BS	O60829.D	07/02/20 14:26	n/a	Blank Spike
VO2337-MB	O60830.D	07/02/20 14:51	n/a	Method Blank
ZZZZZZ	O60831.D	07/02/20 15:15	n/a	(unrelated sample)
FA76463-2	O60832.D	07/02/20 15:39	n/a	(used for QC only; not part of job FA77472)
ZZZZZZ	O60833.D	07/02/20 16:03	n/a	(unrelated sample)
ZZZZZZ	O60834.D	07/02/20 16:27	n/a	(unrelated sample)
ZZZZZZ	O60835.D	07/02/20 16:50	n/a	(unrelated sample)
ZZZZZZ	O60836.D	07/02/20 17:15	n/a	(unrelated sample)
FA76463-2MS	O60837.D	07/02/20 17:38	n/a	Matrix Spike
FA76463-2MSD	O60838.D	07/02/20 18:03	n/a	Matrix Spike Duplicate
VO2337-ECC2337	O60839.D	07/02/20 18:26	n/a	Ending cal 5

Run Sequence Report**Job Number:** FA77472**Account:** AHTNACAS Ahtna Global, LLC**Project:** DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA

Run ID: VO2343	Method: SW846 8260B BY SIM	Instrument ID: GCMSO
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Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
VO2343-BFB	O60960.D	08/06/20 08:42	n/a	BFB Tune
VO2343-CC2337	O60961.D	08/06/20 09:02	n/a	Continuing cal 5
VO2343-MB	O60963.D	08/06/20 09:51	n/a	Method Blank
VO2343-BS	O60964.D	08/06/20 10:14	n/a	Blank Spike
FA77472-1	O60965.D	08/06/20 10:38	n/a	2032MOU2161A
FA77472-2	O60966.D	08/06/20 11:03	n/a	2032MOU2162F
FA77472-3	O60967.D	08/06/20 11:27	n/a	2032MOU2163F
FA77472-4	O60968.D	08/06/20 11:51	n/a	2032MOU2164F
FA77472-5	O60969.D	08/06/20 12:14	n/a	2032MOU2165F
FA77472-2MS	O60970.D	08/06/20 12:38	n/a	Matrix Spike
FA77472-2MSD	O60971.D	08/06/20 13:03	n/a	Matrix Spike Duplicate
FA77472-6	O60973.D	08/06/20 13:51	n/a	2032MOU2166F
FA77472-7	O60974.D	08/06/20 14:15	n/a	2032MOU2167F
FA77472-8	O60975.D	08/06/20 14:39	n/a	2032MOU2168F
FA77472-9	O60976.D	08/06/20 15:04	n/a	2032MOU2169F
VO2343-ECC2337	O60979.D	08/06/20 16:16	n/a	Ending cal 5

Run Sequence Report**Job Number:** FA77472**Account:** AHTNACAS Ahtna Global, LLC**Project:** DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA**Run ID:** VO2344**Method:** SW846 8260B BY SIM **Instrument ID:** GCMSO

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
VO2344-BFB	O60985.D	08/07/20 09:46	n/a	BFB Tune
VO2344-CC2337	O60986.D	08/07/20 10:07	n/a	Continuing cal 5
VO2344-BS	O60987.D	08/07/20 10:31	n/a	Blank Spike
VO2344-MB	O60988.D	08/07/20 10:56	n/a	Method Blank
FA77472-10	O60989.D	08/07/20 11:20	n/a	2032MOU2170F
FA77472-11	O60990.D	08/07/20 11:43	n/a	2032MOU2171D
FA77472-10MS	O60991.D	08/07/20 12:08	n/a	Matrix Spike
FA77472-10MSD	O60992.D	08/07/20 12:31	n/a	Matrix Spike Duplicate
VO2344-ECC2337	O60993.D	08/07/20 12:55	n/a	Ending cal 5

MS Volatiles

Raw Data

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\080620\
Data File : O60965.D
Acq On : 6 Aug 2020 10:38 am
Operator : amandab
Sample : FA77472-1 Inst : MSVOA12
Misc : MS46912,VO2343,,,,,
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 06 10:58:26 2020
Quant Method : C:\msdchem\2\methods\SIMCL070220.M
Quant Title : Standard Methods 6200B
QLast Update : Thu Jul 02 13:33:54 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.346	96	328207	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.447	117	214673	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.074	65	123758	5.14	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	102.80%	
19) Toluene-d8	8.900	98	262770	5.08	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	101.60%	
Target Compounds						
3) Chloromethane	2.799	50	8616	0.15	ug/L	88
5) Methylene Chloride	4.703	49	104286	1.52	ug/L	98
21) Tetrachloroethene	9.337	166	3892m	0.14	ug/L	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

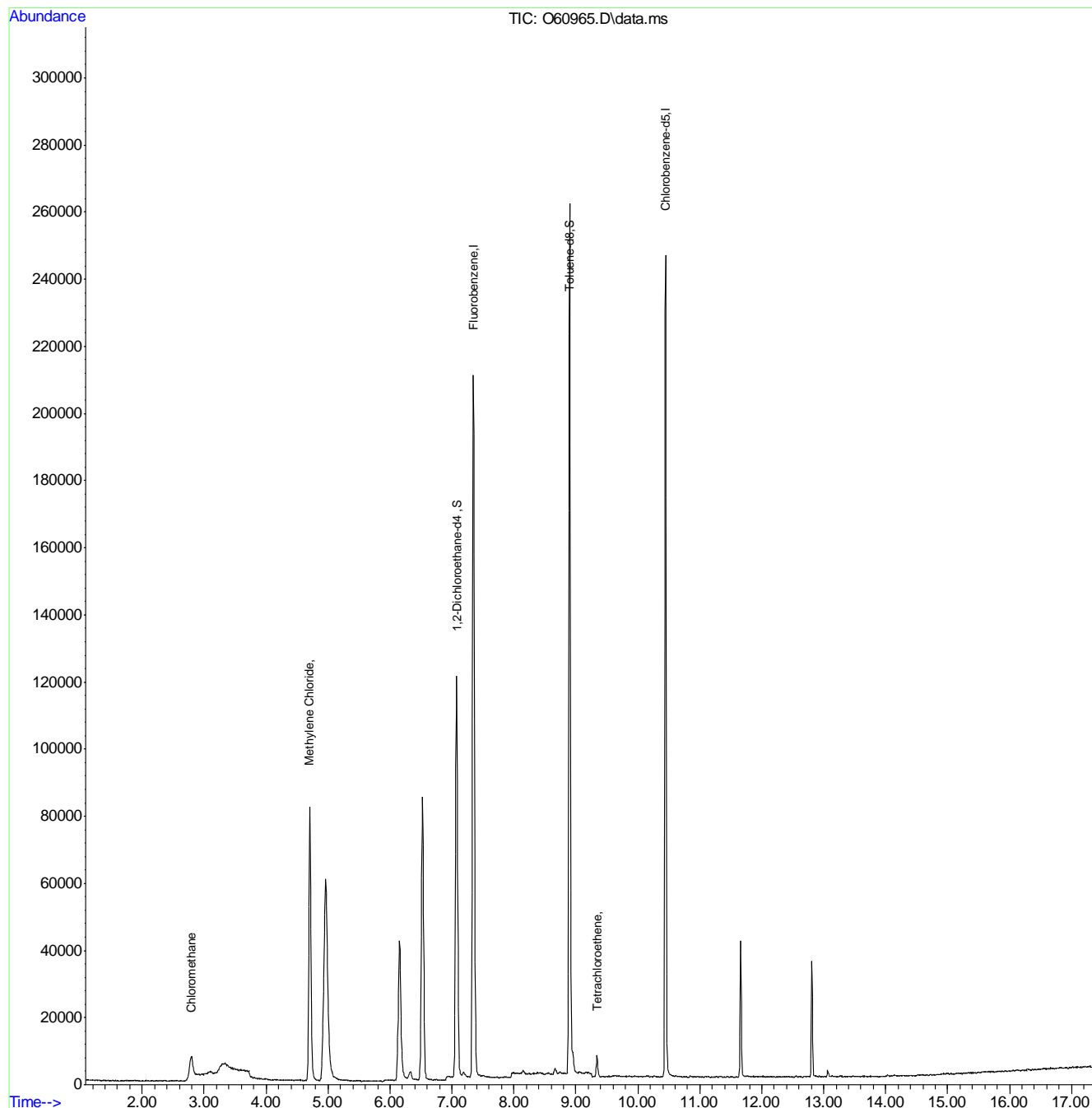
7.1.1
7

Quantitation Report (QT Reviewed)

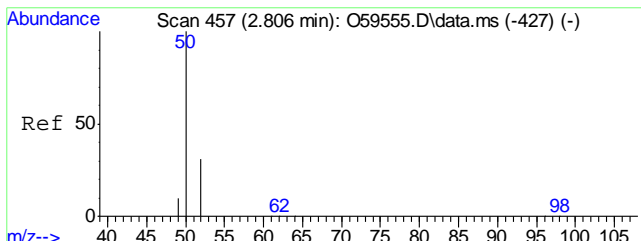
Data Path : C:\msdchem\2\data\080620\
 Data File : O60965.D
 Acq On : 6 Aug 2020 10:38 am
 Operator : amandab
 Sample : FA77472-1
 Misc : MS46912,VO2343,,,,,
 ALS Vial : 5 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Aug 06 10:58:26 2020
 Quant Method : C:\msdchem\2\methods\SIMCL070220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jul 02 13:33:54 2020
 Response via : Initial Calibration

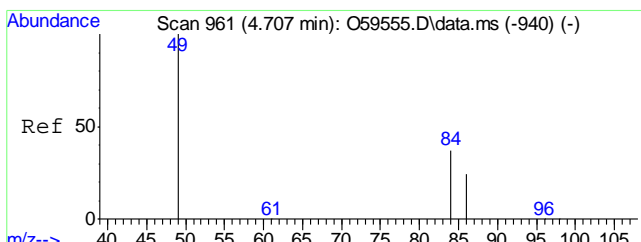
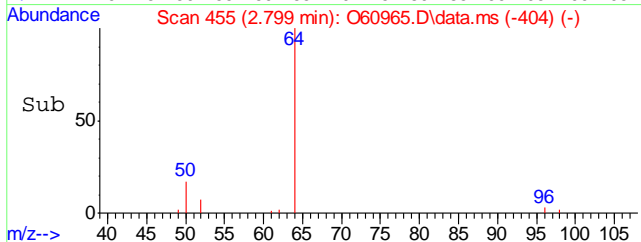
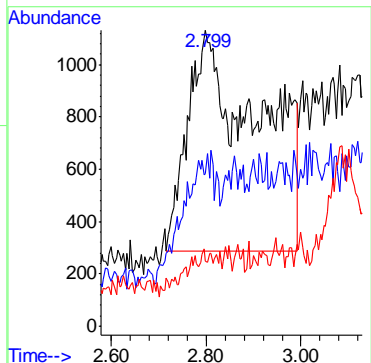
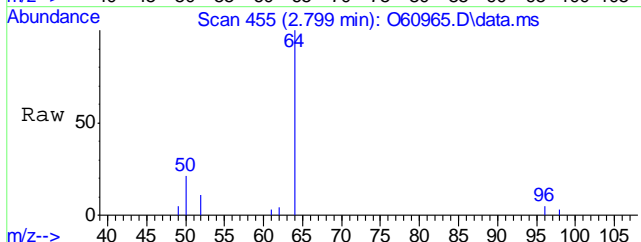


711
7



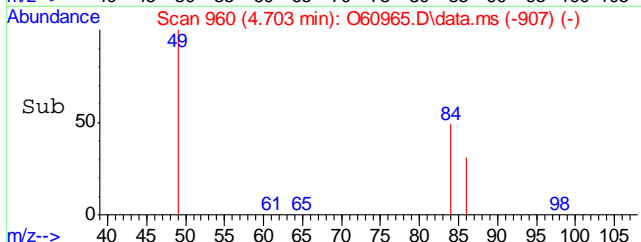
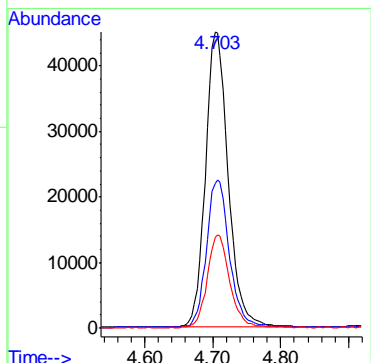
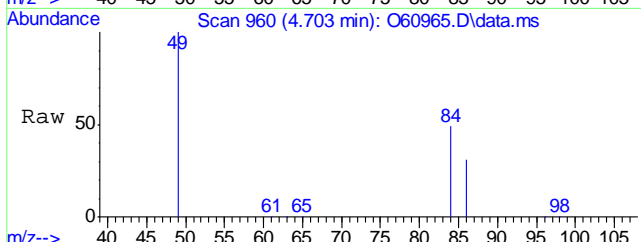
#3
 Chloromethane
 Concen: 0.15 ug/L
 RT: 2.799 min Scan# 455
 Delta R.T. -0.007 min
 Lab File: O60965.D
 Acq: 6 Aug 2020 10:38 am

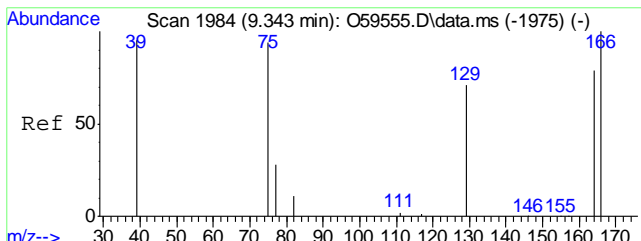
Tgt Ion	Resp	Lower	Upper
50	100		
52	36.1	8.5	48.5
49	7.4	0.0	29.8



#5
 Methylene Chloride
 Concen: 1.52 ug/L
 RT: 4.703 min Scan# 960
 Delta R.T. 0.000 min
 Lab File: O60965.D
 Acq: 6 Aug 2020 10:38 am

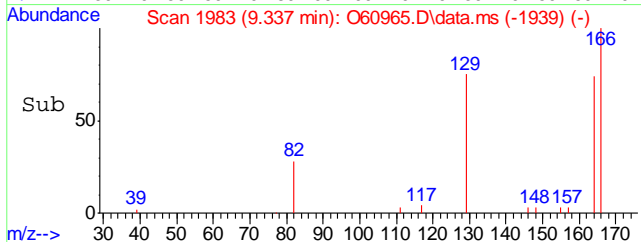
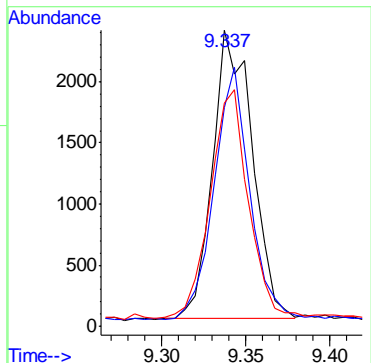
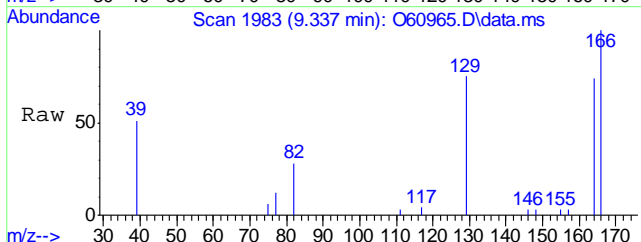
Tgt Ion	Resp	Lower	Upper
49	100		
84	48.7	17.1	77.1
86	30.7	0.0	59.3





#21
Tetrachloroethene
Concen: 0.14 ug/L m
RT: 9.337 min Scan# 1983
Delta R.T. -0.006 min
Lab File: O60965.D
Acq: 6 Aug 2020 10:38 am

Tgt Ion	Resp	Lower	Upper
166	3892		
166	100		
164	73.9	48.3	108.3
129	75.3	39.5	99.5



7.1.1
7

Manual Integration Approval Summary

Sample Number: FA77472-1

Method: SW846 8260B BY SIM

Lab FileID: O60965.D

Analyst approved: 08/06/20 11:00 Amanda Bacsko

Injection Time: 08/06/20 10:38

Supervisor approved: 08/07/20 08:32 Melissa Mangual

Parameter	CAS	Sig#	R.T. (min.)	Reason
Tetrachloroethylene	127-18-4		9.34	Poor instrument integration

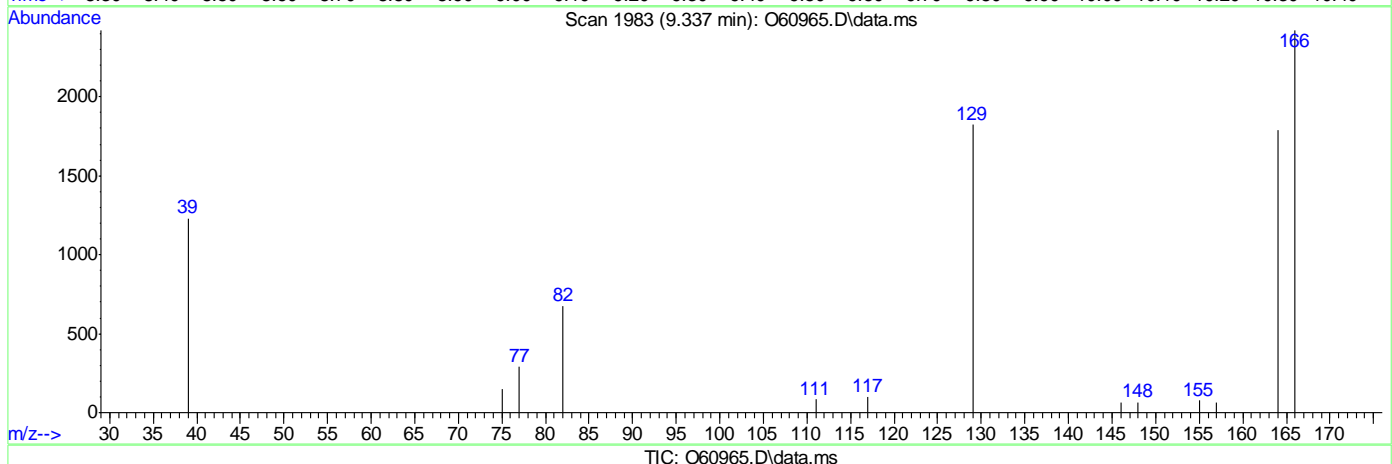
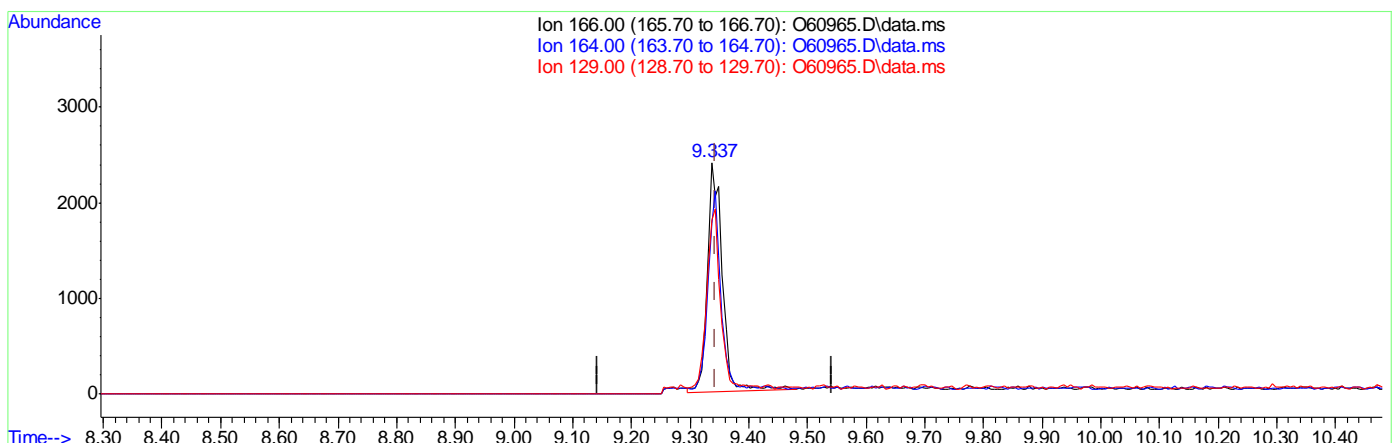
7.1.1.1

7

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\080620\
Data File : O60965.D
Acq On : 6 Aug 2020 10:38 am
Operator : amandab
Sample : FA77472-1 Inst : MSVOA12
Misc : MS46912,VO2343,,,,,
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 06 10:58:11 2020
Quant Method : C:\msdchem\2\methods\SIMCL070220.M
Quant Title : Standard Methods 6200B
QLast Update : Thu Jul 02 13:33:54 2020
Response via : Initial Calibration



(21) Tetrachloroethene ()
9.337min (-0.006) 0.16ug/L
response 4315

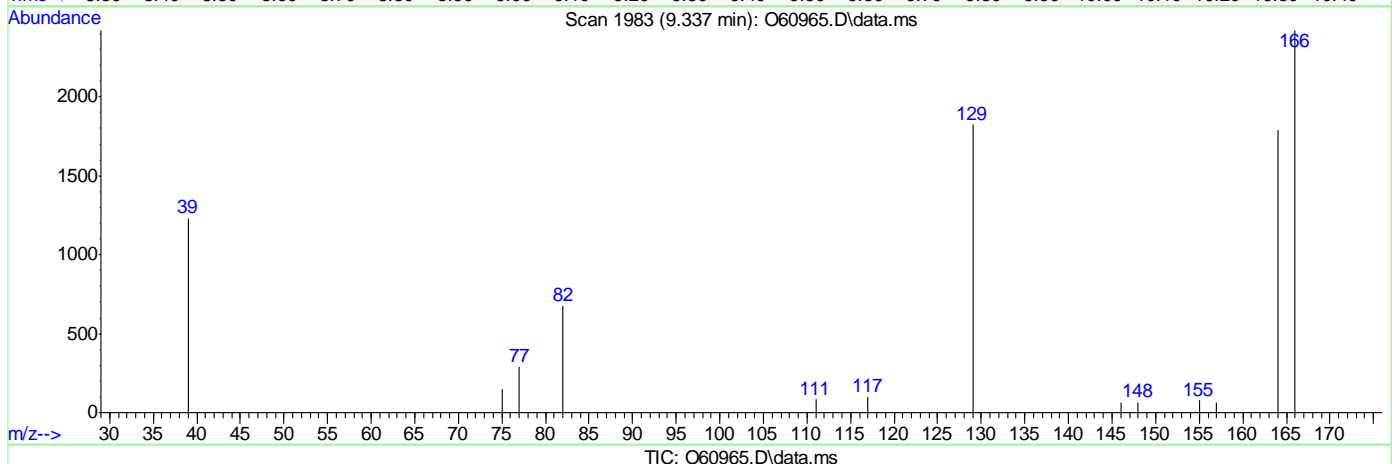
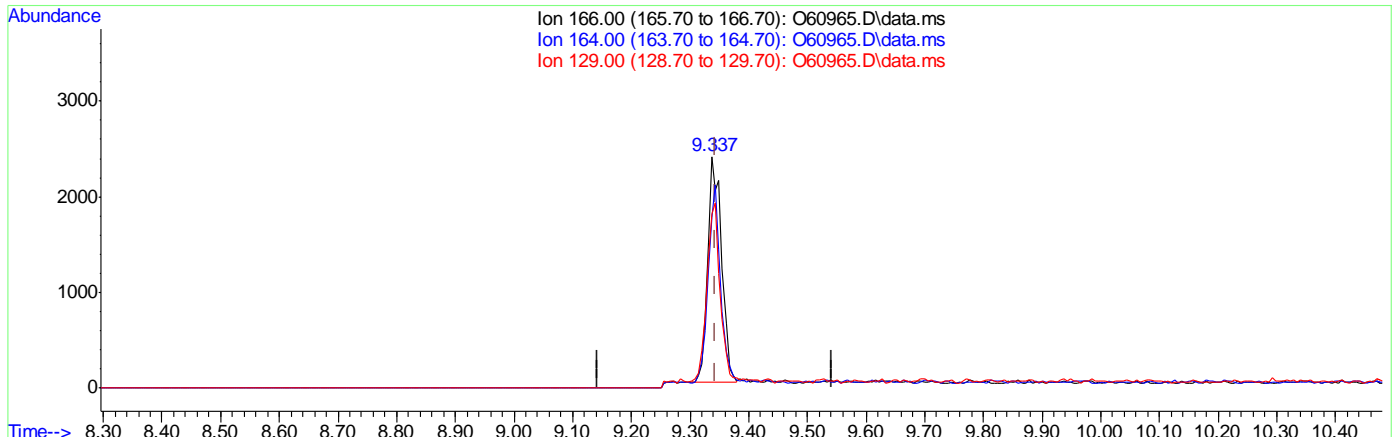
Ion	Exp%	Act%
166.00	100	100
164.00	78.30	72.75
129.00	69.50	74.01
0.00	0.00	0.00

7.1.12
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\080620\
Data File : O60965.D
Acq On : 6 Aug 2020 10:38 am
Operator : amandab
Sample : FA77472-1 Inst : MSVOA12
Misc : MS46912,VO2343,,,,,
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 06 10:58:11 2020
Quant Method : C:\msdchem\2\methods\SIMCL070220.M
Quant Title : Standard Methods 6200B
QLast Update : Thu Jul 02 13:33:54 2020
Response via : Initial Calibration



(21) Tetrachloroethene ()
9.337min (-0.006) 0.14ug/L m
response 3892
Ion Exp% Act%
166.00 100 100
164.00 78.30 73.85
129.00 69.50 75.30
0.00 0.00 0.00

7.1.1.3
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\080620\
Data File : O60966.D
Acq On : 6 Aug 2020 11:03 am
Operator : amandab
Sample : FA77472-2 Inst : MSVOA12
Misc : MS46912,VO2343,,,,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 06 11:21:43 2020
Quant Method : C:\msdchem\2\methods\SIMCL070220.M
Quant Title : Standard Methods 6200B
QLast Update : Thu Jul 02 13:33:54 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.346	96	306627	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.447	117	202825	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.074	65	116403	5.17	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	103.40%	
19) Toluene-d8	8.900	98	246244	5.04	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	100.80%	
Target Compounds						
3) Chloromethane	2.807	50	14658	0.28	ug/L	97
7) 1,1-Dichloroethane	5.518	63	21416	0.42	ug/L	96
8) cis-1,2-Dichloroethene	6.072	96	32149	1.16	ug/L	99
9) Chloroform	6.333	83	15572	0.32	ug/L	91
14) 1,2-Dichloroethane	7.139	62	6382	0.16	ug/L	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

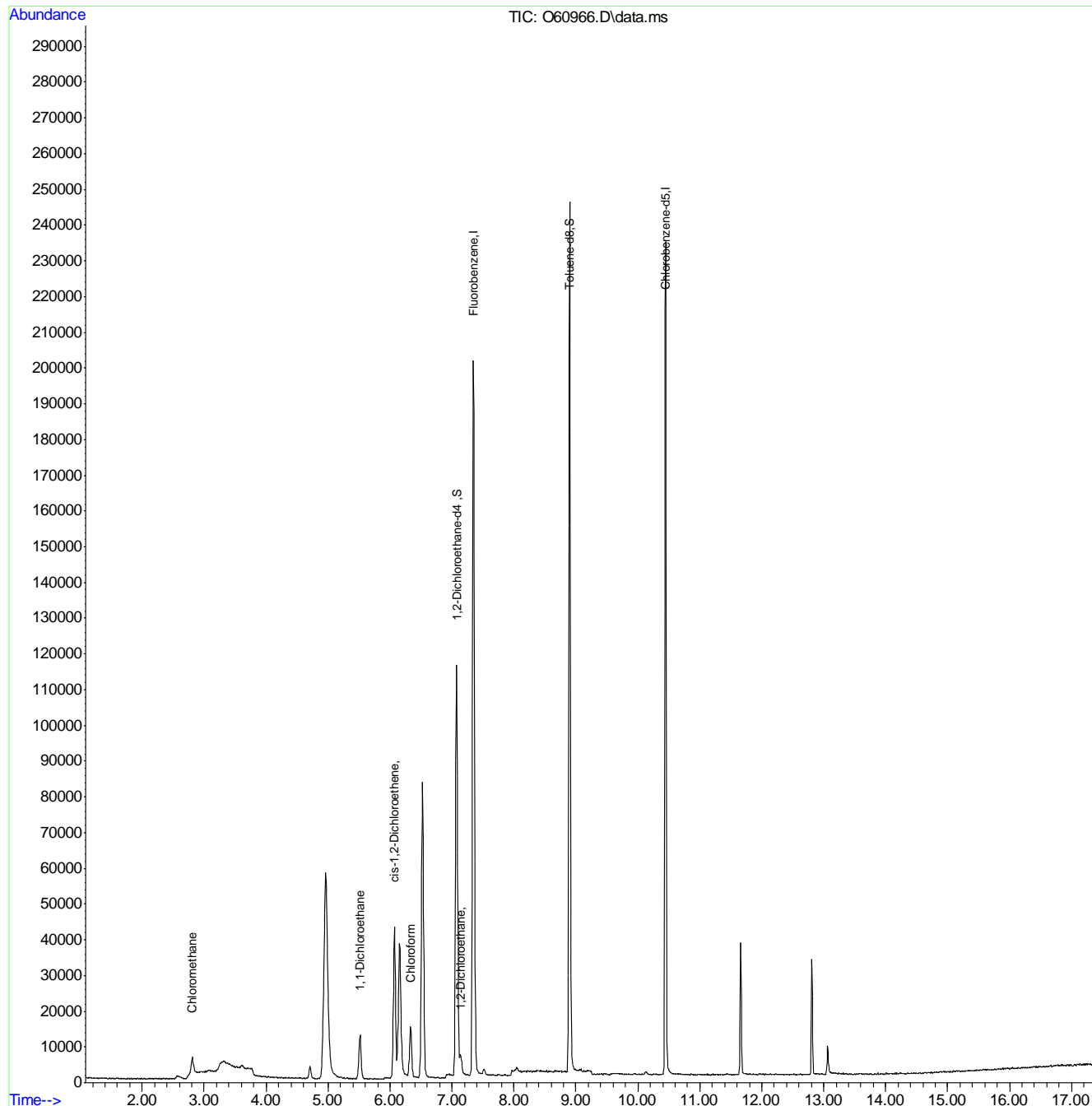
7.12
7

Quantitation Report (QT Reviewed)

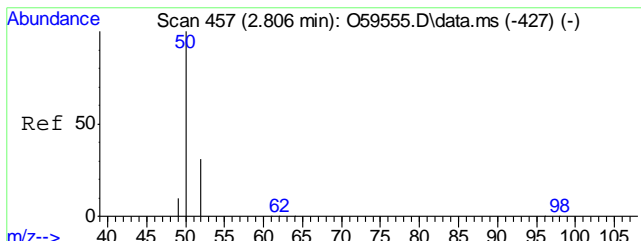
Data Path : C:\msdchem\2\data\080620\
 Data File : O60966.D
 Acq On : 6 Aug 2020 11:03 am
 Operator : amandab
 Sample : FA77472-2
 Misc : MS46912,VO2343,,,,,
 ALS Vial : 6 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Aug 06 11:21:43 2020
 Quant Method : C:\msdchem\2\methods\SIMCL070220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jul 02 13:33:54 2020
 Response via : Initial Calibration

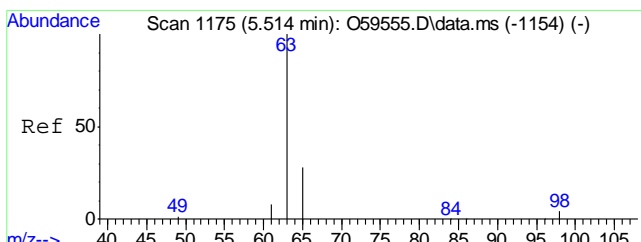
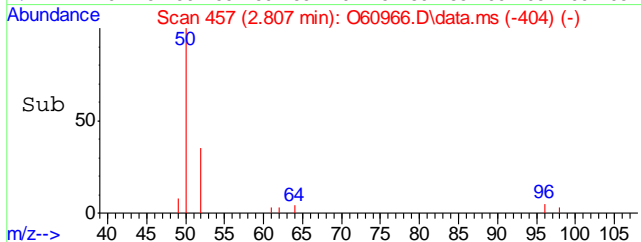
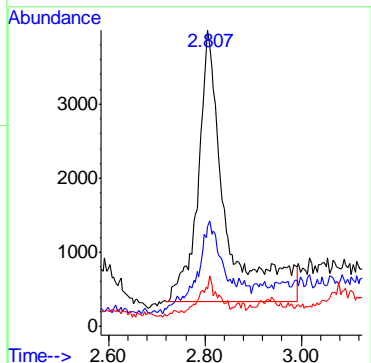
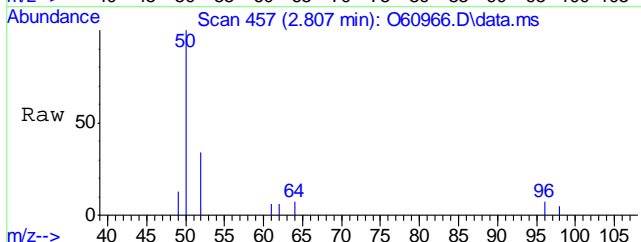


7.1.2
7



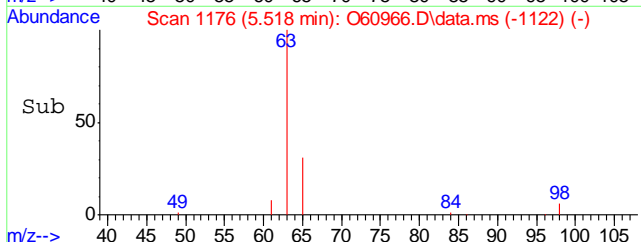
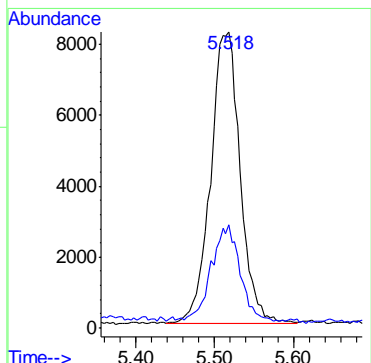
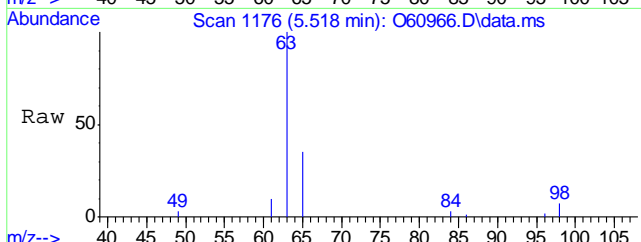
#3
 Chloromethane
 Concen: 0.28 ug/L
 RT: 2.807 min Scan# 457
 Delta R.T. 0.001 min
 Lab File: O60966.D
 Acq: 6 Aug 2020 11:03 am

Tgt Ion	Resp	Lower	Upper
50	14658		
52	30.6	8.5	48.5
49	10.0	0.0	29.8

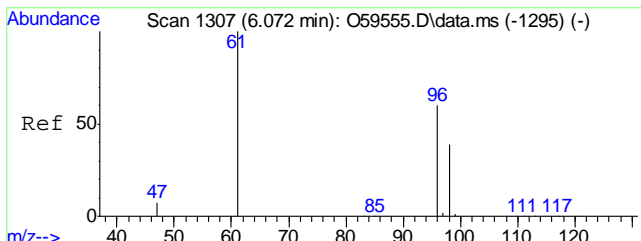


#7
 1,1-Dichloroethane
 Concen: 0.42 ug/L
 RT: 5.518 min Scan# 1176
 Delta R.T. 0.004 min
 Lab File: O60966.D
 Acq: 6 Aug 2020 11:03 am

Tgt Ion	Resp	Lower	Upper
63	21416		
65	33.0	0.7	60.7

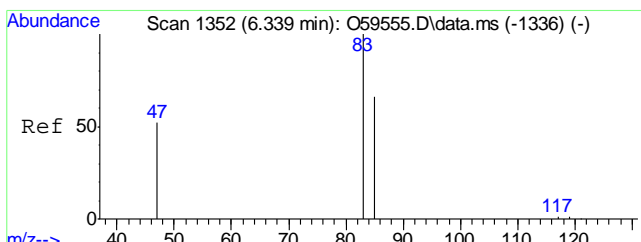
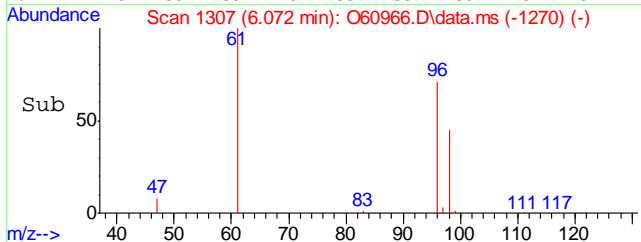
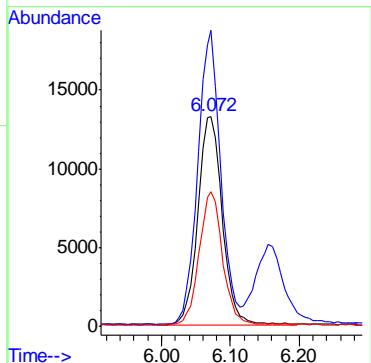
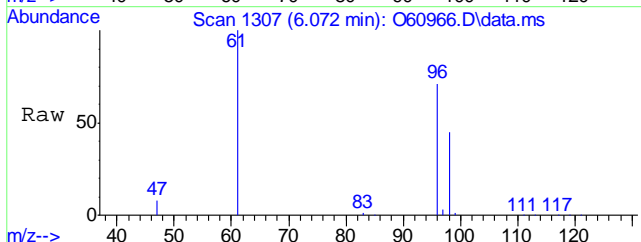


7.12
7



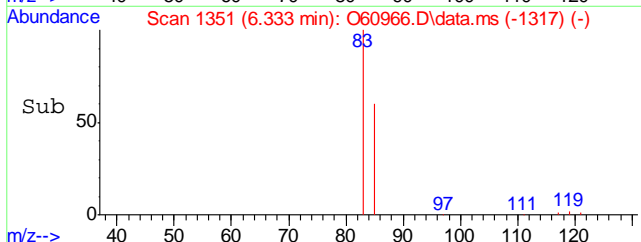
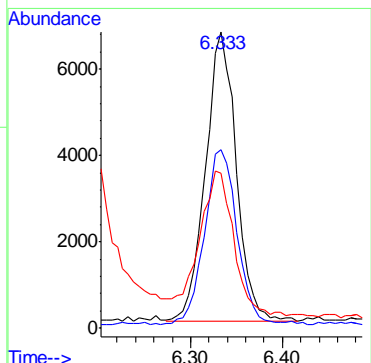
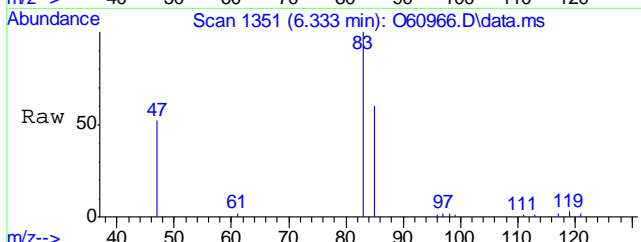
#8
 cis-1,2-Dichloroethene
 Concen: 1.16 ug/L
 RT: 6.072 min Scan# 1307
 Delta R.T. 0.000 min
 Lab File: O60966.D
 Acq: 6 Aug 2020 11:03 am

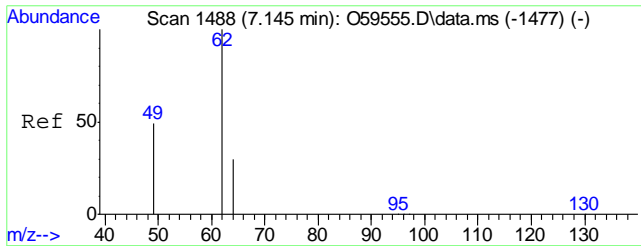
Tgt Ion	Resp	Lower	Upper
96	32149		
96	100		
61	141.0	110.0	170.0
98	63.6	34.1	94.1



#9
 Chloroform
 Concen: 0.32 ug/L
 RT: 6.333 min Scan# 1351
 Delta R.T. -0.000 min
 Lab File: O60966.D
 Acq: 6 Aug 2020 11:03 am

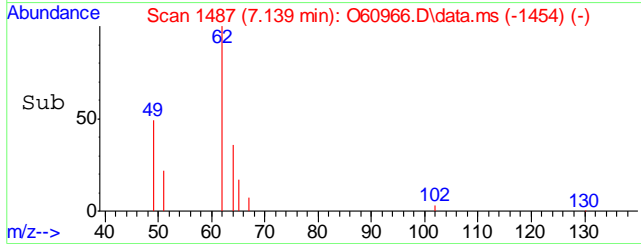
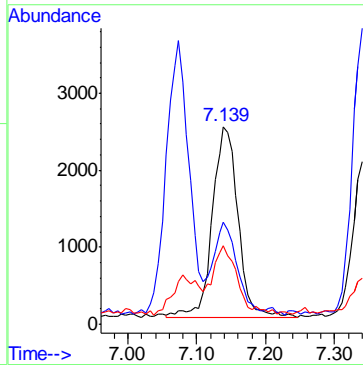
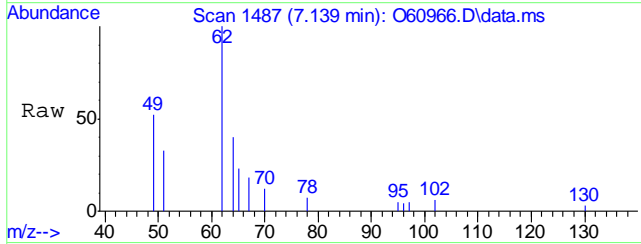
Tgt Ion	Resp	Lower	Upper
83	15572		
83	100		
85	60.3	34.7	94.7
47	48.6	9.0	69.0





#14
 1,2-Dichloroethane
 Concen: 0.16 ug/L
 RT: 7.139 min Scan# 1487
 Delta R.T. -0.006 min
 Lab File: O60966.D
 Acq: 6 Aug 2020 11:03 am

Tgt Ion	Resp	Lower	Upper
62	100		
49	47.5	17.8	77.8
64	35.2	1.3	61.3



7.12
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\080620\
 Data File : O60967.D
 Acq On : 6 Aug 2020 11:27 am
 Operator : amandab
 Sample : FA77472-3 Inst : MSVOA12
 Misc : MS46912,VO2343,,,,,
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 06 11:45:16 2020
 Quant Method : C:\msdchem\2\methods\SIMCL070220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jul 02 13:33:54 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.346	96	290363	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.447	117	197846	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.073	65	111854	5.25	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	105.00%	
19) Toluene-d8	8.900	98	233392	4.90	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	98.00%	
Target Compounds						
						Qvalue
3) Chloromethane	2.806	50	19581	0.39	ug/L	93
7) 1,1-Dichloroethane	5.510	63	14658	0.30	ug/L	94
8) cis-1,2-Dichloroethene	6.066	96	34747	1.33	ug/L	96
9) Chloroform	6.333	83	11784	0.25	ug/L	93
14) 1,2-Dichloroethane	7.139	62	4546	0.12	ug/L	90
15) Trichloroethene	7.512	95	89099	3.15	ug/L	97
21) Tetrachloroethene	9.343	166	4867m	0.19	ug/L	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

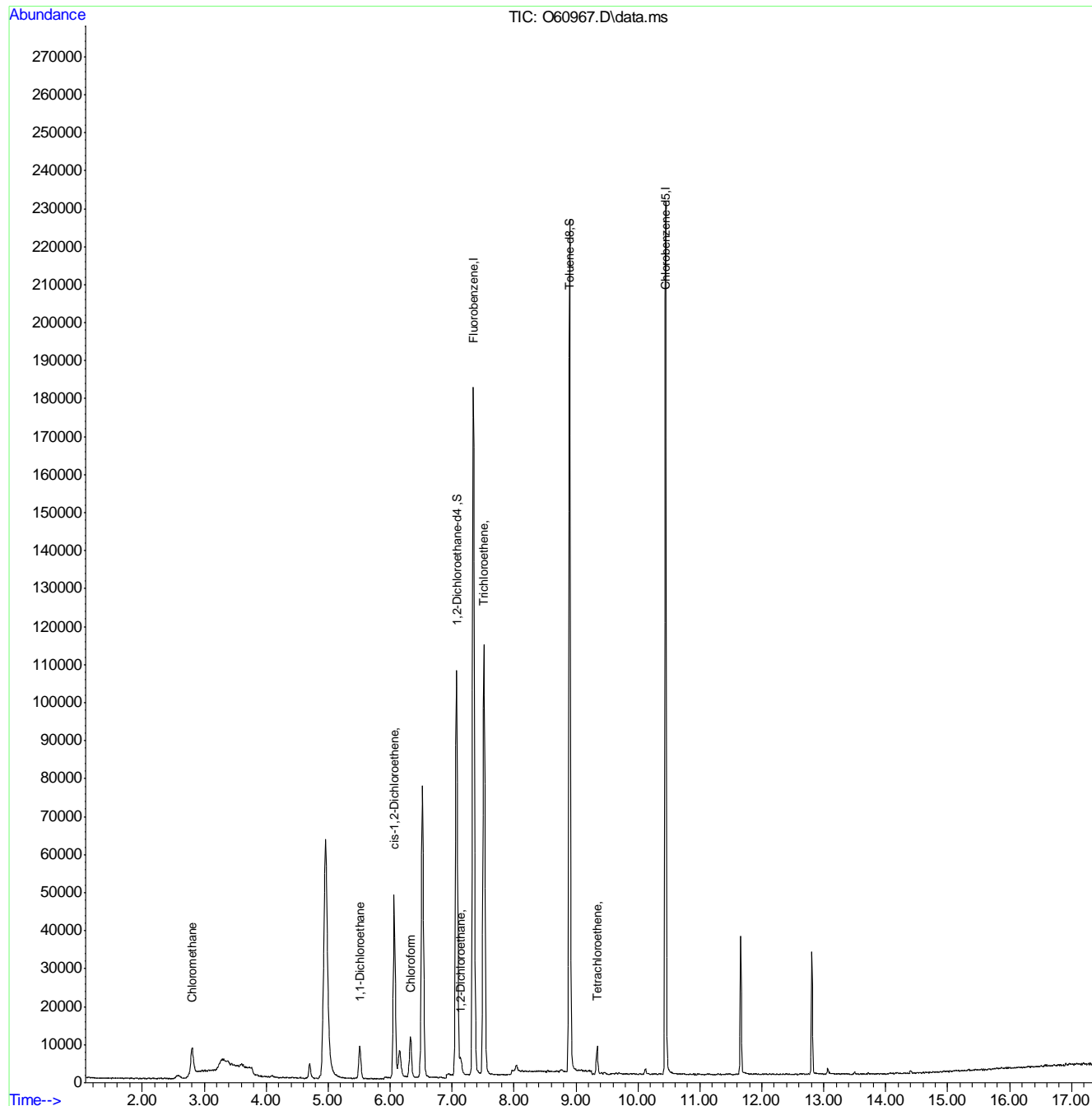
7.1.3
7

Quantitation Report (QT Reviewed)

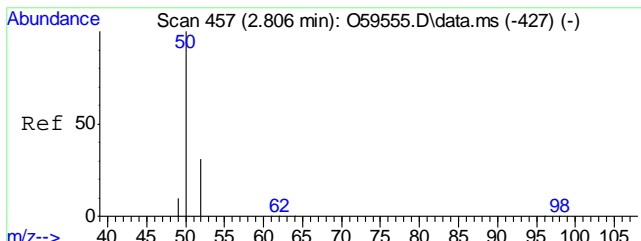
Data Path : C:\msdchem\2\data\080620\
 Data File : O60967.D
 Acq On : 6 Aug 2020 11:27 am
 Operator : amandab
 Sample : FA77472-3
 Misc : MS46912,VO2343,,,,,
 ALS Vial : 7 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Aug 06 11:45:16 2020
 Quant Method : C:\msdchem\2\methods\SIMCL070220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jul 02 13:33:54 2020
 Response via : Initial Calibration

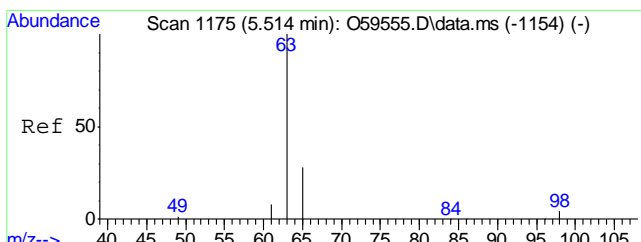
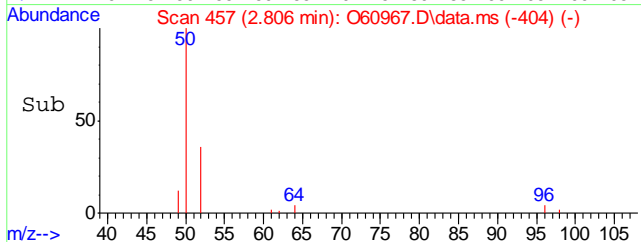
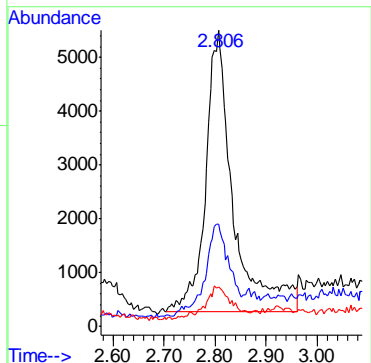
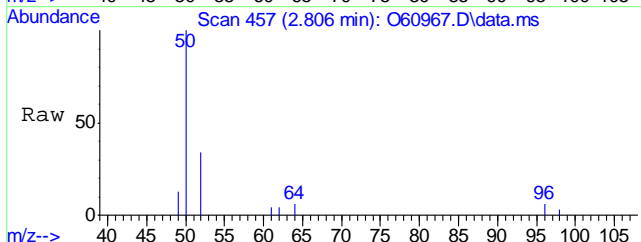


7.1.3
7



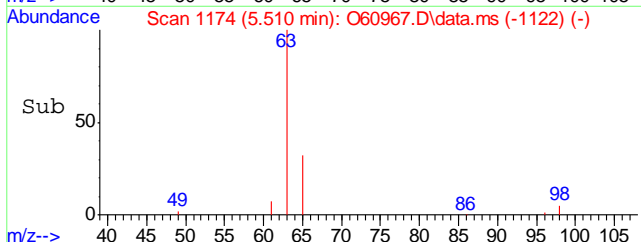
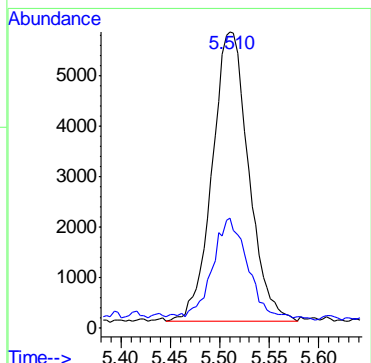
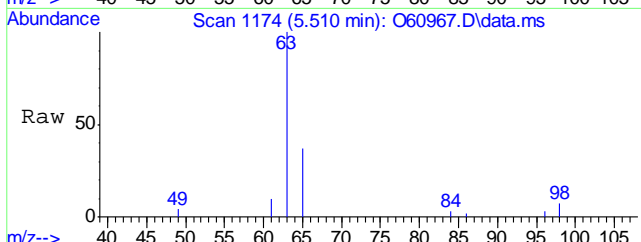
#3
Chloromethane
Concen: 0.39 ug/L
RT: 2.806 min Scan# 457
Delta R.T. 0.000 min
Lab File: O60967.D
Acq: 6 Aug 2020 11:27 am

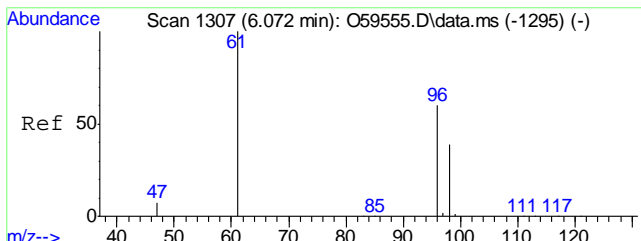
Tgt Ion	Resp	Lower	Upper
50	19581		
52	32.4	8.5	48.5
49	11.6	0.0	29.8



#7
1,1-Dichloroethane
Concen: 0.30 ug/L
RT: 5.510 min Scan# 1174
Delta R.T. -0.004 min
Lab File: O60967.D
Acq: 6 Aug 2020 11:27 am

Tgt Ion	Resp	Lower	Upper
63	14658		
65	34.0	0.7	60.7

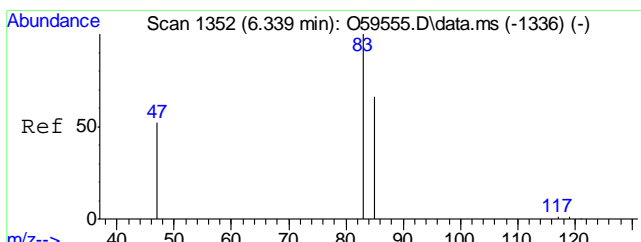
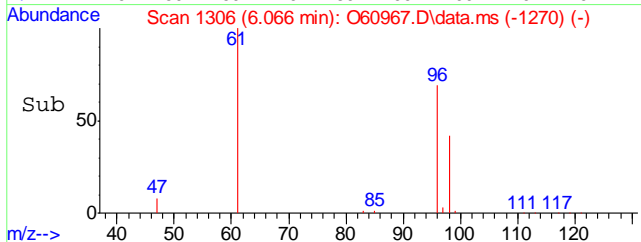
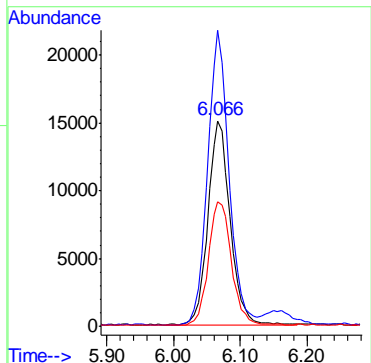
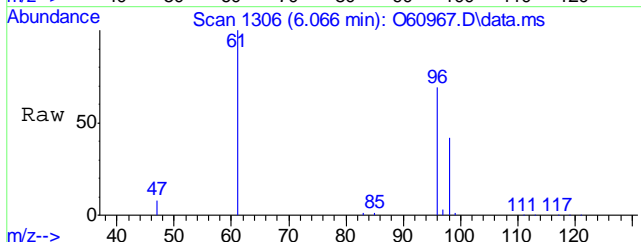




#8
 cis-1,2-Dichloroethene
 Concen: 1.33 ug/L
 RT: 6.066 min Scan# 1306
 Delta R.T. -0.006 min
 Lab File: O60967.D
 Acq: 6 Aug 2020 11:27 am

Tgt Ion: 96 Resp: 34747

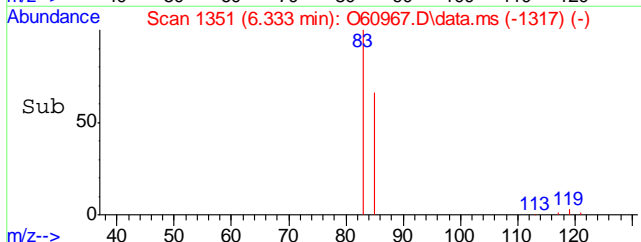
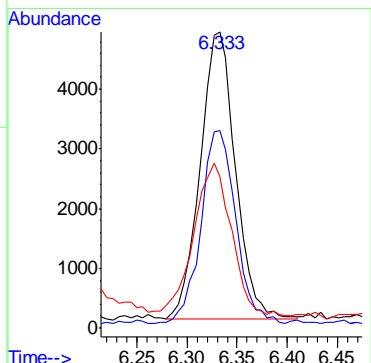
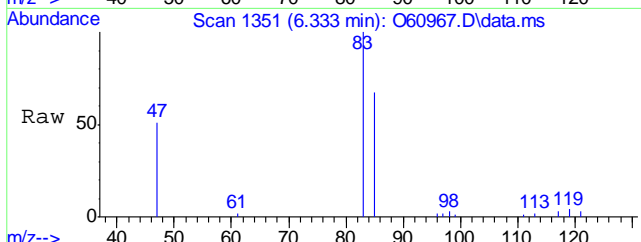
Ion	Ratio	Lower	Upper
96	100		
61	144.4	110.0	170.0
98	60.4	34.1	94.1

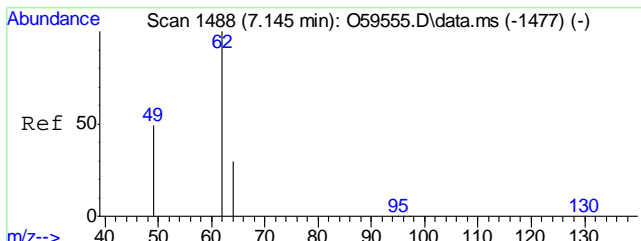


#9
 Chloroform
 Concen: 0.25 ug/L
 RT: 6.333 min Scan# 1351
 Delta R.T. -0.000 min
 Lab File: O60967.D
 Acq: 6 Aug 2020 11:27 am

Tgt Ion: 83 Resp: 11784

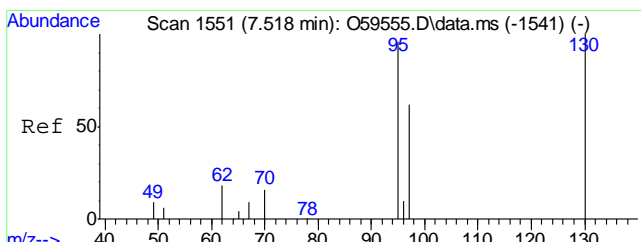
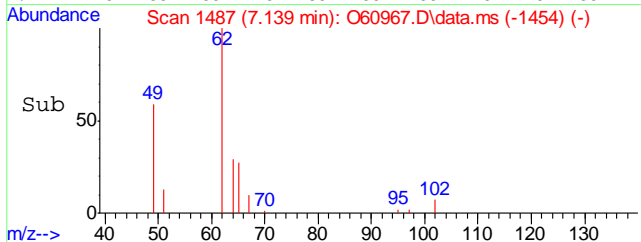
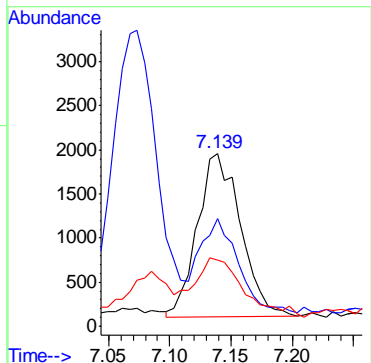
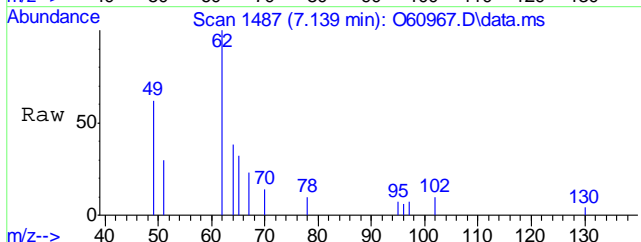
Ion	Ratio	Lower	Upper
83	100		
85	66.7	34.7	94.7
47	47.9	9.0	69.0





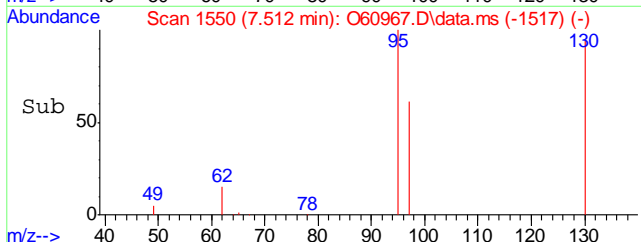
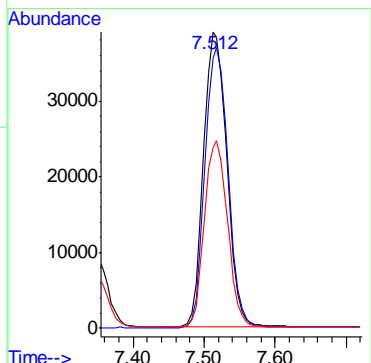
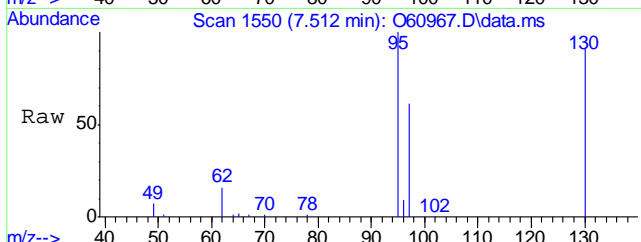
#14
1,2-Dichloroethane
Concen: 0.12 ug/L
RT: 7.139 min Scan# 1487
Delta R.T. -0.006 min
Lab File: O60967.D
Acq: 6 Aug 2020 11:27 am

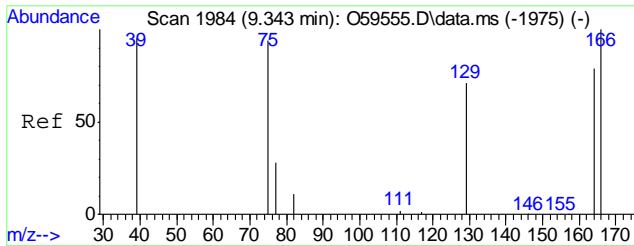
Tgt Ion	Resp	Lower	Upper
62	4546		
49	57.5	17.8	77.8
64	32.7	1.3	61.3



#15
Trichloroethene
Concen: 3.15 ug/L
RT: 7.512 min Scan# 1550
Delta R.T. -0.006 min
Lab File: O60967.D
Acq: 6 Aug 2020 11:27 am

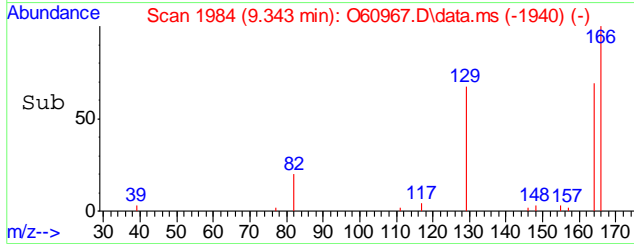
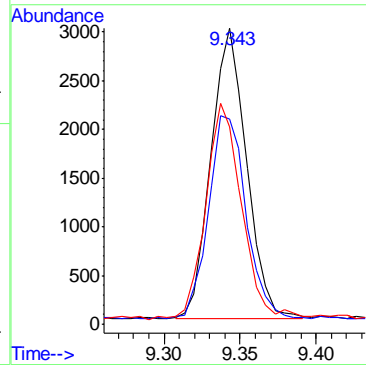
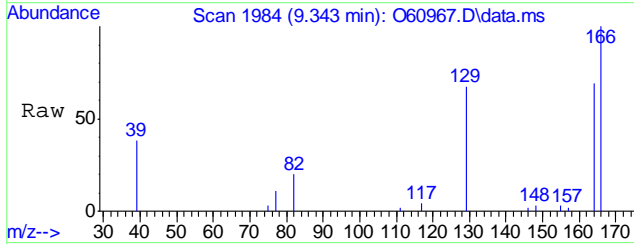
Tgt Ion	Resp	Lower	Upper
95	89099		
130	91.2	63.4	123.4
97	61.1	35.0	95.0





#21
 Tetrachloroethene
 Concen: 0.19 ug/L m
 RT: 9.343 min Scan# 1984
 Delta R.T. 0.000 min
 Lab File: O60967.D
 Acq: 6 Aug 2020 11:27 am

Tgt Ion	Resp	Lower	Upper
166	4867		
164	69.4	48.3	108.3
129	66.7	39.5	99.5



7.1.3
7

Manual Integration Approval Summary

Sample Number: FA77472-3

Method: SW846 8260B BY SIM

Lab FileID: O60967.D

Analyst approved: 08/06/20 11:46 Amanda Bacsko

Injection Time: 08/06/20 11:27

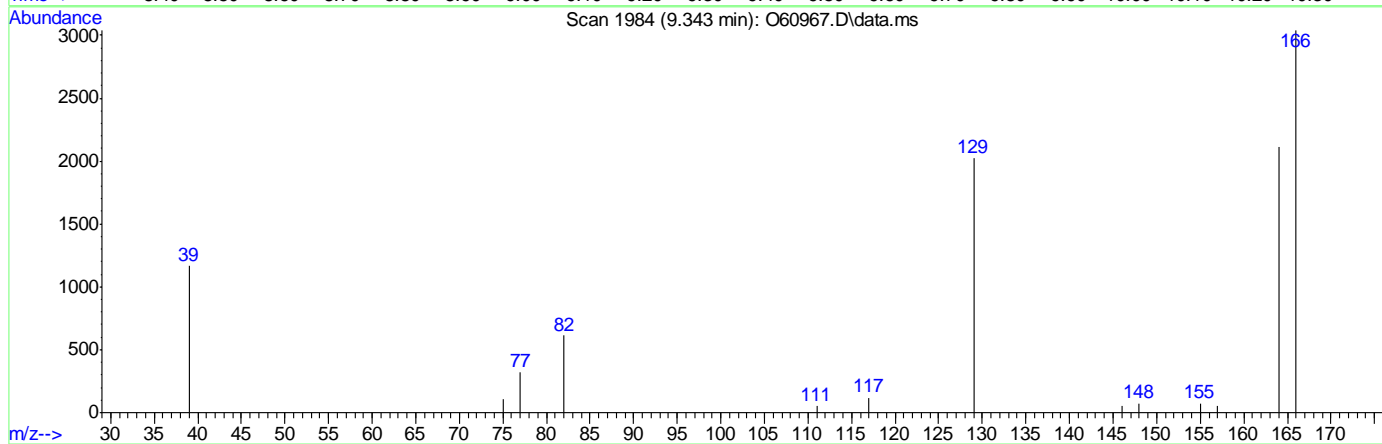
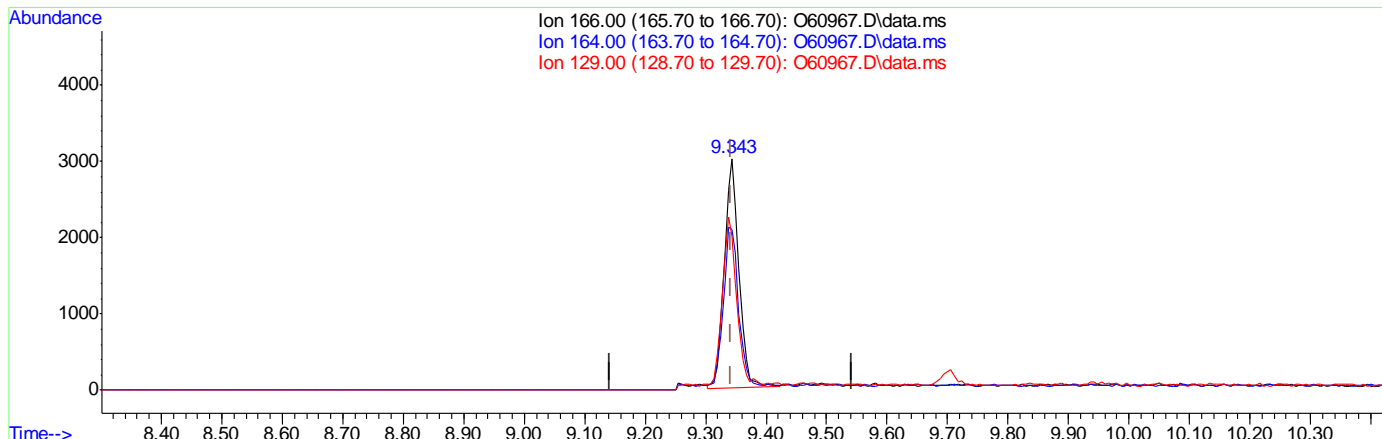
Supervisor approved: 08/07/20 08:33 Melissa Mangual

Parameter	CAS	Sig#	R.T. (min.)	Reason
Tetrachloroethylene	127-18-4		9.34	Poor instrument integration

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\080620\
 Data File : O60967.D
 Acq On : 6 Aug 2020 11:27 am
 Operator : amandab
 Sample : FA77472-3 Inst : MSVOA12
 Misc : MS46912,VO2343,,,,,
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 06 11:44:47 2020
 Quant Method : C:\msdchem\2\methods\SIMCL070220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jul 02 13:33:54 2020
 Response via : Initial Calibration



(21) Tetrachloroethene ()

9.343min (+0.000) 0.20ug/L

response 5066

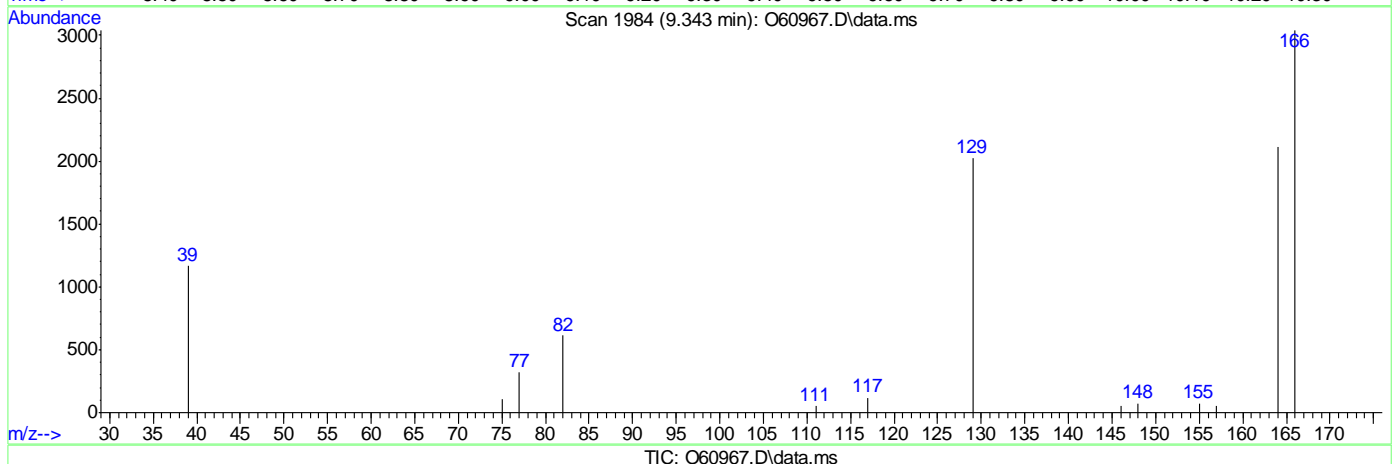
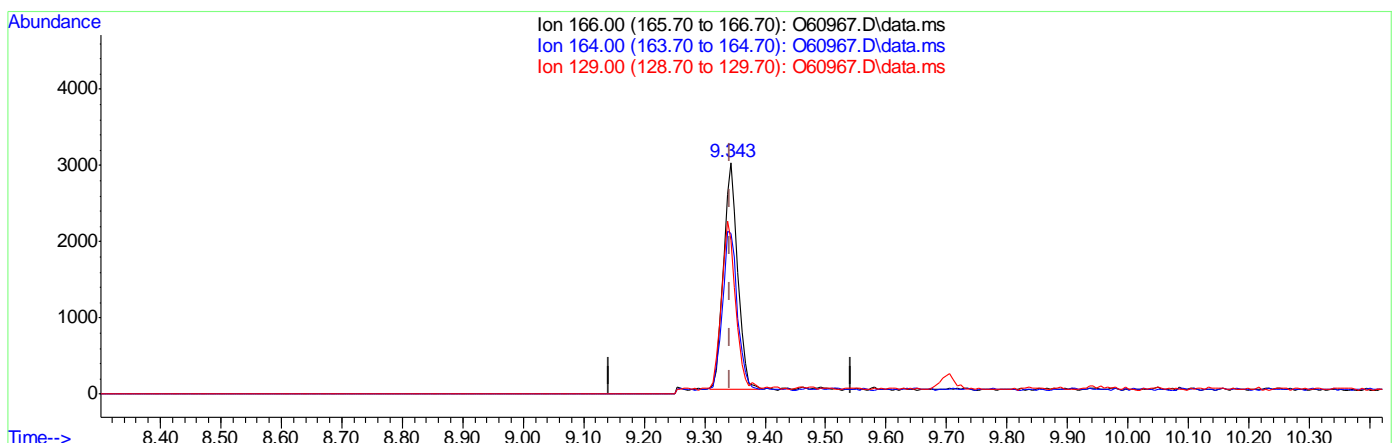
Ion	Exp%	Act%
166.00	100	100
164.00	78.30	68.71
129.00	69.50	65.46
0.00	0.00	0.00

7.1.3.2
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\080620\
Data File : O60967.D
Acq On : 6 Aug 2020 11:27 am
Operator : amandab
Sample : FA77472-3 Inst : MSVOA12
Misc : MS46912,VO2343,,,,,
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 06 11:44:47 2020
Quant Method : C:\msdchem\2\methods\SIMCL070220.M
Quant Title : Standard Methods 6200B
QLast Update : Thu Jul 02 13:33:54 2020
Response via : Initial Calibration



(21) Tetrachloroethene ()
9.343min (+0.000) 0.19ug/L m
response 4867

Ion	Exp%	Act%
166.00	100	100
164.00	78.30	69.43
129.00	69.50	66.67
0.00	0.00	0.00

7.1.3.3
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\080620\
 Data File : O60968.D
 Acq On : 6 Aug 2020 11:51 am
 Operator : amandab
 Sample : FA77472-4 Inst : MSVOA12
 Misc : MS46912,VO2343,,,,,
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 06 12:08:45 2020
 Quant Method : C:\msdchem\2\methods\SIMCL070220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jul 02 13:33:54 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.346	96	272196	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.447	117	182463	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.074	65	105887	5.30	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	106.00%	
19) Toluene-d8	8.900	98	218024	4.96	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	99.20%	
Target Compounds						
7) 1,1-Dichloroethane	5.514	63	17937	0.39	ug/L	99
8) cis-1,2-Dichloroethene	6.072	96	41013	1.67	ug/L	98
9) Chloroform	6.333	83	13696	0.31	ug/L	94
14) 1,2-Dichloroethane	7.145	62	4842	0.14	ug/L	99
15) Trichloroethene	7.518	95	12079	0.45	ug/L	96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

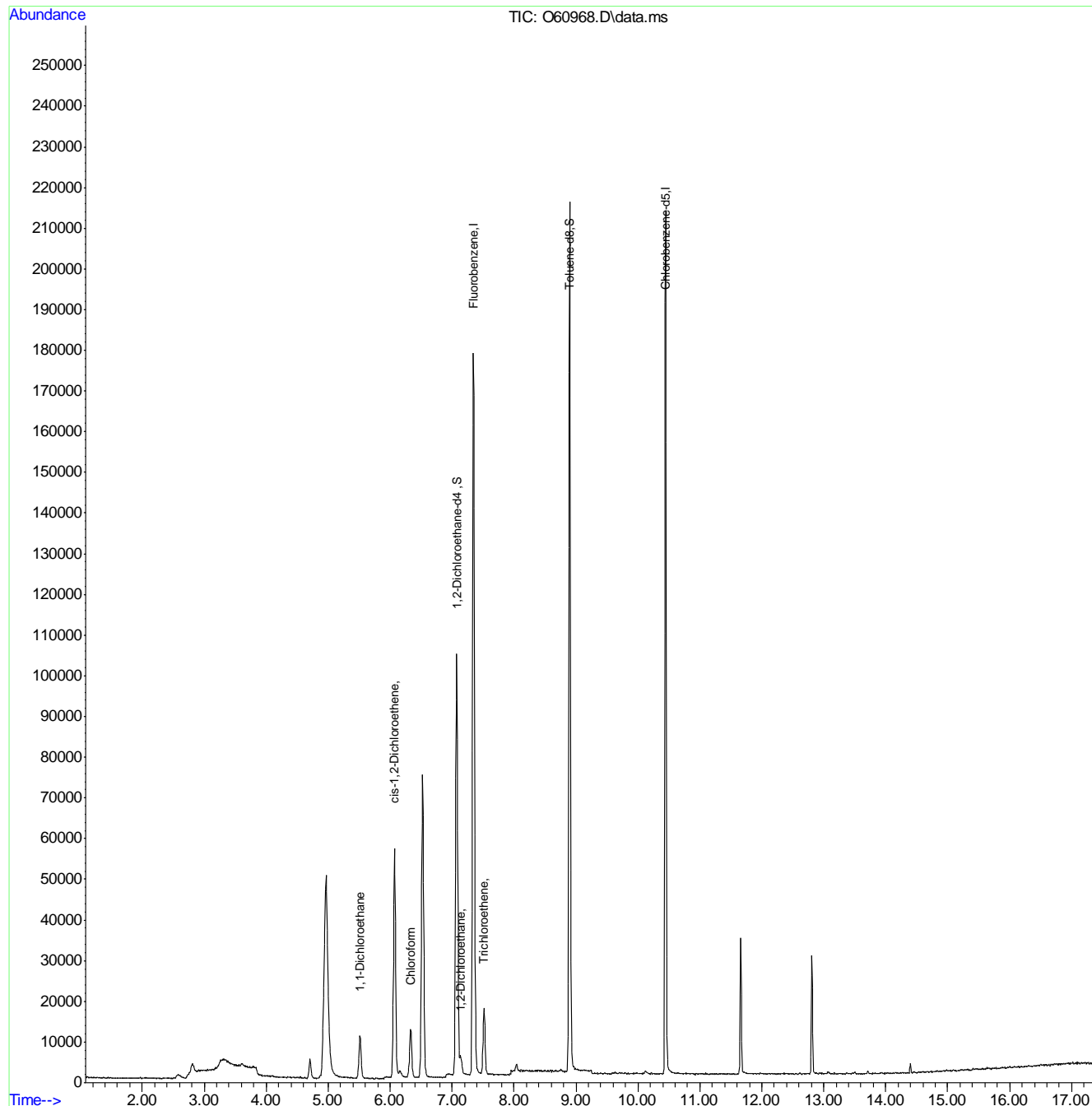
7.14
7

Quantitation Report (QT Reviewed)

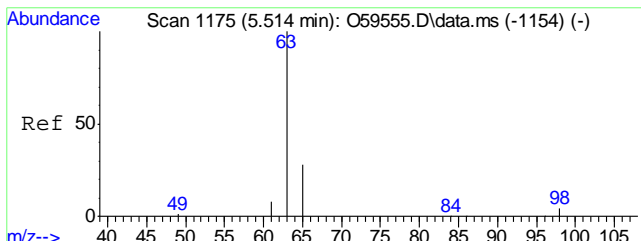
Data Path : C:\msdchem\2\data\080620\
 Data File : O60968.D
 Acq On : 6 Aug 2020 11:51 am
 Operator : amandab
 Sample : FA77472-4
 Misc : MS46912,VO2343,,,,,
 ALS Vial : 8 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Aug 06 12:08:45 2020
 Quant Method : C:\msdchem\2\methods\SIMCL070220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jul 02 13:33:54 2020
 Response via : Initial Calibration

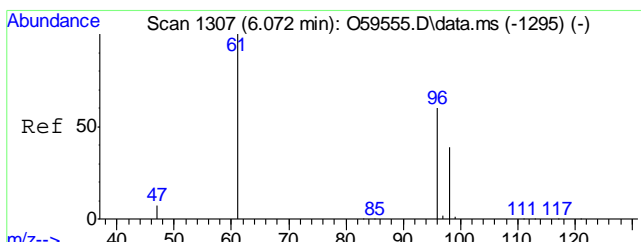
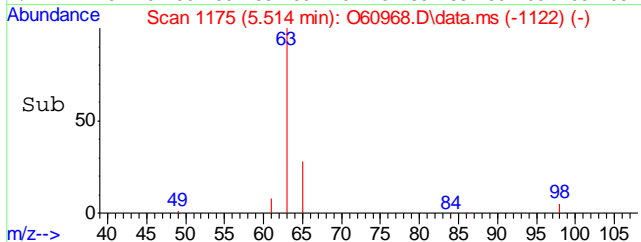
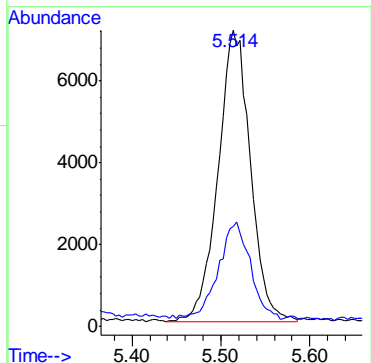
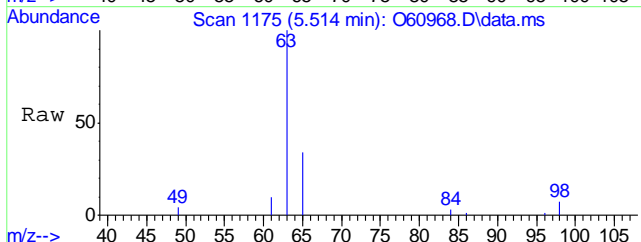


7.1.4
7



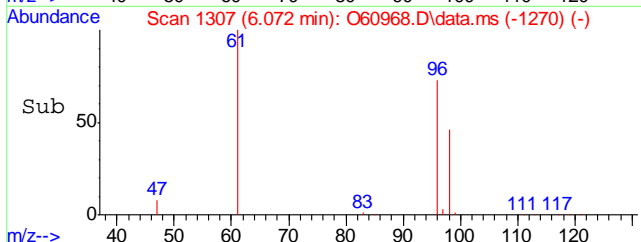
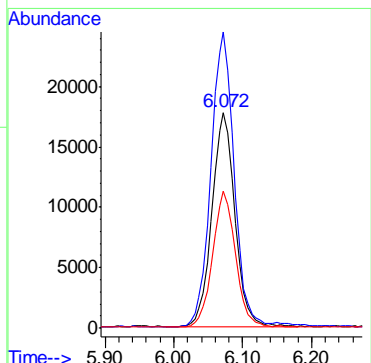
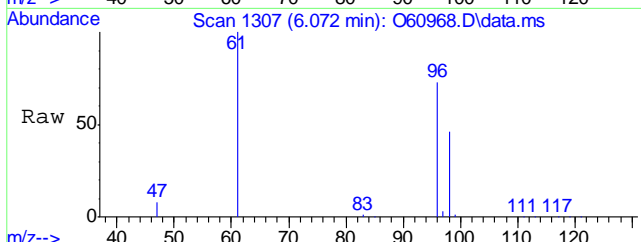
#7
 1,1-Dichloroethane
 Concen: 0.39 ug/L
 RT: 5.514 min Scan# 1175
 Delta R.T. -0.000 min
 Lab File: O60968.D
 Acq: 6 Aug 2020 11:51 am

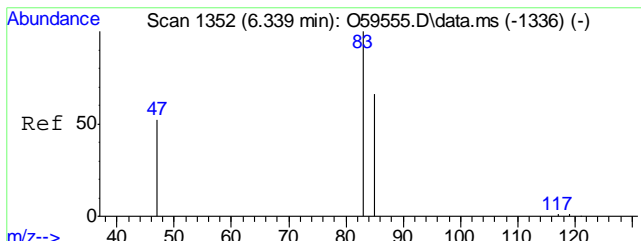
Tgt Ion	Resp	Lower	Upper
63	17937		
65	31.4	0.7	60.7



#8
 cis-1,2-Dichloroethene
 Concen: 1.67 ug/L
 RT: 6.072 min Scan# 1307
 Delta R.T. 0.000 min
 Lab File: O60968.D
 Acq: 6 Aug 2020 11:51 am

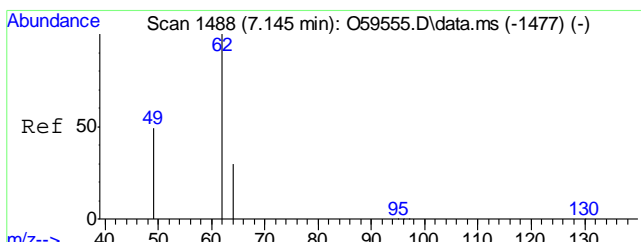
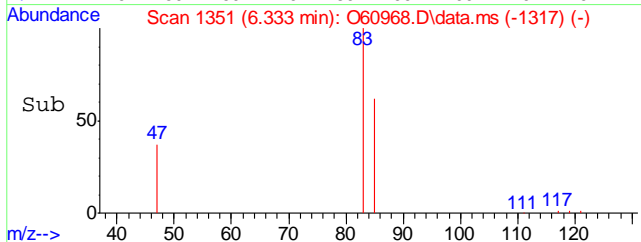
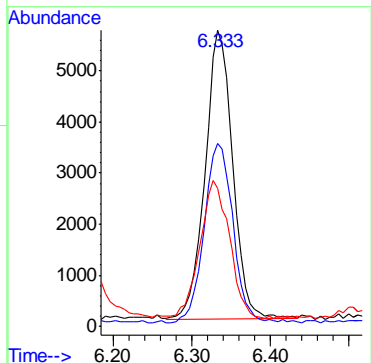
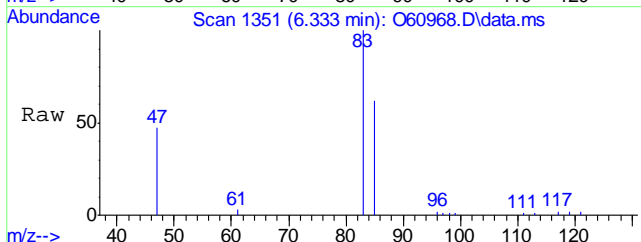
Tgt Ion	Resp	Lower	Upper
96	41013		
61	137.3	110.0	170.0
98	63.5	34.1	94.1





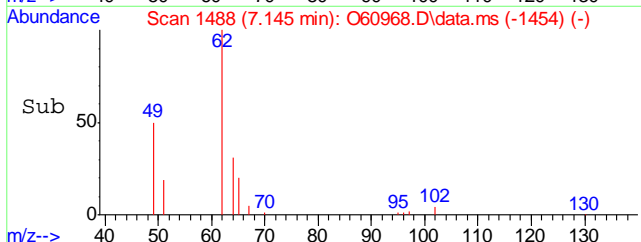
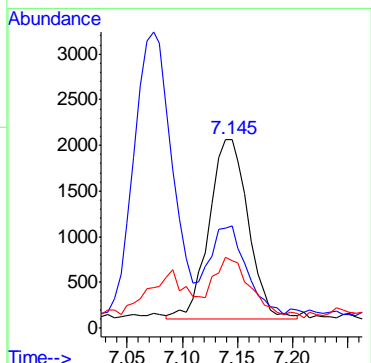
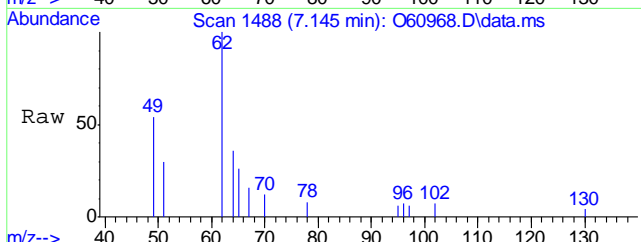
#9
Chloroform
Concen: 0.31 ug/L
RT: 6.333 min Scan# 1351
Delta R.T. -0.000 min
Lab File: O60968.D
Acq: 6 Aug 2020 11:51 am

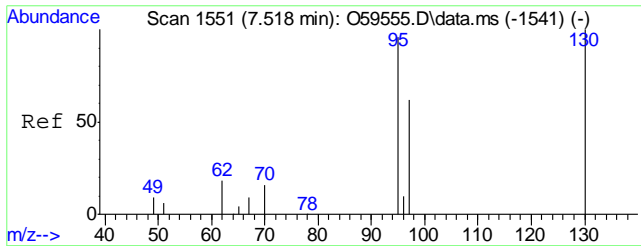
Tgt Ion	Resp	Lower	Upper
83	13696		
85	61.9	34.7	94.7
47	44.5	9.0	69.0



#14
1,2-Dichloroethane
Concen: 0.14 ug/L
RT: 7.145 min Scan# 1488
Delta R.T. -0.000 min
Lab File: O60968.D
Acq: 6 Aug 2020 11:51 am

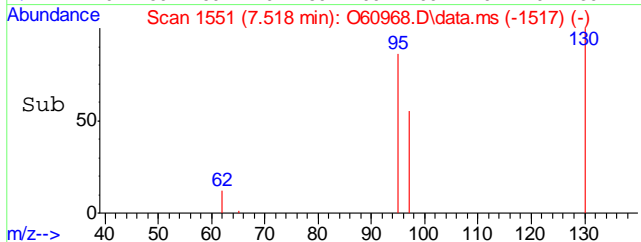
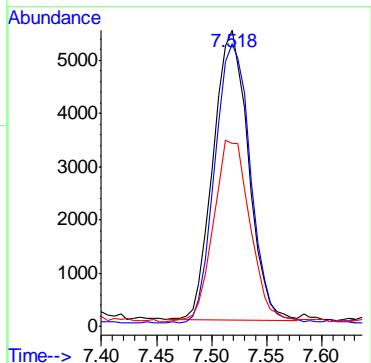
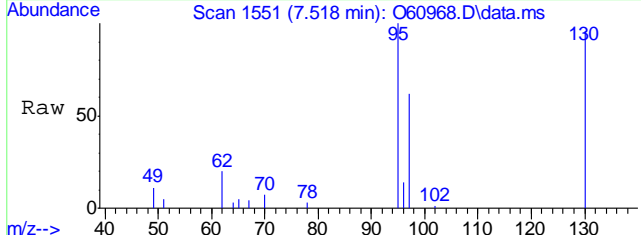
Tgt Ion	Resp	Lower	Upper
62	4842		
49	48.1	17.8	77.8
64	30.2	1.3	61.3





#15
 Trichloroethene
 Concen: 0.45 ug/L
 RT: 7.518 min Scan# 1551
 Delta R.T. 0.000 min
 Lab File: O60968.D
 Acq: 6 Aug 2020 11:51 am

Tgt Ion	Resp	Lower	Upper
95	12079		
95	100		
130	96.8	63.4	123.4
97	61.9	35.0	95.0



7.14
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\080620\
Data File : O60969.D
Acq On : 6 Aug 2020 12:14 pm
Operator : amandab
Sample : FA77472-5 Inst : MSVOA12
Misc : MS46912,VO2343,,,,,
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 06 12:38:09 2020
Quant Method : C:\msdchem\2\methods\SIMCL070220.M
Quant Title : Standard Methods 6200B
QLast Update : Thu Jul 02 13:33:54 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.346	96	256042	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.447	117	169881	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.074	65	101483	5.40	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	108.00%	
19) Toluene-d8	8.900	98	204353	4.99	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	99.80%	
Target Compounds						
3) Chloromethane	2.799	50	13608	0.31	ug/L	97
7) 1,1-Dichloroethane	5.510	63	20458	0.48	ug/L	97
8) cis-1,2-Dichloroethene	6.066	96	28768	1.25	ug/L	96
9) Chloroform	6.333	83	14917	0.36	ug/L	95
14) 1,2-Dichloroethane	7.145	62	5068	0.16	ug/L	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

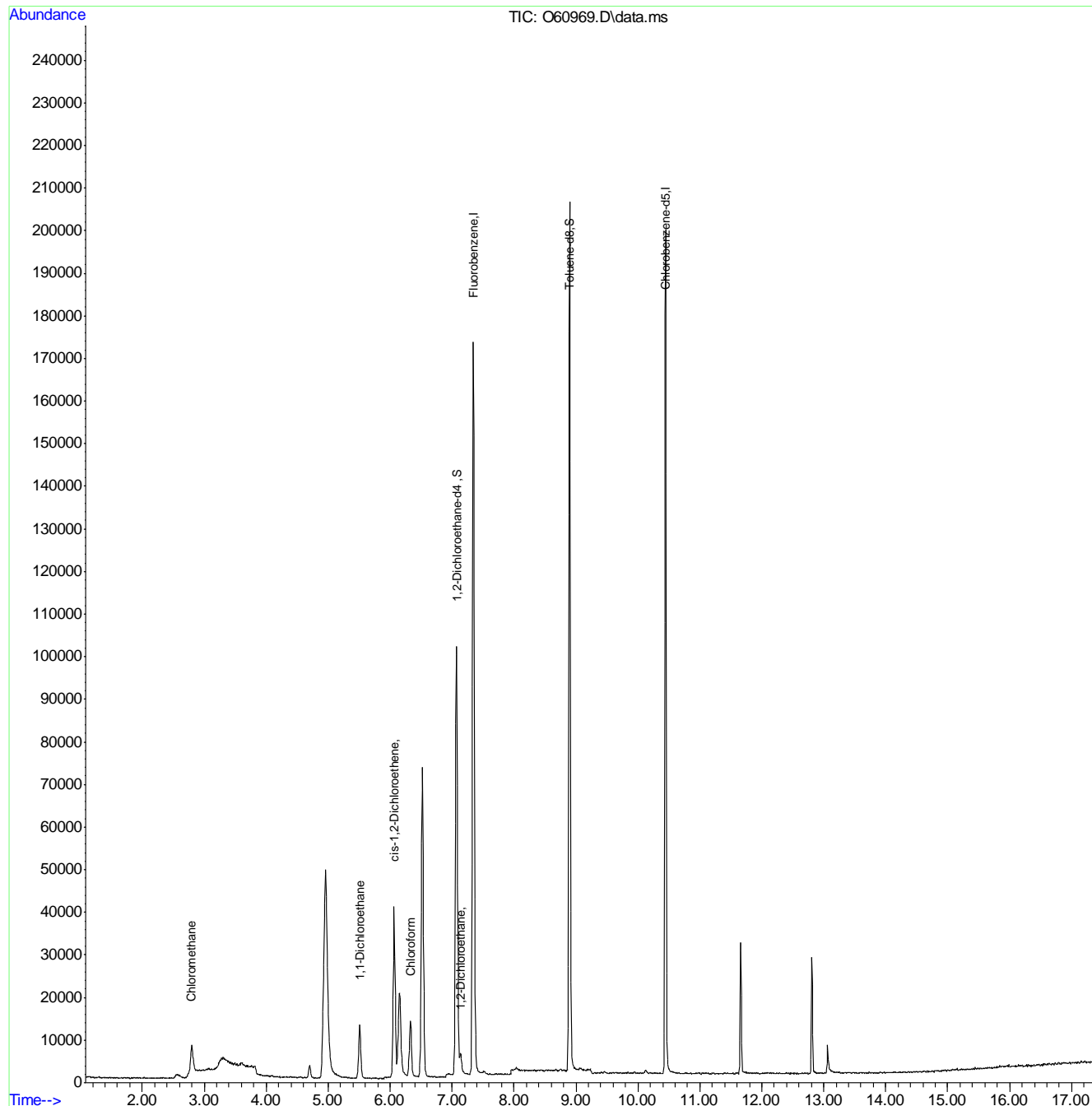
7.15
7

Quantitation Report (QT Reviewed)

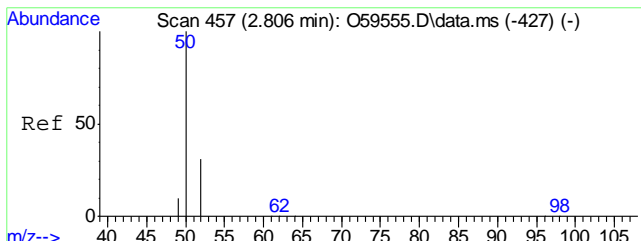
Data Path : C:\msdchem\2\data\080620\
 Data File : O60969.D
 Acq On : 6 Aug 2020 12:14 pm
 Operator : amandab
 Sample : FA77472-5
 Misc : MS46912,VO2343,,,,,
 ALS Vial : 9 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Aug 06 12:38:09 2020
 Quant Method : C:\msdchem\2\methods\SIMCL070220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jul 02 13:33:54 2020
 Response via : Initial Calibration

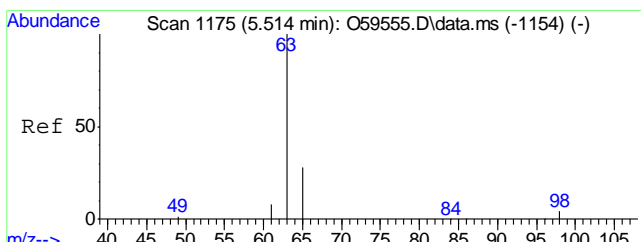
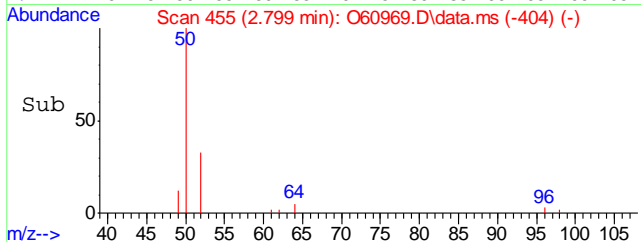
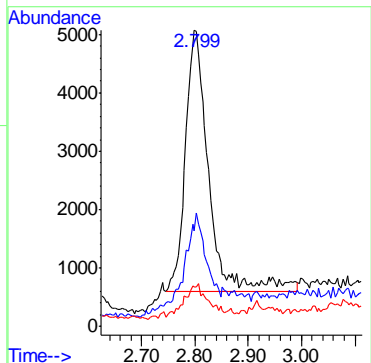
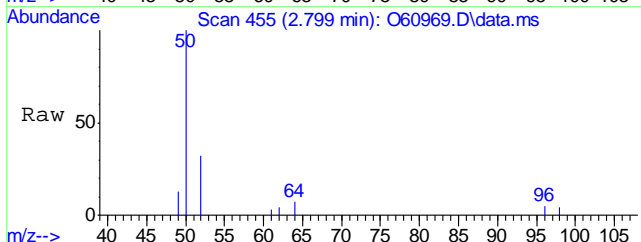


7.15
7



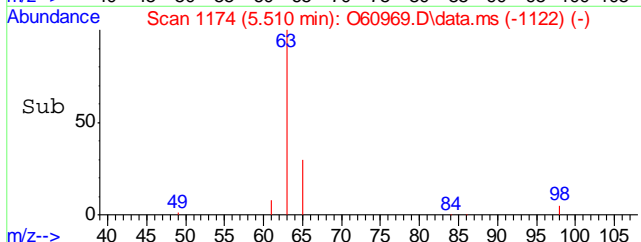
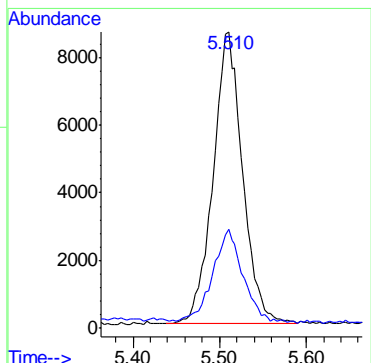
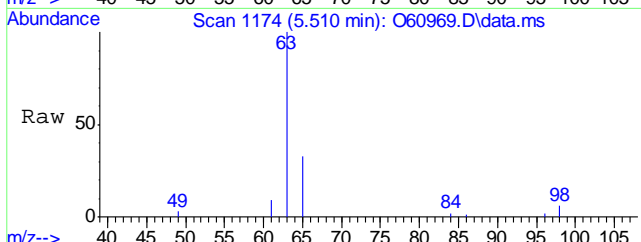
#3
 Chloromethane
 Concen: 0.31 ug/L
 RT: 2.799 min Scan# 455
 Delta R.T. -0.007 min
 Lab File: O60969.D
 Acq: 6 Aug 2020 12:14 pm

Tgt Ion	Resp	Lower	Upper
50	13608		
52	27.4	8.5	48.5
49	11.6	0.0	29.8

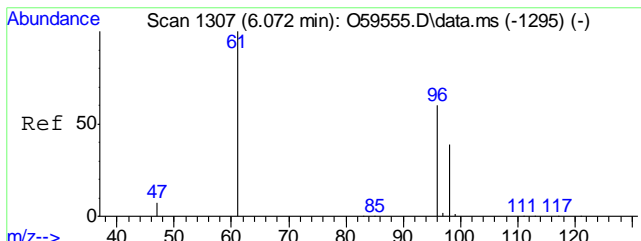


#7
 1,1-Dichloroethane
 Concen: 0.48 ug/L
 RT: 5.510 min Scan# 1174
 Delta R.T. -0.004 min
 Lab File: O60969.D
 Acq: 6 Aug 2020 12:14 pm

Tgt Ion	Resp	Lower	Upper
63	20458		
65	32.1	0.7	60.7

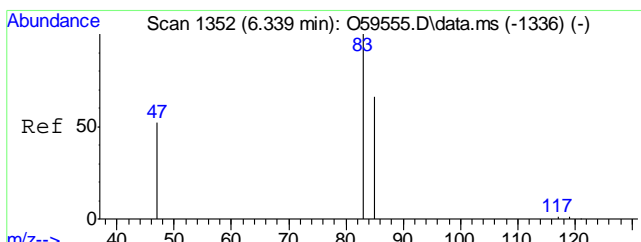
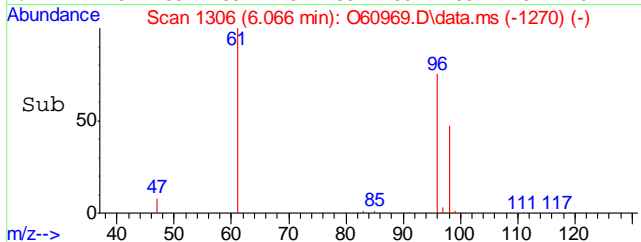
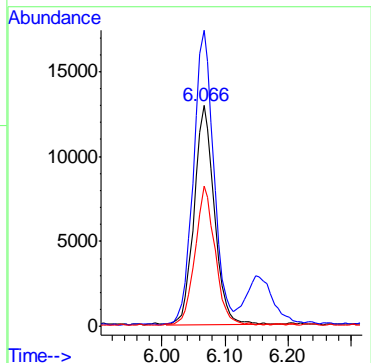
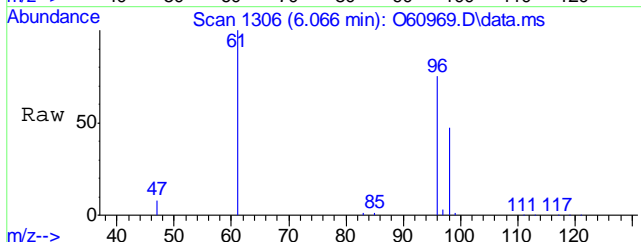


7.15
7



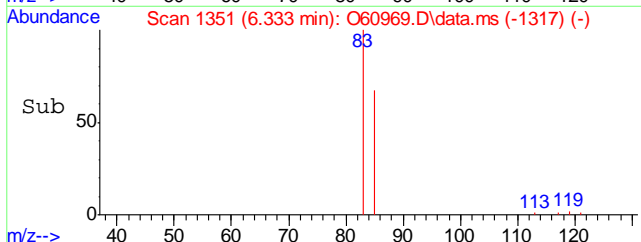
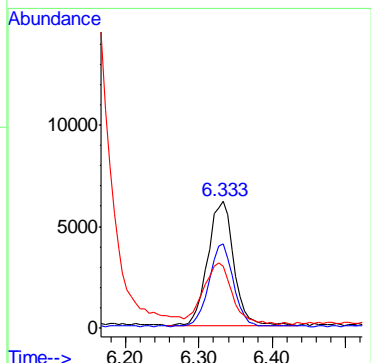
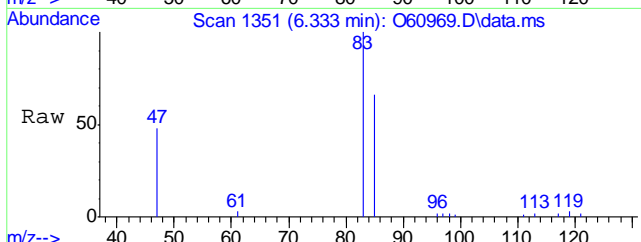
#8
 cis-1,2-Dichloroethene
 Concen: 1.25 ug/L
 RT: 6.066 min Scan# 1306
 Delta R.T. -0.006 min
 Lab File: O60969.D
 Acq: 6 Aug 2020 12:14 pm

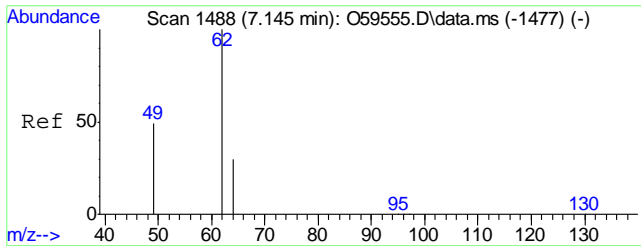
Tgt Ion	Resp	Lower	Upper
96	28768		
96	100		
61	134.3	110.0	170.0
98	63.1	34.1	94.1



#9
 Chloroform
 Concen: 0.36 ug/L
 RT: 6.333 min Scan# 1351
 Delta R.T. -0.000 min
 Lab File: O60969.D
 Acq: 6 Aug 2020 12:14 pm

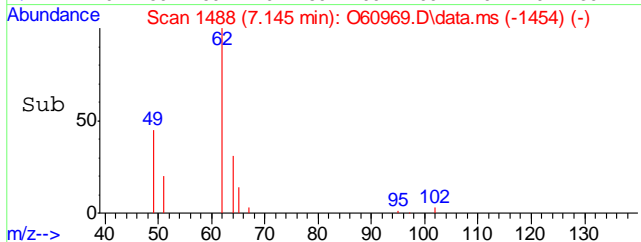
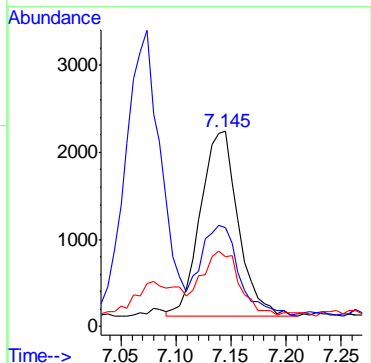
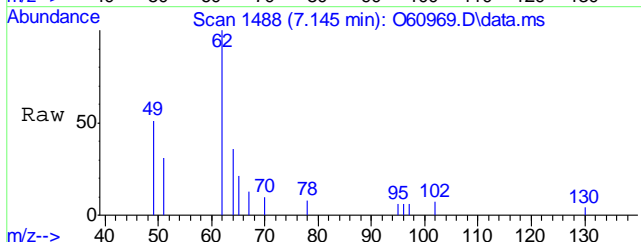
Tgt Ion	Resp	Lower	Upper
83	14917		
83	100		
85	66.3	34.7	94.7
47	45.1	9.0	69.0





#14
 1,2-Dichloroethane
 Concen: 0.16 ug/L
 RT: 7.145 min Scan# 1488
 Delta R.T. -0.000 min
 Lab File: O60969.D
 Acq: 6 Aug 2020 12:14 pm

Tgt Ion	Resp	Lower	Upper
62	100		
49	46.7	17.8	77.8
64	30.4	1.3	61.3



7.15
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\080620\
Data File : O60973.D
Acq On : 6 Aug 2020 1:51 pm
Operator : amandab
Sample : FA77472-6 Inst : MSVOA12
Misc : MS46912,VO2343,,,,,
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Aug 06 14:17:22 2020
Quant Method : C:\msdchem\2\methods\SIMCL070220.M
Quant Title : Standard Methods 6200B
QLast Update : Thu Jul 02 13:33:54 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Fluorobenzene	7.346	96	263809	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.447	117	172141	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.074	65	102905	5.31	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	106.20%	
19) Toluene-d8	8.896	98	209128	5.04	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	100.80%	
Target Compounds						
						Qvalue
3) Chloromethane	2.807	50	24485	0.54	ug/L	92
7) 1,1-Dichloroethane	5.506	63	14739	0.33	ug/L	99
8) cis-1,2-Dichloroethene	6.066	96	33083	1.39	ug/L	97
9) Chloroform	6.327	83	11431	0.27	ug/L	91
14) 1,2-Dichloroethane	7.139	62	4674	0.14	ug/L	96
15) Trichloroethene	7.512	95	98661	3.83	ug/L	98
21) Tetrachloroethene	9.343	166	3292m	0.15	ug/L	

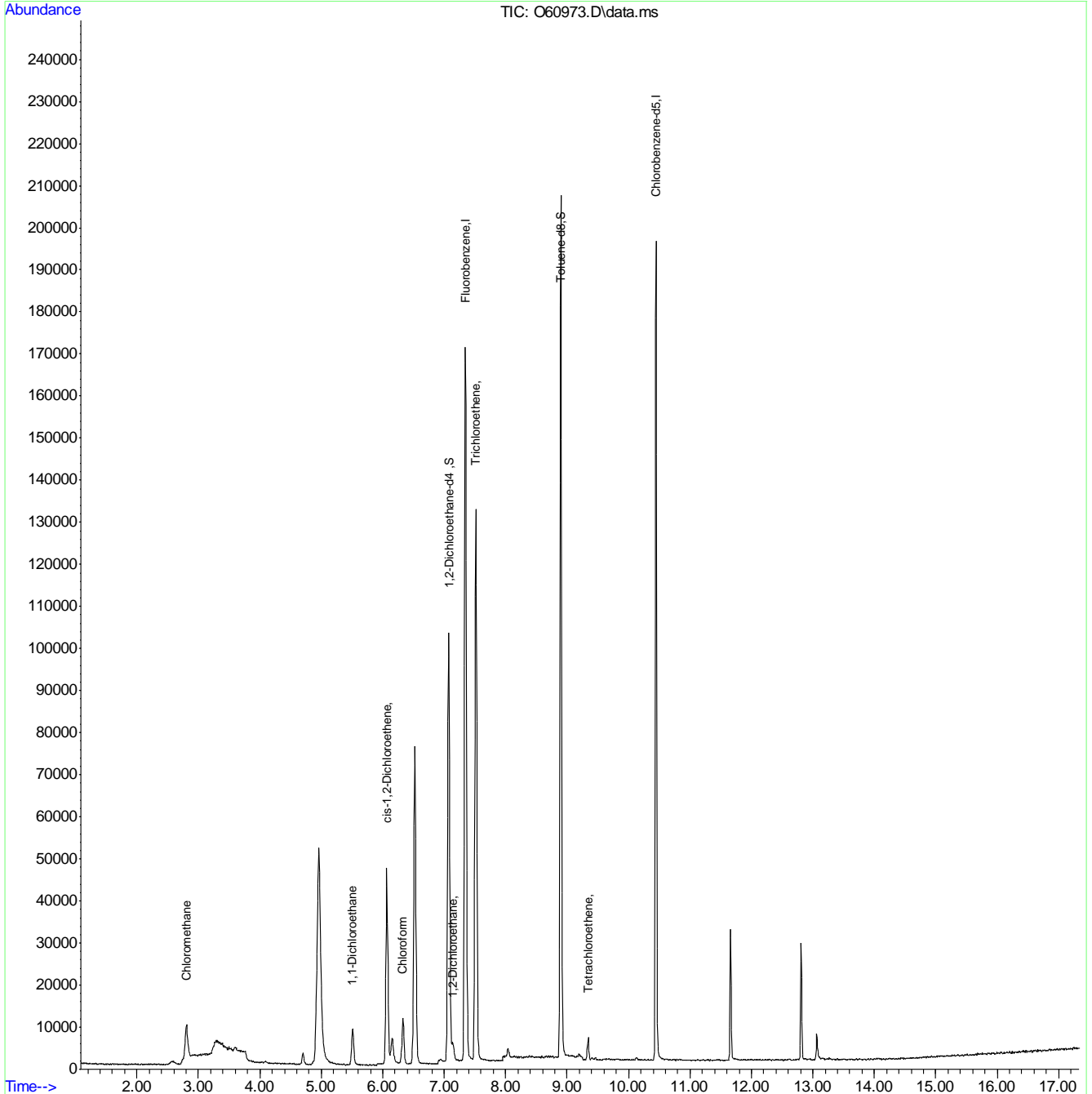
(#) = qualifier out of range (m) = manual integration (+) = signals summed

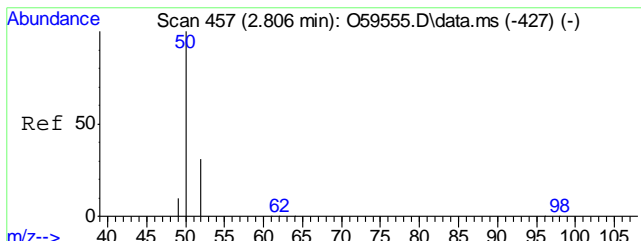
7.1.6
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\080620\
 Data File : O60973.D
 Acq On : 6 Aug 2020 1:51 pm
 Operator : amandab
 Sample : FA77472-6 Inst : MSVOA12
 Misc : MS46912,VO2343,,,,,
 ALS Vial : 13 Sample Multiplier: 1

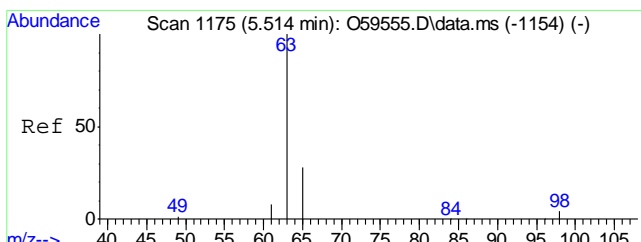
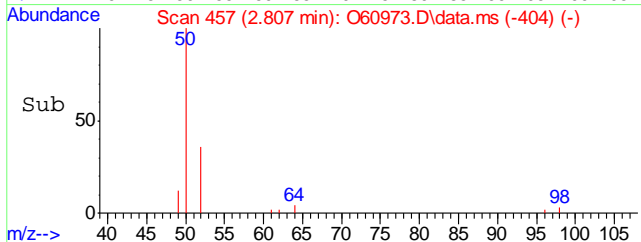
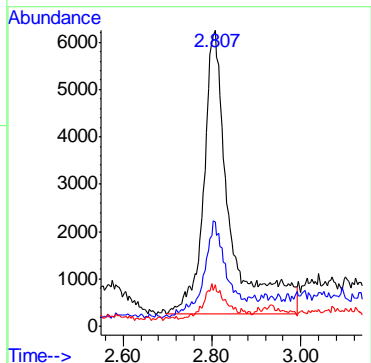
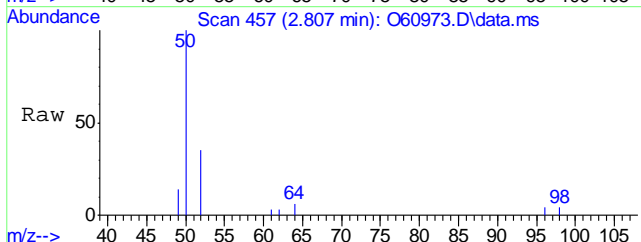
Quant Time: Aug 06 14:17:22 2020
 Quant Method : C:\msdchem\2\methods\SIMCL070220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jul 02 13:33:54 2020
 Response via : Initial Calibration





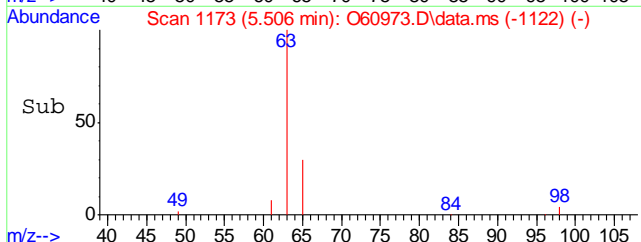
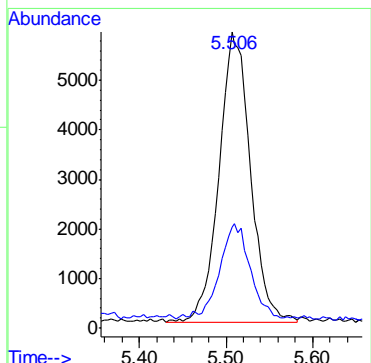
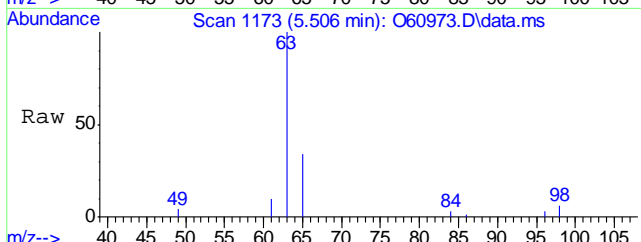
#3
 Chloromethane
 Concen: 0.54 ug/L
 RT: 2.807 min Scan# 457
 Delta R.T. 0.001 min
 Lab File: O60973.D
 Acq: 6 Aug 2020 1:51 pm

Tgt Ion	Resp	Lower	Upper
50	24485	100	
52	33.0	8.5	48.5
49	11.7	0.0	29.8

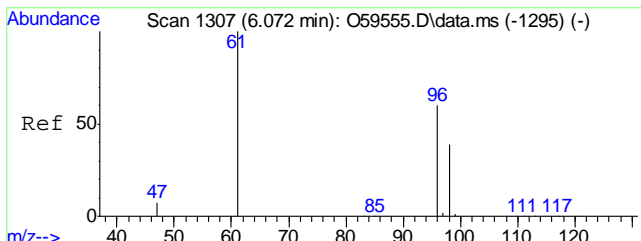


#7
 1,1-Dichloroethane
 Concen: 0.33 ug/L
 RT: 5.506 min Scan# 1173
 Delta R.T. -0.008 min
 Lab File: O60973.D
 Acq: 6 Aug 2020 1:51 pm

Tgt Ion	Resp	Lower	Upper
63	14739	100	
65	31.3	0.7	60.7

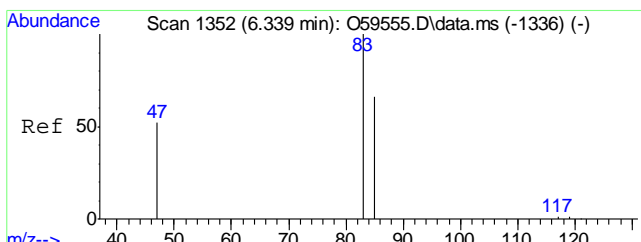
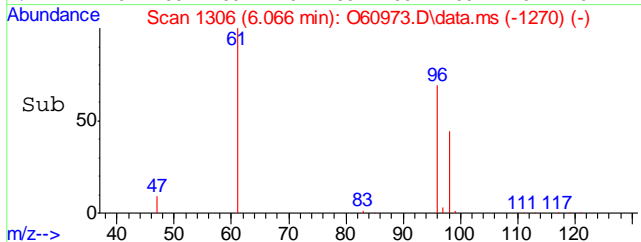
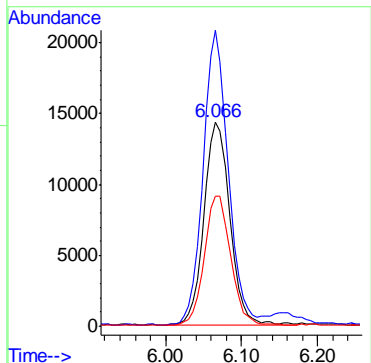
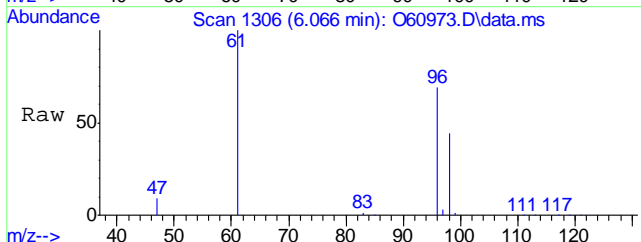


7.1.6
7



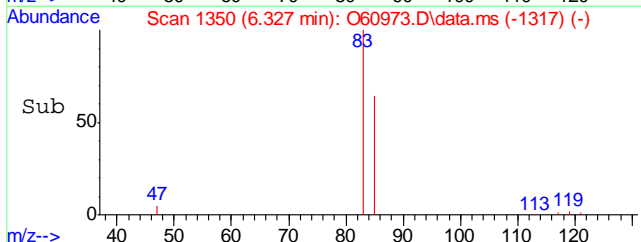
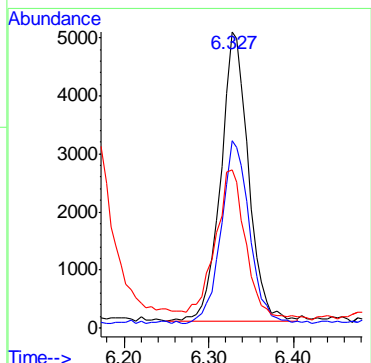
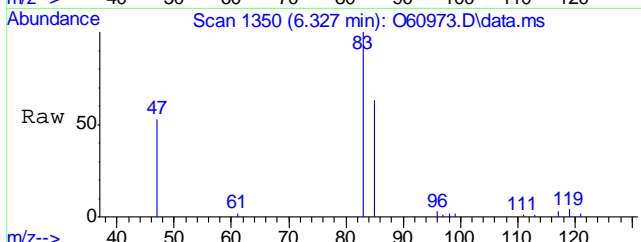
#8
 cis-1,2-Dichloroethene
 Concen: 1.39 ug/L
 RT: 6.066 min Scan# 1306
 Delta R.T. -0.006 min
 Lab File: O60973.D
 Acq: 6 Aug 2020 1:51 pm

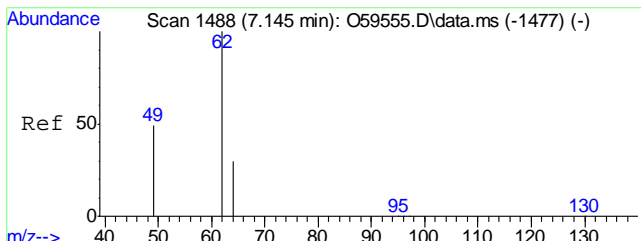
Tgt Ion	Resp	Lower	Upper
96	33083		
96	100		
61	144.9	110.0	170.0
98	63.5	34.1	94.1



#9
 Chloroform
 Concen: 0.27 ug/L
 RT: 6.327 min Scan# 1350
 Delta R.T. -0.006 min
 Lab File: O60973.D
 Acq: 6 Aug 2020 1:51 pm

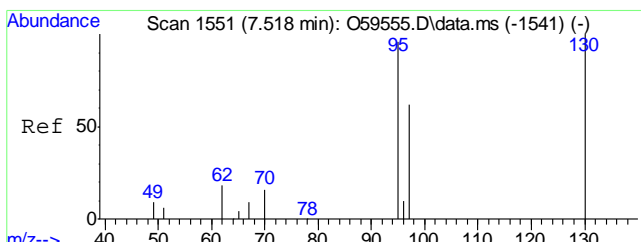
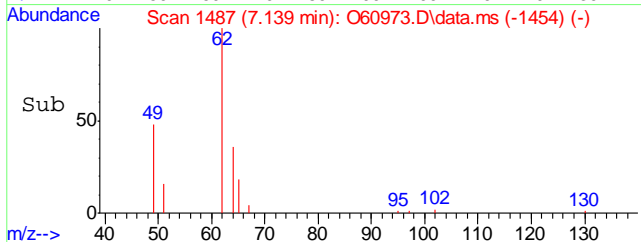
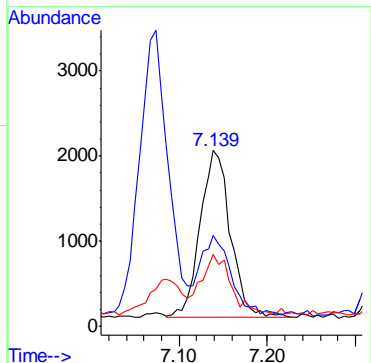
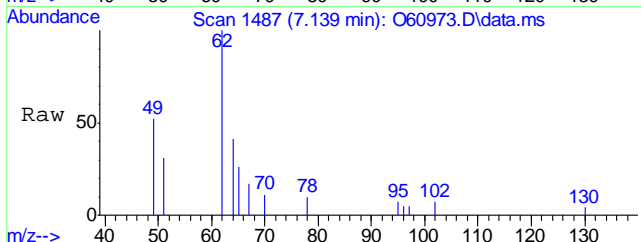
Tgt Ion	Resp	Lower	Upper
83	11431		
83	100		
85	62.7	34.7	94.7
47	50.7	9.0	69.0





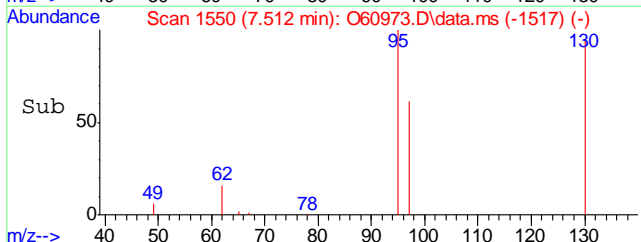
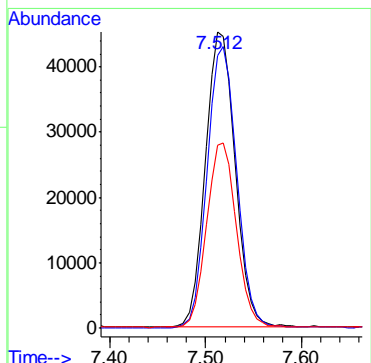
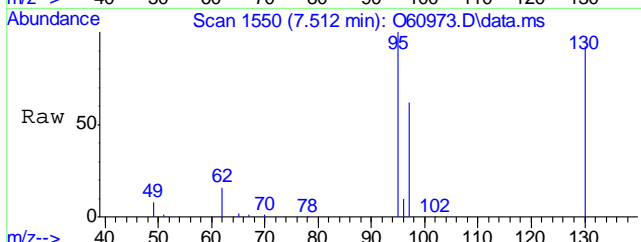
#14
 1,2-Dichloroethane
 Concen: 0.14 ug/L
 RT: 7.139 min Scan# 1487
 Delta R.T. -0.006 min
 Lab File: O60973.D
 Acq: 6 Aug 2020 1:51 pm

Tgt Ion	Resp	Lower	Upper
62	4674		
49	46.9	17.8	77.8
64	35.2	1.3	61.3

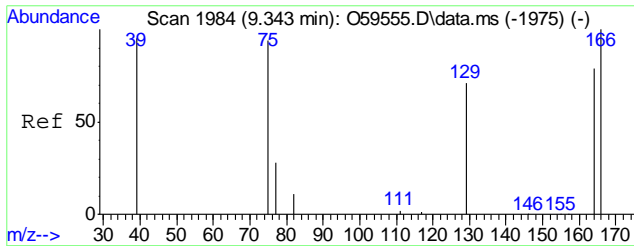


#15
 Trichloroethene
 Concen: 3.83 ug/L
 RT: 7.512 min Scan# 1550
 Delta R.T. -0.006 min
 Lab File: O60973.D
 Acq: 6 Aug 2020 1:51 pm

Tgt Ion	Resp	Lower	Upper
95	98661		
130	92.3	63.4	123.4
97	61.5	35.0	95.0

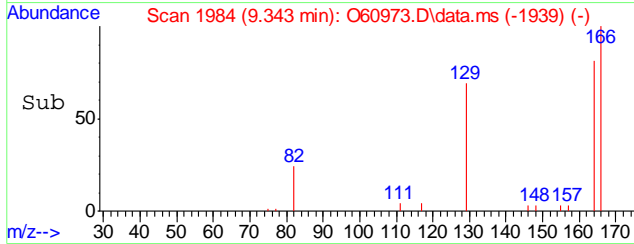
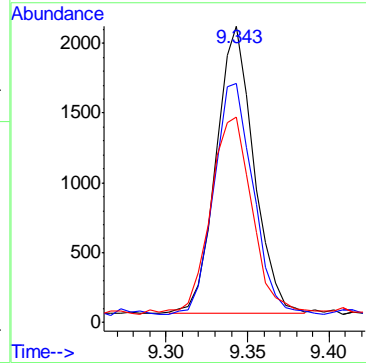
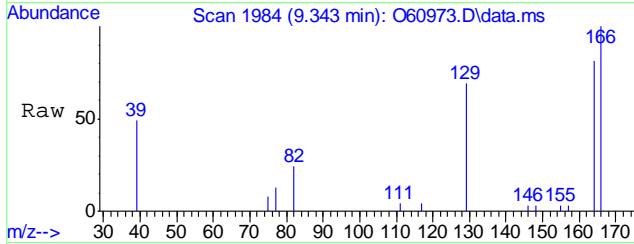


7.1.6
 7



#21
 Tetrachloroethene
 Concen: 0.15 ug/L m
 RT: 9.343 min Scan# 1984
 Delta R.T. 0.000 min
 Lab File: O60973.D
 Acq: 6 Aug 2020 1:51 pm

Tgt Ion	Resp	Lower	Upper
166	3292		
166	100		
164	80.9	48.3	108.3
129	69.4	39.5	99.5



7.1.6
7

Manual Integration Approval Summary

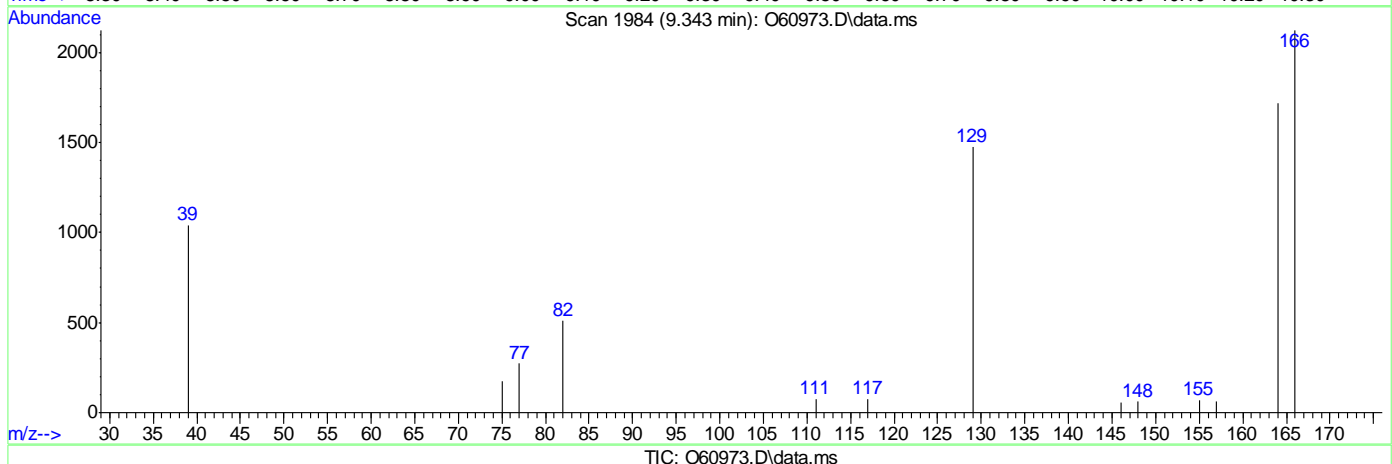
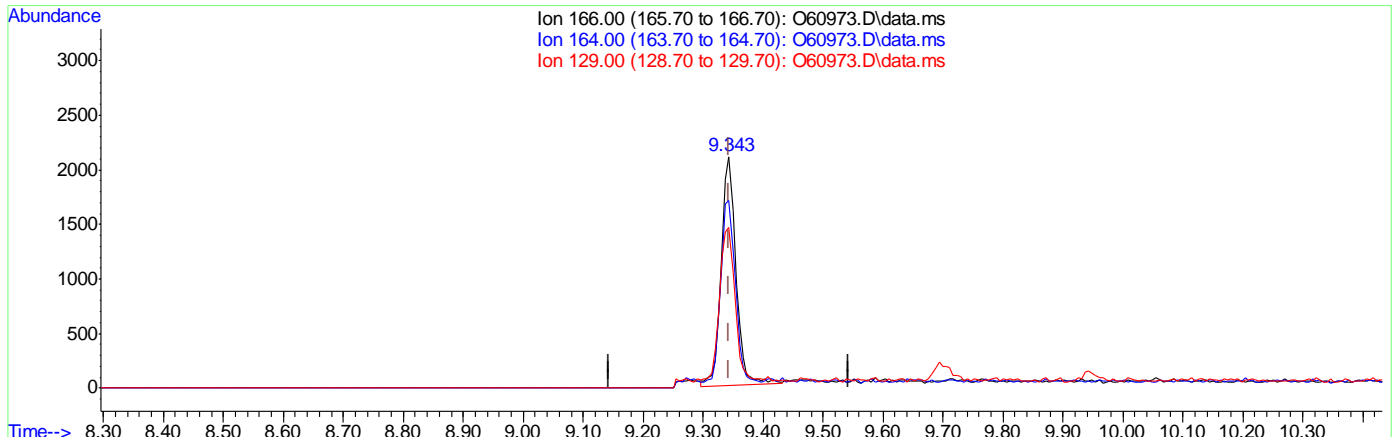
Sample Number: FA77472-6 **Method:** SW846 8260B BY SIM
Lab FileID: O60973.D **Analyst approved:** 08/06/20 15:04 Amanda Bacsko
Injection Time: 08/06/20 13:51 **Supervisor approved:** 08/07/20 08:35 Melissa Mangual

Parameter	CAS	Sig#	R.T. (min.)	Reason
Tetrachloroethylene	127-18-4		9.34	Poor instrument integration

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\080620\
Data File : O60973.D
Acq On : 6 Aug 2020 1:51 pm
Operator : amandab
Sample : FA77472-6 Inst : MSVOA12
Misc : MS46912,VO2343,,,,,
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Aug 06 14:16:42 2020
Quant Method : C:\msdchem\2\methods\SIMCL070220.M
Quant Title : Standard Methods 6200B
QLast Update : Thu Jul 02 13:33:54 2020
Response via : Initial Calibration



(21) Tetrachloroethene ()
9.343min (+0.000) 0.17ug/L
response 3636

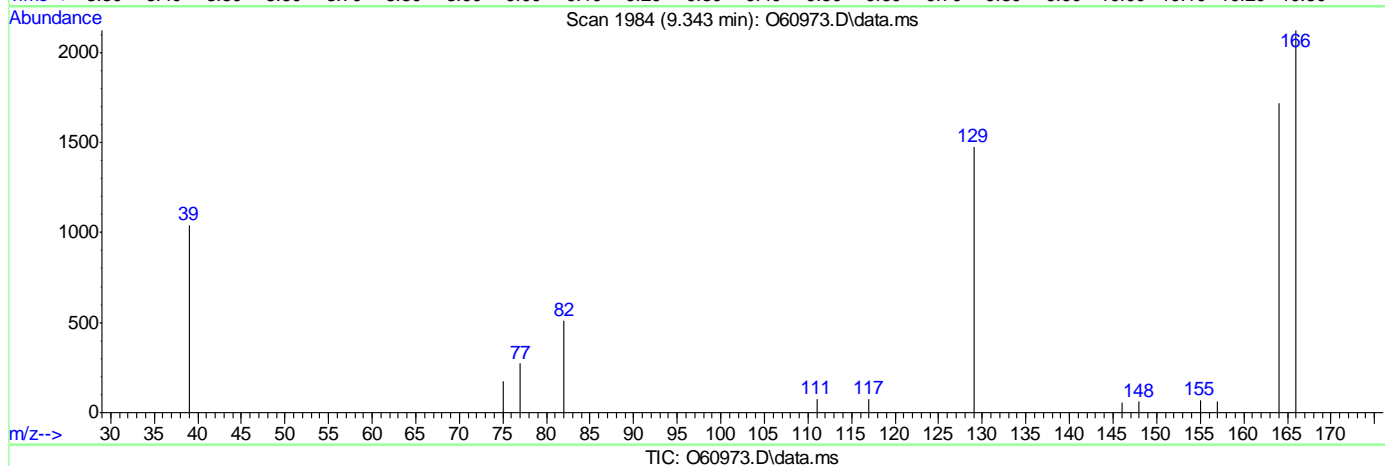
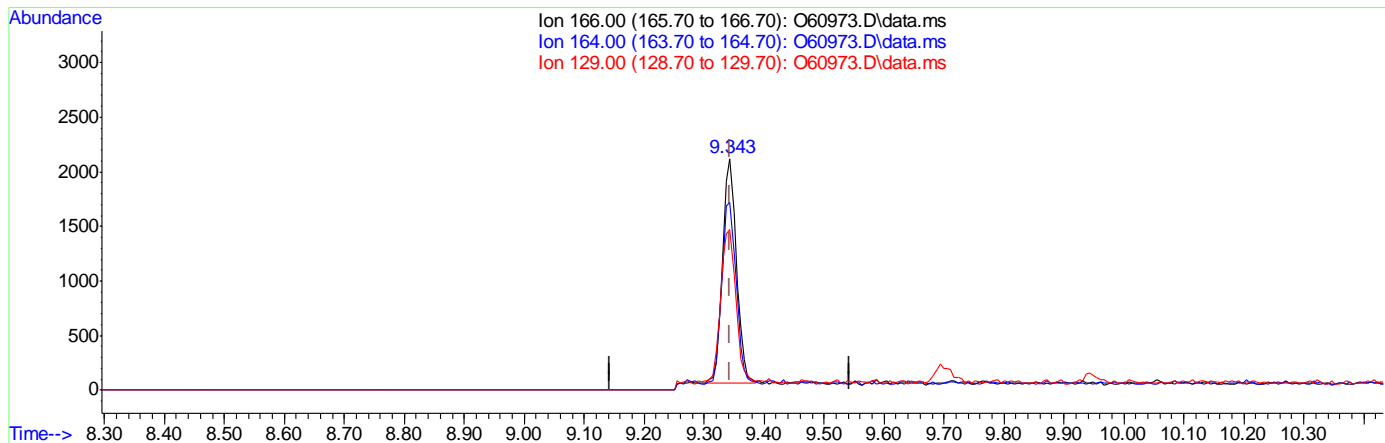
Ion	Exp%	Act%
166.00	100	100
164.00	78.30	80.20
129.00	69.50	67.62
0.00	0.00	0.00

7.1.6.2
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\080620\
 Data File : O60973.D
 Acq On : 6 Aug 2020 1:51 pm
 Operator : amandab
 Sample : FA77472-6 Inst : MSVOA12
 Misc : MS46912,VO2343,,,,,
 ALS Vial : 13 Sample Multiplier: 1

Quant Time: Aug 06 14:16:42 2020
 Quant Method : C:\msdchem\2\methods\SIMCL070220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jul 02 13:33:54 2020
 Response via : Initial Calibration



(21) Tetrachloroethene ()

9.343min (+0.000) 0.15ug/L m

response 3292

Ion	Exp%	Act%
166.00	100	100
164.00	78.30	80.87
129.00	69.50	69.42
0.00	0.00	0.00

7.1.6.3
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\080620\
Data File : O60974.D
Acq On : 6 Aug 2020 2:15 pm
Operator : amandab
Sample : FA77472-7 Inst : MSVOA12
Misc : MS46912,VO2343,,,,,
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Aug 06 15:00:56 2020
Quant Method : C:\msdchem\2\methods\SIMCL070220.M
Quant Title : Standard Methods 6200B
QLast Update : Thu Jul 02 13:33:54 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.346	96	245310	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.447	117	160633	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.073	65	98786	5.48	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	109.60%	
19) Toluene-d8	8.900	98	195487	5.05	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	101.00%	
Target Compounds						
3) Chloromethane	2.814	50	12442	0.30	ug/L	99
7) 1,1-Dichloroethane	5.518	63	16439	0.40	ug/L	96
8) cis-1,2-Dichloroethene	6.072	96	35212	1.59	ug/L	97
9) Chloroform	6.333	83	12608	0.32	ug/L	93
14) 1,2-Dichloroethane	7.145	62	4953	0.16	ug/L	99
15) Trichloroethene	7.518	95	22767	0.95	ug/L	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.17
7

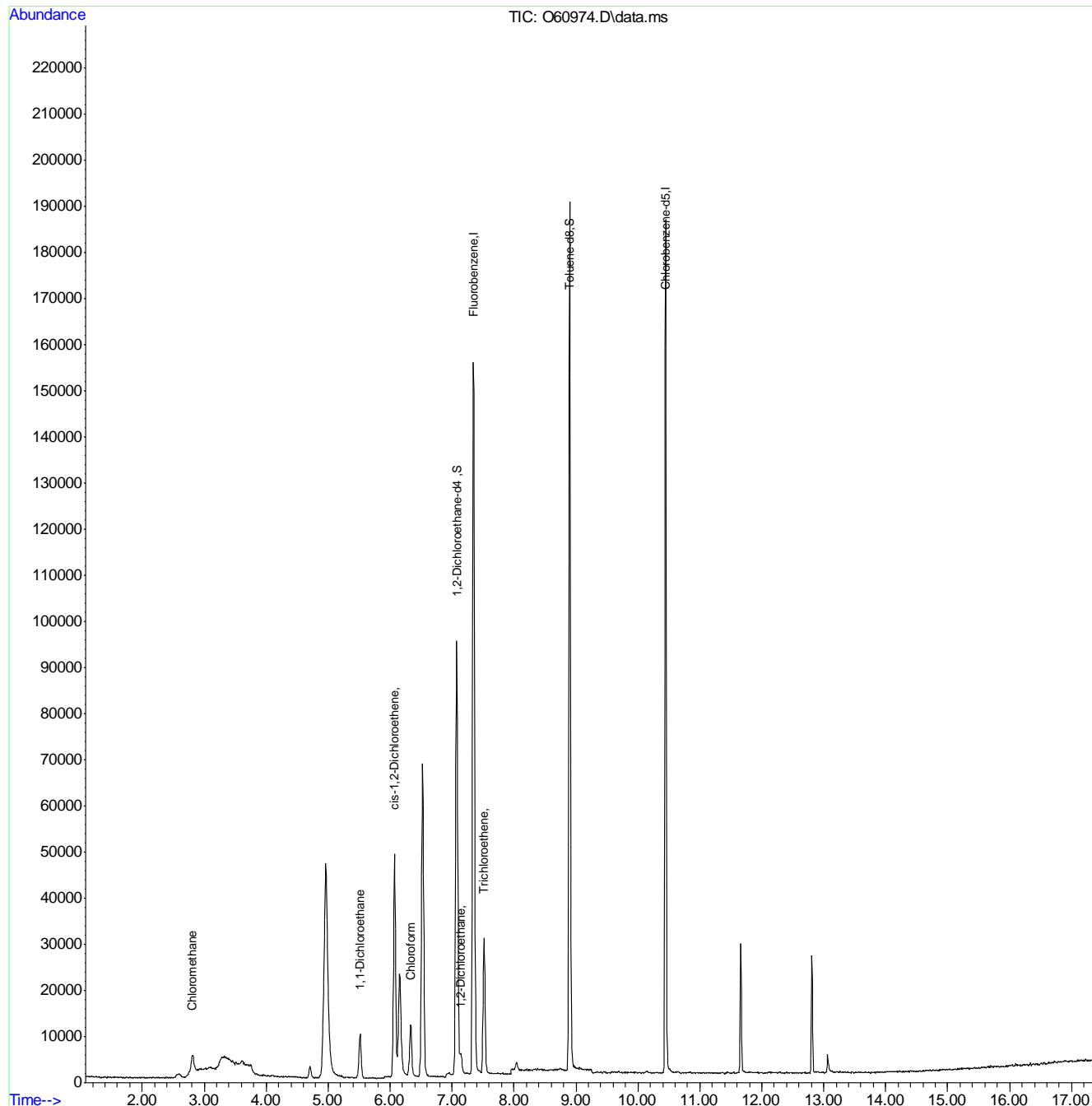


Quantitation Report (QT Reviewed)

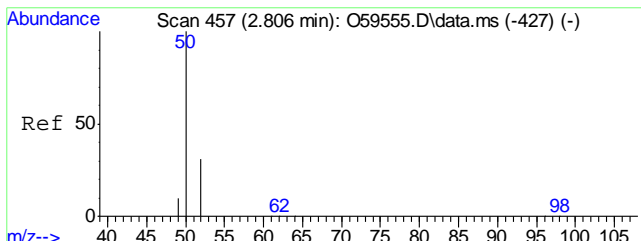
Data Path : C:\msdchem\2\data\080620\
 Data File : O60974.D
 Acq On : 6 Aug 2020 2:15 pm
 Operator : amandab
 Sample : FA77472-7
 Misc : MS46912,VO2343,,,,,
 ALS Vial : 14 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Aug 06 15:00:56 2020
 Quant Method : C:\msdchem\2\methods\SIMCL070220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jul 02 13:33:54 2020
 Response via : Initial Calibration

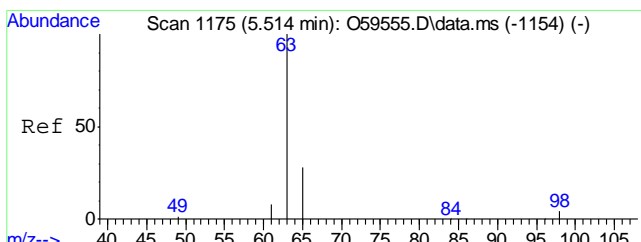
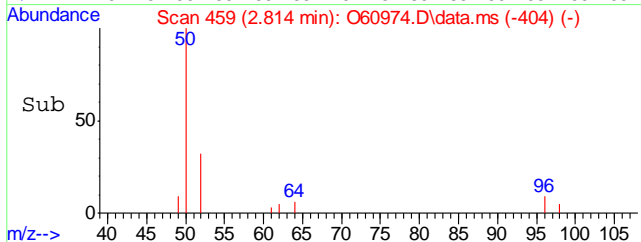
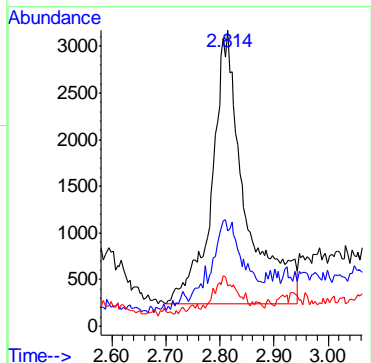
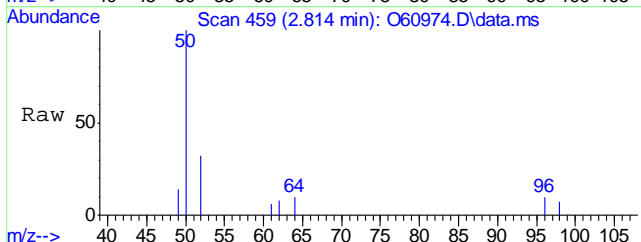


717
7



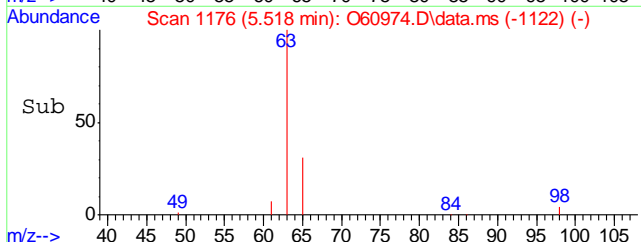
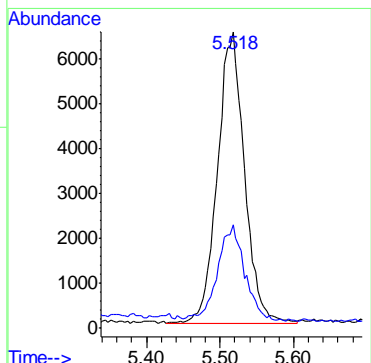
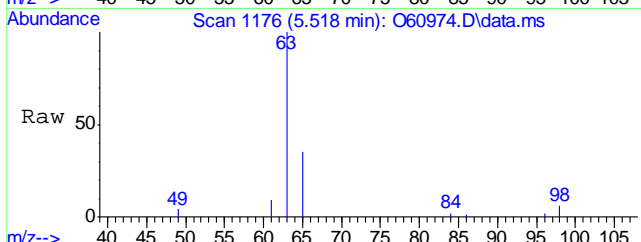
#3
 Chloromethane
 Concen: 0.30 ug/L
 RT: 2.814 min Scan# 459
 Delta R.T. 0.008 min
 Lab File: O60974.D
 Acq: 6 Aug 2020 2:15 pm

Tgt Ion	Resp	Lower	Upper
50	12442		
52	29.0	8.5	48.5
49	9.6	0.0	29.8

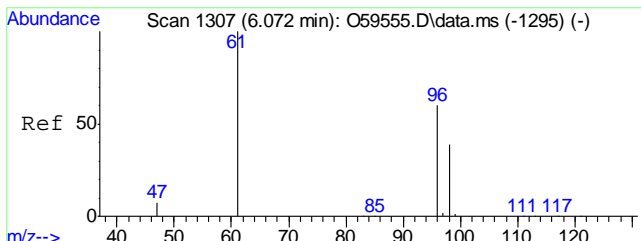


#7
 1,1-Dichloroethane
 Concen: 0.40 ug/L
 RT: 5.518 min Scan# 1176
 Delta R.T. 0.004 min
 Lab File: O60974.D
 Acq: 6 Aug 2020 2:15 pm

Tgt Ion	Resp	Lower	Upper
63	16439		
65	33.0	0.7	60.7



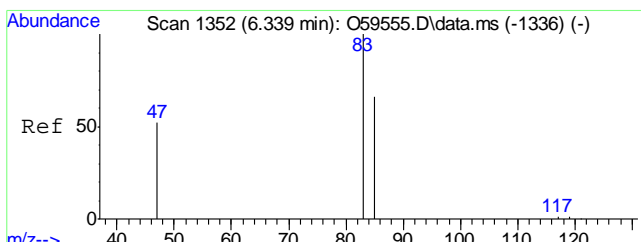
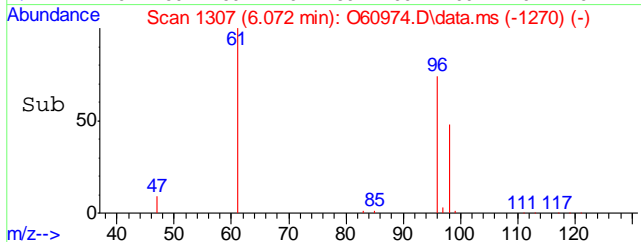
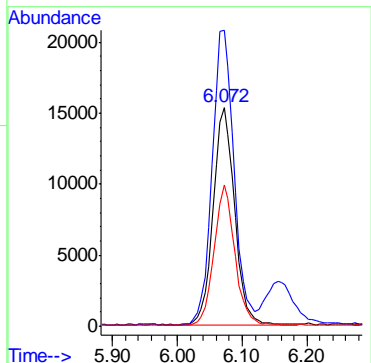
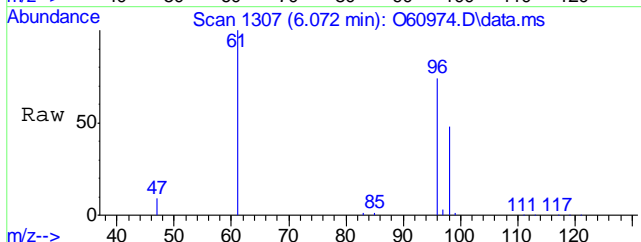
7.17
7



#8
 cis-1,2-Dichloroethene
 Concen: 1.59 ug/L
 RT: 6.072 min Scan# 1307
 Delta R.T. -0.000 min
 Lab File: O60974.D
 Acq: 6 Aug 2020 2:15 pm

Tgt Ion: 96 Resp: 35212

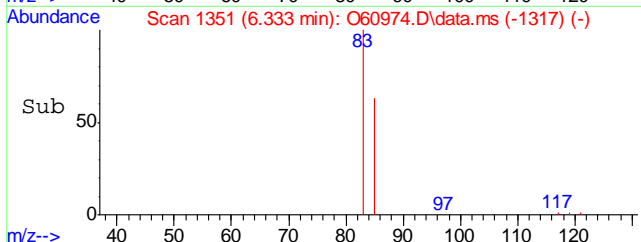
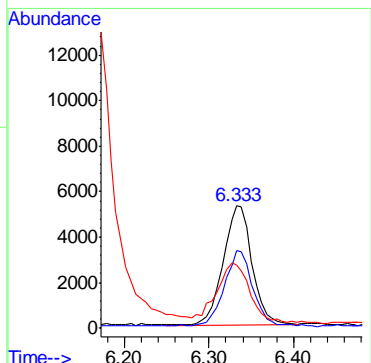
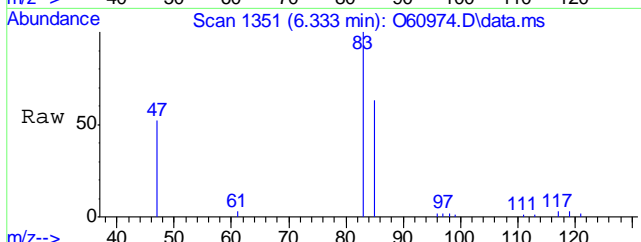
Ion	Ratio	Lower	Upper
96	100		
61	135.4	110.0	170.0
98	64.3	34.1	94.1



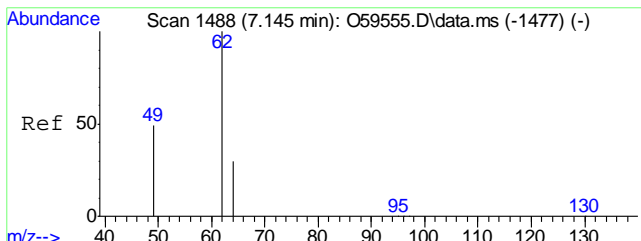
#9
 Chloroform
 Concen: 0.32 ug/L
 RT: 6.333 min Scan# 1351
 Delta R.T. -0.000 min
 Lab File: O60974.D
 Acq: 6 Aug 2020 2:15 pm

Tgt Ion: 83 Resp: 12608

Ion	Ratio	Lower	Upper
83	100		
85	63.2	34.7	94.7
47	48.3	9.0	69.0

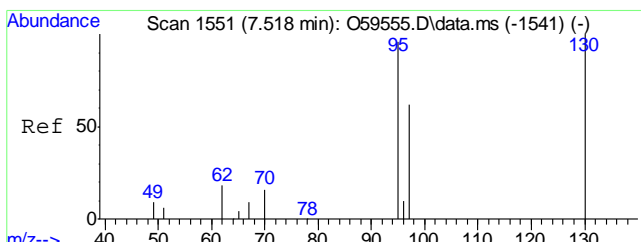
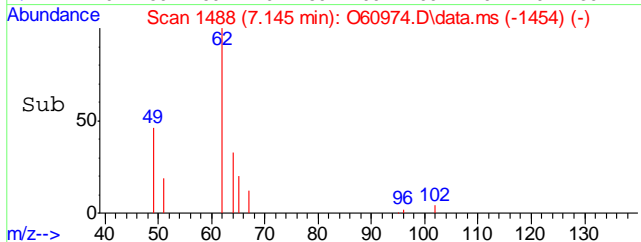
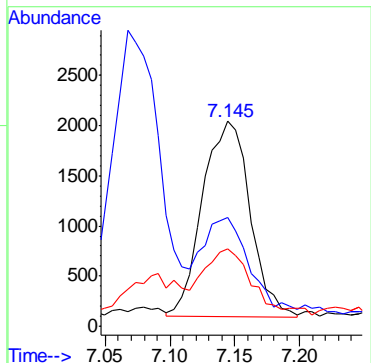
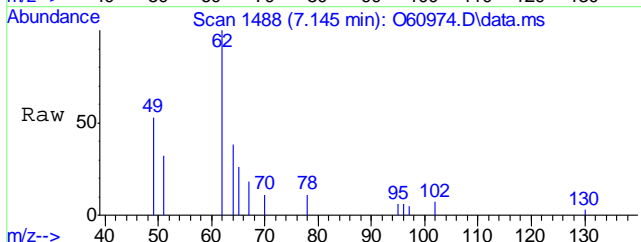


7.17
7



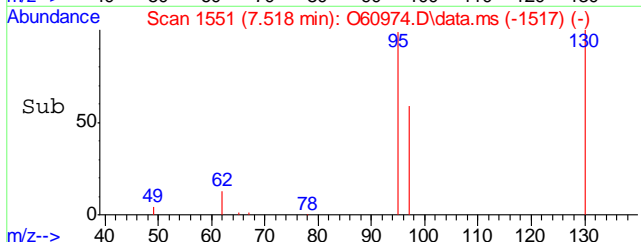
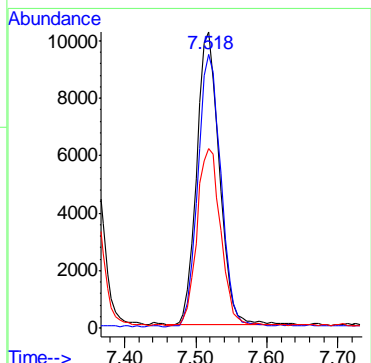
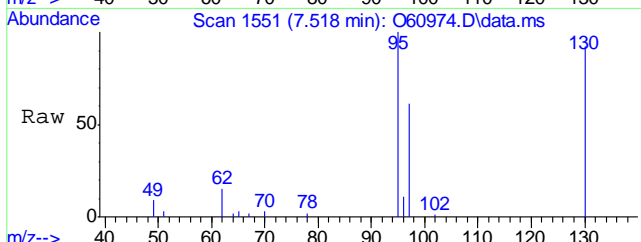
#14
 1,2-Dichloroethane
 Concen: 0.16 ug/L
 RT: 7.145 min Scan# 1488
 Delta R.T. -0.000 min
 Lab File: O60974.D
 Acq: 6 Aug 2020 2:15 pm

Tgt Ion	Resp	Lower	Upper
62	4953		
49	47.0	17.8	77.8
64	30.6	1.3	61.3



#15
 Trichloroethene
 Concen: 0.95 ug/L
 RT: 7.518 min Scan# 1551
 Delta R.T. -0.000 min
 Lab File: O60974.D
 Acq: 6 Aug 2020 2:15 pm

Tgt Ion	Resp	Lower	Upper
95	22767		
130	92.7	63.4	123.4
97	60.4	35.0	95.0



7.17

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\080620\
Data File : O60975.D
Acq On : 6 Aug 2020 2:39 pm
Operator : amandab
Sample : FA77472-8 Inst : MSVOA12
Misc : MS46912,VO2343,,,,,
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Aug 06 15:01:19 2020
Quant Method : C:\msdchem\2\methods\SIMCL070220.M
Quant Title : Standard Methods 6200B
QLast Update : Thu Jul 02 13:33:54 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.346	96	234838	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.447	117	156178	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.074	65	94848	5.50	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	110.00%	
19) Toluene-d8	8.900	98	186255	4.95	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	99.00%	
Target Compounds						
3) Chloromethane	2.803	50	6515	0.16	ug/L	95
7) 1,1-Dichloroethane	5.514	63	17070	0.43	ug/L	97
8) cis-1,2-Dichloroethene	6.072	96	24724	1.17	ug/L	98
9) Chloroform	6.339	83	12127	0.32	ug/L	95
14) 1,2-Dichloroethane	7.133	62	5297	0.18	ug/L	94

(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.1.8
7

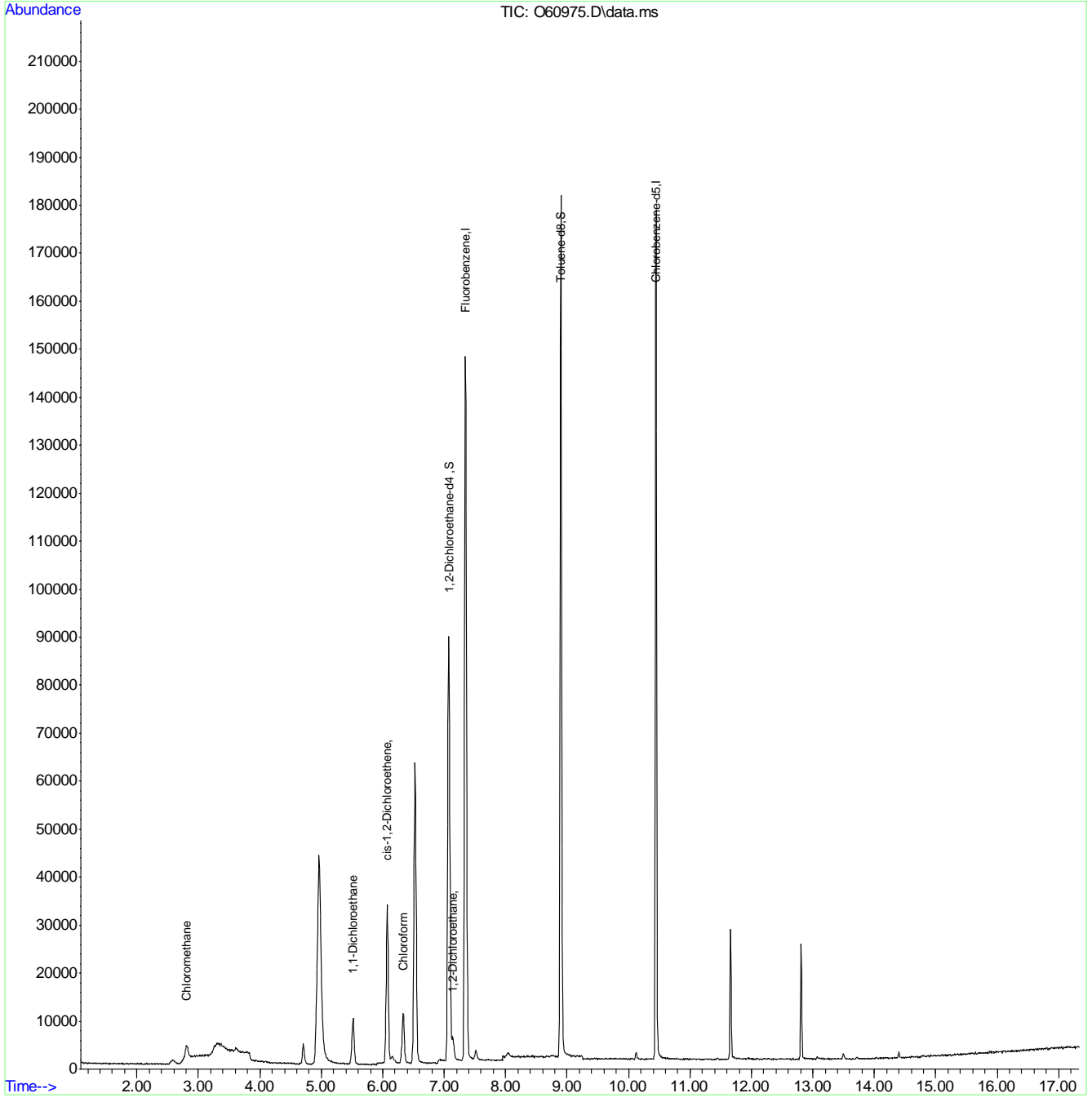


Quantitation Report (QT Reviewed)

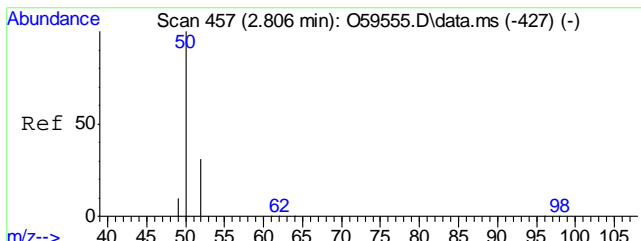
Data Path : C:\msdchem\2\data\080620\
Data File : O60975.D
Acq On : 6 Aug 2020 2:39 pm
Operator : amandab
Sample : FA77472-8
Misc : MS46912,VO2343,,,,,
ALS Vial : 15 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Aug 06 15:01:19 2020
Quant Method : C:\msdchem\2\methods\SIMCL070220.M
Quant Title : Standard Methods 6200B
QLast Update : Thu Jul 02 13:33:54 2020
Response via : Initial Calibration

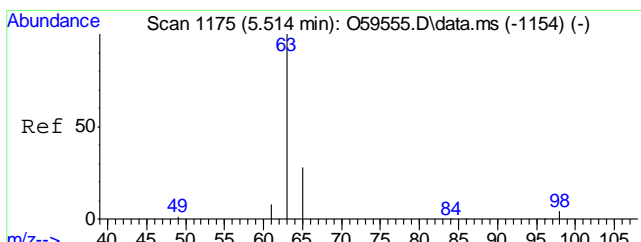
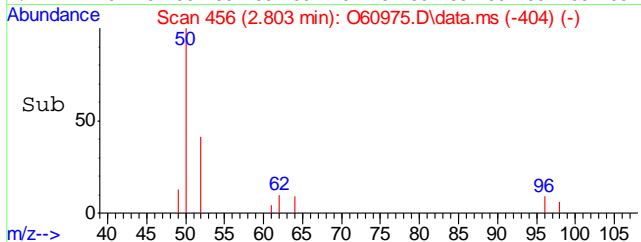
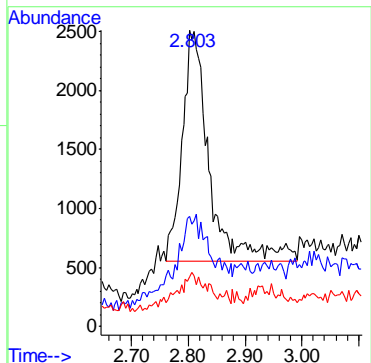
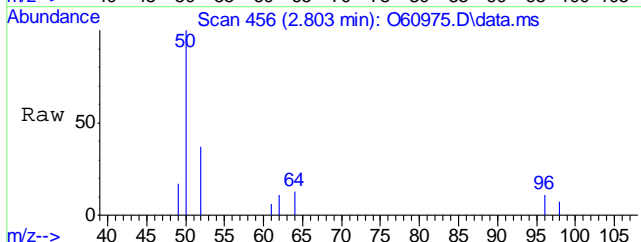


7.1.8
7



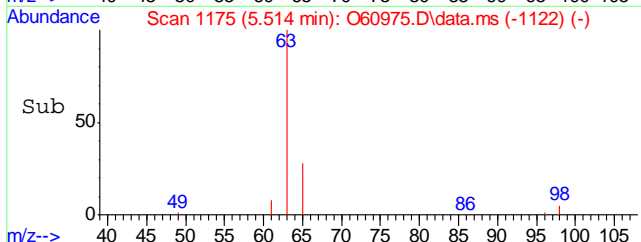
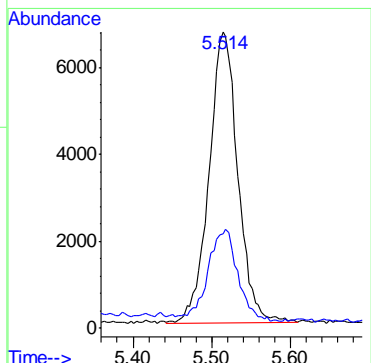
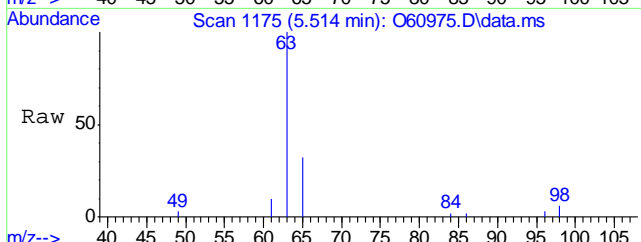
#3
 Chloromethane
 Concen: 0.16 ug/L
 RT: 2.803 min Scan# 456
 Delta R.T. -0.003 min
 Lab File: O60975.D
 Acq: 6 Aug 2020 2:39 pm

Tgt Ion	Resp	Lower	Upper
50	100		
52	25.7	8.5	48.5
49	11.1	0.0	29.8



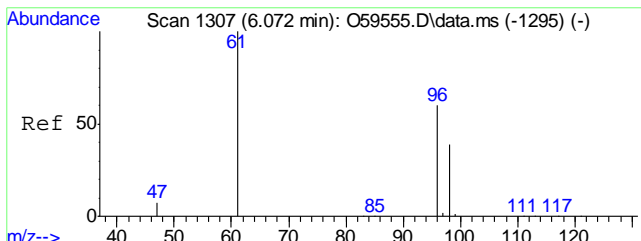
#7
 1,1-Dichloroethane
 Concen: 0.43 ug/L
 RT: 5.514 min Scan# 1175
 Delta R.T. 0.000 min
 Lab File: O60975.D
 Acq: 6 Aug 2020 2:39 pm

Tgt Ion	Resp	Lower	Upper
63	100		
65	29.2	0.7	60.7



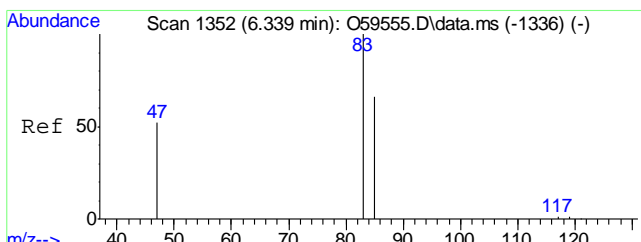
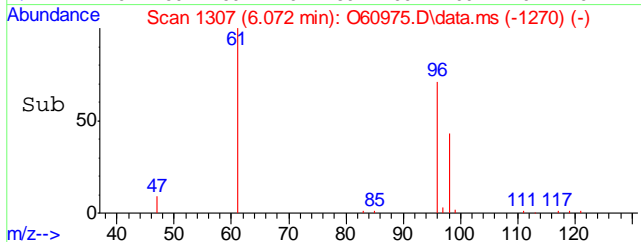
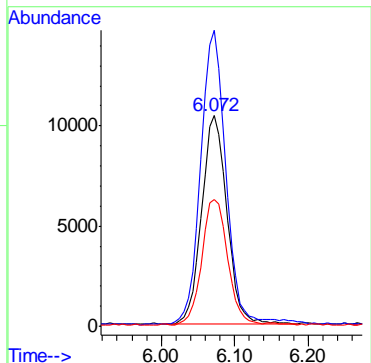
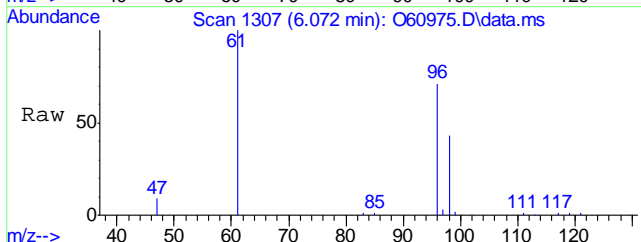
7.1.8
 7





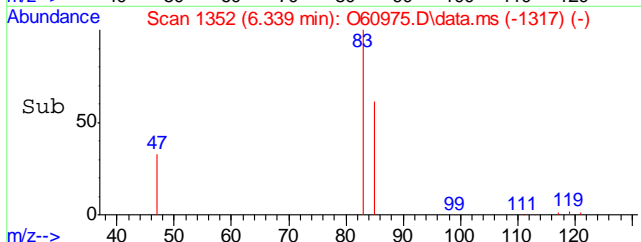
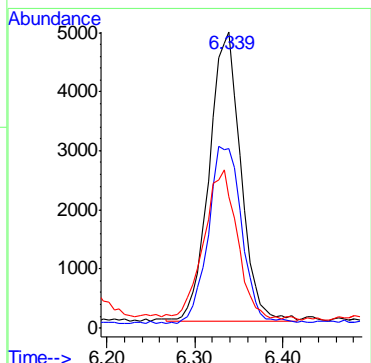
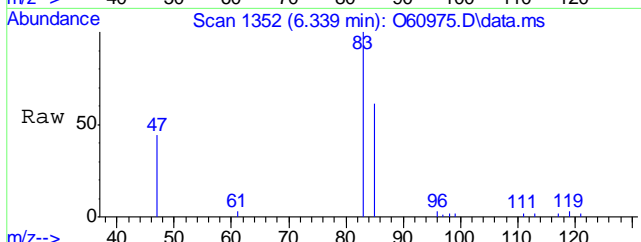
#8
 cis-1,2-Dichloroethene
 Concen: 1.17 ug/L
 RT: 6.072 min Scan# 1307
 Delta R.T. 0.000 min
 Lab File: O60975.D
 Acq: 6 Aug 2020 2:39 pm

Tgt Ion	Resp	Lower	Upper
96	24724		
96	100		
61	140.7	110.0	170.0
98	60.1	34.1	94.1

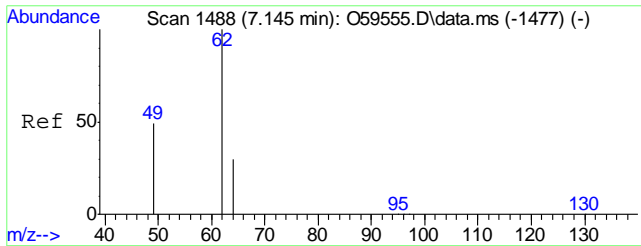


#9
 Chloroform
 Concen: 0.32 ug/L
 RT: 6.339 min Scan# 1352
 Delta R.T. 0.006 min
 Lab File: O60975.D
 Acq: 6 Aug 2020 2:39 pm

Tgt Ion	Resp	Lower	Upper
83	12127		
83	100		
85	60.8	34.7	94.7
47	42.1	9.0	69.0

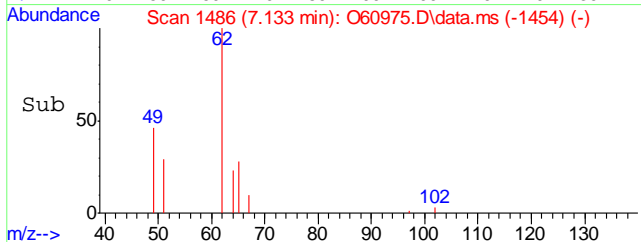
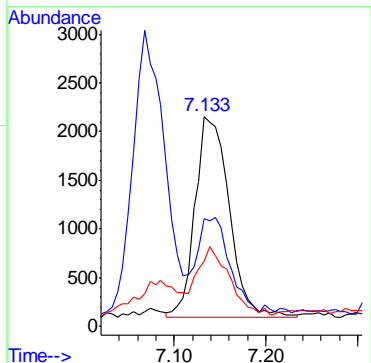
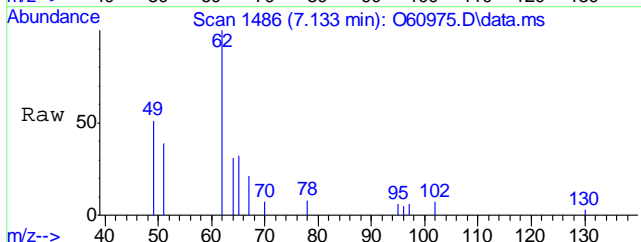


7.1.8
7



#14
 1,2-Dichloroethane
 Concen: 0.18 ug/L
 RT: 7.133 min Scan# 1486
 Delta R.T. -0.012 min
 Lab File: O60975.D
 Acq: 6 Aug 2020 2:39 pm

Tgt Ion	Resp	Lower	Upper
62	5297		
49	46.0	17.8	77.8
64	25.2	1.3	61.3



7.18
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\080620\
Data File : O60976.D
Acq On : 6 Aug 2020 3:04 pm
Operator : amandab
Sample : FA77472-9 Inst : MSVOA12
Misc : MS46912,VO2343,,,,,
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Aug 07 08:02:08 2020
Quant Method : C:\msdchem\2\methods\SIMCL070220.M
Quant Title : Standard Methods 6200B
QLast Update : Thu Jul 02 13:33:54 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.346	96	221162	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.447	117	147369	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.074	65	89928	5.54	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	110.80%	
19) Toluene-d8	8.896	98	174839	4.92	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	98.40%	
Target Compounds						
3) Chloromethane	2.799	50	10628	0.28	ug/L	87
7) 1,1-Dichloroethane	5.506	63	10262	0.28	ug/L	98
8) cis-1,2-Dichloroethene	6.066	96	25746	1.29	ug/L	97
9) Chloroform	6.333	83	9722	0.27	ug/L	90
15) Trichloroethene	7.512	95	89083	4.13	ug/L	99
21) Tetrachloroethene	9.343	166	16130	0.86	ug/L	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.19
7

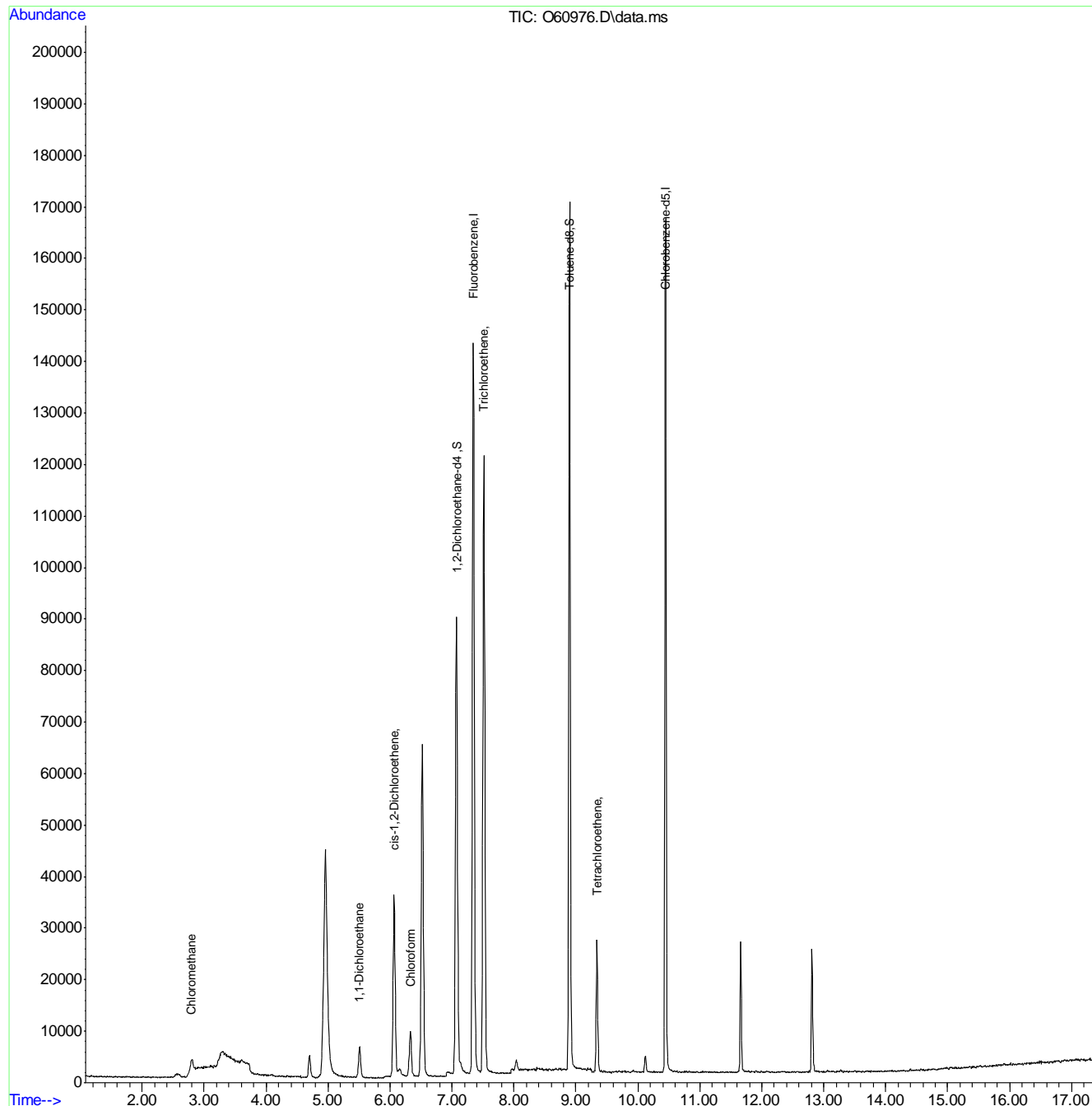


Quantitation Report (QT Reviewed)

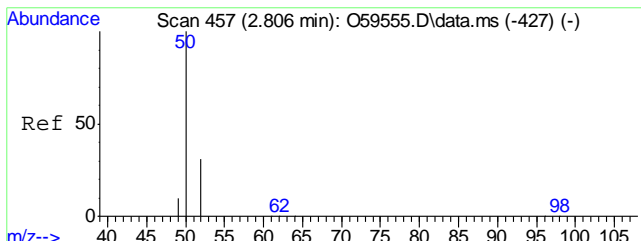
Data Path : C:\msdchem\2\data\080620\
 Data File : O60976.D
 Acq On : 6 Aug 2020 3:04 pm
 Operator : amandab
 Sample : FA77472-9
 Misc : MS46912,VO2343,,,,,
 ALS Vial : 16 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Aug 07 08:02:08 2020
 Quant Method : C:\msdchem\2\methods\SIMCL070220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jul 02 13:33:54 2020
 Response via : Initial Calibration

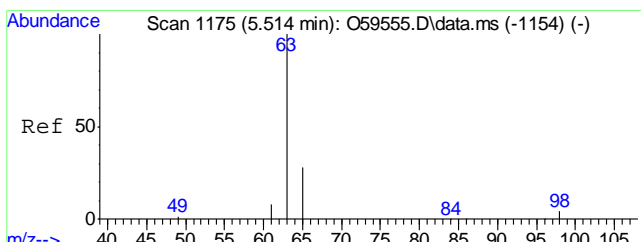
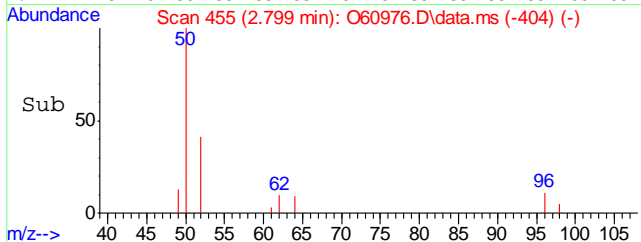
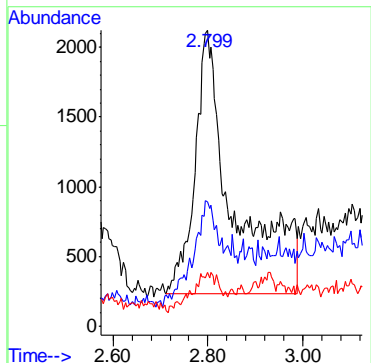
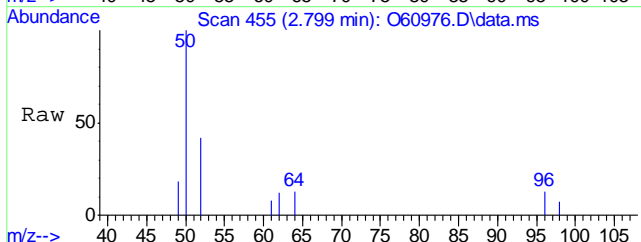


7.19



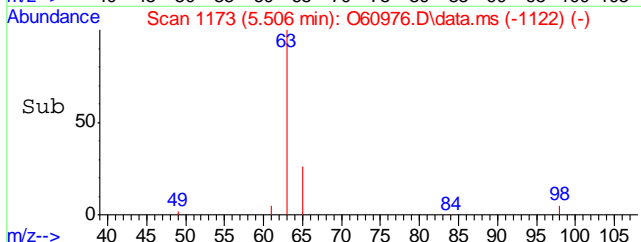
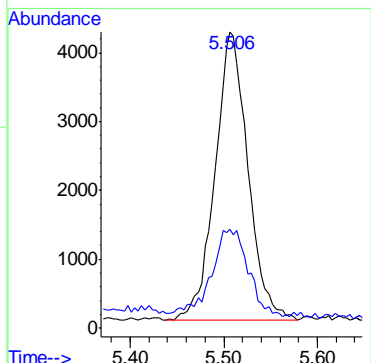
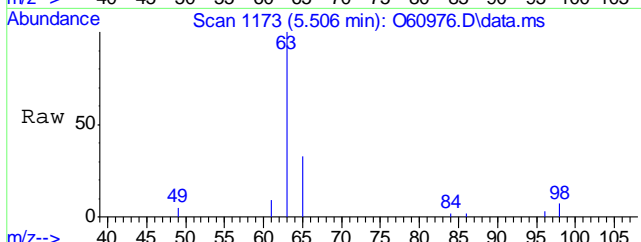
#3
 Chloromethane
 Concen: 0.28 ug/L
 RT: 2.799 min Scan# 455
 Delta R.T. -0.007 min
 Lab File: O60976.D
 Acq: 6 Aug 2020 3:04 pm

Tgt Ion	Resp	Lower	Upper
50	10628		
52	35.5	8.5	48.5
49	14.6	0.0	29.8



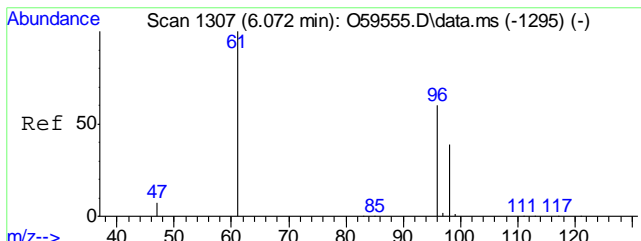
#7
 1,1-Dichloroethane
 Concen: 0.28 ug/L
 RT: 5.506 min Scan# 1173
 Delta R.T. -0.008 min
 Lab File: O60976.D
 Acq: 6 Aug 2020 3:04 pm

Tgt Ion	Resp	Lower	Upper
63	10262		
65	29.6	0.7	60.7



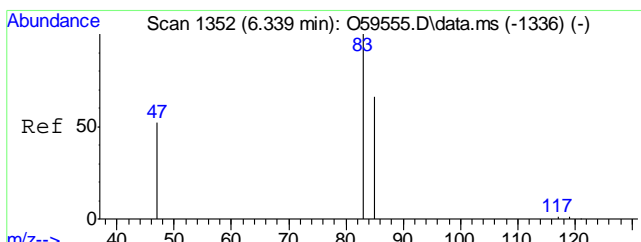
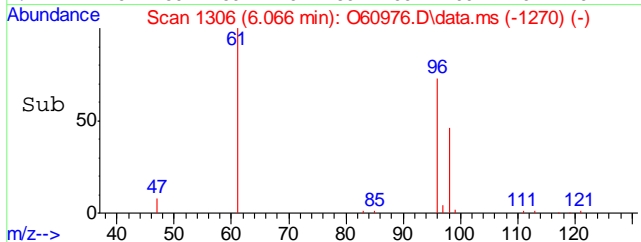
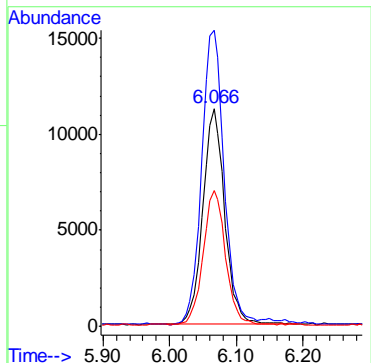
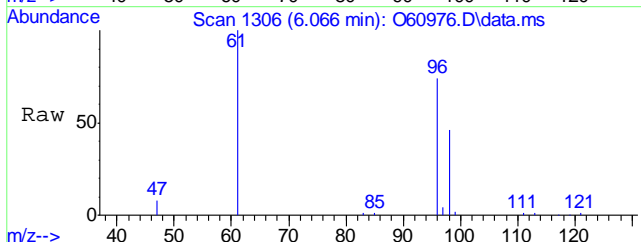
7.19
7





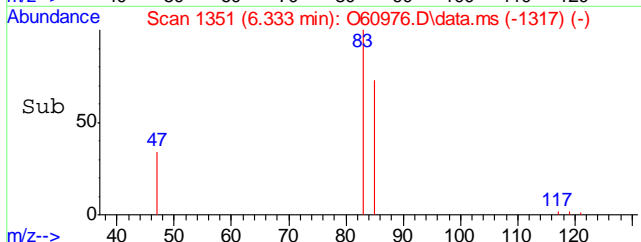
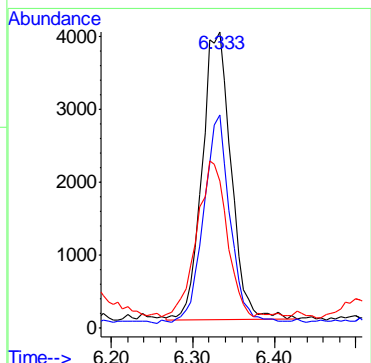
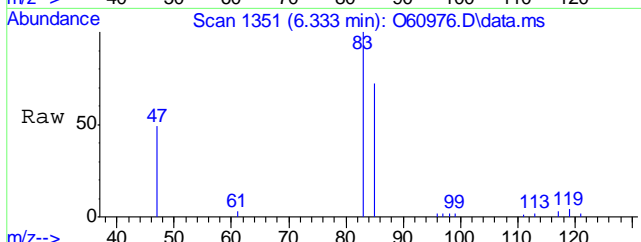
#8
 cis-1,2-Dichloroethene
 Concen: 1.29 ug/L
 RT: 6.066 min Scan# 1306
 Delta R.T. -0.006 min
 Lab File: O60976.D
 Acq: 6 Aug 2020 3:04 pm

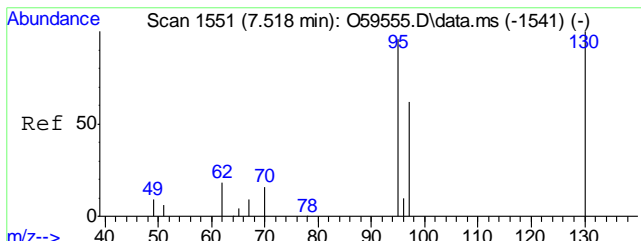
Tgt Ion	Resp	Lower	Upper
96	25746		
96	100		
61	135.7	110.0	170.0
98	61.7	34.1	94.1



#9
 Chloroform
 Concen: 0.27 ug/L
 RT: 6.333 min Scan# 1351
 Delta R.T. -0.000 min
 Lab File: O60976.D
 Acq: 6 Aug 2020 3:04 pm

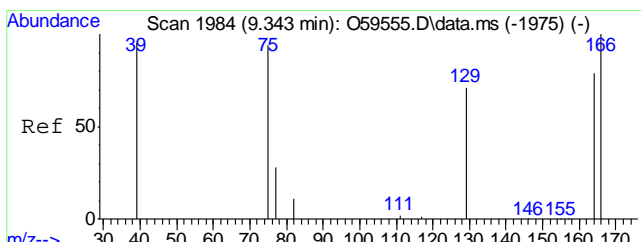
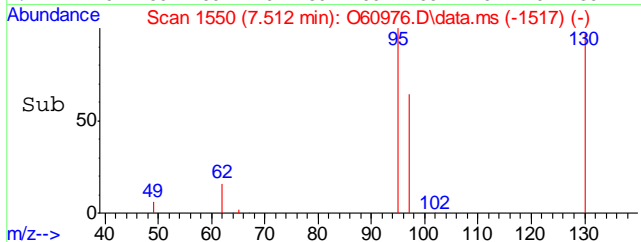
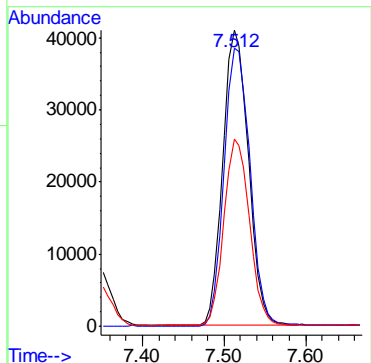
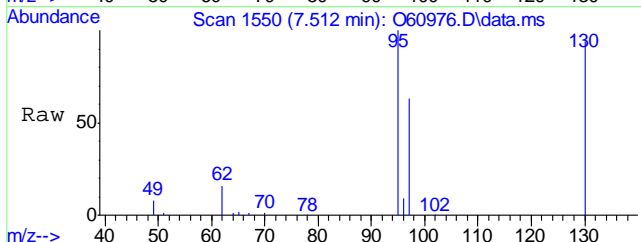
Tgt Ion	Resp	Lower	Upper
83	9722		
83	100		
85	71.6	34.7	94.7
47	46.3	9.0	69.0





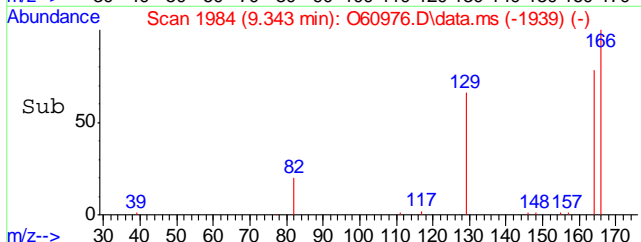
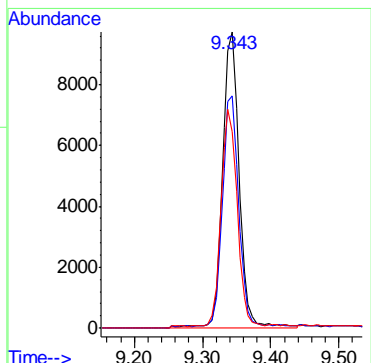
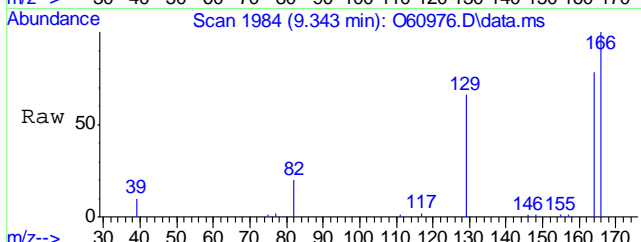
#15
 Trichloroethene
 Concen: 4.13 ug/L
 RT: 7.512 min Scan# 1550
 Delta R.T. -0.006 min
 Lab File: O60976.D
 Acq: 6 Aug 2020 3:04 pm

Tgt Ion	Resp	Lower	Upper
95	89083		
130	94.2	63.4	123.4
97	63.3	35.0	95.0



#21
 Tetrachloroethene
 Concen: 0.86 ug/L
 RT: 9.343 min Scan# 1984
 Delta R.T. 0.000 min
 Lab File: O60976.D
 Acq: 6 Aug 2020 3:04 pm

Tgt Ion	Resp	Lower	Upper
166	16130		
164	78.3	48.3	108.3
129	66.5	39.5	99.5



7.19
7



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\080720\
Data File : O60989.D
Acq On : 7 Aug 2020 11:20 am
Operator : amandab
Sample : FA77472-10 Inst : MSVOA12
Misc : MS46912,VO2344,,,,,
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 07 11:45:35 2020
Quant Method : C:\msdchem\2\methods\SIMCL070220.M
Quant Title : Standard Methods 6200B
QLast Update : Thu Jul 02 13:33:54 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Fluorobenzene	7.346	96	270054	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.447	117	179541	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.074	65	108703	5.48	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	109.60%	
19) Toluene-d8	8.900	98	211749	4.90	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	98.00%	
Target Compounds						
						Qvalue
3) Chloromethane	2.807	50	12554	0.27	ug/L	97
7) 1,1-Dichloroethane	5.514	63	13454	0.30	ug/L	99
8) cis-1,2-Dichloroethene	6.072	96	26226	1.08	ug/L	96
9) Chloroform	6.333	83	10700	0.25	ug/L	91
14) 1,2-Dichloroethane	7.139	62	6839	0.20	ug/L	94
15) Trichloroethene	7.518	95	128686	4.89	ug/L	97
21) Tetrachloroethene	9.343	166	14542	0.63	ug/L	96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.1.10
7

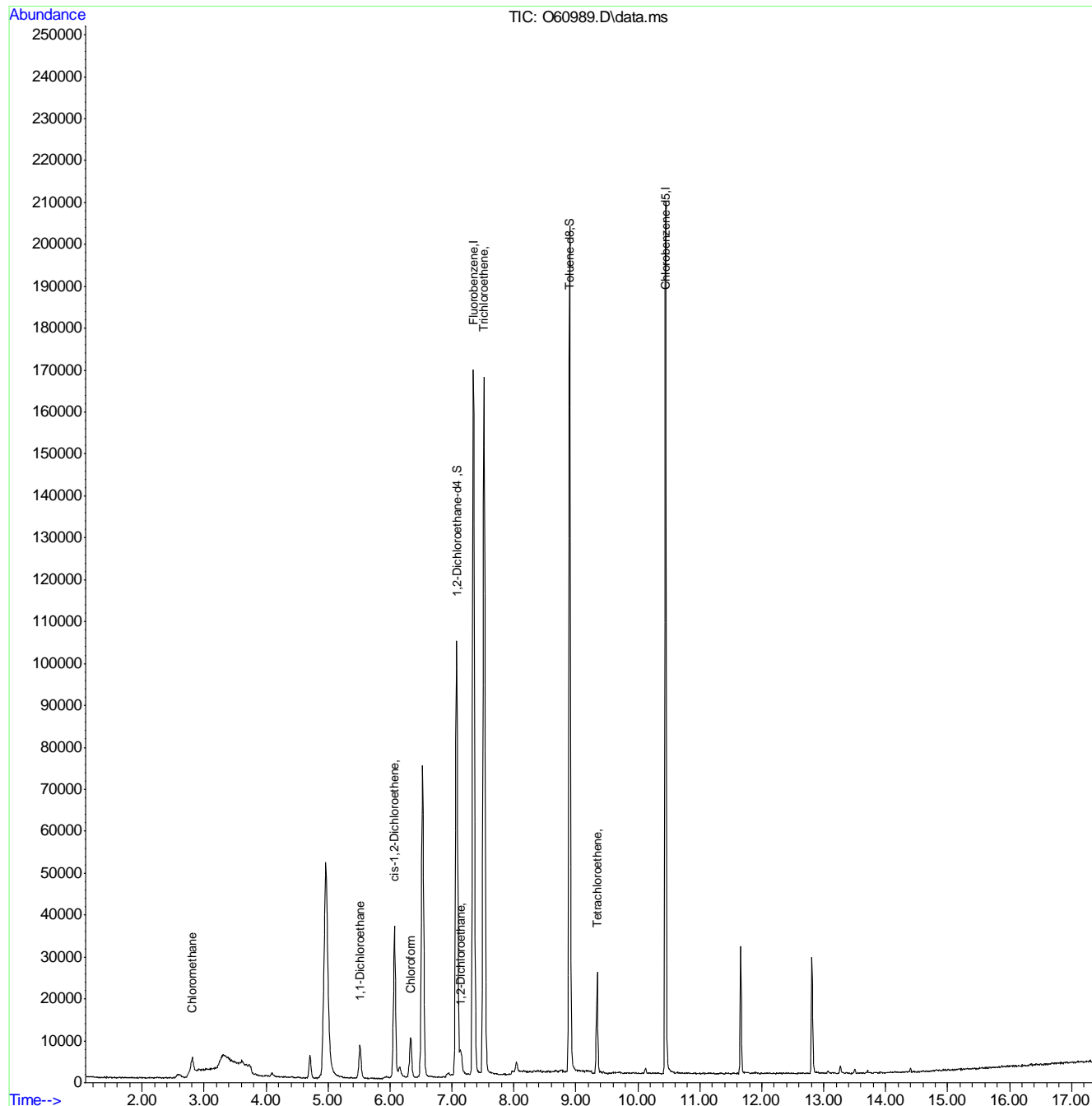


Quantitation Report (QT Reviewed)

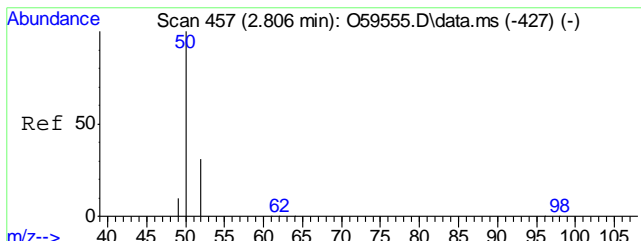
Data Path : C:\msdchem\2\data\080720\
Data File : O60989.D
Acq On : 7 Aug 2020 11:20 am
Operator : amandab
Sample : FA77472-10
Misc : MS46912,VO2344,,,,,
ALS Vial : 4 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Aug 07 11:45:35 2020
Quant Method : C:\msdchem\2\methods\SIMCL070220.M
Quant Title : Standard Methods 6200B
QLast Update : Thu Jul 02 13:33:54 2020
Response via : Initial Calibration

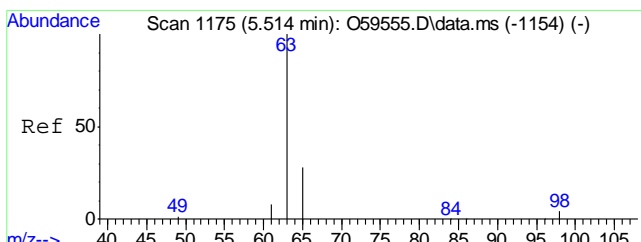
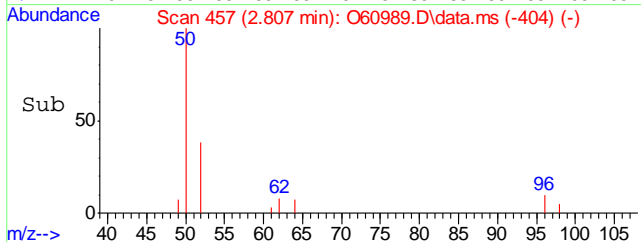
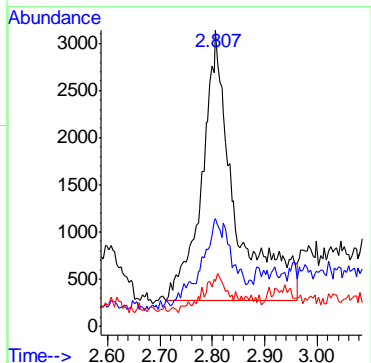
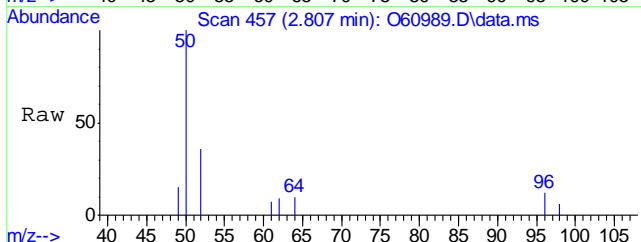


7.1.10
7



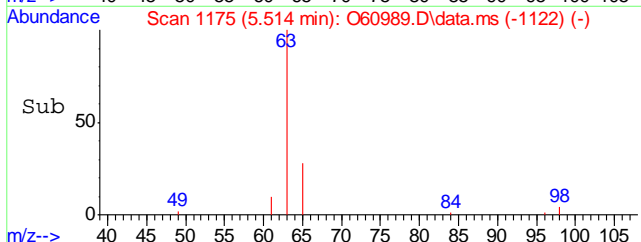
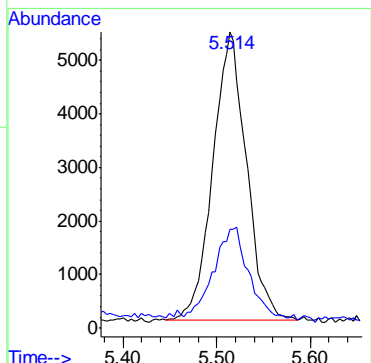
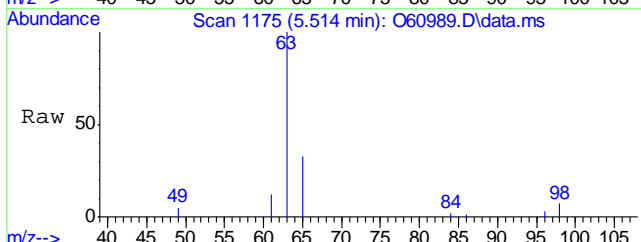
#3
 Chloromethane
 Concen: 0.27 ug/L
 RT: 2.807 min Scan# 457
 Delta R.T. 0.001 min
 Lab File: O60989.D
 Acq: 7 Aug 2020 11:20 am

Tgt Ion	Resp	Lower	Upper
50	12554		
52	30.3	8.5	48.5
49	10.8	0.0	29.8

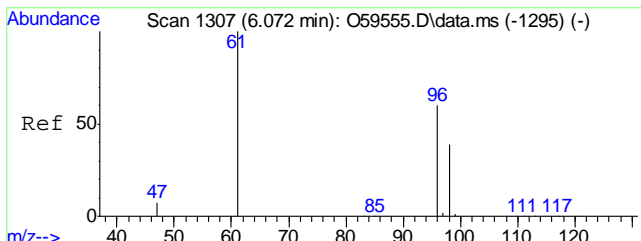


#7
 1,1-Dichloroethane
 Concen: 0.30 ug/L
 RT: 5.514 min Scan# 1175
 Delta R.T. 0.000 min
 Lab File: O60989.D
 Acq: 7 Aug 2020 11:20 am

Tgt Ion	Resp	Lower	Upper
63	13454		
65	31.4	0.7	60.7

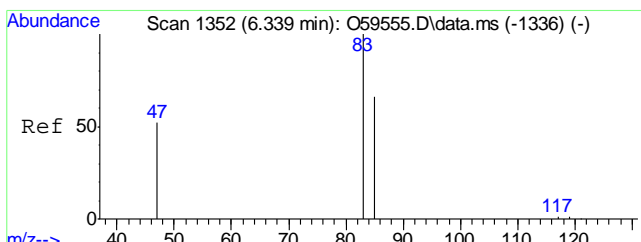
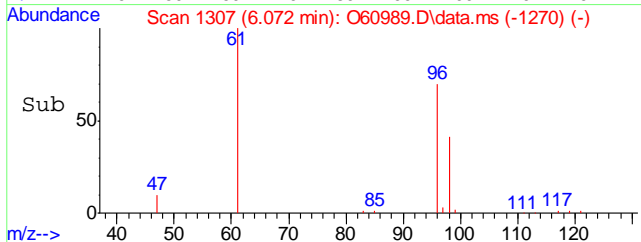
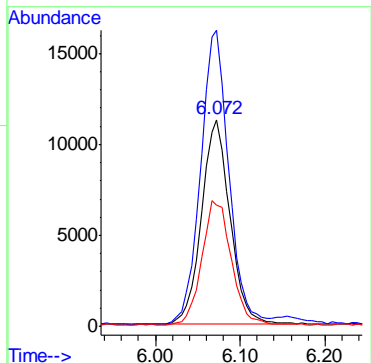
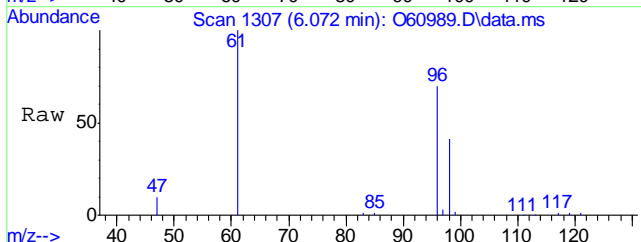


7.1.10
7



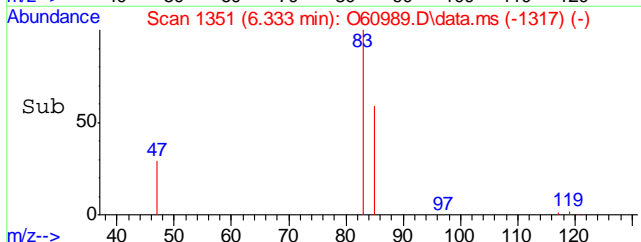
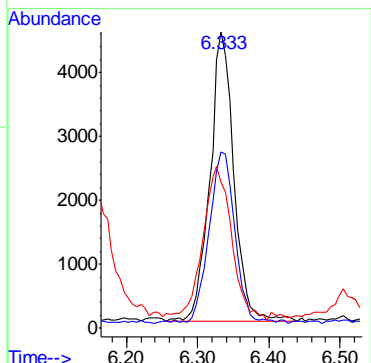
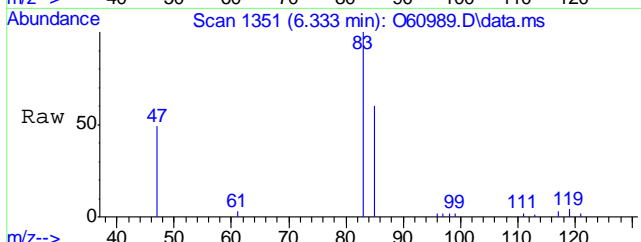
#8
 cis-1,2-Dichloroethene
 Concen: 1.08 ug/L
 RT: 6.072 min Scan# 1307
 Delta R.T. 0.000 min
 Lab File: O60989.D
 Acq: 7 Aug 2020 11:20 am

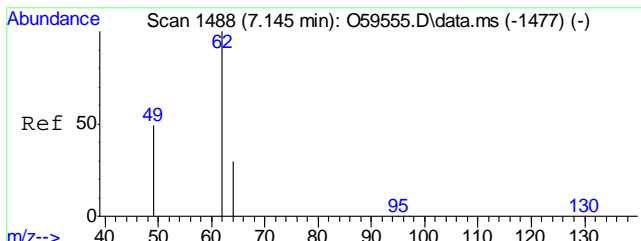
Tgt Ion	Resp	Lower	Upper
96	26226		
96	100		
61	143.3	110.0	170.0
98	58.7	34.1	94.1



#9
 Chloroform
 Concen: 0.25 ug/L
 RT: 6.333 min Scan# 1351
 Delta R.T. -0.000 min
 Lab File: O60989.D
 Acq: 7 Aug 2020 11:20 am

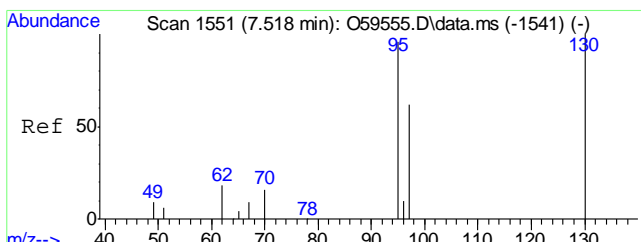
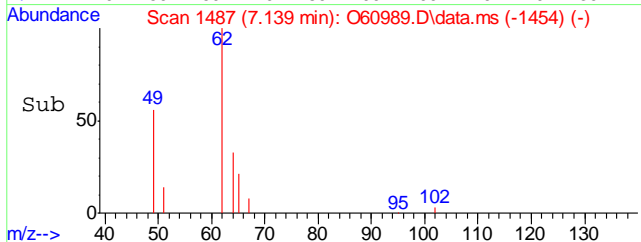
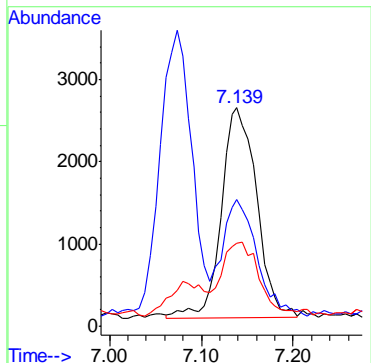
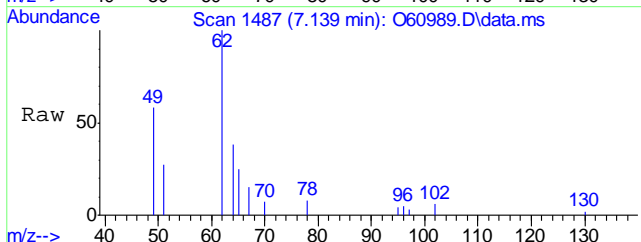
Tgt Ion	Resp	Lower	Upper
83	10700		
83	100		
85	58.7	34.7	94.7
47	46.0	9.0	69.0





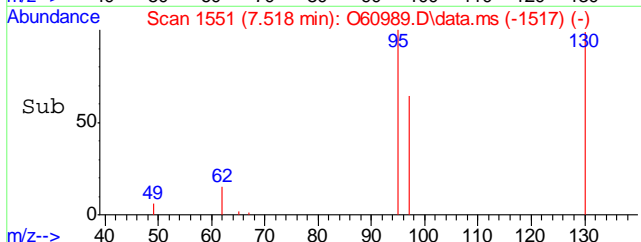
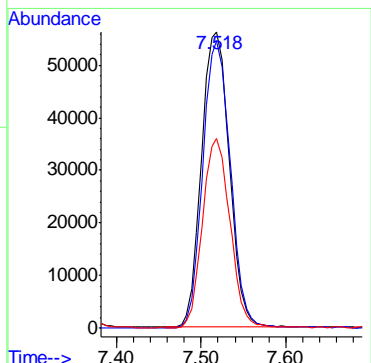
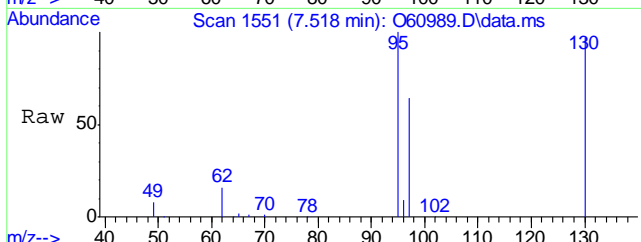
#14
1,2-Dichloroethane
Concen: 0.20 ug/L
RT: 7.139 min Scan# 1487
Delta R.T. -0.006 min
Lab File: O60989.D
Acq: 7 Aug 2020 11:20 am

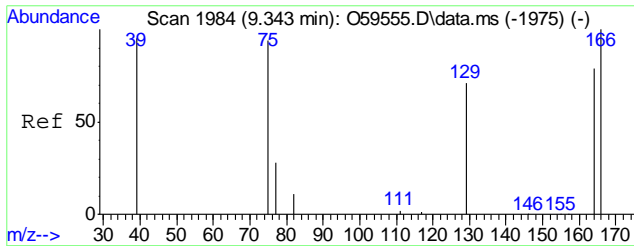
Tgt Ion	Resp	Lower	Upper
62	6839		
49	53.1	17.8	77.8
64	32.3	1.3	61.3



#15
Trichloroethene
Concen: 4.89 ug/L
RT: 7.518 min Scan# 1551
Delta R.T. 0.000 min
Lab File: O60989.D
Acq: 7 Aug 2020 11:20 am

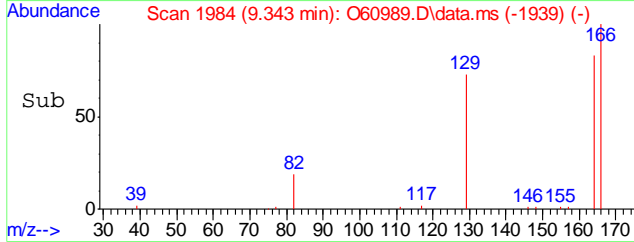
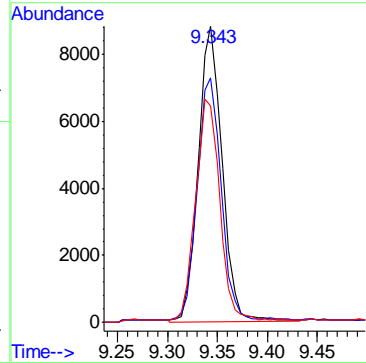
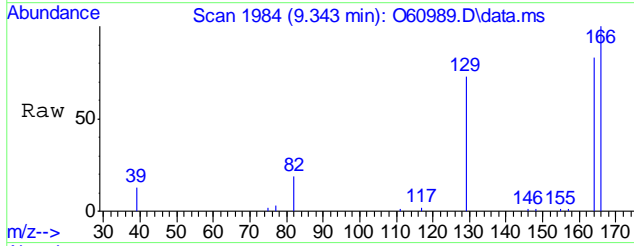
Tgt Ion	Resp	Lower	Upper
95	128686		
130	96.9	63.4	123.4
97	64.1	35.0	95.0





#21
 Tetrachloroethene
 Concen: 0.63 ug/L
 RT: 9.343 min Scan# 1984
 Delta R.T. 0.000 min
 Lab File: O60989.D
 Acq: 7 Aug 2020 11:20 am

Tgt Ion	Resp	Lower	Upper
166	14542		
166	100		
164	82.4	48.3	108.3
129	72.6	39.5	99.5



7.1.10
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\080720\
Data File : O60990.D
Acq On : 7 Aug 2020 11:43 am
Operator : amandab
Sample : FA77472-11 Inst : MSVOA12
Misc : MS46912,VO2344,,,,,
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 07 12:02:07 2020
Quant Method : C:\msdchem\2\methods\SIMCL070220.M
Quant Title : Standard Methods 6200B
QLast Update : Thu Jul 02 13:33:54 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.346	96	259322	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.447	117	170717	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.074	65	106321	5.58	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	111.60%	
19) Toluene-d8	8.900	98	203245	4.94	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	98.80%	
Target Compounds						
3) Chloromethane	2.810	50	5724	0.13	ug/L	99
7) 1,1-Dichloroethane	5.514	63	12500	0.29	ug/L	95
8) cis-1,2-Dichloroethene	6.072	96	25312	1.08	ug/L	96
9) Chloroform	6.339	83	10365	0.25	ug/L	92
14) 1,2-Dichloroethane	7.133	62	6950	0.21	ug/L	93
15) Trichloroethene	7.518	95	122450	4.84	ug/L	96
21) Tetrachloroethene	9.343	166	14138	0.65	ug/L	99

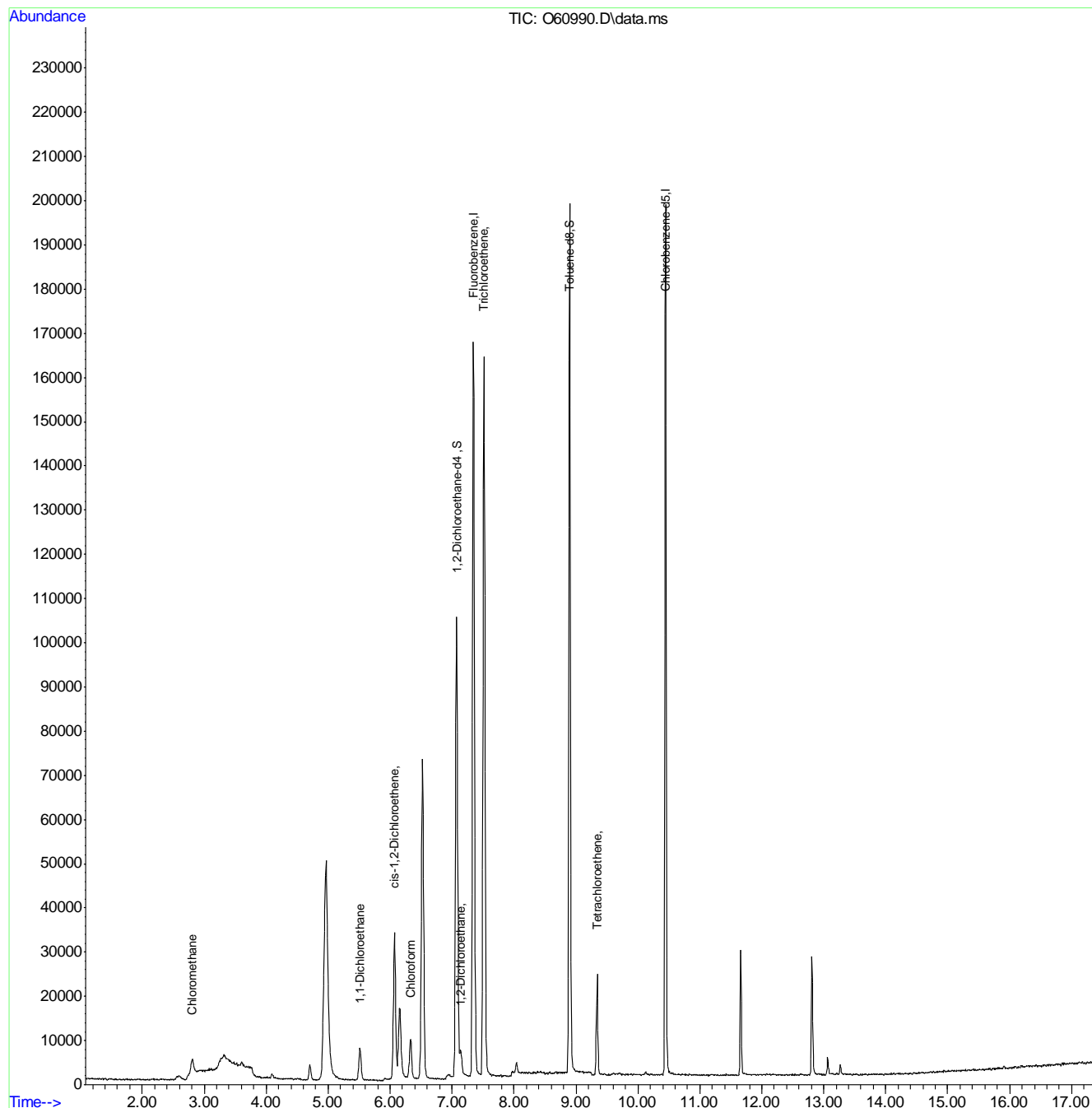
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.1.11
7

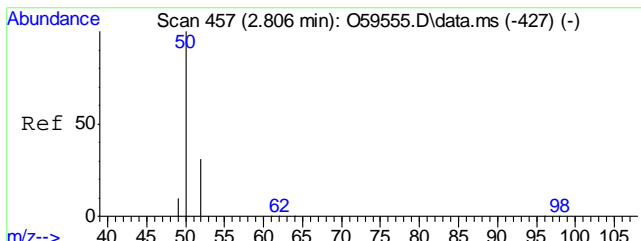
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\080720\
 Data File : O60990.D
 Acq On : 7 Aug 2020 11:43 am
 Operator : amandab
 Sample : FA77472-11 Inst : MSVOA12
 Misc : MS46912,VO2344,,,,,
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 07 12:02:07 2020
 Quant Method : C:\msdchem\2\methods\SIMCL070220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jul 02 13:33:54 2020
 Response via : Initial Calibration

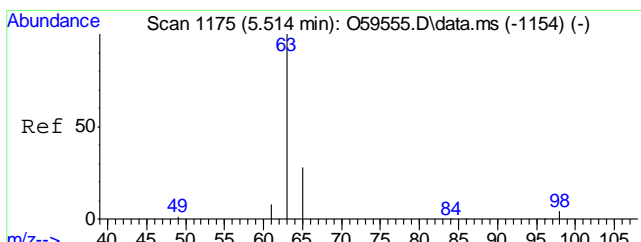
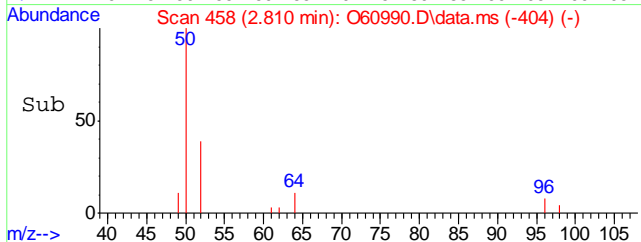
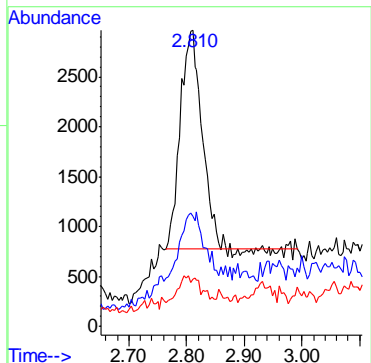
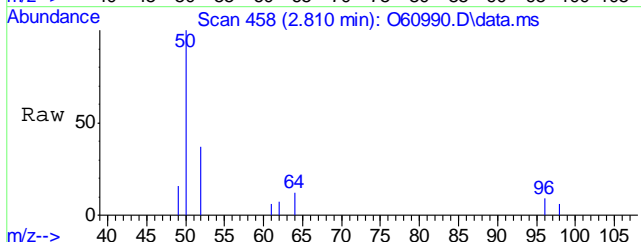


7.1.11
7



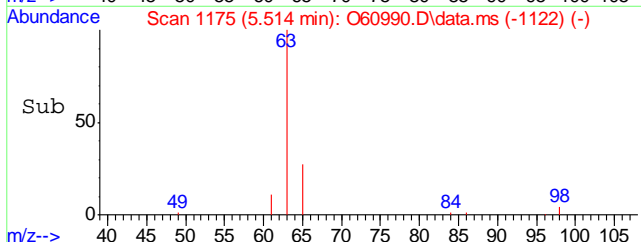
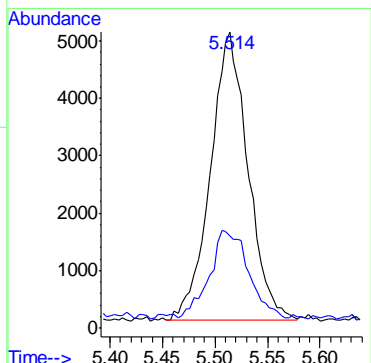
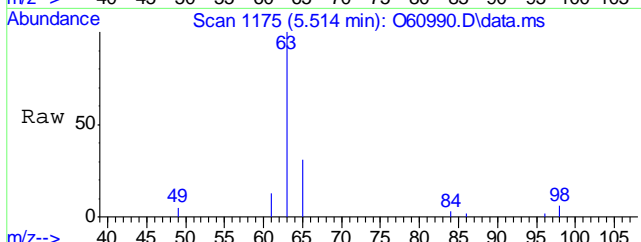
#3
 Chloromethane
 Concen: 0.13 ug/L
 RT: 2.810 min Scan# 458
 Delta R.T. 0.004 min
 Lab File: O60990.D
 Acq: 7 Aug 2020 11:43 am

Tgt Ion	Resp	Lower	Upper
50	100		
52	27.9	8.5	48.5
49	10.3	0.0	29.8



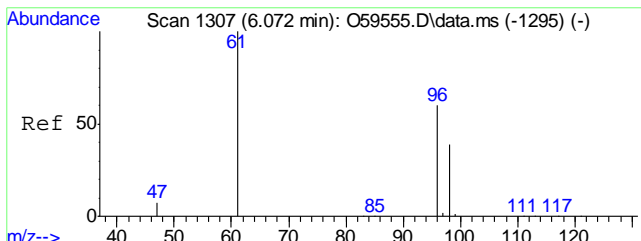
#7
 1,1-Dichloroethane
 Concen: 0.29 ug/L
 RT: 5.514 min Scan# 1175
 Delta R.T. -0.000 min
 Lab File: O60990.D
 Acq: 7 Aug 2020 11:43 am

Tgt Ion	Resp	Lower	Upper
63	100		
65	27.8	0.7	60.7



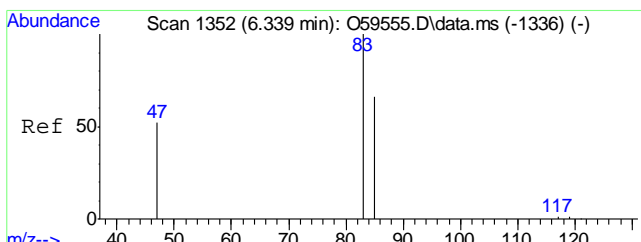
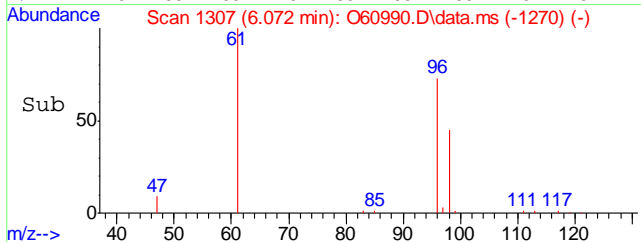
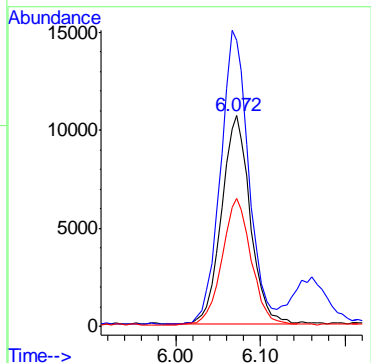
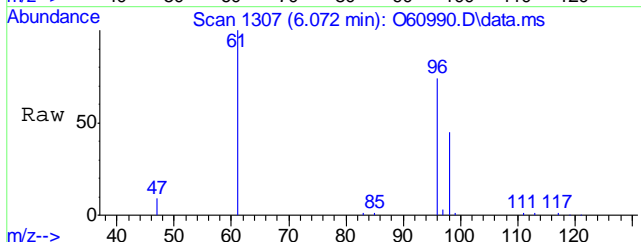
7.1.11
7





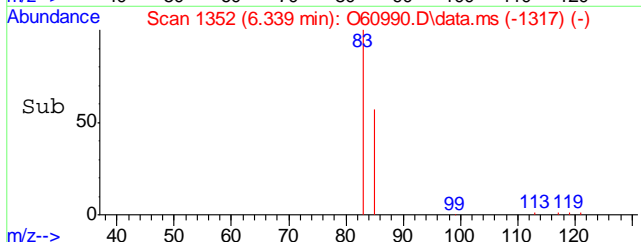
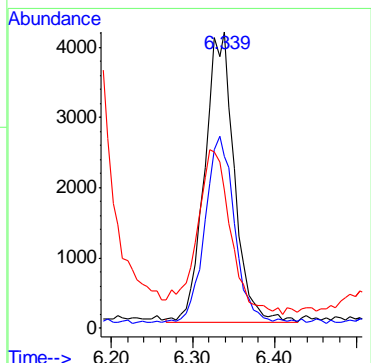
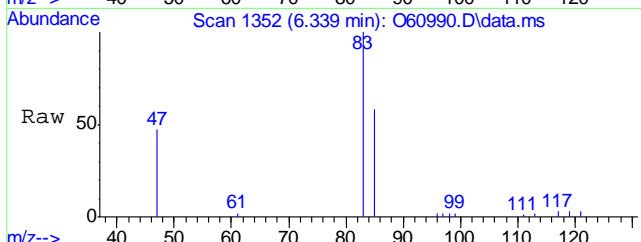
#8
 cis-1,2-Dichloroethene
 Concen: 1.08 ug/L
 RT: 6.072 min Scan# 1307
 Delta R.T. 0.000 min
 Lab File: O60990.D
 Acq: 7 Aug 2020 11:43 am

Tgt Ion	Resp	Lower	Upper
96	25312		
96	100		
61	136.1	110.0	170.0
98	60.8	34.1	94.1

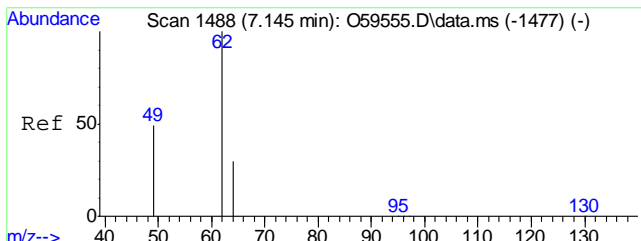


#9
 Chloroform
 Concen: 0.25 ug/L
 RT: 6.339 min Scan# 1352
 Delta R.T. 0.006 min
 Lab File: O60990.D
 Acq: 7 Aug 2020 11:43 am

Tgt Ion	Resp	Lower	Upper
83	10365		
83	100		
85	56.7	34.7	94.7
47	42.2	9.0	69.0

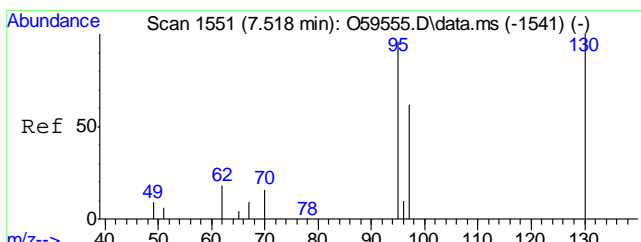
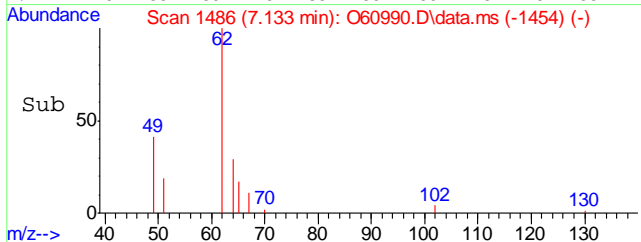
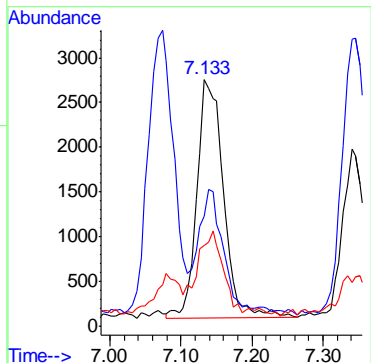
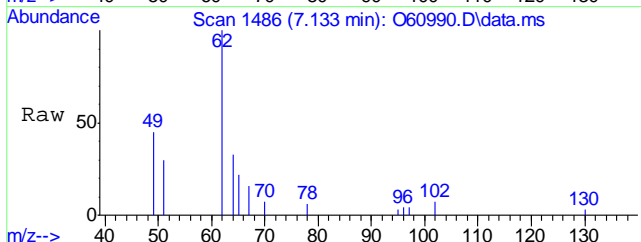


7.1.11
 7



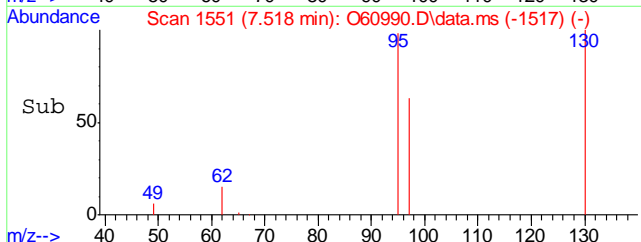
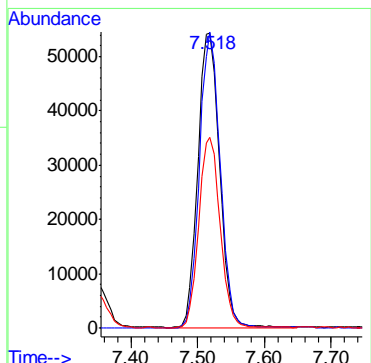
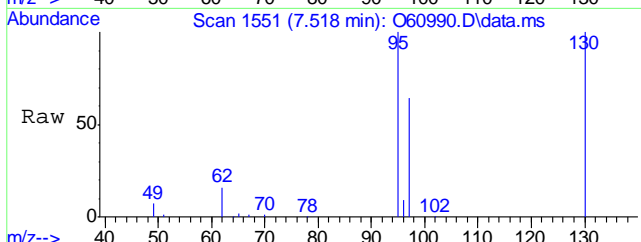
#14
 1,2-Dichloroethane
 Concen: 0.21 ug/L
 RT: 7.133 min Scan# 1486
 Delta R.T. -0.012 min
 Lab File: O60990.D
 Acq: 7 Aug 2020 11:43 am

Tgt Ion	Resp	Lower	Upper
62	6950		
49	41.5	17.8	77.8
64	29.3	1.3	61.3

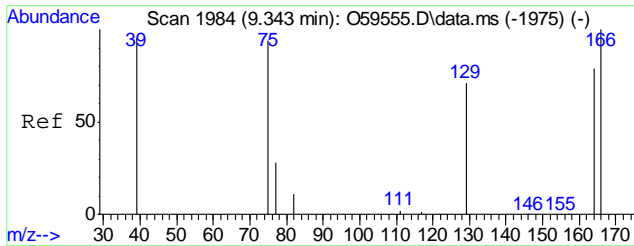


#15
 Trichloroethene
 Concen: 4.84 ug/L
 RT: 7.518 min Scan# 1551
 Delta R.T. 0.000 min
 Lab File: O60990.D
 Acq: 7 Aug 2020 11:43 am

Tgt Ion	Resp	Lower	Upper
95	122450		
130	100.3	63.4	123.4
97	64.5	35.0	95.0

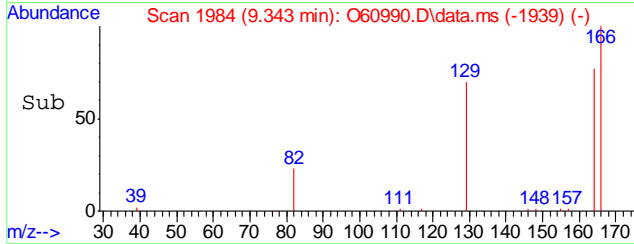
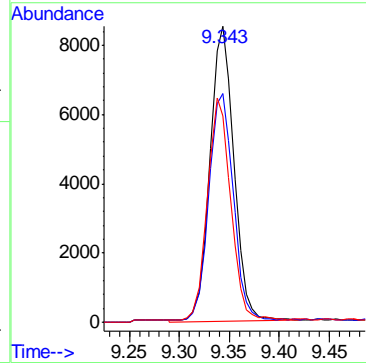
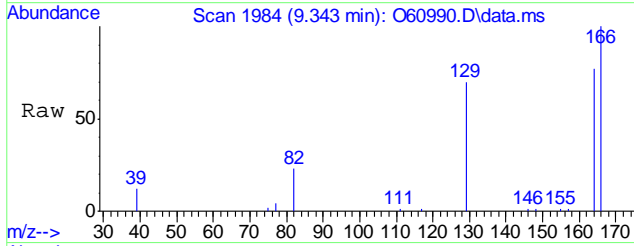


7.1.11
7



#21
Tetrachloroethene
Concen: 0.65 ug/L
RT: 9.343 min Scan# 1984
Delta R.T. 0.000 min
Lab File: O60990.D
Acq: 7 Aug 2020 11:43 am

Tgt Ion	Resp	Lower	Upper
166	14138		
164	77.2	48.3	108.3
129	69.4	39.5	99.5



7.1.11
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\080620\
 Data File : O60963.D
 Acq On : 6 Aug 2020 9:51 am
 Operator : amandab
 Sample : MB Inst : MSVOA12
 Misc : MS46912,VO2343,,,,,
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 06 10:08:47 2020
 Quant Method : C:\msdchem\2\methods\SIMCL070220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jul 02 13:33:54 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.346	96	351141	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.447	117	230919	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.074	65	129893	5.04	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	100.80%	
19) Toluene-d8	8.896	98	281268	5.06	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	101.20%	

Target Compounds Qvalue

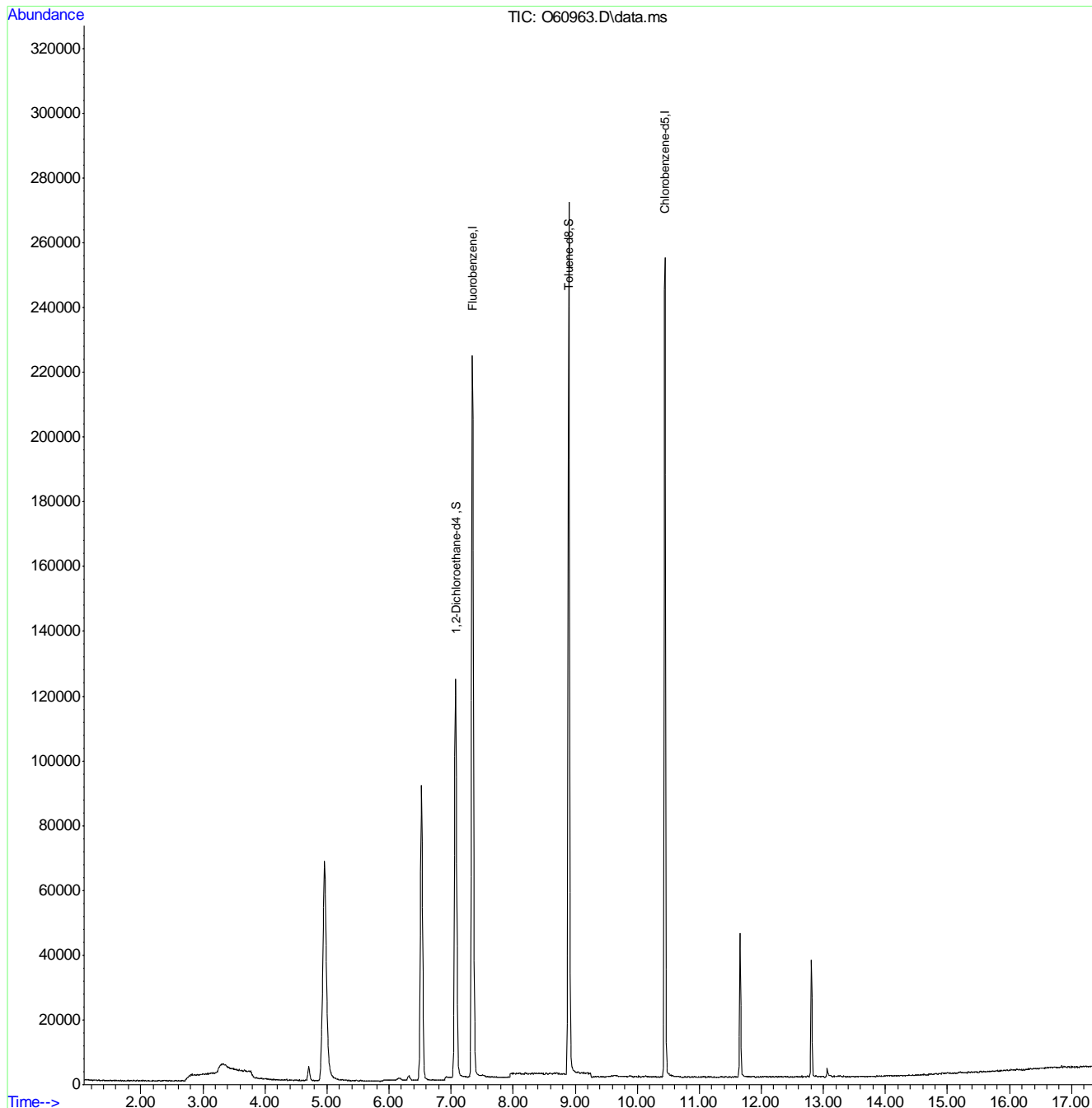
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.2.1
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\080620\
Data File : O60963.D
Acq On : 6 Aug 2020 9:51 am
Operator : amandab
Sample : MB Inst : MSVOA12
Misc : MS46912,VO2343,,,,,
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 06 10:08:47 2020
Quant Method : C:\msdchem\2\methods\SIMCL070220.M
Quant Title : Standard Methods 6200B
QLast Update : Thu Jul 02 13:33:54 2020
Response via : Initial Calibration



7.2.1
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\080720\
 Data File : O60988.D
 Acq On : 7 Aug 2020 10:56 am
 Operator : amandab
 Sample : MB Inst : MSVOA12
 Misc : MS46912,VO2344,,,,,
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 07 11:45:11 2020
 Quant Method : C:\msdchem\2\methods\SIMCL070220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jul 02 13:33:54 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.346	96	294679	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.447	117	193207	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.074	65	117244	5.42	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	108.40%	
19) Toluene-d8	8.900	98	232201	4.99	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	99.80%	

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

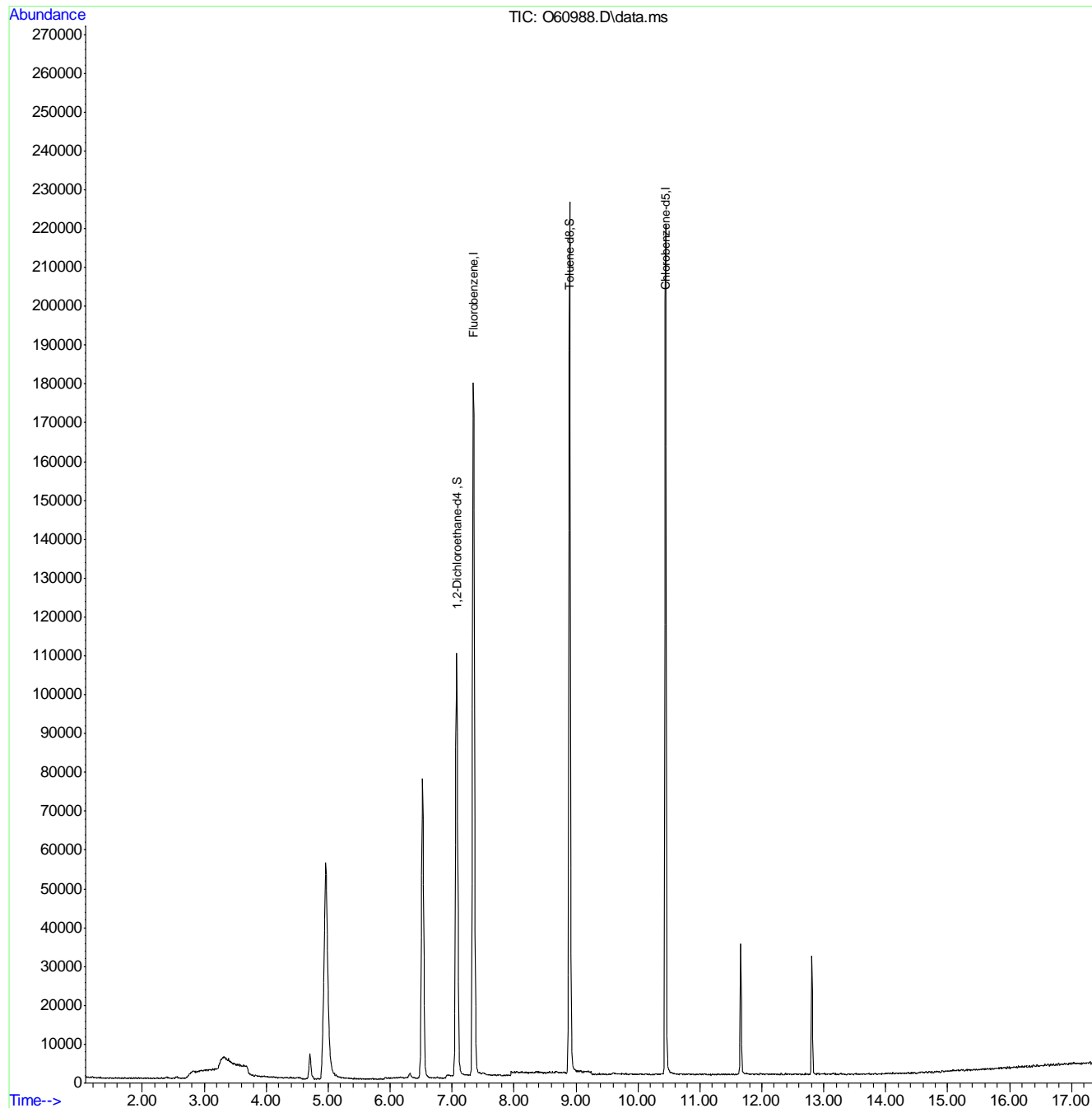
7.2.2
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\080720\
Data File : O60988.D
Acq On : 7 Aug 2020 10:56 am
Operator : amandab
Sample : MB
Misc : MS46912,VO2344,,,,,
ALS Vial : 3 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Aug 07 11:45:11 2020
Quant Method : C:\msdchem\2\methods\SIMCL070220.M
Quant Title : Standard Methods 6200B
QLast Update : Thu Jul 02 13:33:54 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\080620\
 Data File : O60964.D
 Acq On : 6 Aug 2020 10:14 am
 Operator : amandab
 Sample : BS Inst : MSVOA12
 Misc : MS46912,VO2343,,,,,
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 06 10:32:23 2020
 Quant Method : C:\msdchem\2\methods\SIMCL070220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jul 02 13:33:54 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
Internal Standards							
1) Fluorobenzene	7.346	96	362755	5.00	ug/L	0.00	
18) Chlorobenzene-d5	10.447	117	242260	5.00	ug/L	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.073	65	139944	5.25	ug/L	0.00	
Spiked Amount	5.000	Range 74 - 125	Recovery	=	105.00%		
19) Toluene-d8	8.896	98	285190	4.89	ug/L	0.00	
Spiked Amount	5.000	Range 88 - 111	Recovery	=	97.80%		
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.897	62	158809	4.56	ug/L		98
3) Chloromethane	2.799	50	234583	3.90	ug/L		98
4) 1,1-Dichloroethene	4.085	61	177033	3.98	ug/L		97
5) Methylene Chloride	4.696	49	290665	3.88	ug/L		97
6) trans-1,2-Dichloroethene	4.865	61	203983	4.27	ug/L		97
7) 1,1-Dichloroethane	5.506	63	247525	4.09	ug/L		99
8) cis-1,2-Dichloroethene	6.066	96	139876	4.28	ug/L		98
9) Chloroform	6.327	83	253197	4.35	ug/L		97
10) Carbon Tetrachloride	6.504	117	175259	4.91	ug/L		99
11) 1,1,1-Trichloroethane	6.576	97	197296	4.70	ug/L		97
12) Benzene	6.937	78	429692	4.29	ug/L		98
14) 1,2-Dichloroethane	7.139	62	187375	4.11	ug/L		97
15) Trichloroethene	7.512	95	157013	4.44	ug/L		100
16) 1,2-Dichloropropane	8.040	63	142617	4.24	ug/L		97
17) cis-1,3-Dichloropropene	8.711	75	166002	4.42	ug/L		98
20) trans-1,3-Dichloropropene	9.343	75	162410	4.40	ug/L		100
21) Tetrachloroethene	9.343	166	136626	4.41	ug/L		99
22) 1,4-Dichlorobenzene	12.827	146	247844	4.15	ug/L		100
23) 1,2-Dibromo-3-Chloropr...	14.037	75	45881	3.96	ug/L		97

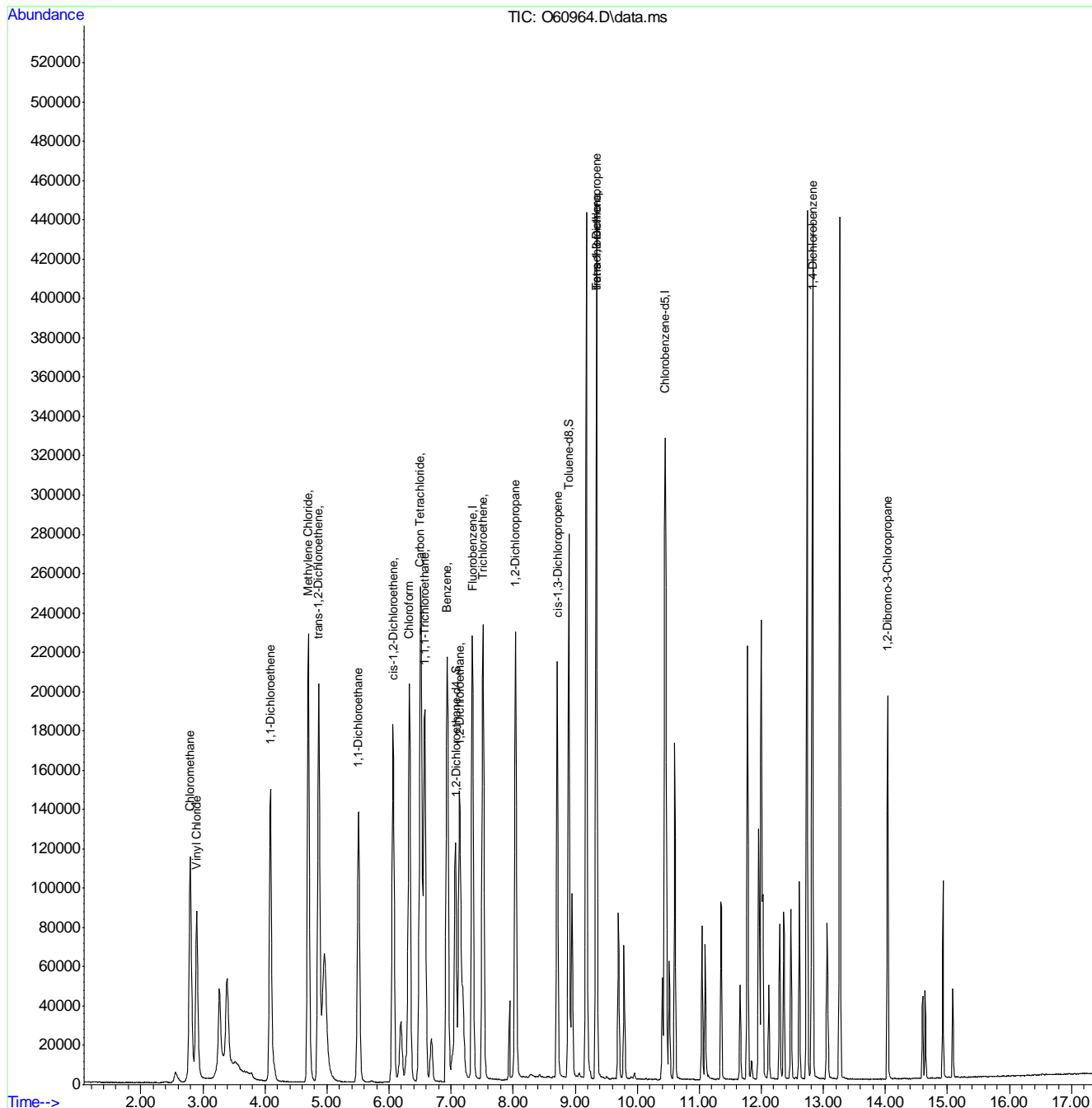
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\080620\
 Data File : O60964.D
 Acq On : 6 Aug 2020 10:14 am
 Operator : amandab
 Sample : BS
 Misc : MS46912,VO2343,,,,,
 ALS Vial : 4 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Aug 06 10:32:23 2020
 Quant Method : C:\msdchem\2\methods\SIMCL070220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jul 02 13:33:54 2020
 Response via : Initial Calibration



7.3.1
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\080720\
 Data File : O60987.D
 Acq On : 7 Aug 2020 10:31 am
 Operator : amandab
 Sample : BS Inst : MSVOA12
 Misc : MS46912,VO2344,,,,,
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 07 10:55:58 2020
 Quant Method : C:\msdchem\2\methods\SIMCL070220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jul 02 13:33:54 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.346	96	350026	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.447	117	233208	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.067	65	137761	5.36	ug/L	-0.01
Spiked Amount	5.000	Range 74 - 125	Recovery	=	107.20%	
19) Toluene-d8	8.896	98	269084	4.79	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	95.80%	
Target Compounds						
						Qvalue
2) Vinyl Chloride	2.901	62	177803	5.29	ug/L	100
3) Chloromethane	2.799	50	268238	4.64	ug/L	99
4) 1,1-Dichloroethene	4.085	61	187973	4.38	ug/L	98
5) Methylene Chloride	4.696	49	319422	4.44	ug/L	100
6) trans-1,2-Dichloroethene	4.865	61	216586	4.70	ug/L	99
7) 1,1-Dichloroethane	5.510	63	265149	4.55	ug/L	99
8) cis-1,2-Dichloroethene	6.066	96	142231	4.51	ug/L	95
9) Chloroform	6.327	83	259724	4.62	ug/L	99
10) Carbon Tetrachloride	6.504	117	169461	4.92	ug/L	98
11) 1,1,1-Trichloroethane	6.576	97	195725	4.84	ug/L	97
12) Benzene	6.937	78	448122	4.63	ug/L	99
14) 1,2-Dichloroethane	7.139	62	195275	4.44	ug/L	99
15) Trichloroethene	7.512	95	161348	4.73	ug/L	100
16) 1,2-Dichloropropane	8.040	63	154121	4.74	ug/L	98
17) cis-1,3-Dichloropropene	8.711	75	162005	4.47	ug/L	97
20) trans-1,3-Dichloropropene	9.343	75	158932	4.47	ug/L	99
21) Tetrachloroethene	9.337	166	136665	4.58	ug/L	94
22) 1,4-Dichlorobenzene	12.827	146	250183	4.36	ug/L	100
23) 1,2-Dibromo-3-Chloropr...	14.037	75	45071	4.04	ug/L	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

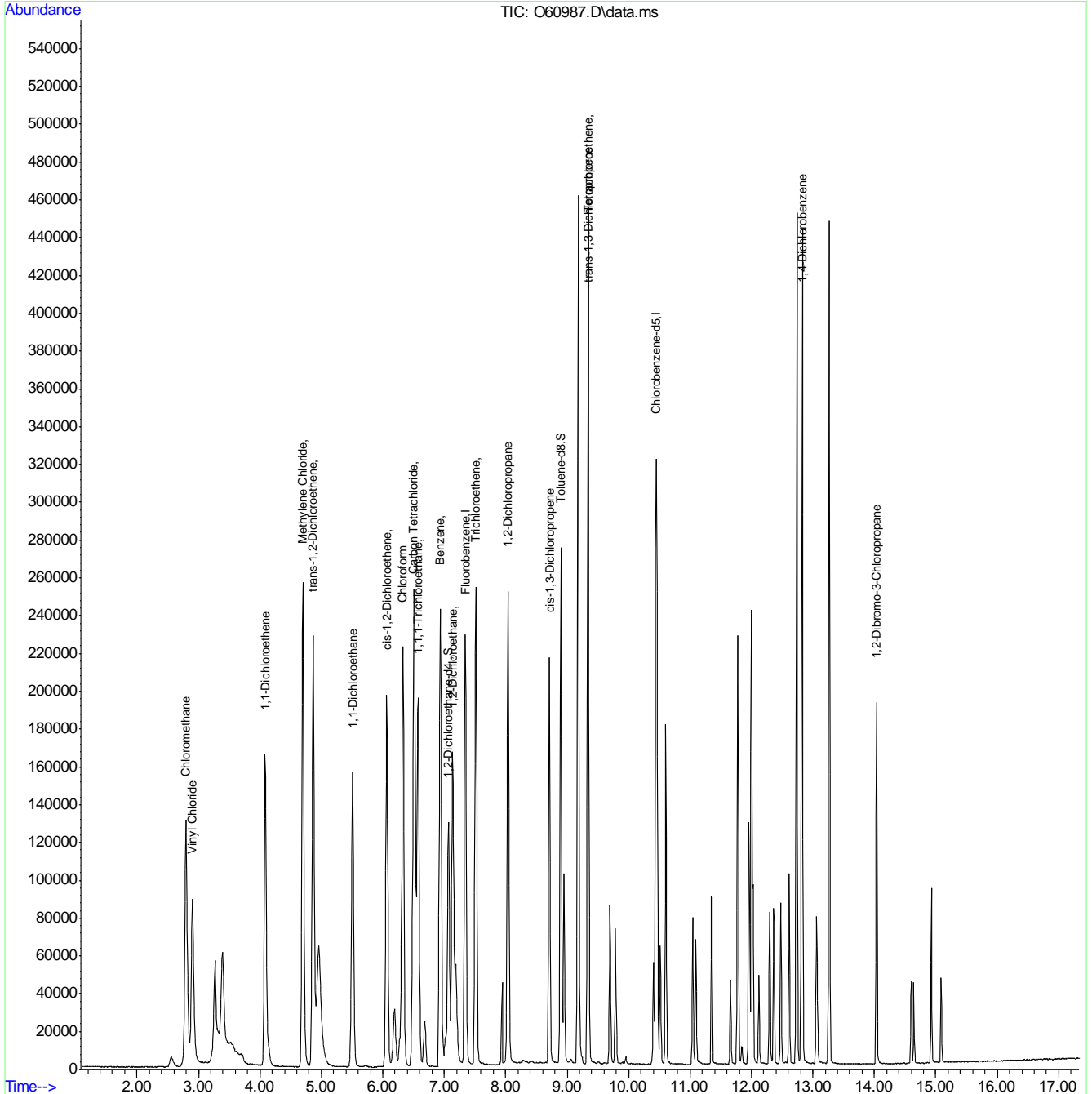
7.32
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\080720\
 Data File : O60987.D
 Acq On : 7 Aug 2020 10:31 am
 Operator : amandab
 Sample : BS
 Misc : MS46912,VO2344,,,,,
 ALS Vial : 2 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Aug 07 10:55:58 2020
 Quant Method : C:\msdchem\2\methods\SIMCL070220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jul 02 13:33:54 2020
 Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\080620\
 Data File : O60970.D
 Acq On : 6 Aug 2020 12:38 pm
 Operator : amandab
 Sample : FA77472-2MS,5X Inst : MSVOA12
 Misc : MS46912,VO2343,,,,,5
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 06 12:57:24 2020
 Quant Method : C:\msdchem\2\methods\SIMCL070220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jul 02 13:33:54 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.346	96	284940	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.447	117	193915	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.073	65	105821	5.06	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	101.20%	
19) Toluene-d8	8.900	98	222669	4.77	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	95.40%	
Target Compounds						
						Qvalue
2) Vinyl Chloride	2.916	62	163289	5.97	ug/L	97
3) Chloromethane	2.810	50	250290	5.36	ug/L	99
4) 1,1-Dichloroethene	4.092	61	174852	5.01	ug/L	99
5) Methylene Chloride	4.703	49	298928	5.12	ug/L	97
6) trans-1,2-Dichloroethene	4.869	61	198128	5.28	ug/L	99
7) 1,1-Dichloroethane	5.514	63	248075	5.23	ug/L	99
8) cis-1,2-Dichloroethene	6.072	96	137545	5.36	ug/L	99
9) Chloroform	6.333	83	247625	5.42	ug/L	98
10) Carbon Tetrachloride	6.510	117	162141	5.78	ug/L	99
11) 1,1,1-Trichloroethane	6.576	97	188707	5.73	ug/L	98
12) Benzene	6.943	78	421307	5.35	ug/L	98
14) 1,2-Dichloroethane	7.145	62	183820	5.15	ug/L	99
15) Trichloroethene	7.518	95	142186	5.12	ug/L	99
16) 1,2-Dichloropropane	8.043	63	140393	5.31	ug/L	98
17) cis-1,3-Dichloropropene	8.711	75	142895	4.84	ug/L	99
20) trans-1,3-Dichloropropene	9.343	75	140004	4.74	ug/L	99
21) Tetrachloroethene	9.343	166	128987	5.20	ug/L	99
22) 1,4-Dichlorobenzene	12.827	146	239397	5.01	ug/L	99
23) 1,2-Dibromo-3-Chloropr...	14.037	75	41511	4.47	ug/L	94

(#) = qualifier out of range (m) = manual integration (+) = signals summed

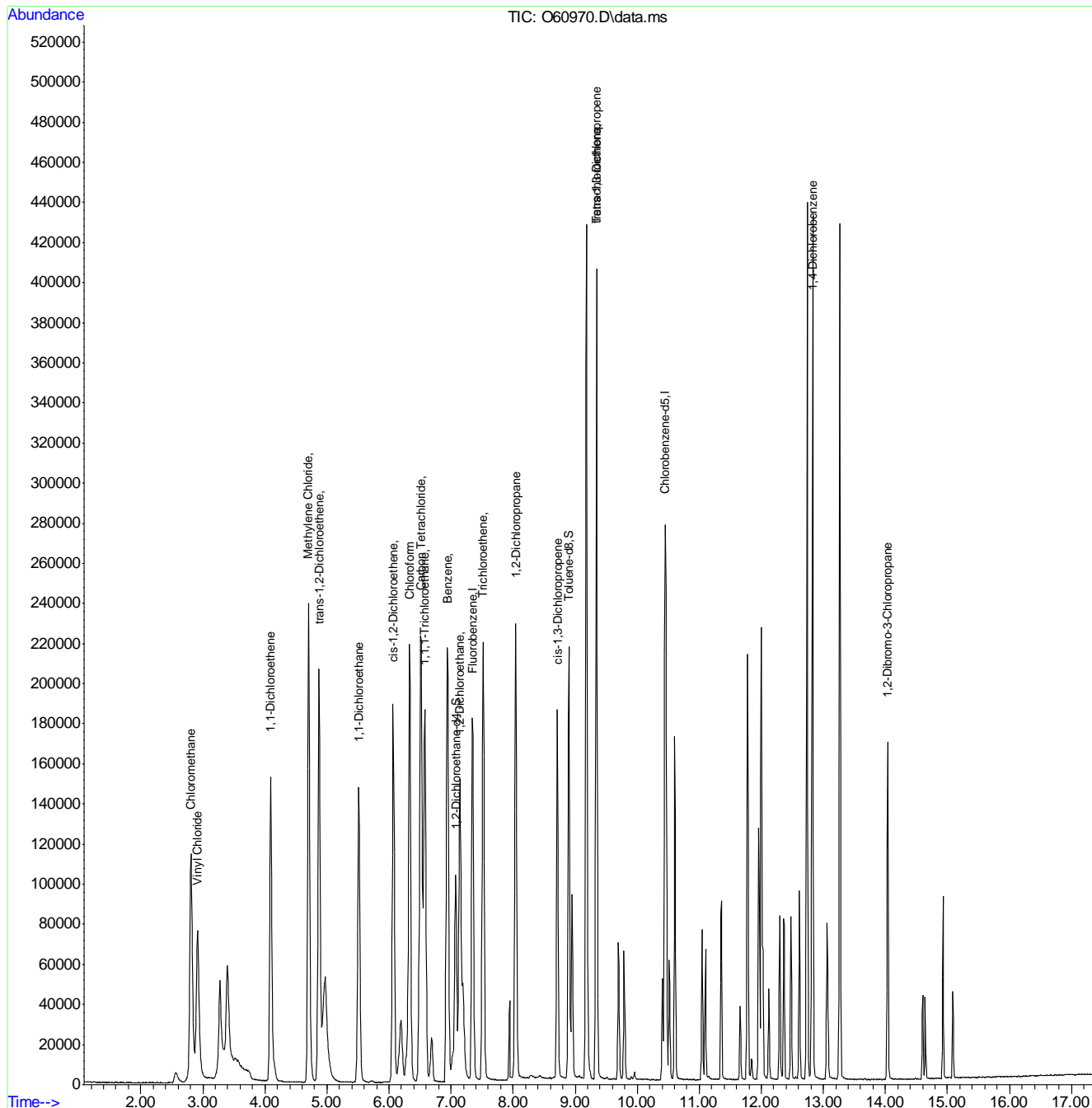
7.4.1
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\080620\
 Data File : O60970.D
 Acq On : 6 Aug 2020 12:38 pm
 Operator : amandab
 Sample : FA77472-2MS,5X
 Misc : MS46912,VO2343,,,,,5
 ALS Vial : 10 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Aug 06 12:57:24 2020
 Quant Method : C:\msdchem\2\methods\SIMCL070220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jul 02 13:33:54 2020
 Response via : Initial Calibration



7.4.1
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\080620\
 Data File : O60971.D
 Acq On : 6 Aug 2020 1:03 pm
 Operator : amandab
 Sample : FA77472-2MSD,5X Inst : MSVOA12
 Misc : MS46912,VO2343,,,,,5
 ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 06 14:16:38 2020
 Quant Method : C:\msdchem\2\methods\SIMCL070220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jul 02 13:33:54 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.346	96	288593	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.447	117	193494	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.074	65	106792	5.04	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	100.80%	
19) Toluene-d8	8.900	98	225218	4.83	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	96.60%	
Target Compounds						
						Qvalue
2) Vinyl Chloride	2.920	62	155230	5.61	ug/L	100
3) Chloromethane	2.814	50	237660	5.01	ug/L	99
4) 1,1-Dichloroethene	4.096	61	157687	4.46	ug/L	99
5) Methylene Chloride	4.703	49	269704	4.55	ug/L	99
6) trans-1,2-Dichloroethene	4.873	61	178147	4.69	ug/L	98
7) 1,1-Dichloroethane	5.514	63	224322	4.67	ug/L	100
8) cis-1,2-Dichloroethene	6.072	96	124902	4.81	ug/L	98
9) Chloroform	6.333	83	223579	4.83	ug/L	99
10) Carbon Tetrachloride	6.511	117	145765	5.13	ug/L	99
11) 1,1,1-Trichloroethane	6.576	97	169807	5.09	ug/L	98
12) Benzene	6.943	78	379473	4.76	ug/L	99
14) 1,2-Dichloroethane	7.145	62	166278	4.59	ug/L	98
15) Trichloroethene	7.518	95	126993	4.51	ug/L	98
16) 1,2-Dichloropropane	8.044	63	126252	4.71	ug/L	99
17) cis-1,3-Dichloropropene	8.711	75	129646	4.34	ug/L	100
20) trans-1,3-Dichloropropene	9.343	75	126648	4.29	ug/L	98
21) Tetrachloroethene	9.343	166	115748	4.67	ug/L	99
22) 1,4-Dichlorobenzene	12.827	146	214182	4.49	ug/L	99
23) 1,2-Dibromo-3-Chloropr...	14.038	75	36420	3.93	ug/L	95

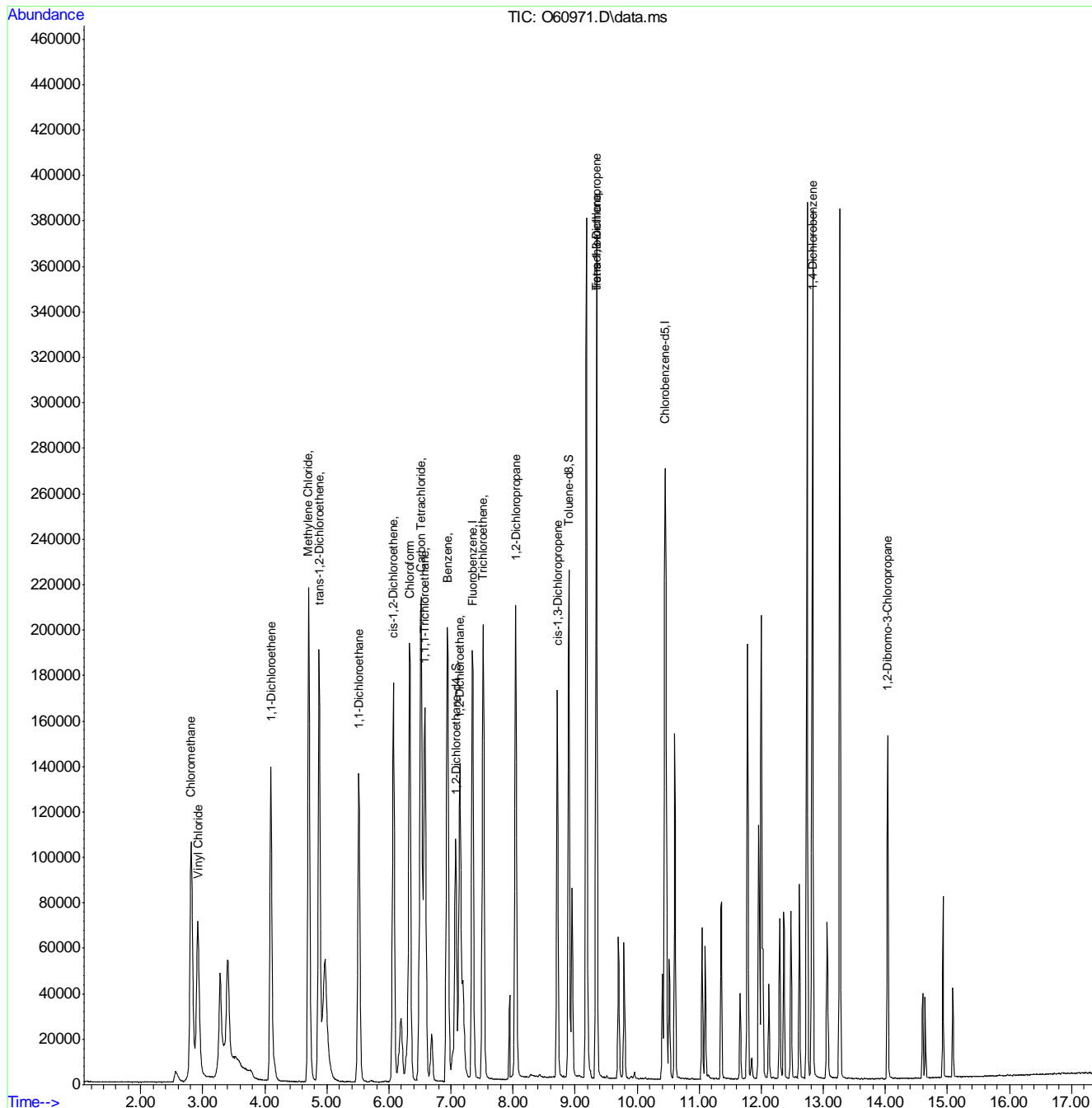
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\080620\
 Data File : O60971.D
 Acq On : 6 Aug 2020 1:03 pm
 Operator : amandab
 Sample : FA77472-2MSD,5X
 Misc : MS46912,VO2343,,,,,5
 ALS Vial : 11 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Aug 06 14:16:38 2020
 Quant Method : C:\msdchem\2\methods\SIMCL070220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jul 02 13:33:54 2020
 Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\080720\
 Data File : O60991.D
 Acq On : 7 Aug 2020 12:08 pm
 Operator : amandab
 Sample : FA77472-10MS,5X Inst : MSVOA12
 Misc : MS46912,VO2344,,,,,5
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 07 12:54:29 2020
 Quant Method : C:\msdchem\2\methods\SIMCL070220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jul 02 13:33:54 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.346	96	295460	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.447	117	200470	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.074	65	119703	5.52	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	110.40%	
19) Toluene-d8	8.900	98	223507	4.63	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	92.60%	
Target Compounds						
						Qvalue
2) Vinyl Chloride	2.912	62	164296	5.80	ug/L	100
3) Chloromethane	2.810	50	250407	5.16	ug/L	99
4) 1,1-Dichloroethene	4.096	61	160799	4.44	ug/L	98
5) Methylene Chloride	4.703	49	287706	4.74	ug/L	100
6) trans-1,2-Dichloroethene	4.869	61	181569	4.67	ug/L	99
7) 1,1-Dichloroethane	5.514	63	226238	4.60	ug/L	100
8) cis-1,2-Dichloroethene	6.066	96	120724	4.54	ug/L	98
9) Chloroform	6.333	83	222433	4.69	ug/L	99
10) Carbon Tetrachloride	6.511	117	141142	4.85	ug/L	99
11) 1,1,1-Trichloroethane	6.576	97	165442	4.84	ug/L	99
12) Benzene	6.943	78	376966	4.62	ug/L	99
14) 1,2-Dichloroethane	7.145	62	167409	4.51	ug/L	99
15) Trichloroethene	7.518	95	148088	5.14	ug/L	98
16) 1,2-Dichloropropane	8.043	63	129723	4.73	ug/L	95
17) cis-1,3-Dichloropropene	8.711	75	121872	3.98	ug/L	98
20) trans-1,3-Dichloropropene	9.343	75	120640	3.95	ug/L	99
21) Tetrachloroethene	9.343	166	118739	4.63	ug/L	100
22) 1,4-Dichlorobenzene	12.827	146	214980	4.35	ug/L	99
23) 1,2-Dibromo-3-Chloropr...	14.037	75	34790	3.63	ug/L	97

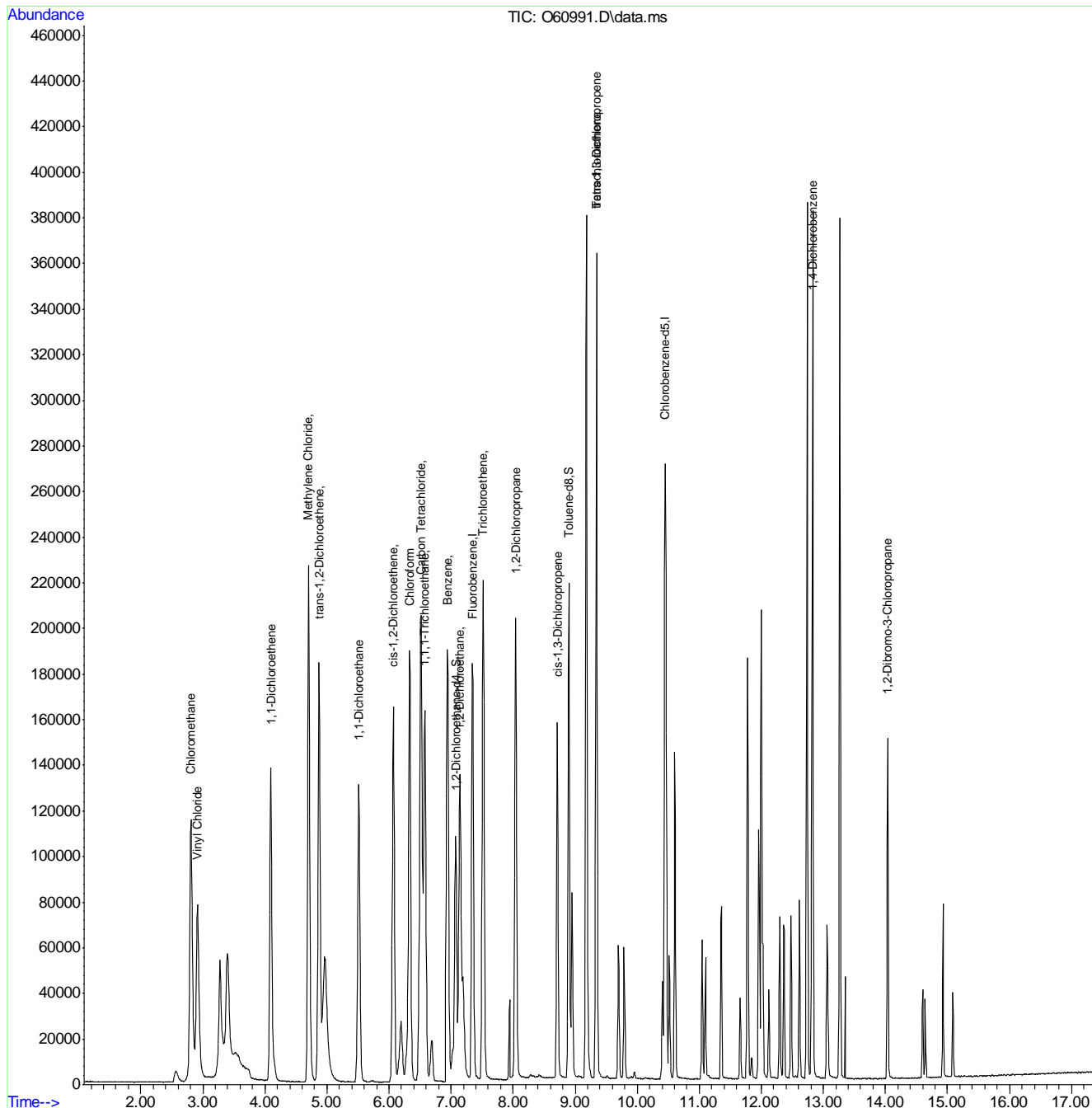
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\080720\
 Data File : O60991.D
 Acq On : 7 Aug 2020 12:08 pm
 Operator : amandab
 Sample : FA77472-10MS,5X
 Misc : MS46912,VO2344,,,,,5
 ALS Vial : 6 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Aug 07 12:54:29 2020
 Quant Method : C:\msdchem\2\methods\SIMCL070220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jul 02 13:33:54 2020
 Response via : Initial Calibration



7.4.3
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\080720\
 Data File : O60992.D
 Acq On : 7 Aug 2020 12:31 pm
 Operator : amandab
 Sample : FA77472-10MSD,5X Inst : MSVOA12
 Misc : MS46912,VO2344,,,,,5
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 07 12:54:31 2020
 Quant Method : C:\msdchem\2\methods\SIMCL070220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jul 02 13:33:54 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.346	96	307437	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.447	117	208929	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.074	65	115053	5.10	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	102.00%	
19) Toluene-d8	8.900	98	233943	4.65	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	93.00%	
Target Compounds						
						Qvalue
2) Vinyl Chloride	2.908	62	169969	5.76	ug/L	100
3) Chloromethane	2.803	50	263124	5.21	ug/L	99
4) 1,1-Dichloroethene	4.092	61	177269	4.71	ug/L	99
5) Methylene Chloride	4.703	49	308106	4.88	ug/L	97
6) trans-1,2-Dichloroethene	4.869	61	197208	4.87	ug/L	100
7) 1,1-Dichloroethane	5.514	63	246429	4.81	ug/L	100
8) cis-1,2-Dichloroethene	6.066	96	131329	4.74	ug/L	98
9) Chloroform	6.333	83	242145	4.91	ug/L	99
10) Carbon Tetrachloride	6.511	117	154235	5.10	ug/L	100
11) 1,1,1-Trichloroethane	6.576	97	180228	5.07	ug/L	98
12) Benzene	6.943	78	412483	4.85	ug/L	98
14) 1,2-Dichloroethane	7.139	62	181750	4.71	ug/L	99
15) Trichloroethene	7.512	95	160919	5.37	ug/L	98
16) 1,2-Dichloropropane	8.043	63	137240	4.81	ug/L	97
17) cis-1,3-Dichloropropene	8.711	75	135825	4.27	ug/L	100
20) trans-1,3-Dichloropropene	9.343	75	136319	4.28	ug/L	99
21) Tetrachloroethene	9.343	166	128813	4.82	ug/L	100
22) 1,4-Dichlorobenzene	12.827	146	234113	4.55	ug/L	99
23) 1,2-Dibromo-3-Chloropr...	14.038	75	38697	3.87	ug/L	99

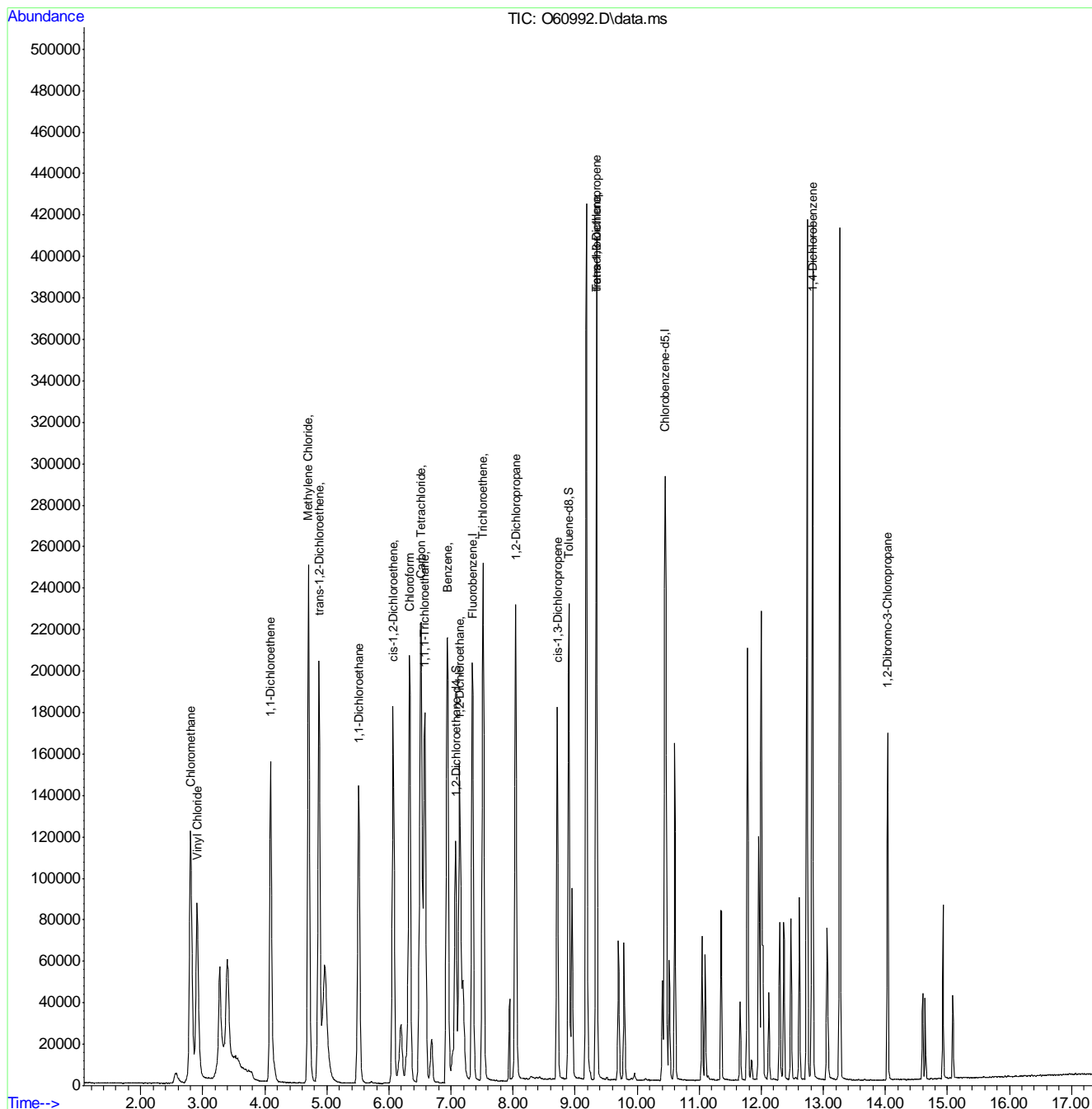
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

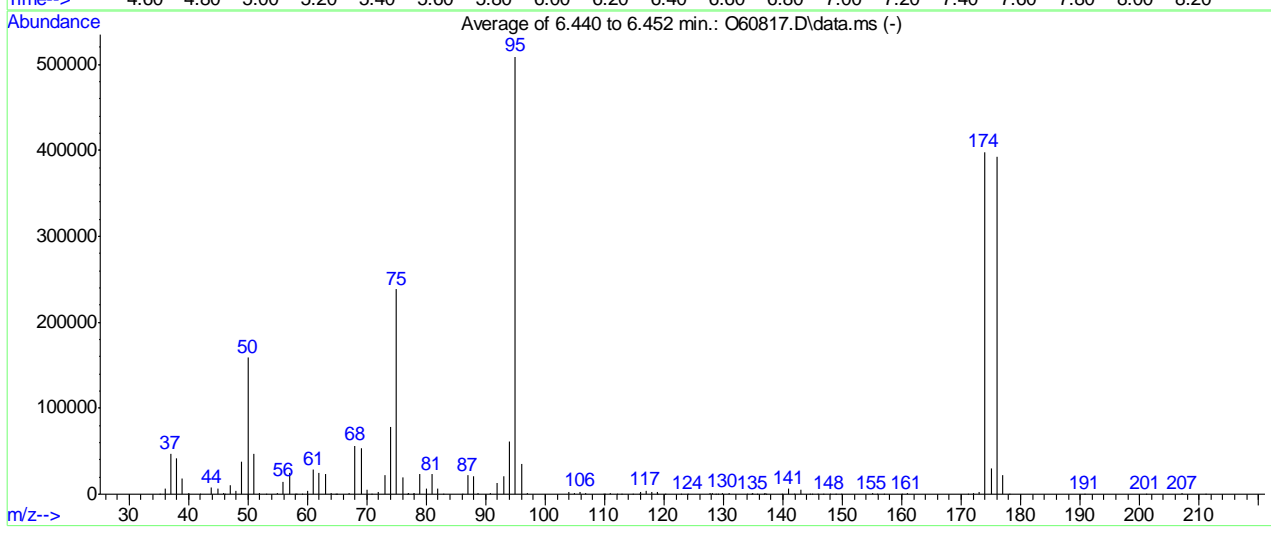
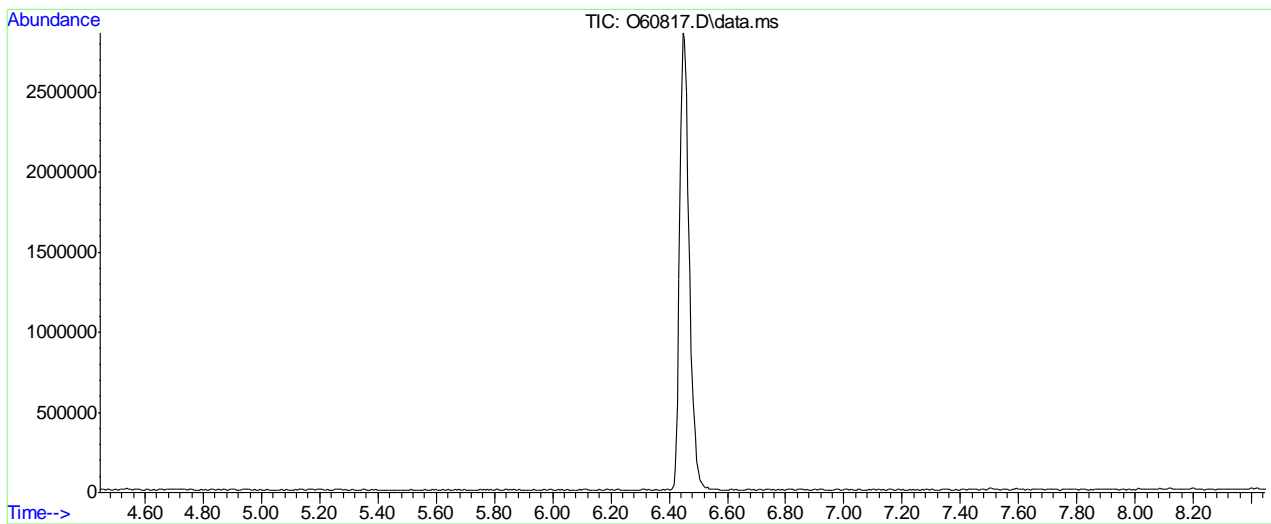
Data Path : C:\msdchem\2\data\080720\
 Data File : O60992.D
 Acq On : 7 Aug 2020 12:31 pm
 Operator : amandab
 Sample : FA77472-10MSD,5X
 Misc : MS46912,VO2344,,,,,5
 ALS Vial : 7 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Aug 07 12:54:31 2020
 Quant Method : C:\msdchem\2\methods\SIMCL070220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jul 02 13:33:54 2020
 Response via : Initial Calibration



Methods: SW-846 8260B
 Data File : C:\msdchem\2\data\070220\O60817.D Vial: 100
 Acq On : 2 Jul 2020 8:25 am Operator: amandab
 Sample : BFB Inst : MSVOA12
 Misc : MS46601,VO2337,,,,, Multiplr: 1.00
 MS Integration Params: rteint.p
 Method : C:\msdchem\2\methods\SIMCL070220.M (RTE Integrator)
 Title : Standard Methods 6200B



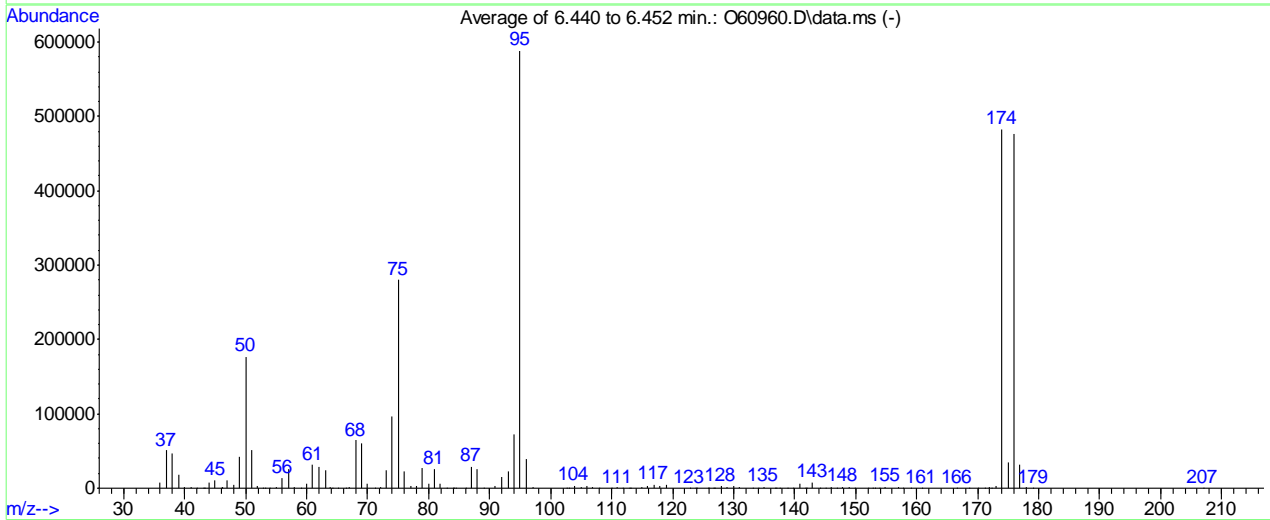
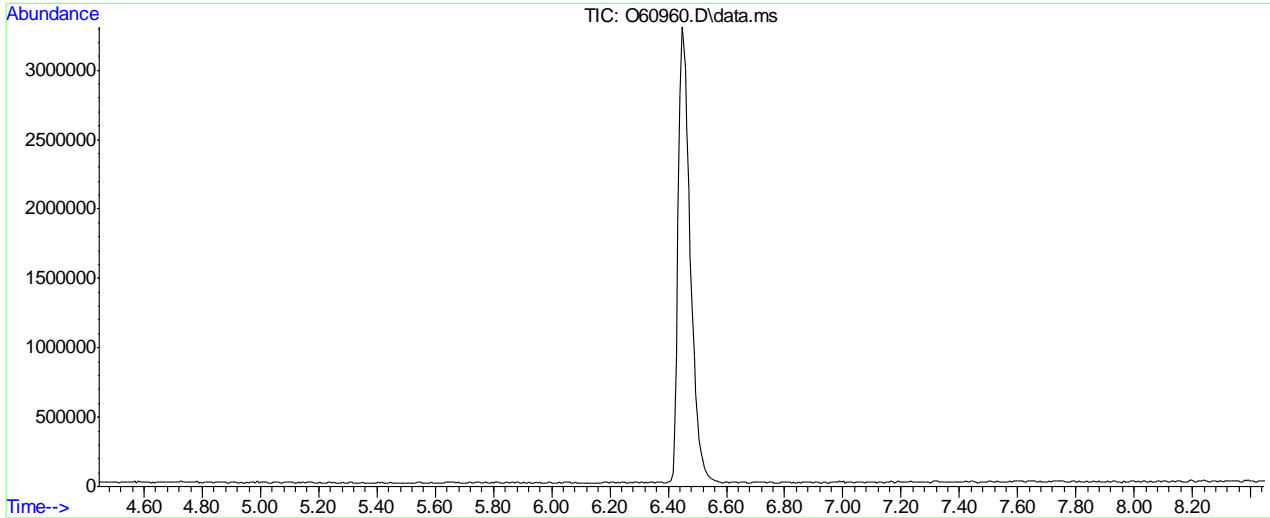
AutoFind: Scans 468, 469, 470; Background Corrected with Scan 460

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	31.2	158784	PASS
75	95	30	60	46.8	238571	PASS
95	95	100	100	100.0	509461	PASS
96	95	5	9	6.8	34768	PASS
173	174	0.00	2	0.7	2676	PASS
174	95	50	100	78.1	398016	PASS
175	174	5	9	7.6	30053	PASS
176	174	95	101	98.6	392512	PASS
177	176	5	9	5.7	22248	PASS

7.5.1
7

Methods: SW-846 8260B
 Data File : C:\msdchem\2\data\080620\O60960.D Vial: 100
 Acq On : 6 Aug 2020 8:42 am Operator: amandab
 Sample : BFB Inst : MSVOA12
 Misc : MS46803,VO2343,,,,, Multiplr: 1.00
 MS Integration Params: rteint.p

Method : C:\msdchem\2\methods\SIMCL070220.M (RTE Integrator)
 Title : Standard Methods 6200B

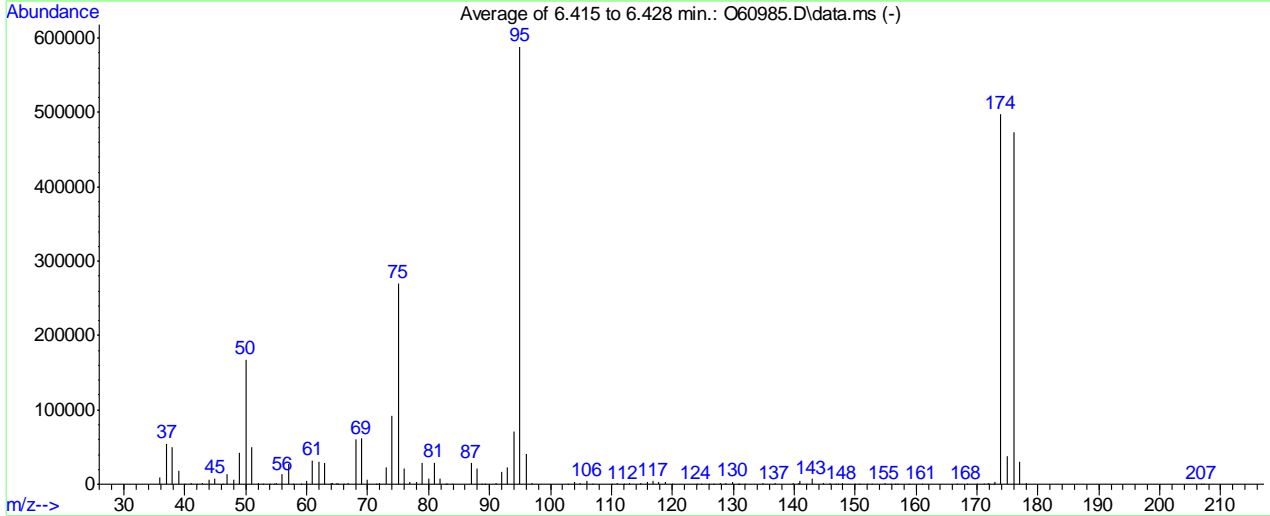
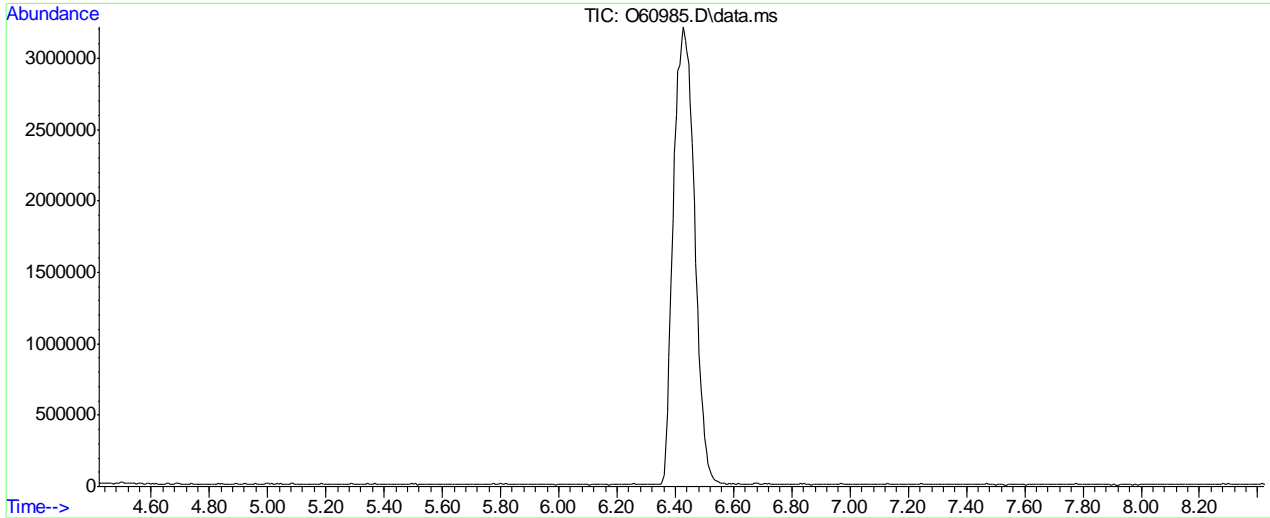


AutoFind: Scans 468, 469, 470; Background Corrected with Scan 459

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	30.0	176661	PASS
75	95	30	60	47.6	280085	PASS
95	95	100	100	100.0	588629	PASS
96	95	5	9	6.6	39048	PASS
173	174	0.00	2	0.6	3088	PASS
174	95	50	100	82.1	483179	PASS
175	174	5	9	7.1	34536	PASS
176	174	95	101	98.5	475733	PASS
177	176	5	9	6.5	31003	PASS

Methods: SW-846 8260B
 Data File : C:\msdchem\2\data\080720\O60985.D Vial: 100
 Acq On : 7 Aug 2020 9:46 am Operator: amandab
 Sample : BFB Inst : MSVOA12
 Misc : MS46912,VO2344,,,,, Multiplr: 1.00
 MS Integration Params: rteint.p

Method : C:\msdchem\2\methods\SIMCL070220.M (RTE Integrator)
 Title : Standard Methods 6200B



AutoFind: Scans 464, 465, 466; Background Corrected with Scan 450

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	28.5	167893	PASS
75	95	30	60	45.8	269995	PASS
95	95	100	100	100.0	588885	PASS
96	95	5	9	7.0	40979	PASS
173	174	0.00	2	0.5	2551	PASS
174	95	50	100	84.6	497963	PASS
175	174	5	9	7.4	37045	PASS
176	174	95	101	95.2	474069	PASS
177	176	5	9	6.5	30680	PASS

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\070220\
 Data File : O60820.D
 Acq On : 2 Jul 2020 10:49 am
 Operator : amandab
 Sample : IC2337-1 Inst : MSVOA12
 Misc : MS46657,VO2337,,,,,
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 02 11:32:38 2020
 Quant Method : C:\msdchem\2\methods\SIMCL070220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jun 18 12:40:46 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.346	96	389489	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.441	117	246974	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.068	65	146743	4.91	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	98.20%	
19) Toluene-d8	8.896	98	308482	5.63	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	112.60%#	
Target Compounds						
						Qvalue
2) Vinyl Chloride	2.908	62	3479	0.06	ug/L	94
3) Chloromethane	2.806	50	15964	0.15	ug/L	99
4) 1,1-Dichloroethene	4.092	61	4983	0.10	ug/L	97
5) Methylene Chloride	4.699	49	15605	0.14	ug/L	99
6) trans-1,2-Dichloroethene	4.869	61	5491	0.09	ug/L	99
7) 1,1-Dichloroethane	5.514	63	17594	0.23	ug/L	97
8) cis-1,2-Dichloroethene	6.066	96	4029	0.10	ug/L	85
9) Chloroform	6.333	83	6760	0.09	ug/L	88
10) Carbon Tetrachloride	6.511	117	4090	0.09	ug/L	97
11) 1,1,1-Trichloroethane	6.576	97	4913	0.10	ug/L	85
12) Benzene	6.937	78	31827	0.26	ug/L	99
14) 1,2-Dichloroethane	7.139	62	9816	0.17	ug/L	96
15) Trichloroethene	7.512	95	4327	0.10	ug/L	92
16) 1,2-Dichloropropane	8.043	63	3612m	0.08	ug/L	
17) cis-1,3-Dichloropropene	8.711	75	4058	0.09	ug/L	87
20) trans-1,3-Dichloropropene	9.343	75	3545	0.11	ug/L	91
21) Tetrachloroethene	9.337	166	3437m	0.11	ug/L	
22) 1,4-Dichlorobenzene	12.827	146	5966	0.10	ug/L	96
23) 1,2-Dibromo-3-Chloropr...	14.032	75	1337m	0.13	ug/L	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

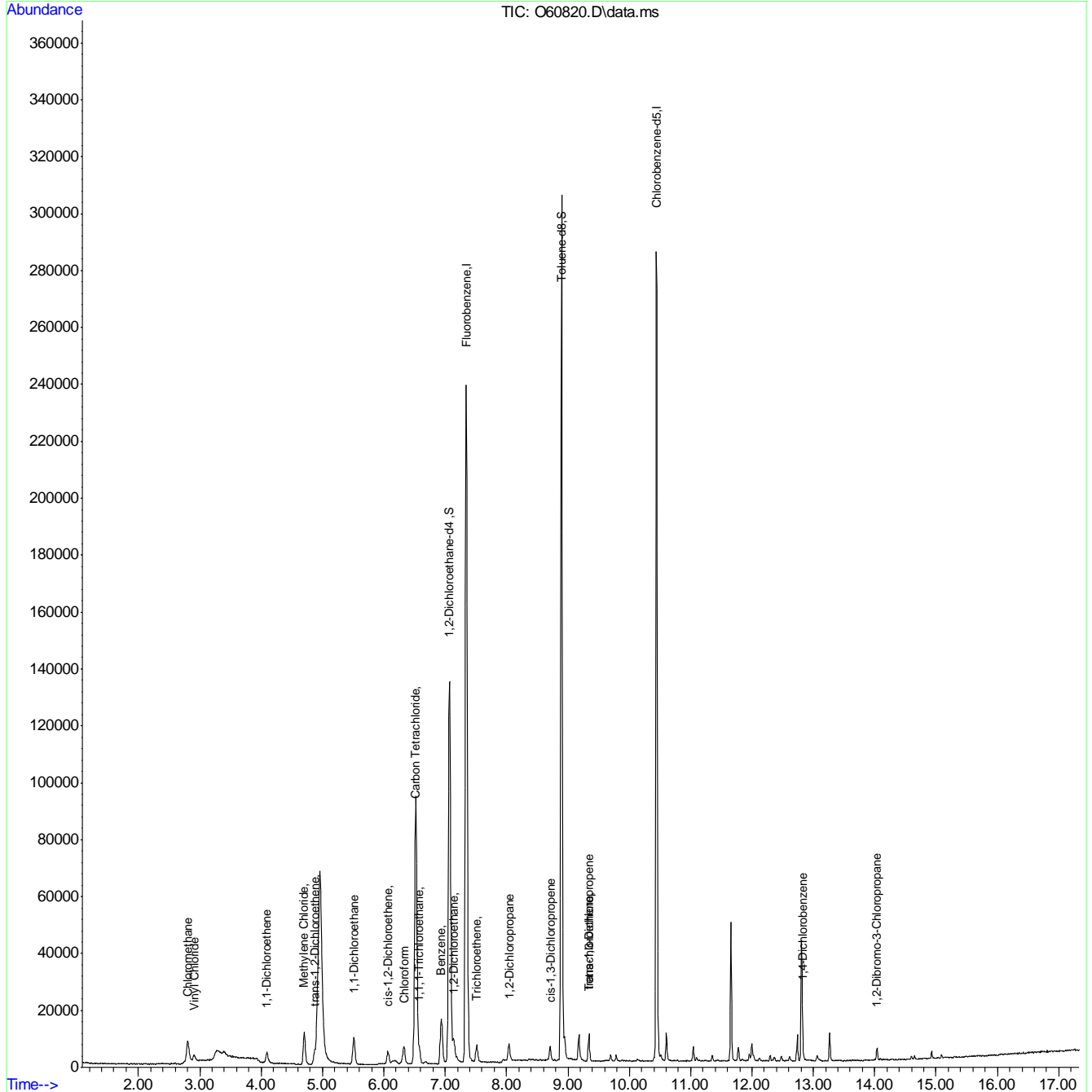
7.6.1
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\070220\
 Data File : O60820.D
 Acq On : 2 Jul 2020 10:49 am
 Operator : amandab
 Sample : IC2337-1
 Misc : MS46657,VO2337,,,,,
 ALS Vial : 1 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Jul 02 11:32:38 2020
 Quant Method : C:\msdchem\2\methods\SIMCL070220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jun 18 12:40:46 2020
 Response via : Initial Calibration



7
197

Manual Integration Approval Summary

Sample Number: VO2337-IC2337
Lab FileID: O60820.D
Injection Time: 07/02/20 10:49

Method: SW846 8260B BY SIM
Analyst approved: 07/02/20 14:27 Amanda Bacsko
Supervisor approved: 07/06/20 08:23 Melissa Mangual

Parameter	CAS	Sig#	R.T. (min.)	Reason
1,2-Dichloropropane	78-87-5		8.04	Poor instrument integration
Tetrachloroethylene	127-18-4		9.34	Poor instrument integration
1,2-Dibromo-3-chloropropane	96-12-8		14.03	Missed peak

7.6.1.1

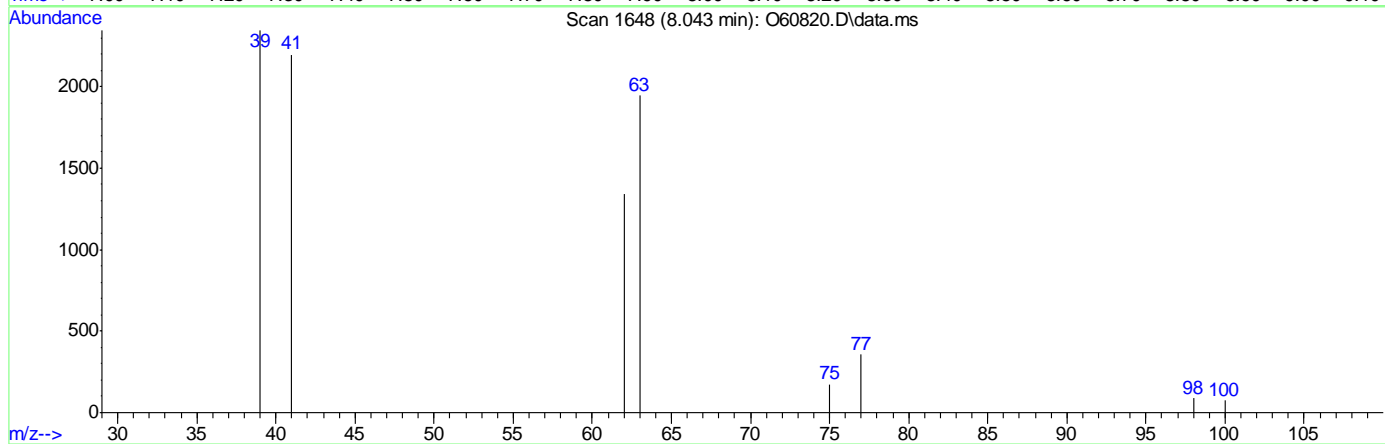
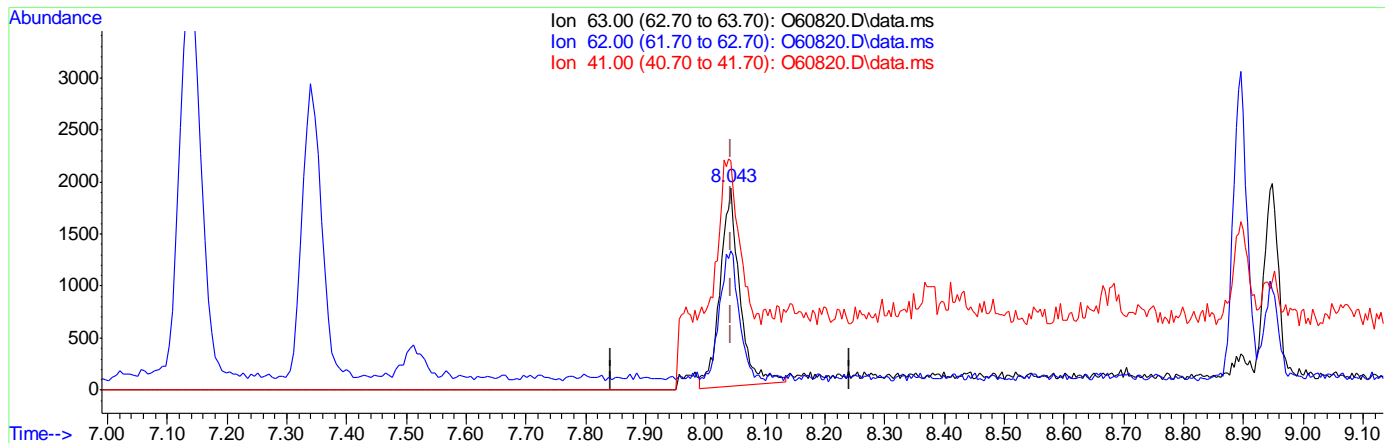
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\070220\
 Data File : O60820.D
 Acq On : 2 Jul 2020 10:49 am
 Operator : amandab
 Sample : IC2337-1
 Misc : MS46657,VO2337,,,,,
 ALS Vial : 1 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Jul 02 11:31:39 2020
 Quant Method : C:\msdchem\2\methods\SIMCL070220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jun 18 12:40:46 2020
 Response via : Initial Calibration



(16) 1,2-Dichloropropane
 8.043min (+0.000) 0.10ug/L
 response 4270

Ion	Exp%	Act%
63.00	100	100
62.00	72.70	68.16
41.00	92.50	80.16
0.00	0.00	0.00

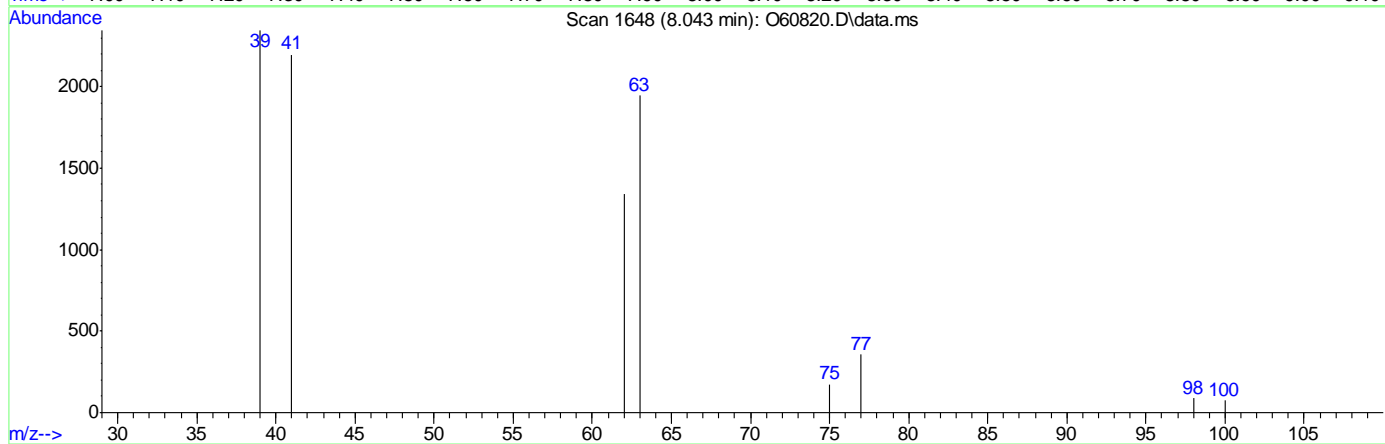
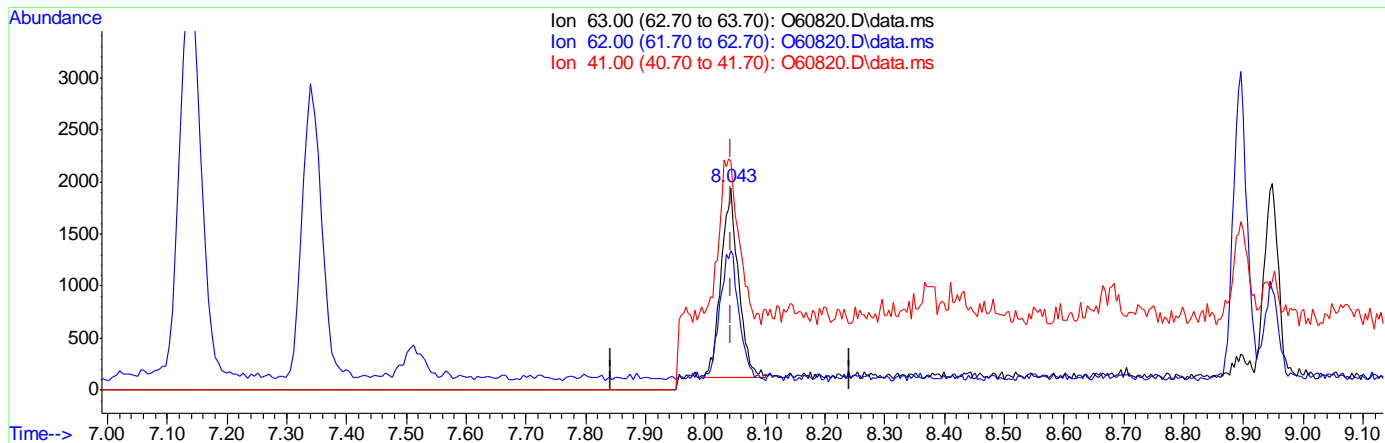
7.6.12
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\070220\
 Data File : O60820.D
 Acq On : 2 Jul 2020 10:49 am
 Operator : amandab
 Sample : IC2337-1
 Misc : MS46657,VO2337,,,,,
 ALS Vial : 1 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Jul 02 11:31:39 2020
 Quant Method : C:\msdchem\2\methods\SIMCL070220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jun 18 12:40:46 2020
 Response via : Initial Calibration



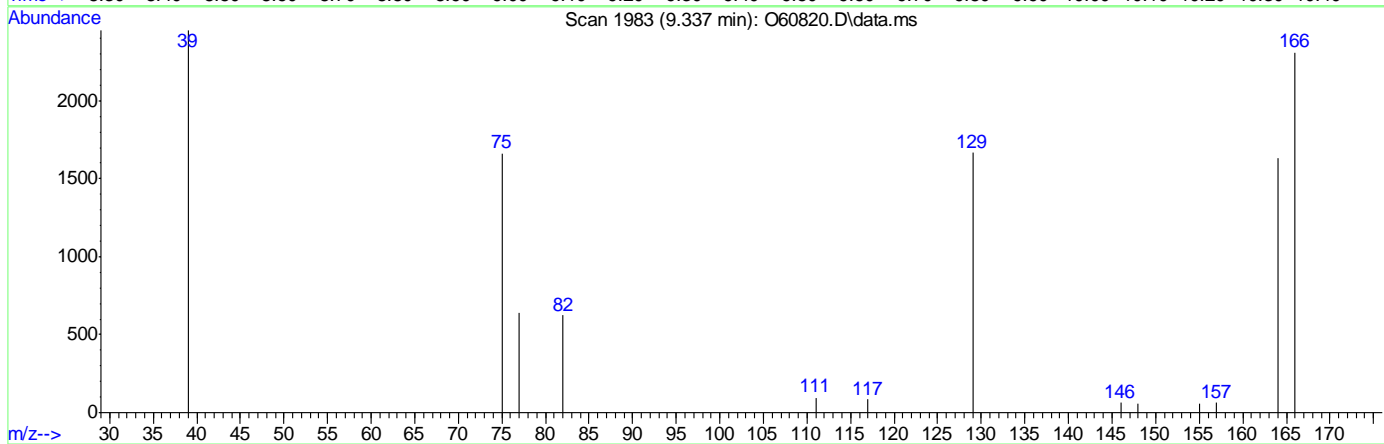
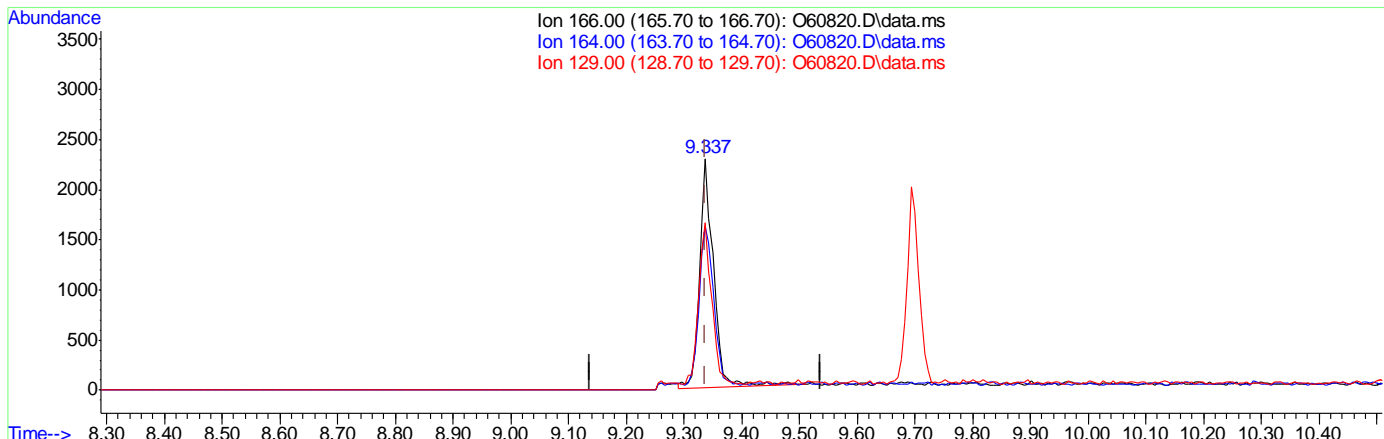
(16) 1,2-Dichloropropane
 8.043min (+0.000) 0.08ug/L m
 response 3612

Ion	Exp%	Act%
63.00	100	100
62.00	72.70	68.91
41.00	92.50	112.74
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\070220\
 Data File : O60820.D
 Acq On : 2 Jul 2020 10:49 am
 Operator : amandab
 Sample : IC2337-1 Inst : MSVOA12
 Misc : MS46657,VO2337,,,,,
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 02 11:31:39 2020
 Quant Method : C:\msdchem\2\methods\SIMCL070220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jun 18 12:40:46 2020
 Response via : Initial Calibration



(21) Tetrachloroethene ()
 9.337min (+0.000) 0.12ug/L
 response 3771

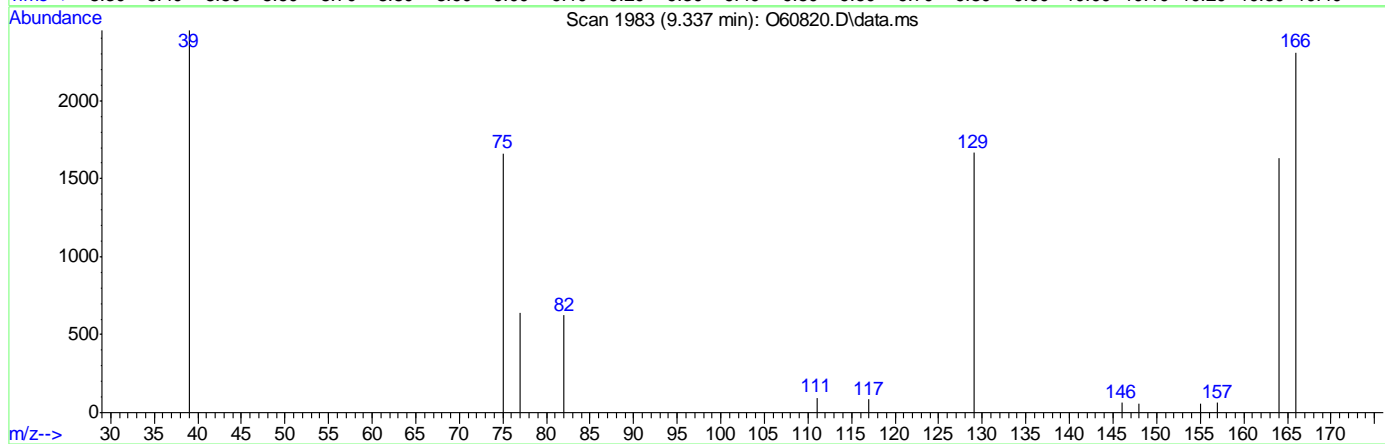
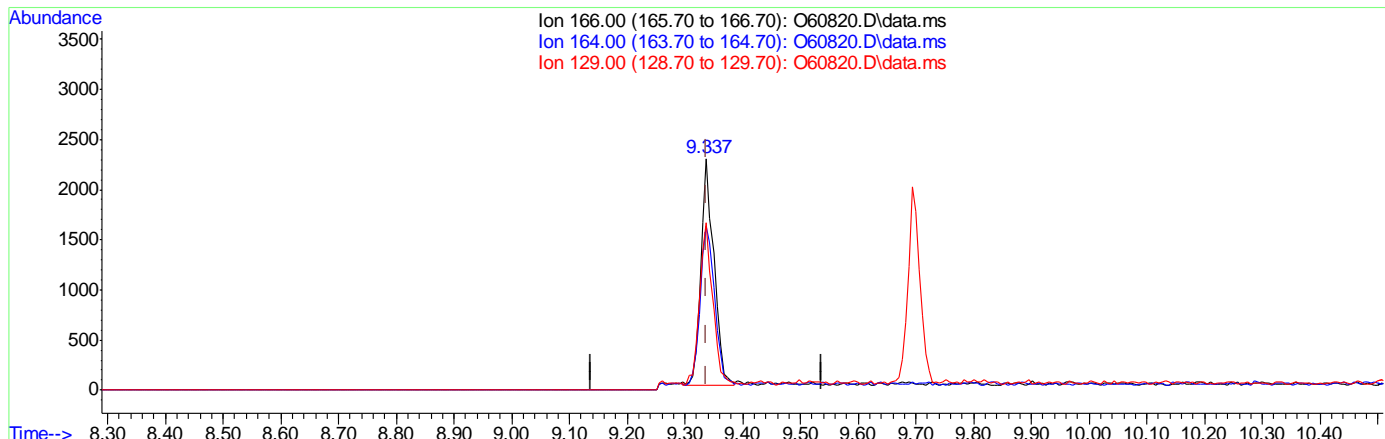
Ion	Exp%	Act%
166.00	100	100
164.00	79.80	69.27
129.00	73.70	70.96
0.00	0.00	0.00

7.6.1.4
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\070220\
 Data File : O60820.D
 Acq On : 2 Jul 2020 10:49 am
 Operator : amandab
 Sample : IC2337-1 Inst : MSVOA12
 Misc : MS46657,VO2337,,,,,
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 02 11:31:39 2020
 Quant Method : C:\msdchem\2\methods\SIMCL070220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jun 18 12:40:46 2020
 Response via : Initial Calibration



(21) Tetrachloroethene ()
 9.337min (+0.000) 0.11ug/L m
 response 3437

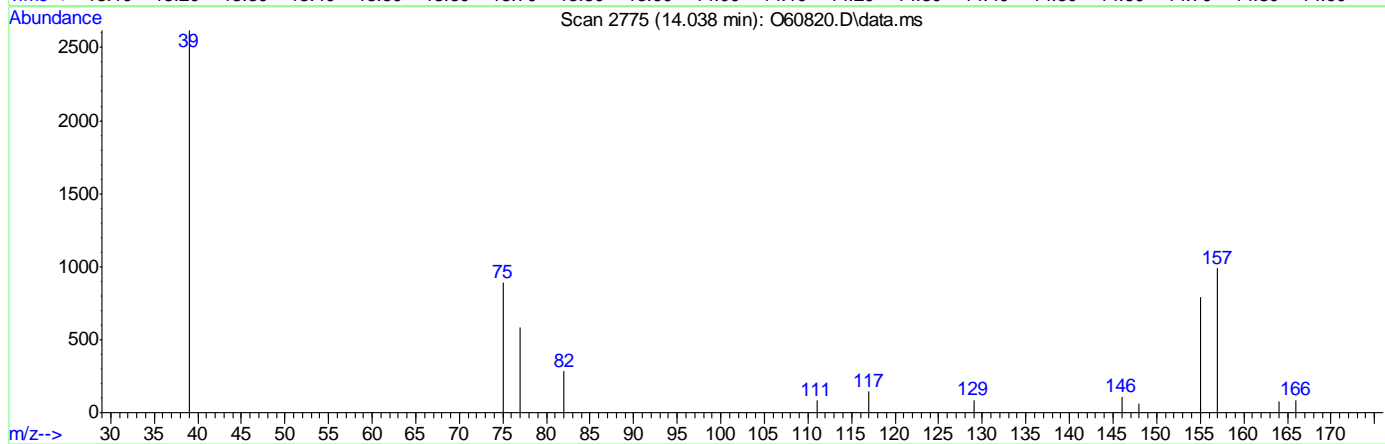
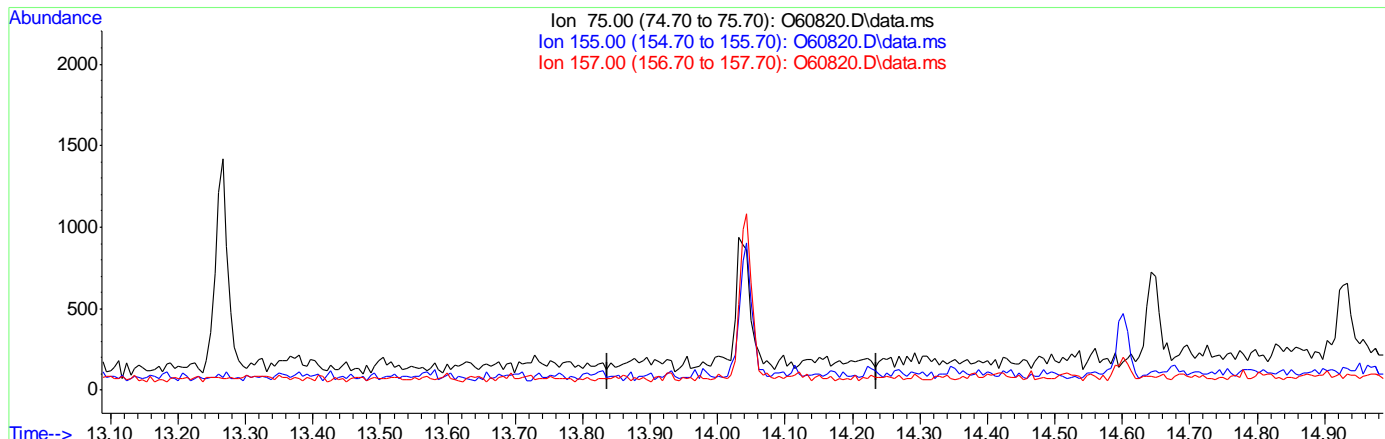
Ion	Exp%	Act%
166.00	100	100
164.00	79.80	70.62
129.00	73.70	72.05
0.00	0.00	0.00

7.6.1.5
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\070220\
 Data File : O60820.D
 Acq On : 2 Jul 2020 10:49 am
 Operator : amandab
 Sample : IC2337-1 Inst : MSVOA12
 Misc : MS46657,VO2337,,,,,
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 02 11:31:39 2020
 Quant Method : C:\msdchem\2\methods\SIMCL070220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jun 18 12:40:46 2020
 Response via : Initial Calibration



(23) 1,2-Dibromo-3-Chloropropane

14.037min (-14.037) 0.00ug/L

response 0

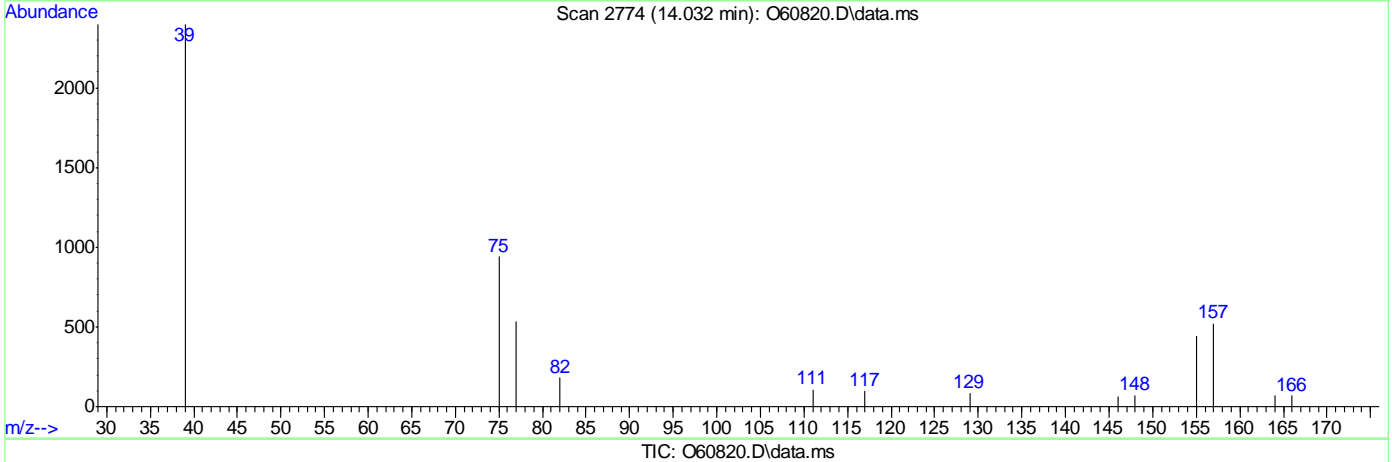
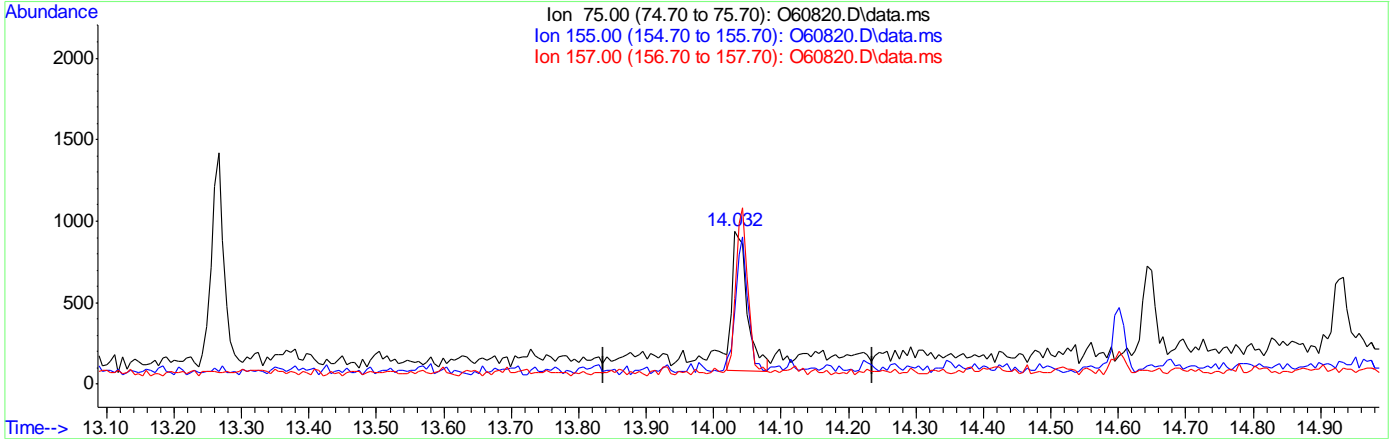
Ion	Exp%	Act%
75.00	100	0.00
155.00	91.70	0.00#
157.00	113.30	0.00#
0.00	0.00	0.00

7.6.1.6
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\070220\
 Data File : O60820.D
 Acq On : 2 Jul 2020 10:49 am
 Operator : amandab
 Sample : IC2337-1 Inst : MSVOA12
 Misc : MS46657,VO2337,,,,,
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 02 11:31:39 2020
 Quant Method : C:\msdchem\2\methods\SIMCL070220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jun 18 12:40:46 2020
 Response via : Initial Calibration



(23) 1,2-Dibromo-3-Chloropropane

14.032min (-0.005) 0.13ug/L m

response 1337

Ion	Exp%	Act%
75.00	100	100
155.00	91.70	47.18#
157.00	113.30	55.69#
0.00	0.00	0.00

7.6.1.7
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\070220\
 Data File : O60821.D
 Acq On : 2 Jul 2020 11:12 am
 Operator : amandab
 Sample : IC2337-2 Inst : MSVOA12
 Misc : MS46657,VO2337,,,,,
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 02 11:31:41 2020
 Quant Method : C:\msdchem\2\methods\SIMCL070220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jun 18 12:40:46 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.346	96	317197	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.447	117	203515	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.074	65	118591	4.88	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	97.60%	
19) Toluene-d8	8.900	98	249331	5.52	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	110.40%	
Target Compounds						
						Qvalue
2) Vinyl Chloride	2.908	62	14066	0.28	ug/L	98
3) Chloromethane	2.803	50	26961	0.31	ug/L	95
4) 1,1-Dichloroethene	4.092	61	17981	0.44	ug/L	95
5) Methylene Chloride	4.703	49	35330	0.39	ug/L	99
6) trans-1,2-Dichloroethene	4.869	61	19601	0.39	ug/L	98
7) 1,1-Dichloroethane	5.518	63	24380	0.39	ug/L	100
8) cis-1,2-Dichloroethene	6.072	96	12981	0.40	ug/L	99
9) Chloroform	6.333	83	23723	0.40	ug/L	99
10) Carbon Tetrachloride	6.511	117	14000	0.40	ug/L	93
11) 1,1,1-Trichloroethane	6.576	97	15978	0.39	ug/L	97
12) Benzene	6.943	78	41706	0.41	ug/L	96
14) 1,2-Dichloroethane	7.145	62	17966	0.38	ug/L	94
15) Trichloroethene	7.512	95	13724	0.39	ug/L	96
16) 1,2-Dichloropropane	8.040	63	14068	0.40	ug/L	93
17) cis-1,3-Dichloropropene	8.711	75	13707	0.39	ug/L	93
20) trans-1,3-Dichloropropene	9.343	75	12674	0.46	ug/L	94
21) Tetrachloroethene	9.343	166	12250	0.46	ug/L	94
22) 1,4-Dichlorobenzene	12.827	146	22111	0.43	ug/L	99
23) 1,2-Dibromo-3-Chloropr...	14.038	75	4256	0.51	ug/L #	84

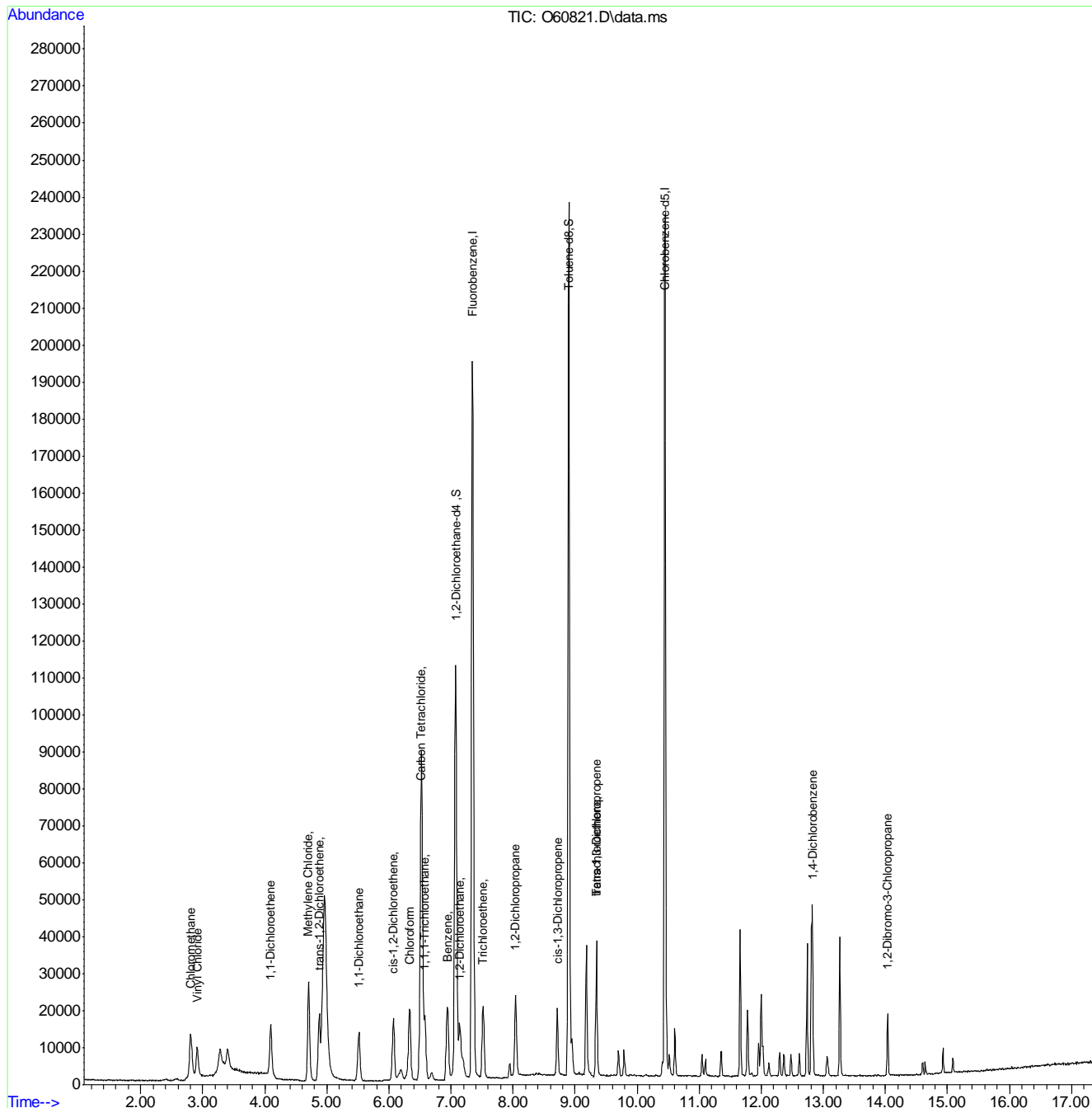
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\070220\
 Data File : 060821.D
 Acq On : 2 Jul 2020 11:12 am
 Operator : amandab
 Sample : IC2337-2
 Misc : MS46657,VO2337,,,,,
 ALS Vial : 2 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Jul 02 11:31:41 2020
 Quant Method : C:\msdchem\2\methods\SIMCL070220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jun 18 12:40:46 2020
 Response via : Initial Calibration



7.6.2
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\070220\
 Data File : O60822.D
 Acq On : 2 Jul 2020 11:37 am
 Operator : amandab
 Sample : IC2337-3 Inst : MSVOA12
 Misc : MS46657,VO2337,,,,,
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jul 02 12:00:29 2020
 Quant Method : C:\msdchem\2\methods\SIMCL070220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jun 18 12:40:46 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.346	96	313328	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.447	117	202873	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.073	65	119301	4.97	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	99.40%	
19) Toluene-d8	8.900	98	244756	5.44	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	108.80%	
Target Compounds						
						Qvalue
2) Vinyl Chloride	2.908	62	63310	1.30	ug/L	98
3) Chloromethane	2.810	50	104776	1.22	ug/L	99
4) 1,1-Dichloroethene	4.092	61	64750	1.59	ug/L	98
5) Methylene Chloride	4.703	49	125986	1.41	ug/L	99
6) trans-1,2-Dichloroethene	4.873	61	75293	1.52	ug/L	97
7) 1,1-Dichloroethane	5.514	63	93208	1.53	ug/L	99
8) cis-1,2-Dichloroethene	6.072	96	50766	1.57	ug/L	97
9) Chloroform	6.333	83	92648	1.58	ug/L	97
10) Carbon Tetrachloride	6.510	117	51180	1.46	ug/L	99
11) 1,1,1-Trichloroethane	6.576	97	62134	1.51	ug/L	99
12) Benzene	6.943	78	157953	1.58	ug/L	95
14) 1,2-Dichloroethane	7.139	62	73424	1.57	ug/L	99
15) Trichloroethene	7.518	95	53331	1.54	ug/L	99
16) 1,2-Dichloropropane	8.043	63	55712	1.61	ug/L	94
17) cis-1,3-Dichloropropene	8.711	75	57846	1.65	ug/L	95
20) trans-1,3-Dichloropropene	9.343	75	55743	2.00	ug/L	91
21) Tetrachloroethene	9.343	166	46656	1.75	ug/L	94
22) 1,4-Dichlorobenzene	12.827	146	93363	1.80	ug/L	99
23) 1,2-Dibromo-3-Chloropr...	14.037	75	16558	1.94	ug/L	88

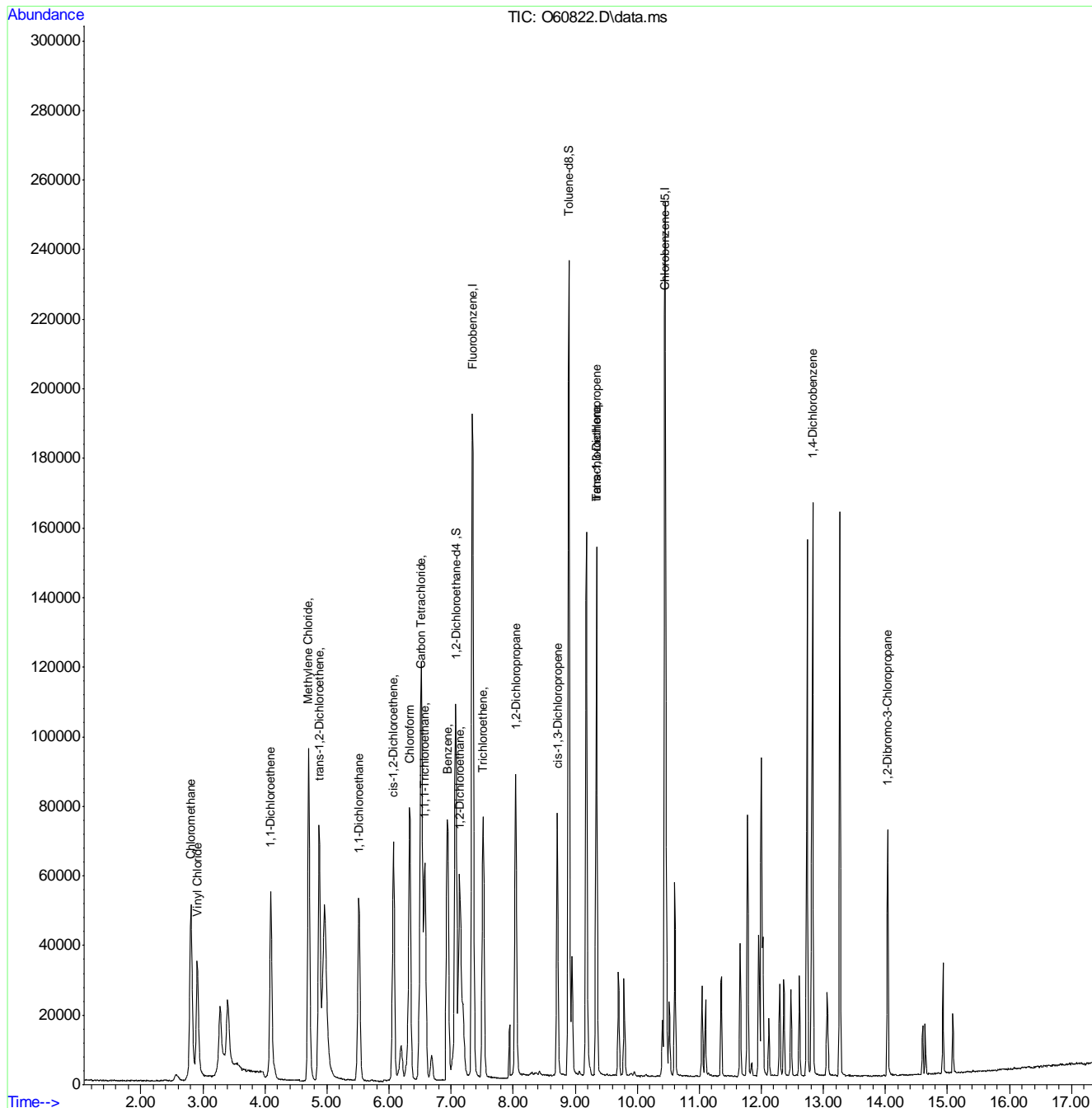
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\070220\
 Data File : O60822.D
 Acq On : 2 Jul 2020 11:37 am
 Operator : amandab
 Sample : IC2337-3
 Misc : MS46657,VO2337,,,,,
 ALS Vial : 3 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Jul 02 12:00:29 2020
 Quant Method : C:\msdchem\2\methods\SIMCL070220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jun 18 12:40:46 2020
 Response via : Initial Calibration



7.6.3
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\070220\
 Data File : O60823.D
 Acq On : 2 Jul 2020 12:00 pm
 Operator : amandab
 Sample : IC2337-4 Inst : MSVOA12
 Misc : MS46657,VO2337,,,,,
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jul 02 12:41:48 2020
 Quant Method : C:\msdchem\2\methods\SIMCL070220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jun 18 12:40:46 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.346	96	323353	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.447	117	208446	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.074	65	117522	4.74	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	94.80%	
19) Toluene-d8	8.900	98	249740	5.40	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	108.00%	
Target Compounds						
						Qvalue
2) Vinyl Chloride	2.908	62	164816	3.36	ug/L	99
3) Chloromethane	2.806	50	271206	3.13	ug/L	99
4) 1,1-Dichloroethene	4.092	61	200116	4.58	ug/L	96
5) Methylene Chloride	4.703	49	324702	3.59	ug/L	97
6) trans-1,2-Dichloroethene	4.873	61	208146	4.07	ug/L	96
7) 1,1-Dichloroethane	5.514	63	258339	4.12	ug/L	100
8) cis-1,2-Dichloroethene	6.072	96	141028	4.23	ug/L	99
9) Chloroform	6.333	83	258042	4.29	ug/L	97
10) Carbon Tetrachloride	6.511	117	152041	4.18	ug/L	99
11) 1,1,1-Trichloroethane	6.576	97	181114	4.24	ug/L	97
12) Benzene	6.943	78	429742	4.17	ug/L	96
14) 1,2-Dichloroethane	7.145	62	200868	4.18	ug/L	97
15) Trichloroethene	7.518	95	151681	4.21	ug/L	99
16) 1,2-Dichloropropane	8.043	63	150689	4.21	ug/L	93
17) cis-1,3-Dichloropropene	8.711	75	166811	4.50	ug/L	93
20) trans-1,3-Dichloropropene	9.343	75	162498	5.39	ug/L	91
21) Tetrachloroethene	9.343	166	129313	4.69	ug/L	97
22) 1,4-Dichlorobenzene	12.827	146	257076	4.78	ug/L	99
23) 1,2-Dibromo-3-Chloropr...	14.038	75	48010	5.23	ug/L	96

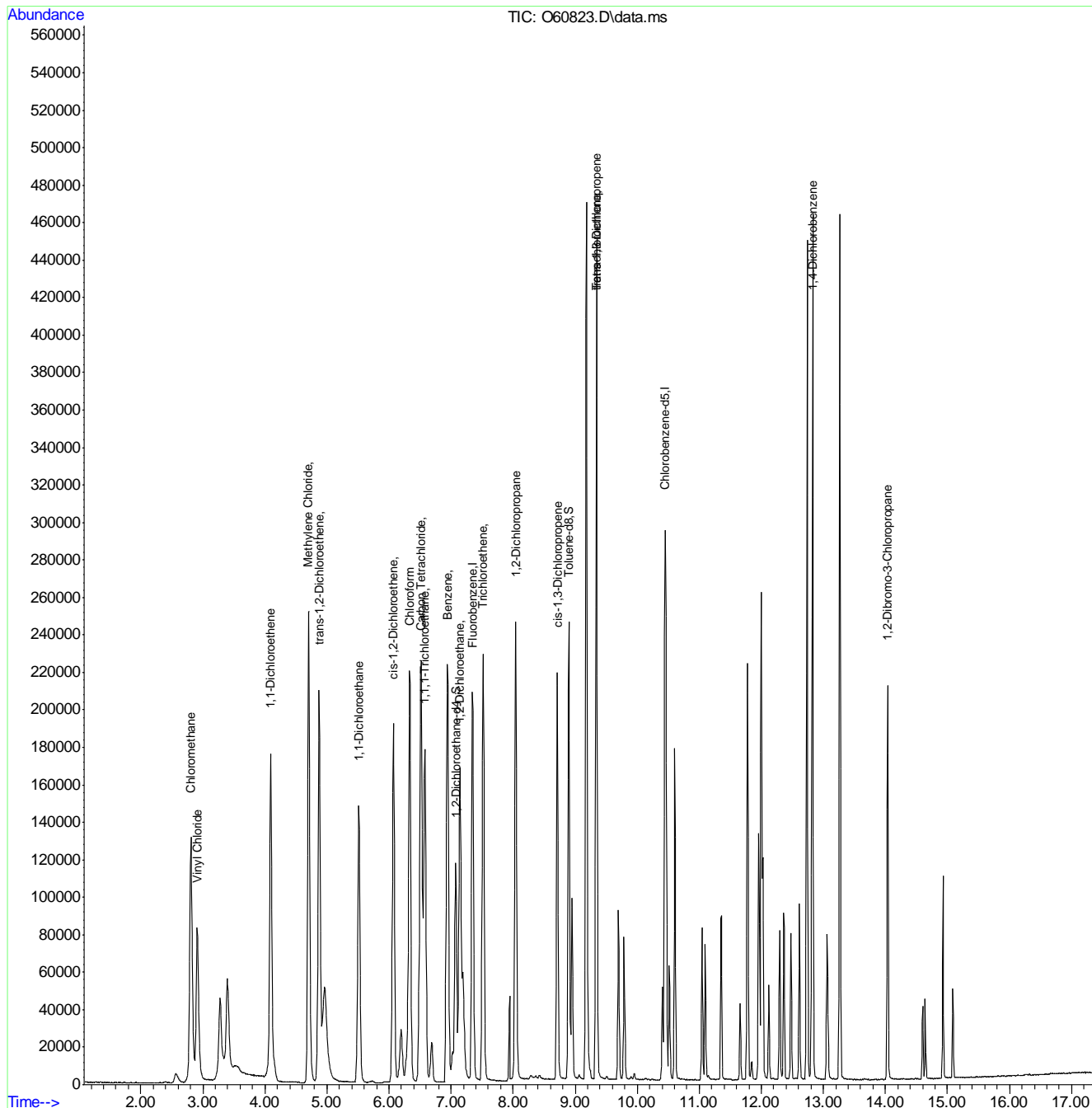
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\070220\
 Data File : O60823.D
 Acq On : 2 Jul 2020 12:00 pm
 Operator : amandab
 Sample : IC2337-4
 Misc : MS46657,VO2337,,,,,
 ALS Vial : 4 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Jul 02 12:41:48 2020
 Quant Method : C:\msdchem\2\methods\SIMCL070220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jun 18 12:40:46 2020
 Response via : Initial Calibration



7.6.4
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\070220\
 Data File : O60824.D
 Acq On : 2 Jul 2020 12:24 pm
 Operator : amandab
 Sample : ICC2337-5 Inst : MSVOA12
 Misc : MS46657,VO2337,,,,,
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jul 02 12:42:25 2020
 Quant Method : C:\msdchem\2\methods\SIMCL070220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jun 18 12:40:46 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.346	96	347161	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.447	117	227073	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.079	65	124704	4.69	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	93.80%	
19) Toluene-d8	8.900	98	266156	5.28	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	105.60%	
Target Compounds						
						Qvalue
2) Vinyl Chloride	2.912	62	342556	6.75	ug/L	98
3) Chloromethane	2.806	50	540358	6.04	ug/L	100
4) 1,1-Dichloroethene	4.092	61	412988	8.38	ug/L	97
5) Methylene Chloride	4.703	49	692135	7.41	ug/L	96
6) trans-1,2-Dichloroethene	4.873	61	474585	8.65	ug/L	95
7) 1,1-Dichloroethane	5.514	63	576155	8.62	ug/L	100
8) cis-1,2-Dichloroethene	6.072	96	319533	8.94	ug/L	99
9) Chloroform	6.333	83	572237	8.90	ug/L	96
10) Carbon Tetrachloride	6.511	117	361935	9.12	ug/L	99
11) 1,1,1-Trichloroethane	6.576	97	422152	9.08	ug/L	96
12) Benzene	6.943	78	967597	8.77	ug/L	97
14) 1,2-Dichloroethane	7.145	62	432160	8.43	ug/L	97
15) Trichloroethene	7.518	95	349429	8.91	ug/L	98
16) 1,2-Dichloropropane	8.043	63	328028	8.56	ug/L	92
17) cis-1,3-Dichloropropene	8.711	75	378743	9.16	ug/L	92
20) trans-1,3-Dichloropropene	9.343	75	370210	10.49	ug/L	88
21) Tetrachloroethene	9.343	166	299619	9.86	ug/L	97
22) 1,4-Dichlorobenzene	12.827	146	585384	9.81	ug/L	99
23) 1,2-Dibromo-3-Chloropr...	14.038	75	110425	10.35	ug/L	95

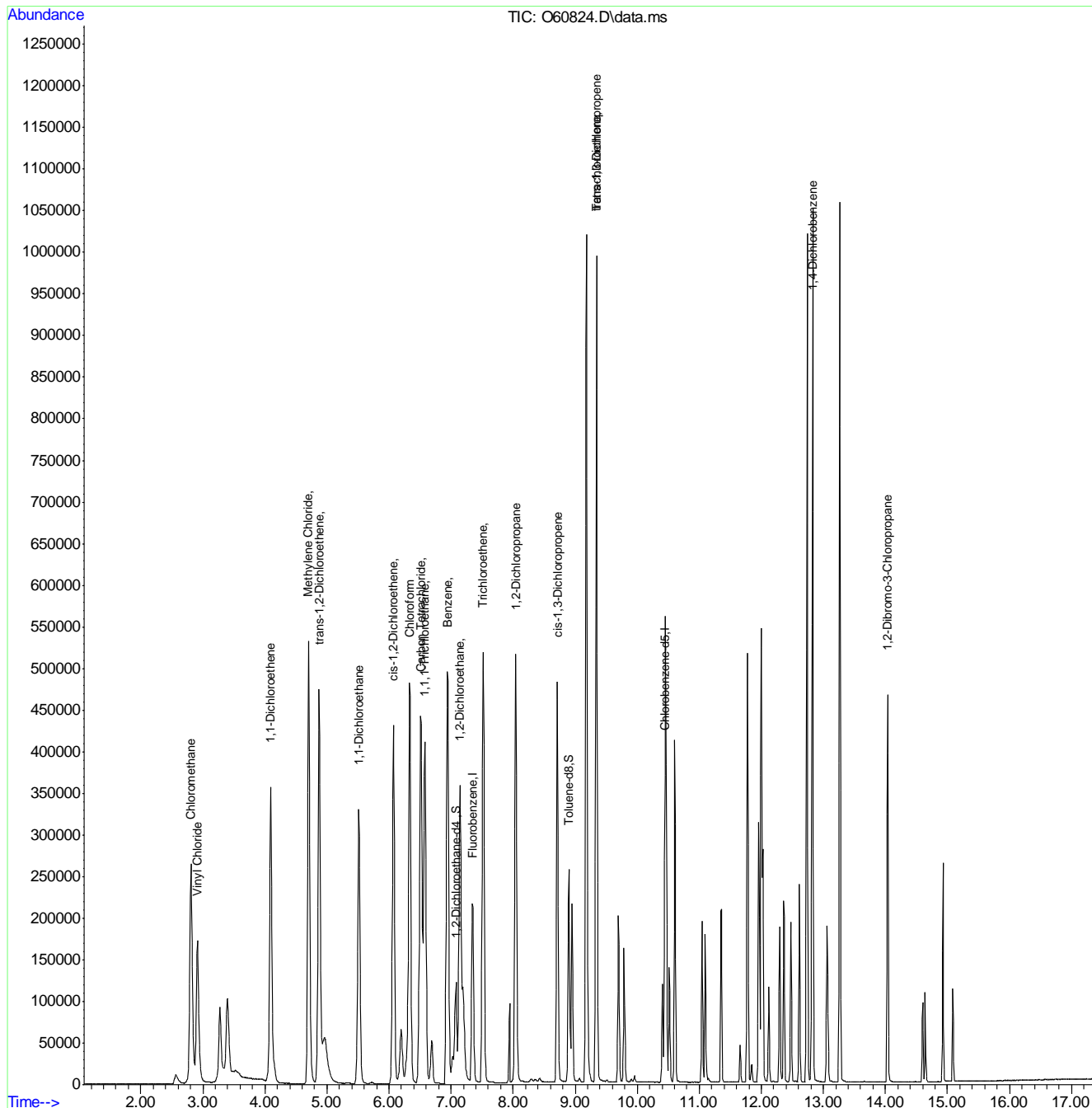
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\070220\
 Data File : O60824.D
 Acq On : 2 Jul 2020 12:24 pm
 Operator : amandab
 Sample : ICC2337-5
 Misc : MS46657,VO2337,,,,,
 ALS Vial : 5 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Jul 02 12:42:25 2020
 Quant Method : C:\msdchem\2\methods\SIMCL070220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jun 18 12:40:46 2020
 Response via : Initial Calibration



7.6.5
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\070220\
 Data File : O60825.D
 Acq On : 2 Jul 2020 12:48 pm
 Operator : amandab
 Sample : IC2337-6 Inst : MSVOA12
 Misc : MS46657,VO2337,,,,,
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jul 02 13:31:57 2020
 Quant Method : C:\msdchem\2\methods\SIMCL070220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jun 18 12:40:46 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.346	96	369277	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.447	117	240614	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.080	65	133031	4.70	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	94.00%	
19) Toluene-d8	8.900	98	286301	5.36	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	107.20%	
Target Compounds						
						Qvalue
2) Vinyl Chloride	2.908	62	545360	10.55	ug/L	99
3) Chloromethane	2.807	50	840467	9.22	ug/L	99
4) 1,1-Dichloroethene	4.089	61	828982	14.64	ug/L	97
5) Methylene Chloride	4.703	49	1083192	11.39	ug/L	94
6) trans-1,2-Dichloroethene	4.869	61	758916	12.99	ug/L	96
7) 1,1-Dichloroethane	5.514	63	920034	13.05	ug/L	100
8) cis-1,2-Dichloroethene	6.072	96	514305	13.56	ug/L	98
9) Chloroform	6.333	83	917949	13.48	ug/L	96
10) Carbon Tetrachloride	6.511	117	602232	14.04	ug/L	100
11) 1,1,1-Trichloroethane	6.576	97	695481	13.86	ug/L	97
12) Benzene	6.943	78	1553138	13.26	ug/L	96
14) 1,2-Dichloroethane	7.145	62	685169	12.66	ug/L	97
15) Trichloroethene	7.518	95	569135	13.47	ug/L	99
16) 1,2-Dichloropropane	8.044	63	539390	13.25	ug/L	92
17) cis-1,3-Dichloropropene	8.711	75	631495	13.84	ug/L	91
20) trans-1,3-Dichloropropene	9.343	75	609953	15.32	ug/L	87
21) Tetrachloroethene	9.343	166	480366	14.75	ug/L	99
22) 1,4-Dichlorobenzene	12.827	146	956841	14.87	ug/L	99
23) 1,2-Dibromo-3-Chloropr...	14.038	75	186456	15.51	ug/L	95

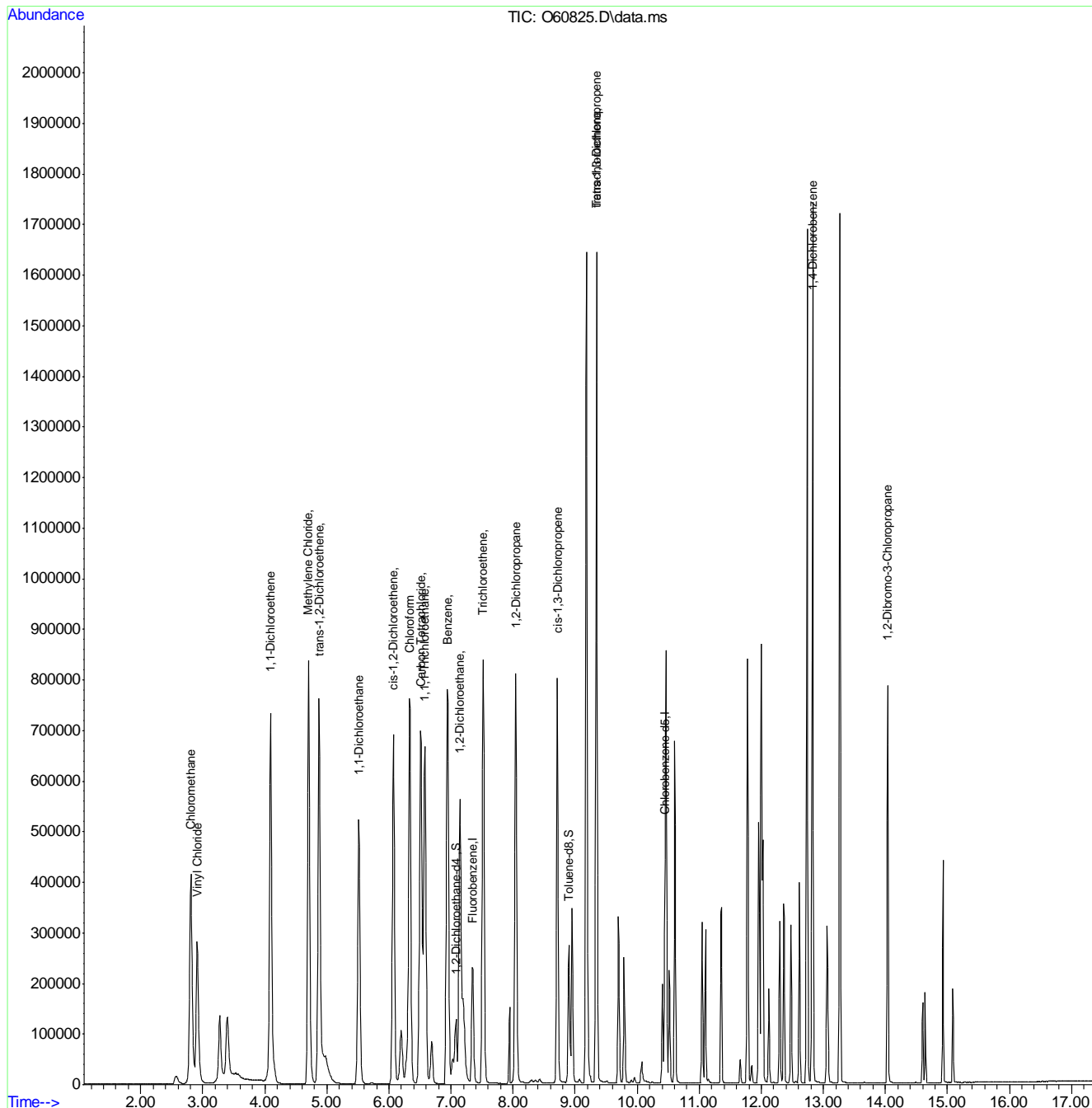
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\070220\
 Data File : O60825.D
 Acq On : 2 Jul 2020 12:48 pm
 Operator : amandab
 Sample : IC2337-6
 Misc : MS46657,VO2337,,,,,
 ALS Vial : 6 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Jul 02 13:31:57 2020
 Quant Method : C:\msdchem\2\methods\SIMCL070220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jun 18 12:40:46 2020
 Response via : Initial Calibration



9.9.7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\070220\
 Data File : O60826.D
 Acq On : 2 Jul 2020 1:12 pm
 Operator : amandab
 Sample : IC2337-7 Inst : MSVOA12
 Misc : MS46657,VO2337,,,,,
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jul 02 13:31:59 2020
 Quant Method : C:\msdchem\2\methods\SIMCL070220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jun 18 12:40:46 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.352	96	401950	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.447	117	262656	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.074	65	142864	4.64	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	92.80%	
19) Toluene-d8	8.900	98	313066	5.37	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	107.40%	
Target Compounds						
						Qvalue
2) Vinyl Chloride	2.912	62	752084	13.93	ug/L	99
3) Chloromethane	2.810	50	1157566	12.16	ug/L	100
4) 1,1-Dichloroethene	4.092	61	969326	15.56	ug/L	93
5) Methylene Chloride	4.703	49	1506574	15.19	ug/L	94
6) trans-1,2-Dichloroethene	4.873	61	1076513	16.91	ug/L	92
7) 1,1-Dichloroethane	5.514	63	1293839	16.97	ug/L	99
8) cis-1,2-Dichloroethene	6.072	96	738784	17.93	ug/L	96
9) Chloroform	6.333	83	1302915	17.65	ug/L	96
10) Carbon Tetrachloride	6.511	117	861150	18.21	ug/L	99
11) 1,1,1-Trichloroethane	6.576	97	998609	18.07	ug/L	96
12) Benzene	6.943	78	2219019	17.45	ug/L	96
14) 1,2-Dichloroethane	7.145	62	976392	16.69	ug/L	97
15) Trichloroethene	7.518	95	826541	17.76	ug/L	98
16) 1,2-Dichloropropane	8.047	63	757699	17.13	ug/L	91
17) cis-1,3-Dichloropropene	8.715	75	927871	18.10	ug/L	87
20) trans-1,3-Dichloropropene	9.343	75	910947	19.82	ug/L	86
21) Tetrachloroethene	9.343	166	695436	19.35	ug/L	98
22) 1,4-Dichlorobenzene	12.827	146	1393746	19.52	ug/L	99
23) 1,2-Dibromo-3-Chloropr...	14.038	75	272499	19.78	ug/L	96

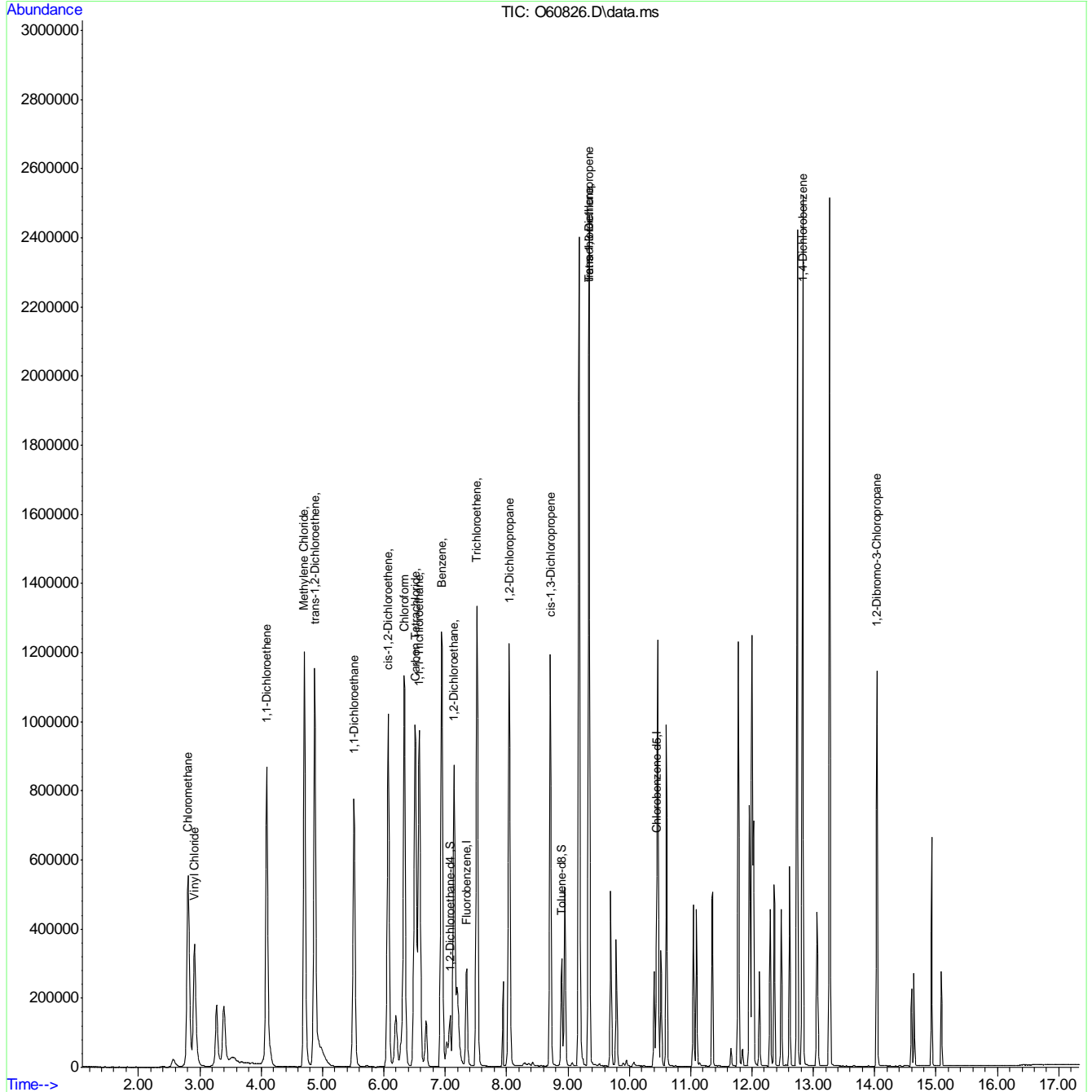
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\070220\
 Data File : O60826.D
 Acq On : 2 Jul 2020 1:12 pm
 Operator : amandab
 Sample : IC2337-7
 Misc : MS46657,VO2337,,,,,
 ALS Vial : 7 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Jul 02 13:31:59 2020
 Quant Method : C:\msdchem\2\methods\SIMCL070220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jun 18 12:40:46 2020
 Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\070220\
 Data File : O60828.D
 Acq On : 2 Jul 2020 2:01 pm
 Operator : amandab
 Sample : ICV2337-5 Inst : MSVOA12
 Misc : MS46657,VO2337,,,,,
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jul 02 14:44:46 2020
 Quant Method : C:\msdchem\2\methods\SIMCL070220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jul 02 13:33:54 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.346	96	355647	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.447	117	231381	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.080	65	128583	4.92	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	98.40%	
19) Toluene-d8	8.900	98	275271	4.94	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	98.80%	
Target Compounds						
						Qvalue
2) Vinyl Chloride	2.912	62	324266	9.50	ug/L	99
3) Chloromethane	2.807	50	496889	8.77	ug/L	99
4) 1,1-Dichloroethene	4.092	61	413565	9.49	ug/L	99
5) Methylene Chloride	4.703	49	686897	9.67	ug/L	98
6) trans-1,2-Dichloroethene	4.869	61	462947	9.89	ug/L	100
7) 1,1-Dichloroethane	5.514	63	575207	9.80	ug/L	98
8) cis-1,2-Dichloroethene	6.072	96	317678	9.92	ug/L	98
9) Chloroform	6.333	83	566057	9.92	ug/L	98
10) Carbon Tetrachloride	6.511	117	349481	9.98	ug/L	99
11) 1,1,1-Trichloroethane	6.576	97	408571	9.93	ug/L	98
12) Benzene	6.943	78	988965	10.05	ug/L	99
14) 1,2-Dichloroethane	7.145	62	438371	9.92	ug/L	99
15) Trichloroethene	7.518	95	357956	10.32	ug/L	98
16) 1,2-Dichloropropane	8.043	63	339688	10.29	ug/L	99
17) cis-1,3-Dichloropropene	8.711	75	396503	10.77	ug/L	99
20) trans-1,3-Dichloropropene	9.343	75	391489	11.10	ug/L	99
21) Tetrachloroethene	9.343	166	292424	9.87	ug/L	98
22) 1,4-Dichlorobenzene	12.827	146	599822	10.53	ug/L	99
23) 1,2-Dibromo-3-Chloropr...	14.038	75	113372	10.24	ug/L	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

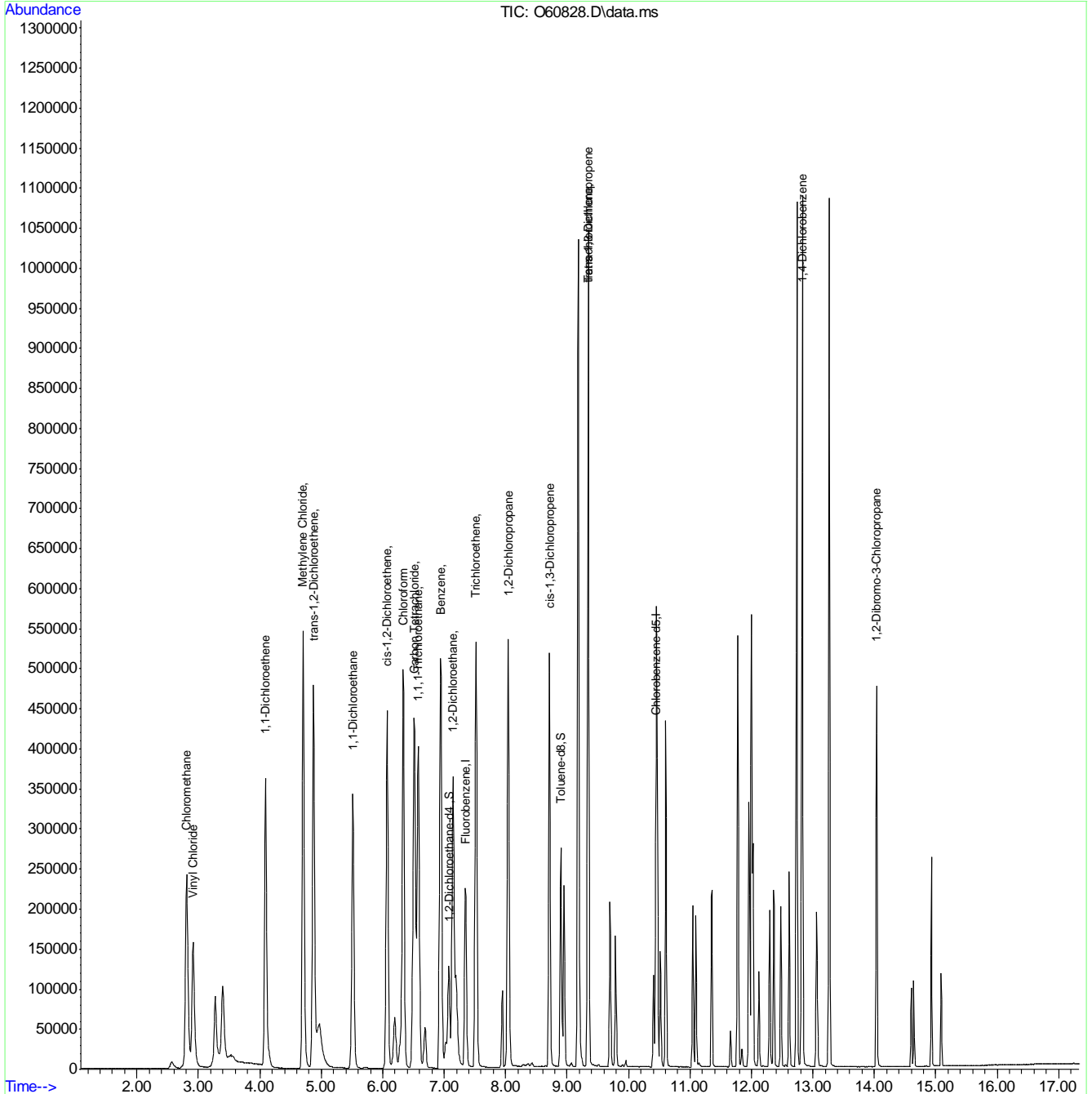
7.6.8
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\070220\
 Data File : O60828.D
 Acq On : 2 Jul 2020 2:01 pm
 Operator : amandab
 Sample : ICV2337-5
 Misc : MS46657,VO2337,,,,,
 ALS Vial : 9 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Jul 02 14:44:46 2020
 Quant Method : C:\msdchem\2\methods\SIMCL070220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jul 02 13:33:54 2020
 Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\080620\
 Data File : O60961.D
 Acq On : 6 Aug 2020 9:02 am
 Operator : amandab
 Sample : CC2337-5 Inst : MSVOA12
 Misc : MS46803,VO2343,,,,,
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 06 09:25:01 2020
 Quant Method : C:\msdchem\2\methods\SIMCL070220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jul 02 13:33:54 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
Internal Standards							
1) Fluorobenzene	7.340	96	416989	5.00	ug/L	0.00	
18) Chlorobenzene-d5	10.441	117	290058	5.00	ug/L	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.068	65	148761	4.86	ug/L	-0.01	
Spiked Amount	5.000	Range 74 - 125	Recovery	=	97.20%		
19) Toluene-d8	8.896	98	336432	4.81	ug/L	0.00	
Spiked Amount	5.000	Range 88 - 111	Recovery	=	96.20%		
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.897	62	320454	8.01	ug/L		98
3) Chloromethane	2.795	50	489110	7.27	ug/L		99
4) 1,1-Dichloroethene	4.085	61	419855	8.22	ug/L		99
5) Methylene Chloride	4.696	49	695969	8.29	ug/L		95
6) trans-1,2-Dichloroethene	4.862	61	491706	8.96	ug/L		99
7) 1,1-Dichloroethane	5.506	63	604440	8.77	ug/L		99
8) cis-1,2-Dichloroethene	6.060	96	345220	9.19	ug/L		97
9) Chloroform	6.327	83	609737	9.11	ug/L		99
10) Carbon Tetrachloride	6.505	117	411775	10.03	ug/L		99
11) 1,1,1-Trichloroethane	6.570	97	476264	9.88	ug/L		97
12) Benzene	6.937	78	1034207	8.96	ug/L		96
14) 1,2-Dichloroethane	7.133	62	455515	8.78	ug/L		99
15) Trichloroethene	7.512	95	370633	9.11	ug/L		98
16) 1,2-Dichloropropane	8.040	63	341084	8.81	ug/L		99
17) cis-1,3-Dichloropropene	8.707	75	426724	9.89	ug/L		99
20) trans-1,3-Dichloropropene	9.343	75	416259	9.42	ug/L		96
21) Tetrachloroethene	9.337	166	323655	8.72	ug/L		94
22) 1,4-Dichlorobenzene	12.827	146	627886	8.79	ug/L		100
23) 1,2-Dibromo-3-Chloropr...	14.037	75	132297	9.53	ug/L		96

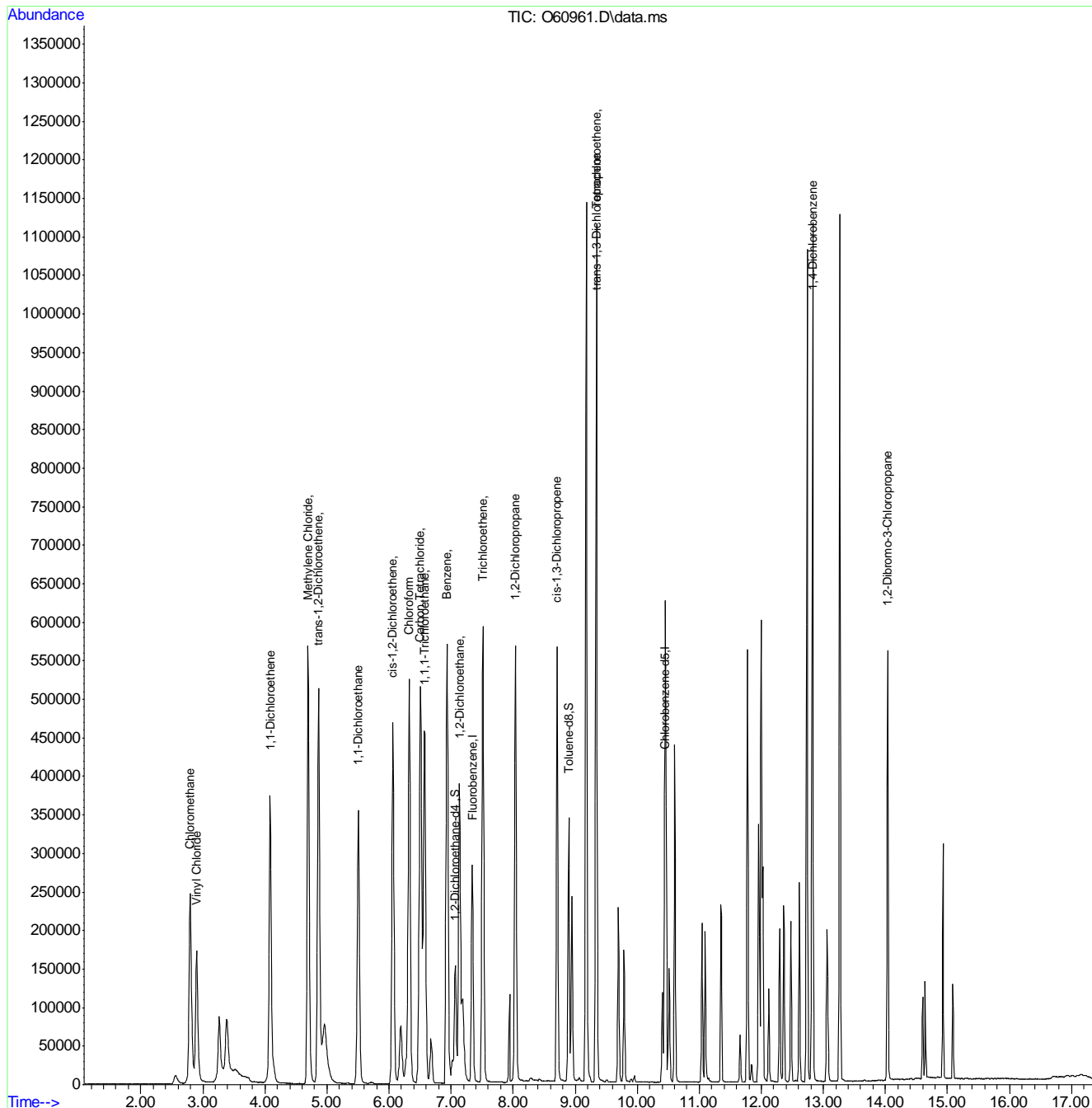
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\080620\
 Data File : O60961.D
 Acq On : 6 Aug 2020 9:02 am
 Operator : amandab
 Sample : CC2337-5
 Misc : MS46803,VO2343,,,,,
 ALS Vial : 1 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Aug 06 09:25:01 2020
 Quant Method : C:\msdchem\2\methods\SIMCL070220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jul 02 13:33:54 2020
 Response via : Initial Calibration



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Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\080620\
 Data File : O60979.D
 Acq On : 6 Aug 2020 4:16 pm
 Operator : amandab
 Sample : ECC2337-5 Inst : MSVOA12
 Misc : MS46912,VO2343,,,,,
 ALS Vial : 19 Sample Multiplier: 1

Quant Time: Aug 07 07:44:25 2020
 Quant Method : C:\msdchem\2\methods\SIMCL070220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jul 02 13:33:54 2020
 Response via : Initial Calibration

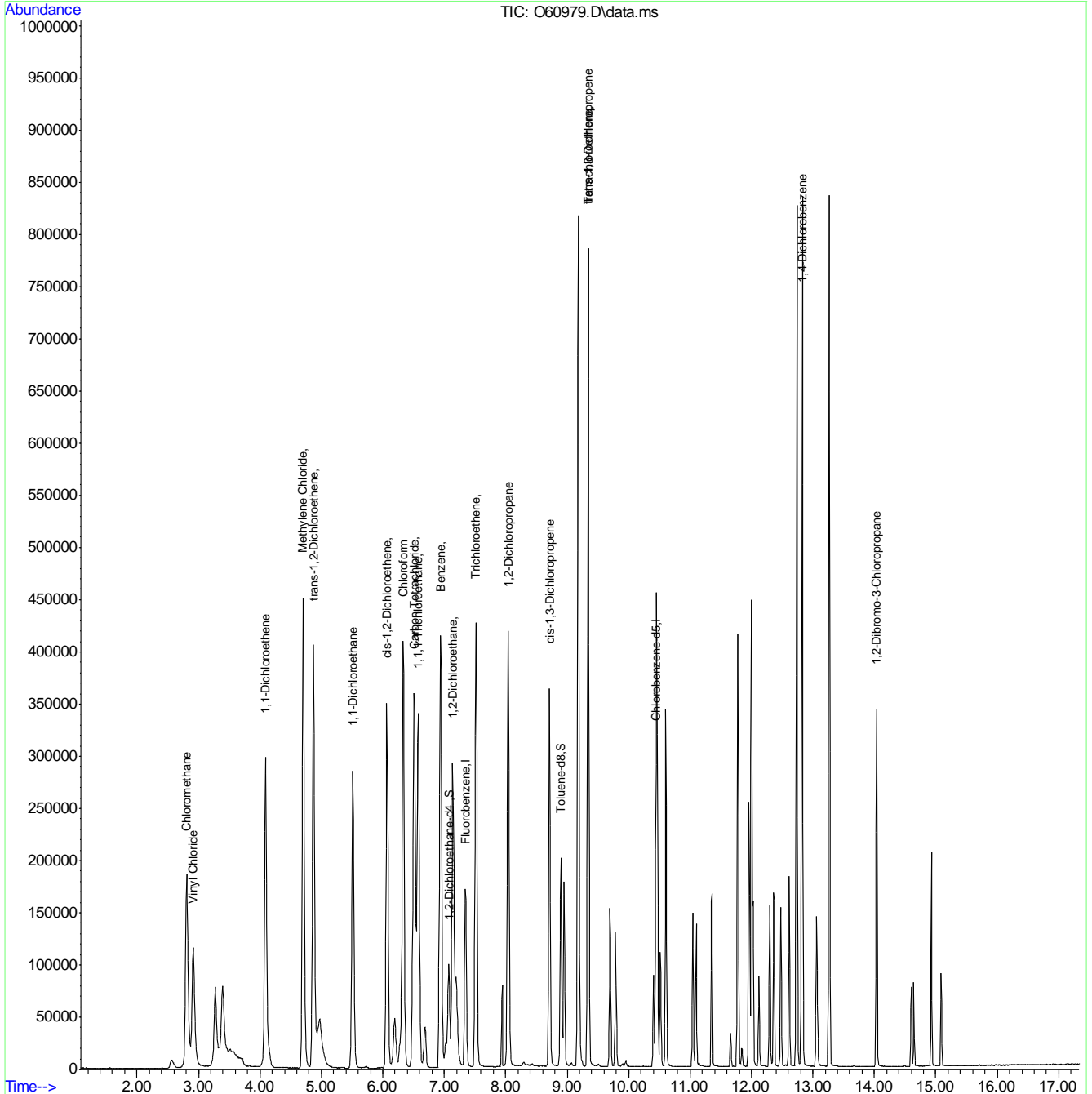
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
Internal Standards							
1) Fluorobenzene	7.346	96	259288	5.00	ug/L	0.00	
18) Chlorobenzene-d5	10.447	117	178733	5.00	ug/L	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.073	65	97292	5.11	ug/L	0.00	
Spiked Amount	5.000	Range 74 - 125	Recovery	=	102.20%		
19) Toluene-d8	8.900	98	199098	4.62	ug/L	0.00	
Spiked Amount	5.000	Range 88 - 111	Recovery	=	92.40%		
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.916	62	249181	10.02	ug/L		97
3) Chloromethane	2.806	50	397588	9.70	ug/L		99
4) 1,1-Dichloroethene	4.092	61	333083	10.49	ug/L		100
5) Methylene Chloride	4.703	49	562110	10.93	ug/L		99
6) trans-1,2-Dichloroethene	4.869	61	377465	11.06	ug/L		100
7) 1,1-Dichloroethane	5.514	63	467484	10.95	ug/L		99
8) cis-1,2-Dichloroethene	6.066	96	246219	10.55	ug/L		97
9) Chloroform	6.333	83	460116	11.06	ug/L		99
10) Carbon Tetrachloride	6.510	117	291514	11.42	ug/L		98
11) 1,1,1-Trichloroethane	6.576	97	342334	11.42	ug/L		99
12) Benzene	6.943	78	777714	10.84	ug/L		98
14) 1,2-Dichloroethane	7.139	62	349284	10.87	ug/L		99
15) Trichloroethene	7.518	95	277004	10.95	ug/L		100
16) 1,2-Dichloropropane	8.043	63	255994	10.64	ug/L		97
17) cis-1,3-Dichloropropene	8.711	75	276103	10.29	ug/L		98
20) trans-1,3-Dichloropropene	9.343	75	275981	10.13	ug/L		99
21) Tetrachloroethene	9.343	166	233123	10.19	ug/L		100
22) 1,4-Dichlorobenzene	12.827	146	460727	10.47	ug/L		99
23) 1,2-Dibromo-3-Chloropr...	14.037	75	81028	9.47	ug/L		95

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\080620\
 Data File : O60979.D
 Acq On : 6 Aug 2020 4:16 pm
 Operator : amandab
 Sample : ECC2337-5 Inst : MSVOA12
 Misc : MS46912,VO2343,,,,,
 ALS Vial : 19 Sample Multiplier: 1

Quant Time: Aug 07 07:44:25 2020
 Quant Method : C:\msdchem\2\methods\SIMCL070220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jul 02 13:33:54 2020
 Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\080720\
 Data File : O60986.D
 Acq On : 7 Aug 2020 10:07 am
 Operator : amandab
 Sample : CC2337-5 Inst : MSVOA12
 Misc : MS46912,VO2344,,,,,
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 07 10:25:27 2020
 Quant Method : C:\msdchem\2\methods\SIMCL070220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jul 02 13:33:54 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
Internal Standards							
1) Fluorobenzene	7.346	96	418402	5.00	ug/L	0.00	
18) Chlorobenzene-d5	10.447	117	292954	5.00	ug/L	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.073	65	149062	4.85	ug/L	0.00	
Spiked Amount	5.000	Range 74 - 125	Recovery	=	97.00%		
19) Toluene-d8	8.896	98	327773	4.64	ug/L	0.00	
Spiked Amount	5.000	Range 88 - 111	Recovery	=	92.80%		
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.904	62	321288	8.00	ug/L		98
3) Chloromethane	2.799	50	507405	7.53	ug/L		99
4) 1,1-Dichloroethene	4.088	61	422401	8.24	ug/L		99
5) Methylene Chloride	4.699	49	727559	8.65	ug/L		97
6) trans-1,2-Dichloroethene	4.865	61	490879	8.92	ug/L		98
7) 1,1-Dichloroethane	5.510	63	609640	8.81	ug/L		99
8) cis-1,2-Dichloroethene	6.066	96	328336	8.71	ug/L		98
9) Chloroform	6.327	83	599811	8.93	ug/L		99
10) Carbon Tetrachloride	6.510	117	383526	9.31	ug/L		99
11) 1,1,1-Trichloroethane	6.576	97	453802	9.38	ug/L		98
12) Benzene	6.943	78	1030134	8.90	ug/L		97
14) 1,2-Dichloroethane	7.139	62	451860	8.67	ug/L		100
15) Trichloroethene	7.512	95	365712	8.96	ug/L		99
16) 1,2-Dichloropropane	8.040	63	338220	8.71	ug/L		100
17) cis-1,3-Dichloropropene	8.711	75	389680	9.00	ug/L		96
20) trans-1,3-Dichloropropene	9.343	75	387022	8.67	ug/L		97
21) Tetrachloroethene	9.337	166	305401	8.14	ug/L		94
22) 1,4-Dichlorobenzene	12.827	146	610033	8.46	ug/L		99
23) 1,2-Dibromo-3-Chloropr...	14.037	75	117983	8.42	ug/L		96

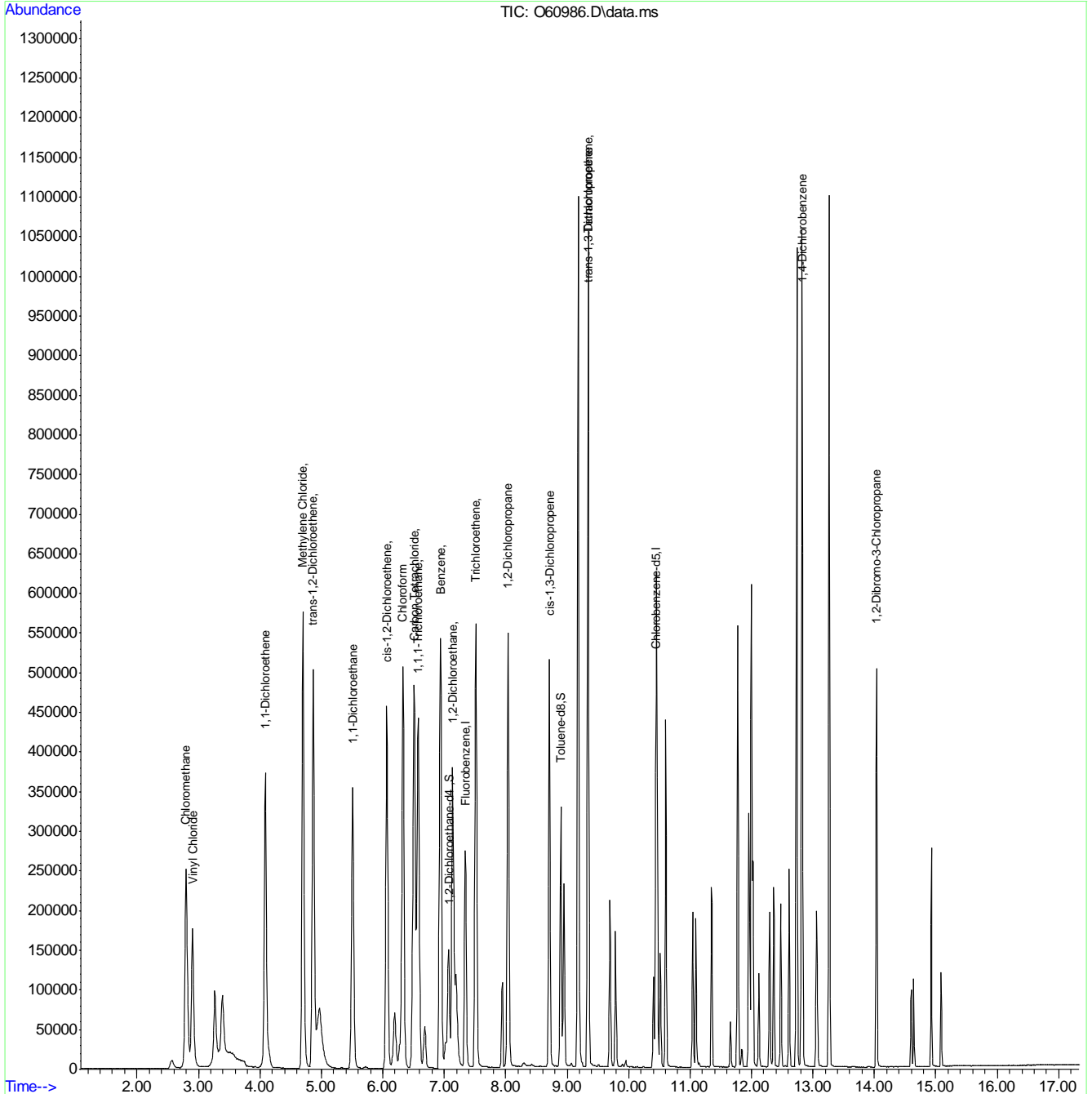
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\080720\
 Data File : O60986.D
 Acq On : 7 Aug 2020 10:07 am
 Operator : amandab
 Sample : CC2337-5
 Misc : MS46912,VO2344,,,,,
 ALS Vial : 1 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Aug 07 10:25:27 2020
 Quant Method : C:\msdchem\2\methods\SIMCL070220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jul 02 13:33:54 2020
 Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\080720\
 Data File : O60993.D
 Acq On : 7 Aug 2020 12:55 pm
 Operator : amandab
 Sample : ECC2337-5 Inst : MSVOA12
 Misc : MS46912,VO2344,,,,,
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 07 14:09:38 2020
 Quant Method : C:\msdchem\2\methods\SIMCL070220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jul 02 13:33:54 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
Internal Standards							
1) Fluorobenzene	7.346	96	340481	5.00	ug/L	0.00	
18) Chlorobenzene-d5	10.447	117	232487	5.00	ug/L	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.074	65	124840	4.99	ug/L	0.00	
Spiked Amount	5.000	Range 74 - 125	Recovery	=	99.80%		
19) Toluene-d8	8.900	98	257803	4.60	ug/L	0.00	
Spiked Amount	5.000	Range 88 - 111	Recovery	=	92.00%		
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.905	62	318435	9.75	ug/L		100
3) Chloromethane	2.799	50	504617	9.34	ug/L		99
4) 1,1-Dichloroethene	4.085	61	423168	10.14	ug/L		99
5) Methylene Chloride	4.700	49	714781	10.56	ug/L		96
6) trans-1,2-Dichloroethene	4.865	61	485963	10.85	ug/L		99
7) 1,1-Dichloroethane	5.510	63	605385	10.79	ug/L		99
8) cis-1,2-Dichloroethene	6.066	96	318026	10.37	ug/L		99
9) Chloroform	6.327	83	589774	10.80	ug/L		98
10) Carbon Tetrachloride	6.505	117	375112	11.19	ug/L		99
11) 1,1,1-Trichloroethane	6.576	97	444760	11.30	ug/L		96
12) Benzene	6.943	78	1004272	10.66	ug/L		96
14) 1,2-Dichloroethane	7.139	62	443961	10.51	ug/L		100
15) Trichloroethene	7.512	95	356669	10.74	ug/L		99
16) 1,2-Dichloropropane	8.040	63	328435	10.39	ug/L		98
17) cis-1,3-Dichloropropene	8.711	75	364205	10.33	ug/L		97
20) trans-1,3-Dichloropropene	9.343	75	360736	10.18	ug/L		99
21) Tetrachloroethene	9.343	166	295063	9.91	ug/L		99
22) 1,4-Dichlorobenzene	12.827	146	585674	10.23	ug/L		100
23) 1,2-Dibromo-3-Chloropr...	14.038	75	106320	9.56	ug/L		99

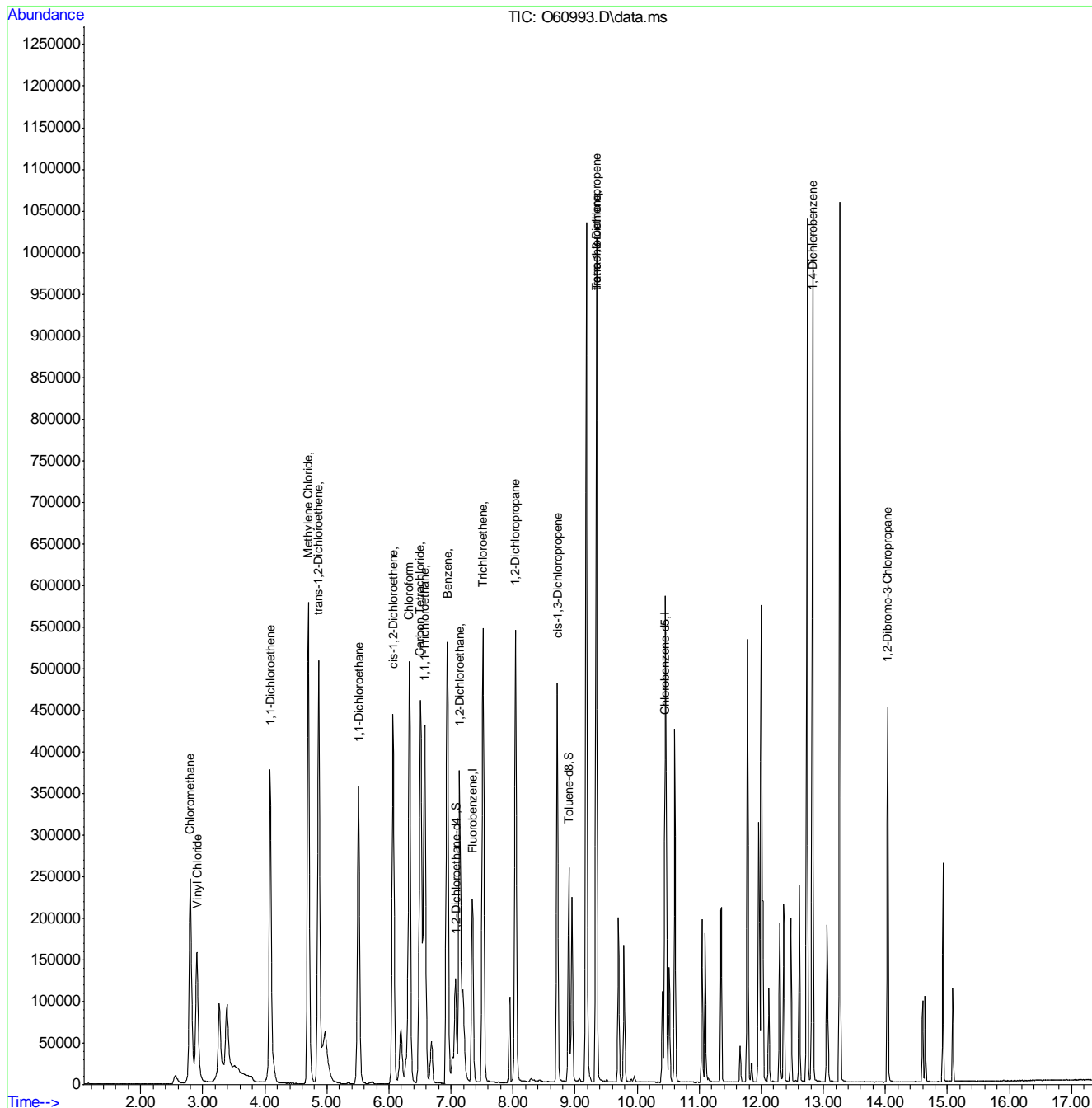
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\080720\
 Data File : O60993.D
 Acq On : 7 Aug 2020 12:55 pm
 Operator : amandab
 Sample : ECC2337-5
 Misc : MS46912,VO2344,,,,,
 ALS Vial : 8 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Aug 07 14:09:38 2020
 Quant Method : C:\msdchem\2\methods\SIMCL070220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Thu Jul 02 13:33:54 2020
 Response via : Initial Calibration



7.6.12
7

SGS -ORLANDO

MSVOA12-O-ANALYSIS LOG

Date:	7/2/2020
COLUMN TYPE:	RTX VMS
DETECTOR:	5975 MSD
INSTRUMENT:	MSVOA12-O
PURGE PRESSURE:	8.4PSI
PURGE VOLUME:	5 mL
ANALYST:	AMANDAB

METHODS:*	SIMCLM
METHOD FILE:	SIMCL070220.m
CALIB. DATE:	7/2/2020
EM VOLTAGE:	1565V
BFB RESPONSE	6545625
RUN ID:	VO2337

BFB:	V25845C
ICAL/CC:	V25832 V25843
ISTD/SUR:	V25863
ICV/QC:	V25849 V25844

PH LOT1-12 :230814
ph lot 0.0-3.0 : 220416a
KI PAPER LOT:030317
SAMPLE ID VERIFIED BY:
AB
DATE VERIFIED: 07/02/20

Data File	Sample ID	DIL.	VIAL #	MATRIX	ALS POS.	SAMPLE METHOD	MANUALLY INTEGRATED PEAK RATIONAL, PEAK #	PH	CL ?	RR	COMMENTS
O60815	BLK	NA	NA	w	1	ACQ_SIMCL		NA	NA		✓
O60816	BLK	NA	NA	w	2	ACQ_SIMCL		NA	NA		✓
O60817	BFB	NA	NA	w	100	BFB		NA	NA		Passed autofind 2ul
O60818	CC2335-5	NA	NA	w	1	ACQ_SIMCL		NA	NA		x 50ul->50mL
O60819	CC2335-5	NA	NA	w	1	ACQ_SIMCL		NA	NA		x 50ul->50mL
O60820	IC2337-1	NA	NA	w	1	ACQ_SIMCL	#16.21 (Pli) #23 (MP)	NA	NA		1ul->100mL ✓
O60821	IC2337-2	NA	NA	w	2	ACQ_SIMCL		NA	NA		5ul->100mL ✓
O60822	IC2337-3	NA	NA	w	3	ACQ_SIMCL		NA	NA		10ul->50mL ✓
O60823	IC2337-4	NA	NA	w	4	ACQ_SIMCL		NA	NA		25ul->50mL ✓
O60824	IC2337-5	NA	NA	w	5	ACQ_SIMCL		NA	NA		50ul->50mL ✓
O60825	IC2337-6	NA	NA	w	6	ACQ_SIMCL		NA	NA		75ul->50mL ✓
O60826	IC2337-7	NA	NA	w	7	ACQ_SIMCL		NA	NA		100ul->50mL ✓
O60827	BLK	NA	NA	w	8	ACQ_SIMCL		NA	NA		ND ✓
O60828	ICV2337-5	NA	NA	w	9	ACQ_SIMCL		NA	NA		50ul->50mL ✓
O60829	BS	NA	NA	w	1	ACQ_SIMCL		NA	NA		20ul->vial ✓
O60830	MB	NA	NA	w	2	ACQ_SIMCL		NA	NA		✓ ND
O60831	FAT6463-1		2	w	3	ACQ_SIMCL	All vials arrived with bubbles > 6mm	1	N		✓
O60832	FAT6463-2		1	w	4	ACQ_SIMCL		1	N		✓
O60833	FAT6463-3		1	w	5	ACQ_SIMCL	#21 (Pli)	1	N		✓
O60834	FAT6463-4		1	w	6	ACQ_SIMCL		1	N		✓
O60835	FAT6463-5		1	w	7	ACQ_SIMCL		1	N		✓
O60836	FAT6463-6		1	w	8	ACQ_SIMCL		1	N		✓
O60837	FAT6463-2MS	5X	2	w	9	ACQ_SIMCL	10 mL (-) 50 mL	1	N		20ul->vial ✓
O60838	FAT6463-2MSD	5X	2	w	10	ACQ_SIMCL	10 mL (-) 50 mL	1	N		20ul->vial ✓
O60839	ECC2337-5	NA	NA	w	11	ACQ_SIMCL		NA	NA		50ul->50mL ✓

* For NELAC purposes, Method 8260 includes analytes by SOP MS005 Matrix: Designate "W" for Water "S" for soil, "O" for Oil, "Liq" for Non-aqueous Liquid, and "TCLP" or "SPLP" for Leachate.
Manual Integration Rational SOP QA029: MP Missed Peak, OP Overlapping Peak, SP Split Peak, PDB Poorly Defined Baseline, BR Baseline Ripple, Pli Poor Instrument

Analyst's Signature: _____

1 of 1

VO2337.MS 040918

SGS -ORLANDO

MSVOA12-O-ANALYSIS LOG

Date:	8/6/2020
COLUMN TYPE:	RTX VMS
DETECTOR:	5975 MSD
INSTRUMENT:	MSVOA12-O
PURGE PRESSURE:	8.4PSI
PURGE VOLUME:	5 mL
ANALYST:	Amanda B

METHODS:*	SIMCLm
METHOD FILE:	SIMCL070220.m
CALIB. DATE:	7/2/2020
EM VOLTAGE:	1565V
BFB RESPONSE	9553895
RUN ID:	VO2343

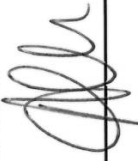
BFB:	VS0726D
ICAL/CC:	V25879 V25905
ISTD/SUR:	V25904
ICV/QC:	V25907 V25906

PH LOT1-12 :	230814
ph lot 0.0-3.0 :	220416a
KI PAPER LOT:	030317
SAMPLE ID VERIFIED BY:	AB
DATE VERIFIED:	08/06/20

Data File	Sample ID	DIL.	VIAL #	MATRIX	ALS POS.	SAMPLE METHOD	MANUALLY INTEGRATED PEAK RATIONAL, PEAK #	PH	CL	RR	COMMENTS
O60957	BLK	NA	NA	w	1	ACQ_SIMCL		NA	NA		✓
O60958	BLK	NA	NA	w	2	ACQ_SIMCL		NA	NA		✓
O60959	BFB	NA	NA	w	100	BFB		NA	NA		Failed autofind 2uL ✓
O60960	BFB	NA	NA	w	100	BFB		NA	NA		Passed autofind 2uL ✓
O60961	CC2337-5	NA	NA	w	1	ACQ_SIMCL		NA	NA		50uL->50mL ✓
O60962	BS	NA	NA	w	2	ACQ_SIMCL		NA	NA		20uL->vial x (1,1DCA low)
O60963	MB	NA	NA	w	3	ACQ_SIMCL		NA	NA		ND ✓
O60964	BS	NA	NA	w	4	ACQ_SIMCL		NA	NA		20uL->vial ✓
O60965	FA77472-1	NA	1	w	5	ACQ_SIMCL	All vials bubbles > 6mm #21 (PII)	1	N		lot #424219 (same lot already cf) ✓
O60966	FA77472-2		1	w	6	ACQ_SIMCL		1	N		✓
O60967	FA77472-3		1	w	7	ACQ_SIMCL	#21 (PII)	1	N		✓
O60968	FA77472-4		1	w	8	ACQ_SIMCL		1	N		✓
O60969	FA77472-5		1	w	9	ACQ_SIMCL		1	N		✓
O60970	FA77472-2MS	5X	1	w	10	ACQ_SIMCL	10 mL (-) 50 mL	1	N		20uL->vial ✓
O60971	FA77472-2MSD	5X	1	w	11	ACQ_SIMCL	10 mL (-) 50 mL	1	N		20uL->vial ✓
O60972	COND STD	NA	NA	w	12	ACQ_SIMCL		NA	NA		50uL->50mL ✓
O60973	FA77472-6		1	w	13	ACQ_SIMCL	#21 (PII)	1	N		✓
O60974	FA77472-7		1	w	14	ACQ_SIMCL		1	N		✓
O60975	FA77472-8		1	w	15	ACQ_SIMCL		1	N		✓
O60976	FA77472-9		1	w	16	ACQ_SIMCL		1	N		✓
O60977	FA77472-10		1	w	17	ACQ_SIMCL		1	N	1x	IS failure
O60978	FA77472-11		1	w	18	ACQ_SIMCL		1	N	1x	IS failure
O60979	ECC2337-5	NA	NA	w	19	ACQ_SIMCL		NA	NA		50uL->50mL ✓

* For NELAC purposes, Method 8260 includes analyses by SOP MS005 Matrix: Designate "W" for Water "s" for soil, "O" for Oil, "Liq" for Non-aqueous Liquid, and "TCLP" or "SPLP" for Leachate.

Manual Integration Rational SOP QA029: MP Missed Peak, OP Overlapping Peak, SP Split Peak, PDB Poorly Defined Baseline, BR Baseline Ripple, PI Poor Instrument

Analyst's Signature: 

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

e-Hardcopy 2.0
Automated Report

Technical Report for

Ahtna Global, LLC

Fort Ord Groundwater Monitoring

21065.000.01.0000(Former Fort Ord GWMP - OU2 Aquifer)

SGS Job Number: FA78442

Sampling Date: 09/01/20



Report to:

Ahtna Global, LLC
9699 Blue Larkspur Lane Suite 203
Monterey, CA 93940
dlieberman@ahtna.net; mfisher@ahtna.net;
hdillon@ahtna.net; eschmidt@ahtna.net;
ATTN: Derek Lieberman

Total number of pages in report: **310**



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

Norm Farmer
Technical Director

Client Service contact: Elvin Kumar 407-425-6700

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

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Test results relate only to samples analyzed.

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Sample Summary

Ahtna Global, LLC

Job No: FA78442

Fort Ord Groundwater Monitoring

Project No: 21065.000.01.0000(Former Fort Ord GWMP - OU2 Aquifer)

Sample Number	Collected		Matrix Received	Code	Type	Client Sample ID
	Date	Time By				
FA78442-1	09/01/20	10:23 LBTS	09/03/20	AQ	Ground Water	2036YOU2387F
FA78442-2	09/01/20	10:40 LBTS	09/03/20	AQ	Ground Water	2036YOU2388F
FA78442-3	09/01/20	10:55 LBTS	09/03/20	AQ	Ground Water	2036YOU2389F
FA78442-4	09/01/20	11:10 LBTS	09/03/20	AQ	Ground Water	2036YOU2390F
FA78442-5	09/01/20	11:15 LBTS	09/03/20	AQ	Ground Water	2036YOU2391D
FA78442-6	09/01/20	11:35 LBTS	09/03/20	AQ	Ground Water	2036YOU2392F
FA78442-7	09/01/20	11:47 LBTS	09/03/20	AQ	Ground Water	2036YOU2393F
FA78442-8	09/01/20	12:04 LBTS	09/03/20	AQ	Ground Water	2036YOU2394F
FA78442-9	09/01/20	14:24 LBTS	09/03/20	AQ	Ground Water	2036YOU2396F
FA78442-10	09/01/20	14:38 LBTS	09/03/20	AQ	Ground Water	2036YOU2397F
FA78442-11	09/01/20	15:08 LBTS	09/03/20	AQ	Ground Water	2036YOU2399F
FA78442-12	09/01/20	15:27 LBTS	09/03/20	AQ	Ground Water	2036YOU2400F

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: Ahtna Global, LLC

Job No: FA78442

Site: Fort Ord Groundwater Monitoring

Report Date 9/16/2020 2:27:24

12 Sample(s), 0 Trip Blank(s) and 0 Field Blank(s) were collected on 09/01/2020 and were received at SGS North America Inc - Orlando on 09/03/2020 properly preserved, at 2.8 Deg. C and intact. These Samples received an SGS Orlando job number of FA78442. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section. Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

MS Volatiles By Method SW846 8260B BY SIM

Matrix: AQ

Batch ID: VO2353

All samples were analyzed within the recommended method holding time.

Sample(s) FA78398-4MS, FA78398-4MSD were used as the QC samples indicated.

All method blanks for this batch meet method specific criteria.

Matrix Spike Recovery(s) for 1,1-Dichloroethane, Benzene are outside control limits. Probable cause is due to matrix interference.

Matrix: AQ

Batch ID: VZ2409

All samples were analyzed within the recommended method holding time.

Sample(s) FA78442-3MS, FA78442-3MSD were used as the QC samples indicated.

All method blanks for this batch meet method specific criteria.

FA78442-3 for 1,2-Dichloroethane-D4: Outside DOD QSM control limits high.

FA78442-4 for 1,2-Dichloroethane-D4: Outside DOD QSM control limits high.

FA78442-5 for 1,2-Dichloroethane-D4: Outside DOD QSM control limits high.

FA78442-6 for 1,2-Dichloroethane-D4: Outside DOD QSM control limits high.

FA78442-7 for 1,2-Dichloroethane-D4: Outside DOD QSM control limits high.

Matrix: AQ

Batch ID: VZ2412

All samples were analyzed within the recommended method holding time.

Sample(s) FA78398-19MS, FA78398-19MSD were used as the QC samples indicated.

All method blanks for this batch meet method specific criteria.

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

Narrative prepared by:

Ariel Hartney, Client Services (*Signature on File*)

Summary of Hits

Job Number: FA78442
Account: Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring
Collected: 09/01/20



Lab Sample ID	Client Sample ID	Result/ Qual	LOQ	LOD	Units	Method
FA78442-1	2036YOU2387F					
	Tetrachloroethylene	0.34 J	0.50	0.25	ug/l	SW846 8260B BY SIM
FA78442-2	2036YOU2388F					
	1,1-Dichloroethane	3.9	0.50	0.25	ug/l	SW846 8260B BY SIM
	1,2-Dichloroethane	0.91	0.50	0.25	ug/l	SW846 8260B BY SIM
	cis-1,2-Dichloroethylene	2.0	0.50	0.25	ug/l	SW846 8260B BY SIM
	1,2-Dichloropropane	0.20 J	0.50	0.25	ug/l	SW846 8260B BY SIM
	Tetrachloroethylene	2.6	0.50	0.25	ug/l	SW846 8260B BY SIM
	Trichloroethylene	0.51	0.50	0.25	ug/l	SW846 8260B BY SIM
	Vinyl Chloride	7.5	0.10	0.050	ug/l	SW846 8260B BY SIM
FA78442-3	2036YOU2389F					
	Chloroform	0.31 J	0.50	0.25	ug/l	SW846 8260B BY SIM
	cis-1,2-Dichloroethylene	2.0	0.50	0.25	ug/l	SW846 8260B BY SIM
	Tetrachloroethylene	1.6	0.50	0.25	ug/l	SW846 8260B BY SIM
	Trichloroethylene	7.0	0.50	0.25	ug/l	SW846 8260B BY SIM
FA78442-4	2036YOU2390F					
	Benzene	0.25 J	0.50	0.25	ug/l	SW846 8260B BY SIM
	1,1-Dichloroethane	2.7	0.50	0.25	ug/l	SW846 8260B BY SIM
	1,2-Dichloroethane	0.51	0.50	0.25	ug/l	SW846 8260B BY SIM
	cis-1,2-Dichloroethylene	1.0	0.50	0.25	ug/l	SW846 8260B BY SIM
	Tetrachloroethylene	1.9	0.50	0.25	ug/l	SW846 8260B BY SIM
	Vinyl Chloride	5.2	0.10	0.050	ug/l	SW846 8260B BY SIM
FA78442-5	2036YOU2391D					
	Benzene	0.24 J	0.50	0.25	ug/l	SW846 8260B BY SIM
	1,1-Dichloroethane	2.7	0.50	0.25	ug/l	SW846 8260B BY SIM
	1,2-Dichloroethane	0.51	0.50	0.25	ug/l	SW846 8260B BY SIM
	cis-1,2-Dichloroethylene	0.99	0.50	0.25	ug/l	SW846 8260B BY SIM
	Tetrachloroethylene	1.9	0.50	0.25	ug/l	SW846 8260B BY SIM
	Vinyl Chloride	5.4	0.10	0.050	ug/l	SW846 8260B BY SIM
FA78442-6	2036YOU2392F					
	1,1-Dichloroethane	0.39 J	0.50	0.25	ug/l	SW846 8260B BY SIM
	Tetrachloroethylene	2.3	0.50	0.25	ug/l	SW846 8260B BY SIM
	Trichloroethylene	0.27 J	0.50	0.25	ug/l	SW846 8260B BY SIM

Summary of Hits

Job Number: FA78442
Account: Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring
Collected: 09/01/20



Lab Sample ID	Client Sample ID	Result/ Qual	LOQ	LOD	Units	Method
FA78442-7	2036YOU2393F					
cis-1,2-Dichloroethylene		0.37 J	0.50	0.25	ug/l	SW846 8260B BY SIM
Tetrachloroethylene		0.28 J	0.50	0.25	ug/l	SW846 8260B BY SIM
Trichloroethylene		3.1	0.50	0.25	ug/l	SW846 8260B BY SIM
FA78442-8	2036YOU2394F					
Chloroform		0.20 J	0.50	0.25	ug/l	SW846 8260B BY SIM
1,1-Dichloroethane		0.17 J	0.50	0.25	ug/l	SW846 8260B BY SIM
Tetrachloroethylene		0.51	0.50	0.25	ug/l	SW846 8260B BY SIM
Trichloroethylene		2.3	0.50	0.25	ug/l	SW846 8260B BY SIM
FA78442-9	2036YOU2396F					
Chloroform		0.20 J	0.50	0.25	ug/l	SW846 8260B BY SIM
Trichloroethylene		1.9	0.50	0.25	ug/l	SW846 8260B BY SIM
FA78442-10	2036YOU2397F					
Chloroform		0.20 J	0.50	0.25	ug/l	SW846 8260B BY SIM
Tetrachloroethylene		0.11 J	0.50	0.25	ug/l	SW846 8260B BY SIM
Trichloroethylene		4.0	0.50	0.25	ug/l	SW846 8260B BY SIM
FA78442-11	2036YOU2399F					
Chloroform		0.71	0.50	0.25	ug/l	SW846 8260B BY SIM
1,1-Dichloroethane		0.16 J	0.50	0.25	ug/l	SW846 8260B BY SIM
cis-1,2-Dichloroethylene		2.6	0.50	0.25	ug/l	SW846 8260B BY SIM
1,2-Dichloropropane		0.16 J	0.50	0.25	ug/l	SW846 8260B BY SIM
Tetrachloroethylene		0.42 J	0.50	0.25	ug/l	SW846 8260B BY SIM
Trichloroethylene		10	0.50	0.25	ug/l	SW846 8260B BY SIM
FA78442-12	2036YOU2400F					
cis-1,2-Dichloroethylene		0.25 J	0.50	0.25	ug/l	SW846 8260B BY SIM
Tetrachloroethylene		0.11 J	0.50	0.25	ug/l	SW846 8260B BY SIM
Trichloroethylene		0.86	0.50	0.25	ug/l	SW846 8260B BY SIM

Sample Results

Report of Analysis

SGS North America Inc.

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Client Sample ID:	2036YOU2387F	Date Sampled:	09/01/20
Lab Sample ID:	FA78442-1	Date Received:	09/03/20
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B BY SIM		
Project:	Fort Ord Groundwater Monitoring		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Z62087.D	1	09/04/20 13:12	SO	n/a	n/a	VZ2409
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
71-43-2	Benzene	0.25 U	0.50	0.25	0.10	ug/l	
56-23-5	Carbon Tetrachloride	0.25 U	0.50	0.25	0.10	ug/l	
67-66-3	Chloroform	0.25 U	0.50	0.25	0.10	ug/l	
75-34-3	1,1-Dichloroethane	0.25 U	0.50	0.25	0.10	ug/l	
107-06-2	1,2-Dichloroethane	0.25 U	0.50	0.25	0.10	ug/l	
156-59-2	cis-1,2-Dichloroethylene	0.25 U	0.50	0.25	0.10	ug/l	
78-87-5	1,2-Dichloropropane	0.25 U	0.50	0.25	0.10	ug/l	
75-09-2	Methylene Chloride	0.50 U	2.0	0.50	0.50	ug/l	
127-18-4	Tetrachloroethylene	0.34	0.50	0.25	0.10	ug/l	J
79-01-6	Trichloroethylene	0.25 U	0.50	0.25	0.10	ug/l	
75-01-4	Vinyl Chloride	0.050 U	0.10	0.050	0.050	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	118%		74-125%
2037-26-5	Toluene-D8	100%		88-111%

U = Not detected

LOD = Limit of Detection

J = Indicates an estimated value

LOQ = Limit of Quantitation

DL = Detection Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	2036YOU2388F		Date Sampled:	09/01/20
Lab Sample ID:	FA78442-2	Date Received:	09/03/20	
Matrix:	AQ - Ground Water		Percent Solids:	n/a
Method:	SW846 8260B BY SIM			
Project:	Fort Ord Groundwater Monitoring			

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Z62088.D	1	09/04/20 13:32	SO	n/a	n/a	VZ2409
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
71-43-2	Benzene	0.25 U	0.50	0.25	0.10	ug/l	
56-23-5	Carbon Tetrachloride	0.25 U	0.50	0.25	0.10	ug/l	
67-66-3	Chloroform	0.25 U	0.50	0.25	0.10	ug/l	
75-34-3	1,1-Dichloroethane	3.9	0.50	0.25	0.10	ug/l	
107-06-2	1,2-Dichloroethane	0.91	0.50	0.25	0.10	ug/l	
156-59-2	cis-1,2-Dichloroethylene	2.0	0.50	0.25	0.10	ug/l	
78-87-5	1,2-Dichloropropane	0.20	0.50	0.25	0.10	ug/l	J
75-09-2	Methylene Chloride	0.50 U	2.0	0.50	0.50	ug/l	
127-18-4	Tetrachloroethylene	2.6	0.50	0.25	0.10	ug/l	
79-01-6	Trichloroethylene	0.51	0.50	0.25	0.10	ug/l	
75-01-4	Vinyl Chloride	7.5	0.10	0.050	0.050	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	118%		74-125%
2037-26-5	Toluene-D8	100%		88-111%

U = Not detected

LOD = Limit of Detection

J = Indicates an estimated value

LOQ = Limit of Quantitation

DL = Detection Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 2036YOU2389F	
Lab Sample ID: FA78442-3	Date Sampled: 09/01/20
Matrix: AQ - Ground Water	Date Received: 09/03/20
Method: SW846 8260B BY SIM	Percent Solids: n/a
Project: Fort Ord Groundwater Monitoring	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Z62089.D	1	09/04/20 13:51	SO	n/a	n/a	VZ2409
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
71-43-2	Benzene	0.25 U	0.50	0.25	0.10	ug/l	
56-23-5	Carbon Tetrachloride	0.25 U	0.50	0.25	0.10	ug/l	
67-66-3	Chloroform	0.31	0.50	0.25	0.10	ug/l	J
75-34-3	1,1-Dichloroethane	0.25 U	0.50	0.25	0.10	ug/l	
107-06-2	1,2-Dichloroethane	0.25 U	0.50	0.25	0.10	ug/l	
156-59-2	cis-1,2-Dichloroethylene	2.0	0.50	0.25	0.10	ug/l	
78-87-5	1,2-Dichloropropane	0.25 U	0.50	0.25	0.10	ug/l	
75-09-2	Methylene Chloride	0.50 U	2.0	0.50	0.50	ug/l	
127-18-4	Tetrachloroethylene	1.6	0.50	0.25	0.10	ug/l	
79-01-6	Trichloroethylene	7.0	0.50	0.25	0.10	ug/l	
75-01-4	Vinyl Chloride	0.050 U	0.10	0.050	0.050	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	119% ^a		74-125%
2037-26-5	Toluene-D8	100%		88-111%

(a) Outside DOD QSM control limits high.

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
 LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

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Client Sample ID:	2036YOU2390F	Date Sampled:	09/01/20
Lab Sample ID:	FA78442-4	Date Received:	09/03/20
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B BY SIM		
Project:	Fort Ord Groundwater Monitoring		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Z62092.D	1	09/04/20 14:51	SO	n/a	n/a	VZ2409
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
71-43-2	Benzene	0.25	0.50	0.25	0.10	ug/l	J
56-23-5	Carbon Tetrachloride	0.25 U	0.50	0.25	0.10	ug/l	
67-66-3	Chloroform	0.25 U	0.50	0.25	0.10	ug/l	
75-34-3	1,1-Dichloroethane	2.7	0.50	0.25	0.10	ug/l	
107-06-2	1,2-Dichloroethane	0.51	0.50	0.25	0.10	ug/l	
156-59-2	cis-1,2-Dichloroethylene	1.0	0.50	0.25	0.10	ug/l	
78-87-5	1,2-Dichloropropane	0.25 U	0.50	0.25	0.10	ug/l	
75-09-2	Methylene Chloride	0.50 U	2.0	0.50	0.50	ug/l	
127-18-4	Tetrachloroethylene	1.9	0.50	0.25	0.10	ug/l	
79-01-6	Trichloroethylene	0.25 U	0.50	0.25	0.10	ug/l	
75-01-4	Vinyl Chloride	5.2	0.10	0.050	0.050	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	119% ^a		74-125%
2037-26-5	Toluene-D8	100%		88-111%

(a) Outside DOD QSM control limits high.

U = Not detected

LOD = Limit of Detection

J = Indicates an estimated value

LOQ = Limit of Quantitation

DL = Detection Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	2036YOU2391D	Date Sampled:	09/01/20
Lab Sample ID:	FA78442-5	Date Received:	09/03/20
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B BY SIM		
Project:	Fort Ord Groundwater Monitoring		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Z62093.D	1	09/04/20 15:10	SO	n/a	n/a	VZ2409
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
71-43-2	Benzene	0.24	0.50	0.25	0.10	ug/l	J
56-23-5	Carbon Tetrachloride	0.25 U	0.50	0.25	0.10	ug/l	
67-66-3	Chloroform	0.25 U	0.50	0.25	0.10	ug/l	
75-34-3	1,1-Dichloroethane	2.7	0.50	0.25	0.10	ug/l	
107-06-2	1,2-Dichloroethane	0.51	0.50	0.25	0.10	ug/l	
156-59-2	cis-1,2-Dichloroethylene	0.99	0.50	0.25	0.10	ug/l	
78-87-5	1,2-Dichloropropane	0.25 U	0.50	0.25	0.10	ug/l	
75-09-2	Methylene Chloride	0.50 U	2.0	0.50	0.50	ug/l	
127-18-4	Tetrachloroethylene	1.9	0.50	0.25	0.10	ug/l	
79-01-6	Trichloroethylene	0.25 U	0.50	0.25	0.10	ug/l	
75-01-4	Vinyl Chloride	5.4	0.10	0.050	0.050	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	120% ^a		74-125%
2037-26-5	Toluene-D8	99%		88-111%

(a) Outside DOD QSM control limits high.

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
 LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

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Client Sample ID:	2036YOU2392F	Date Sampled:	09/01/20
Lab Sample ID:	FA78442-6	Date Received:	09/03/20
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B BY SIM		
Project:	Fort Ord Groundwater Monitoring		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Z62094.D	1	09/04/20 15:30	SO	n/a	n/a	VZ2409
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
71-43-2	Benzene	0.25 U	0.50	0.25	0.10	ug/l	
56-23-5	Carbon Tetrachloride	0.25 U	0.50	0.25	0.10	ug/l	
67-66-3	Chloroform	0.25 U	0.50	0.25	0.10	ug/l	
75-34-3	1,1-Dichloroethane	0.39	0.50	0.25	0.10	ug/l	J
107-06-2	1,2-Dichloroethane	0.25 U	0.50	0.25	0.10	ug/l	
156-59-2	cis-1,2-Dichloroethylene	0.25 U	0.50	0.25	0.10	ug/l	
78-87-5	1,2-Dichloropropane	0.25 U	0.50	0.25	0.10	ug/l	
75-09-2	Methylene Chloride	0.50 U	2.0	0.50	0.50	ug/l	
127-18-4	Tetrachloroethylene	2.3	0.50	0.25	0.10	ug/l	
79-01-6	Trichloroethylene	0.27	0.50	0.25	0.10	ug/l	J
75-01-4	Vinyl Chloride	0.050 U	0.10	0.050	0.050	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	121% ^a		74-125%
2037-26-5	Toluene-D8	100%		88-111%

(a) Outside DOD QSM control limits high.

U = Not detected

LOD = Limit of Detection

J = Indicates an estimated value

LOQ = Limit of Quantitation

DL = Detection Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 2036YOU2393F	
Lab Sample ID: FA78442-7	Date Sampled: 09/01/20
Matrix: AQ - Ground Water	Date Received: 09/03/20
Method: SW846 8260B BY SIM	Percent Solids: n/a
Project: Fort Ord Groundwater Monitoring	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Z62095.D	1	09/04/20 15:49	SO	n/a	n/a	VZ2409
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
71-43-2	Benzene	0.25 U	0.50	0.25	0.10	ug/l	
56-23-5	Carbon Tetrachloride	0.25 U	0.50	0.25	0.10	ug/l	
67-66-3	Chloroform	0.25 U	0.50	0.25	0.10	ug/l	
75-34-3	1,1-Dichloroethane	0.25 U	0.50	0.25	0.10	ug/l	
107-06-2	1,2-Dichloroethane	0.25 U	0.50	0.25	0.10	ug/l	
156-59-2	cis-1,2-Dichloroethylene	0.37	0.50	0.25	0.10	ug/l	J
78-87-5	1,2-Dichloropropane	0.25 U	0.50	0.25	0.10	ug/l	
75-09-2	Methylene Chloride	0.50 U	2.0	0.50	0.50	ug/l	
127-18-4	Tetrachloroethylene	0.28	0.50	0.25	0.10	ug/l	J
79-01-6	Trichloroethylene	3.1	0.50	0.25	0.10	ug/l	
75-01-4	Vinyl Chloride	0.050 U	0.10	0.050	0.050	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	121% ^a		74-125%
2037-26-5	Toluene-D8	100%		88-111%

(a) Outside DOD QSM control limits high.

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
 LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	2036YOU2394F	Date Sampled:	09/01/20
Lab Sample ID:	FA78442-8	Date Received:	09/03/20
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B BY SIM		
Project:	Fort Ord Groundwater Monitoring		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	O61148.D	1	09/09/20 16:52	MM	n/a	n/a	VO2353
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
71-43-2	Benzene	0.25 U	0.50	0.25	0.10	ug/l	
56-23-5	Carbon Tetrachloride	0.25 U	0.50	0.25	0.10	ug/l	
67-66-3	Chloroform	0.20	0.50	0.25	0.10	ug/l	J
75-34-3	1,1-Dichloroethane	0.17	0.50	0.25	0.10	ug/l	J
107-06-2	1,2-Dichloroethane	0.25 U	0.50	0.25	0.10	ug/l	
156-59-2	cis-1,2-Dichloroethylene	0.25 U	0.50	0.25	0.10	ug/l	
78-87-5	1,2-Dichloropropane	0.25 U	0.50	0.25	0.10	ug/l	
75-09-2	Methylene Chloride	0.50 U	2.0	0.50	0.50	ug/l	
127-18-4	Tetrachloroethylene	0.51	0.50	0.25	0.10	ug/l	
79-01-6	Trichloroethylene	2.3	0.50	0.25	0.10	ug/l	
75-01-4	Vinyl Chloride	0.050 U	0.10	0.050	0.050	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	114%		74-125%
2037-26-5	Toluene-D8	102%		88-111%

U = Not detected

LOD = Limit of Detection

J = Indicates an estimated value

LOQ = Limit of Quantitation

DL = Detection Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

SGS North America Inc.

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Client Sample ID:	2036YOU2396F	Date Sampled:	09/01/20
Lab Sample ID:	FA78442-9	Date Received:	09/03/20
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B BY SIM		
Project:	Fort Ord Groundwater Monitoring		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	O61149.D	1	09/09/20 17:12	MM	n/a	n/a	VO2353
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
71-43-2	Benzene	0.25 U	0.50	0.25	0.10	ug/l	
56-23-5	Carbon Tetrachloride	0.25 U	0.50	0.25	0.10	ug/l	
67-66-3	Chloroform	0.20	0.50	0.25	0.10	ug/l	J
75-34-3	1,1-Dichloroethane	0.25 U	0.50	0.25	0.10	ug/l	
107-06-2	1,2-Dichloroethane	0.25 U	0.50	0.25	0.10	ug/l	
156-59-2	cis-1,2-Dichloroethylene	0.25 U	0.50	0.25	0.10	ug/l	
78-87-5	1,2-Dichloropropane	0.25 U	0.50	0.25	0.10	ug/l	
75-09-2	Methylene Chloride	0.50 U	2.0	0.50	0.50	ug/l	
127-18-4	Tetrachloroethylene	0.25 U	0.50	0.25	0.10	ug/l	
79-01-6	Trichloroethylene	1.9	0.50	0.25	0.10	ug/l	
75-01-4	Vinyl Chloride	0.050 U	0.10	0.050	0.050	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	114%		74-125%
2037-26-5	Toluene-D8	102%		88-111%

U = Not detected

LOD = Limit of Detection

J = Indicates an estimated value

LOQ = Limit of Quantitation

DL = Detection Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Page 1 of 1

Client Sample ID:	2036YOU2397F	Date Sampled:	09/01/20
Lab Sample ID:	FA78442-10	Date Received:	09/03/20
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B BY SIM		
Project:	Fort Ord Groundwater Monitoring		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	O61150.D	1	09/09/20 17:33	MM	n/a	n/a	VO2353
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
71-43-2	Benzene	0.25 U	0.50	0.25	0.10	ug/l	
56-23-5	Carbon Tetrachloride	0.25 U	0.50	0.25	0.10	ug/l	
67-66-3	Chloroform	0.20	0.50	0.25	0.10	ug/l	J
75-34-3	1,1-Dichloroethane	0.25 U	0.50	0.25	0.10	ug/l	
107-06-2	1,2-Dichloroethane	0.25 U	0.50	0.25	0.10	ug/l	
156-59-2	cis-1,2-Dichloroethylene	0.25 U	0.50	0.25	0.10	ug/l	
78-87-5	1,2-Dichloropropane	0.25 U	0.50	0.25	0.10	ug/l	
75-09-2	Methylene Chloride	0.50 U	2.0	0.50	0.50	ug/l	
127-18-4	Tetrachloroethylene	0.11	0.50	0.25	0.10	ug/l	J
79-01-6	Trichloroethylene	4.0	0.50	0.25	0.10	ug/l	
75-01-4	Vinyl Chloride	0.050 U	0.10	0.050	0.050	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	115%		74-125%
2037-26-5	Toluene-D8	101%		88-111%

U = Not detected

LOD = Limit of Detection

J = Indicates an estimated value

LOQ = Limit of Quantitation

DL = Detection Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Page 1 of 1

Client Sample ID:	2036YOU2399F	Date Sampled:	09/01/20
Lab Sample ID:	FA78442-11	Date Received:	09/03/20
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B BY SIM		
Project:	Fort Ord Groundwater Monitoring		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Z62167.D	1	09/09/20 15:46	SO	n/a	n/a	VZ2412
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
71-43-2	Benzene	0.25 U	0.50	0.25	0.10	ug/l	
56-23-5	Carbon Tetrachloride	0.25 U	0.50	0.25	0.10	ug/l	
67-66-3	Chloroform	0.71	0.50	0.25	0.10	ug/l	
75-34-3	1,1-Dichloroethane	0.16	0.50	0.25	0.10	ug/l	J
107-06-2	1,2-Dichloroethane	0.25 U	0.50	0.25	0.10	ug/l	
156-59-2	cis-1,2-Dichloroethylene	2.6	0.50	0.25	0.10	ug/l	
78-87-5	1,2-Dichloropropane	0.16	0.50	0.25	0.10	ug/l	J
75-09-2	Methylene Chloride	0.50 U	2.0	0.50	0.50	ug/l	
127-18-4	Tetrachloroethylene	0.42	0.50	0.25	0.10	ug/l	J
79-01-6	Trichloroethylene	10	0.50	0.25	0.10	ug/l	
75-01-4	Vinyl Chloride	0.050 U	0.10	0.050	0.050	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	108%		74-125%
2037-26-5	Toluene-D8	101%		88-111%

U = Not detected

LOD = Limit of Detection

J = Indicates an estimated value

LOQ = Limit of Quantitation

DL = Detection Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Page 1 of 1

Client Sample ID:	2036YOU2400F	Date Sampled:	09/01/20
Lab Sample ID:	FA78442-12	Date Received:	09/03/20
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B BY SIM		
Project:	Fort Ord Groundwater Monitoring		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Z62168.D	1	09/09/20 16:05	SO	n/a	n/a	VZ2412
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
71-43-2	Benzene	0.25 U	0.50	0.25	0.10	ug/l	
56-23-5	Carbon Tetrachloride	0.25 U	0.50	0.25	0.10	ug/l	
67-66-3	Chloroform	0.25 U	0.50	0.25	0.10	ug/l	
75-34-3	1,1-Dichloroethane	0.25 U	0.50	0.25	0.10	ug/l	
107-06-2	1,2-Dichloroethane	0.25 U	0.50	0.25	0.10	ug/l	
156-59-2	cis-1,2-Dichloroethylene	0.25	0.50	0.25	0.10	ug/l	J
78-87-5	1,2-Dichloropropane	0.25 U	0.50	0.25	0.10	ug/l	
75-09-2	Methylene Chloride	0.50 U	2.0	0.50	0.50	ug/l	
127-18-4	Tetrachloroethylene	0.11	0.50	0.25	0.10	ug/l	J
79-01-6	Trichloroethylene	0.86	0.50	0.25	0.10	ug/l	
75-01-4	Vinyl Chloride	0.050 U	0.10	0.050	0.050	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	109%		74-125%
2037-26-5	Toluene-D8	100%		88-111%

U = Not detected

LOD = Limit of Detection

J = Indicates an estimated value

LOQ = Limit of Quantitation

DL = Detection Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody
- QC Evaluation: DOD QSM5.x Limits

CAD\$ 2027
Ahtna

CHAIN OF CUSTODY

WATER / SOIL

Chain of Custody #:

0124

10P1

Carbon Copies: White - Laboratory Yellow - Ahtna

Project Information:		Analysis Requested		Lab Sample Receipt	
Project Location: <u>Former Fort Ord, CA</u>		Sampler/s: <u>Lindsey Barger, Thomas Stewart</u>		Laboratory Sample Delivery	
Project Name: <u>Basewide GMM Program</u>		Report To: <u>Derek Lieberman</u>		Group #: _____	
Project Number: <u>21065.000.01.0000</u>		E-Mail: <u>dlieberman@ahтна.net</u>		Custody Seal: _____	
Sampling Event/Site: <u>FFO GWMP 392020</u>		Laboratory: <u>SGS</u>		Temp (°C): _____	

Lab Number	Sample Collection		Matrix			Number of Preserved Bottles										VOCs 8260 - SIM	Metals 6010 C	Chloride 9056A	Notes	
	Sample Number/Description	Date	Time	Water	Soil	Other	Total # of Bottles	HCl	HNO ₃	H ₂ SO ₄	NaOH	MeOH	NaHSO ₄	None	Other					
1	203104OU2387F	9/1/20	1023	X			3	X									X			
2	203104OU2388F	9/1/20	1040	X			3	X									X			
3	203104OU2389F	9/1/20	1055	X			3	X									X			
4	203104OU2390F	9/1/20	1110	X			3	X									X			
5	203104OU2391D	9/1/20	1115	X			2	X									X			
6	203104OU2392E	9/1/20	1135	X			3	X									X			
7	203104OU2393F	9/1/20	1147	X			3	X									X			
8	203104OU2394F	9/1/20	1204	X			3	X									X			
9	203104OU2396F	9/1/20	1424	X			3	X									X			
10	203104OU2397F	9/1/20	1438	X			3	X									X			
11	203104OU2399F	9/1/20	1508	X			3	X									X			>10 mg/L
12	203104OU2400F	9/1/20	1527	X			3	X									X			

NITIA LASES: MC
ABE: H. O. V. H. A. K.

Turnaround Time: Standard : 3-5 Day Rush : 48 Hour Rush : 24 Hour Rush

Shipment: Method: Tracking ID:

Comments:

OU2 Aquifer

Chain of Custody Tracking:			
Relinquished By:	Date/Time: 9/1/20 1027	Received By:	Date/Time: 9/1/20 1630
Relinquished By:	Date/Time: 9/1/20 1045	Received By: <u>Lee Barger</u>	Date/Time: 9/2/20 1045
Relinquished By: <u>Lee Barger</u> Fedex	Date/Time: 9/2/20 1100	Received By Laboratory: <u>PODEX</u> <u>Myra Oren</u>	Date/Time: 9/2/20 1100
			2.8 9/3/20 945

FA78442: Chain of Custody

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5.1
5

SGS Sample Receipt Summary

Job Number: FA78442

Client: AHTNA

Project: Former Fort Ord, CA - OU2 Aquifer

Date / Time Received: 9/3/2020 9:45:00 AM

Delivery Method: FedEx

Airbill #s: 771431903999

Therm ID: IR 1;

Therm CF: -0.2;

of Coolers: 1

Cooler Temps (Raw Measured) °C: Cooler 1: (3.0);

Cooler Temps (Corrected) °C: Cooler 1: (2.8);

Cooler Information

	Y	or	N
1. Custody Seals Present	<input checked="" type="checkbox"/>		<input type="checkbox"/>
2. Custody Seals Intact	<input checked="" type="checkbox"/>		<input type="checkbox"/>
3. Temp criteria achieved	<input checked="" type="checkbox"/>		<input type="checkbox"/>
4. Cooler temp verification	IR Gun		
5. Cooler media	Ice (Bag)		

Sample Information

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

Trip Blank Information

	Y	or	N	N/A
1. Trip Blank present / cooler	<input checked="" type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
2. Trip Blank listed on COC	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>
	W	or	S	N/A
3. Type Of TB Received	<input checked="" type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>

Misc. Information

Number of Encores: 25-Gram _____ 5-Gram _____ Number of 5035 Field Kits: _____ Number of Lab Filtered Metals: _____
 Test Strip Lot #: pH 0-3 _____ 230315 _____ pH 10-12 _____ 219813A _____ Other: (Specify) _____
 Residual Chlorine Test Strip Lot #: _____

Comments

SM001
Rev. Date 05/24/17

Technician: BRYANG

Date: 9/3/2020 9:45:00 AM

Reviewer: PH

Date: 9/6/2020

FA78442: Chain of Custody

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5.1
5

QC Evaluation: DOD QSM5.x Limits

Job Number: FA78442
Account: Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring
Collected: 09/01/20

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
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VO2353 SW846 8260B BY SIM

VO2353-BS	71-43-2	Benzene	BSP	REC	110	%	79-120
VO2353-BS	56-23-5	Carbon Tetrachloride	BSP	REC	112	%	72-136
VO2353-BS	67-66-3	Chloroform	BSP	REC	104	%	79-124
VO2353-BS	75-34-3	1,1-Dichloroethane	BSP	REC	110	%	77-125
VO2353-BS	107-06-2	1,2-Dichloroethane	BSP	REC	104	%	73-128
VO2353-BS	156-59-2	cis-1,2-Dichloroethylene	BSP	REC	106	%	78-123
VO2353-BS	78-87-5	1,2-Dichloropropane	BSP	REC	110	%	78-122
VO2353-BS	75-09-2	Methylene Chloride	BSP	REC	94	%	74-124
VO2353-BS	127-18-4	Tetrachloroethylene	BSP	REC	106	%	74-129
VO2353-BS	79-01-6	Trichloroethylene	BSP	REC	110	%	79-123
VO2353-BS	75-01-4	Vinyl Chloride	BSP	REC	108	%	58-137
VO2353-BS	17060-07-0	1,2-Dichloroethane-D4	BSP	SURR	101	%	81-118
VO2353-BS	2037-26-5	Toluene-D8	BSP	SURR	98	%	89-112
FA78398-4MS*	71-43-2	Benzene	MS	REC	124	%	79-120
FA78398-4MS*	56-23-5	Carbon Tetrachloride	MS	REC	121	%	72-136
FA78398-4MS*	67-66-3	Chloroform	MS	REC	118	%	79-124
FA78398-4MS*	75-34-3	1,1-Dichloroethane	MS	REC	126	%	77-125
FA78398-4MS*	107-06-2	1,2-Dichloroethane	MS	REC	121	%	73-128
FA78398-4MS*	156-59-2	cis-1,2-Dichloroethylene	MS	REC	116	%	78-123
FA78398-4MS*	78-87-5	1,2-Dichloropropane	MS	REC	124	%	78-122
FA78398-4MS*	75-09-2	Methylene Chloride	MS	REC	113	%	74-124
FA78398-4MS*	127-18-4	Tetrachloroethylene	MS	REC	118	%	74-129
FA78398-4MS*	79-01-6	Trichloroethylene	MS	REC	116	%	79-123
FA78398-4MS*	75-01-4	Vinyl Chloride	MS	REC	118	%	58-137
FA78398-4MS*	17060-07-0	1,2-Dichloroethane-D4	MS	SURR	106	%	81-118
FA78398-4MS*	2037-26-5	Toluene-D8	MS	SURR	101	%	89-112
FA78398-4MSD*	71-43-2	Benzene	MSD	REC	122	%	79-120
FA78398-4MSD*	71-43-2	Benzene	MSD	RPD	2	%	20
FA78398-4MSD*	56-23-5	Carbon Tetrachloride	MSD	REC	120	%	72-136
FA78398-4MSD*	56-23-5	Carbon Tetrachloride	MSD	RPD	1	%	20
FA78398-4MSD*	67-66-3	Chloroform	MSD	REC	114	%	79-124
FA78398-4MSD*	67-66-3	Chloroform	MSD	RPD	3	%	20
FA78398-4MSD*	75-34-3	1,1-Dichloroethane	MSD	REC	122	%	77-125
FA78398-4MSD*	75-34-3	1,1-Dichloroethane	MSD	RPD	3	%	20
FA78398-4MSD*	107-06-2	1,2-Dichloroethane	MSD	REC	117	%	73-128
FA78398-4MSD*	107-06-2	1,2-Dichloroethane	MSD	RPD	3	%	20
FA78398-4MSD*	156-59-2	cis-1,2-Dichloroethylene	MSD	REC	112	%	78-123
FA78398-4MSD*	156-59-2	cis-1,2-Dichloroethylene	MSD	RPD	4	%	20
FA78398-4MSD*	78-87-5	1,2-Dichloropropane	MSD	REC	121	%	78-122
FA78398-4MSD*	78-87-5	1,2-Dichloropropane	MSD	RPD	2	%	20
FA78398-4MSD*	75-09-2	Methylene Chloride	MSD	REC	110	%	74-124
FA78398-4MSD*	75-09-2	Methylene Chloride	MSD	RPD	3	%	20

* Sample used for QC is not from job FA78442

5.2
5

QC Evaluation: DOD QSM5.x Limits

Job Number: FA78442
Account: Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring
Collected: 09/01/20

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
FA78398-4MSD*	127-18-4	Tetrachloroethylene	MSD	REC	115	%	74-129
FA78398-4MSD*	127-18-4	Tetrachloroethylene	MSD	RPD	3	%	20
FA78398-4MSD*	79-01-6	Trichloroethylene	MSD	REC	113	%	79-123
FA78398-4MSD*	79-01-6	Trichloroethylene	MSD	RPD	3	%	20
FA78398-4MSD*	75-01-4	Vinyl Chloride	MSD	REC	116	%	58-137
FA78398-4MSD*	75-01-4	Vinyl Chloride	MSD	RPD	2	%	20
FA78398-4MSD*	17060-07-0	1,2-Dichloroethane-D4	MSD	SURR	106	%	81-118
FA78398-4MSD*	2037-26-5	Toluene-D8	MSD	SURR	101	%	89-112
VO2353-MB	17060-07-0	1,2-Dichloroethane-D4	MB	SURR	102	%	81-118
VO2353-MB	2037-26-5	Toluene-D8	MB	SURR	101	%	89-112
FA78442-8	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	114	%	81-118
FA78442-8	2037-26-5	Toluene-D8	SAMP	SURR	102	%	89-112
FA78442-9	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	114	%	81-118
FA78442-9	2037-26-5	Toluene-D8	SAMP	SURR	102	%	89-112
FA78442-10	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	115	%	81-118
FA78442-10	2037-26-5	Toluene-D8	SAMP	SURR	101	%	89-112

VZ2409 SW846 8260B BY SIM

VZ2409-BS	71-43-2	Benzene	BSP	REC	88	%	79-120
VZ2409-BS	56-23-5	Carbon Tetrachloride	BSP	REC	86	%	72-136
VZ2409-BS	67-66-3	Chloroform	BSP	REC	84	%	79-124
VZ2409-BS	75-34-3	1,1-Dichloroethane	BSP	REC	86	%	77-125
VZ2409-BS	107-06-2	1,2-Dichloroethane	BSP	REC	92	%	73-128
VZ2409-BS	156-59-2	cis-1,2-Dichloroethylene	BSP	REC	84	%	78-123
VZ2409-BS	78-87-5	1,2-Dichloropropane	BSP	REC	90	%	78-122
VZ2409-BS	75-09-2	Methylene Chloride	BSP	REC	84	%	74-124
VZ2409-BS	127-18-4	Tetrachloroethylene	BSP	REC	88	%	74-129
VZ2409-BS	79-01-6	Trichloroethylene	BSP	REC	84	%	79-123
VZ2409-BS	75-01-4	Vinyl Chloride	BSP	REC	104	%	58-137
VZ2409-BS	17060-07-0	1,2-Dichloroethane-D4	BSP	SURR	104	%	81-118
VZ2409-BS	2037-26-5	Toluene-D8	BSP	SURR	99	%	89-112
FA78442-3MS	71-43-2	Benzene	MS	REC	101	%	79-120
FA78442-3MS	56-23-5	Carbon Tetrachloride	MS	REC	95	%	72-136
FA78442-3MS	67-66-3	Chloroform	MS	REC	100	%	79-124
FA78442-3MS	75-34-3	1,1-Dichloroethane	MS	REC	103	%	77-125
FA78442-3MS	107-06-2	1,2-Dichloroethane	MS	REC	120	%	73-128
FA78442-3MS	156-59-2	cis-1,2-Dichloroethylene	MS	REC	94	%	78-123
FA78442-3MS	78-87-5	1,2-Dichloropropane	MS	REC	108	%	78-122
FA78442-3MS	75-09-2	Methylene Chloride	MS	REC	100	%	74-124
FA78442-3MS	127-18-4	Tetrachloroethylene	MS	REC	101	%	74-129
FA78442-3MS	79-01-6	Trichloroethylene	MS	REC	98	%	79-123
FA78442-3MS	75-01-4	Vinyl Chloride	MS	REC	115	%	58-137
FA78442-3MS	17060-07-0	1,2-Dichloroethane-D4	MS	SURR	119 ^a	%	81-118
FA78442-3MS	2037-26-5	Toluene-D8	MS	SURR	97	%	89-112

* Sample used for QC is not from job FA78442

5.2
5

QC Evaluation: DOD QSM5.x Limits

Job Number: FA78442
Account: Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring
Collected: 09/01/20

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
FA78442-3MSD	71-43-2	Benzene	MSD	REC	105	%	79-120
FA78442-3MSD	71-43-2	Benzene	MSD	RPD	4	%	20
FA78442-3MSD	56-23-5	Carbon Tetrachloride	MSD	REC	98	%	72-136
FA78442-3MSD	56-23-5	Carbon Tetrachloride	MSD	RPD	4	%	20
FA78442-3MSD	67-66-3	Chloroform	MSD	REC	104	%	79-124
FA78442-3MSD	67-66-3	Chloroform	MSD	RPD	4	%	20
FA78442-3MSD	75-34-3	1,1-Dichloroethane	MSD	REC	107	%	77-125
FA78442-3MSD	75-34-3	1,1-Dichloroethane	MSD	RPD	4	%	20
FA78442-3MSD	107-06-2	1,2-Dichloroethane	MSD	REC	125	%	73-128
FA78442-3MSD	107-06-2	1,2-Dichloroethane	MSD	RPD	4	%	20
FA78442-3MSD	156-59-2	cis-1,2-Dichloroethylene	MSD	REC	98	%	78-123
FA78442-3MSD	156-59-2	cis-1,2-Dichloroethylene	MSD	RPD	4	%	20
FA78442-3MSD	78-87-5	1,2-Dichloropropane	MSD	REC	112	%	78-122
FA78442-3MSD	78-87-5	1,2-Dichloropropane	MSD	RPD	4	%	20
FA78442-3MSD	75-09-2	Methylene Chloride	MSD	REC	103	%	74-124
FA78442-3MSD	75-09-2	Methylene Chloride	MSD	RPD	4	%	20
FA78442-3MSD	127-18-4	Tetrachloroethylene	MSD	REC	106	%	74-129
FA78442-3MSD	127-18-4	Tetrachloroethylene	MSD	RPD	5	%	20
FA78442-3MSD	79-01-6	Trichloroethylene	MSD	REC	103	%	79-123
FA78442-3MSD	79-01-6	Trichloroethylene	MSD	RPD	4	%	20
FA78442-3MSD	75-01-4	Vinyl Chloride	MSD	REC	123	%	58-137
FA78442-3MSD	75-01-4	Vinyl Chloride	MSD	RPD	7	%	20
FA78442-3MSD	17060-07-0	1,2-Dichloroethane-D4	MSD	SURR	117	%	81-118
FA78442-3MSD	2037-26-5	Toluene-D8	MSD	SURR	98	%	89-112
VZ2409-MB	17060-07-0	1,2-Dichloroethane-D4	MB	SURR	108	%	81-118
VZ2409-MB	2037-26-5	Toluene-D8	MB	SURR	101	%	89-112
FA78442-1	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	118	%	81-118
FA78442-1	2037-26-5	Toluene-D8	SAMP	SURR	100	%	89-112
FA78442-2	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	118	%	81-118
FA78442-2	2037-26-5	Toluene-D8	SAMP	SURR	100	%	89-112
FA78442-3	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	119 ^a	%	81-118
FA78442-3	2037-26-5	Toluene-D8	SAMP	SURR	100	%	89-112
FA78442-4	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	119 ^a	%	81-118
FA78442-4	2037-26-5	Toluene-D8	SAMP	SURR	100	%	89-112
FA78442-5	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	120 ^a	%	81-118
FA78442-5	2037-26-5	Toluene-D8	SAMP	SURR	99	%	89-112
FA78442-6	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	121 ^a	%	81-118
FA78442-6	2037-26-5	Toluene-D8	SAMP	SURR	100	%	89-112
FA78442-7	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	121 ^a	%	81-118
FA78442-7	2037-26-5	Toluene-D8	SAMP	SURR	100	%	89-112
VZ2412	SW846 8260B BY SIM						
VZ2412-BS	71-43-2	Benzene	BSP	REC	112	%	79-120
VZ2412-BS	56-23-5	Carbon Tetrachloride	BSP	REC	112	%	72-136

* Sample used for QC is not from job FA78442

5.2
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QC Evaluation: DOD QSM5.x Limits

Job Number: FA78442
Account: Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring
Collected: 09/01/20

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
VZ2412-BS	67-66-3	Chloroform	BSP	REC	106	%	79-124
VZ2412-BS	75-34-3	1,1-Dichloroethane	BSP	REC	108	%	77-125
VZ2412-BS	107-06-2	1,2-Dichloroethane	BSP	REC	108	%	73-128
VZ2412-BS	156-59-2	cis-1,2-Dichloroethylene	BSP	REC	106	%	78-123
VZ2412-BS	78-87-5	1,2-Dichloropropane	BSP	REC	110	%	78-122
VZ2412-BS	75-09-2	Methylene Chloride	BSP	REC	102	%	74-124
VZ2412-BS	127-18-4	Tetrachloroethylene	BSP	REC	108	%	74-129
VZ2412-BS	79-01-6	Trichloroethylene	BSP	REC	108	%	79-123
VZ2412-BS	75-01-4	Vinyl Chloride	BSP	REC	96	%	58-137
VZ2412-BS	17060-07-0	1,2-Dichloroethane-D4	BSP	SURR	99	%	81-118
VZ2412-BS	2037-26-5	Toluene-D8	BSP	SURR	99	%	89-112
FA78398-19MS*	71-43-2	Benzene	MS	REC	103	%	79-120
FA78398-19MS*	56-23-5	Carbon Tetrachloride	MS	REC	100	%	72-136
FA78398-19MS*	67-66-3	Chloroform	MS	REC	98	%	79-124
FA78398-19MS*	75-34-3	1,1-Dichloroethane	MS	REC	100	%	77-125
FA78398-19MS*	107-06-2	1,2-Dichloroethane	MS	REC	104	%	73-128
FA78398-19MS*	156-59-2	cis-1,2-Dichloroethylene	MS	REC	95	%	78-123
FA78398-19MS*	78-87-5	1,2-Dichloropropane	MS	REC	103	%	78-122
FA78398-19MS*	75-09-2	Methylene Chloride	MS	REC	93	%	74-124
FA78398-19MS*	127-18-4	Tetrachloroethylene	MS	REC	98	%	74-129
FA78398-19MS*	79-01-6	Trichloroethylene	MS	REC	100	%	79-123
FA78398-19MS*	75-01-4	Vinyl Chloride	MS	REC	97	%	58-137
FA78398-19MS*	17060-07-0	1,2-Dichloroethane-D4	MS	SURR	105	%	81-118
FA78398-19MS*	2037-26-5	Toluene-D8	MS	SURR	96	%	89-112
FA78398-19MSD*	71-43-2	Benzene	MSD	REC	106	%	79-120
FA78398-19MSD*	71-43-2	Benzene	MSD	RPD	3	%	20
FA78398-19MSD*	56-23-5	Carbon Tetrachloride	MSD	REC	105	%	72-136
FA78398-19MSD*	56-23-5	Carbon Tetrachloride	MSD	RPD	5	%	20
FA78398-19MSD*	67-66-3	Chloroform	MSD	REC	100	%	79-124
FA78398-19MSD*	67-66-3	Chloroform	MSD	RPD	2	%	20
FA78398-19MSD*	75-34-3	1,1-Dichloroethane	MSD	REC	103	%	77-125
FA78398-19MSD*	75-34-3	1,1-Dichloroethane	MSD	RPD	3	%	20
FA78398-19MSD*	107-06-2	1,2-Dichloroethane	MSD	REC	106	%	73-128
FA78398-19MSD*	107-06-2	1,2-Dichloroethane	MSD	RPD	2	%	20
FA78398-19MSD*	156-59-2	cis-1,2-Dichloroethylene	MSD	REC	98	%	78-123
FA78398-19MSD*	156-59-2	cis-1,2-Dichloroethylene	MSD	RPD	3	%	20
FA78398-19MSD*	78-87-5	1,2-Dichloropropane	MSD	REC	105	%	78-122
FA78398-19MSD*	78-87-5	1,2-Dichloropropane	MSD	RPD	2	%	20
FA78398-19MSD*	75-09-2	Methylene Chloride	MSD	REC	94	%	74-124
FA78398-19MSD*	75-09-2	Methylene Chloride	MSD	RPD	1	%	20
FA78398-19MSD*	127-18-4	Tetrachloroethylene	MSD	REC	101	%	74-129
FA78398-19MSD*	127-18-4	Tetrachloroethylene	MSD	RPD	3	%	20
FA78398-19MSD*	79-01-6	Trichloroethylene	MSD	REC	100	%	79-123
FA78398-19MSD*	79-01-6	Trichloroethylene	MSD	RPD	1	%	20
FA78398-19MSD*	75-01-4	Vinyl Chloride	MSD	REC	98	%	58-137

* Sample used for QC is not from job FA78442

5.2
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QC Evaluation: DOD QSM5.x Limits

Job Number: FA78442
Account: Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring
Collected: 09/01/20

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
FA78398-19MSD*	75-01-4	Vinyl Chloride	MSD	RPD	1	%	20
FA78398-19MSD*	17060-07-0	1,2-Dichloroethane-D4	MSD	SURR	104	%	81-118
FA78398-19MSD*	2037-26-5	Toluene-D8	MSD	SURR	98	%	89-112
VZ2412-MB	17060-07-0	1,2-Dichloroethane-D4	MB	SURR	103	%	81-118
VZ2412-MB	2037-26-5	Toluene-D8	MB	SURR	103	%	89-112
FA78442-11	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	108	%	81-118
FA78442-11	2037-26-5	Toluene-D8	SAMP	SURR	101	%	89-112
FA78442-12	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	109	%	81-118
FA78442-12	2037-26-5	Toluene-D8	SAMP	SURR	100	%	89-112

(a) Outside DOD QSM control limits high.

* Sample used for QC is not from job FA78442

MS Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Instrument Performance Checks (BFB)
- Internal Standard Area Summaries
- Surrogate Recovery Summaries
- Initial and Continuing Calibration Summaries
- Run Sequence Reports

Method Blank Summary

Job Number: FA78442
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VZ2409-MB	Z62076.D	1	09/04/20	SO	n/a	n/a	VZ2409

The QC reported here applies to the following samples:

Method: SW846 8260B BY SIM

FA78442-1, FA78442-2, FA78442-3, FA78442-4, FA78442-5, FA78442-6, FA78442-7

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	0.50	0.10	ug/l	
56-23-5	Carbon Tetrachloride	ND	0.50	0.10	ug/l	
67-66-3	Chloroform	ND	0.50	0.10	ug/l	
75-34-3	1,1-Dichloroethane	ND	0.50	0.10	ug/l	
107-06-2	1,2-Dichloroethane	ND	0.50	0.10	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	0.50	0.10	ug/l	
78-87-5	1,2-Dichloropropane	ND	0.50	0.10	ug/l	
75-09-2	Methylene Chloride	ND	2.0	0.50	ug/l	
127-18-4	Tetrachloroethylene	ND	0.50	0.10	ug/l	
79-01-6	Trichloroethylene	ND	0.50	0.10	ug/l	
75-01-4	Vinyl Chloride	ND	0.10	0.050	ug/l	

CAS No.	Surrogate Recoveries	Limits	
17060-07-0	1,2-Dichloroethane-D4	108%	74-125%
2037-26-5	Toluene-D8	101%	88-111%

Method Blank Summary

Job Number: FA78442
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VO2353-MB	O61130.D	1	09/09/20	MM	n/a	n/a	VO2353

The QC reported here applies to the following samples:

Method: SW846 8260B BY SIM

FA78442-8, FA78442-9, FA78442-10

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	0.50	0.10	ug/l	
56-23-5	Carbon Tetrachloride	ND	0.50	0.10	ug/l	
67-66-3	Chloroform	ND	0.50	0.10	ug/l	
75-34-3	1,1-Dichloroethane	ND	0.50	0.10	ug/l	
107-06-2	1,2-Dichloroethane	ND	0.50	0.10	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	0.50	0.10	ug/l	
78-87-5	1,2-Dichloropropane	ND	0.50	0.10	ug/l	
75-09-2	Methylene Chloride	ND	2.0	0.50	ug/l	
127-18-4	Tetrachloroethylene	ND	0.50	0.10	ug/l	
79-01-6	Trichloroethylene	ND	0.50	0.10	ug/l	
75-01-4	Vinyl Chloride	ND	0.10	0.050	ug/l	

CAS No.	Surrogate Recoveries	Limits	
17060-07-0	1,2-Dichloroethane-D4	102%	74-125%
2037-26-5	Toluene-D8	101%	88-111%

Method Blank Summary

Job Number: FA78442
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VZ2412-MB	Z62160.D	1	09/09/20	SO	n/a	n/a	VZ2412

The QC reported here applies to the following samples:

Method: SW846 8260B BY SIM

FA78442-11, FA78442-12

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	0.50	0.10	ug/l	
56-23-5	Carbon Tetrachloride	ND	0.50	0.10	ug/l	
67-66-3	Chloroform	ND	0.50	0.10	ug/l	
75-34-3	1,1-Dichloroethane	ND	0.50	0.10	ug/l	
107-06-2	1,2-Dichloroethane	ND	0.50	0.10	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	0.50	0.10	ug/l	
78-87-5	1,2-Dichloropropane	ND	0.50	0.10	ug/l	
75-09-2	Methylene Chloride	ND	2.0	0.50	ug/l	
127-18-4	Tetrachloroethylene	ND	0.50	0.10	ug/l	
79-01-6	Trichloroethylene	ND	0.50	0.10	ug/l	
75-01-4	Vinyl Chloride	ND	0.10	0.050	ug/l	

CAS No.	Surrogate Recoveries	Limits	
17060-07-0	1,2-Dichloroethane-D4	103%	74-125%
2037-26-5	Toluene-D8	103%	88-111%

Blank Spike Summary

Job Number: FA78442
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VZ2409-BS	Z62075.D	1	09/04/20	SO	n/a	n/a	VZ2409

The QC reported here applies to the following samples:

Method: SW846 8260B BY SIM

FA78442-1, FA78442-2, FA78442-3, FA78442-4, FA78442-5, FA78442-6, FA78442-7

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
71-43-2	Benzene	5	4.4	88	81-122
56-23-5	Carbon Tetrachloride	5	4.3	86	76-136
67-66-3	Chloroform	5	4.2	84	80-124
75-34-3	1,1-Dichloroethane	5	4.3	86	81-122
107-06-2	1,2-Dichloroethane	5	4.6	92	75-125
156-59-2	cis-1,2-Dichloroethylene	5	4.2	84	78-120
78-87-5	1,2-Dichloropropane	5	4.5	90	76-124
75-09-2	Methylene Chloride	5	4.2	84	69-135
127-18-4	Tetrachloroethylene	5	4.4	88	76-135
79-01-6	Trichloroethylene	5	4.2	84	81-126
75-01-4	Vinyl Chloride	5	5.2	104	69-159

CAS No.	Surrogate Recoveries	BSP	Limits
17060-07-0	1,2-Dichloroethane-D4	104%	74-125%
2037-26-5	Toluene-D8	99%	88-111%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA78442
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VO2353-BS	O61129.D	1	09/09/20	MM	n/a	n/a	VO2353

The QC reported here applies to the following samples:

Method: SW846 8260B BY SIM

FA78442-8, FA78442-9, FA78442-10

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
71-43-2	Benzene	5	5.5	110	81-122
56-23-5	Carbon Tetrachloride	5	5.6	112	76-136
67-66-3	Chloroform	5	5.2	104	80-124
75-34-3	1,1-Dichloroethane	5	5.5	110	81-122
107-06-2	1,2-Dichloroethane	5	5.2	104	75-125
156-59-2	cis-1,2-Dichloroethylene	5	5.3	106	78-120
78-87-5	1,2-Dichloropropane	5	5.5	110	76-124
75-09-2	Methylene Chloride	5	4.7	94	69-135
127-18-4	Tetrachloroethylene	5	5.3	106	76-135
79-01-6	Trichloroethylene	5	5.5	110	81-126
75-01-4	Vinyl Chloride	5	5.4	108	69-159

CAS No.	Surrogate Recoveries	BSP	Limits
17060-07-0	1,2-Dichloroethane-D4	101%	74-125%
2037-26-5	Toluene-D8	98%	88-111%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA78442
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VZ2412-BS	Z62159.D	1	09/09/20	SO	n/a	n/a	VZ2412

The QC reported here applies to the following samples:

Method: SW846 8260B BY SIM

FA78442-11, FA78442-12

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
71-43-2	Benzene	5	5.6	112	81-122
56-23-5	Carbon Tetrachloride	5	5.6	112	76-136
67-66-3	Chloroform	5	5.3	106	80-124
75-34-3	1,1-Dichloroethane	5	5.4	108	81-122
107-06-2	1,2-Dichloroethane	5	5.4	108	75-125
156-59-2	cis-1,2-Dichloroethylene	5	5.3	106	78-120
78-87-5	1,2-Dichloropropane	5	5.5	110	76-124
75-09-2	Methylene Chloride	5	5.1	102	69-135
127-18-4	Tetrachloroethylene	5	5.4	108	76-135
79-01-6	Trichloroethylene	5	5.4	108	81-126
75-01-4	Vinyl Chloride	5	4.8	96	69-159

CAS No.	Surrogate Recoveries	BSP	Limits
17060-07-0	1,2-Dichloroethane-D4	99%	74-125%
2037-26-5	Toluene-D8	99%	88-111%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA78442
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA78442-3MS	Z62090.D	10	09/04/20	SO	n/a	n/a	VZ2409
FA78442-3MSD	Z62091.D	10	09/04/20	SO	n/a	n/a	VZ2409
FA78442-3	Z62089.D	1	09/04/20	SO	n/a	n/a	VZ2409

The QC reported here applies to the following samples:

Method: SW846 8260B BY SIM

FA78442-1, FA78442-2, FA78442-3, FA78442-4, FA78442-5, FA78442-6, FA78442-7

CAS No.	Compound	FA78442-3 ug/l	Spike Q	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	0.50 U	50	50.6	101	50	52.6	105	4	81-122/14
56-23-5	Carbon Tetrachloride	0.50 U	50	47.4	95	50	49.2	98	4	76-136/23
67-66-3	Chloroform	0.31 J	50	50.4	100	50	52.2	104	4	80-124/15
75-34-3	1,1-Dichloroethane	0.50 U	50	51.3	103	50	53.4	107	4	81-122/15
107-06-2	1,2-Dichloroethane	0.50 U	50	60.0	120	50	62.4	125	4	75-125/14
156-59-2	cis-1,2-Dichloroethylene	2.0	50	49.0	94	50	51.1	98	4	78-120/15
78-87-5	1,2-Dichloropropane	0.50 U	50	54.0	108	50	56.1	112	4	76-124/14
75-09-2	Methylene Chloride	2.0 U	50	49.8	100	50	51.6	103	4	69-135/16
127-18-4	Tetrachloroethylene	1.6	50	52.1	101	50	54.6	106	5	76-135/16
79-01-6	Trichloroethylene	7.0	50	56.0	98	50	58.5	103	4	81-126/15
75-01-4	Vinyl Chloride	0.10 U	50	57.5	115	50	61.4	123	7	69-159/18

CAS No.	Surrogate Recoveries	MS	MSD	FA78442-3	Limits
17060-07-0	1,2-Dichloroethane-D4	119% ^a	117%	119% ^a	74-125%
2037-26-5	Toluene-D8	97%	98%	100%	88-111%

(a) Outside DOD QSM control limits high.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA78442
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA78398-4MS	O61136.D	20	09/09/20	MM	n/a	n/a	VO2353
FA78398-4MSD	O61137.D	20	09/09/20	MM	n/a	n/a	VO2353
FA78398-4	O61132.D	1	09/09/20	MM	n/a	n/a	VO2353

The QC reported here applies to the following samples:

Method: SW846 8260B BY SIM

FA78442-8, FA78442-9, FA78442-10

CAS No.	Compound	FA78398-4 ug/l	Spike Q ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	0.50 U	100	124	124*	100	122	122	2	81-122/14
56-23-5	Carbon Tetrachloride	0.50 U	100	121	121	100	120	120	1	76-136/23
67-66-3	Chloroform	0.50 U	100	118	118	100	114	114	3	80-124/15
75-34-3	1,1-Dichloroethane	0.50 U	100	126	126*	100	122	122	3	81-122/15
107-06-2	1,2-Dichloroethane	0.50 U	100	121	121	100	117	117	3	75-125/14
156-59-2	cis-1,2-Dichloroethylene	0.50 U	100	116	116	100	112	112	4	78-120/15
78-87-5	1,2-Dichloropropane	0.50 U	100	124	124	100	121	121	2	76-124/14
75-09-2	Methylene Chloride	2.0 U	100	113	113	100	110	110	3	69-135/16
127-18-4	Tetrachloroethylene	0.50 U	100	118	118	100	115	115	3	76-135/16
79-01-6	Trichloroethylene	0.50 U	100	116	116	100	113	113	3	81-126/15
75-01-4	Vinyl Chloride	0.10 U	100	118	118	100	116	116	2	69-159/18

CAS No.	Surrogate Recoveries	MS	MSD	FA78398-4	Limits
17060-07-0	1,2-Dichloroethane-D4	106%	106%	106%	74-125%
2037-26-5	Toluene-D8	101%	101%	99%	88-111%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA78442
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA78398-19MS	Z62164.D	10	09/09/20	SO	n/a	n/a	VZ2412
FA78398-19MSD	Z62165.D	10	09/09/20	SO	n/a	n/a	VZ2412
FA78398-19	Z62163.D	1	09/09/20	SO	n/a	n/a	VZ2412

The QC reported here applies to the following samples:

Method: SW846 8260B BY SIM

FA78442-11, FA78442-12

CAS No.	Compound	FA78398-19 ug/l	Spike Q ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	0.50 U	50	51.5	103	50	53.2	106	3	81-122/14
56-23-5	Carbon Tetrachloride	0.50 U	50	49.8	100	50	52.6	105	5	76-136/23
67-66-3	Chloroform	0.50 U	50	49.0	98	50	50.2	100	2	80-124/15
75-34-3	1,1-Dichloroethane	0.50 U	50	50.0	100	50	51.3	103	3	81-122/15
107-06-2	1,2-Dichloroethane	0.50 U	50	52.1	104	50	52.9	106	2	75-125/14
156-59-2	cis-1,2-Dichloroethylene	1.2	50	48.9	95	50	50.4	98	3	78-120/15
78-87-5	1,2-Dichloropropane	0.50 U	50	51.5	103	50	52.7	105	2	76-124/14
75-09-2	Methylene Chloride	2.0 U	50	46.4	93	50	47.0	94	1	69-135/16
127-18-4	Tetrachloroethylene	0.18 J	50	49.0	98	50	50.7	101	3	76-135/16
79-01-6	Trichloroethylene	2.4	50	52.3	100	50	52.6	100	1	81-126/15
75-01-4	Vinyl Chloride	0.10 U	50	48.7	97	50	49.2	98	1	69-159/18

CAS No.	Surrogate Recoveries	MS	MSD	FA78398-19	Limits
17060-07-0	1,2-Dichloroethane-D4	105%	104%	106%	74-125%
2037-26-5	Toluene-D8	96%	98%	101%	88-111%

* = Outside of Control Limits.

Instrument Performance Check (BFB)

Job Number: FA78442
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Sample: VO2352-BFB	Injection Date: 09/08/20
Lab File ID: O61115.D	Injection Time: 11:44
Instrument ID: GCMSO	

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	116296	32.9	Pass
75	30.0 - 60.0% of mass 95	177003	50.1	Pass
95	Base peak, 100% relative abundance	353365	100.0	Pass
96	5.0 - 9.0% of mass 95	24240	6.86	Pass
173	Less than 2.0% of mass 174	1519	0.43 (0.60) ^a	Pass
174	50.0 - 100.0% of mass 95	251541	71.2	Pass
175	5.0 - 9.0% of mass 174	17467	4.94 (6.94) ^a	Pass
176	95.0 - 101.0% of mass 174	244224	69.1 (97.1) ^a	Pass
177	5.0 - 9.0% of mass 176	17221	4.87 (7.05) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VO2352-IC2352	O61116.D	09/08/20	12:14	00:30	Initial cal 1
VO2352-IC2352	O61117.D	09/08/20	12:34	00:50	Initial cal 2
VO2352-IC2352	O61118.D	09/08/20	12:55	01:11	Initial cal 3
VO2352-IC2352	O61119.D	09/08/20	13:15	01:31	Initial cal 4
VO2352-ICC2352	O61120.D	09/08/20	13:55	02:11	Initial cal 5
VO2352-IC2352	O61121.D	09/08/20	14:15	02:31	Initial cal 6
VO2352-IC2352	O61122.D	09/08/20	14:36	02:52	Initial cal 7
VO2352-ICV2352	O61124.D	09/08/20	15:16	03:32	Initial cal verification 5

Instrument Performance Check (BFB)

Job Number: FA78442
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Sample: VO2353-BFB	Injection Date: 09/09/20
Lab File ID: O61127.D	Injection Time: 08:18
Instrument ID: GCMSO	

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	130946	35.1	Pass
75	30.0 - 60.0% of mass 95	188117	50.5	Pass
95	Base peak, 100% relative abundance	372651	100.0	Pass
96	5.0 - 9.0% of mass 95	26909	7.22	Pass
173	Less than 2.0% of mass 174	1346	0.36 (0.53) ^a	Pass
174	50.0 - 100.0% of mass 95	254421	68.3	Pass
175	5.0 - 9.0% of mass 174	18171	4.88 (7.14) ^a	Pass
176	95.0 - 101.0% of mass 174	245568	65.9 (96.5) ^a	Pass
177	5.0 - 9.0% of mass 176	15987	4.29 (6.51) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VO2353-CC2352	O61128.D	09/09/20	08:52	00:34	Continuing cal 5
VO2353-BS	O61129.D	09/09/20	09:59	01:41	Blank Spike
VO2353-MB	O61130.D	09/09/20	10:34	02:16	Method Blank
FA78398-4	O61132.D	09/09/20	11:24	03:06	(used for QC only; not part of job FA78442)
ZZZZZZ	O61133.D	09/09/20	11:44	03:26	(unrelated sample)
ZZZZZZ	O61134.D	09/09/20	12:04	03:46	(unrelated sample)
ZZZZZZ	O61135.D	09/09/20	12:25	04:07	(unrelated sample)
FA78398-4MS	O61136.D	09/09/20	12:45	04:27	Matrix Spike
FA78398-4MSD	O61137.D	09/09/20	13:05	04:47	Matrix Spike Duplicate
ZZZZZZ	O61138.D	09/09/20	13:26	05:08	(unrelated sample)
ZZZZZZ	O61139.D	09/09/20	13:46	05:28	(unrelated sample)
ZZZZZZ	O61140.D	09/09/20	14:07	05:49	(unrelated sample)
ZZZZZZ	O61141.D	09/09/20	14:27	06:09	(unrelated sample)
ZZZZZZ	O61142.D	09/09/20	14:48	06:30	(unrelated sample)
ZZZZZZ	O61143.D	09/09/20	15:10	06:52	(unrelated sample)
ZZZZZZ	O61144.D	09/09/20	15:30	07:12	(unrelated sample)
ZZZZZZ	O61145.D	09/09/20	15:51	07:33	(unrelated sample)
ZZZZZZ	O61146.D	09/09/20	16:11	07:53	(unrelated sample)
ZZZZZZ	O61147.D	09/09/20	16:32	08:14	(unrelated sample)
FA78442-8	O61148.D	09/09/20	16:52	08:34	2036YOU2394F
FA78442-9	O61149.D	09/09/20	17:12	08:54	2036YOU2396F
FA78442-10	O61150.D	09/09/20	17:33	09:15	2036YOU2397F
VO2353-ECC2352	O61151.D	09/09/20	17:53	09:35	Ending cal 5

Instrument Performance Check (BFB)

Job Number: FA78442
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Sample: VZ2408-BFB	Injection Date: 09/03/20
Lab File ID: Z62039.D	Injection Time: 09:29
Instrument ID: GCMSZ	

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	66488	21.9	Pass
75	30.0 - 60.0% of mass 95	162304	53.5	Pass
95	Base peak, 100% relative abundance	303153	100.0	Pass
96	5.0 - 9.0% of mass 95	21238	7.01	Pass
173	Less than 2.0% of mass 174	1222	0.40 (0.52) ^a	Pass
174	50.0 - 100.0% of mass 95	235477	77.7	Pass
175	5.0 - 9.0% of mass 174	16056	5.30 (6.82) ^a	Pass
176	95.0 - 101.0% of mass 174	230208	75.9 (97.8) ^a	Pass
177	5.0 - 9.0% of mass 176	15659	5.17 (6.80) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VZ2408-IC2408	Z62040.D	09/03/20	09:52	00:23	Initial cal 1
VZ2408-IC2408	Z62041.D	09/03/20	10:11	00:42	Initial cal 2
VZ2408-IC2408	Z62042.D	09/03/20	10:59	01:30	Initial cal 3
VZ2408-IC2408	Z62043.D	09/03/20	11:18	01:49	Initial cal 4
VZ2408-ICC2408	Z62044.D	09/03/20	11:40	02:11	Initial cal 5
VZ2408-IC2408	Z62045.D	09/03/20	11:59	02:30	Initial cal 6
VZ2408-IC2408	Z62046.D	09/03/20	12:18	02:49	Initial cal 7
VZ2408-ICV2408	Z62048.D	09/03/20	12:57	03:28	Initial cal verification 5

Instrument Performance Check (BFB)

Job Number: FA78442
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Sample: VZ2409-BFB	Injection Date: 09/04/20
Lab File ID: Z62073.D	Injection Time: 08:05
Instrument ID: GCMSZ	

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	39290	23.7	Pass
75	30.0 - 60.0% of mass 95	96384	58.2	Pass
95	Base peak, 100% relative abundance	165525	100.0	Pass
96	5.0 - 9.0% of mass 95	11804	7.13	Pass
173	Less than 2.0% of mass 174	624	0.38 (0.47) ^a	Pass
174	50.0 - 100.0% of mass 95	132253	79.9	Pass
175	5.0 - 9.0% of mass 174	9164	5.54 (6.93) ^a	Pass
176	95.0 - 101.0% of mass 174	129197	78.1 (97.7) ^a	Pass
177	5.0 - 9.0% of mass 176	8818	5.33 (6.83) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VZ2409-CC2408	Z62074.D	09/04/20	08:57	00:52	Continuing cal 5
VZ2409-BS	Z62075.D	09/04/20	09:17	01:12	Blank Spike
VZ2409-MB	Z62076.D	09/04/20	09:37	01:32	Method Blank
FA78398-2	Z62077.D	09/04/20	09:57	01:52	(used for QC only; not part of job FA78442)
ZZZZZZ	Z62078.D	09/04/20	10:17	02:12	(unrelated sample)
ZZZZZZ	Z62079.D	09/04/20	10:36	02:31	(unrelated sample)
ZZZZZZ	Z62083.D	09/04/20	11:55	03:50	(unrelated sample)
ZZZZZZ	Z62084.D	09/04/20	12:14	04:09	(unrelated sample)
ZZZZZZ	Z62085.D	09/04/20	12:34	04:29	(unrelated sample)
ZZZZZZ	Z62086.D	09/04/20	12:53	04:48	(unrelated sample)
FA78442-1	Z62087.D	09/04/20	13:12	05:07	2036YOU2387F
FA78442-2	Z62088.D	09/04/20	13:32	05:27	2036YOU2388F
FA78442-3	Z62089.D	09/04/20	13:51	05:46	2036YOU2389F
FA78442-3MS	Z62090.D	09/04/20	14:11	06:06	Matrix Spike
FA78442-3MSD	Z62091.D	09/04/20	14:30	06:25	Matrix Spike Duplicate
FA78442-4	Z62092.D	09/04/20	14:51	06:46	2036YOU2390F
FA78442-5	Z62093.D	09/04/20	15:10	07:05	2036YOU2391D
FA78442-6	Z62094.D	09/04/20	15:30	07:25	2036YOU2392F
FA78442-7	Z62095.D	09/04/20	15:49	07:44	2036YOU2393F
VZ2409-ECC2408	Z62100.D	09/04/20	19:51	11:46	Ending cal 5

Instrument Performance Check (BFB)

Job Number: FA78442
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Sample: VZ2411-BFB	Injection Date: 09/08/20
Lab File ID: Z62140.D	Injection Time: 11:50
Instrument ID: GCMSZ	

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	27152	25.1	Pass
75	30.0 - 60.0% of mass 95	60931	56.4	Pass
95	Base peak, 100% relative abundance	108091	100.0	Pass
96	5.0 - 9.0% of mass 95	8064	7.46	Pass
173	Less than 2.0% of mass 174	604	0.56 (0.71) ^a	Pass
174	50.0 - 100.0% of mass 95	85061	78.7	Pass
175	5.0 - 9.0% of mass 174	5760	5.33 (6.77) ^a	Pass
176	95.0 - 101.0% of mass 174	82453	76.3 (96.9) ^a	Pass
177	5.0 - 9.0% of mass 176	5099	4.72 (6.18) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VZ2411-IC2411	Z62141.D	09/08/20	12:14	00:24	Initial cal 1
VZ2411-IC2411	Z62142.D	09/08/20	12:33	00:43	Initial cal 2
VZ2411-IC2411	Z62143.D	09/08/20	12:58	01:08	Initial cal 3
VZ2411-IC2411	Z62144.D	09/08/20	13:18	01:28	Initial cal 4
VZ2411-ICC2411	Z62145.D	09/08/20	13:41	01:51	Initial cal 5
VZ2411-IC2411	Z62146.D	09/08/20	14:01	02:11	Initial cal 6
VZ2411-IC2411	Z62147.D	09/08/20	14:20	02:30	Initial cal 7

Instrument Performance Check (BFB)

Job Number: FA78442
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Sample: VZ2412-BFB	Injection Date: 09/09/20
Lab File ID: Z62156.D	Injection Time: 12:01
Instrument ID: GCMSZ	

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	29805	25.2	Pass
75	30.0 - 60.0% of mass 95	66459	56.1	Pass
95	Base peak, 100% relative abundance	118435	100.0	Pass
96	5.0 - 9.0% of mass 95	8621	7.28	Pass
173	Less than 2.0% of mass 174	453	0.38 (0.48) ^a	Pass
174	50.0 - 100.0% of mass 95	95107	80.3	Pass
175	5.0 - 9.0% of mass 174	7488	6.32 (7.87) ^a	Pass
176	95.0 - 101.0% of mass 174	93064	78.6 (97.9) ^a	Pass
177	5.0 - 9.0% of mass 176	5724	4.83 (6.15) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VZ2412-CC2411	Z62157.D	09/09/20	12:24	00:23	Continuing cal 5
VZ2412-ICV2411	Z62158.D	09/09/20	12:47	00:46	Initial cal verification 5
VZ2412-BS	Z62159.D	09/09/20	13:07	01:06	Blank Spike
VZ2412-MB	Z62160.D	09/09/20	13:26	01:25	Method Blank
ZZZZZZ	Z62161.D	09/09/20	13:46	01:45	(unrelated sample)
ZZZZZZ	Z62162.D	09/09/20	14:05	02:04	(unrelated sample)
FA78398-19	Z62163.D	09/09/20	14:26	02:25	(used for QC only; not part of job FA78442)
FA78398-19MS	Z62164.D	09/09/20	14:45	02:44	Matrix Spike
FA78398-19MSD	Z62165.D	09/09/20	15:07	03:06	Matrix Spike Duplicate
FA78442-11	Z62167.D	09/09/20	15:46	03:45	2036YOU2399F
FA78442-12	Z62168.D	09/09/20	16:05	04:04	2036YOU2400F
ZZZZZZ	Z62169.D	09/09/20	16:24	04:23	(unrelated sample)
ZZZZZZ	Z62170.D	09/09/20	16:43	04:42	(unrelated sample)
ZZZZZZ	Z62171.D	09/09/20	17:02	05:01	(unrelated sample)
ZZZZZZ	Z62172.D	09/09/20	17:22	05:21	(unrelated sample)
VZ2412-ECC2411	Z62173.D	09/09/20	17:41	05:40	Ending cal 5

Internal Standard Area Summary

Job Number: FA78442
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Check Std: VO2353-CC2352	Injection Date: 09/09/20
Lab File ID: O61128.D	Injection Time: 08:52
Instrument ID: GCMSO	Method: SW846 8260B BY SIM

	IS 1	RT	IS 2	RT
	AREA		AREA	
Initial Cal ^a	275666	7.35	205542	10.44
Check Std ^b	304482	7.34	231537	10.44
Upper Limit ^c	608964	7.51	463074	10.61
Lower Limit ^d	152241	7.17	115769	10.27

Lab	IS 1	RT	IS 2	RT
Sample ID	AREA		AREA	
VO2353-BS	301697	7.34	228681	10.44
VO2353-MB	278072	7.34	202417	10.44
FA78398-4	250453	7.34	185886	10.44
ZZZZZZ	240678	7.35	173540	10.45
ZZZZZZ	236281	7.35	170065	10.45
ZZZZZZ	226628	7.35	162982	10.45
FA78398-4MS	229453	7.35	165946	10.45
FA78398-4MSD	234733	7.35	169227	10.45
ZZZZZZ	225810	7.35	159981	10.45
ZZZZZZ	217163	7.35	155018	10.45
ZZZZZZ	209035	7.35	149184	10.45
ZZZZZZ	204066	7.35	143970	10.45
ZZZZZZ	200322	7.35	142355	10.45
ZZZZZZ	192715	7.35	137400	10.45
ZZZZZZ	192371	7.35	135788	10.45
ZZZZZZ	188805	7.35	134192	10.45
ZZZZZZ	185749	7.35	131655	10.45
ZZZZZZ	180807	7.35	127568	10.45
FA78442-8	179269	7.35	127066	10.45
FA78442-9	180986	7.35	128381	10.45
FA78442-10	173659	7.35	123144	10.45
VO2353-ECC2352197933	142304	7.35	142304	10.45

IS 1 = Fluorobenzene
IS 2 = Chlorobenzene-D5

- (a) Initial Cal is: VO2352-ICC2352 O61120.D 09/08/20 13:55
- (b) Check Std Limit = -50 to + 100% of initial cal area.
- (c) Upper Limit = + 100% of check standard area; Retention time + 0.167 minutes.
- (d) Lower Limit = -50% of check standard area; Retention time -0.167 minutes.

6.5.1
6

Internal Standard Area Summary

Job Number: FA78442
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Check Std: VZ2409-CC2408	Injection Date: 09/04/20
Lab File ID: Z62074.D	Injection Time: 08:57
Instrument ID: GCMSZ	Method: SW846 8260B BY SIM

	IS 1 AREA	RT	IS 2 AREA	RT
Initial Cal ^a	3260477	7.40	2497954	10.51
Check Std ^b	2815075	7.39	2127080	10.51
Upper Limit ^c	5630150	7.56	4254160	10.68
Lower Limit ^d	1407538	7.22	1063540	10.34

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT
VZ2409-BS	2672989	7.40	2058240	10.51
VZ2409-MB	2556488	7.40	1926956	10.51
FA78398-2	2370806	7.40	1792632	10.51
ZZZZZZ	2351900	7.40	1763939	10.51
ZZZZZZ	2198438	7.40	1658808	10.51
ZZZZZZ	2038462	7.40	1511976	10.52
ZZZZZZ	1994625	7.40	1489243	10.51
ZZZZZZ	2009231	7.40	1508709	10.51
ZZZZZZ	2164070	7.40	1612157	10.51
FA78442-1	1826748	7.40	1363212	10.51
FA78442-2	1838941	7.40	1380575	10.52
FA78442-3	1837994	7.40	1379031	10.51
FA78442-3MS	1927205	7.40	1476074	10.51
FA78442-3MSD	1739870	7.40	1320439	10.51
FA78442-4	1825157	7.40	1358812	10.51
FA78442-5	1800530	7.40	1346624	10.51
FA78442-6	1764784	7.40	1319390	10.51
FA78442-7	1724664	7.40	1284998	10.52
VZ2409-ECC24082077882	7.40	1582551	10.51	

IS 1 = Fluorobenzene
IS 2 = Chlorobenzene-D5

- (a) Initial Cal is: VZ2408-ICC2408 Z62044.D 09/03/20 11:40
- (b) Check Std Limit = -50 to + 100% of initial cal area.
- (c) Upper Limit = + 100% of check standard area; Retention time + 0.167 minutes.
- (d) Lower Limit = -50% of check standard area; Retention time -0.167 minutes.

6.5.2
6

Internal Standard Area Summary

Job Number: FA78442
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Check Std: VZ2412-CC2411	Injection Date: 09/09/20
Lab File ID: Z62157.D	Injection Time: 12:24
Instrument ID: GCMSZ	Method: SW846 8260B BY SIM

	IS 1 AREA	RT	IS 2 AREA	RT
Initial Cal ^a	1762982	7.40	1382913	10.51
Check Std ^b	1823502	7.40	1435140	10.51
Upper Limit ^c	3647004	7.57	2870280	10.68
Lower Limit ^d	911751	7.23	717570	10.34

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT
VZ2412-BS	1738886	7.40	1358497	10.51
VZ2412-MB	1611304	7.40	1212825	10.51
ZZZZZZ	1485575	7.40	1123506	10.51
ZZZZZZ	1419236	7.40	1070743	10.51
FA78398-19	1399678	7.40	1057286	10.51
FA78398-19MS	1522488	7.40	1200980	10.51
FA78398-19MSD	1574872	7.40	1220568	10.51
FA78442-11	1371336	7.40	1039000	10.51
FA78442-12	1351993	7.40	1026079	10.51
ZZZZZZ	1333945	7.40	1018011	10.51
ZZZZZZ	1327202	7.40	1013342	10.51
ZZZZZZ	1279530	7.40	976948	10.51
ZZZZZZ	1255082	7.40	980615	10.51
VZ2412-ECC2411	1408602	7.40	1150128	10.51

IS 1 = Fluorobenzene
IS 2 = Chlorobenzene-D5

- (a) Initial Cal is: VZ2411-ICC2411 Z62145.D 09/08/20 13:41
- (b) Check Std Limit = -50 to + 100% of initial cal area.
- (c) Upper Limit = + 100% of check standard area; Retention time + 0.167 minutes.
- (d) Lower Limit = -50% of check standard area; Retention time -0.167 minutes.

6.5.3
6

Surrogate Recovery Summary

Job Number: FA78442
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Method: SW846 8260B BY SIM	Matrix: AQ
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Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2
FA78442-1	Z62087.D	118	100
FA78442-2	Z62088.D	118	100
FA78442-3	Z62089.D	119 ^a	100
FA78442-4	Z62092.D	119 ^a	100
FA78442-5	Z62093.D	120 ^a	99
FA78442-6	Z62094.D	121 ^a	100
FA78442-7	Z62095.D	121 ^a	100
FA78442-8	O61148.D	114	102
FA78442-9	O61149.D	114	102
FA78442-10	O61150.D	115	101
FA78442-11	Z62167.D	108	101
FA78442-12	Z62168.D	109	100
FA78398-19MS	Z62164.D	105	96
FA78398-19MSD	Z62165.D	104	98
FA78398-4MS	O61136.D	106	101
FA78398-4MSD	O61137.D	106	101
FA78442-3MS	Z62090.D	119 ^a	97
FA78442-3MSD	Z62091.D	117	98
VO2353-BS	O61129.D	101	98
VO2353-MB	O61130.D	102	101
VZ2409-BS	Z62075.D	104	99
VZ2409-MB	Z62076.D	108	101
VZ2412-BS	Z62159.D	99	99
VZ2412-MB	Z62160.D	103	103

Surrogate Compounds	Recovery Limits
S1 = 1,2-Dichloroethane-D4	74-125%
S2 = Toluene-D8	88-111%

(a) Outside DOD QSM control limits high.

Initial Calibration Summary

Job Number: FA78442
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Sample: VO2352-ICC2352
Lab FileID: O61120.D

Response Factor Report MSVOA12

Method : C:\msdchem\2\methods\SIMCL090820.M (RTE Integrator)
 Title : Standard Methods 6200B
 Last Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration

Calibration Files

1 =O61116.D 2 =O61117.D 3 =O61118.D 4 =O61119.D
 5 =O61120.D 6 =O61121.D 7 =O61122.D

Compound	1	2	3	4	5	6	7	Avg	%RSD

1) I Fluorobenzene	-----ISTD-----								
2) Vinyl Chloride	0.463	0.530	0.475	0.479	0.446	0.447	0.410	0.464	7.93
	---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9995								
	Response Ratio = 0.00000 + 0.49614 *A + -0.02038 *A^2								
3) Chloromethane	0.877	0.903	0.730	0.695	0.646	0.632	0.610	0.728	16.27
	---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9992								
	Response Ratio = 0.00000 + 0.72943 *A + -0.03155 *A^2								
4) 1,1-Dichloroethen	0.614	0.744	0.700	0.733	0.650	0.654	0.644	0.677	7.27
5) Methylene Chlorid	5.638	1.935	1.242	1.109	1.016	0.990	0.979	1.844	92.53
	---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9950								
	Response Ratio = 0.00000 + 1.26138 *A + -0.08085 *A^2								
6) trans-1,2-Dichlor	0.819	0.961	0.843	0.861	0.787	0.790	0.783	0.835	7.58
	---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9996								
	Response Ratio = 0.00000 + 0.82729 *A + -0.01169 *A^2								
7) 1,1-Dichloroethan	0.918	1.003	0.938	0.968	0.912	0.919	0.918	0.939	3.63
8) cis-1,2-Dichloroe	0.424	0.452	0.409	0.425	0.402	0.407	0.409	0.418	4.08
9) Chloroform	0.820	0.819	0.748	0.769	0.722	0.727	0.725	0.761	5.63
10) Carbon Tetrachlor	0.407	0.515	0.480	0.508	0.467	0.475	0.472	0.475	7.43
11) 1,1,1-Trichloroet	0.497	0.586	0.542	0.585	0.536	0.550	0.548	0.549	5.53
12) Benzene	1.696	1.672	1.508	1.542	1.449	1.480	1.472	1.545	6.41
	---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9998								
	Response Ratio = 0.00000 + 1.48747 *A + -0.00413 *A^2								
13)S 1,2-Dichloroethan	0.440	0.443	0.450	0.442	0.437	0.434	0.429	0.439	1.51
14) 1,2-Dichloroethan	0.847	0.892	0.811	0.832	0.790	0.790	0.786	0.821	4.71
15) Trichloroethene	0.426	0.466	0.429	0.453	0.421	0.427	0.424	0.435	3.93
16) 1,2-Dichloropropa	0.559	0.616	0.552	0.560	0.531	0.540	0.537	0.556	5.13
	---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9998								
	Response Ratio = 0.00000 + 0.54374 *A + -0.00170 *A^2								
17) cis-1,3-Dichlorop	0.581	0.625	0.583	0.614	0.605	0.621	0.625	0.608	3.12
18) I Chlorobenzene-d5	-----ISTD-----								
19)S Toluene-d8	1.215	1.234	1.224	1.219	1.209	1.222	1.233	1.222	0.73
20) trans-1,3-Dichlor	0.688	0.766	0.725	0.775	0.771	0.801	0.811	0.762	5.60
21) Tetrachloroethene	0.451	0.550	0.492	0.520	0.468	0.481	0.480	0.492	6.74
	---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9994								
	Response Ratio = 0.00000 + 0.48599 *A + -0.00171 *A^2								
22) 1,4-Dichlorobenze	1.068	1.167	1.034	1.052	1.008	1.019	1.021	1.053	5.17
23) 1,2-Dibromo-3-Chl	0.315	0.278	0.247	0.263	0.270	0.278	0.285	0.277	7.53

6.7.1
6

Initial Calibration Summary

Job Number: FA78442
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Sample: VO2352-ICC2352
Lab FileID: O61120.D

(#) = Out of Range

SIMCL090820.M

Wed Sep 09 12:21:07 2020

Initial Calibration Verification

Job Number: FA78442
 Account: AHTNACAS Ahtna Global, LLC
 Project: Fort Ord Groundwater Monitoring

Sample: VO2352-ICV2352
 Lab FileID: O61124.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\2\data\090820\O61124.D Vial: 9
 Acq On : 8 Sep 2020 3:16 pm Operator: melissam
 Sample : icv2352-5 Inst : MSVOA12
 Misc : MS47137,VO2352,,,,, Multiplr: 1.00
 MS Integration Params: rteint.p

Method : C:\msdchem\2\methods\SIMCL090820.M (RTE Integrator)
 Title : Standard Methods 6200B
 Last Update : Wed Sep 09 12:10:38 2020
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	Fluorobenzene	1.000	1.000	0.0	98	0.00	7.35
	----- Amount	Calc.	%Drift	-----			
2	Vinyl Chloride	10.000	9.564	4.4	96	-0.01	2.90
3	Chloromethane	10.000	9.444	5.6	96	0.00	2.80
	----- AvgRF	CCRF	%Dev	-----			
4	1,1-Dichloroethene	0.677	0.699	-3.2	105	0.00	4.09
	----- Amount	Calc.	%Drift	-----			
5	Methylene Chloride	10.000	10.213	-2.1	108	0.00	4.70
6	trans-1,2-Dichloroethene	10.000	10.422	-4.2	104	0.00	4.87
	----- AvgRF	CCRF	%Dev	-----			
7	1,1-Dichloroethane	0.939	0.975	-3.8	105	0.00	5.51
8	cis-1,2-Dichloroethene	0.418	0.426	-1.9	104	0.00	6.07
9	Chloroform	0.761	0.759	0.3	103	0.00	6.33
10	Carbon Tetrachloride	0.475	0.492	-3.6	103	0.00	6.51
11	1,1,1-Trichloroethane	0.549	0.564	-2.7	103	0.00	6.58
	----- Amount	Calc.	%Drift	-----			
12	Benzene	10.000	10.813	-8.1	108	0.00	6.94
	----- AvgRF	CCRF	%Dev	-----			
13 S	1,2-Dichloroethane-d4	0.439	0.438	0.2	98	0.00	7.07
14	1,2-Dichloroethane	0.821	0.856	-4.3	106	0.00	7.14
15	Trichloroethene	0.435	0.463	-6.4	107	0.00	7.52
	----- Amount	Calc.	%Drift	-----			
16	1,2-Dichloropropane	10.000	10.851	-8.5	108	0.00	8.04
	----- AvgRF	CCRF	%Dev	-----			
17	cis-1,3-Dichloropropene	0.608	0.665	-9.4	108	0.00	8.71
18 I	Chlorobenzene-d5	1.000	1.000	0.0	97	0.00	10.45
19 S	Toluene-d8	1.222	1.224	-0.2	98	0.00	8.90
20	trans-1,3-Dichloropropene	0.762	0.863	-13.3	109	0.00	9.34
	----- Amount	Calc.	%Drift	-----			
21	Tetrachloroethene	10.000	10.329	-3.3	103	0.00	9.34
	----- AvgRF	CCRF	%Dev	-----			

Initial Calibration Verification

Job Number: FA78442
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Sample: VO2352-ICV2352
Lab FileID: O61124.D

22	1,4-Dichlorobenzene	1.053	1.075	-2.1	104	0.00	12.83
23	1,2-Dibromo-3-Chloropropa	0.277	0.288	-4.0	104	0.00	14.04

(#) = Out of Range SPCC's out = 0 CCC's out = 0
O61120.D SIMCL090820.M Wed Sep 09 12:21:15 2020

Continuing Calibration Summary

Job Number: FA78442
 Account: AHTNACAS Ahtna Global, LLC
 Project: Fort Ord Groundwater Monitoring

Sample: VO2353-CC2352
 Lab FileID: O61128.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\2\data\090920\O61128.D Vial: 1
 Acq On : 9 Sep 2020 8:52 am Operator: melissam
 Sample : cc2352-5 Inst : MSVOA12
 Misc : MS47137,VO2353,,,,, Multiplr: 1.00
 MS Integration Params: rteint.p

Method : C:\msdchem\2\methods\SIMCL090820.M (RTE Integrator)
 Title : Standard Methods 6200B
 Last Update : Wed Sep 09 12:10:38 2020
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	Fluorobenzene	1.000	1.000	0.0	110	0.00	7.34
	----- Amount	Calc.	%Drift	-----			
2	Vinyl Chloride	10.000	10.809	-8.1	121	0.00	2.90
3	Chloromethane	10.000	10.655	-6.5	121	0.00	2.80
	----- AvgRF	CCRF	%Dev	-----			
4	1,1-Dichloroethene	0.677	0.691	-2.1	117	0.00	4.09
	----- Amount	Calc.	%Drift	-----			
5	Methylene Chloride	10.000	9.158	8.4	111	0.00	4.70
6	trans-1,2-Dichloroethene	10.000	10.301	-3.0	116	0.00	4.87
	----- AvgRF	CCRF	%Dev	-----			
7	1,1-Dichloroethane	0.939	0.944	-0.5	114	0.00	5.51
8	cis-1,2-Dichloroethene	0.418	0.413	1.2	113	0.00	6.07
9	Chloroform	0.761	0.745	2.1	114	0.00	6.33
10	Carbon Tetrachloride	0.475	0.501	-5.5	119	0.00	6.50
11	1,1,1-Trichloroethane	0.549	0.569	-3.6	117	0.00	6.58
	----- Amount	Calc.	%Drift	-----			
12	Benzene	10.000	10.085	-0.9	114	0.00	6.94
	----- AvgRF	CCRF	%Dev	-----			
13 S	1,2-Dichloroethane-d4	0.439	0.439	0.0	111	0.00	7.07
14	1,2-Dichloroethane	0.821	0.804	2.1	112	0.00	7.14
15	Trichloroethene	0.435	0.436	-0.2	114	0.00	7.51
	----- Amount	Calc.	%Drift	-----			
16	1,2-Dichloropropane	10.000	10.072	-0.7	113	0.00	8.04
	----- AvgRF	CCRF	%Dev	-----			
17	cis-1,3-Dichloropropene	0.608	0.616	-1.3	112	0.00	8.71
18 I	Chlorobenzene-d5	1.000	1.000	0.0	113	0.00	10.44
19 S	Toluene-d8	1.222	1.192	2.5	111	0.00	8.90
20	trans-1,3-Dichloropropene	0.762	0.769	-0.9	112	0.00	9.34
	----- Amount	Calc.	%Drift	-----			
21	Tetrachloroethene	10.000	9.971	0.3	116	0.00	9.34
	----- AvgRF	CCRF	%Dev	-----			

Continuing Calibration Summary

Job Number: FA78442
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Sample: VO2353-CC2352
Lab FileID: O61128.D

22	1,4-Dichlorobenzene	1.053	0.986	6.4	110	0.00	12.82
23	1,2-Dibromo-3-Chloropropa	0.277	0.261	5.8	109	0.00	14.04

(#) = Out of Range
O61120.D SIMCL090820.M

SPCC's out = 0 CCC's out = 0
Thu Sep 10 08:56:02 2020

Continuing Calibration Summary

Job Number: FA78442
 Account: AHTNACAS Ahtna Global, LLC
 Project: Fort Ord Groundwater Monitoring

Sample: VO2353-ECC2352
 Lab FileID: O61151.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\2\data\090920\O61151.D Vial: 24
 Acq On : 9 Sep 2020 5:53 pm Operator: melissam
 Sample : ecc2352-5 Inst : MSVOA12
 Misc : MS47147,VO2353,,,,, Multiplr: 1.00
 MS Integration Params: rteint.p

Method : C:\msdchem\2\methods\SIMCL090820.M (RTE Integrator)
 Title : Standard Methods 6200B
 Last Update : Wed Sep 09 12:10:38 2020
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 50% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	Fluorobenzene	1.000	1.000	0.0	72	0.00	7.35
	----- Amount	Calc.	%Drift	-----			
2	Vinyl Chloride	10.000	12.695	-27.0	91	0.00	2.91
3	Chloromethane	10.000	13.585	-35.9	97	0.00	2.81
	----- AvgRF	CCRF	%Dev	-----			
4	1,1-Dichloroethene	0.677	0.682	-0.7	75	0.00	4.09
	----- Amount	Calc.	%Drift	-----			
5	Methylene Chloride	10.000	10.980	-9.8	84	0.00	4.70
6	trans-1,2-Dichloroethene	10.000	10.427	-4.3	76	0.00	4.87
	----- AvgRF	CCRF	%Dev	-----			
7	1,1-Dichloroethane	0.939	0.976	-3.9	77	0.00	5.51
8	cis-1,2-Dichloroethene	0.418	0.395	5.5	71	0.00	6.07
9	Chloroform	0.761	0.745	2.1	74	0.00	6.33
10	Carbon Tetrachloride	0.475	0.387	18.5	60	0.00	6.51
11	1,1,1-Trichloroethane	0.549	0.474	13.7	63	0.00	6.58
	----- Amount	Calc.	%Drift	-----			
12	Benzene	10.000	9.770	2.3	72	0.00	6.94
	----- AvgRF	CCRF	%Dev	-----			
13 S	1,2-Dichloroethane-d4	0.439	0.480	-9.3	79	0.00	7.07
14	1,2-Dichloroethane	0.821	0.913	-11.2	83	0.00	7.14
15	Trichloroethene	0.435	0.400	8.0	68	0.00	7.52
	----- Amount	Calc.	%Drift	-----			
16	1,2-Dichloropropane	10.000	10.817	-8.2	79	0.00	8.04
	----- AvgRF	CCRF	%Dev	-----			
17	cis-1,3-Dichloropropene	0.608	0.592	2.6	70	0.00	8.71
18 I	Chlorobenzene-d5	1.000	1.000	0.0	69	0.00	10.45
19 S	Toluene-d8	1.222	1.210	1.0	69	0.00	8.90
20	trans-1,3-Dichloropropene	0.762	0.816	-7.1	73	0.00	9.34
	----- Amount	Calc.	%Drift	-----			
21	Tetrachloroethene	10.000	8.318	16.8	59	0.00	9.34
	----- AvgRF	CCRF	%Dev	-----			

Continuing Calibration Summary

Job Number: FA78442
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Sample: VO2353-ECC2352
Lab FileID: O61151.D

22	1,4-Dichlorobenzene	1.053	0.969	8.0	67	0.00	12.83
23	1,2-Dibromo-3-Chloropropa	0.277	0.249	10.1	64	0.00	14.04

(#) = Out of Range

O61120.D SIMCL090820.M

SPCC's out = 0 CCC's out = 0

Thu Sep 10 08:59:33 2020

Initial Calibration Summary

Job Number: FA78442
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Sample: VZ2408-ICC2408
Lab FileID: Z62044.D

Response Factor Report MSVOA15

Method : C:\msdchem\1\methods\SIMCL090320.M (RTE Integrator)
 Title : WATER-EPA 8260B
 Last Update : Fri Sep 04 11:36:05 2020
 Response via : Initial Calibration

Calibration Files

1 =Z62040.D 2 =Z62041.D 3 =Z62042.D 4 =Z62043.D
 5 =Z62044.D 6 =Z62045.D 7 =Z62046.D

Compound	1	2	3	4	5	6	7	Avg	%RSD
1) I Fluorobenzene	-----ISTD-----								
2) Vinyl Chloride	0.794	0.463	0.459	0.429	0.461	0.457	0.479	0.506	25.30
	---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9997								
	Response Ratio = 0.00000 + 0.42534 *A + 0.01287 *A^2								
3) Chloromethane	0.878	0.479	0.498	0.469	0.461	0.475	0.504	0.538	28.07
	---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9995								
	Response Ratio = 0.00000 + 0.42874 *A + 0.01805 *A^2								
4) 1,1-Dichloroethen	0.434	0.305	0.289	0.312	0.324	0.320	0.341	0.332	14.33
	---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9994								
	Response Ratio = 0.00000 + 0.29464 *A + 0.01101 *A^2								
5) Methylene Chlorid	0.786	0.535	0.450	0.429	0.419	0.437	0.509	0.509	27.83
	---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9986								
	Response Ratio = 0.00000 + 0.43058 *A + 0.00030 *A^2								
6)T trans-1,2-Dichlor	0.543	0.360	0.360	0.383	0.402	0.400	0.428	0.411	15.37
	---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9995								
	Response Ratio = 0.00000 + 0.36221 *A + 0.01572 *A^2								
7) 1,1-Dichloroethan	0.923	0.631	0.638	0.678	0.710	0.705	0.747	0.719	13.74
8) cis-1,2-Dichloroe	0.531	0.387	0.385	0.408	0.427	0.424	0.450	0.430	11.68
9) Chloroform	1.017	0.698	0.713	0.753	0.791	0.785	0.836	0.799	13.39
10) Carbon Tetrachlor	0.756	0.480	0.510	0.534	0.578	0.580	0.620	0.580	15.70
	---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9996								
	Response Ratio = 0.00000 + 0.51032 *A + 0.02676 *A^2								
11) 1,1,1-Trichloroet	0.950	0.631	0.634	0.684	0.724	0.721	0.765	0.730	14.91
	---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9996								
	Response Ratio = 0.00000 + 0.65351 *A + 0.02692 *A^2								
12) Benzene	1.892	1.310	1.314	1.401	1.450	1.448	1.520	1.476	13.44
13)S 1,2-Dichloroethan	0.313	0.324	0.323	0.328	0.323	0.329	0.328	0.324	1.75
14) 1,2-Dichloroethan	0.493	0.471	0.504	0.541	0.554	0.562	0.586	0.530	7.85
15) Trichloroethene	0.593	0.397	0.411	0.439	0.453	0.456	0.485	0.462	14.03
16) 1,2-Dichloropropa	0.412	0.336	0.339	0.369	0.381	0.383	0.401	0.374	7.75
17) cis-1,3-Dichlorop	0.435	0.292	0.441	0.446	0.513	0.531	0.562	0.460	19.38
	---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9997								
	Response Ratio = 0.00000 + 0.43921 *A + 0.03094 *A^2								
18) I Chlorobenzene-d5	-----ISTD-----								
19)S Toluene-d8	1.248	1.258	1.248	1.247	1.236	1.239	1.234	1.244	0.69
20)T trans-1,3-Dichlor	0.399	0.287	0.461	0.474	0.566	0.597	0.636	0.489	24.91
	---- Linear regr., Force(0,0) ---- Coefficient = 0.9956								

6.7.5
6



Initial Calibration Summary

Job Number: FA78442
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Sample: VZ2408-ICC2408
Lab FileID: Z62044.D

$$\text{Response Ratio} = 0.00000 + 0.60851 *A$$

21) Tetrachloroethene 0.868 0.562 0.546 0.585 0.608 0.614 0.641 0.632 17.25
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9999
Response Ratio = 0.00000 + 0.56157 *A + 0.01953 *A^2

(#) = Out of Range

SIMCL090320.M

Fri Sep 04 14:05:20 2020

6.7.5

6

Initial Calibration Verification

Job Number: FA78442
 Account: AHTNACAS Ahtna Global, LLC
 Project: Fort Ord Groundwater Monitoring

Sample: VZ2408-ICV2408
 Lab FileID: Z62048.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\Je...-2020\VZ2408\Z62048.d Vial: 9
 Acq On : 3 Sep 2020 12:57 pm Operator: shanicao
 Sample : cc2408-5 Inst : MSVOA15
 Misc : MS46458,VZ2408,,,,, Multiplr: 1.00
 MS Integration Params: RTEINT.P

Method : C:\msdchem\1\methods\SIMCL090320.M (RTE Integrator)
 Title : WATER-EPA 8260B
 Last Update : Thu Sep 03 14:30:55 2020
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	Fluorobenzene	1.000	1.000	0.0	83	0.00	7.40
	----- True	Calc.	% Drift	-----			
2	Vinyl Chloride	10.000	9.694	3.1	79	0.00	2.85
3	Chloromethane	10.000	10.151	-1.5	85	0.00	2.74
	----- AvgRF	CCRF	% Dev	-----			
4	1,1-Dichloroethene	0.332	0.296	10.8	76	0.00	4.08
	----- True	Calc.	% Drift	-----			
5	Methylene Chloride	10.000	9.714	2.9	81	0.00	4.71
6 T	trans-1,2-Dichloroethene	10.000	9.671	3.3	78	0.00	4.89
	----- AvgRF	CCRF	% Dev	-----			
7	1,1-Dichloroethane	0.719	0.695	3.3	81	0.00	5.55
8	cis-1,2-Dichloroethene	0.430	0.417	3.0	81	0.00	6.11
9	Chloroform	0.799	0.771	3.5	81	0.00	6.38
	----- True	Calc.	% Drift	-----			
10	Carbon Tetrachloride	10.000	9.580	4.2	77	0.00	6.54
11	1,1,1-Trichloroethane	10.000	9.677	3.2	78	0.00	6.61
	----- AvgRF	CCRF	% Dev	-----			
12	Benzene	1.476	1.468	0.5	84	0.00	6.99
13 S	1,2-Dichloroethane-d4	0.324	0.335	-3.4	86	0.00	7.13
14	1,2-Dichloroethane	0.530	0.573	-8.1	86	0.00	7.20
15	Trichloroethene	0.462	0.467	-1.1	85	0.00	7.56
16	1,2-Dichloropropane	0.374	0.390	-4.3	85	0.00	8.11
	----- True	Calc.	% Drift	-----			
17	cis-1,3-Dichloropropene	10.000	9.853	1.5	80	0.00	8.77
	----- AvgRF	CCRF	% Dev	-----			
18 I	Chlorobenzene-d5	1.000	1.000	0.0	83	0.00	10.51
19 S	Toluene-d8	1.244	1.241	0.2	83	0.00	8.96
	----- True	Calc.	% Drift	-----			
20 T	trans-1,3-Dichloropropene	10.000	9.828	1.7	79	0.00	9.41
21	Tetrachloroethene	10.000	9.817	1.8	80	0.00	9.40

Initial Calibration Verification

Job Number: FA78442
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Sample: VZ2408-ICV2408
Lab FileID: Z62048.D

(#) = Out of Range
Z62044.D SIMCL090320.M

SPCC's out = 0 CCC's out = 0
Fri Sep 04 00:37:04 2020

Continuing Calibration Summary

Job Number: FA78442
 Account: AHTNACAS Ahtna Global, LLC
 Project: Fort Ord Groundwater Monitoring

Sample: VZ2409-CC2408
 Lab FileID: Z62074.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\je...-2020\VZ2409\Z62074.d Vial: 1
 Acq On : 4 Sep 2020 8:57 am Operator: shanicao
 Sample : CC2408-5 Inst : MSVOA15
 Misc : MS47134,VZ2409,,,,, Multiplr: 1.00
 MS Integration Params: RTEINT.P

Method : C:\msdchem\1\methods\SIMCL090320.M (RTE Integrator)
 Title : WATER-EPA 8260B
 Last Update : Fri Sep 04 11:36:05 2020
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	Fluorobenzene	1.000	1.000	0.0	86	0.00	7.39
	----- True	Calc.	% Drift	-----			
2	Vinyl Chloride	10.000	10.261	-2.6	87	0.00	2.83
3	Chloromethane	10.000	10.613	-6.1	93	0.00	2.73
4	1,1-Dichloroethene	10.000	9.699	3.0	82	0.00	4.08
5	Methylene Chloride	10.000	9.985	0.2	87	0.00	4.71
6 T	trans-1,2-Dichloroethene	10.000	9.899	1.0	84	0.00	4.88
	----- AvgRF	CCRF	% Dev	-----			
7	1,1-Dichloroethane	0.719	0.706	1.8	86	0.00	5.54
8	cis-1,2-Dichloroethene	0.430	0.418	2.8	84	0.00	6.10
9	Chloroform	0.799	0.780	2.4	85	0.00	6.37
	----- True	Calc.	% Drift	-----			
10	Carbon Tetrachloride	10.000	9.419	5.8	79	0.00	6.54
11	1,1,1-Trichloroethane	10.000	9.639	3.6	81	0.00	6.61
	----- AvgRF	CCRF	% Dev	-----			
12	Benzene	1.476	1.437	2.6	86	0.00	6.99
13 S	1,2-Dichloroethane-d4	0.324	0.340	-4.9	91	0.00	7.12
14	1,2-Dichloroethane	0.530	0.590	-11.3	92	0.00	7.19
15	Trichloroethene	0.462	0.442	4.3	84	0.00	7.56
16	1,2-Dichloropropane	0.374	0.382	-2.1	87	0.00	8.10
	----- True	Calc.	% Drift	-----			
17	cis-1,3-Dichloropropene	10.000	10.129	-1.3	86	0.00	8.77
	----- AvgRF	CCRF	% Dev	-----			
18 I	Chlorobenzene-d5	1.000	1.000	0.0	85	0.00	10.51
19 S	Toluene-d8	1.244	1.239	0.4	85	0.00	8.96
	----- True	Calc.	% Drift	-----			
20 T	trans-1,3-Dichloropropene	10.000	9.573	4.3	88	0.00	9.41
21	Tetrachloroethene	10.000	9.736	2.6	82	0.00	9.39

(#) = Out of Range SPCC's out = 0 CCC's out = 0
 Z62044.D SIMCL090320.M Tue Sep 08 01:12:30 2020

Continuing Calibration Summary

Job Number: FA78442
 Account: AHTNACAS Ahtna Global, LLC
 Project: Fort Ord Groundwater Monitoring

Sample: VZ2409-ECC2408
 Lab FileID: Z62100.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\090420\Z62100.D Vial: 17
 Acq On : 4 Sep 2020 7:51 pm Operator: shanicao
 Sample : ECC2408-5 Inst : MSVOA15
 Misc : MS47134,VZ2409,,,,, Multiplr: 1.00
 MS Integration Params: RTEINT.P

Method : C:\msdchem\1\methods\SIMCL090320.M (RTE Integrator)
 Title : WATER-EPA 8260B
 Last Update : Fri Sep 04 11:36:05 2020
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 50% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	Fluorobenzene	1.000	1.000	0.0	64	0.00	7.40
	----- Amount	Calc.	%Drift	-----			
2	Vinyl Chloride	10.000	11.864	-18.6	75	0.00	2.84
3	Chloromethane	10.000	11.518	-15.2	75	0.00	2.74
4	1,1-Dichloroethene	10.000	10.079	-0.8	63	0.00	4.08
5	Methylene Chloride	10.000	10.080	-0.8	65	0.00	4.71
6 T	trans-1,2-Dichloroethene	10.000	10.058	-0.6	63	0.00	4.89
	----- AvgRF	CCRF	%Dev	-----			
7	1,1-Dichloroethane	0.719	0.751	-4.5	67	0.00	5.54
8	cis-1,2-Dichloroethene	0.430	0.412	4.2	61	0.00	6.10
9	Chloroform	0.799	0.818	-2.4	66	0.00	6.37
	----- Amount	Calc.	%Drift	-----			
10	Carbon Tetrachloride	10.000	9.792	2.1	61	0.00	6.54
11	1,1,1-Trichloroethane	10.000	10.103	-1.0	63	0.00	6.61
	----- AvgRF	CCRF	%Dev	-----			
12	Benzene	1.476	1.473	0.2	65	0.00	6.99
13 S	1,2-Dichloroethane-d4	0.324	0.384	-18.5	76	0.00	7.12
14	1,2-Dichloroethane	0.530	0.633	-19.4	73	0.00	7.19
15	Trichloroethene	0.462	0.455	1.5	64	0.00	7.56
16	1,2-Dichloropropane	0.374	0.393	-5.1	66	0.00	8.10
	----- Amount	Calc.	%Drift	-----			
17	cis-1,3-Dichloropropene	10.000	9.350	6.5	58	0.00	8.77
	----- AvgRF	CCRF	%Dev	-----			
18 I	Chlorobenzene-d5	1.000	1.000	0.0	63	0.00	10.51
19 S	Toluene-d8	1.244	1.203	3.3	62	0.00	8.96
	----- Amount	Calc.	%Drift	-----			
20 T	trans-1,3-Dichloropropene	10.000	8.918	10.8	61	0.00	9.41
21	Tetrachloroethene	10.000	9.489	5.1	59	0.00	9.40

(#) = Out of Range SPCC's out = 0 CCC's out = 0
 Z62044.D SIMCL090320.M Tue Sep 08 12:34:34 2020

Initial Calibration Summary

Job Number: FA78442
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Sample: VZ2411-ICC2411
Lab FileID: Z62145.D

Response Factor Report MSVOA15

Method : C:\msdchem\1\methods\SIMCL090820.M (RTE Integrator)
 Title : WATER-EPA 8260B
 Last Update : Tue Sep 08 14:39:51 2020
 Response via : Initial Calibration

Calibration Files

1 =Z62141.D 2 =Z62142.D 3 =Z62143.D 4 =Z62144.D
 5 =Z62145.D 6 =Z62146.D 7 =Z62147.D

Compound	1	2	3	4	5	6	7	Avg	%RSD

1) I Fluorobenzene	-----ISTD-----								
2) Vinyl Chloride	0.616	0.599	0.506	0.499	0.552	0.526	0.521	0.546	8.44
3) Chloromethane	0.755	0.597	0.516	0.518	0.568	0.551	0.540	0.578	14.34
4) 1,1-Dichloroethen	0.319	0.337	0.313	0.316	0.339	0.317	0.321	0.323	3.24
5) Methylene Chlorid	1.018	0.640	0.522	0.502	0.466	0.457	0.601	0.601	35.72
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9989									
Response Ratio = 0.00000 + 0.54610 *A + -0.02322 *A^2									
6)T trans-1,2-Dichlor	0.380	0.400	0.394	0.395	0.430	0.409	0.415	0.403	4.09
7) 1,1-Dichloroethan	0.747	0.781	0.771	0.768	0.816	0.767	0.771	0.774	2.71
8) cis-1,2-Dichloroe	0.434	0.422	0.421	0.419	0.448	0.431	0.437	0.430	2.44
9) Chloroform	0.846	0.844	0.847	0.843	0.898	0.850	0.854	0.854	2.27
10) Carbon Tetrachlor	0.489	0.490	0.490	0.514	0.590	0.552	0.574	0.528	8.18
11) 1,1,1-Trichloroet	0.667	0.704	0.686	0.704	0.776	0.730	0.741	0.716	5.08
12) Benzene	1.377	1.486	1.482	1.498	1.601	1.520	1.525	1.498	4.48
13)S 1,2-Dichloroethan	0.374	0.388	0.381	0.380	0.371	0.366	0.361	0.374	2.50
14) 1,2-Dichloroethan	0.532	0.626	0.646	0.634	0.645	0.621	0.621	0.618	6.39
15) Trichloroethene	0.462	0.460	0.451	0.458	0.507	0.471	0.481	0.470	4.05
16) 1,2-Dichloropropa	0.347	0.396	0.406	0.404	0.426	0.408	0.409	0.400	6.24
17) cis-1,3-Dichlorop	0.317	0.284	0.367	0.387	0.459	0.468	0.501	0.397	20.50
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9994									
Response Ratio = 0.00000 + 0.38368 *A + 0.02928 *A^2									
18) I Chlorobenzene-d5	-----ISTD-----								
19)S Toluene-d8	1.262	1.236	1.212	1.192	1.182	1.185	1.183	1.207	2.56
20)T trans-1,3-Dichlor	0.304	0.273	0.376	0.412	0.491	0.521	0.567	0.421	26.39
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9997									
Response Ratio = 0.00000 + 0.38841 *A + 0.04478 *A^2									
21) Tetrachloroethene	0.640	0.610	0.567	0.568	0.609	0.578	0.583	0.594	4.58

(#) = Out of Range

SIMCL090820.M Wed Sep 09 14:34:33 2020

6.7.9
6

Continuing Calibration Summary

Job Number: FA78442
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Sample: VZ2412-CC2411
Lab FileID: Z62157.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\jo...-2020\ vz2412\Z62157.d Vial: 1
 Acq On : 9 Sep 2020 12:24 pm Operator: SHANICAO
 Sample : CC2411-5 Inst : MSVOA15
 Misc : MS47137,VZ2412,,,,, Multiplr: 1.00
 MS Integration Params: RTEINT.P

Method : C:\msdchem\1\methods\SIMCL090820.M (RTE Integrator)
 Title : WATER-EPA 8260B
 Last Update : Tue Sep 08 14:39:51 2020
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	Fluorobenzene	1.000	1.000	0.0	103	0.00	7.40
2	Vinyl Chloride	0.546	0.554	-1.5	104	-0.01	2.83
3	Chloromethane	0.578	0.567	1.9	103	-0.01	2.73
4	1,1-Dichloroethene	0.323	0.321	0.6	98	0.00	4.08
		----- True	Calc.	% Drift	-----		
5	Methylene Chloride	10.000	10.165	-1.6	104	0.00	4.71
		----- AvgRF	CCRF	% Dev	-----		
6 T	trans-1,2-Dichloroethene	0.403	0.423	-5.0	102	0.00	4.88
7	1,1-Dichloroethane	0.774	0.799	-3.2	101	0.00	5.54
8	cis-1,2-Dichloroethene	0.430	0.447	-4.0	103	0.00	6.10
9	Chloroform	0.854	0.881	-3.2	101	0.00	6.37
10	Carbon Tetrachloride	0.528	0.555	-5.1	97	0.00	6.54
11	1,1,1-Trichloroethane	0.716	0.737	-2.9	98	0.00	6.61
12	Benzene	1.498	1.565	-4.5	101	0.00	6.99
13 S	1,2-Dichloroethane-d4	0.374	0.365	2.4	102	0.00	7.12
14	1,2-Dichloroethane	0.618	0.639	-3.4	102	0.00	7.19
15	Trichloroethene	0.470	0.456	3.0	93	0.00	7.56
16	1,2-Dichloropropane	0.400	0.412	-3.0	100	0.00	8.10
		----- True	Calc.	% Drift	-----		
17	cis-1,3-Dichloropropene	10.000	11.193	-11.9	113	0.00	8.77
		----- AvgRF	CCRF	% Dev	-----		
18 I	Chlorobenzene-d5	1.000	1.000	0.0	104	0.00	10.51
19 S	Toluene-d8	1.207	1.183	2.0	104	0.00	8.96
		----- True	Calc.	% Drift	-----		
20 T	trans-1,3-Dichloropropene	10.000	11.552	-15.5	120	0.00	9.41
		----- AvgRF	CCRF	% Dev	-----		
21	Tetrachloroethene	0.594	0.581	2.2	99	0.00	9.40

(#) = Out of Range SPCC's out = 0 CCC's out = 0
 Z62145.D SIMCL090820.M Thu Sep 10 05:56:47 2020

Initial Calibration Verification

Job Number: FA78442
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Sample: VZ2412-ICV2411
Lab FileID: Z62158.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\jo...-2020\ vz2412\Z62158.d Vial: 2
 Acq On : 9 Sep 2020 12:47 pm Operator: SHANICAO
 Sample : ICV2411-5 Inst : MSVOA15
 Misc : MS47137,VZ2412,,,,, Multiplr: 1.00
 MS Integration Params: RTEINT.P

Method : C:\msdchem\1\methods\SIMCL090820.M (RTE Integrator)
 Title : WATER-EPA 8260B
 Last Update : Tue Sep 08 14:39:51 2020
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	Fluorobenzene	1.000	1.000	0.0	102	0.00	7.40
2	Vinyl Chloride	0.546	0.493	9.7	91	0.00	2.84
3	Chloromethane	0.578	0.496	14.2	89	0.00	2.73
4	1,1-Dichloroethene	0.323	0.322	0.3	97	0.00	4.08
		----- True	Calc.	% Drift	-----		
5	Methylene Chloride	10.000	10.237	-2.4	104	0.00	4.71
		----- AvgRF	CCRF	% Dev	-----		
6 T	trans-1,2-Dichloroethene	0.403	0.426	-5.7	101	0.00	4.89
7	1,1-Dichloroethane	0.774	0.812	-4.9	102	0.00	5.54
8	cis-1,2-Dichloroethene	0.430	0.453	-5.3	103	0.00	6.11
9	Chloroform	0.854	0.882	-3.3	100	0.00	6.37
10	Carbon Tetrachloride	0.528	0.566	-7.2	98	0.00	6.54
11	1,1,1-Trichloroethane	0.716	0.740	-3.4	97	0.00	6.61
12	Benzene	1.498	1.632	-8.9	104	0.00	6.99
13 S	1,2-Dichloroethane-d4	0.374	0.362	3.2	100	0.00	7.13
14	1,2-Dichloroethane	0.618	0.650	-5.2	103	0.00	7.20
15	Trichloroethene	0.470	0.484	-3.0	98	0.00	7.56
16	1,2-Dichloropropane	0.400	0.434	-8.5	104	0.00	8.10
		----- True	Calc.	% Drift	-----		
17	cis-1,3-Dichloropropene	10.000	11.315	-13.1	113	0.00	8.77
		----- AvgRF	CCRF	% Dev	-----		
18 I	Chlorobenzene-d5	1.000	1.000	0.0	102	0.00	10.51
19 S	Toluene-d8	1.207	1.184	1.9	103	0.00	8.96
		----- True	Calc.	% Drift	-----		
20 T	trans-1,3-Dichloropropene	10.000	11.385	-13.8	116	0.00	9.41
		----- AvgRF	CCRF	% Dev	-----		
21	Tetrachloroethene	0.594	0.588	1.0	99	0.00	9.40

(#) = Out of Range SPCC's out = 0 CCC's out = 0
 Z62145.D SIMCL090820.M Thu Sep 10 05:57:42 2020

6.7.11
6

Continuing Calibration Summary

Job Number: FA78442
 Account: AHTNACAS Ahtna Global, LLC
 Project: Fort Ord Groundwater Monitoring

Sample: VZ2412-ECC2411
 Lab FileID: Z62173.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\jo...-2020\ vz2412\Z62173.d Vial: 17
 Acq On : 9 Sep 2020 5:41 pm Operator: SHANICAO
 Sample : ECC2411-5 Inst : MSVOA15
 Misc : MS47171,VZ2412,,,,, Multiplr: 1.00
 MS Integration Params: RTEINT.P

Method : C:\msdchem\1\methods\SIMCL090820.M (RTE Integrator)
 Title : WATER-EPA 8260B
 Last Update : Tue Sep 08 14:39:51 2020
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 50% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	Fluorobenzene	1.000	1.000	0.0	80	0.00	7.40
2	Vinyl Chloride	0.546	0.595	-9.0	86	0.00	2.84
3	Chloromethane	0.578	0.571	1.2	80	0.00	2.73
4	1,1-Dichloroethene	0.323	0.347	-7.4	82	0.00	4.08
		True	Calc.	% Drift			
5	Methylene Chloride	10.000	10.419	-4.2	83	0.00	4.71
		AvgRF	CCRF	% Dev			
6 T	trans-1,2-Dichloroethene	0.403	0.440	-9.2	82	0.00	4.89
7	1,1-Dichloroethane	0.774	0.853	-10.2	84	0.00	5.55
8	cis-1,2-Dichloroethene	0.430	0.460	-7.0	82	0.00	6.11
9	Chloroform	0.854	0.946	-10.8	84	0.00	6.38
10	Carbon Tetrachloride	0.528	0.592	-12.1	80	0.00	6.54
11	1,1,1-Trichloroethane	0.716	0.797	-11.3	82	0.00	6.61
12	Benzene	1.498	1.667	-11.3	83	0.00	6.99
13 S	1,2-Dichloroethane-d4	0.374	0.390	-4.3	84	0.00	7.13
14	1,2-Dichloroethane	0.618	0.699	-13.1	87	0.00	7.20
15	Trichloroethene	0.470	0.511	-8.7	81	0.00	7.56
16	1,2-Dichloropropane	0.400	0.449	-12.2	84	0.00	8.10
		True	Calc.	% Drift			
17	cis-1,3-Dichloropropene	10.000	10.123	-1.2	78	0.00	8.77
		AvgRF	CCRF	% Dev			
18 I	Chlorobenzene-d5	1.000	1.000	0.0	83	0.00	10.51
19 S	Toluene-d8	1.207	1.126	6.7	79	0.00	8.96
		True	Calc.	% Drift			
20 T	trans-1,3-Dichloropropene	10.000	10.226	-2.3	83	0.00	9.41
		AvgRF	CCRF	% Dev			
21	Tetrachloroethene	0.594	0.608	-2.4	83	0.00	9.40

(#) = Out of Range SPCC's out = 0 CCC's out = 0
 Z62145.D SIMCL090820.M Thu Sep 10 05:57:09 2020

Run Sequence Report

Job Number: FA78442
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Run ID: VO2352	Method: SW846 8260B BY SIM	Instrument ID: GCMSO
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Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
VO2352-BFB	O61115.D	09/08/20 11:44	n/a	BFB Tune
VO2352-IC2352	O61116.D	09/08/20 12:14	n/a	Initial cal 1
VO2352-IC2352	O61117.D	09/08/20 12:34	n/a	Initial cal 2
VO2352-IC2352	O61118.D	09/08/20 12:55	n/a	Initial cal 3
VO2352-IC2352	O61119.D	09/08/20 13:15	n/a	Initial cal 4
VO2352-ICC2352	O61120.D	09/08/20 13:55	n/a	Initial cal 5
VO2352-IC2352	O61121.D	09/08/20 14:15	n/a	Initial cal 6
VO2352-IC2352	O61122.D	09/08/20 14:36	n/a	Initial cal 7
VO2352-ICV2352	O61124.D	09/08/20 15:16	n/a	Initial cal verification 5

Run Sequence Report

Job Number: FA78442
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Run ID: VO2353 **Method:** SW846 8260B BY SIM **Instrument ID:** GCMSO

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
VO2353-BFB	O61127.D	09/09/20 08:18	n/a	BFB Tune
VO2353-CC2352	O61128.D	09/09/20 08:52	n/a	Continuing cal 5
VO2353-BS	O61129.D	09/09/20 09:59	n/a	Blank Spike
VO2353-MB	O61130.D	09/09/20 10:34	n/a	Method Blank
FA78398-4	O61132.D	09/09/20 11:24	n/a	(used for QC only; not part of job FA78442)
ZZZZZZ	O61133.D	09/09/20 11:44	n/a	(unrelated sample)
ZZZZZZ	O61134.D	09/09/20 12:04	n/a	(unrelated sample)
ZZZZZZ	O61135.D	09/09/20 12:25	n/a	(unrelated sample)
FA78398-4MS	O61136.D	09/09/20 12:45	n/a	Matrix Spike
FA78398-4MSD	O61137.D	09/09/20 13:05	n/a	Matrix Spike Duplicate
ZZZZZZ	O61138.D	09/09/20 13:26	n/a	(unrelated sample)
ZZZZZZ	O61139.D	09/09/20 13:46	n/a	(unrelated sample)
ZZZZZZ	O61140.D	09/09/20 14:07	n/a	(unrelated sample)
ZZZZZZ	O61141.D	09/09/20 14:27	n/a	(unrelated sample)
ZZZZZZ	O61142.D	09/09/20 14:48	n/a	(unrelated sample)
ZZZZZZ	O61143.D	09/09/20 15:10	n/a	(unrelated sample)
ZZZZZZ	O61144.D	09/09/20 15:30	n/a	(unrelated sample)
ZZZZZZ	O61145.D	09/09/20 15:51	n/a	(unrelated sample)
ZZZZZZ	O61146.D	09/09/20 16:11	n/a	(unrelated sample)
ZZZZZZ	O61147.D	09/09/20 16:32	n/a	(unrelated sample)
FA78442-8	O61148.D	09/09/20 16:52	n/a	2036YOU2394F
FA78442-9	O61149.D	09/09/20 17:12	n/a	2036YOU2396F
FA78442-10	O61150.D	09/09/20 17:33	n/a	2036YOU2397F
VO2353-ECC2352	O61151.D	09/09/20 17:53	n/a	Ending cal 5

Run Sequence Report

Job Number: FA78442
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Run ID: VZ2408	Method: SW846 8260B BY SIM	Instrument ID: GCMSZ
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Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
VZ2408-BFB	Z62039.D	09/03/20 09:29	n/a	BFB Tune
VZ2408-IC2408	Z62040.D	09/03/20 09:52	n/a	Initial cal 1
VZ2408-IC2408	Z62041.D	09/03/20 10:11	n/a	Initial cal 2
VZ2408-IC2408	Z62042.D	09/03/20 10:59	n/a	Initial cal 3
VZ2408-IC2408	Z62043.D	09/03/20 11:18	n/a	Initial cal 4
VZ2408-ICC2408	Z62044.D	09/03/20 11:40	n/a	Initial cal 5
VZ2408-IC2408	Z62045.D	09/03/20 11:59	n/a	Initial cal 6
VZ2408-IC2408	Z62046.D	09/03/20 12:18	n/a	Initial cal 7
VZ2408-ICV2408	Z62048.D	09/03/20 12:57	n/a	Initial cal verification 5

Run Sequence Report

Job Number: FA78442
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Run ID: VZ2409	Method: SW846 8260B BY SIM	Instrument ID: GCMSZ
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Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
VZ2409-BFB	Z62073.D	09/04/20 08:05	n/a	BFB Tune
VZ2409-CC2408	Z62074.D	09/04/20 08:57	n/a	Continuing cal 5
VZ2409-BS	Z62075.D	09/04/20 09:17	n/a	Blank Spike
VZ2409-MB	Z62076.D	09/04/20 09:37	n/a	Method Blank
FA78398-2	Z62077.D	09/04/20 09:57	n/a	(used for QC only; not part of job FA78442)
ZZZZZZ	Z62078.D	09/04/20 10:17	n/a	(unrelated sample)
ZZZZZZ	Z62079.D	09/04/20 10:36	n/a	(unrelated sample)
ZZZZZZ	Z62083.D	09/04/20 11:55	n/a	(unrelated sample)
ZZZZZZ	Z62084.D	09/04/20 12:14	n/a	(unrelated sample)
ZZZZZZ	Z62085.D	09/04/20 12:34	n/a	(unrelated sample)
ZZZZZZ	Z62086.D	09/04/20 12:53	n/a	(unrelated sample)
FA78442-1	Z62087.D	09/04/20 13:12	n/a	2036YOU2387F
FA78442-2	Z62088.D	09/04/20 13:32	n/a	2036YOU2388F
FA78442-3	Z62089.D	09/04/20 13:51	n/a	2036YOU2389F
FA78442-3MS	Z62090.D	09/04/20 14:11	n/a	Matrix Spike
FA78442-3MSD	Z62091.D	09/04/20 14:30	n/a	Matrix Spike Duplicate
FA78442-4	Z62092.D	09/04/20 14:51	n/a	2036YOU2390F
FA78442-5	Z62093.D	09/04/20 15:10	n/a	2036YOU2391D
FA78442-6	Z62094.D	09/04/20 15:30	n/a	2036YOU2392F
FA78442-7	Z62095.D	09/04/20 15:49	n/a	2036YOU2393F
VZ2409-ECC2408	Z62100.D	09/04/20 19:51	n/a	Ending cal 5

Run Sequence Report

Job Number: FA78442
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Run ID: VZ2411	Method: SW846 8260B BY SIM	Instrument ID: GCMSZ
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Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
VZ2411-BFB	Z62140.D	09/08/20 11:50	n/a	BFB Tune
VZ2411-IC2411	Z62141.D	09/08/20 12:14	n/a	Initial cal 1
VZ2411-IC2411	Z62142.D	09/08/20 12:33	n/a	Initial cal 2
VZ2411-IC2411	Z62143.D	09/08/20 12:58	n/a	Initial cal 3
VZ2411-IC2411	Z62144.D	09/08/20 13:18	n/a	Initial cal 4
VZ2411-ICC2411	Z62145.D	09/08/20 13:41	n/a	Initial cal 5
VZ2411-IC2411	Z62146.D	09/08/20 14:01	n/a	Initial cal 6
VZ2411-IC2411	Z62147.D	09/08/20 14:20	n/a	Initial cal 7

Run Sequence Report

Job Number: FA78442
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Run ID: VZ2412	Method: SW846 8260B BY SIM	Instrument ID: GCMSZ
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Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
VZ2412-BFB	Z62156.D	09/09/20 12:01	n/a	BFB Tune
VZ2412-CC2411	Z62157.D	09/09/20 12:24	n/a	Continuing cal 5
VZ2412-ICV2411	Z62158.D	09/09/20 12:47	n/a	Initial cal verification 5
VZ2412-BS	Z62159.D	09/09/20 13:07	n/a	Blank Spike
VZ2412-MB	Z62160.D	09/09/20 13:26	n/a	Method Blank
ZZZZZZ	Z62161.D	09/09/20 13:46	n/a	(unrelated sample)
ZZZZZZ	Z62162.D	09/09/20 14:05	n/a	(unrelated sample)
FA78398-19	Z62163.D	09/09/20 14:26	n/a	(used for QC only; not part of job FA78442)
FA78398-19MS	Z62164.D	09/09/20 14:45	n/a	Matrix Spike
FA78398-19MSD	Z62165.D	09/09/20 15:07	n/a	Matrix Spike Duplicate
FA78442-11	Z62167.D	09/09/20 15:46	n/a	2036YOU2399F
FA78442-12	Z62168.D	09/09/20 16:05	n/a	2036YOU2400F
ZZZZZZ	Z62169.D	09/09/20 16:24	n/a	(unrelated sample)
ZZZZZZ	Z62170.D	09/09/20 16:43	n/a	(unrelated sample)
ZZZZZZ	Z62171.D	09/09/20 17:02	n/a	(unrelated sample)
ZZZZZZ	Z62172.D	09/09/20 17:22	n/a	(unrelated sample)
VZ2412-ECC2411	Z62173.D	09/09/20 17:41	n/a	Ending cal 5

MS Volatiles

Raw Data

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-08-2020\VZ2409\
 Data File : Z62087.d
 Acq On : 4 Sep 2020 1:12 pm
 Operator : shanicao
 Sample : FA78442-1
 Misc : MS47147,VZ2409,,,,,
 ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 08 01:15:57 2020
 Quant Method : C:\msdchem\1\methods\SIMCL090320.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Fri Sep 04 11:36:05 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Fluorobenzene	7.401	96	1826748	5.00	ppb	0.00
18) Chlorobenzene-d5	10.511	117	1363212	5.00	ppb	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.130	65	697870	5.90	ppb	0.00
Spiked Amount	5.000	Range 79 - 125	Recovery	=	118.00%	
19) Toluene-d8	8.961	98	1702745	5.02	ppb	0.00
Spiked Amount	5.000	Range 70 - 130	Recovery	=	100.40%	
Target Compounds						
21) Tetrachloroethene	9.399	166	51712	0.34	ppb	Qvalue 99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

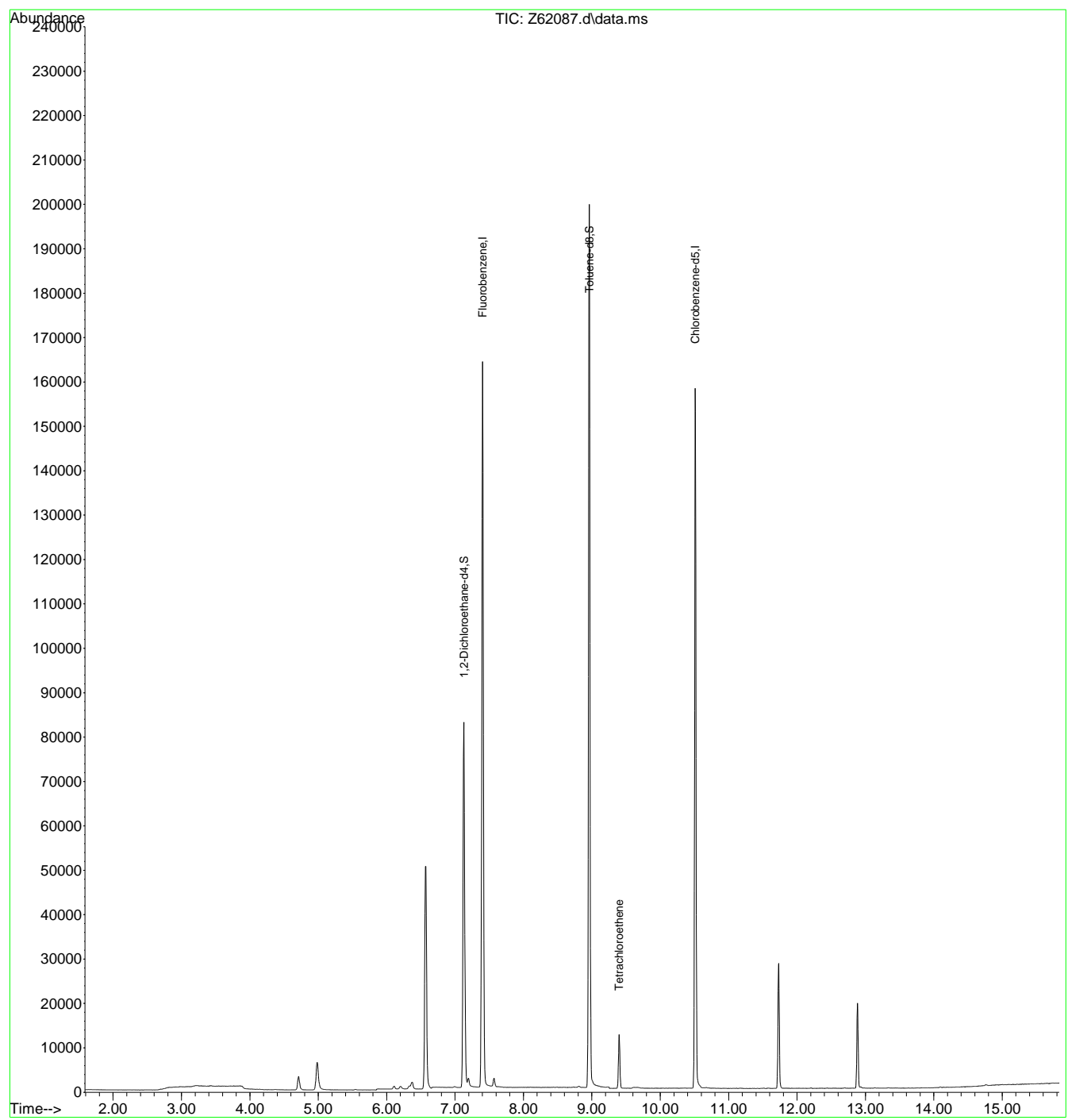
7.1.1
7



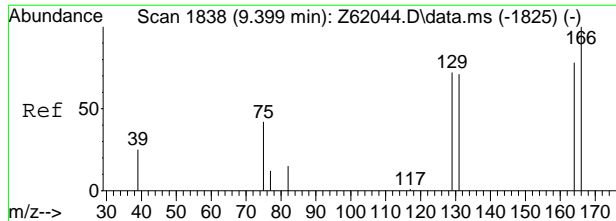
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-08-2020\VZ2409\
Data File : Z62087.d
Acq On : 4 Sep 2020 1:12 pm
Operator : shanicao
Sample : FA78442-1
Misc : MS47147,VZ2409,,,,,
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 08 01:15:57 2020
Quant Method : C:\msdchem\1\methods\SIMCL090320.M
Quant Title : WATER-EPA 8260B
QLast Update : Fri Sep 04 11:36:05 2020
Response via : Initial Calibration



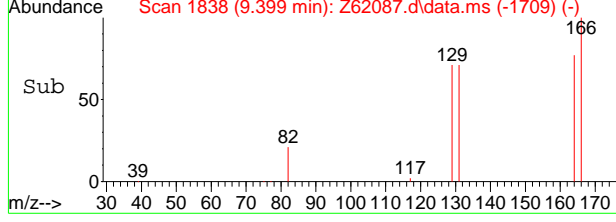
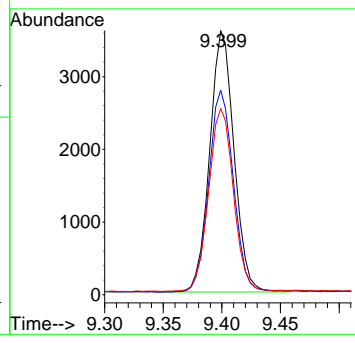
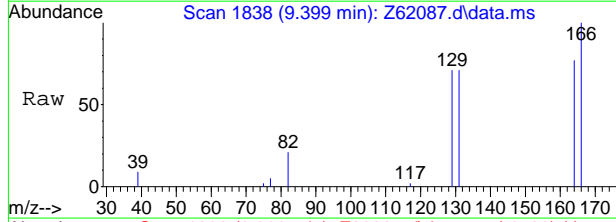
7.1.1
7



#21
 Tetrachloroethene
 Concen: 0.34 ppb
 RT: 9.399 min Scan# 1838
 Delta R.T. -0.000 min
 Lab File: Z62087.d
 Acq: 4 Sep 2020 1:12 pm

Tgt Ion:166 Resp: 51712

Ion	Ratio	Lower	Upper
166	100		
164	77.1	58.4	98.4
131	69.9	50.7	90.7



7.1.1
7



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-08-2020\VZ2409\
Data File : Z62088.d
Acq On : 4 Sep 2020 1:32 pm
Operator : shanicao
Sample : FA78442-2
Misc : MS47147,VZ2409,,,,,
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Sep 08 01:16:20 2020
Quant Method : C:\msdchem\1\methods\SIMCL090320.M
Quant Title : WATER-EPA 8260B
QLast Update : Fri Sep 04 11:36:05 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	

Internal Standards							
1) Fluorobenzene	7.401	96	1838941	5.00	ppb	0.00	
18) Chlorobenzene-d5	10.515	117	1380575	5.00	ppb	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.130	65	700657	5.88	ppb	0.00	
Spiked Amount	5.000	Range	79 - 125	Recovery	=	117.60%	
19) Toluene-d8	8.961	98	1710091	4.98	ppb	0.00	
Spiked Amount	5.000	Range	70 - 130	Recovery	=	99.60%	
Target Compounds							
2) Vinyl Chloride	2.850	62	1228545	7.51	ppb	99	Qvalue
7) 1,1-Dichloroethane	5.546	63	1024247	3.87	ppb	#	100
8) cis-1,2-Dichloroethene	6.110	96	315936	2.00	ppb		92
14) 1,2-Dichloroethane	7.198	62	177940	0.91	ppb		98
15) Trichloroethene	7.571	95	85865	0.51	ppb		94
16) 1,2-Dichloropropane	8.105	63	27265	0.20	ppb		92
21) Tetrachloroethene	9.399	166	407374	2.58	ppb		99

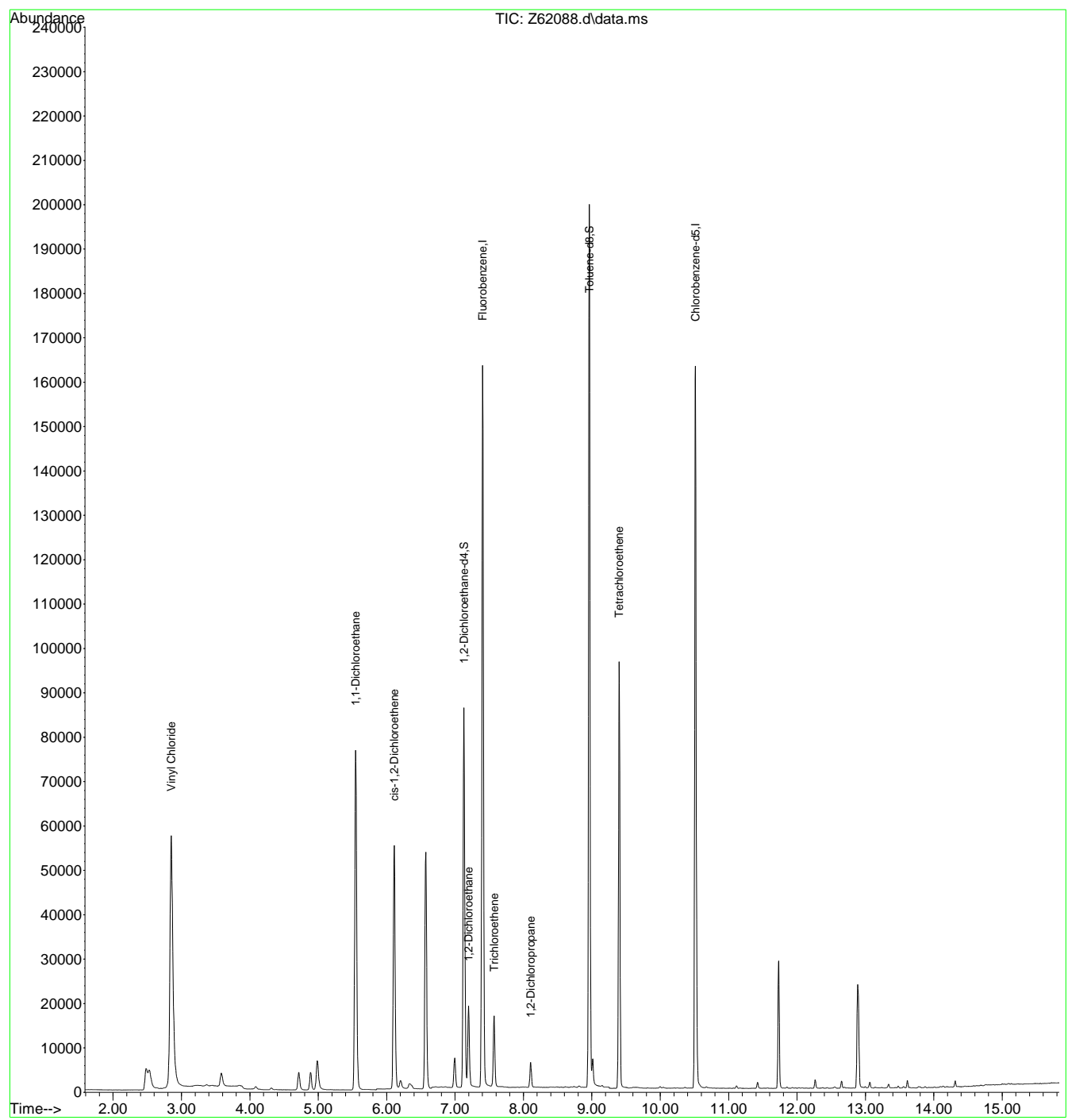
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.12
7

Quantitation Report (QT Reviewed)

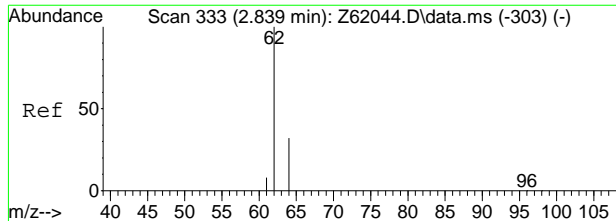
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Data File : Z62088.d
Acq On : 4 Sep 2020 1:32 pm
Operator : shanicao
Sample : FA78442-2
Misc : MS47147,VZ2409,,,,,
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Sep 08 01:16:20 2020
Quant Method : C:\msdchem\1\methods\SIMCL090320.M
Quant Title : WATER-EPA 8260B
QLast Update : Fri Sep 04 11:36:05 2020
Response via : Initial Calibration



7.1.2
7

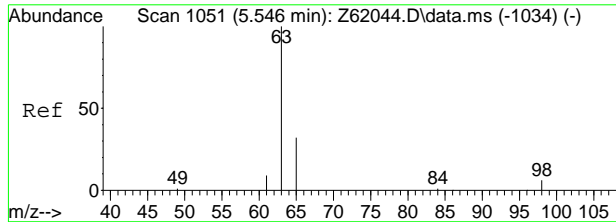
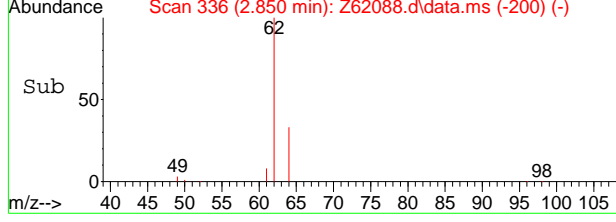
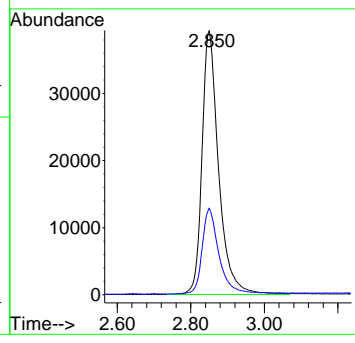
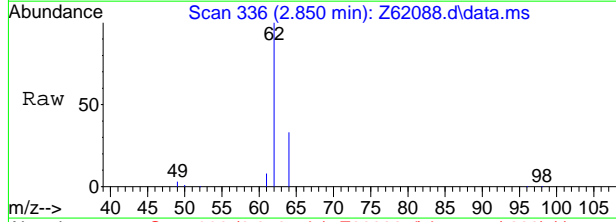




#2
 Vinyl Chloride
 Concen: 7.51 ppb
 RT: 2.850 min Scan# 336
 Delta R.T. 0.011 min
 Lab File: Z62088.d
 Acq: 4 Sep 2020 1:32 pm

Tgt Ion: 62 Resp: 1228545

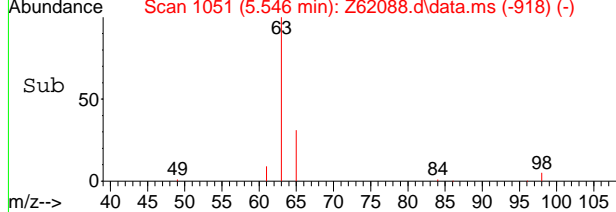
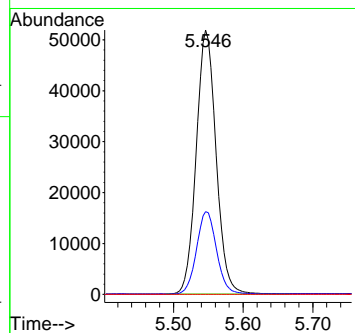
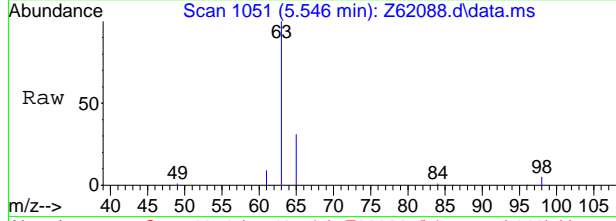
Ion	Ratio	Lower	Upper
62	100		
64	32.6	11.9	51.9



#7
 1,1-Dichloroethane
 Concen: 3.87 ppb
 RT: 5.546 min Scan# 1051
 Delta R.T. 0.000 min
 Lab File: Z62088.d
 Acq: 4 Sep 2020 1:32 pm

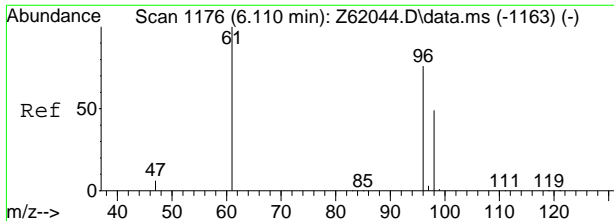
Tgt Ion: 63 Resp: 1024247

Ion	Ratio	Lower	Upper
63	100		
65	31.6	11.5	51.5
83	0.0	0.0	30.0



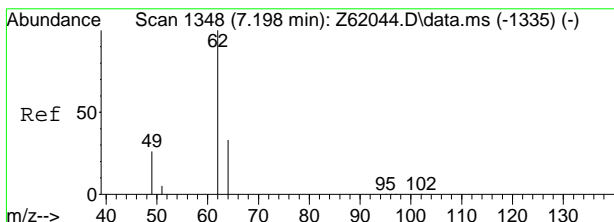
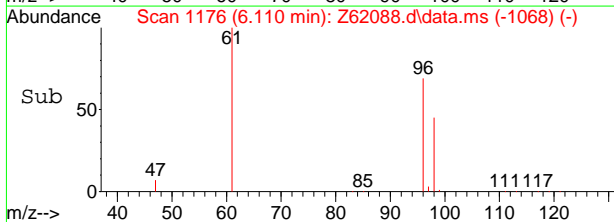
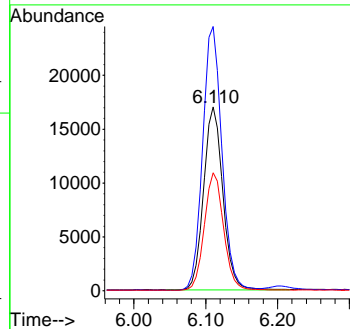
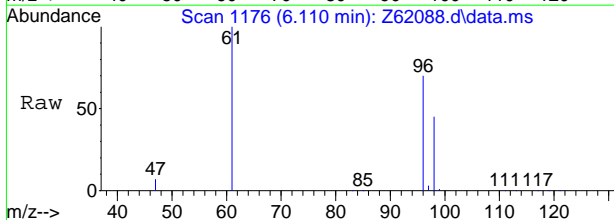
7.12
7





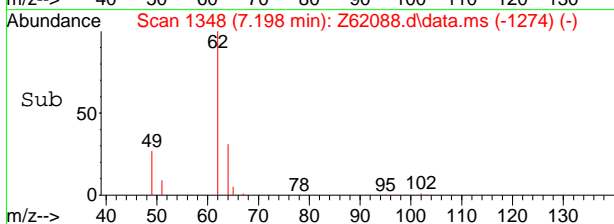
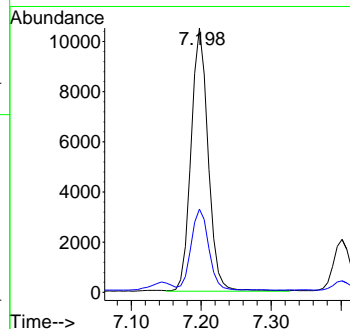
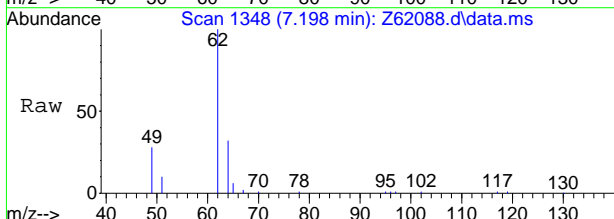
#8
 cis-1,2-Dichloroethene
 Concen: 2.00 ppb
 RT: 6.110 min Scan# 1176
 Delta R.T. 0.000 min
 Lab File: Z62088.d
 Acq: 4 Sep 2020 1:32 pm

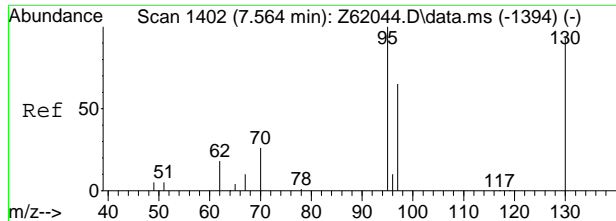
Tgt Ion	Resp	Lower	Upper
96	315936		
96	100		
61	144.2	111.3	151.3
98	64.2	44.6	84.6



#14
 1,2-Dichloroethane
 Concen: 0.91 ppb
 RT: 7.198 min Scan# 1348
 Delta R.T. -0.000 min
 Lab File: Z62088.d
 Acq: 4 Sep 2020 1:32 pm

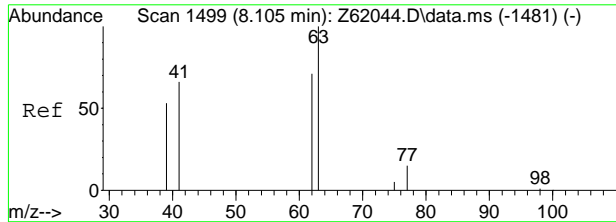
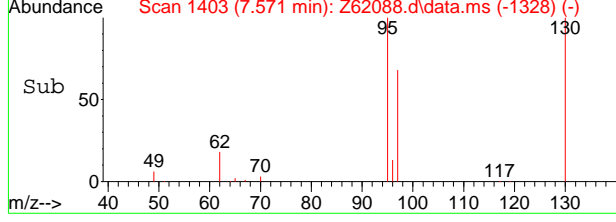
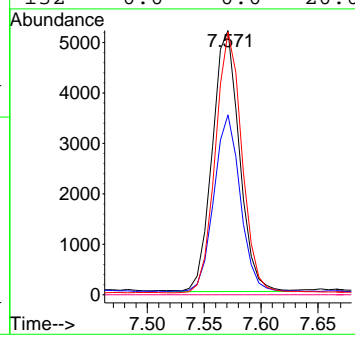
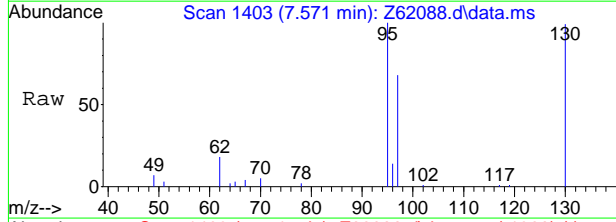
Tgt Ion	Resp	Lower	Upper
62	177940		
62	100		
64	31.3	12.3	52.3





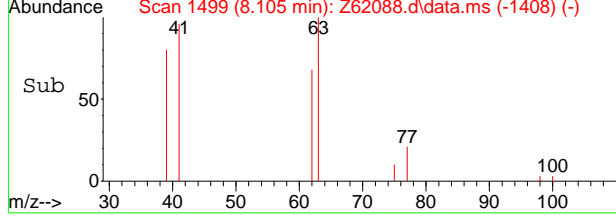
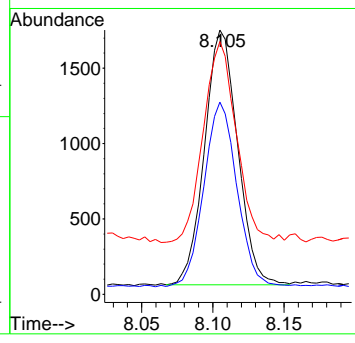
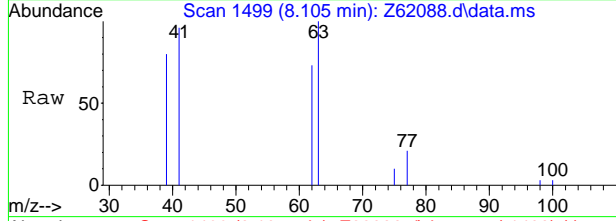
#15
 Trichloroethene
 Concen: 0.51 ppb
 RT: 7.571 min Scan# 1403
 Delta R.T. 0.007 min
 Lab File: Z62088.d
 Acq: 4 Sep 2020 1:32 pm

Tgt Ion	Resp	Lower	Upper
95	85865		
97	67.8	45.0	85.0
130	100.1	72.6	112.6
132	0.0	0.0	20.0



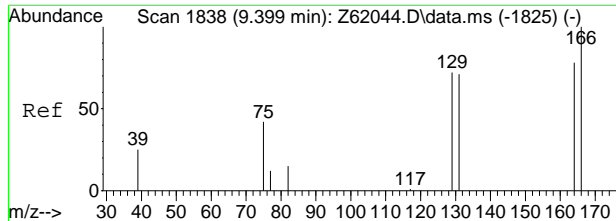
#16
 1,2-Dichloropropane
 Concen: 0.20 ppb
 RT: 8.105 min Scan# 1499
 Delta R.T. -0.000 min
 Lab File: Z62088.d
 Acq: 4 Sep 2020 1:32 pm

Tgt Ion	Resp	Lower	Upper
63	27265		
62	73.0	51.3	91.3
41	77.9	36.8	96.8



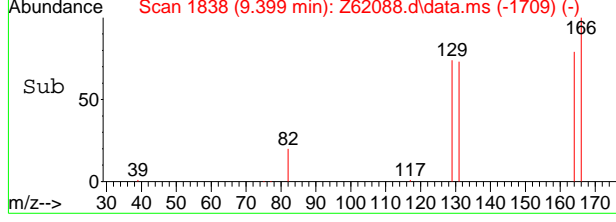
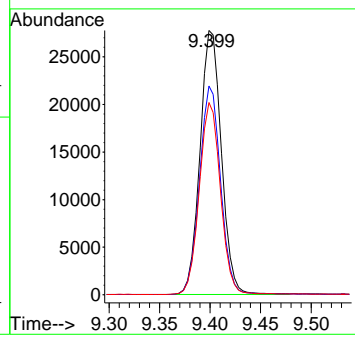
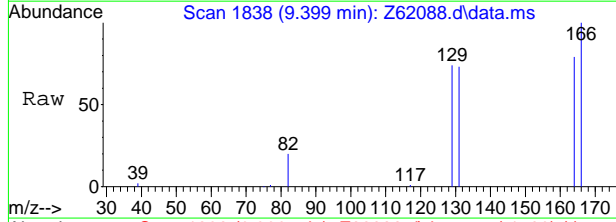
7.12
7





#21
 Tetrachloroethene
 Concen: 2.58 ppb
 RT: 9.399 min Scan# 1838
 Delta R.T. -0.000 min
 Lab File: Z62088.d
 Acq: 4 Sep 2020 1:32 pm

Tgt Ion	Ratio	Lower	Upper
166	100		
164	78.9	58.4	98.4
131	72.6	50.7	90.7



7.1.2
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-08-2020\VZ2409\
Data File : Z62089.d
Acq On : 4 Sep 2020 1:51 pm
Operator : shanicao
Sample : FA78442-3
Misc : MS47147,VZ2409,,,,,
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 08 01:16:57 2020
Quant Method : C:\msdchem\1\methods\SIMCL090320.M
Quant Title : WATER-EPA 8260B
QLast Update : Fri Sep 04 11:36:05 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Fluorobenzene	7.401	96	1837994	5.00	ppb	0.00
18) Chlorobenzene-d5	10.511	117	1379031	5.00	ppb	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.130	65	709486	5.96	ppb	0.00
Spiked Amount	5.000	Range	79 - 125	Recovery	=	119.20%
19) Toluene-d8	8.961	98	1711296	4.99	ppb	0.00
Spiked Amount	5.000	Range	70 - 130	Recovery	=	99.80%
Target Compounds						
8) cis-1,2-Dichloroethene	6.110	96	317309	2.01	ppb	93
9) Chloroform	6.377	83	91713	0.31	ppb	100
15) Trichloroethene	7.571	95	1183278	6.97	ppb	94
21) Tetrachloroethene	9.399	166	249660	1.59	ppb	98

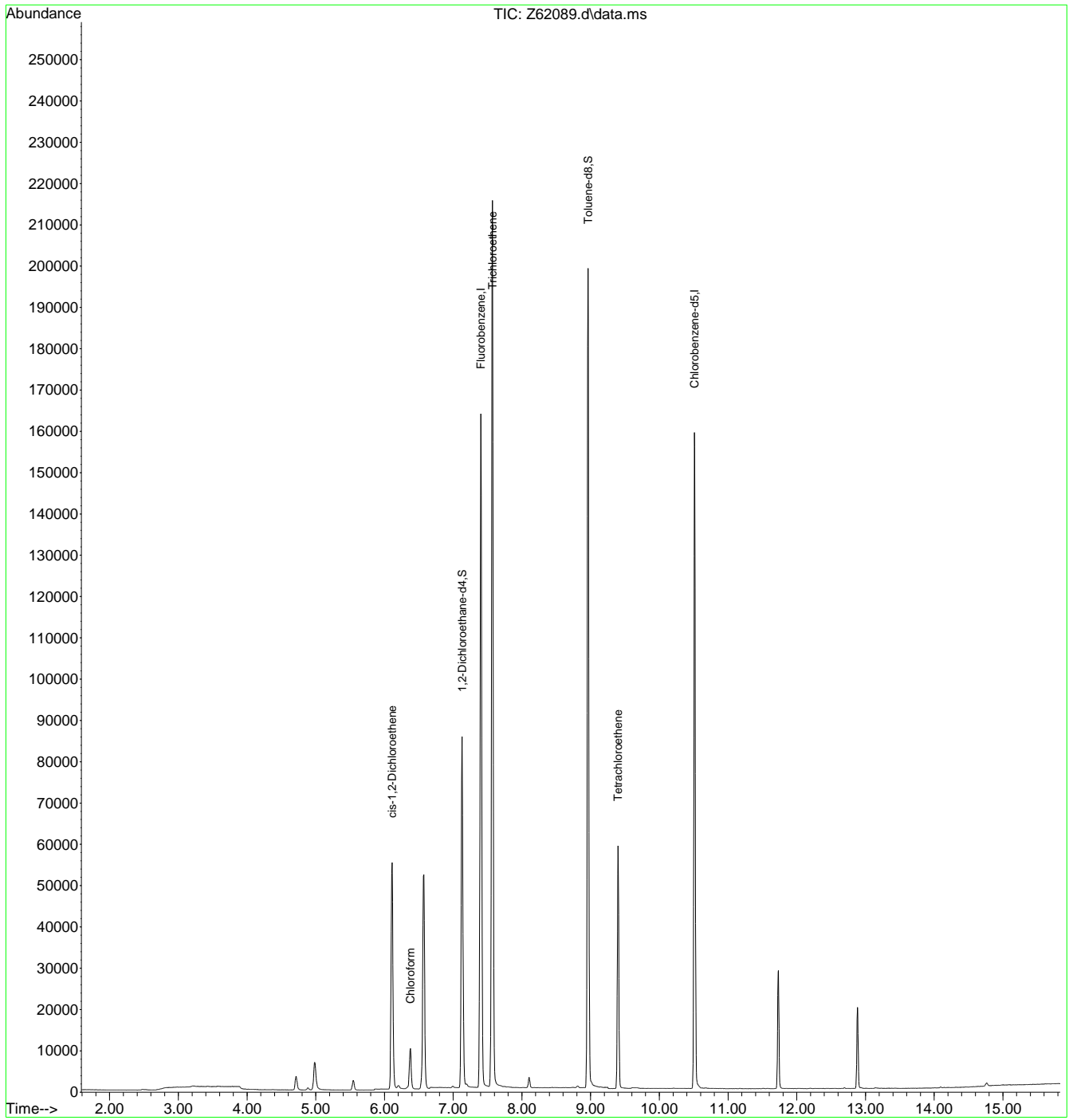
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.1.3
7

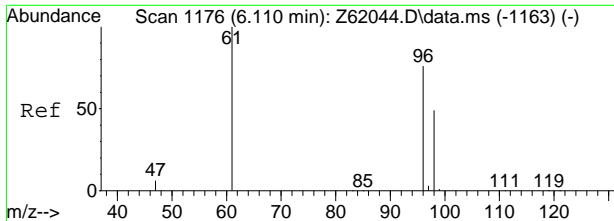
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-08-2020\VZ2409\
Data File : Z62089.d
Acq On : 4 Sep 2020 1:51 pm
Operator : shanicao
Sample : FA78442-3
Misc : MS47147,VZ2409,,,,,
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 08 01:16:57 2020
Quant Method : C:\msdchem\1\methods\SIMCL090320.M
Quant Title : WATER-EPA 8260B
QLast Update : Fri Sep 04 11:36:05 2020
Response via : Initial Calibration

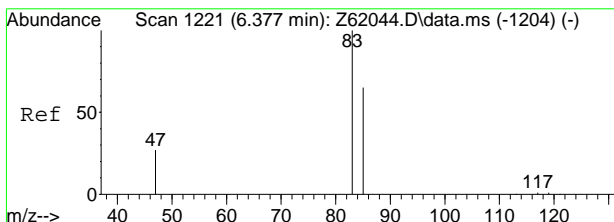
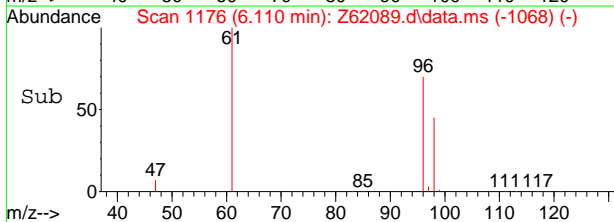
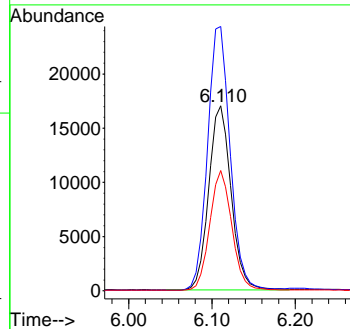
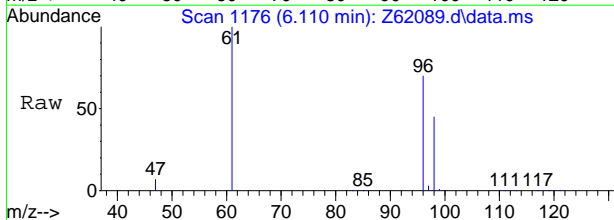


7.1.3
7



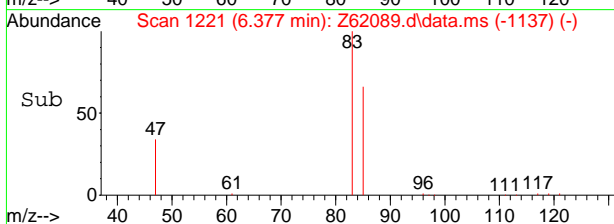
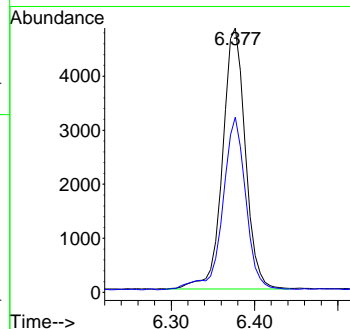
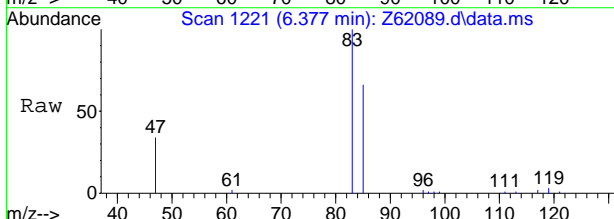
#8
 cis-1,2-Dichloroethene
 Concen: 2.01 ppb
 RT: 6.110 min Scan# 1176
 Delta R.T. 0.000 min
 Lab File: Z62089.d
 Acq: 4 Sep 2020 1:51 pm

Tgt Ion	Resp	Lower	Upper
96	317309		
96	100		
61	143.2	111.3	151.3
98	64.9	44.6	84.6



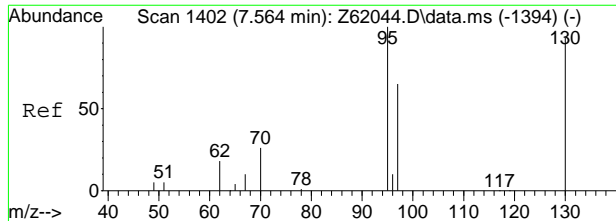
#9
 Chloroform
 Concen: 0.31 ppb
 RT: 6.377 min Scan# 1221
 Delta R.T. 0.000 min
 Lab File: Z62089.d
 Acq: 4 Sep 2020 1:51 pm

Tgt Ion	Resp	Lower	Upper
83	91713		
83	100		
85	66.6	46.4	86.4



7.1.3
7

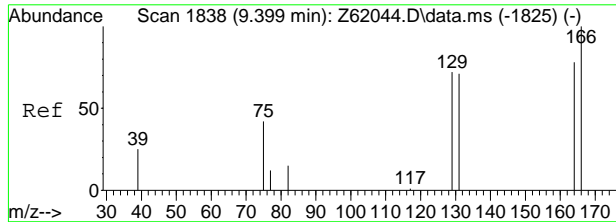
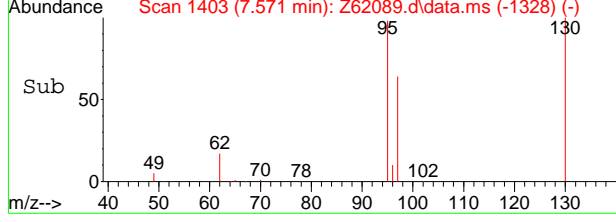
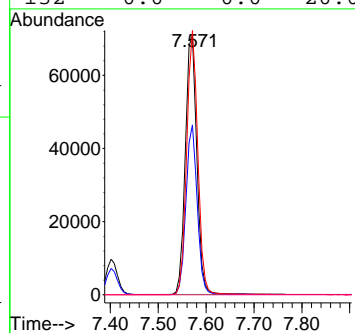
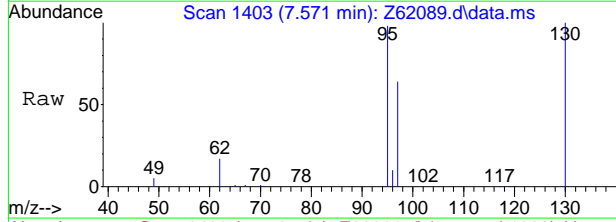




#15
 Trichloroethene
 Concen: 6.97 ppb
 RT: 7.571 min Scan# 1403
 Delta R.T. 0.007 min
 Lab File: Z62089.d
 Acq: 4 Sep 2020 1:51 pm

Tgt Ion: 95 Resp: 1183278

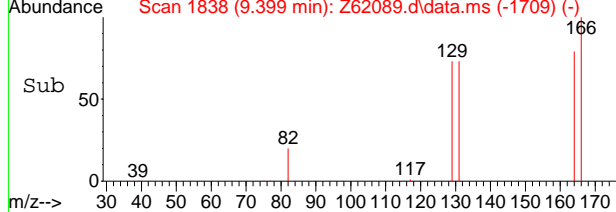
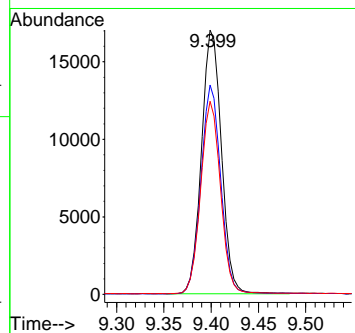
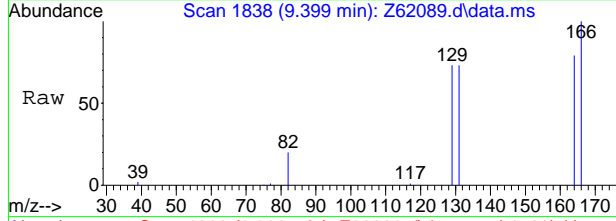
Ion	Ratio	Lower	Upper
95	100		
97	65.4	45.0	85.0
130	102.0	72.6	112.6
132	0.0	0.0	20.0



#21
 Tetrachloroethene
 Concen: 1.59 ppb
 RT: 9.399 min Scan# 1838
 Delta R.T. -0.000 min
 Lab File: Z62089.d
 Acq: 4 Sep 2020 1:51 pm

Tgt Ion: 166 Resp: 249660

Ion	Ratio	Lower	Upper
166	100		
164	79.1	58.4	98.4
131	72.9	50.7	90.7



7.1.3
7



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-08-2020\VZ2409\
Data File : Z62092.d
Acq On : 4 Sep 2020 2:51 pm
Operator : shanicao
Sample : FA78442-4
Misc : MS47147,VZ2409,,,,,
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Sep 08 01:17:51 2020
Quant Method : C:\msdchem\1\methods\SIMCL090320.M
Quant Title : WATER-EPA 8260B
QLast Update : Fri Sep 04 11:36:05 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	

Internal Standards							
1) Fluorobenzene	7.401	96	1825157	5.00	ppb	0.00	
18) Chlorobenzene-d5	10.511	117	1358812	5.00	ppb	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.130	65	700910	5.93	ppb	0.00	
Spiked Amount	5.000	Range	79 - 125	Recovery	=	118.60%	
19) Toluene-d8	8.961	98	1696241	5.02	ppb	0.00	
Spiked Amount	5.000	Range	70 - 130	Recovery	=	100.40%	
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.854	62	832138	5.20	ppb		100
5) Methylene Chloride	4.713	84	33353	0.21	ppb		94
7) 1,1-Dichloroethane	5.543	63	721132	2.75	ppb	#	100
8) cis-1,2-Dichloroethene	6.110	96	158488	1.01	ppb		92
12) Benzene	6.994	78	132206	0.25	ppb		97
14) 1,2-Dichloroethane	7.198	62	99162	0.51	ppb		98
21) Tetrachloroethene	9.399	166	298787	1.93	ppb		99

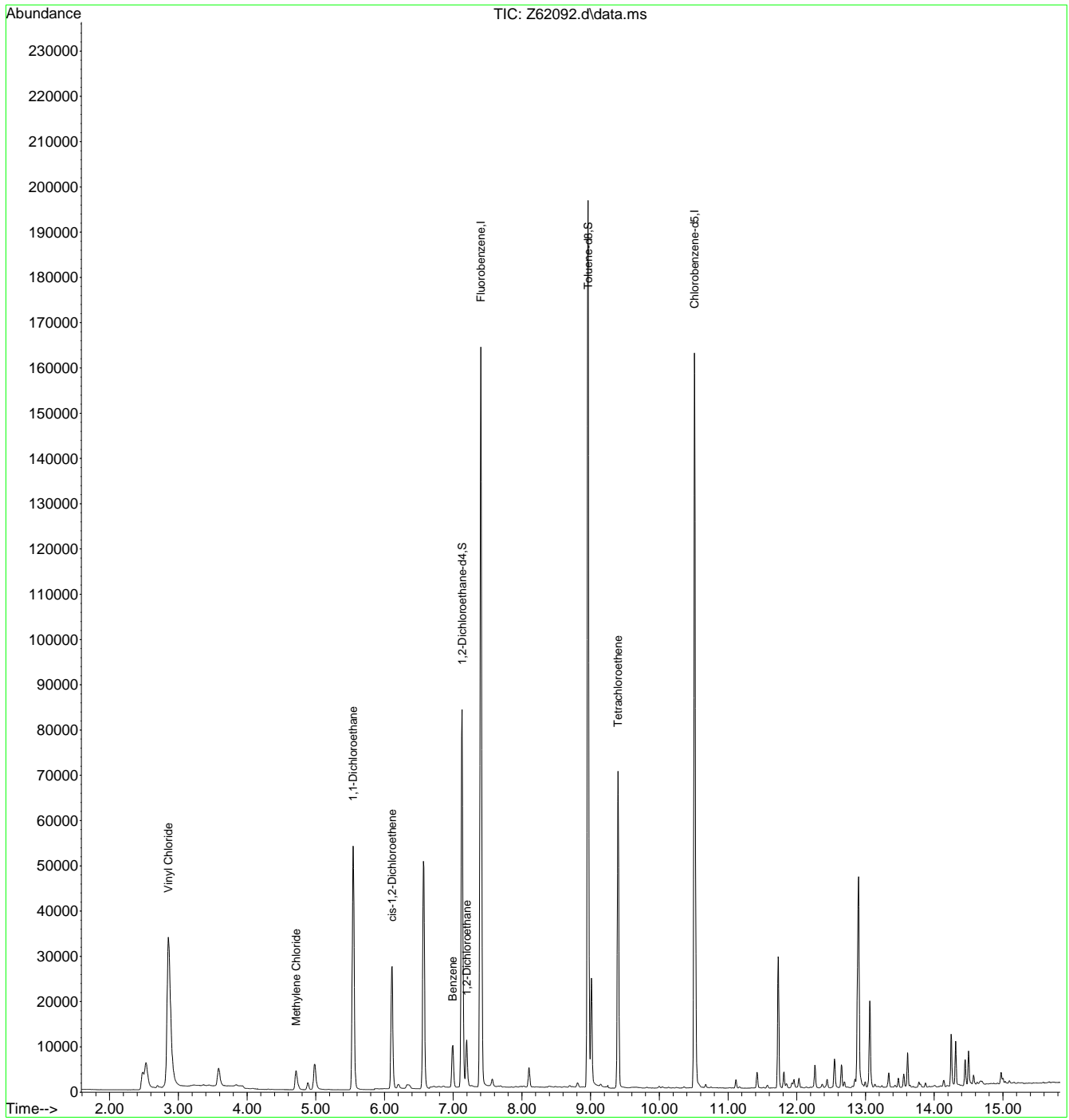
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.14
7

Quantitation Report (QT Reviewed)

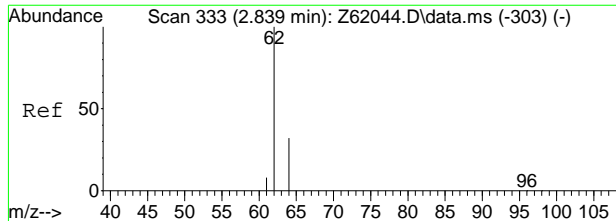
Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-08-2020\VZ2409\
Data File : Z62092.d
Acq On : 4 Sep 2020 2:51 pm
Operator : shanicao
Sample : FA78442-4
Misc : MS47147,VZ2409,,,,,
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Sep 08 01:17:51 2020
Quant Method : C:\msdchem\1\methods\SIMCL090320.M
Quant Title : WATER-EPA 8260B
QLast Update : Fri Sep 04 11:36:05 2020
Response via : Initial Calibration



7.1.4
7

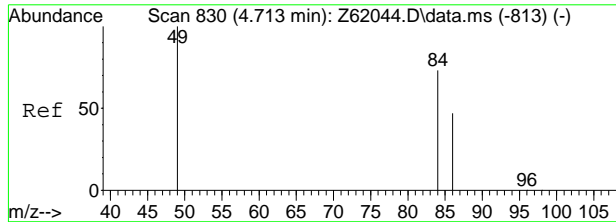
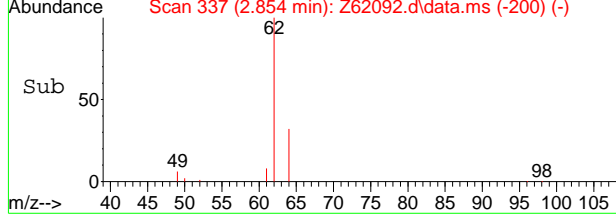
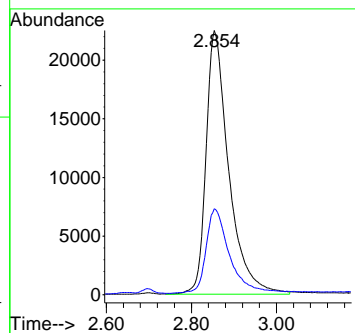
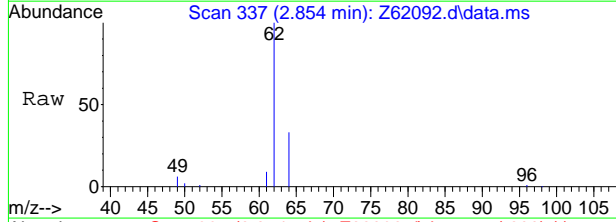




#2
 Vinyl Chloride
 Concen: 5.20 ppb
 RT: 2.854 min Scan# 337
 Delta R.T. 0.015 min
 Lab File: Z62092.d
 Acq: 4 Sep 2020 2:51 pm

Tgt Ion: 62 Resp: 832138

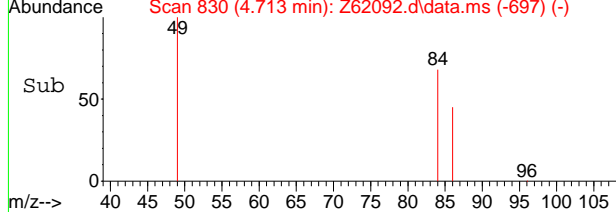
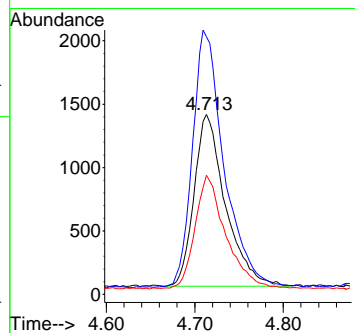
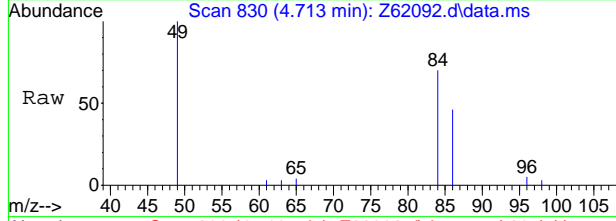
Ion	Ratio	Lower	Upper
62	100		
64	32.1	11.9	51.9



#5
 Methylene Chloride
 Concen: 0.21 ppb
 RT: 4.713 min Scan# 830
 Delta R.T. 0.000 min
 Lab File: Z62092.d
 Acq: 4 Sep 2020 2:51 pm

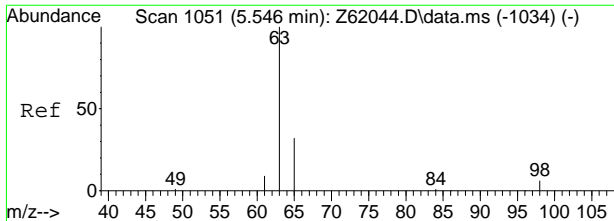
Tgt Ion: 84 Resp: 33353

Ion	Ratio	Lower	Upper
84	100		
49	145.2	116.6	156.6
86	65.6	43.9	83.9



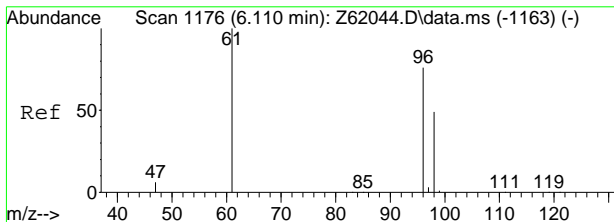
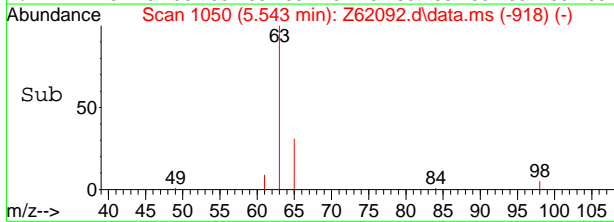
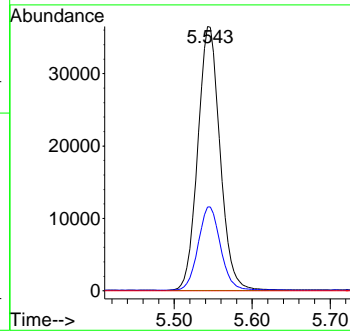
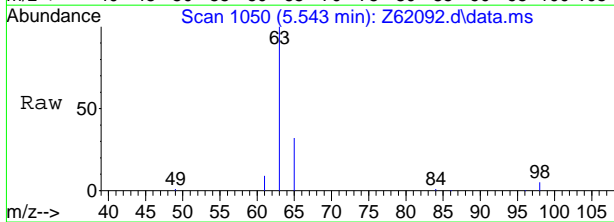
7.14
7





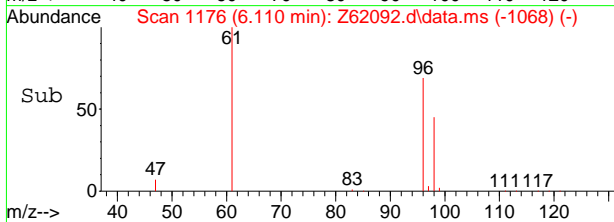
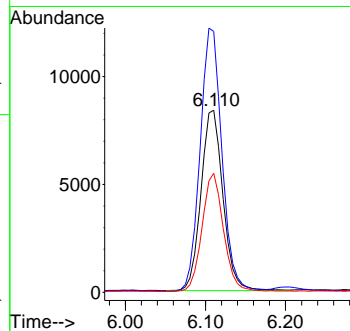
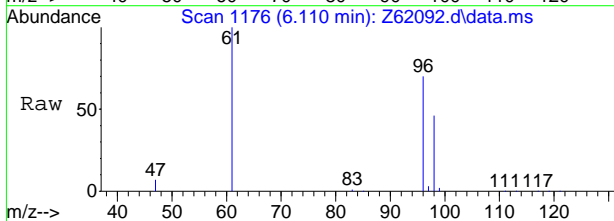
#7
 1,1-Dichloroethane
 Concen: 2.75 ppb
 RT: 5.543 min Scan# 1050
 Delta R.T. -0.003 min
 Lab File: Z62092.d
 Acq: 4 Sep 2020 2:51 pm

Tgt Ion	Resp	Lower	Upper
63	721132		
65	31.7	11.5	51.5
83	0.0	0.0	30.0

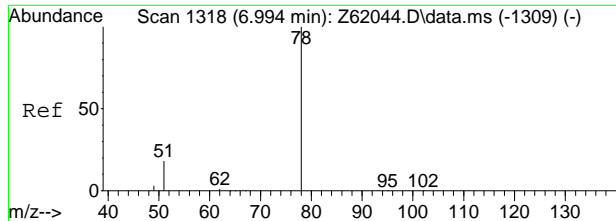


#8
 cis-1,2-Dichloroethene
 Concen: 1.01 ppb
 RT: 6.110 min Scan# 1176
 Delta R.T. 0.000 min
 Lab File: Z62092.d
 Acq: 4 Sep 2020 2:51 pm

Tgt Ion	Resp	Lower	Upper
96	158488		
61	144.1	111.3	151.3
98	65.3	44.6	84.6

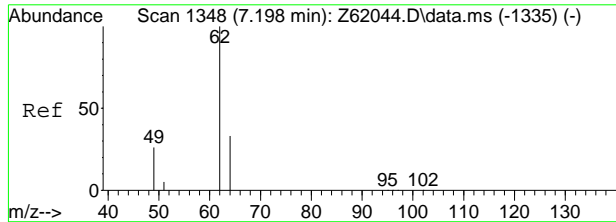
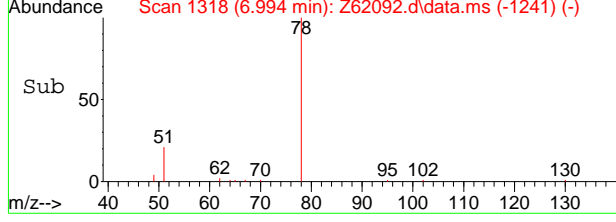
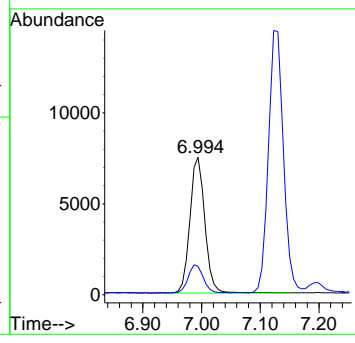
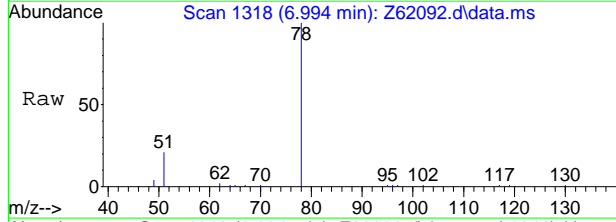


7.1.4
7



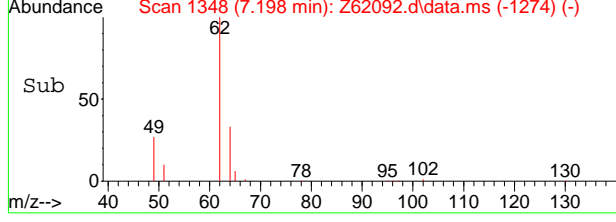
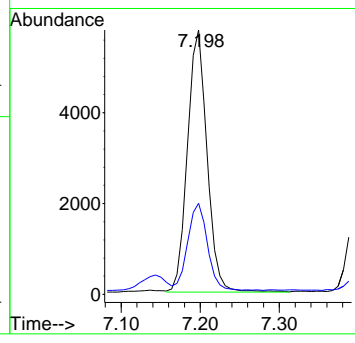
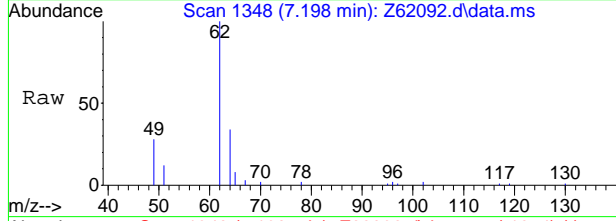
#12
 Benzene
 Concen: 0.25 ppb
 RT: 6.994 min Scan# 1318
 Delta R.T. 0.000 min
 Lab File: Z62092.d
 Acq: 4 Sep 2020 2:51 pm

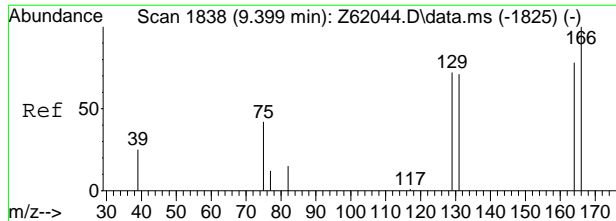
Tgt Ion	Resp	Lower	Upper
78	132206	100	
51	19.3	0.0	38.2



#14
 1,2-Dichloroethane
 Concen: 0.51 ppb
 RT: 7.198 min Scan# 1348
 Delta R.T. -0.000 min
 Lab File: Z62092.d
 Acq: 4 Sep 2020 2:51 pm

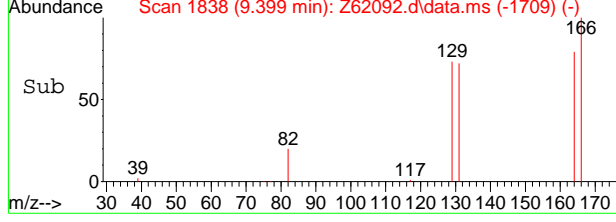
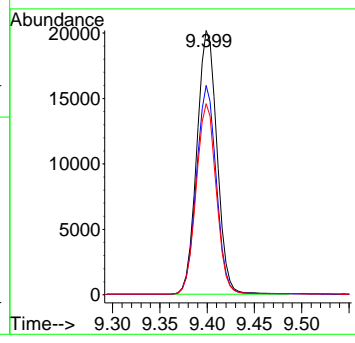
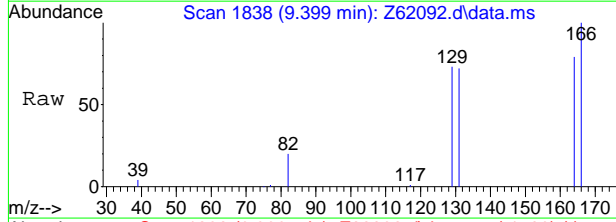
Tgt Ion	Resp	Lower	Upper
62	99162	100	
64	33.7	12.3	52.3





#21
 Tetrachloroethene
 Concen: 1.93 ppb
 RT: 9.399 min Scan# 1838
 Delta R.T. -0.000 min
 Lab File: Z62092.d
 Acq: 4 Sep 2020 2:51 pm

Tgt Ion	Ratio	Lower	Upper
166	100		
164	79.1	58.4	98.4
131	72.2	50.7	90.7



7.1.4
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-08-2020\VZ2409\
Data File : Z62093.d
Acq On : 4 Sep 2020 3:10 pm
Operator : shanicao
Sample : FA78442-5
Misc : MS47147,VZ2409,,,,,
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Sep 08 01:18:10 2020
Quant Method : C:\msdchem\1\methods\SIMCL090320.M
Quant Title : WATER-EPA 8260B
QLast Update : Fri Sep 04 11:36:05 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	

Internal Standards							
1) Fluorobenzene	7.401	96	1800530	5.00	ppb	0.00	
18) Chlorobenzene-d5	10.511	117	1346624	5.00	ppb	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.130	65	702592	6.02	ppb	0.00	
Spiked Amount	5.000	Range	79 - 125	Recovery	=	120.40%	
19) Toluene-d8	8.961	98	1663403	4.96	ppb	0.00	
Spiked Amount	5.000	Range	70 - 130	Recovery	=	99.20%	
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.846	62	851745	5.39	ppb		99
5) Methylene Chloride	4.713	84	31827	0.21	ppb		92
7) 1,1-Dichloroethane	5.546	63	699758	2.70	ppb	#	100
8) cis-1,2-Dichloroethene	6.110	96	153958	0.99	ppb		95
12) Benzene	6.994	78	125876	0.24	ppb		94
14) 1,2-Dichloroethane	7.198	62	96701	0.51	ppb		99
21) Tetrachloroethene	9.399	166	286592	1.87	ppb		98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

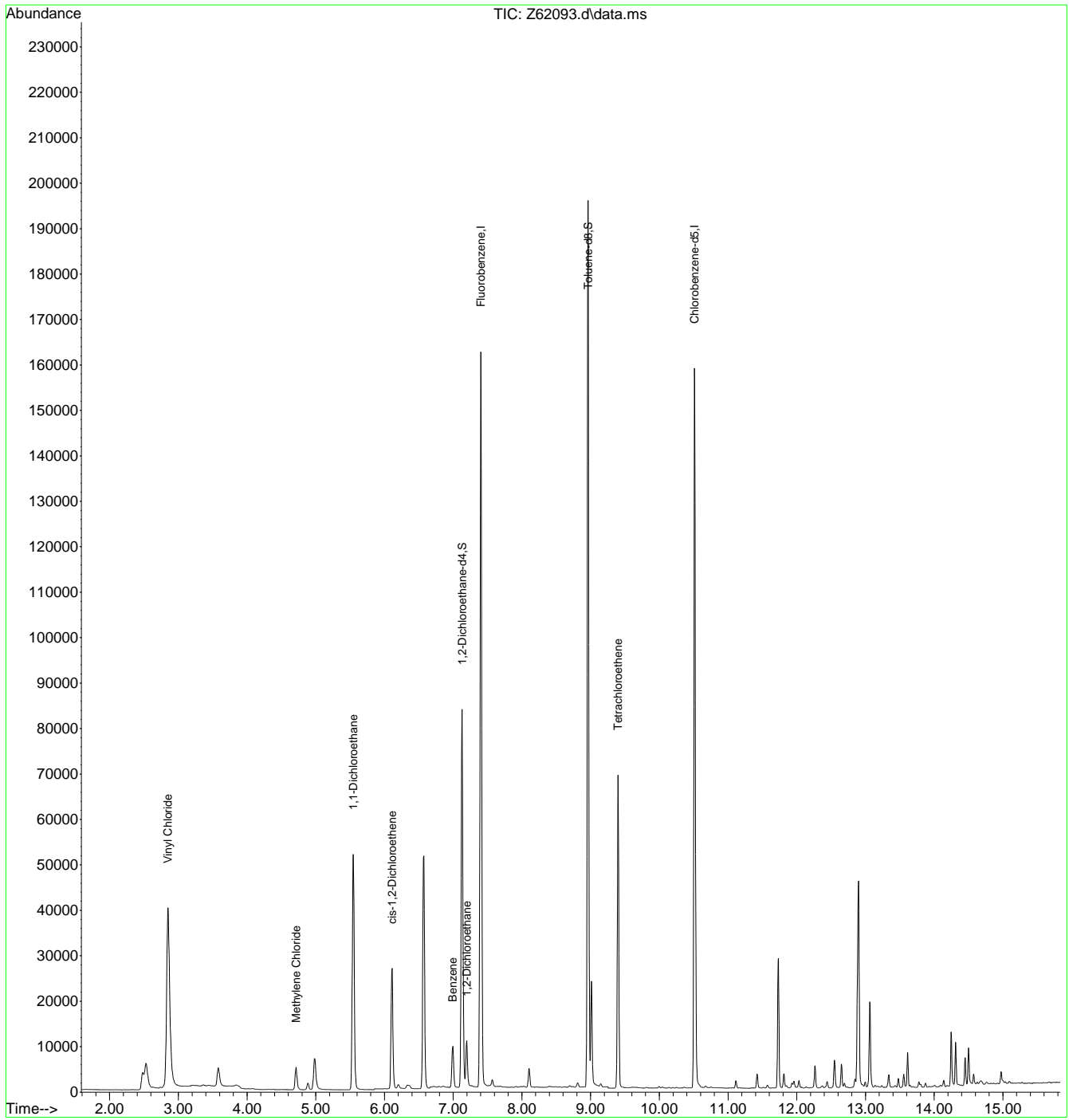
7.15
7



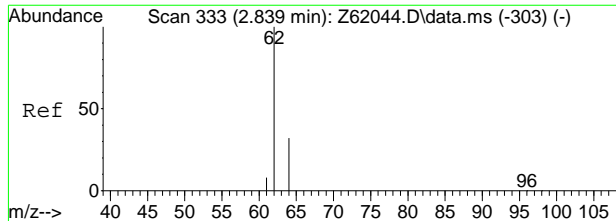
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-08-2020\VZ2409\
Data File : Z62093.d
Acq On : 4 Sep 2020 3:10 pm
Operator : shanicao
Sample : FA78442-5
Misc : MS47147,VZ2409,,,,,
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Sep 08 01:18:10 2020
Quant Method : C:\msdchem\1\methods\SIMCL090320.M
Quant Title : WATER-EPA 8260B
QLast Update : Fri Sep 04 11:36:05 2020
Response via : Initial Calibration



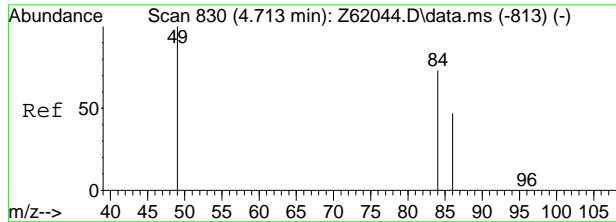
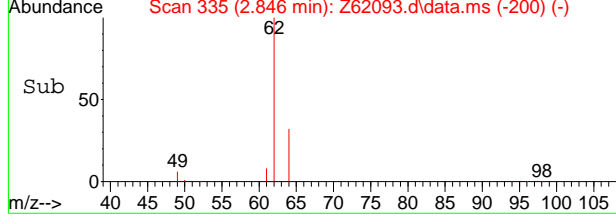
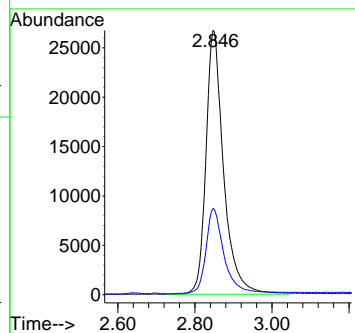
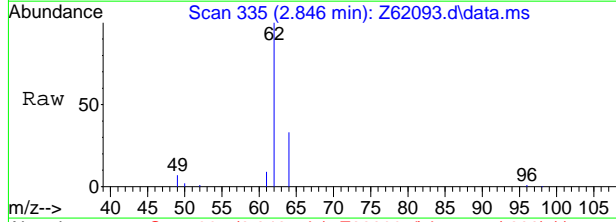
7.1.5
7



#2
 Vinyl Chloride
 Concen: 5.39 ppb
 RT: 2.846 min Scan# 335
 Delta R.T. 0.007 min
 Lab File: Z62093.d
 Acq: 4 Sep 2020 3:10 pm

Tgt Ion: 62 Resp: 851745

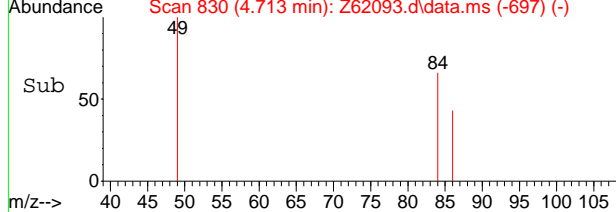
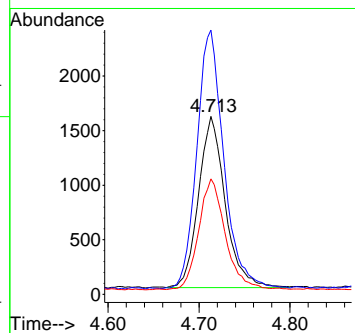
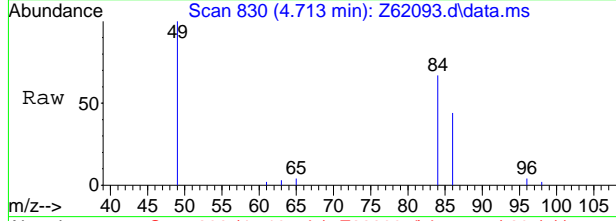
Ion	Ratio	Lower	Upper
62	100		
64	32.3	11.9	51.9



#5
 Methylene Chloride
 Concen: 0.21 ppb
 RT: 4.713 min Scan# 830
 Delta R.T. -0.000 min
 Lab File: Z62093.d
 Acq: 4 Sep 2020 3:10 pm

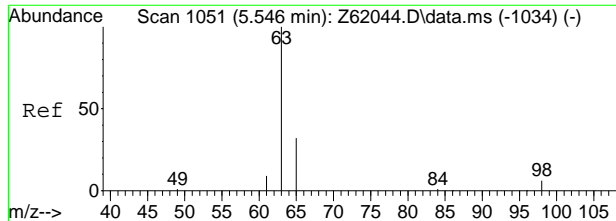
Tgt Ion: 84 Resp: 31827

Ion	Ratio	Lower	Upper
84	100		
49	150.7	116.6	156.6
86	64.6	43.9	83.9



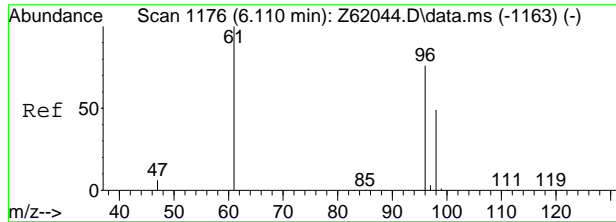
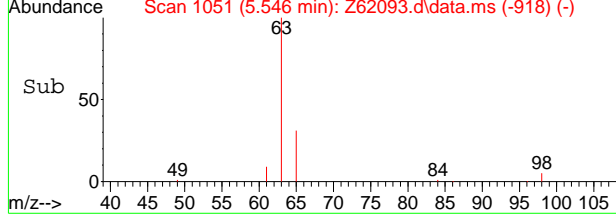
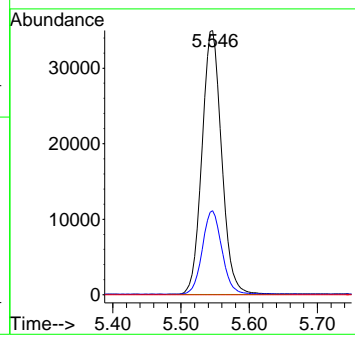
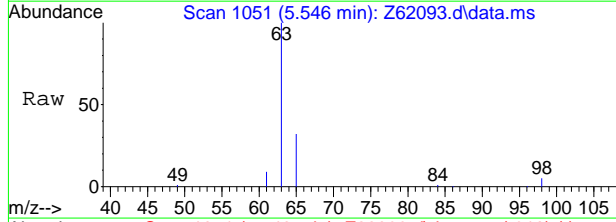
7.15
7





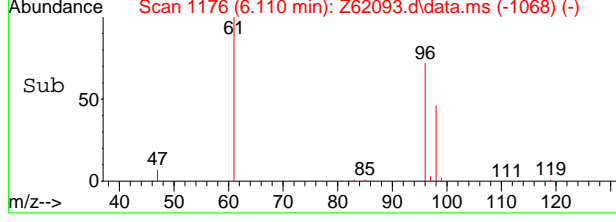
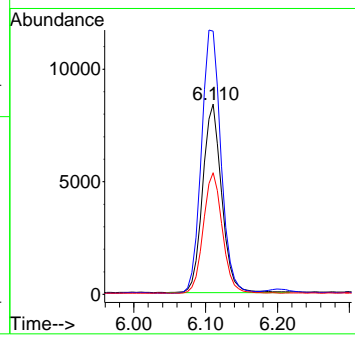
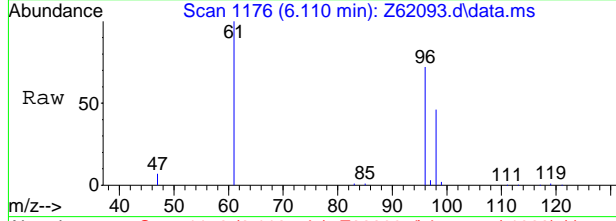
#7
 1,1-Dichloroethane
 Concen: 2.70 ppb
 RT: 5.546 min Scan# 1051
 Delta R.T. 0.000 min
 Lab File: Z62093.d
 Acq: 4 Sep 2020 3:10 pm

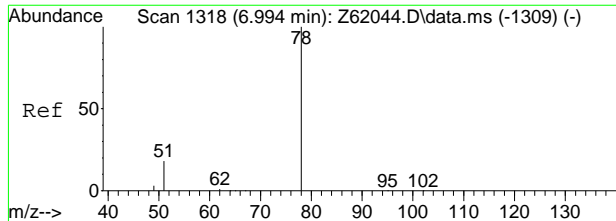
Tgt Ion	Resp	Lower	Upper
63	699758		
63	100		
65	31.5	11.5	51.5
83	0.0	0.0	30.0



#8
 cis-1,2-Dichloroethene
 Concen: 0.99 ppb
 RT: 6.110 min Scan# 1176
 Delta R.T. 0.000 min
 Lab File: Z62093.d
 Acq: 4 Sep 2020 3:10 pm

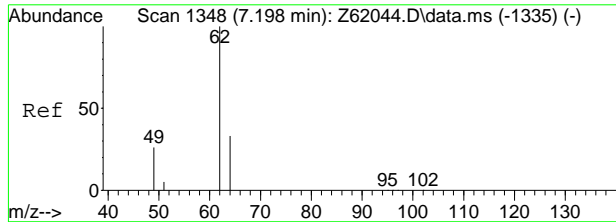
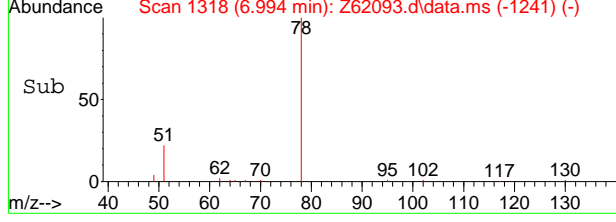
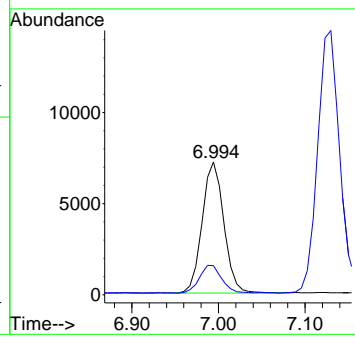
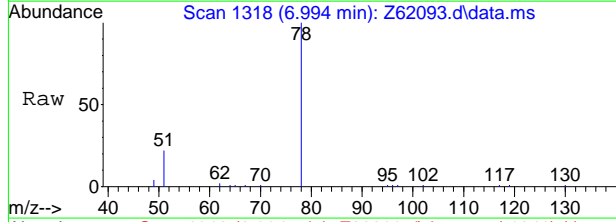
Tgt Ion	Resp	Lower	Upper
96	153958		
96	100		
61	138.9	111.3	151.3
98	63.8	44.6	84.6





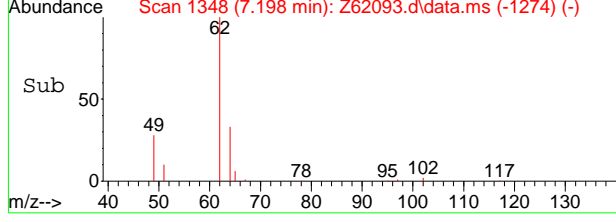
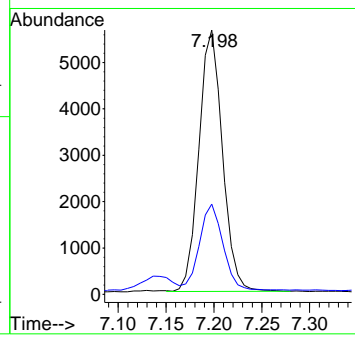
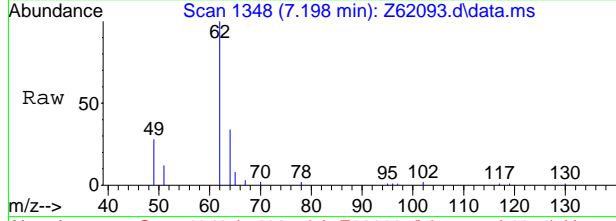
#12
Benzene
Concen: 0.24 ppb
RT: 6.994 min Scan# 1318
Delta R.T. 0.000 min
Lab File: Z62093.d
Acq: 4 Sep 2020 3:10 pm

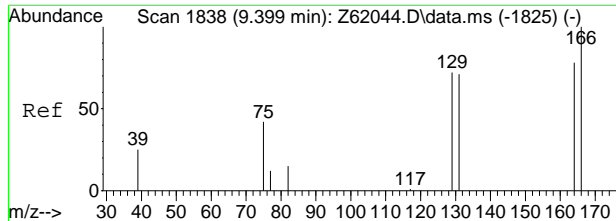
Tgt Ion	Resp	Lower	Upper
78	125876	100	
51	20.8	0.0	38.2



#14
1,2-Dichloroethane
Concen: 0.51 ppb
RT: 7.198 min Scan# 1348
Delta R.T. -0.000 min
Lab File: Z62093.d
Acq: 4 Sep 2020 3:10 pm

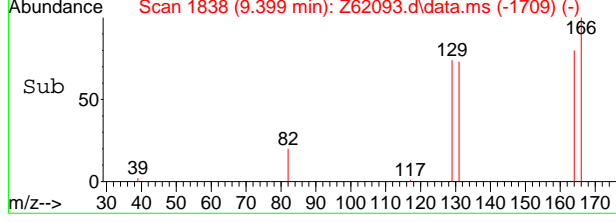
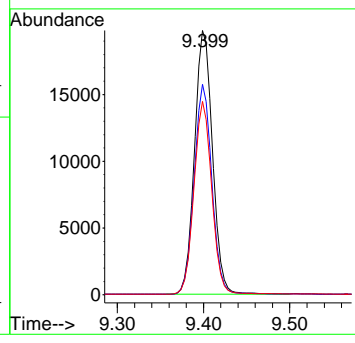
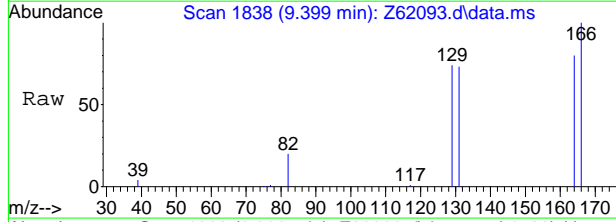
Tgt Ion	Resp	Lower	Upper
62	96701	100	
64	33.0	12.3	52.3





#21
 Tetrachloroethene
 Concen: 1.87 ppb
 RT: 9.399 min Scan# 1838
 Delta R.T. -0.000 min
 Lab File: Z62093.d
 Acq: 4 Sep 2020 3:10 pm

Tgt Ion	Resp	Ratio	Lower	Upper
166	286592	100		
164		79.6	58.4	98.4
131		73.1	50.7	90.7



7.1.5
7



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-08-2020\VZ2409\
Data File : Z62094.d
Acq On : 4 Sep 2020 3:30 pm
Operator : shanicao
Sample : FA78442-6
Misc : MS47147,VZ2409,,,,,
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Sep 08 01:18:31 2020
Quant Method : C:\msdchem\1\methods\SIMCL090320.M
Quant Title : WATER-EPA 8260B
QLast Update : Fri Sep 04 11:36:05 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Fluorobenzene	7.401	96	1764784	5.00	ppb	0.00
18) Chlorobenzene-d5	10.511	117	1319390	5.00	ppb	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.130	65	692732	6.06	ppb	0.00
Spiked Amount	5.000	Range	79 - 125	Recovery	=	121.20%
19) Toluene-d8	8.961	98	1637897	4.99	ppb	0.00
Spiked Amount	5.000	Range	70 - 130	Recovery	=	99.80%
Target Compounds						
7) 1,1-Dichloroethane	5.546	63	98106	0.39	ppb	99
15) Trichloroethene	7.571	95	44713	0.27	ppb	95
21) Tetrachloroethene	9.399	166	340946	2.27	ppb	98

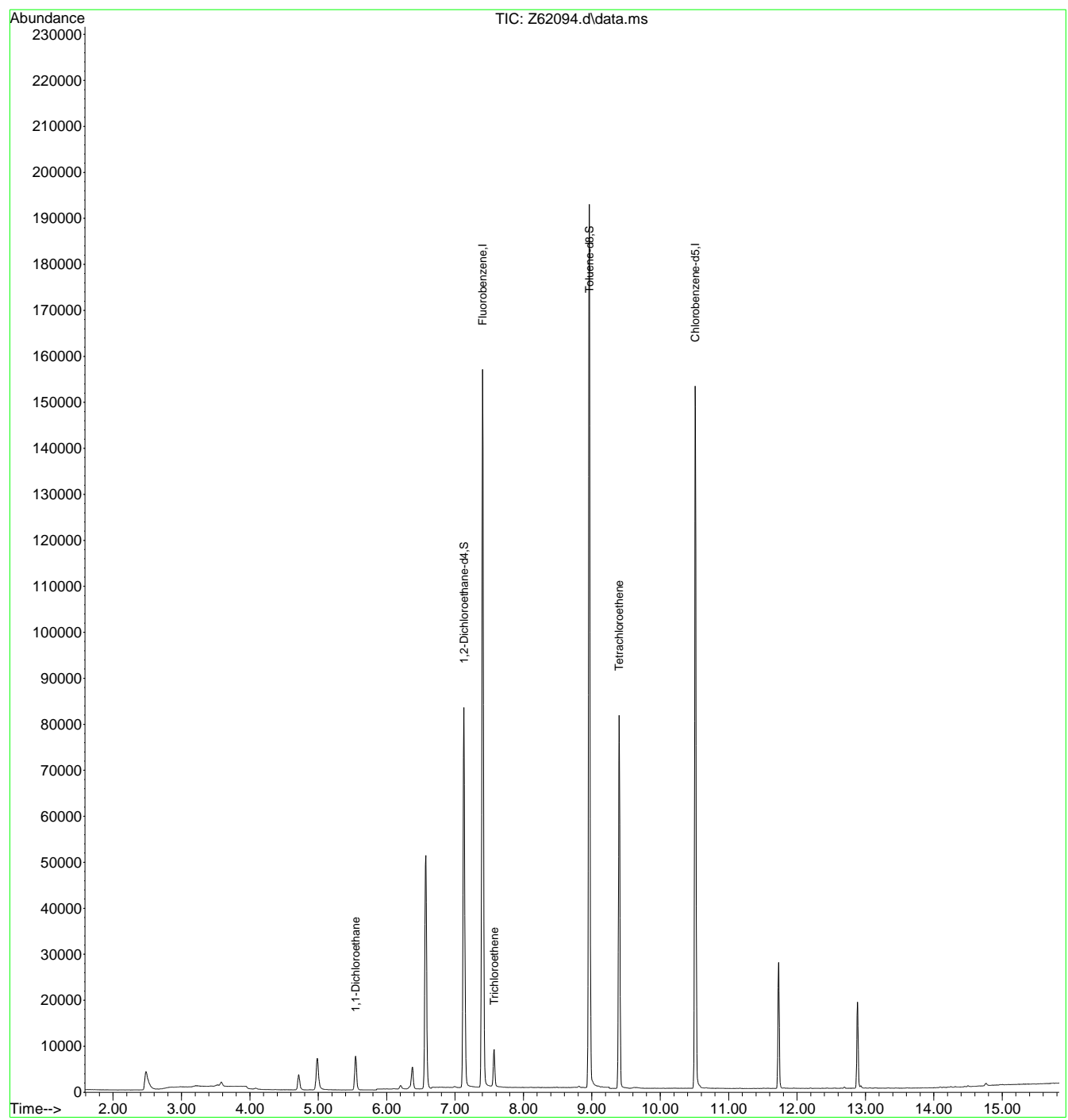
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.1.6
7

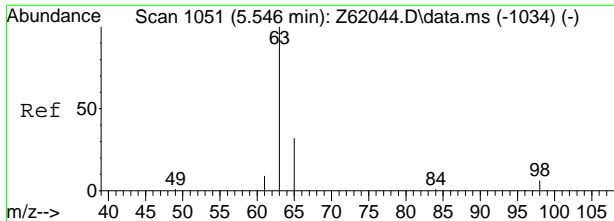
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-08-2020\VZ2409\
Data File : Z62094.d
Acq On : 4 Sep 2020 3:30 pm
Operator : shanicao
Sample : FA78442-6
Misc : MS47147,VZ2409,,,,,
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Sep 08 01:18:31 2020
Quant Method : C:\msdchem\1\methods\SIMCL090320.M
Quant Title : WATER-EPA 8260B
QLast Update : Fri Sep 04 11:36:05 2020
Response via : Initial Calibration

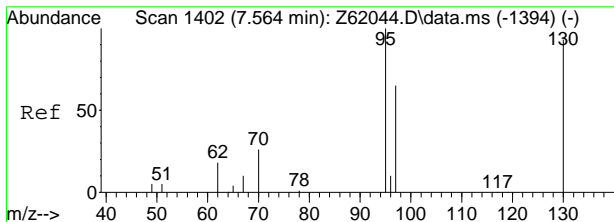
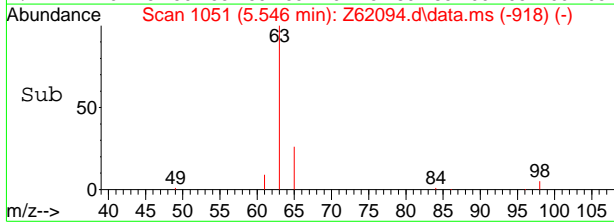
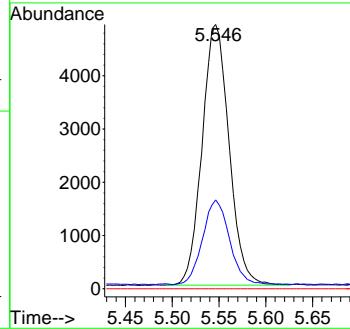
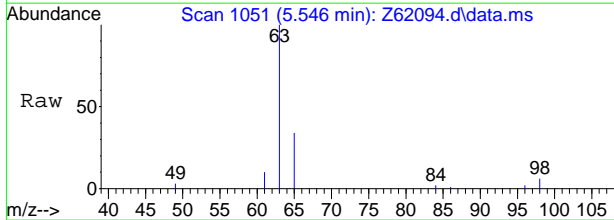


7.1.6
7



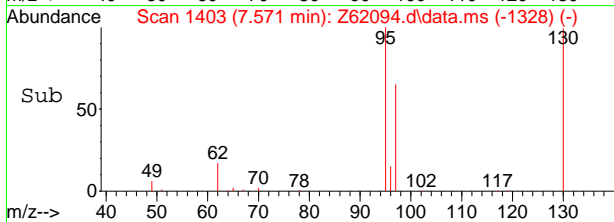
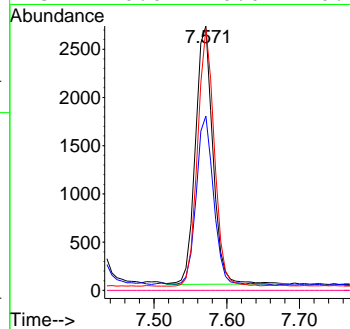
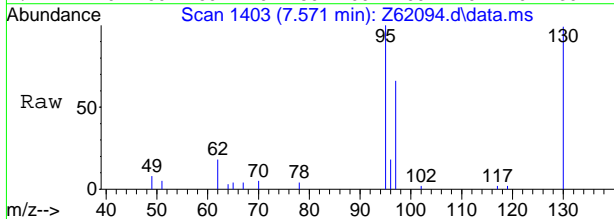
#7
 1,1-Dichloroethane
 Concen: 0.39 ppb
 RT: 5.546 min Scan# 1051
 Delta R.T. 0.000 min
 Lab File: Z62094.d
 Acq: 4 Sep 2020 3:30 pm

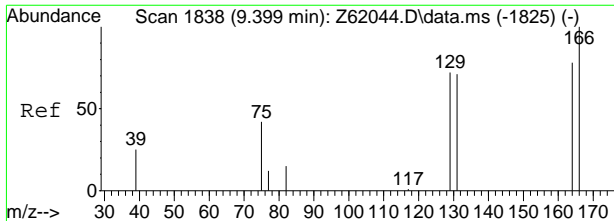
Tgt Ion	Ratio	Lower	Upper
63	100		
65	32.2	11.5	51.5
83	0.0	0.0	30.0



#15
 Trichloroethene
 Concen: 0.27 ppb
 RT: 7.571 min Scan# 1403
 Delta R.T. 0.007 min
 Lab File: Z62094.d
 Acq: 4 Sep 2020 3:30 pm

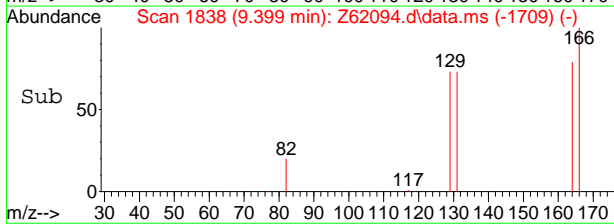
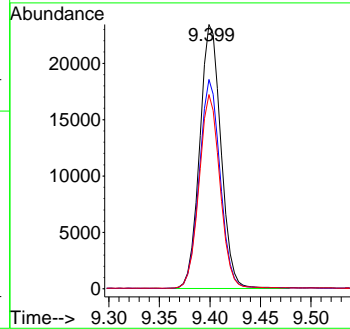
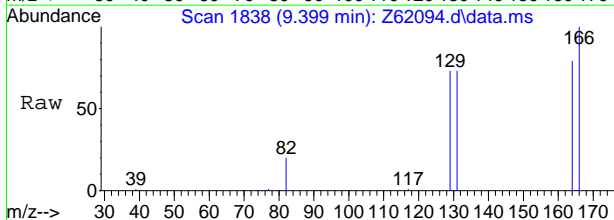
Tgt Ion	Ratio	Lower	Upper
95	100		
97	65.4	45.0	85.0
130	99.9	72.6	112.6
132	0.0	0.0	20.0





#21
 Tetrachloroethene
 Concen: 2.27 ppb
 RT: 9.399 min Scan# 1838
 Delta R.T. -0.000 min
 Lab File: Z62094.d
 Acq: 4 Sep 2020 3:30 pm

Tgt Ion	Resp	Lower	Upper
166	340946		
166	100		
164	79.1	58.4	98.4
131	73.3	50.7	90.7



7.1.6
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-08-2020\VZ2409\
Data File : Z62095.d
Acq On : 4 Sep 2020 3:49 pm
Operator : shanicao
Sample : FA78442-7
Misc : MS47147,VZ2409,,,,,
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Sep 08 01:18:57 2020
Quant Method : C:\msdchem\1\methods\SIMCL090320.M
Quant Title : WATER-EPA 8260B
QLast Update : Fri Sep 04 11:36:05 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	Qvalue

Internal Standards							
1) Fluorobenzene	7.401	96	1724664	5.00	ppb	0.00	
18) Chlorobenzene-d5	10.515	117	1284998	5.00	ppb	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.130	65	678704	6.07	ppb	0.00	
Spiked Amount	5.000	Range	79 - 125	Recovery	=	121.40%	
19) Toluene-d8	8.961	98	1600416	5.01	ppb	0.00	
Spiked Amount	5.000	Range	70 - 130	Recovery	=	100.20%	
Target Compounds							
8) cis-1,2-Dichloroethene	6.110	96	55412	0.37	ppb	94	
15) Trichloroethene	7.571	95	488783	3.07	ppb	95	
21) Tetrachloroethene	9.399	166	40881	0.28	ppb	96	

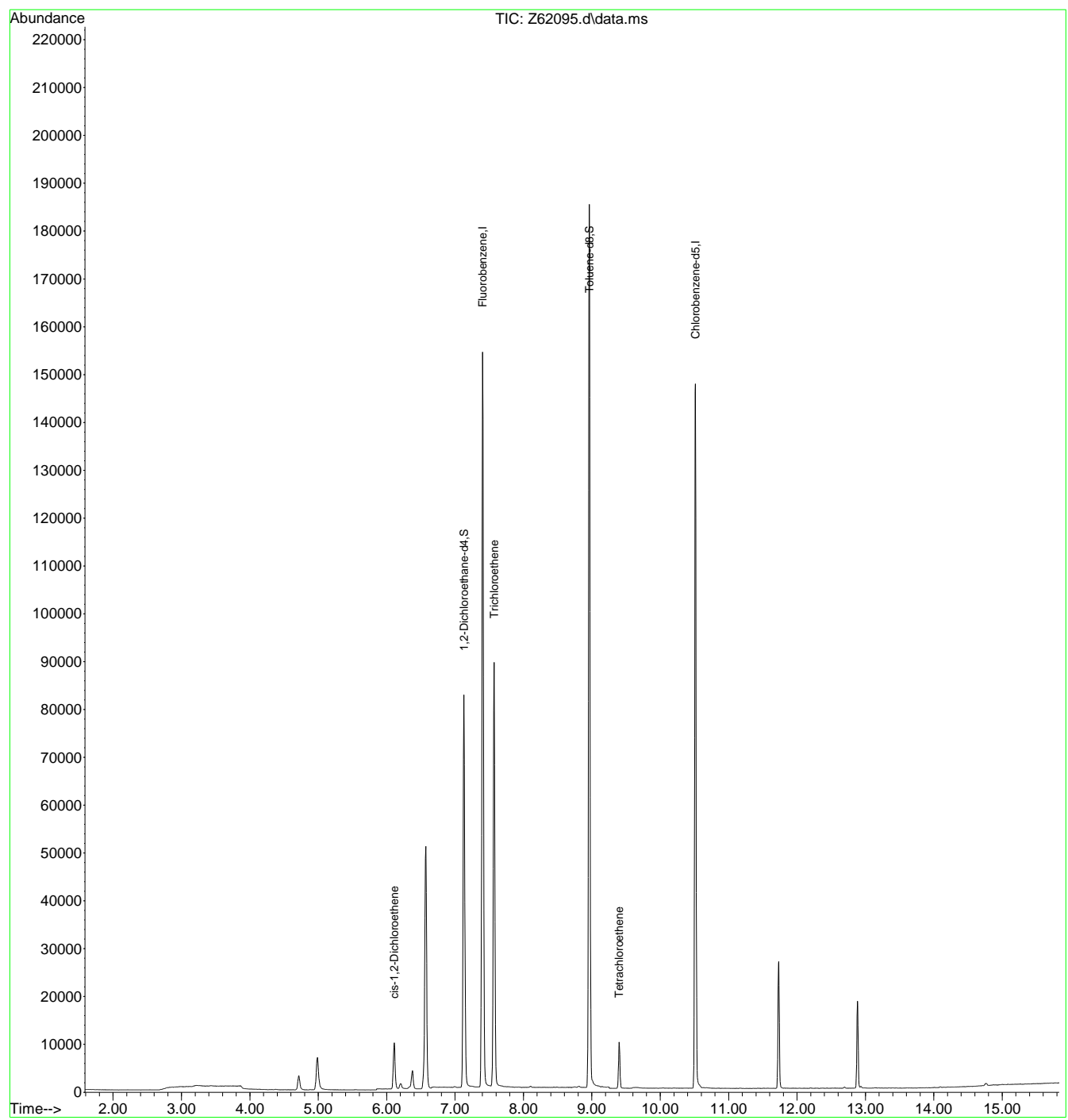
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.17
7

Quantitation Report (QT Reviewed)

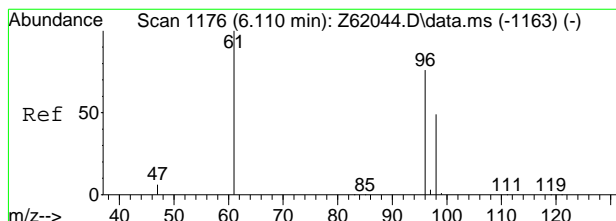
Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-08-2020\VZ2409\
Data File : Z62095.d
Acq On : 4 Sep 2020 3:49 pm
Operator : shanicao
Sample : FA78442-7
Misc : MS47147,VZ2409,,,,,
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Sep 08 01:18:57 2020
Quant Method : C:\msdchem\1\methods\SIMCL090320.M
Quant Title : WATER-EPA 8260B
QLast Update : Fri Sep 04 11:36:05 2020
Response via : Initial Calibration



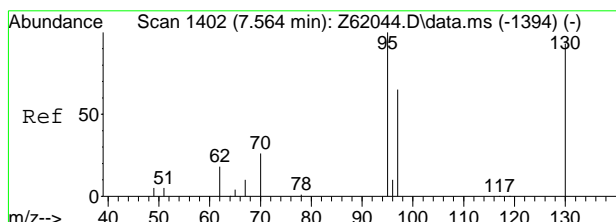
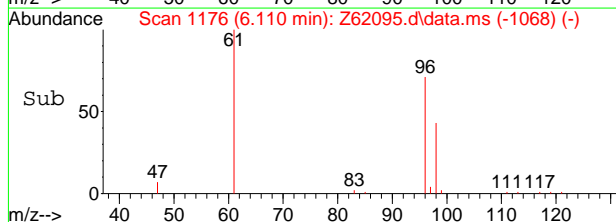
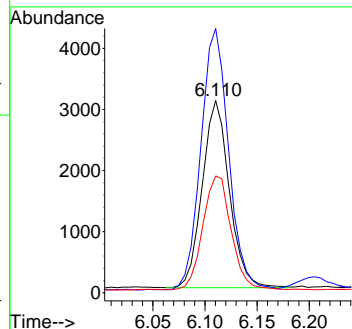
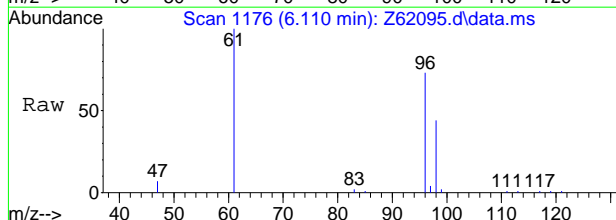
7.1.7
7





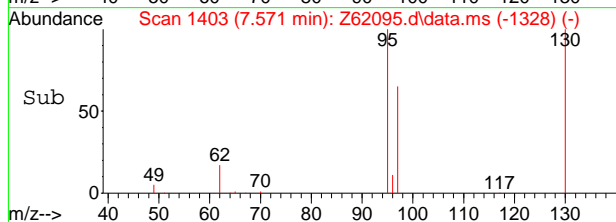
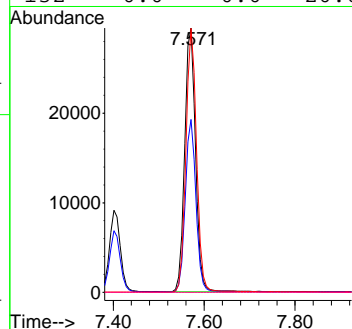
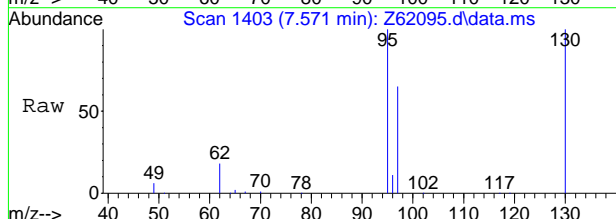
#8
 cis-1,2-Dichloroethene
 Concen: 0.37 ppb
 RT: 6.110 min Scan# 1176
 Delta R.T. 0.000 min
 Lab File: Z62095.d
 Acq: 4 Sep 2020 3:49 pm

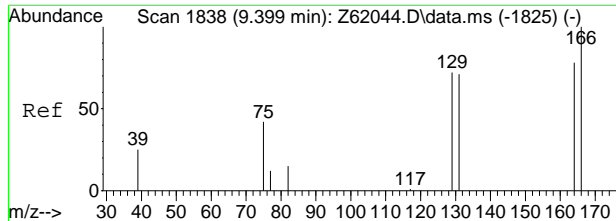
Tgt Ion	Resp	Lower	Upper
96	55412		
61	139.5	111.3	151.3
98	60.7	44.6	84.6



#15
 Trichloroethene
 Concen: 3.07 ppb
 RT: 7.571 min Scan# 1403
 Delta R.T. 0.007 min
 Lab File: Z62095.d
 Acq: 4 Sep 2020 3:49 pm

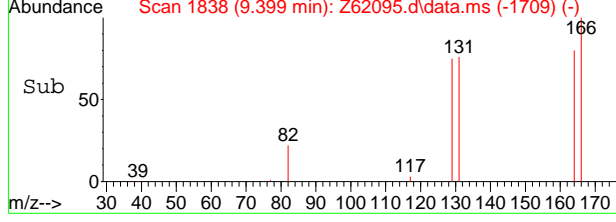
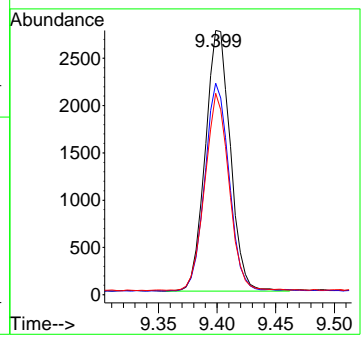
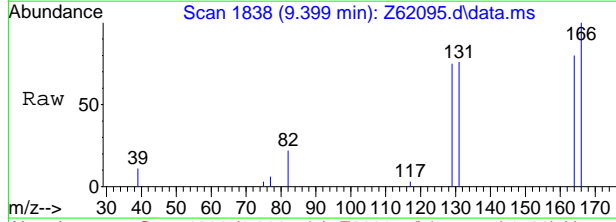
Tgt Ion	Resp	Lower	Upper
95	488783		
97	65.3	45.0	85.0
130	100.0	72.6	112.6
132	0.0	0.0	20.0





#21
 Tetrachloroethene
 Concen: 0.28 ppb
 RT: 9.399 min Scan# 1838
 Delta R.T. -0.000 min
 Lab File: Z62095.d
 Acq: 4 Sep 2020 3:49 pm

Tgt Ion	Resp		
166	40881		
Ion	Ratio	Lower	Upper
166	100		
164	79.7	58.4	98.4
131	75.5	50.7	90.7



7.1.7
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\edessas\09-10-2020\vo2353\
Data File : O61148.d
Acq On : 9 Sep 2020 4:52 pm
Operator : melissam
Sample : FA78442-8
Misc : MS47147,VO2353,,,,,
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Sep 09 21:27:00 2020
Quant Method : C:\msdchem\1\methods\SIMCL090820.M
Quant Title : Standard Methods 6200B
QLast Update : Wed Sep 09 12:10:38 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	

Internal Standards							
1) Fluorobenzene	7.346	96	179269	5.00	ug/L	0.00	
18) Chlorobenzene-d5	10.447	117	127066	5.00	ug/L	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.074	65	89851	5.71	ug/L	0.00	
Spiked Amount	5.000	Range 74 - 125	Recovery	=	114.20%		
19) Toluene-d8	8.896	98	158277	5.10	ug/L	0.00	
Spiked Amount	5.000	Range 88 - 111	Recovery	=	102.00%		
Target Compounds							
5) Methylene Chloride	4.707	49	4256	0.09	ug/L	87	Qvalue
7) 1,1-Dichloroethane	5.514	63	5679	0.17	ug/L	100	
9) Chloroform	6.333	83	5491	0.20	ug/L #	79	
15) Trichloroethene	7.518	95	35748	2.29	ug/L	97	
21) Tetrachloroethene	9.343	166	6271m	0.51	ug/L		

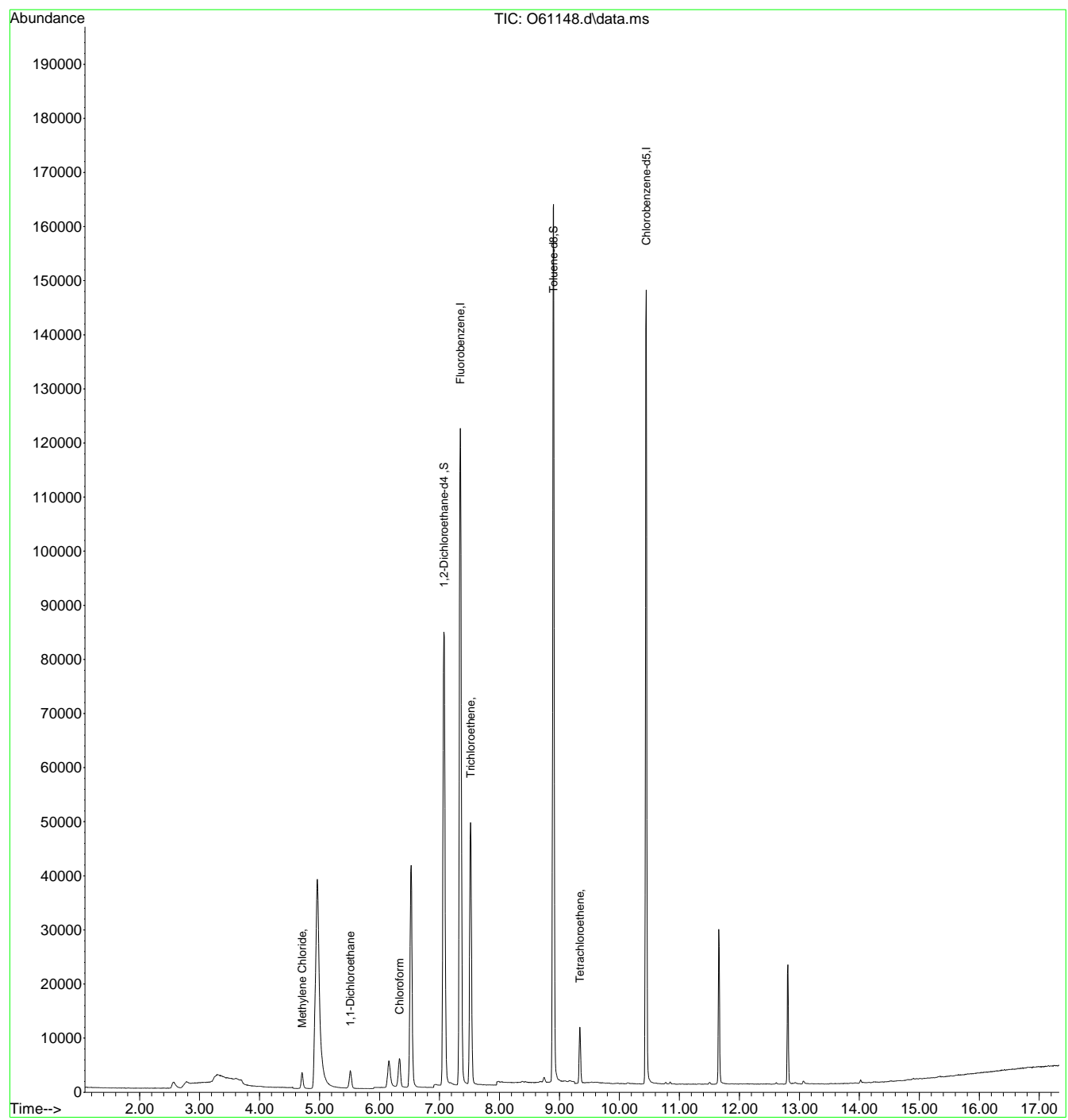
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.1.8
7

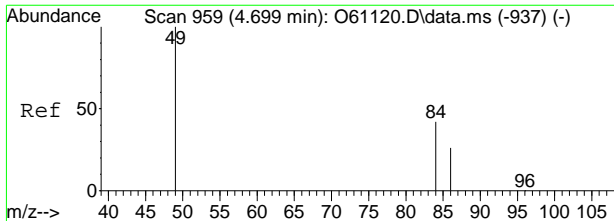
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\edessas\09-10-2020\vo2353\
Data File : O61148.d
Acq On : 9 Sep 2020 4:52 pm
Operator : melissam
Sample : FA78442-8
Misc : MS47147,VO2353,,,,,
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Sep 09 21:27:00 2020
Quant Method : C:\msdchem\1\methods\SIMCL090820.M
Quant Title : Standard Methods 6200B
QLast Update : Wed Sep 09 12:10:38 2020
Response via : Initial Calibration

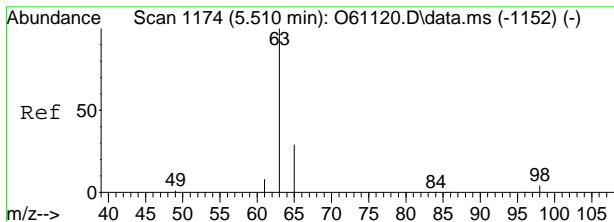
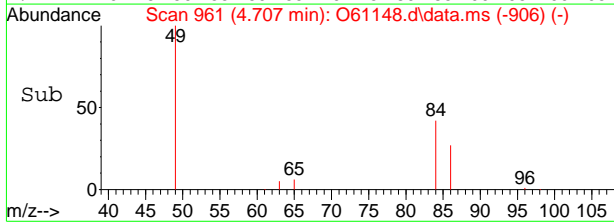
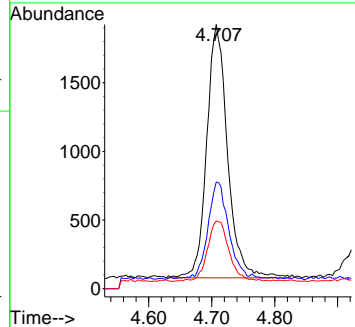
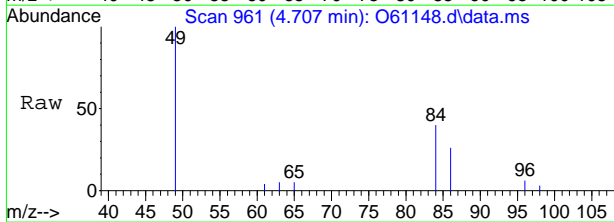


718
7



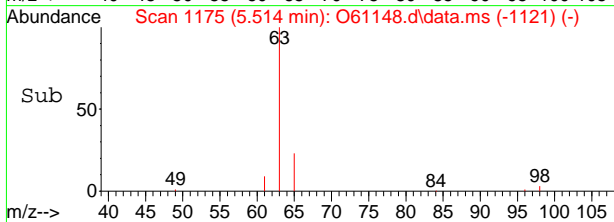
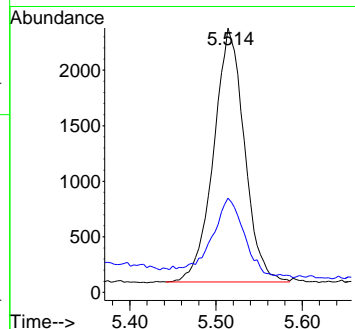
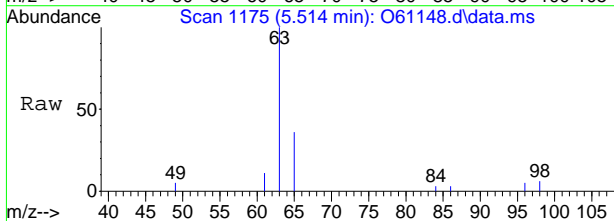
#5
 Methylene Chloride
 Concen: 0.09 ug/L
 RT: 4.707 min Scan# 961
 Delta R.T. 0.008 min
 Lab File: O61148.d
 Acq: 9 Sep 2020 4:52 pm

Tgt Ion	Ratio	Lower	Upper
49	100		
84	38.3	17.9	77.9
86	23.3	0.0	59.8

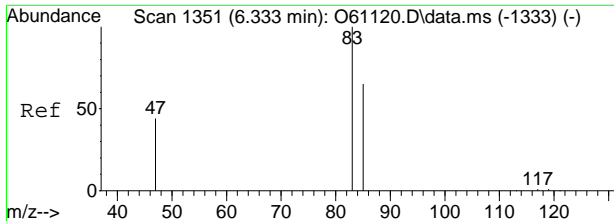


#7
 1,1-Dichloroethane
 Concen: 0.17 ug/L
 RT: 5.514 min Scan# 1175
 Delta R.T. 0.004 min
 Lab File: O61148.d
 Acq: 9 Sep 2020 4:52 pm

Tgt Ion	Ratio	Lower	Upper
63	100		
65	30.5	0.7	60.7

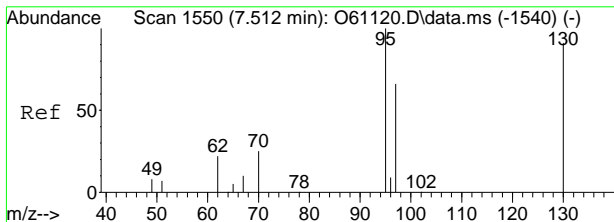
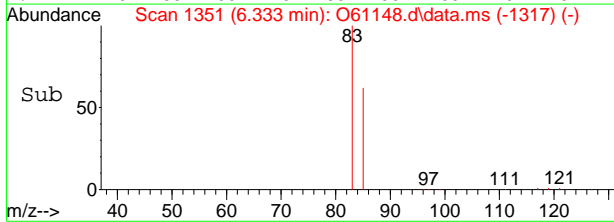
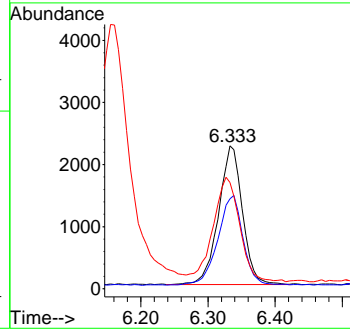
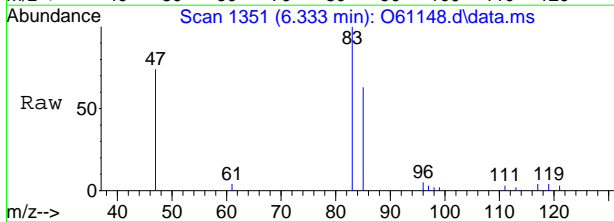


7.18
7



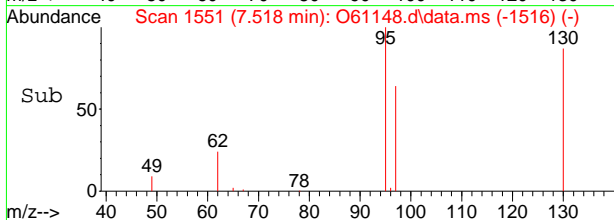
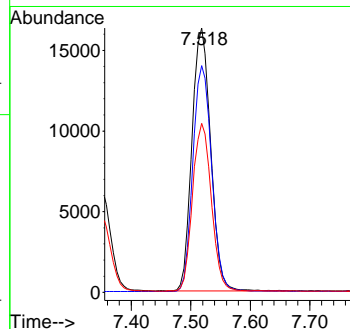
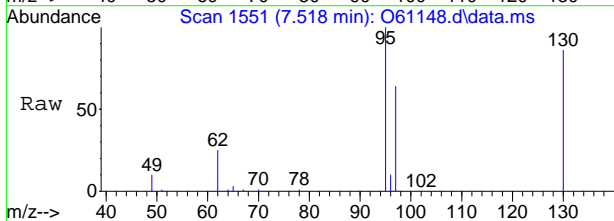
#9
 Chloroform
 Concen: 0.20 ug/L
 RT: 6.333 min Scan# 1351
 Delta R.T. 0.000 min
 Lab File: O61148.d
 Acq: 9 Sep 2020 4:52 pm

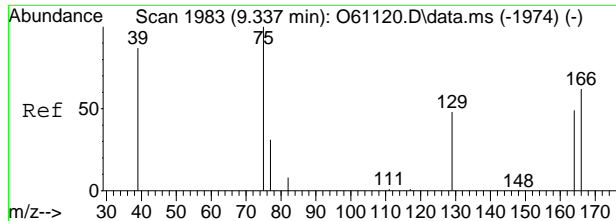
Tgt Ion	Resp	Lower	Upper
83	5491		
85	62.2	33.0	93.0
47	70.9	8.1	68.1#



#15
 Trichloroethene
 Concen: 2.29 ug/L
 RT: 7.518 min Scan# 1551
 Delta R.T. 0.006 min
 Lab File: O61148.d
 Acq: 9 Sep 2020 4:52 pm

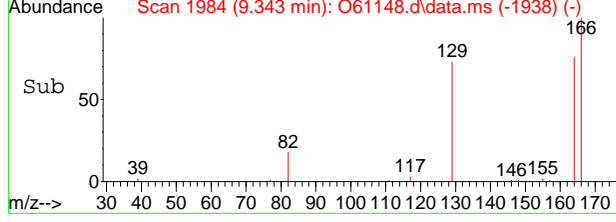
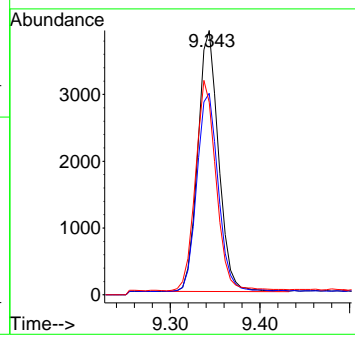
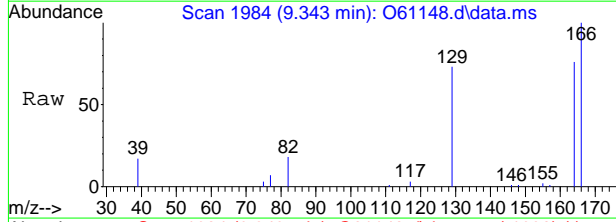
Tgt Ion	Resp	Lower	Upper
95	35748		
95	100		
130	85.9	60.4	120.4
97	63.8	34.6	94.6





#21
 Tetrachloroethene
 Concen: 0.51 ug/L m
 RT: 9.343 min Scan# 1984
 Delta R.T. 0.006 min
 Lab File: O61148.d
 Acq: 9 Sep 2020 4:52 pm

Tgt Ion	Resp	Lower	Upper
166	6271		
166	100		
164	76.3	47.3	107.3
129	72.8	37.5	97.5



7.1.8
7



Manual Integration Approval Summary

Sample Number: FA78442-8 **Method:** SW846 8260B BY SIM
Lab FileID: O61148.D **Analyst approved:** 09/09/20 22:14 Edessa Sumagaysay
Injection Time: 09/09/20 16:52 **Supervisor approved:** 09/10/20 09:07 Melissa Mangual

Parameter	CAS	Sig#	R.T. (min.)	Reason
Tetrachloroethylene	127-18-4		9.34	Poor instrument integration

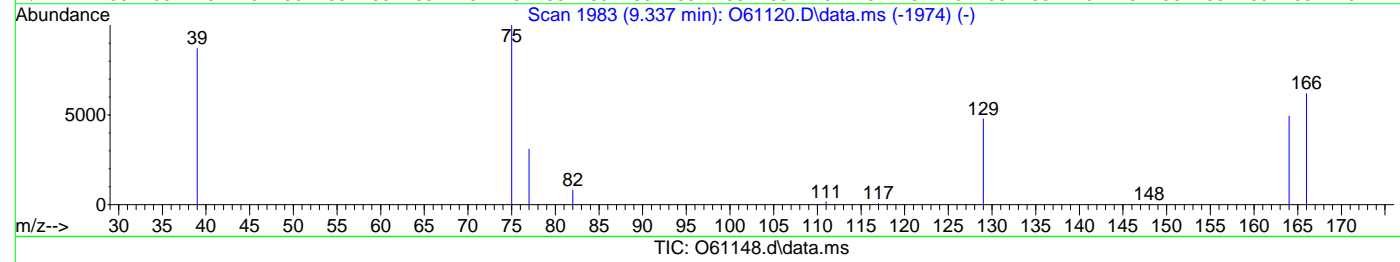
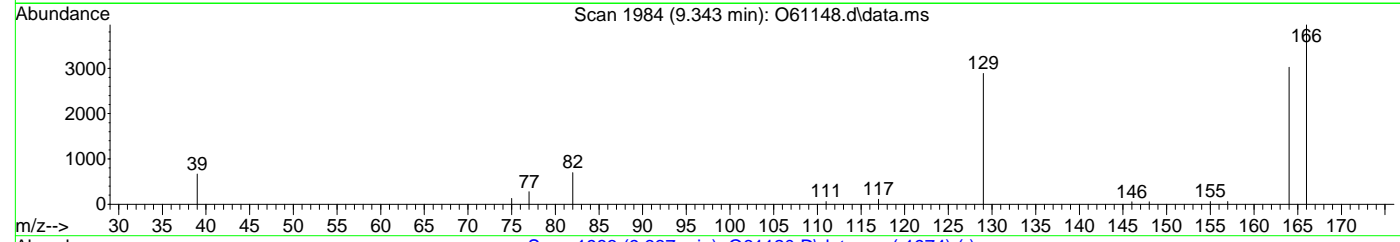
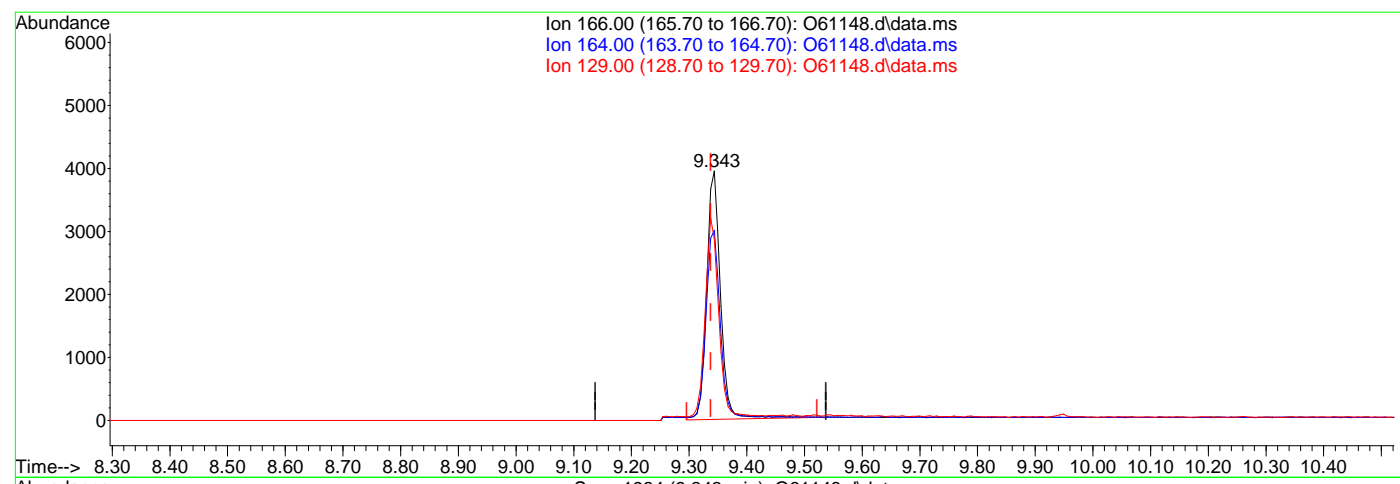
7.1.8.1

7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\edessas\09-10-2020\vo2353\
Data File : O61148.d
Acq On : 9 Sep 2020 4:52 pm
Operator : melissam
Sample : FA78442-8
Misc : MS47147,VO2353,,,,,
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Sep 09 20:48:56 2020
Quant Method : C:\msdchem\1\methods\SIMCL090820.M
Quant Title : Standard Methods 6200B
QLast Update : Wed Sep 09 12:10:38 2020
Response via : Initial Calibration



(21) Tetrachloroethene ()

9.343min (+0.006) 0.53ug/L

response 6569

Ion	Exp%	Act%
166.00	100	100
164.00	77.30	75.91
129.00	67.50	72.20
0.00	0.00	0.00

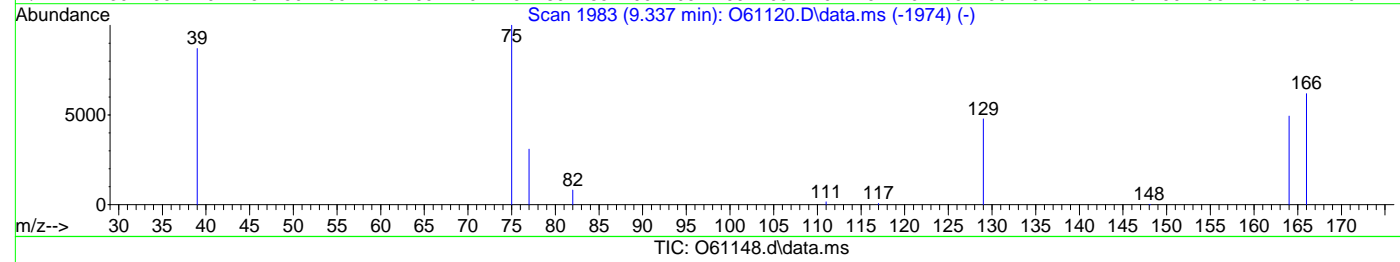
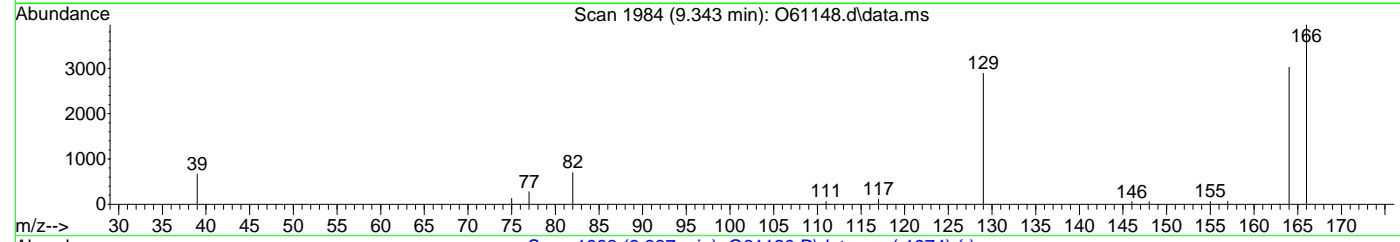
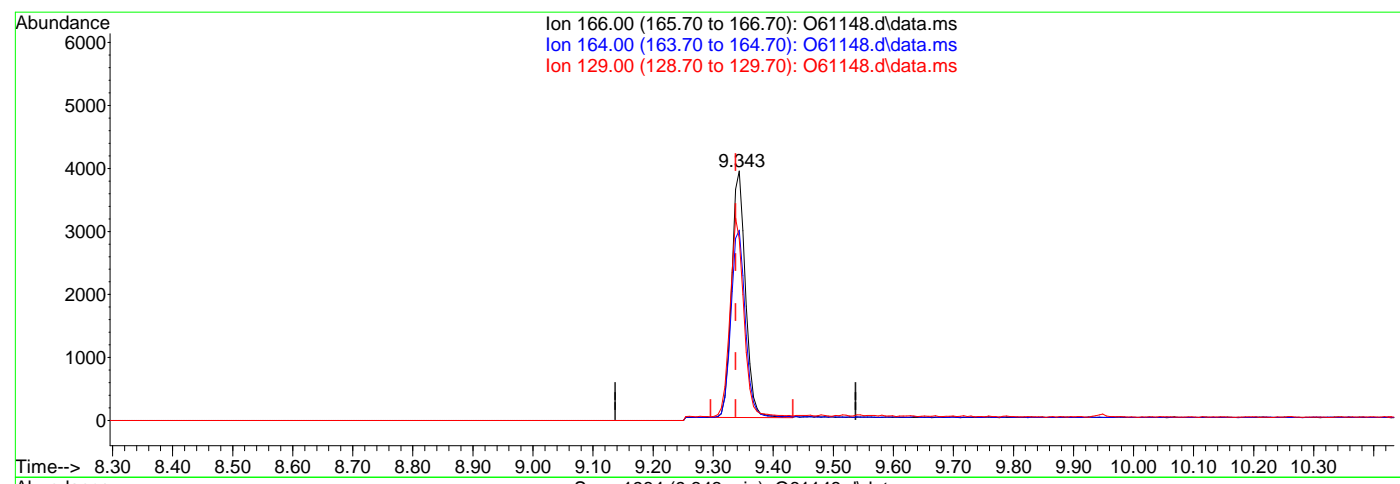
7.1.8.2
7



Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\edessas\09-10-2020\vo2353\
Data File : O61148.d
Acq On : 9 Sep 2020 4:52 pm
Operator : melissam
Sample : FA78442-8
Misc : MS47147,VO2353,,,,,
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Sep 09 20:48:56 2020
Quant Method : C:\msdchem\1\methods\SIMCL090820.M
Quant Title : Standard Methods 6200B
QLast Update : Wed Sep 09 12:10:38 2020
Response via : Initial Calibration



(21) Tetrachloroethene ()
9.343min (+0.006) 0.51ug/L m
response 6271

Ion	Exp%	Act%
166.00	100	100
164.00	77.30	76.26
129.00	67.50	72.83
0.00	0.00	0.00

7.1.8.3
7



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\edessas\09-10-2020\vo2353\
Data File : O61149.d
Acq On : 9 Sep 2020 5:12 pm
Operator : melissam
Sample : FA78442-9
Misc : MS47147,VO2353,,,,,
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Sep 09 21:28:16 2020
Quant Method : C:\msdchem\1\methods\SIMCL090820.M
Quant Title : Standard Methods 6200B
QLast Update : Wed Sep 09 12:10:38 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Fluorobenzene	7.346	96	180986	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.447	117	128381	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.074	65	90758	5.71	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	114.20%	
19) Toluene-d8	8.900	98	159873	5.09	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	101.80%	
Target Compounds						
5) Methylene Chloride	4.707	49	4851	0.11	ug/L	86
7) 1,1-Dichloroethane	5.514	63	1934	0.06	ug/L	99
9) Chloroform	6.333	83	5581	0.20	ug/L #	73
15) Trichloroethene	7.518	95	30082	1.91	ug/L	97
21) Tetrachloroethene	9.343	166	707m	0.06	ug/L	

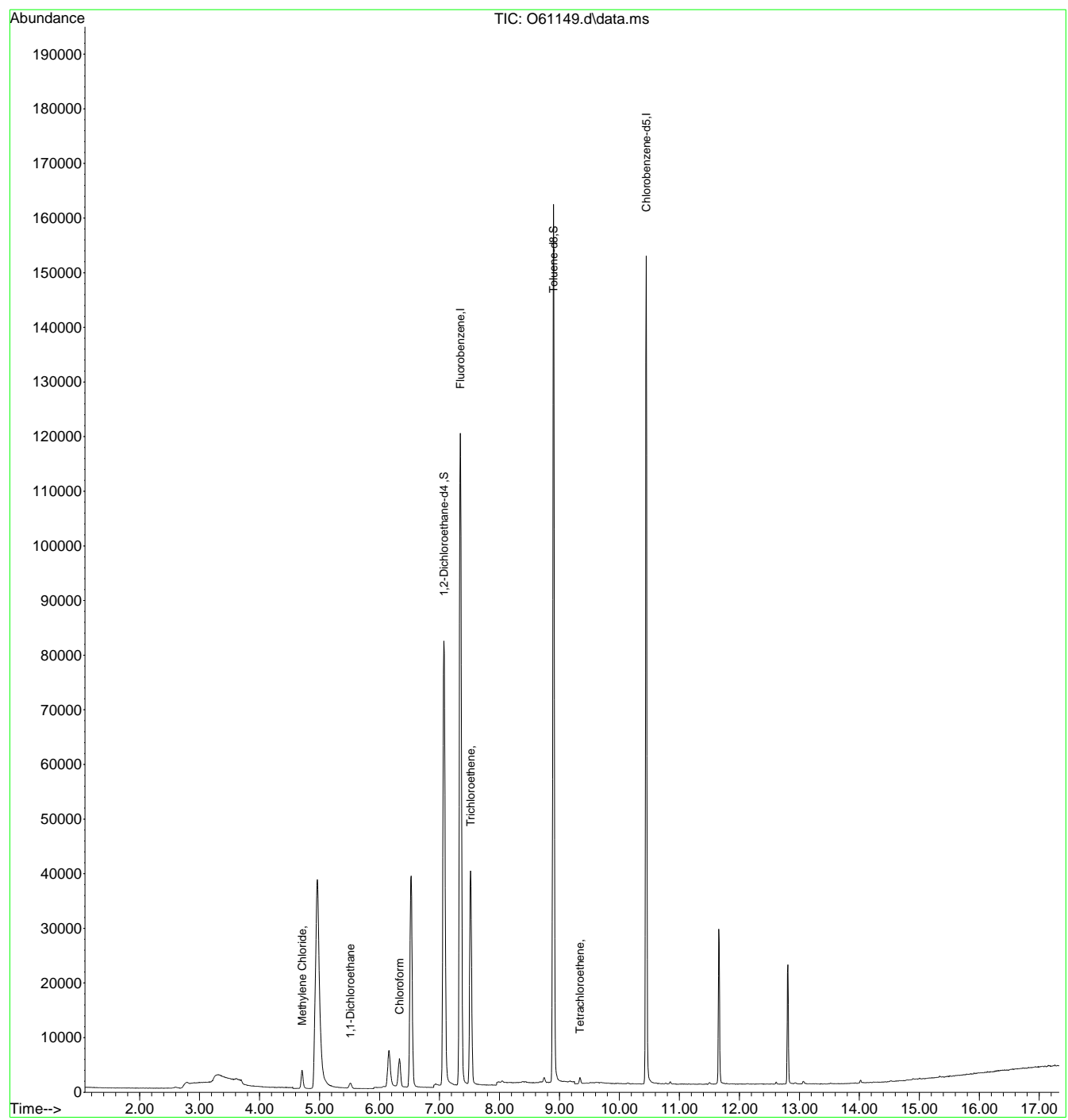
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.1.9
7

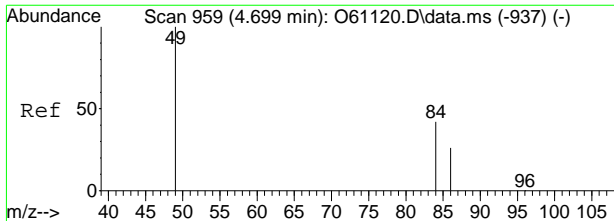
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\edessas\09-10-2020\vo2353\
Data File : O61149.d
Acq On : 9 Sep 2020 5:12 pm
Operator : melissam
Sample : FA78442-9
Misc : MS47147,VO2353,,,,,
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Sep 09 21:28:16 2020
Quant Method : C:\msdchem\1\methods\SIMCL090820.M
Quant Title : Standard Methods 6200B
QLast Update : Wed Sep 09 12:10:38 2020
Response via : Initial Calibration

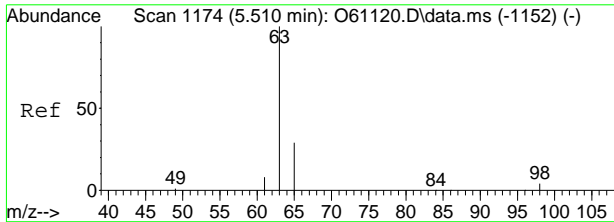
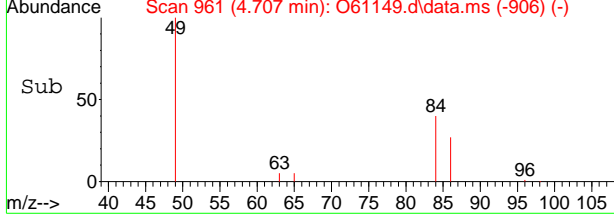
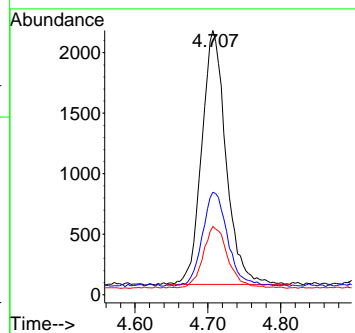
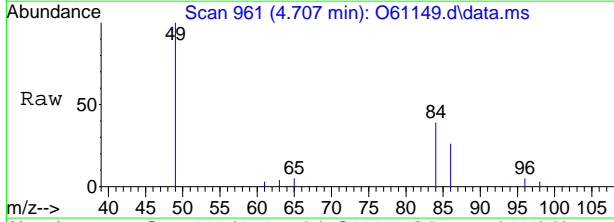


7.1.7



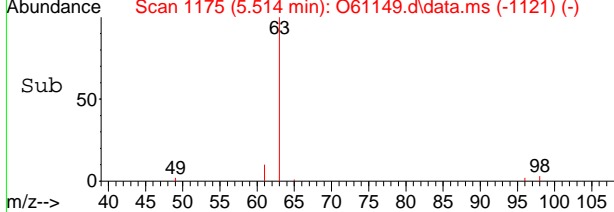
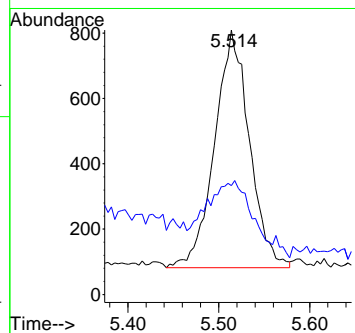
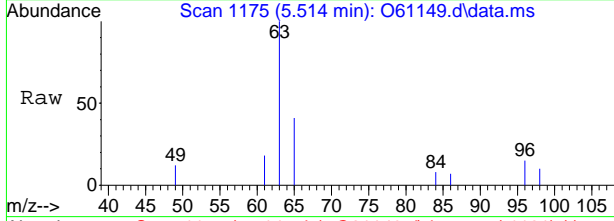
#5
 Methylene Chloride
 Concen: 0.11 ug/L
 RT: 4.707 min Scan# 961
 Delta R.T. 0.008 min
 Lab File: O61149.d
 Acq: 9 Sep 2020 5:12 pm

Tgt Ion	Resp	Lower	Upper
49	4851		
84	37.1	17.9	77.9
86	24.3	0.0	59.8

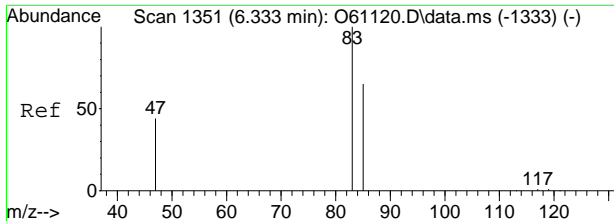


#7
 1,1-Dichloroethane
 Concen: 0.06 ug/L
 RT: 5.514 min Scan# 1175
 Delta R.T. 0.004 min
 Lab File: O61149.d
 Acq: 9 Sep 2020 5:12 pm

Tgt Ion	Resp	Lower	Upper
63	1934		
65	30.4	0.7	60.7

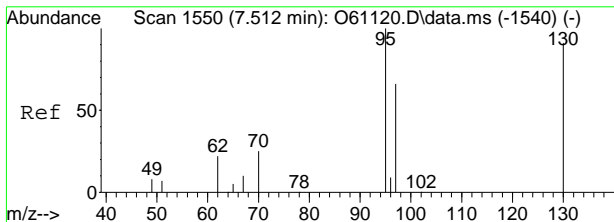
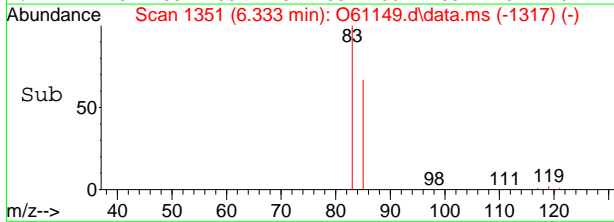
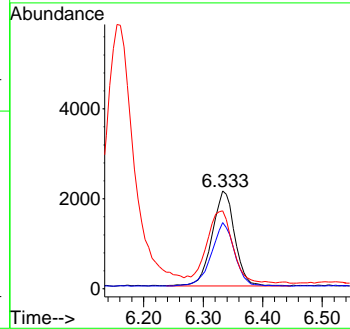
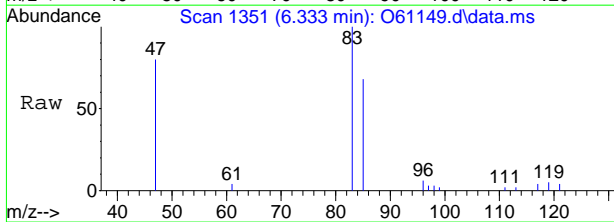


7.19
7



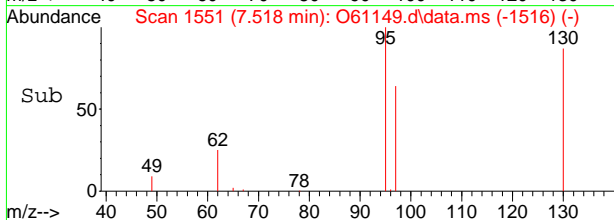
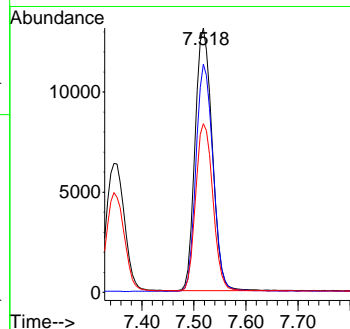
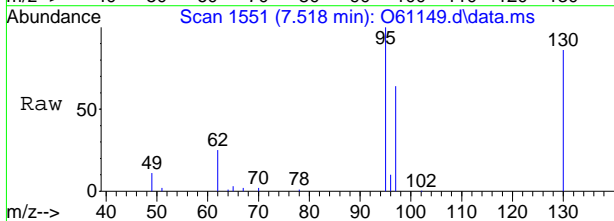
#9
 Chloroform
 Concen: 0.20 ug/L
 RT: 6.333 min Scan# 1351
 Delta R.T. 0.000 min
 Lab File: O61149.d
 Acq: 9 Sep 2020 5:12 pm

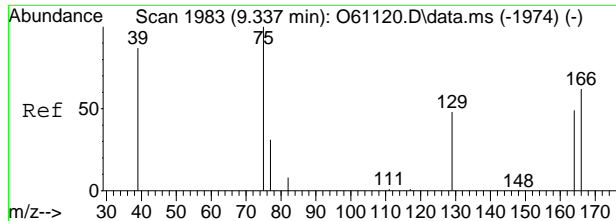
Tgt Ion	Resp	Lower	Upper
83	5581		
85	66.8	33.0	93.0
47	76.3	8.1	68.1#



#15
 Trichloroethene
 Concen: 1.91 ug/L
 RT: 7.518 min Scan# 1551
 Delta R.T. 0.006 min
 Lab File: O61149.d
 Acq: 9 Sep 2020 5:12 pm

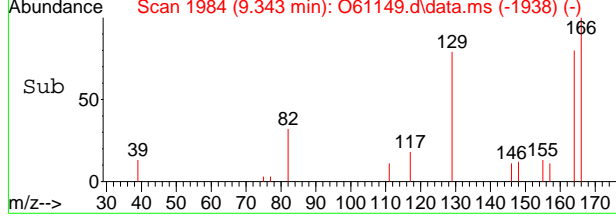
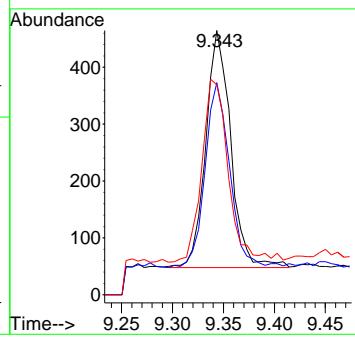
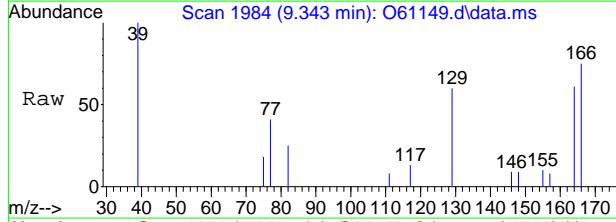
Tgt Ion	Resp	Lower	Upper
95	30082		
130	86.5	60.4	120.4
97	63.6	34.6	94.6





#21
 Tetrachloroethene
 Concen: 0.06 ug/L m
 RT: 9.343 min Scan# 1984
 Delta R.T. 0.006 min
 Lab File: O61149.d
 Acq: 9 Sep 2020 5:12 pm

Tgt Ion	Ratio	Lower	Upper
166	100		
164	80.2	47.3	107.3
129	79.4	37.5	97.5



7.1.9
7



Manual Integration Approval Summary

Sample Number: FA78442-9 **Method:** SW846 8260B BY SIM
Lab FileID: O61149.D **Analyst approved:** 09/09/20 22:14 Edessa Sumagaysay
Injection Time: 09/09/20 17:12 **Supervisor approved:** 09/10/20 09:07 Melissa Mangual

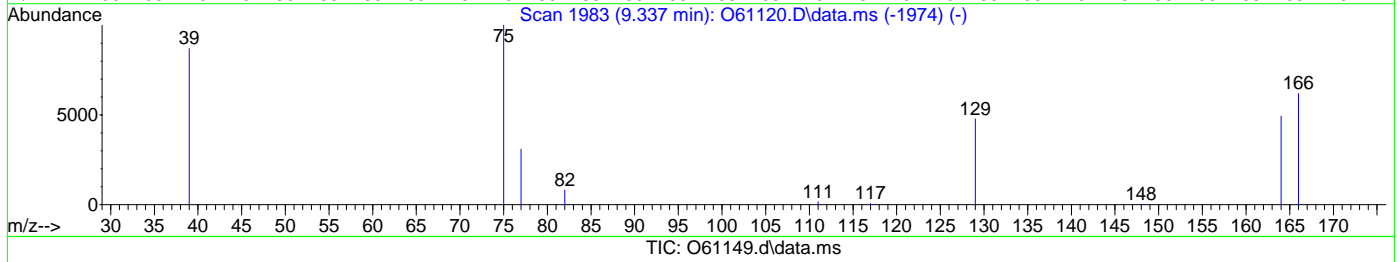
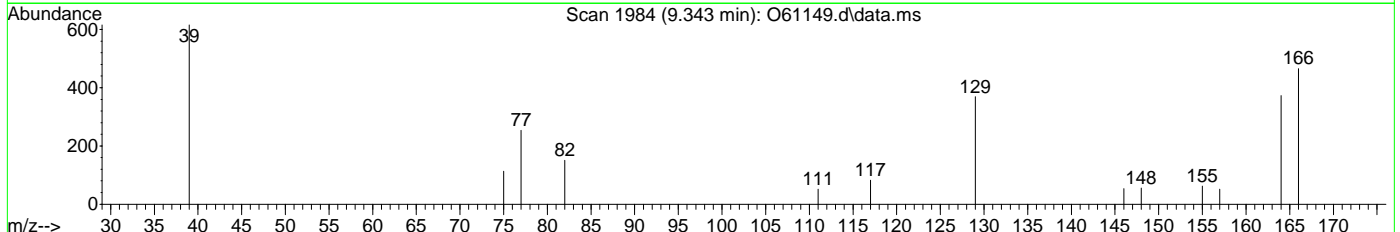
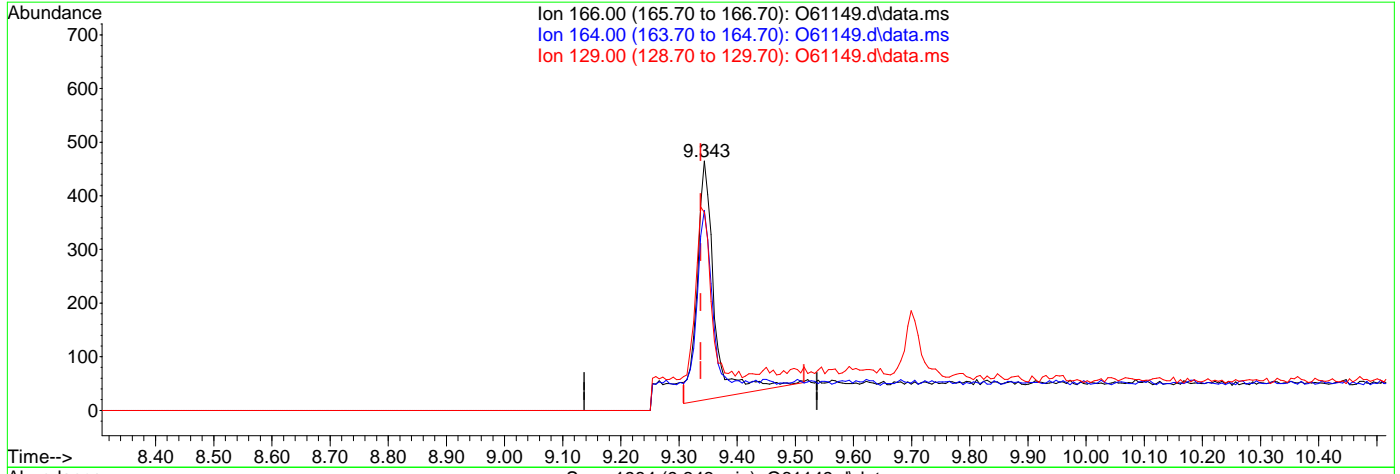
Parameter	CAS	Sig#	R.T. (min.)	Reason
Tetrachloroethylene	127-18-4		9.34	Poor instrument integration

7.1.9.1
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\edessas\09-10-2020\vo2353\
Data File : O61149.d
Acq On : 9 Sep 2020 5:12 pm
Operator : melissam
Sample : FA78442-9
Misc : MS47147,VO2353,,,,,
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Sep 09 20:48:58 2020
Quant Method : C:\msdchem\1\methods\SIMCL090820.M
Quant Title : Standard Methods 6200B
QLast Update : Wed Sep 09 12:10:38 2020
Response via : Initial Calibration



(21) Tetrachloroethene ()

9.343min (+0.006) 0.07ug/L

response 918

Ion	Exp%	Act%
166.00	100	100
164.00	77.30	78.21
129.00	67.50	74.09
0.00	0.00	0.00

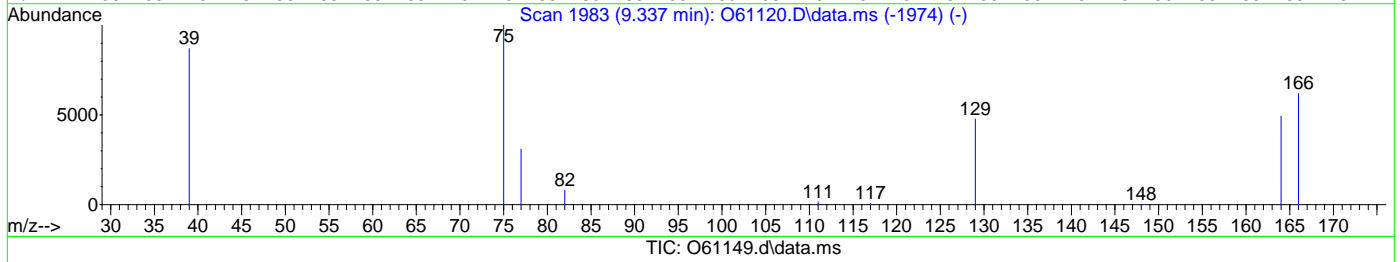
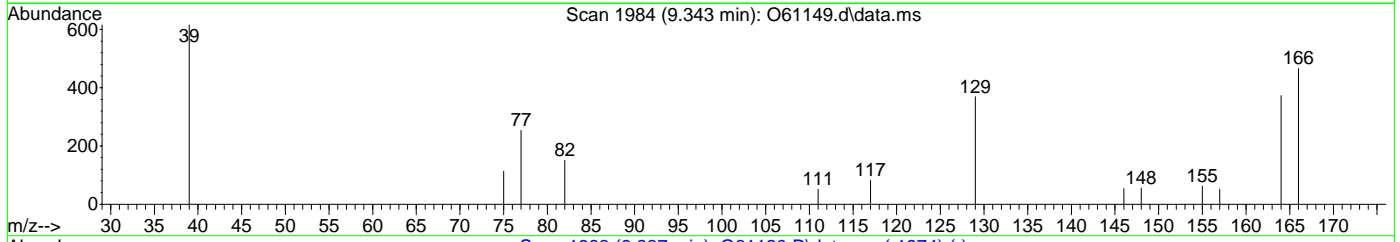
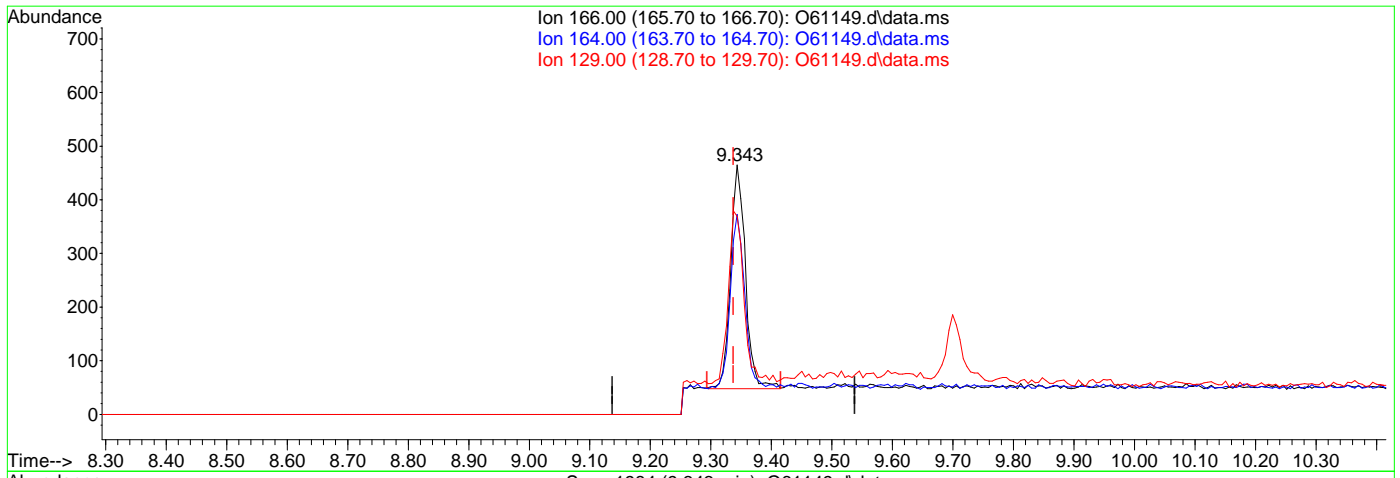


7.1.9.2
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\edessas\09-10-2020\vo2353\
Data File : O61149.d
Acq On : 9 Sep 2020 5:12 pm
Operator : melissam
Sample : FA78442-9
Misc : MS47147,VO2353,,,,,
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Sep 09 20:48:58 2020
Quant Method : C:\msdchem\1\methods\SIMCL090820.M
Quant Title : Standard Methods 6200B
QLast Update : Wed Sep 09 12:10:38 2020
Response via : Initial Calibration



(21) Tetrachloroethene ()
9.343min (+0.006) 0.06ug/L m
response 707
lon Exp% Act%
166.00 100 100
164.00 77.30 80.22
129.00 67.50 79.35
0.00 0.00 0.00



7.1.9.3
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\edessas\09-10-2020\vo2353\
Data File : O61150.d
Acq On : 9 Sep 2020 5:33 pm
Operator : melissam
Sample : FA78442-10
Misc : MS47147,VO2353,,,,,
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Sep 09 21:30:06 2020
Quant Method : C:\msdchem\1\methods\SIMCL090820.M
Quant Title : Standard Methods 6200B
QLast Update : Wed Sep 09 12:10:38 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	Qvalue

Internal Standards							
1) Fluorobenzene	7.346	96	173659	5.00	ug/L	0.00	
18) Chlorobenzene-d5	10.447	117	123144	5.00	ug/L	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.079	65	87480	5.74	ug/L	0.00	
Spiked Amount	5.000	Range 74 - 125	Recovery	=	114.80%		
19) Toluene-d8	8.900	98	152197	5.06	ug/L	0.00	
Spiked Amount	5.000	Range 88 - 111	Recovery	=	101.20%		
Target Compounds							
3) Chloromethane	2.784	50	2815m	0.11	ug/L		
5) Methylene Chloride	4.711	49	4829	0.11	ug/L		88
7) 1,1-Dichloroethane	5.514	63	1957	0.06	ug/L		97
9) Chloroform	6.339	83	5322	0.20	ug/L		82
15) Trichloroethene	7.518	95	60206	3.98	ug/L		97
21) Tetrachloroethene	9.343	166	1292m	0.11	ug/L		

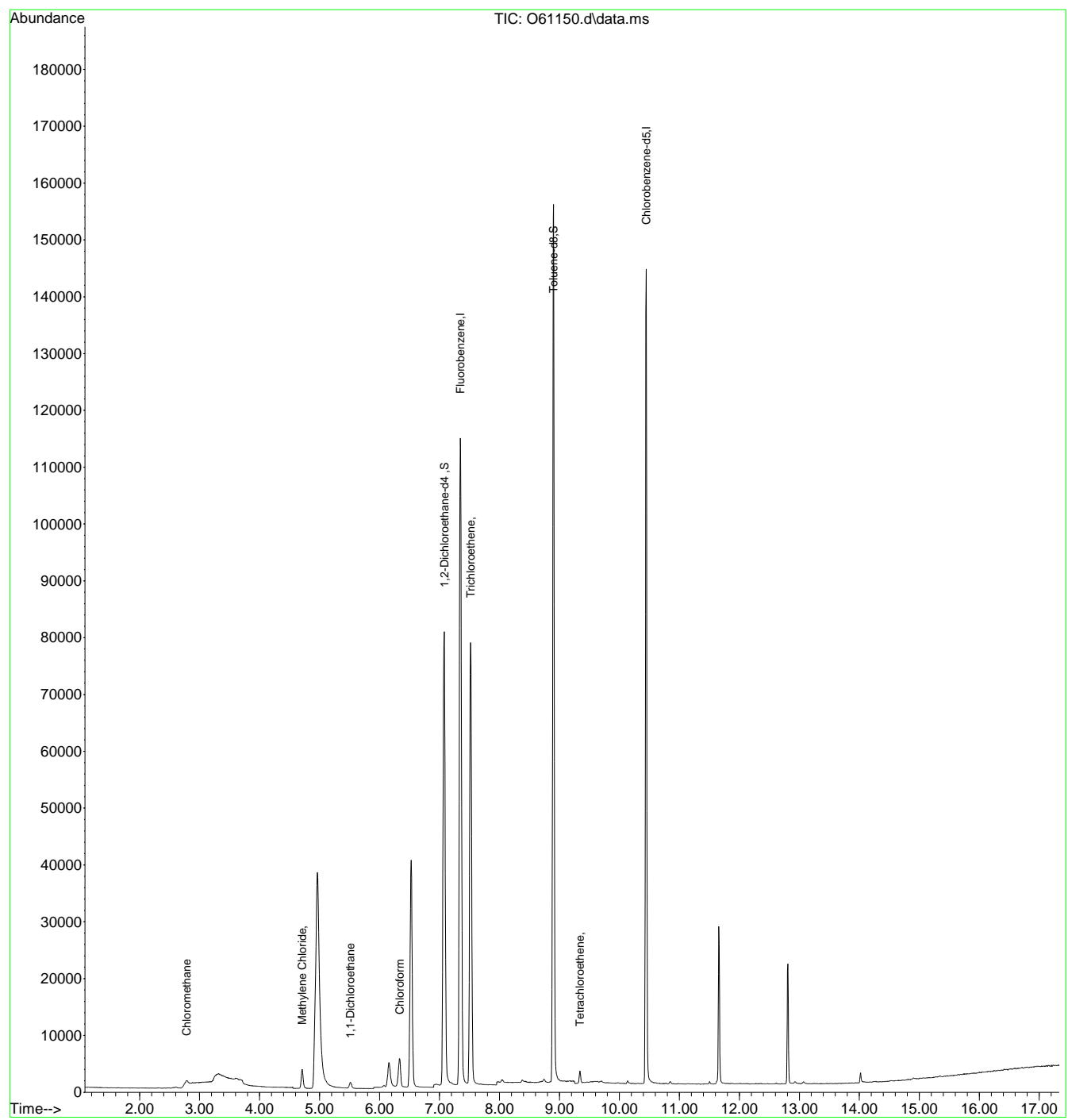
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.1.10
7

Quantitation Report (QT Reviewed)

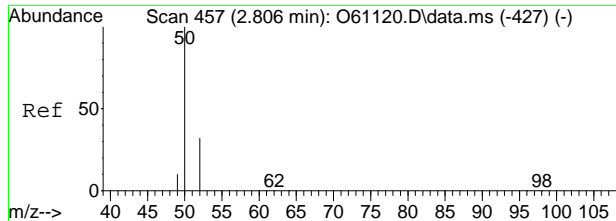
Data Path : C:\msdchem\1\data\edessas\09-10-2020\vo2353\
Data File : O61150.d
Acq On : 9 Sep 2020 5:33 pm
Operator : melissam
Sample : FA78442-10
Misc : MS47147,VO2353,,,,,
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Sep 09 21:30:06 2020
Quant Method : C:\msdchem\1\methods\SIMCL090820.M
Quant Title : Standard Methods 6200B
QLast Update : Wed Sep 09 12:10:38 2020
Response via : Initial Calibration



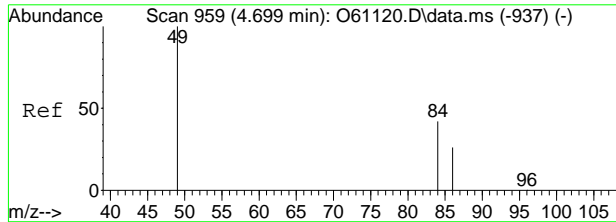
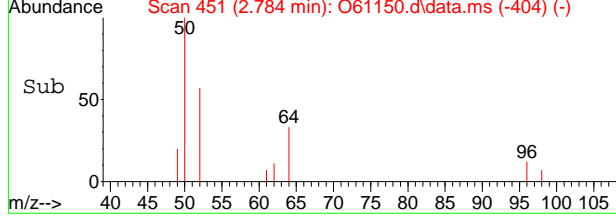
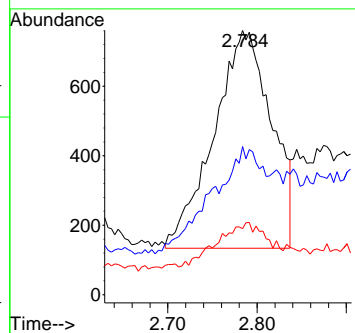
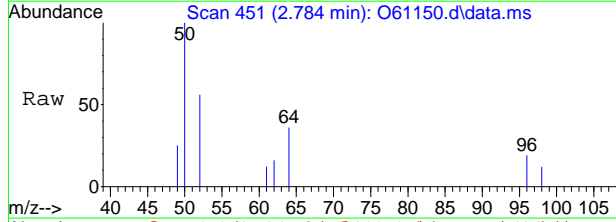
7.1.10
7





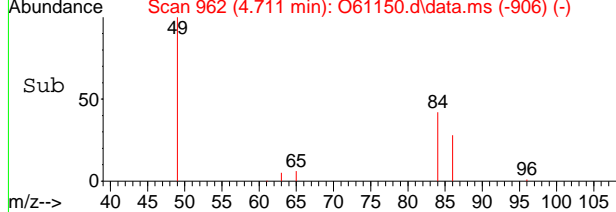
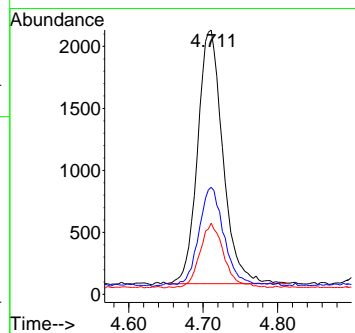
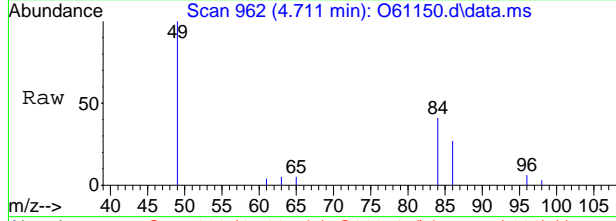
#3
 Chloromethane
 Concen: 0.11 ug/L m
 RT: 2.784 min Scan# 451
 Delta R.T. -0.023 min
 Lab File: O61150.d
 Acq: 9 Sep 2020 5:33 pm

Tgt Ion	Resp	Lower	Upper
50	2815		
52	56.1	7.8	47.8#
49	25.0	0.0	30.5



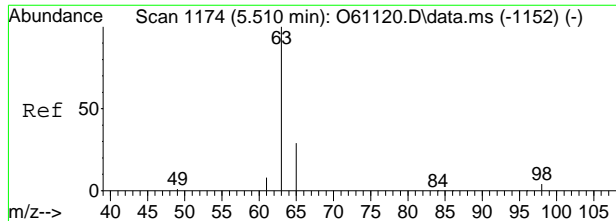
#5
 Methylene Chloride
 Concen: 0.11 ug/L
 RT: 4.711 min Scan# 962
 Delta R.T. 0.011 min
 Lab File: O61150.d
 Acq: 9 Sep 2020 5:33 pm

Tgt Ion	Resp	Lower	Upper
49	4829		
49	100		
84	38.5	17.9	77.9
86	25.4	0.0	59.8



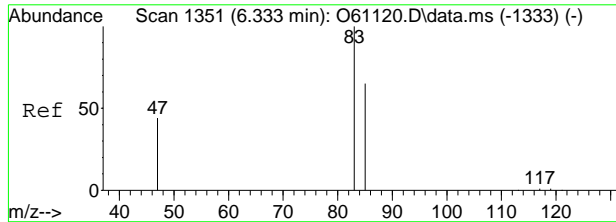
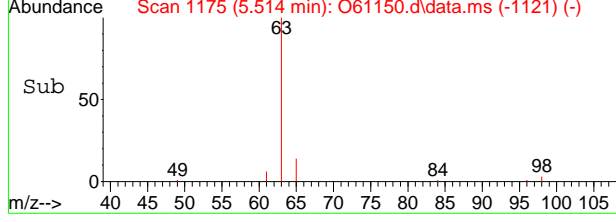
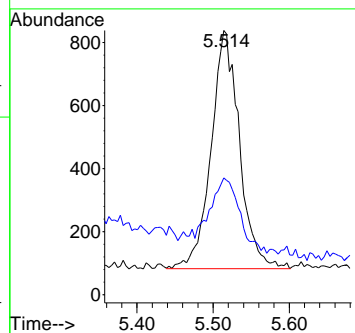
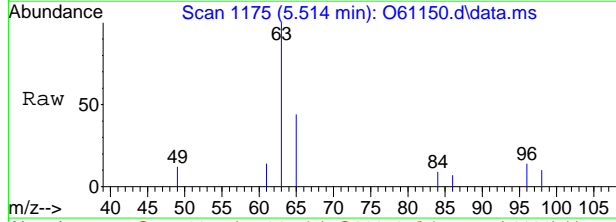
7.1.10
7





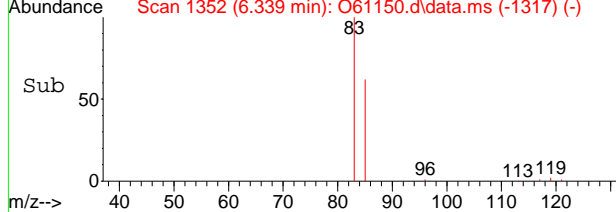
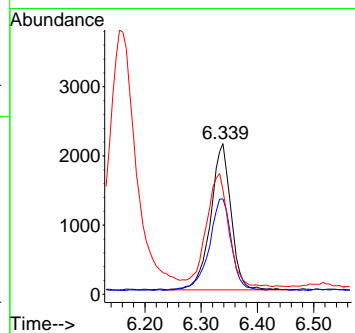
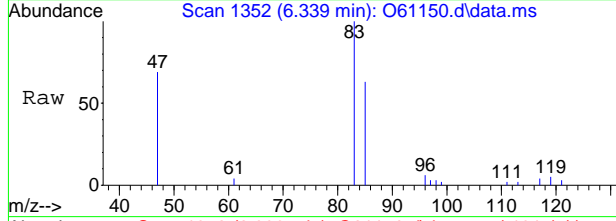
#7
 1,1-Dichloroethane
 Concen: 0.06 ug/L
 RT: 5.514 min Scan# 1175
 Delta R.T. 0.004 min
 Lab File: O61150.d
 Acq: 9 Sep 2020 5:33 pm

Tgt Ion	Resp	Lower	Upper
63	1957		
65	32.3	0.7	60.7



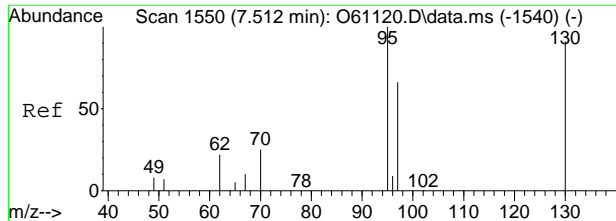
#9
 Chloroform
 Concen: 0.20 ug/L
 RT: 6.339 min Scan# 1352
 Delta R.T. 0.006 min
 Lab File: O61150.d
 Acq: 9 Sep 2020 5:33 pm

Tgt Ion	Resp	Lower	Upper
83	5322		
85	62.1	33.0	93.0
47	65.8	8.1	68.1



7.1.10
 7

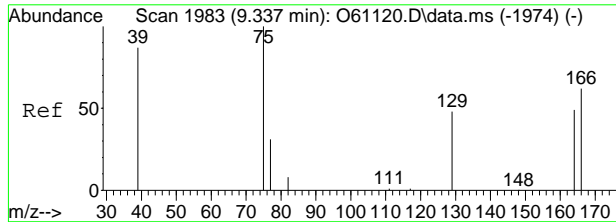
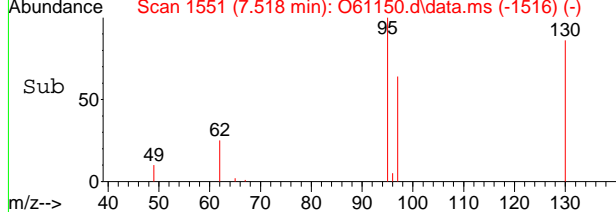
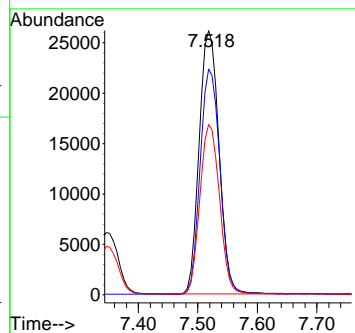
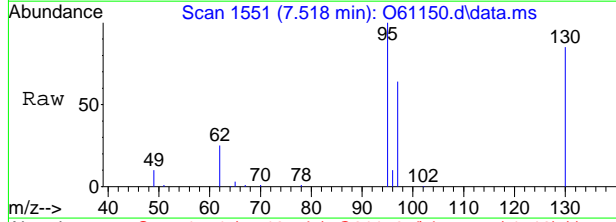




#15
 Trichloroethene
 Concen: 3.98 ug/L
 RT: 7.518 min Scan# 1551
 Delta R.T. 0.006 min
 Lab File: O61150.d
 Acq: 9 Sep 2020 5:33 pm

Tgt Ion: 95 Resp: 60206

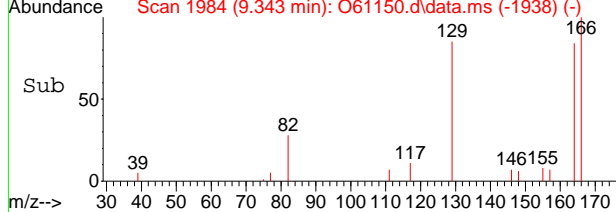
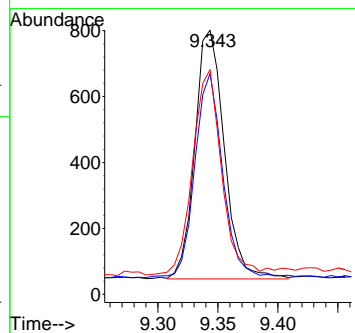
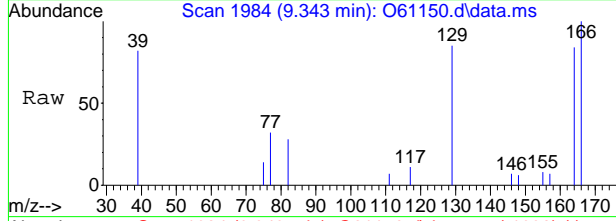
Ion	Ratio	Lower	Upper
95	100		
130	85.5	60.4	120.4
97	64.4	34.6	94.6



#21
 Tetrachloroethene
 Concen: 0.11 ug/L m
 RT: 9.343 min Scan# 1984
 Delta R.T. 0.006 min
 Lab File: O61150.d
 Acq: 9 Sep 2020 5:33 pm

Tgt Ion: 166 Resp: 1292

Ion	Ratio	Lower	Upper
166	100		
164	83.5	47.3	107.3
129	85.0	37.5	97.5



7.1.10
7



Manual Integration Approval Summary

Sample Number: FA78442-10 **Method:** SW846 8260B BY SIM
Lab FileID: O61150.D **Analyst approved:** 09/09/20 22:14 Edessa Sumagaysay
Injection Time: 09/09/20 17:33 **Supervisor approved:** 09/10/20 09:07 Melissa Mangual

Parameter	CAS	Sig#	R.T. (min.)	Reason
Methyl Chloride	74-87-3		2.78	Poor instrument integration
Tetrachloroethylene	127-18-4		9.34	Poor instrument integration

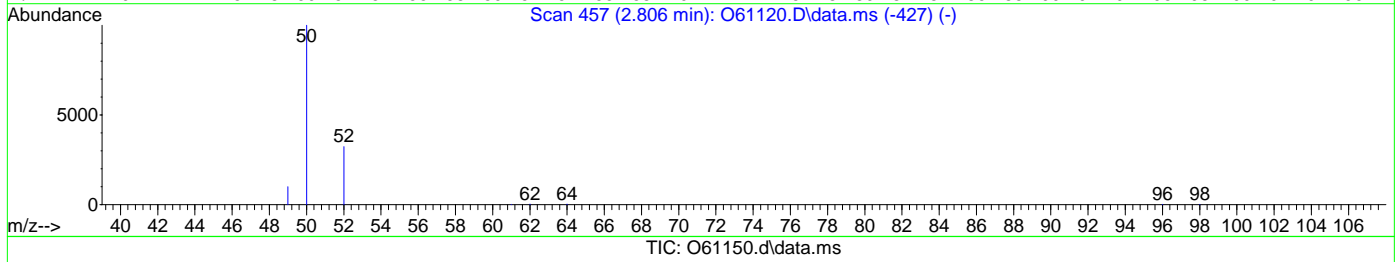
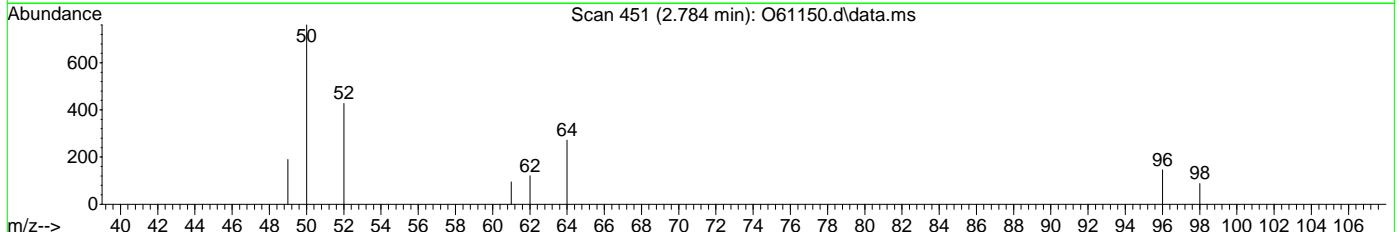
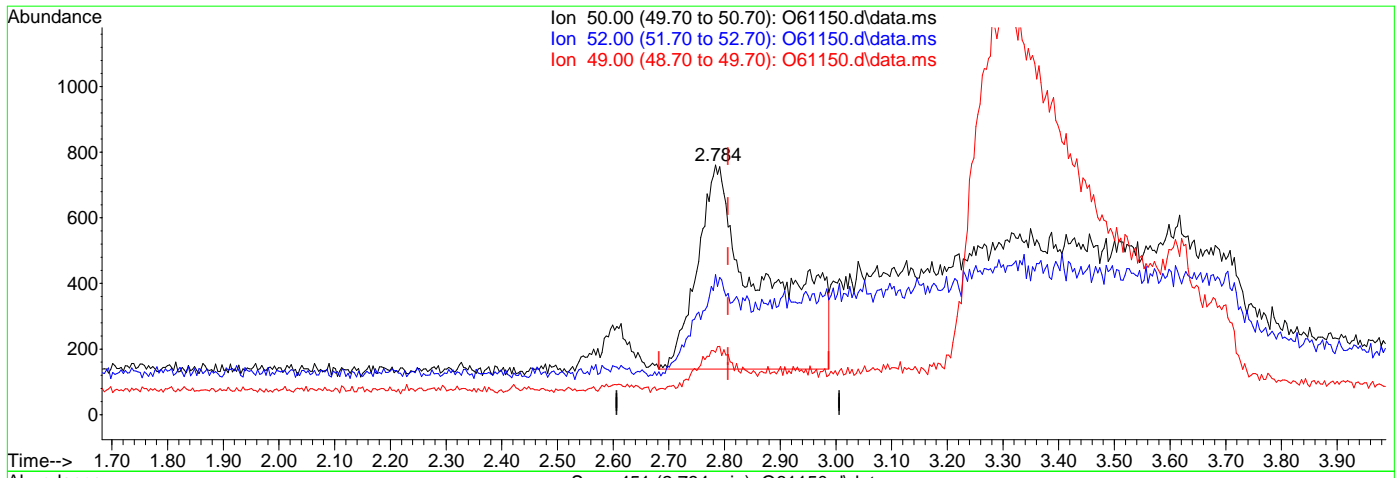
7.1.10.1

7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\edessas\09-10-2020\vo2353\
Data File : O61150.d
Acq On : 9 Sep 2020 5:33 pm
Operator : melissam
Sample : FA78442-10
Misc : MS47147,VO2353,,,,,
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Sep 09 20:49:00 2020
Quant Method : C:\msdchem\1\methods\SIMCL090820.M
Quant Title : Standard Methods 6200B
QLast Update : Wed Sep 09 12:10:38 2020
Response via : Initial Calibration



(3) Chloromethane
2.784min (-0.023) 0.20ug/L
response 5181
Ion Exp% Act%
50.00 100 100
52.00 27.80 47.75
49.00 10.50 18.01
0.00 0.00 0.00

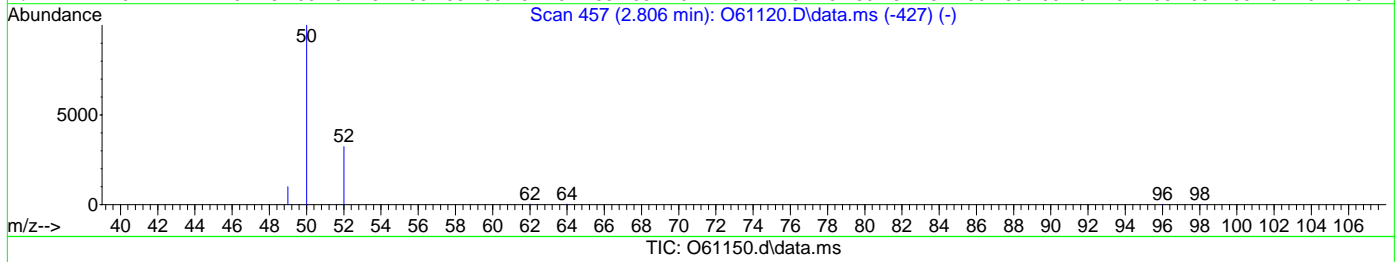
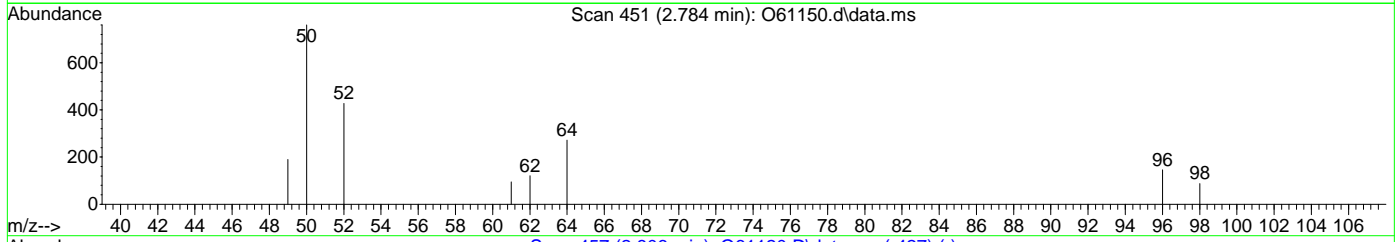
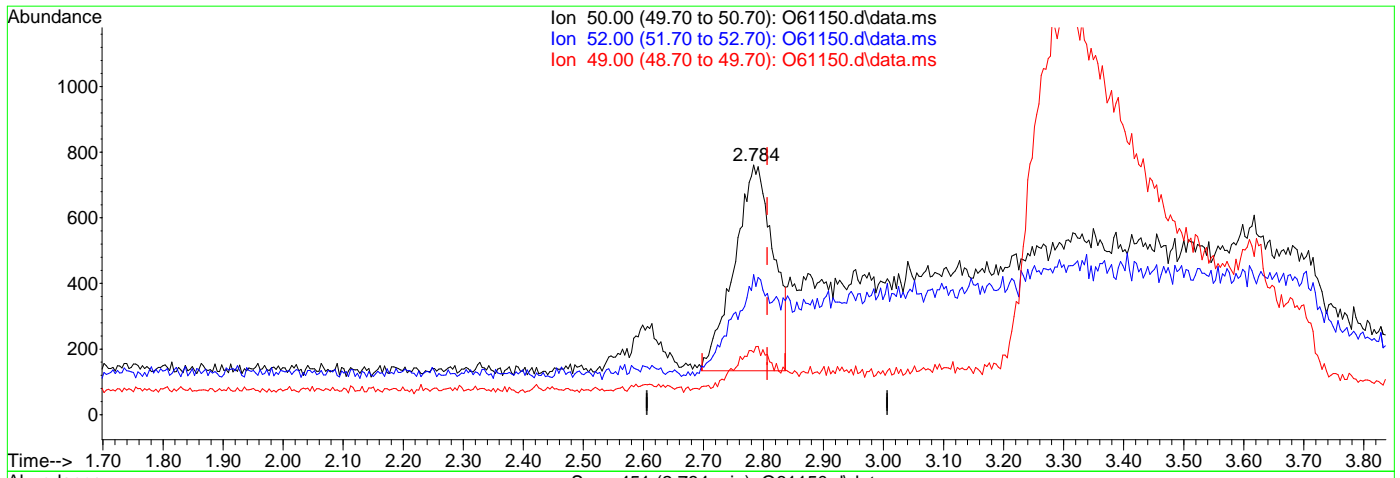


7.1.102
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\edessas\09-10-2020\vo2353\
Data File : O61150.d
Acq On : 9 Sep 2020 5:33 pm
Operator : melissam
Sample : FA78442-10
Misc : MS47147,VO2353,,,,,
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Sep 09 20:49:00 2020
Quant Method : C:\msdchem\1\methods\SIMCL090820.M
Quant Title : Standard Methods 6200B
QLast Update : Wed Sep 09 12:10:38 2020
Response via : Initial Calibration



(3) Chloromethane
2.784min (-0.023) 0.11ug/L m
response 2815
lon Exp% Act%
50.00 100 100
52.00 27.80 56.11#
49.00 10.50 24.97
0.00 0.00 0.00

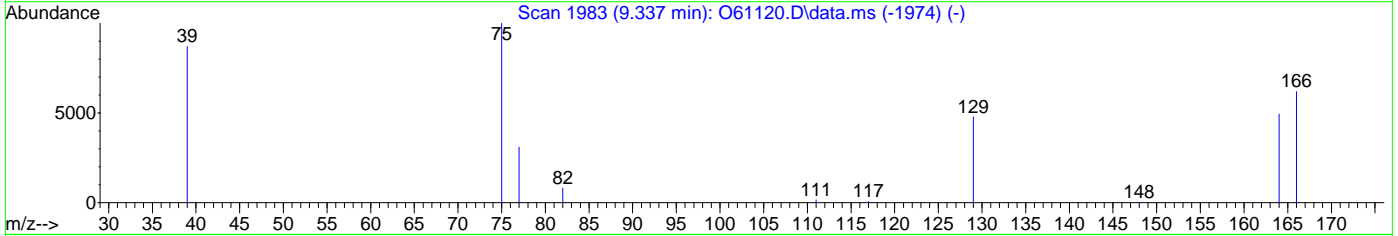
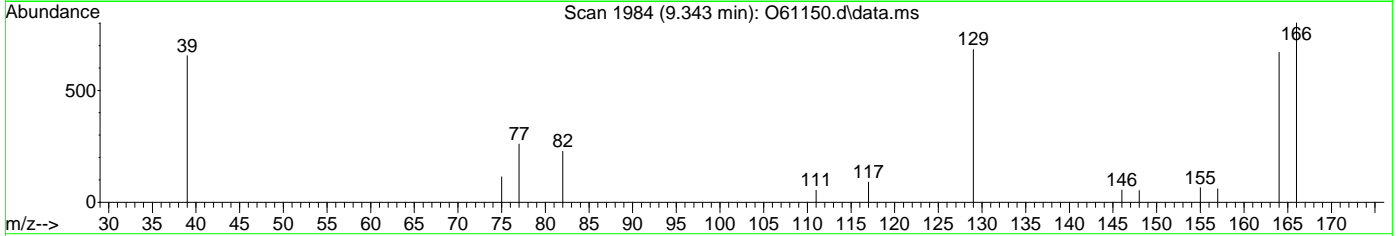
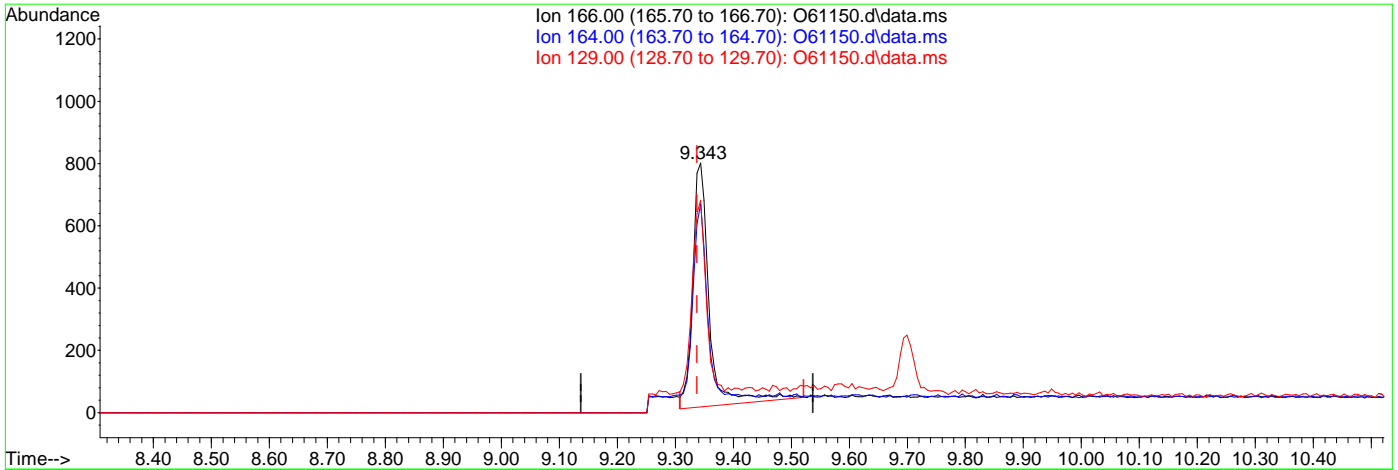


7.1.10.3
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\edessas\09-10-2020\vo2353\
 Data File : O61150.d
 Acq On : 9 Sep 2020 5:33 pm
 Operator : melissam
 Sample : FA78442-10
 Misc : MS47147,VO2353,,,,,
 ALS Vial : 23 Sample Multiplier: 1

Quant Time: Sep 09 20:49:00 2020
 Quant Method : C:\msdchem\1\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration



(21) Tetrachloroethene ()

9.343min (+0.006) 0.13ug/L

response 1546

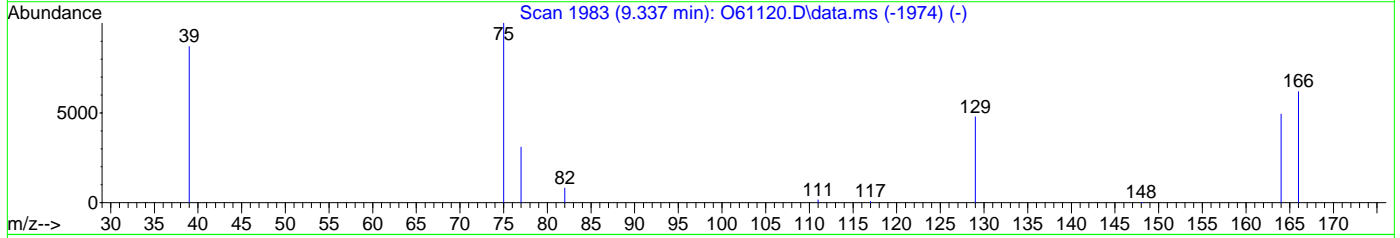
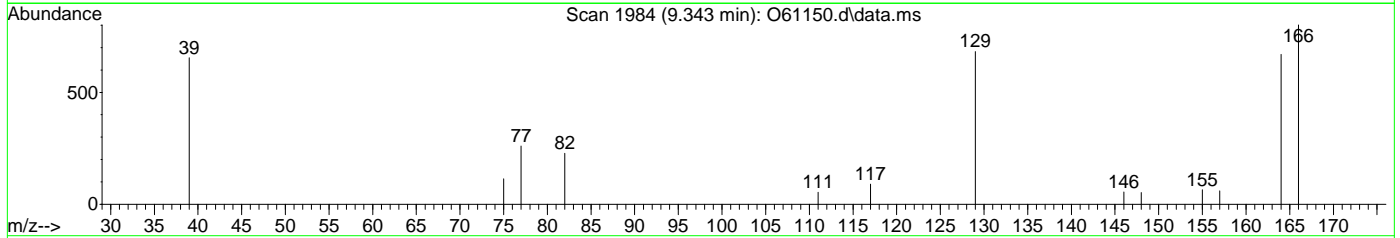
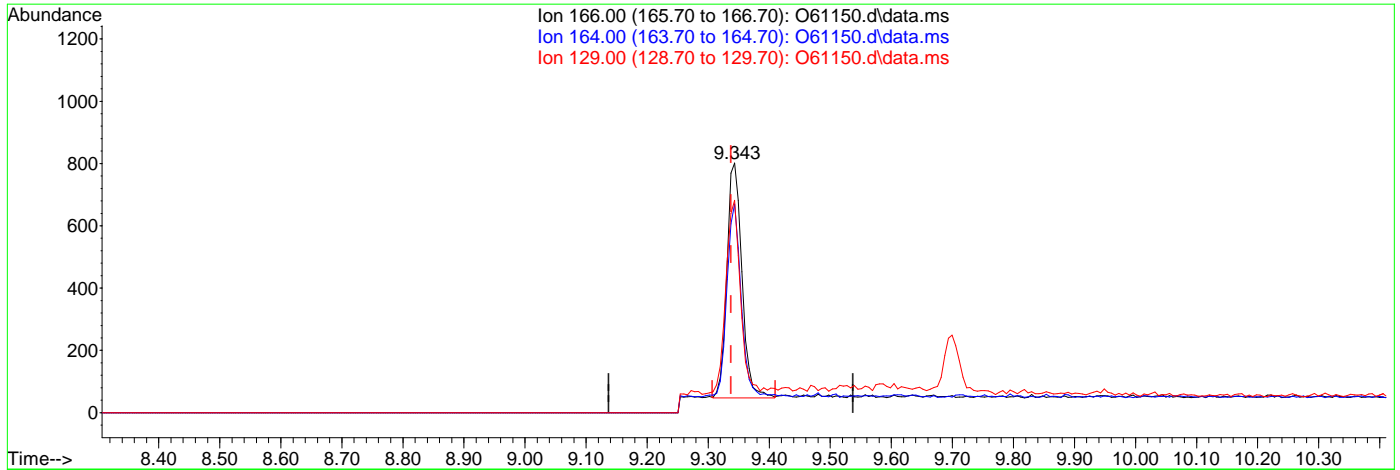
Ion	Exp%	Act%
166.00	100	100
164.00	77.30	81.81
129.00	67.50	81.67
0.00	0.00	0.00

7.1.10.4
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\edessas\09-10-2020\vo2353\
 Data File : O61150.d
 Acq On : 9 Sep 2020 5:33 pm
 Operator : melissam
 Sample : FA78442-10
 Misc : MS47147,VO2353,,,,,
 ALS Vial : 23 Sample Multiplier: 1

Quant Time: Sep 09 20:49:00 2020
 Quant Method : C:\msdchem\1\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration



(21) Tetrachloroethene ()

9.343min (+0.006) 0.11ug/L m

response 1292

Ion	Exp%	Act%
166.00	100	100
164.00	77.30	83.54
129.00	67.50	85.04
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-10-2020\vz2412\
Data File : Z62167.d
Acq On : 9 Sep 2020 3:46 pm
Operator : SHANICAO
Sample : FA78442-11
Misc : MS47171,VZ2412,,,,,
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 10 05:50:57 2020
Quant Method : C:\msdchem\1\methods\SIMCL090820.M
Quant Title : WATER-EPA 8260B
QLast Update : Tue Sep 08 14:39:51 2020
Response via : Initial Calibration

Table with 7 columns: Compound, R.T., QIon, Response, Conc Units, Dev (Min). Rows include Internal Standards (Fluorobenzene, Chlorobenzene-d5), System Monitoring Compounds (1,2-Dichloroethane-d4, Toluene-d8), and Target Compounds (Methylene Chloride, 1,1-Dichloroethane, cis-1,2-Dichloroethene, Chloroform, 1,2-Dichloroethane, Trichloroethene, 1,2-Dichloropropane, Tetrachloroethene).

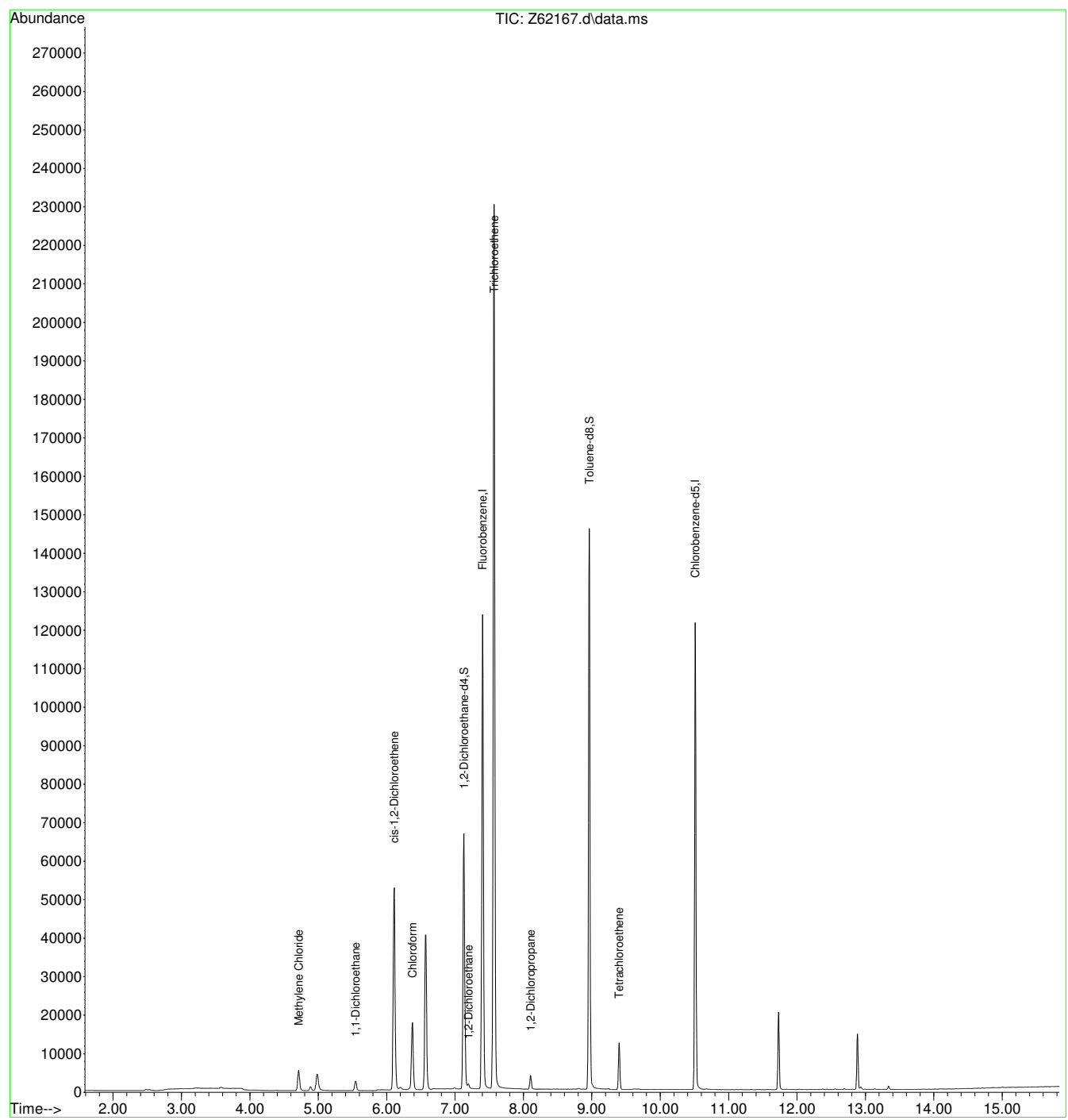
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.1.11
7

Quantitation Report (QT Reviewed)

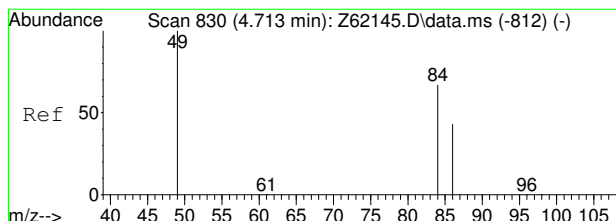
Data Path : C:\msdchem\1\data\johnm\September 2020\09-10-2020\ vz2412\
Data File : Z62167.d
Acq On : 9 Sep 2020 3:46 pm
Operator : SHANICAO
Sample : FA78442-11
Misc : MS47171,VZ2412,,,,,
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 10 05:50:57 2020
Quant Method : C:\msdchem\1\methods\SIMCL090820.M
Quant Title : WATER-EPA 8260B
QLast Update : Tue Sep 08 14:39:51 2020
Response via : Initial Calibration



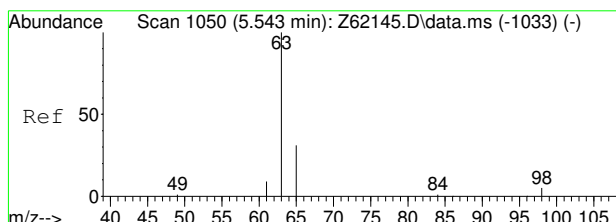
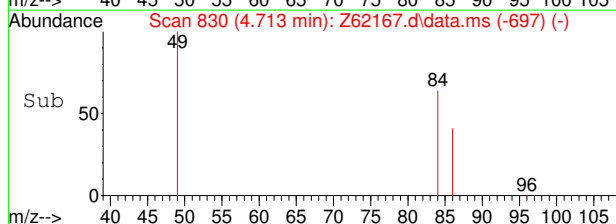
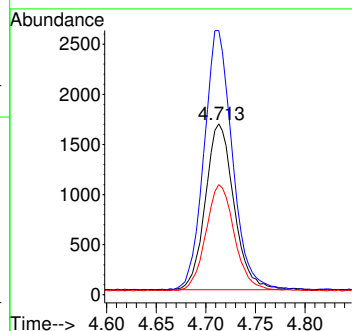
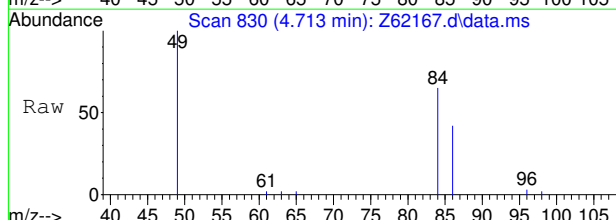
7.111
7





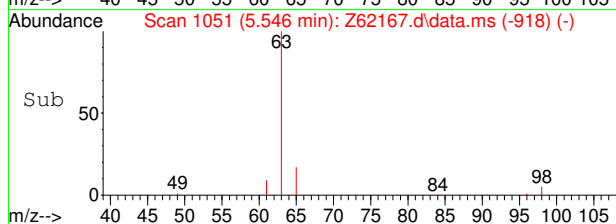
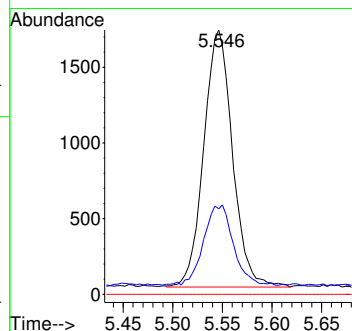
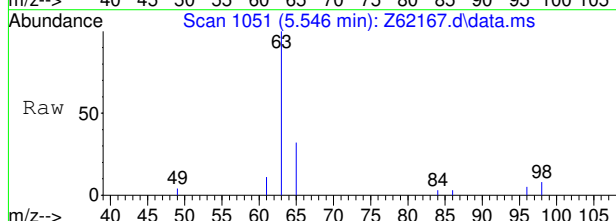
#5
 Methylene Chloride
 Concen: 0.22 ppb
 RT: 4.713 min Scan# 830
 Delta R.T. -0.000 min
 Lab File: Z62167.d
 Acq: 9 Sep 2020 3:46 pm

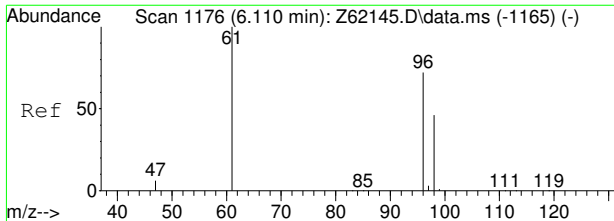
Tgt Ion	Ratio	Lower	Upper
84	100		
49	156.6	128.7	168.7
86	63.9	43.9	83.9



#7
 1,1-Dichloroethane
 Concen: 0.16 ppb
 RT: 5.546 min Scan# 1051
 Delta R.T. 0.003 min
 Lab File: Z62167.d
 Acq: 9 Sep 2020 3:46 pm

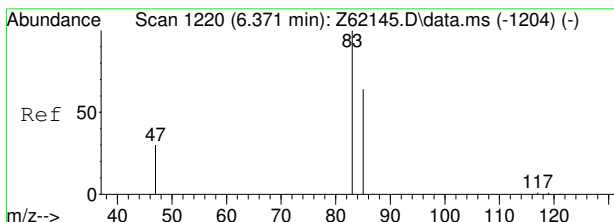
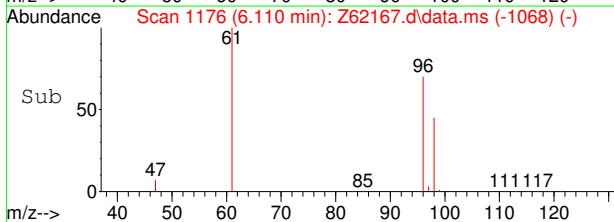
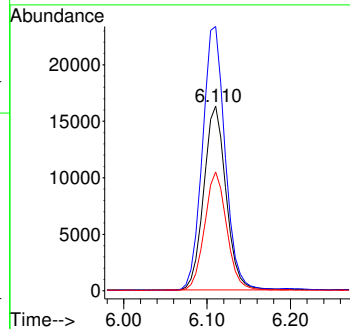
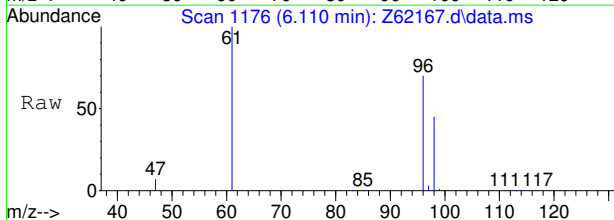
Tgt Ion	Ratio	Lower	Upper
63	100		
65	32.3	11.3	51.3
83	0.0	0.0	30.0





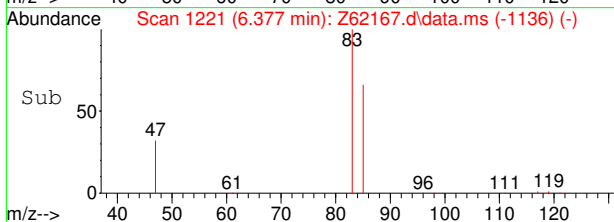
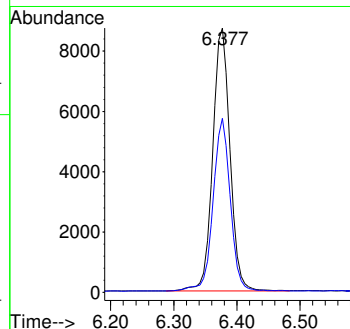
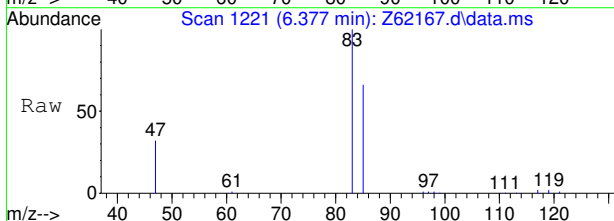
#8
 cis-1,2-Dichloroethene
 Concen: 2.56 ppb
 RT: 6.110 min Scan# 1176
 Delta R.T. 0.000 min
 Lab File: Z62167.d
 Acq: 9 Sep 2020 3:46 pm

Tgt Ion	Resp	Lower	Upper
96	302180		
96	100		
61	143.5	119.3	159.3
98	64.4	44.5	84.5

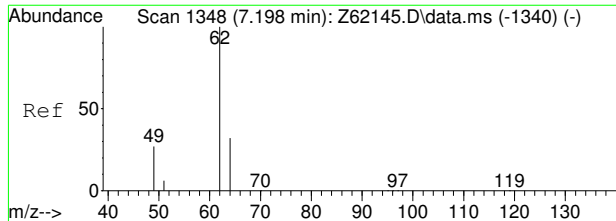


#9
 Chloroform
 Concen: 0.71 ppb
 RT: 6.377 min Scan# 1221
 Delta R.T. 0.006 min
 Lab File: Z62167.d
 Acq: 9 Sep 2020 3:46 pm

Tgt Ion	Resp	Lower	Upper
83	165769		
83	100		
85	65.3	46.1	86.1



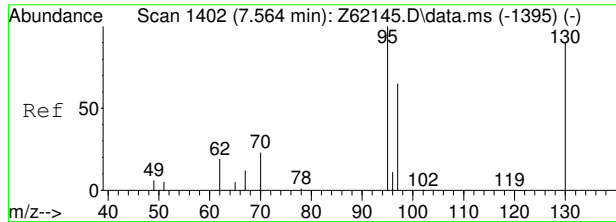
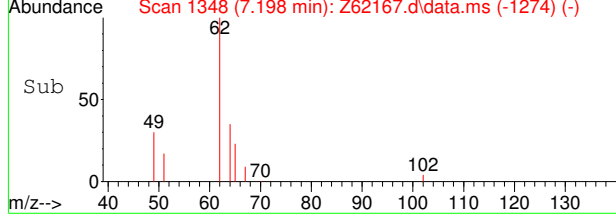
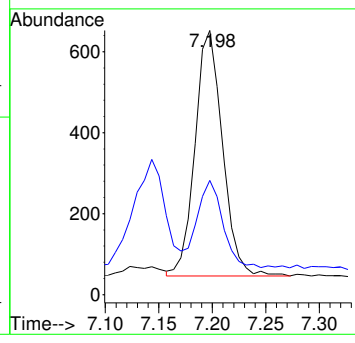
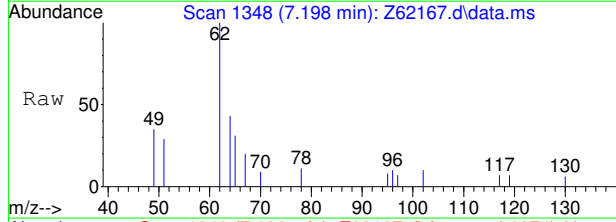
7.1.11
7



#14
 1,2-Dichloroethane
 Concen: 0.06 ppb
 RT: 7.198 min Scan# 1348
 Delta R.T. -0.000 min
 Lab File: Z62167.d
 Acq: 9 Sep 2020 3:46 pm

Tgt Ion: 62 Resp: 10842

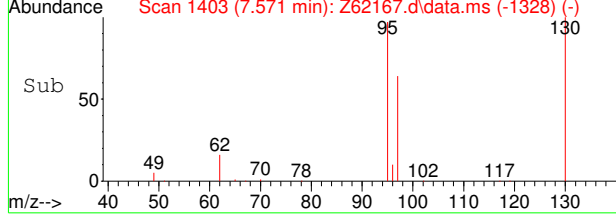
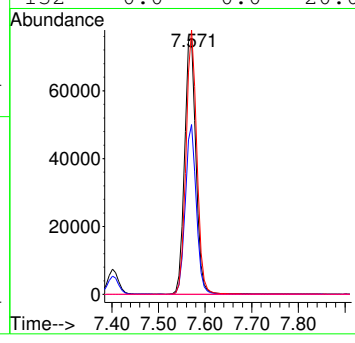
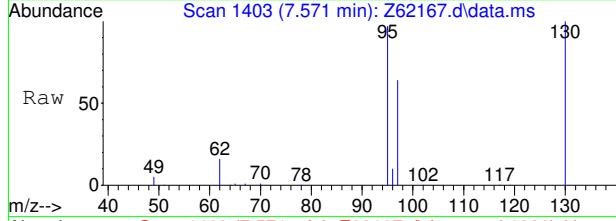
Ion	Ratio	Lower	Upper
62	100		
64	33.8	12.3	52.3



#15
 Trichloroethene
 Concen: 9.95 ppb
 RT: 7.571 min Scan# 1403
 Delta R.T. 0.007 min
 Lab File: Z62167.d
 Acq: 9 Sep 2020 3:46 pm

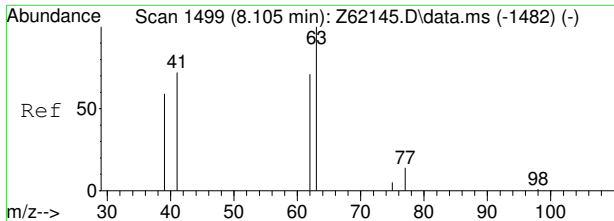
Tgt Ion: 95 Resp: 1283277

Ion	Ratio	Lower	Upper
95	100		
97	66.4	44.5	84.5
130	103.4	69.7	109.7
132	0.0	0.0	20.0

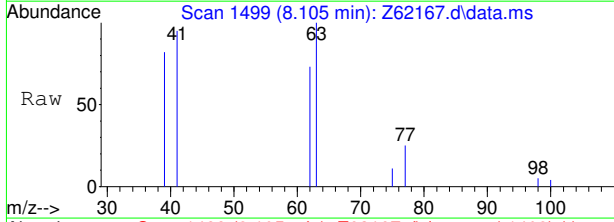


7.1.11
7



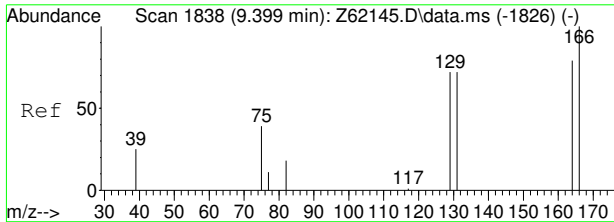
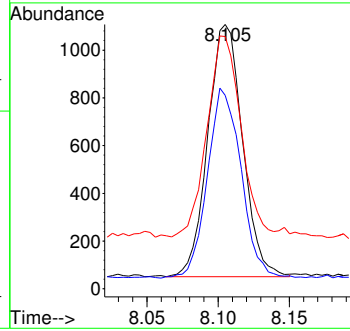
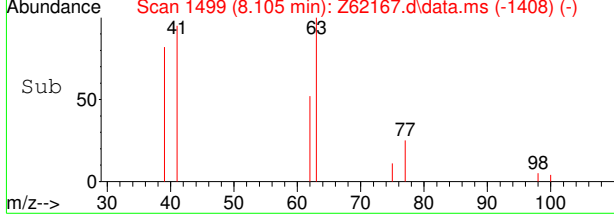


#16
 1,2-Dichloropropane
 Concen: 0.16 ppb
 RT: 8.105 min Scan# 1499
 Delta R.T. 0.000 min
 Lab File: Z62167.d
 Acq: 9 Sep 2020 3:46 pm

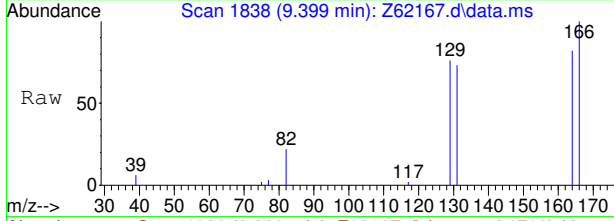


Tgt Ion: 63 Resp: 17941

Ion	Ratio	Lower	Upper
63	100		
62	73.3	51.6	91.6
41	80.1	43.7	103.7

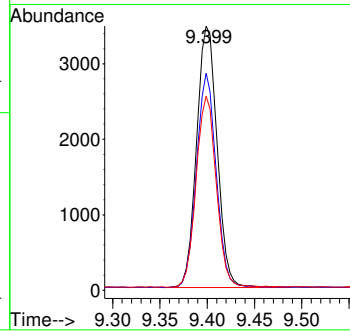
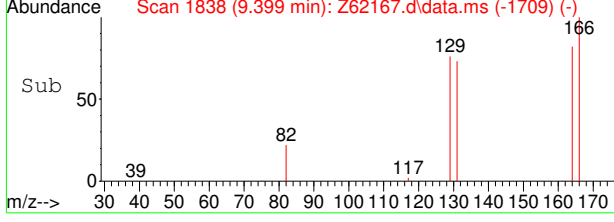


#21
 Tetrachloroethene
 Concen: 0.42 ppb
 RT: 9.399 min Scan# 1838
 Delta R.T. -0.000 min
 Lab File: Z62167.d
 Acq: 9 Sep 2020 3:46 pm



Tgt Ion: 166 Resp: 52152

Ion	Ratio	Lower	Upper
166	100		
164	81.9	58.7	98.7
131	73.1	51.6	91.6



7.1.11
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-10-2020\vz2412\
Data File : Z62168.d
Acq On : 9 Sep 2020 4:05 pm
Operator : SHANICAO
Sample : FA78442-12
Misc : MS47171,VZ2412,,,,,
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 10 05:51:00 2020
Quant Method : C:\msdchem\1\methods\SIMCL090820.M
Quant Title : WATER-EPA 8260B
QLast Update : Tue Sep 08 14:39:51 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)	Qvalue

Internal Standards							
1) Fluorobenzene	7.401	96	1351993	5.00	ppb	0.00	
18) Chlorobenzene-d5	10.511	117	1026079	5.00	ppb	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.130	65	550437	5.44	ppb	0.00	
Spiked Amount	5.000	Range	79 - 125	Recovery	=	108.80%	
19) Toluene-d8	8.961	98	1242037	5.01	ppb	0.00	
Spiked Amount	5.000	Range	70 - 130	Recovery	=	100.20%	
Target Compounds							
5) Methylene Chloride	4.717	84	30531	0.21	ppb	96	
8) cis-1,2-Dichloroethene	6.110	96	28538	0.25	ppb	94	
9) Chloroform	6.371	83	14613	0.06	ppb	89	
15) Trichloroethene	7.571	95	108939	0.86	ppb	91	
21) Tetrachloroethene	9.399	166	13387	0.11	ppb	99	

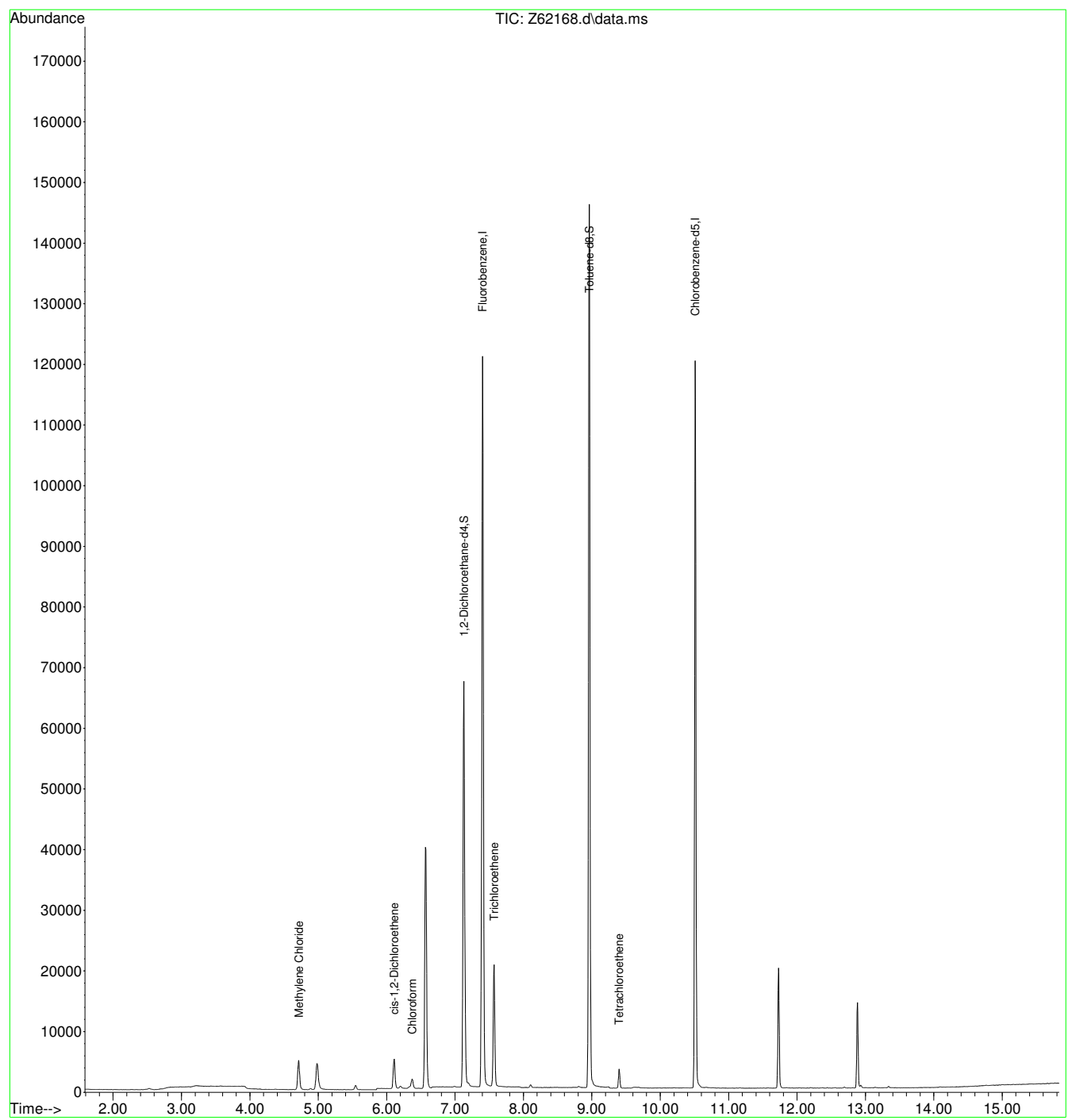
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.1.12
7

Quantitation Report (QT Reviewed)

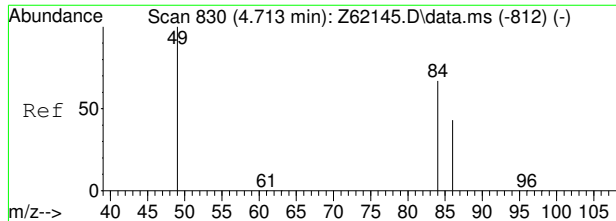
Data Path : C:\msdchem\1\data\johnm\September 2020\09-10-2020\ vz2412\
Data File : Z62168.d
Acq On : 9 Sep 2020 4:05 pm
Operator : SHANICAO
Sample : FA78442-12
Misc : MS47171,VZ2412,,,,,
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 10 05:51:00 2020
Quant Method : C:\msdchem\1\methods\SIMCL090820.M
Quant Title : WATER-EPA 8260B
QLast Update : Tue Sep 08 14:39:51 2020
Response via : Initial Calibration



7.1.12
7

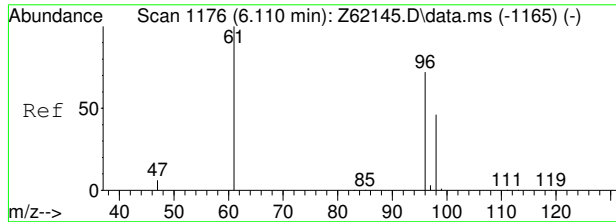
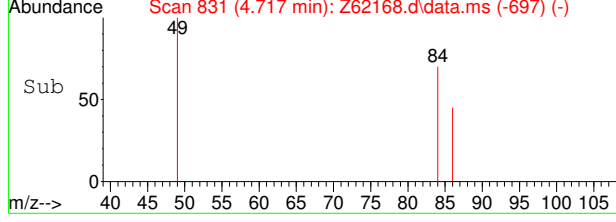
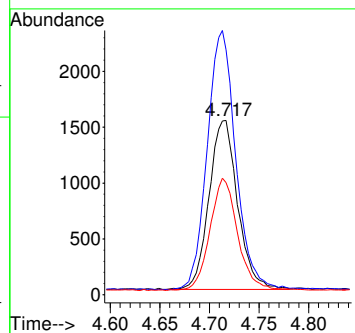
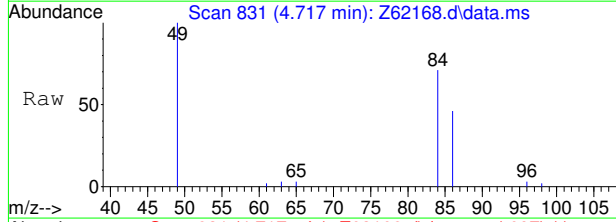




#5
 Methylene Chloride
 Concen: 0.21 ppb
 RT: 4.717 min Scan# 831
 Delta R.T. 0.004 min
 Lab File: Z62168.d
 Acq: 9 Sep 2020 4:05 pm

Tgt Ion: 84 Resp: 30531

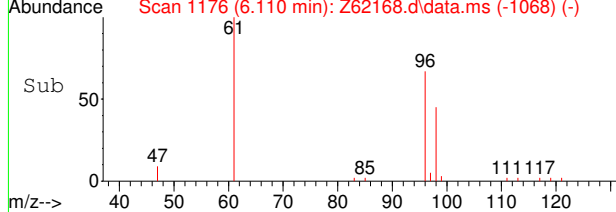
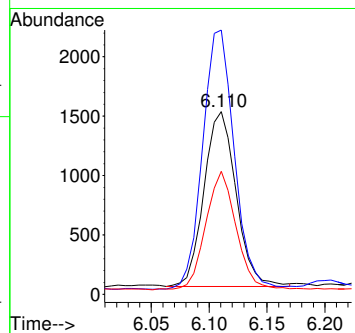
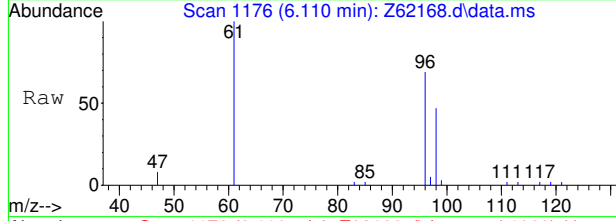
Ion	Ratio	Lower	Upper
84	100		
49	141.7	128.7	168.7
86	63.9	43.9	83.9



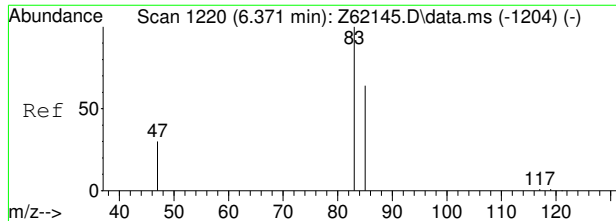
#8
 cis-1,2-Dichloroethene
 Concen: 0.25 ppb
 RT: 6.110 min Scan# 1176
 Delta R.T. 0.000 min
 Lab File: Z62168.d
 Acq: 9 Sep 2020 4:05 pm

Tgt Ion: 96 Resp: 28538

Ion	Ratio	Lower	Upper
96	100		
61	148.1	119.3	159.3
98	67.3	44.5	84.5



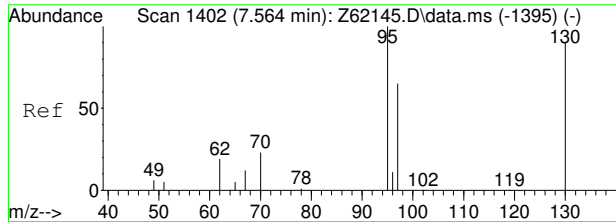
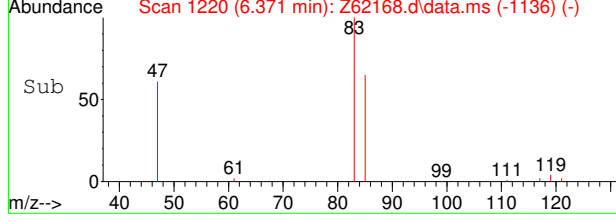
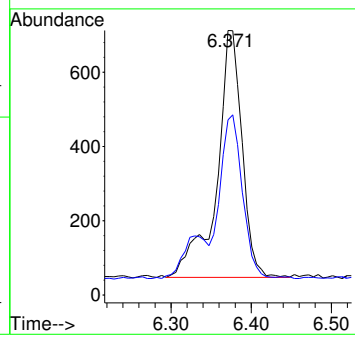
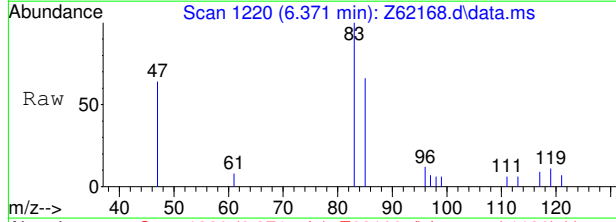
7.1.12
7



#9
 Chloroform
 Concen: 0.06 ppb
 RT: 6.371 min Scan# 1220
 Delta R.T. 0.000 min
 Lab File: Z62168.d
 Acq: 9 Sep 2020 4:05 pm

Tgt Ion: 83 Resp: 14613

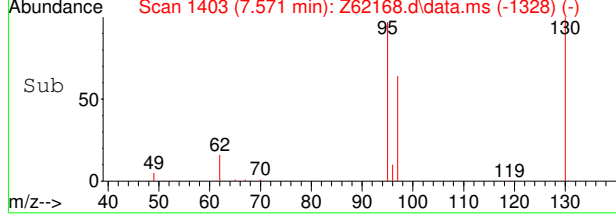
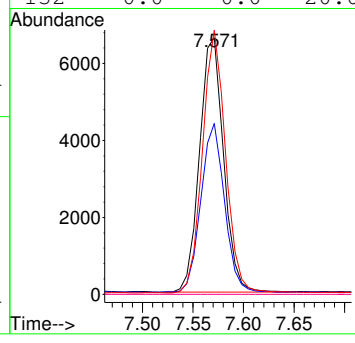
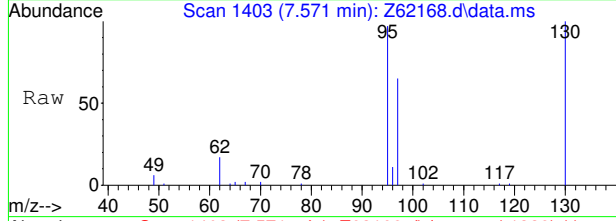
Ion	Ratio	Lower	Upper
83	100		
85	57.2	46.1	86.1



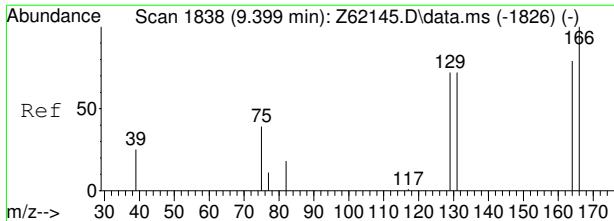
#15
 Trichloroethene
 Concen: 0.86 ppb
 RT: 7.571 min Scan# 1403
 Delta R.T. 0.007 min
 Lab File: Z62168.d
 Acq: 9 Sep 2020 4:05 pm

Tgt Ion: 95 Resp: 108939

Ion	Ratio	Lower	Upper
95	100		
97	66.3	44.5	84.5
130	103.3	69.7	109.7
132	0.0	0.0	20.0

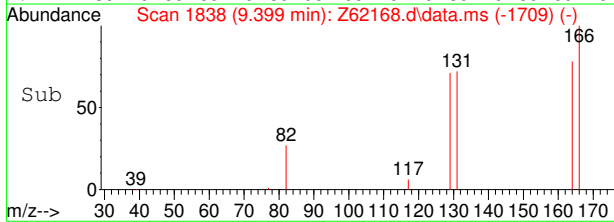
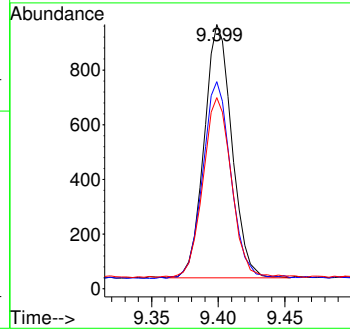
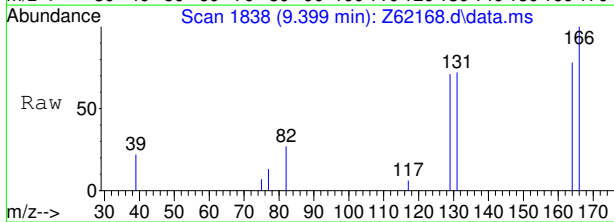


7.1.12
7



#21
 Tetrachloroethene
 Concen: 0.11 ppb
 RT: 9.399 min Scan# 1838
 Delta R.T. -0.000 min
 Lab File: Z62168.d
 Acq: 9 Sep 2020 4:05 pm

Tgt Ion	Resp	Lower	Upper
166	13387		
166	100		
164	77.6	58.7	98.7
131	70.4	51.6	91.6



7.1.12
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-08-2020\VZ2409\
 Data File : Z62076.d
 Acq On : 4 Sep 2020 9:37 am
 Operator : shanicao
 Sample : MB
 Misc : MS47134,VZ2409,,,,,
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 08 01:08:19 2020
 Quant Method : C:\msdchem\1\methods\SIMCL090320.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Fri Sep 04 11:36:05 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Fluorobenzene	7.401	96	2556488	5.00	ppb	0.00
18) Chlorobenzene-d5	10.511	117	1926956	5.00	ppb	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.130	65	892184	5.39	ppb	0.00
Spiked Amount	5.000	Range	79 - 125	Recovery	=	107.80%
19) Toluene-d8	8.961	98	2425025	5.06	ppb	0.00
Spiked Amount	5.000	Range	70 - 130	Recovery	=	101.20%
Target Compounds						
5) Methylene Chloride	4.713	84	53538	0.24	ppb	Qvalue 95

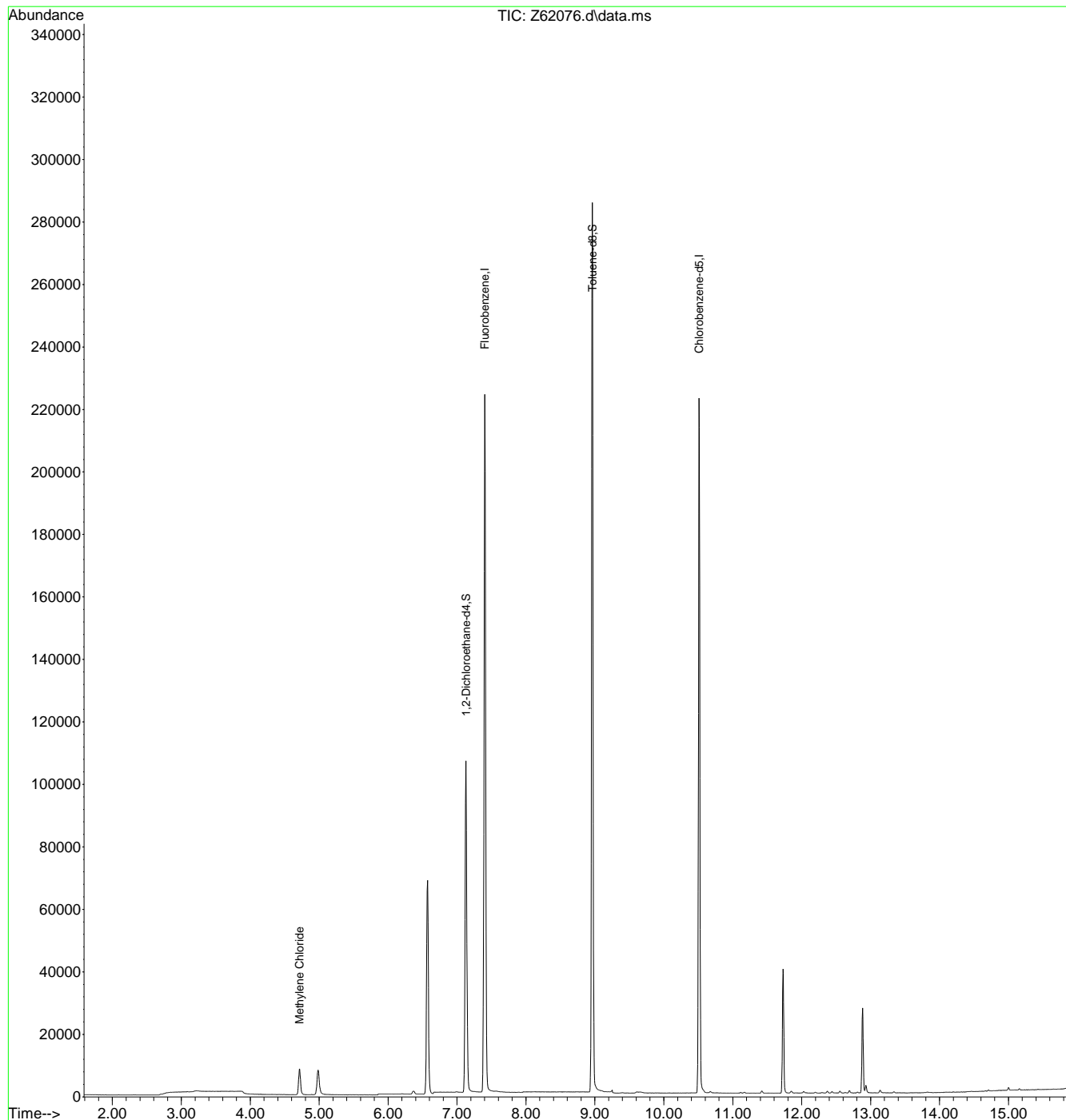
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.2.1
7

Quantitation Report (QT Reviewed)

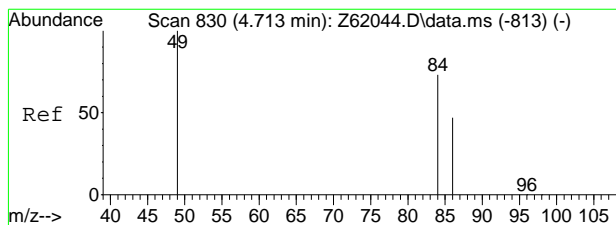
Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-08-2020\VZ2409\
 Data File : Z62076.d
 Acq On : 4 Sep 2020 9:37 am
 Operator : shanicao
 Sample : MB
 Misc : MS47134,VZ2409,,,,,
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 08 01:08:19 2020
 Quant Method : C:\msdchem\1\methods\SIMCL090320.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Fri Sep 04 11:36:05 2020
 Response via : Initial Calibration



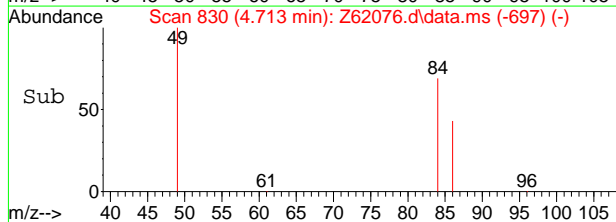
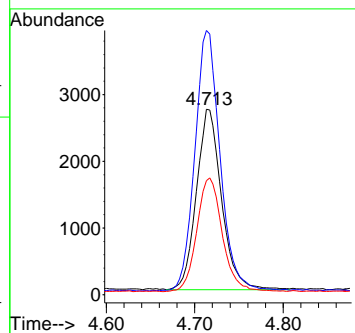
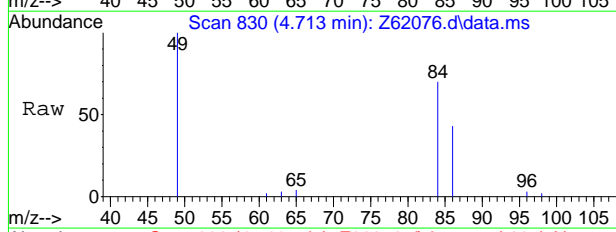
7.2.1
7





#5
 Methylene Chloride
 Concen: 0.24 ppb
 RT: 4.713 min Scan# 830
 Delta R.T. 0.000 min
 Lab File: Z62076.d
 Acq: 4 Sep 2020 9:37 am

Tgt Ion	Resp	Lower	Upper
84	53538		
Ion	Ratio	Lower	Upper
84	100		
49	144.1	116.6	156.6
86	61.3	43.9	83.9



7.2.1
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\edessas\09-10-2020\vo2353\
 Data File : O61130.d
 Acq On : 9 Sep 2020 10:34 am
 Operator : melissam
 Sample : mb
 Misc : MS47134,VO2353,,,,,
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 09 21:05:51 2020
 Quant Method : C:\msdchem\1\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Fluorobenzene	7.340	96	278072	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.441	117	202417	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.068	65	124841	5.11	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	102.20%	
19) Toluene-d8	8.896	98	248825	5.03	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	100.60%	
Target Compounds						
5) Methylene Chloride	4.699	49	21487	0.31	ug/L	Qvalue 90

(#) = qualifier out of range (m) = manual integration (+) = signals summed

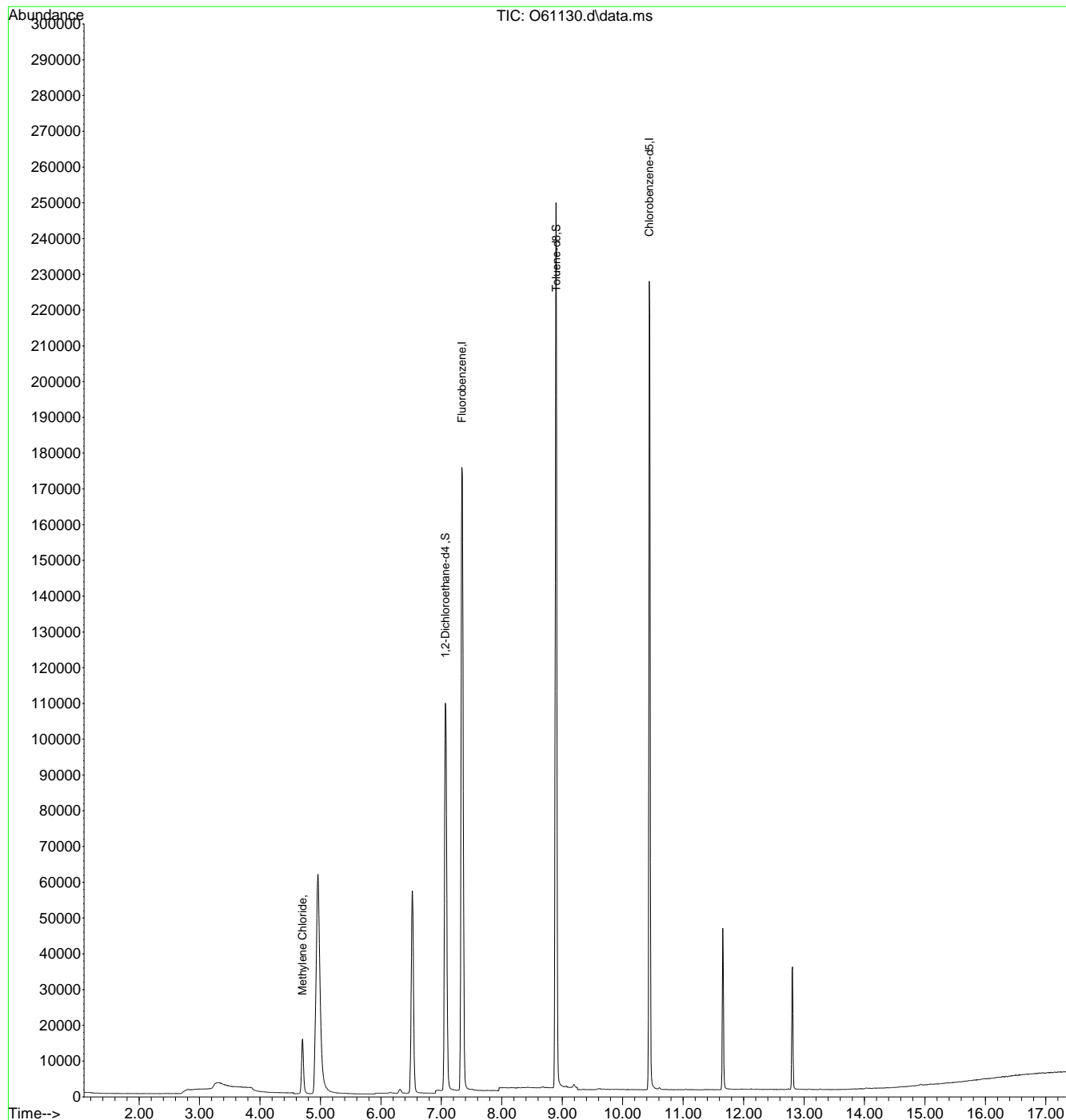
7.22
7



Quantitation Report (QT Reviewed)

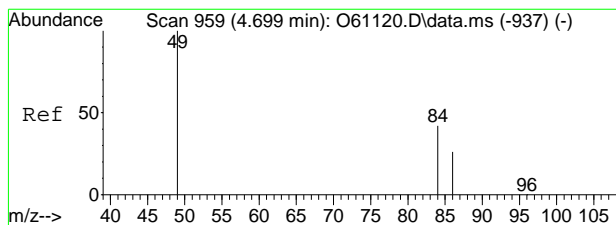
Data Path : C:\msdchem\1\data\edessas\09-10-2020\vo2353\
 Data File : O61130.d
 Acq On : 9 Sep 2020 10:34 am
 Operator : melissam
 Sample : mb
 Misc : MS47134,VO2353,,,,,
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 09 21:05:51 2020
 Quant Method : C:\msdchem\1\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration



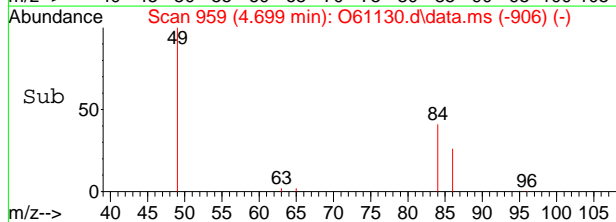
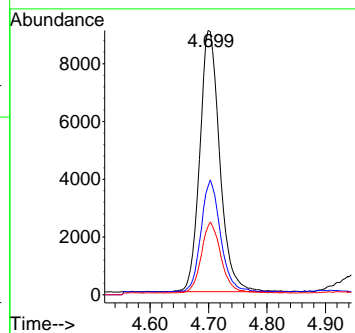
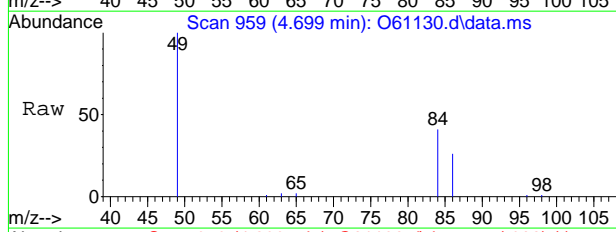
7.2.2
7





#5
 Methylene Chloride
 Concen: 0.31 ug/L
 RT: 4.699 min Scan# 959
 Delta R.T. 0.000 min
 Lab File: O61130.d
 Acq: 9 Sep 2020 10:34 am

Tgt Ion	Ratio	Lower	Upper
49	100		
84	40.4	17.9	77.9
86	25.5	0.0	59.8



7.22
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-10-2020\vz2412\
 Data File : Z62160.d
 Acq On : 9 Sep 2020 1:26 pm
 Operator : SHANICAO
 Sample : MB
 Misc : MS47137,VZ2412,,,,,
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 10 05:50:36 2020
 Quant Method : C:\msdchem\1\methods\SIMCL090820.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Tue Sep 08 14:39:51 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)

Internal Standards						
1) Fluorobenzene	7.401	96	1611304	5.00	ppb	0.00
18) Chlorobenzene-d5	10.511	117	1212825	5.00	ppb	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.130	65	621104	5.15	ppb	0.00
Spiked Amount	5.000	Range	79 - 125	Recovery	=	103.00%
19) Toluene-d8	8.961	98	1501231	5.13	ppb	0.00
Spiked Amount	5.000	Range	70 - 130	Recovery	=	102.60%
Target Compounds						
5) Methylene Chloride	4.717	84	52285	0.30	ppb	Qvalue 100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

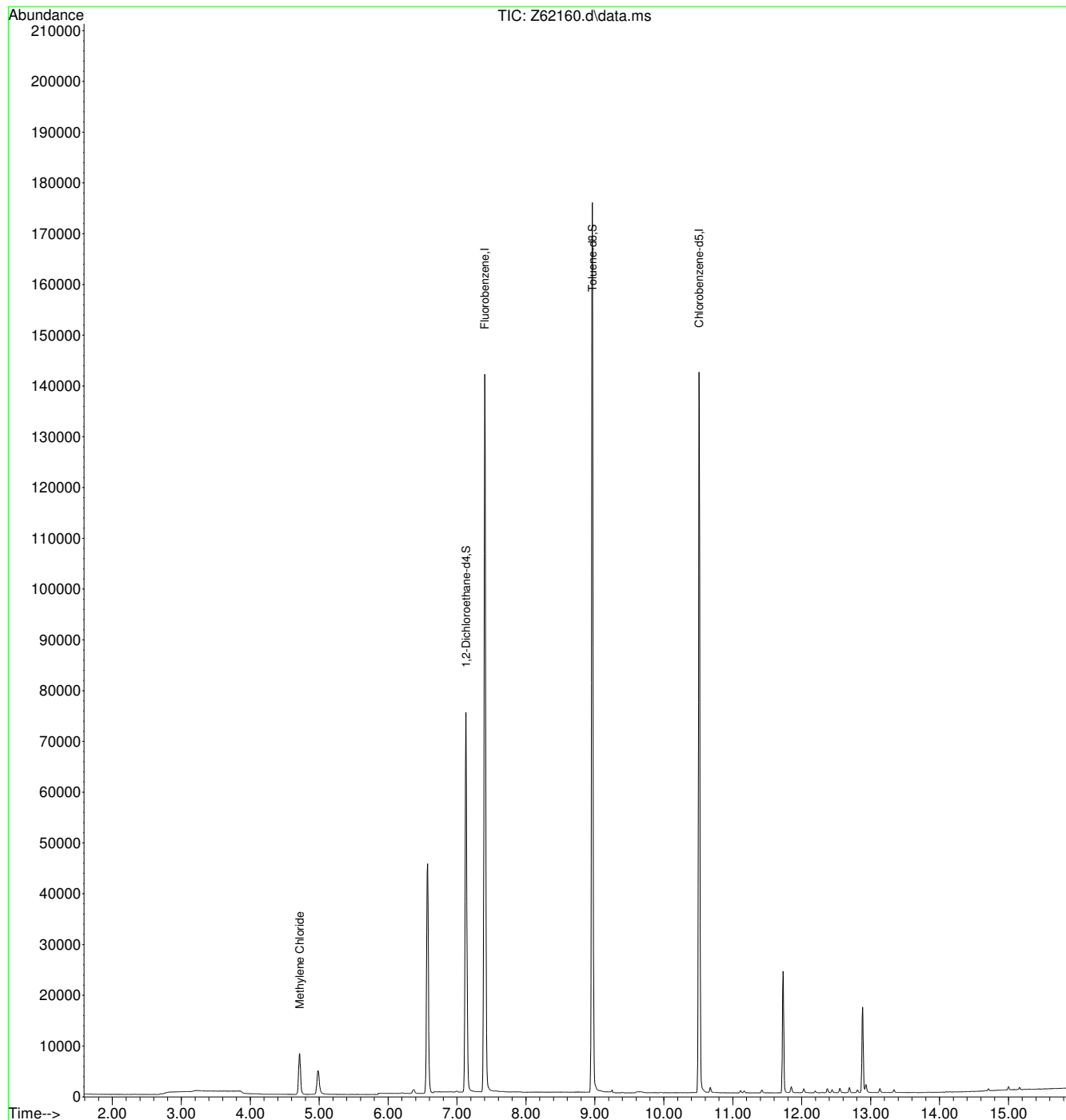
7.2.3
7



Quantitation Report (QT Reviewed)

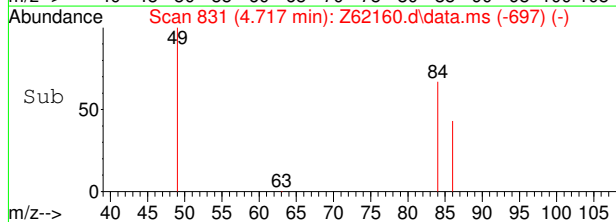
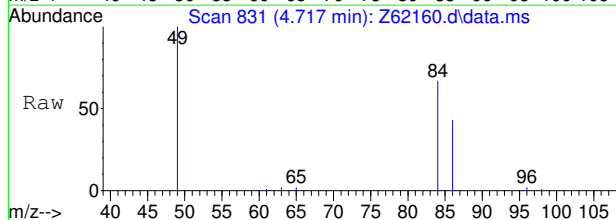
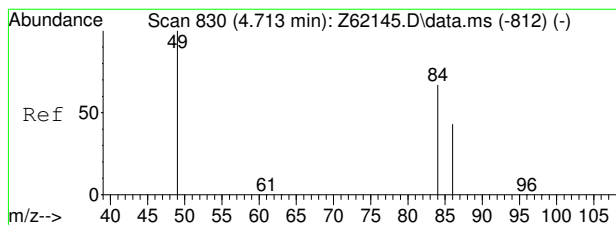
Data Path : C:\msdchem\1\data\johnm\September 2020\09-10-2020\ vz2412\
 Data File : Z62160.d
 Acq On : 9 Sep 2020 1:26 pm
 Operator : SHANICAO
 Sample : MB
 Misc : MS47137,VZ2412,,,,,
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 10 05:50:36 2020
 Quant Method : C:\msdchem\1\methods\SIMCL090820.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Tue Sep 08 14:39:51 2020
 Response via : Initial Calibration



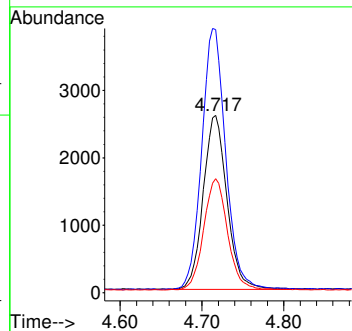
7.2.3
7





#5
 Methylene Chloride
 Concen: 0.30 ppb
 RT: 4.717 min Scan# 831
 Delta R.T. 0.004 min
 Lab File: Z62160.d
 Acq: 9 Sep 2020 1:26 pm

Tgt Ion	Ratio	Lower	Upper
84	100		
49	149.1	128.7	168.7
86	63.9	43.9	83.9



7.2.3
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-08-2020\VZ2409\
 Data File : Z62075.d
 Acq On : 4 Sep 2020 9:17 am
 Operator : shanicao
 Sample : BS
 Misc : MS47134,VZ2409,,,,,
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 08 01:08:17 2020
 Quant Method : C:\msdchem\1\methods\SIMCL090320.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Fri Sep 04 11:36:05 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	

Internal Standards							
1) Fluorobenzene	7.401	96	2672989	5.00	ppb	0.00	
18) Chlorobenzene-d5	10.511	117	2058240	5.00	ppb	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.130	65	897164	5.18	ppb	0.00	
Spiked Amount	5.000	Range 79 - 125	Recovery	=	103.60%		
19) Toluene-d8	8.961	98	2545872	4.97	ppb	0.00	
Spiked Amount	5.000	Range 70 - 130	Recovery	=	99.40%		
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.839	62	1221527	5.21	ppb		100
3) Chloromethane	2.733	50	1182271	4.95	ppb		99
4) 1,1-Dichloroethene	4.083	96	718514	4.42	ppb		97
5) Methylene Chloride	4.713	84	971240	4.22	ppb		97
6) trans-1,2-Dichloroethene	4.886	96	901138	4.48	ppb		98
7) 1,1-Dichloroethane	5.542	63	1666670	4.34	ppb	#	100
8) cis-1,2-Dichloroethene	6.104	96	970016	4.22	ppb		94
9) Chloroform	6.371	83	1807214	4.23	ppb		100
10) Carbon Tetrachloride	6.543	117	1230469	4.31	ppb		100
11) 1,1,1-Trichloroethane	6.614	97	1594318	4.40	ppb		99
12) Benzene	6.994	78	3462489	4.39	ppb		100
14) 1,2-Dichloroethane	7.198	62	1309090	4.62	ppb		99
15) Trichloroethene	7.564	95	1034184	4.19	ppb		99
16) 1,2-Dichloropropane	8.105	63	902107	4.51	ppb		98
17) cis-1,3-Dichloropropene	8.773	75	1001964	4.04	ppb		99
20) trans-1,3-Dichloropropene	9.411	75	810545	3.24	ppb		100
21) Tetrachloroethene	9.399	166	1055308	4.43	ppb		100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

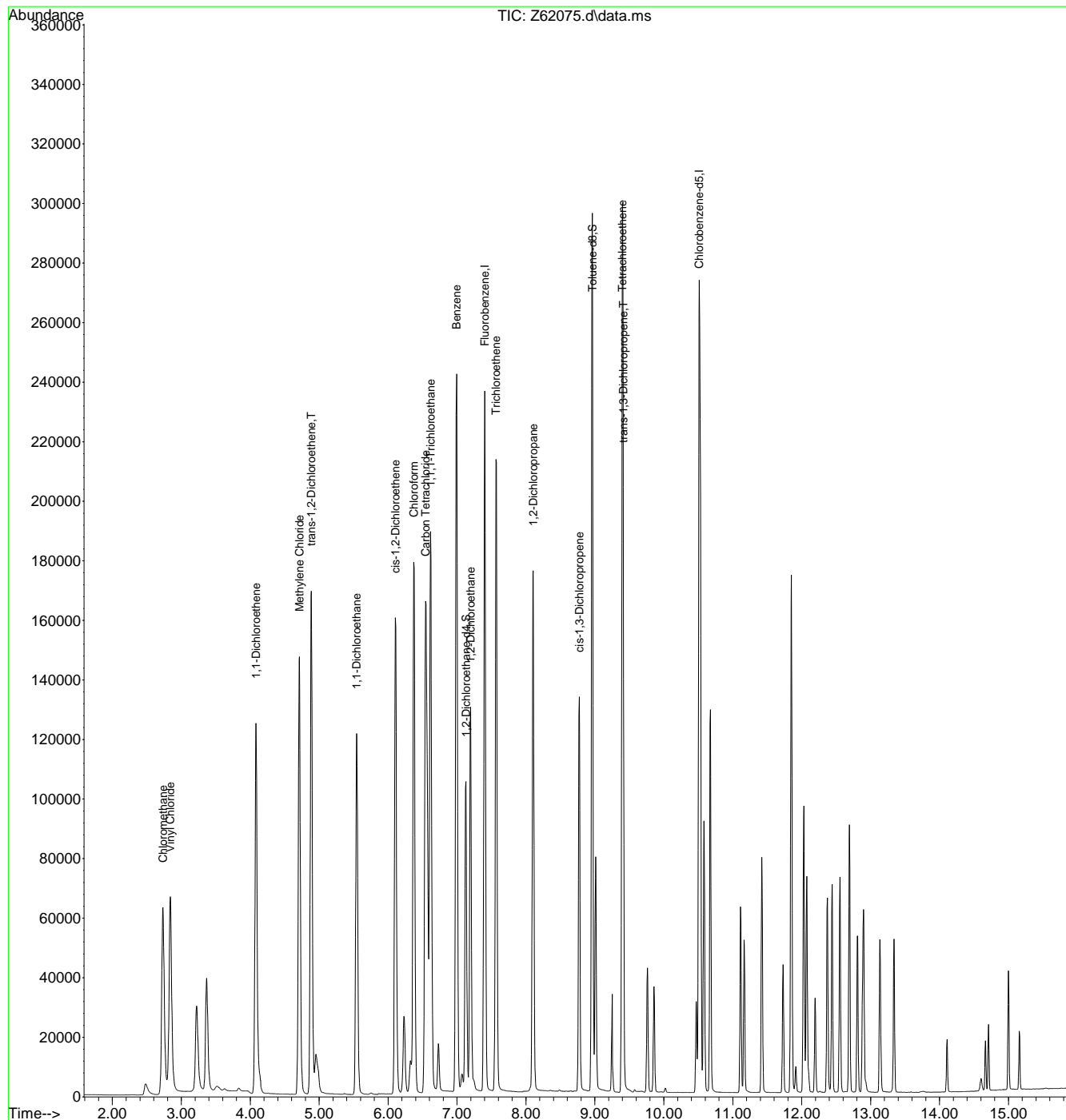
7.3.1
7



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-08-2020\VZ2409\
 Data File : Z62075.d
 Acq On : 4 Sep 2020 9:17 am
 Operator : shanicao
 Sample : BS
 Misc : MS47134,VZ2409,,,,,
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 08 01:08:17 2020
 Quant Method : C:\msdchem\1\methods\SIMCL090320.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Fri Sep 04 11:36:05 2020
 Response via : Initial Calibration



7.3.1
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\edessas\09-10-2020\vo2353\
 Data File : O61129.d
 Acq On : 9 Sep 2020 9:59 am
 Operator : melissam
 Sample : bs
 Misc : MS47134,VO2353,,,,,
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 09 21:51:46 2020
 Quant Method : C:\msdchem\1\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	

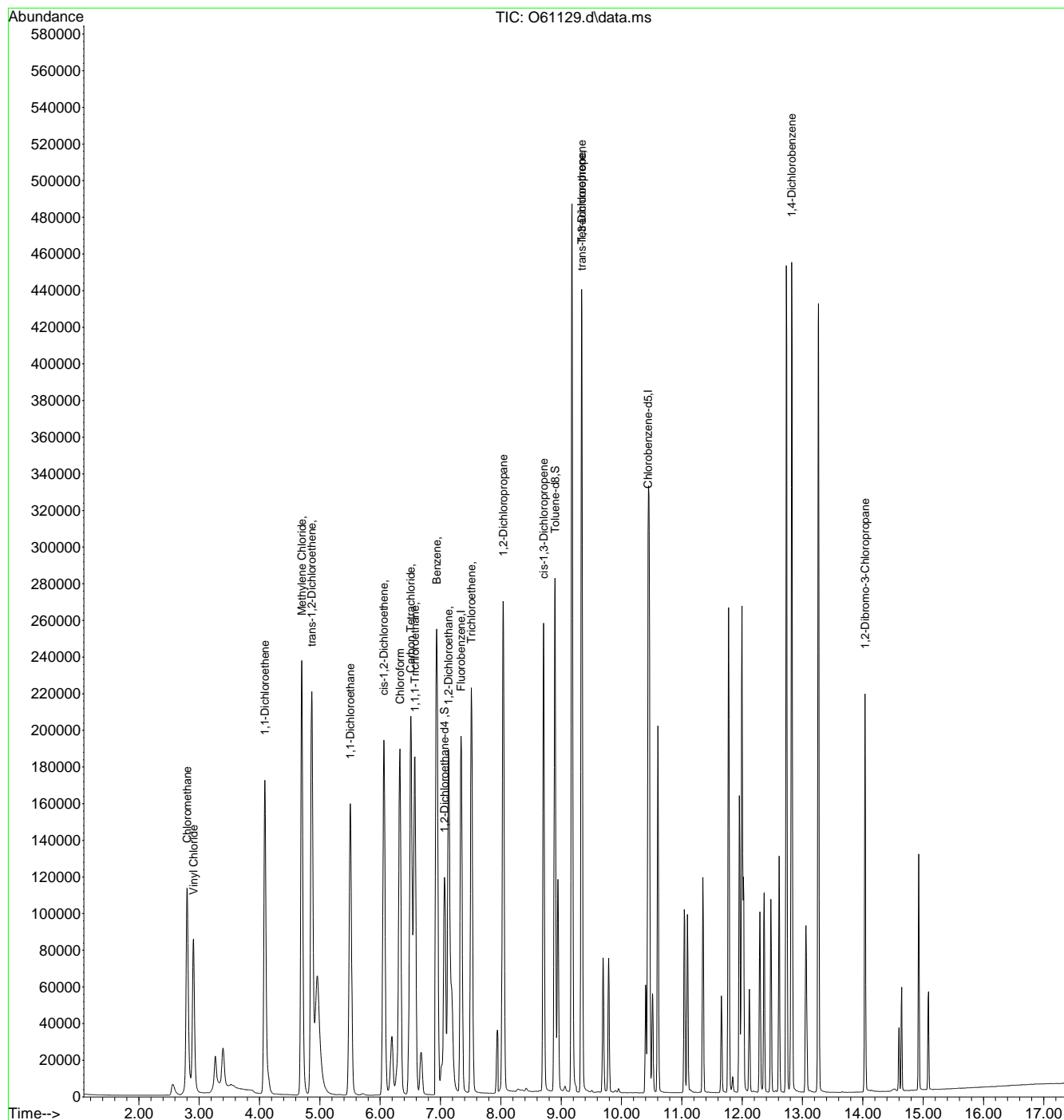
Internal Standards							
1) Fluorobenzene	7.340	96	301697	5.00	ug/L	0.00	
18) Chlorobenzene-d5	10.441	117	228681	5.00	ug/L	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.068	65	134049m	5.06	ug/L	0.00	
Spiked Amount	5.000	Range 74 - 125	Recovery	=	101.20%		
19) Toluene-d8	8.896	98	273434	4.89	ug/L	0.00	
Spiked Amount	5.000	Range 88 - 111	Recovery	=	97.80%		
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.905	62	155043	5.42	ug/L		97
3) Chloromethane	2.799	50	216884	5.16	ug/L		94
4) 1,1-Dichloroethene	4.089	61	238137	5.83	ug/L		82
5) Methylene Chloride	4.700	49	334090	4.67	ug/L		94
6) trans-1,2-Dichloroethene	4.865	61	275312	5.60	ug/L		76
7) 1,1-Dichloroethane	5.506	63	309004	5.45	ug/L		97
8) cis-1,2-Dichloroethene	6.060	96	132523	5.25	ug/L #		61
9) Chloroform	6.327	83	237426	5.17	ug/L		95
10) Carbon Tetrachloride	6.505	117	161121	5.62	ug/L		87
11) 1,1,1-Trichloroethane	6.576	97	181892	5.49	ug/L		87
12) Benzene	6.937	78	493886m	5.52	ug/L		
14) 1,2-Dichloroethane	7.133	62	256656	5.18	ug/L		89
15) Trichloroethene	7.512	95	143671	5.47	ug/L		98
16) 1,2-Dichloropropane	8.036	63	178297	5.45	ug/L		95
17) cis-1,3-Dichloropropene	8.707	75	195150	5.32	ug/L		97
20) trans-1,3-Dichloropropene	9.343	75	184480	5.29	ug/L		99
21) Tetrachloroethene	9.337	166	118156	5.34	ug/L		94
22) 1,4-Dichlorobenzene	12.821	146	242050	5.03	ug/L		94
23) 1,2-Dibromo-3-Chloropr...	14.038	75	59304	4.69	ug/L		88

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\edessas\09-10-2020\vo2353\
 Data File : O61129.d
 Acq On : 9 Sep 2020 9:59 am
 Operator : melissam
 Sample : bs
 Misc : MS47134,VO2353,,,,,
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 09 21:51:46 2020
 Quant Method : C:\msdchem\1\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration



7.3.2
7



Manual Integration Approval Summary

Sample Number: VO2353-BS **Method:** SW846 8260B BY SIM
Lab FileID: O61129.D **Analyst approved:** 09/09/20 22:01 Edessa Sumagaysay
Injection Time: 09/09/20 09:59 **Supervisor approved:** 09/10/20 09:00 Melissa Mangual

Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzene	71-43-2		6.94	Poor instrument integration
1,2-Dichloroethane-D4	17060-07-0		7.07	Overlapping peak

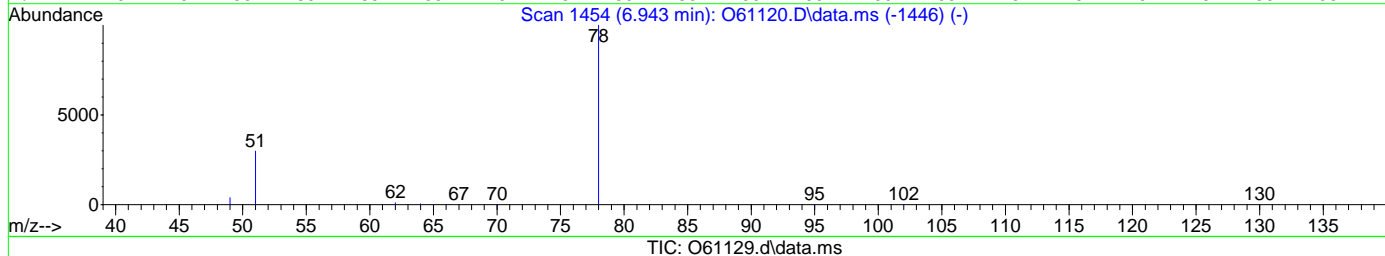
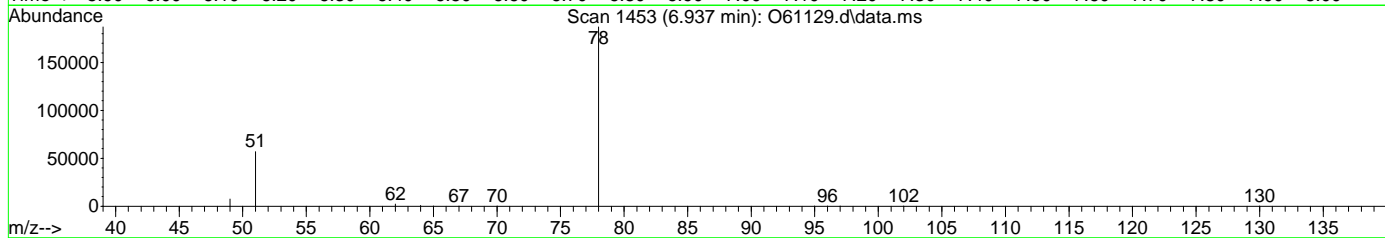
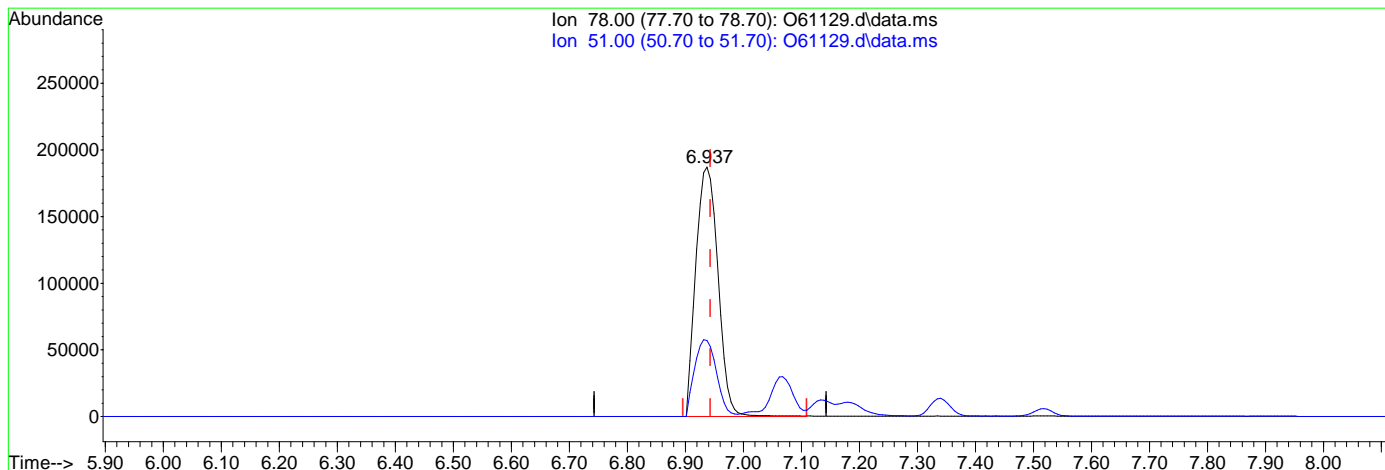
7.3.2.1

7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\edessas\09-10-2020\vo2353\
 Data File : O61129.d
 Acq On : 9 Sep 2020 9:59 am
 Operator : melissam
 Sample : bs
 Misc : MS47134,VO2353,,,,,
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 09 20:48:08 2020
 Quant Method : C:\msdchem\1\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration



(12) Benzene ()
 6.937min (-0.006) 5.57ug/L
 response 498503

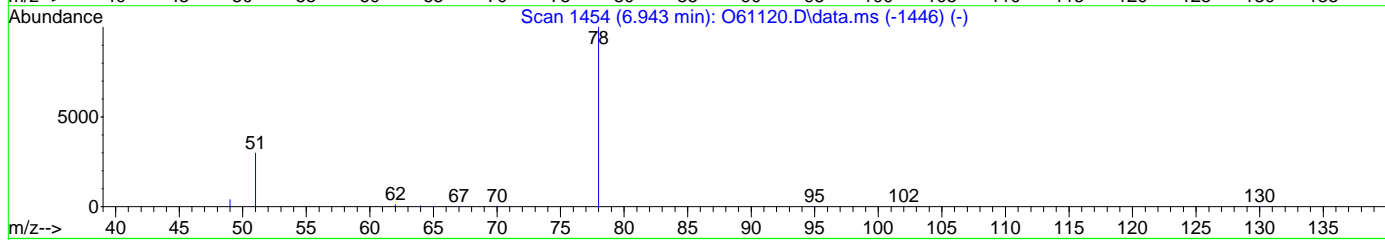
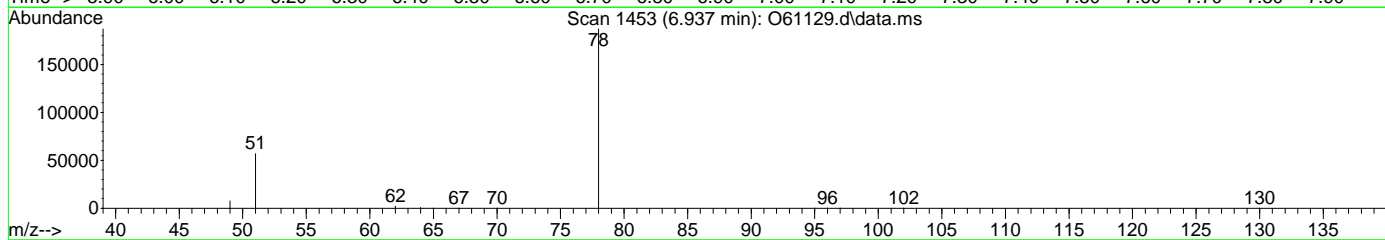
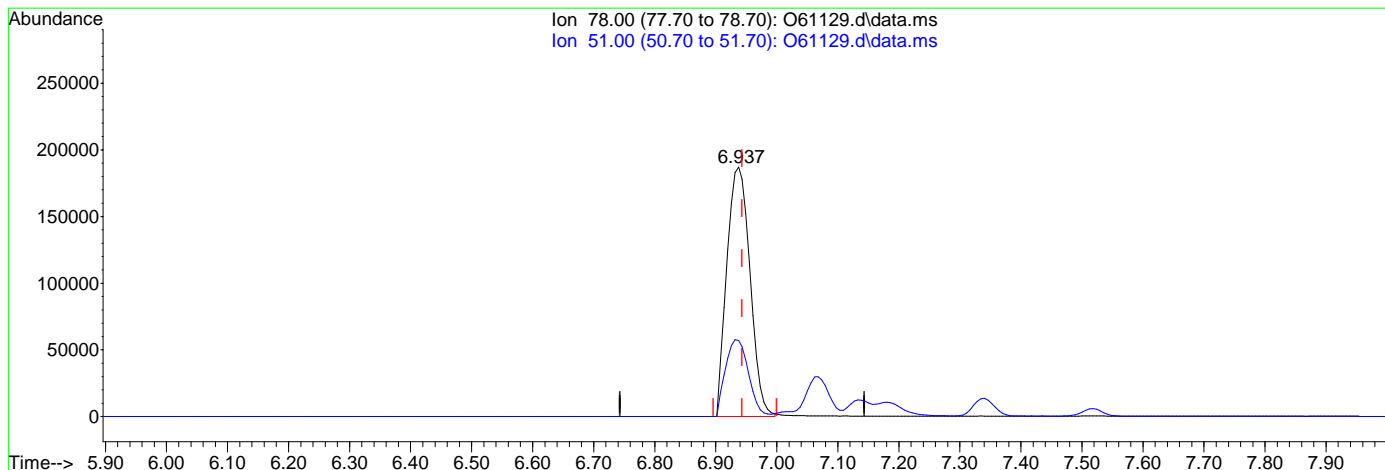
Ion	Exp%	Act%
78.00	100	100
51.00	26.20	30.46
0.00	0.00	0.00
0.00	0.00	0.00

7.3.2.2
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\edessas\09-10-2020\vo2353\
 Data File : O61129.d
 Acq On : 9 Sep 2020 9:59 am
 Operator : melissam
 Sample : bs
 Misc : MS47134,VO2353,,,,,
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 09 20:48:08 2020
 Quant Method : C:\msdchem\1\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration



(12) Benzene ()

6.937min (-0.006) 5.52ug/L m

response 493886

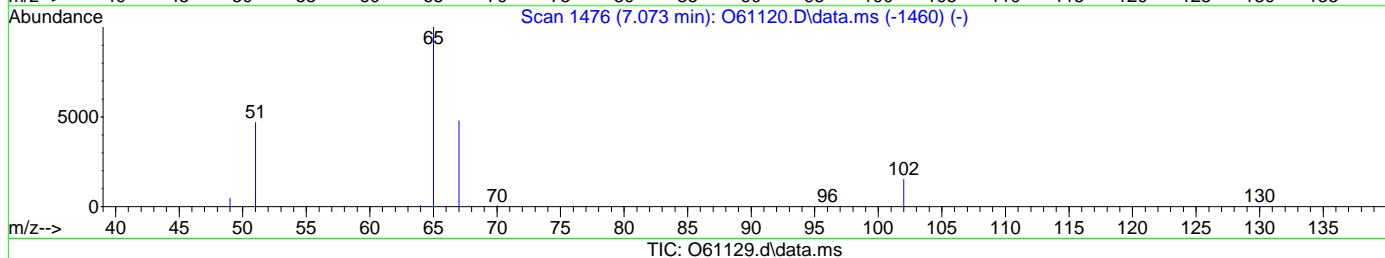
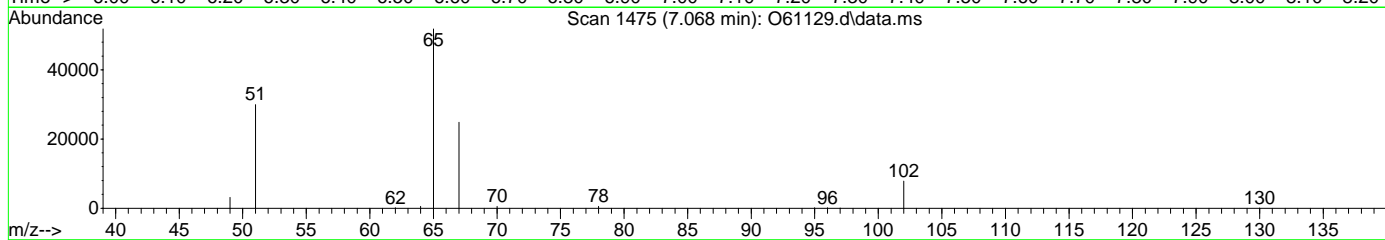
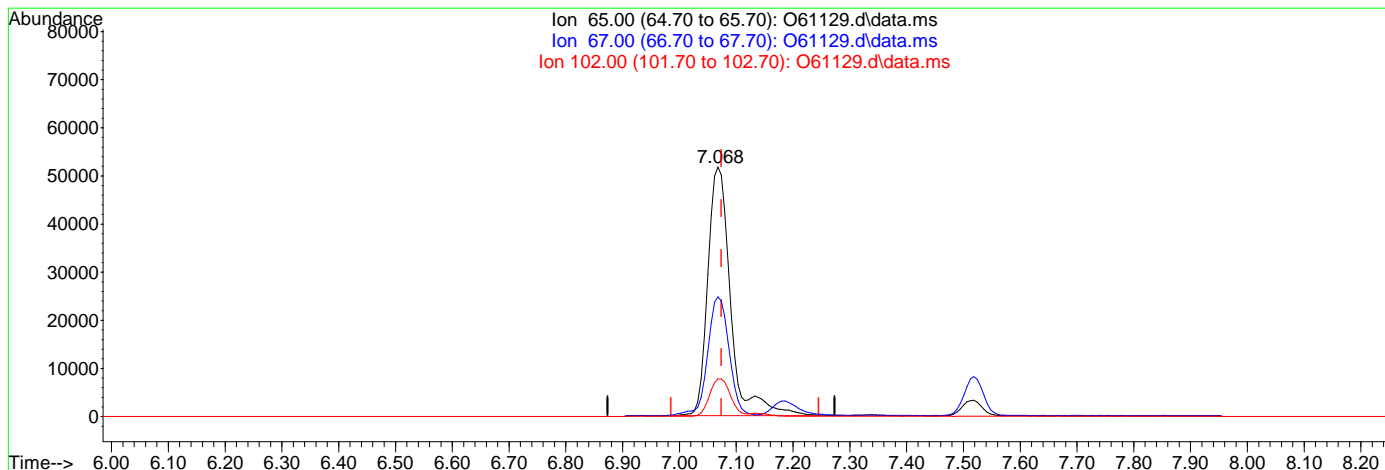
Ion	Exp%	Act%
78.00	100	100
51.00	26.20	30.46
0.00	0.00	0.00
0.00	0.00	0.00

7.3.2.3
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\edessas\09-10-2020\vo2353\
 Data File : O61129.d
 Acq On : 9 Sep 2020 9:59 am
 Operator : melissam
 Sample : bs
 Misc : MS47134,VO2353,,,,,
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 09 20:48:08 2020
 Quant Method : C:\msdchem\1\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration



(13) 1,2-Dichloroethane-d4 (S)

7.068min (-0.006) 5.49ug/L

response 145398

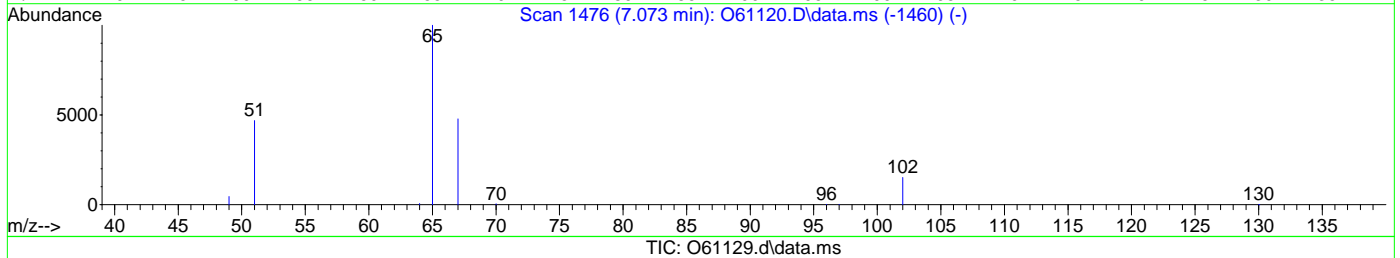
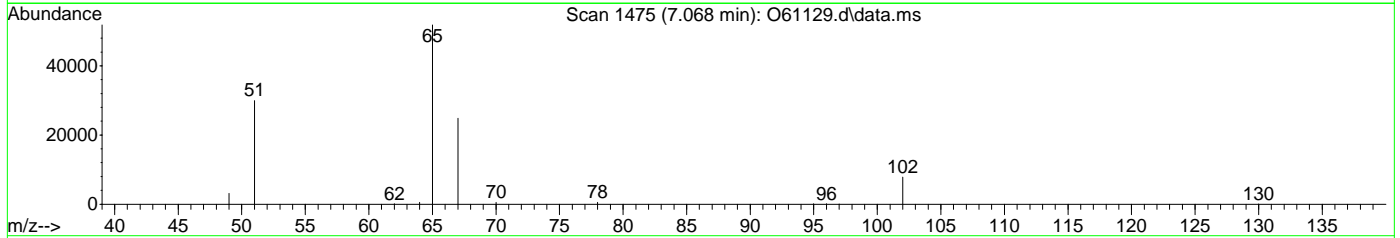
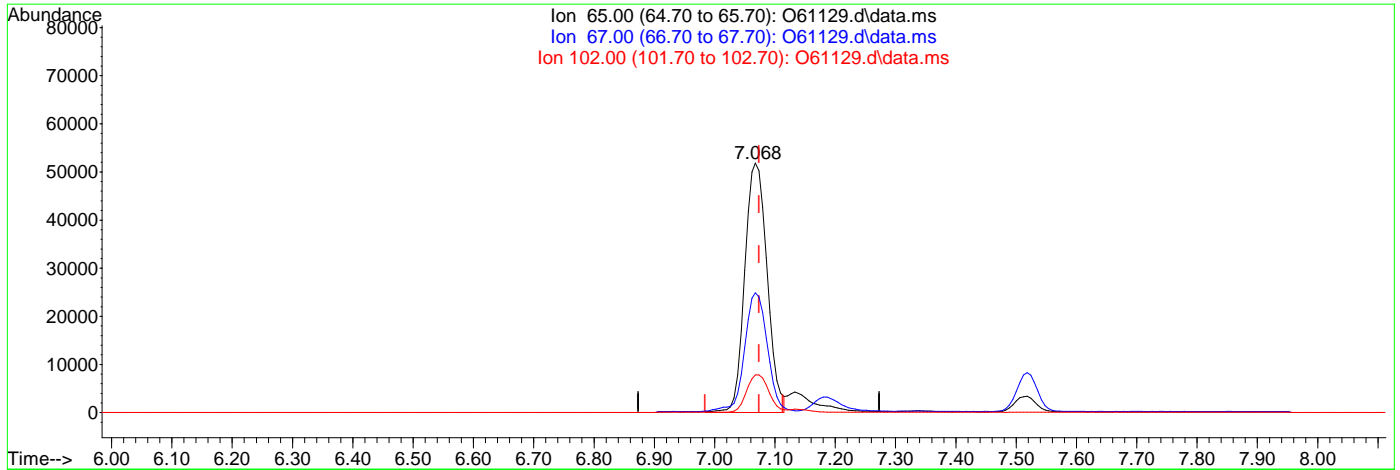
Ion	Exp%	Act%
65.00	100	100
67.00	53.50	47.51
102.00	16.10	15.00
0.00	0.00	0.00

7.3.2.4
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\edessas\09-10-2020\vo2353\
 Data File : O61129.d
 Acq On : 9 Sep 2020 9:59 am
 Operator : melissam
 Sample : bs
 Misc : MS47134,VO2353,,,,,
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 09 20:48:08 2020
 Quant Method : C:\msdchem\1\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration



(13) 1,2-Dichloroethane-d4 (S)

7.068min (-0.006) 5.06ug/L m

response 134049

Ion	Exp%	Act%
65.00	100	100
67.00	53.50	47.94
102.00	16.10	15.08
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-10-2020\vz2412\
 Data File : Z62159.d
 Acq On : 9 Sep 2020 1:07 pm
 Operator : SHANICAO
 Sample : BS
 Misc : MS47137,VZ2412,,,,,
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 10 05:50:33 2020
 Quant Method : C:\msdchem\1\methods\SIMCL090820.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Tue Sep 08 14:39:51 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)	
Internal Standards							
1) Fluorobenzene	7.401	96	1738886	5.00	ppb	0.00	
18) Chlorobenzene-d5	10.511	117	1358497	5.00	ppb	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.130	65	645014	4.96	ppb	0.00	
Spiked Amount	5.000	Range	79 - 125	Recovery	=	99.20%	
19) Toluene-d8	8.961	98	1622043	4.94	ppb	0.00	
Spiked Amount	5.000	Range	70 - 130	Recovery	=	98.80%	
Target Compounds							Qvalue
2) Vinyl Chloride	2.839	62	907722	4.78	ppb	100	
3) Chloromethane	2.733	50	863487	4.30	ppb	99	
4) 1,1-Dichloroethene	4.087	96	618075	5.50	ppb	98	
5) Methylene Chloride	4.717	84	924985	5.09	ppb	97	
6) trans-1,2-Dichloroethene	4.890	96	768450	5.48	ppb	99	
7) 1,1-Dichloroethane	5.546	63	1455164	5.40	ppb	# 100	
8) cis-1,2-Dichloroethene	6.110	96	796617	5.32	ppb	99	
9) Chloroform	6.377	83	1566837	5.27	ppb	100	
10) Carbon Tetrachloride	6.543	117	1031296	5.61	ppb	100	
11) 1,1,1-Trichloroethane	6.620	97	1364300	5.48	ppb	100	
12) Benzene	6.994	78	2920789	5.60	ppb	98	
14) 1,2-Dichloroethane	7.198	62	1153547	5.37	ppb	99	
15) Trichloroethene	7.571	95	878878	5.38	ppb	90	
16) 1,2-Dichloropropane	8.105	63	766338	5.52	ppb	100	
17) cis-1,3-Dichloropropene	8.773	75	761916	5.28	ppb	100	
20) trans-1,3-Dichloropropene	9.412	75	630720	5.32	ppb	100	
21) Tetrachloroethene	9.399	166	865464	5.37	ppb	100	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

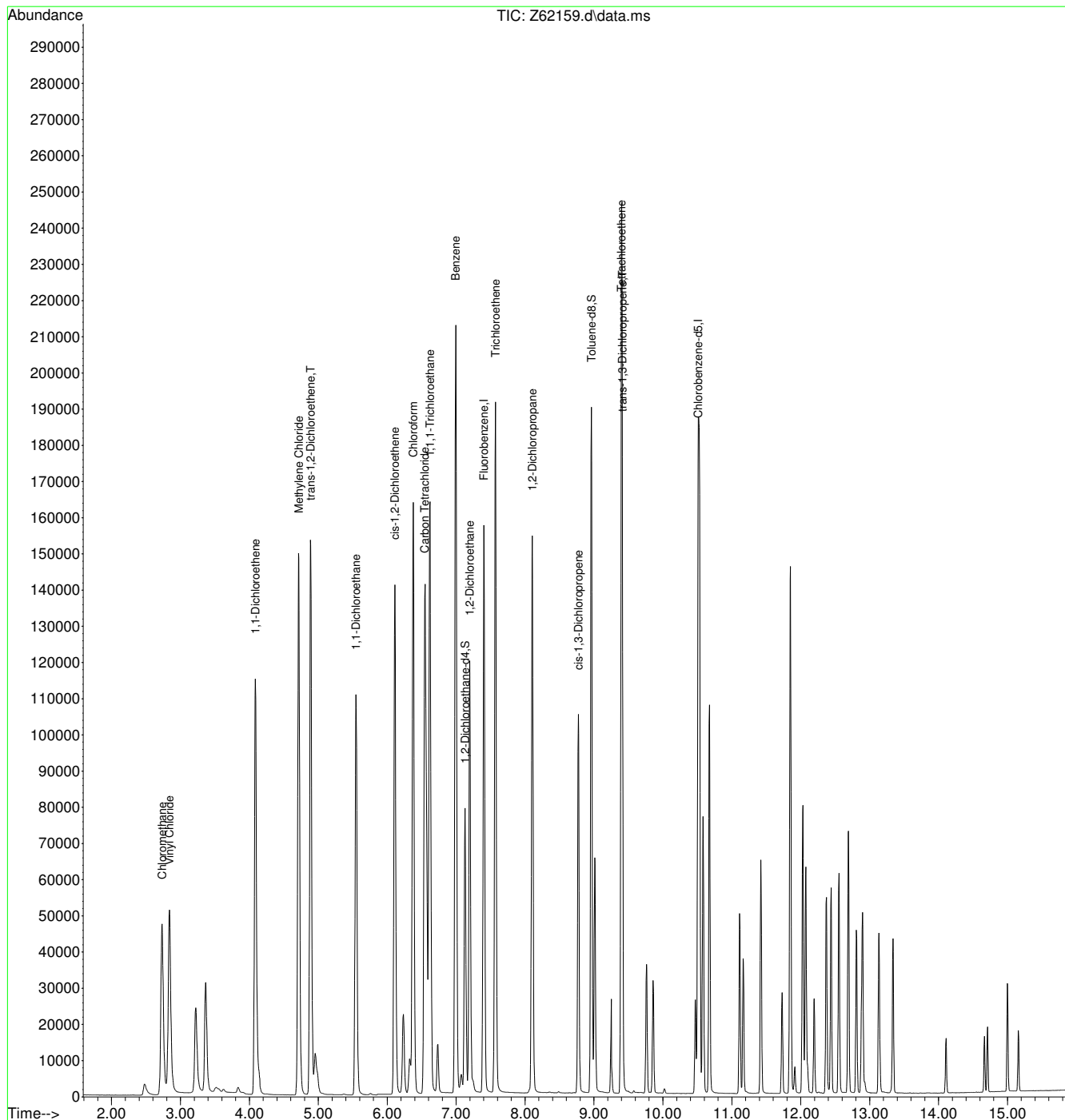
7.3.3
7



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-10-2020\ vz2412\
 Data File : Z62159.d
 Acq On : 9 Sep 2020 1:07 pm
 Operator : SHANICAO
 Sample : BS
 Misc : MS47137,VZ2412,,,,,
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 10 05:50:33 2020
 Quant Method : C:\msdchem\1\methods\SIMCL090820.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Tue Sep 08 14:39:51 2020
 Response via : Initial Calibration



7.3.3
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-08-2020\VZ2409\
 Data File : Z62090.d
 Acq On : 4 Sep 2020 2:11 pm
 Operator : shanicao
 Sample : FA78442-3MS,10X
 Misc : MS47147,VZ2409,,,,,10
 ALS Vial : 17 Sample Multiplier: 1

Quant Time: Sep 08 01:08:47 2020
 Quant Method : C:\msdchem\1\methods\SIMCL090320.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Fri Sep 04 11:36:05 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	

Internal Standards							
1) Fluorobenzene	7.401	96	1927205	5.00	ppb	0.00	
18) Chlorobenzene-d5	10.511	117	1476074	5.00	ppb	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.130	65	740560	5.93	ppb	0.00	
Spiked Amount	5.000	Range	79 - 125	Recovery	=	118.60%	
19) Toluene-d8	8.961	98	1785094	4.86	ppb	0.00	
Spiked Amount	5.000	Range	70 - 130	Recovery	=	97.20%	
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.846	62	975708	5.75	ppb		100
3) Chloromethane	2.741	50	987371	5.70	ppb		100
4) 1,1-Dichloroethene	4.083	96	604497	5.13	ppb		92
5) Methylene Chloride	4.713	84	827330	4.98	ppb		91
6) trans-1,2-Dichloroethene	4.886	96	736417	5.05	ppb		93
7) 1,1-Dichloroethane	5.546	63	1421339	5.13	ppb	#	100
8) cis-1,2-Dichloroethene	6.110	96	812887	4.90	ppb		93
9) Chloroform	6.377	83	1551890	5.04	ppb		99
10) Carbon Tetrachloride	6.543	117	978045	4.74	ppb		99
11) 1,1,1-Trichloroethane	6.620	97	1340293	5.11	ppb		100
12) Benzene	6.994	78	2881758	5.06	ppb		96
14) 1,2-Dichloroethane	7.198	62	1225772	6.00	ppb		99
15) Trichloroethene	7.571	95	997475	5.60	ppb		93
16) 1,2-Dichloropropane	8.105	63	778960	5.40	ppb		95
17) cis-1,3-Dichloropropene	8.777	75	694717	3.89	ppb		99
20) trans-1,3-Dichloropropene	9.412	75	573985	3.20	ppb		100
21) Tetrachloroethene	9.399	166	894464	5.21	ppb		99

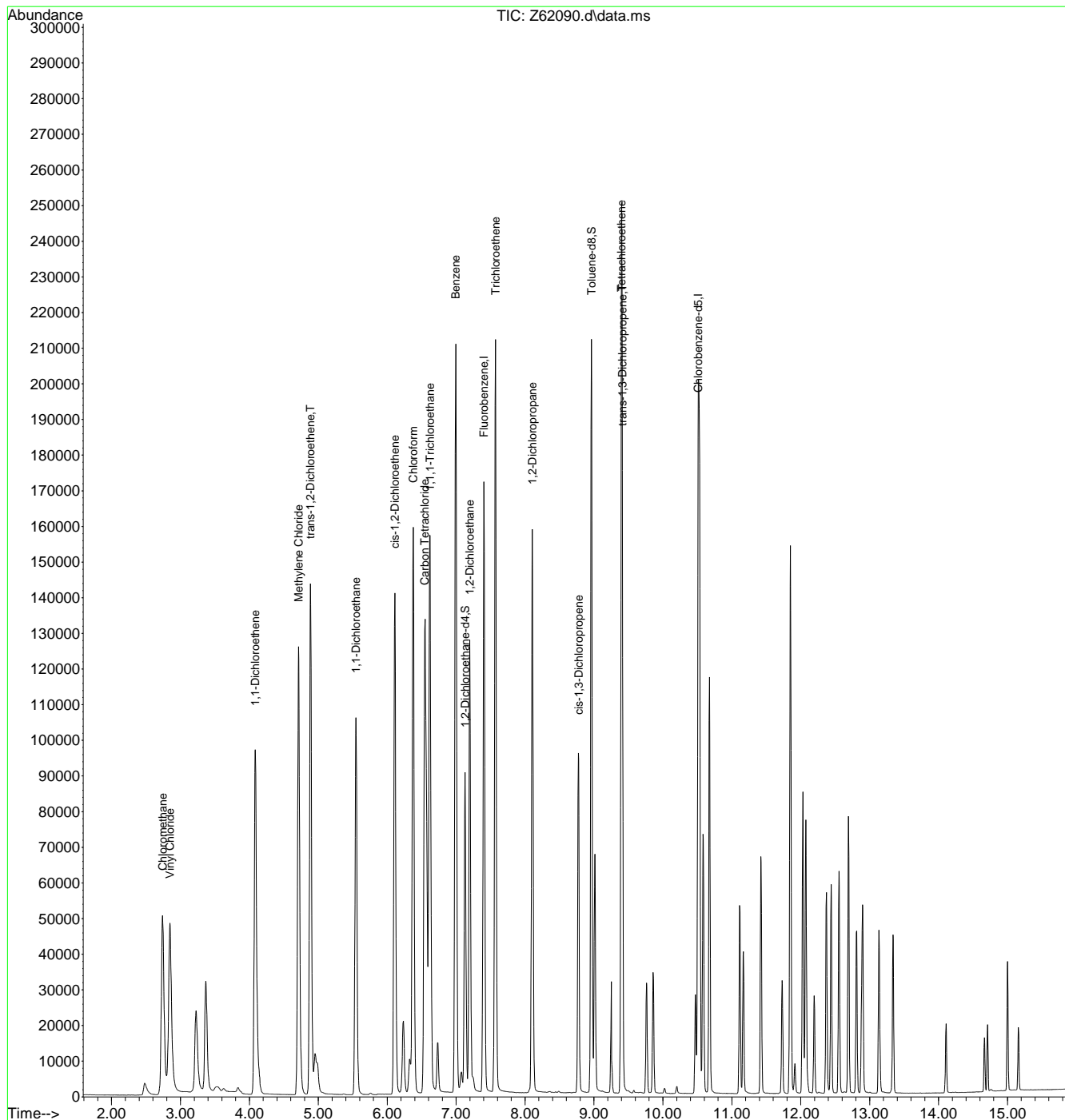
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.4.1
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-08-2020\VZ2409\
 Data File : Z62090.d
 Acq On : 4 Sep 2020 2:11 pm
 Operator : shanicao
 Sample : FA78442-3MS,10X
 Misc : MS47147,VZ2409,,,,,10
 ALS Vial : 17 Sample Multiplier: 1

Quant Time: Sep 08 01:08:47 2020
 Quant Method : C:\msdchem\1\methods\SIMCL090320.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Fri Sep 04 11:36:05 2020
 Response via : Initial Calibration



7.4.1
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-08-2020\VZ2409\
 Data File : Z62091.d
 Acq On : 4 Sep 2020 2:30 pm
 Operator : shanicao
 Sample : FA78442-3MSD,10X
 Misc : MS47147,VZ2409,,,,,10
 ALS Vial : 18 Sample Multiplier: 1

Quant Time: Sep 08 01:08:49 2020
 Quant Method : C:\msdchem\1\methods\SIMCL090320.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Fri Sep 04 11:36:05 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	

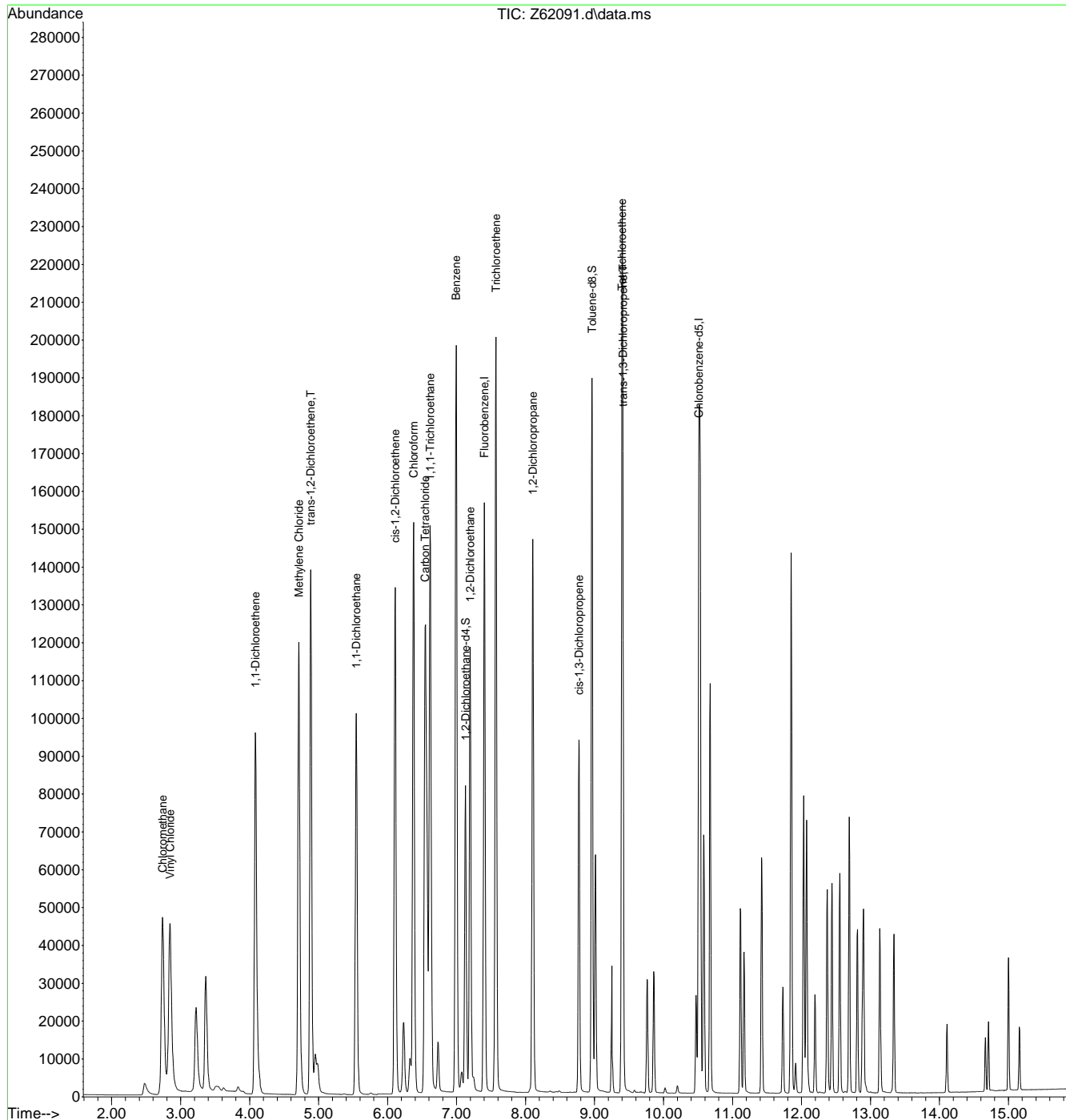
Internal Standards							
1) Fluorobenzene	7.401	96	1739870	5.00	ppb	0.00	
18) Chlorobenzene-d5	10.511	117	1320439	5.00	ppb	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.130	65	658592	5.84	ppb	0.00	
Spiked Amount	5.000	Range	79 - 125	Recovery	=	116.80%	
19) Toluene-d8	8.961	98	1610720	4.90	ppb	0.00	
Spiked Amount	5.000	Range	70 - 130	Recovery	=	98.00%	
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.846	62	941813	6.14	ppb		100
3) Chloromethane	2.737	50	943125	6.02	ppb		99
4) 1,1-Dichloroethene	4.083	96	572511	5.37	ppb		93
5) Methylene Chloride	4.713	84	773758	5.16	ppb		92
6) trans-1,2-Dichloroethene	4.886	96	691771	5.25	ppb		93
7) 1,1-Dichloroethane	5.546	63	1335552	5.34	ppb	#	100
8) cis-1,2-Dichloroethene	6.110	96	765038	5.11	ppb		94
9) Chloroform	6.377	83	1452348	5.22	ppb		100
10) Carbon Tetrachloride	6.543	117	918453	4.92	ppb		99
11) 1,1,1-Trichloroethane	6.614	97	1253381	5.28	ppb		100
12) Benzene	6.994	78	2704435	5.26	ppb		96
14) 1,2-Dichloroethane	7.198	62	1151954	6.24	ppb		99
15) Trichloroethene	7.571	95	940503	5.85	ppb		92
16) 1,2-Dichloropropane	8.105	63	730446	5.61	ppb		95
17) cis-1,3-Dichloropropene	8.773	75	678104	4.19	ppb		99
20) trans-1,3-Dichloropropene	9.411	75	564612	3.51	ppb		100
21) Tetrachloroethene	9.399	166	840455	5.46	ppb		99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-08-2020\VZ2409\
 Data File : Z62091.d
 Acq On : 4 Sep 2020 2:30 pm
 Operator : shanicao
 Sample : FA78442-3MSD,10X
 Misc : MS47147,VZ2409,,,,,10
 ALS Vial : 18 Sample Multiplier: 1

Quant Time: Sep 08 01:08:49 2020
 Quant Method : C:\msdchem\1\methods\SIMCL090320.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Fri Sep 04 11:36:05 2020
 Response via : Initial Calibration



7.4.2
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\edessas\09-10-2020\vo2353\
 Data File : O61136.d
 Acq On : 9 Sep 2020 12:45 pm
 Operator : melissam
 Sample : FA78398-4MS, 20x
 Misc : MS47134,VO2353,,,,,20
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 09 22:03:48 2020
 Quant Method : C:\msdchem\1\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	

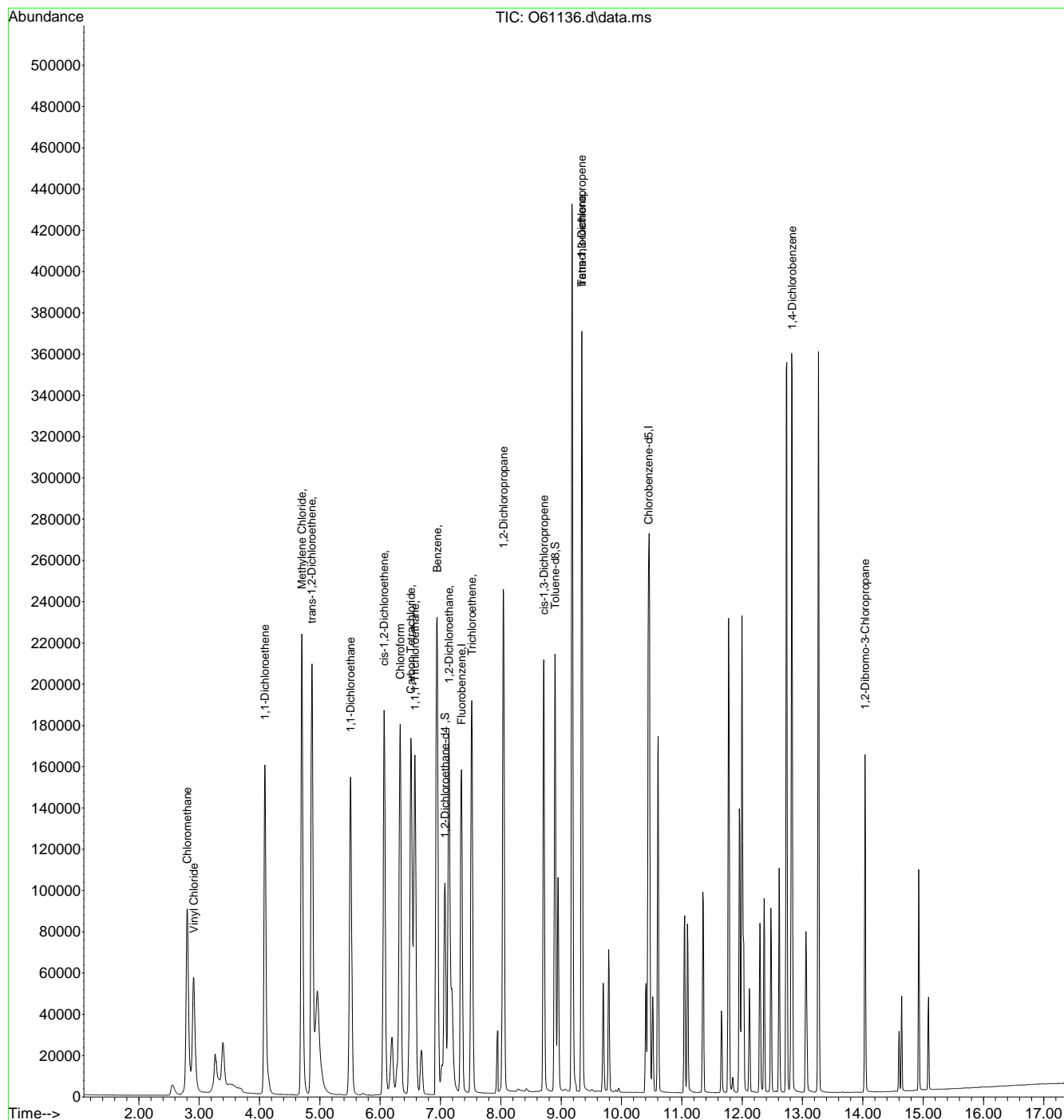
Internal Standards							
1) Fluorobenzene	7.346	96	229453	5.00	ug/L	0.00	
18) Chlorobenzene-d5	10.447	117	165946	5.00	ug/L	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.074	65	107151	5.32	ug/L	0.00	
Spiked Amount	5.000	Range 74 - 125	Recovery	=	106.40%		
19) Toluene-d8	8.896	98	204028	5.03	ug/L	0.00	
Spiked Amount	5.000	Range 88 - 111	Recovery	=	100.60%		
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.908	62	127330	5.88	ug/L		96
3) Chloromethane	2.803	50	194366	6.13	ug/L		94
4) 1,1-Dichloroethene	4.089	61	214900	6.92	ug/L		79
5) Methylene Chloride	4.699	49	304420	5.67	ug/L		91
6) trans-1,2-Dichloroethene	4.865	61	242702	6.51	ug/L		72
7) 1,1-Dichloroethane	5.510	63	271802	6.30	ug/L		96
8) cis-1,2-Dichloroethene	6.066	96	111126	5.79	ug/L #		58
9) Chloroform	6.333	83	205351	5.88	ug/L		94
10) Carbon Tetrachloride	6.511	117	131544	6.04	ug/L		88
11) 1,1,1-Trichloroethane	6.576	97	154595	6.14	ug/L		85
12) Benzene	6.943	78	423030m	6.22	ug/L		
14) 1,2-Dichloroethane	7.139	62	227961	6.05	ug/L		89
15) Trichloroethene	7.518	95	116133	5.82	ug/L		98
16) 1,2-Dichloropropane	8.043	63	153934	6.19	ug/L		96
17) cis-1,3-Dichloropropene	8.711	75	155749	5.58	ug/L		94
20) trans-1,3-Dichloropropene	9.343	75	147168	5.82	ug/L		94
21) Tetrachloroethene	9.343	166	95132	5.92	ug/L		98
22) 1,4-Dichlorobenzene	12.827	146	192309	5.50	ug/L		97
23) 1,2-Dibromo-3-Chloropr...	14.038	75	44118	4.80	ug/L #		77

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\edessas\09-10-2020\vo2353\
 Data File : O61136.d
 Acq On : 9 Sep 2020 12:45 pm
 Operator : melissam
 Sample : FA78398-4MS, 20x
 Misc : MS47134,VO2353,,,,,20
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 09 22:03:48 2020
 Quant Method : C:\msdchem\1\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration



7.4.3
7

Manual Integration Approval Summary

Sample Number: FA78398-4MS **Method:** SW846 8260B BY SIM
Lab FileID: O61136.D **Analyst approved:** 09/09/20 22:13 Edessa Sumagaysay
Injection Time: 09/09/20 12:45 **Supervisor approved:** 09/10/20 09:01 Melissa Mangual

Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzene	71-43-2		6.94	Poor instrument integration

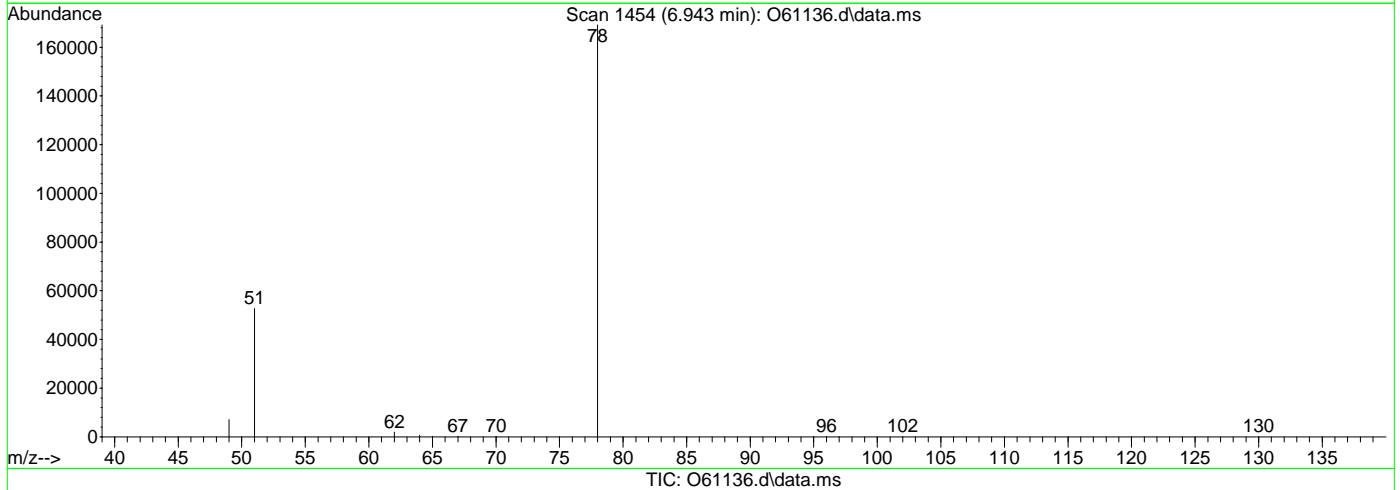
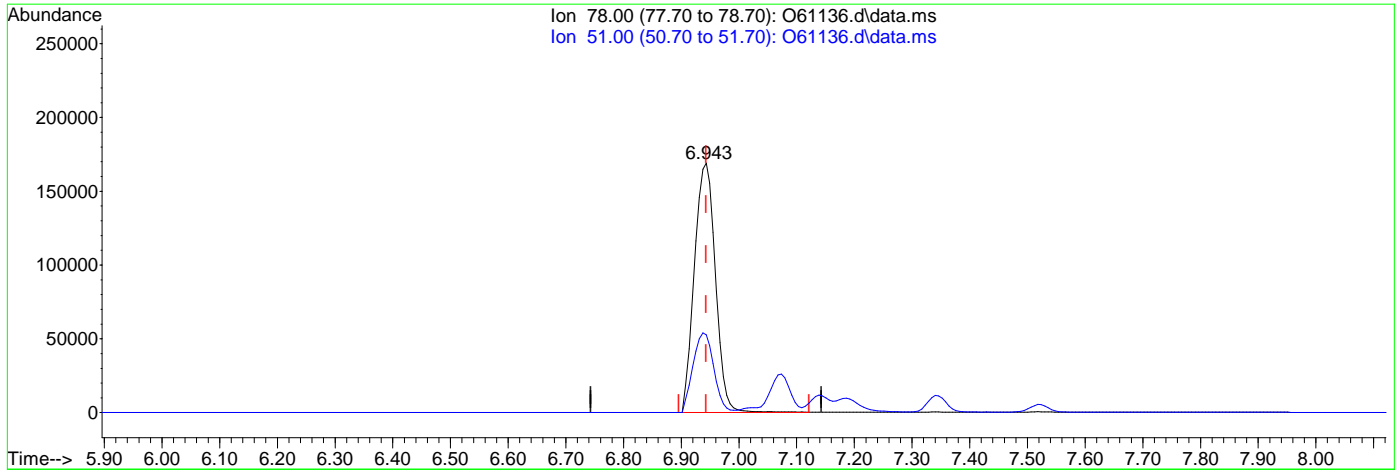
7.4.3.1

7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\edessas\09-10-2020\vo2353\
 Data File : O61136.d
 Acq On : 9 Sep 2020 12:45 pm
 Operator : melissam
 Sample : FA78398-4MS, 20x
 Misc : MS47134,VO2353,,,,,20
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 09 20:48:23 2020
 Quant Method : C:\msdchem\1\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration



(12) Benzene ()

6.943min (+0.000) 6.30ug/L

response 428352

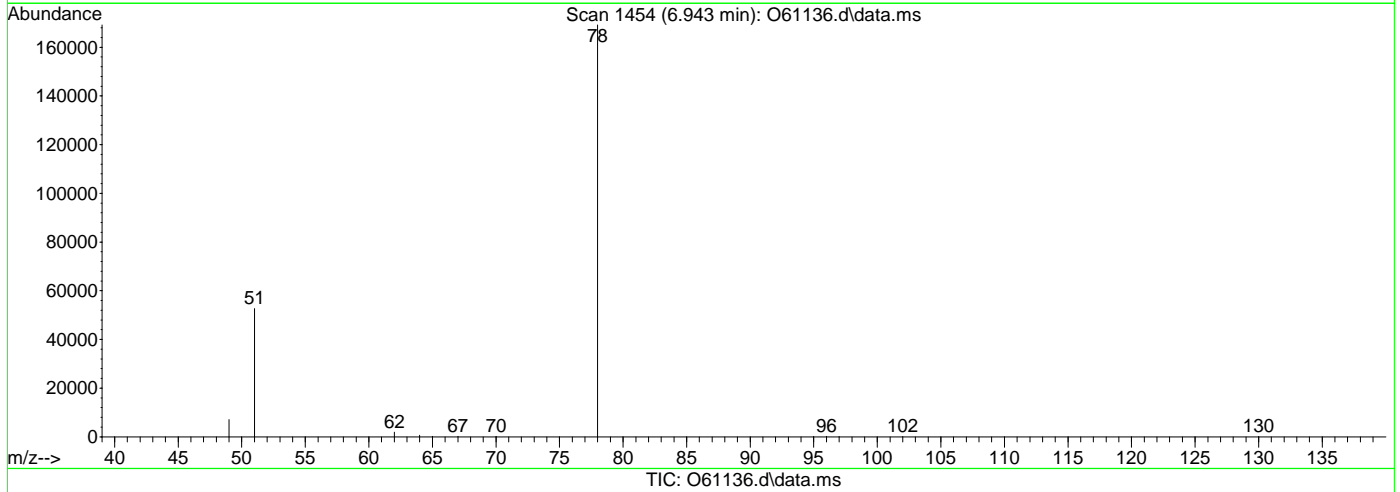
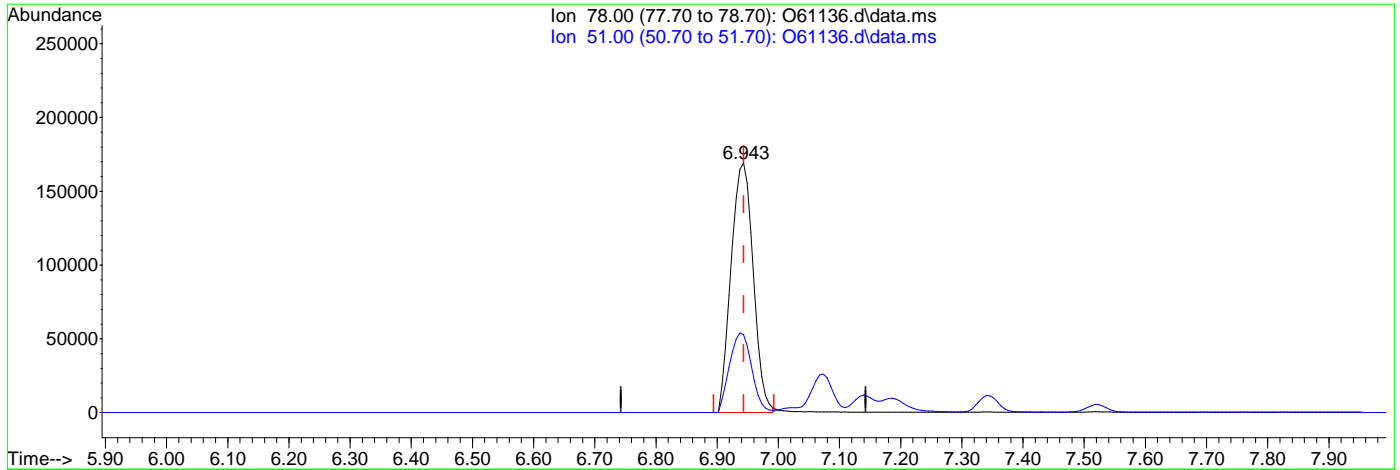
Ion	Exp%	Act%
78.00	100	100
51.00	26.20	31.15
0.00	0.00	0.00
0.00	0.00	0.00

74.32
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\edessas\09-10-2020\vo2353\
 Data File : O61136.d
 Acq On : 9 Sep 2020 12:45 pm
 Operator : melissam
 Sample : FA78398-4MS, 20x
 Misc : MS47134,VO2353,,,,,20
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 09 20:48:23 2020
 Quant Method : C:\msdchem\1\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration



(12) Benzene ()

6.943min (+0.000) 6.22ug/L m

response 423030

Ion	Exp%	Act%
78.00	100	100
51.00	26.20	31.15
0.00	0.00	0.00
0.00	0.00	0.00

74.3.3
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\edessas\09-10-2020\vo2353\
 Data File : O61137.d
 Acq On : 9 Sep 2020 1:05 pm
 Operator : melissam
 Sample : FA78398-4MSD,20x
 Misc : MS47134,VO2353,,,,,20
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 09 22:03:15 2020
 Quant Method : C:\msdchem\1\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	

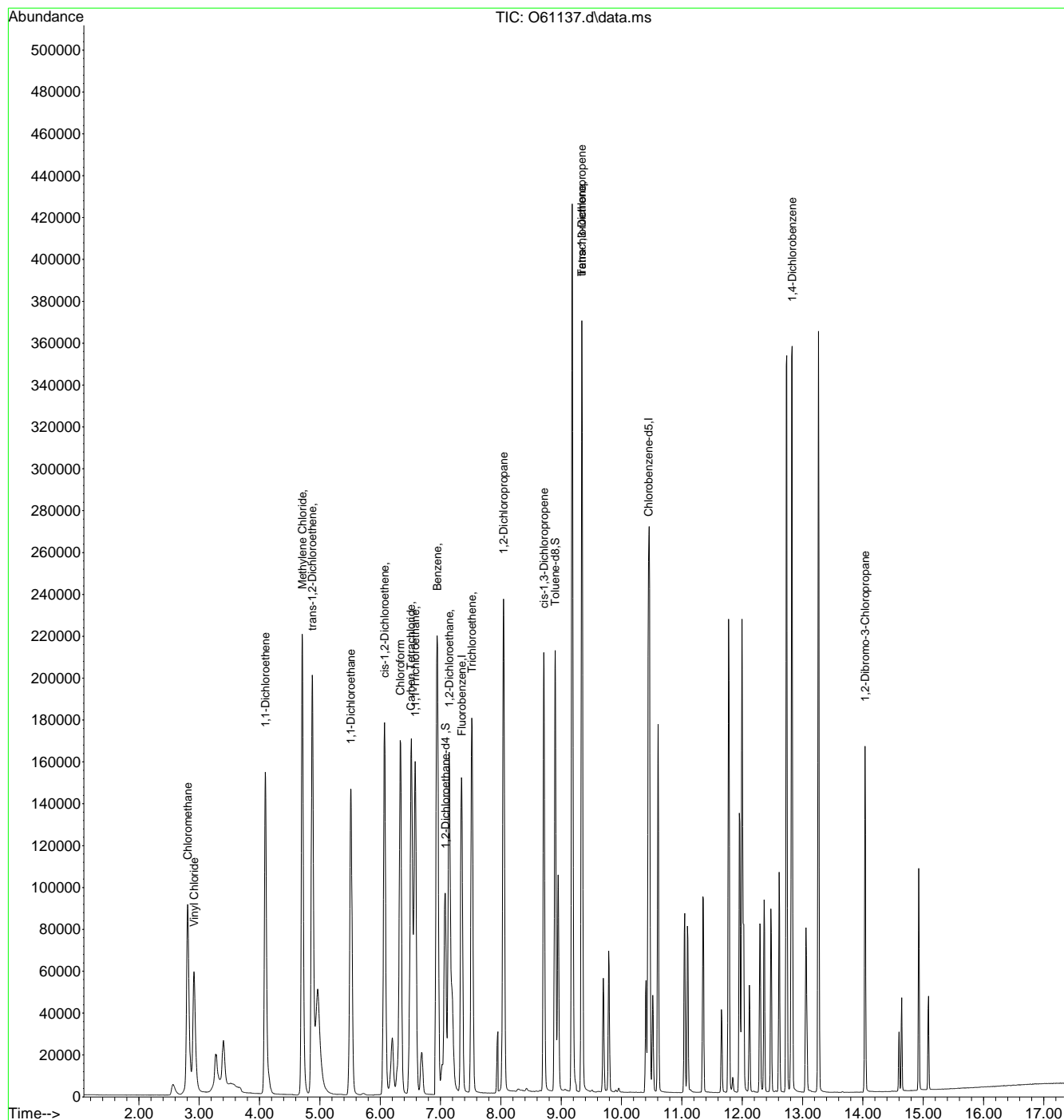
Internal Standards							
1) Fluorobenzene	7.352	96	234733	5.00	ug/L	0.00	
18) Chlorobenzene-d5	10.447	117	169227	5.00	ug/L	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.080	65	109390m	5.31	ug/L	0.00	
Spiked Amount	5.000	Range 74 - 125	Recovery	=	106.20%		
19) Toluene-d8	8.900	98	207961	5.03	ug/L	0.00	
Spiked Amount	5.000	Range 88 - 111	Recovery	=	100.60%		
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.912	62	128576	5.80	ug/L		96
3) Chloromethane	2.810	50	192934	5.94	ug/L		94
4) 1,1-Dichloroethene	4.096	61	210821	6.63	ug/L		79
5) Methylene Chloride	4.707	49	303973	5.52	ug/L		92
6) trans-1,2-Dichloroethene	4.873	61	241345	6.33	ug/L		73
7) 1,1-Dichloroethane	5.514	63	270054	6.12	ug/L		96
8) cis-1,2-Dichloroethene	6.072	96	110251	5.62	ug/L #		59
9) Chloroform	6.333	83	204480	5.72	ug/L		93
10) Carbon Tetrachloride	6.511	117	133297	5.98	ug/L		87
11) 1,1,1-Trichloroethane	6.582	97	152968	5.93	ug/L		85
12) Benzene	6.943	78	423648m	6.09	ug/L		
14) 1,2-Dichloroethane	7.145	62	226206	5.87	ug/L		89
15) Trichloroethene	7.518	95	115248	5.64	ug/L		98
16) 1,2-Dichloropropane	8.043	63	154425	6.07	ug/L		96
17) cis-1,3-Dichloropropene	8.711	75	158073	5.54	ug/L		92
20) trans-1,3-Dichloropropene	9.343	75	149465	5.79	ug/L		94
21) Tetrachloroethene	9.343	166	93851	5.73	ug/L		95
22) 1,4-Dichlorobenzene	12.827	146	191777	5.38	ug/L		97
23) 1,2-Dibromo-3-Chloropr...	14.038	75	45075	4.81	ug/L #		77

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\edessas\09-10-2020\vo2353\
Data File : O61137.d
Acq On : 9 Sep 2020 1:05 pm
Operator : melissam
Sample : FA78398-4MSD,20x
Misc : MS47134,VO2353,,,,,20
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 09 22:03:15 2020
Quant Method : C:\msdchem\1\methods\SIMCL090820.M
Quant Title : Standard Methods 6200B
QLast Update : Wed Sep 09 12:10:38 2020
Response via : Initial Calibration



Manual Integration Approval Summary

Sample Number: FA78398-4MSD **Method:** SW846 8260B BY SIM
Lab FileID: O61137.D **Analyst approved:** 09/09/20 22:13 Edessa Sumagaysay
Injection Time: 09/09/20 13:05 **Supervisor approved:** 09/10/20 09:01 Melissa Mangual

Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzene	71-43-2		6.94	Poor instrument integration
1,2-Dichloroethane-D4	17060-07-0		7.08	Overlapping peak

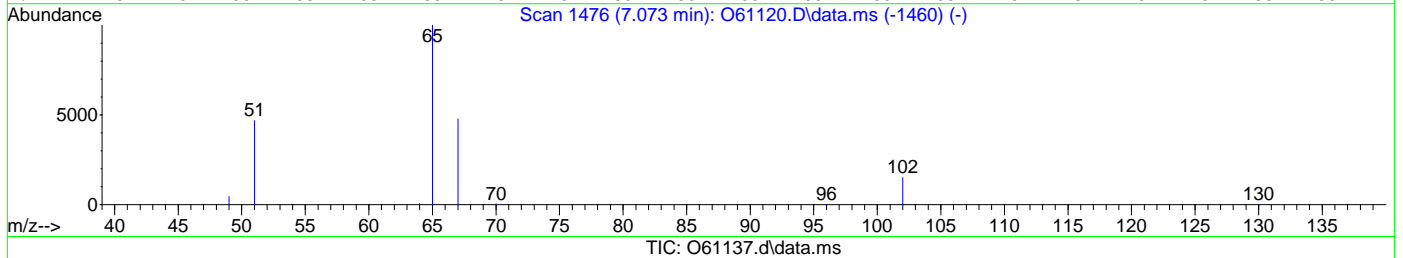
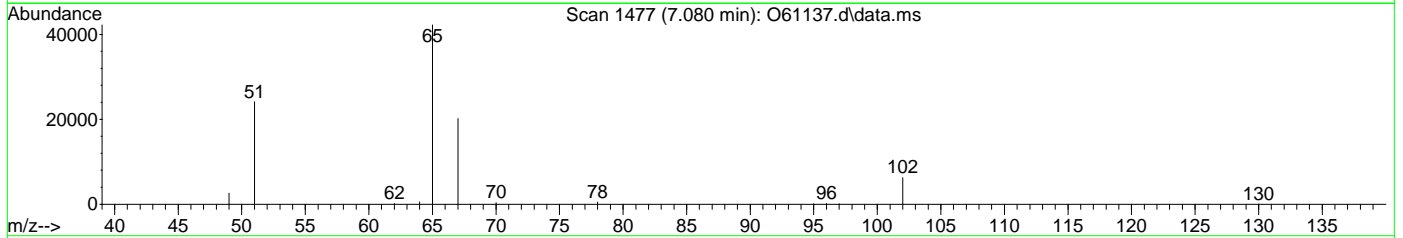
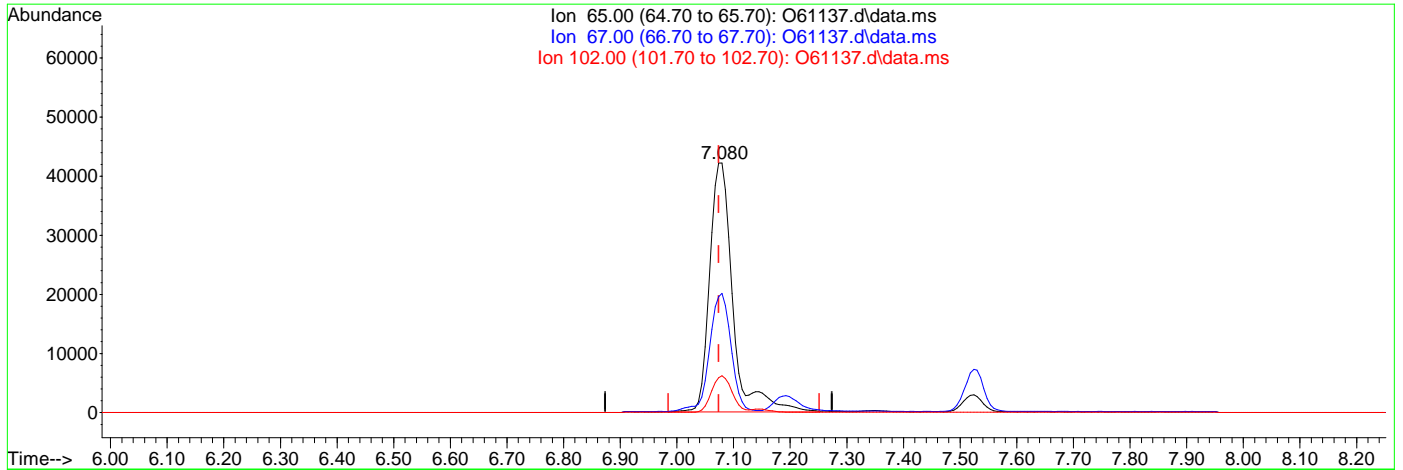
7.4.4.1

7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\edessas\09-10-2020\vo2353\
 Data File : O61137.d
 Acq On : 9 Sep 2020 1:05 pm
 Operator : melissam
 Sample : FA78398-4MSD,20x
 Misc : MS47134,VO2353,,,,,20
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 09 20:48:25 2020
 Quant Method : C:\msdchem\1\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration



(13) 1,2-Dichloroethane-d4 (S)

7.080min (+0.006) 5.80ug/L

response 119616

Ion Exp% Act%

65.00 100 100

67.00 53.50 47.42

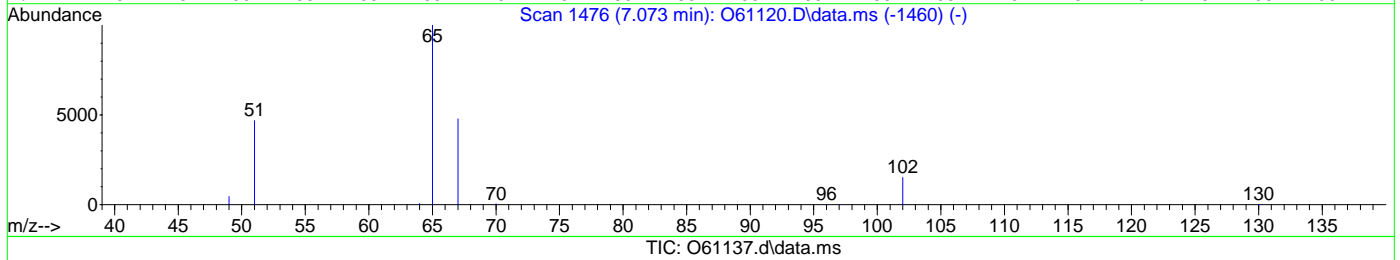
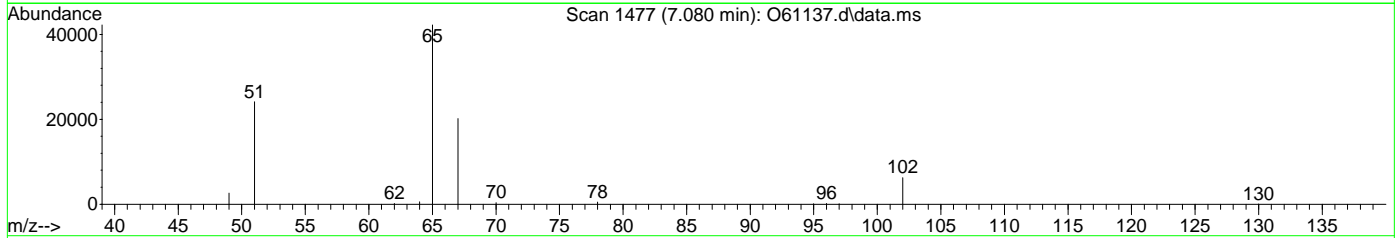
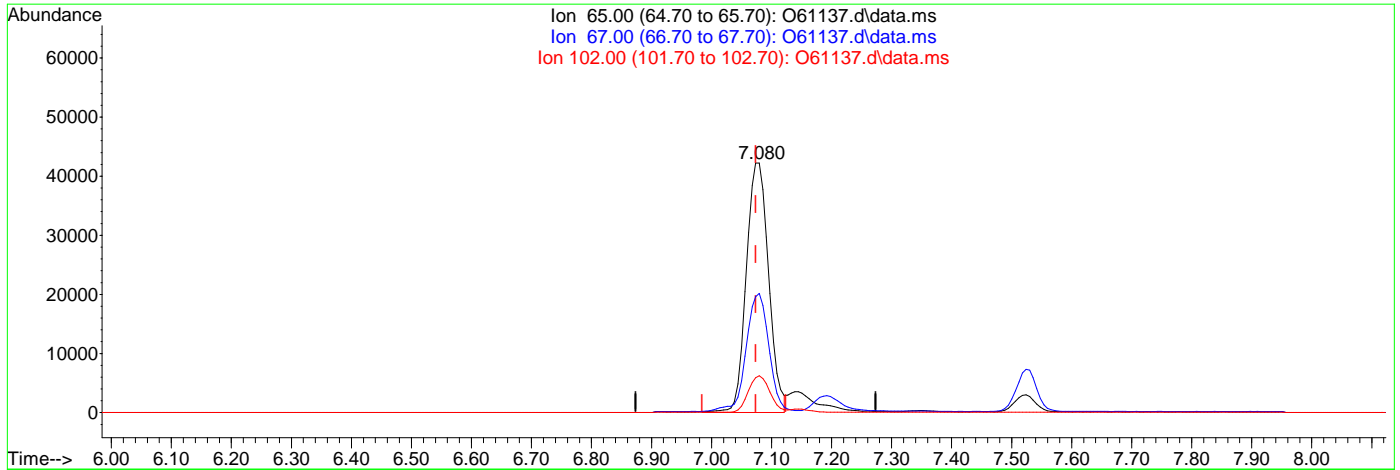
102.00 16.10 14.65

0.00 0.00 0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\edessas\09-10-2020\vo2353\
 Data File : O61137.d
 Acq On : 9 Sep 2020 1:05 pm
 Operator : melissam
 Sample : FA78398-4MSD,20x
 Misc : MS47134,VO2353,,,,,20
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 09 20:48:25 2020
 Quant Method : C:\msdchem\1\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration



(13) 1,2-Dichloroethane-d4 (S)

7.080min (+0.006) 5.31ug/L m

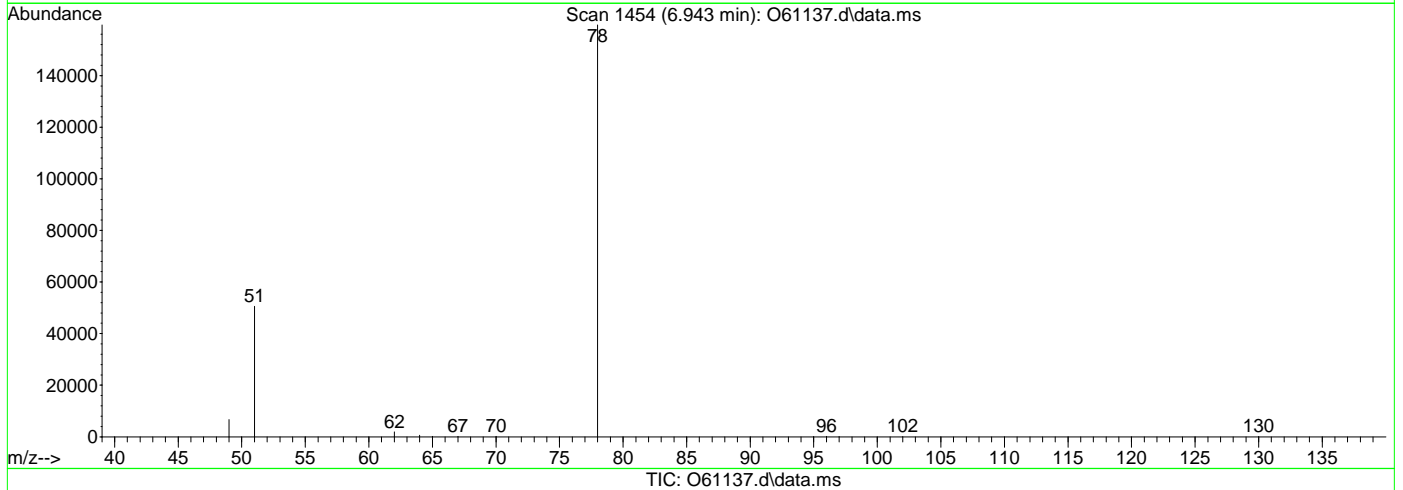
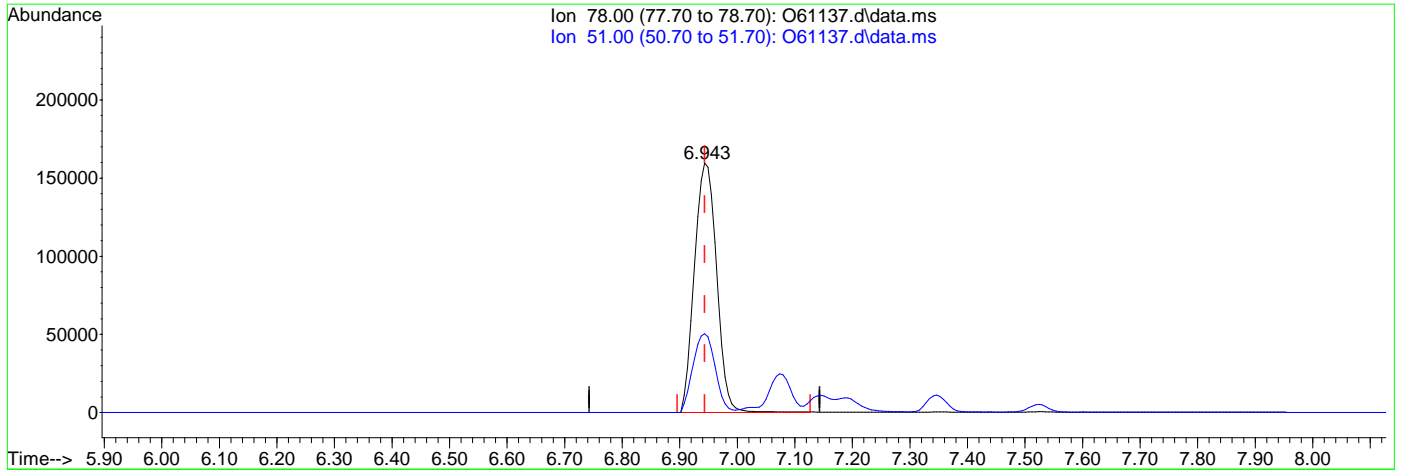
response 109390

Ion	Exp%	Act%
65.00	100	100
67.00	53.50	47.74
102.00	16.10	14.74
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\edessas\09-10-2020\vo2353\
 Data File : O61137.d
 Acq On : 9 Sep 2020 1:05 pm
 Operator : melissam
 Sample : FA78398-4MSD,20x
 Misc : MS47134,VO2353,,,,,20
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 09 21:52:26 2020
 Quant Method : C:\msdchem\1\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration



(12) Benzene ()

6.943min (+0.000) 6.16ug/L

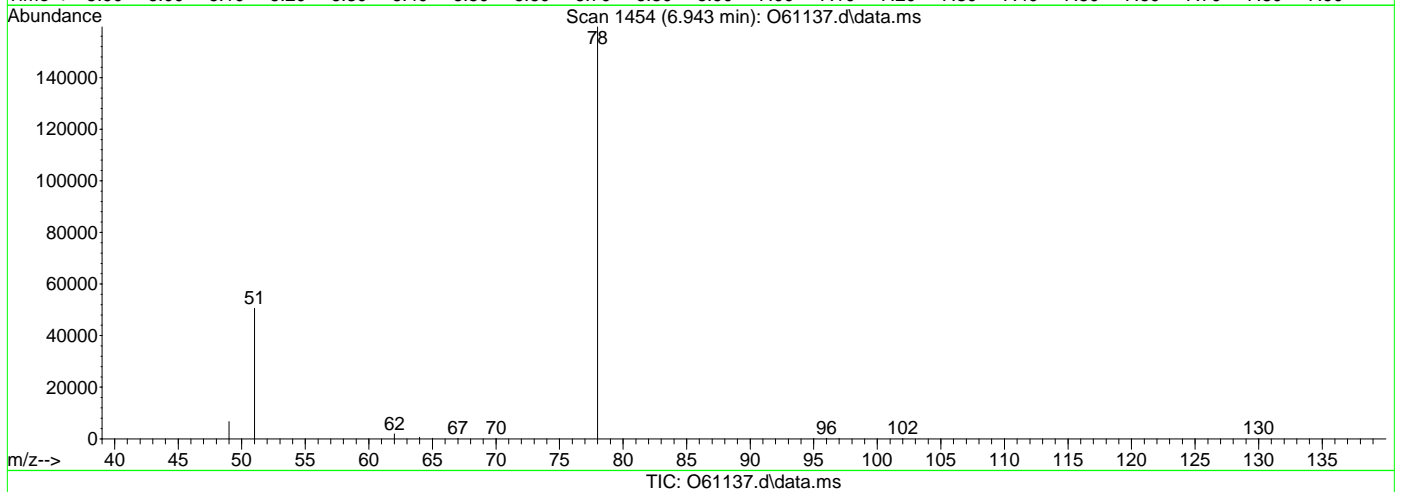
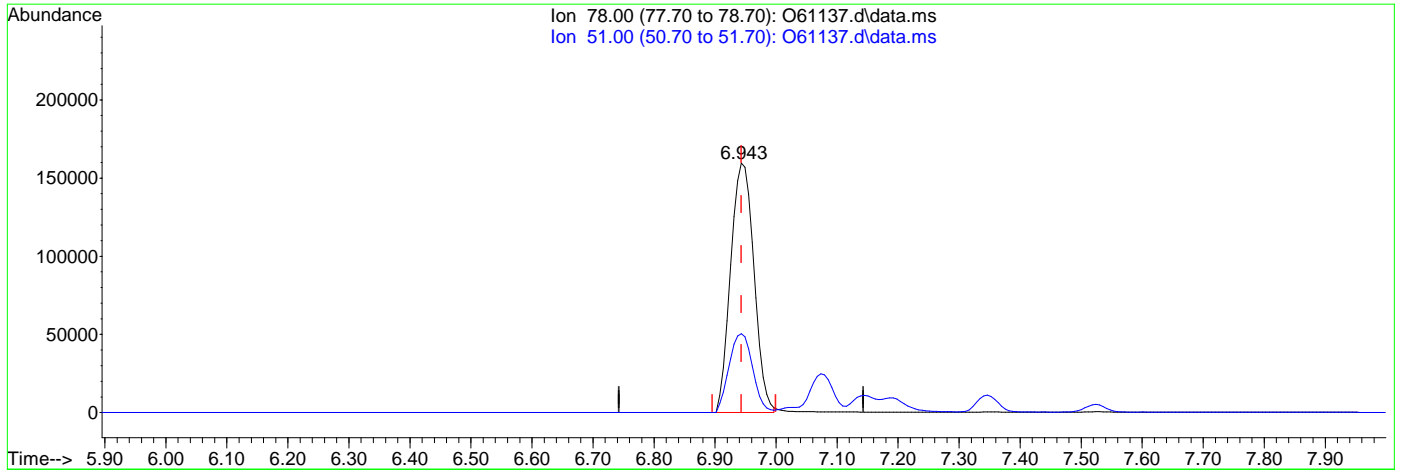
response 428842

Ion	Exp%	Act%
78.00	100	100
51.00	26.20	31.64
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\edessas\09-10-2020\vo2353\
 Data File : O61137.d
 Acq On : 9 Sep 2020 1:05 pm
 Operator : melissam
 Sample : FA78398-4MSD,20x
 Misc : MS47134,VO2353,,,,,20
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 09 21:52:26 2020
 Quant Method : C:\msdchem\1\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration



(12) Benzene ()

6.943min (+0.000) 6.09ug/L m

response 423648

Ion	Exp%	Act%
78.00	100	100
51.00	26.20	31.64
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-10-2020\vvz2412\
 Data File : Z62164.d
 Acq On : 9 Sep 2020 2:45 pm
 Operator : SHANICAO
 Sample : FA78398-19MS,10X
 Misc : MS47171,VZ2412,,,,,10
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 10 05:50:48 2020
 Quant Method : C:\msdchem\1\methods\SIMCL090820.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Tue Sep 08 14:39:51 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	

Internal Standards							
1) Fluorobenzene	7.401	96	1522488	5.00	ppb	0.00	
18) Chlorobenzene-d5	10.511	117	1200980	5.00	ppb	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.130	65	597969	5.25	ppb	0.00	
Spiked Amount	5.000	Range	79 - 125	Recovery	=	105.00%	
19) Toluene-d8	8.961	98	1391783	4.80	ppb	0.00	
Spiked Amount	5.000	Range	70 - 130	Recovery	=	96.00%	
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.842	62	808402	4.87	ppb		100
3) Chloromethane	2.733	50	765204	4.35	ppb		99
4) 1,1-Dichloroethene	4.087	96	496857	5.05	ppb		98
5) Methylene Chloride	4.713	84	741224	4.64	ppb		97
6) trans-1,2-Dichloroethene	4.886	96	607605	4.95	ppb		97
7) 1,1-Dichloroethane	5.546	63	1179766	5.00	ppb	#	100
8) cis-1,2-Dichloroethene	6.110	96	640441	4.89	ppb		97
9) Chloroform	6.377	83	1274863	4.90	ppb		100
10) Carbon Tetrachloride	6.549	117	801555	4.98	ppb		99
11) 1,1,1-Trichloroethane	6.620	97	1086753	4.99	ppb		100
12) Benzene	6.994	78	2349752	5.15	ppb		98
14) 1,2-Dichloroethane	7.197	62	980367	5.21	ppb		99
15) Trichloroethene	7.571	95	749296	5.23	ppb		91
16) 1,2-Dichloropropane	8.105	63	626092	5.15	ppb		99
17) cis-1,3-Dichloropropene	8.773	75	548810	4.40	ppb		100
20) trans-1,3-Dichloropropene	9.411	75	462796	4.49	ppb		99
21) Tetrachloroethene	9.399	166	698924	4.90	ppb		99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

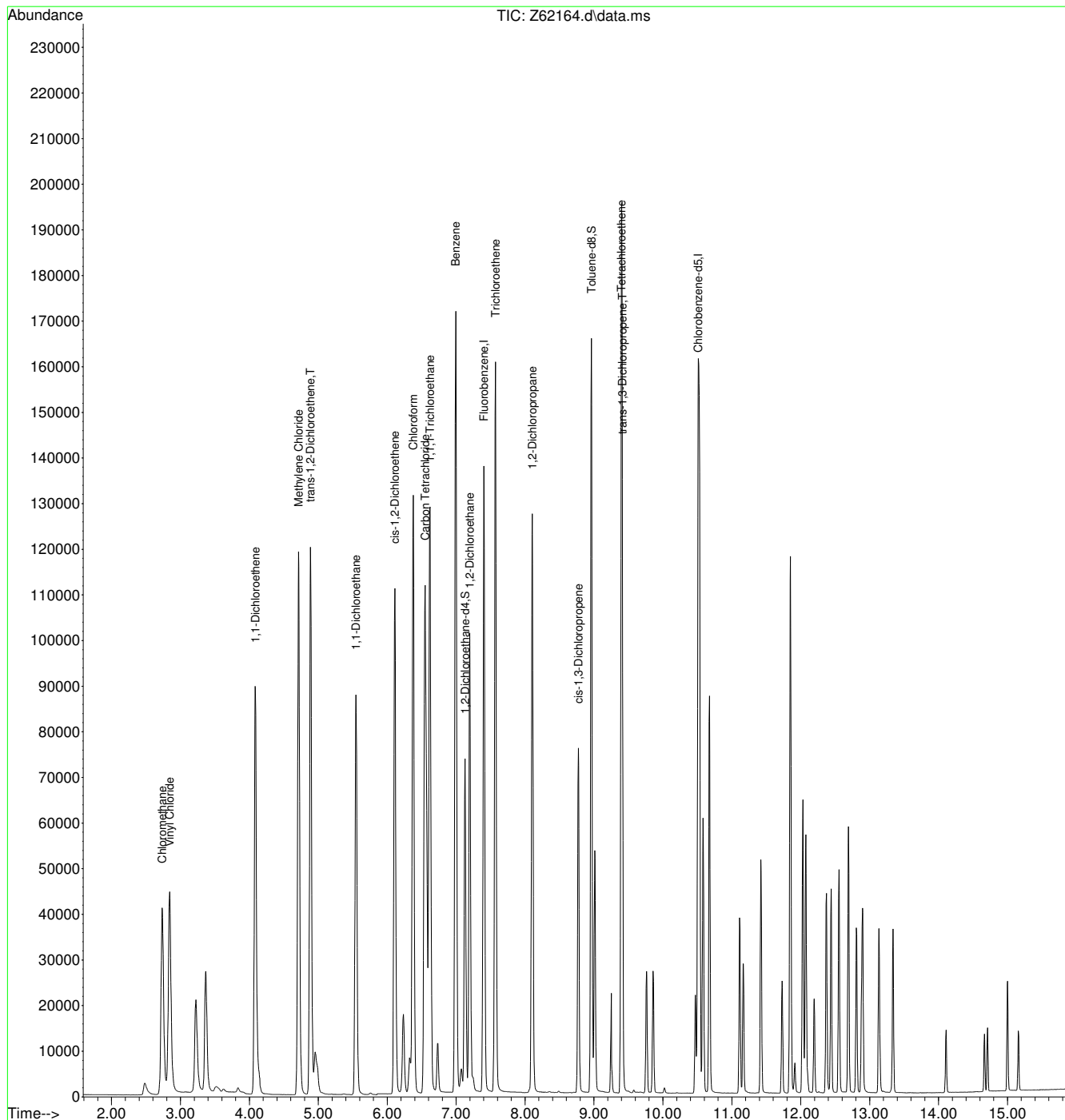
7.4.5
7



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-10-2020\ vz2412\
 Data File : Z62164.d
 Acq On : 9 Sep 2020 2:45 pm
 Operator : SHANICAO
 Sample : FA78398-19MS,10X
 Misc : MS47171,VZ2412,,,,,10
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 10 05:50:48 2020
 Quant Method : C:\msdchem\1\methods\SIMCL090820.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Tue Sep 08 14:39:51 2020
 Response via : Initial Calibration



7.4.5
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-10-2020\vvz2412\
 Data File : Z62165.d
 Acq On : 9 Sep 2020 3:07 pm
 Operator : SHANICAO
 Sample : FA78398-19MSD,10X
 Misc : MS47171,VZ2412,,,,,10
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 10 05:50:51 2020
 Quant Method : C:\msdchem\1\methods\SIMCL090820.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Tue Sep 08 14:39:51 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)	

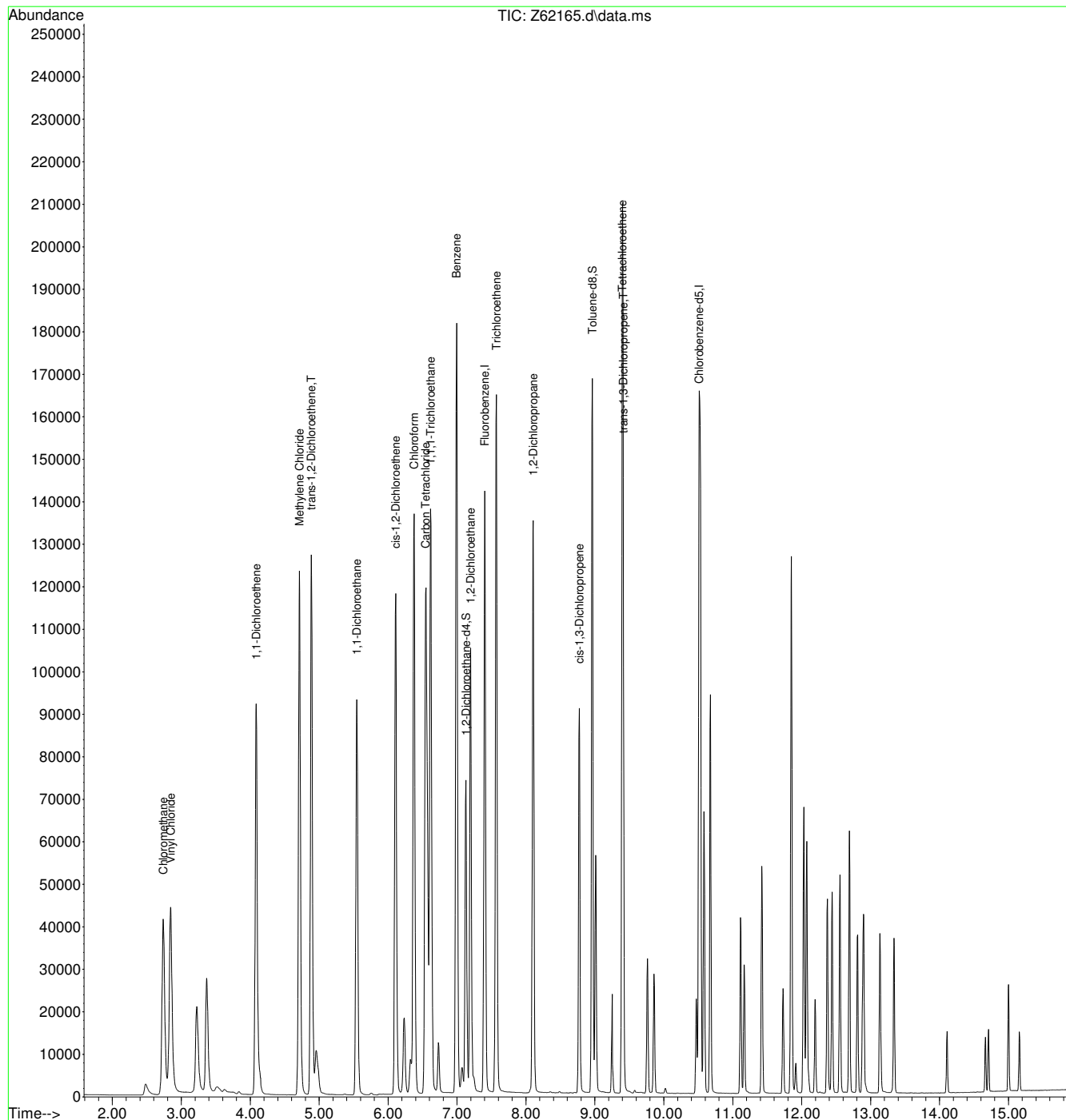
Internal Standards							
1) Fluorobenzene	7.401	96	1574872	5.00	ppb	0.00	
18) Chlorobenzene-d5	10.511	117	1220568	5.00	ppb	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.130	65	610639	5.18	ppb	0.00	
Spiked Amount	5.000	Range	79 - 125	Recovery	=	103.60%	
19) Toluene-d8	8.961	98	1437020	4.88	ppb	0.00	
Spiked Amount	5.000	Range	70 - 130	Recovery	=	97.60%	
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.846	62	846295	4.92	ppb		99
3) Chloromethane	2.737	50	805808	4.43	ppb		99
4) 1,1-Dichloroethene	4.087	96	519747	5.11	ppb		97
5) Methylene Chloride	4.713	84	776691	4.70	ppb		98
6) trans-1,2-Dichloroethene	4.886	96	650209	5.12	ppb		98
7) 1,1-Dichloroethane	5.546	63	1252285	5.13	ppb	#	100
8) cis-1,2-Dichloroethene	6.110	96	683581	5.04	ppb		98
9) Chloroform	6.377	83	1349955	5.02	ppb		100
10) Carbon Tetrachloride	6.543	117	875337	5.26	ppb		100
11) 1,1,1-Trichloroethane	6.614	97	1147286	5.09	ppb		100
12) Benzene	6.994	78	2510573	5.32	ppb		98
14) 1,2-Dichloroethane	7.198	62	1030088	5.29	ppb		100
15) Trichloroethene	7.571	95	778403	5.26	ppb		89
16) 1,2-Dichloropropane	8.105	63	663442	5.27	ppb		99
17) cis-1,3-Dichloropropene	8.773	75	658214	5.06	ppb		100
20) trans-1,3-Dichloropropene	9.412	75	542913	5.12	ppb		99
21) Tetrachloroethene	9.399	166	734632	5.07	ppb		100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-10-2020\ vz2412\
Data File : Z62165.d
Acq On : 9 Sep 2020 3:07 pm
Operator : SHANICAO
Sample : FA78398-19MSD,10X
Misc : MS47171,VZ2412,,,,,10
ALS Vial : 9 Sample Multiplier: 1

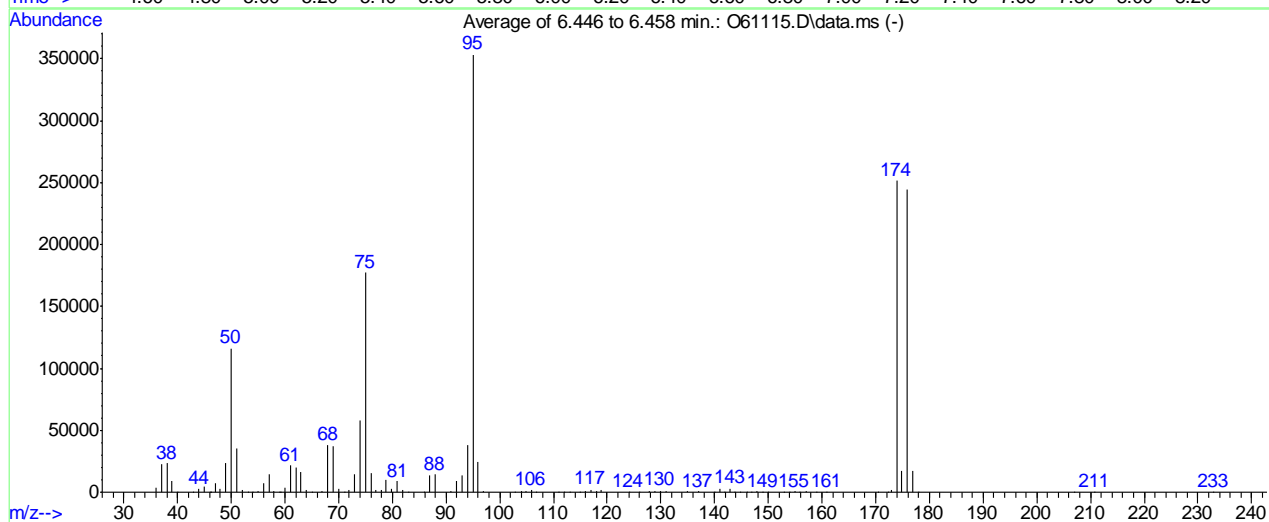
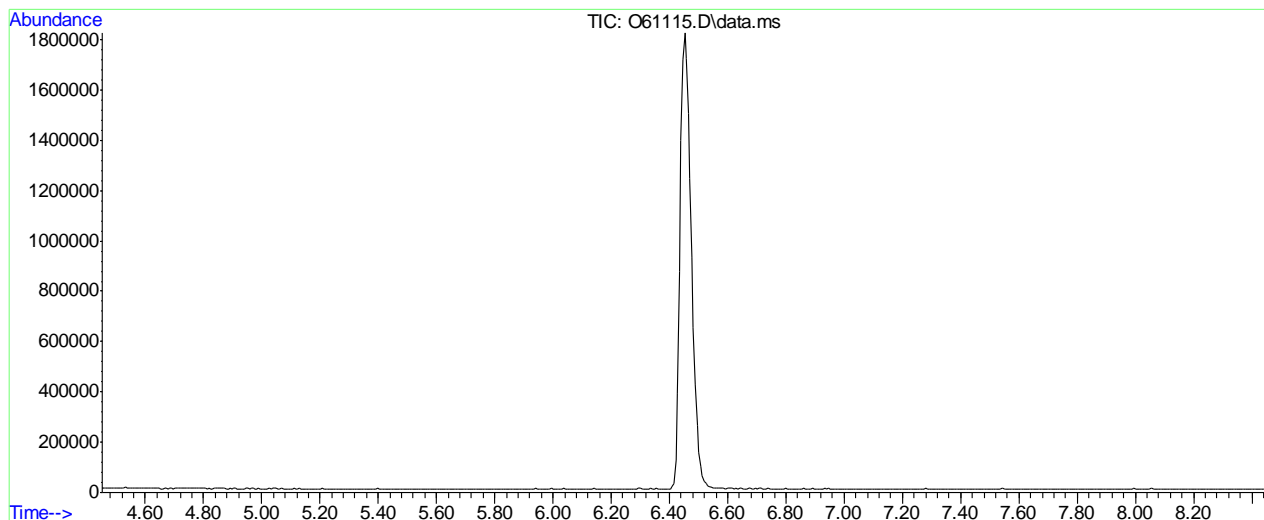
Quant Time: Sep 10 05:50:51 2020
Quant Method : C:\msdchem\1\methods\SIMCL090820.M
Quant Title : WATER-EPA 8260B
QLast Update : Tue Sep 08 14:39:51 2020
Response via : Initial Calibration



7.4.6
7

Methods: SW-846 8260B
 Data File : C:\msdchem\2\data\090820\O61115.D Vial: 100
 Acq On : 8 Sep 2020 11:44 am Operator: melissam
 Sample : BFB Inst : MSVOA12
 Misc : MS47137,VO2352,,,,, Multiplr: 1.00
 MS Integration Params: rteint.p

Method : C:\msdchem\2\methods\SIMCL090820.M (RTE Integrator)
 Title : Standard Methods 6200B



AutoFind: Scans 469, 470, 471; Background Corrected with Scan 460

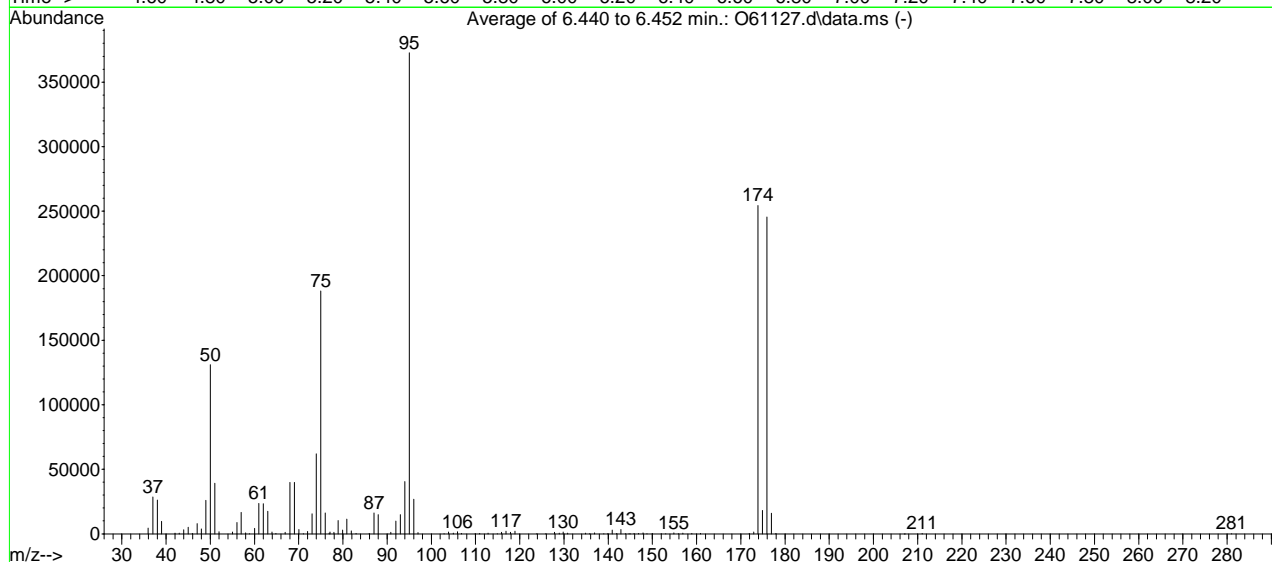
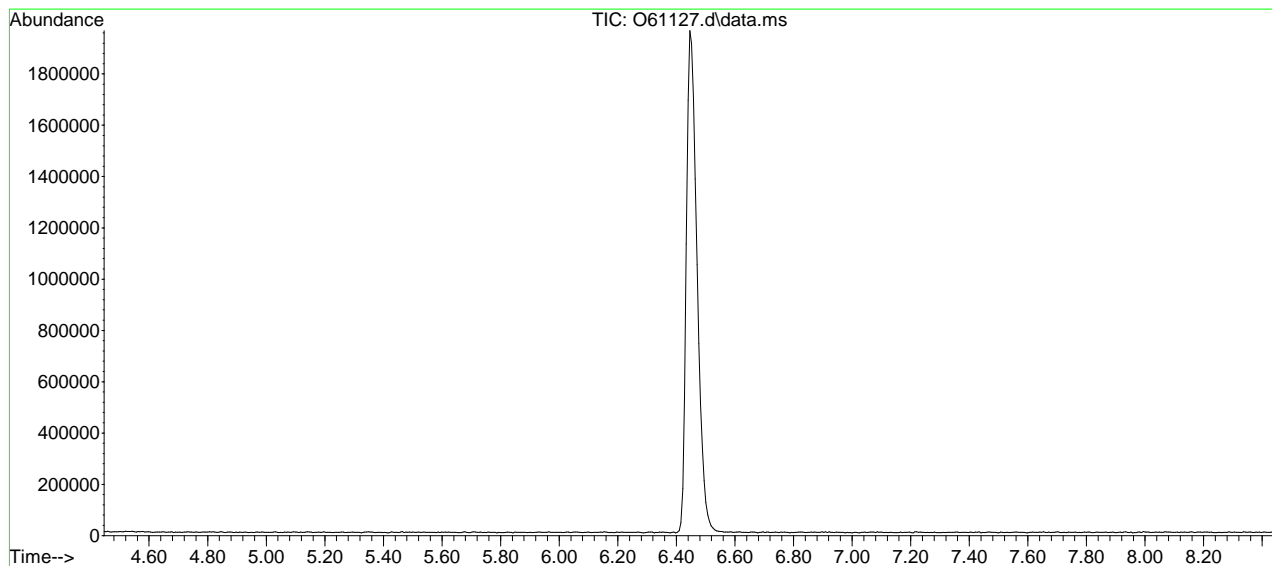
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	32.9	116296	PASS
75	95	30	60	50.1	177003	PASS
95	95	100	100	100.0	353365	PASS
96	95	5	9	6.9	24240	PASS
173	174	0.00	2	0.6	1519	PASS
174	95	50	100	71.2	251541	PASS
175	174	5	9	6.9	17467	PASS
176	174	95	101	97.1	244224	PASS
177	176	5	9	7.1	17221	PASS

O61115.D SIMCL090820.M Wed Sep 09 12:13:11 2020

Methods: SW-846 8260B

Data File : C:\msdchem\1\data\ed...-2020\vo2353\O61127.d Vial: 100
 Acq On : 9 Sep 2020 8:18 am Operator: melissam
 Sample : BFB Inst : MSVOA12
 Misc : MS47137,VO2353,,,,, Multiplr: 1.00
 MS Integration Params: rteint.p

Method : C:\msdchem\1\methods\SIMCL090820.M (RTE Integrator)
 Title : Standard Methods 6200B



AutoFind: Scans 468, 469, 470; Background Corrected with Scan 460

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	35.1	130946	PASS
75	95	30	60	50.5	188117	PASS
95	95	100	100	100.0	372651	PASS
96	95	5	9	7.2	26909	PASS
173	174	0.00	2	0.5	1346	PASS
174	95	50	100	68.3	254421	PASS
175	174	5	9	7.1	18171	PASS
176	174	95	101	96.5	245568	PASS
177	176	5	9	6.5	15987	PASS

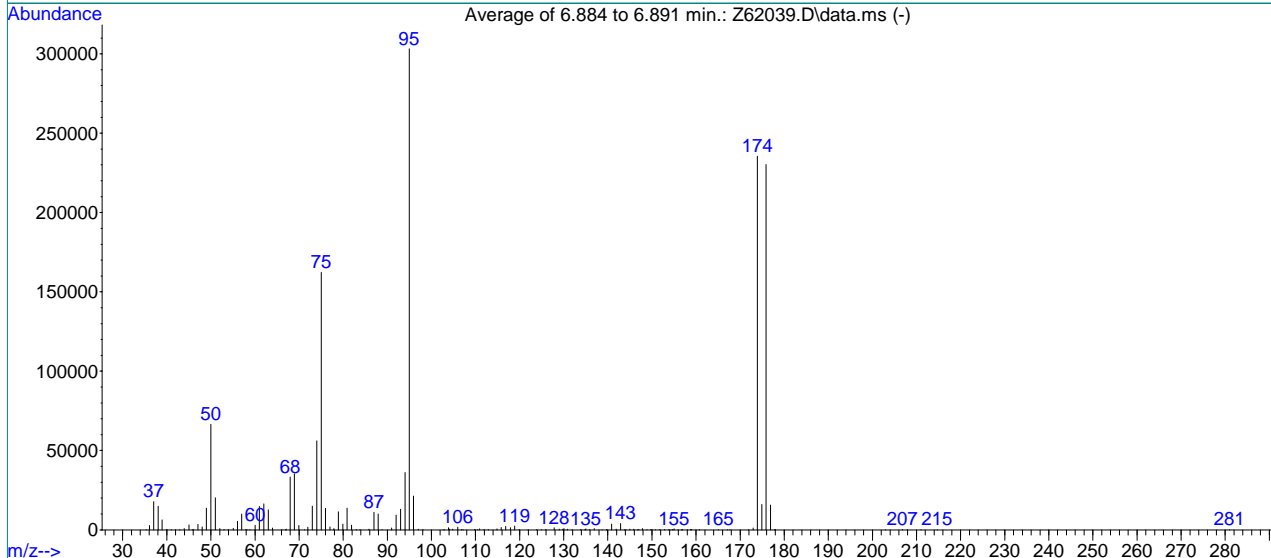
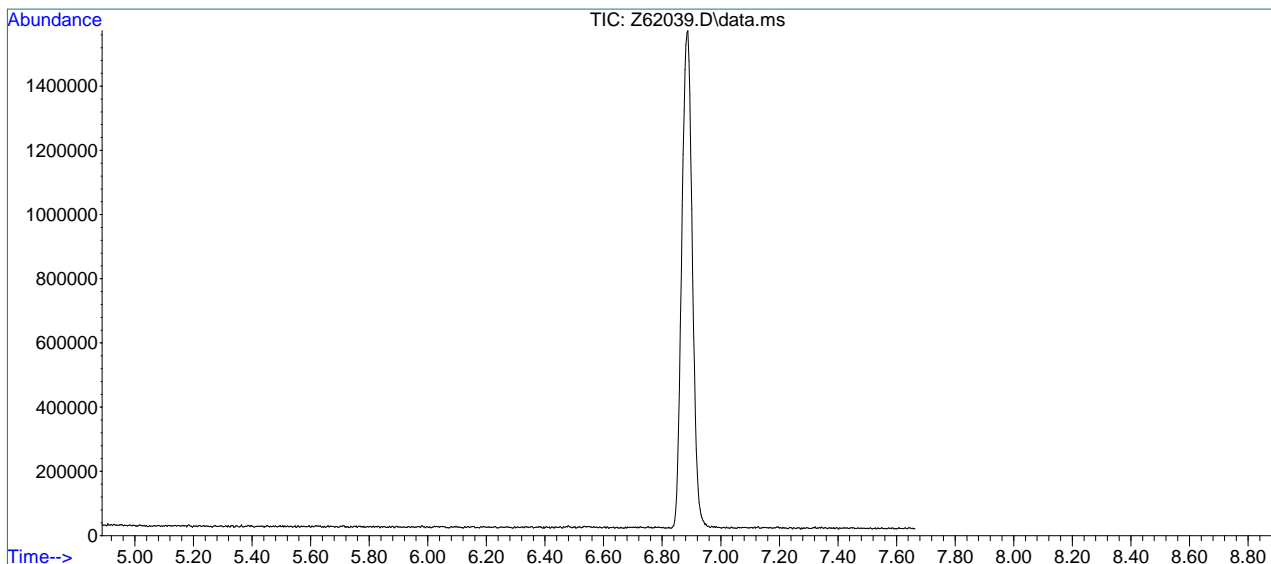
O61127.d SIMCL090820.M Wed Sep 09 20:47:43 2020

BFB

Data File : C:\msdchem\1\data\090320\Z62039.D
 Acq On : 3 Sep 2020 9:29 am
 Sample : BFB
 Misc : MS46458,VZ2408,,,,,
 MS Integration Params: RTEINT.P

Vial: 100
 Operator: shanicao
 Inst : MSVOA15
 Multiplr: 1.00

Method : C:\msdchem\1\methods\SIMCL090320.M (RTE Integrator)
 Title : WATER-EPA 8260B



AutoFind: Scans 2114, 2115, 2116; Background Corrected with Scan 2095

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	21.9	66488	PASS
75	95	30	60	53.5	162304	PASS
95	95	100	100	100.0	303153	PASS
96	95	5	9	7.0	21238	PASS
173	174	0.00	2	0.5	1222	PASS
174	95	50	100	77.7	235477	PASS
175	174	5	9	6.8	16056	PASS
176	174	95	101	97.8	230208	PASS
177	176	5	9	6.8	15659	PASS

7.5.3
7

Average of 6.884 to 6.891 min.: Z62039.D\data.ms

BFB

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
35.30	52	45.80	167	56.00	5387	66.90	190
36.05	2773	46.05	183	57.00	9992	67.10	489
37.00	17718	47.05	3550	57.90	268	67.95	33363
38.05	14875	48.00	1840	58.20	136	68.95	35178
38.95	6224	49.00	13650	58.85	124	69.95	2763
40.00	334	50.00	66488	60.00	2916	71.20	99
41.00	107	51.00	20248	61.00	14791	71.95	1717
42.00	125	52.05	861	62.00	16361	73.00	14848
42.95	161	52.95	207	63.00	12571	74.00	56120
43.95	877	53.90	349	63.95	1178	75.00	162304
45.00	3127	55.05	1007	66.05	98	76.00	13465

Average of 6.884 to 6.891 min.: Z62039.D\data.ms

BFB

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
77.00	1815	88.80	61	103.85	1339	114.85	649
77.90	720	90.95	1090	104.10	528	115.80	1564
78.90	11413	92.00	9313	104.85	445	116.85	2289
79.90	3660	93.00	12994	105.95	1740	117.90	1393
80.85	13619	94.00	36128	106.85	292	118.85	2352
81.90	2951	94.95	303153	107.20	159	119.90	68
82.95	278	95.95	21238	109.80	314	121.90	152
83.80	70	97.00	532	110.50	69	123.80	180
85.85	442	98.10	70	110.95	588	125.00	76
86.95	11103	102.70	96	111.95	227	125.90	236
87.95	10026	103.00	134	112.90	296	127.85	1308

Average of 6.884 to 6.891 min.: Z62039.D\data.ms

BFB

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
128.95	377	139.75	271	148.85	182	155.90	165
129.80	432	140.85	3605	149.75	321	156.70	160
130.05	765	141.90	478	150.00	157	156.95	249
130.85	489	142.90	3996	150.80	112	158.00	152
131.90	186	143.80	187	151.80	268	158.80	237
133.85	274	144.10	61	152.90	320	159.00	202
134.80	216	145.00	433	153.85	141	160.75	310
135.00	602	145.90	383	154.10	123	165.10	50
135.85	140	146.70	72	154.60	122	167.10	115
136.90	757	147.00	206	154.80	203	167.70	52
138.70	65	147.85	763	155.05	591	171.90	71

Average of 6.884 to 6.891 min.: Z62039.D\data.ms

BFB

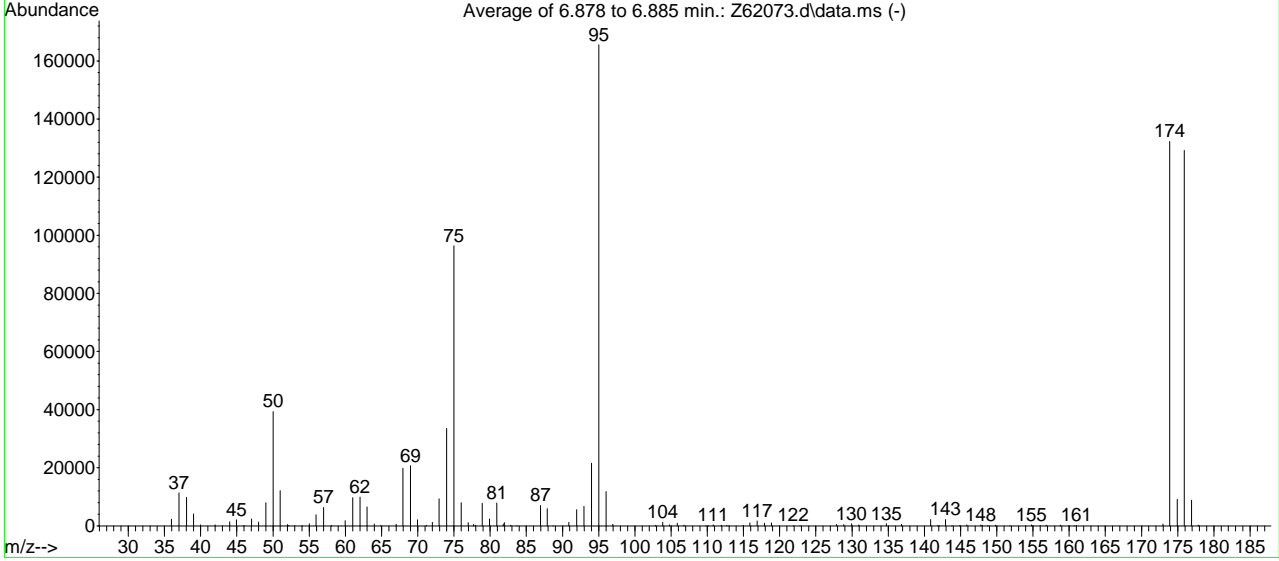
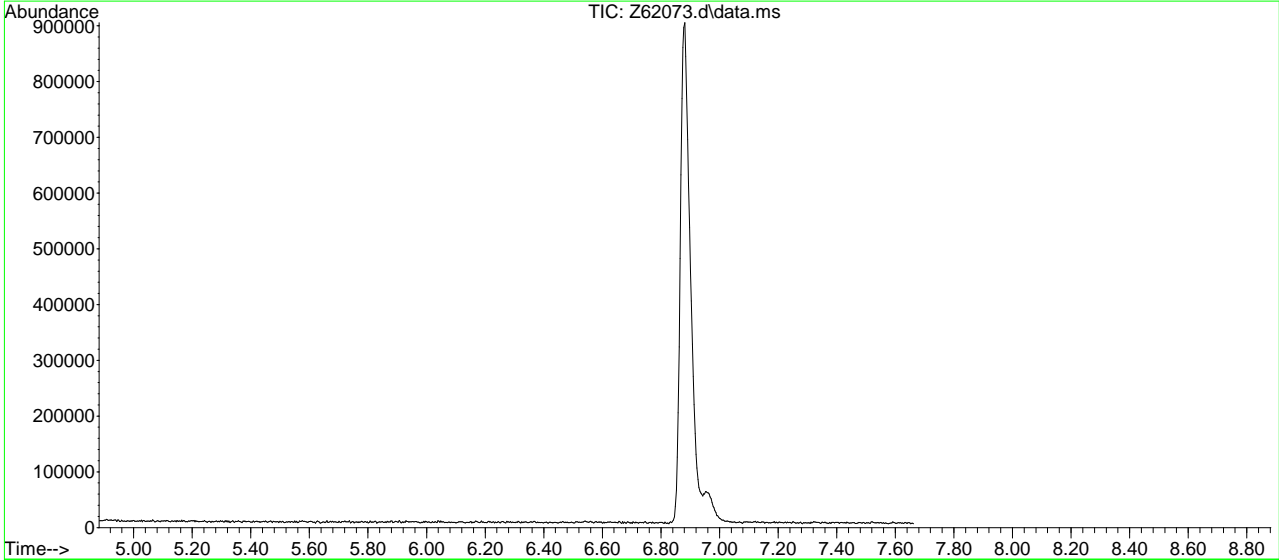
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
172.95	1222	214.70	76				
173.90	235477	281.00	82				
174.90	16056						
175.90	230208						
176.90	15659						
177.80	57						
178.00	304						
202.95	136						
206.85	258						
207.90	70						
211.00	61						

BFB

Data File : C:\msdchem\1\data\je...-2020\VZ2409\Z62073.d Vial: 100
 Acq On : 4 Sep 2020 8:05 am Operator: shanicao
 Sample : BFB Inst : MSVOA15
 Misc : MS47134,VZ2409,,,,, Multiplr: 1.00
 MS Integration Params: RTEINT.P

Method : C:\msdchem\1\methods\SIMCL090320.M (RTE Integrator)
 Title : WATER-EPA 8260B



AutoFind: Scans 2112, 2113, 2114; Background Corrected with Scan 2097

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	23.7	39290	PASS
75	95	30	60	58.2	96384	PASS
95	95	100	100	100.0	165525	PASS
96	95	5	9	7.1	11804	PASS
173	174	0.00	2	0.5	624	PASS
174	95	50	100	79.9	132253	PASS
175	174	5	9	6.9	9164	PASS
176	174	95	101	97.7	129197	PASS
177	176	5	9	6.8	8818	PASS

7.5.4
7

Average of 6.878 to 6.885 min.: Z62073.d\data.ms

BFB

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
35.95	2233	48.00	1274	58.05	186	71.20	163
37.00	11343	49.00	8005	59.95	1748	72.00	1185
38.05	9847	50.00	39290	61.00	9653	72.95	9335
39.00	4082	51.00	12159	62.00	9935	74.00	33565
40.00	336	52.00	407	63.00	6535	75.00	96384
42.00	303	52.20	157	64.00	619	76.00	7977
43.00	22	53.00	80	64.90	55	76.95	1111
44.00	1368	54.00	58	67.00	528	77.70	423
44.95	2087	55.00	724	67.95	19862	77.95	291
45.95	182	55.95	3808	69.00	20677	78.90	7725
47.05	2329	57.00	6318	69.95	2092	79.90	2334

Average of 6.878 to 6.885 min.: Z62073.d\data.ms

BFB

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
80.90	7832	94.00	21539	110.80	362	127.85	453
81.80	588	95.00	165525	111.95	210	128.85	403
81.95	1074	96.00	11804	112.70	173	129.95	756
82.85	245	96.95	519	113.00	57	130.95	360
83.70	53	102.85	159	115.00	177	134.75	743
86.95	6963	103.85	1173	115.90	999	136.85	521
87.90	5956	104.75	302	116.90	1674	140.85	2191
88.70	97	105.85	891	117.90	941	141.85	193
90.85	1187	106.80	249	118.85	998	142.10	97
91.95	5512	109.80	74	121.90	93	142.90	2214
92.95	6742	110.20	80	122.80	58	143.80	76

Average of 6.878 to 6.885 min.: Z62073.d\data.ms

BFB

Modified:subtracted

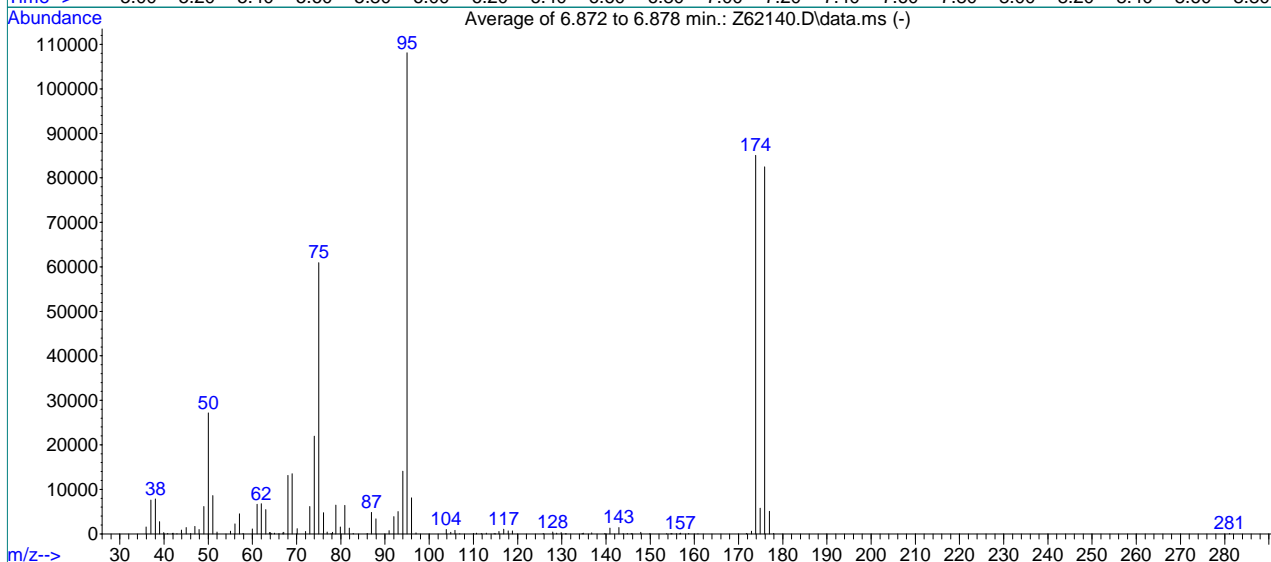
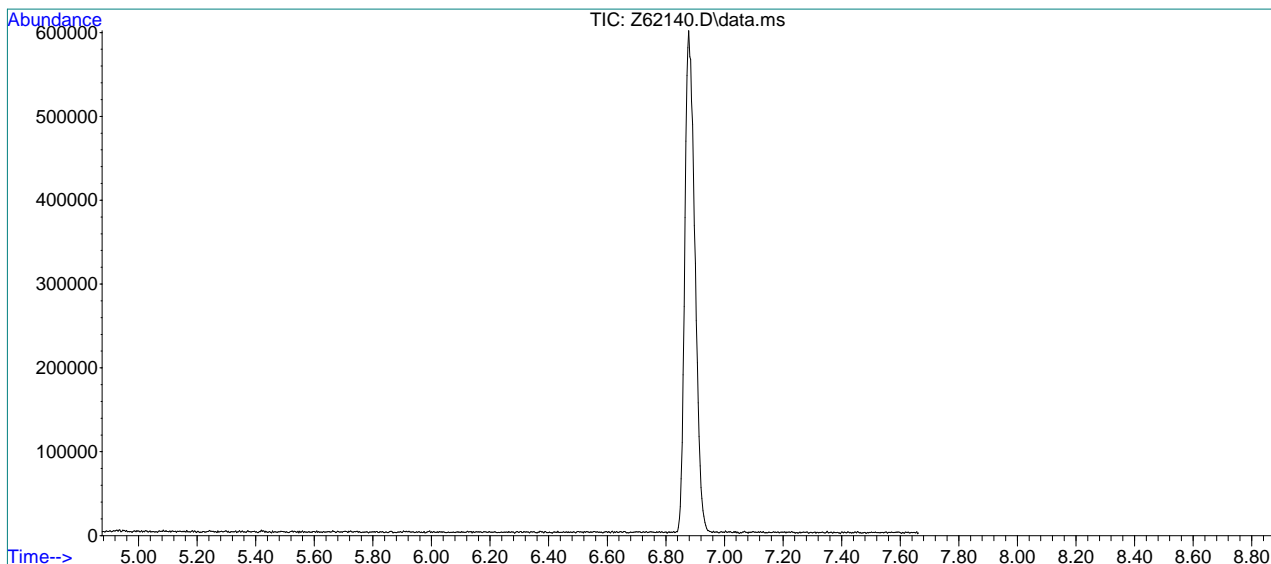
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
144.90	132	156.80	294				
145.85	304	158.80	210				
147.80	298	160.00	53				
148.00	226	160.70	65				
148.75	185	161.00	145				
149.80	221	172.95	624				
151.80	60	173.90	132253				
154.00	52	174.95	9164				
154.80	386	175.90	129197				
155.00	145	176.90	8818				
156.00	93	177.85	239				

BFB

Data File : C:\msdchem\1\data\090820\Z62140.D
 Acq On : 8 Sep 2020 11:50 am
 Sample : BFB
 Misc : MS47137,VZ2411,,,,,
 MS Integration Params: RTEINT.P

Vial: 100
 Operator: SHANICAO
 Inst : MSVOA15
 Multiplr: 1.00

Method : C:\msdchem\1\methods\SIMCL090820.M (RTE Integrator)
 Title : WATER-EPA 8260B



AutoFind: Scans 2110, 2111, 2112; Background Corrected with Scan 2097

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	25.1	27152	PASS
75	95	30	60	56.4	60931	PASS
95	95	100	100	100.0	108091	PASS
96	95	5	9	7.5	8064	PASS
173	174	0.00	2	0.7	604	PASS
174	95	50	100	78.7	85061	PASS
175	174	5	9	6.8	5760	PASS
176	174	95	101	96.9	82453	PASS
177	176	5	9	6.2	5099	PASS

7.5.5
7

Average of 6.872 to 6.878 min.: Z62140.D\data.ms

BFB

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
35.95	1534	46.00	71	59.95	1088	68.00	13160
37.00	7560	46.95	1666	61.05	6655	69.00	13501
38.00	7814	47.95	983	62.00	6765	70.10	1166
39.00	2713	49.00	6130	63.00	5442	72.00	553
39.95	268	50.00	27152	63.85	301	73.00	6122
40.80	124	51.00	8607	64.00	258	74.00	21944
41.90	87	51.95	413	64.20	95	75.00	60931
42.05	148	55.00	579	65.00	136	76.05	4774
42.90	27	56.05	2234	66.00	51	76.90	389
43.95	825	57.05	4479	66.90	216	77.80	92
45.00	1392	57.90	124	67.10	361	78.10	370

Average of 6.872 to 6.878 min.: Z62140.D\data.ms

BFB

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
78.90	6461	94.00	14102	112.90	165	130.80	65
79.90	1543	95.00	108091	114.70	113	131.00	66
80.90	6403	96.00	8064	115.00	66	134.60	108
81.90	1326	97.00	212	115.75	562	134.85	186
82.80	80	103.85	948	116.85	1053	136.75	231
86.00	75	104.85	334	117.90	640	139.75	115
86.95	4792	105.85	787	118.85	647	140.90	1296
87.95	3384	106.90	51	125.80	68	142.95	1437
90.95	723	110.00	108	127.95	432	143.90	51
92.00	3868	110.70	129	128.85	190	144.85	113
92.95	4992	111.80	71	129.85	279	145.70	126

Average of 6.872 to 6.878 min.: Z62140.D\data.ms

BFB

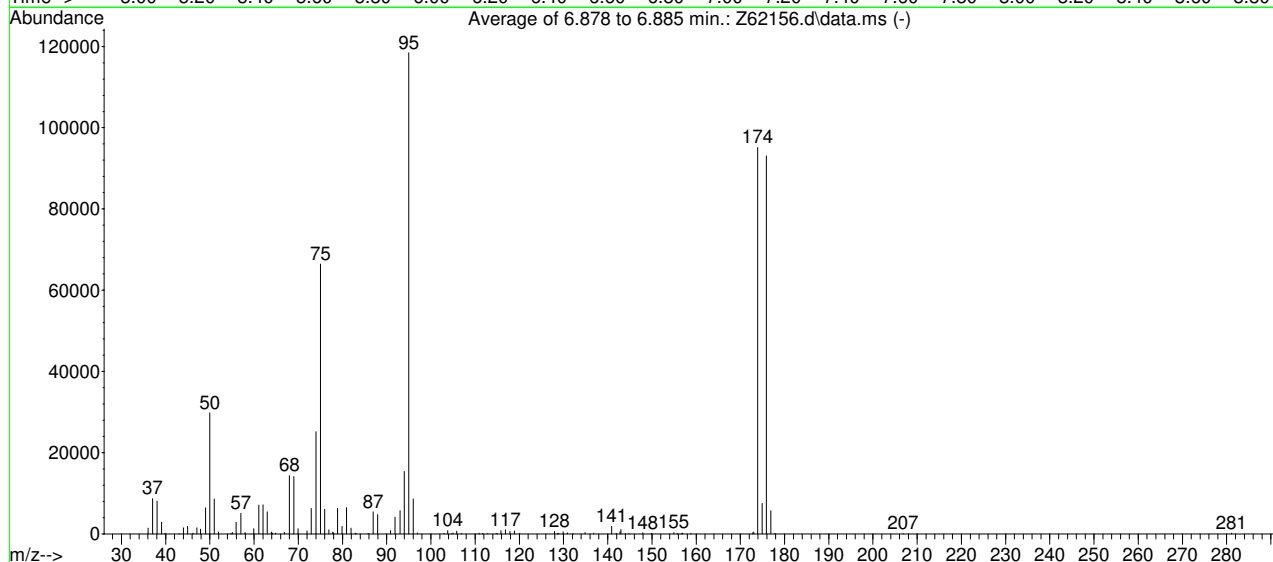
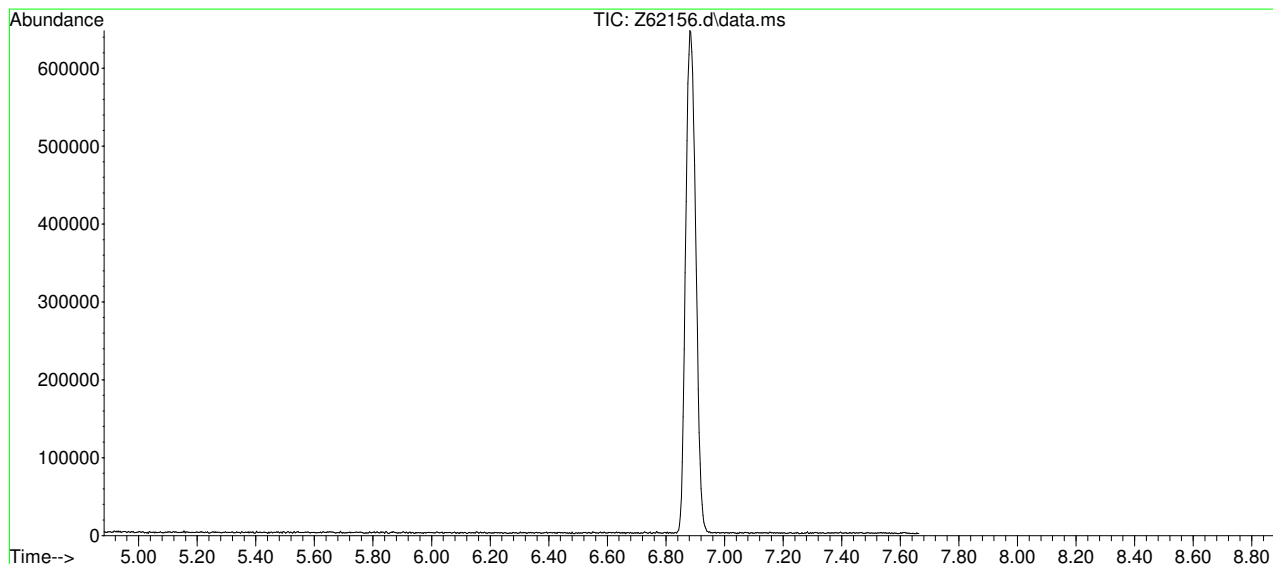
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
145.90	54	171.80	125				
147.85	321	172.95	604				
149.90	63	173.90	85061				
153.70	51	174.90	5760				
154.70	114	175.90	82453				
154.90	93	176.95	5099				
155.90	66	177.90	110				
156.70	50	281.10	117				
156.90	177						
158.70	81						
160.80	64						

BFB

Data File : C:\msdchem\1\data\jo...-2020\ vz2412\Z62156.d Vial: 100
 Acq On : 9 Sep 2020 12:01 pm Operator: SHANICAO
 Sample : BFB Inst : MSVOA15
 Misc : MS47137,VZ2412,,,,, Multiplr: 1.00
 MS Integration Params: RTEINT.P

Method : C:\msdchem\1\methods\SIMCL090820.M (RTE Integrator)
 Title : WATER-EPA 8260B



AutoFind: Scans 2112, 2113, 2114; Background Corrected with Scan 2097

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	25.2	29805	PASS
75	95	30	60	56.1	66459	PASS
95	95	100	100	100.0	118435	PASS
96	95	5	9	7.3	8621	PASS
173	174	0.00	2	0.5	453	PASS
174	95	50	100	80.3	95107	PASS
175	174	5	9	7.9	7488	PASS
176	174	95	101	97.9	93064	PASS
177	176	5	9	6.2	5724	PASS

7.5.6
7

Average of 6.878 to 6.885 min.: Z62156.d\data.ms

BFB

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.05	1403	49.00	6377	62.00	7126	74.00	25125
37.05	8675	50.00	29805	63.00	5431	75.00	66459
38.05	8039	51.00	8583	63.95	463	76.00	6017
39.05	2901	51.95	484	64.20	145	76.95	988
39.85	187	54.80	164	64.85	209	77.80	428
43.05	55	55.10	321	66.85	374	78.00	242
44.00	1473	55.95	2867	68.00	14300	78.90	6222
44.95	1837	57.00	5053	69.00	14105	79.90	1853
46.15	193	57.95	307	69.95	1292	80.90	6447
47.05	1509	59.95	1289	71.95	762	81.90	1450
47.90	1151	61.05	7099	72.95	6273	82.90	169

Average of 6.878 to 6.885 min.: Z62156.d\data.ms

BFB

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
83.10	103	103.00	92	115.85	796	134.85	339
85.80	77	103.80	823	116.85	995	136.85	191
86.95	5433	104.60	58	117.85	575	140.90	1810
87.95	4743	105.00	164	118.90	743	141.90	94
90.85	765	105.80	681	120.10	56	142.80	511
91.90	4138	106.90	63	127.95	571	142.95	1087
93.00	5674	110.90	209	128.60	94	144.00	55
94.00	15369	111.65	108	128.90	149	144.80	91
95.00	118435	112.85	118	129.95	499	147.90	220
96.00	8621	114.75	104	130.90	237	149.90	103
96.95	263	115.00	53	132.20	52	154.95	307

Average of 6.878 to 6.885 min.: Z62156.d\data.ms

BFB

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
155.75	114	206.80	71				
156.70	117	281.10	157				
156.90	159						
158.85	126						
172.80	242						
173.00	453						
173.90	95107						
174.95	7488						
175.90	93064						
176.90	5724						
177.80	73						

Quantitation Report (QT Reviewed)

Melissa Mangual
09/10/20 08:47

Data Path : C:\msdchem\2\data\090820\
 Data File : O61116.D
 Acq On : 8 Sep 2020 12:14 pm
 Operator : melissam
 Sample : ic2352-1 Inst : MSVOA12
 Misc : MS47137,VO2352,,,,,
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 09 12:04:02 2020
 Quant Method : C:\msdchem\2\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Fri Sep 04 07:54:30 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.346	96	289638	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.441	117	217308	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.068	65	127316	5.57	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	111.40%	
19) Toluene-d8	8.896	98	263980	5.53	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	110.60%	
Target Compounds						
						Qvalue
2) Vinyl Chloride	2.912	62	2682	0.08	ug/L	96
3) Chloromethane	2.806	50	5083m	0.08	ug/L	
4) 1,1-Dichloroethene	4.096	61	3555	0.11	ug/L	81
5) Methylene Chloride	4.703	49	32662	0.39	ug/L	94
6) trans-1,2-Dichloroethene	4.869	61	4744	0.12	ug/L	76
7) 1,1-Dichloroethane	5.510	63	5315	0.11	ug/L	99
8) cis-1,2-Dichloroethene	6.066	96	2455	0.09	ug/L #	68
9) Chloroform	6.327	83	4748	0.10	ug/L #	76
10) Carbon Tetrachloride	6.511	117	2357	0.08	ug/L	91
11) 1,1,1-Trichloroethane	6.582	97	2879	0.08	ug/L	91
12) Benzene	6.943	78	9822m	0.12	ug/L	
14) 1,2-Dichloroethane	7.139	62	4904	0.13	ug/L	88
15) Trichloroethene	7.512	95	2469	0.08	ug/L	97
16) 1,2-Dichloropropane	8.040	63	3239m	0.12	ug/L	
17) cis-1,3-Dichloropropene	8.711	75	3367	0.12	ug/L	100
20) trans-1,3-Dichloropropene	9.343	75	2991	0.10	ug/L	97
21) Tetrachloroethene	9.343	166	1962m	0.07	ug/L	
22) 1,4-Dichlorobenzene	12.827	146	4642	0.09	ug/L	97
23) 1,2-Dibromo-3-Chloropr...	14.038	75	1368m	0.13	ug/L	

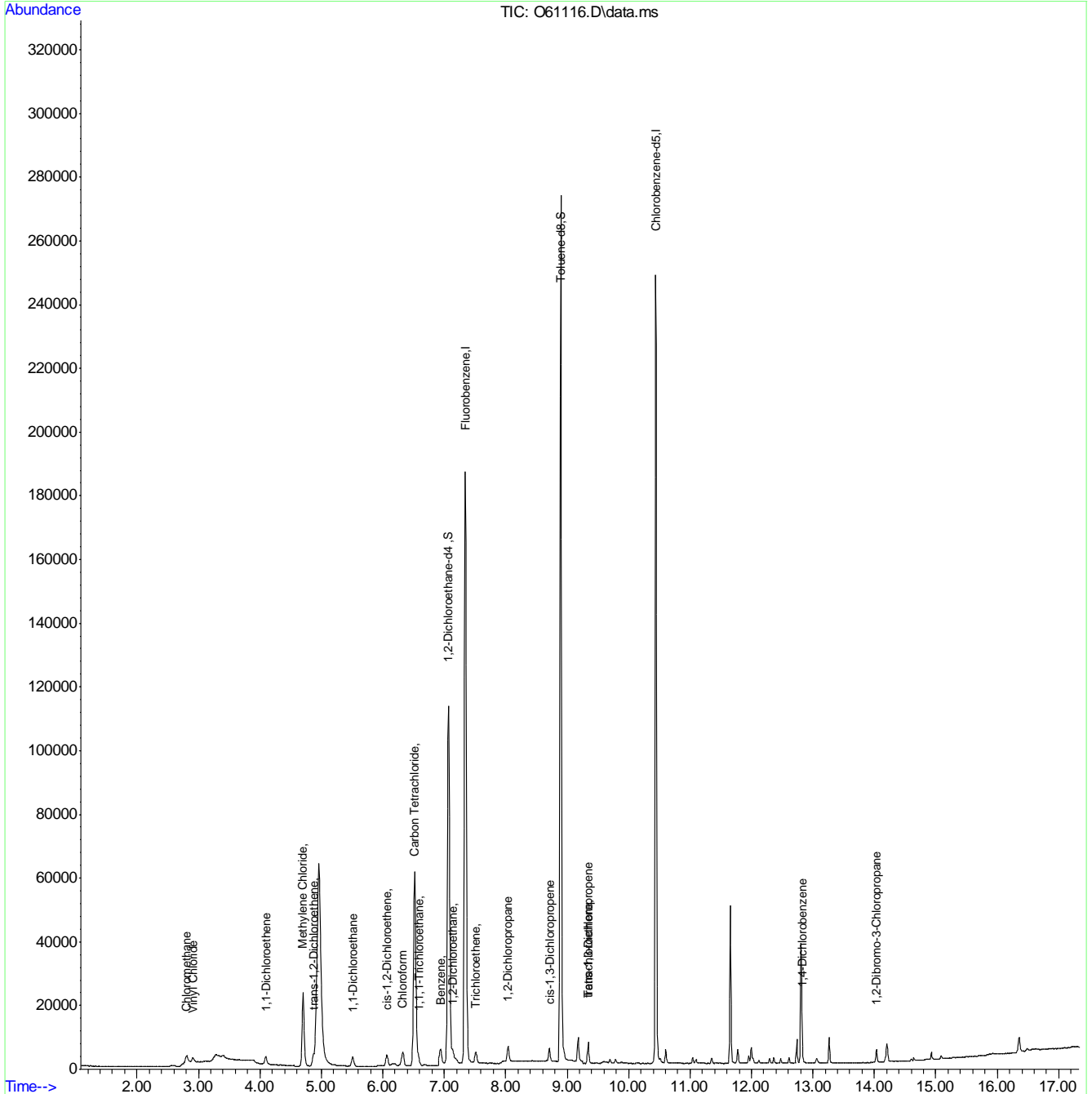
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\090820\
 Data File : O61116.D
 Acq On : 8 Sep 2020 12:14 pm
 Operator : melissam
 Sample : ic2352-1
 Misc : MS47137,VO2352,,,,,
 ALS Vial : 1 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 09 12:04:02 2020
 Quant Method : C:\msdchem\2\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Fri Sep 04 07:54:30 2020
 Response via : Initial Calibration



1.9.7

Manual Integration Approval Summary

Sample Number: VO2352-IC2352 **Method:** SW846 8260B BY SIM
Lab FileID: O61116.D **Analyst approved:** 09/10/20 08:40 Akari Giraldo
Injection Time: 09/08/20 12:14 **Supervisor approved:** 09/10/20 08:47 Melissa Mangual

Parameter	CAS	Sig#	R.T. (min.)	Reason
Methyl Chloride	74-87-3		2.81	Poor instrument integration
Benzene	71-43-2		6.94	Poor instrument integration
1,2-Dichloropropane	78-87-5		8.04	Poor instrument integration
Tetrachloroethylene	127-18-4		9.34	Poor instrument integration
1,2-Dibromo-3-chloropropane	96-12-8		14.04	Missed peak

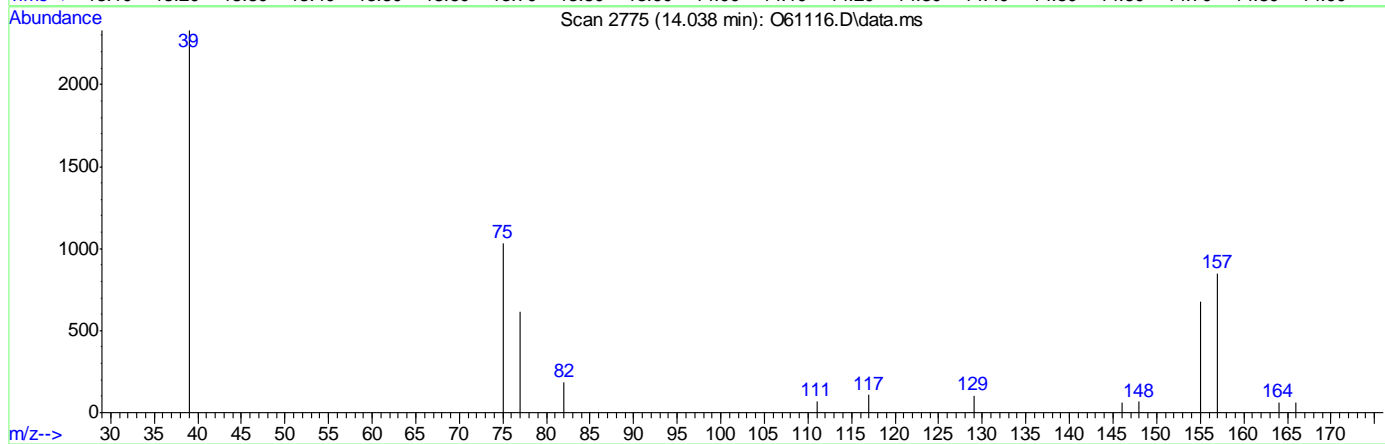
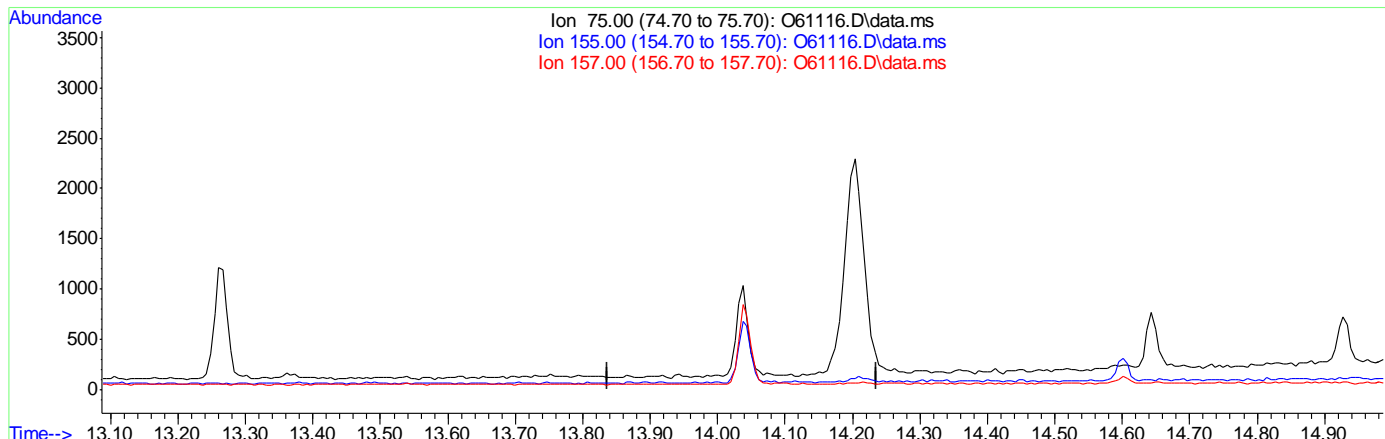
7.6.1.1
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\090820\
 Data File : O61116.D
 Acq On : 8 Sep 2020 12:14 pm
 Operator : melissam
 Sample : ic2352-1
 Misc : MS47137,VO2352,,,,,
 ALS Vial : 1 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 08 14:42:21 2020
 Quant Method : C:\msdchem\2\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Fri Sep 04 07:54:30 2020
 Response via : Initial Calibration



(23) 1,2-Dibromo-3-Chloropropane

14.037min (-14.037) 0.00ug/L

response 0

Ion	Exp%	Act%
75.00	100	0.00
155.00	88.00	0.00#
157.00	106.80	0.00#
0.00	0.00	0.00

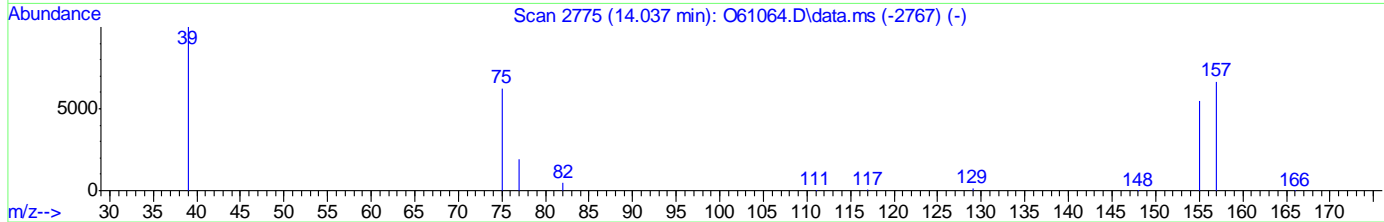
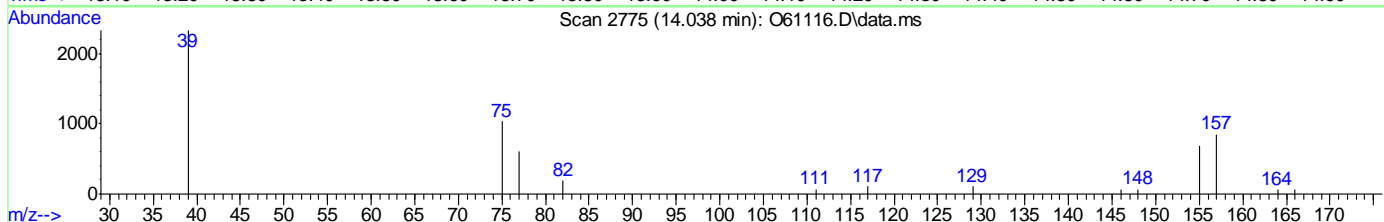
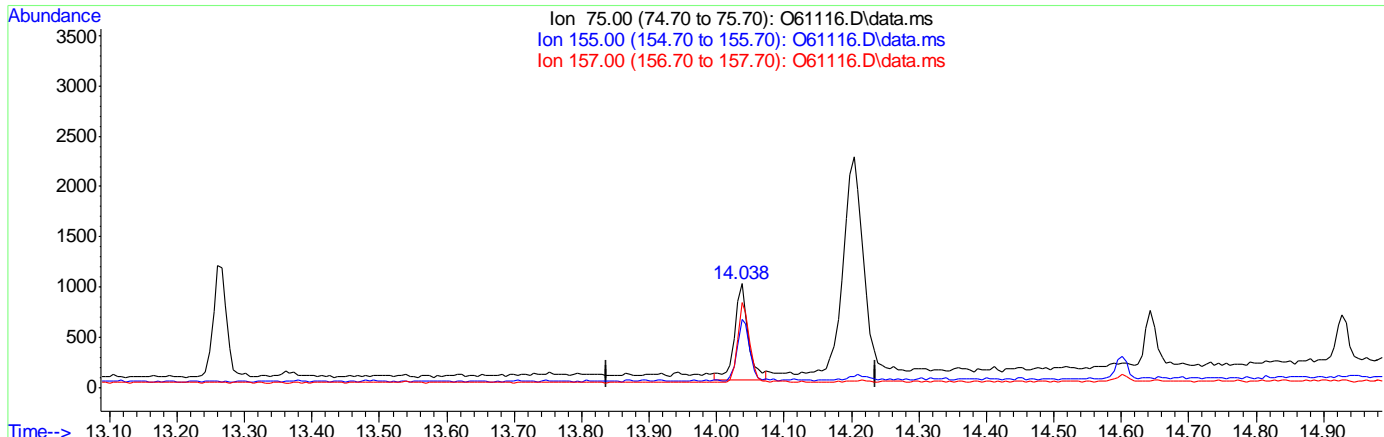
7.6.1.2
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\090820\
 Data File : O61116.D
 Acq On : 8 Sep 2020 12:14 pm
 Operator : melissam
 Sample : ic2352-1
 Misc : MS47137,VO2352,,,,,
 ALS Vial : 1 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 08 14:42:21 2020
 Quant Method : C:\msdchem\2\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Fri Sep 04 07:54:30 2020
 Response via : Initial Calibration



TIC: O61116.D\data.ms

(23) 1,2-Dibromo-3-Chloropropane
 14.038min (+0.000) 0.13ug/L m
 response 1368

Ion	Exp%	Act%
75.00	100	100
155.00	88.00	65.70#
157.00	106.80	82.03#
0.00	0.00	0.00

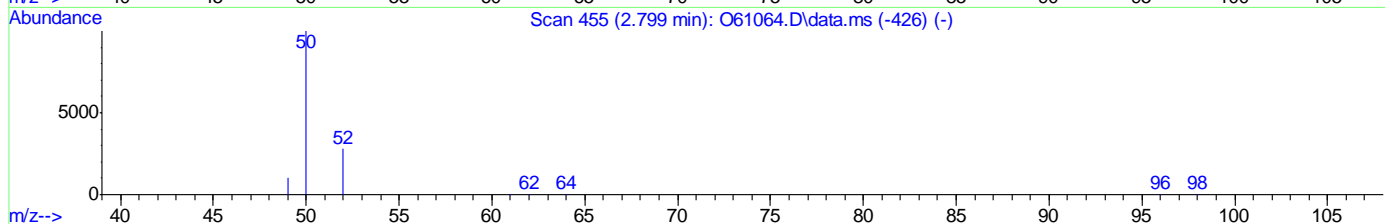
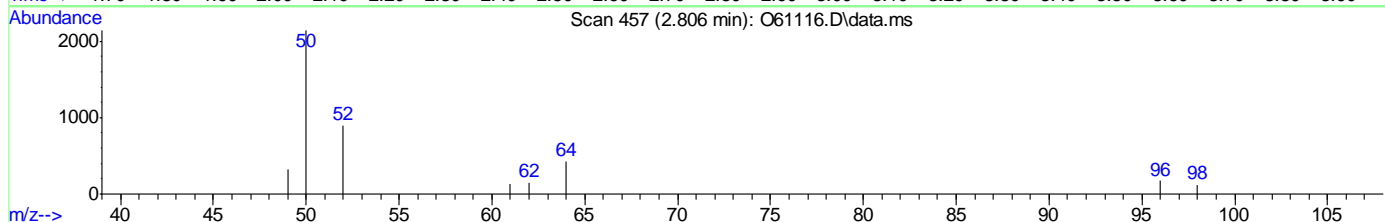
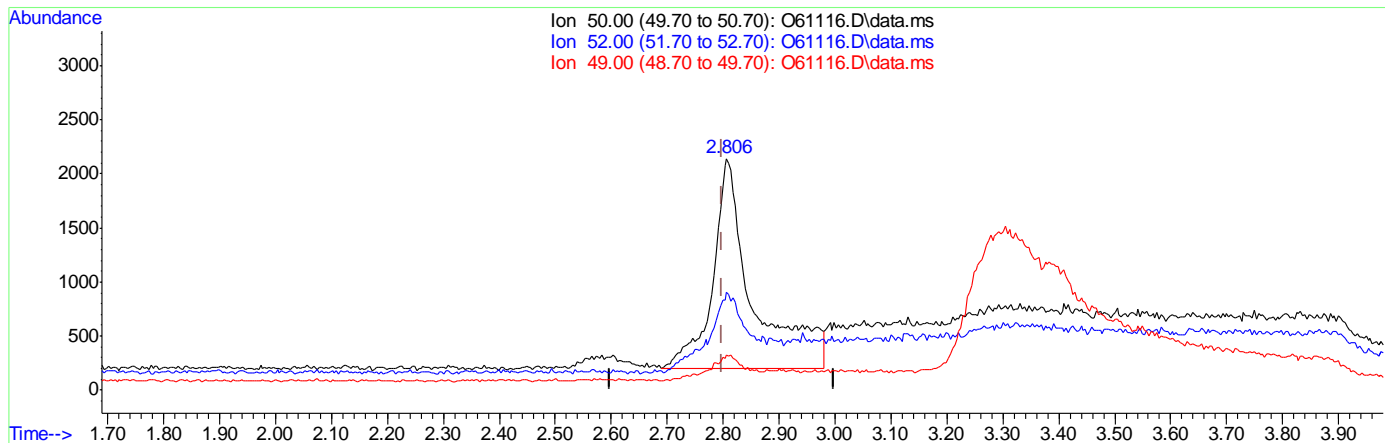
7.6.1.3
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\090820\
 Data File : O61116.D
 Acq On : 8 Sep 2020 12:14 pm
 Operator : melissam
 Sample : ic2352-1
 Misc : MS47137,VO2352,,,,,
 ALS Vial : 1 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 08 14:42:21 2020
 Quant Method : C:\msdchem\2\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Fri Sep 04 07:54:30 2020
 Response via : Initial Calibration



(3) Chloromethane

2.806min (+0.007) 0.16ug/L

response 9635

Ion	Exp%	Act%
50.00	100	100
52.00	27.80	37.41
49.00	10.50	12.38
0.00	0.00	0.00

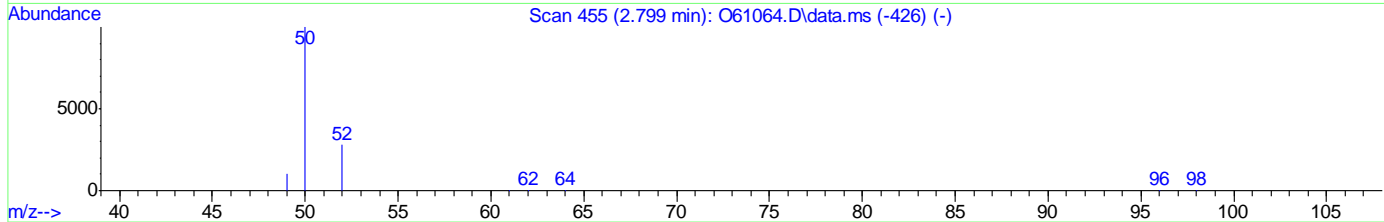
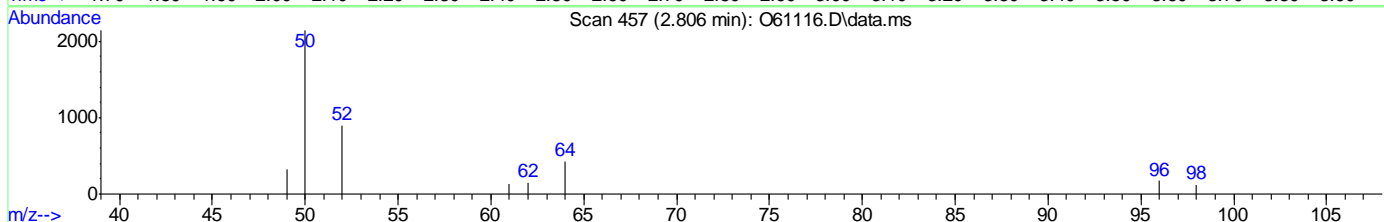
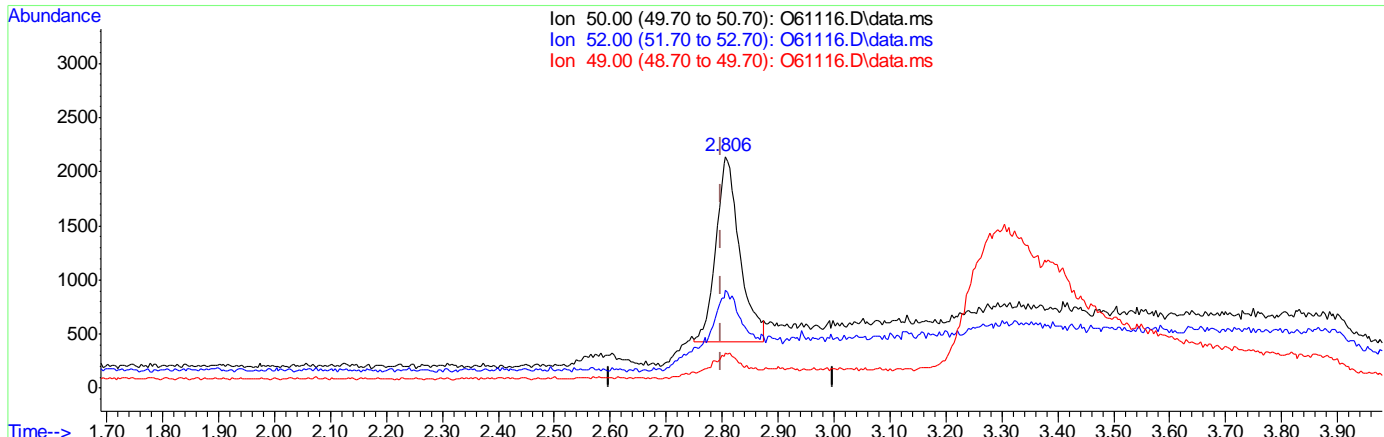
7.6.1.4
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\090820\
 Data File : O61116.D
 Acq On : 8 Sep 2020 12:14 pm
 Operator : melissam
 Sample : ic2352-1
 Misc : MS47137,VO2352,,,,,
 ALS Vial : 1 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 08 14:42:21 2020
 Quant Method : C:\msdchem\2\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Fri Sep 04 07:54:30 2020
 Response via : Initial Calibration



TIC: O61116.D\data.ms

(3) Chloromethane
 2.806min (+0.007) 0.08ug/L m
 response 5083

Ion	Exp%	Act%
50.00	100	100
52.00	27.80	42.08
49.00	10.50	15.27
0.00	0.00	0.00

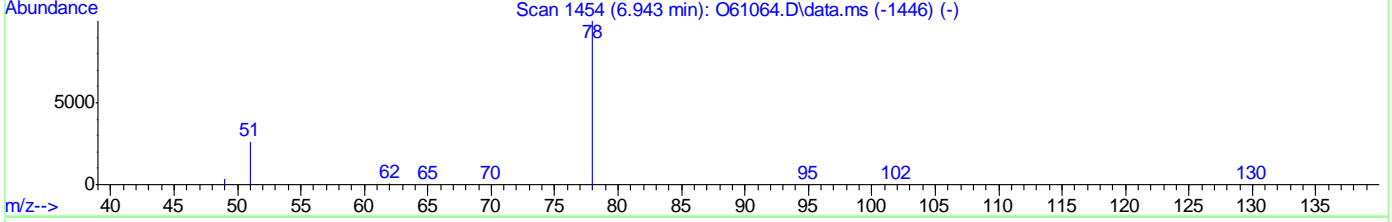
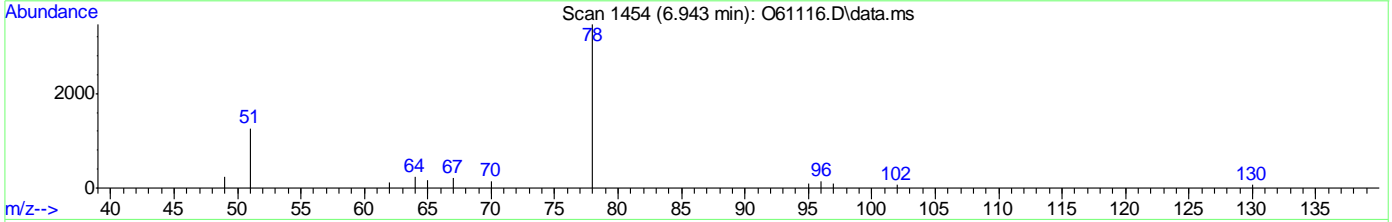
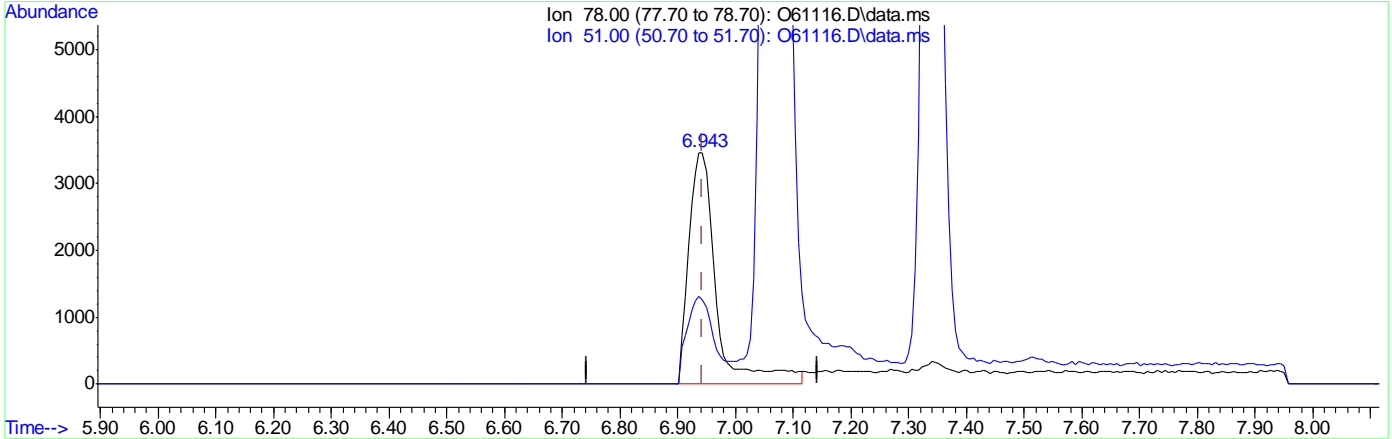
7.6.1.5
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\090820\
 Data File : O61116.D
 Acq On : 8 Sep 2020 12:14 pm
 Operator : melissam
 Sample : ic2352-1
 Misc : MS47137,VO2352,,,,,
 ALS Vial : 1 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 08 14:42:21 2020
 Quant Method : C:\msdchem\2\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Fri Sep 04 07:54:30 2020
 Response via : Initial Calibration



TIC: O61116.D\data.ms

(12) Benzene ()
 6.943min (+0.000) 0.14ug/L
 response 11274

Ion	Exp%	Act%
78.00	100	100
51.00	26.20	36.42
0.00	0.00	0.00
0.00	0.00	0.00

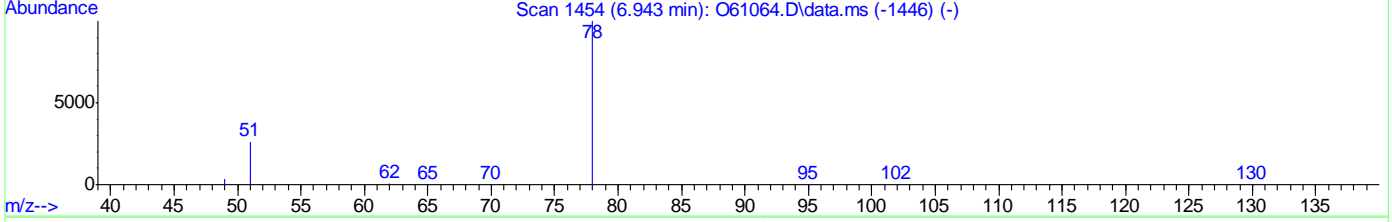
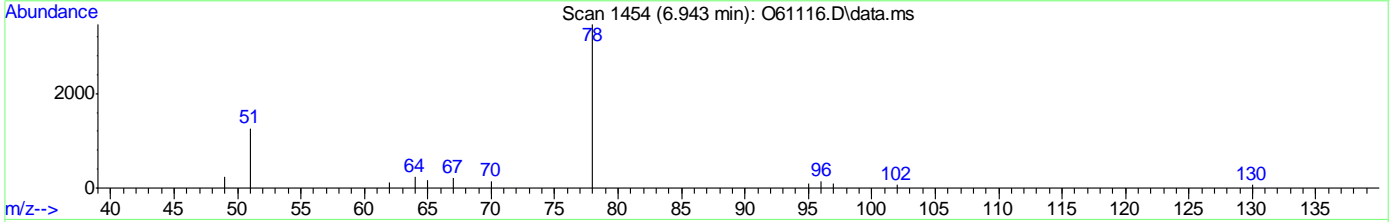
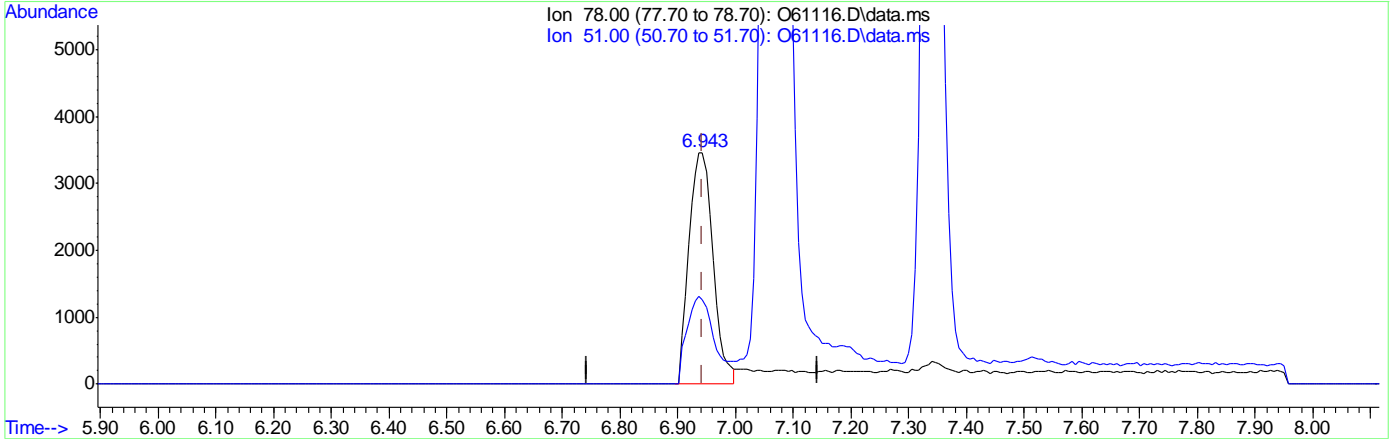
7.6.1.6
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\090820\
 Data File : O61116.D
 Acq On : 8 Sep 2020 12:14 pm
 Operator : melissam
 Sample : ic2352-1
 Misc : MS47137,VO2352,,,,,
 ALS Vial : 1 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 08 14:42:21 2020
 Quant Method : C:\msdchem\2\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Fri Sep 04 07:54:30 2020
 Response via : Initial Calibration



TIC: O61116.D\data.ms

(12) Benzene ()
 6.943min (+0.000) 0.12ug/L m
 response 9822

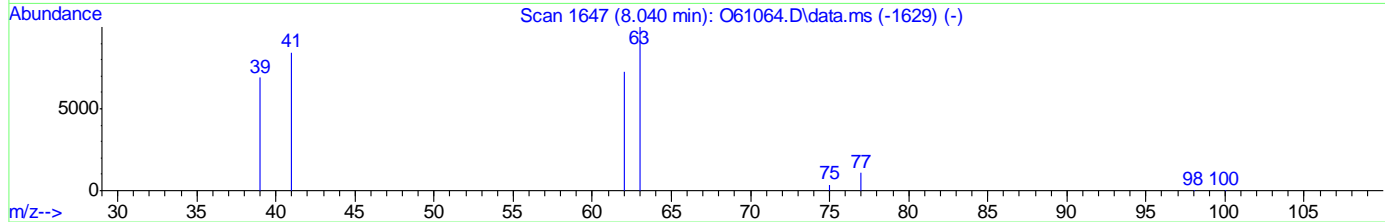
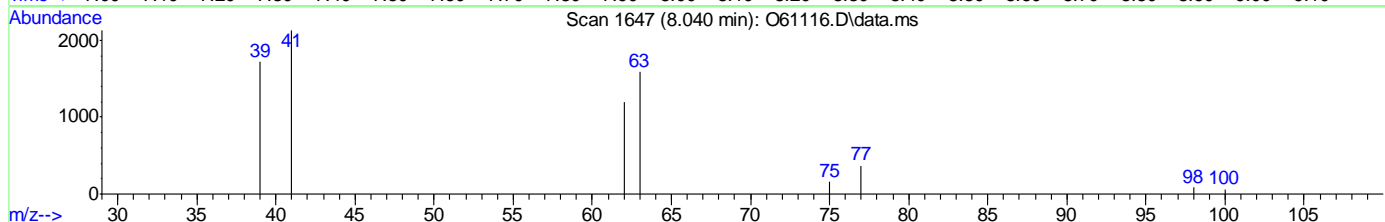
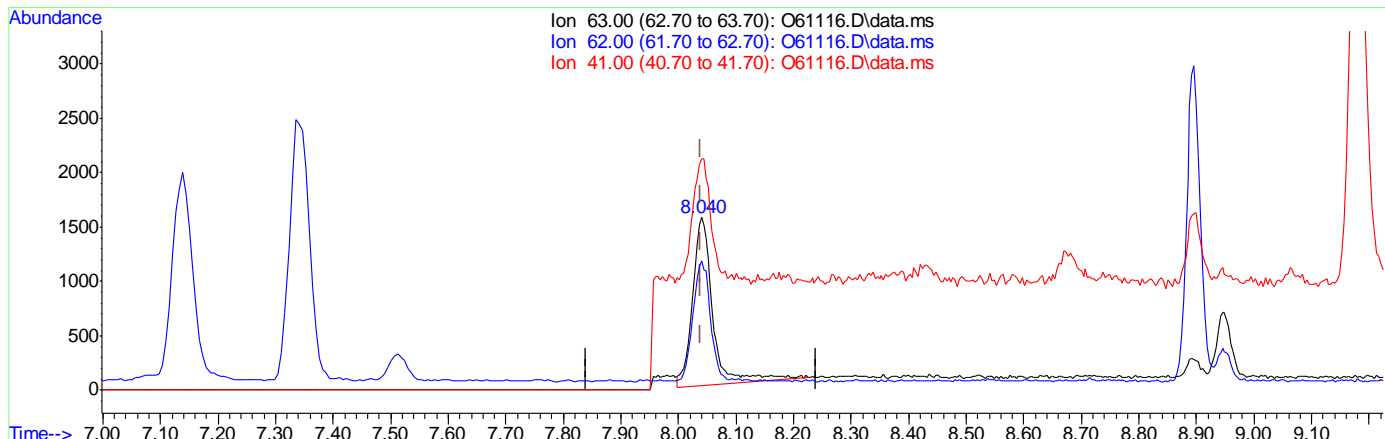
Ion	Exp%	Act%
78.00	100	100
51.00	26.20	36.42
0.00	0.00	0.00
0.00	0.00	0.00

7.6.1.7
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\090820\
 Data File : O61116.D
 Acq On : 8 Sep 2020 12:14 pm
 Operator : melissam
 Sample : ic2352-1 Inst : MSVOA12
 Misc : MS47137,VO2352,,,,,
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 08 14:42:21 2020
 Quant Method : C:\msdchem\2\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Fri Sep 04 07:54:30 2020
 Response via : Initial Calibration



(16) 1,2-Dichloropropane
 8.040min (-0.000) 0.14ug/L
 response 3809

Ion	Exp%	Act%
63.00	100	100
62.00	72.70	75.22
41.00	84.50	77.26
0.00	0.00	0.00

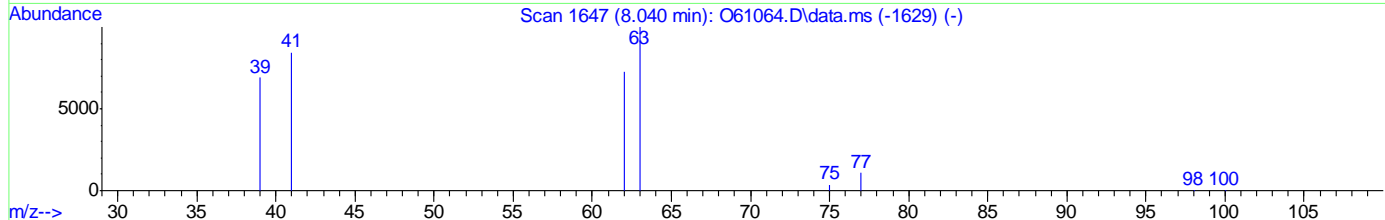
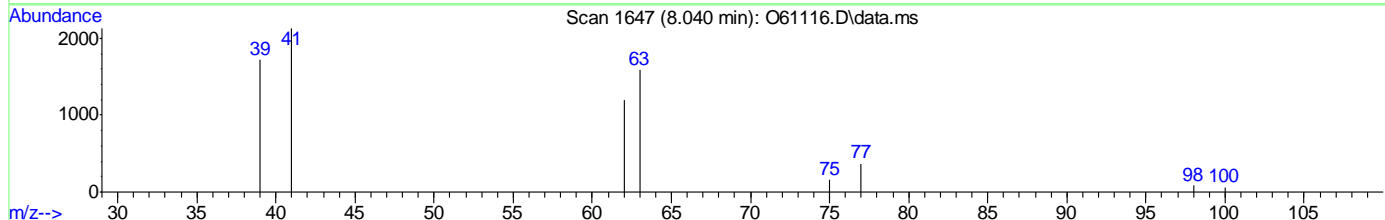
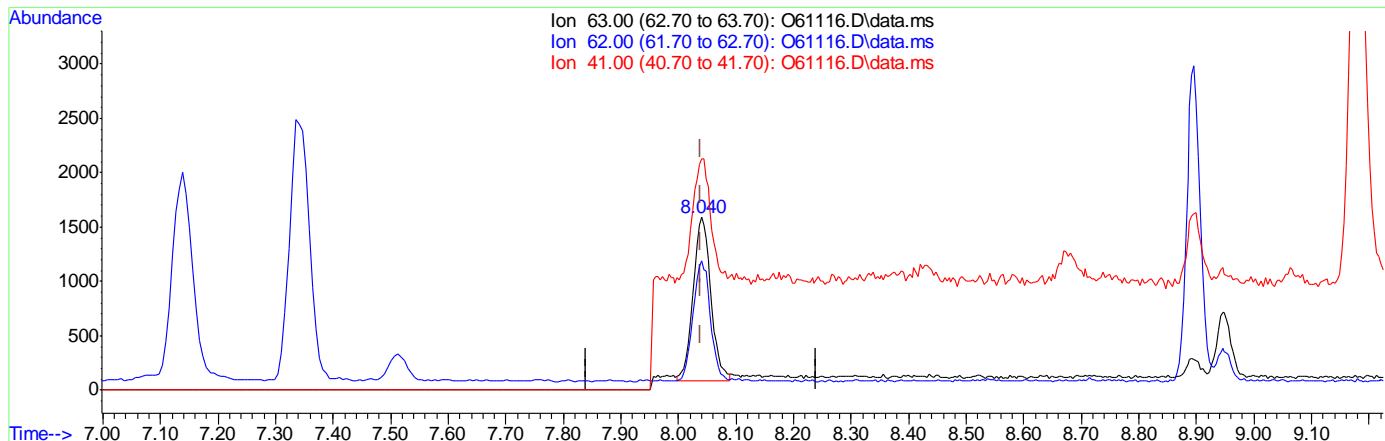
7.6.1.8
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\090820\
 Data File : O61116.D
 Acq On : 8 Sep 2020 12:14 pm
 Operator : melissam
 Sample : ic2352-1
 Misc : MS47137,VO2352,,,,,
 ALS Vial : 1 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 08 14:42:21 2020
 Quant Method : C:\msdchem\2\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Fri Sep 04 07:54:30 2020
 Response via : Initial Calibration



(16) 1,2-Dichloropropane
 8.040min (-0.000) 0.12ug/L m
 response 3239

Ion	Exp%	Act%
63.00	100	100
62.00	72.70	74.83
41.00	84.50	133.98#
0.00	0.00	0.00

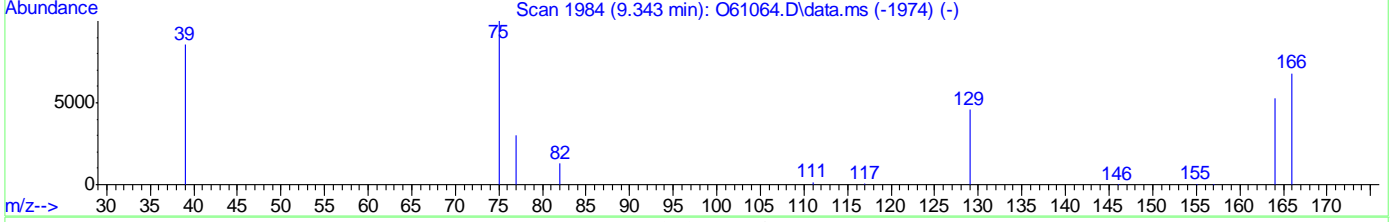
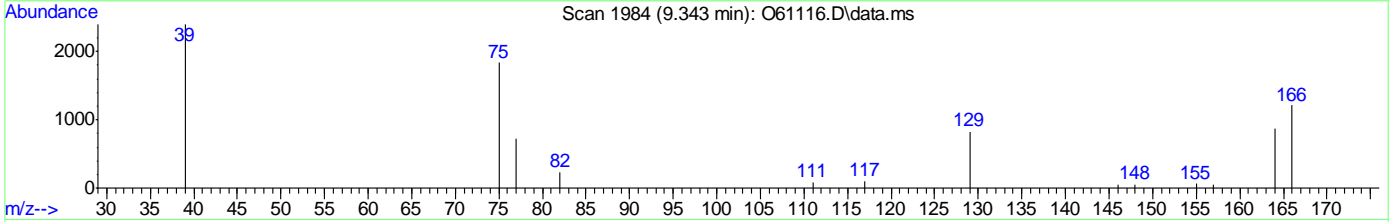
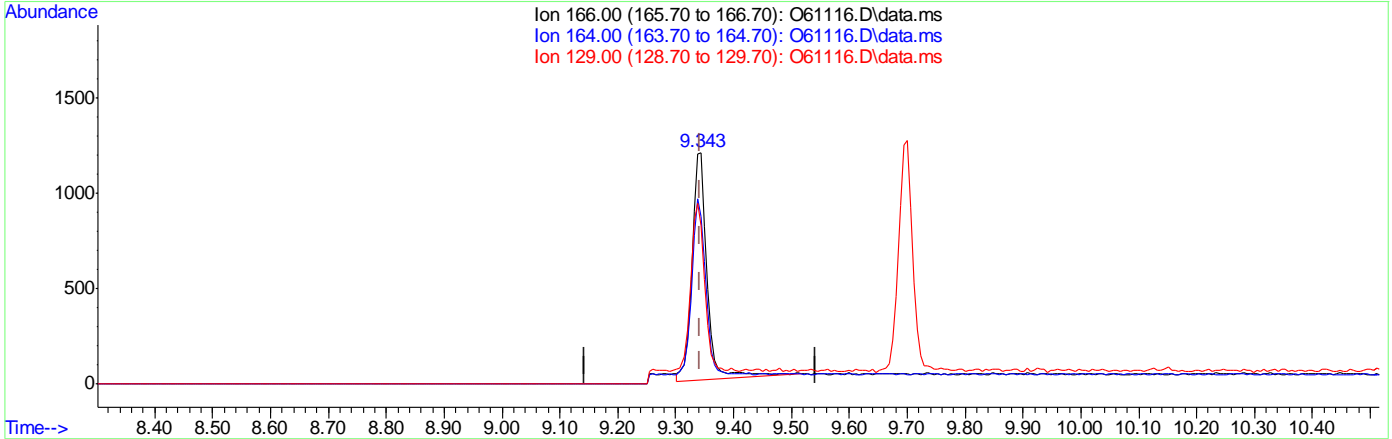
7.6.1.9
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\090820\
 Data File : O61116.D
 Acq On : 8 Sep 2020 12:14 pm
 Operator : melissam
 Sample : ic2352-1
 Misc : MS47137,VO2352,,,,,
 ALS Vial : 1 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 08 14:42:21 2020
 Quant Method : C:\msdchem\2\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Fri Sep 04 07:54:30 2020
 Response via : Initial Calibration



TIC: O61116.D\data.ms

(21) Tetrachloroethene ()

9.343min (+0.000) 0.08ug/L

response 2203

Ion	Exp%	Act%
166.00	100	100
164.00	77.30	71.27
129.00	67.50	65.14
0.00	0.00	0.00

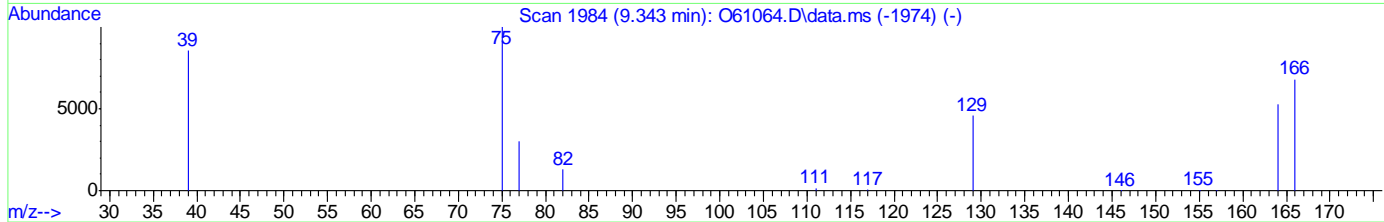
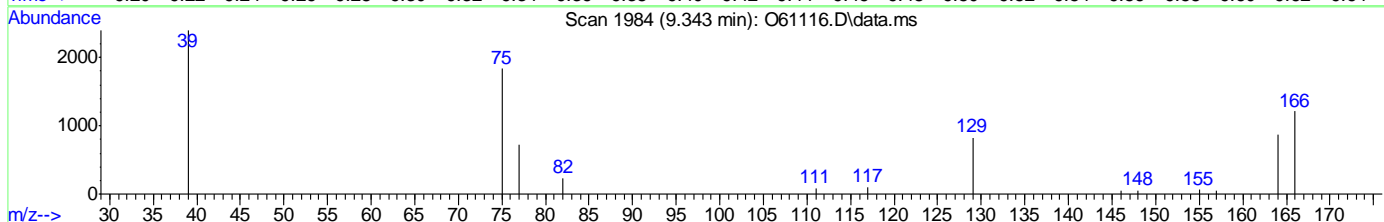
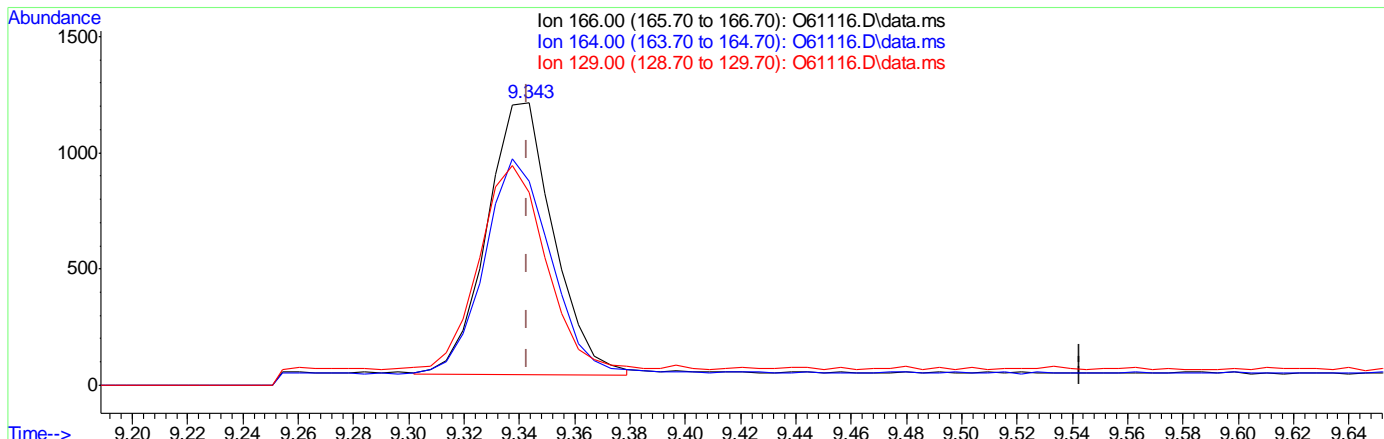
7.6.1.10
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\090820\
 Data File : O61116.D
 Acq On : 8 Sep 2020 12:14 pm
 Operator : melissam
 Sample : ic2352-1
 Misc : MS47137,VO2352,,,,,
 ALS Vial : 1 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 08 14:42:21 2020
 Quant Method : C:\msdchem\2\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Fri Sep 04 07:54:30 2020
 Response via : Initial Calibration



TIC: O61116.D\data.ms

(21) Tetrachloroethene ()
 9.343min (+0.000) 0.07ug/L m
 response 1962

Ion	Exp%	Act%
166.00	100	100
164.00	77.30	72.38
129.00	67.50	68.34
0.00	0.00	0.00

7.6.1.11
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\090820\
 Data File : O61117.D
 Acq On : 8 Sep 2020 12:34 pm
 Operator : manager
 Sample : ic2352-2 Inst : MSVOA12
 Misc : MS47137,VO2352,,,,,
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 09 12:05:32 2020
 Quant Method : C:\msdchem\2\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Fri Sep 04 07:54:30 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
Internal Standards							
1) Fluorobenzene	7.346	96	274031	5.00	ug/L	0.00	
18) Chlorobenzene-d5	10.447	117	201797	5.00	ug/L	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.073	65	121365	5.62	ug/L	0.00	
Spiked Amount	5.000	Range 74 - 125	Recovery	=	112.40%		
19) Toluene-d8	8.896	98	248944	5.62	ug/L	0.00	
Spiked Amount	5.000	Range 88 - 111	Recovery	=	112.40%#		
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.901	62	14511	0.48	ug/L		100
3) Chloromethane	2.803	50	24752m	0.43	ug/L		
4) 1,1-Dichloroethene	4.088	61	20392	0.66	ug/L		81
5) Methylene Chloride	4.699	49	53019	0.68	ug/L		92
6) trans-1,2-Dichloroethene	4.869	61	26348	0.72	ug/L		75
7) 1,1-Dichloroethane	5.510	63	27492	0.60	ug/L		98
8) cis-1,2-Dichloroethene	6.066	96	12379	0.47	ug/L #		65
9) Chloroform	6.333	83	22437	0.47	ug/L		93
10) Carbon Tetrachloride	6.510	117	14112	0.51	ug/L		88
11) 1,1,1-Trichloroethane	6.576	97	16052	0.47	ug/L		85
12) Benzene	6.943	78	45806m	0.60	ug/L		
14) 1,2-Dichloroethane	7.139	62	24432	0.68	ug/L		89
15) Trichloroethene	7.512	95	12757	0.46	ug/L		99
16) 1,2-Dichloropropane	8.040	63	16884	0.67	ug/L		94
17) cis-1,3-Dichloropropene	8.711	75	17116	0.65	ug/L		98
20) trans-1,3-Dichloropropene	9.343	75	15467	0.53	ug/L		97
21) Tetrachloroethene	9.343	166	11099	0.45	ug/L		94
22) 1,4-Dichlorobenzene	12.827	146	23554	0.49	ug/L		97
23) 1,2-Dibromo-3-Chloropr...	14.037	75	5606	0.58	ug/L		82

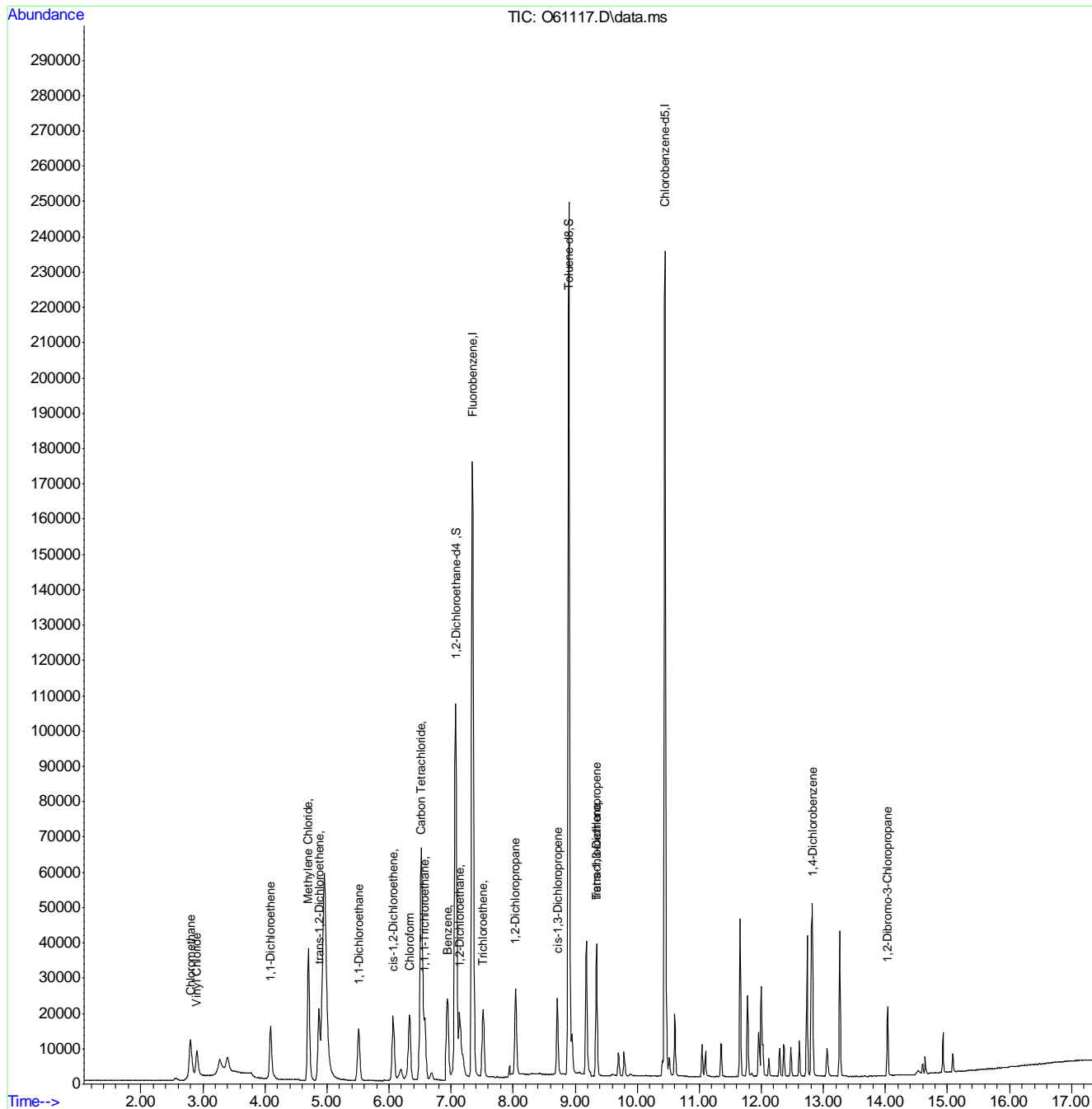
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\090820\
 Data File : O61117.D
 Acq On : 8 Sep 2020 12:34 pm
 Operator : manager
 Sample : ic2352-2
 Misc : MS47137,VO2352,,,,,
 ALS Vial : 2 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 09 12:05:32 2020
 Quant Method : C:\msdchem\2\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Fri Sep 04 07:54:30 2020
 Response via : Initial Calibration



Manual Integration Approval Summary

Sample Number: VO2352-IC2352 **Method:** SW846 8260B BY SIM
Lab FileID: O61117.D **Analyst approved:** 09/10/20 08:40 Akari Giraldo
Injection Time: 09/08/20 12:34 **Supervisor approved:** 09/10/20 08:47 Melissa Mangual

Parameter	CAS	Sig#	R.T. (min.)	Reason
Methyl Chloride	74-87-3		2.80	Poor instrument integration
Benzene	71-43-2		6.94	Poor instrument integration

7.6.2.1

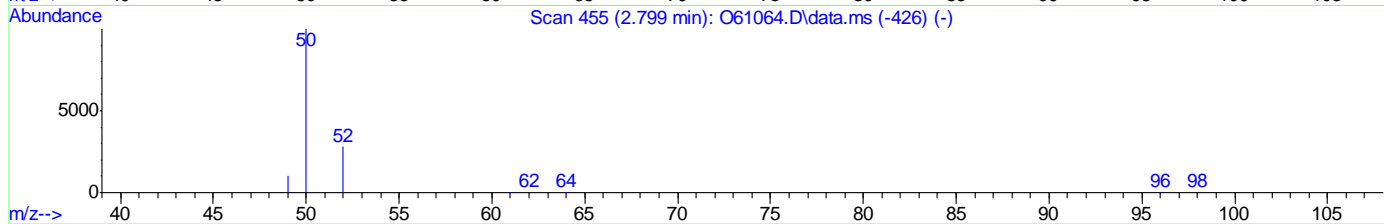
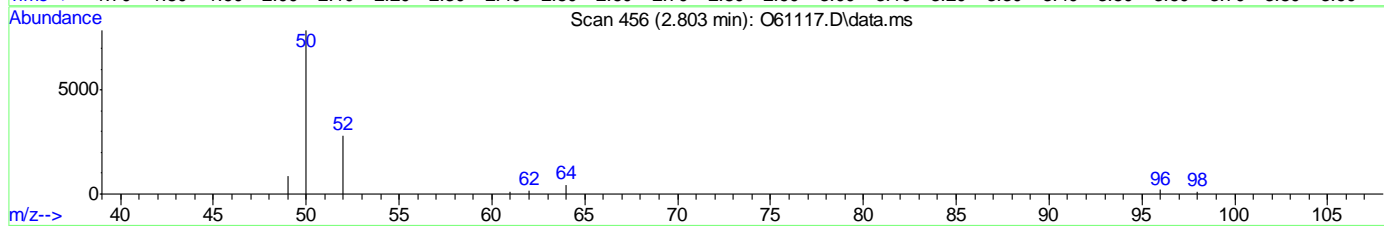
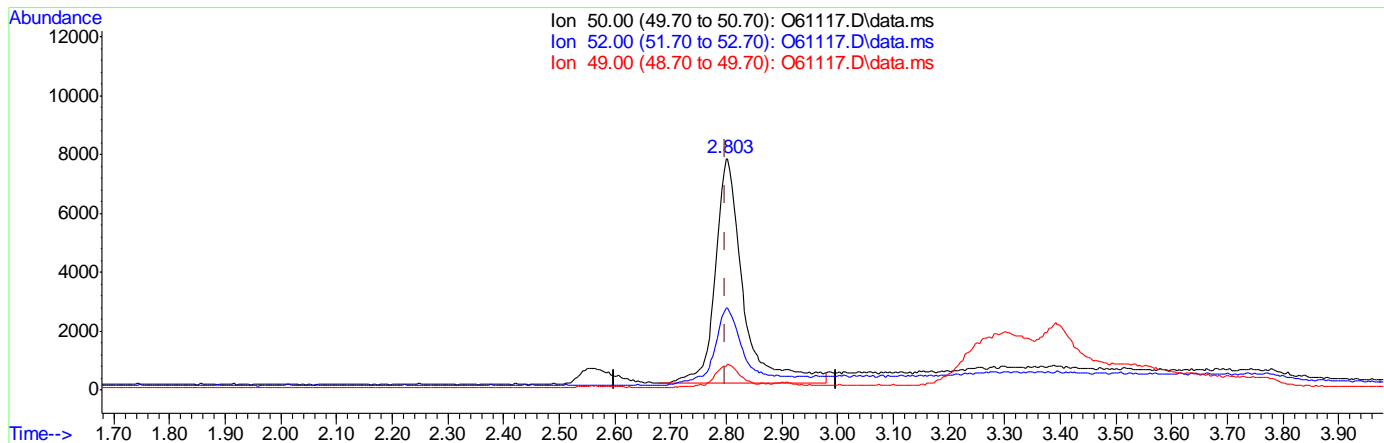
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\090820\
 Data File : O61117.D
 Acq On : 8 Sep 2020 12:34 pm
 Operator : manager
 Sample : ic2352-2
 Misc : MS47137,VO2352,,,,,
 ALS Vial : 2 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 08 14:42:23 2020
 Quant Method : C:\msdchem\2\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Fri Sep 04 07:54:30 2020
 Response via : Initial Calibration



TIC: O61117.D\data.ms

(3) Chloromethane

2.803min (+0.004) 0.46ug/L

response 26768

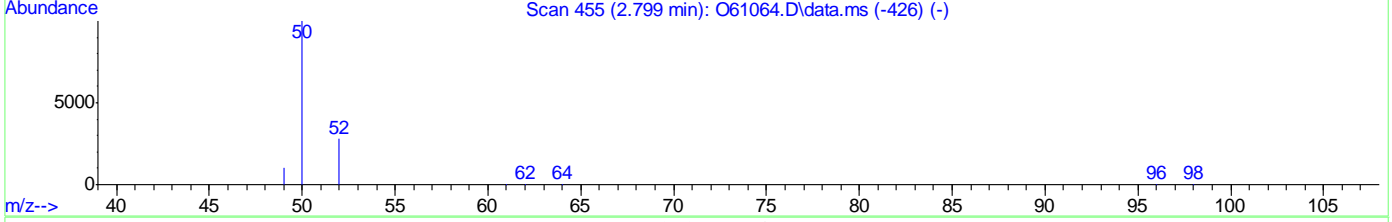
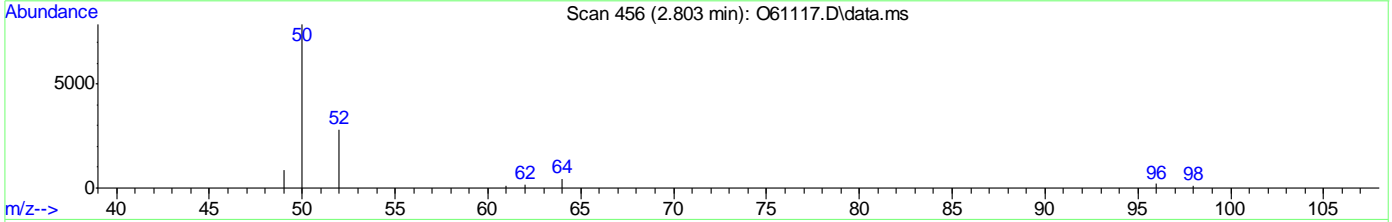
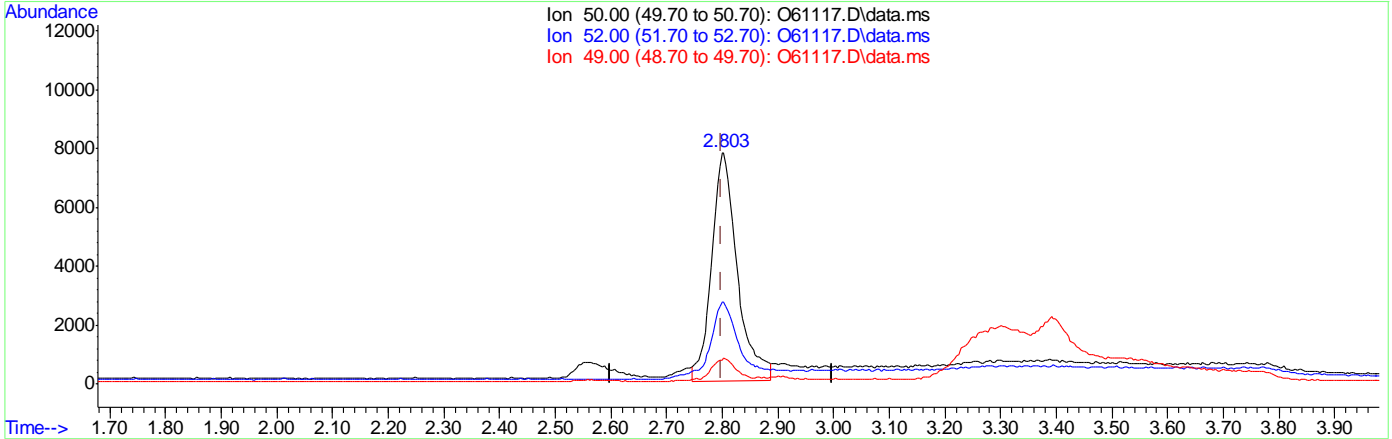
Ion	Exp%	Act%
50.00	100	100
52.00	27.80	34.53
49.00	10.50	10.16
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\090820\
 Data File : O61117.D
 Acq On : 8 Sep 2020 12:34 pm
 Operator : manager
 Sample : ic2352-2
 Misc : MS47137,VO2352,,,,,
 ALS Vial : 2 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 08 14:42:23 2020
 Quant Method : C:\msdchem\2\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Fri Sep 04 07:54:30 2020
 Response via : Initial Calibration



TIC: O61117.D\data.ms

(3) Chloromethane
 2.803min (+0.004) 0.43ug/L m
 response 24752

Ion	Exp%	Act%
50.00	100	100
52.00	27.80	35.70
49.00	10.50	11.10
0.00	0.00	0.00

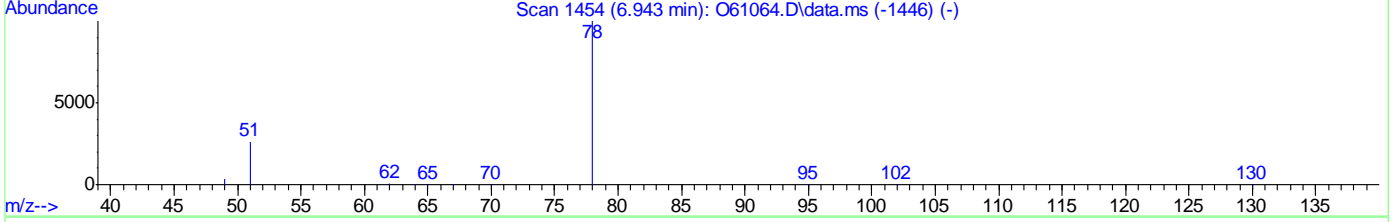
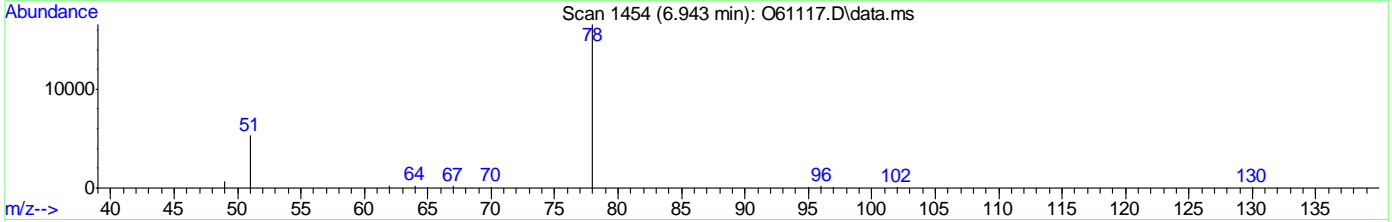
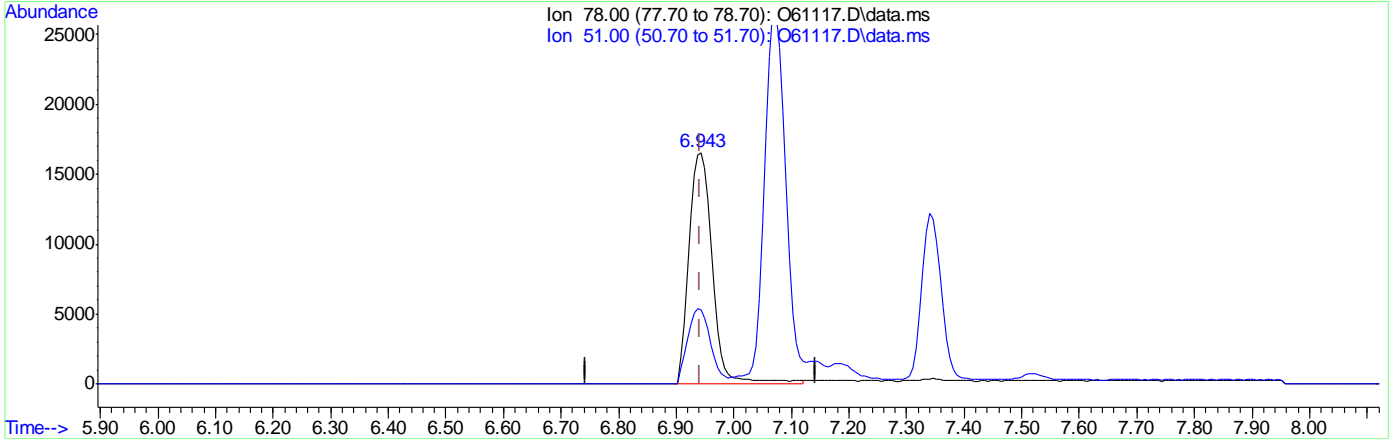
7.6.2.3
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\090820\
 Data File : O61117.D
 Acq On : 8 Sep 2020 12:34 pm
 Operator : manager
 Sample : ic2352-2
 Misc : MS47137,VO2352,,,,,
 ALS Vial : 2 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 08 14:42:23 2020
 Quant Method : C:\msdchem\2\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Fri Sep 04 07:54:30 2020
 Response via : Initial Calibration



TIC: O61117.D\data.ms

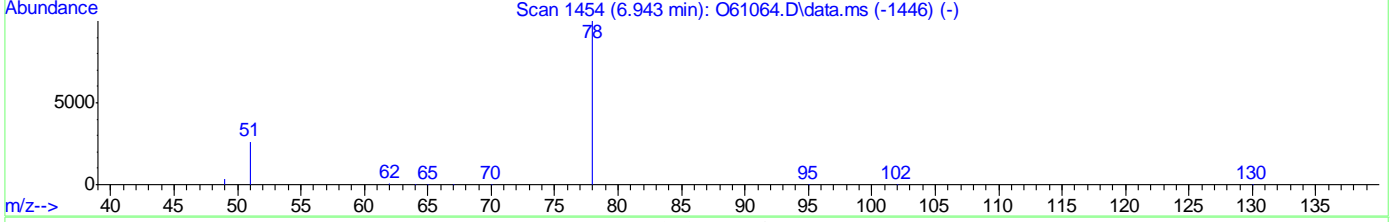
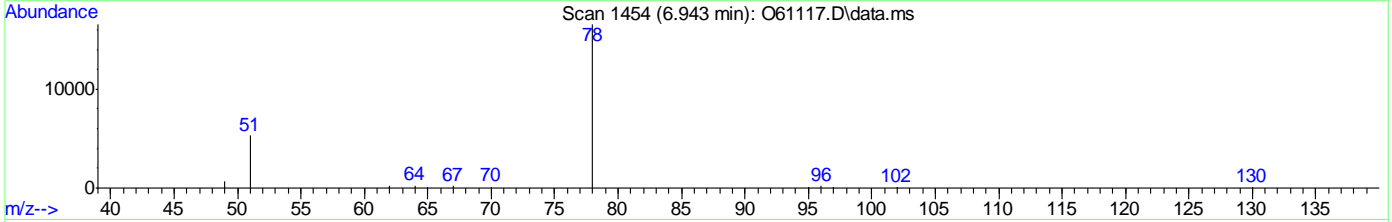
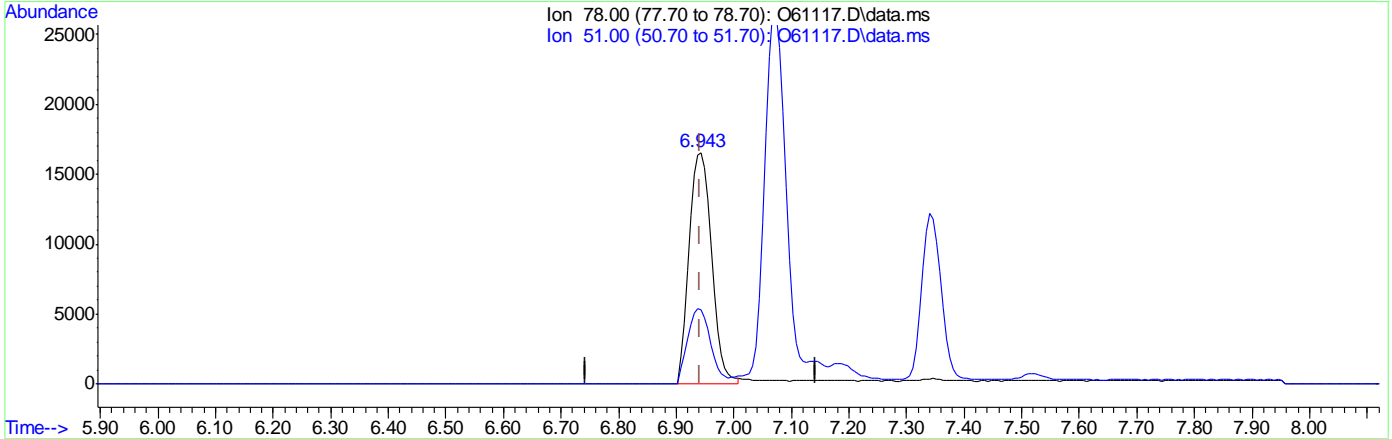
(12) Benzene ()		
6.943min (+0.000)	0.63ug/L	
response	47679	
Ion	Exp%	Act%
78.00	100	100
51.00	26.20	31.98
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\090820\
 Data File : O61117.D
 Acq On : 8 Sep 2020 12:34 pm
 Operator : manager
 Sample : ic2352-2
 Misc : MS47137,VO2352,,,,,
 ALS Vial : 2 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 08 14:42:23 2020
 Quant Method : C:\msdchem\2\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Fri Sep 04 07:54:30 2020
 Response via : Initial Calibration



TIC: O61117.D\data.ms

(12) Benzene ()

6.943min (+0.000) 0.60ug/L m

response 45806

Ion	Exp%	Act%
78.00	100	100
51.00	26.20	31.98
0.00	0.00	0.00
0.00	0.00	0.00

7.6.2.5
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\090820\
 Data File : O61118.D
 Acq On : 8 Sep 2020 12:55 pm
 Operator : manager
 Sample : ic2352-3 Inst : MSVOA12
 Misc : MS47137,VO2352,,,,,
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 09 12:06:27 2020
 Quant Method : C:\msdchem\2\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Fri Sep 04 07:54:30 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
Internal Standards							
1) Fluorobenzene	7.346	96	267443	5.00	ug/L	0.00	
18) Chlorobenzene-d5	10.447	117	198930	5.00	ug/L	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.073	65	120244	5.70	ug/L	0.00	
Spiked Amount	5.000	Range 74 - 125	Recovery	=	114.00%		
19) Toluene-d8	8.900	98	243439	5.58	ug/L	0.00	
Spiked Amount	5.000	Range 88 - 111	Recovery	=	111.60%#		
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.904	62	50835	1.73	ug/L		97
3) Chloromethane	2.803	50	78059	1.40	ug/L		93
4) 1,1-Dichloroethene	4.088	61	74881	2.46	ug/L		80
5) Methylene Chloride	4.699	49	132871	1.78	ug/L		91
6) trans-1,2-Dichloroethene	4.869	61	90167	2.53	ug/L		75
7) 1,1-Dichloroethane	5.510	63	100332	2.25	ug/L		97
8) cis-1,2-Dichloroethene	6.066	96	43762	1.72	ug/L #		62
9) Chloroform	6.333	83	80028	1.73	ug/L		94
10) Carbon Tetrachloride	6.510	117	51338	1.88	ug/L		87
11) 1,1,1-Trichloroethane	6.576	97	58003	1.75	ug/L		87
12) Benzene	6.943	78	161333m	2.18	ug/L		
14) 1,2-Dichloroethane	7.139	62	86717	2.47	ug/L		89
15) Trichloroethene	7.512	95	45861	1.69	ug/L		99
16) 1,2-Dichloropropane	8.043	63	59021	2.39	ug/L		95
17) cis-1,3-Dichloropropene	8.711	75	62339	2.36	ug/L		97
20) trans-1,3-Dichloropropene	9.343	75	57704	1.99	ug/L		96
21) Tetrachloroethene	9.343	166	39169	1.62	ug/L		97
22) 1,4-Dichlorobenzene	12.827	146	82271	1.73	ug/L		96
23) 1,2-Dibromo-3-Chloropr...	14.037	75	19681	2.06	ug/L		82

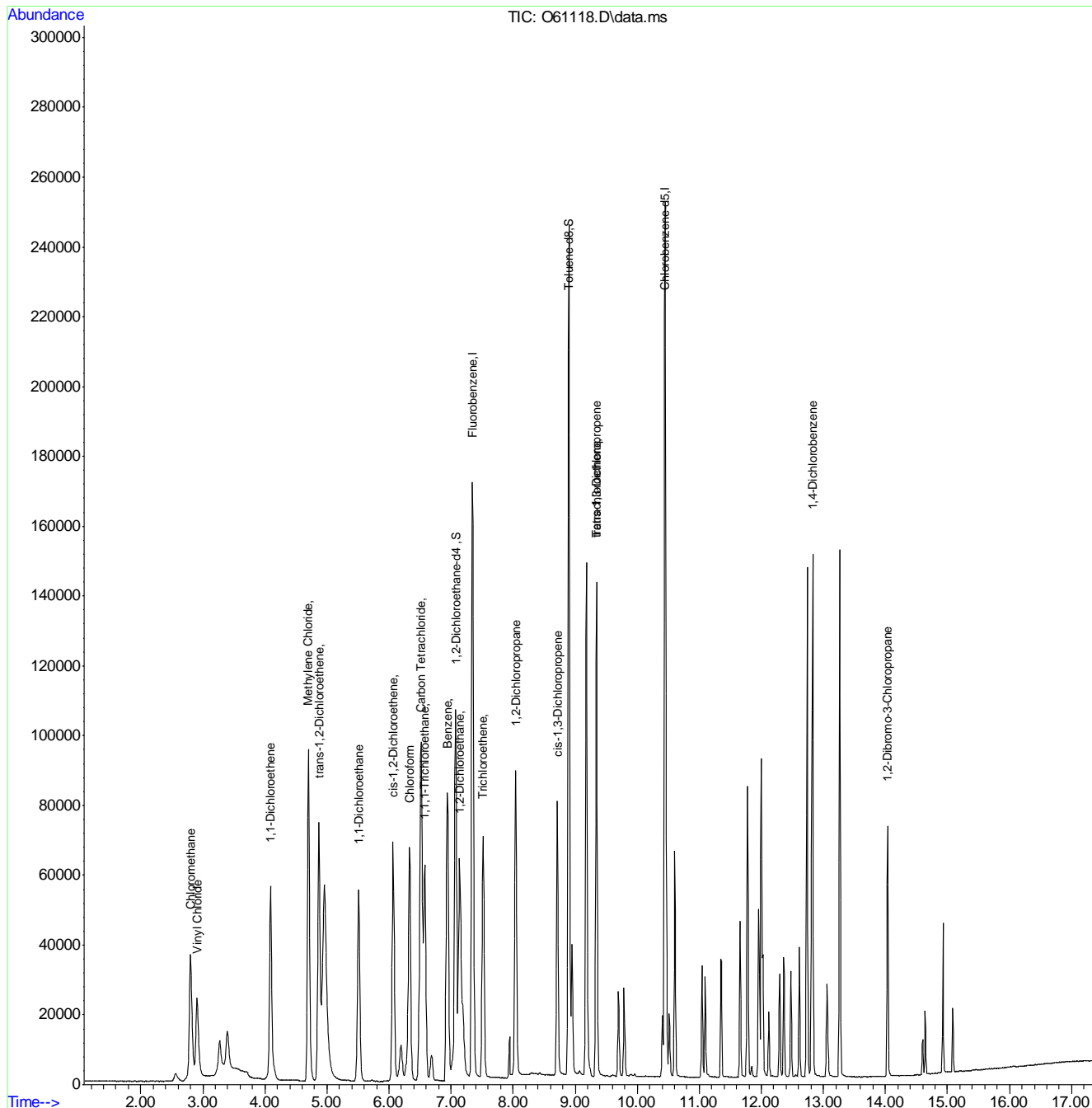
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\090820\
 Data File : O61118.D
 Acq On : 8 Sep 2020 12:55 pm
 Operator : manager
 Sample : ic2352-3
 Misc : MS47137,VO2352,,,,,
 ALS Vial : 3 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 09 12:06:27 2020
 Quant Method : C:\msdchem\2\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Fri Sep 04 07:54:30 2020
 Response via : Initial Calibration



7.6.3
7

Manual Integration Approval Summary

Sample Number: VO2352-IC2352 **Method:** SW846 8260B BY SIM
Lab FileID: O61118.D **Analyst approved:** 09/10/20 08:40 Akari Giraldo
Injection Time: 09/08/20 12:55 **Supervisor approved:** 09/10/20 08:47 Melissa Mangual

Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzene	71-43-2		6.94	Poor instrument integration

7.6.3.1

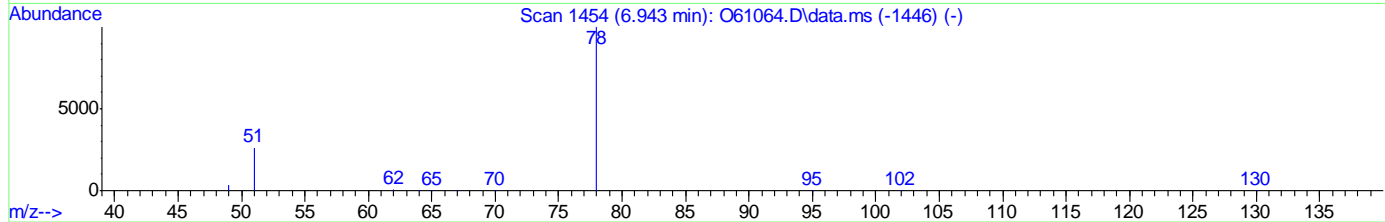
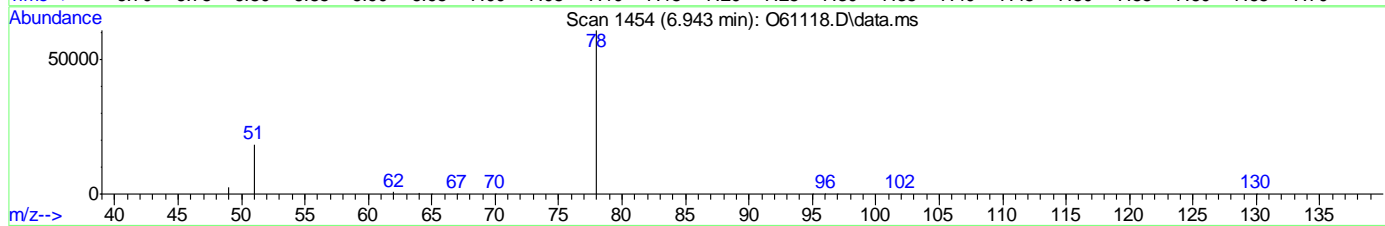
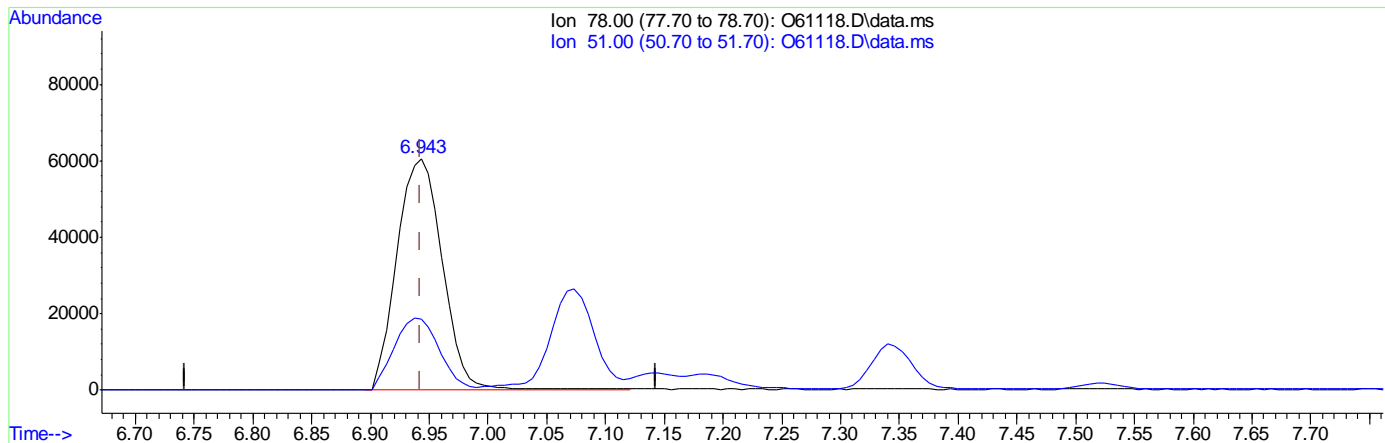
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\090820\
 Data File : O61118.D
 Acq On : 8 Sep 2020 12:55 pm
 Operator : manager
 Sample : ic2352-3
 Misc : MS47137,VO2352,,,,,
 ALS Vial : 3 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 08 14:42:25 2020
 Quant Method : C:\msdchem\2\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Fri Sep 04 07:54:30 2020
 Response via : Initial Calibration



TIC: O61118.D\data.ms

(12) Benzene ()
 6.943min (+0.000) 2.21ug/L
 response 163663

Ion	Exp%	Act%
78.00	100	100
51.00	26.20	30.47
0.00	0.00	0.00
0.00	0.00	0.00

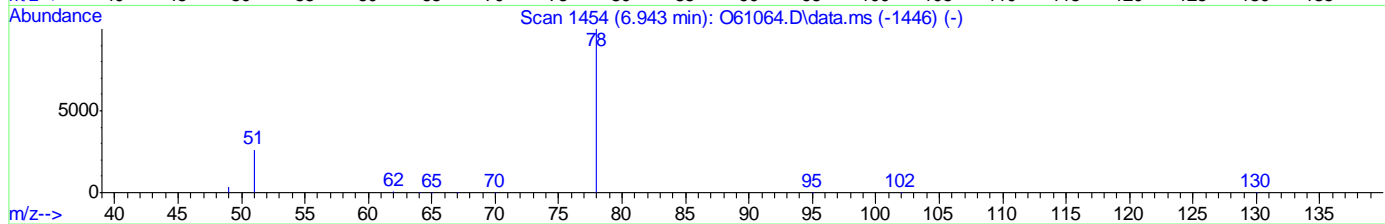
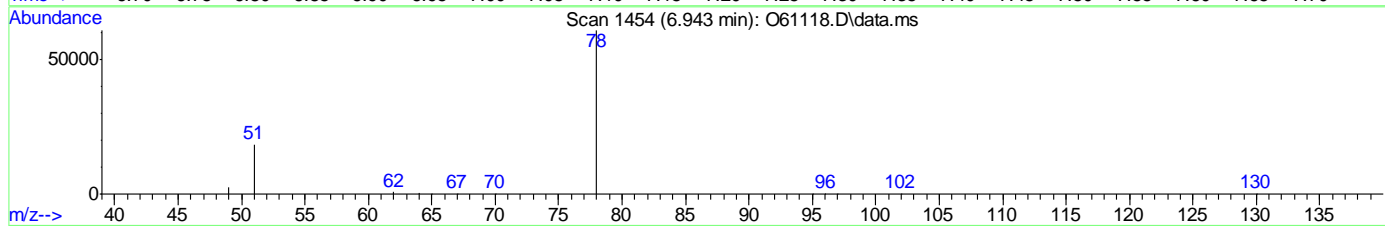
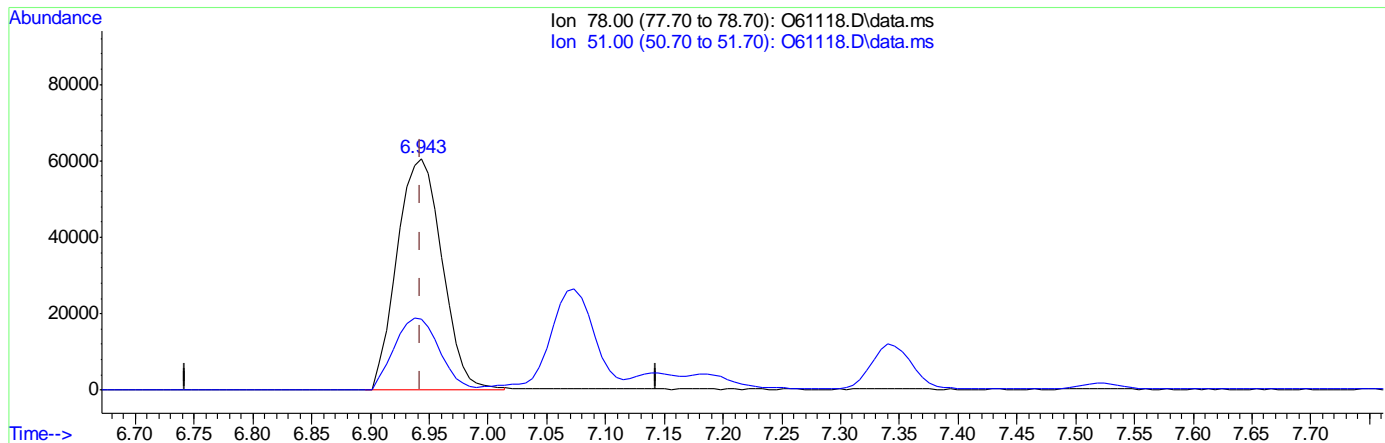
7.6.3.2
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\090820\
 Data File : O61118.D
 Acq On : 8 Sep 2020 12:55 pm
 Operator : manager
 Sample : ic2352-3
 Misc : MS47137,VO2352,,,,,
 ALS Vial : 3 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 08 14:42:25 2020
 Quant Method : C:\msdchem\2\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Fri Sep 04 07:54:30 2020
 Response via : Initial Calibration



TIC: O61118.D\data.ms

(12) Benzene ()
 6.943min (+0.000) 2.18ug/L m
 response 161333

Ion	Exp%	Act%
78.00	100	100
51.00	26.20	30.47
0.00	0.00	0.00
0.00	0.00	0.00

7.6.3.3
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\090820\
 Data File : O61119.D
 Acq On : 8 Sep 2020 1:15 pm
 Operator : manager
 Sample : ic2352-4 Inst : MSVOA12
 Misc : MS47137,VO2352,,,,,
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 09 12:09:55 2020
 Quant Method : C:\msdchem\2\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Fri Sep 04 07:54:30 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
Internal Standards							
1) Fluorobenzene	7.346	96	267496	5.00	ug/L	0.00	
18) Chlorobenzene-d5	10.447	117	199178	5.00	ug/L	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.073	65	118113m	5.60	ug/L	0.00	
Spiked Amount	5.000	Range 74 - 125	Recovery	=	112.00%		
19) Toluene-d8	8.900	98	242710	5.55	ug/L	0.00	
Spiked Amount	5.000	Range 88 - 111	Recovery	=	111.00%		
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.908	62	128059	4.36	ug/L		97
3) Chloromethane	2.806	50	185780	3.44	ug/L		93
4) 1,1-Dichloroethene	4.092	61	196176	6.46	ug/L		81
5) Methylene Chloride	4.703	49	296658	4.13	ug/L		92
6) trans-1,2-Dichloroethene	4.869	61	230442	6.48	ug/L		74
7) 1,1-Dichloroethane	5.514	63	258912	5.81	ug/L		96
8) cis-1,2-Dichloroethene	6.072	96	113621	4.47	ug/L #		64
9) Chloroform	6.333	83	205725	4.46	ug/L		94
10) Carbon Tetrachloride	6.510	117	136009	4.92	ug/L		87
11) 1,1,1-Trichloroethane	6.582	97	156364	4.70	ug/L		88
12) Benzene	6.943	78	412524m	5.57	ug/L		
14) 1,2-Dichloroethane	7.145	62	222462	6.34	ug/L		88
15) Trichloroethene	7.518	95	121299	4.42	ug/L		98
16) 1,2-Dichloropropane	8.043	63	149842	6.06	ug/L		94
17) cis-1,3-Dichloropropene	8.711	75	164334	6.00	ug/L		98
20) trans-1,3-Dichloropropene	9.343	75	154275	5.12	ug/L		99
21) Tetrachloroethene	9.343	166	103525	4.26	ug/L		97
22) 1,4-Dichlorobenzene	12.827	146	209514	4.34	ug/L		97
23) 1,2-Dibromo-3-Chloropr...	14.037	75	52470	5.49	ug/L		81

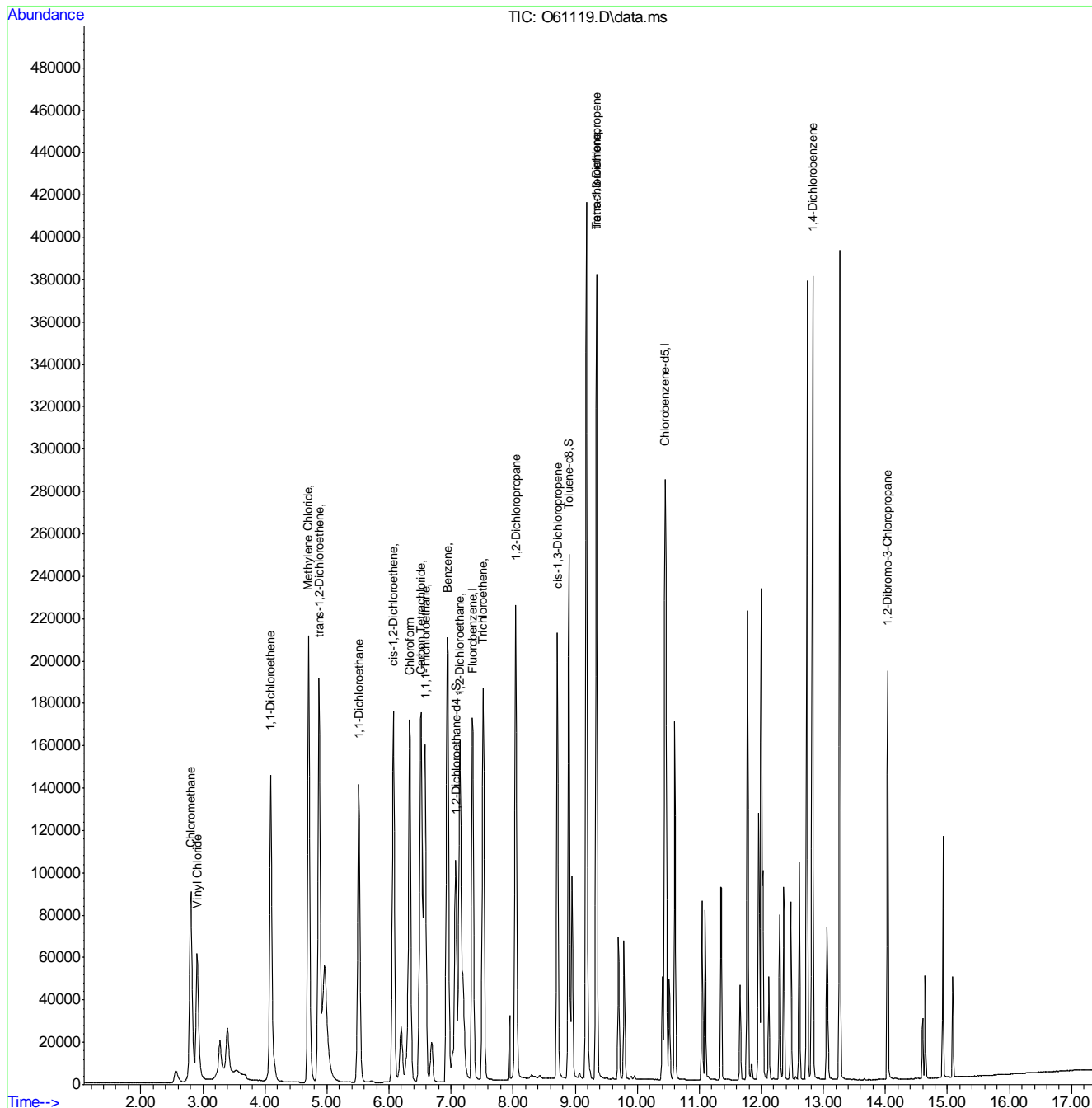
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\090820\
 Data File : O61119.D
 Acq On : 8 Sep 2020 1:15 pm
 Operator : manager
 Sample : ic2352-4
 Misc : MS47137,VO2352,,,,,
 ALS Vial : 4 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 09 12:09:55 2020
 Quant Method : C:\msdchem\2\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Fri Sep 04 07:54:30 2020
 Response via : Initial Calibration



Manual Integration Approval Summary

Sample Number: VO2352-IC2352 **Method:** SW846 8260B BY SIM
Lab FileID: O61119.D **Analyst approved:** 09/10/20 08:40 Akari Giraldo
Injection Time: 09/08/20 13:15 **Supervisor approved:** 09/10/20 08:47 Melissa Mangual

Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzene	71-43-2		6.94	Poor instrument integration
1,2-Dichloroethane-D4	17060-07-0		7.07	Overlapping peak

7.6.4.1

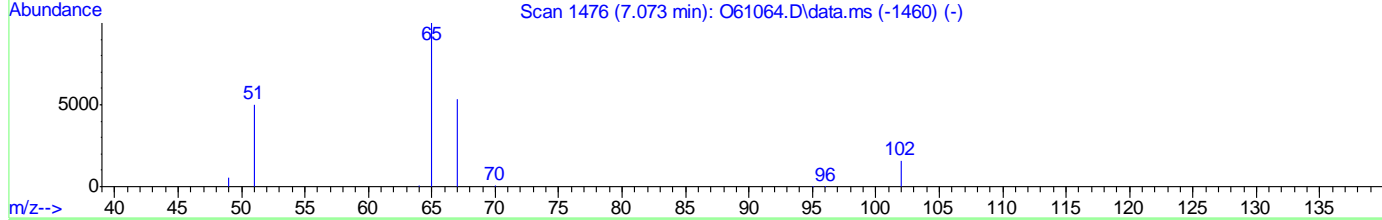
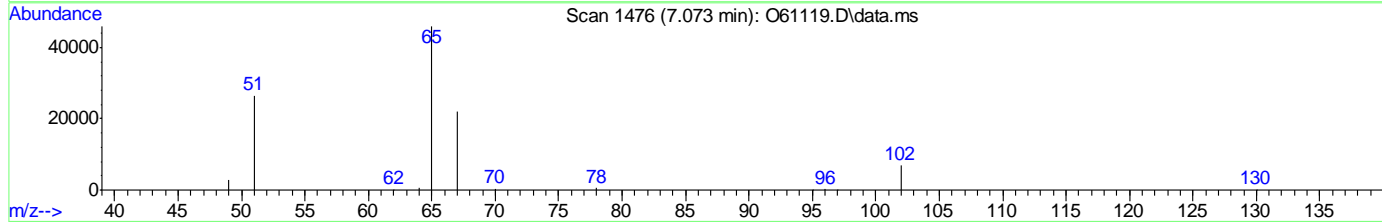
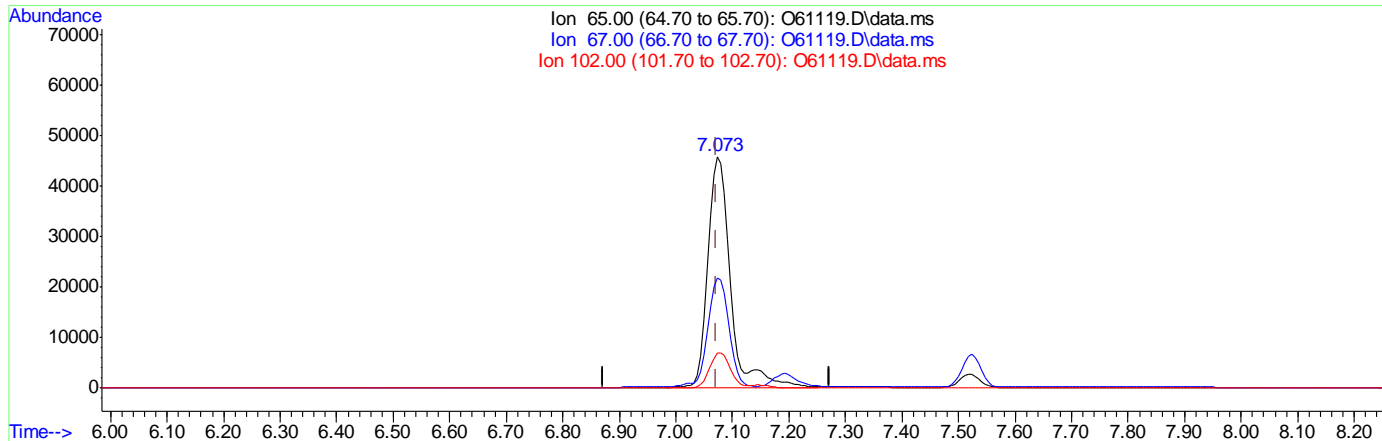
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\090820\
 Data File : O61119.D
 Acq On : 8 Sep 2020 1:15 pm
 Operator : manager
 Sample : ic2352-4
 Misc : MS47137,VO2352,,,,,
 ALS Vial : 4 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 08 14:42:27 2020
 Quant Method : C:\msdchem\2\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Fri Sep 04 07:54:30 2020
 Response via : Initial Calibration



TIC: O61119.D\data.ms

(13) 1,2-Dichloroethane-d4 (S)

7.073min (+0.000) 6.01ug/L

response 126863

Ion	Exp%	Act%
65.00	100	100
67.00	53.50	47.49
102.00	16.10	14.99
0.00	0.00	0.00

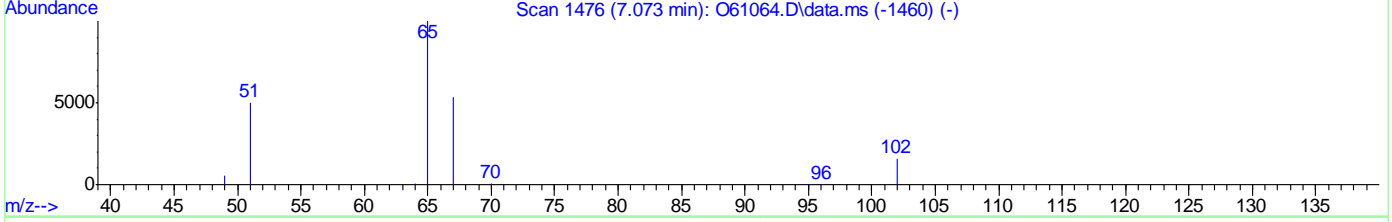
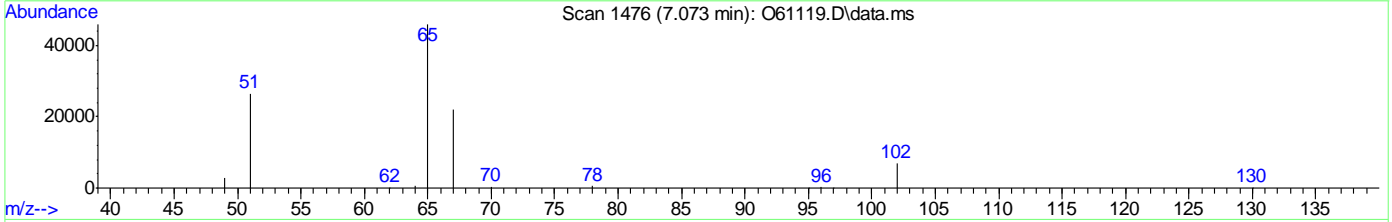
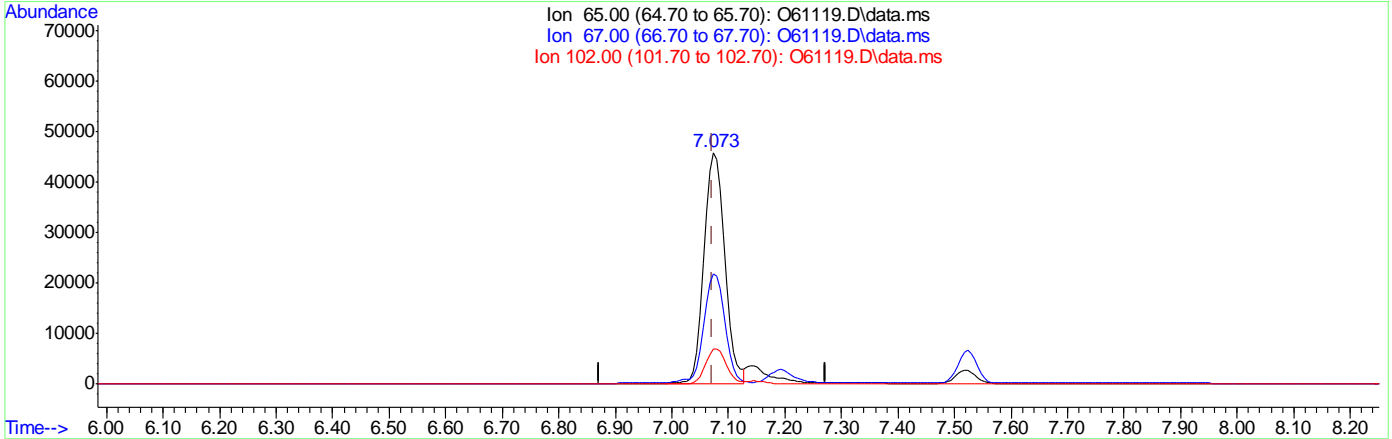
7.6.4.2
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\090820\
 Data File : O61119.D
 Acq On : 8 Sep 2020 1:15 pm
 Operator : manager
 Sample : ic2352-4
 Misc : MS47137,VO2352,,,,,
 ALS Vial : 4 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 08 14:42:27 2020
 Quant Method : C:\msdchem\2\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Fri Sep 04 07:54:30 2020
 Response via : Initial Calibration



TIC: O61119.D\data.ms

(13) 1,2-Dichloroethane-d4 (S)
 7.073min (+0.000) 5.60ug/L m
 response 118113

Ion	Exp%	Act%
65.00	100	100
67.00	53.50	47.82
102.00	16.10	15.07
0.00	0.00	0.00

7.6.4.3

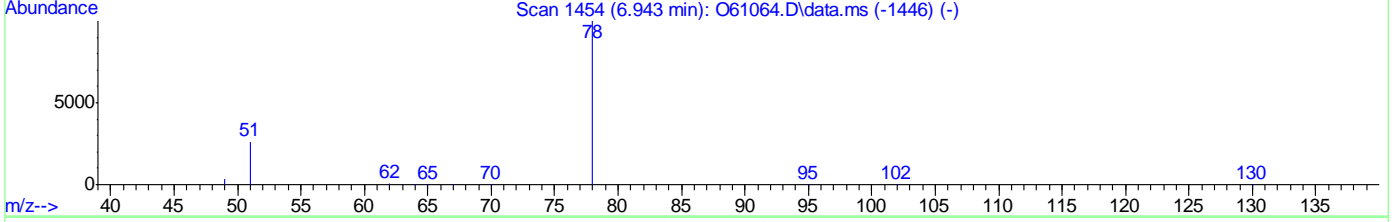
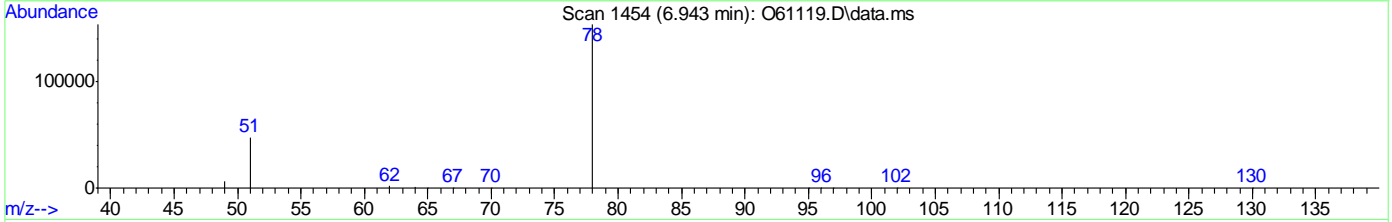
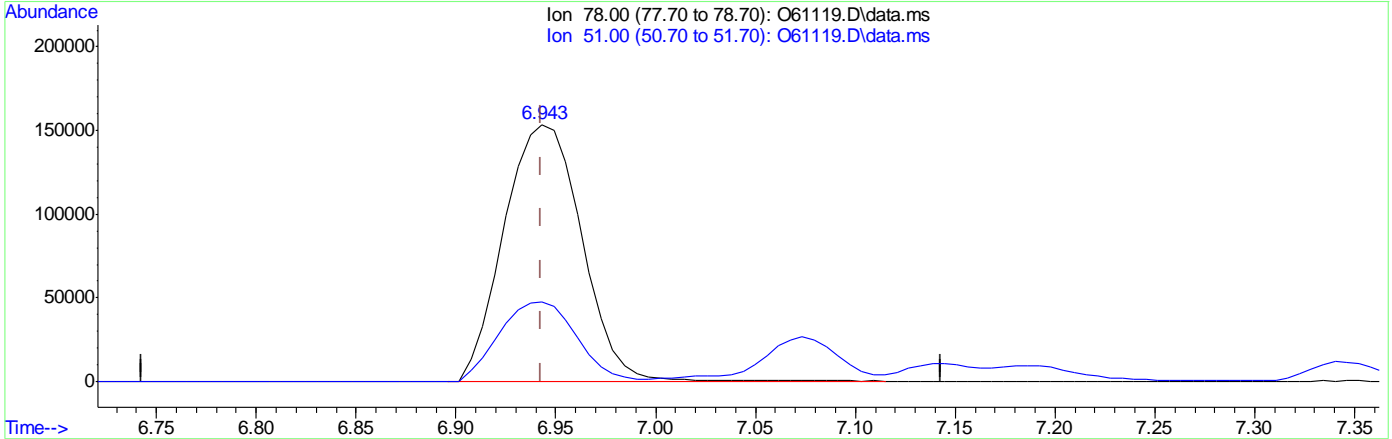
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\090820\
 Data File : O61119.D
 Acq On : 8 Sep 2020 1:15 pm
 Operator : manager
 Sample : ic2352-4
 Misc : MS47137,VO2352,,,,,
 ALS Vial : 4 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 09 12:07:18 2020
 Quant Method : C:\msdchem\2\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Fri Sep 04 07:54:30 2020
 Response via : Initial Calibration



TIC: O61119.D\data.ms

(12) Benzene ()

6.943min (+0.000) 5.62ug/L

response 416284

Ion	Exp%	Act%
78.00	100	100
51.00	26.20	31.18
0.00	0.00	0.00
0.00	0.00	0.00

7.6.4.4

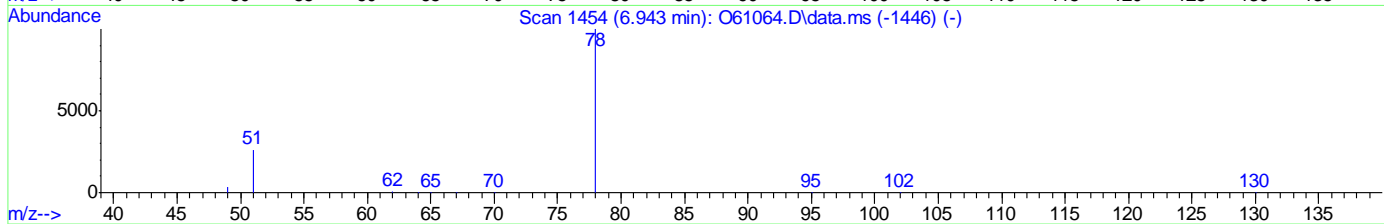
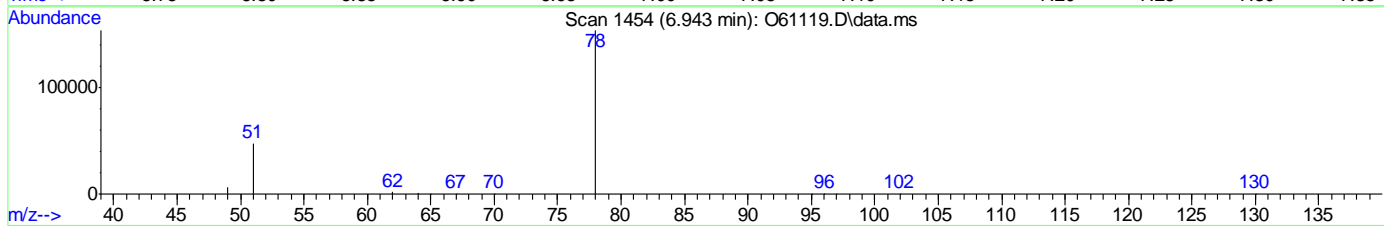
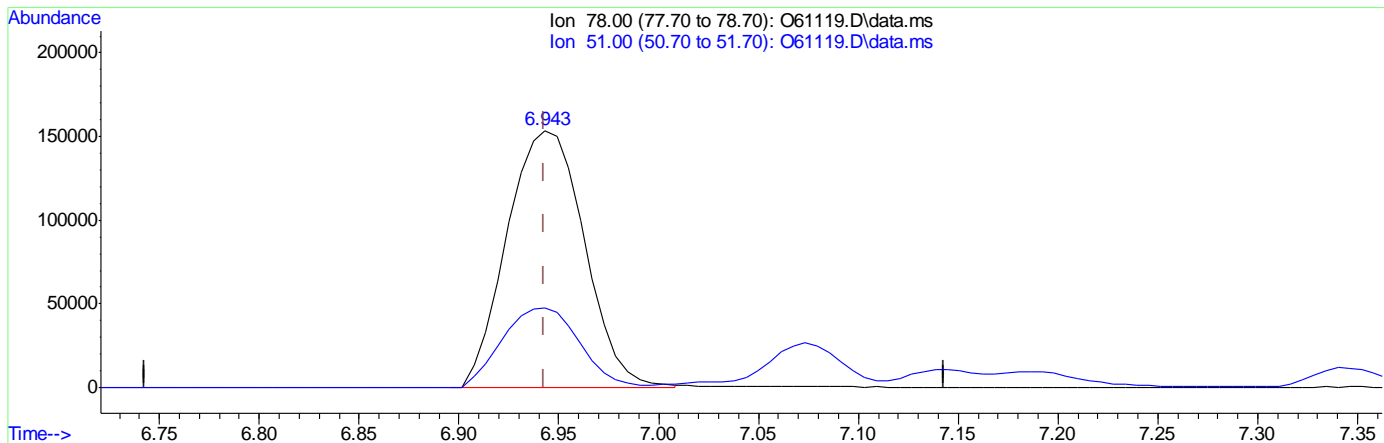
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\090820\
 Data File : O61119.D
 Acq On : 8 Sep 2020 1:15 pm
 Operator : manager
 Sample : ic2352-4
 Misc : MS47137,VO2352,,,,,
 ALS Vial : 4 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 09 12:07:18 2020
 Quant Method : C:\msdchem\2\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Fri Sep 04 07:54:30 2020
 Response via : Initial Calibration



TIC: O61119.D\data.ms

(12) Benzene ()

6.943min (+0.000) 5.57ug/L m

response 412524

Ion	Exp%	Act%
78.00	100	100
51.00	26.20	31.18
0.00	0.00	0.00
0.00	0.00	0.00

7.6.4.5

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\090820\
 Data File : O61120.D
 Acq On : 8 Sep 2020 1:55 pm
 Operator : melissam
 Sample : icc2352-5 Inst : MSVOA12
 Misc : MS47137,VO2352,,,,,
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 09 12:07:51 2020
 Quant Method : C:\msdchem\2\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Fri Sep 04 07:54:30 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
Internal Standards							
1) Fluorobenzene	7.346	96	275666	5.00	ug/L	0.00	
18) Chlorobenzene-d5	10.441	117	205542	5.00	ug/L	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.073	65	120563	5.55	ug/L	0.00	
Spiked Amount	5.000	Range 74 - 125	Recovery	=	111.00%		
19) Toluene-d8	8.896	98	248588	5.51	ug/L	0.00	
Spiked Amount	5.000	Range 88 - 111	Recovery	=	110.20%		
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.912	62	246013	8.14	ug/L		97
3) Chloromethane	2.806	50	356376	6.77	ug/L		93
4) 1,1-Dichloroethene	4.088	61	358360	11.44	ug/L		82
5) Methylene Chloride	4.699	49	560380	8.16	ug/L		92
6) trans-1,2-Dichloroethene	4.865	61	434103	11.84	ug/L		75
7) 1,1-Dichloroethane	5.510	63	502830	10.94	ug/L		97
8) cis-1,2-Dichloroethene	6.066	96	221835	8.51	ug/L #		65
9) Chloroform	6.333	83	397951	8.37	ug/L		95
10) Carbon Tetrachloride	6.505	117	257228	8.88	ug/L		87
11) 1,1,1-Trichloroethane	6.576	97	295502	8.54	ug/L		88
12) Benzene	6.943	78	799075m	10.46	ug/L		
14) 1,2-Dichloroethane	7.139	62	435601	12.04	ug/L		89
15) Trichloroethene	7.512	95	232343	8.14	ug/L		99
16) 1,2-Dichloropropane	8.040	63	292776	11.49	ug/L		93
17) cis-1,3-Dichloropropene	8.707	75	333567	11.22	ug/L		98
20) trans-1,3-Dichloropropene	9.343	75	316745	9.71	ug/L		98
21) Tetrachloroethene	9.337	166	192508	7.65	ug/L		93
22) 1,4-Dichlorobenzene	12.821	146	414460	8.16	ug/L		94
23) 1,2-Dibromo-3-Chloropr...	14.037	75	111042	11.26	ug/L		86

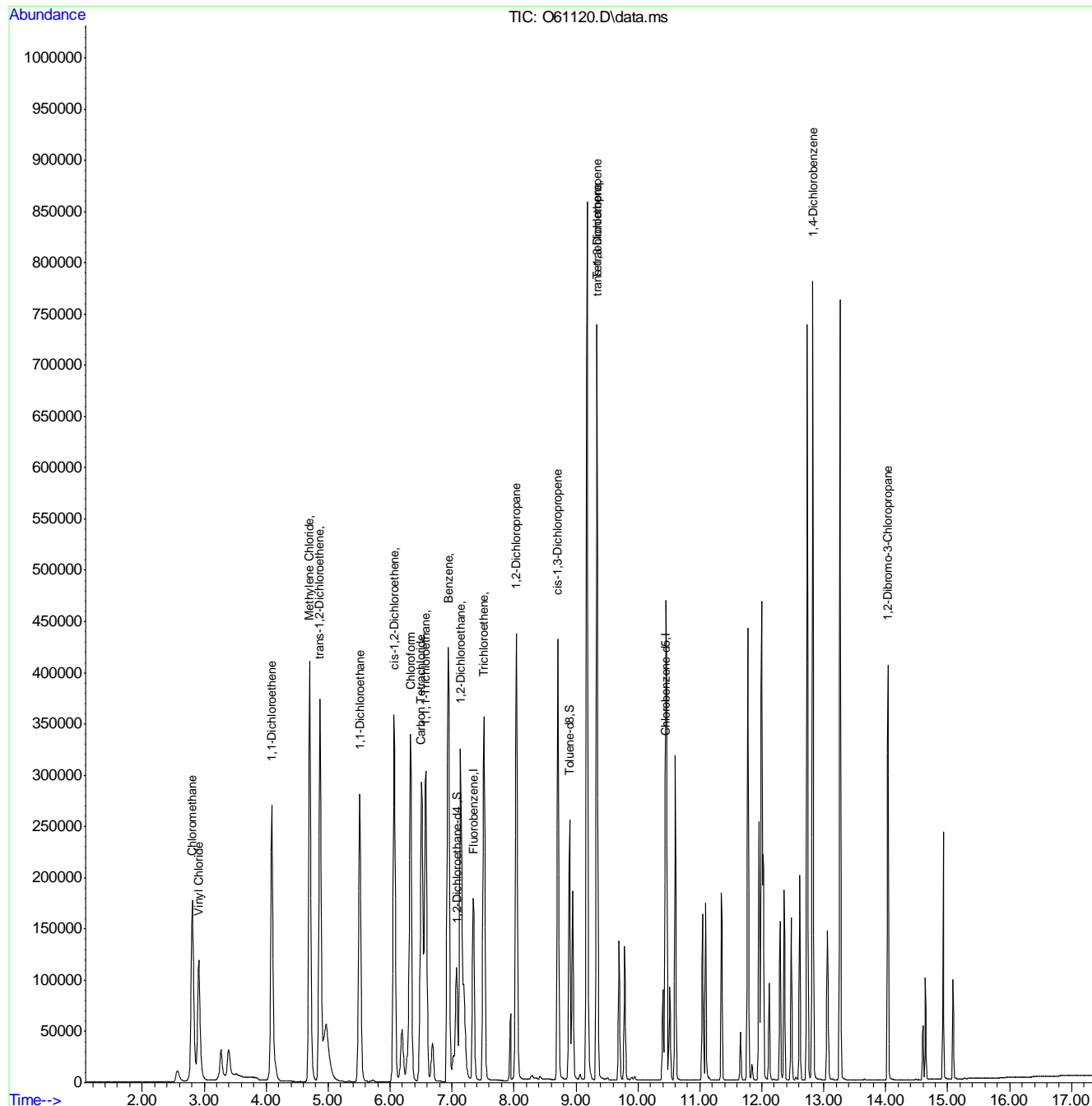
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\090820\
 Data File : O61120.D
 Acq On : 8 Sep 2020 1:55 pm
 Operator : melissam
 Sample : icc2352-5
 Misc : MS47137,VO2352,,,,,
 ALS Vial : 5 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 09 12:07:51 2020
 Quant Method : C:\msdchem\2\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Fri Sep 04 07:54:30 2020
 Response via : Initial Calibration



Manual Integration Approval Summary

Sample Number: VO2352-ICC2352 **Method:** SW846 8260B BY SIM
Lab FileID: O61120.D **Analyst approved:** 09/10/20 08:40 Akari Giraldo
Injection Time: 09/08/20 13:55 **Supervisor approved:** 09/10/20 08:47 Melissa Mangual

Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzene	71-43-2		6.94	Poor instrument integration

7.6.5.1

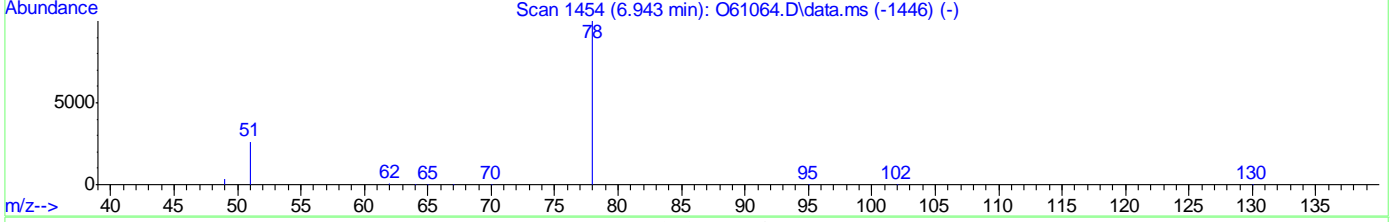
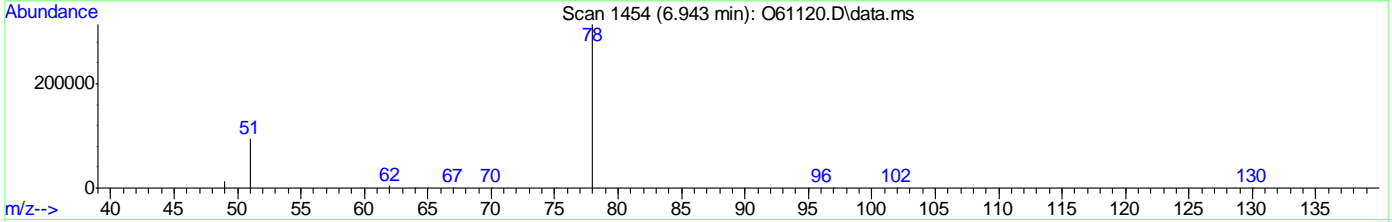
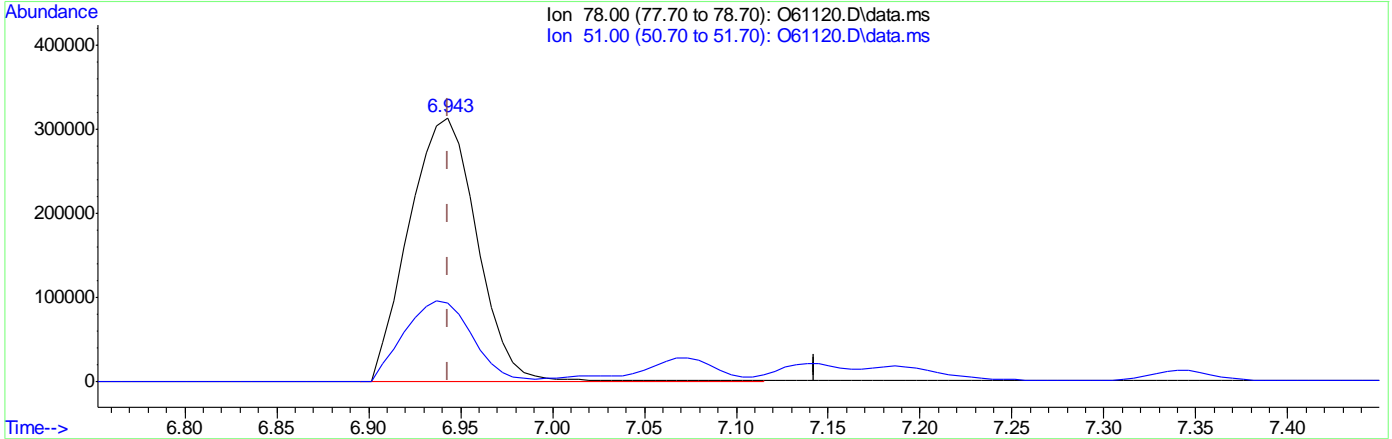
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\090820\
 Data File : O61120.D
 Acq On : 8 Sep 2020 1:55 pm
 Operator : melissam
 Sample : icc2352-5
 Misc : MS47137,VO2352,,,,,
 ALS Vial : 5 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 08 14:42:29 2020
 Quant Method : C:\msdchem\2\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Fri Sep 04 07:54:30 2020
 Response via : Initial Calibration



TIC: O61120.D\data.ms

(12) Benzene ()
 6.943min (+0.000) 10.53ug/L
 response 804139

Ion	Exp%	Act%
78.00	100	100
51.00	26.20	29.83
0.00	0.00	0.00
0.00	0.00	0.00

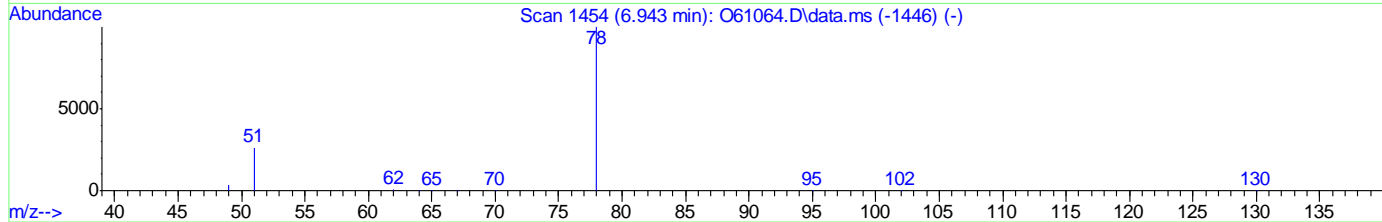
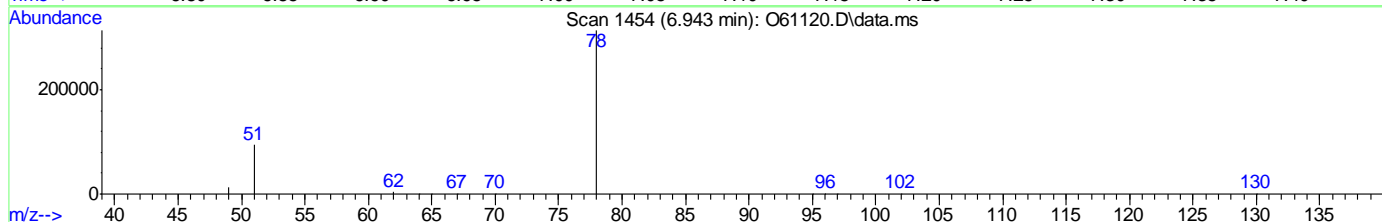
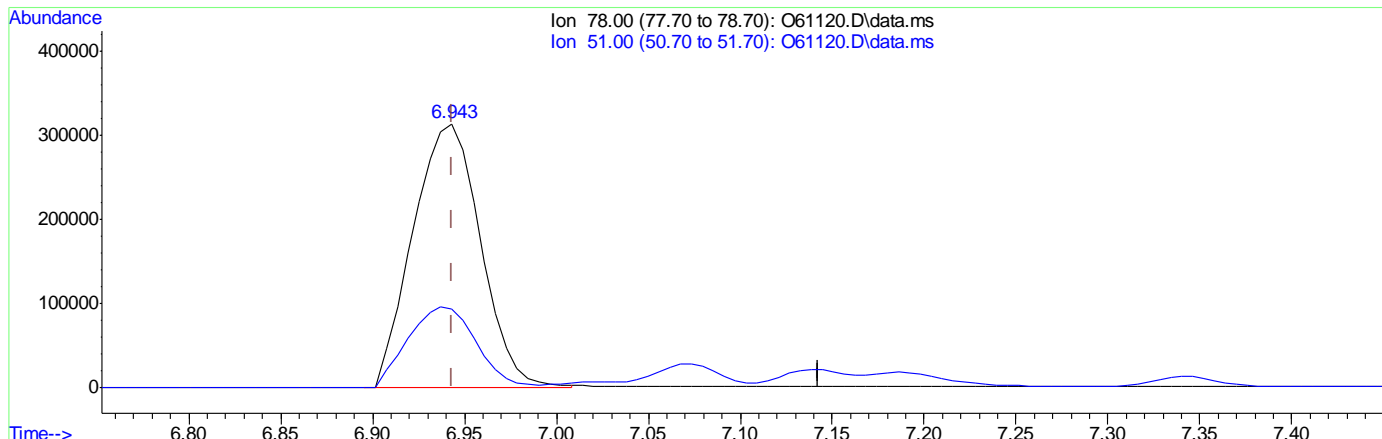
7.6.5.2
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\090820\
 Data File : O61120.D
 Acq On : 8 Sep 2020 1:55 pm
 Operator : melissam
 Sample : icc2352-5
 Misc : MS47137,VO2352,,,,,
 ALS Vial : 5 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 08 14:42:29 2020
 Quant Method : C:\msdchem\2\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Fri Sep 04 07:54:30 2020
 Response via : Initial Calibration



(12) Benzene ()
 6.943min (+0.000) 10.46ug/L m
 response 799075

Ion	Exp%	Act%
78.00	100	100
51.00	26.20	29.83
0.00	0.00	0.00
0.00	0.00	0.00

7.6.5.3
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\090820\
 Data File : O61121.D
 Acq On : 8 Sep 2020 2:15 pm
 Operator : manager
 Sample : ic2352-6 Inst : MSVOA12
 Misc : MS47137,VO2352,,,,,
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 09 12:09:36 2020
 Quant Method : C:\msdchem\2\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Fri Sep 04 07:54:30 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
Internal Standards							
1) Fluorobenzene	7.352	96	283380	5.00	ug/L	0.00	
18) Chlorobenzene-d5	10.447	117	209327	5.00	ug/L	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.079	65	123126	5.51	ug/L	0.00	
Spiked Amount	5.000	Range 74 - 125	Recovery	=	110.20%		
19) Toluene-d8	8.900	98	255819	5.57	ug/L	0.00	
Spiked Amount	5.000	Range 88 - 111	Recovery	=	111.40%#		
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.916	62	379724	12.22	ug/L		97
3) Chloromethane	2.810	50	536919	10.59	ug/L		94
4) 1,1-Dichloroethene	4.092	61	555757	17.27	ug/L		83
5) Methylene Chloride	4.707	49	841969	13.20	ug/L		94
6) trans-1,2-Dichloroethene	4.869	61	671373	17.81	ug/L		74
7) 1,1-Dichloroethane	5.514	63	781589	16.55	ug/L		97
8) cis-1,2-Dichloroethene	6.072	96	346056	12.99	ug/L #		66
9) Chloroform	6.333	83	617988	12.64	ug/L		95
10) Carbon Tetrachloride	6.511	117	404173	13.35	ug/L		87
11) 1,1,1-Trichloroethane	6.576	97	467816	13.03	ug/L		88
12) Benzene	6.943	78	1257981m	16.02	ug/L		
14) 1,2-Dichloroethane	7.145	62	671818	18.07	ug/L		89
15) Trichloroethene	7.518	95	362748	12.23	ug/L		98
16) 1,2-Dichloropropane	8.043	63	459058	17.53	ug/L		93
17) cis-1,3-Dichloropropene	8.715	75	528281	16.45	ug/L		97
20) trans-1,3-Dichloropropene	9.343	75	502755	14.42	ug/L		99
21) Tetrachloroethene	9.343	166	302083	11.72	ug/L		96
22) 1,4-Dichlorobenzene	12.827	146	640186	12.13	ug/L		97
23) 1,2-Dibromo-3-Chloropr...	14.038	75	174616	17.39	ug/L		84

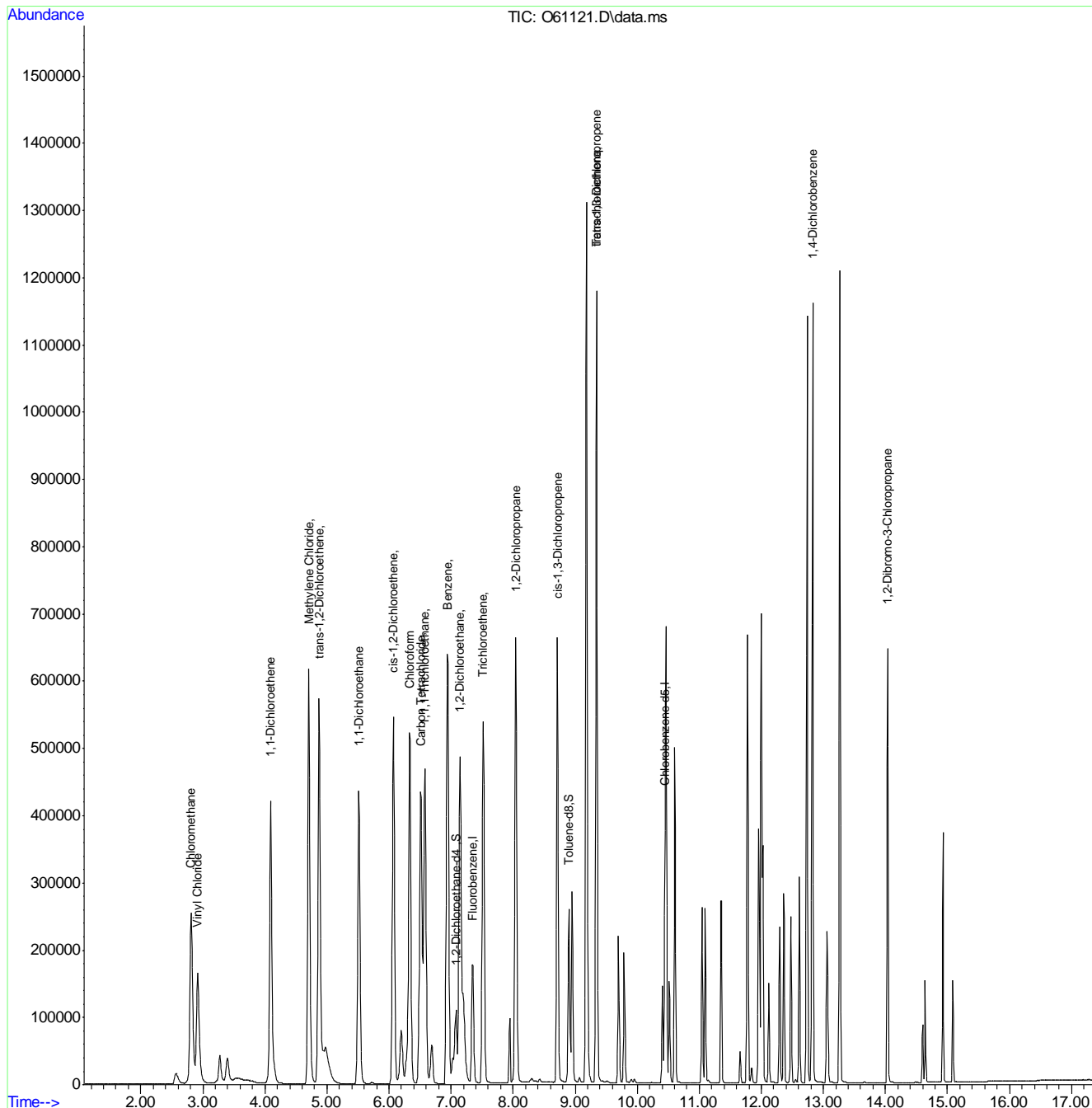
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\090820\
 Data File : O61121.D
 Acq On : 8 Sep 2020 2:15 pm
 Operator : manager
 Sample : ic2352-6
 Misc : MS47137,VO2352,,,,,
 ALS Vial : 6 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 09 12:09:36 2020
 Quant Method : C:\msdchem\2\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Fri Sep 04 07:54:30 2020
 Response via : Initial Calibration



9.9.7

Manual Integration Approval Summary

Sample Number: VO2352-IC2352 **Method:** SW846 8260B BY SIM
Lab FileID: O61121.D **Analyst approved:** 09/10/20 08:40 Akari Giraldo
Injection Time: 09/08/20 14:15 **Supervisor approved:** 09/10/20 08:47 Melissa Mangual

Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzene	71-43-2		6.94	Poor instrument integration

7.6.6.1

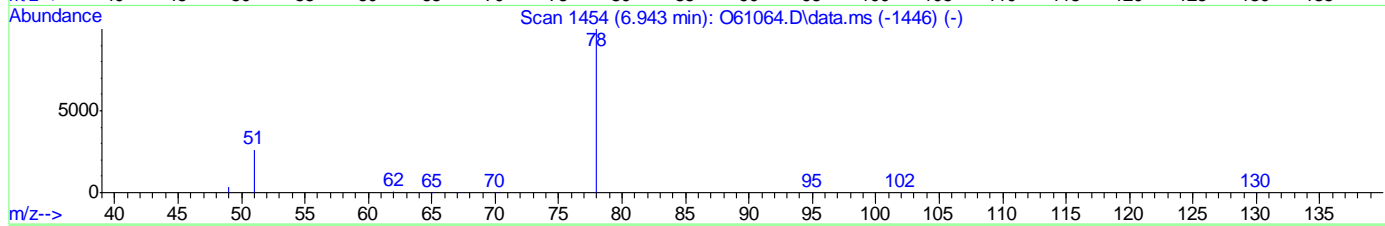
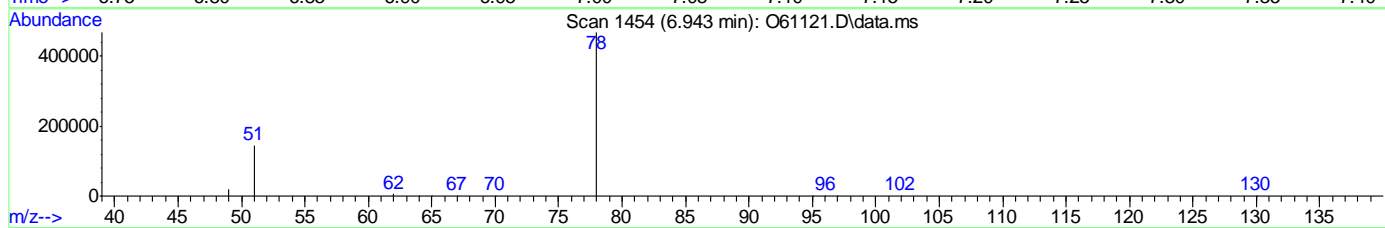
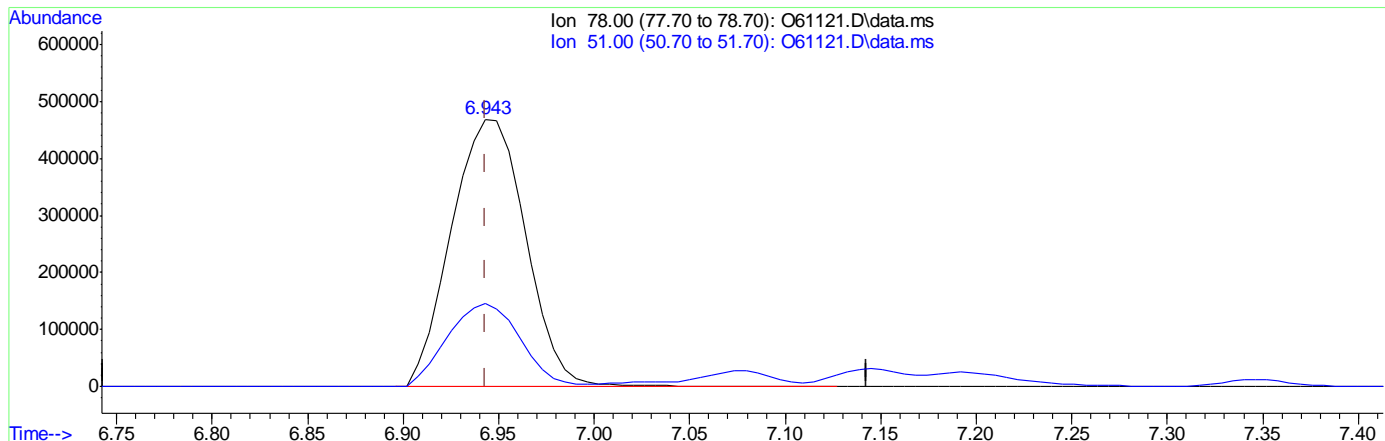
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\090820\
 Data File : O61121.D
 Acq On : 8 Sep 2020 2:15 pm
 Operator : manager
 Sample : ic2352-6
 Misc : MS47137,VO2352,,,,,
 ALS Vial : 6 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 08 14:42:31 2020
 Quant Method : C:\msdchem\2\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Fri Sep 04 07:54:30 2020
 Response via : Initial Calibration



TIC: O61121.D\data.ms

(12) Benzene ()
 6.943min (+0.000) 16.10ug/L
 response 1264549

Ion	Exp%	Act%
78.00	100	100
51.00	26.20	31.02
0.00	0.00	0.00
0.00	0.00	0.00

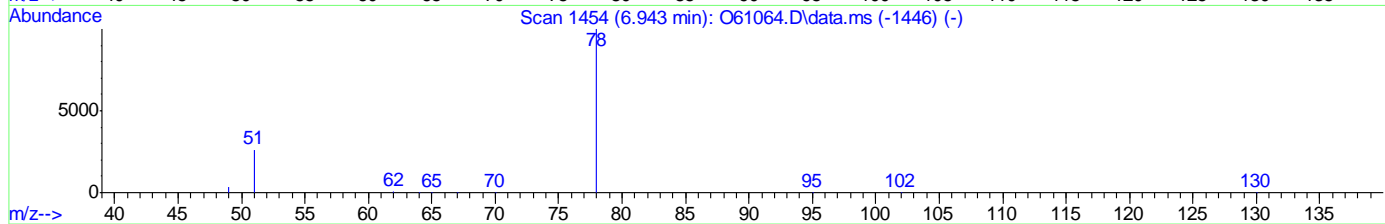
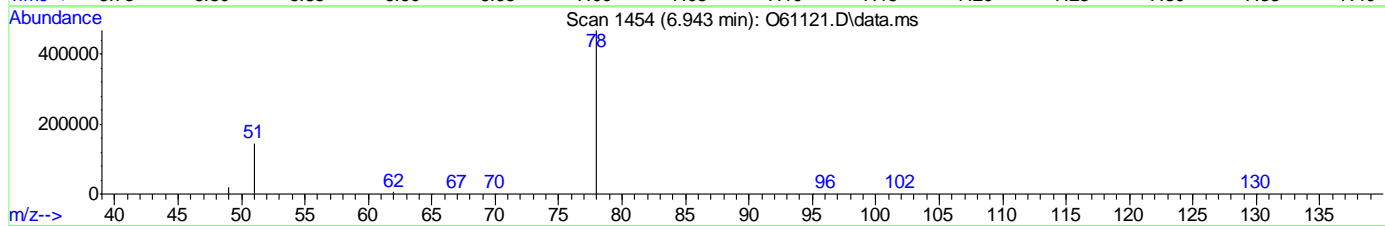
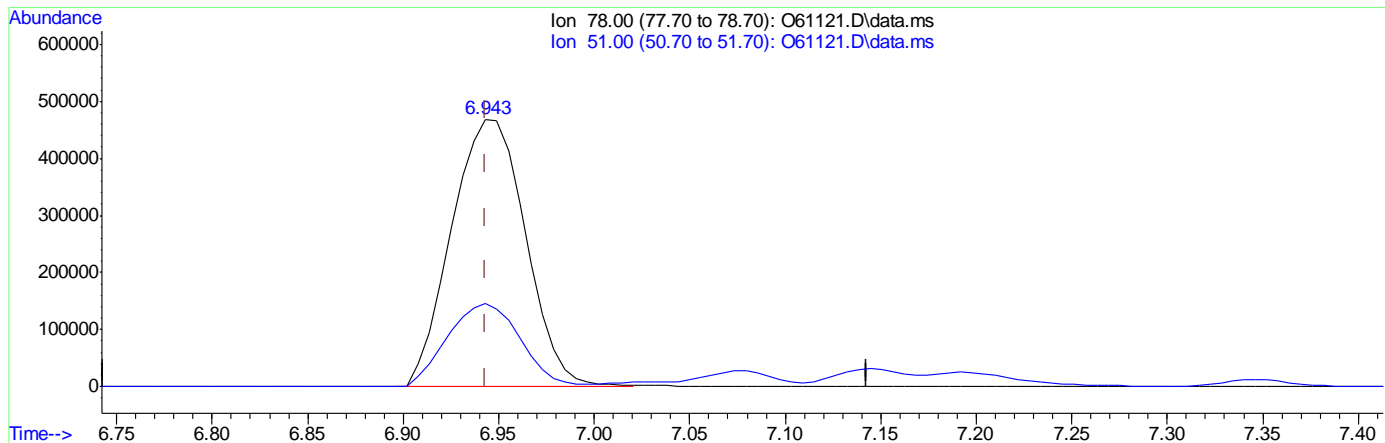
7.6.6.2
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\090820\
 Data File : O61121.D
 Acq On : 8 Sep 2020 2:15 pm
 Operator : manager
 Sample : ic2352-6
 Misc : MS47137,VO2352,,,,,
 ALS Vial : 6 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 08 14:42:31 2020
 Quant Method : C:\msdchem\2\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Fri Sep 04 07:54:30 2020
 Response via : Initial Calibration



TIC: O61121.D\data.ms

(12) Benzene ()
 6.943min (+0.000) 16.02ug/L m
 response 1257981

Ion	Exp%	Act%
78.00	100	100
51.00	26.20	31.02
0.00	0.00	0.00
0.00	0.00	0.00

7.6.6.3

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\090820\
 Data File : O61122.D
 Acq On : 8 Sep 2020 2:36 pm
 Operator : manager
 Sample : ic2352-7 Inst : MSVOA12
 Misc : MS47137,VO2352,,,,,
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 09 12:09:10 2020
 Quant Method : C:\msdchem\2\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Fri Sep 04 07:54:30 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
Internal Standards							
1) Fluorobenzene	7.352	96	288238	5.00	ug/L	0.00	
18) Chlorobenzene-d5	10.447	117	211205	5.00	ug/L	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.080	65	123556	5.44	ug/L	0.00	
Spiked Amount	5.000	Range 74 - 125	Recovery	=	108.80%		
19) Toluene-d8	8.900	98	260318	5.62	ug/L	0.00	
Spiked Amount	5.000	Range 88 - 111	Recovery	=	112.40%#		
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.908	62	473041	14.96	ug/L		97
3) Chloromethane	2.807	50	703261	14.73	ug/L		93
4) 1,1-Dichloroethene	4.089	61	743005	22.69	ug/L		83
5) Methylene Chloride	4.703	49	1128317	20.68	ug/L		93
6) trans-1,2-Dichloroethene	4.869	61	902631	23.55	ug/L		76
7) 1,1-Dichloroethane	5.514	63	1058794	22.04	ug/L		97
8) cis-1,2-Dichloroethene	6.072	96	471054	17.48	ug/L #		68
9) Chloroform	6.333	83	835571	16.80	ug/L		95
10) Carbon Tetrachloride	6.511	117	543755	17.38	ug/L		88
11) 1,1,1-Trichloroethane	6.576	97	631682	17.16	ug/L		89
12) Benzene	6.943	78	1696873m	21.25	ug/L		
14) 1,2-Dichloroethane	7.145	62	906149	23.96	ug/L		89
15) Trichloroethene	7.518	95	489099	16.05	ug/L		97
16) 1,2-Dichloropropane	8.044	63	619396	23.25	ug/L		92
17) cis-1,3-Dichloropropene	8.711	75	721104	21.15	ug/L		100
20) trans-1,3-Dichloropropene	9.343	75	685086	18.68	ug/L		98
21) Tetrachloroethene	9.343	166	405790	15.54	ug/L		97
22) 1,4-Dichlorobenzene	12.827	146	862973	15.91	ug/L		96
23) 1,2-Dibromo-3-Chloropr...	14.038	75	240869	23.78	ug/L		87

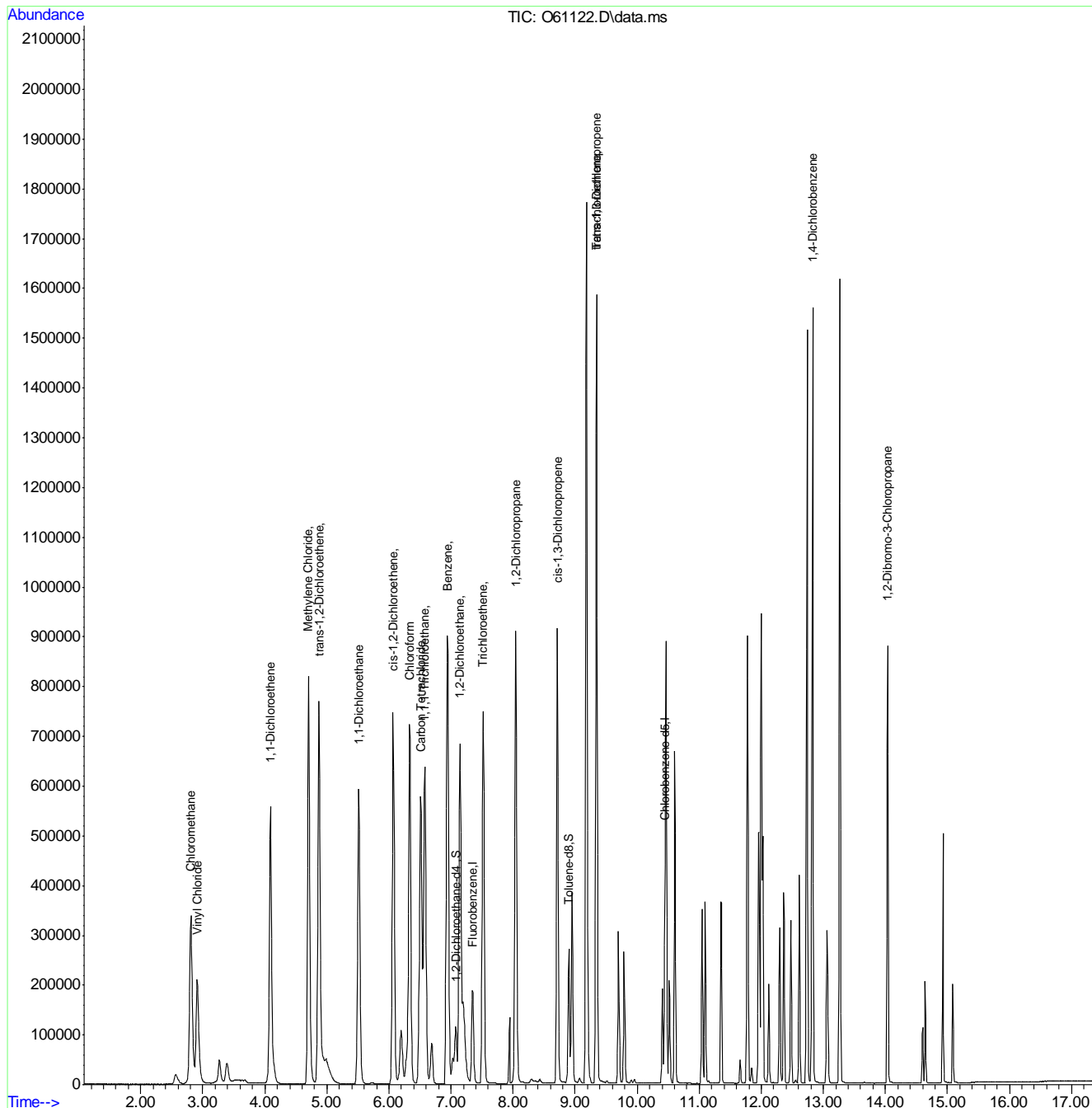
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\090820\
 Data File : O61122.D
 Acq On : 8 Sep 2020 2:36 pm
 Operator : manager
 Sample : ic2352-7
 Misc : MS47137,VO2352,,,,,
 ALS Vial : 7 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 09 12:09:10 2020
 Quant Method : C:\msdchem\2\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Fri Sep 04 07:54:30 2020
 Response via : Initial Calibration



7.6.7
7

Manual Integration Approval Summary

Sample Number: VO2352-IC2352 **Method:** SW846 8260B BY SIM
Lab FileID: O61122.D **Analyst approved:** 09/10/20 08:40 Akari Giraldo
Injection Time: 09/08/20 14:36 **Supervisor approved:** 09/10/20 08:47 Melissa Mangual

Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzene	71-43-2		6.94	Poor instrument integration

7.6.7.1

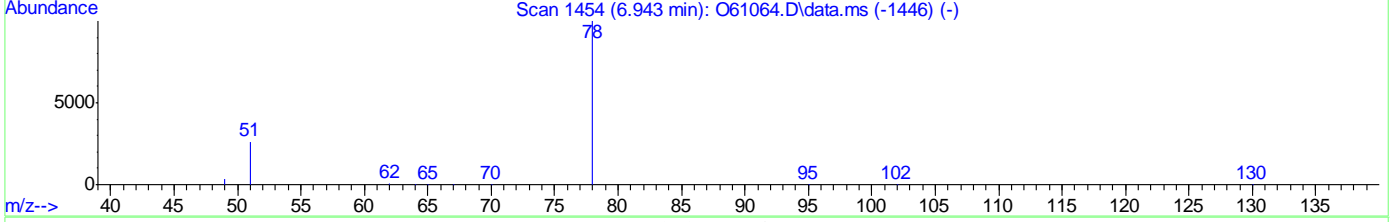
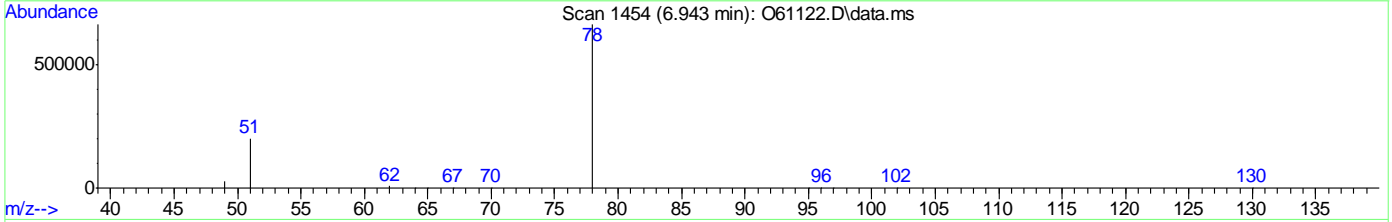
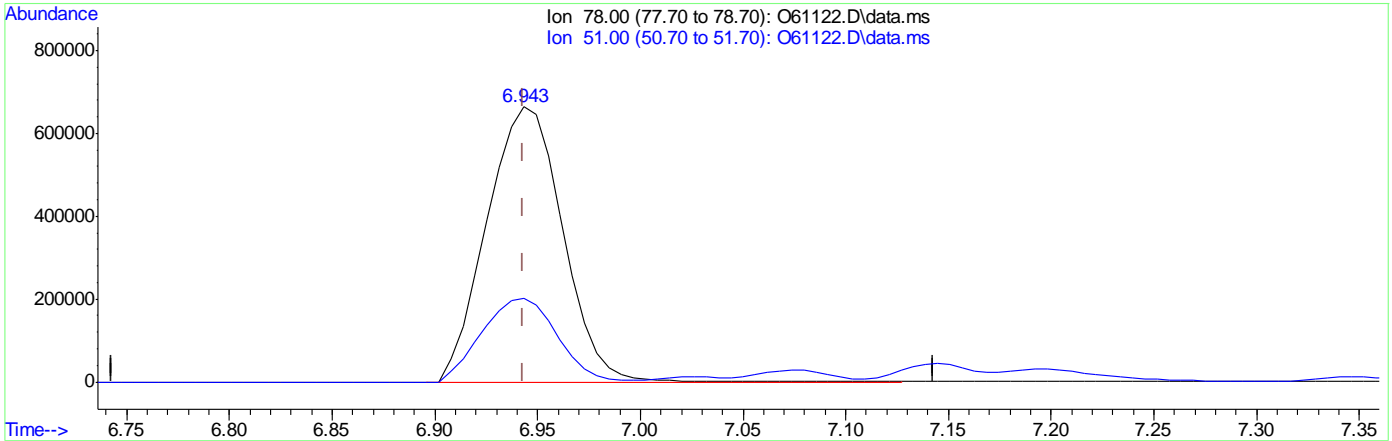
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\090820\
 Data File : O61122.D
 Acq On : 8 Sep 2020 2:36 pm
 Operator : manager
 Sample : ic2352-7
 Misc : MS47137,VO2352,,,,,
 ALS Vial : 7 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 08 14:54:58 2020
 Quant Method : C:\msdchem\2\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Fri Sep 04 07:54:30 2020
 Response via : Initial Calibration



TIC: O61122.D\data.ms

(12) Benzene ()

6.943min (+0.000) 21.37ug/L

response 1706822

Ion	Exp%	Act%
78.00	100	100
51.00	26.20	30.47
0.00	0.00	0.00
0.00	0.00	0.00

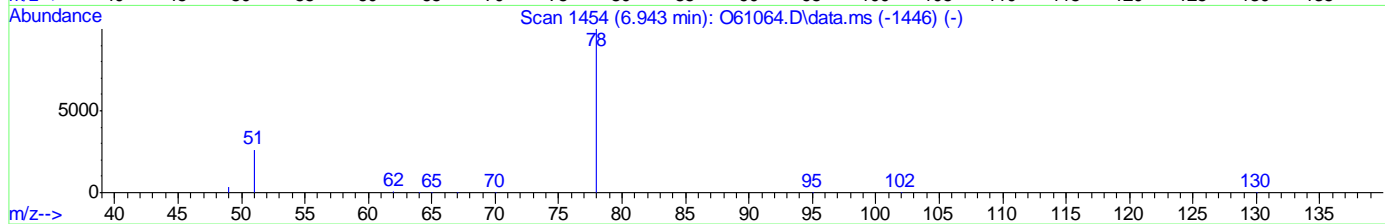
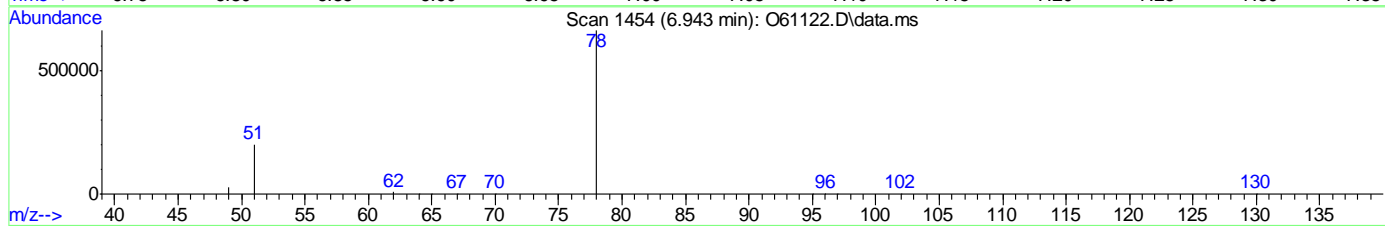
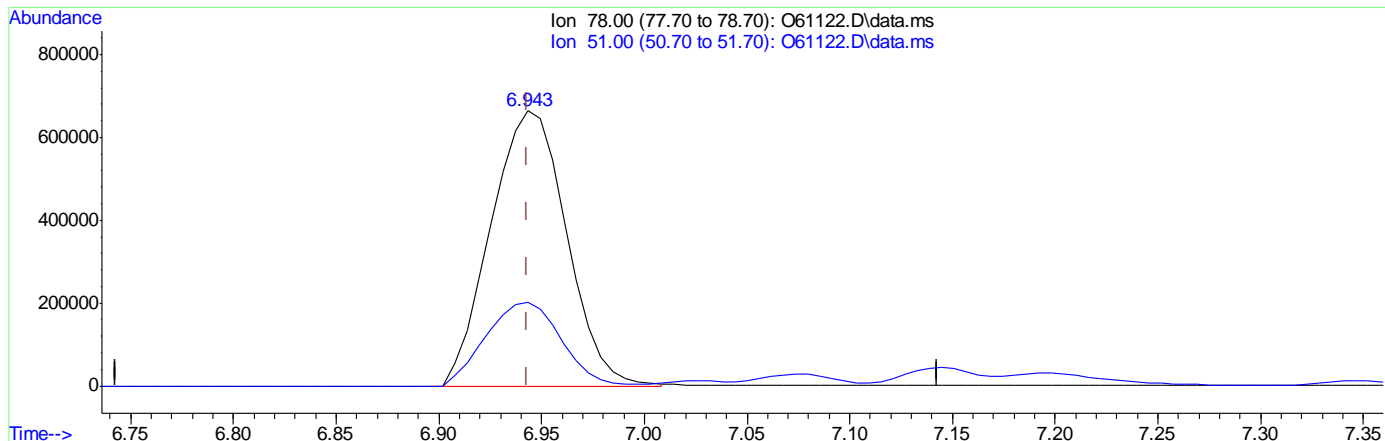
7.6.7.2
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\090820\
 Data File : O61122.D
 Acq On : 8 Sep 2020 2:36 pm
 Operator : manager
 Sample : ic2352-7
 Misc : MS47137,VO2352,,,,,
 ALS Vial : 7 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 08 14:54:58 2020
 Quant Method : C:\msdchem\2\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Fri Sep 04 07:54:30 2020
 Response via : Initial Calibration



TIC: O61122.D\data.ms

(12) Benzene ()
 6.943min (+0.000) 21.25ug/L m
 response 1696873

Ion	Exp%	Act%
78.00	100	100
51.00	26.20	30.47
0.00	0.00	0.00
0.00	0.00	0.00

7.6.7.3

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\090820\
 Data File : O61124.D
 Acq On : 8 Sep 2020 3:16 pm
 Operator : manager
 Sample : icv2352-5 Inst : MSVOA12
 Misc : MS47137,VO2352,,,,,
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 09 12:11:11 2020
 Quant Method : C:\msdchem\2\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
Internal Standards							
1) Fluorobenzene	7.346	96	269781	5.00	ug/L	0.00	
18) Chlorobenzene-d5	10.447	117	199638	5.00	ug/L	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.073	65	118119	4.98	ug/L	0.00	
Spiked Amount	5.000	Range 74 - 125	Recovery	=	99.60%		
19) Toluene-d8	8.900	98	244362	5.01	ug/L	0.00	
Spiked Amount	5.000	Range 88 - 111	Recovery	=	100.20%		
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.901	62	235919	9.56	ug/L		97
3) Chloromethane	2.799	50	341325	9.44	ug/L		94
4) 1,1-Dichloroethene	4.088	61	377200	10.33	ug/L		82
5) Methylene Chloride	4.699	49	604104	10.21	ug/L		92
6) trans-1,2-Dichloroethene	4.865	61	451495	10.42	ug/L		74
7) 1,1-Dichloroethane	5.510	63	526268	10.38	ug/L		97
8) cis-1,2-Dichloroethene	6.066	96	229693	10.18	ug/L #		63
9) Chloroform	6.333	83	409605	9.97	ug/L		94
10) Carbon Tetrachloride	6.510	117	265582	10.37	ug/L		89
11) 1,1,1-Trichloroethane	6.576	97	304075	10.26	ug/L		88
12) Benzene	6.943	78	862650m	10.81	ug/L		
14) 1,2-Dichloroethane	7.145	62	461873	10.43	ug/L		89
15) Trichloroethene	7.518	95	249696	10.63	ug/L		97
16) 1,2-Dichloropropane	8.043	63	316184	10.85	ug/L		94
17) cis-1,3-Dichloropropene	8.711	75	359076	10.95	ug/L		98
20) trans-1,3-Dichloropropene	9.343	75	344476	11.32	ug/L		98
21) Tetrachloroethene	9.343	166	198970	10.33	ug/L		96
22) 1,4-Dichlorobenzene	12.827	146	429249	10.21	ug/L		97
23) 1,2-Dibromo-3-Chloropr...	14.037	75	115169	10.43	ug/L		81

(#) = qualifier out of range (m) = manual integration (+) = signals summed

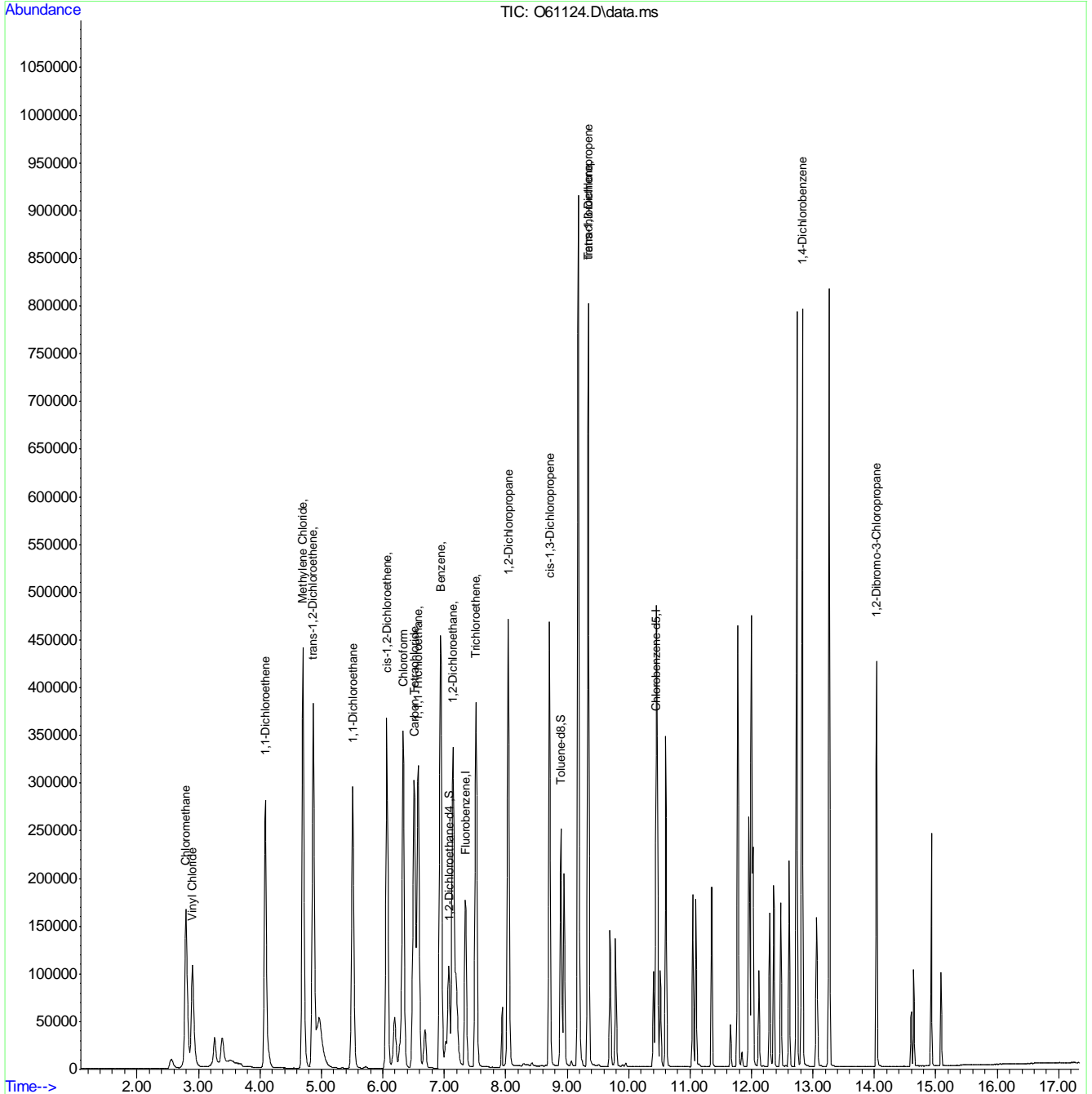
7.6.8
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\090820\
 Data File : O61124.D
 Acq On : 8 Sep 2020 3:16 pm
 Operator : manager
 Sample : icv2352-5
 Misc : MS47137,VO2352,,,,,
 ALS Vial : 9 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 09 12:11:11 2020
 Quant Method : C:\msdchem\2\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration



8'9'7

Manual Integration Approval Summary

Sample Number: VO2352-ICV2352 **Method:** SW846 8260B BY SIM
Lab FileID: O61124.D **Analyst approved:** 09/10/20 08:40 Akari Giraldo
Injection Time: 09/08/20 15:16 **Supervisor approved:** 09/10/20 08:47 Melissa Mangual

Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzene	71-43-2		6.94	Poor instrument integration

7.6.8.1

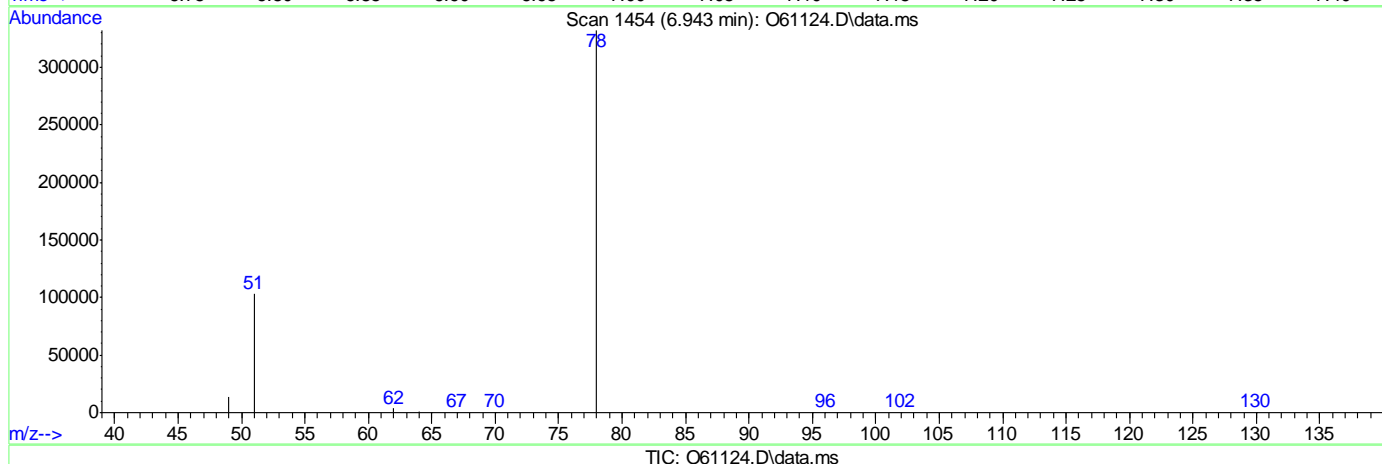
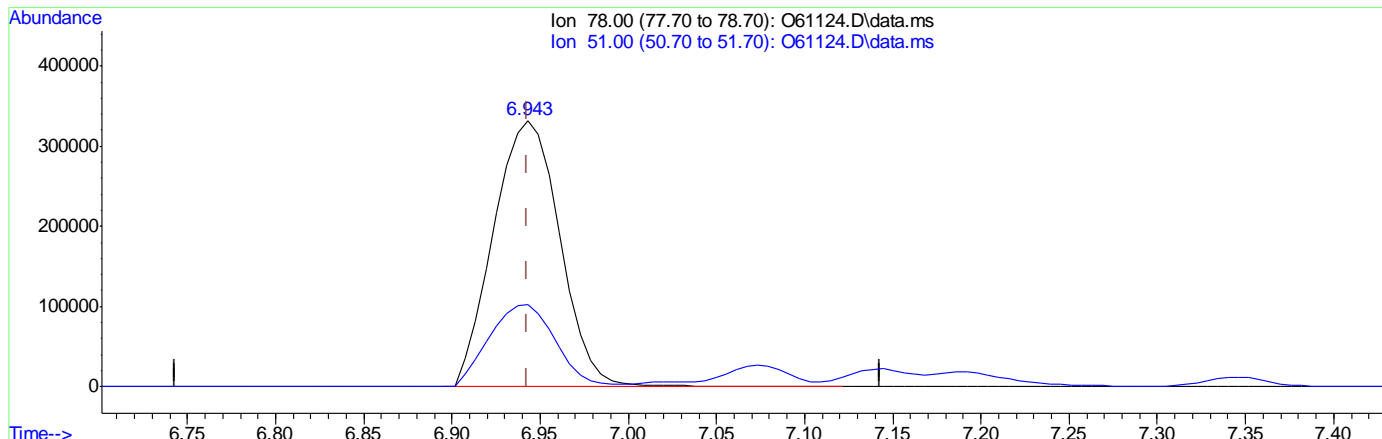
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\090820\
 Data File : O61124.D
 Acq On : 8 Sep 2020 3:16 pm
 Operator : manager
 Sample : icv2352-5
 Misc : MS47137,VO2352,,,,,
 ALS Vial : 9 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 09 12:10:53 2020
 Quant Method : C:\msdchem\2\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration



(12) Benzene ()

6.943min (-0.000) 10.89ug/L

response 868530

Ion	Exp%	Act%
78.00	100	100
51.00	26.20	31.04
0.00	0.00	0.00
0.00	0.00	0.00

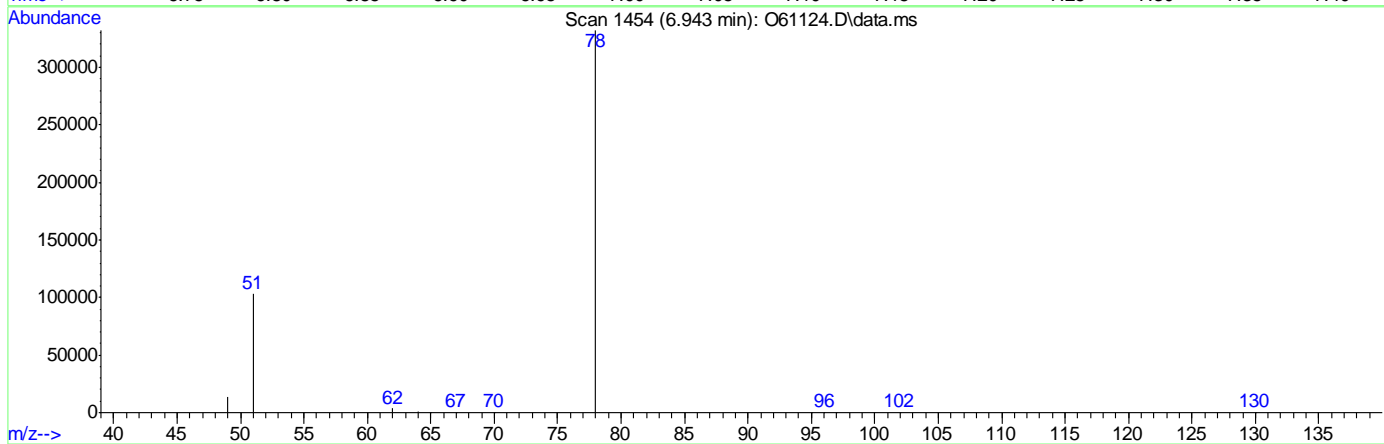
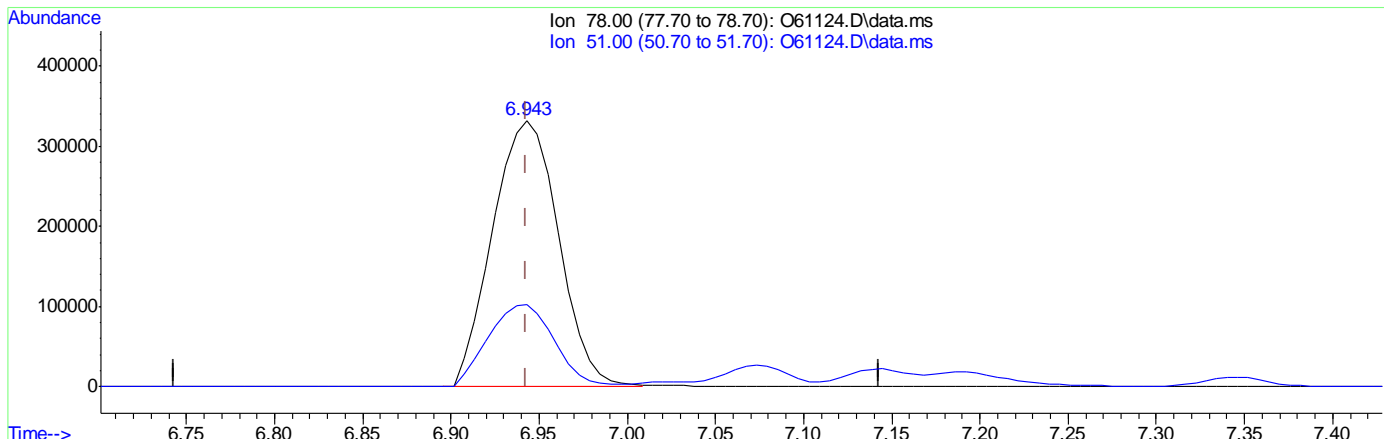
7.68.2
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\090820\
 Data File : O61124.D
 Acq On : 8 Sep 2020 3:16 pm
 Operator : manager
 Sample : icv2352-5
 Misc : MS47137,VO2352,,,,,
 ALS Vial : 9 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 09 12:10:53 2020
 Quant Method : C:\msdchem\2\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration



(12) Benzene ()
 6.943min (-0.000) 10.81ug/L m
 response 862650

Ion	Exp%	Act%
78.00	100	100
51.00	26.20	31.04
0.00	0.00	0.00
0.00	0.00	0.00

7.68.3
7

Quantitation Report (QT Reviewed)

Melissa Mangual
09/10/20 09:00

Data Path : C:\msdchem\2\data\090920\
 Data File : O61128.D
 Acq On : 9 Sep 2020 8:52 am
 Operator : melissam
 Sample : cc2352-5 Inst : MSVOA12
 Misc : MS47137,VO2353,,,,,
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 10 08:55:17 2020
 Quant Method : C:\msdchem\2\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.340	96	304482	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.441	117	231537	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.067	65	133518	4.99	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	99.80%	
19) Toluene-d8	8.896	98	275898	4.88	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	97.60%	
Target Compounds						
						Qvalue
2) Vinyl Chloride	2.904	62	297586	10.81	ug/L	97
3) Chloromethane	2.803	50	429661	10.66	ug/L	93
4) 1,1-Dichloroethene	4.088	61	420731	10.20	ug/L	82
5) Methylene Chloride	4.699	49	620887	9.16	ug/L	93
6) trans-1,2-Dichloroethene	4.865	61	503828	10.30	ug/L	75
7) 1,1-Dichloroethane	5.506	63	574763	10.05	ug/L	97
8) cis-1,2-Dichloroethene	6.066	96	251392	9.87	ug/L #	64
9) Chloroform	6.327	83	453503	9.78	ug/L	94
10) Carbon Tetrachloride	6.504	117	304856	10.54	ug/L	88
11) 1,1,1-Trichloroethane	6.576	97	346647	10.37	ug/L	88
12) Benzene	6.937	78	908396m	10.09	ug/L	
14) 1,2-Dichloroethane	7.139	62	489759	9.80	ug/L	89
15) Trichloroethene	7.512	95	265491	10.02	ug/L	98
16) 1,2-Dichloropropane	8.040	63	331399	10.07	ug/L	94
17) cis-1,3-Dichloropropene	8.707	75	375094	10.13	ug/L	97
20) trans-1,3-Dichloropropene	9.343	75	356314	10.09	ug/L	99
21) Tetrachloroethene	9.337	166	222837	9.97	ug/L	92
22) 1,4-Dichlorobenzene	12.821	146	456581	9.36	ug/L	94
23) 1,2-Dibromo-3-Chloropr...	14.037	75	120721	9.42	ug/L	84

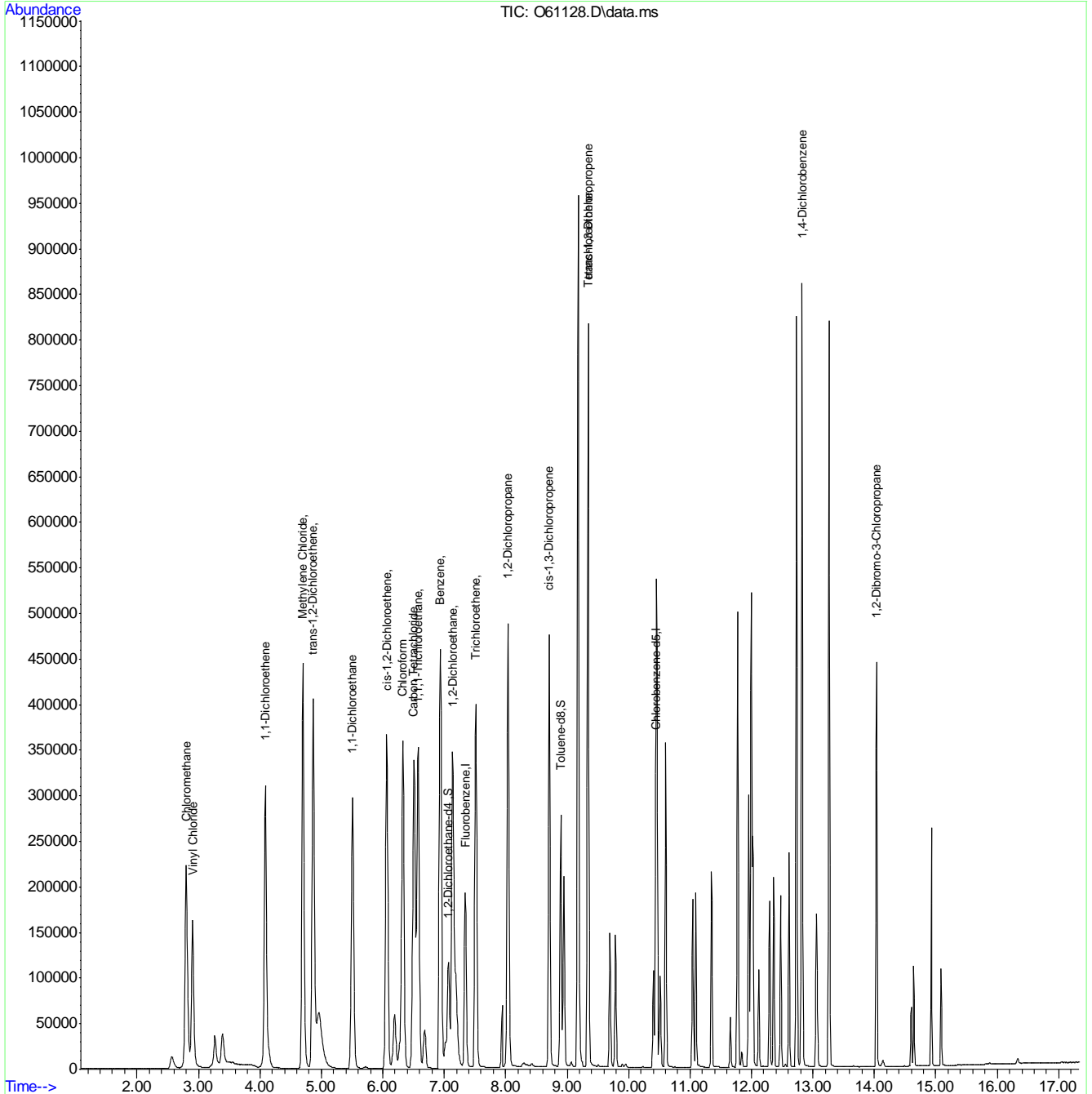
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\090920\
 Data File : O61128.D
 Acq On : 9 Sep 2020 8:52 am
 Operator : melissam
 Sample : cc2352-5
 Misc : MS47137,VO2353,,,,,
 ALS Vial : 1 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 10 08:55:17 2020
 Quant Method : C:\msdchem\2\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration



Manual Integration Approval Summary

Sample Number: VO2353-CC2352 **Method:** SW846 8260B BY SIM
Lab FileID: O61128.D **Analyst approved:** 09/10/20 08:57 Akari Giraldo
Injection Time: 09/09/20 08:52 **Supervisor approved:** 09/10/20 09:00 Melissa Mangual

Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzene	71-43-2		6.94	Poor instrument integration

7.6.9.1

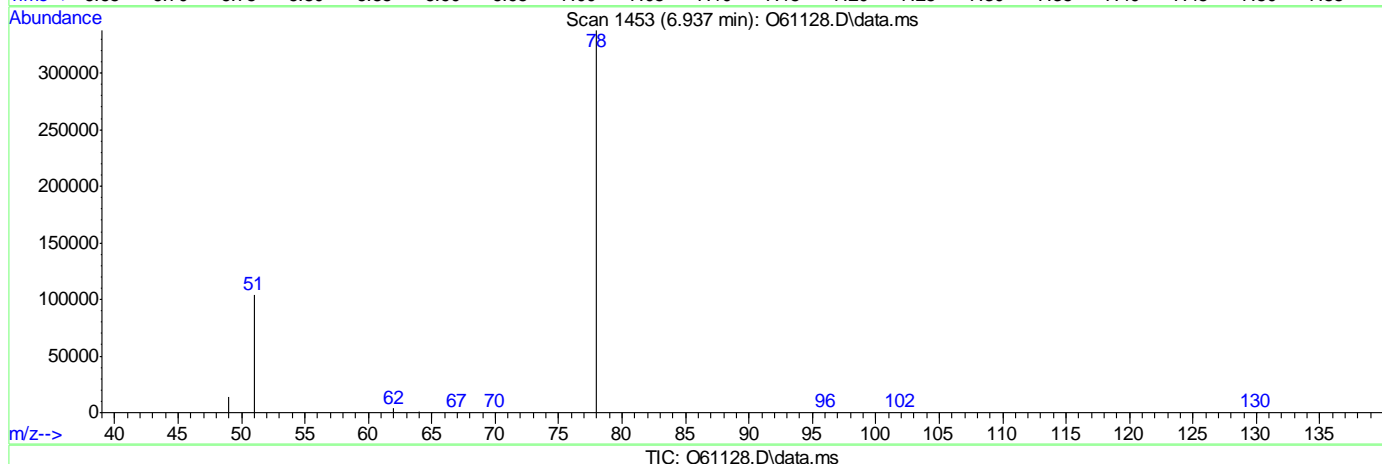
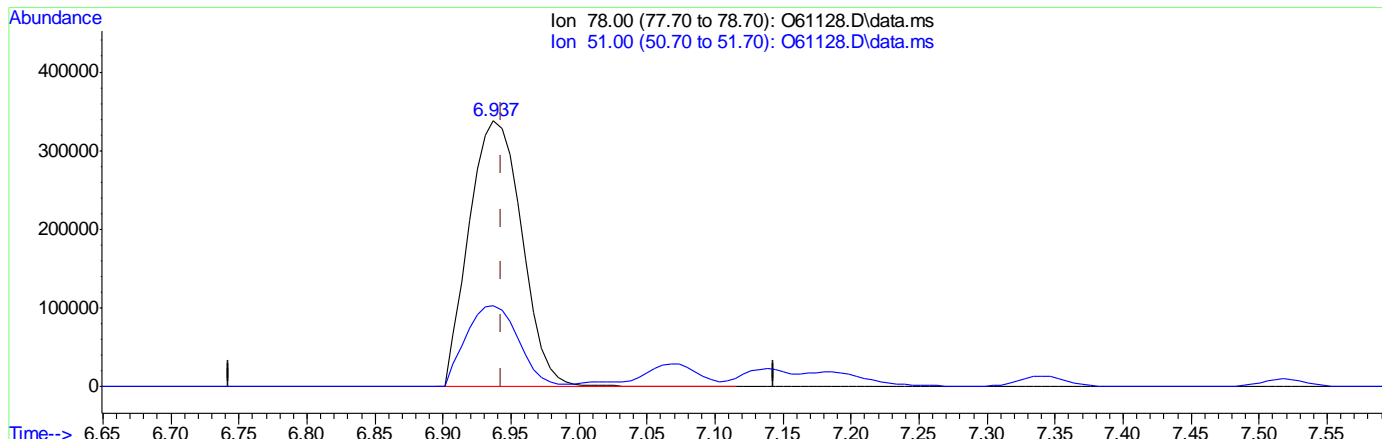
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\090920\
 Data File : O61128.D
 Acq On : 9 Sep 2020 8:52 am
 Operator : melissam
 Sample : cc2352-5
 Misc : MS47137,VO2353,,,,,
 ALS Vial : 1 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 09 12:16:10 2020
 Quant Method : C:\msdchem\2\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration



(12) Benzene ()

6.937min (-0.006) 10.15ug/L

response 914416

Ion	Exp%	Act%
78.00	100	100
51.00	26.20	30.67
0.00	0.00	0.00
0.00	0.00	0.00

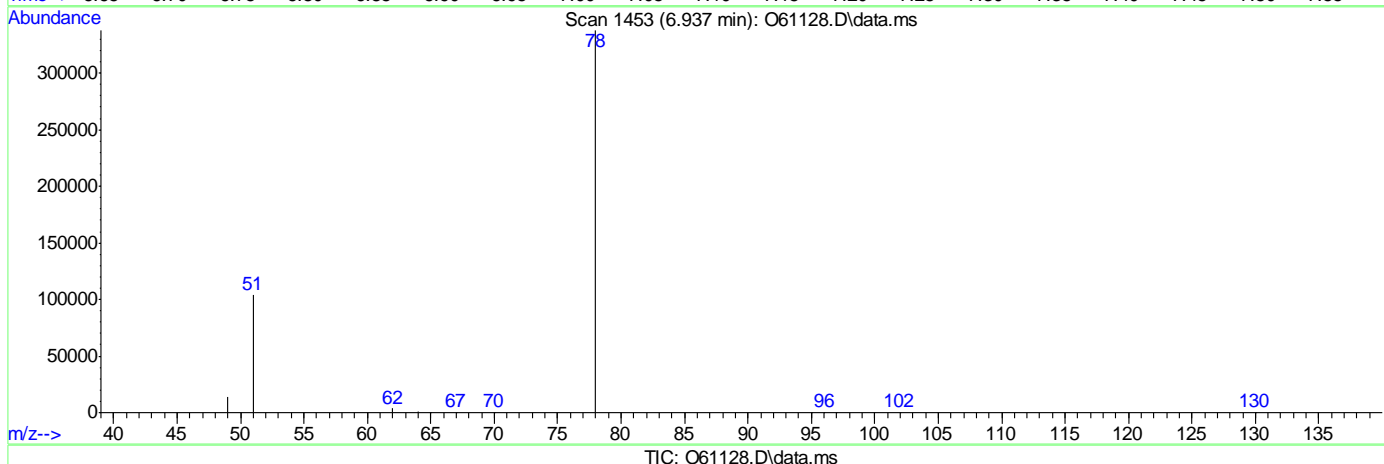
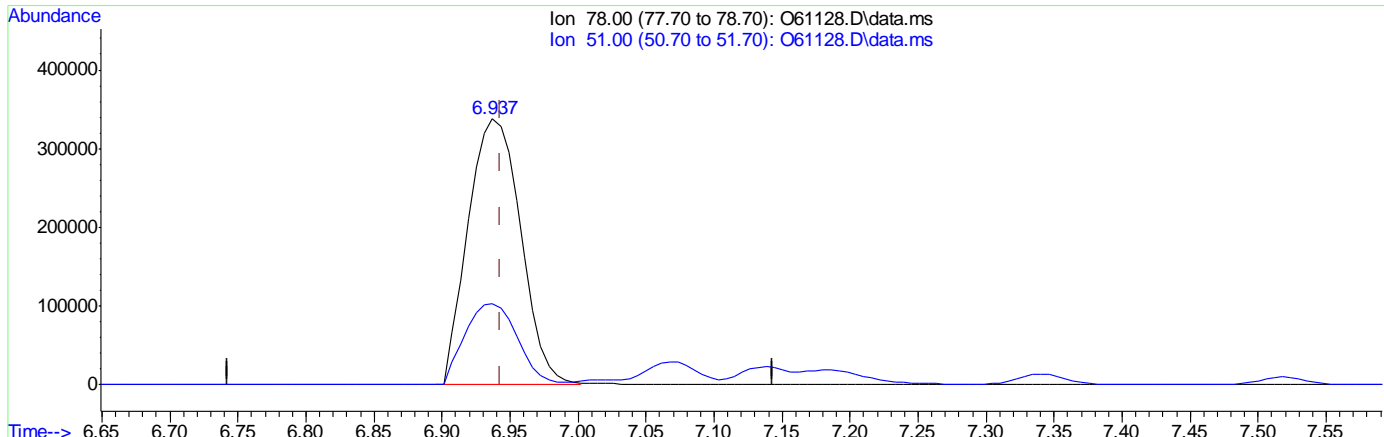
7.692
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\090920\
 Data File : O61128.D
 Acq On : 9 Sep 2020 8:52 am
 Operator : melissam
 Sample : cc2352-5
 Misc : MS47137,VO2353,,,,,
 ALS Vial : 1 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 09 12:16:10 2020
 Quant Method : C:\msdchem\2\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration



(12) Benzene ()
 6.937min (-0.006) 10.09ug/L m
 response 908396

Ion	Exp%	Act%
78.00	100	100
51.00	26.20	30.67
0.00	0.00	0.00
0.00	0.00	0.00

7.69.3
7

Quantitation Report (QT Reviewed)

Melissa Mangual
09/10/20 09:07

Data Path : C:\msdchem\2\data\090920\
 Data File : O61151.D
 Acq On : 9 Sep 2020 5:53 pm
 Operator : manager
 Sample : ecc2352-5 Inst : MSVOA12
 Misc : MS47147,VO2353,,,,,
 ALS Vial : 24 Sample Multiplier: 1

Quant Time: Sep 10 08:56:17 2020
 Quant Method : C:\msdchem\2\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
Internal Standards							
1) Fluorobenzene	7.346	96	197933	5.00	ug/L	0.00	
18) Chlorobenzene-d5	10.447	117	142304	5.00	ug/L	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.073	65	94982	5.46	ug/L	0.00	
Spiked Amount	5.000	Range 74 - 125	Recovery	=	109.20%		
19) Toluene-d8	8.900	98	172210	4.95	ug/L	0.00	
Spiked Amount	5.000	Range 88 - 111	Recovery	=	99.00%		
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.908	62	223336	12.70	ug/L		96
3) Chloromethane	2.806	50	346171	13.59	ug/L		94
4) 1,1-Dichloroethene	4.092	61	269853	10.07	ug/L		78
5) Methylene Chloride	4.703	49	471103	10.98	ug/L		89
6) trans-1,2-Dichloroethene	4.869	61	331418	10.43	ug/L		70
7) 1,1-Dichloroethane	5.514	63	386381	10.39	ug/L		97
8) cis-1,2-Dichloroethene	6.072	96	156460	9.45	ug/L #		56
9) Chloroform	6.333	83	294916	9.79	ug/L		91
10) Carbon Tetrachloride	6.510	117	153149	8.15	ug/L		87
11) 1,1,1-Trichloroethane	6.582	97	187538	8.63	ug/L		81
12) Benzene	6.943	78	572150m	9.77	ug/L		
14) 1,2-Dichloroethane	7.139	62	361620	11.13	ug/L		91
15) Trichloroethene	7.518	95	158467	9.20	ug/L		97
16) 1,2-Dichloropropane	8.043	63	231254	10.82	ug/L		97
17) cis-1,3-Dichloropropene	8.711	75	234313	9.74	ug/L		89
20) trans-1,3-Dichloropropene	9.343	75	232379	10.71	ug/L		90
21) Tetrachloroethene	9.343	166	114376	8.32	ug/L		95
22) 1,4-Dichlorobenzene	12.827	146	275762	9.20	ug/L		96
23) 1,2-Dibromo-3-Chloropr...	14.037	75	70779	8.99	ug/L #		76

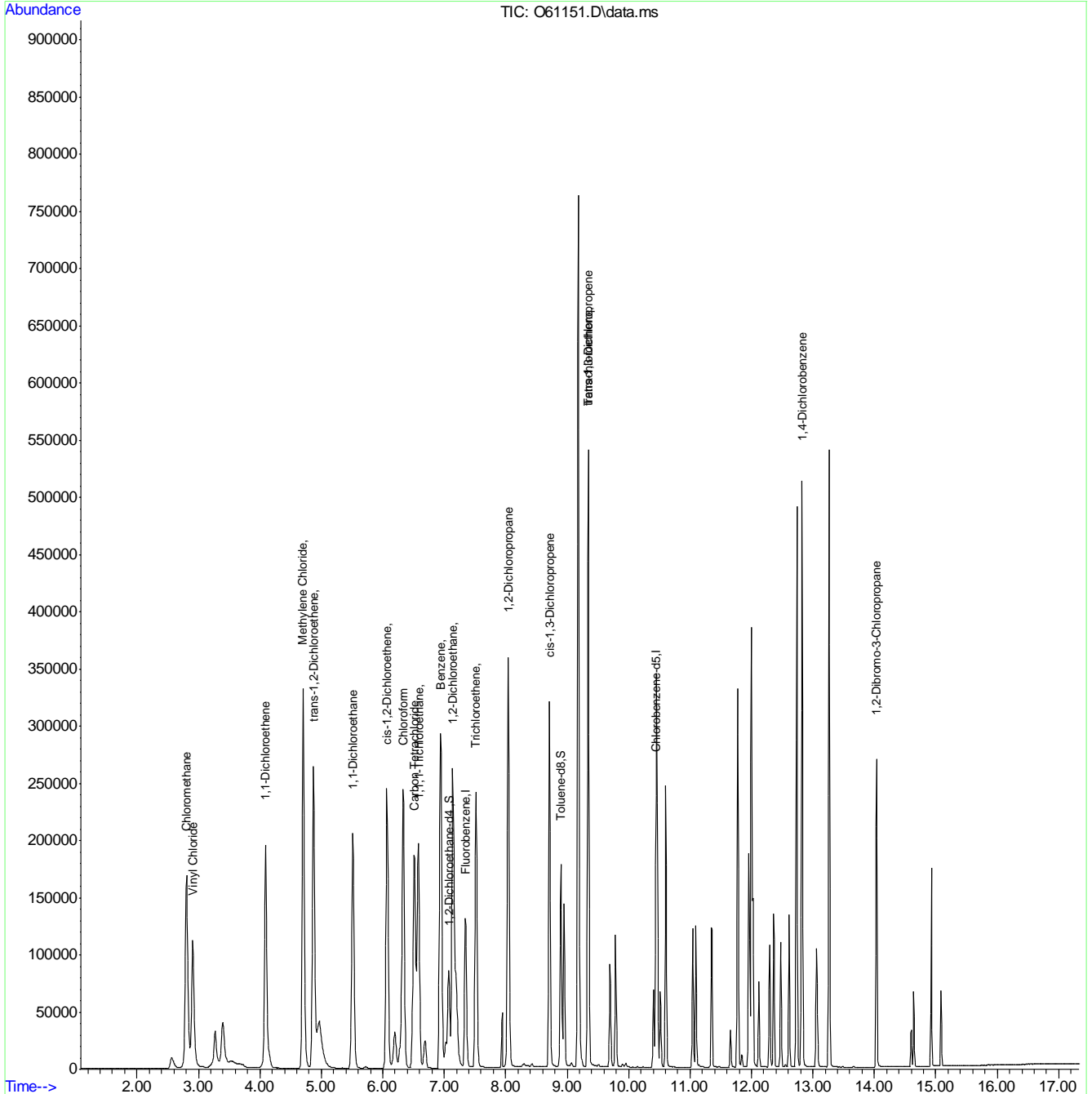
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\090920\
 Data File : O61151.D
 Acq On : 9 Sep 2020 5:53 pm
 Operator : manager
 Sample : ecc2352-5
 Misc : MS47147,VO2353,,,,,
 ALS Vial : 24 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 10 08:56:17 2020
 Quant Method : C:\msdchem\2\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration



Manual Integration Approval Summary

Sample Number: VO2353-ECC2352 **Method:** SW846 8260B BY SIM
Lab FileID: O61151.D **Analyst approved:** 09/10/20 08:59 Akari Giraldo
Injection Time: 09/09/20 17:53 **Supervisor approved:** 09/10/20 09:07 Melissa Mangual

Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzene	71-43-2		6.94	Poor instrument integration

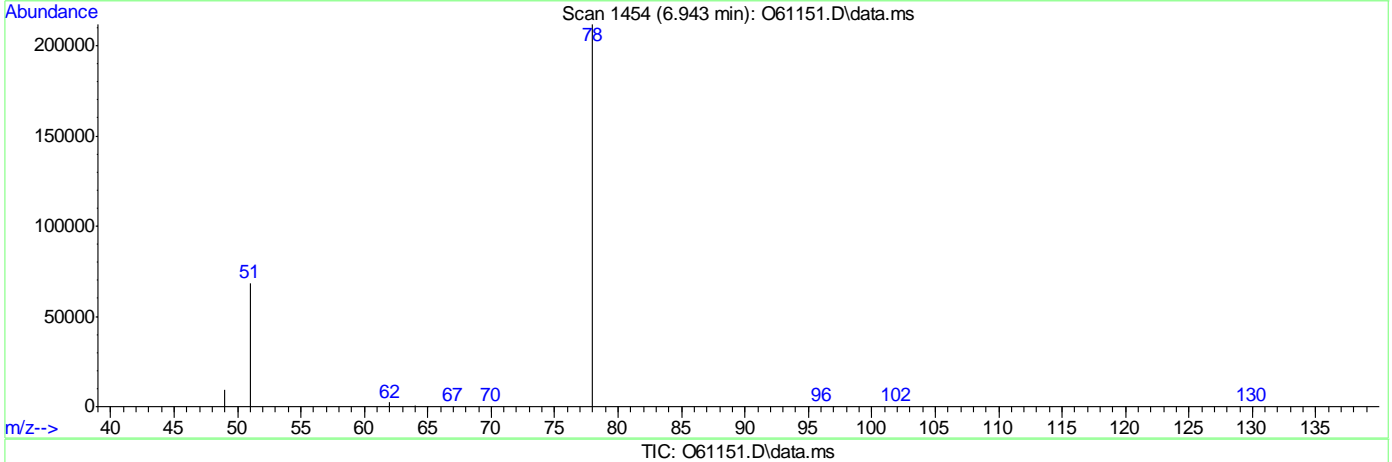
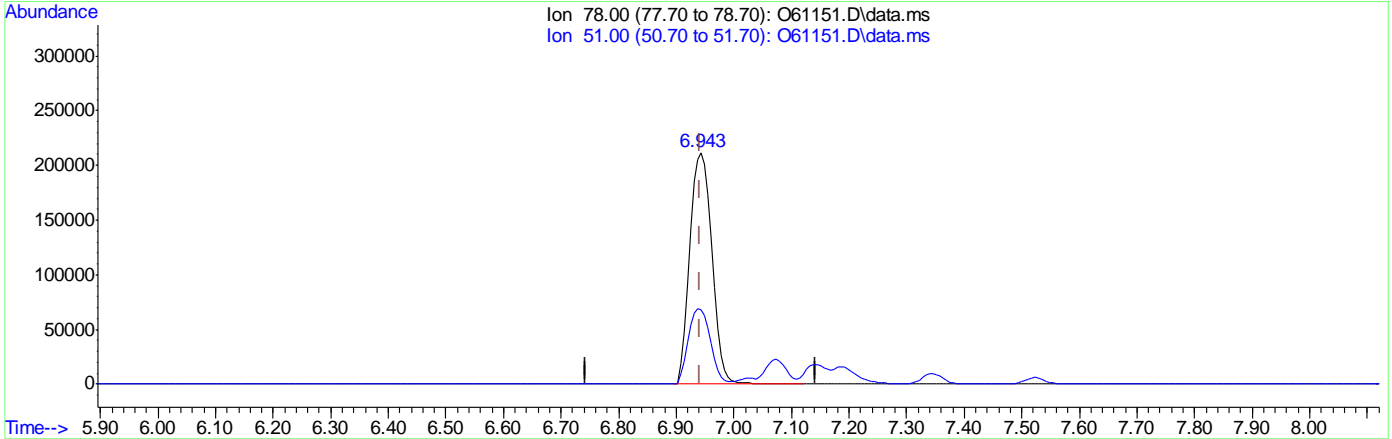
7.6.10.1

7

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\090920\
 Data File : O61151.D
 Acq On : 9 Sep 2020 5:53 pm
 Operator : manager
 Sample : ecc2352-5 Inst : MSVOA12
 Misc : MS47147,VO2353,,,,,
 ALS Vial : 24 Sample Multiplier: 1

Quant Time: Sep 10 06:42:41 2020
 Quant Method : C:\msdchem\2\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration



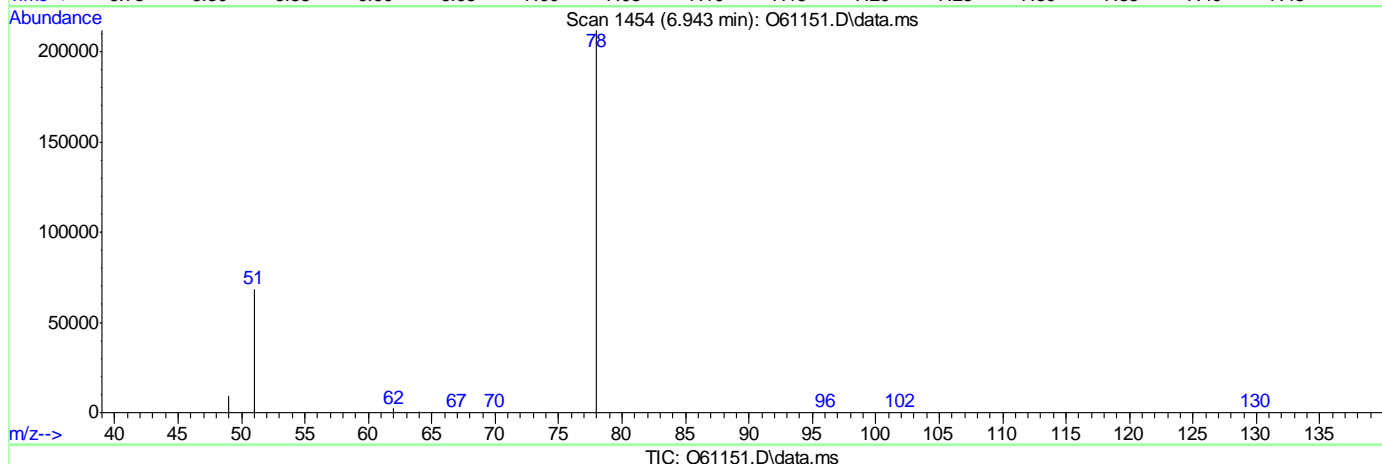
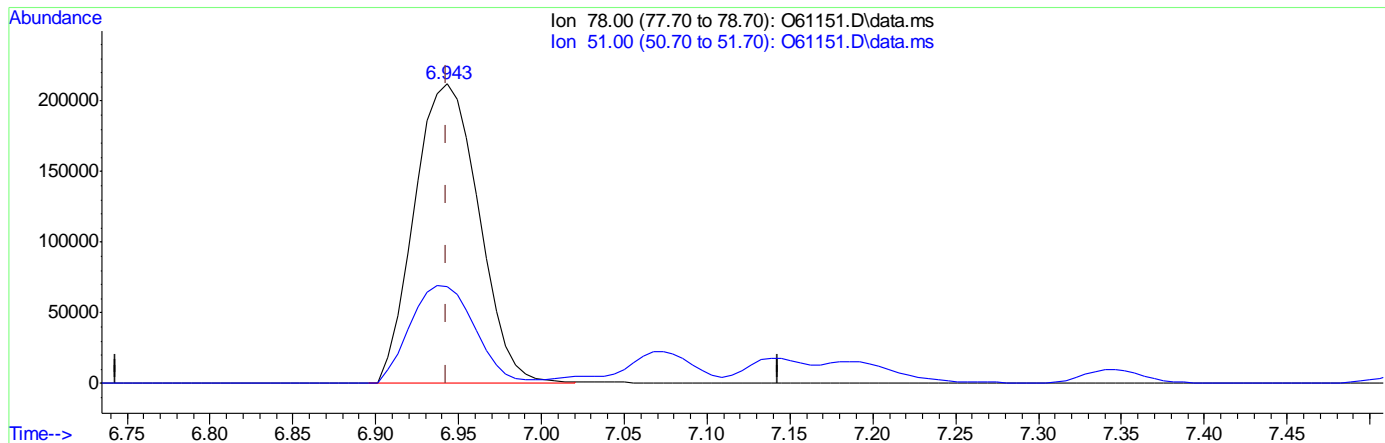
(12) Benzene ()
 6.943min (-0.000) 9.83ug/L
 response 575596

Ion	Exp%	Act%
78.00	100	100
51.00	26.20	32.33
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\090920\
 Data File : O61151.D
 Acq On : 9 Sep 2020 5:53 pm
 Operator : manager
 Sample : ecc2352-5 Inst : MSVOA12
 Misc : MS47147,VO2353,,,,,
 ALS Vial : 24 Sample Multiplier: 1

Quant Time: Sep 10 06:42:41 2020
 Quant Method : C:\msdchem\2\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration



(12) Benzene ()

6.943min (-0.000) 9.77ug/L m

response 572150

Ion	Exp%	Act%
78.00	100	100
51.00	26.20	32.33
0.00	0.00	0.00
0.00	0.00	0.00

7.6.10.3

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\090320\
 Data File : Z62040.D
 Acq On : 3 Sep 2020 9:52 am
 Operator : shanicao
 Sample : IC2408-1
 Misc : MS46458,VZ2408,,,,,
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 03 10:46:37 2020
 Quant Method : C:\msdchem\1\methods\SIMCL090320.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Mon Jun 08 12:29:45 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	

Internal Standards							
1) Fluorobenzene	7.401	96	3804478	5.00	ppb	0.00	
18) Chlorobenzene-d5	10.511	117	2917946	5.00	ppb	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.123	65	1189054	4.66	ppb	0.00	
Spiked Amount	5.000	Range 79 - 125	Recovery	=	93.20%		
19) Toluene-d8	8.958	98	3642217	5.53	ppb	0.00	
Spiked Amount	5.000	Range 70 - 130	Recovery	=	110.60%		
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.839	62	60425	0.16	ppb		81
3) Chloromethane	2.730	50	66839	0.17	ppb		98
4) 1,1-Dichloroethene	4.083	96	33018	0.19	ppb		98
5) Methylene Chloride	4.713	84	235103	0.84	ppb	#	89
6) trans-1,2-Dichloroethene	4.883	96	41344	0.16	ppb		98
7) 1,1-Dichloroethane	5.543	63	70207	0.14	ppb	#	100
8) cis-1,2-Dichloroethene	6.104	96	40436	0.13	ppb		93
9) Chloroform	6.371	83	77366	0.13	ppb		96
10) Carbon Tetrachloride	6.543	117	57498	0.17	ppb		99
11) 1,1,1-Trichloroethane	6.614	97	72306	0.16	ppb		92
12) Benzene	6.987	78	143997	0.15	ppb		96
14) 1,2-Dichloroethane	7.191	62	37491	0.10	ppb		99
15) Trichloroethene	7.564	95	45115	0.16	ppb		97
16) 1,2-Dichloropropane	8.101	63	31354	0.11	ppb		99
17) cis-1,3-Dichloropropene	8.773	75	33085	0.10	ppb		95
20) trans-1,3-Dichloropropene	9.407	75	23314	0.08	ppb		99
21) Tetrachloroethene	9.399	166	50663	0.17	ppb		98

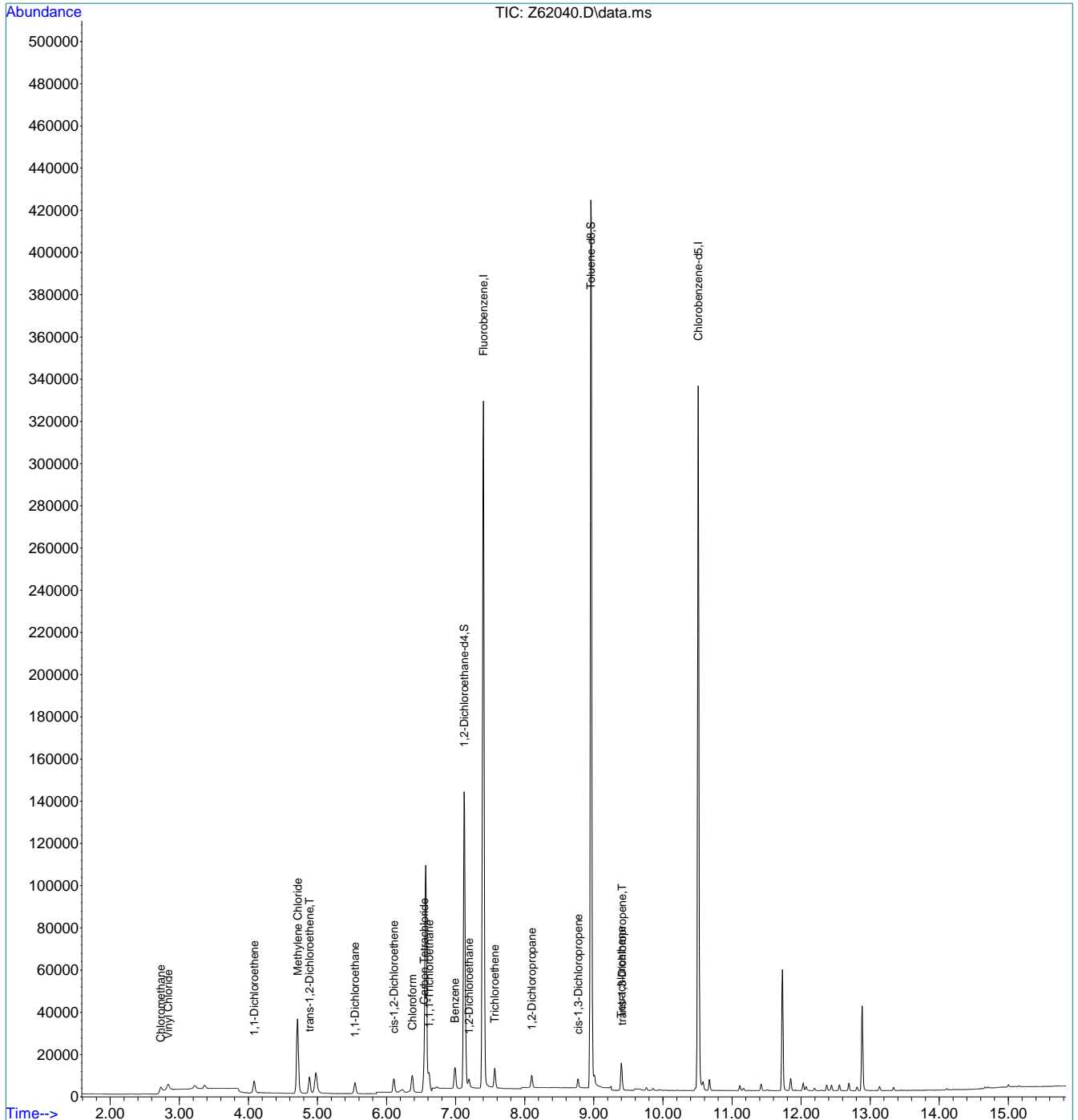
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.6.11
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\090320\
 Data File : Z62040.D
 Acq On : 3 Sep 2020 9:52 am
 Operator : shanicao
 Sample : IC2408-1
 Misc : MS46458,VZ2408,,,,,
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 03 10:46:37 2020
 Quant Method : C:\msdchem\1\methods\SIMCL090320.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Mon Jun 08 12:29:45 2020
 Response via : Initial Calibration



7.6.11
7



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\090320\
 Data File : Z62041.D
 Acq On : 3 Sep 2020 10:11 am
 Operator : shanicao
 Sample : IC2408-2
 Misc : MS46458,VZ2408,,,,,
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 03 10:46:39 2020
 Quant Method : C:\msdchem\1\methods\SIMCL090320.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Mon Jun 08 12:29:45 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	

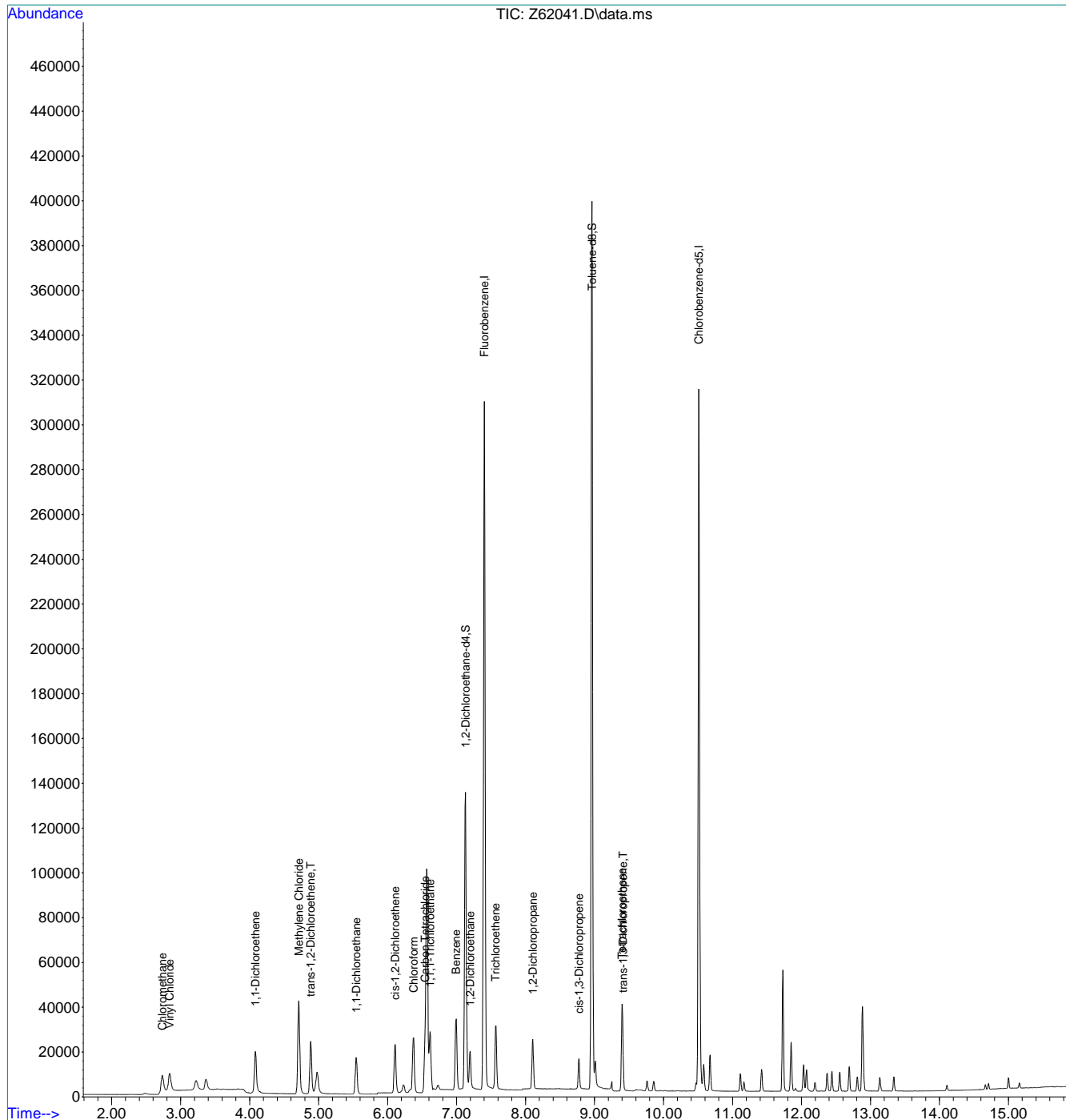
Internal Standards							
1) Fluorobenzene	7.401	96	3529389	5.00	ppb	0.00	
18) Chlorobenzene-d5	10.511	117	2691939	5.00	ppb	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.130	65	1143820	4.83	ppb	0.00	
Spiked Amount	5.000	Range	79 - 125	Recovery	=	96.60%	
19) Toluene-d8	8.961	98	3386795	5.57	ppb	0.00	
Spiked Amount	5.000	Range	70 - 130	Recovery	=	111.40%	
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.839	62	163586	0.47	ppb		96
3) Chloromethane	2.733	50	169046	0.48	ppb		99
4) 1,1-Dichloroethene	4.083	96	107728	0.67	ppb		98
5) Methylene Chloride	4.713	84	277305	1.06	ppb		91
6) trans-1,2-Dichloroethene	4.886	96	126935	0.52	ppb		100
7) 1,1-Dichloroethane	5.546	63	222785	0.48	ppb	#	98
8) cis-1,2-Dichloroethene	6.110	96	136596	0.48	ppb		94
9) Chloroform	6.377	83	246283	0.45	ppb		97
10) Carbon Tetrachloride	6.543	117	169258	0.54	ppb		100
11) 1,1,1-Trichloroethane	6.614	97	222786	0.52	ppb		98
12) Benzene	6.994	78	462224	0.50	ppb		99
14) 1,2-Dichloroethane	7.198	62	166346	0.47	ppb		98
15) Trichloroethene	7.564	95	140144	0.52	ppb		97
16) 1,2-Dichloropropane	8.105	63	118533	0.45	ppb		99
17) cis-1,3-Dichloropropene	8.773	75	103090	0.32	ppb		99
20) trans-1,3-Dichloropropene	9.411	75	77291	0.30	ppb		99
21) Tetrachloroethene	9.399	166	151253	0.56	ppb		98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\090320\
 Data File : Z62041.D
 Acq On : 3 Sep 2020 10:11 am
 Operator : shanicao
 Sample : IC2408-2
 Misc : MS46458,VZ2408,,,,,
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 03 10:46:39 2020
 Quant Method : C:\msdchem\1\methods\SIMCL090320.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Mon Jun 08 12:29:45 2020
 Response via : Initial Calibration



7.6.12
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\090320\
 Data File : Z62042.D
 Acq On : 3 Sep 2020 10:59 am
 Operator : shanicao
 Sample : IC2408-3
 Misc : MS46458,VZ2408,,,,,
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 03 11:30:02 2020
 Quant Method : C:\msdchem\1\methods\SIMCL090320.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Mon Jun 08 12:29:45 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	

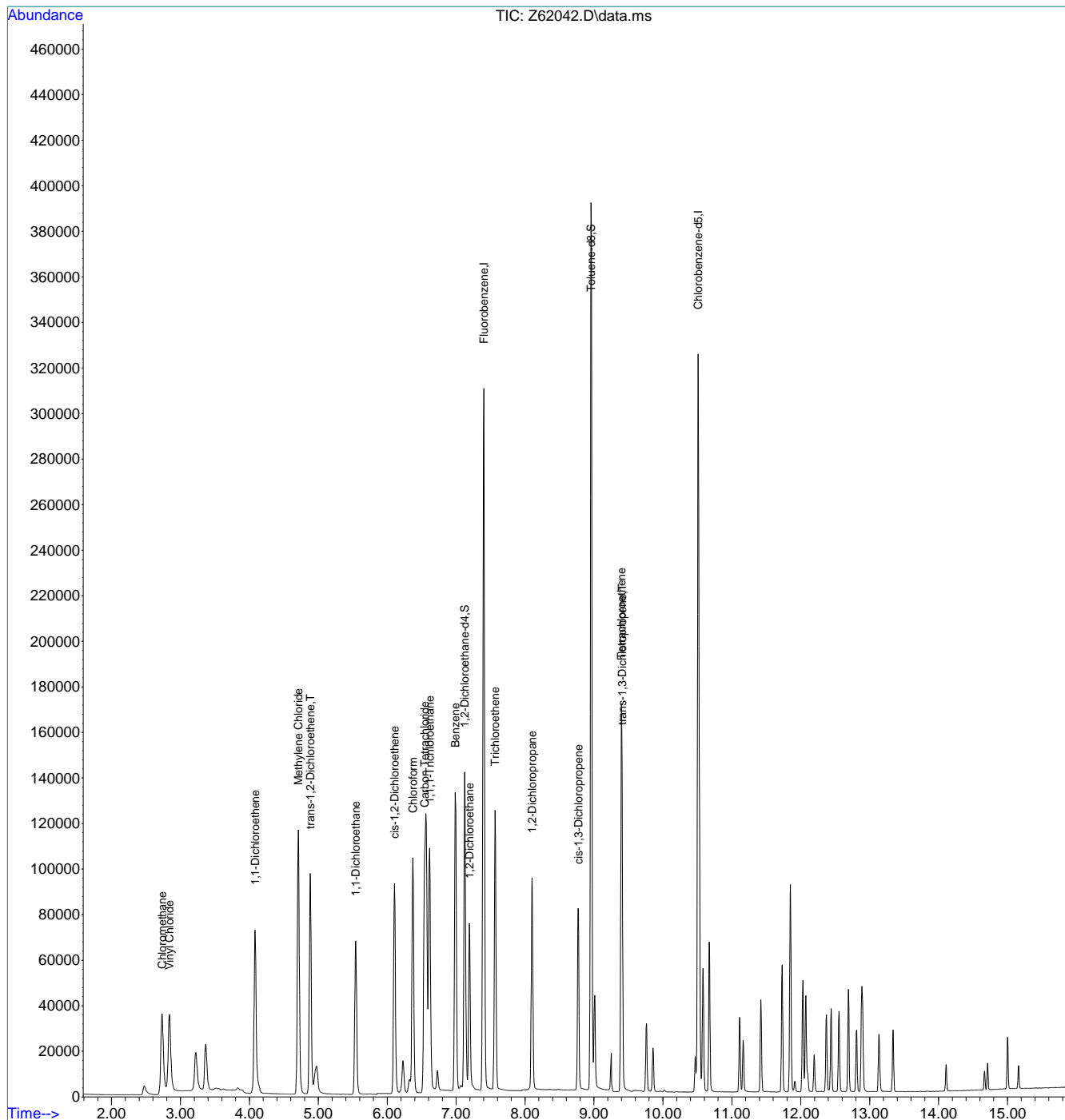
Internal Standards							
1) Fluorobenzene	7.401	96	3565081	5.00	ppb	0.00	
18) Chlorobenzene-d5	10.511	117	2721469	5.00	ppb	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.123	65	1150679	4.81	ppb	0.00	
Spiked Amount	5.000	Range 79 - 125	Recovery	=	96.20%		
19) Toluene-d8	8.957	98	3395429	5.52	ppb	0.00	
Spiked Amount	5.000	Range 70 - 130	Recovery	=	110.40%		
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.839	62	653900	1.88	ppb		96
3) Chloromethane	2.733	50	710717	1.99	ppb		99
4) 1,1-Dichloroethene	4.083	96	412798	2.56	ppb		98
5) Methylene Chloride	4.709	84	763200	2.89	ppb		94
6) trans-1,2-Dichloroethene	4.882	96	513878	2.07	ppb		98
7) 1,1-Dichloroethane	5.542	63	909896	1.95	ppb	#	99
8) cis-1,2-Dichloroethene	6.104	96	548481	1.92	ppb		96
9) Chloroform	6.371	83	1017447	1.86	ppb		98
10) Carbon Tetrachloride	6.543	117	726775	2.29	ppb		100
11) 1,1,1-Trichloroethane	6.614	97	903445	2.10	ppb		99
12) Benzene	6.987	78	1873808	2.01	ppb		97
14) 1,2-Dichloroethane	7.191	62	719288	2.00	ppb		100
15) Trichloroethene	7.564	95	585391	2.15	ppb		99
16) 1,2-Dichloropropane	8.101	63	482887	1.80	ppb		99
17) cis-1,3-Dichloropropene	8.773	75	629327	1.93	ppb		100
20) trans-1,3-Dichloropropene	9.407	75	501903	1.92	ppb		99
21) Tetrachloroethene	9.399	166	594039	2.16	ppb		98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\090320\
 Data File : Z62042.D
 Acq On : 3 Sep 2020 10:59 am
 Operator : shanicao
 Sample : IC2408-3
 Misc : MS46458,VZ2408,,,,,
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 03 11:30:02 2020
 Quant Method : C:\msdchem\1\methods\SIMCL090320.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Mon Jun 08 12:29:45 2020
 Response via : Initial Calibration



7.6.13
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\090320\
 Data File : Z62043.D
 Acq On : 3 Sep 2020 11:18 am
 Operator : shanicao
 Sample : IC2408-4
 Misc : MS46458,VZ2408,,,,,
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 03 11:36:06 2020
 Quant Method : C:\msdchem\1\methods\SIMCL090320.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Mon Jun 08 12:29:45 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	

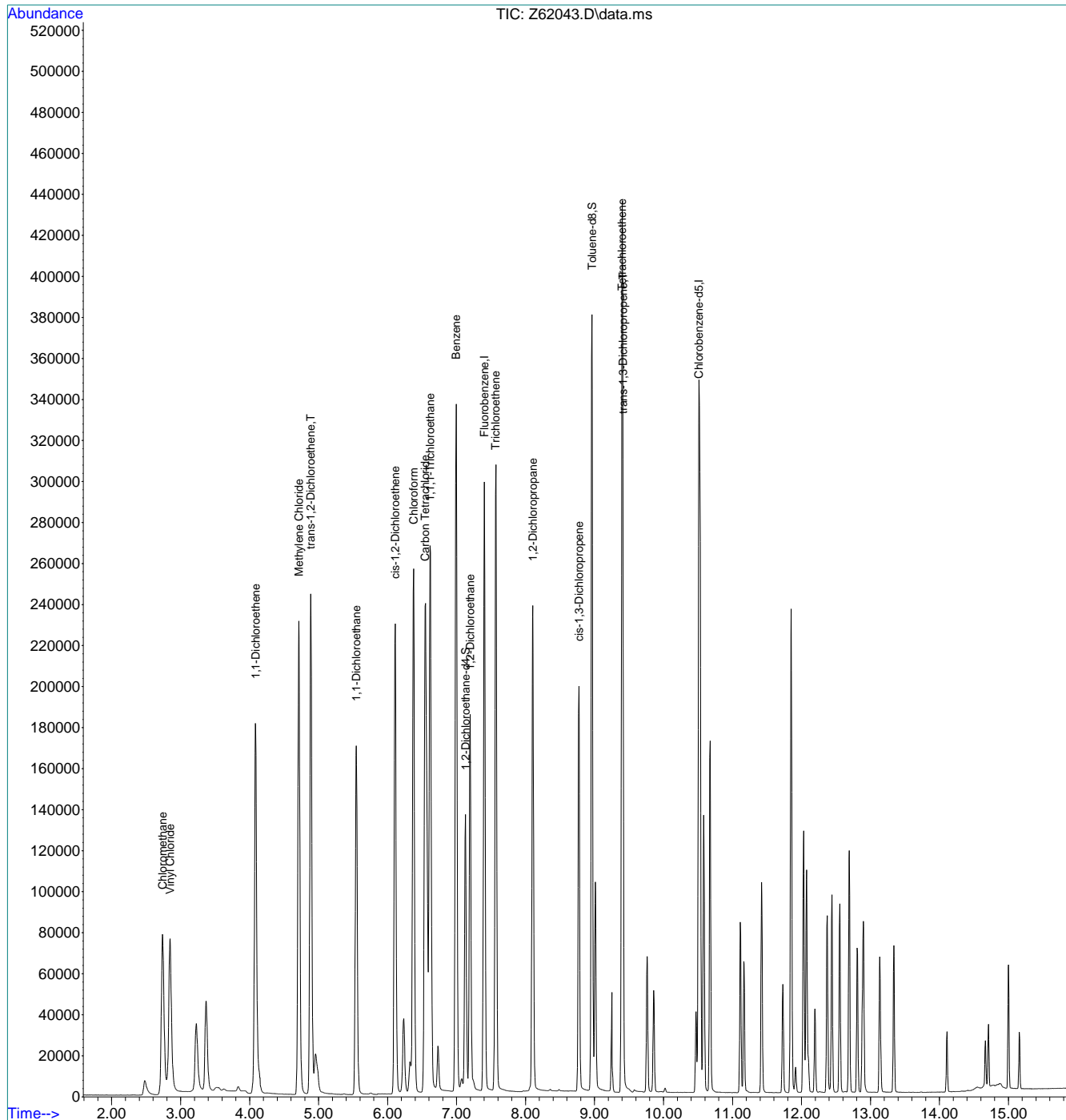
Internal Standards							
1) Fluorobenzene	7.401	96	3393850	5.00	ppb	0.00	
18) Chlorobenzene-d5	10.511	117	2594246	5.00	ppb	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.130	65	1113929	4.89	ppb	0.00	
Spiked Amount	5.000	Range	79 - 125	Recovery	=	97.80%	
19) Toluene-d8	8.961	98	3233788	5.52	ppb	0.00	
Spiked Amount	5.000	Range	70 - 130	Recovery	=	110.40%	
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.846	62	1454957	4.39	ppb		97
3) Chloromethane	2.737	50	1592779	4.73	ppb		100
4) 1,1-Dichloroethene	4.087	96	1060060	6.90	ppb		98
5) Methylene Chloride	4.713	84	1526559	6.05	ppb		93
6) trans-1,2-Dichloroethene	4.886	96	1301321	5.50	ppb		99
7) 1,1-Dichloroethane	5.546	63	2300012	5.12	ppb	#	98
8) cis-1,2-Dichloroethene	6.110	96	1384187	5.08	ppb		94
9) Chloroform	6.377	83	2556080	4.90	ppb		99
10) Carbon Tetrachloride	6.543	117	1811545	6.00	ppb		100
11) 1,1,1-Trichloroethane	6.614	97	2322600	5.66	ppb		100
12) Benzene	6.994	78	4756353	5.28	ppb		100
14) 1,2-Dichloroethane	7.198	62	1836620	5.31	ppb		100
15) Trichloroethene	7.564	95	1488604	5.75	ppb		97
16) 1,2-Dichloropropane	8.105	63	1251224	4.90	ppb		99
17) cis-1,3-Dichloropropene	8.773	75	1512864	4.87	ppb		100
20) trans-1,3-Dichloropropene	9.411	75	1229739	4.93	ppb		100
21) Tetrachloroethene	9.399	166	1518603	5.80	ppb		99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\090320\
 Data File : Z62043.D
 Acq On : 3 Sep 2020 11:18 am
 Operator : shanicao
 Sample : IC2408-4
 Misc : MS46458,VZ2408,,,,,
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 03 11:36:06 2020
 Quant Method : C:\msdchem\1\methods\SIMCL090320.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Mon Jun 08 12:29:45 2020
 Response via : Initial Calibration



7.6.14
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\090320\
 Data File : Z62044.D
 Acq On : 3 Sep 2020 11:40 am
 Operator : shanicao
 Sample : ICC2408-5
 Misc : MS46458,VZ2408,,,,,
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 03 12:07:56 2020
 Quant Method : C:\msdchem\1\methods\SIMCL090320.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Mon Jun 08 12:29:45 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	

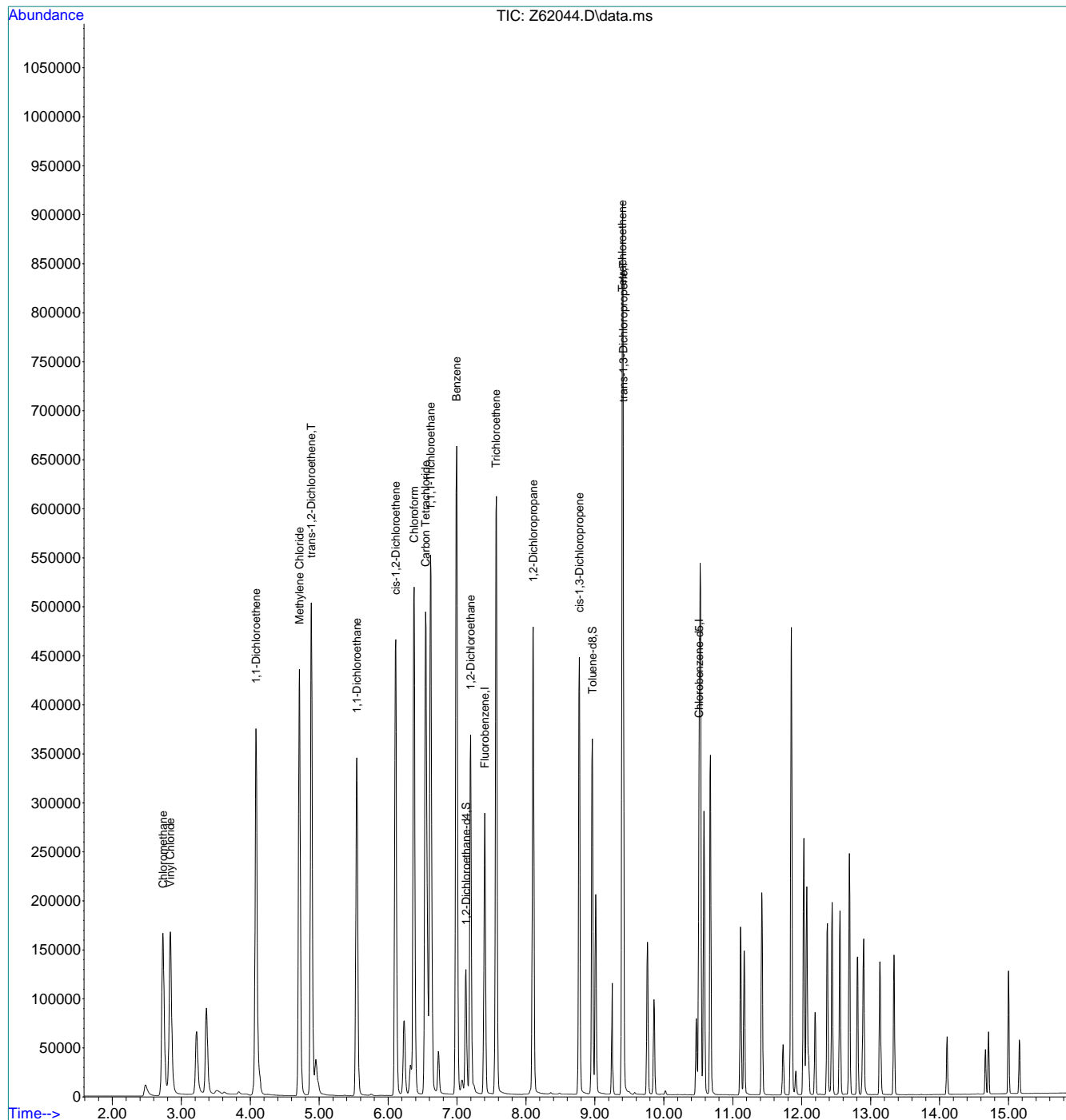
Internal Standards							
1) Fluorobenzene	7.401	96	3260477	5.00	ppb	0.00	
18) Chlorobenzene-d5	10.511	117	2497954	5.00	ppb	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.130	65	1053734	4.82	ppb	0.00	
Spiked Amount	5.000	Range	79 - 125	Recovery	=	96.40%	
19) Toluene-d8	8.961	98	3086779	5.47	ppb	0.00	
Spiked Amount	5.000	Range	70 - 130	Recovery	=	109.40%	
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.839	62	3003337	9.44	ppb		98
3) Chloromethane	2.733	50	3004853	9.45	ppb		99
4) 1,1-Dichloroethene	4.083	96	2110416	14.31	ppb		97
5) Methylene Chloride	4.713	84	2800264	11.44	ppb		93
6) trans-1,2-Dichloroethene	4.886	96	2623746	11.55	ppb		100
7) 1,1-Dichloroethane	5.546	63	4627710	10.55	ppb	#	98
8) cis-1,2-Dichloroethene	6.110	96	2786347	10.65	ppb		94
9) Chloroform	6.377	83	5159486	10.30	ppb		99
10) Carbon Tetrachloride	6.543	117	3767946	12.99	ppb		100
11) 1,1,1-Trichloroethane	6.614	97	4718727	11.98	ppb		100
12) Benzene	6.994	78	9454398	10.65	ppb		100
14) 1,2-Dichloroethane	7.198	62	3615367	10.71	ppb		99
15) Trichloroethene	7.564	95	2955722	11.89	ppb		98
16) 1,2-Dichloropropane	8.105	63	2485857	10.14	ppb		99
17) cis-1,3-Dichloropropene	8.773	75	3347102	11.22	ppb		100
20) trans-1,3-Dichloropropene	9.411	75	2827150	11.76	ppb		100
21) Tetrachloroethene	9.399	166	3036745	12.05	ppb		99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\090320\
 Data File : Z62044.D
 Acq On : 3 Sep 2020 11:40 am
 Operator : shanicao
 Sample : ICC2408-5
 Misc : MS46458,VZ2408,,,,,
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 03 12:07:56 2020
 Quant Method : C:\msdchem\1\methods\SIMCL090320.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Mon Jun 08 12:29:45 2020
 Response via : Initial Calibration



7.6.15
7



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\090320\
 Data File : Z62045.D
 Acq On : 3 Sep 2020 11:59 am
 Operator : shanicao
 Sample : IC2408-6
 Misc : MS46458,VZ2408,,,,,
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 03 12:16:55 2020
 Quant Method : C:\msdchem\1\methods\SIMCL090320.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Mon Jun 08 12:29:45 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	

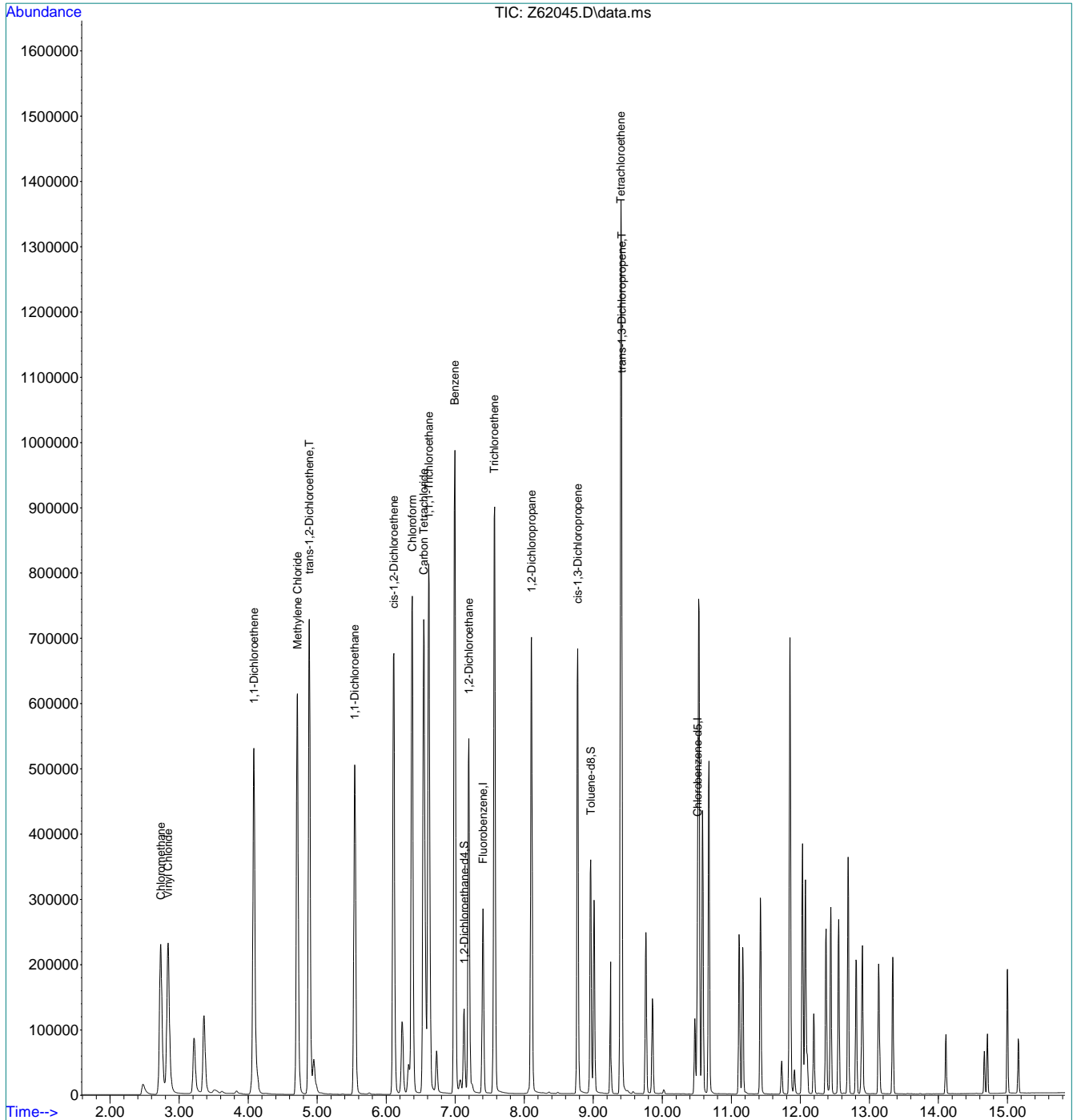
Internal Standards							
1) Fluorobenzene	7.401	96	3196001	5.00	ppb	0.00	
18) Chlorobenzene-d5	10.511	117	2443895	5.00	ppb	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.130	65	1051841	4.90	ppb	0.00	
Spiked Amount	5.000	Range	79 - 125	Recovery	=	98.00%	
19) Toluene-d8	8.961	98	3027479	5.48	ppb	0.00	
Spiked Amount	5.000	Range	70 - 130	Recovery	=	109.60%	
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.839	62	4378556	14.04	ppb		98
3) Chloromethane	2.733	50	4551242	14.89	ppb		99
4) 1,1-Dichloroethene	4.083	96	3066264	21.21	ppb		99
5) Methylene Chloride	4.713	84	4012715	16.58	ppb		91
6) trans-1,2-Dichloroethene	4.886	96	3838318	17.24	ppb		99
7) 1,1-Dichloroethane	5.543	63	6756600	15.47	ppb	#	98
8) cis-1,2-Dichloroethene	6.110	96	4062378	15.85	ppb		94
9) Chloroform	6.377	83	7531102	15.34	ppb		98
10) Carbon Tetrachloride	6.543	117	5562204	19.57	ppb		100
11) 1,1,1-Trichloroethane	6.614	97	6908579	17.89	ppb		100
12) Benzene	6.994	78	13884250	15.61	ppb		100
14) 1,2-Dichloroethane	7.198	62	5390318	16.04	ppb		99
15) Trichloroethene	7.564	95	4368807	17.93	ppb		98
16) 1,2-Dichloropropane	8.105	63	3668654	15.27	ppb		99
17) cis-1,3-Dichloropropene	8.773	75	5087870	17.40	ppb		100
20) trans-1,3-Dichloropropene	9.412	75	4379634	18.63	ppb		100
21) Tetrachloroethene	9.399	166	4500176	18.25	ppb		99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\090320\
 Data File : Z62045.D
 Acq On : 3 Sep 2020 11:59 am
 Operator : shanicao
 Sample : IC2408-6
 Misc : MS46458,VZ2408,,,,,
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 03 12:16:55 2020
 Quant Method : C:\msdchem\1\methods\SIMCL090320.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Mon Jun 08 12:29:45 2020
 Response via : Initial Calibration



7.6.16
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\090320\
 Data File : Z62046.D
 Acq On : 3 Sep 2020 12:18 pm
 Operator : shanicao
 Sample : IC2408-7
 Misc : MS46458,VZ2408,,,,,
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 03 12:35:55 2020
 Quant Method : C:\msdchem\1\methods\SIMCL090320.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Mon Jun 08 12:29:45 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	

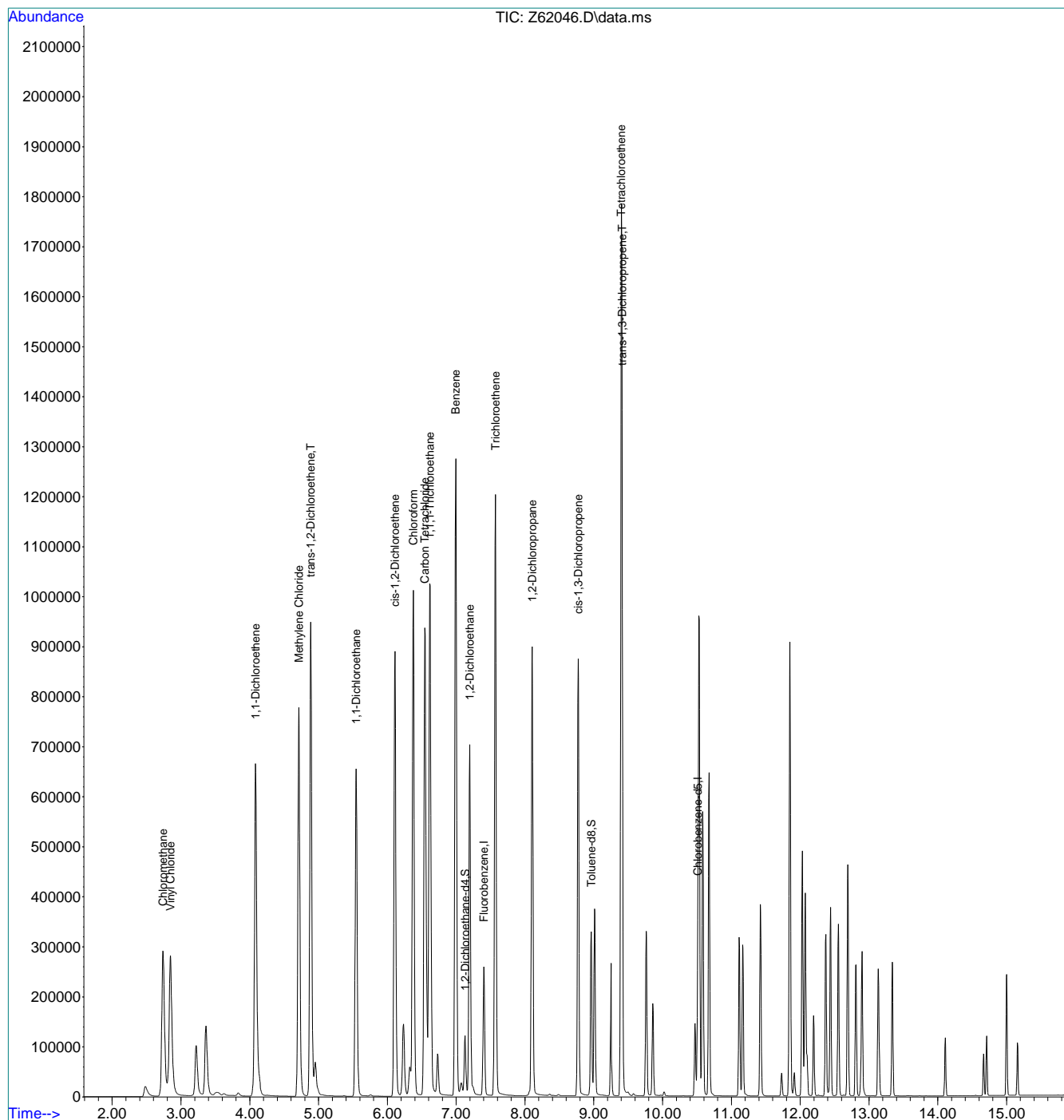
Internal Standards							
1) Fluorobenzene	7.401	96	2938110	5.00	ppb	0.00	
18) Chlorobenzene-d5	10.511	117	2256895m	5.00	ppb	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.130	65	963232	4.88	ppb	0.00	
Spiked Amount	5.000	Range 79 - 125	Recovery	=	97.60%		
19) Toluene-d8	8.961	98	2784483	5.46	ppb	0.00	
Spiked Amount	5.000	Range 70 - 130	Recovery	=	109.20%		
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.846	62	5627397	19.63	ppb		98
3) Chloromethane	2.737	50	5928894	21.65	ppb		100
4) 1,1-Dichloroethene	4.083	96	4008221	30.16	ppb		97
5) Methylene Chloride	4.713	84	5136689	22.86	ppb		93
6) trans-1,2-Dichloroethene	4.886	96	5027216	24.57	ppb		100
7) 1,1-Dichloroethane	5.546	63	8782985	21.49	ppb	#	98
8) cis-1,2-Dichloroethene	6.110	96	5293616	22.46	ppb		94
9) Chloroform	6.377	83	9822563	21.76	ppb		98
10) Carbon Tetrachloride	6.543	117	7287855	27.89	ppb		100
11) 1,1,1-Trichloroethane	6.614	97	8989931	25.32	ppb		99
12) Benzene	6.994	78	17863042	21.32	ppb		99
14) 1,2-Dichloroethane	7.198	62	6887900	21.91	ppb		99
15) Trichloroethene	7.571	95	5698644	25.45	ppb		91
16) 1,2-Dichloropropane	8.105	63	4715015	21.35	ppb		99
17) cis-1,3-Dichloropropene	8.773	75	6610083	24.59	ppb		100
20) trans-1,3-Dichloropropene	9.412	75	5737207m	26.42	ppb		
21) Tetrachloroethene	9.399	166	5790603	25.42	ppb		99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\090320\
 Data File : Z62046.D
 Acq On : 3 Sep 2020 12:18 pm
 Operator : shanicao
 Sample : IC2408-7
 Misc : MS46458,VZ2408,,,,,
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 03 12:35:55 2020
 Quant Method : C:\msdchem\1\methods\SIMCL090320.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Mon Jun 08 12:29:45 2020
 Response via : Initial Calibration



7.6.17
7



Manual Integration Approval Summary

Sample Number: VZ2408-IC2408 **Method:** SW846 8260B BY SIM
Lab FileID: Z62046.D **Analyst approved:** 09/03/20 13:54 Shanica O'Connor
Injection Time: 09/03/20 12:18 **Supervisor approved:** 09/03/20 15:13 Melissa Mangual

Parameter	CAS	Sig#	R.T. (min.)	Reason
trans-1,3-Dichloropropene	10061-02-6		9.41	Missed peak
Chlorobenzene-D5	3114-55-4		10.51	Missed peak

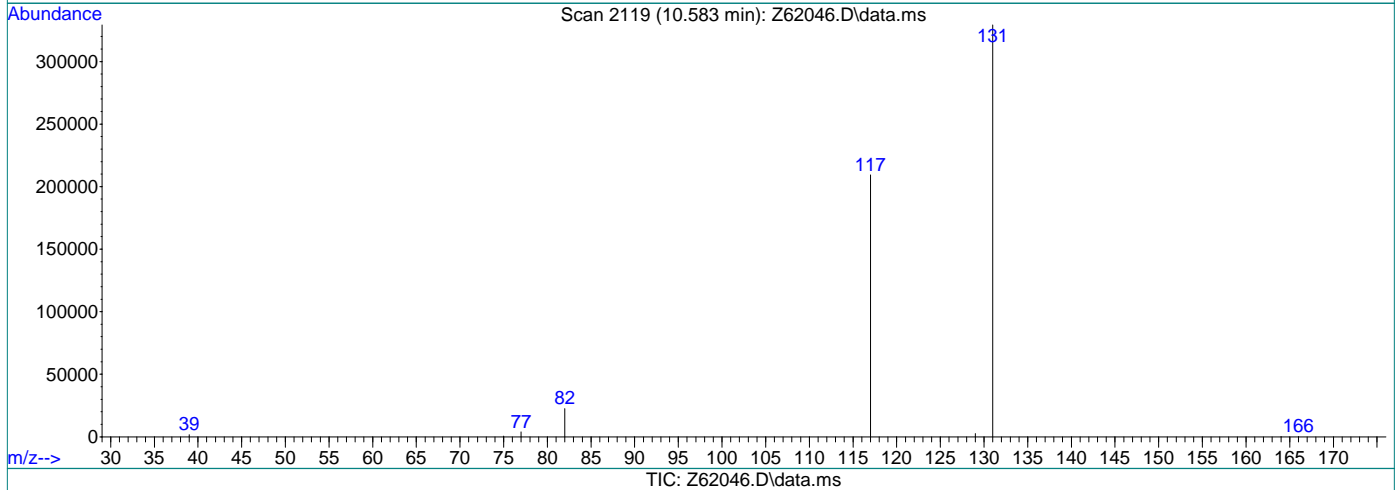
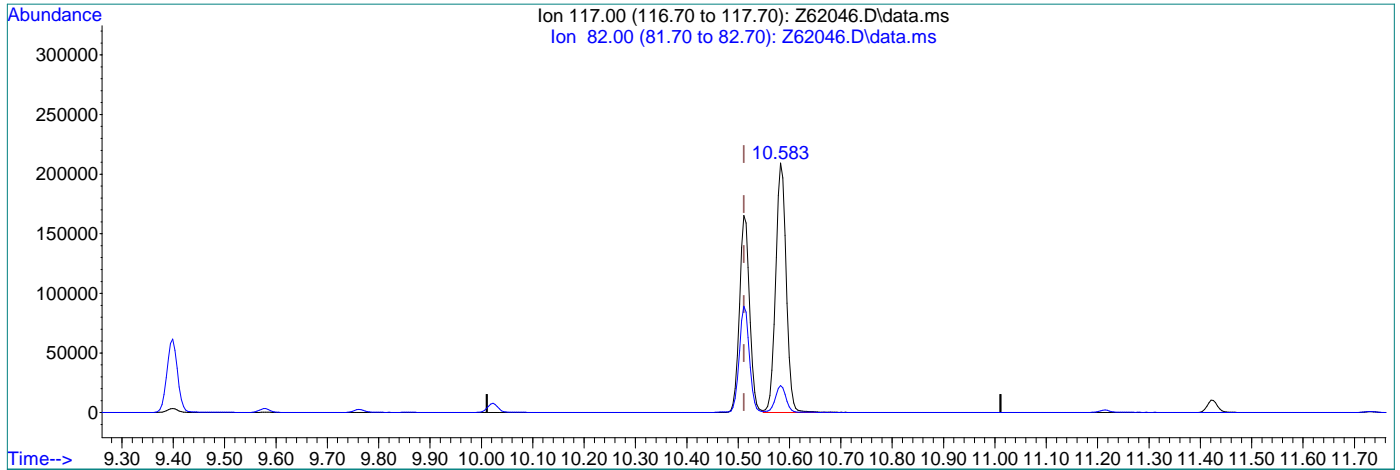
7.6.17.1

7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\090320\
 Data File : Z62046.D
 Acq On : 3 Sep 2020 12:18 pm
 Operator : shanicao
 Sample : IC2408-7
 Misc : MS46458,VZ2408,,,,,
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 03 12:34:55 2020
 Quant Method : C:\msdchem\1\methods\SIMCL090320.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Mon Jun 08 12:29:45 2020
 Response via : Initial Calibration



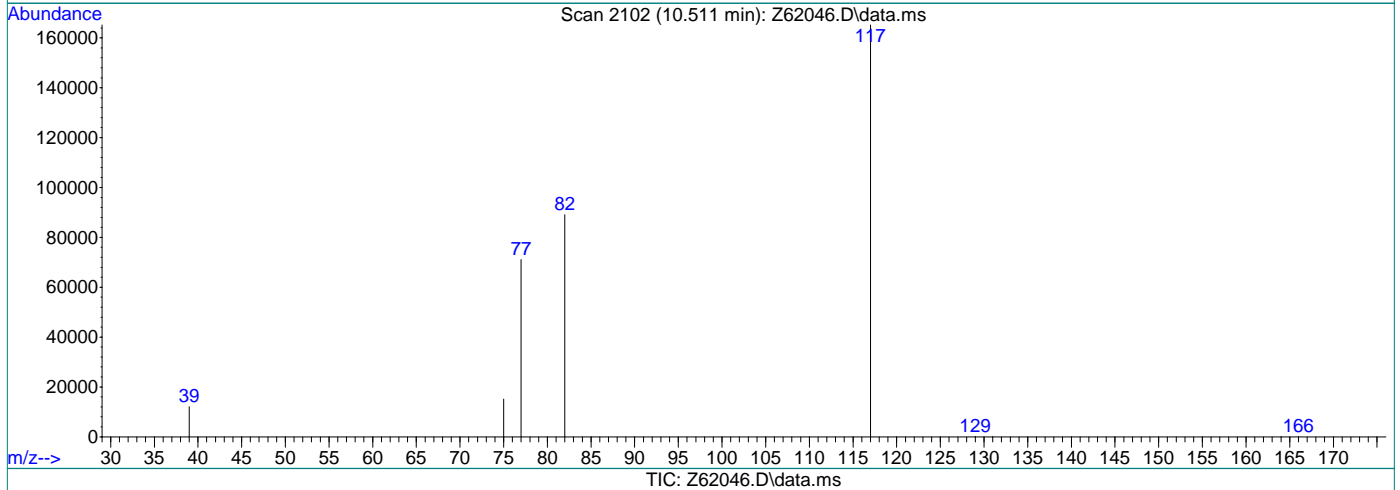
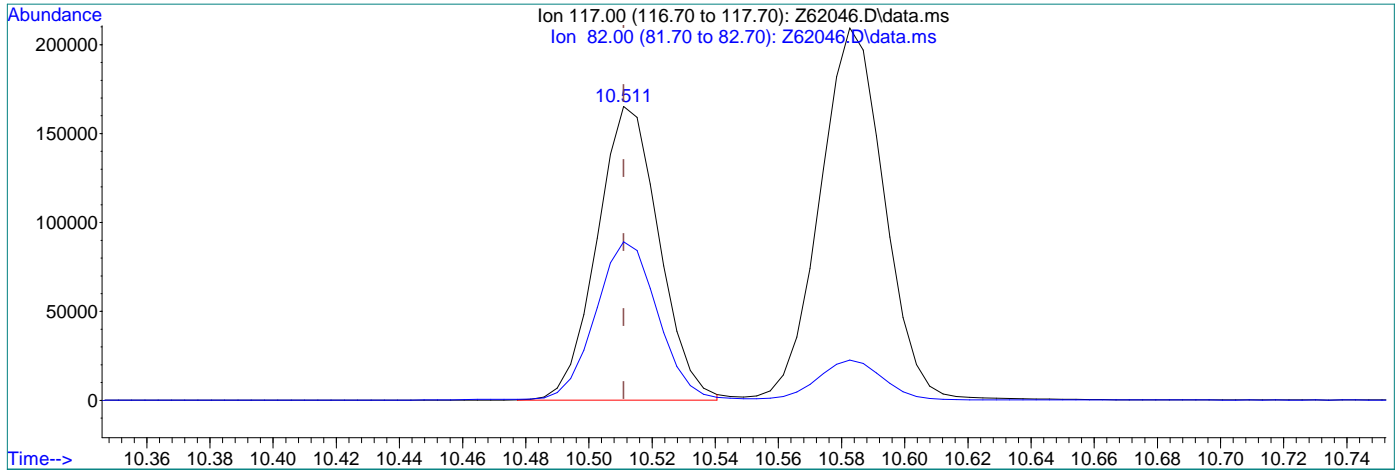
(18) Chlorobenzene-d5 (l)
 10.583min (+0.072) 5.00ppb
 response 2971404

Ion	Exp%	Act%
117.00	100	100
82.00	52.30	10.84#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\090320\
 Data File : Z62046.D
 Acq On : 3 Sep 2020 12:18 pm
 Operator : shanicao
 Sample : IC2408-7
 Misc : MS46458,VZ2408,,,,,
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 03 12:34:55 2020
 Quant Method : C:\msdchem\1\methods\SIMCL090320.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Mon Jun 08 12:29:45 2020
 Response via : Initial Calibration



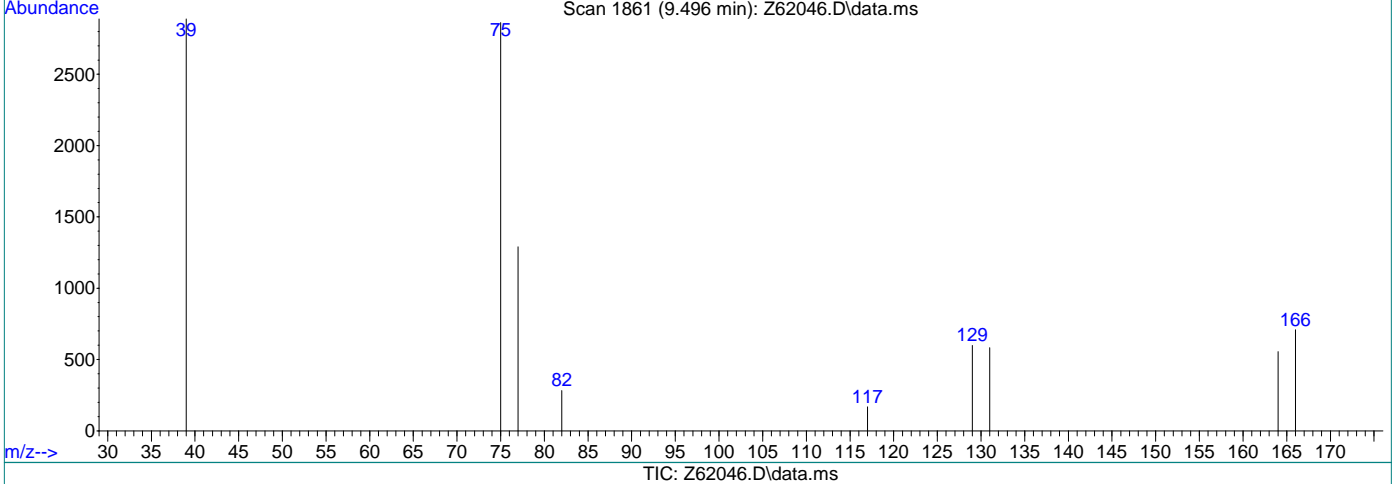
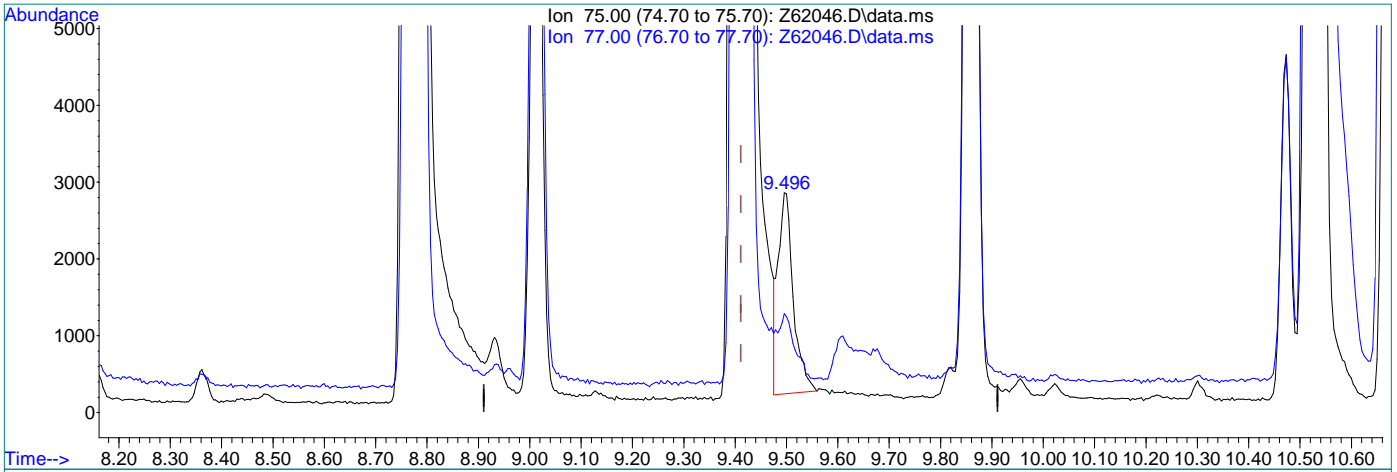
(18) Chlorobenzene-d5 (l)
 10.511min (+0.000) 5.00ppb m
 response 2256895

Ion	Exp%	Act%
117.00	100	100
82.00	52.30	14.27#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\090320\
 Data File : Z62046.D
 Acq On : 3 Sep 2020 12:18 pm
 Operator : shanicao
 Sample : IC2408-7
 Misc : MS46458,VZ2408,,,,,
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 03 12:34:55 2020
 Quant Method : C:\msdchem\1\methods\SIMCL090320.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Mon Jun 08 12:29:45 2020
 Response via : Initial Calibration



(20) trans-1,3-Dichloropropene (T)

9.496min (+0.085) 0.25ppb

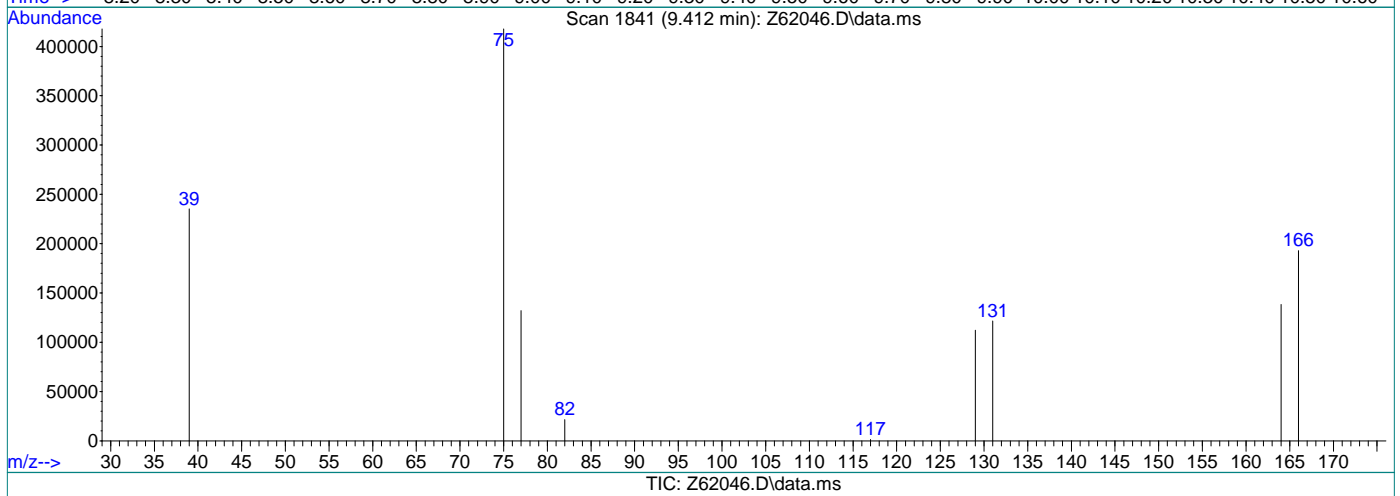
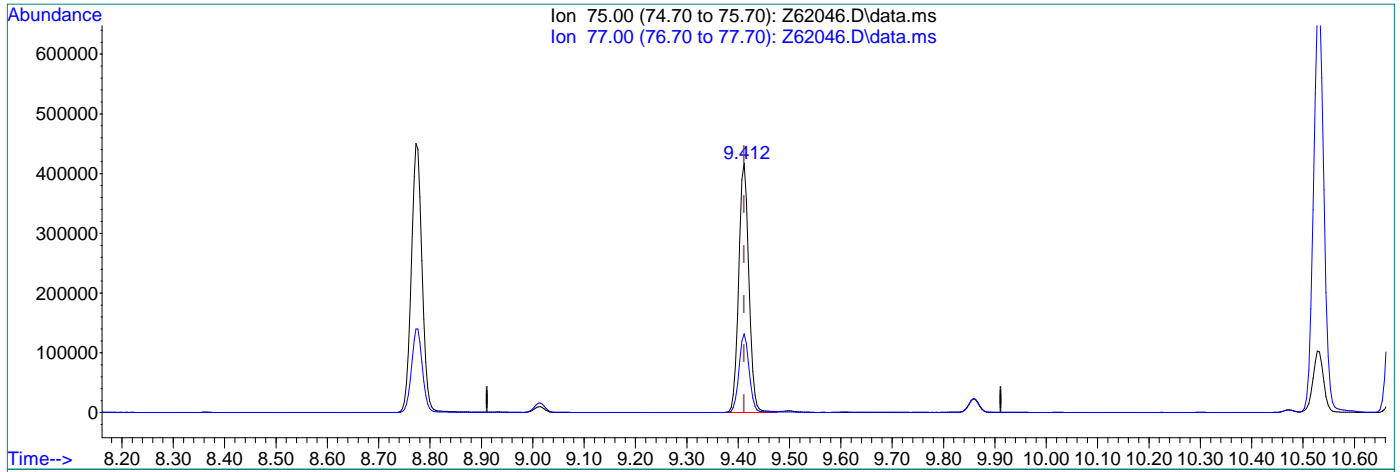
response 54281

Ion	Exp%	Act%
75.00	100	100
77.00	31.30	32.73
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\090320\
 Data File : Z62046.D
 Acq On : 3 Sep 2020 12:18 pm
 Operator : shanicao
 Sample : IC2408-7
 Misc : MS46458,VZ2408,,,,,
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 03 12:34:55 2020
 Quant Method : C:\msdchem\1\methods\SIMCL090320.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Mon Jun 08 12:29:45 2020
 Response via : Initial Calibration



(20) trans-1,3-Dichloropropene (T)

9.412min (+0.001) 26.42ppb m

response 5737207

Ion	Exp%	Act%
75.00	100	100
77.00	31.30	31.59
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-08-2020\VZ2408\
 Data File : Z62048.d
 Acq On : 3 Sep 2020 12:57 pm
 Operator : shanicao
 Sample : cc2408-5
 Misc : MS46458,VZ2408,,,,,
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 08 01:01:22 2020
 Quant Method : C:\msdchem\1\methods\SIMCL090320.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Fri Sep 04 11:36:05 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	

Internal Standards							
1) Fluorobenzene	7.401	96	2703421	5.00	ppb	0.00	
18) Chlorobenzene-d5	10.511	117	2067570	5.00	ppb	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.130	65	904830	5.17	ppb	0.00	
Spiked Amount	5.000	Range	79 - 125	Recovery	=	103.40%	
19) Toluene-d8	8.961	98	2565152	4.99	ppb	0.00	
Spiked Amount	5.000	Range	70 - 130	Recovery	=	99.80%	
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.846	62	2360196	9.69	ppb		100
3) Chloromethane	2.737	50	2554199	10.15	ppb		99
4) 1,1-Dichloroethene	4.083	96	1601477	9.39	ppb		99
5) Methylene Chloride	4.713	84	2264575	9.71	ppb		99
6) trans-1,2-Dichloroethene	4.886	96	2053096	9.67	ppb		100
7) 1,1-Dichloroethane	5.546	63	3757114	9.67	ppb	#	100
8) cis-1,2-Dichloroethene	6.110	96	2254117	9.69	ppb		99
9) Chloroform	6.377	83	4170126	9.65	ppb		99
10) Carbon Tetrachloride	6.543	117	2909066	9.58	ppb		100
11) 1,1,1-Trichloroethane	6.614	97	3691887	9.68	ppb		100
12) Benzene	6.994	78	7934663	9.94	ppb		99
14) 1,2-Dichloroethane	7.198	62	3100443	10.81	ppb		100
15) Trichloroethene	7.564	95	2526004	10.12	ppb		99
16) 1,2-Dichloropropane	8.105	63	2106428	10.41	ppb		99
17) cis-1,3-Dichloropropene	8.773	75	2664551	9.85	ppb		100
20) trans-1,3-Dichloropropene	9.412	75	2239218	8.90	ppb		100
21) Tetrachloroethene	9.399	166	2435376	9.82	ppb		100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

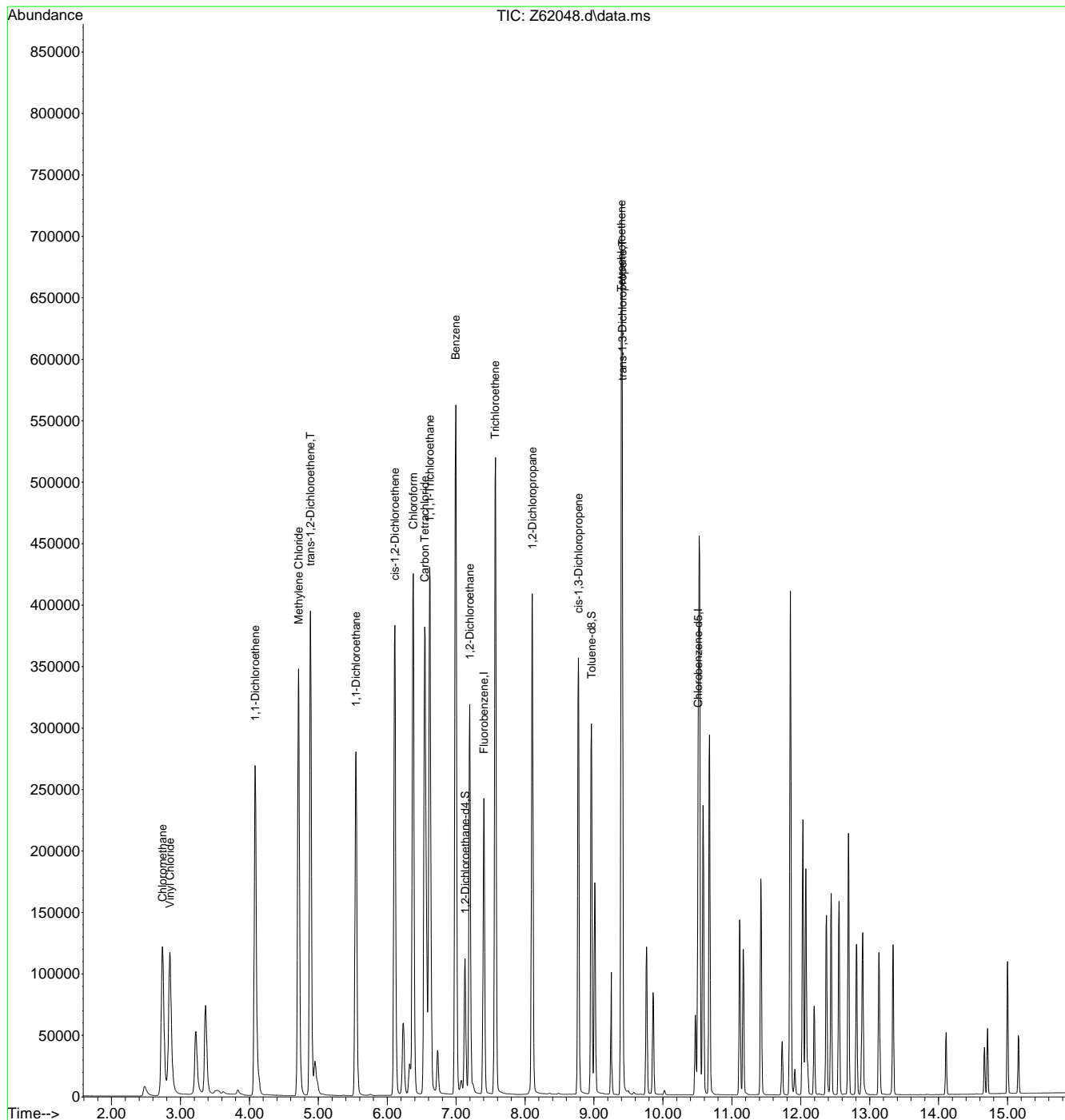
7.6.18
7



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-08-2020\VZ2408\
 Data File : Z62048.d
 Acq On : 3 Sep 2020 12:57 pm
 Operator : shanicao
 Sample : cc2408-5
 Misc : MS46458,VZ2408,,,,,
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 08 01:01:22 2020
 Quant Method : C:\msdchem\1\methods\SIMCL090320.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Fri Sep 04 11:36:05 2020
 Response via : Initial Calibration



7.6.18
7



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-08-2020\VZ2409\
 Data File : Z62074.d
 Acq On : 4 Sep 2020 8:57 am
 Operator : shanicao
 Sample : CC2408-5
 Misc : MS47134,VZ2409,,,,,
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 08 01:08:15 2020
 Quant Method : C:\msdchem\1\methods\SIMCL090320.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Fri Sep 04 11:36:05 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	

Internal Standards							
1) Fluorobenzene	7.394	96	2815075	5.00	ppb	0.00	
18) Chlorobenzene-d5	10.511	117	2127080	5.00	ppb	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.123	65	956752	5.25	ppb	0.00	
Spiked Amount	5.000	Range	79 - 125	Recovery	=	105.00%	
19) Toluene-d8	8.957	98	2636308	4.98	ppb	0.00	
Spiked Amount	5.000	Range	70 - 130	Recovery	=	99.60%	
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.835	62	2609737	10.26	ppb		100
3) Chloromethane	2.729	50	2790837	10.61	ppb		100
4) 1,1-Dichloroethene	4.079	96	1725523	9.70	ppb		99
5) Methylene Chloride	4.705	84	2424022	9.99	ppb		96
6) trans-1,2-Dichloroethene	4.879	96	2192175	9.90	ppb		96
7) 1,1-Dichloroethane	5.539	63	3974168	9.82	ppb	#	100
8) cis-1,2-Dichloroethene	6.104	96	2352379	9.71	ppb		98
9) Chloroform	6.371	83	4390850	9.76	ppb		100
10) Carbon Tetrachloride	6.537	117	2973735	9.42	ppb		100
11) 1,1,1-Trichloroethane	6.608	97	3828124	9.64	ppb		99
12) Benzene	6.987	78	8089584	9.73	ppb		98
14) 1,2-Dichloroethane	7.191	62	3319599	11.12	ppb		99
15) Trichloroethene	7.564	95	2488599	9.57	ppb		93
16) 1,2-Dichloropropane	8.101	63	2151044	10.21	ppb		98
17) cis-1,3-Dichloropropene	8.769	75	2862257	10.13	ppb		100
20) trans-1,3-Dichloropropene	9.407	75	2478162	9.57	ppb		100
21) Tetrachloroethene	9.394	166	2483509	9.74	ppb		98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

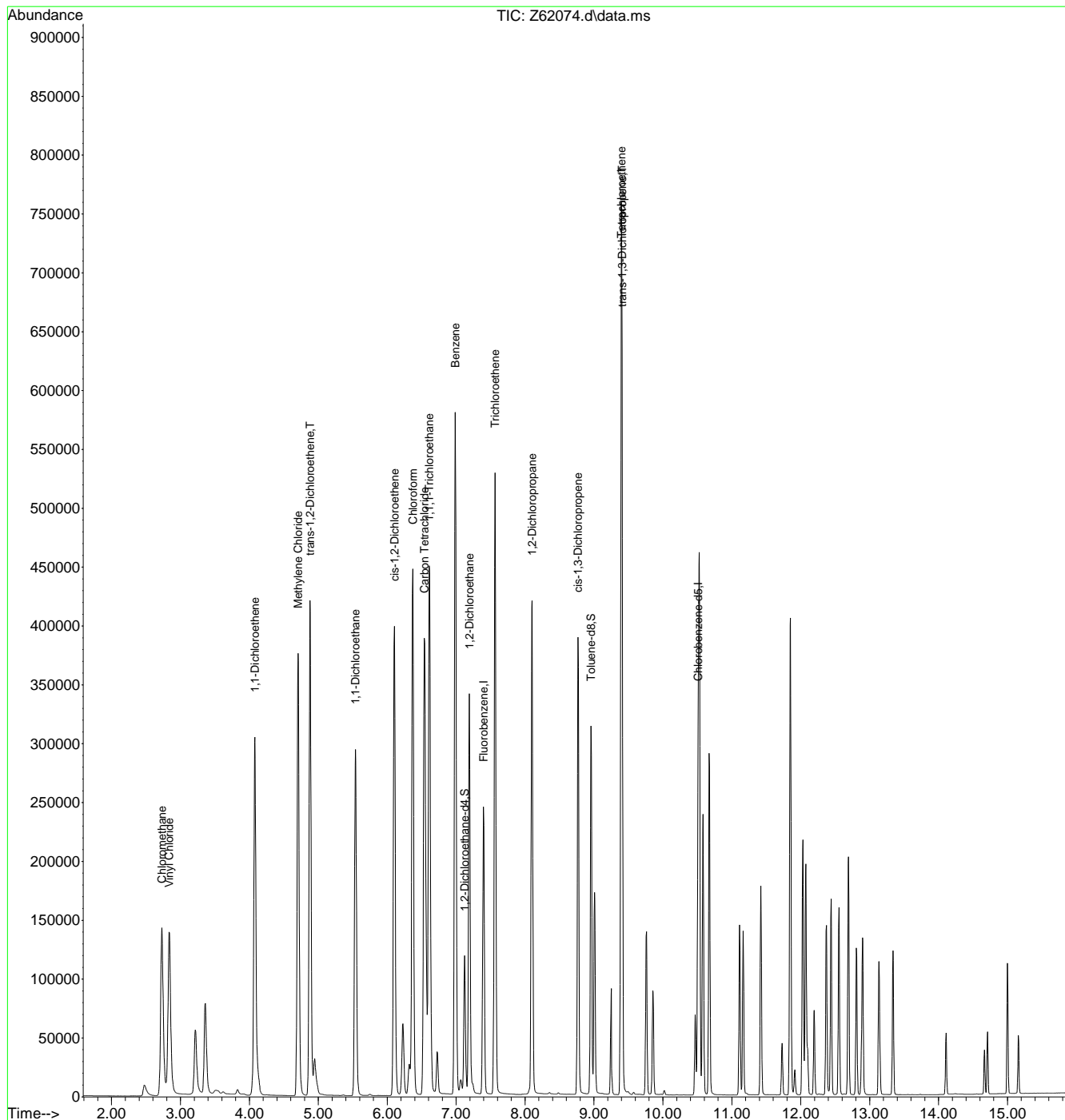
7.6.19
7



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-08-2020\VZ2409\
 Data File : Z62074.d
 Acq On : 4 Sep 2020 8:57 am
 Operator : shanicao
 Sample : CC2408-5
 Misc : MS47134,VZ2409,,,,,
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 08 01:08:15 2020
 Quant Method : C:\msdchem\1\methods\SIMCL090320.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Fri Sep 04 11:36:05 2020
 Response via : Initial Calibration



7.6.19
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\090420\
 Data File : Z62100.D
 Acq On : 4 Sep 2020 7:51 pm
 Operator : shanicao
 Sample : ECC2408-5
 Misc : MS47134,VZ2409,,,,,
 ALS Vial : 17 Sample Multiplier: 1

Quant Time: Sep 08 12:33:43 2020
 Quant Method : C:\msdchem\1\methods\SIMCL090320.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Fri Sep 04 11:36:05 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	

Internal Standards							
1) Fluorobenzene	7.401	96	2077882	5.00	ppb	0.00	
18) Chlorobenzene-d5	10.511	117	1582551	5.00	ppb	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.123	65	797692	5.92	ppb	0.00	
Spiked Amount	5.000	Range	79 - 125	Recovery	=	118.40%	
19) Toluene-d8	8.961	98	1903866	4.83	ppb	0.00	
Spiked Amount	5.000	Range	70 - 130	Recovery	=	96.60%	
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.843	62	2247681	11.86	ppb		100
3) Chloromethane	2.737	50	2251165	11.52	ppb		99
4) 1,1-Dichloroethene	4.083	96	1327110	10.08	ppb		94
5) Methylene Chloride	4.713	84	1806224	10.08	ppb		93
6) trans-1,2-Dichloroethene	4.886	96	1646147	10.06	ppb		96
7) 1,1-Dichloroethane	5.542	63	3119022	10.44	ppb	#	100
8) cis-1,2-Dichloroethene	6.104	96	1713387	9.58	ppb		90
9) Chloroform	6.371	83	3400356	10.24	ppb		100
10) Carbon Tetrachloride	6.543	117	2290003	9.79	ppb		100
11) 1,1,1-Trichloroethane	6.614	97	2972349	10.10	ppb		100
12) Benzene	6.994	78	6122154	9.98	ppb		99
14) 1,2-Dichloroethane	7.191	62	2629082	11.93	ppb		100
15) Trichloroethene	7.564	95	1891838	9.86	ppb		99
16) 1,2-Dichloropropane	8.101	63	1633582	10.50	ppb		94
17) cis-1,3-Dichloropropene	8.773	75	1931558	9.35	ppb		100
20) trans-1,3-Dichloropropene	9.411	75	1717548	8.92	ppb		100
21) Tetrachloroethene	9.399	166	1798016	9.49	ppb		100

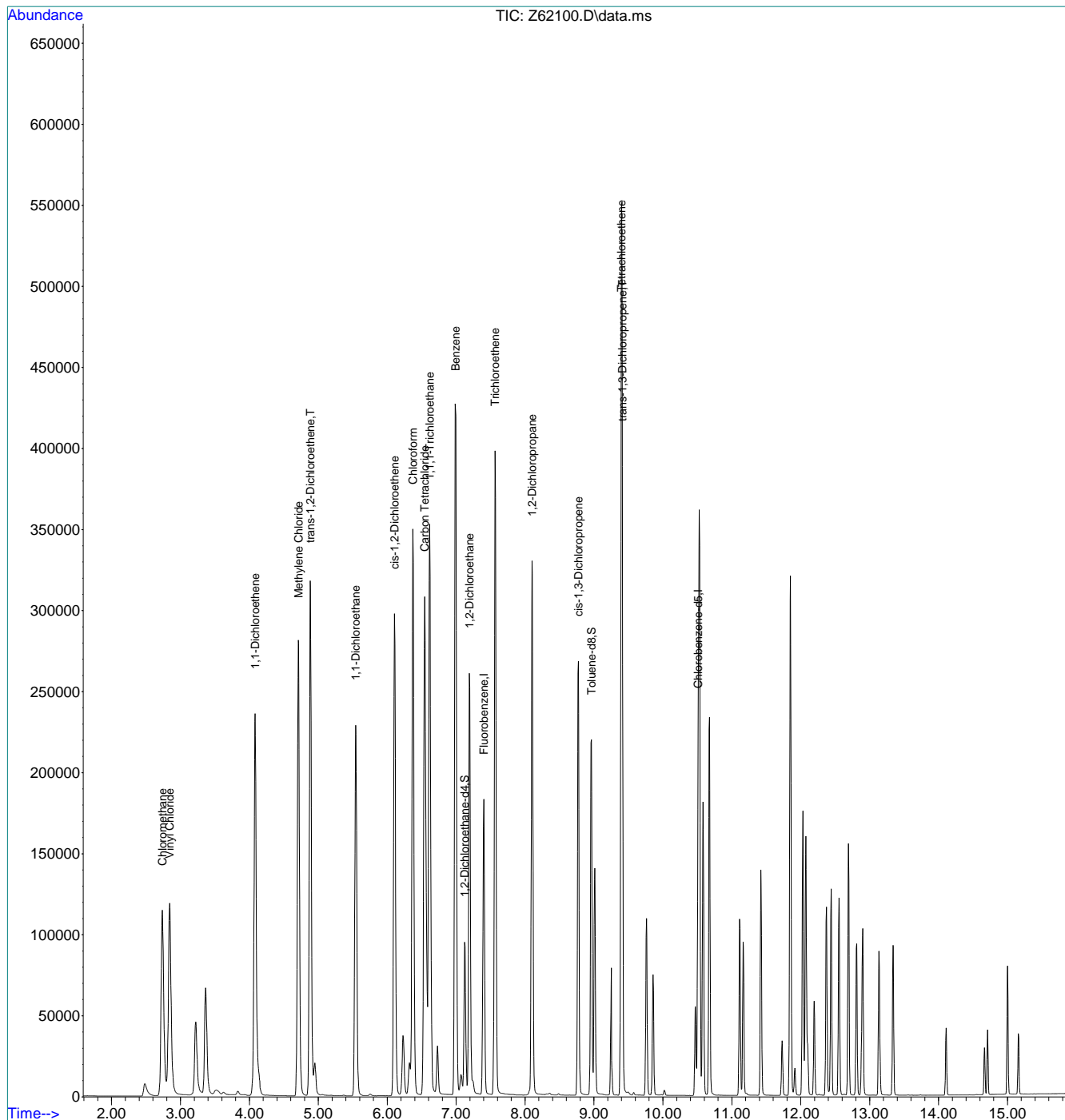
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.6.20
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\090420\
 Data File : Z62100.D
 Acq On : 4 Sep 2020 7:51 pm
 Operator : shanicao
 Sample : ECC2408-5
 Misc : MS47134,VZ2409,,,,,
 ALS Vial : 17 Sample Multiplier: 1

Quant Time: Sep 08 12:33:43 2020
 Quant Method : C:\msdchem\1\methods\SIMCL090320.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Fri Sep 04 11:36:05 2020
 Response via : Initial Calibration



7.6.20
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\090820\
 Data File : Z62141.D
 Acq On : 8 Sep 2020 12:14 pm
 Operator : SHANICAO
 Sample : IC2411-1
 Misc : MS47137,VZ2411,,,,,
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 08 13:13:00 2020
 Quant Method : C:\msdchem\1\methods\SIMCL090320.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Fri Sep 04 11:36:05 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	

Internal Standards							
1) Fluorobenzene	7.401	96	1924209	5.00	ppb	0.00	
18) Chlorobenzene-d5	10.511	117	1424870	5.00	ppb	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.123	65	718719	5.76	ppb	0.00	
Spiked Amount	5.000	Range	79 - 125	Recovery	=	115.20%	
19) Toluene-d8	8.958	98	1798096	5.07	ppb	0.00	
Spiked Amount	5.000	Range	70 - 130	Recovery	=	101.40%	
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.835	62	23724	0.14	ppb		99
3) Chloromethane	2.730	50	29039	0.18	ppb		94
4) 1,1-Dichloroethene	4.083	96	12262	0.11	ppb		91
5) Methylene Chloride	4.709	84	140979	0.85	ppb		91
6) trans-1,2-Dichloroethene	4.886	96	14607	0.10	ppb		95
7) 1,1-Dichloroethane	5.543	63	28733	0.10	ppb	#	99
8) cis-1,2-Dichloroethene	6.104	96	16719	0.10	ppb		89
9) Chloroform	6.371	83	32570	0.11	ppb		98
10) Carbon Tetrachloride	6.543	117	18805	0.10	ppb		98
11) 1,1,1-Trichloroethane	6.614	97	25685	0.10	ppb		87
12) Benzene	6.987	78	52979	0.09	ppb		91
14) 1,2-Dichloroethane	7.191	62	20455	0.10	ppb		98
15) Trichloroethene	7.564	95	17787	0.10	ppb		97
16) 1,2-Dichloropropane	8.101	63	13354	0.09	ppb		90
17) cis-1,3-Dichloropropene	8.773	75	12193	0.07	ppb		99
20) trans-1,3-Dichloropropene	9.412	75	8673	0.05	ppb		92
21) Tetrachloroethene	9.399	166	18252	0.11	ppb		99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

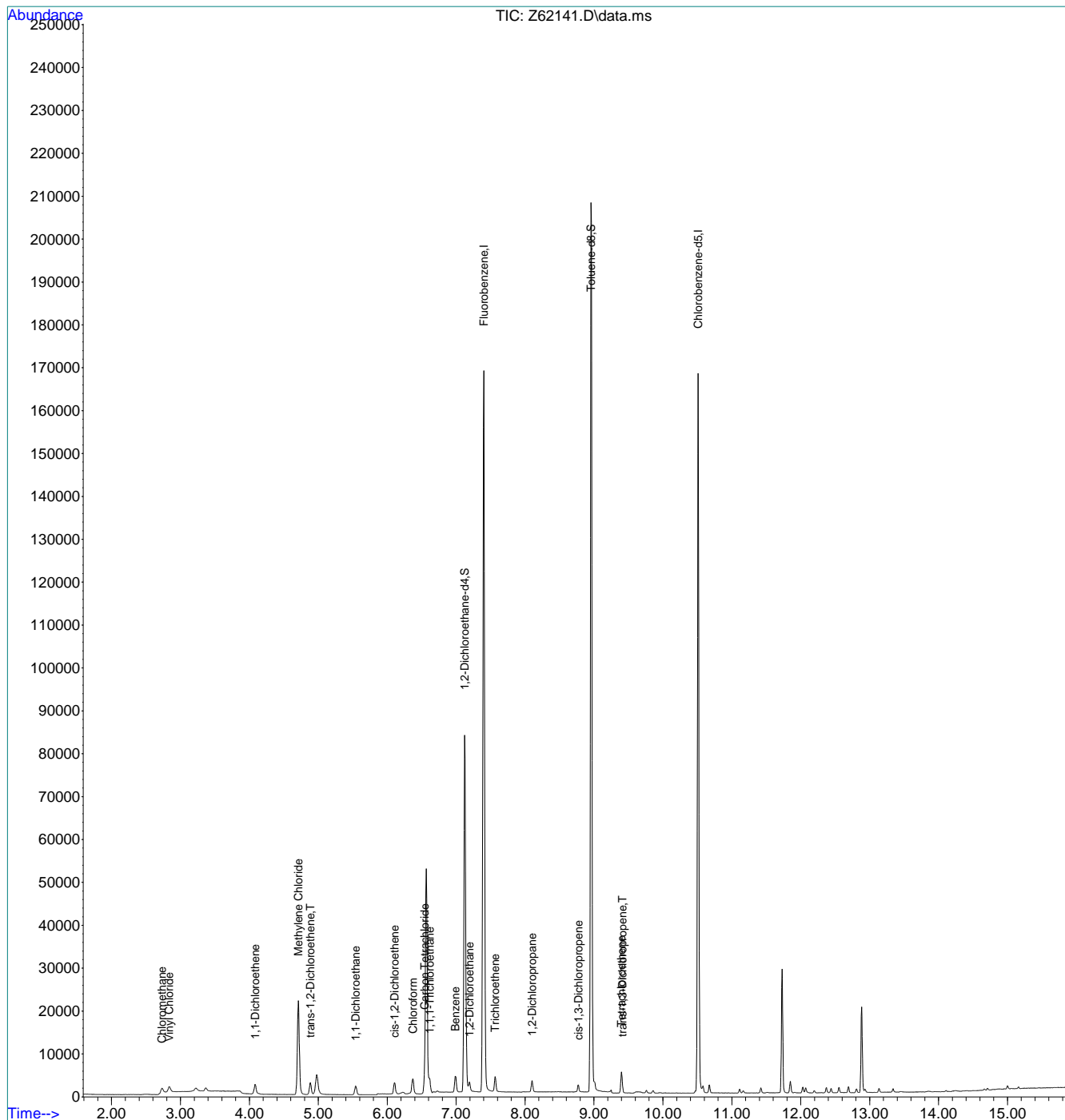
7.6.21
7



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\090820\
 Data File : Z62141.D
 Acq On : 8 Sep 2020 12:14 pm
 Operator : SHANICAO
 Sample : IC2411-1
 Misc : MS47137,VZ2411,,,,,
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 08 13:13:00 2020
 Quant Method : C:\msdchem\1\methods\SIMCL090320.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Fri Sep 04 11:36:05 2020
 Response via : Initial Calibration



7.6.21
7



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\090820\
 Data File : Z62142.D
 Acq On : 8 Sep 2020 12:33 pm
 Operator : SHANICAO
 Sample : IC2411-2
 Misc : MS47137,VZ2411,,,,,
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 08 13:13:02 2020
 Quant Method : C:\msdchem\1\methods\SIMCL090320.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Fri Sep 04 11:36:05 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	

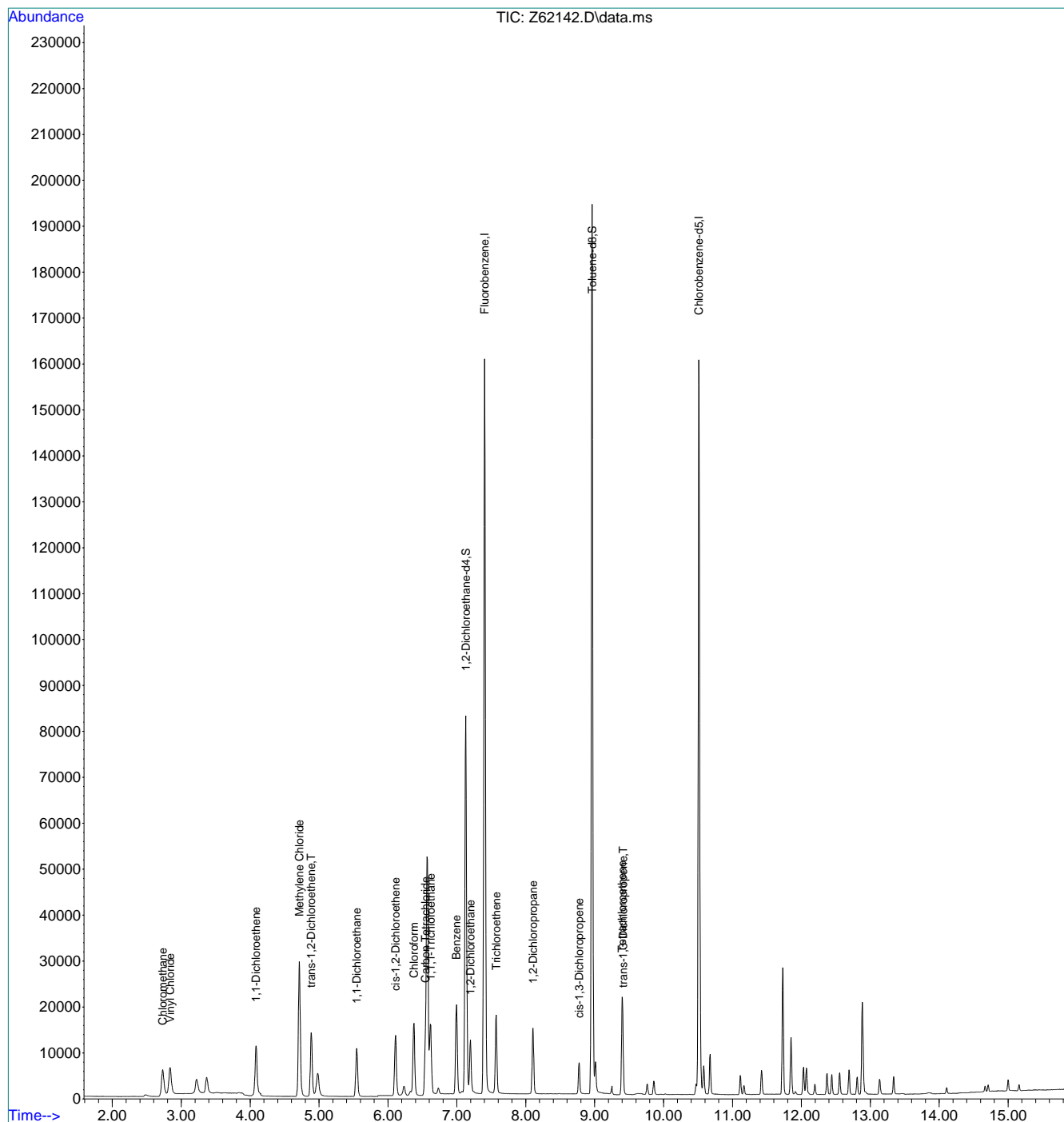
Internal Standards							
1) Fluorobenzene	7.401	96	1795816	5.00	ppb	0.00	
18) Chlorobenzene-d5	10.511	117	1358417	5.00	ppb	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.130	65	696489	5.99	ppb	0.00	
Spiked Amount	5.000	Range	79 - 125	Recovery	=	119.80%	
19) Toluene-d8	8.961	98	1678369	4.97	ppb	0.00	
Spiked Amount	5.000	Range	70 - 130	Recovery	=	99.40%	
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.839	62	107625	0.70	ppb		96
3) Chloromethane	2.729	50	107224	0.69	ppb		98
4) 1,1-Dichloroethene	4.083	96	60498	0.57	ppb		95
5) Methylene Chloride	4.713	84	182837	1.18	ppb		90
6) trans-1,2-Dichloroethene	4.886	96	71784	0.55	ppb		93
7) 1,1-Dichloroethane	5.546	63	140255	0.54	ppb	#	99
8) cis-1,2-Dichloroethene	6.110	96	75738	0.49	ppb		92
9) Chloroform	6.377	83	151530	0.53	ppb		100
10) Carbon Tetrachloride	6.543	117	87942	0.48	ppb		100
11) 1,1,1-Trichloroethane	6.620	97	126459	0.54	ppb		98
12) Benzene	6.994	78	266837	0.50	ppb		96
14) 1,2-Dichloroethane	7.198	62	112441	0.59	ppb		100
15) Trichloroethene	7.571	95	82604	0.50	ppb		93
16) 1,2-Dichloropropane	8.105	63	71072	0.53	ppb		93
17) cis-1,3-Dichloropropene	8.773	75	50977	0.32	ppb		97
20) trans-1,3-Dichloropropene	9.411	75	37048	0.22	ppb		98
21) Tetrachloroethene	9.399	166	82882	0.54	ppb		99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\090820\
 Data File : Z62142.D
 Acq On : 8 Sep 2020 12:33 pm
 Operator : SHANICAO
 Sample : IC2411-2
 Misc : MS47137,VZ2411,,,,,
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 08 13:13:02 2020
 Quant Method : C:\msdchem\1\methods\SIMCL090320.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Fri Sep 04 11:36:05 2020
 Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\090820\
 Data File : Z62143.D
 Acq On : 8 Sep 2020 12:58 pm
 Operator : SHANICAO
 Sample : IC2411-3
 Misc : MS47137,VZ2411,,,,,
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 08 14:17:31 2020
 Quant Method : C:\msdchem\1\methods\SIMCL090820.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Fri Sep 04 11:36:05 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	

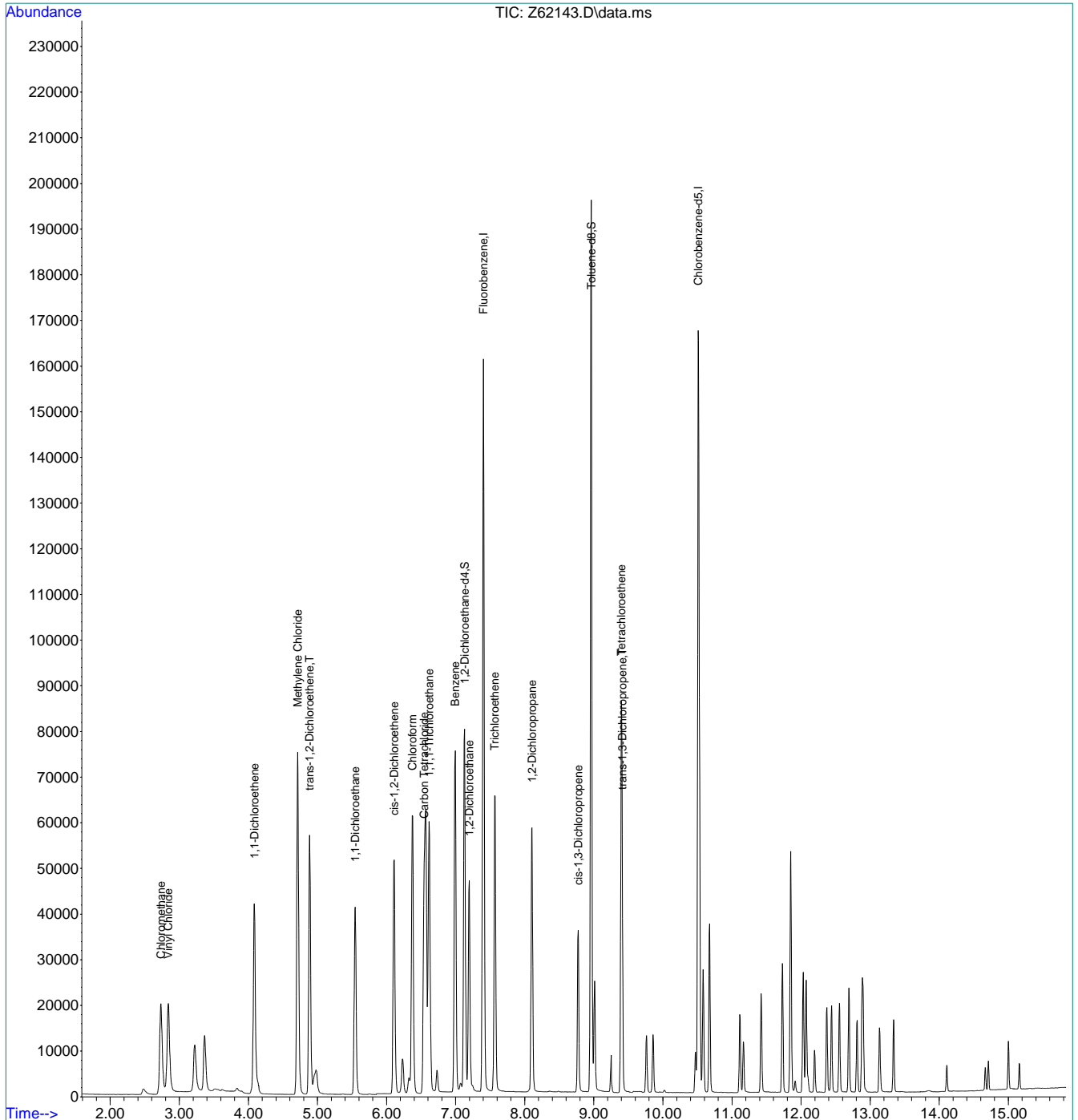
Internal Standards							
1) Fluorobenzene	7.401	96	1772851	5.00	ppb	0.00	
18) Chlorobenzene-d5	10.511	117	1361386	5.00	ppb	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.130	65	674876	5.88	ppb	0.00	
Spiked Amount	5.000	Range	79 - 125	Recovery	=	117.60%	
19) Toluene-d8	8.961	98	1650308	4.87	ppb	0.00	
Spiked Amount	5.000	Range	70 - 130	Recovery	=	97.40%	
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.839	62	358696	2.35	ppb		99
3) Chloromethane	2.733	50	366110	2.36	ppb		99
4) 1,1-Dichloroethene	4.087	96	221687	2.09	ppb		94
5) Methylene Chloride	4.713	84	453611	2.97	ppb		91
6) trans-1,2-Dichloroethene	4.886	96	279217	2.13	ppb		92
7) 1,1-Dichloroethane	5.546	63	546934	2.15	ppb	#	100
8) cis-1,2-Dichloroethene	6.110	96	298830	1.96	ppb		94
9) Chloroform	6.371	83	600493	2.12	ppb		99
10) Carbon Tetrachloride	6.543	117	347585	1.88	ppb		100
11) 1,1,1-Trichloroethane	6.614	97	486587	2.06	ppb		100
12) Benzene	6.994	78	1050967	2.01	ppb		97
14) 1,2-Dichloroethane	7.198	62	458452	2.44	ppb		99
15) Trichloroethene	7.564	95	319871	1.95	ppb		98
16) 1,2-Dichloropropane	8.105	63	288137	2.17	ppb		94
17) cis-1,3-Dichloropropene	8.773	75	260324	1.63	ppb		100
20) trans-1,3-Dichloropropene	9.411	75	204771	1.24	ppb		100
21) Tetrachloroethene	9.399	166	308663	1.99	ppb		99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\090820\
 Data File : Z62143.D
 Acq On : 8 Sep 2020 12:58 pm
 Operator : SHANICAO
 Sample : IC2411-3
 Misc : MS47137,VZ2411,,,,,
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 08 14:17:31 2020
 Quant Method : C:\msdchem\1\methods\SIMCL090820.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Fri Sep 04 11:36:05 2020
 Response via : Initial Calibration



7.6.23
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\090820\
 Data File : Z62144.D
 Acq On : 8 Sep 2020 1:18 pm
 Operator : SHANICAO
 Sample : IC2411-4
 Misc : MS47137,VZ2411,,,,,
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 08 14:17:33 2020
 Quant Method : C:\msdchem\1\methods\SIMCL090820.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Fri Sep 04 11:36:05 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	

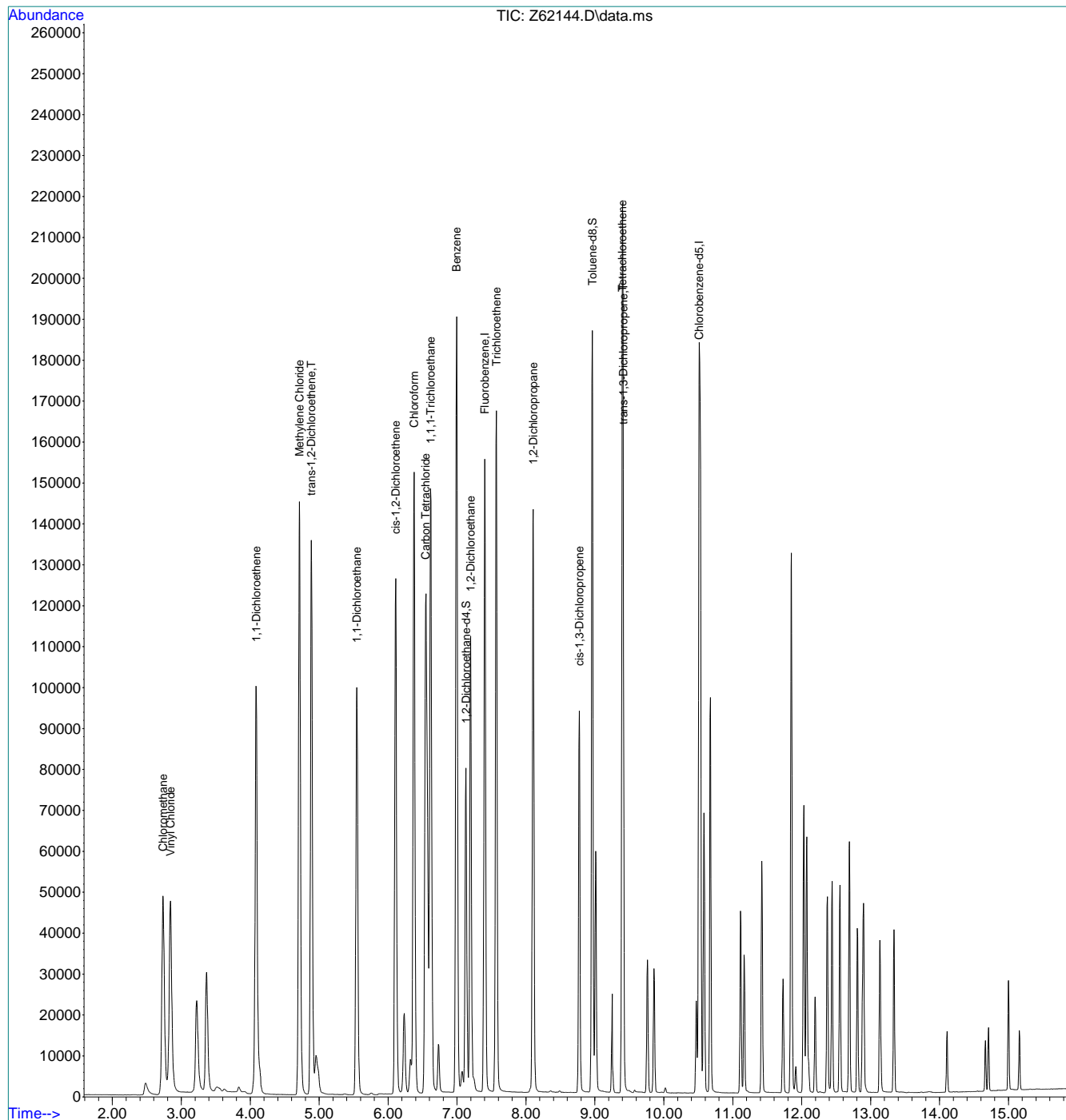
Internal Standards							
1) Fluorobenzene	7.401	96	1735343	5.00	ppb	0.00	
18) Chlorobenzene-d5	10.511	117	1347966	5.00	ppb	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.130	65	659484	5.87	ppb	0.00	
Spiked Amount	5.000	Range	79 - 125	Recovery	=	117.40%	
19) Toluene-d8	8.961	98	1606162	4.79	ppb	0.00	
Spiked Amount	5.000	Range	70 - 130	Recovery	=	95.80%	
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.843	62	865253	5.67	ppb		100
3) Chloromethane	2.733	50	898636	5.76	ppb		99
4) 1,1-Dichloroethene	4.087	96	548302	5.16	ppb		93
5) Methylene Chloride	4.713	84	906399	6.06	ppb		91
6) trans-1,2-Dichloroethene	4.886	96	685766	5.22	ppb		91
7) 1,1-Dichloroethane	5.546	63	1332797	5.34	ppb	#	100
8) cis-1,2-Dichloroethene	6.110	96	727659	4.87	ppb		93
9) Chloroform	6.377	83	1463364	5.28	ppb		100
10) Carbon Tetrachloride	6.543	117	892769	4.80	ppb		100
11) 1,1,1-Trichloroethane	6.614	97	1222247	5.17	ppb		99
12) Benzene	6.994	78	2599779	5.07	ppb		97
14) 1,2-Dichloroethane	7.198	62	1099394	5.97	ppb		99
15) Trichloroethene	7.571	95	794691	4.96	ppb		93
16) 1,2-Dichloropropane	8.105	63	700970	5.40	ppb		95
17) cis-1,3-Dichloropropene	8.773	75	670992	4.16	ppb		100
20) trans-1,3-Dichloropropene	9.412	75	555131	3.38	ppb		100
21) Tetrachloroethene	9.399	166	765906	4.89	ppb		98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\090820\
 Data File : Z62144.D
 Acq On : 8 Sep 2020 1:18 pm
 Operator : SHANICAO
 Sample : IC2411-4
 Misc : MS47137,VZ2411,,,,,
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 08 14:17:33 2020
 Quant Method : C:\msdchem\1\methods\SIMCL090820.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Fri Sep 04 11:36:05 2020
 Response via : Initial Calibration



7.6.24
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\090820\
 Data File : Z62145.D
 Acq On : 8 Sep 2020 1:41 pm
 Operator : SHANICAO
 Sample : ICC2411-5
 Misc : MS47137,VZ2411,,,,,
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 08 14:17:35 2020
 Quant Method : C:\msdchem\1\methods\SIMCL090820.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Fri Sep 04 11:36:05 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	

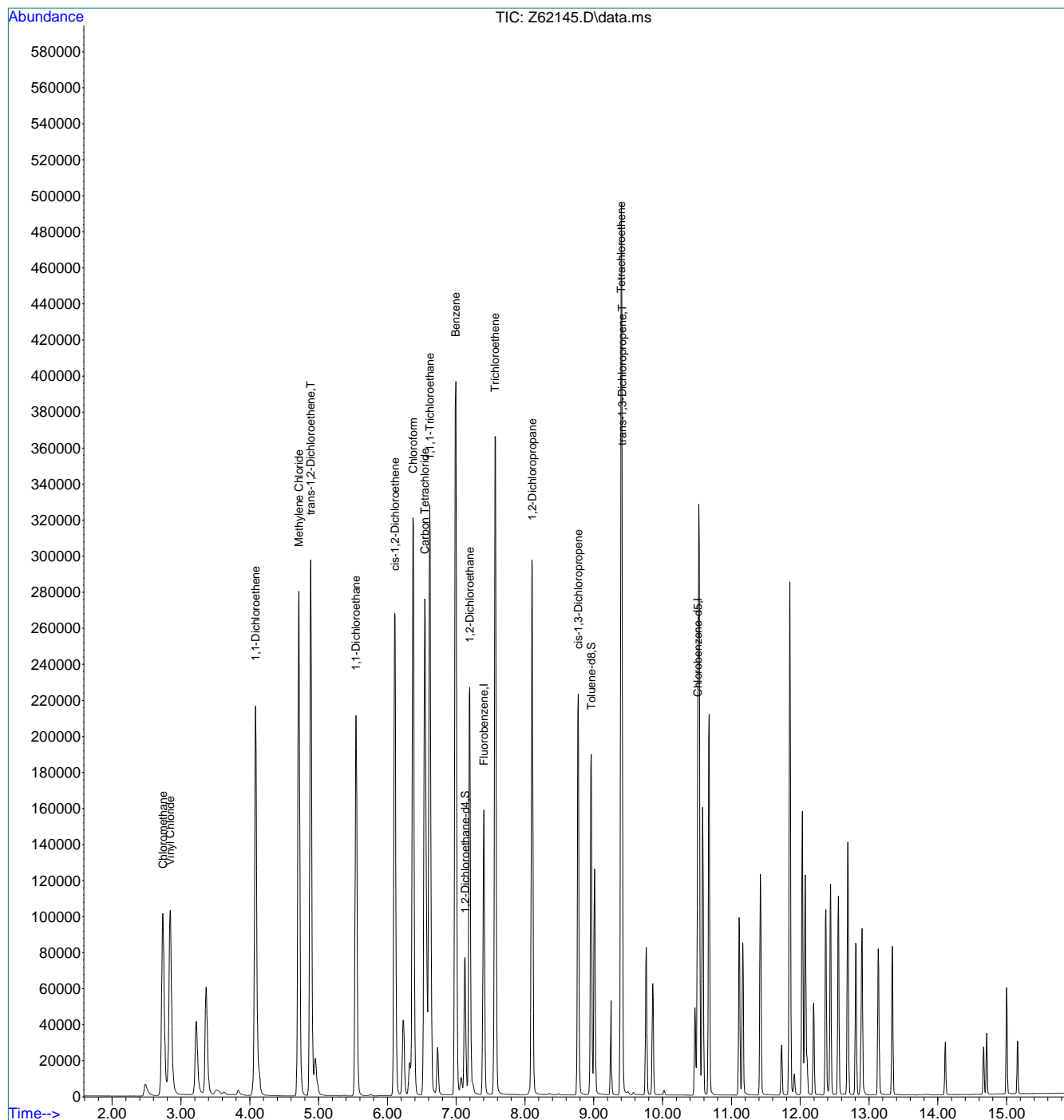
Internal Standards							
1) Fluorobenzene	7.401	96	1762982	5.00	ppb	0.00	
18) Chlorobenzene-d5	10.511	117	1382913	5.00	ppb	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.130	65	653252	5.72	ppb	0.00	
Spiked Amount	5.000	Range	79 - 125	Recovery	=	114.40%	
19) Toluene-d8	8.961	98	1634708	4.75	ppb	0.00	
Spiked Amount	5.000	Range	70 - 130	Recovery	=	95.00%	
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.843	62	1945937	12.09	ppb		100
3) Chloromethane	2.737	50	2004441	12.04	ppb		100
4) 1,1-Dichloroethene	4.083	96	1194340	10.65	ppb		93
5) Methylene Chloride	4.713	84	1769911	11.64	ppb		93
6) trans-1,2-Dichloroethene	4.886	96	1516586	10.85	ppb		95
7) 1,1-Dichloroethane	5.543	63	2876048	11.35	ppb	#	100
8) cis-1,2-Dichloroethene	6.110	96	1581371	10.42	ppb		95
9) Chloroform	6.371	83	3165293	11.23	ppb		100
10) Carbon Tetrachloride	6.543	117	2082076	10.43	ppb		100
11) 1,1,1-Trichloroethane	6.614	97	2735257	10.89	ppb		100
12) Benzene	6.994	78	5645487	10.84	ppb		98
14) 1,2-Dichloroethane	7.198	62	2275144	12.17	ppb		100
15) Trichloroethene	7.564	95	1788579	10.98	ppb		98
16) 1,2-Dichloropropane	8.105	63	1503226	11.39	ppb		96
17) cis-1,3-Dichloropropene	8.773	75	1618959	9.25	ppb		100
20) trans-1,3-Dichloropropene	9.411	75	1357917	8.07	ppb		100
21) Tetrachloroethene	9.399	166	1685600	10.14	ppb		99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\090820\
 Data File : Z62145.D
 Acq On : 8 Sep 2020 1:41 pm
 Operator : SHANICAO
 Sample : ICC2411-5
 Misc : MS47137,VZ2411,,,,,
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 08 14:17:35 2020
 Quant Method : C:\msdchem\1\methods\SIMCL090820.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Fri Sep 04 11:36:05 2020
 Response via : Initial Calibration



7.6.25
7



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\090820\
 Data File : Z62146.D
 Acq On : 8 Sep 2020 2:01 pm
 Operator : SHANICAO
 Sample : IC2411-6
 Misc : MS47137,VZ2411,,,,,
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 08 14:17:37 2020
 Quant Method : C:\msdchem\1\methods\SIMCL090820.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Fri Sep 04 11:36:05 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	

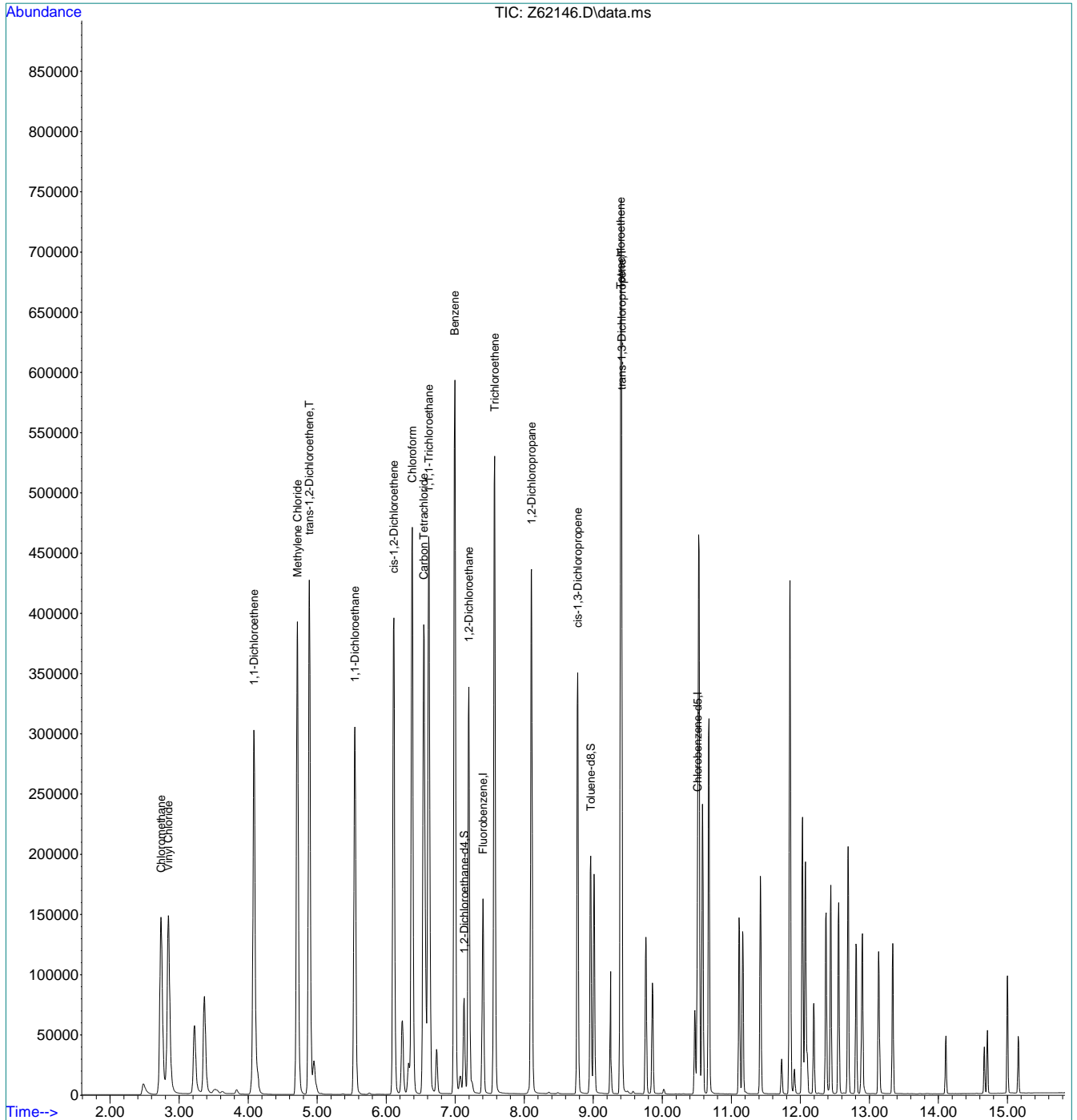
Internal Standards							
1) Fluorobenzene	7.401	96	1807474	5.00	ppb	0.00	
18) Chlorobenzene-d5	10.511	117	1423429	5.00	ppb	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.130	65	661460	5.65	ppb	0.00	
Spiked Amount	5.000	Range	79 - 125	Recovery	=	113.00%	
19) Toluene-d8	8.961	98	1687301	4.76	ppb	0.00	
Spiked Amount	5.000	Range	70 - 130	Recovery	=	95.20%	
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.843	62	2851288	16.83	ppb		99
3) Chloromethane	2.737	50	2989471	16.89	ppb		100
4) 1,1-Dichloroethene	4.083	96	1718057	14.55	ppb		94
5) Methylene Chloride	4.713	84	2526490	16.19	ppb		95
6) trans-1,2-Dichloroethene	4.886	96	2217006	14.98	ppb		95
7) 1,1-Dichloroethane	5.546	63	4157965	16.00	ppb	#	100
8) cis-1,2-Dichloroethene	6.110	96	2337789	15.03	ppb		96
9) Chloroform	6.377	83	4607295	15.95	ppb		100
10) Carbon Tetrachloride	6.543	117	2994181	14.13	ppb		100
11) 1,1,1-Trichloroethane	6.614	97	3959602	14.93	ppb		100
12) Benzene	6.994	78	8243685	15.45	ppb		98
14) 1,2-Dichloroethane	7.198	62	3368220	17.57	ppb		100
15) Trichloroethene	7.571	95	2556545	15.31	ppb		90
16) 1,2-Dichloropropane	8.105	63	2211676	16.34	ppb		96
17) cis-1,3-Dichloropropene	8.773	75	2535087	13.43	ppb		100
20) trans-1,3-Dichloropropene	9.412	75	2224010	12.84	ppb		100
21) Tetrachloroethene	9.399	166	2469117	14.07	ppb		99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\090820\
 Data File : Z62146.D
 Acq On : 8 Sep 2020 2:01 pm
 Operator : SHANICAO
 Sample : IC2411-6
 Misc : MS47137,VZ2411,,,,,
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 08 14:17:37 2020
 Quant Method : C:\msdchem\1\methods\SIMCL090820.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Fri Sep 04 11:36:05 2020
 Response via : Initial Calibration



7.6.26
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\090820\
 Data File : Z62147.D
 Acq On : 8 Sep 2020 2:20 pm
 Operator : SHANICAO
 Sample : IC2411-7
 Misc : MS47137,VZ2411,,,,,
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 08 14:37:16 2020
 Quant Method : C:\msdchem\1\methods\SIMCL090820.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Fri Sep 04 11:36:05 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	

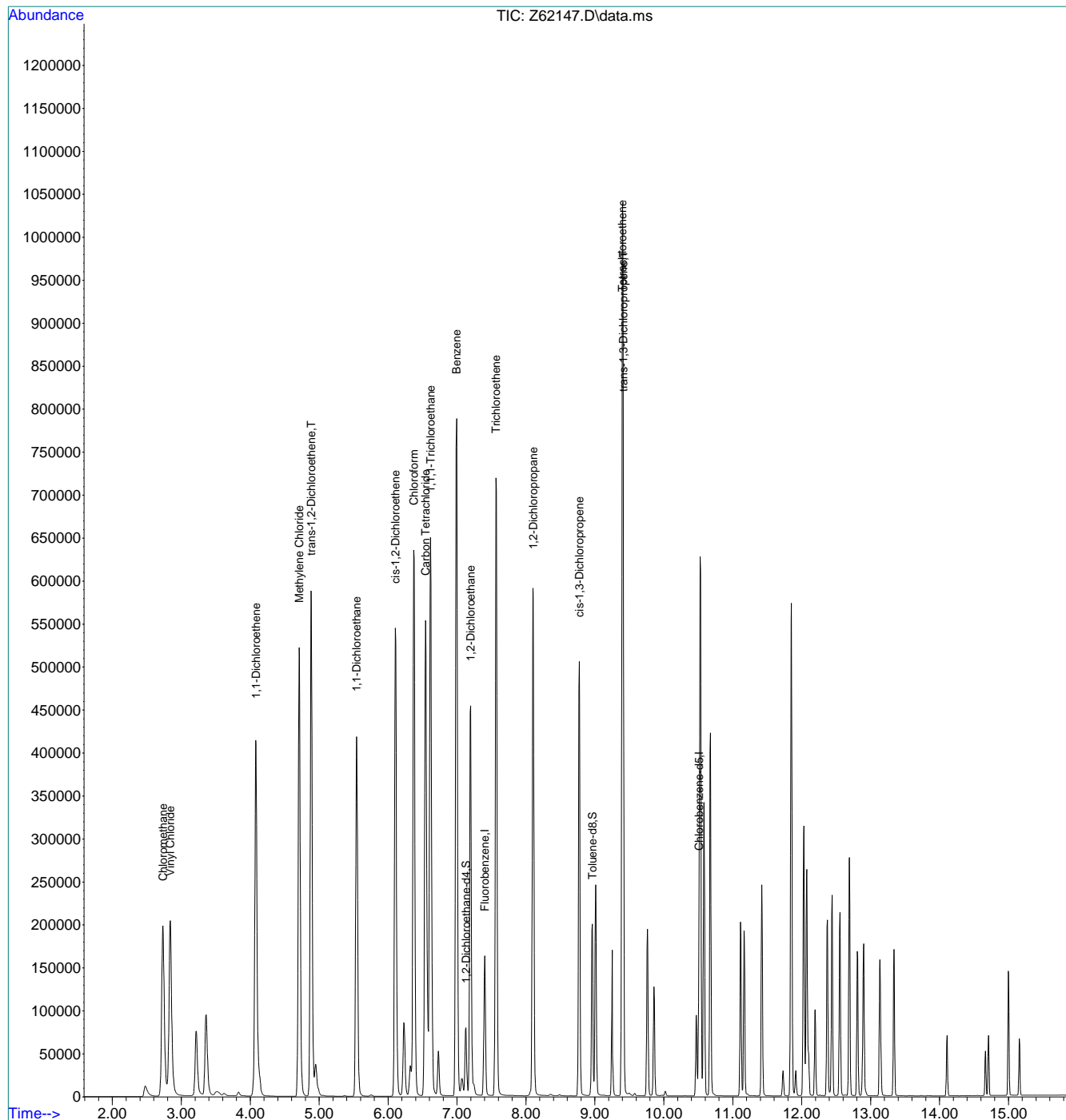
Internal Standards							
1) Fluorobenzene	7.401	96	1834129	5.00	ppb	0.00	
18) Chlorobenzene-d5	10.511	117	1446855m	5.00	ppb	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.130	65	661602	5.57	ppb	0.00	
Spiked Amount	5.000	Range	79 - 125	Recovery	=	111.40%	
19) Toluene-d8	8.961	98	1712261	4.76	ppb	0.00	
Spiked Amount	5.000	Range	70 - 130	Recovery	=	95.20%	
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.839	62	3822656	21.66	ppb		100
3) Chloromethane	2.733	50	3962501	21.36	ppb		100
4) 1,1-Dichloroethene	4.083	96	2355016	19.07	ppb		96
5) Methylene Chloride	4.709	84	3354676	21.18	ppb		93
6) trans-1,2-Dichloroethene	4.887	96	3047455	19.60	ppb		99
7) 1,1-Dichloroethane	5.543	63	5653470	21.44	ppb	#	100
8) cis-1,2-Dichloroethene	6.104	96	3202987	20.29	ppb		92
9) Chloroform	6.371	83	6262640	21.36	ppb		100
10) Carbon Tetrachloride	6.543	117	4210034	18.79	ppb		100
11) 1,1,1-Trichloroethane	6.614	97	5438359	19.54	ppb		99
12) Benzene	6.994	78	11189079	20.66	ppb		99
14) 1,2-Dichloroethane	7.198	62	4558098	23.43	ppb		100
15) Trichloroethene	7.564	95	3527005	20.82	ppb		100
16) 1,2-Dichloropropane	8.105	63	3003188	21.87	ppb		97
17) cis-1,3-Dichloropropene	8.773	75	3674225	18.16	ppb		100
20) trans-1,3-Dichloropropene	9.412	75	3282077m	18.64	ppb		
21) Tetrachloroethene	9.399	166	3372729	18.40	ppb		99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\090820\
 Data File : Z62147.D
 Acq On : 8 Sep 2020 2:20 pm
 Operator : SHANICAO
 Sample : IC2411-7
 Misc : MS47137,VZ2411,,,,,
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 08 14:37:16 2020
 Quant Method : C:\msdchem\1\methods\SIMCL090820.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Fri Sep 04 11:36:05 2020
 Response via : Initial Calibration



7.6.27
7

Manual Integration Approval Summary

Sample Number: VZ2411-IC2411 **Method:** SW846 8260B BY SIM
Lab FileID: Z62147.D **Analyst approved:** 09/09/20 12:41 Shanica O'Connor
Injection Time: 09/08/20 14:20 **Supervisor approved:** 09/10/20 10:07 Melissa Mangual

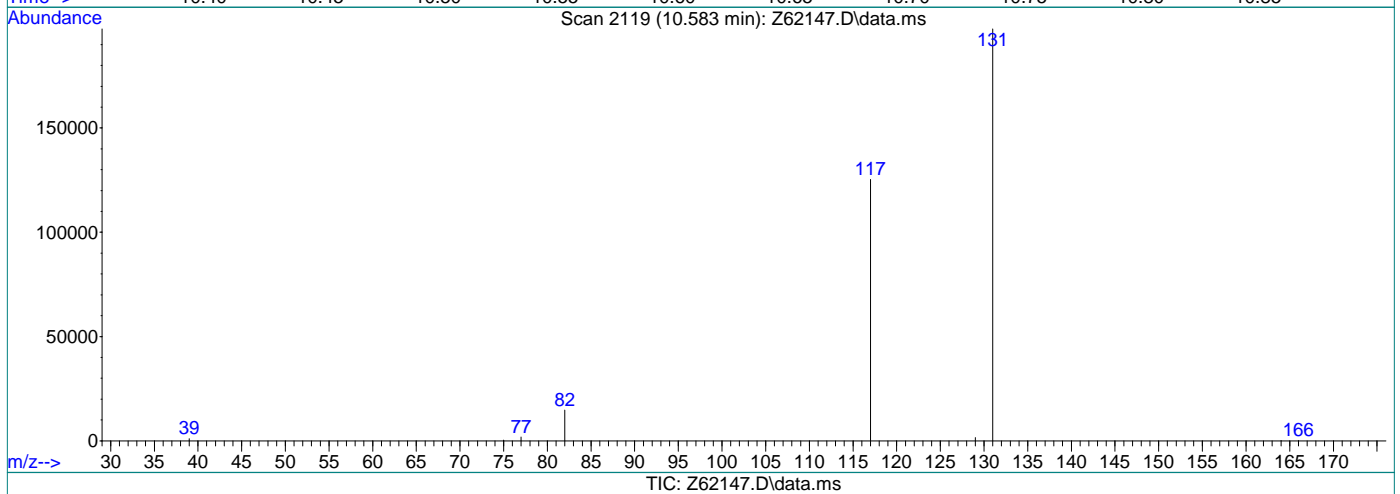
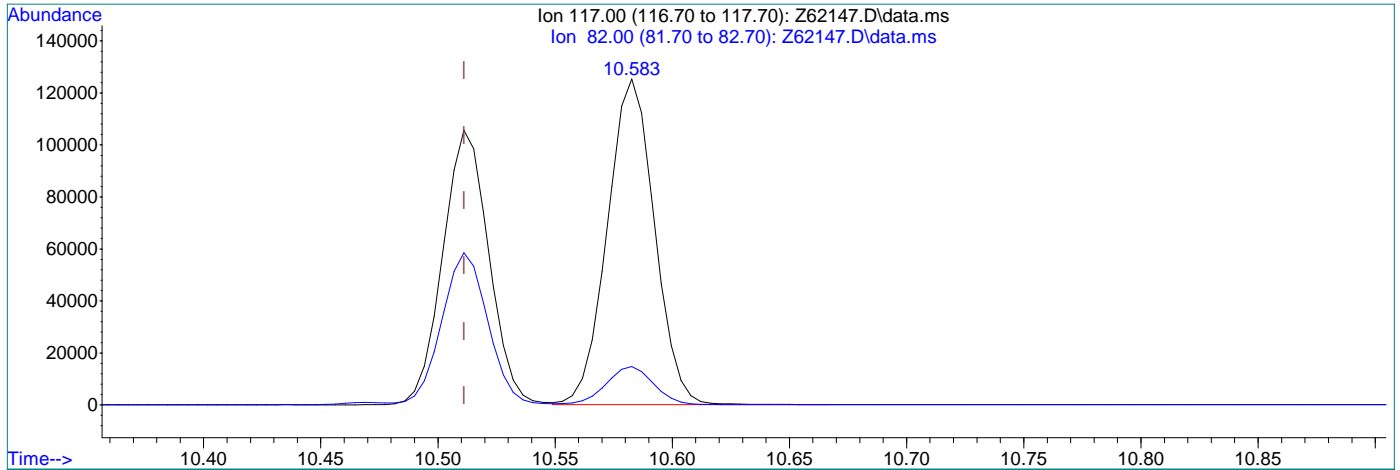
Parameter	CAS	Sig#	R.T. (min.)	Reason
trans-1,3-Dichloropropene	10061-02-6		9.41	Missed peak
Chlorobenzene-D5	3114-55-4		10.51	Missed peak

7.6.27.1
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\090820\
 Data File : Z62147.D
 Acq On : 8 Sep 2020 2:20 pm
 Operator : SHANICAO
 Sample : IC2411-7
 Misc : MS47137,VZ2411,,,,,
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 08 14:36:41 2020
 Quant Method : C:\msdchem\1\methods\SIMCL090820.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Fri Sep 04 11:36:05 2020
 Response via : Initial Calibration



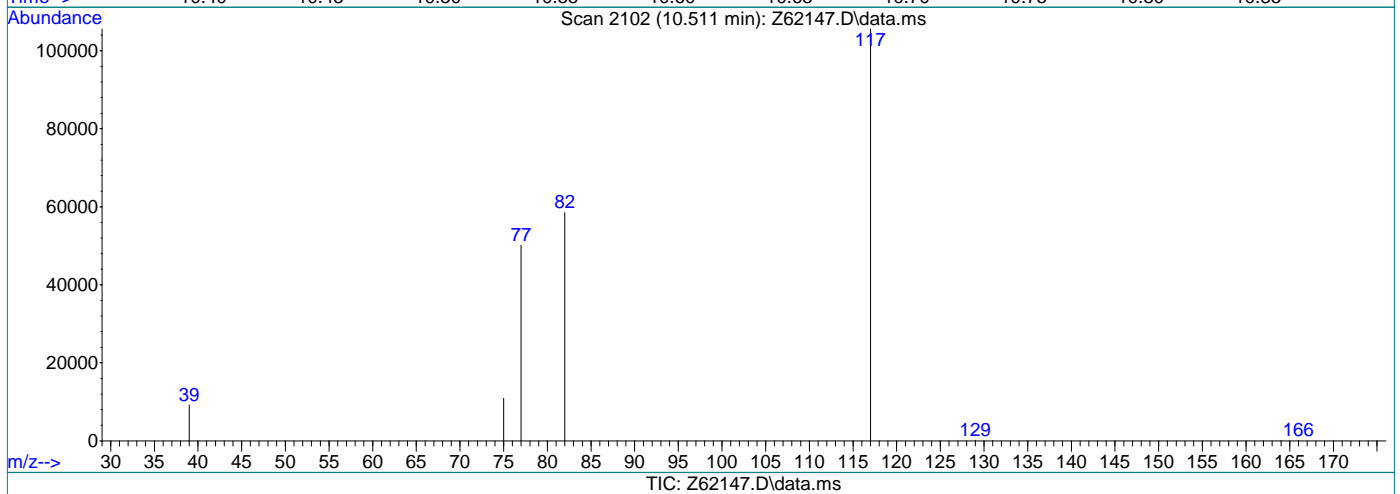
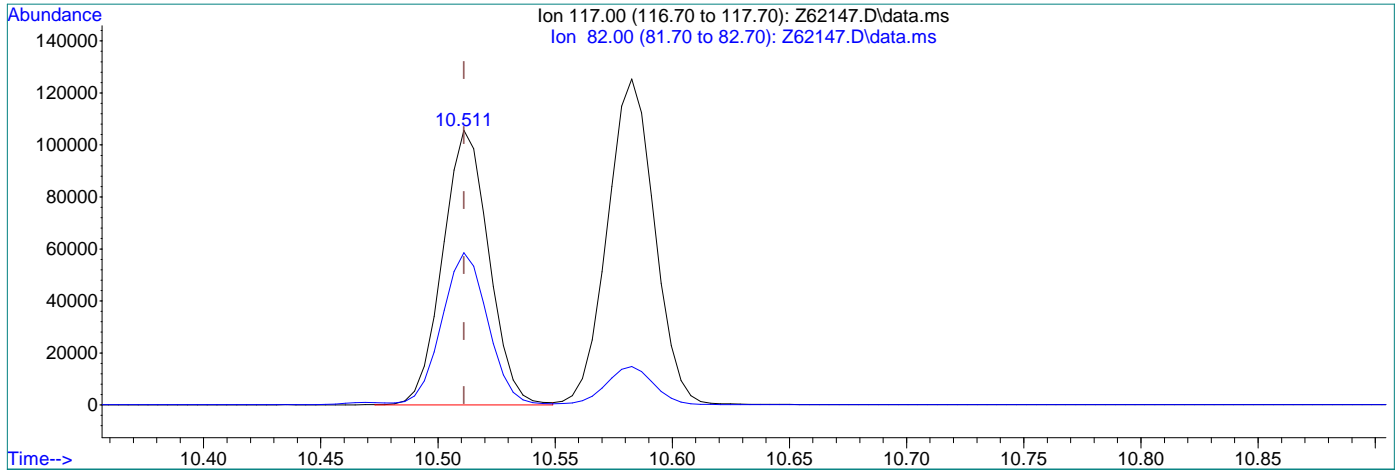
(18) Chlorobenzene-d5 (l)
 10.583min (+0.072) 5.00ppb
 response 1750423

Ion	Exp%	Act%
117.00	100	100
82.00	54.40	11.80#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\090820\
 Data File : Z62147.D
 Acq On : 8 Sep 2020 2:20 pm
 Operator : SHANICAO
 Sample : IC2411-7
 Misc : MS47137,VZ2411,,,,,
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 08 14:36:41 2020
 Quant Method : C:\msdchem\1\methods\SIMCL090820.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Fri Sep 04 11:36:05 2020
 Response via : Initial Calibration



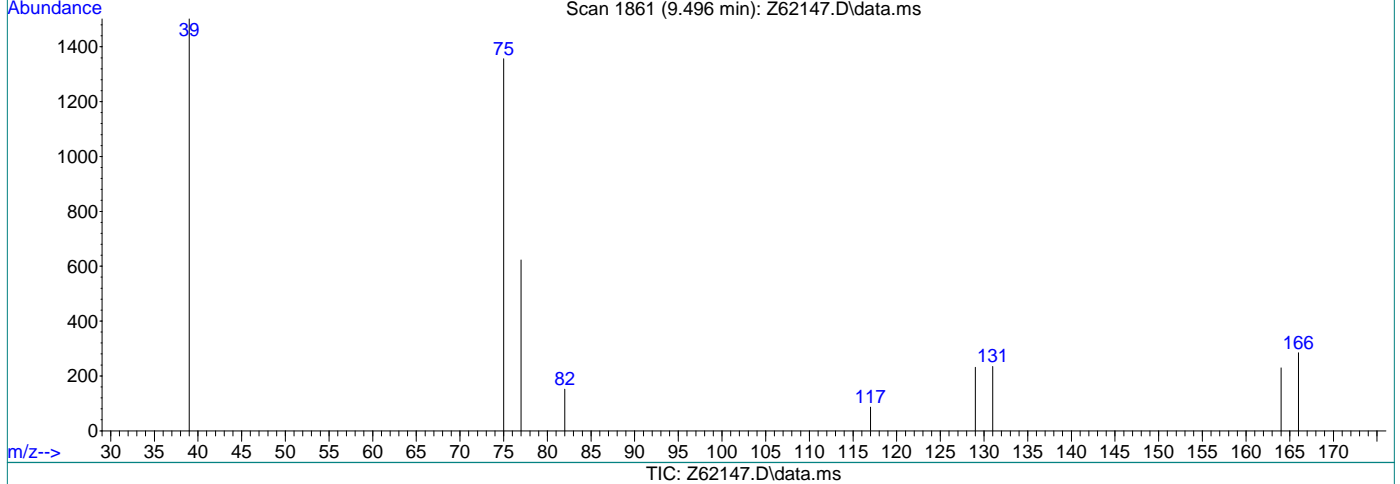
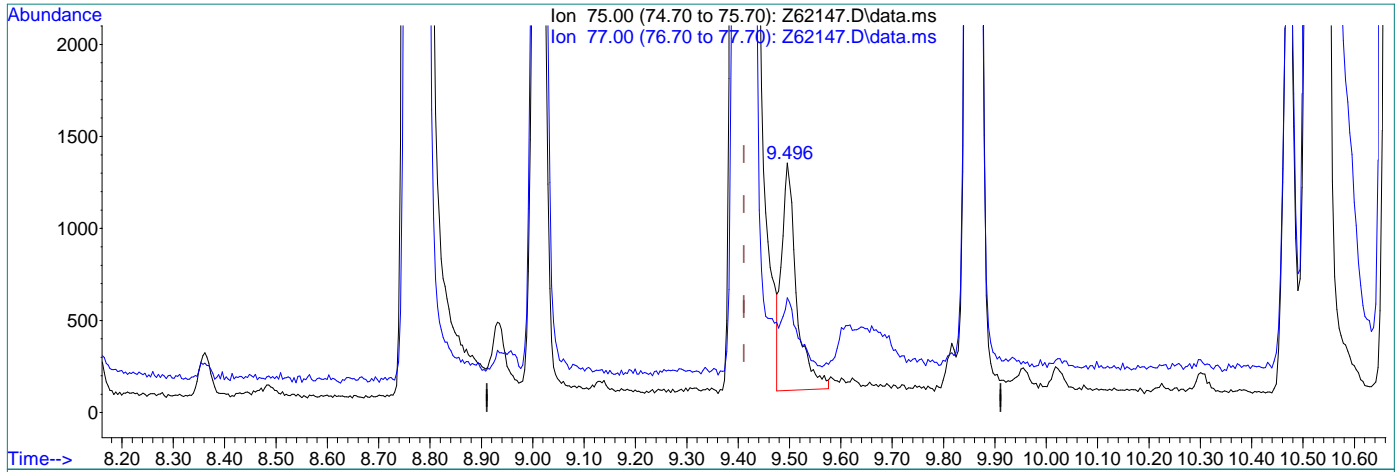
(18) Chlorobenzene-d5 (l)
 10.511min (+0.000) 5.00ppb m
 response 1446855

Ion	Exp%	Act%
117.00	100	100
82.00	54.40	14.28#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\090820\
 Data File : Z62147.D
 Acq On : 8 Sep 2020 2:20 pm
 Operator : SHANICAO
 Sample : IC2411-7
 Misc : MS47137,VZ2411,,,,,
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 08 14:36:41 2020
 Quant Method : C:\msdchem\1\methods\SIMCL090820.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Fri Sep 04 11:36:05 2020
 Response via : Initial Calibration



(20) trans-1,3-Dichloropropene (T)

9.496min (+0.085) 0.14ppb

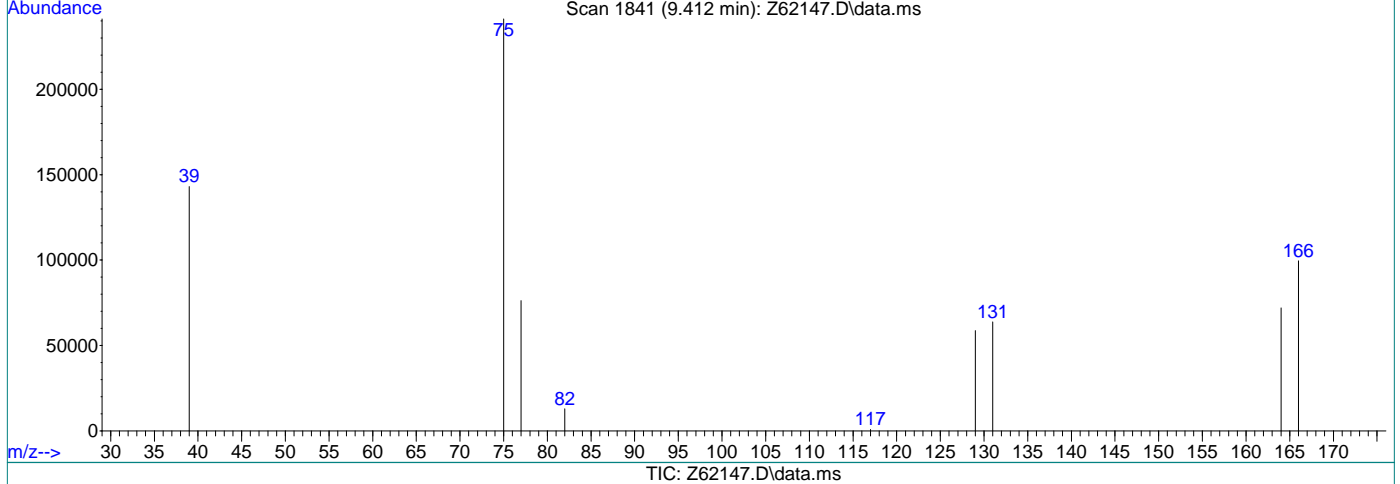
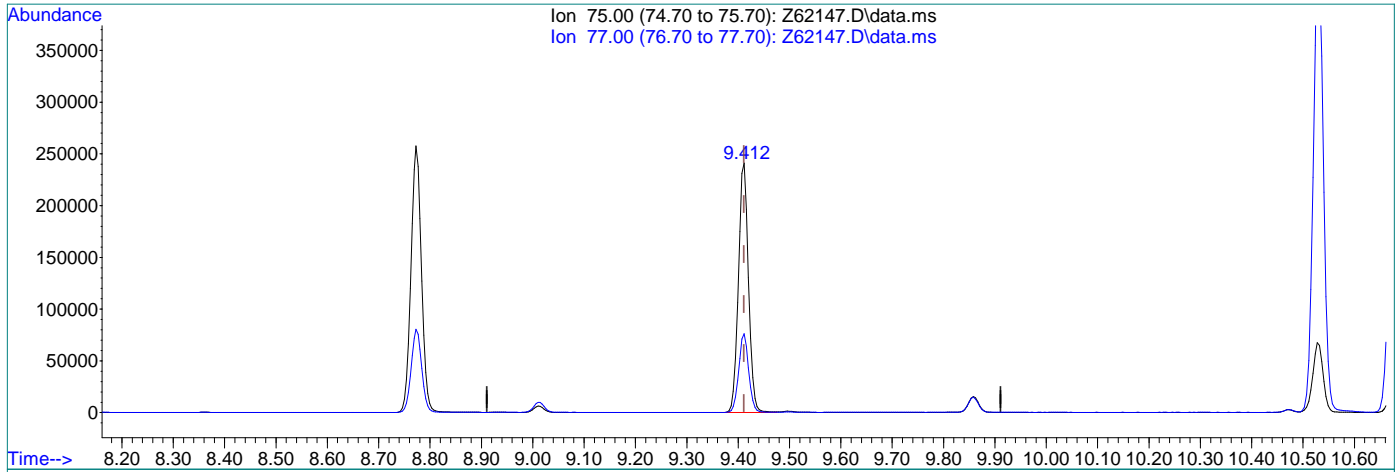
response 24984

Ion	Exp%	Act%
75.00	100	100
77.00	31.40	30.62
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\090820\
 Data File : Z62147.D
 Acq On : 8 Sep 2020 2:20 pm
 Operator : SHANICAO
 Sample : IC2411-7
 Misc : MS47137,VZ2411,,,,,
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 08 14:36:41 2020
 Quant Method : C:\msdchem\1\methods\SIMCL090820.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Fri Sep 04 11:36:05 2020
 Response via : Initial Calibration



(20) trans-1,3-Dichloropropene (T)

9.412min (+0.001) 18.64ppb m

response 3282077

Ion	Exp%	Act%
75.00	100	100
77.00	31.40	31.59
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-10-2020\vvz2412\
 Data File : Z62157.d
 Acq On : 9 Sep 2020 12:24 pm
 Operator : SHANICAO
 Sample : CC2411-5
 Misc : MS47137,VZ2412,,,,,
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 10 05:50:27 2020
 Quant Method : C:\msdchem\1\methods\SIMCL090820.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Tue Sep 08 14:39:51 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)	

Internal Standards							
1) Fluorobenzene	7.401	96	1823502	5.00	ppb	0.00	
18) Chlorobenzene-d5	10.511	117	1435140	5.00	ppb	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.123	65	664917	4.87	ppb	0.00	
Spiked Amount	5.000	Range	79 - 125	Recovery	=	97.40%	
19) Toluene-d8	8.958	98	1697110	4.90	ppb	0.00	
Spiked Amount	5.000	Range	70 - 130	Recovery	=	98.00%	
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.831	62	2019063	10.15	ppb		100
3) Chloromethane	2.726	50	2069018	9.82	ppb		99
4) 1,1-Dichloroethene	4.080	96	1172320	9.95	ppb		99
5) Methylene Chloride	4.709	84	1849487	10.17	ppb		98
6) trans-1,2-Dichloroethene	4.883	96	1543130	10.49	ppb		98
7) 1,1-Dichloroethane	5.539	63	2914675	10.32	ppb	#	100
8) cis-1,2-Dichloroethene	6.104	96	1628774	10.38	ppb		99
9) Chloroform	6.371	83	3212571	10.31	ppb		100
10) Carbon Tetrachloride	6.543	117	2025121	10.51	ppb		100
11) 1,1,1-Trichloroethane	6.614	97	2686619	10.29	ppb		99
12) Benzene	6.987	78	5709255	10.45	ppb		96
14) 1,2-Dichloroethane	7.191	62	2330340	10.34	ppb		99
15) Trichloroethene	7.564	95	1662817	9.70	ppb		94
16) 1,2-Dichloropropane	8.101	63	1500839	10.30	ppb		100
17) cis-1,3-Dichloropropene	8.769	75	1833834	11.19	ppb		100
20) trans-1,3-Dichloropropene	9.407	75	1630889	11.55	ppb		99
21) Tetrachloroethene	9.399	166	1668530	9.79	ppb		99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

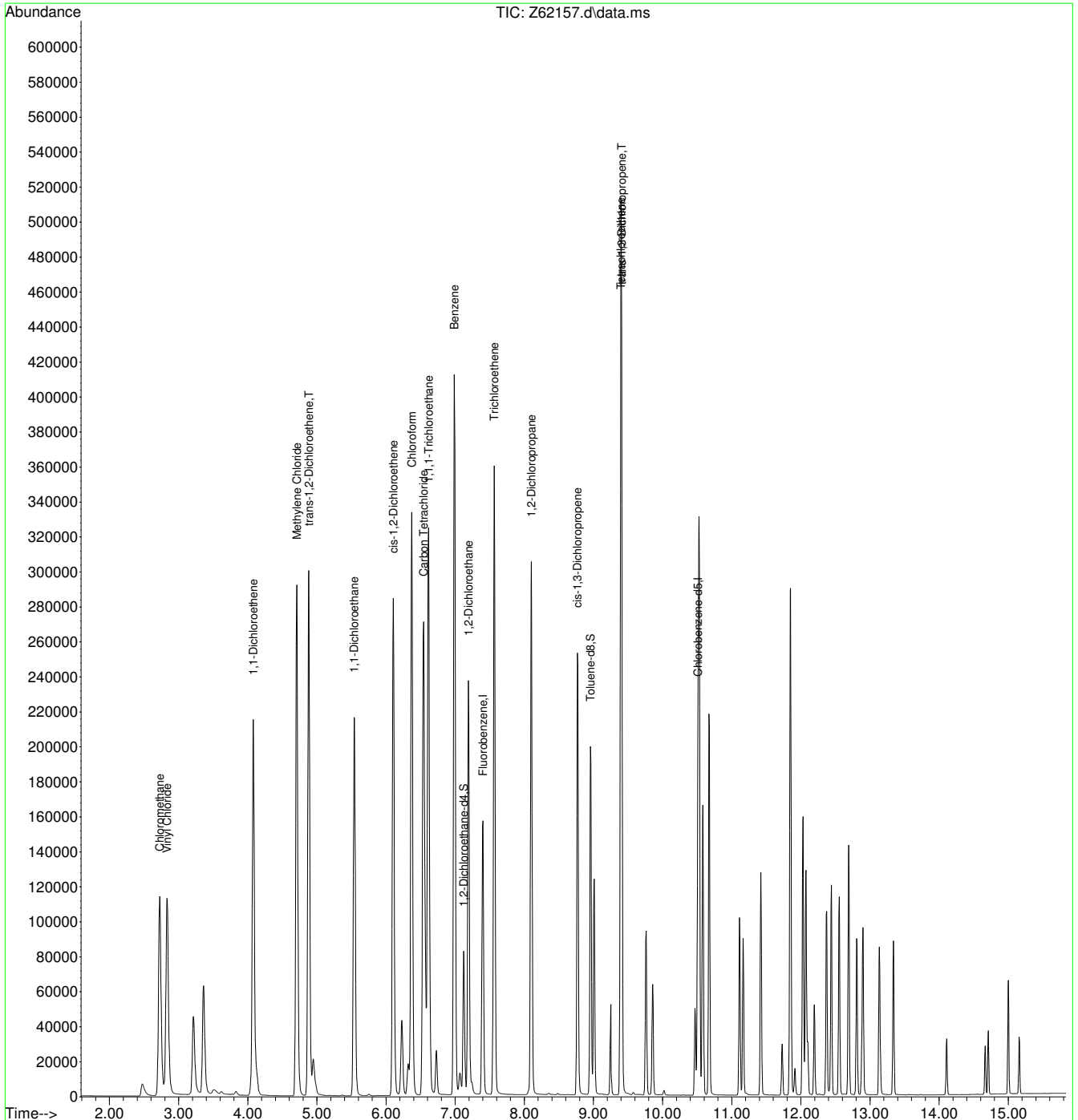
7.6.28
7



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-10-2020\ vz2412\
 Data File : Z62157.d
 Acq On : 9 Sep 2020 12:24 pm
 Operator : SHANICAO
 Sample : CC2411-5
 Misc : MS47137,VZ2412,,,,,
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 10 05:50:27 2020
 Quant Method : C:\msdchem\1\methods\SIMCL090820.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Tue Sep 08 14:39:51 2020
 Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-10-2020\vz2412\
 Data File : Z62158.d
 Acq On : 9 Sep 2020 12:47 pm
 Operator : SHANICAO
 Sample : ICV2411-5
 Misc : MS47137,VZ2412,,,,,
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 10 05:50:30 2020
 Quant Method : C:\msdchem\1\methods\SIMCL090820.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Tue Sep 08 14:39:51 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)	

Internal Standards							
1) Fluorobenzene	7.401	96	1802615	5.00	ppb	0.00	
18) Chlorobenzene-d5	10.511	117	1416680	5.00	ppb	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.130	65	652413	4.84	ppb	0.00	
Spiked Amount	5.000	Range 79 - 125	Recovery	=	96.80%		
19) Toluene-d8	8.961	98	1677584	4.90	ppb	0.00	
Spiked Amount	5.000	Range 70 - 130	Recovery	=	98.00%		
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.839	62	1778016	9.04	ppb		100
3) Chloromethane	2.733	50	1786499	8.57	ppb		100
4) 1,1-Dichloroethene	4.083	96	1159890	9.96	ppb		98
5) Methylene Chloride	4.713	84	1840031	10.24	ppb		98
6) trans-1,2-Dichloroethene	4.886	96	1537188	10.57	ppb		99
7) 1,1-Dichloroethane	5.542	63	2928449	10.49	ppb	#	100
8) cis-1,2-Dichloroethene	6.110	96	1631818	10.52	ppb		99
9) Chloroform	6.371	83	3178856	10.32	ppb		100
10) Carbon Tetrachloride	6.543	117	2041444	10.71	ppb		100
11) 1,1,1-Trichloroethane	6.614	97	2666314	10.33	ppb		100
12) Benzene	6.994	78	5882823	10.89	ppb		100
14) 1,2-Dichloroethane	7.198	62	2345169	10.53	ppb		100
15) Trichloroethene	7.564	95	1745507	10.30	ppb		98
16) 1,2-Dichloropropane	8.105	63	1564303	10.86	ppb		99
17) cis-1,3-Dichloropropene	8.773	75	1835405	11.31	ppb		100
20) trans-1,3-Dichloropropene	9.411	75	1581802	11.38	ppb		99
21) Tetrachloroethene	9.399	166	1667206	9.91	ppb		99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

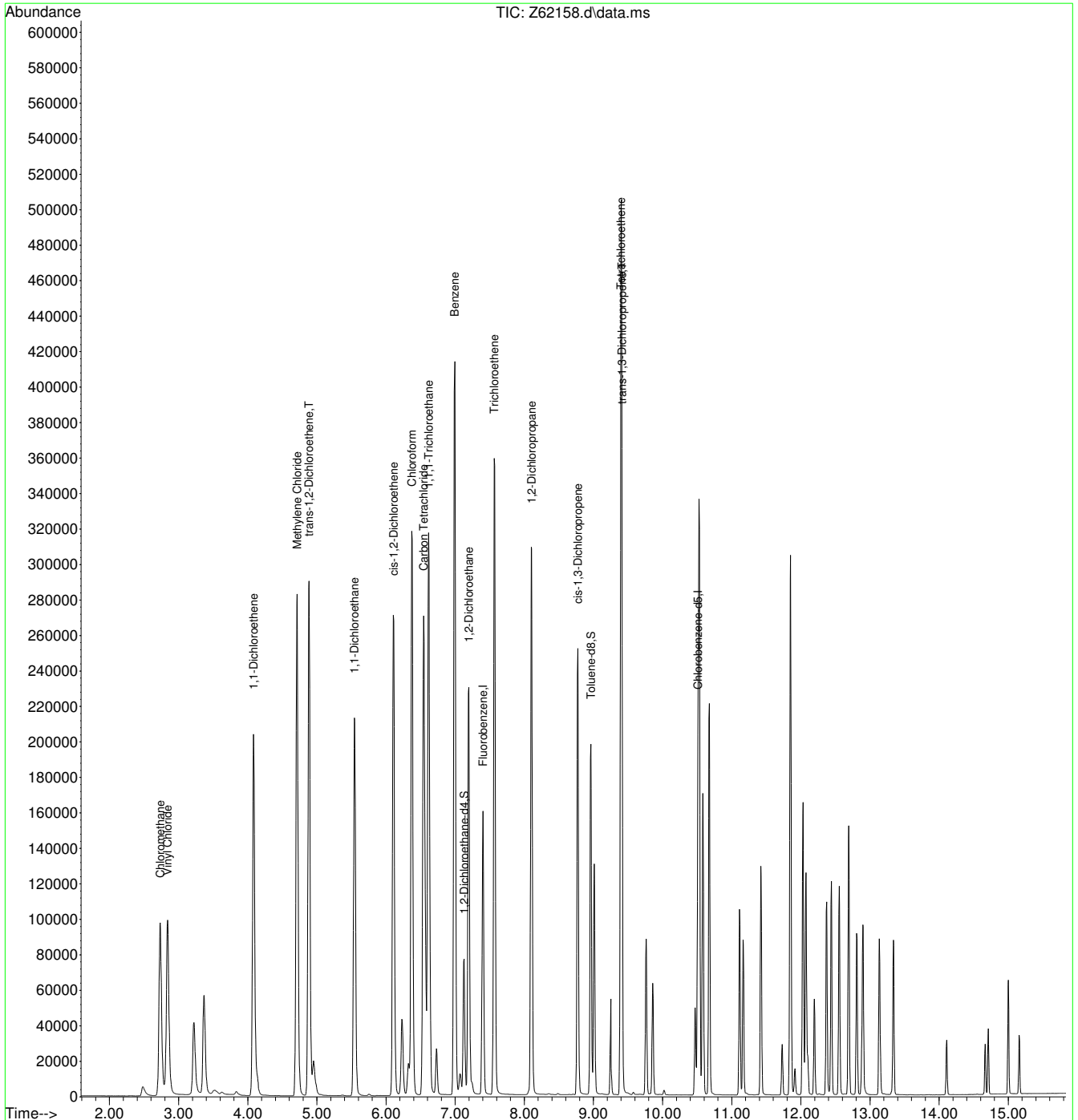
7.6.29
7



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-10-2020\ vz2412\
 Data File : Z62158.d
 Acq On : 9 Sep 2020 12:47 pm
 Operator : SHANICAO
 Sample : ICV2411-5
 Misc : MS47137,VZ2412,,,,,
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 10 05:50:30 2020
 Quant Method : C:\msdchem\1\methods\SIMCL090820.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Tue Sep 08 14:39:51 2020
 Response via : Initial Calibration



7.6.29
7



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-10-2020\vz2412\
 Data File : Z62173.d
 Acq On : 9 Sep 2020 5:41 pm
 Operator : SHANICAO
 Sample : ECC2411-5
 Misc : MS47171,VZ2412,,,,,
 ALS Vial : 17 Sample Multiplier: 1

Quant Time: Sep 10 05:51:14 2020
 Quant Method : C:\msdchem\1\methods\SIMCL090820.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Tue Sep 08 14:39:51 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)	

Internal Standards							
1) Fluorobenzene	7.401	96	1408602	5.00	ppb	0.00	
18) Chlorobenzene-d5	10.511	117	1150128	5.00	ppb	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.130	65	549564	5.21	ppb	0.00	
Spiked Amount	5.000	Range	79 - 125	Recovery	=	104.20%	
19) Toluene-d8	8.961	98	1294606	4.66	ppb	0.00	
Spiked Amount	5.000	Range	70 - 130	Recovery	=	93.20%	
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.839	62	1676617	10.91	ppb		99
3) Chloromethane	2.733	50	1609294	9.88	ppb		99
4) 1,1-Dichloroethene	4.083	96	976375	10.73	ppb		99
5) Methylene Chloride	4.713	84	1460891	10.42	ppb		100
6) trans-1,2-Dichloroethene	4.886	96	1240617	10.92	ppb		100
7) 1,1-Dichloroethane	5.546	63	2402655	11.01	ppb	#	100
8) cis-1,2-Dichloroethene	6.110	96	1296695	10.69	ppb		100
9) Chloroform	6.377	83	2664860	11.07	ppb		100
10) Carbon Tetrachloride	6.543	117	1666585	11.19	ppb		100
11) 1,1,1-Trichloroethane	6.614	97	2246437	11.14	ppb		100
12) Benzene	6.994	78	4695666	11.12	ppb		100
14) 1,2-Dichloroethane	7.198	62	1969791	11.32	ppb		100
15) Trichloroethene	7.564	95	1440760	10.88	ppb		100
16) 1,2-Dichloropropane	8.105	63	1265810	11.25	ppb		100
17) cis-1,3-Dichloropropene	8.773	75	1263260	10.12	ppb		100
20) trans-1,3-Dichloropropene	9.411	75	1129030	10.23	ppb		100
21) Tetrachloroethene	9.399	166	1399314	10.25	ppb		99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

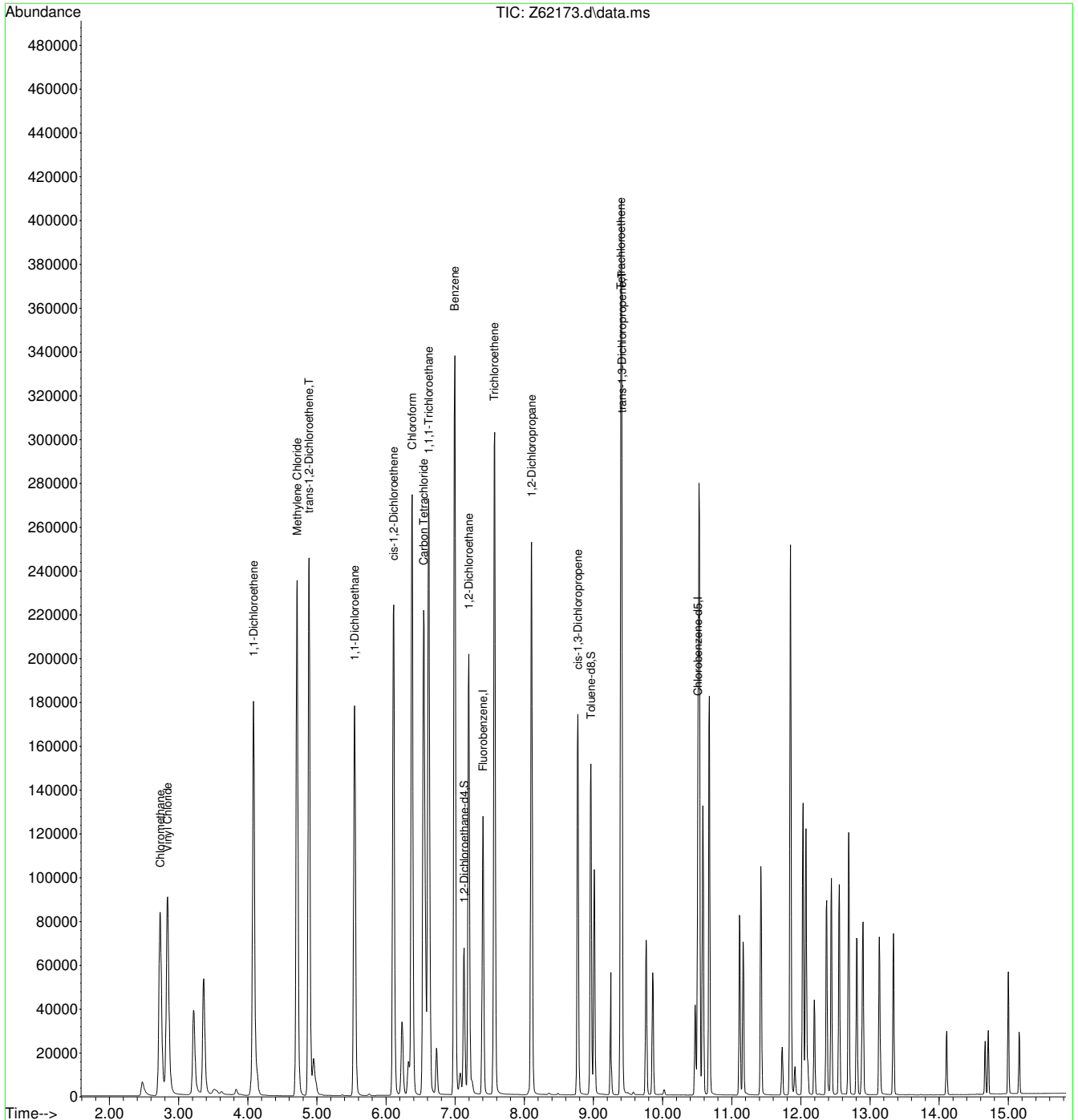
7.6.30
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Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-10-2020\ vz2412\
 Data File : Z62173.d
 Acq On : 9 Sep 2020 5:41 pm
 Operator : SHANICAO
 Sample : ECC2411-5
 Misc : MS47171,VZ2412,,,,,
 ALS Vial : 17 Sample Multiplier: 1

Quant Time: Sep 10 05:51:14 2020
 Quant Method : C:\msdchem\1\methods\SIMCL090820.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Tue Sep 08 14:39:51 2020
 Response via : Initial Calibration



7.6.30
7

SGS -ORLANDO

MSV0A12-O-ANALYSIS LOG

Date:	9/8/2020
COLUMN TYPE:	RTX VMS
DETECTOR:	5975 MSD
INSTRUMENT:	MSV0A12-O
PURGE PRESSURE:	8.4PSI
PURGE VOLUME:	5 mL
ANALYST:	mellissam

METHODS:*	SIMCLM
METHOD FILE:	SIMCLO90820.M
CALIB. DATE:	9/8/2020
EM VOLTAGE:	1588V
BFB RESPONSE	4883116
RUN ID:	VO2352

BFB:	V25942b
ICAL/CC:	V25934 VS0792
ISTD/SUR:	VS0799
ICV/QC:	VS0793 VS0802

PH LOT1-12 :230814
ph lot 0.0-3.0 : 220416a
K1 PAPER LOT:030317
SAMPLE ID VERIFIED BY:
NA
DATE VERIFIED: 09/09/20

Data File	Sample ID	DIL.	VIAL #	MATRIX	ALS POS.	SAMPLE METHOD	MANUALLY INTEGRATED PEAK RATIONAL, PEAK #	PH	CL ?	RR	COMMENTS
O61108	BLK	NA	NA	w	1	ACQ_SIMCL		NA	NA		
O61109	BLK	NA	NA	w	2	ACQ_SIMCL		NA	NA		
O61110	BFB	NA	NA	w	100	BFB		NA	NA		176/174 low
O61111	BFB	NA	NA	w	100	BFB		NA	NA		176/174 low
O61112	BFB	NA	NA	w	100	BFB	increased voltage 219	NA	NA		Pass on autofind 2ul
O61113	CC2349-5	NA	NA	w	1	ACQ_SIMCL		NA	NA		50ul -> 50ml , failed
O61114	BLANK	NA	NA	w	2	ACQ_SIMCL		NA	NA		
O61115	BFB	NA	NA	w	100	BFB		NA	NA		Passed autofind 2ul
O61116	IC2352-1	NA	NA	w	1	ACQ_SIMCL	23mp, (3.12, 16.21)Pll	NA	NA		1ul -> 100ml
O61117	IC2352-2	NA	NA	w	2	ACQ_SIMCL	3.12Pll	NA	NA		5ul -> 100ml
O61118	IC2352-3	NA	NA	w	3	ACQ_SIMCL	12Pll	NA	NA		10ul -> 50ml
O61119	IC2352-4	NA	NA	w	4	ACQ_SIMCL	13OP, 12Pll	NA	NA		25ul -> 50ml
O61120	IC2352-5	NA	NA	w	5	ACQ_SIMCL	12Pll	NA	NA		50ul -> 50ml
O61121	IC2352-6	NA	NA	w	6	ACQ_SIMCL	12Pll	NA	NA		75ul -> 50ml
O61122	IC2352-7	NA	NA	w	7	ACQ_SIMCL	12Pll	NA	NA		100ul -> 50ml
O61123	BLANK	NA	NA	w	8	ACQ_SIMCL		NA	NA		
O61124	ICV2352-5	NA	NA	w	9	ACQ_SIMCL	12Pll	NA	NA		50ul -> 50ml
O61125	BLANK	NA	NA	w	1	ACQ_SIMCL		NA	NA		
O61126	BLANK	NA	NA	w	2	ACQ_SIMCL		NA	NA		

* For NELAC purposes, Method 8260 includes analytes by SOP MS005 Matrix: Designate "W" for Water "S" for soil, "O" for Oil, "Liq" for Non-aqueous Liquid, and "TCLP" or "SPLP" for Leachate.
Manual Integration Rational SOP QA029: MP Missed Peak, OP Overlapping Peak, SP Split Peak, PDB Poorly Defined Baseline, BR Baseline Ripple, PlI Poor Instrument

Analyst's Signature:



SGS ORLANDO

MSV0A12- ANALYSIS LOG

Date: 9/9/2020
 COLUMN TYPE: RTX VMS
 DETECTOR: 5975 MSD
 INSTRUMENT: MSV0A12-O
 PURGE PRESSURE 8.4PSI
 PURGE VOLUME: 5 mL
 ANALYST: melissam/akarig

METHODS: SIMCLM
 METHOD FILE: SIMCL090820.M
 CALIB. DATE: 9/8/2020
 EM VOLTAGE: 1588V
 BFB RESPONSE: 4996179
 RUN ID: VO2353

BFB: V25942b
 ICA/LCC: V25934 VS0792
 ISTD/SUR: VS0799
 ICVQC: VS0793 VS0802

PH LOT1-12 :230814
 ph lot 0.0-3.0 : 220416a
 KI PAPER LOT:030317
 SAMPLE ID VERIFIED BY: Shanika/akarig
 DATE VERIFIED: 9/08/20

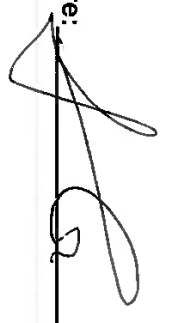
Data File	Sample ID	DIL.	VIAL #	MATRIX	ALS Pos.	SAMPLE METHOD	MANUALLY INTEGRATED PEAK RATIONAL, PEAK #	PH	CL	RR	COMMENTS
061127	BFB	-	-	w	100	BFB		-	-		Passed autofnd 2ul
061128	CC2352-5	-	-	w	1	ACQ_SIMCL		-	-		50ul -> 50ml passed
061129	BS	-	-	w	2	ACQ_SIMCL	#12(Pil)#13(OP)	-	-		20ul -> vial passed
061130	MB	-	-	w	3	ACQ_SIMCL		-	-		NDV
061131	MB	-	-	w	4	ACQ_SIMCL		-	-		xNot used
061132	FAT8398-4	1X	2	w	5	ACQ_SIMCL		1	N		NDV
061133	FAT8398-5	1X	2	w	6	ACQ_SIMCL	#3,21(Pil)	1	N		✓
061134	FAT8398-6	1X	2	w	7	ACQ_SIMCL	#3(Pil)	1	N		✓
061135	FAT8398-7	1X	2	w	8	ACQ_SIMCL	#21(Pil)	1	N		✓
061136	FAT8398-4MS	20x	2	w	9	ACQ_SIMCL	#12(Pil)	1	N		20ul -> vial ✓
061137	FAT8398-4MSD	20x	2	w	10	ACQ_SIMCL	#12(Pil)#13(OP)	1	N		20ul -> vial ✓
061138	FAT8398-8	1X	2	w	11	ACQ_SIMCL	#3,21(Pil)	1	N		✓
061139	FAT8398-9	1X	2	w	12	ACQ_SIMCL	#21(Pil)	1	N		✓
061140	FAT8398-10	1X	2	w	13	ACQ_SIMCL	#21(Pil)	1	N		✓
061141	FAT8398-11	1X	2	w	14	ACQ_SIMCL	#21(Pil)	1	N		✓
061142	FAT8398-12	1X	2	w	15	ACQ_SIMCL	#3,21(Pil)	1	N		✓
061143	FAT8398-13	1X	2	w	16	ACQ_SIMCL	#21(Pil)	1	N		✓
061144	FAT8398-14	1X	2	w	17	ACQ_SIMCL	#21(Pil)	1	N		✓
061145	FAT8398-15	1X	2	w	18	ACQ_SIMCL	#21(Pil)	1	N		✓
061146	FAT8398-16	1X	1	w	19	ACQ_SIMCL	#21(Pil)	1	N		✓
061147	FAT8398-2	1X	2	w	20	ACQ_SIMCL	#21(Pil)	1	N		✓
061148	FAT8442-8	1X	2	w	21	ACQ_SIMCL	#21(Pil)	1	N		✓
061149	FAT8442-9	1X	2	w	22	ACQ_SIMCL	#21(Pil)	1	N		✓
061150	FAT8442-10	1X	2	w	23	ACQ_SIMCL	#3,21(Pil)	1	N		✓
061151	ECC2352-5	-	-	w	24	ACQ_SIMCL		-	-		50ul -> 50ml

* For NELAC purposes, Method 8260 includes analytes by SOP MS005 Matrix. Designate "w" for Water, "s" for soil, "O" for Oil, "Liq" for Non-aqueous Liquid, and "TCLP" or "SPLP" for Leachate.
 Manual Integration Rational SOP QA029. MP Missed Peak, OP Overlapping Peak, SP Split Peak, PDB Poorly Defined Baseline, BR Baseline Ripple, Pil Poor Instrument

VO2353.xls 040918

1 of 1

Analyst's Signature:



MSVOA17-1A-ANALYSIS LOG

SGS -ORLANDO

DATE: 09/03/20		METHOD FILE(s): SimCl		BFB: V25942A		PH LOT: 1 to 12 pH lot #. 200814				
COLUMN TYPE: RTX-VMS		METHOD FILE(s): simcl090320.m		ICAL/CC: VS0934, VS0792		0 to 3 pH lot#: 220416				
DETECTOR: 5975C MSD		CALIB. DATE: 09/03/20		ISTD/SURR: VS0791		KI PAPER LOT: 060117				
INSTRUMENT: MSVOA15-z		EM VOLTAGE: 1718V		ICV/QC: VS0907, VS0793		Processed BY: SO/JF				
PURGE PRESSURE: 9.7psi		BFB Response: 38738678		AFA: VS0418A		SAMPLE ID VERIFIED BY:				
PURGE VOLUME: 5 mL		RUN ID: VZ2408		DATE VERIFIED: 09/03/20		SO				
ANALYST: Shanika O.						COMMENTS				
Data File	Sample ID	DIL.	VIAL #	MATRIX	ALS POS.	SAMPLE METHOD	MANUALLY INTEGRATED PEAKS RATIONAL, PEAK #	PH	CL	RR
Z62037	BLK	-	-	w	1	acq_simcl0214		-	-	✓
Z62038	BLK	-	-	w	2	acq_simcl0214		-	-	✓
Z62039	BFB	-	-	w	100	bfb		-	-	✓ Passed Autofind
Z62040	IC2408-1	-	-	w	1	acq_simcl0214		-	-	1µL→100mL ✓
Z62041	IC2408-2	-	-	w	2	acq_simcl0214		-	-	5µL→100mL ✓
Z62042	IC2408-3	-	-	w	3	acq_simcl0214		-	-	10µL→50mL ✓
Z62043	IC2408-4	-	-	w	4	acq_simcl0214		-	-	25µL→50mL ✓
Z62044	IC2408-5	-	-	w	5	acq_simcl0214		-	-	50µL→50mL ✓
Z62045	IC2408-6	-	-	w	6	acq_simcl0214		-	-	75µL→50mL ✓
Z62046	IC2408-7	-	-	w	7	acq_simcl0214	#18,20(MP)	-	-	100µL→50mL ✓
Z62047	BLK	-	-	w	8	acq_simcl0214		-	-	✓
Z62048	ICV2408-5	-	-	w	9	acq_simcl0214		-	-	50µL→50mL ✓
Z62049	BS	-	-	w	10	acq_simcl0214		-	-	✓
Z62050	MB	-	-	w	11	acq_simcl0214		-	-	ND✓
Z62051	FA78405-2MS	1X	2	w	12	acq_simcl0214		1	NO	20µL→40mL ✓
Z62052	FA78405-2MSD	1X	2	w	13	acq_simcl0214		1	NO	20µL→40mL ✓
Z62053	FA78153-5	1X	3	w	14	acq_simcl0214		1	NO	✓
Z62054	FA78405-1	1X	1	w	15	acq_simcl0214		1	NO	ND✓
Z62055	FA78405-2	1X	1	w	16	acq_simcl0214		1	NO	✓
Z62056	FA78405-3	1X	1	w	17	acq_simcl0214		1	NO	ND✓
Z62057	FA78406-1	1X	1	w	18	acq_simcl0214		1	NO	✓
Z62058	FA78398-1	1X	2	w	19	acq_simcl0214		1	NO	ND✓
Z62059	FA78398-2	1X	1	w	20	acq_simcl0214		1	NO	✓
Z62060	FA78398-3	1X	1	w	21	acq_simcl0214		1	NO	✓
Z62061	FA78398-4	1X	1	w	22	acq_simcl0214		1	NO	ND✓
Z62062	FA78398-5	1X	1	w	23	acq_simcl0214		1	NO	✓
Z62063	FA78398-6	1X	1	w	24	acq_simcl0214		1	NO	✓
Z62064	FA78398-7	1X	1	w	25	acq_simcl0214		1	NO	✓
Z62065	FA78398-8	1X	1	w	26	acq_simcl0214		1	NO	✓
Z62066	FA78398-9	1X	1	w	27	acq_simcl0214		1	NO	✓
Z62067	FA78398-10	1X	1	w	28	acq_simcl0214		1	NO	✓
Z62068	ECC2408-5	-	-	w	29	acq_simcl0214		-	-	50µL→50mL ✓

* For NELAC purposes, Method 8260 includes analytes by SOP MS005. Matrix: Designate "W" for Water, "S" for Soil, "O" for Oil, "Liq" for Non-aqueous Liquid, and "TCLP" or "SPLP" for Leachate. Manual Integration Rationale SOP QA029: MP Missed Peak, OP Overlapping Peak, SP Split Peak, PDB Poorly Defined Baseline, BR Baseline Ripple, PII Poor Instrument Integration.

Analyst's Signature: *Shanika O.*

DATE: 09/04/20		METHOD(S): * SimCl		METHOD FILE(S): simcl090320.m		BFB: V25942A		PH LOT: 1 to 12 pH lot #: 200814		
COLUMN TYPE: RTX-VMS		CALIB. DATE: 09/03/20		EM VOLTAGE: 1718V		ICAL/CC: VS0934, VS0792		0 to 3 pH lot#: 220416		
DETECTOR: 5975C MSD		BFB Response: 21392364		BFB Response: 21392364		ISTD/SURR: VS0791		KI PAPER LOT: 060117		
INSTRUMENT: MSVOA15-z		RUN ID: VZ2409		VIAL #		MATRIX		Processed BY: SO/JF		
PURGE PRESSURE: 9.7psi		ALS POS.		SAMPLE METHOD		MANUALLY INTEGRATED PEAKS		SAMPLE ID VERIFIED BY:		
PURGE VOLUME: 5 mL		DIL.		VIAL #		RATIONAL, PEAK #		SO		
ANALYST: Shanika O.		VIAL #		MATRIX		RATIONAL, PEAK #		DATE VERIFIED: 09/08/20		
Data File	Sample ID	DIL.	VIAL #	MATRIX	ALS POS.	SAMPLE METHOD	MANUALLY INTEGRATED PEAKS	PH	RR	COMMENTS
Z62069	BLK	-	-	W	1	acq_simcl0214		-	-	✓
Z62070	BLK	-	-	W	2	acq_simcl0214		-	-	✓
Z62071	BFB	-	-	W	100	bfb		-	-	☒ Passed Autofind
Z62072	BFB	-	-	W	100	bfb		-	-	☒ Passed Autofind
Z62073	BFB	-	-	W	100	bfb		-	-	✓ Passed Autofind
Z62074	CC2408-5	-	-	W	1	acq_simcl0214		-	-	50µL→50mL ✓
Z62075	BS	-	-	W	2	acq_simcl0214		-	-	20µL→40mL ✓
Z62076	MB	-	-	W	3	acq_simcl0214		-	-	ND ✓
Z62077	FA78398-2	1X	3	W	4	acq_simcl0214		-	1X	BS low for 1,3-DCPT
Z62078	FA78398-1	1X	1	W	5	acq_simcl0214		-	1X	BS low for 1,3-DCPT
Z62079	FA78398-3	1X	2	W	6	acq_simcl0214		-	1X	BS low for 1,3-DCPT
Z62080	FA78398-2MS	10X	3	W	7	acq_simcl0214		-		20µL→40mL ✓
Z62081	FA78398-2MSD	10X	3	W	8	acq_simcl0214		-		20µL→40mL ✓
Z62082	BS	-	-	W	9	acq_simcl0214		-	-	20µL→40mL ☒
Z62083	FA78405-1	1X	2	W	10	acq_simcl0214		-	-	ND ✓
Z62084	FA78405-2	1X	3	W	11	acq_simcl0214		-	-	✓
Z62085	FA78405-3	1X	2	W	12	acq_simcl0214		-	-	ND ✓
Z62086	FA78406-1	1X	2	W	13	acq_simcl0214		-	-	ND ✓
Z62087	FA78442-1	1X	1	W	14	acq_simcl0214		-	-	✓
Z62088	FA78442-2	1X	1	W	15	acq_simcl0214		-	-	✓
Z62089	FA78442-3	1X	1	W	16	acq_simcl0214		-	-	ND ✓
Z62090	FA78442-3MS	10X	1	W	17	acq_simcl0215		-	-	20µL→40mL ✓
Z62091	FA78442-3MSD	10X	1	W	18	acq_simcl0216		-	-	20µL→40mL ✓
Z62092	FA78442-4	1X	1	W	19	acq_simcl0215		-	-	✓
Z62093	FA78442-5	1X	1	W	20	acq_simcl0216		-	-	✓
Z62094	FA78442-6	1X	1	W	21	acq_simcl0217		-	-	✓
Z62095	FA78442-7	1X	1	W	22	acq_simcl0218		-	-	✓
Z62096	FA78442-8	1X	1	W	23	acq_simcl0219	Power outage; sequence restarted.	-	1X	Purged Air
Z62097	FA78442-9	1X	1	W	24	acq_simcl0220		-	1X	Purged Air
Z62098	FA78442-10	1X	1	W	25	acq_simcl0221		-	1X	Purged Air
Z62099	BLK	-	-	W	26	acq_simcl0222		-	-	
Z62100	ECC2408-5	-	-	W	27			-	-	50µL→50mL ✓

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VZ2409M 040918

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Analyst's Signature: *Shanika O.*

SGS -ORLANDO

MSVOA17-1A-ANALYSIS LOG

DATE: 09/08/20		METHOD FILE(s): SimCI		BFB: V25942A		PH LOT: 1 to 12 pH lot #: 200814				
COLUMN TYPE: RTX-VMS		METHOD FILE(s): simcl091120.m		ICAL/CC: V25934, VS0792		0 to 3 pH lot#: 220416				
DETECTOR: 5975C MSD		CALIB. DATE: 09/11/20		ISTD/SURR: VS0791		Processed BY: SO				
INSTRUMENT: MSVOA15-z		EM VOLTAGE: 1718V		ICV/QC: VS0802, VS0793		SAMPLE ID VERIFIED BY: SO				
PURGE PRESSURE: 9.7psi		BFB Response: 14419642		AFA: VS0418A		DATE VERIFIED: 09/09/20				
PURGE VOLUME: 5 mL		RUN ID: VZ2411		COMMENTS						
ANALYST: Shanika O.										
Data File	Sample ID	DIL.	VIAL #	MATRIX	ALS POS.	SAMPLE METHOD	MANUALLY INTEGRATED PEAKS RATIONAL, PEAK #	PH	CL	RR
Z62133	BLK	-	-	w	1	acq_simcl0214		-	-	✓
Z62134	BLK	-	-	w	2	acq_simcl0214		-	-	✓
Z62135	BFB	-	-	w	100	bfb		-	-	✓ Passed Autofind
Z62136	BLK	-	-	w	1	acq_simcl0214		-	-	✓
Z62137	CC2408-5	-	-	w	1	acq_simcl0214		-	-	50µL→50mL ✓
Z62138	BS	-	-	w	2	acq_simcl0215		-	-	20µL→40mL ✓
Z62139	MB	-	-	w	3	acq_simcl0216		-	-	✓
Z62140	BFB	-	-	w	100	bfb		-	-	✓ Passed Autofind
Z62141	IC2411-1	-	-	w	1	acq_simcl0214		-	-	1µL→100mL ✓
Z62142	IC2411-2	-	-	w	2	acq_simcl0214		-	-	5µL→100mL ✓
Z62143	IC2411-3	-	-	w	3	acq_simcl0214		-	-	10µL→50mL ✓
Z62144	IC2411-4	-	-	w	4	acq_simcl0214		-	-	25µL→50mL ✓
Z62145	IC2411-5	-	-	w	5	acq_simcl0214		-	-	50µL→50mL ✓
Z62146	IC2411-6	-	-	w	6	acq_simcl0214		-	-	75µL→50mL ✓
Z62147	IC2411-7	-	-	w	7	acq_simcl0214 #18,20(MP)		-	-	100µL→50mL ✓
Z62148	BLK	-	-	w	8	acq_simcl0214		-	-	
Z62149	ICV2411-5	-	-	w	9	acq_simcl0214 Bad purge		-	-	50µL→50mL ☒
Z62150	BS	-	-	w	10	acq_simcl0214 Bad purge		-	-	20µL→40mL ☒
Z62151	MB	-	-	w	11	acq_simcl0214 Bad purge		-	-	☒

* For NELAC purposes, Method 8260 includes analytes by SOP MS005. Matrix: Designate "W" for Water, "S" for Soil, "O" for Oil, "Liq" for Non-aqueous Liquid, and "TCLP" or "SPLP" for Leachate. Manual Integration Rationale SOP QA029. MP Missed Peak, OP Overlapping Peak, SP Split Peak, PDB Poorly Defined Baseline, BR Baseline Ripple, PII Poor Instrument Integration.

Analyst's Signature: *Shanika O.*



MSVOA17-1A-ANALYSIS LOG

SGS -ORLANDO

DATE: 09/09/20		METHOD(S):* SimC1		BFB: V25942A		PH LOT: 1 to 12 pH lot #: 200814					
COLUMN TYPE: RTX-VMS		METHOD FILE(S): simc1091120.m		ICAL/CC: V25934, VS0792		0 to 3 pH lot#: 220416					
DETECTOR: 5975C MSD		CALIB. DATE: 09/11/20		ISTD/SURR: VS0791		KI PAPER LOT: 060117					
INSTRUMENT: MSVOA15-z		EM VOLTAGE: 1718V		ICV/QC: VS0802, VS0793		Processed BY: johnm					
PURGE PRESSURE: 9.7psi		BFB Response: 15605648		AFA: VS0418A		SAMPLE ID VERIFIED BY:					
PURGE VOLUME: 5 mL		RUN ID: VZ2412				SO					
ANALYST: Shanika O.						DATE VERIFIED: 09/12/20					
Data File	Sample ID	DIL.	VIAL #	MATRIX	ALS POS.	SAMPLE METHOD	MANUALLY INTEGRATED PEAKS RATIONAL, PEAK #	PH	CL	RR	COMMENTS
Z62152	BLK	-	-	w	1	acq_simc10214		-	-	-	✓
Z62153	BLK	-	-	w	2	acq_simc10215		-	-	-	✓
Z62154	BLK	-	-	w	1	acq_simc10216		-	-	-	✓
Z62155	BLK	-	-	w	2	acq_simc10214		-	-	-	✓
Z62156	BFB	-	-	w	100	bfb		-	-	-	✓ Passed Autofind
Z62157	CC2411-5	-	-	w	1	acq_simc10214		-	-	-	50µL→50mL ✓
Z62158	ICV2411-5	-	-	w	1	acq_simc10215		-	-	-	50µL→50mL ✓
Z62159	BS	-	-	w	2	acq_simc10216		-	-	-	✓
Z62160	MB	-	-	w	3	acq_simc10217		-	-	-	ND✓
Z62161	FA78398-17	1X	1	w	4	acq_simc10214		1	NO	-	✓
Z62162	FA78398-18	1X	1	w	5	acq_simc10214		1	NO	-	✓
Z62163	FA78398-19	1X	1	w	6	acq_simc10214		1	NO	-	✓
Z62164	FA78398-19MS	10X	1	w	7	acq_simc10215		1	NO	-	20µL→40mL ✓
Z62165	FA78398-19MSD	10X	1	w	8	acq_simc10216		1	NO	-	20µL→40mL ✓
Z62166	BLK	-	-	w	9	acq_simc10217		1	NO	-	✓
Z62167	FA78442-11	1X	1	w	10	acq_simc10214		1	NO	-	✓
Z62168	FA78442-12	1X	1	w	11	acq_simc10214		1	NO	-	✓
Z62169	FA78444-1	1X	1	w	12	acq_simc10214		1	NO	-	✓
Z62170	FA78444-2	1X	1	w	13	acq_simc10214		1	NO	-	✓
Z62171	FA78444-3	1X	1	w	14	acq_simc10214		1	NO	-	✓
Z62172	FA78444-4	1X	1	w	15	acq_simc10214		1	NO	-	✓
Z62173	ECC2411-5	-	-	w	16	acq_simc10214		-	-	-	50µL→50mL ✓

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Analyst's Signature: *Shanika O.*

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

e-Hardcopy 2.0
Automated Report

Technical Report for

Ahtna Global, LLC

Fort Ord Groundwater Monitoring

21065.000.01.0000(Former Fort Ord GWMP - OU2 Aquifer)

SGS Job Number: FA78549

Sampling Date: 09/02/20



Report to:

Ahtna Global, LLC
9699 Blue Larkspur Lane Suite 203
Monterey, CA 93940
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ATTN: Derek Lieberman

Total number of pages in report: **872**



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

Norm Farmer
Technical Director

Client Service contact: Elvin Kumar 407-425-6700

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

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Test results relate only to samples analyzed.

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Sample Summary

Ahtna Global, LLC

Job No: FA78549

Fort Ord Groundwater Monitoring

Project No: 21065.000.01.0000(Former Fort Ord GWMP - OU2 Aquifer)

Sample Number	Collected		Received	Matrix		Client Sample ID
	Date	Time By		Code	Type	
FA78549-1	09/02/20	09:20 MF	09/08/20	AQ	Trip Blank Water	2036MOU2177A
FA78549-2	09/02/20	09:31 MF	09/08/20	AQ	Ground Water	2036MOU2179F
FA78549-3	09/02/20	09:39 MF	09/08/20	AQ	Ground Water	2036MOU2180F
FA78549-4	09/02/20	09:52 MF	09/08/20	AQ	Ground Water	2036MOU2181F
FA78549-5	09/02/20	09:58 MF	09/08/20	AQ	Ground Water	2036MOU2182D
FA78549-6	09/02/20	10:17 MF	09/08/20	AQ	Ground Water	2036MOU2183F
FA78549-7	09/02/20	10:31 MF	09/08/20	AQ	Ground Water	2036MOU2184F
FA78549-8	09/02/20	10:38 MF	09/08/20	AQ	Ground Water	2036MOU2185F
FA78549-9	09/02/20	10:47 MF	09/08/20	AQ	Ground Water	2036MOU2186F
FA78549-10	09/02/20	10:57 MF	09/08/20	AQ	Ground Water	2036MOU2187F
FA78549-11	09/02/20	11:05 MF	09/08/20	AQ	Ground Water	2036MOU2188F
FA78549-12	09/02/20	11:18 MF	09/08/20	AQ	Ground Water	2036MOU2189F
FA78549-13	09/02/20	11:25 MF	09/08/20	AQ	Ground Water	2036MOU2190F



Sample Summary

(continued)

Ahtna Global, LLC

Job No: FA78549

Fort Ord Groundwater Monitoring

Project No: 21065.000.01.0000(Former Fort Ord GWMP - OU2 Aquifer)

Sample Number	Collected		Received	Matrix		Client Sample ID
	Date	Time By		Code	Type	
FA78549-14	09/02/20	11:34 MF	09/08/20	AQ	Ground Water	2036MOU2191F
FA78549-15	09/02/20	11:44 MF	09/08/20	AQ	Ground Water	2036MOU2192F
FA78549-16	09/02/20	11:52 MF	09/08/20	AQ	Ground Water	2036MOU2193F
FA78549-16D	09/02/20	11:52 MF	09/08/20	AQ	Water Dup/MSD	2036MOU2193F
FA78549-16S	09/02/20	11:52 MF	09/08/20	AQ	Water Matrix Spike	2036MOU2193F
FA78549-17	09/02/20	12:02 MF	09/08/20	AQ	Ground Water	2036MOU2194F
FA78549-18	09/02/20	12:08 MF	09/08/20	AQ	Ground Water	2036MOU2195F
FA78549-19	09/02/20	12:26 MF	09/08/20	AQ	Ground Water	2036MOU2196F
FA78549-20	09/02/20	13:47 MF	09/08/20	AQ	Ground Water	2036MOU2197F
FA78549-21	09/02/20	13:57 MF	09/08/20	AQ	Ground Water	2036MOU2198F
FA78549-22	09/02/20	14:15 MF	09/08/20	AQ	Ground Water	2036MOU2199F
FA78549-23	09/02/20	14:22 MF	09/08/20	AQ	Ground Water	2036MOU2200D
FA78549-24	09/02/20	14:31 MF	09/08/20	AQ	Ground Water	2036MOU2201F



Sample Summary

(continued)

Ahtna Global, LLC

Job No: FA78549

Fort Ord Groundwater Monitoring

Project No: 21065.000.01.0000(Former Fort Ord GWMP - OU2 Aquifer)

Sample Number	Collected		Matrix Code	Received	Type	Client Sample ID
	Date	Time By				
FA78549-25	09/02/20	07:26 TSLB	AQ	09/08/20	Trip Blank Water	2036YOU2401A
FA78549-26	09/02/20	08:26 TSLB	AQ	09/08/20	Ground Water	2036Y0BW402F
FA78549-27	09/02/20	08:38 TSLB	AQ	09/08/20	Ground Water	2036Y0BW403F
FA78549-28	09/02/20	09:14 TSLB	AQ	09/08/20	Ground Water	2036YOU2404F
FA78549-29	09/02/20	09:48 TSLB	AQ	09/08/20	Ground Water	2036YOU2405F
FA78549-30	09/02/20	10:35 TSLB	AQ	09/08/20	Ground Water	2036YOU2406F
FA78549-31	09/02/20	10:40 TSLB	AQ	09/08/20	Ground Water	2036YOU2407D
FA78549-32	09/02/20	11:00 TSLB	AQ	09/08/20	Ground Water	2036YOU2408F
FA78549-33	09/02/20	11:27 TSLB	AQ	09/08/20	Ground Water	2036YOU2409F
FA78549-34	09/02/20	11:45 TSLB	AQ	09/08/20	Ground Water	2036YOU2410F
FA78549-35	09/02/20	11:52 TSLB	AQ	09/08/20	Ground Water	2036YOU2411F
FA78549-36	09/02/20	12:25 TSLB	AQ	09/08/20	Ground Water	2036YOU2412F
FA78549-37	09/02/20	12:35 TSLB	AQ	09/08/20	Ground Water	2036YOU2413F



Sample Summary

(continued)

Ahtna Global, LLC

Job No: FA78549

Fort Ord Groundwater Monitoring

Project No: 21065.000.01.0000(Former Fort Ord GWMP - OU2 Aquifer)

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
FA78549-38	09/02/20	13:44	TSLB 09/08/20	AQ	Ground Water	2036YOU2414F
FA78549-39	09/02/20	14:23	TSLB 09/08/20	AQ	Ground Water	2036YOU2417F
FA78549-40	09/02/20	14:33	TSLB 09/08/20	AQ	Ground Water	2036YOU2418F
FA78549-41	09/02/20	14:45	TSLB 09/08/20	AQ	Ground Water	2036YOU2419C
FA78549-42	09/02/20	15:13	TSLB 09/08/20	AQ	Ground Water	2036YOU2420F

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: Ahtna Global, LLC

Job No: FA78549

Site: Fort Ord Groundwater Monitoring

Report Date 9/28/2020 4:11:14

40 Sample(s), 2 Trip Blank(s) and 0 Field Blank(s) were collected on 09/02/2020 and were received at SGS North America Inc - Orlando on 09/08/2020 properly preserved, at 2.2 Deg. C and intact. These Samples received an SGS Orlando job number of FA78549. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section. Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

MS Volatiles By Method SW846 8260B BY SIM

Matrix: AQ

Batch ID: VO2354

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA78549-2MS, FA78549-2MSD were used as the QC samples indicated.

Matrix Spike Recovery(s) for 1,1-Dichloroethane, 1,2-Dichloropropane, Benzene are outside control limits. Probable cause is due to matrix interference.

Matrix Spike Duplicate Recovery(s) for 1,1-Dichloroethane, 1,2-Dichloropropane, Benzene are outside control limits. Probable cause is due to matrix interference.

FA78549-11 for 1,2-Dichloroethane-D4: Outside DOD QSM control limits.

Matrix: AQ

Batch ID: VO2360

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA78564-1MS, FA78564-1MSD were used as the QC samples indicated.

Sample(s) FA78549-41 have surrogates outside control limits.

FA78549-41 for Toluene-D8: Outside DOD QSM control limits.

FA78549-41 for Vinyl Chloride: Confirmed ND by reanalysis.

Matrix: AQ

Batch ID: VO2363

Sample(s) FA78549-13 have surrogates outside control limits.

FA78549-2 for 1,2-Dichloroethane-D4: Outside DOD QSM control limits.

FA78549-2: Confirmation run.

FA78549-6 for 1,2-Dichloroethane-D4: Outside DOD QSM control limits.

FA78549-6: Confirmation run.

FA78549-7 for 1,2-Dichloroethane-D4: Outside DOD QSM control limits.

FA78549-7: Confirmation run.

FA78549-8 for 1,2-Dichloroethane-D4: Outside DOD QSM control limits.

FA78549-8: Confirmation run.

FA78549-11 for 1,2-Dichloroethane-D4: Outside DOD QSM control limits.

FA78549-11: Confirmation run.

FA78549-12: Confirmation run.

FA78549-13 for 1,2-Dichloroethane-D4: Outside DOD QSM control limits.

FA78549-13: Confirmation run.

FA78549-14: Sample re-analyzed beyond hold time; reported results are considered minimum values. Confirmation run.

FA78549-15: Sample re-analyzed beyond hold time; reported results are considered minimum values. Confirmation run.

Matrix: AQ

Batch ID: VZ2417

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA78549-16MS, FA78549-16MSD were used as the QC samples indicated.

Matrix: AQ

Batch ID: VZ2418

All samples were analyzed within the recommended method holding time.

Sample(s) FA78551-15MS, FA78551-15MSD were used as the QC samples indicated.

All method blanks for this batch meet method specific criteria.

FA78549-42 for 1,2-Dichloroethane-D4: Outside DOD QSM control limits.

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

Narrative prepared by:

Ariel Hartney, Client Services (*Signature on File*)

Summary of Hits

Job Number: FA78549
Account: Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring
Collected: 09/02/20



Lab Sample ID	Client Sample ID	Result/ Analyte	LOQ	LOD	Units	Method
FA78549-1		2036MOU2177A				
		Methylene Chloride	2.6	2.0	0.50	ug/l SW846 8260B BY SIM
		Tetrachloroethylene	2.1	0.50	0.25	ug/l SW846 8260B BY SIM
FA78549-2		2036MOU2179F				
		Chloroform	0.25 J	0.50	0.25	ug/l SW846 8260B BY SIM
		1,1-Dichloroethane	0.37 J	0.50	0.25	ug/l SW846 8260B BY SIM
		Trichloroethylene	1.9	0.50	0.25	ug/l SW846 8260B BY SIM
FA78549-3		2036MOU2180F				
		Chloroform	0.37 J	0.50	0.25	ug/l SW846 8260B BY SIM
		1,1-Dichloroethane	0.46 J	0.50	0.25	ug/l SW846 8260B BY SIM
		1,2-Dichloroethane	0.30 J	0.50	0.25	ug/l SW846 8260B BY SIM
		cis-1,2-Dichloroethylene	0.85	0.50	0.25	ug/l SW846 8260B BY SIM
		1,2-Dichloropropane	0.10 J	0.50	0.25	ug/l SW846 8260B BY SIM
		Tetrachloroethylene	0.50	0.50	0.25	ug/l SW846 8260B BY SIM
		Trichloroethylene	3.9	0.50	0.25	ug/l SW846 8260B BY SIM
FA78549-4		2036MOU2181F				
		Chloroform	0.30 J	0.50	0.25	ug/l SW846 8260B BY SIM
		1,1-Dichloroethane	0.19 J	0.50	0.25	ug/l SW846 8260B BY SIM
		cis-1,2-Dichloroethylene	0.57	0.50	0.25	ug/l SW846 8260B BY SIM
		Tetrachloroethylene	0.27 J	0.50	0.25	ug/l SW846 8260B BY SIM
		Trichloroethylene	3.1	0.50	0.25	ug/l SW846 8260B BY SIM
FA78549-5		2036MOU2182D				
		Chloroform	0.30 J	0.50	0.25	ug/l SW846 8260B BY SIM
		1,1-Dichloroethane	0.19 J	0.50	0.25	ug/l SW846 8260B BY SIM
		cis-1,2-Dichloroethylene	0.60	0.50	0.25	ug/l SW846 8260B BY SIM
		Tetrachloroethylene	0.28 J	0.50	0.25	ug/l SW846 8260B BY SIM
		Trichloroethylene	3.2	0.50	0.25	ug/l SW846 8260B BY SIM
FA78549-6		2036MOU2183F				
		Tetrachloroethylene	0.17 J	0.50	0.25	ug/l SW846 8260B BY SIM
		Trichloroethylene	0.14 J	0.50	0.25	ug/l SW846 8260B BY SIM
		Vinyl Chloride	0.051 J	0.10	0.050	ug/l SW846 8260B BY SIM

Summary of Hits

Job Number: FA78549
Account: Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring
Collected: 09/02/20



Lab Sample ID	Client Sample ID	Result/ Qual	LOQ	LOD	Units	Method
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FA78549-7 2036MOU2184F

1,1-Dichloroethane	0.25 J	0.50	0.25	ug/l	SW846 8260B BY SIM
1,2-Dichloroethane	0.51	0.50	0.25	ug/l	SW846 8260B BY SIM
cis-1,2-Dichloroethylene	1.0	0.50	0.25	ug/l	SW846 8260B BY SIM
Tetrachloroethylene	0.61	0.50	0.25	ug/l	SW846 8260B BY SIM
Trichloroethylene	0.70	0.50	0.25	ug/l	SW846 8260B BY SIM
Vinyl Chloride	0.053 J	0.10	0.050	ug/l	SW846 8260B BY SIM

FA78549-8 2036MOU2185F

Chloroform	0.39 J	0.50	0.25	ug/l	SW846 8260B BY SIM
1,1-Dichloroethane	0.21 J	0.50	0.25	ug/l	SW846 8260B BY SIM
cis-1,2-Dichloroethylene	1.3	0.50	0.25	ug/l	SW846 8260B BY SIM
Tetrachloroethylene	0.32 J	0.50	0.25	ug/l	SW846 8260B BY SIM
Trichloroethylene	5.2	0.50	0.25	ug/l	SW846 8260B BY SIM

FA78549-9 2036MOU2186F

Chloroform	0.22 J	0.50	0.25	ug/l	SW846 8260B BY SIM
1,1-Dichloroethane	1.4	0.50	0.25	ug/l	SW846 8260B BY SIM
1,2-Dichloroethane	0.30 J	0.50	0.25	ug/l	SW846 8260B BY SIM
cis-1,2-Dichloroethylene	1.0	0.50	0.25	ug/l	SW846 8260B BY SIM
1,2-Dichloropropane	0.12 J	0.50	0.25	ug/l	SW846 8260B BY SIM
Tetrachloroethylene	0.77	0.50	0.25	ug/l	SW846 8260B BY SIM
Trichloroethylene	1.8	0.50	0.25	ug/l	SW846 8260B BY SIM

FA78549-10 2036MOU2187F

Chloroform	0.68	0.50	0.25	ug/l	SW846 8260B BY SIM
1,1-Dichloroethane	5.4	0.50	0.25	ug/l	SW846 8260B BY SIM
1,2-Dichloroethane	2.1	0.50	0.25	ug/l	SW846 8260B BY SIM
cis-1,2-Dichloroethylene	4.1	0.50	0.25	ug/l	SW846 8260B BY SIM
1,2-Dichloropropane	0.36 J	0.50	0.25	ug/l	SW846 8260B BY SIM
Tetrachloroethylene	4.2	0.50	0.25	ug/l	SW846 8260B BY SIM
Trichloroethylene	6.5	0.50	0.25	ug/l	SW846 8260B BY SIM
Vinyl Chloride	0.11	0.10	0.050	ug/l	SW846 8260B BY SIM

FA78549-11 2036MOU2188F

Chloroform	0.66	0.50	0.25	ug/l	SW846 8260B BY SIM
1,1-Dichloroethane	1.5	0.50	0.25	ug/l	SW846 8260B BY SIM
1,2-Dichloroethane	4.1	0.50	0.25	ug/l	SW846 8260B BY SIM
cis-1,2-Dichloroethylene	2.0	0.50	0.25	ug/l	SW846 8260B BY SIM
1,2-Dichloropropane	0.17 J	0.50	0.25	ug/l	SW846 8260B BY SIM

Summary of Hits

Job Number: FA78549
Account: Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring
Collected: 09/02/20



Lab Sample ID Analyte	Client Sample ID	Result/ Qual	LOQ	LOD	Units	Method
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Tetrachloroethylene		2.1	0.50	0.25	ug/l	SW846 8260B BY SIM
Trichloroethylene		5.9	0.50	0.25	ug/l	SW846 8260B BY SIM

FA78549-12 2036MOU2189F

Benzene		0.15 J	0.50	0.25	ug/l	SW846 8260B BY SIM
Chloroform		0.28 J	0.50	0.25	ug/l	SW846 8260B BY SIM
1,1-Dichloroethane		5.7	0.50	0.25	ug/l	SW846 8260B BY SIM
1,2-Dichloroethane		2.0	0.50	0.25	ug/l	SW846 8260B BY SIM
cis-1,2-Dichloroethylene		8.9	0.50	0.25	ug/l	SW846 8260B BY SIM
1,2-Dichloropropane		0.69	0.50	0.25	ug/l	SW846 8260B BY SIM
Tetrachloroethylene		2.2	0.50	0.25	ug/l	SW846 8260B BY SIM
Trichloroethylene		2.5	0.50	0.25	ug/l	SW846 8260B BY SIM
Vinyl Chloride		0.57	0.10	0.050	ug/l	SW846 8260B BY SIM

FA78549-13 2036MOU2190F

Chloroform		0.19 J	0.50	0.25	ug/l	SW846 8260B BY SIM
cis-1,2-Dichloroethylene		0.36 J	0.50	0.25	ug/l	SW846 8260B BY SIM
Tetrachloroethylene		0.34 J	0.50	0.25	ug/l	SW846 8260B BY SIM
Trichloroethylene		2.7	0.50	0.25	ug/l	SW846 8260B BY SIM

FA78549-14 2036MOU2191F

Chloroform		0.38 J	0.50	0.25	ug/l	SW846 8260B BY SIM
1,1-Dichloroethane		0.18 J	0.50	0.25	ug/l	SW846 8260B BY SIM
cis-1,2-Dichloroethylene		1.3	0.50	0.25	ug/l	SW846 8260B BY SIM
1,2-Dichloropropane		0.12 J	0.50	0.25	ug/l	SW846 8260B BY SIM
Tetrachloroethylene		0.77	0.50	0.25	ug/l	SW846 8260B BY SIM
Trichloroethylene		4.2	0.50	0.25	ug/l	SW846 8260B BY SIM

FA78549-15 2036MOU2192F

Carbon Tetrachloride		0.12 J	0.50	0.25	ug/l	SW846 8260B BY SIM
Chloroform		0.42 J	0.50	0.25	ug/l	SW846 8260B BY SIM
cis-1,2-Dichloroethylene		1.5	0.50	0.25	ug/l	SW846 8260B BY SIM
1,2-Dichloropropane		0.12 J	0.50	0.25	ug/l	SW846 8260B BY SIM
Tetrachloroethylene		0.79	0.50	0.25	ug/l	SW846 8260B BY SIM
Trichloroethylene		3.5	0.50	0.25	ug/l	SW846 8260B BY SIM

FA78549-16 2036MOU2193F

Chloroform		0.82	0.50	0.25	ug/l	SW846 8260B BY SIM
1,1-Dichloroethane		1.4	0.50	0.25	ug/l	SW846 8260B BY SIM
1,2-Dichloroethane		0.12 J	0.50	0.25	ug/l	SW846 8260B BY SIM

Summary of Hits

Job Number: FA78549
Account: Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring
Collected: 09/02/20



Lab Sample ID	Client Sample ID	Result/ Analyte	LOQ	LOD	Units	Method
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cis-1,2-Dichloroethylene		0.43 J	0.50	0.25	ug/l	SW846 8260B BY SIM
Tetrachloroethylene		5.9	0.50	0.25	ug/l	SW846 8260B BY SIM
Trichloroethylene		9.5	0.50	0.25	ug/l	SW846 8260B BY SIM

FA78549-17 2036MOU2194F

Benzene		0.18 J	0.50	0.25	ug/l	SW846 8260B BY SIM
Chloroform		0.52	0.50	0.25	ug/l	SW846 8260B BY SIM
1,1-Dichloroethane		6.6	0.50	0.25	ug/l	SW846 8260B BY SIM
1,2-Dichloroethane		1.0	0.50	0.25	ug/l	SW846 8260B BY SIM
cis-1,2-Dichloroethylene		3.5	0.50	0.25	ug/l	SW846 8260B BY SIM
1,2-Dichloropropane		0.26 J	0.50	0.25	ug/l	SW846 8260B BY SIM
Methylene Chloride		1.6 J	2.0	0.50	ug/l	SW846 8260B BY SIM
Tetrachloroethylene		5.4	0.50	0.25	ug/l	SW846 8260B BY SIM
Trichloroethylene		10.1	0.50	0.25	ug/l	SW846 8260B BY SIM
Vinyl Chloride		0.51	0.10	0.050	ug/l	SW846 8260B BY SIM

FA78549-18 2036MOU2195F

Benzene		0.23 J	0.50	0.25	ug/l	SW846 8260B BY SIM
Chloroform		0.24 J	0.50	0.25	ug/l	SW846 8260B BY SIM
1,1-Dichloroethane		12.6	0.50	0.25	ug/l	SW846 8260B BY SIM
1,2-Dichloroethane		1.9	0.50	0.25	ug/l	SW846 8260B BY SIM
cis-1,2-Dichloroethylene		11.1	0.50	0.25	ug/l	SW846 8260B BY SIM
1,2-Dichloropropane		0.55	0.50	0.25	ug/l	SW846 8260B BY SIM
Tetrachloroethylene		5.4	0.50	0.25	ug/l	SW846 8260B BY SIM
Trichloroethylene		5.3	0.50	0.25	ug/l	SW846 8260B BY SIM
Vinyl Chloride		1.3	0.10	0.050	ug/l	SW846 8260B BY SIM

FA78549-19 2036MOU2196F

Benzene		0.17 J	0.50	0.25	ug/l	SW846 8260B BY SIM
1,1-Dichloroethane		5.1	0.50	0.25	ug/l	SW846 8260B BY SIM
1,2-Dichloroethane		0.72	0.50	0.25	ug/l	SW846 8260B BY SIM
cis-1,2-Dichloroethylene		7.7	0.50	0.25	ug/l	SW846 8260B BY SIM
1,2-Dichloropropane		0.24 J	0.50	0.25	ug/l	SW846 8260B BY SIM
Tetrachloroethylene		1.3	0.50	0.25	ug/l	SW846 8260B BY SIM
Trichloroethylene		1.3	0.50	0.25	ug/l	SW846 8260B BY SIM
Vinyl Chloride		0.86	0.10	0.050	ug/l	SW846 8260B BY SIM

FA78549-20 2036MOU2197F

Chloroform		0.13 J	0.50	0.25	ug/l	SW846 8260B BY SIM
cis-1,2-Dichloroethylene		0.21 J	0.50	0.25	ug/l	SW846 8260B BY SIM
Tetrachloroethylene		0.22 J	0.50	0.25	ug/l	SW846 8260B BY SIM

Summary of Hits

Job Number: FA78549
Account: Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring
Collected: 09/02/20



Lab Sample ID Analyte	Client Sample ID	Result/ Qual	LOQ	LOD	Units	Method
Trichloroethylene		1.7	0.50	0.25	ug/l	SW846 8260B BY SIM
FA78549-21 2036MOU2198F						
cis-1,2-Dichloroethylene		3.9	0.50	0.25	ug/l	SW846 8260B BY SIM
Tetrachloroethylene		0.85	0.50	0.25	ug/l	SW846 8260B BY SIM
Trichloroethylene		0.17 J	0.50	0.25	ug/l	SW846 8260B BY SIM
FA78549-22 2036MOU2199F						
Chloroform		0.36 J	0.50	0.25	ug/l	SW846 8260B BY SIM
1,1-Dichloroethane		0.16 J	0.50	0.25	ug/l	SW846 8260B BY SIM
cis-1,2-Dichloroethylene		1.1	0.50	0.25	ug/l	SW846 8260B BY SIM
Tetrachloroethylene		0.89	0.50	0.25	ug/l	SW846 8260B BY SIM
Trichloroethylene		7.6	0.50	0.25	ug/l	SW846 8260B BY SIM
FA78549-23 2036MOU2200D						
Chloroform		0.36 J	0.50	0.25	ug/l	SW846 8260B BY SIM
1,1-Dichloroethane		0.16 J	0.50	0.25	ug/l	SW846 8260B BY SIM
cis-1,2-Dichloroethylene		1.1	0.50	0.25	ug/l	SW846 8260B BY SIM
Tetrachloroethylene		0.90	0.50	0.25	ug/l	SW846 8260B BY SIM
Trichloroethylene		7.6	0.50	0.25	ug/l	SW846 8260B BY SIM
FA78549-24 2036MOU2201F						
Carbon Tetrachloride		0.12 J	0.50	0.25	ug/l	SW846 8260B BY SIM
Chloroform		0.16 J	0.50	0.25	ug/l	SW846 8260B BY SIM
cis-1,2-Dichloroethylene		0.59	0.50	0.25	ug/l	SW846 8260B BY SIM
Tetrachloroethylene		0.47 J	0.50	0.25	ug/l	SW846 8260B BY SIM
Trichloroethylene		7.3	0.50	0.25	ug/l	SW846 8260B BY SIM
FA78549-25 2036YOU2401A						
No hits reported in this sample.						
FA78549-26 2036Y0BW402F						
Chloroform		0.37 J	0.50	0.25	ug/l	SW846 8260B BY SIM
1,1-Dichloroethane		0.89	0.50	0.25	ug/l	SW846 8260B BY SIM
Tetrachloroethylene		0.12 J	0.50	0.25	ug/l	SW846 8260B BY SIM
Trichloroethylene		2.3	0.50	0.25	ug/l	SW846 8260B BY SIM

Summary of Hits

Job Number: FA78549
Account: Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring
Collected: 09/02/20



Lab Sample ID	Client Sample ID	Result/ Qual	LOQ	LOD	Units	Method
FA78549-27	2036Y0BW403F					
Chloroform		0.25 J	0.50	0.25	ug/l	SW846 8260B BY SIM
1,1-Dichloroethane		0.11 J	0.50	0.25	ug/l	SW846 8260B BY SIM
cis-1,2-Dichloroethylene		0.68	0.50	0.25	ug/l	SW846 8260B BY SIM
Trichloroethylene		4.1	0.50	0.25	ug/l	SW846 8260B BY SIM
FA78549-28	2036YOU2404F					
Chloroform		0.20 J	0.50	0.25	ug/l	SW846 8260B BY SIM
cis-1,2-Dichloroethylene		0.54	0.50	0.25	ug/l	SW846 8260B BY SIM
Tetrachloroethylene		0.13 J	0.50	0.25	ug/l	SW846 8260B BY SIM
Trichloroethylene		2.5	0.50	0.25	ug/l	SW846 8260B BY SIM
FA78549-29	2036YOU2405F					
Chloroform		0.18 J	0.50	0.25	ug/l	SW846 8260B BY SIM
FA78549-30	2036YOU2406F					
1,1-Dichloroethane		0.70	0.50	0.25	ug/l	SW846 8260B BY SIM
1,2-Dichloroethane		0.61	0.50	0.25	ug/l	SW846 8260B BY SIM
cis-1,2-Dichloroethylene		1.3	0.50	0.25	ug/l	SW846 8260B BY SIM
Tetrachloroethylene		1.2	0.50	0.25	ug/l	SW846 8260B BY SIM
Trichloroethylene		2.6	0.50	0.25	ug/l	SW846 8260B BY SIM
FA78549-31	2036YOU2407D					
1,1-Dichloroethane		0.72	0.50	0.25	ug/l	SW846 8260B BY SIM
1,2-Dichloroethane		0.63	0.50	0.25	ug/l	SW846 8260B BY SIM
cis-1,2-Dichloroethylene		1.3	0.50	0.25	ug/l	SW846 8260B BY SIM
Tetrachloroethylene		1.2	0.50	0.25	ug/l	SW846 8260B BY SIM
Trichloroethylene		2.6	0.50	0.25	ug/l	SW846 8260B BY SIM
FA78549-32	2036YOU2408F					
Chloroform		0.63	0.50	0.25	ug/l	SW846 8260B BY SIM
cis-1,2-Dichloroethylene		1.5	0.50	0.25	ug/l	SW846 8260B BY SIM
Trichloroethylene		9.6	0.50	0.25	ug/l	SW846 8260B BY SIM
FA78549-33	2036YOU2409F					
1,1-Dichloroethane		0.41 J	0.50	0.25	ug/l	SW846 8260B BY SIM
1,2-Dichloroethane		0.20 J	0.50	0.25	ug/l	SW846 8260B BY SIM
cis-1,2-Dichloroethylene		0.97	0.50	0.25	ug/l	SW846 8260B BY SIM

Summary of Hits

Job Number: FA78549
Account: Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring
Collected: 09/02/20



Lab Sample ID	Client Sample ID	Result/ Analyte	LOQ	LOD	Units	Method
		Tetrachloroethylene	0.35 J	0.50	0.25	ug/l SW846 8260B BY SIM
		Trichloroethylene	1.2	0.50	0.25	ug/l SW846 8260B BY SIM
FA78549-34		2036YOU2410F				
		Trichloroethylene	0.82	0.50	0.25	ug/l SW846 8260B BY SIM
FA78549-35		2036YOU2411F				
		Chloroform	0.97	0.50	0.25	ug/l SW846 8260B BY SIM
		1,1-Dichloroethane	2.4	0.50	0.25	ug/l SW846 8260B BY SIM
		1,2-Dichloroethane	0.84	0.50	0.25	ug/l SW846 8260B BY SIM
		cis-1,2-Dichloroethylene	0.70	0.50	0.25	ug/l SW846 8260B BY SIM
		Tetrachloroethylene	2.4	0.50	0.25	ug/l SW846 8260B BY SIM
		Trichloroethylene	5.6	0.50	0.25	ug/l SW846 8260B BY SIM
FA78549-36		2036YOU2412F				
		Chloroform	0.79	0.50	0.25	ug/l SW846 8260B BY SIM
		1,1-Dichloroethane	6.3	0.50	0.25	ug/l SW846 8260B BY SIM
		cis-1,2-Dichloroethylene	0.58	0.50	0.25	ug/l SW846 8260B BY SIM
		Tetrachloroethylene	0.51	0.50	0.25	ug/l SW846 8260B BY SIM
		Trichloroethylene	0.54	0.50	0.25	ug/l SW846 8260B BY SIM
FA78549-37		2036YOU2413F				
		Chloroform	0.27 J	0.50	0.25	ug/l SW846 8260B BY SIM
		Trichloroethylene	0.51	0.50	0.25	ug/l SW846 8260B BY SIM
FA78549-38		2036YOU2414F				
		Chloroform	0.65	0.50	0.25	ug/l SW846 8260B BY SIM
		1,1-Dichloroethane	0.34 J	0.50	0.25	ug/l SW846 8260B BY SIM
		Tetrachloroethylene	4.1	0.50	0.25	ug/l SW846 8260B BY SIM
FA78549-39		2036YOU2417F				
		Chloroform	0.31 J	0.50	0.25	ug/l SW846 8260B BY SIM
		Tetrachloroethylene	0.61	0.50	0.25	ug/l SW846 8260B BY SIM
FA78549-40		2036YOU2418F				
		Chloroform	0.23 J	0.50	0.25	ug/l SW846 8260B BY SIM
		cis-1,2-Dichloroethylene	0.23 J	0.50	0.25	ug/l SW846 8260B BY SIM
		Tetrachloroethylene	0.40 J	0.50	0.25	ug/l SW846 8260B BY SIM

Summary of Hits

Job Number: FA78549
Account: Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring
Collected: 09/02/20



Lab Sample ID	Client Sample ID	Result/ Qual	LOQ	LOD	Units	Method
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Trichloroethylene		5.1	0.50	0.25	ug/l	SW846 8260B BY SIM
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FA78549-41 2036YOU2419C

No hits reported in this sample.

FA78549-42 2036YOU2420F

Trichloroethylene		0.35 J	0.50	0.25	ug/l	SW846 8260B BY SIM
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Sample Results

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Client Sample ID:	2036MOU2177A	Date Sampled:	09/02/20
Lab Sample ID:	FA78549-1	Date Received:	09/08/20
Matrix:	AQ - Trip Blank Water	Percent Solids:	n/a
Method:	SW846 8260B BY SIM		
Project:	Fort Ord Groundwater Monitoring		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	O61159.D	1	09/10/20 09:56	MM	n/a	n/a	VO2354
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
71-43-2	Benzene	0.25 U	0.50	0.25	0.10	ug/l	
56-23-5	Carbon Tetrachloride	0.25 U	0.50	0.25	0.10	ug/l	
67-66-3	Chloroform	0.25 U	0.50	0.25	0.10	ug/l	
75-34-3	1,1-Dichloroethane	0.25 U	0.50	0.25	0.10	ug/l	
107-06-2	1,2-Dichloroethane	0.25 U	0.50	0.25	0.10	ug/l	
156-59-2	cis-1,2-Dichloroethylene	0.25 U	0.50	0.25	0.10	ug/l	
78-87-5	1,2-Dichloropropane	0.25 U	0.50	0.25	0.10	ug/l	
75-09-2	Methylene Chloride	2.6	2.0	0.50	0.50	ug/l	
127-18-4	Tetrachloroethylene	2.1	0.50	0.25	0.10	ug/l	
79-01-6	Trichloroethylene	0.25 U	0.50	0.25	0.10	ug/l	
75-01-4	Vinyl Chloride	0.050 U	0.10	0.050	0.050	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	111%		74-125%
2037-26-5	Toluene-D8	102%		88-111%

U = Not detected

LOD = Limit of Detection

J = Indicates an estimated value

LOQ = Limit of Quantitation

DL = Detection Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

SGS North America Inc.

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Client Sample ID:	2036MOU2179F	
Lab Sample ID:	FA78549-2	Date Sampled: 09/02/20
Matrix:	AQ - Ground Water	Date Received: 09/08/20
Method:	SW846 8260B BY SIM	Percent Solids: n/a
Project:	Fort Ord Groundwater Monitoring	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	O61160.D	1	09/10/20 10:17	MM	n/a	n/a	VO2354
Run #2 ^a	O61414.D	1	09/16/20 16:13	AG	n/a	n/a	VO2363

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
71-43-2	Benzene	0.25 U	0.50	0.25	0.10	ug/l	
56-23-5	Carbon Tetrachloride	0.25 U	0.50	0.25	0.10	ug/l	
67-66-3	Chloroform	0.25	0.50	0.25	0.10	ug/l	J
75-34-3	1,1-Dichloroethane	0.37	0.50	0.25	0.10	ug/l	J
107-06-2	1,2-Dichloroethane	0.25 U	0.50	0.25	0.10	ug/l	
156-59-2	cis-1,2-Dichloroethylene	0.25 U	0.50	0.25	0.10	ug/l	
78-87-5	1,2-Dichloropropane	0.25 U	0.50	0.25	0.10	ug/l	
75-09-2	Methylene Chloride	0.50 U	2.0	0.50	0.50	ug/l	
127-18-4	Tetrachloroethylene	0.25 U	0.50	0.25	0.10	ug/l	
79-01-6	Trichloroethylene	1.9	0.50	0.25	0.10	ug/l	
75-01-4	Vinyl Chloride	0.050 U	0.10	0.050	0.050	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	112%	119% ^b	74-125%
2037-26-5	Toluene-D8	102%	104%	88-111%

(a) Confirmation run.

(b) Outside DOD QSM control limits.

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
 LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

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Client Sample ID:	2036MOU2180F	Date Sampled:	09/02/20
Lab Sample ID:	FA78549-3	Date Received:	09/08/20
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B BY SIM		
Project:	Fort Ord Groundwater Monitoring		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	O61161.D	1	09/10/20 10:37	MM	n/a	n/a	VO2354
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
71-43-2	Benzene	0.25 U	0.50	0.25	0.10	ug/l	
56-23-5	Carbon Tetrachloride	0.25 U	0.50	0.25	0.10	ug/l	
67-66-3	Chloroform	0.37	0.50	0.25	0.10	ug/l	J
75-34-3	1,1-Dichloroethane	0.46	0.50	0.25	0.10	ug/l	J
107-06-2	1,2-Dichloroethane	0.30	0.50	0.25	0.10	ug/l	J
156-59-2	cis-1,2-Dichloroethylene	0.85	0.50	0.25	0.10	ug/l	
78-87-5	1,2-Dichloropropane	0.10	0.50	0.25	0.10	ug/l	J
75-09-2	Methylene Chloride	0.50 U	2.0	0.50	0.50	ug/l	
127-18-4	Tetrachloroethylene	0.50	0.50	0.25	0.10	ug/l	
79-01-6	Trichloroethylene	3.9	0.50	0.25	0.10	ug/l	
75-01-4	Vinyl Chloride	0.050 U	0.10	0.050	0.050	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	113%		74-125%
2037-26-5	Toluene-D8	102%		88-111%

U = Not detected

LOD = Limit of Detection

J = Indicates an estimated value

LOQ = Limit of Quantitation

DL = Detection Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

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Client Sample ID:	2036MOU2181F	Date Sampled:	09/02/20
Lab Sample ID:	FA78549-4	Date Received:	09/08/20
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B BY SIM		
Project:	Fort Ord Groundwater Monitoring		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	O61162.D	1	09/10/20 10:57	MM	n/a	n/a	VO2354
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
71-43-2	Benzene	0.25 U	0.50	0.25	0.10	ug/l	
56-23-5	Carbon Tetrachloride	0.25 U	0.50	0.25	0.10	ug/l	
67-66-3	Chloroform	0.30	0.50	0.25	0.10	ug/l	J
75-34-3	1,1-Dichloroethane	0.19	0.50	0.25	0.10	ug/l	J
107-06-2	1,2-Dichloroethane	0.25 U	0.50	0.25	0.10	ug/l	
156-59-2	cis-1,2-Dichloroethylene	0.57	0.50	0.25	0.10	ug/l	
78-87-5	1,2-Dichloropropane	0.25 U	0.50	0.25	0.10	ug/l	
75-09-2	Methylene Chloride	0.50 U	2.0	0.50	0.50	ug/l	
127-18-4	Tetrachloroethylene	0.27	0.50	0.25	0.10	ug/l	J
79-01-6	Trichloroethylene	3.1	0.50	0.25	0.10	ug/l	
75-01-4	Vinyl Chloride	0.050 U	0.10	0.050	0.050	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	113%		74-125%
2037-26-5	Toluene-D8	102%		88-111%

U = Not detected

LOD = Limit of Detection

J = Indicates an estimated value

LOQ = Limit of Quantitation

DL = Detection Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

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Client Sample ID:	2036MOU2182D	Date Sampled:	09/02/20
Lab Sample ID:	FA78549-5	Date Received:	09/08/20
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B BY SIM		
Project:	Fort Ord Groundwater Monitoring		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	O61165.D	1	09/10/20 11:58	MM	n/a	n/a	VO2354
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
71-43-2	Benzene	0.25 U	0.50	0.25	0.10	ug/l	
56-23-5	Carbon Tetrachloride	0.25 U	0.50	0.25	0.10	ug/l	
67-66-3	Chloroform	0.30	0.50	0.25	0.10	ug/l	J
75-34-3	1,1-Dichloroethane	0.19	0.50	0.25	0.10	ug/l	J
107-06-2	1,2-Dichloroethane	0.25 U	0.50	0.25	0.10	ug/l	
156-59-2	cis-1,2-Dichloroethylene	0.60	0.50	0.25	0.10	ug/l	
78-87-5	1,2-Dichloropropane	0.25 U	0.50	0.25	0.10	ug/l	
75-09-2	Methylene Chloride	0.50 U	2.0	0.50	0.50	ug/l	
127-18-4	Tetrachloroethylene	0.28	0.50	0.25	0.10	ug/l	J
79-01-6	Trichloroethylene	3.2	0.50	0.25	0.10	ug/l	
75-01-4	Vinyl Chloride	0.050 U	0.10	0.050	0.050	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	112%		74-125%
2037-26-5	Toluene-D8	103%		88-111%

U = Not detected

LOD = Limit of Detection

J = Indicates an estimated value

LOQ = Limit of Quantitation

DL = Detection Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

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Client Sample ID:	2036MOU2183F	
Lab Sample ID:	FA78549-6	Date Sampled: 09/02/20
Matrix:	AQ - Ground Water	Date Received: 09/08/20
Method:	SW846 8260B BY SIM	Percent Solids: n/a
Project:	Fort Ord Groundwater Monitoring	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	O61166.D	1	09/10/20 12:18	MM	n/a	n/a	VO2354
Run #2 ^a	O61415.D	1	09/16/20 16:33	AG	n/a	n/a	VO2363

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
71-43-2	Benzene	0.25 U	0.50	0.25	0.10	ug/l	
56-23-5	Carbon Tetrachloride	0.25 U	0.50	0.25	0.10	ug/l	
67-66-3	Chloroform	0.25 U	0.50	0.25	0.10	ug/l	
75-34-3	1,1-Dichloroethane	0.25 U	0.50	0.25	0.10	ug/l	
107-06-2	1,2-Dichloroethane	0.25 U	0.50	0.25	0.10	ug/l	
156-59-2	cis-1,2-Dichloroethylene	0.25 U	0.50	0.25	0.10	ug/l	
78-87-5	1,2-Dichloropropane	0.25 U	0.50	0.25	0.10	ug/l	
75-09-2	Methylene Chloride	0.50 U	2.0	0.50	0.50	ug/l	
127-18-4	Tetrachloroethylene	0.17	0.50	0.25	0.10	ug/l	J
79-01-6	Trichloroethylene	0.14	0.50	0.25	0.10	ug/l	J
75-01-4	Vinyl Chloride	0.051	0.10	0.050	0.050	ug/l	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	113%	119% ^b	74-125%
2037-26-5	Toluene-D8	102%	103%	88-111%

(a) Confirmation run.

(b) Outside DOD QSM control limits.

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
 LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

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Client Sample ID:	2036MOU2184F	
Lab Sample ID:	FA78549-7	Date Sampled: 09/02/20
Matrix:	AQ - Ground Water	Date Received: 09/08/20
Method:	SW846 8260B BY SIM	Percent Solids: n/a
Project:	Fort Ord Groundwater Monitoring	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	O61167.D	1	09/10/20 12:38	MM	n/a	n/a	VO2354
Run #2 ^a	O61416.D	1	09/16/20 16:53	AG	n/a	n/a	VO2363

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
71-43-2	Benzene	0.25 U	0.50	0.25	0.10	ug/l	
56-23-5	Carbon Tetrachloride	0.25 U	0.50	0.25	0.10	ug/l	
67-66-3	Chloroform	0.25 U	0.50	0.25	0.10	ug/l	
75-34-3	1,1-Dichloroethane	0.25	0.50	0.25	0.10	ug/l	J
107-06-2	1,2-Dichloroethane	0.51	0.50	0.25	0.10	ug/l	
156-59-2	cis-1,2-Dichloroethylene	1.0	0.50	0.25	0.10	ug/l	
78-87-5	1,2-Dichloropropane	0.25 U	0.50	0.25	0.10	ug/l	
75-09-2	Methylene Chloride	0.50 U	2.0	0.50	0.50	ug/l	
127-18-4	Tetrachloroethylene	0.61	0.50	0.25	0.10	ug/l	
79-01-6	Trichloroethylene	0.70	0.50	0.25	0.10	ug/l	
75-01-4	Vinyl Chloride	0.053	0.10	0.050	0.050	ug/l	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	113%	122% ^b	74-125%
2037-26-5	Toluene-D8	103%	105%	88-111%

(a) Confirmation run.

(b) Outside DOD QSM control limits.

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
 LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

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Client Sample ID:	2036MOU2185F	Date Sampled:	09/02/20
Lab Sample ID:	FA78549-8	Date Received:	09/08/20
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B BY SIM		
Project:	Fort Ord Groundwater Monitoring		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	O61168.D	1	09/10/20 12:59	MM	n/a	n/a	VO2354
Run #2 ^a	O61417.D	1	09/16/20 17:14	AG	n/a	n/a	VO2363

Purge Volume	
Run #1	5.0 ml
Run #2	5.0 ml

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
71-43-2	Benzene	0.25 U	0.50	0.25	0.10	ug/l	
56-23-5	Carbon Tetrachloride	0.25 U	0.50	0.25	0.10	ug/l	
67-66-3	Chloroform	0.39	0.50	0.25	0.10	ug/l	J
75-34-3	1,1-Dichloroethane	0.21	0.50	0.25	0.10	ug/l	J
107-06-2	1,2-Dichloroethane	0.25 U	0.50	0.25	0.10	ug/l	
156-59-2	cis-1,2-Dichloroethylene	1.3	0.50	0.25	0.10	ug/l	
78-87-5	1,2-Dichloropropane	0.25 U	0.50	0.25	0.10	ug/l	
75-09-2	Methylene Chloride	0.50 U	2.0	0.50	0.50	ug/l	
127-18-4	Tetrachloroethylene	0.32	0.50	0.25	0.10	ug/l	J
79-01-6	Trichloroethylene	5.2	0.50	0.25	0.10	ug/l	
75-01-4	Vinyl Chloride	0.050 U	0.10	0.050	0.050	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	114%	124% ^b	74-125%
2037-26-5	Toluene-D8	102%	103%	88-111%

(a) Confirmation run.

(b) Outside DOD QSM control limits.

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
 LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

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Client Sample ID:	2036MOU2186F	Date Sampled:	09/02/20
Lab Sample ID:	FA78549-9	Date Received:	09/08/20
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B BY SIM		
Project:	Fort Ord Groundwater Monitoring		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	O61169.D	1	09/10/20 13:19	MM	n/a	n/a	VO2354
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
71-43-2	Benzene	0.25 U	0.50	0.25	0.10	ug/l	
56-23-5	Carbon Tetrachloride	0.25 U	0.50	0.25	0.10	ug/l	
67-66-3	Chloroform	0.22	0.50	0.25	0.10	ug/l	J
75-34-3	1,1-Dichloroethane	1.4	0.50	0.25	0.10	ug/l	
107-06-2	1,2-Dichloroethane	0.30	0.50	0.25	0.10	ug/l	J
156-59-2	cis-1,2-Dichloroethylene	1.0	0.50	0.25	0.10	ug/l	
78-87-5	1,2-Dichloropropane	0.12	0.50	0.25	0.10	ug/l	J
75-09-2	Methylene Chloride	0.50 U	2.0	0.50	0.50	ug/l	
127-18-4	Tetrachloroethylene	0.77	0.50	0.25	0.10	ug/l	
79-01-6	Trichloroethylene	1.8	0.50	0.25	0.10	ug/l	
75-01-4	Vinyl Chloride	0.050 U	0.10	0.050	0.050	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	114%		74-125%
2037-26-5	Toluene-D8	102%		88-111%

U = Not detected

LOD = Limit of Detection

J = Indicates an estimated value

LOQ = Limit of Quantitation

DL = Detection Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

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Client Sample ID:	2036MOU2187F	Date Sampled:	09/02/20
Lab Sample ID:	FA78549-10	Date Received:	09/08/20
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B BY SIM		
Project:	Fort Ord Groundwater Monitoring		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	O61170.D	1	09/10/20 13:39	MM	n/a	n/a	VO2354
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
71-43-2	Benzene	0.25 U	0.50	0.25	0.10	ug/l	
56-23-5	Carbon Tetrachloride	0.25 U	0.50	0.25	0.10	ug/l	
67-66-3	Chloroform	0.68	0.50	0.25	0.10	ug/l	
75-34-3	1,1-Dichloroethane	5.4	0.50	0.25	0.10	ug/l	
107-06-2	1,2-Dichloroethane	2.1	0.50	0.25	0.10	ug/l	
156-59-2	cis-1,2-Dichloroethylene	4.1	0.50	0.25	0.10	ug/l	
78-87-5	1,2-Dichloropropane	0.36	0.50	0.25	0.10	ug/l	J
75-09-2	Methylene Chloride	0.50 U	2.0	0.50	0.50	ug/l	
127-18-4	Tetrachloroethylene	4.2	0.50	0.25	0.10	ug/l	
79-01-6	Trichloroethylene	6.5	0.50	0.25	0.10	ug/l	
75-01-4	Vinyl Chloride	0.11	0.10	0.050	0.050	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	116%		74-125%
2037-26-5	Toluene-D8	102%		88-111%

U = Not detected

LOD = Limit of Detection

J = Indicates an estimated value

LOQ = Limit of Quantitation

DL = Detection Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

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Client Sample ID:	2036MOU2188F	Date Sampled:	09/02/20
Lab Sample ID:	FA78549-11	Date Received:	09/08/20
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B BY SIM		
Project:	Fort Ord Groundwater Monitoring		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	O61171.D	1	09/10/20 14:00	MM	n/a	n/a	VO2354
Run #2 ^a	O61418.D	1	09/16/20 17:34	AG	n/a	n/a	VO2363

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
71-43-2	Benzene	0.25 U	0.50	0.25	0.10	ug/l	
56-23-5	Carbon Tetrachloride	0.25 U	0.50	0.25	0.10	ug/l	
67-66-3	Chloroform	0.66	0.50	0.25	0.10	ug/l	
75-34-3	1,1-Dichloroethane	1.5	0.50	0.25	0.10	ug/l	
107-06-2	1,2-Dichloroethane	4.1	0.50	0.25	0.10	ug/l	
156-59-2	cis-1,2-Dichloroethylene	2.0	0.50	0.25	0.10	ug/l	
78-87-5	1,2-Dichloropropane	0.17	0.50	0.25	0.10	ug/l	J
75-09-2	Methylene Chloride	0.50 U	2.0	0.50	0.50	ug/l	
127-18-4	Tetrachloroethylene	2.1	0.50	0.25	0.10	ug/l	
79-01-6	Trichloroethylene	5.9	0.50	0.25	0.10	ug/l	
75-01-4	Vinyl Chloride	0.050 U	0.10	0.050	0.050	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	120% ^b	123% ^b	74-125%
2037-26-5	Toluene-D8	102%	104%	88-111%

(a) Confirmation run.

(b) Outside DOD QSM control limits.

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
 LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

4.11
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SGS North America Inc.

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Client Sample ID:	2036MOU2189F	Date Sampled:	09/02/20
Lab Sample ID:	FA78549-12	Date Received:	09/08/20
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B BY SIM		
Project:	Fort Ord Groundwater Monitoring		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	O61172.D	1	09/10/20 14:20	MM	n/a	n/a	VO2354
Run #2 ^a	O61419.D	1	09/16/20 17:55	AG	n/a	n/a	VO2363

Purge Volume	
Run #1	5.0 ml
Run #2	5.0 ml

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
71-43-2	Benzene	0.15	0.50	0.25	0.10	ug/l	J
56-23-5	Carbon Tetrachloride	0.25 U	0.50	0.25	0.10	ug/l	
67-66-3	Chloroform	0.28	0.50	0.25	0.10	ug/l	J
75-34-3	1,1-Dichloroethane	5.7	0.50	0.25	0.10	ug/l	
107-06-2	1,2-Dichloroethane	2.0	0.50	0.25	0.10	ug/l	
156-59-2	cis-1,2-Dichloroethylene	8.9	0.50	0.25	0.10	ug/l	
78-87-5	1,2-Dichloropropane	0.69	0.50	0.25	0.10	ug/l	
75-09-2	Methylene Chloride	0.50 U	2.0	0.50	0.50	ug/l	
127-18-4	Tetrachloroethylene	2.2	0.50	0.25	0.10	ug/l	
79-01-6	Trichloroethylene	2.5	0.50	0.25	0.10	ug/l	
75-01-4	Vinyl Chloride	0.57	0.10	0.050	0.050	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	115%	107%	74-125%
2037-26-5	Toluene-D8	103%	110%	88-111%

(a) Confirmation run.

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
 LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

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Client Sample ID: 2036MOU2190F	
Lab Sample ID: FA78549-13	Date Sampled: 09/02/20
Matrix: AQ - Ground Water	Date Received: 09/08/20
Method: SW846 8260B BY SIM	Percent Solids: n/a
Project: Fort Ord Groundwater Monitoring	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	O61173.D	1	09/10/20 14:40	MM	n/a	n/a	VO2354
Run #2 ^a	O61420.D	1	09/16/20 18:15	AG	n/a	n/a	VO2363

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
71-43-2	Benzene	0.25 U	0.50	0.25	0.10	ug/l	
56-23-5	Carbon Tetrachloride	0.25 U	0.50	0.25	0.10	ug/l	
67-66-3	Chloroform	0.19	0.50	0.25	0.10	ug/l	J
75-34-3	1,1-Dichloroethane	0.25 U	0.50	0.25	0.10	ug/l	
107-06-2	1,2-Dichloroethane	0.25 U	0.50	0.25	0.10	ug/l	
156-59-2	cis-1,2-Dichloroethylene	0.36	0.50	0.25	0.10	ug/l	J
78-87-5	1,2-Dichloropropane	0.25 U	0.50	0.25	0.10	ug/l	
75-09-2	Methylene Chloride	0.50 U	2.0	0.50	0.50	ug/l	
127-18-4	Tetrachloroethylene	0.34	0.50	0.25	0.10	ug/l	J
79-01-6	Trichloroethylene	2.7	0.50	0.25	0.10	ug/l	
75-01-4	Vinyl Chloride	0.050 U	0.10	0.050	0.050	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	114%	126% ^b	74-125%
2037-26-5	Toluene-D8	102%	103%	88-111%

(a) Confirmation run.

(b) Outside DOD QSM control limits.

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
 LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

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Client Sample ID:	2036MOU2191F	Date Sampled:	09/02/20
Lab Sample ID:	FA78549-14	Date Received:	09/08/20
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B BY SIM		
Project:	Fort Ord Groundwater Monitoring		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	O61174.D	1	09/10/20 15:01	MM	n/a	n/a	VO2354
Run #2 ^a	O61453.D	1	09/18/20 15:24	MM	n/a	n/a	VO2365

Purge Volume	
Run #1	5.0 ml
Run #2	5.0 ml

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
71-43-2	Benzene	0.25 U	0.50	0.25	0.10	ug/l	
56-23-5	Carbon Tetrachloride	0.25 U	0.50	0.25	0.10	ug/l	
67-66-3	Chloroform	0.38	0.50	0.25	0.10	ug/l	J
75-34-3	1,1-Dichloroethane	0.18	0.50	0.25	0.10	ug/l	J
107-06-2	1,2-Dichloroethane	0.25 U	0.50	0.25	0.10	ug/l	
156-59-2	cis-1,2-Dichloroethylene	1.3	0.50	0.25	0.10	ug/l	
78-87-5	1,2-Dichloropropane	0.12	0.50	0.25	0.10	ug/l	J
75-09-2	Methylene Chloride	0.50 U	2.0	0.50	0.50	ug/l	
127-18-4	Tetrachloroethylene	0.77	0.50	0.25	0.10	ug/l	
79-01-6	Trichloroethylene	4.2	0.50	0.25	0.10	ug/l	
75-01-4	Vinyl Chloride	0.050 U	0.10	0.050	0.050	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	115%	110%	74-125%
2037-26-5	Toluene-D8	102%	104%	88-111%

(a) Sample re-analyzed beyond hold time; reported results are considered minimum values. Confirmation run.

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
 LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

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Client Sample ID:	2036MOU2192F	
Lab Sample ID:	FA78549-15	Date Sampled: 09/02/20
Matrix:	AQ - Ground Water	Date Received: 09/08/20
Method:	SW846 8260B BY SIM	Percent Solids: n/a
Project:	Fort Ord Groundwater Monitoring	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	O61175.D	1	09/10/20 15:21	MM	n/a	n/a	VO2354
Run #2 ^a	O61454.D	1	09/18/20 15:45	MM	n/a	n/a	VO2365

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
71-43-2	Benzene	0.25 U	0.50	0.25	0.10	ug/l	
56-23-5	Carbon Tetrachloride	0.12	0.50	0.25	0.10	ug/l	J
67-66-3	Chloroform	0.42	0.50	0.25	0.10	ug/l	J
75-34-3	1,1-Dichloroethane	0.25 U	0.50	0.25	0.10	ug/l	
107-06-2	1,2-Dichloroethane	0.25 U	0.50	0.25	0.10	ug/l	
156-59-2	cis-1,2-Dichloroethylene	1.5	0.50	0.25	0.10	ug/l	
78-87-5	1,2-Dichloropropane	0.12	0.50	0.25	0.10	ug/l	J
75-09-2	Methylene Chloride	0.50 U	2.0	0.50	0.50	ug/l	
127-18-4	Tetrachloroethylene	0.79	0.50	0.25	0.10	ug/l	
79-01-6	Trichloroethylene	3.5	0.50	0.25	0.10	ug/l	
75-01-4	Vinyl Chloride	0.050 U	0.10	0.050	0.050	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	115%	112%	74-125%
2037-26-5	Toluene-D8	101%	104%	88-111%

(a) Sample re-analyzed beyond hold time; reported results are considered minimum values. Confirmation run.

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
 LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

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Report of Analysis

Client Sample ID: 2036MOU2193F	
Lab Sample ID: FA78549-16	Date Sampled: 09/02/20
Matrix: AQ - Ground Water	Date Received: 09/08/20
Method: SW846 8260B BY SIM	Percent Solids: n/a
Project: Fort Ord Groundwater Monitoring	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Z62293.D	1	09/13/20 12:52	SP	n/a	n/a	VZ2417
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
71-43-2	Benzene	0.25 U	0.50	0.25	0.10	ug/l	
56-23-5	Carbon Tetrachloride	0.25 U	0.50	0.25	0.10	ug/l	
67-66-3	Chloroform	0.82	0.50	0.25	0.10	ug/l	
75-34-3	1,1-Dichloroethane	1.4	0.50	0.25	0.10	ug/l	
107-06-2	1,2-Dichloroethane	0.12	0.50	0.25	0.10	ug/l	J
156-59-2	cis-1,2-Dichloroethylene	0.43	0.50	0.25	0.10	ug/l	J
78-87-5	1,2-Dichloropropane	0.25 U	0.50	0.25	0.10	ug/l	
75-09-2	Methylene Chloride	0.50 U	2.0	0.50	0.50	ug/l	
127-18-4	Tetrachloroethylene	5.9	0.50	0.25	0.10	ug/l	
79-01-6	Trichloroethylene	9.5	0.50	0.25	0.10	ug/l	
75-01-4	Vinyl Chloride	0.050 U	0.10	0.050	0.050	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	109%		74-125%
2037-26-5	Toluene-D8	101%		88-111%

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
 LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

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Client Sample ID:	2036MOU2194F	Date Sampled:	09/02/20
Lab Sample ID:	FA78549-17	Date Received:	09/08/20
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B BY SIM		
Project:	Fort Ord Groundwater Monitoring		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Z62294.D	1	09/13/20 13:12	SP	n/a	n/a	VZ2417
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
71-43-2	Benzene	0.18	0.50	0.25	0.10	ug/l	J
56-23-5	Carbon Tetrachloride	0.25 U	0.50	0.25	0.10	ug/l	
67-66-3	Chloroform	0.52	0.50	0.25	0.10	ug/l	
75-34-3	1,1-Dichloroethane	6.6	0.50	0.25	0.10	ug/l	
107-06-2	1,2-Dichloroethane	1.0	0.50	0.25	0.10	ug/l	
156-59-2	cis-1,2-Dichloroethylene	3.5	0.50	0.25	0.10	ug/l	
78-87-5	1,2-Dichloropropane	0.26	0.50	0.25	0.10	ug/l	J
75-09-2	Methylene Chloride	1.6	2.0	0.50	0.50	ug/l	J
127-18-4	Tetrachloroethylene	5.4	0.50	0.25	0.10	ug/l	
79-01-6	Trichloroethylene	10.1	0.50	0.25	0.10	ug/l	
75-01-4	Vinyl Chloride	0.51	0.10	0.050	0.050	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	108%		74-125%
2037-26-5	Toluene-D8	100%		88-111%

U = Not detected

LOD = Limit of Detection

J = Indicates an estimated value

LOQ = Limit of Quantitation

DL = Detection Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 2036MOU2195F	
Lab Sample ID: FA78549-18	Date Sampled: 09/02/20
Matrix: AQ - Ground Water	Date Received: 09/08/20
Method: SW846 8260B BY SIM	Percent Solids: n/a
Project: Fort Ord Groundwater Monitoring	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Z62295.D	1	09/13/20 13:31	SP	n/a	n/a	VZ2417
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
71-43-2	Benzene	0.23	0.50	0.25	0.10	ug/l	J
56-23-5	Carbon Tetrachloride	0.25 U	0.50	0.25	0.10	ug/l	
67-66-3	Chloroform	0.24	0.50	0.25	0.10	ug/l	J
75-34-3	1,1-Dichloroethane	12.6	0.50	0.25	0.10	ug/l	
107-06-2	1,2-Dichloroethane	1.9	0.50	0.25	0.10	ug/l	
156-59-2	cis-1,2-Dichloroethylene	11.1	0.50	0.25	0.10	ug/l	
78-87-5	1,2-Dichloropropane	0.55	0.50	0.25	0.10	ug/l	
75-09-2	Methylene Chloride	0.50 U	2.0	0.50	0.50	ug/l	
127-18-4	Tetrachloroethylene	5.4	0.50	0.25	0.10	ug/l	
79-01-6	Trichloroethylene	5.3	0.50	0.25	0.10	ug/l	
75-01-4	Vinyl Chloride	1.3	0.10	0.050	0.050	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	109%		74-125%
2037-26-5	Toluene-D8	100%		88-111%

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
 LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

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Report of Analysis

Client Sample ID: 2036MOU2196F	
Lab Sample ID: FA78549-19	Date Sampled: 09/02/20
Matrix: AQ - Ground Water	Date Received: 09/08/20
Method: SW846 8260B BY SIM	Percent Solids: n/a
Project: Fort Ord Groundwater Monitoring	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Z62296.D	1	09/13/20 13:50	SP	n/a	n/a	VZ2417
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
71-43-2	Benzene	0.17	0.50	0.25	0.10	ug/l	J
56-23-5	Carbon Tetrachloride	0.25 U	0.50	0.25	0.10	ug/l	
67-66-3	Chloroform	0.25 U	0.50	0.25	0.10	ug/l	
75-34-3	1,1-Dichloroethane	5.1	0.50	0.25	0.10	ug/l	
107-06-2	1,2-Dichloroethane	0.72	0.50	0.25	0.10	ug/l	
156-59-2	cis-1,2-Dichloroethylene	7.7	0.50	0.25	0.10	ug/l	
78-87-5	1,2-Dichloropropane	0.24	0.50	0.25	0.10	ug/l	J
75-09-2	Methylene Chloride	0.50 U	2.0	0.50	0.50	ug/l	
127-18-4	Tetrachloroethylene	1.3	0.50	0.25	0.10	ug/l	
79-01-6	Trichloroethylene	1.3	0.50	0.25	0.10	ug/l	
75-01-4	Vinyl Chloride	0.86	0.10	0.050	0.050	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	109%		74-125%
2037-26-5	Toluene-D8	100%		88-111%

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
 LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

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Client Sample ID:	2036MOU2197F	Date Sampled:	09/02/20
Lab Sample ID:	FA78549-20	Date Received:	09/08/20
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B BY SIM		
Project:	Fort Ord Groundwater Monitoring		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Z62297.D	1	09/13/20 14:10	SP	n/a	n/a	VZ2417
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
71-43-2	Benzene	0.25 U	0.50	0.25	0.10	ug/l	
56-23-5	Carbon Tetrachloride	0.25 U	0.50	0.25	0.10	ug/l	
67-66-3	Chloroform	0.13	0.50	0.25	0.10	ug/l	J
75-34-3	1,1-Dichloroethane	0.25 U	0.50	0.25	0.10	ug/l	
107-06-2	1,2-Dichloroethane	0.25 U	0.50	0.25	0.10	ug/l	
156-59-2	cis-1,2-Dichloroethylene	0.21	0.50	0.25	0.10	ug/l	J
78-87-5	1,2-Dichloropropane	0.25 U	0.50	0.25	0.10	ug/l	
75-09-2	Methylene Chloride	0.50 U	2.0	0.50	0.50	ug/l	
127-18-4	Tetrachloroethylene	0.22	0.50	0.25	0.10	ug/l	J
79-01-6	Trichloroethylene	1.7	0.50	0.25	0.10	ug/l	
75-01-4	Vinyl Chloride	0.050 U	0.10	0.050	0.050	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	111%		74-125%
2037-26-5	Toluene-D8	100%		88-111%

U = Not detected

LOD = Limit of Detection

J = Indicates an estimated value

LOQ = Limit of Quantitation

DL = Detection Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

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Client Sample ID:	2036MOU2198F	Date Sampled:	09/02/20
Lab Sample ID:	FA78549-21	Date Received:	09/08/20
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B BY SIM		
Project:	Fort Ord Groundwater Monitoring		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Z62298.D	1	09/13/20 14:29	SP	n/a	n/a	VZ2417
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
71-43-2	Benzene	0.25 U	0.50	0.25	0.10	ug/l	
56-23-5	Carbon Tetrachloride	0.25 U	0.50	0.25	0.10	ug/l	
67-66-3	Chloroform	0.25 U	0.50	0.25	0.10	ug/l	
75-34-3	1,1-Dichloroethane	0.25 U	0.50	0.25	0.10	ug/l	
107-06-2	1,2-Dichloroethane	0.25 U	0.50	0.25	0.10	ug/l	
156-59-2	cis-1,2-Dichloroethylene	3.9	0.50	0.25	0.10	ug/l	
78-87-5	1,2-Dichloropropane	0.25 U	0.50	0.25	0.10	ug/l	
75-09-2	Methylene Chloride	0.50 U	2.0	0.50	0.50	ug/l	
127-18-4	Tetrachloroethylene	0.85	0.50	0.25	0.10	ug/l	
79-01-6	Trichloroethylene	0.17	0.50	0.25	0.10	ug/l	J
75-01-4	Vinyl Chloride	0.050 U	0.10	0.050	0.050	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	112%		74-125%
2037-26-5	Toluene-D8	100%		88-111%

U = Not detected

LOD = Limit of Detection

J = Indicates an estimated value

LOQ = Limit of Quantitation

DL = Detection Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

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Client Sample ID:	2036MOU2199F	Date Sampled:	09/02/20
Lab Sample ID:	FA78549-22	Date Received:	09/08/20
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B BY SIM		
Project:	Fort Ord Groundwater Monitoring		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Z62299.D	1	09/13/20 14:48	SP	n/a	n/a	VZ2417
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
71-43-2	Benzene	0.25 U	0.50	0.25	0.10	ug/l	
56-23-5	Carbon Tetrachloride	0.25 U	0.50	0.25	0.10	ug/l	
67-66-3	Chloroform	0.36	0.50	0.25	0.10	ug/l	J
75-34-3	1,1-Dichloroethane	0.16	0.50	0.25	0.10	ug/l	J
107-06-2	1,2-Dichloroethane	0.25 U	0.50	0.25	0.10	ug/l	
156-59-2	cis-1,2-Dichloroethylene	1.1	0.50	0.25	0.10	ug/l	
78-87-5	1,2-Dichloropropane	0.25 U	0.50	0.25	0.10	ug/l	
75-09-2	Methylene Chloride	0.50 U	2.0	0.50	0.50	ug/l	
127-18-4	Tetrachloroethylene	0.89	0.50	0.25	0.10	ug/l	
79-01-6	Trichloroethylene	7.6	0.50	0.25	0.10	ug/l	
75-01-4	Vinyl Chloride	0.050 U	0.10	0.050	0.050	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	112%		74-125%
2037-26-5	Toluene-D8	100%		88-111%

U = Not detected

LOD = Limit of Detection

J = Indicates an estimated value

LOQ = Limit of Quantitation

DL = Detection Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

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Client Sample ID:	2036MOU2200D	Date Sampled:	09/02/20
Lab Sample ID:	FA78549-23	Date Received:	09/08/20
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B BY SIM		
Project:	Fort Ord Groundwater Monitoring		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Z62300.D	1	09/13/20 15:08	SP	n/a	n/a	VZ2417
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
71-43-2	Benzene	0.25 U	0.50	0.25	0.10	ug/l	
56-23-5	Carbon Tetrachloride	0.25 U	0.50	0.25	0.10	ug/l	
67-66-3	Chloroform	0.36	0.50	0.25	0.10	ug/l	J
75-34-3	1,1-Dichloroethane	0.16	0.50	0.25	0.10	ug/l	J
107-06-2	1,2-Dichloroethane	0.25 U	0.50	0.25	0.10	ug/l	
156-59-2	cis-1,2-Dichloroethylene	1.1	0.50	0.25	0.10	ug/l	
78-87-5	1,2-Dichloropropane	0.25 U	0.50	0.25	0.10	ug/l	
75-09-2	Methylene Chloride	0.50 U	2.0	0.50	0.50	ug/l	
127-18-4	Tetrachloroethylene	0.90	0.50	0.25	0.10	ug/l	
79-01-6	Trichloroethylene	7.6	0.50	0.25	0.10	ug/l	
75-01-4	Vinyl Chloride	0.050 U	0.10	0.050	0.050	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	114%		74-125%
2037-26-5	Toluene-D8	100%		88-111%

U = Not detected

LOD = Limit of Detection

J = Indicates an estimated value

LOQ = Limit of Quantitation

DL = Detection Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 2036MOU2201F	
Lab Sample ID: FA78549-24	Date Sampled: 09/02/20
Matrix: AQ - Ground Water	Date Received: 09/08/20
Method: SW846 8260B BY SIM	Percent Solids: n/a
Project: Fort Ord Groundwater Monitoring	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Z62301.D	1	09/13/20 15:27	SP	n/a	n/a	VZ2417
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
71-43-2	Benzene	0.25 U	0.50	0.25	0.10	ug/l	
56-23-5	Carbon Tetrachloride	0.12	0.50	0.25	0.10	ug/l	J
67-66-3	Chloroform	0.16	0.50	0.25	0.10	ug/l	J
75-34-3	1,1-Dichloroethane	0.25 U	0.50	0.25	0.10	ug/l	
107-06-2	1,2-Dichloroethane	0.25 U	0.50	0.25	0.10	ug/l	
156-59-2	cis-1,2-Dichloroethylene	0.59	0.50	0.25	0.10	ug/l	
78-87-5	1,2-Dichloropropane	0.25 U	0.50	0.25	0.10	ug/l	
75-09-2	Methylene Chloride	0.50 U	2.0	0.50	0.50	ug/l	
127-18-4	Tetrachloroethylene	0.47	0.50	0.25	0.10	ug/l	J
79-01-6	Trichloroethylene	7.3	0.50	0.25	0.10	ug/l	
75-01-4	Vinyl Chloride	0.050 U	0.10	0.050	0.050	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	114%		74-125%
2037-26-5	Toluene-D8	100%		88-111%

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
 LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	2036YOU2401A	Date Sampled:	09/02/20
Lab Sample ID:	FA78549-25	Date Received:	09/08/20
Matrix:	AQ - Trip Blank Water	Percent Solids:	n/a
Method:	SW846 8260B BY SIM		
Project:	Fort Ord Groundwater Monitoring		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Z62302.D	1	09/13/20 15:46	SP	n/a	n/a	VZ2417
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
71-43-2	Benzene	0.25 U	0.50	0.25	0.10	ug/l	
56-23-5	Carbon Tetrachloride	0.25 U	0.50	0.25	0.10	ug/l	
67-66-3	Chloroform	0.25 U	0.50	0.25	0.10	ug/l	
75-34-3	1,1-Dichloroethane	0.25 U	0.50	0.25	0.10	ug/l	
107-06-2	1,2-Dichloroethane	0.25 U	0.50	0.25	0.10	ug/l	
156-59-2	cis-1,2-Dichloroethylene	0.25 U	0.50	0.25	0.10	ug/l	
78-87-5	1,2-Dichloropropane	0.25 U	0.50	0.25	0.10	ug/l	
75-09-2	Methylene Chloride	0.50 U	2.0	0.50	0.50	ug/l	
127-18-4	Tetrachloroethylene	0.25 U	0.50	0.25	0.10	ug/l	
79-01-6	Trichloroethylene	0.25 U	0.50	0.25	0.10	ug/l	
75-01-4	Vinyl Chloride	0.050 U	0.10	0.050	0.050	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	113%		74-125%
2037-26-5	Toluene-D8	99%		88-111%

U = Not detected

LOD = Limit of Detection

J = Indicates an estimated value

LOQ = Limit of Quantitation

DL = Detection Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

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Client Sample ID:	2036Y0BW402F	Date Sampled:	09/02/20
Lab Sample ID:	FA78549-26	Date Received:	09/08/20
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B BY SIM		
Project:	Fort Ord Groundwater Monitoring		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Z62303.D	1	09/13/20 16:06	SP	n/a	n/a	VZ2417
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
71-43-2	Benzene	0.25 U	0.50	0.25	0.10	ug/l	
56-23-5	Carbon Tetrachloride	0.25 U	0.50	0.25	0.10	ug/l	
67-66-3	Chloroform	0.37	0.50	0.25	0.10	ug/l	J
75-34-3	1,1-Dichloroethane	0.89	0.50	0.25	0.10	ug/l	
107-06-2	1,2-Dichloroethane	0.25 U	0.50	0.25	0.10	ug/l	
156-59-2	cis-1,2-Dichloroethylene	0.25 U	0.50	0.25	0.10	ug/l	
78-87-5	1,2-Dichloropropane	0.25 U	0.50	0.25	0.10	ug/l	
75-09-2	Methylene Chloride	0.50 U	2.0	0.50	0.50	ug/l	
127-18-4	Tetrachloroethylene	0.12	0.50	0.25	0.10	ug/l	J
79-01-6	Trichloroethylene	2.3	0.50	0.25	0.10	ug/l	
75-01-4	Vinyl Chloride	0.050 U	0.10	0.050	0.050	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	116%		74-125%
2037-26-5	Toluene-D8	99%		88-111%

U = Not detected

LOD = Limit of Detection

J = Indicates an estimated value

LOQ = Limit of Quantitation

DL = Detection Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

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Client Sample ID:	2036Y0BW403F	Date Sampled:	09/02/20
Lab Sample ID:	FA78549-27	Date Received:	09/08/20
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B BY SIM		
Project:	Fort Ord Groundwater Monitoring		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Z62304.D	1	09/13/20 16:25	SP	n/a	n/a	VZ2417
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
71-43-2	Benzene	0.25 U	0.50	0.25	0.10	ug/l	
56-23-5	Carbon Tetrachloride	0.25 U	0.50	0.25	0.10	ug/l	
67-66-3	Chloroform	0.25	0.50	0.25	0.10	ug/l	J
75-34-3	1,1-Dichloroethane	0.11	0.50	0.25	0.10	ug/l	J
107-06-2	1,2-Dichloroethane	0.25 U	0.50	0.25	0.10	ug/l	
156-59-2	cis-1,2-Dichloroethylene	0.68	0.50	0.25	0.10	ug/l	
78-87-5	1,2-Dichloropropane	0.25 U	0.50	0.25	0.10	ug/l	
75-09-2	Methylene Chloride	0.50 U	2.0	0.50	0.50	ug/l	
127-18-4	Tetrachloroethylene	0.25 U	0.50	0.25	0.10	ug/l	
79-01-6	Trichloroethylene	4.1	0.50	0.25	0.10	ug/l	
75-01-4	Vinyl Chloride	0.050 U	0.10	0.050	0.050	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	116%		74-125%
2037-26-5	Toluene-D8	99%		88-111%

U = Not detected

LOD = Limit of Detection

J = Indicates an estimated value

LOQ = Limit of Quantitation

DL = Detection Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

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Client Sample ID:	2036YOU2404F	Date Sampled:	09/02/20
Lab Sample ID:	FA78549-28	Date Received:	09/08/20
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B BY SIM		
Project:	Fort Ord Groundwater Monitoring		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Z62305.D	1	09/13/20 16:44	SP	n/a	n/a	VZ2417
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
71-43-2	Benzene	0.25 U	0.50	0.25	0.10	ug/l	
56-23-5	Carbon Tetrachloride	0.25 U	0.50	0.25	0.10	ug/l	
67-66-3	Chloroform	0.20	0.50	0.25	0.10	ug/l	J
75-34-3	1,1-Dichloroethane	0.25 U	0.50	0.25	0.10	ug/l	
107-06-2	1,2-Dichloroethane	0.25 U	0.50	0.25	0.10	ug/l	
156-59-2	cis-1,2-Dichloroethylene	0.54	0.50	0.25	0.10	ug/l	
78-87-5	1,2-Dichloropropane	0.25 U	0.50	0.25	0.10	ug/l	
75-09-2	Methylene Chloride	0.50 U	2.0	0.50	0.50	ug/l	
127-18-4	Tetrachloroethylene	0.13	0.50	0.25	0.10	ug/l	J
79-01-6	Trichloroethylene	2.5	0.50	0.25	0.10	ug/l	
75-01-4	Vinyl Chloride	0.050 U	0.10	0.050	0.050	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	115%		74-125%
2037-26-5	Toluene-D8	99%		88-111%

U = Not detected

LOD = Limit of Detection

J = Indicates an estimated value

LOQ = Limit of Quantitation

DL = Detection Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

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Client Sample ID:	2036YOU2405F	Date Sampled:	09/02/20
Lab Sample ID:	FA78549-29	Date Received:	09/08/20
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B BY SIM		
Project:	Fort Ord Groundwater Monitoring		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Z62306.D	1	09/13/20 17:04	SP	n/a	n/a	VZ2417
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
71-43-2	Benzene	0.25 U	0.50	0.25	0.10	ug/l	
56-23-5	Carbon Tetrachloride	0.25 U	0.50	0.25	0.10	ug/l	
67-66-3	Chloroform	0.18	0.50	0.25	0.10	ug/l	J
75-34-3	1,1-Dichloroethane	0.25 U	0.50	0.25	0.10	ug/l	
107-06-2	1,2-Dichloroethane	0.25 U	0.50	0.25	0.10	ug/l	
156-59-2	cis-1,2-Dichloroethylene	0.25 U	0.50	0.25	0.10	ug/l	
78-87-5	1,2-Dichloropropane	0.25 U	0.50	0.25	0.10	ug/l	
75-09-2	Methylene Chloride	0.50 U	2.0	0.50	0.50	ug/l	
127-18-4	Tetrachloroethylene	0.25 U	0.50	0.25	0.10	ug/l	
79-01-6	Trichloroethylene	0.25 U	0.50	0.25	0.10	ug/l	
75-01-4	Vinyl Chloride	0.050 U	0.10	0.050	0.050	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	115%		74-125%
2037-26-5	Toluene-D8	98%		88-111%

U = Not detected

LOD = Limit of Detection

J = Indicates an estimated value

LOQ = Limit of Quantitation

DL = Detection Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

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Client Sample ID:	2036YOU2406F	Date Sampled:	09/02/20
Lab Sample ID:	FA78549-30	Date Received:	09/08/20
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B BY SIM		
Project:	Fort Ord Groundwater Monitoring		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	O61332.D	1	09/13/20 14:08	SP	n/a	n/a	VO2360
Run #2	Z62326.D	1	09/14/20 15:04	JG	n/a	n/a	VZ2418

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
71-43-2	Benzene	0.25 U	0.50	0.25	0.10	ug/l	
56-23-5	Carbon Tetrachloride	0.25 U	0.50	0.25	0.10	ug/l	
67-66-3	Chloroform	0.25 U	0.50	0.25	0.10	ug/l	
75-34-3	1,1-Dichloroethane	0.70	0.50	0.25	0.10	ug/l	
107-06-2	1,2-Dichloroethane	0.61	0.50	0.25	0.10	ug/l	
156-59-2	cis-1,2-Dichloroethylene	1.3	0.50	0.25	0.10	ug/l	
78-87-5	1,2-Dichloropropane	0.25 U	0.50	0.25	0.10	ug/l	
75-09-2	Methylene Chloride	0.50 U ^a	2.0	0.50	0.50	ug/l	
127-18-4	Tetrachloroethylene	1.2	0.50	0.25	0.10	ug/l	
79-01-6	Trichloroethylene	2.6	0.50	0.25	0.10	ug/l	
75-01-4	Vinyl Chloride	0.050 U	0.10	0.050	0.050	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	112%	109%	74-125%
2037-26-5	Toluene-D8	91%	99%	88-111%

(a) Result is from Run# 2

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
 LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

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Client Sample ID: 2036YOU2407D	Date Sampled: 09/02/20
Lab Sample ID: FA78549-31	Date Received: 09/08/20
Matrix: AQ - Ground Water	Percent Solids: n/a
Method: SW846 8260B BY SIM	
Project: Fort Ord Groundwater Monitoring	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	O61333.D	1	09/13/20 14:28	SP	n/a	n/a	VO2360
Run #2	Z62327.D	1	09/14/20 15:23	JG	n/a	n/a	VZ2418

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
71-43-2	Benzene	0.25 U	0.50	0.25	0.10	ug/l	
56-23-5	Carbon Tetrachloride	0.25 U	0.50	0.25	0.10	ug/l	
67-66-3	Chloroform	0.25 U	0.50	0.25	0.10	ug/l	
75-34-3	1,1-Dichloroethane	0.72	0.50	0.25	0.10	ug/l	
107-06-2	1,2-Dichloroethane	0.63	0.50	0.25	0.10	ug/l	
156-59-2	cis-1,2-Dichloroethylene	1.3	0.50	0.25	0.10	ug/l	
78-87-5	1,2-Dichloropropane	0.25 U	0.50	0.25	0.10	ug/l	
75-09-2	Methylene Chloride	0.50 U ^a	2.0	0.50	0.50	ug/l	
127-18-4	Tetrachloroethylene	1.2	0.50	0.25	0.10	ug/l	
79-01-6	Trichloroethylene	2.6	0.50	0.25	0.10	ug/l	
75-01-4	Vinyl Chloride	0.050 U	0.10	0.050	0.050	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	114%	113%	74-125%
2037-26-5	Toluene-D8	91%	99%	88-111%

(a) Result is from Run# 2

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
 LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

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Client Sample ID: 2036YOU2408F	
Lab Sample ID: FA78549-32	Date Sampled: 09/02/20
Matrix: AQ - Ground Water	Date Received: 09/08/20
Method: SW846 8260B BY SIM	Percent Solids: n/a
Project: Fort Ord Groundwater Monitoring	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	O61334.D	1	09/13/20 14:48	SP	n/a	n/a	VO2360
Run #2	Z62328.D	1	09/14/20 15:42	JG	n/a	n/a	VZ2418

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
71-43-2	Benzene	0.25 U	0.50	0.25	0.10	ug/l	
56-23-5	Carbon Tetrachloride	0.25 U	0.50	0.25	0.10	ug/l	
67-66-3	Chloroform	0.63	0.50	0.25	0.10	ug/l	
75-34-3	1,1-Dichloroethane	0.25 U	0.50	0.25	0.10	ug/l	
107-06-2	1,2-Dichloroethane	0.25 U	0.50	0.25	0.10	ug/l	
156-59-2	cis-1,2-Dichloroethylene	1.5	0.50	0.25	0.10	ug/l	
78-87-5	1,2-Dichloropropane	0.25 U	0.50	0.25	0.10	ug/l	
75-09-2	Methylene Chloride	0.50 U ^a	2.0	0.50	0.50	ug/l	
127-18-4	Tetrachloroethylene	0.25 U	0.50	0.25	0.10	ug/l	
79-01-6	Trichloroethylene	9.6	0.50	0.25	0.10	ug/l	
75-01-4	Vinyl Chloride	0.050 U	0.10	0.050	0.050	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	113%	113%	74-125%
2037-26-5	Toluene-D8	92%	99%	88-111%

(a) Result is from Run# 2

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
 LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

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Client Sample ID: 2036YOU2409F	Date Sampled: 09/02/20
Lab Sample ID: FA78549-33	Date Received: 09/08/20
Matrix: AQ - Ground Water	Percent Solids: n/a
Method: SW846 8260B BY SIM	
Project: Fort Ord Groundwater Monitoring	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	O61335.D	1	09/13/20 15:09	SP	n/a	n/a	VO2360
Run #2	Z62329.D	1	09/14/20 16:02	JG	n/a	n/a	VZ2418

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
71-43-2	Benzene	0.25 U	0.50	0.25	0.10	ug/l	
56-23-5	Carbon Tetrachloride	0.25 U	0.50	0.25	0.10	ug/l	
67-66-3	Chloroform	0.25 U	0.50	0.25	0.10	ug/l	
75-34-3	1,1-Dichloroethane	0.41	0.50	0.25	0.10	ug/l	J
107-06-2	1,2-Dichloroethane	0.20	0.50	0.25	0.10	ug/l	J
156-59-2	cis-1,2-Dichloroethylene	0.97	0.50	0.25	0.10	ug/l	
78-87-5	1,2-Dichloropropane	0.25 U	0.50	0.25	0.10	ug/l	
75-09-2	Methylene Chloride	0.50 U ^a	2.0	0.50	0.50	ug/l	
127-18-4	Tetrachloroethylene	0.35	0.50	0.25	0.10	ug/l	J
79-01-6	Trichloroethylene	1.2	0.50	0.25	0.10	ug/l	
75-01-4	Vinyl Chloride	0.050 U	0.10	0.050	0.050	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	113%	114%	74-125%
2037-26-5	Toluene-D8	90%	99%	88-111%

(a) Result is from Run# 2

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
 LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

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Client Sample ID: 2036YOU2410F	
Lab Sample ID: FA78549-34	Date Sampled: 09/02/20
Matrix: AQ - Ground Water	Date Received: 09/08/20
Method: SW846 8260B BY SIM	Percent Solids: n/a
Project: Fort Ord Groundwater Monitoring	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	O61336.D	1	09/13/20 15:29	SP	n/a	n/a	VO2360
Run #2	Z62330.D	1	09/14/20 16:21	JG	n/a	n/a	VZ2418

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
71-43-2	Benzene	0.25 U	0.50	0.25	0.10	ug/l	
56-23-5	Carbon Tetrachloride	0.25 U	0.50	0.25	0.10	ug/l	
67-66-3	Chloroform	0.25 U	0.50	0.25	0.10	ug/l	
75-34-3	1,1-Dichloroethane	0.25 U	0.50	0.25	0.10	ug/l	
107-06-2	1,2-Dichloroethane	0.25 U	0.50	0.25	0.10	ug/l	
156-59-2	cis-1,2-Dichloroethylene	0.25 U	0.50	0.25	0.10	ug/l	
78-87-5	1,2-Dichloropropane	0.25 U	0.50	0.25	0.10	ug/l	
75-09-2	Methylene Chloride	0.50 U ^a	2.0	0.50	0.50	ug/l	
127-18-4	Tetrachloroethylene	0.25 U	0.50	0.25	0.10	ug/l	
79-01-6	Trichloroethylene	0.82	0.50	0.25	0.10	ug/l	
75-01-4	Vinyl Chloride	0.050 U	0.10	0.050	0.050	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	115%	115%	74-125%
2037-26-5	Toluene-D8	91%	99%	88-111%

(a) Result is from Run# 2

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
 LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

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Client Sample ID: 2036YOU2411F	
Lab Sample ID: FA78549-35	Date Sampled: 09/02/20
Matrix: AQ - Ground Water	Date Received: 09/08/20
Method: SW846 8260B BY SIM	Percent Solids: n/a
Project: Fort Ord Groundwater Monitoring	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	O61337.D	1	09/13/20 15:49	SP	n/a	n/a	VO2360
Run #2	Z62331.D	1	09/14/20 16:41	JG	n/a	n/a	VZ2418

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
71-43-2	Benzene	0.25 U	0.50	0.25	0.10	ug/l	
56-23-5	Carbon Tetrachloride	0.25 U	0.50	0.25	0.10	ug/l	
67-66-3	Chloroform	0.97	0.50	0.25	0.10	ug/l	
75-34-3	1,1-Dichloroethane	2.4	0.50	0.25	0.10	ug/l	
107-06-2	1,2-Dichloroethane	0.84	0.50	0.25	0.10	ug/l	
156-59-2	cis-1,2-Dichloroethylene	0.70	0.50	0.25	0.10	ug/l	
78-87-5	1,2-Dichloropropane	0.25 U	0.50	0.25	0.10	ug/l	
75-09-2	Methylene Chloride	0.50 U ^a	2.0	0.50	0.50	ug/l	
127-18-4	Tetrachloroethylene	2.4	0.50	0.25	0.10	ug/l	
79-01-6	Trichloroethylene	5.6	0.50	0.25	0.10	ug/l	
75-01-4	Vinyl Chloride	0.050 U	0.10	0.050	0.050	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	116%	114%	74-125%
2037-26-5	Toluene-D8	89%	98%	88-111%

(a) Result is from Run# 2

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
 LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

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Client Sample ID: 2036YOU2412F	
Lab Sample ID: FA78549-36	Date Sampled: 09/02/20
Matrix: AQ - Ground Water	Date Received: 09/08/20
Method: SW846 8260B BY SIM	Percent Solids: n/a
Project: Fort Ord Groundwater Monitoring	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	O61338.D	1	09/13/20 16:09	SP	n/a	n/a	VO2360
Run #2	Z62332.D	1	09/14/20 17:00	JG	n/a	n/a	VZ2418

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
71-43-2	Benzene	0.25 U	0.50	0.25	0.10	ug/l	
56-23-5	Carbon Tetrachloride	0.25 U	0.50	0.25	0.10	ug/l	
67-66-3	Chloroform	0.79	0.50	0.25	0.10	ug/l	
75-34-3	1,1-Dichloroethane	6.3	0.50	0.25	0.10	ug/l	
107-06-2	1,2-Dichloroethane	0.25 U	0.50	0.25	0.10	ug/l	
156-59-2	cis-1,2-Dichloroethylene	0.58	0.50	0.25	0.10	ug/l	
78-87-5	1,2-Dichloropropane	0.25 U	0.50	0.25	0.10	ug/l	
75-09-2	Methylene Chloride	0.50 U ^a	2.0	0.50	0.50	ug/l	
127-18-4	Tetrachloroethylene	0.51	0.50	0.25	0.10	ug/l	
79-01-6	Trichloroethylene	0.54	0.50	0.25	0.10	ug/l	
75-01-4	Vinyl Chloride	0.050 U	0.10	0.050	0.050	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	116%	116%	74-125%
2037-26-5	Toluene-D8	90%	98%	88-111%

(a) Result is from Run# 2

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
 LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

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Client Sample ID: 2036YOU2413F	
Lab Sample ID: FA78549-37	Date Sampled: 09/02/20
Matrix: AQ - Ground Water	Date Received: 09/08/20
Method: SW846 8260B BY SIM	Percent Solids: n/a
Project: Fort Ord Groundwater Monitoring	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	O61339.D	1	09/13/20 16:30	SP	n/a	n/a	VO2360
Run #2	Z62333.D	1	09/14/20 17:19	JG	n/a	n/a	VZ2418

Purge Volume	
Run #1	5.0 ml
Run #2	5.0 ml

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
71-43-2	Benzene	0.25 U	0.50	0.25	0.10	ug/l	
56-23-5	Carbon Tetrachloride	0.25 U	0.50	0.25	0.10	ug/l	
67-66-3	Chloroform	0.27	0.50	0.25	0.10	ug/l	J
75-34-3	1,1-Dichloroethane	0.25 U	0.50	0.25	0.10	ug/l	
107-06-2	1,2-Dichloroethane	0.25 U	0.50	0.25	0.10	ug/l	
156-59-2	cis-1,2-Dichloroethylene	0.25 U	0.50	0.25	0.10	ug/l	
78-87-5	1,2-Dichloropropane	0.25 U	0.50	0.25	0.10	ug/l	
75-09-2	Methylene Chloride	0.50 U ^a	2.0	0.50	0.50	ug/l	
127-18-4	Tetrachloroethylene	0.25 U	0.50	0.25	0.10	ug/l	
79-01-6	Trichloroethylene	0.51	0.50	0.25	0.10	ug/l	
75-01-4	Vinyl Chloride	0.050 U	0.10	0.050	0.050	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	116%	117%	74-125%
2037-26-5	Toluene-D8	91%	98%	88-111%

(a) Result is from Run# 2

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
 LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

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Client Sample ID: 2036YOU2414F	Date Sampled: 09/02/20
Lab Sample ID: FA78549-38	Date Received: 09/08/20
Matrix: AQ - Ground Water	Percent Solids: n/a
Method: SW846 8260B BY SIM	
Project: Fort Ord Groundwater Monitoring	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	O61340.D	1	09/13/20 16:50	SP	n/a	n/a	VO2360
Run #2	Z62337.D	1	09/14/20 18:36	JG	n/a	n/a	VZ2418

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
71-43-2	Benzene	0.25 U	0.50	0.25	0.10	ug/l	
56-23-5	Carbon Tetrachloride	0.25 U	0.50	0.25	0.10	ug/l	
67-66-3	Chloroform	0.65	0.50	0.25	0.10	ug/l	
75-34-3	1,1-Dichloroethane	0.34	0.50	0.25	0.10	ug/l	J
107-06-2	1,2-Dichloroethane	0.25 U	0.50	0.25	0.10	ug/l	
156-59-2	cis-1,2-Dichloroethylene	0.25 U	0.50	0.25	0.10	ug/l	
78-87-5	1,2-Dichloropropane	0.25 U	0.50	0.25	0.10	ug/l	
75-09-2	Methylene Chloride	0.50 U ^a	2.0	0.50	0.50	ug/l	
127-18-4	Tetrachloroethylene	4.1	0.50	0.25	0.10	ug/l	
79-01-6	Trichloroethylene	0.25 U	0.50	0.25	0.10	ug/l	
75-01-4	Vinyl Chloride	0.050 U	0.10	0.050	0.050	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	116%	115%	74-125%
2037-26-5	Toluene-D8	91%	99%	88-111%

(a) Result is from Run# 2

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
 LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

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Client Sample ID: 2036YOU2417F	
Lab Sample ID: FA78549-39	Date Sampled: 09/02/20
Matrix: AQ - Ground Water	Date Received: 09/08/20
Method: SW846 8260B BY SIM	Percent Solids: n/a
Project: Fort Ord Groundwater Monitoring	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	O61341.D	1	09/13/20 17:10	SP	n/a	n/a	VO2360
Run #2	Z62338.D	1	09/14/20 18:55	JG	n/a	n/a	VZ2418

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
71-43-2	Benzene	0.25 U	0.50	0.25	0.10	ug/l	
56-23-5	Carbon Tetrachloride	0.25 U	0.50	0.25	0.10	ug/l	
67-66-3	Chloroform	0.31	0.50	0.25	0.10	ug/l	J
75-34-3	1,1-Dichloroethane	0.25 U	0.50	0.25	0.10	ug/l	
107-06-2	1,2-Dichloroethane	0.25 U	0.50	0.25	0.10	ug/l	
156-59-2	cis-1,2-Dichloroethylene	0.25 U	0.50	0.25	0.10	ug/l	
78-87-5	1,2-Dichloropropane	0.25 U	0.50	0.25	0.10	ug/l	
75-09-2	Methylene Chloride	0.50 U ^a	2.0	0.50	0.50	ug/l	
127-18-4	Tetrachloroethylene	0.61	0.50	0.25	0.10	ug/l	
79-01-6	Trichloroethylene	0.25 U	0.50	0.25	0.10	ug/l	
75-01-4	Vinyl Chloride	0.050 U	0.10	0.050	0.050	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	117%	117%	74-125%
2037-26-5	Toluene-D8	94%	98%	88-111%

(a) Result is from Run# 2

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
 LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

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Client Sample ID:	2036YOU2418F	Date Sampled:	09/02/20
Lab Sample ID:	FA78549-40	Date Received:	09/08/20
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B BY SIM		
Project:	Fort Ord Groundwater Monitoring		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	O61342.D	1	09/13/20 17:30	SP	n/a	n/a	VO2360
Run #2	Z62339.D	1	09/14/20 19:14	JG	n/a	n/a	VZ2418

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
71-43-2	Benzene	0.25 U	0.50	0.25	0.10	ug/l	
56-23-5	Carbon Tetrachloride	0.25 U	0.50	0.25	0.10	ug/l	
67-66-3	Chloroform	0.23	0.50	0.25	0.10	ug/l	J
75-34-3	1,1-Dichloroethane	0.25 U	0.50	0.25	0.10	ug/l	
107-06-2	1,2-Dichloroethane	0.25 U	0.50	0.25	0.10	ug/l	
156-59-2	cis-1,2-Dichloroethylene	0.23	0.50	0.25	0.10	ug/l	J
78-87-5	1,2-Dichloropropane	0.25 U	0.50	0.25	0.10	ug/l	
75-09-2	Methylene Chloride	0.50 U ^a	2.0	0.50	0.50	ug/l	
127-18-4	Tetrachloroethylene	0.40	0.50	0.25	0.10	ug/l	J
79-01-6	Trichloroethylene	5.1	0.50	0.25	0.10	ug/l	
75-01-4	Vinyl Chloride	0.050 U	0.10	0.050	0.050	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	117%	118%	74-125%
2037-26-5	Toluene-D8	92%	98%	88-111%

(a) Result is from Run# 2

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
 LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

4.40
 4

SGS North America Inc.

Report of Analysis

Page 1 of 1

Client Sample ID: 2036YOU2419C	
Lab Sample ID: FA78549-41	Date Sampled: 09/02/20
Matrix: AQ - Ground Water	Date Received: 09/08/20
Method: SW846 8260B BY SIM	Percent Solids: n/a
Project: Fort Ord Groundwater Monitoring	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Z62340.D	1	09/14/20 19:33	JG	n/a	n/a	VZ2418
Run #2	O61343.D	1	09/13/20 17:51	SP	n/a	n/a	VO2360

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
71-43-2	Benzene	0.25 U	0.50	0.25	0.10	ug/l	
56-23-5	Carbon Tetrachloride	0.25 U	0.50	0.25	0.10	ug/l	
67-66-3	Chloroform	0.25 U	0.50	0.25	0.10	ug/l	
75-34-3	1,1-Dichloroethane	0.25 U	0.50	0.25	0.10	ug/l	
107-06-2	1,2-Dichloroethane	0.25 U	0.50	0.25	0.10	ug/l	
156-59-2	cis-1,2-Dichloroethylene	0.25 U	0.50	0.25	0.10	ug/l	
78-87-5	1,2-Dichloropropane	0.25 U	0.50	0.25	0.10	ug/l	
75-09-2	Methylene Chloride	0.50 U	2.0	0.50	0.50	ug/l	
127-18-4	Tetrachloroethylene	0.25 U	0.50	0.25	0.10	ug/l	
79-01-6	Trichloroethylene	0.25 U	0.50	0.25	0.10	ug/l	
75-01-4	Vinyl Chloride ^a	0.050 U ^b	0.10	0.050	0.050	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	118%	116%	74-125%
2037-26-5	Toluene-D8	96%	74% ^c	88-111%

- (a) Confirmed ND by reanalysis.
- (b) Result is from Run# 2
- (c) Outside DOD QSM control limits.

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
 LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

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SGS North America Inc.

Report of Analysis

Page 1 of 1

Client Sample ID:	2036YOU2420F	Date Sampled:	09/02/20
Lab Sample ID:	FA78549-42	Date Received:	09/08/20
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B BY SIM		
Project:	Fort Ord Groundwater Monitoring		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	O61344.D	1	09/13/20 18:11	SP	n/a	n/a	VO2360
Run #2	Z62341.D	1	09/14/20 19:52	JG	n/a	n/a	VZ2418

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
71-43-2	Benzene	0.25 U	0.50	0.25	0.10	ug/l	
56-23-5	Carbon Tetrachloride	0.25 U	0.50	0.25	0.10	ug/l	
67-66-3	Chloroform	0.25 U	0.50	0.25	0.10	ug/l	
75-34-3	1,1-Dichloroethane	0.25 U	0.50	0.25	0.10	ug/l	
107-06-2	1,2-Dichloroethane	0.25 U	0.50	0.25	0.10	ug/l	
156-59-2	cis-1,2-Dichloroethylene	0.25 U	0.50	0.25	0.10	ug/l	
78-87-5	1,2-Dichloropropane	0.25 U	0.50	0.25	0.10	ug/l	
75-09-2	Methylene Chloride	0.50 U ^a	2.0	0.50	0.50	ug/l	
127-18-4	Tetrachloroethylene	0.25 U	0.50	0.25	0.10	ug/l	
79-01-6	Trichloroethylene	0.35	0.50	0.25	0.10	ug/l	J
75-01-4	Vinyl Chloride	0.050 U	0.10	0.050	0.050	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	117%	119% ^b	74-125%
2037-26-5	Toluene-D8	95%	98%	88-111%

(a) Result is from Run# 2

(b) Outside DOD QSM control limits.

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
 LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody
- QC Evaluation: DOD QSM5.x Limits

CADS2031
Ahtna

CHAIN OF CUSTODY

FA78549
WATER / SOIL

10F4
Chain of Custody #: 0037
Carbon Copies: White - Laboratory Yellow - Ahtna

Project Information:										Analysis Requested					Lab Sample Receipt					
Project Location: <u>Former Fort Ord, CA</u>			Sampler/s: <u>MARK FISLER</u>												Laboratory Sample Delivery					
Project Name: <u>OUR EWS</u>			Report To: <u>Derek Lieberman</u>												Group #: _____					
Project Number: <u>21065.000.01.0000</u>			E-Mail: <u>dlieberman@ahntna.net</u>												Custody Seal: _____					
Sampling Event/Site: <u>3RD QTR SAMPLING</u>			Laboratory: <u>SGS</u>												Temp (°C): _____					
Lab Number	Sample Number/Description	Sample Collection		Matrix			Number of Preserved Bottles										VOCs 8260 - SIM	Metals 6010 C	Chloride 9056A	Notes
		Date	Time	Water	Soil	Other	Total # of Bottles	HCl	HNO ₃	H ₂ SO ₄	NaOH	MeOH	NaHSO ₄	None	Other					
1	2036M0U2177A	9/2/20	0920	X			2	2										X	TRIP BLANK	
	2036M0U2178F			X			3	3										X		
2	2036M0U2179F		0931	X			3	3										X		
3	2036M0U2180F		0939	X			3	3										X		
4	2036M0U2181F		0952	X			3	3										X		
5	2036M0U2182D		0958	X			3	2										X		
6	2036M0U2183F		1017	X			3	3										X		
7	2036M0U2184F		1031	X			3	3										X	INITIAL ASSESSMENT <u>AD</u>	
9	2036M0U2185F		1038	X			3	3										X	LABORATORY VERIFICATION <u>AK</u>	
9	2036M0U2186F		1042	X			3	3										X		
10	2036M0U2187F		1057	X			3	3										X		
11	2036M0U2188F		1105	X			3	3										X		
12	2036M0U2189F		1118	X			3	3										X	> 10ug/l	
13	2036M0U2190F		1135	X			3	3										X		
14	2036M0U2191F		1134	X			3	3										X		

Turnaround Time: Standard : 3-5 Day Rush : 48 Hour Rush : 24 Hour Rush
 Comments: _____
 Shipments: Method: _____ Tracking ID: _____

OL2

Chain of Custody Tracking:			
Relinquished By: <u>[Signature]</u>	Date/Time: <u>9/3/20 0950</u>	Received By: <u>[Signature]</u>	Date/Time: <u>9/3/20 0955</u>
Relinquished By: <u>[Signature]</u>	Date/Time: <u>9/3/20 1035</u>	Received By: <u>[Signature]</u>	Date/Time: <u>9/3/20 1040</u>
Relinquished By: <u>[Signature]</u>	Date/Time: <u>9/8/20 1500</u>	Received By Laboratory: <u>FEDEX</u>	Date/Time: <u>9/8/20 1500</u>

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Ahtna

CHAIN OF CUSTODY

FA78549
WATER / SOIL

2024

Chain of Custody #: 0040

Carbon Copies: White - Laboratory Yellow - Ahtna

Project Information:			Analysis Requested										Lab Sample Receipt	
Project Location: <u>Former Fort Ord, CA</u> Sampler/s: <u>MARK FISLER</u>													Laboratory Sample Delivery	
Project Name: <u>OU2 EXTRACTION WELLS</u> Report To: <u>Derek Lieberman</u>													Group #: _____	
Project Number: <u>21065.000.01.0000</u> E-Mail: <u>dlieberman@ahtna.net</u>													Custody Seal: _____	
Sampling Event/Site: <u>3rd QTR 2020</u> Laboratory: <u>SGS</u>													Temp (°C): _____	

Lab Number	Sample Number/Description	Sample Collection		Matrix			Number of Preserved Bottles										Notes											
		Date	Time	Water	Soil	Other	Total # of Bottles	HCl	HNO ₃	H ₂ SO ₄	NaOH	MeOH	NaHSO ₄	None	Other	VOCs 8260 - SIM		Metals 6010 C	Chloride 9056A									
15	2036M0U2192 F	9/2/20	1144				3	3											X									
16	2036M0U2193 F		1152				9	9											X								(nsg/msd) >10 ug/l	
17	2036M0U2194 F		1202				3	3											X								>10 ug/l	
18	2036M0U2195 F		1208				3	3											X								>10 ug/l	
19	2036M0U2196 F		1221				3	3											X									
20	2036M0U2197 F		1247				3	3											X									
21	2036M0U2198 F		1357				3	3											X									
22	2036M0U2199 F		1415				3	3											X									
23	2036M0U2200 F		1422				3	3											X									
24	2036M0U2201 F		1431				3	3											X									

Turnaround Time: Standard : 3-5 Day Rush : 48 Hour Rush : 24 Hour Rush Shipment: Method: Tracking ID:

Comments:

OU2

Chain of Custody Tracking:			
Relinquished By: <u>[Signature]</u>	Date/Time: <u>9/3/20 0950</u>	Received By: <u>[Signature]</u>	Date/Time: <u>9/3/20 1055</u>
Relinquished By: <u>[Signature]</u>	Date/Time: <u>9/3/20 1035</u>	Received By: <u>[Signature]</u>	Date/Time: <u>9/3/20 1040</u>
Relinquished By: <u>Lee Bax</u>	Date/Time: <u>9/8/20 1500</u>	Received By Laboratory: <u>FOXES</u>	Date/Time: <u>9/8/20 1500</u>

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Ahtna

CHAIN OF CUSTODY

FA 78549

WATER / SOIL

3 of 4

Chain of Custody #:

0128

Carbon Copies: White - Laboratory Yellow - Ahtna

Project Information:										Analysis Requested					Lab Sample Receipt		
Project Location: <u>Former Fort Ord, CA</u>			Sampler(s): <u>Thomas Stuart / Lindsay Bayer</u>							VOCs 8260 - SIM	Metals 6010 C	Chloride 9056A	Laboratory Sample Delivery				
Project Name: <u>Base Wide GWM Program</u>			Report To: <u>Derek Lieberman</u>										Group #: _____				
Project Number: <u>21065.000.01.0000</u>			E-Mail: <u>dlieberman@ahntna.net</u>										Custody Seal: _____				
Sampling Event/Site: <u>FFO bWMP 3Q 2020</u>			Laboratory: <u>SGS</u>										Temp (°C): _____				
Lab Number	Sample Collection		Matrix			Number of Preserved Bottles										Notes	
	Date	Time	Water	Soil	Other	Total # of Bottles	HCl	HNO ₃	H ₂ SO ₄	NaOH	MeOH	NaHSO ₄	None	Other			
25	2036YOU2401A	9/2/2020	0726	X		2	X								X		
26	2036YOU2402F	9/2/2020	0826	X		3	X								X		
27	2036YOU2403F	9/2/20	0838	X		3	X								X		
28	2036YOU2404F	9/2/20	0914	X		3	X								X		
29	2036YOU2405F	9/2/20	0948	X		3	X								X		
30	2036YOU2406F	9/2/20	1035	X		3	X								X		
31	2036YOU2407F	9/2/20	1040	X		3	X								X		
32	2036YOU2408F	9/2/20	1100	X		3	X								X		
33	2036YOU2409F	9/2/20	1127	X		3	X								X		
34	2036YOU2410F	9/2/20	1145	X		3	X								X		
35	2036YOU2411F	9/2/20	1152	X		3	X								X		
36	2036YOU2412F	9/2/20	1225	X		3	X								X		
37	2036YOU2413F	9/2/20	1235	X		3	X								X		
38	2036YOU2414F	9/2/20	1341	X		3	X								X		
39	2036YOU2417F	9/2/20	1423	X		3	X								X		

Turnaround Time: Standard : 3-5 Day Rush : 48 Hour Rush : 24 Hour Rush Shipment: Method: Tracking ID:

Comments: OUZ AQUIFER

Chain of Custody Tracking:			
Relinquished By: <u>[Signature]</u>	Date/Time: <u>9/2/20 1613</u>	Received By: <u>[Signature]</u>	Date/Time: <u>9/2/20 1615</u>
Relinquished By: <u>[Signature]</u>	Date/Time: <u>9/3/20 1035</u>	Received By: <u>[Signature]</u>	Date/Time: <u>9/3/20 1040</u>
Relinquished By: <u>Lee Bawn</u>	Date/Time: <u>9/8/20 1500</u>	Received By: <u>[Signature]</u>	Date/Time: <u>9/8/20 1500</u>

2.2



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Ahtna

CHAIN OF CUSTODY

WATER / SOIL

FA78549

40F4

Chain of Custody #:

0125

Carbon Copies: White - Laboratory Yellow - Ahtna

Project information:		Analysis Requested			Lab Sample Receipt	
Project Location: Former Fort Ord, CA		Sampler/s: T. Slattery, L. Bauer			Laboratory Sample Delivery	
Project Name: Basewide GWMP		Report To: Derek Lieberman			Group #: _____	
Project Number: 21065.000.01.0000		E-Mail: dlieberman@ahntna.net			Custody Seal: _____	
Sampling Event/Site: FFO GWMP 3Q2020		Laboratory: SGS			Temp (°C): _____	

Lab Number	Sample Number/Description	Sample Collection		Matrix			Number of Preserved Bottles										VOCs 8260 - SIM	Metals 6010 C	Chloride 9056A	Notes	
		Date	Time	Water	Soil	Other	Total # of Bottles	HCl	HNO ₃	H ₂ SO ₄	NaOH	MeOH	NaHSO ₄	None	Other						
40	2036Y002418F	9/2/20	1433	X			3	X										X			
41	2036Y002419C	9/2/20	1445	X			3	X										X			
42	2036Y002420F	9/2/20	1513	X			3	X										X			

Turnaround Time: Standard : 3-5 Day Rush : 48 Hour Rush : 24 Hour Rush

Shipment: Method: Tracking ID:

Comments: OU2 AQUIFER

Chain of Custody Tracking:			
Relinquished By: [Signature]	Date/Time: 9/2/20 1613	Received By: [Signature]	Date/Time: 9/2/20 1615
Relinquished By: [Signature]	Date/Time: 9/3/20 1035	Received By: [Signature]	Date/Time: 9/3/20 1040
Relinquished By: Lee Bauer	Date/Time: 9/8/20 1500	Received By: FODR	Date/Time: 9/8/20 1500

2.2



5.1 5

SGS Sample Receipt Summary

Job Number: FA78549

Client: AHTNA

Project: Former Fort Ord, CA - 3Q2020 - OU2

Date / Time Received: 9/8/2020 3:00:00 PM

Delivery Method: FedEx

Airbill #: 771472207745

Therm ID: IR 1;	Therm CF: -0.2;	# of Coolers: 1
Cooler Temps (Raw Measured) °C: Cooler 1: (1.4);		
Cooler Temps (Corrected) °C: Cooler 1: (1.2);		

<u>Cooler Information</u>	<u>Y</u>	<u>or</u>	<u>N</u>
1. Custody Seals Present	<input checked="" type="checkbox"/>		<input type="checkbox"/>
2. Custody Seals Intact	<input checked="" type="checkbox"/>		<input type="checkbox"/>
3. Temp criteria achieved	<input checked="" type="checkbox"/>		<input type="checkbox"/>
4. Cooler temp verification	IR Gun		
5. Cooler media	Ice (Bag)		

<u>Trip Blank Information</u>	<u>Y</u>	<u>or</u>	<u>N</u>	<u>N/A</u>
1. Trip Blank present / cooler	<input checked="" type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
2. Trip Blank listed on COC	<input checked="" type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>

<u>W</u>	<u>or</u>	<u>S</u>	<u>N/A</u>
3. Type Of TB Received	<input checked="" type="checkbox"/>		<input type="checkbox"/>

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

<u>Misc. Information</u>			
Number of Encores: 25-Gram _____	5-Gram _____	Number of 5035 Field Kits: _____	Number of Lab Filtered Metals: _____
Test Strip Lot #: pH 0-3 _____	230315 _____	pH 10-12 _____	219813A _____
Residual Chlorine Test Strip Lot #: _____			

Comments

SM001 Rev. Date 05/24/17 Technician: ADAMK Date: 9/8/2020 3:00:00 PM Reviewer: PH Date: 9/10/2020

5.1
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QC Evaluation: DOD QSM5.x Limits

Job Number: FA78549
Account: Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring
Collected: 09/02/20

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
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VO2354 SW846 8260B BY SIM

VO2354-BS	71-43-2	Benzene	BSP	REC	116	%	79-120
VO2354-BS	56-23-5	Carbon Tetrachloride	BSP	REC	106	%	72-136
VO2354-BS	67-66-3	Chloroform	BSP	REC	108	%	79-124
VO2354-BS	75-34-3	1,1-Dichloroethane	BSP	REC	120	%	77-125
VO2354-BS	107-06-2	1,2-Dichloroethane	BSP	REC	110	%	73-128
VO2354-BS	156-59-2	cis-1,2-Dichloroethylene	BSP	REC	106	%	78-123
VO2354-BS	78-87-5	1,2-Dichloropropane	BSP	REC	118	%	78-122
VO2354-BS	75-09-2	Methylene Chloride	BSP	REC	104	%	74-124
VO2354-BS	127-18-4	Tetrachloroethylene	BSP	REC	106	%	74-129
VO2354-BS	79-01-6	Trichloroethylene	BSP	REC	112	%	79-123
VO2354-BS	75-01-4	Vinyl Chloride	BSP	REC	122	%	58-137
VO2354-BS	17060-07-0	1,2-Dichloroethane-D4	BSP	SURR	116	%	81-118
VO2354-BS	2037-26-5	Toluene-D8	BSP	SURR	100	%	89-112
FA78549-2MS	71-43-2	Benzene	MS	REC	123	%	79-120
FA78549-2MS	56-23-5	Carbon Tetrachloride	MS	REC	108	%	72-136
FA78549-2MS	67-66-3	Chloroform	MS	REC	113	%	79-124
FA78549-2MS	75-34-3	1,1-Dichloroethane	MS	REC	128	%	77-125
FA78549-2MS	107-06-2	1,2-Dichloroethane	MS	REC	118	%	73-128
FA78549-2MS	156-59-2	cis-1,2-Dichloroethylene	MS	REC	109	%	78-123
FA78549-2MS	78-87-5	1,2-Dichloropropane	MS	REC	125	%	78-122
FA78549-2MS	75-09-2	Methylene Chloride	MS	REC	127	%	74-124
FA78549-2MS	127-18-4	Tetrachloroethylene	MS	REC	109	%	74-129
FA78549-2MS	79-01-6	Trichloroethylene	MS	REC	112	%	79-123
FA78549-2MS	75-01-4	Vinyl Chloride	MS	REC	133	%	58-137
FA78549-2MS	17060-07-0	1,2-Dichloroethane-D4	MS	SURR	120	%	81-118
FA78549-2MS	2037-26-5	Toluene-D8	MS	SURR	99	%	89-112
FA78549-2MSD	71-43-2	Benzene	MSD	REC	123	%	79-120
FA78549-2MSD	71-43-2	Benzene	MSD	RPD	0	%	20
FA78549-2MSD	56-23-5	Carbon Tetrachloride	MSD	REC	110	%	72-136
FA78549-2MSD	56-23-5	Carbon Tetrachloride	MSD	RPD	2	%	20
FA78549-2MSD	67-66-3	Chloroform	MSD	REC	114	%	79-124
FA78549-2MSD	67-66-3	Chloroform	MSD	RPD	1	%	20
FA78549-2MSD	75-34-3	1,1-Dichloroethane	MSD	REC	128	%	77-125
FA78549-2MSD	75-34-3	1,1-Dichloroethane	MSD	RPD	0	%	20
FA78549-2MSD	107-06-2	1,2-Dichloroethane	MSD	REC	117	%	73-128
FA78549-2MSD	107-06-2	1,2-Dichloroethane	MSD	RPD	1	%	20
FA78549-2MSD	156-59-2	cis-1,2-Dichloroethylene	MSD	REC	109	%	78-123
FA78549-2MSD	156-59-2	cis-1,2-Dichloroethylene	MSD	RPD	0	%	20
FA78549-2MSD	78-87-5	1,2-Dichloropropane	MSD	REC	125	%	78-122
FA78549-2MSD	78-87-5	1,2-Dichloropropane	MSD	RPD	0	%	20
FA78549-2MSD	75-09-2	Methylene Chloride	MSD	REC	130	%	74-124
FA78549-2MSD	75-09-2	Methylene Chloride	MSD	RPD	2	%	20

* Sample used for QC is not from job FA78549

QC Evaluation: DOD QSM5.x Limits

Job Number: FA78549
Account: Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring
Collected: 09/02/20

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
FA78549-2MSD	127-18-4	Tetrachloroethylene	MSD	REC	109	%	74-129
FA78549-2MSD	127-18-4	Tetrachloroethylene	MSD	RPD	0	%	20
FA78549-2MSD	79-01-6	Trichloroethylene	MSD	REC	113	%	79-123
FA78549-2MSD	79-01-6	Trichloroethylene	MSD	RPD	1	%	20
FA78549-2MSD	75-01-4	Vinyl Chloride	MSD	REC	134	%	58-137
FA78549-2MSD	75-01-4	Vinyl Chloride	MSD	RPD	1	%	20
FA78549-2MSD	17060-07-0	1,2-Dichloroethane-D4	MSD	SURR	119	%	81-118
FA78549-2MSD	2037-26-5	Toluene-D8	MSD	SURR	99	%	89-112
VO2354-MB	17060-07-0	1,2-Dichloroethane-D4	MB	SURR	111	%	81-118
VO2354-MB	2037-26-5	Toluene-D8	MB	SURR	103	%	89-112
FA78549-1	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	111	%	81-118
FA78549-1	2037-26-5	Toluene-D8	SAMP	SURR	102	%	89-112
FA78549-2	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	112	%	81-118
FA78549-2	2037-26-5	Toluene-D8	SAMP	SURR	102	%	89-112
FA78549-3	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	113	%	81-118
FA78549-3	2037-26-5	Toluene-D8	SAMP	SURR	102	%	89-112
FA78549-4	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	113	%	81-118
FA78549-4	2037-26-5	Toluene-D8	SAMP	SURR	102	%	89-112
FA78549-5	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	112	%	81-118
FA78549-5	2037-26-5	Toluene-D8	SAMP	SURR	103	%	89-112
FA78549-6	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	113	%	81-118
FA78549-6	2037-26-5	Toluene-D8	SAMP	SURR	102	%	89-112
FA78549-7	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	113	%	81-118
FA78549-7	2037-26-5	Toluene-D8	SAMP	SURR	103	%	89-112
FA78549-8	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	114	%	81-118
FA78549-8	2037-26-5	Toluene-D8	SAMP	SURR	102	%	89-112
FA78549-9	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	114	%	81-118
FA78549-9	2037-26-5	Toluene-D8	SAMP	SURR	102	%	89-112
FA78549-10	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	116	%	81-118
FA78549-10	2037-26-5	Toluene-D8	SAMP	SURR	102	%	89-112
FA78549-11	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	120 ^a	%	81-118
FA78549-11	2037-26-5	Toluene-D8	SAMP	SURR	102	%	89-112
FA78549-12	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	115	%	81-118
FA78549-12	2037-26-5	Toluene-D8	SAMP	SURR	103	%	89-112
FA78549-13	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	114	%	81-118
FA78549-13	2037-26-5	Toluene-D8	SAMP	SURR	102	%	89-112
FA78549-14	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	115	%	81-118
FA78549-14	2037-26-5	Toluene-D8	SAMP	SURR	102	%	89-112
FA78549-15	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	115	%	81-118
FA78549-15	2037-26-5	Toluene-D8	SAMP	SURR	101	%	89-112
VO2360	SW846 8260B BY SIM						
VO2360-BS	71-43-2	Benzene	BSP	REC	108	%	79-120
VO2360-BS	56-23-5	Carbon Tetrachloride	BSP	REC	108	%	72-136

* Sample used for QC is not from job FA78549

5.2
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QC Evaluation: DOD QSM5.x Limits

Job Number: FA78549
Account: Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring
Collected: 09/02/20

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
VO2360-BS	67-66-3	Chloroform	BSP	REC	102	%	79-124
VO2360-BS	75-34-3	1,1-Dichloroethane	BSP	REC	110	%	77-125
VO2360-BS	107-06-2	1,2-Dichloroethane	BSP	REC	102	%	73-128
VO2360-BS	156-59-2	cis-1,2-Dichloroethylene	BSP	REC	102	%	78-123
VO2360-BS	78-87-5	1,2-Dichloropropane	BSP	REC	106	%	78-122
VO2360-BS	127-18-4	Tetrachloroethylene	BSP	REC	108	%	74-129
VO2360-BS	79-01-6	Trichloroethylene	BSP	REC	106	%	79-123
VO2360-BS	75-01-4	Vinyl Chloride	BSP	REC	100	%	58-137
VO2360-BS	17060-07-0	1,2-Dichloroethane-D4	BSP	SURR	97	%	81-118
VO2360-BS	2037-26-5	Toluene-D8	BSP	SURR	92	%	89-112
FA78564-1MS*	71-43-2	Benzene	MS	REC	98	%	79-120
FA78564-1MS*	56-23-5	Carbon Tetrachloride	MS	REC	99	%	72-136
FA78564-1MS*	67-66-3	Chloroform	MS	REC	97	%	79-124
FA78564-1MS*	75-34-3	1,1-Dichloroethane	MS	REC	101	%	77-125
FA78564-1MS*	107-06-2	1,2-Dichloroethane	MS	REC	95	%	73-128
FA78564-1MS*	156-59-2	cis-1,2-Dichloroethylene	MS	REC	88	%	78-123
FA78564-1MS*	78-87-5	1,2-Dichloropropane	MS	REC	98	%	78-122
FA78564-1MS*	127-18-4	Tetrachloroethylene	MS	REC	101	%	74-129
FA78564-1MS*	79-01-6	Trichloroethylene	MS	REC	97	%	79-123
FA78564-1MS*	75-01-4	Vinyl Chloride	MS	REC	115	%	58-137
FA78564-1MS*	17060-07-0	1,2-Dichloroethane-D4	MS	SURR	101	%	81-118
FA78564-1MS*	2037-26-5	Toluene-D8	MS	SURR	85	%	89-112
FA78564-1MSD*	71-43-2	Benzene	MSD	REC	103	%	79-120
FA78564-1MSD*	71-43-2	Benzene	MSD	RPD	6	%	20
FA78564-1MSD*	56-23-5	Carbon Tetrachloride	MSD	REC	105	%	72-136
FA78564-1MSD*	56-23-5	Carbon Tetrachloride	MSD	RPD	5	%	20
FA78564-1MSD*	67-66-3	Chloroform	MSD	REC	100	%	79-124
FA78564-1MSD*	67-66-3	Chloroform	MSD	RPD	4	%	20
FA78564-1MSD*	75-34-3	1,1-Dichloroethane	MSD	REC	106	%	77-125
FA78564-1MSD*	75-34-3	1,1-Dichloroethane	MSD	RPD	5	%	20
FA78564-1MSD*	107-06-2	1,2-Dichloroethane	MSD	REC	99	%	73-128
FA78564-1MSD*	107-06-2	1,2-Dichloroethane	MSD	RPD	4	%	20
FA78564-1MSD*	156-59-2	cis-1,2-Dichloroethylene	MSD	REC	94	%	78-123
FA78564-1MSD*	156-59-2	cis-1,2-Dichloroethylene	MSD	RPD	7	%	20
FA78564-1MSD*	78-87-5	1,2-Dichloropropane	MSD	REC	104	%	78-122
FA78564-1MSD*	78-87-5	1,2-Dichloropropane	MSD	RPD	6	%	20
FA78564-1MSD*	127-18-4	Tetrachloroethylene	MSD	REC	107	%	74-129
FA78564-1MSD*	127-18-4	Tetrachloroethylene	MSD	RPD	6	%	20
FA78564-1MSD*	79-01-6	Trichloroethylene	MSD	REC	103	%	79-123
FA78564-1MSD*	79-01-6	Trichloroethylene	MSD	RPD	6	%	20
FA78564-1MSD*	75-01-4	Vinyl Chloride	MSD	REC	108	%	58-137
FA78564-1MSD*	75-01-4	Vinyl Chloride	MSD	RPD	6	%	20
FA78564-1MSD*	17060-07-0	1,2-Dichloroethane-D4	MSD	SURR	99	%	81-118
FA78564-1MSD*	2037-26-5	Toluene-D8	MSD	SURR	87	%	89-112
VO2360-MB	17060-07-0	1,2-Dichloroethane-D4	MB	SURR	108	%	81-118

* Sample used for QC is not from job FA78549

5.2
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QC Evaluation: DOD QSM5.x Limits

Job Number: FA78549
Account: Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring
Collected: 09/02/20

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
VO2360-MB	2037-26-5	Toluene-D8	MB	SURR	98	%	89-112
FA78549-30	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	112	%	81-118
FA78549-30	2037-26-5	Toluene-D8	SAMP	SURR	91	%	89-112
FA78549-31	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	114	%	81-118
FA78549-31	2037-26-5	Toluene-D8	SAMP	SURR	91	%	89-112
FA78549-32	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	113	%	81-118
FA78549-32	2037-26-5	Toluene-D8	SAMP	SURR	92	%	89-112
FA78549-33	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	113	%	81-118
FA78549-33	2037-26-5	Toluene-D8	SAMP	SURR	90	%	89-112
FA78549-34	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	115	%	81-118
FA78549-34	2037-26-5	Toluene-D8	SAMP	SURR	91	%	89-112
FA78549-35	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	116	%	81-118
FA78549-35	2037-26-5	Toluene-D8	SAMP	SURR	89	%	89-112
FA78549-36	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	116	%	81-118
FA78549-36	2037-26-5	Toluene-D8	SAMP	SURR	90	%	89-112
FA78549-37	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	116	%	81-118
FA78549-37	2037-26-5	Toluene-D8	SAMP	SURR	91	%	89-112
FA78549-38	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	116	%	81-118
FA78549-38	2037-26-5	Toluene-D8	SAMP	SURR	91	%	89-112
FA78549-39	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	117	%	81-118
FA78549-39	2037-26-5	Toluene-D8	SAMP	SURR	94	%	89-112
FA78549-40	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	117	%	81-118
FA78549-40	2037-26-5	Toluene-D8	SAMP	SURR	92	%	89-112
FA78549-41	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	116	%	81-118
FA78549-41	2037-26-5	Toluene-D8	SAMP	SURR	74 ^a	%	89-112
FA78549-42	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	117	%	81-118
FA78549-42	2037-26-5	Toluene-D8	SAMP	SURR	95	%	89-112
VZ2417 SW846 8260B BY SIM							
VZ2417-BS	71-43-2	Benzene	BSP	REC	116	%	79-120
VZ2417-BS	56-23-5	Carbon Tetrachloride	BSP	REC	108	%	72-136
VZ2417-BS	67-66-3	Chloroform	BSP	REC	110	%	79-124
VZ2417-BS	75-34-3	1,1-Dichloroethane	BSP	REC	116	%	77-125
VZ2417-BS	107-06-2	1,2-Dichloroethane	BSP	REC	110	%	73-128
VZ2417-BS	156-59-2	cis-1,2-Dichloroethylene	BSP	REC	108	%	78-123
VZ2417-BS	78-87-5	1,2-Dichloropropane	BSP	REC	110	%	78-122
VZ2417-BS	75-09-2	Methylene Chloride	BSP	REC	98	%	74-124
VZ2417-BS	127-18-4	Tetrachloroethylene	BSP	REC	106	%	74-129
VZ2417-BS	79-01-6	Trichloroethylene	BSP	REC	114	%	79-123
VZ2417-BS	75-01-4	Vinyl Chloride	BSP	REC	118	%	58-137
VZ2417-BS	17060-07-0	1,2-Dichloroethane-D4	BSP	SURR	107	%	81-118
VZ2417-BS	2037-26-5	Toluene-D8	BSP	SURR	100	%	89-112
FA78549-16MS	71-43-2	Benzene	MS	REC	116	%	79-120
FA78549-16MS	56-23-5	Carbon Tetrachloride	MS	REC	104	%	72-136

* Sample used for QC is not from job FA78549

5.2
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QC Evaluation: DOD QSM5.x Limits

Job Number: FA78549
Account: Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring
Collected: 09/02/20

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
FA78549-16MS	67-66-3	Chloroform	MS	REC	114	%	79-124
FA78549-16MS	75-34-3	1,1-Dichloroethane	MS	REC	120	%	77-125
FA78549-16MS	107-06-2	1,2-Dichloroethane	MS	REC	112	%	73-128
FA78549-16MS	156-59-2	cis-1,2-Dichloroethylene	MS	REC	105	%	78-123
FA78549-16MS	78-87-5	1,2-Dichloropropane	MS	REC	112	%	78-122
FA78549-16MS	75-09-2	Methylene Chloride	MS	REC	98	%	74-124
FA78549-16MS	127-18-4	Tetrachloroethylene	MS	REC	112	%	74-129
FA78549-16MS	79-01-6	Trichloroethylene	MS	REC	124	%	79-123
FA78549-16MS	75-01-4	Vinyl Chloride	MS	REC	128	%	58-137
FA78549-16MS	17060-07-0	1,2-Dichloroethane-D4	MS	SURR	113	%	81-118
FA78549-16MS	2037-26-5	Toluene-D8	MS	SURR	94	%	89-112
FA78549-16MSD	71-43-2	Benzene	MSD	REC	118	%	79-120
FA78549-16MSD	71-43-2	Benzene	MSD	RPD	2	%	20
FA78549-16MSD	56-23-5	Carbon Tetrachloride	MSD	REC	106	%	72-136
FA78549-16MSD	56-23-5	Carbon Tetrachloride	MSD	RPD	2	%	20
FA78549-16MSD	67-66-3	Chloroform	MSD	REC	114	%	79-124
FA78549-16MSD	67-66-3	Chloroform	MSD	RPD	0	%	20
FA78549-16MSD	75-34-3	1,1-Dichloroethane	MSD	REC	120	%	77-125
FA78549-16MSD	75-34-3	1,1-Dichloroethane	MSD	RPD	0	%	20
FA78549-16MSD	107-06-2	1,2-Dichloroethane	MSD	REC	114	%	73-128
FA78549-16MSD	107-06-2	1,2-Dichloroethane	MSD	RPD	2	%	20
FA78549-16MSD	156-59-2	cis-1,2-Dichloroethylene	MSD	REC	105	%	78-123
FA78549-16MSD	156-59-2	cis-1,2-Dichloroethylene	MSD	RPD	0	%	20
FA78549-16MSD	78-87-5	1,2-Dichloropropane	MSD	REC	114	%	78-122
FA78549-16MSD	78-87-5	1,2-Dichloropropane	MSD	RPD	2	%	20
FA78549-16MSD	75-09-2	Methylene Chloride	MSD	REC	98	%	74-124
FA78549-16MSD	75-09-2	Methylene Chloride	MSD	RPD	0	%	20
FA78549-16MSD	127-18-4	Tetrachloroethylene	MSD	REC	110	%	74-129
FA78549-16MSD	127-18-4	Tetrachloroethylene	MSD	RPD	1	%	20
FA78549-16MSD	79-01-6	Trichloroethylene	MSD	REC	114	%	79-123
FA78549-16MSD	79-01-6	Trichloroethylene	MSD	RPD	3	%	20
FA78549-16MSD	75-01-4	Vinyl Chloride	MSD	REC	118	%	58-137
FA78549-16MSD	75-01-4	Vinyl Chloride	MSD	RPD	8	%	20
FA78549-16MSD	17060-07-0	1,2-Dichloroethane-D4	MSD	SURR	112	%	81-118
FA78549-16MSD	2037-26-5	Toluene-D8	MSD	SURR	95	%	89-112
VZ2417-MB	17060-07-0	1,2-Dichloroethane-D4	MB	SURR	112	%	81-118
VZ2417-MB	2037-26-5	Toluene-D8	MB	SURR	100	%	89-112
FA78549-16	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	109	%	81-118
FA78549-16	2037-26-5	Toluene-D8	SAMP	SURR	101	%	89-112
FA78549-17	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	108	%	81-118
FA78549-17	2037-26-5	Toluene-D8	SAMP	SURR	100	%	89-112
FA78549-18	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	109	%	81-118
FA78549-18	2037-26-5	Toluene-D8	SAMP	SURR	100	%	89-112
FA78549-19	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	109	%	81-118
FA78549-19	2037-26-5	Toluene-D8	SAMP	SURR	100	%	89-112

* Sample used for QC is not from job FA78549

5.2
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QC Evaluation: DOD QSM5.x Limits

Job Number: FA78549
Account: Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring
Collected: 09/02/20

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
FA78549-20	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	111	%	81-118
FA78549-20	2037-26-5	Toluene-D8	SAMP	SURR	100	%	89-112
FA78549-21	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	112	%	81-118
FA78549-21	2037-26-5	Toluene-D8	SAMP	SURR	100	%	89-112
FA78549-22	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	112	%	81-118
FA78549-22	2037-26-5	Toluene-D8	SAMP	SURR	100	%	89-112
FA78549-23	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	114	%	81-118
FA78549-23	2037-26-5	Toluene-D8	SAMP	SURR	100	%	89-112
FA78549-24	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	114	%	81-118
FA78549-24	2037-26-5	Toluene-D8	SAMP	SURR	100	%	89-112
FA78549-25	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	113	%	81-118
FA78549-25	2037-26-5	Toluene-D8	SAMP	SURR	99	%	89-112
FA78549-26	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	116	%	81-118
FA78549-26	2037-26-5	Toluene-D8	SAMP	SURR	99	%	89-112
FA78549-27	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	116	%	81-118
FA78549-27	2037-26-5	Toluene-D8	SAMP	SURR	99	%	89-112
FA78549-28	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	115	%	81-118
FA78549-28	2037-26-5	Toluene-D8	SAMP	SURR	99	%	89-112
FA78549-29	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	115	%	81-118
FA78549-29	2037-26-5	Toluene-D8	SAMP	SURR	98	%	89-112

VZ2418 SW846 8260B BY SIM

VZ2418-BS	71-43-2	Benzene	BSP	REC	118	%	79-120
VZ2418-BS	56-23-5	Carbon Tetrachloride	BSP	REC	114	%	72-136
VZ2418-BS	67-66-3	Chloroform	BSP	REC	114	%	79-124
VZ2418-BS	75-34-3	1,1-Dichloroethane	BSP	REC	122	%	77-125
VZ2418-BS	107-06-2	1,2-Dichloroethane	BSP	REC	114	%	73-128
VZ2418-BS	156-59-2	cis-1,2-Dichloroethylene	BSP	REC	110	%	78-123
VZ2418-BS	78-87-5	1,2-Dichloropropane	BSP	REC	112	%	78-122
VZ2418-BS	75-09-2	Methylene Chloride	BSP	REC	104	%	74-124
VZ2418-BS	127-18-4	Tetrachloroethylene	BSP	REC	106	%	74-129
VZ2418-BS	79-01-6	Trichloroethylene	BSP	REC	114	%	79-123
VZ2418-BS	17060-07-0	1,2-Dichloroethane-D4	BSP	SURR	110	%	81-118
VZ2418-BS	2037-26-5	Toluene-D8	BSP	SURR	98	%	89-112
FA78551-15MS*	71-43-2	Benzene	MS	REC	116	%	79-120
FA78551-15MS*	56-23-5	Carbon Tetrachloride	MS	REC	102	%	72-136
FA78551-15MS*	67-66-3	Chloroform	MS	REC	112	%	79-124
FA78551-15MS*	75-34-3	1,1-Dichloroethane	MS	REC	114	%	77-125
FA78551-15MS*	107-06-2	1,2-Dichloroethane	MS	REC	112	%	73-128
FA78551-15MS*	156-59-2	cis-1,2-Dichloroethylene	MS	REC	104	%	78-123
FA78551-15MS*	78-87-5	1,2-Dichloropropane	MS	REC	111	%	78-122
FA78551-15MS*	75-09-2	Methylene Chloride	MS	REC	102	%	74-124
FA78551-15MS*	127-18-4	Tetrachloroethylene	MS	REC	100	%	74-129
FA78551-15MS*	79-01-6	Trichloroethylene	MS	REC	116	%	79-123

* Sample used for QC is not from job FA78549

QC Evaluation: DOD QSM5.x Limits

Job Number: FA78549
Account: Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring
Collected: 09/02/20

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
FA78551-15MS*	17060-07-0	1,2-Dichloroethane-D4	MS	SURR	114	%	81-118
FA78551-15MS*	2037-26-5	Toluene-D8	MS	SURR	93	%	89-112
FA78551-15MSD*	71-43-2	Benzene	MSD	REC	117	%	79-120
FA78551-15MSD*	71-43-2	Benzene	MSD	RPD	1	%	20
FA78551-15MSD*	56-23-5	Carbon Tetrachloride	MSD	REC	103	%	72-136
FA78551-15MSD*	56-23-5	Carbon Tetrachloride	MSD	RPD	1	%	20
FA78551-15MSD*	67-66-3	Chloroform	MSD	REC	113	%	79-124
FA78551-15MSD*	67-66-3	Chloroform	MSD	RPD	1	%	20
FA78551-15MSD*	75-34-3	1,1-Dichloroethane	MSD	REC	115	%	77-125
FA78551-15MSD*	75-34-3	1,1-Dichloroethane	MSD	RPD	0	%	20
FA78551-15MSD*	107-06-2	1,2-Dichloroethane	MSD	REC	113	%	73-128
FA78551-15MSD*	107-06-2	1,2-Dichloroethane	MSD	RPD	1	%	20
FA78551-15MSD*	156-59-2	cis-1,2-Dichloroethylene	MSD	REC	105	%	78-123
FA78551-15MSD*	156-59-2	cis-1,2-Dichloroethylene	MSD	RPD	1	%	20
FA78551-15MSD*	78-87-5	1,2-Dichloropropane	MSD	REC	111	%	78-122
FA78551-15MSD*	78-87-5	1,2-Dichloropropane	MSD	RPD	1	%	20
FA78551-15MSD*	75-09-2	Methylene Chloride	MSD	REC	102	%	74-124
FA78551-15MSD*	75-09-2	Methylene Chloride	MSD	RPD	0	%	20
FA78551-15MSD*	127-18-4	Tetrachloroethylene	MSD	REC	102	%	74-129
FA78551-15MSD*	127-18-4	Tetrachloroethylene	MSD	RPD	1	%	20
FA78551-15MSD*	79-01-6	Trichloroethylene	MSD	REC	116	%	79-123
FA78551-15MSD*	79-01-6	Trichloroethylene	MSD	RPD	0	%	20
FA78551-15MSD*	17060-07-0	1,2-Dichloroethane-D4	MSD	SURR	113	%	81-118
FA78551-15MSD*	2037-26-5	Toluene-D8	MSD	SURR	94	%	89-112
VZ2418-MB	17060-07-0	1,2-Dichloroethane-D4	MB	SURR	112	%	81-118
VZ2418-MB	2037-26-5	Toluene-D8	MB	SURR	100	%	89-112
FA78549-30	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	109	%	81-118
FA78549-30	2037-26-5	Toluene-D8	SAMP	SURR	99	%	89-112
FA78549-31	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	113	%	81-118
FA78549-31	2037-26-5	Toluene-D8	SAMP	SURR	99	%	89-112
FA78549-32	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	113	%	81-118
FA78549-32	2037-26-5	Toluene-D8	SAMP	SURR	99	%	89-112
FA78549-33	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	114	%	81-118
FA78549-33	2037-26-5	Toluene-D8	SAMP	SURR	99	%	89-112
FA78549-34	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	115	%	81-118
FA78549-34	2037-26-5	Toluene-D8	SAMP	SURR	99	%	89-112
FA78549-35	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	114	%	81-118
FA78549-35	2037-26-5	Toluene-D8	SAMP	SURR	98	%	89-112
FA78549-36	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	116	%	81-118
FA78549-36	2037-26-5	Toluene-D8	SAMP	SURR	98	%	89-112
FA78549-37	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	117	%	81-118
FA78549-37	2037-26-5	Toluene-D8	SAMP	SURR	98	%	89-112
FA78549-38	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	115	%	81-118
FA78549-38	2037-26-5	Toluene-D8	SAMP	SURR	99	%	89-112
FA78549-39	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	117	%	81-118

* Sample used for QC is not from job FA78549

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QC Evaluation: DOD QSM5.x Limits

Job Number: FA78549
Account: Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring
Collected: 09/02/20

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
FA78549-39	2037-26-5	Toluene-D8	SAMP	SURR	98	%	89-112
FA78549-40	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	118	%	81-118
FA78549-40	2037-26-5	Toluene-D8	SAMP	SURR	98	%	89-112
FA78549-41	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	118	%	81-118
FA78549-41	2037-26-5	Toluene-D8	SAMP	SURR	96	%	89-112
FA78549-42	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	119 ^a	%	81-118
FA78549-42	2037-26-5	Toluene-D8	SAMP	SURR	98	%	89-112

(a) Outside DOD QSM control limits.

* Sample used for QC is not from job FA78549

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QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Instrument Performance Checks (BFB)
- Internal Standard Area Summaries
- Surrogate Recovery Summaries
- Initial and Continuing Calibration Summaries
- Run Sequence Reports

Method Blank Summary

Job Number: FA78549
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VO2354-MB	O61158.D	1	09/10/20	MM	n/a	n/a	VO2354

The QC reported here applies to the following samples:

Method: SW846 8260B BY SIM

FA78549-1, FA78549-2, FA78549-3, FA78549-4, FA78549-5, FA78549-6, FA78549-7, FA78549-8, FA78549-9, FA78549-10, FA78549-11, FA78549-12, FA78549-13, FA78549-14, FA78549-15

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	0.50	0.10	ug/l	
56-23-5	Carbon Tetrachloride	ND	0.50	0.10	ug/l	
67-66-3	Chloroform	ND	0.50	0.10	ug/l	
75-34-3	1,1-Dichloroethane	ND	0.50	0.10	ug/l	
107-06-2	1,2-Dichloroethane	ND	0.50	0.10	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	0.50	0.10	ug/l	
78-87-5	1,2-Dichloropropane	ND	0.50	0.10	ug/l	
75-09-2	Methylene Chloride	ND	2.0	0.50	ug/l	
127-18-4	Tetrachloroethylene	ND	0.50	0.10	ug/l	
79-01-6	Trichloroethylene	ND	0.50	0.10	ug/l	
75-01-4	Vinyl Chloride	ND	0.10	0.050	ug/l	

CAS No.	Surrogate Recoveries	Limits	
17060-07-0	1,2-Dichloroethane-D4	111%	74-125%
2037-26-5	Toluene-D8	103%	88-111%

Method Blank Summary

Job Number: FA78549
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VZ2417-MB	Z62292.D	1	09/13/20	SP	n/a	n/a	VZ2417

The QC reported here applies to the following samples:

Method: SW846 8260B BY SIM

FA78549-16, FA78549-17, FA78549-18, FA78549-19, FA78549-20, FA78549-21, FA78549-22, FA78549-23, FA78549-24, FA78549-25, FA78549-26, FA78549-27, FA78549-28, FA78549-29

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	0.50	0.10	ug/l	
56-23-5	Carbon Tetrachloride	ND	0.50	0.10	ug/l	
67-66-3	Chloroform	ND	0.50	0.10	ug/l	
75-34-3	1,1-Dichloroethane	ND	0.50	0.10	ug/l	
107-06-2	1,2-Dichloroethane	ND	0.50	0.10	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	0.50	0.10	ug/l	
78-87-5	1,2-Dichloropropane	ND	0.50	0.10	ug/l	
75-09-2	Methylene Chloride	ND	2.0	0.50	ug/l	
127-18-4	Tetrachloroethylene	ND	0.50	0.10	ug/l	
79-01-6	Trichloroethylene	ND	0.50	0.10	ug/l	
75-01-4	Vinyl Chloride	ND	0.10	0.050	ug/l	

CAS No.	Surrogate Recoveries	Limits	
17060-07-0	1,2-Dichloroethane-D4	112%	74-125%
2037-26-5	Toluene-D8	100%	88-111%

Method Blank Summary

Job Number: FA78549
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VO2360-MB	O61328.D	1	09/13/20	SP	n/a	n/a	VO2360

The QC reported here applies to the following samples:

Method: SW846 8260B BY SIM

FA78549-30, FA78549-31, FA78549-32, FA78549-33, FA78549-34, FA78549-35, FA78549-36, FA78549-37, FA78549-38, FA78549-39, FA78549-40, FA78549-41, FA78549-42

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	0.50	0.10	ug/l	
56-23-5	Carbon Tetrachloride	ND	0.50	0.10	ug/l	
67-66-3	Chloroform	ND	0.50	0.10	ug/l	
75-34-3	1,1-Dichloroethane	ND	0.50	0.10	ug/l	
107-06-2	1,2-Dichloroethane	ND	0.50	0.10	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	0.50	0.10	ug/l	
78-87-5	1,2-Dichloropropane	ND	0.50	0.10	ug/l	
127-18-4	Tetrachloroethylene	ND	0.50	0.10	ug/l	
79-01-6	Trichloroethylene	ND	0.50	0.10	ug/l	
75-01-4	Vinyl Chloride	ND	0.10	0.050	ug/l	

CAS No.	Surrogate Recoveries	Limits	
17060-07-0	1,2-Dichloroethane-D4	108%	74-125%
2037-26-5	Toluene-D8	98%	88-111%

Method Blank Summary

Job Number: FA78549
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VZ2418-MB	Z62325.D	1	09/14/20	JG	n/a	n/a	VZ2418

The QC reported here applies to the following samples:

Method: SW846 8260B BY SIM

FA78549-30, FA78549-31, FA78549-32, FA78549-33, FA78549-34, FA78549-35, FA78549-36, FA78549-37, FA78549-38, FA78549-39, FA78549-40, FA78549-41, FA78549-42

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	0.50	0.10	ug/l	
56-23-5	Carbon Tetrachloride	ND	0.50	0.10	ug/l	
67-66-3	Chloroform	ND	0.50	0.10	ug/l	
75-34-3	1,1-Dichloroethane	ND	0.50	0.10	ug/l	
107-06-2	1,2-Dichloroethane	ND	0.50	0.10	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	0.50	0.10	ug/l	
78-87-5	1,2-Dichloropropane	ND	0.50	0.10	ug/l	
75-09-2	Methylene Chloride	ND	2.0	0.50	ug/l	
127-18-4	Tetrachloroethylene	ND	0.50	0.10	ug/l	
79-01-6	Trichloroethylene	ND	0.50	0.10	ug/l	

CAS No.	Surrogate Recoveries	Limits	
17060-07-0	1,2-Dichloroethane-D4	112%	74-125%
2037-26-5	Toluene-D8	100%	88-111%

Blank Spike Summary

Job Number: FA78549
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VO2354-BS	O61156.D	1	09/10/20	MM	n/a	n/a	VO2354

The QC reported here applies to the following samples:

Method: SW846 8260B BY SIM

FA78549-1, FA78549-2, FA78549-3, FA78549-4, FA78549-5, FA78549-6, FA78549-7, FA78549-8, FA78549-9, FA78549-10, FA78549-11, FA78549-12, FA78549-13, FA78549-14, FA78549-15

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
71-43-2	Benzene	5	5.8	116	81-122
56-23-5	Carbon Tetrachloride	5	5.3	106	76-136
67-66-3	Chloroform	5	5.4	108	80-124
75-34-3	1,1-Dichloroethane	5	6.0	120	81-122
107-06-2	1,2-Dichloroethane	5	5.5	110	75-125
156-59-2	cis-1,2-Dichloroethylene	5	5.3	106	78-120
78-87-5	1,2-Dichloropropane	5	5.9	118	76-124
75-09-2	Methylene Chloride	5	5.2	104	69-135
127-18-4	Tetrachloroethylene	5	5.3	106	76-135
79-01-6	Trichloroethylene	5	5.6	112	81-126
75-01-4	Vinyl Chloride	5	6.1	122	69-159

CAS No.	Surrogate Recoveries	BSP	Limits
17060-07-0	1,2-Dichloroethane-D4	116%	74-125%
2037-26-5	Toluene-D8	100%	88-111%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA78549
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VZ2417-BS	Z62290.D	1	09/13/20	SP	n/a	n/a	VZ2417

The QC reported here applies to the following samples:

Method: SW846 8260B BY SIM

FA78549-16, FA78549-17, FA78549-18, FA78549-19, FA78549-20, FA78549-21, FA78549-22, FA78549-23, FA78549-24, FA78549-25, FA78549-26, FA78549-27, FA78549-28, FA78549-29

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
71-43-2	Benzene	5	5.8	116	81-122
56-23-5	Carbon Tetrachloride	5	5.4	108	76-136
67-66-3	Chloroform	5	5.5	110	80-124
75-34-3	1,1-Dichloroethane	5	5.8	116	81-122
107-06-2	1,2-Dichloroethane	5	5.5	110	75-125
156-59-2	cis-1,2-Dichloroethylene	5	5.4	108	78-120
78-87-5	1,2-Dichloropropane	5	5.5	110	76-124
75-09-2	Methylene Chloride	5	4.9	98	69-135
127-18-4	Tetrachloroethylene	5	5.3	106	76-135
79-01-6	Trichloroethylene	5	5.7	114	81-126
75-01-4	Vinyl Chloride	5	5.9	118	69-159

CAS No.	Surrogate Recoveries	BSP	Limits
17060-07-0	1,2-Dichloroethane-D4	107%	74-125%
2037-26-5	Toluene-D8	100%	88-111%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA78549
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VO2360-BS	O61326.D	1	09/13/20	SP	n/a	n/a	VO2360

The QC reported here applies to the following samples:

Method: SW846 8260B BY SIM

FA78549-30, FA78549-31, FA78549-32, FA78549-33, FA78549-34, FA78549-35, FA78549-36, FA78549-37, FA78549-38, FA78549-39, FA78549-40, FA78549-41, FA78549-42

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
71-43-2	Benzene	5	5.4	108	81-122
56-23-5	Carbon Tetrachloride	5	5.4	108	76-136
67-66-3	Chloroform	5	5.1	102	80-124
75-34-3	1,1-Dichloroethane	5	5.5	110	81-122
107-06-2	1,2-Dichloroethane	5	5.1	102	75-125
156-59-2	cis-1,2-Dichloroethylene	5	5.1	102	78-120
78-87-5	1,2-Dichloropropane	5	5.3	106	76-124
127-18-4	Tetrachloroethylene	5	5.4	108	76-135
79-01-6	Trichloroethylene	5	5.3	106	81-126
75-01-4	Vinyl Chloride	5	5.0	100	69-159

CAS No.	Surrogate Recoveries	BSP	Limits
17060-07-0	1,2-Dichloroethane-D4	97%	74-125%
2037-26-5	Toluene-D8	92%	88-111%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA78549
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VZ2418-BS	Z62323.D	1	09/14/20	JG	n/a	n/a	VZ2418

The QC reported here applies to the following samples:

Method: SW846 8260B BY SIM

FA78549-30, FA78549-31, FA78549-32, FA78549-33, FA78549-34, FA78549-35, FA78549-36, FA78549-37, FA78549-38, FA78549-39, FA78549-40, FA78549-41, FA78549-42

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
71-43-2	Benzene	5	5.9	118	81-122
56-23-5	Carbon Tetrachloride	5	5.7	114	76-136
67-66-3	Chloroform	5	5.7	114	80-124
75-34-3	1,1-Dichloroethane	5	6.1	122	81-122
107-06-2	1,2-Dichloroethane	5	5.7	114	75-125
156-59-2	cis-1,2-Dichloroethylene	5	5.5	110	78-120
78-87-5	1,2-Dichloropropane	5	5.6	112	76-124
75-09-2	Methylene Chloride	5	5.2	104	69-135
127-18-4	Tetrachloroethylene	5	5.3	106	76-135
79-01-6	Trichloroethylene	5	5.7	114	81-126

CAS No.	Surrogate Recoveries	BSP	Limits
17060-07-0	1,2-Dichloroethane-D4	110%	74-125%
2037-26-5	Toluene-D8	98%	88-111%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA78549
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA78549-2MS	O61163.D	20	09/10/20	MM	n/a	n/a	VO2354
FA78549-2MSD	O61164.D	20	09/10/20	MM	n/a	n/a	VO2354
FA78549-2	O61160.D	1	09/10/20	MM	n/a	n/a	VO2354

The QC reported here applies to the following samples:

Method: SW846 8260B BY SIM

FA78549-1, FA78549-2, FA78549-3, FA78549-4, FA78549-5, FA78549-6, FA78549-7, FA78549-8, FA78549-9, FA78549-10, FA78549-11, FA78549-12, FA78549-13, FA78549-14, FA78549-15

CAS No.	Compound	FA78549-2 ug/l	Spike Q	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	0.50 U		100	123	123*	100	123	0	81-122/14
56-23-5	Carbon Tetrachloride	0.50 U		100	108	108	100	110	2	76-136/23
67-66-3	Chloroform	0.25	J	100	113	113	100	114	1	80-124/15
75-34-3	1,1-Dichloroethane	0.37	J	100	128	128*	100	128	0	81-122/15
107-06-2	1,2-Dichloroethane	0.50 U		100	118	118	100	117	1	75-125/14
156-59-2	cis-1,2-Dichloroethylene	0.50 U		100	109	109	100	109	0	78-120/15
78-87-5	1,2-Dichloropropane	0.50 U		100	125	125*	100	125	0	76-124/14
75-09-2	Methylene Chloride	2.0 U		100	127	127	100	130	2	69-135/16
127-18-4	Tetrachloroethylene	0.50 U		100	109	109	100	109	0	76-135/16
79-01-6	Trichloroethylene	1.9		100	114	112	100	115	1	81-126/15
75-01-4	Vinyl Chloride	0.10 U		100	133	133	100	134	1	69-159/18

CAS No.	Surrogate Recoveries	MS	MSD	FA78549-2	Limits
17060-07-0	1,2-Dichloroethane-D4	120%	119%	112%	74-125%
2037-26-5	Toluene-D8	99%	99%	102%	88-111%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA78549
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA78549-16MS	Z62314.D	1	09/13/20	SP	n/a	n/a	VZ2417
FA78549-16MSD	Z62315.D	1	09/13/20	SP	n/a	n/a	VZ2417
FA78549-16	Z62293.D	1	09/13/20	SP	n/a	n/a	VZ2417

The QC reported here applies to the following samples:

Method: SW846 8260B BY SIM

FA78549-16, FA78549-17, FA78549-18, FA78549-19, FA78549-20, FA78549-21, FA78549-22, FA78549-23, FA78549-24, FA78549-25, FA78549-26, FA78549-27, FA78549-28, FA78549-29

CAS No.	Compound	FA78549-16 Spike		MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
		ug/l	Q							
71-43-2	Benzene	0.50 U	5	5.8	116	5	5.9	118	2	81-122/14
56-23-5	Carbon Tetrachloride	0.50 U	5	5.2	104	5	5.3	106	2	76-136/23
67-66-3	Chloroform	0.82	5	6.5	114	5	6.5	114	0	80-124/15
75-34-3	1,1-Dichloroethane	1.4	5	7.4	120	5	7.4	120	0	81-122/15
107-06-2	1,2-Dichloroethane	0.12	J 5	5.7	112	5	5.8	114	2	75-125/14
156-59-2	cis-1,2-Dichloroethylene	0.43	J 5	5.7	105	5	5.7	105	0	78-120/15
78-87-5	1,2-Dichloropropane	0.50 U	5	5.6	112	5	5.7	114	2	76-124/14
75-09-2	Methylene Chloride	2.0 U	5	4.9	98	5	4.9	98	0	69-135/16
127-18-4	Tetrachloroethylene	5.9	5	11.5	112	5	11.4	110	1	76-135/16
79-01-6	Trichloroethylene	9.5	5	15.7	124	5	15.2	114	3	81-126/15
75-01-4	Vinyl Chloride	0.10 U	5	6.4	128	5	5.9	118	8	69-159/18

CAS No.	Surrogate Recoveries	MS	MSD	FA78549-16	Limits
17060-07-0	1,2-Dichloroethane-D4	113%	112%	109%	74-125%
2037-26-5	Toluene-D8	94%	95%	101%	88-111%

* = Outside of Control Limits.

6.3.2
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Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA78549
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA78564-1MS	O61349.D	10	09/13/20	SP	n/a	n/a	VO2360
FA78564-1MSD	O61350.D	10	09/13/20	SP	n/a	n/a	VO2360
FA78564-1	O61345.D	1	09/13/20	SP	n/a	n/a	VO2360

The QC reported here applies to the following samples:

Method: SW846 8260B BY SIM

FA78549-30, FA78549-31, FA78549-32, FA78549-33, FA78549-34, FA78549-35, FA78549-36, FA78549-37, FA78549-38, FA78549-39, FA78549-40, FA78549-41, FA78549-42

CAS No.	Compound	FA78564-1 ug/l	Spike Q ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	0.50 U	50	48.8	98	50	51.6	103	6	81-122/14
56-23-5	Carbon Tetrachloride	0.50 U	50	49.7	99	50	52.4	105	5	76-136/23
67-66-3	Chloroform	0.50 U	50	48.3	97	50	50.1	100	4	80-124/15
75-34-3	1,1-Dichloroethane	0.50 U	50	50.3	101	50	52.8	106	5	81-122/15
107-06-2	1,2-Dichloroethane	0.50 U	50	47.3	95	50	49.4	99	4	75-125/14
156-59-2	cis-1,2-Dichloroethylene	0.50 U	50	43.9	88	50	47.1	94	7	78-120/15
78-87-5	1,2-Dichloropropane	0.50 U	50	48.9	98	50	51.8	104	6	76-124/14
127-18-4	Tetrachloroethylene	0.50 U	50	50.4	101	50	53.4	107	6	76-135/16
79-01-6	Trichloroethylene	0.50 U	50	48.3	97	50	51.5	103	6	81-126/15
75-01-4	Vinyl Chloride	0.10 U	50	57.4	115	50	54.0	108	6	69-159/18

CAS No.	Surrogate Recoveries	MS	MSD	FA78564-1	Limits
17060-07-0	1,2-Dichloroethane-D4	101%	99%	118%	74-125%
2037-26-5	Toluene-D8	85%*	87%*	94%	88-111%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA78549
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA78551-15MS	Z62335.D	10	09/14/20	JG	n/a	n/a	VZ2418
FA78551-15MSD	Z62336.D	10	09/14/20	JG	n/a	n/a	VZ2418
FA78551-15	Z62334.D	2	09/14/20	JG	n/a	n/a	VZ2418

The QC reported here applies to the following samples:

Method: SW846 8260B BY SIM

FA78549-30, FA78549-31, FA78549-32, FA78549-33, FA78549-34, FA78549-35, FA78549-36, FA78549-37, FA78549-38, FA78549-39, FA78549-40, FA78549-41, FA78549-42

CAS No.	Compound	FA78551-15 ug/l	Spike Q	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	1.0 U	50	58.0	116	50	58.6	117	1	81-122/14
56-23-5	Carbon Tetrachloride	1.0 U	50	51.0	102	50	51.4	103	1	76-136/23
67-66-3	Chloroform	2.8	50	58.8	112	50	59.1	113	1	80-124/15
75-34-3	1,1-Dichloroethane	21.6	50	78.7	114	50	79.0	115	0	81-122/15
107-06-2	1,2-Dichloroethane	1.4	50	57.6	112	50	57.9	113	1	75-125/14
156-59-2	cis-1,2-Dichloroethylene	5.0	50	56.8	104	50	57.5	105	1	78-120/15
78-87-5	1,2-Dichloropropane	0.56 J	50	56.0	111	50	56.3	111	1	76-124/14
75-09-2	Methylene Chloride	1.5 J	50	52.5	102	50	52.6	102	0	69-135/16
127-18-4	Tetrachloroethylene	5.1	50	55.1	100	50	55.9	102	1	76-135/16
79-01-6	Trichloroethylene	5.9	50	64.0	116	50	63.8	116	0	81-126/15

CAS No.	Surrogate Recoveries	MS	MSD	FA78551-15	Limits
17060-07-0	1,2-Dichloroethane-D4	114%	113%	116%	74-125%
2037-26-5	Toluene-D8	93%	94%	98%	88-111%

* = Outside of Control Limits.

Instrument Performance Check (BFB)

Job Number: FA78549
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Sample: VO2352-BFB	Injection Date: 09/08/20
Lab File ID: O61115.D	Injection Time: 11:44
Instrument ID: GCMSO	

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	116296	32.9	Pass
75	30.0 - 60.0% of mass 95	177003	50.1	Pass
95	Base peak, 100% relative abundance	353365	100.0	Pass
96	5.0 - 9.0% of mass 95	24240	6.86	Pass
173	Less than 2.0% of mass 174	1519	0.43 (0.60) ^a	Pass
174	50.0 - 100.0% of mass 95	251541	71.2	Pass
175	5.0 - 9.0% of mass 174	17467	4.94 (6.94) ^a	Pass
176	95.0 - 101.0% of mass 174	244224	69.1 (97.1) ^a	Pass
177	5.0 - 9.0% of mass 176	17221	4.87 (7.05) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VO2352-IC2352	O61116.D	09/08/20	12:14	00:30	Initial cal 1
VO2352-IC2352	O61117.D	09/08/20	12:34	00:50	Initial cal 2
VO2352-IC2352	O61118.D	09/08/20	12:55	01:11	Initial cal 3
VO2352-IC2352	O61119.D	09/08/20	13:15	01:31	Initial cal 4
VO2352-ICC2352	O61120.D	09/08/20	13:55	02:11	Initial cal 5
VO2352-IC2352	O61121.D	09/08/20	14:15	02:31	Initial cal 6
VO2352-IC2352	O61122.D	09/08/20	14:36	02:52	Initial cal 7
VO2352-ICV2352	O61124.D	09/08/20	15:16	03:32	Initial cal verification 5

Instrument Performance Check (BFB)

Job Number: FA78549
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Sample: VO2354-BFB	Injection Date: 09/10/20
Lab File ID: O61154.D	Injection Time: 07:42
Instrument ID: GCMSO	

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	108933	38.4	Pass
75	30.0 - 60.0% of mass 95	151403	53.3	Pass
95	Base peak, 100% relative abundance	283819	100.0	Pass
96	5.0 - 9.0% of mass 95	20171	7.11	Pass
173	Less than 2.0% of mass 174	1142	0.40 (0.61) ^a	Pass
174	50.0 - 100.0% of mass 95	187819	66.2	Pass
175	5.0 - 9.0% of mass 174	13333	4.70 (7.10) ^a	Pass
176	95.0 - 101.0% of mass 174	180139	63.5 (95.9) ^a	Pass
177	5.0 - 9.0% of mass 176	11373	4.01 (6.31) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VO2354-CC2352	O61155.D	09/10/20	08:05	00:23	Continuing cal 5
VO2354-BS	O61156.D	09/10/20	08:38	00:56	Blank Spike
VO2354-MB	O61158.D	09/10/20	09:36	01:54	Method Blank
FA78549-1	O61159.D	09/10/20	09:56	02:14	2036MOU2177A
FA78549-2	O61160.D	09/10/20	10:17	02:35	2036MOU2179F
FA78549-3	O61161.D	09/10/20	10:37	02:55	2036MOU2180F
FA78549-4	O61162.D	09/10/20	10:57	03:15	2036MOU2181F
FA78549-2MS	O61163.D	09/10/20	11:17	03:35	Matrix Spike
FA78549-2MSD	O61164.D	09/10/20	11:38	03:56	Matrix Spike Duplicate
FA78549-5	O61165.D	09/10/20	11:58	04:16	2036MOU2182D
FA78549-6	O61166.D	09/10/20	12:18	04:36	2036MOU2183F
FA78549-7	O61167.D	09/10/20	12:38	04:56	2036MOU2184F
FA78549-8	O61168.D	09/10/20	12:59	05:17	2036MOU2185F
FA78549-9	O61169.D	09/10/20	13:19	05:37	2036MOU2186F
FA78549-10	O61170.D	09/10/20	13:39	05:57	2036MOU2187F
FA78549-11	O61171.D	09/10/20	14:00	06:18	2036MOU2188F
FA78549-12	O61172.D	09/10/20	14:20	06:38	2036MOU2189F
FA78549-13	O61173.D	09/10/20	14:40	06:58	2036MOU2190F
FA78549-14	O61174.D	09/10/20	15:01	07:19	2036MOU2191F
FA78549-15	O61175.D	09/10/20	15:21	07:39	2036MOU2192F
VO2354-ECC2352	O61178.D	09/10/20	16:26	08:44	Ending cal 5

Instrument Performance Check (BFB)

Job Number: FA78549
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Sample: VO2356-BFB	Injection Date: 09/11/20
Lab File ID: O61227.D	Injection Time: 14:01
Instrument ID: GCMSO	

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	105346	30.7	Pass
75	30.0 - 60.0% of mass 95	169774	49.4	Pass
95	Base peak, 100% relative abundance	343616	100.0	Pass
96	5.0 - 9.0% of mass 95	25531	7.43	Pass
173	Less than 2.0% of mass 174	1340	0.39 (0.45) ^a	Pass
174	50.0 - 100.0% of mass 95	294848	85.8	Pass
175	5.0 - 9.0% of mass 174	20565	5.98 (6.97) ^a	Pass
176	95.0 - 101.0% of mass 174	284096	82.7 (96.4) ^a	Pass
177	5.0 - 9.0% of mass 176	17677	5.14 (6.22) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VO2356-IC2356	O61230.D	09/11/20	15:34	01:33	Initial cal 1
VO2356-IC2356	O61231.D	09/11/20	15:54	01:53	Initial cal 2
VO2356-IC2356	O61232.D	09/11/20	16:14	02:13	Initial cal 3
VO2356-IC2356	O61233.D	09/11/20	16:35	02:34	Initial cal 4
VO2356-ICC2356	O61234.D	09/11/20	16:55	02:54	Initial cal 5
VO2356-IC2356	O61235.D	09/11/20	17:15	03:14	Initial cal 6
VO2356-IC2356	O61236.D	09/11/20	17:36	03:35	Initial cal 7
VO2356-ICV2356	O61238.D	09/11/20	18:16	04:15	Initial cal verification 5

Instrument Performance Check (BFB)

Job Number: FA78549
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Sample: VO2360-BFB	Injection Date: 09/13/20
Lab File ID: O61324.D	Injection Time: 11:21
Instrument ID: GCMSO	

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	105581	32.9	Pass
75	30.0 - 60.0% of mass 95	153003	47.6	Pass
95	Base peak, 100% relative abundance	321323	100.0	Pass
96	5.0 - 9.0% of mass 95	23851	7.42	Pass
173	Less than 2.0% of mass 174	1727	0.54 (0.57) ^a	Pass
174	50.0 - 100.0% of mass 95	302997	94.3	Pass
175	5.0 - 9.0% of mass 174	22299	6.94 (7.36) ^a	Pass
176	95.0 - 101.0% of mass 174	289216	90.0 (95.5) ^a	Pass
177	5.0 - 9.0% of mass 176	18941	5.89 (6.55) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VO2360-CC2356	O61325.D	09/13/20	11:41	00:20	Continuing cal 5
VO2360-BS	O61326.D	09/13/20	12:06	00:45	Blank Spike
VO2360-MB	O61328.D	09/13/20	12:47	01:26	Method Blank
ZZZZZZ	O61329.D	09/13/20	13:07	01:46	(unrelated sample)
ZZZZZZ	O61330.D	09/13/20	13:27	02:06	(unrelated sample)
ZZZZZZ	O61331.D	09/13/20	13:48	02:27	(unrelated sample)
FA78549-30	O61332.D	09/13/20	14:08	02:47	2036YOU2406F
FA78549-31	O61333.D	09/13/20	14:28	03:07	2036YOU2407D
FA78549-32	O61334.D	09/13/20	14:48	03:27	2036YOU2408F
FA78549-33	O61335.D	09/13/20	15:09	03:48	2036YOU2409F
FA78549-34	O61336.D	09/13/20	15:29	04:08	2036YOU2410F
FA78549-35	O61337.D	09/13/20	15:49	04:28	2036YOU2411F
FA78549-36	O61338.D	09/13/20	16:09	04:48	2036YOU2412F
FA78549-37	O61339.D	09/13/20	16:30	05:09	2036YOU2413F
FA78549-38	O61340.D	09/13/20	16:50	05:29	2036YOU2414F
FA78549-39	O61341.D	09/13/20	17:10	05:49	2036YOU2417F
FA78549-40	O61342.D	09/13/20	17:30	06:09	2036YOU2418F
FA78549-41	O61343.D	09/13/20	17:51	06:30	2036YOU2419C
FA78549-42	O61344.D	09/13/20	18:11	06:50	2036YOU2420F
FA78564-1	O61345.D	09/13/20	18:31	07:10	(used for QC only; not part of job FA78549)
ZZZZZZ	O61346.D	09/13/20	18:51	07:30	(unrelated sample)
ZZZZZZ	O61347.D	09/13/20	19:11	07:50	(unrelated sample)
ZZZZZZ	O61348.D	09/13/20	19:32	08:11	(unrelated sample)
FA78564-1MS	O61349.D	09/13/20	19:52	08:31	Matrix Spike

Instrument Performance Check (BFB)

Job Number: FA78549
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Sample: VO2360-BFB	Injection Date: 09/13/20
Lab File ID: O61324.D	Injection Time: 11:21
Instrument ID: GCMSO	

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
FA78564-1MSD	O61350.D	09/13/20	20:12	08:51	Matrix Spike Duplicate
VO2360-ECC2356	O61351.D	09/13/20	20:32	09:11	Ending cal 5

Instrument Performance Check (BFB)

Job Number: FA78549
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Sample: VO2362-BFB	Injection Date: 09/15/20
Lab File ID: O61385.D	Injection Time: 14:52
Instrument ID: GCMSO	

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	96941	32.8	Pass
75	30.0 - 60.0% of mass 95	142400	48.2	Pass
95	Base peak, 100% relative abundance	295275	100.0	Pass
96	5.0 - 9.0% of mass 95	22317	7.56	Pass
173	Less than 2.0% of mass 174	1976	0.67 (0.67) ^a	Pass
174	50.0 - 100.0% of mass 95	294869	99.9	Pass
175	5.0 - 9.0% of mass 174	20685	7.01 (7.01) ^a	Pass
176	95.0 - 101.0% of mass 174	280789	95.1 (95.2) ^a	Pass
177	5.0 - 9.0% of mass 176	17438	5.91 (6.21) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VO2362-IC2362	O61386.D	09/15/20	15:46	00:54	Initial cal 1
VO2362-IC2362	O61387.D	09/15/20	16:06	01:14	Initial cal 2
VO2362-IC2362	O61388.D	09/15/20	16:26	01:34	Initial cal 3
VO2362-IC2362	O61389.D	09/15/20	16:47	01:55	Initial cal 4
VO2362-ICC2362	O61390.D	09/15/20	17:07	02:15	Initial cal 5
VO2362-IC2362	O61391.D	09/15/20	17:28	02:36	Initial cal 6
VO2362-IC2362	O61392.D	09/15/20	17:48	02:56	Initial cal 7
VO2362-ICV2362	O61394.D	09/15/20	18:29	03:37	Initial cal verification 5

Instrument Performance Check (BFB)

Job Number: FA78549
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Sample: VO2363-BFB	Injection Date: 09/16/20
Lab File ID: O61401.D	Injection Time: 11:07
Instrument ID: GCMSO	

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	103707	33.0	Pass
75	30.0 - 60.0% of mass 95	147861	47.0	Pass
95	Base peak, 100% relative abundance	314688	100.0	Pass
96	5.0 - 9.0% of mass 95	23037	7.32	Pass
173	Less than 2.0% of mass 174	1559	0.50 (0.51) ^a	Pass
174	50.0 - 100.0% of mass 95	305045	96.9	Pass
175	5.0 - 9.0% of mass 174	21837	6.94 (7.16) ^a	Pass
176	95.0 - 101.0% of mass 174	297067	94.4 (97.4) ^a	Pass
177	5.0 - 9.0% of mass 176	18176	5.78 (6.12) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VO2363-CC2362	O61402.D	09/16/20	11:32	00:25	Continuing cal 5
VO2363-BS	O61403.D	09/16/20	12:11	01:04	Blank Spike
VO2363-MB	O61405.D	09/16/20	13:09	02:02	Method Blank
ZZZZZZ	O61406.D	09/16/20	13:29	02:22	(unrelated sample)
ZZZZZZ	O61407.D	09/16/20	13:50	02:43	(unrelated sample)
ZZZZZZ	O61408.D	09/16/20	14:10	03:03	(unrelated sample)
ZZZZZZ	O61409.D	09/16/20	14:30	03:23	(unrelated sample)
ZZZZZZ	O61410.D	09/16/20	14:51	03:44	(unrelated sample)
ZZZZZZ	O61411.D	09/16/20	15:11	04:04	(unrelated sample)
ZZZZZZ	O61412.D	09/16/20	15:32	04:25	(unrelated sample)
FA78549-2	O61414.D	09/16/20	16:13	05:06	2036MOU2179F
FA78549-6	O61415.D	09/16/20	16:33	05:26	2036MOU2183F
FA78549-7	O61416.D	09/16/20	16:53	05:46	2036MOU2184F
FA78549-8	O61417.D	09/16/20	17:14	06:07	2036MOU2185F
FA78549-11	O61418.D	09/16/20	17:34	06:27	2036MOU2188F
FA78549-12	O61419.D	09/16/20	17:55	06:48	2036MOU2189F
FA78549-13	O61420.D	09/16/20	18:15	07:08	2036MOU2190F
VO2363-ECC2362	O61422.D	09/17/20	08:05	20:58	Ending cal 5

Instrument Performance Check (BFB)

Job Number: FA78549
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Sample: VO2365-BFB	Injection Date: 09/18/20
Lab File ID: O61437.D	Injection Time: 08:17
Instrument ID: GCMSO	

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	101965	29.3	Pass
75	30.0 - 60.0% of mass 95	162539	46.7	Pass
95	Base peak, 100% relative abundance	348139	100.0	Pass
96	5.0 - 9.0% of mass 95	27092	7.78	Pass
173	Less than 2.0% of mass 174	1951	0.56 (0.59) ^a	Pass
174	50.0 - 100.0% of mass 95	329003	94.5	Pass
175	5.0 - 9.0% of mass 174	21733	6.24 (6.61) ^a	Pass
176	95.0 - 101.0% of mass 174	319701	91.8 (97.2) ^a	Pass
177	5.0 - 9.0% of mass 176	20736	5.96 (6.49) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VO2365-IC2365	O61438.D	09/18/20	08:59	00:42	Initial cal 1
VO2365-IC2365	O61439.D	09/18/20	09:19	01:02	Initial cal 2
VO2365-IC2365	O61440.D	09/18/20	09:39	01:22	Initial cal 3
VO2365-IC2365	O61441.D	09/18/20	09:59	01:42	Initial cal 4
VO2365-ICC2365	O61442.D	09/18/20	10:20	02:03	Initial cal 5
VO2365-IC2365	O61443.D	09/18/20	10:40	02:23	Initial cal 6
VO2365-IC2365	O61444.D	09/18/20	11:00	02:43	Initial cal 7
VO2365-ICV2365	O61449.D	09/18/20	13:45	05:28	Initial cal verification 5
VO2365-BS	O61450.D	09/18/20	14:23	06:06	Blank Spike
VO2365-MB	O61452.D	09/18/20	15:04	06:47	Method Blank
FA78549-14	O61453.D	09/18/20	15:24	07:07	2036MOU2191F
FA78549-15	O61454.D	09/18/20	15:45	07:28	2036MOU2192F
ZZZZZZ	O61455.D	09/18/20	16:05	07:48	(unrelated sample)
FA78549-15MS	O61456.D	09/18/20	16:26	08:09	Matrix Spike
FA78549-15MSD	O61457.D	09/18/20	16:46	08:29	Matrix Spike Duplicate
VO2365-ECC2365	O61458.D	09/18/20	17:07	08:50	Ending cal 5

Instrument Performance Check (BFB)

Job Number: FA78549
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Sample: VZ2414-BFB	Injection Date: 09/11/20
Lab File ID: Z62205.D	Injection Time: 17:20
Instrument ID: GCMSZ	

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	24546	21.4	Pass
75	30.0 - 60.0% of mass 95	61341	53.4	Pass
95	Base peak, 100% relative abundance	114880	100.0	Pass
96	5.0 - 9.0% of mass 95	7912	6.89	Pass
173	Less than 2.0% of mass 174	429	0.37 (0.48) ^a	Pass
174	50.0 - 100.0% of mass 95	89573	78.0	Pass
175	5.0 - 9.0% of mass 174	6903	6.01 (7.71) ^a	Pass
176	95.0 - 101.0% of mass 174	89128	77.6 (99.5) ^a	Pass
177	5.0 - 9.0% of mass 176	5541	4.82 (6.22) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VZ2414-IC2414	Z62207.D	09/11/20	18:15	00:55	Initial cal 1
VZ2414-IC2414	Z62208.D	09/11/20	18:34	01:14	Initial cal 2
VZ2414-IC2414	Z62209.D	09/11/20	18:53	01:33	Initial cal 3
VZ2414-IC2414	Z62210.D	09/11/20	19:13	01:53	Initial cal 4
VZ2414-ICC2414	Z62211.D	09/11/20	19:32	02:12	Initial cal 5
VZ2414-IC2414	Z62212.D	09/11/20	19:51	02:31	Initial cal 6
VZ2414-IC2414	Z62213.D	09/11/20	20:13	02:53	Initial cal 7
VZ2414-ICV2414	Z62215.D	09/11/20	20:51	03:31	Initial cal verification 5
VZ2414-BS	Z62216.D	09/11/20	21:10	03:50	Blank Spike
VZ2414-MB	Z62218.D	09/11/20	21:49	04:29	Method Blank
FA78573-1	Z62219.D	09/11/20	22:08	04:48	(used for QC only; not part of job FA78549)
ZZZZZZ	Z62220.D	09/11/20	22:27	05:07	(unrelated sample)
ZZZZZZ	Z62221.D	09/11/20	22:47	05:27	(unrelated sample)
ZZZZZZ	Z62222.D	09/11/20	23:06	05:46	(unrelated sample)
ZZZZZZ	Z62223.D	09/11/20	23:26	06:06	(unrelated sample)
ZZZZZZ	Z62224.D	09/11/20	23:45	06:25	(unrelated sample)
ZZZZZZ	Z62225.D	09/12/20	00:04	06:44	(unrelated sample)
ZZZZZZ	Z62226.D	09/12/20	00:23	07:03	(unrelated sample)
ZZZZZZ	Z62227.D	09/12/20	00:42	07:22	(unrelated sample)
ZZZZZZ	Z62228.D	09/12/20	01:02	07:42	(unrelated sample)
ZZZZZZ	Z62229.D	09/12/20	01:21	08:01	(unrelated sample)
ZZZZZZ	Z62230.D	09/12/20	01:40	08:20	(unrelated sample)
ZZZZZZ	Z62231.D	09/12/20	02:00	08:40	(unrelated sample)
ZZZZZZ	Z62232.D	09/12/20	02:19	08:59	(unrelated sample)

Instrument Performance Check (BFB)

Job Number: FA78549
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Sample: VZ2414-BFB	Injection Date: 09/11/20
Lab File ID: Z62205.D	Injection Time: 17:20
Instrument ID: GCMSZ	

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
FA78573-1MS	Z62233.D	09/12/20	02:38	09:18	Matrix Spike
FA78573-1MSD	Z62234.D	09/12/20	02:57	09:37	Matrix Spike Duplicate
VZ2414-ECC2414	Z62235.D	09/12/20	03:16	09:56	Ending cal 5

6.4.8

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Instrument Performance Check (BFB)

Job Number: FA78549
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Sample: VZ2417-BFB	Injection Date: 09/13/20
Lab File ID: Z62288.D	Injection Time: 11:05
Instrument ID: GCMSZ	

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	23957	23.8	Pass
75	30.0 - 60.0% of mass 95	56141	55.8	Pass
95	Base peak, 100% relative abundance	100576	100.0	Pass
96	5.0 - 9.0% of mass 95	7461	7.42	Pass
173	Less than 2.0% of mass 174	438	0.44 (0.53) ^a	Pass
174	50.0 - 100.0% of mass 95	83139	82.7	Pass
175	5.0 - 9.0% of mass 174	5898	5.86 (7.09) ^a	Pass
176	95.0 - 101.0% of mass 174	82453	82.0 (99.2) ^a	Pass
177	5.0 - 9.0% of mass 176	5508	5.48 (6.68) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VZ2417-CC2414	Z62289.D	09/13/20	11:28	00:23	Continuing cal 5
VZ2417-BS	Z62290.D	09/13/20	11:55	00:50	Blank Spike
VZ2417-MB	Z62292.D	09/13/20	12:33	01:28	Method Blank
FA78549-16	Z62293.D	09/13/20	12:52	01:47	2036MOU2193F
FA78549-17	Z62294.D	09/13/20	13:12	02:07	2036MOU2194F
FA78549-18	Z62295.D	09/13/20	13:31	02:26	2036MOU2195F
FA78549-19	Z62296.D	09/13/20	13:50	02:45	2036MOU2196F
FA78549-20	Z62297.D	09/13/20	14:10	03:05	2036MOU2197F
FA78549-21	Z62298.D	09/13/20	14:29	03:24	2036MOU2198F
FA78549-22	Z62299.D	09/13/20	14:48	03:43	2036MOU2199F
FA78549-23	Z62300.D	09/13/20	15:08	04:03	2036MOU2200D
FA78549-24	Z62301.D	09/13/20	15:27	04:22	2036MOU2201F
FA78549-25	Z62302.D	09/13/20	15:46	04:41	2036YOU2401A
FA78549-26	Z62303.D	09/13/20	16:06	05:01	2036Y0BW402F
FA78549-27	Z62304.D	09/13/20	16:25	05:20	2036Y0BW403F
FA78549-28	Z62305.D	09/13/20	16:44	05:39	2036YOU2404F
FA78549-29	Z62306.D	09/13/20	17:04	05:59	2036YOU2405F
ZZZZZZ	Z62307.D	09/13/20	17:23	06:18	(unrelated sample)
ZZZZZZ	Z62308.D	09/13/20	17:42	06:37	(unrelated sample)
ZZZZZZ	Z62309.D	09/13/20	18:02	06:57	(unrelated sample)
FA78576-2	Z62310.D	09/13/20	18:21	07:16	(used for QC only; not part of job FA78549)
ZZZZZZ	Z62311.D	09/13/20	18:40	07:35	(unrelated sample)
ZZZZZZ	Z62312.D	09/13/20	18:59	07:54	(unrelated sample)
ZZZZZZ	Z62313.D	09/13/20	19:18	08:13	(unrelated sample)

Instrument Performance Check (BFB)

Job Number: FA78549
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Sample: VZ2417-BFB	Injection Date: 09/13/20
Lab File ID: Z62288.D	Injection Time: 11:05
Instrument ID: GCMSZ	

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
FA78549-16MS	Z62314.D	09/13/20	19:38	08:33	Matrix Spike
FA78549-16MSD	Z62315.D	09/13/20	19:57	08:52	Matrix Spike Duplicate
FA78576-2MS	Z62316.D	09/13/20	20:16	09:11	Matrix Spike
FA78576-2MSD	Z62317.D	09/13/20	20:35	09:30	Matrix Spike Duplicate
VZ2417-ECC2414	Z62318.D	09/13/20	20:54	09:49	Ending cal 5

6.4.9

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Instrument Performance Check (BFB)

Job Number: FA78549
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Sample: VZ2418-BFB	Injection Date: 09/14/20
Lab File ID: Z62321.D	Injection Time: 11:56
Instrument ID: GCMSZ	

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	23573	24.3	Pass
75	30.0 - 60.0% of mass 95	53144	54.7	Pass
95	Base peak, 100% relative abundance	97075	100.0	Pass
96	5.0 - 9.0% of mass 95	6990	7.20	Pass
173	Less than 2.0% of mass 174	393	0.40 (0.48) ^a	Pass
174	50.0 - 100.0% of mass 95	81579	84.0	Pass
175	5.0 - 9.0% of mass 174	5714	5.89 (7.00) ^a	Pass
176	95.0 - 101.0% of mass 174	80621	83.1 (98.8) ^a	Pass
177	5.0 - 9.0% of mass 176	4844	4.99 (6.01) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VZ2418-CC2414	Z62322.D	09/14/20	12:22	00:26	Continuing cal 5
VZ2418-BS	Z62323.D	09/14/20	13:18	01:22	Blank Spike
VZ2418-MB	Z62325.D	09/14/20	13:57	02:01	Method Blank
FA78549-30	Z62326.D	09/14/20	15:04	03:08	2036YOU2406F
FA78549-31	Z62327.D	09/14/20	15:23	03:27	2036YOU2407D
FA78549-32	Z62328.D	09/14/20	15:42	03:46	2036YOU2408F
FA78549-33	Z62329.D	09/14/20	16:02	04:06	2036YOU2409F
FA78549-34	Z62330.D	09/14/20	16:21	04:25	2036YOU2410F
FA78549-35	Z62331.D	09/14/20	16:41	04:45	2036YOU2411F
FA78549-36	Z62332.D	09/14/20	17:00	05:04	2036YOU2412F
FA78549-37	Z62333.D	09/14/20	17:19	05:23	2036YOU2413F
FA78551-15	Z62334.D	09/14/20	17:38	05:42	(used for QC only; not part of job FA78549)
FA78551-15MS	Z62335.D	09/14/20	17:57	06:01	Matrix Spike
FA78551-15MSD	Z62336.D	09/14/20	18:16	06:20	Matrix Spike Duplicate
FA78549-38	Z62337.D	09/14/20	18:36	06:40	2036YOU2414F
FA78549-39	Z62338.D	09/14/20	18:55	06:59	2036YOU2417F
FA78549-40	Z62339.D	09/14/20	19:14	07:18	2036YOU2418F
FA78549-41	Z62340.D	09/14/20	19:33	07:37	2036YOU2419C
FA78549-42	Z62341.D	09/14/20	19:52	07:56	2036YOU2420F
FA78551-16	Z62342.D	09/14/20	20:12	08:16	(used for QC only; not part of job FA78549)
FA78551-16MS	Z62343.D	09/14/20	20:31	08:35	Matrix Spike
FA78551-16MSD	Z62344.D	09/14/20	20:50	08:54	Matrix Spike Duplicate
ZZZZZZ	Z62345.D	09/14/20	21:09	09:13	(unrelated sample)
ZZZZZZ	Z62346.D	09/14/20	21:28	09:32	(unrelated sample)

Instrument Performance Check (BFB)

Job Number: FA78549
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Sample:	VZ2418-BFB	Injection Date:	09/14/20
Lab File ID:	Z62321.D	Injection Time:	11:56
Instrument ID:	GCMSZ		

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ZZZZZZ	Z62347.D	09/14/20	21:48	09:52	(unrelated sample)
ZZZZZZ	Z62348.D	09/14/20	22:07	10:11	(unrelated sample)
ZZZZZZ	Z62349.D	09/14/20	22:26	10:30	(unrelated sample)
VZ2418-ECC2414	Z62350.D	09/14/20	22:45	10:49	Ending cal 5

6.4.10
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Internal Standard Area Summary

Job Number: FA78549
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Check Std: VO2354-CC2352	Injection Date: 09/10/20
Lab File ID: O61155.D	Injection Time: 08:05
Instrument ID: GCMSO	Method: SW846 8260B BY SIM

	IS 1 AREA	RT	IS 2 AREA	RT
Initial Cal ^a	275666	7.35	205542	10.44
Check Std ^b	250240	7.35	180864	10.44
Upper Limit ^c	500480	7.52	361728	10.61
Lower Limit ^d	125120	7.18	90432	10.27

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT
VO2354-BS	241740	7.34	173006	10.44
VO2354-MB	215683	7.35	151395	10.45
FA78549-1	208024	7.35	146146	10.45
FA78549-2	199847	7.35	140702	10.45
FA78549-3	193630	7.35	137025	10.45
FA78549-4	192407	7.35	135894	10.45
FA78549-2MS	203785	7.35	145992	10.45
FA78549-2MSD	209142	7.35	149715	10.45
FA78549-5	196848	7.35	138169	10.45
FA78549-6	189608	7.35	133015	10.45
FA78549-7	184076	7.35	128884	10.45
FA78549-8	179641	7.35	126277	10.45
FA78549-9	172236	7.35	120993	10.45
FA78549-10	174131	7.35	122777	10.45
FA78549-11	166662	7.35	117846	10.45
FA78549-12	177233	7.35	120435	10.45
FA78549-13	162116	7.35	113956	10.45
FA78549-14	156781	7.35	110523	10.45
FA78549-15	154595	7.35	109410	10.45
VO2354-ECC2352	183873	7.35	132738	10.44

IS 1 = Fluorobenzene
IS 2 = Chlorobenzene-D5

- (a) Initial Cal is: VO2352-ICC2352 O61120.D 09/08/20 13:55
- (b) Check Std Limit = -50 to + 100% of initial cal area.
- (c) Upper Limit = + 100% of check standard area; Retention time + 0.167 minutes.
- (d) Lower Limit = -50% of check standard area; Retention time -0.167 minutes.

6.5.1
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Internal Standard Area Summary

Job Number: FA78549
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Check Std: VO2360-CC2356	Injection Date: 09/13/20
Lab File ID: O61325.D	Injection Time: 11:41
Instrument ID: GCMSO	Method: SW846 8260B BY SIM

	IS 1 AREA	RT	IS 2 AREA	RT
Initial Cal ^a	367891	7.35	288681	10.45
Check Std ^b	286719	7.34	233530	10.44
Upper Limit ^c	573438	7.51	467060	10.61
Lower Limit ^d	143360	7.17	116765	10.27

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT
VO2360-BS	283212	7.34	224536	10.44
VO2360-MB	219622	7.35	169409	10.45
ZZZZZZ	211288	7.35	169710	10.45
ZZZZZZ	201101	7.35	156034	10.45
ZZZZZZ	201795	7.35	189821	10.45
FA78549-30	194853	7.35	161681	10.45
FA78549-31	186897	7.35	155497	10.45
FA78549-32	184643	7.34	153620	10.45
FA78549-33	181234	7.35	150472	10.45
FA78549-34	176052	7.35	145910	10.45
FA78549-35	176231	7.35	148576	10.45
FA78549-36	170866	7.35	143561	10.45
FA78549-37	173988	7.34	144405	10.45
FA78549-38	173928	7.34	143428	10.45
FA78549-39	173088	7.35	137078	10.45
FA78549-40	172216	7.35	140001	10.45
FA78549-41	173487	7.34	174735	10.45
FA78549-42	172421	7.34	137210	10.45
FA78564-1	168342	7.35	134027	10.45
ZZZZZZ	168998	7.35	132387	10.45
ZZZZZZ	163470	7.34	132432	10.45
ZZZZZZ	164246	7.34	139552	10.45
FA78564-1MS	215252	7.34	177426	10.44
FA78564-1MSD	233995	7.34	190479	10.44
VO2360-ECC2356254568		7.35	207589	10.45

IS 1 = Fluorobenzene
IS 2 = Chlorobenzene-D5

- (a) Initial Cal is: VO2356-ICC2356 O61234.D 09/11/20 16:55
- (b) Check Std Limit = -50 to + 100% of initial cal area.
- (c) Upper Limit = + 100% of check standard area; Retention time + 0.167 minutes.
- (d) Lower Limit = -50% of check standard area; Retention time -0.167 minutes.

6.5.2
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Internal Standard Area Summary

Job Number: FA78549
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Check Std: VO2363-CC2362	Injection Date: 09/16/20
Lab File ID: O61402.D	Injection Time: 11:32
Instrument ID: GCMSO	Method: SW846 8260B BY SIM

	IS 1	RT	IS 2	RT
	AREA		AREA	
Initial Cal ^a	305864	7.34	250755	10.44
Check Std ^b	325847	7.34	270075	10.44
Upper Limit ^c	651694	7.51	540150	10.61
Lower Limit ^d	162924	7.17	135038	10.27

Lab	IS 1	RT	IS 2	RT
Sample ID	AREA		AREA	
VO2363-BS ^e	320586	7.34	256344	10.44
VO2363-MB	238146	7.35	183919	10.45
ZZZZZZ	224280	7.35	182597	10.45
ZZZZZZ	216471	7.35	178619	10.45
ZZZZZZ	206526	7.35	162387	10.45
ZZZZZZ	197208	7.35	154209	10.45
ZZZZZZ	194058	7.35	193477	10.45
ZZZZZZ	188143	7.35	152706	10.45
ZZZZZZ	187324	7.35	187821	10.45
FA78549-2 ^f	174772	7.35	135780	10.45
FA78549-6 ^f	172443	7.35	135200	10.45
FA78549-7 ^f	172782	7.35	134116*	10.45
FA78549-8 ^f	165610	7.35	131594*	10.45
FA78549-11 ^f	167325	7.35	130941*	10.45
FA78549-12 ^f	217133	7.35	142690	10.45
FA78549-13 ^f	164510	7.35	131208*	10.45
VO2363-ECC2362264356	7.34		231809	10.44

IS 1 = Fluorobenzene
IS 2 = Chlorobenzene-D5

- (a) Initial Cal is: VO2362-ICC2362 O61390.D 09/15/20 17:07
- (b) Check Std Limit = -50 to + 100% of initial cal area.
- (c) Upper Limit = + 100% of check standard area; Retention time + 0.167 minutes.
- (d) Lower Limit = -50% of check standard area; Retention time -0.167 minutes.
- (e) No MS/MSD available for this run.
- (f) Confirmation run.

6.5.3
6

Internal Standard Area Summary

Job Number: FA78549
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Check Std:	VO2365-ICC2365	Injection Date:	09/18/20
Lab File ID:	O61442.D	Injection Time:	10:20
Instrument ID:	GCMSO	Method:	SW846 8260B BY SIM

	IS 1 AREA	RT	IS 2 AREA	RT
Initial Cal ^a	317479	7.34	262197	10.44
Check Std ^b	317479	7.34	262197	10.44
Upper Limit ^c	634958	7.51	524394	10.61
Lower Limit ^d	158740	7.17	131099	10.27

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT
VO2365-BS	319232	7.34	255688	10.44
VO2365-MB	245231	7.34	191262	10.45
FA78549-14 ^e	235447	7.34	184659	10.44
FA78549-15 ^e	219299	7.34	171101	10.45
ZZZZZZ	218908	7.34	167345	10.44
FA78549-15MS	262226	7.34	212260	10.44
FA78549-15MSD	270823	7.34	219151	10.44
VO2365-ECC2365295751	7.34	243771	10.44	

IS 1 = Fluorobenzene
IS 2 = Chlorobenzene-D5

- (a) Initial Cal is: VO2365-ICC2365 O61442.D 09/18/20 10:20
- (b) Check Std Limit = -50 to + 100% of initial cal area.
- (c) Upper Limit = + 100% of check standard area; Retention time + 0.167 minutes.
- (d) Lower Limit = -50% of check standard area; Retention time -0.167 minutes.
- (e) Sample re-analyzed beyond hold time; reported results are considered minimum values. Confirmation run.

Internal Standard Area Summary

Job Number: FA78549
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Check Std: VZ2417-CC2414	Injection Date: 09/13/20
Lab File ID: Z62289.D	Injection Time: 11:28
Instrument ID: GCMSZ	Method: SW846 8260B BY SIM

	IS 1	RT	IS 2	RT
	AREA		AREA	
Initial Cal ^a	1875869	7.40	1507669	10.51
Check Std ^b	1988867	7.40	1615294	10.51
Upper Limit ^c	3977734	7.57	3230588	10.68
Lower Limit ^d	994434	7.23	807647	10.34

Lab	IS 1	RT	IS 2	RT
Sample ID	AREA		AREA	
VZ2417-BS	1886079	7.40	1527862	10.51
VZ2417-MB	1742686	7.40	1397616	10.51
FA78549-16	1709438	7.40	1372484	10.51
FA78549-17	1649211	7.40	1331083	10.51
FA78549-18	1650106	7.40	1324546	10.51
FA78549-19	1629061	7.40	1312360	10.51
FA78549-20	1518270	7.40	1219465	10.51
FA78549-21	1576716	7.40	1259291	10.51
FA78549-22	1559515	7.40	1248471	10.51
FA78549-23	1521040	7.40	1227184	10.51
FA78549-24	1526414	7.40	1229202	10.51
FA78549-25	1452209	7.40	1164213	10.51
FA78549-26	1447476	7.40	1166073	10.51
FA78549-27	1459401	7.40	1178363	10.51
FA78549-28	1462858	7.40	1181382	10.51
FA78549-29	1428926	7.40	1153502	10.51
ZZZZZZ	1374616	7.40	1121437	10.52
ZZZZZZ	1401475	7.40	1134328	10.51
ZZZZZZ	1408887	7.40	1143815	10.52
FA78576-2	1407384	7.40	1130592	10.51
ZZZZZZ	1388103	7.40	1121282	10.52
ZZZZZZ	1346796	7.40	1103498	10.51
ZZZZZZ	1440009	7.40	1181627	10.51
FA78549-16MS	1487167	7.40	1256295	10.51
FA78549-16MSD	1548045	7.40	1296762	10.51
FA78576-2MS	1539982	7.40	1284569	10.51
FA78576-2MSD	1495423	7.40	1239264	10.51
VZ2417-ECC2414	1638791	7.40	1378925	10.51

IS 1 = Fluorobenzene
IS 2 = Chlorobenzene-D5

(a) Initial Cal is: VZ2414-ICC2414 Z62211.D 09/11/20 19:32

Internal Standard Area Summary

Job Number: FA78549
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Check Std: VZ2417-CC2414	Injection Date: 09/13/20
Lab File ID: Z62289.D	Injection Time: 11:28
Instrument ID: GCMSZ	Method: SW846 8260B BY SIM

Lab	IS 1	IS 2		
Sample ID	AREA	RT	AREA	RT

- (b) Check Std Limit = -50 to + 100% of initial cal area.
- (c) Upper Limit = + 100% of check standard area; Retention time + 0.167 minutes.
- (d) Lower Limit = -50% of check standard area; Retention time -0.167 minutes.

Internal Standard Area Summary

Job Number: FA78549
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Check Std: VZ2418-CC2414	Injection Date: 09/14/20
Lab File ID: Z62322.D	Injection Time: 12:22
Instrument ID: GCMSZ	Method: SW846 8260B BY SIM

	IS 1	RT	IS 2	RT
	AREA		AREA	
Initial Cal ^a	1875869	7.40	1507669	10.51
Check Std ^b	1993481	7.40	1656572	10.51
Upper Limit ^c	3986962	7.57	3313144	10.68
Lower Limit ^d	996741	7.23	828286	10.34

Lab	IS 1	RT	IS 2	RT
Sample ID	AREA		AREA	
VZ2418-BS	1802196	7.40	1471249	10.51
VZ2418-MB	1691138	7.40	1358393	10.51
FA78549-30	1602030	7.40	1286055	10.51
FA78549-31	1576340	7.40	1275081	10.51
FA78549-32	1512698	7.40	1225189	10.51
FA78549-33	1527900	7.40	1238043	10.51
FA78549-34	1485802	7.40	1206669	10.51
FA78549-35	1473867	7.40	1201502	10.51
FA78549-36	1444465	7.40	1171684	10.51
FA78549-37	1402630	7.40	1138118	10.51
FA78551-15	1402089	7.40	1140633	10.51
FA78551-15MS	1535956	7.40	1308662	10.51
FA78551-15MSD	1533862	7.40	1295594	10.51
FA78549-38	1474091	7.40	1187051	10.51
FA78549-39	1361609	7.40	1097547	10.51
FA78549-40	1391996	7.40	1135236	10.51
FA78549-41	1380259	7.40	1140028	10.51
FA78549-42	1368340	7.40	1112637	10.51
FA78551-16	1340569	7.40	1092265	10.51
FA78551-16MS	1386954	7.40	1188096	10.51
FA78551-16MSD	1509625	7.40	1278994	10.51
ZZZZZZ	1414299	7.40	1136056	10.51
ZZZZZZ	1371655	7.40	1116479	10.51
ZZZZZZ	1364805	7.40	1111660	10.51
ZZZZZZ	1271893	7.40	1030410	10.51
ZZZZZZ	1273604	7.40	1045493	10.51
VZ2418-ECC2414	1446126	7.40	1266288	10.51

IS 1 = Fluorobenzene
IS 2 = Chlorobenzene-D5

(a) Initial Cal is: VZ2414-ICC2414 Z62211.D 09/11/20 19:32
 (b) Check Std Limit = -50 to + 100% of initial cal area.

6.5.6
6

Internal Standard Area Summary

Job Number: FA78549
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Check Std: VZ2418-CC2414	Injection Date: 09/14/20
Lab File ID: Z62322.D	Injection Time: 12:22
Instrument ID: GCMSZ	Method: SW846 8260B BY SIM

Lab	IS 1	IS 2		
Sample ID	AREA	RT	AREA	RT

- (c) Upper Limit = + 100% of check standard area; Retention time + 0.167 minutes.
- (d) Lower Limit = -50% of check standard area; Retention time -0.167 minutes.

6.5.6
6

Surrogate Recovery Summary

Job Number: FA78549
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Method: SW846 8260B BY SIM	Matrix: AQ
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Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2
FA78549-1	O61159.D	111	102
FA78549-2	O61414.D	119 ^a	104
FA78549-2	O61160.D	112	102
FA78549-3	O61161.D	113	102
FA78549-4	O61162.D	113	102
FA78549-5	O61165.D	112	103
FA78549-6	O61415.D	119 ^a	103
FA78549-6	O61166.D	113	102
FA78549-7	O61416.D	122 ^a	105
FA78549-7	O61167.D	113	103
FA78549-8	O61417.D	124 ^a	103
FA78549-8	O61168.D	114	102
FA78549-9	O61169.D	114	102
FA78549-10	O61170.D	116	102
FA78549-11	O61418.D	123 ^a	104
FA78549-11	O61171.D	120 ^a	102
FA78549-12	O61419.D	107	110
FA78549-12	O61172.D	115	103
FA78549-13	O61420.D	126* ^a	103
FA78549-13	O61173.D	114	102
FA78549-14	O61453.D	110	104
FA78549-14	O61174.D	115	102
FA78549-15	O61454.D	112	104
FA78549-15	O61175.D	115	101
FA78549-16	Z62293.D	109	101
FA78549-17	Z62294.D	108	100
FA78549-18	Z62295.D	109	100
FA78549-19	Z62296.D	109	100
FA78549-20	Z62297.D	111	100
FA78549-21	Z62298.D	112	100
FA78549-22	Z62299.D	112	100
FA78549-23	Z62300.D	114	100
FA78549-24	Z62301.D	114	100
FA78549-25	Z62302.D	113	99
FA78549-26	Z62303.D	116	99
FA78549-27	Z62304.D	116	99
FA78549-28	Z62305.D	115	99
FA78549-29	Z62306.D	115	98
FA78549-30	Z62326.D	109	99
FA78549-30	O61332.D	112	91

Surrogate Recovery Summary

Job Number: FA78549
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Method: SW846 8260B BY SIM	Matrix: AQ
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Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2
FA78549-31	Z62327.D	113	99
FA78549-31	O61333.D	114	91
FA78549-32	Z62328.D	113	99
FA78549-32	O61334.D	113	92
FA78549-33	Z62329.D	114	99
FA78549-33	O61335.D	113	90
FA78549-34	Z62330.D	115	99
FA78549-34	O61336.D	115	91
FA78549-35	Z62331.D	114	98
FA78549-35	O61337.D	116	89
FA78549-36	Z62332.D	116	98
FA78549-36	O61338.D	116	90
FA78549-37	Z62333.D	117	98
FA78549-37	O61339.D	116	91
FA78549-38	Z62337.D	115	99
FA78549-38	O61340.D	116	91
FA78549-39	Z62338.D	117	98
FA78549-39	O61341.D	117	94
FA78549-40	Z62339.D	118	98
FA78549-40	O61342.D	117	92
FA78549-41	Z62340.D	118	96
FA78549-41	O61343.D	116	74* a
FA78549-42	Z62341.D	119 a	98
FA78549-42	O61344.D	117	95
FA78549-16MS	Z62314.D	113	94
FA78549-16MSD	Z62315.D	112	95
FA78549-2MS	O61163.D	120	99
FA78549-2MSD	O61164.D	119	99
FA78551-15MS	Z62335.D	114	93
FA78551-15MSD	Z62336.D	113	94
FA78564-1MS	O61349.D	101	85*
FA78564-1MSD	O61350.D	99	87*
VO2354-BS	O61156.D	116	100
VO2354-MB	O61158.D	111	103
VO2360-BS	O61326.D	97	92
VO2360-MB	O61328.D	108	98
VZ2417-BS	Z62290.D	107	100
VZ2417-MB	Z62292.D	112	100
VZ2418-BS	Z62323.D	110	98
VZ2418-MB	Z62325.D	112	100

Surrogate Recovery Summary

Job Number: FA78549
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Method: SW846 8260B BY SIM	Matrix: AQ
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Samples and QC shown here apply to the above method

Surrogate Compounds	Recovery Limits
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Surrogate Compounds	Recovery Limits
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S1 = 1,2-Dichloroethane-D4	74-125%
S2 = Toluene-D8	88-111%

(a) Outside DOD QSM control limits.

6.6.1
6

Initial Calibration Summary

Job Number: FA78549
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Sample: VO2352-ICC2352
Lab FileID: O61120.D

Response Factor Report MSVOA12

Method : C:\msdchem\2\methods\SIMCL090820.M (RTE Integrator)
 Title : Standard Methods 6200B
 Last Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration

Calibration Files

1 =O61116.D 2 =O61117.D 3 =O61118.D 4 =O61119.D
 5 =O61120.D 6 =O61121.D 7 =O61122.D

Compound	1	2	3	4	5	6	7	Avg	%RSD

1) I Fluorobenzene	-----ISTD-----								
2) Vinyl Chloride	0.463	0.530	0.475	0.479	0.446	0.447	0.410	0.464	7.93
	---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9995								
	Response Ratio = 0.00000 + 0.49614 *A + -0.02038 *A^2								
3) Chloromethane	0.877	0.903	0.730	0.695	0.646	0.632	0.610	0.728	16.27
	---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9992								
	Response Ratio = 0.00000 + 0.72943 *A + -0.03155 *A^2								
4) 1,1-Dichloroethen	0.614	0.744	0.700	0.733	0.650	0.654	0.644	0.677	7.27
5) Methylene Chlorid	5.638	1.935	1.242	1.109	1.016	0.990	0.979	1.844	92.53
	---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9950								
	Response Ratio = 0.00000 + 1.26138 *A + -0.08085 *A^2								
6) trans-1,2-Dichlor	0.819	0.961	0.843	0.861	0.787	0.790	0.783	0.835	7.58
	---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9996								
	Response Ratio = 0.00000 + 0.82729 *A + -0.01169 *A^2								
7) 1,1-Dichloroethan	0.918	1.003	0.938	0.968	0.912	0.919	0.918	0.939	3.63
8) cis-1,2-Dichloroe	0.424	0.452	0.409	0.425	0.402	0.407	0.409	0.418	4.08
9) Chloroform	0.820	0.819	0.748	0.769	0.722	0.727	0.725	0.761	5.63
10) Carbon Tetrachlor	0.407	0.515	0.480	0.508	0.467	0.475	0.472	0.475	7.43
11) 1,1,1-Trichloroet	0.497	0.586	0.542	0.585	0.536	0.550	0.548	0.549	5.53
12) Benzene	1.696	1.672	1.508	1.542	1.449	1.480	1.472	1.545	6.41
	---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9998								
	Response Ratio = 0.00000 + 1.48747 *A + -0.00413 *A^2								
13)S 1,2-Dichloroethan	0.440	0.443	0.450	0.442	0.437	0.434	0.429	0.439	1.51
14) 1,2-Dichloroethan	0.847	0.892	0.811	0.832	0.790	0.790	0.786	0.821	4.71
15) Trichloroethene	0.426	0.466	0.429	0.453	0.421	0.427	0.424	0.435	3.93
16) 1,2-Dichloropropa	0.559	0.616	0.552	0.560	0.531	0.540	0.537	0.556	5.13
	---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9998								
	Response Ratio = 0.00000 + 0.54374 *A + -0.00170 *A^2								
17) cis-1,3-Dichlorop	0.581	0.625	0.583	0.614	0.605	0.621	0.625	0.608	3.12
18) I Chlorobenzene-d5	-----ISTD-----								
19)S Toluene-d8	1.215	1.234	1.224	1.219	1.209	1.222	1.233	1.222	0.73
20) trans-1,3-Dichlor	0.688	0.766	0.725	0.775	0.771	0.801	0.811	0.762	5.60
21) Tetrachloroethene	0.451	0.550	0.492	0.520	0.468	0.481	0.480	0.492	6.74
	---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9994								
	Response Ratio = 0.00000 + 0.48599 *A + -0.00171 *A^2								
22) 1,4-Dichlorobenze	1.068	1.167	1.034	1.052	1.008	1.019	1.021	1.053	5.17
23) 1,2-Dibromo-3-Chl	0.315	0.278	0.247	0.263	0.270	0.278	0.285	0.277	7.53

6.7.1
6

Initial Calibration Summary

Job Number: FA78549
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Sample: VO2352-ICC2352
Lab FileID: O61120.D

(#) = Out of Range

SIMCL090820.M

Wed Sep 09 12:21:07 2020

Initial Calibration Verification

Job Number: FA78549
 Account: AHTNACAS Ahtna Global, LLC
 Project: Fort Ord Groundwater Monitoring

Sample: VO2352-ICV2352
 Lab FileID: O61124.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\2\data\090820\O61124.D Vial: 9
 Acq On : 8 Sep 2020 3:16 pm Operator: melissam
 Sample : icv2352-5 Inst : MSVOA12
 Misc : MS47137,VO2352,,,,, Multiplr: 1.00
 MS Integration Params: rteint.p

Method : C:\msdchem\2\methods\SIMCL090820.M (RTE Integrator)
 Title : Standard Methods 6200B
 Last Update : Wed Sep 09 12:10:38 2020
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	Fluorobenzene	1.000	1.000	0.0	98	0.00	7.35
	----- Amount	Calc.	%Drift	-----			
2	Vinyl Chloride	10.000	9.564	4.4	96	-0.01	2.90
3	Chloromethane	10.000	9.444	5.6	96	0.00	2.80
	----- AvgRF	CCRF	%Dev	-----			
4	1,1-Dichloroethene	0.677	0.699	-3.2	105	0.00	4.09
	----- Amount	Calc.	%Drift	-----			
5	Methylene Chloride	10.000	10.213	-2.1	108	0.00	4.70
6	trans-1,2-Dichloroethene	10.000	10.422	-4.2	104	0.00	4.87
	----- AvgRF	CCRF	%Dev	-----			
7	1,1-Dichloroethane	0.939	0.975	-3.8	105	0.00	5.51
8	cis-1,2-Dichloroethene	0.418	0.426	-1.9	104	0.00	6.07
9	Chloroform	0.761	0.759	0.3	103	0.00	6.33
10	Carbon Tetrachloride	0.475	0.492	-3.6	103	0.00	6.51
11	1,1,1-Trichloroethane	0.549	0.564	-2.7	103	0.00	6.58
	----- Amount	Calc.	%Drift	-----			
12	Benzene	10.000	10.813	-8.1	108	0.00	6.94
	----- AvgRF	CCRF	%Dev	-----			
13 S	1,2-Dichloroethane-d4	0.439	0.438	0.2	98	0.00	7.07
14	1,2-Dichloroethane	0.821	0.856	-4.3	106	0.00	7.14
15	Trichloroethene	0.435	0.463	-6.4	107	0.00	7.52
	----- Amount	Calc.	%Drift	-----			
16	1,2-Dichloropropane	10.000	10.851	-8.5	108	0.00	8.04
	----- AvgRF	CCRF	%Dev	-----			
17	cis-1,3-Dichloropropene	0.608	0.665	-9.4	108	0.00	8.71
18 I	Chlorobenzene-d5	1.000	1.000	0.0	97	0.00	10.45
19 S	Toluene-d8	1.222	1.224	-0.2	98	0.00	8.90
20	trans-1,3-Dichloropropene	0.762	0.863	-13.3	109	0.00	9.34
	----- Amount	Calc.	%Drift	-----			
21	Tetrachloroethene	10.000	10.329	-3.3	103	0.00	9.34
	----- AvgRF	CCRF	%Dev	-----			

Initial Calibration Verification

Job Number: FA78549
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Sample: VO2352-ICV2352
Lab FileID: O61124.D

22	1,4-Dichlorobenzene	1.053	1.075	-2.1	104	0.00	12.83
23	1,2-Dibromo-3-Chloropropa	0.277	0.288	-4.0	104	0.00	14.04

(#) = Out of Range SPCC's out = 0 CCC's out = 0
O61120.D SIMCL090820.M Wed Sep 09 12:21:15 2020

6.7.2

6

Continuing Calibration Summary

Job Number: FA78549
 Account: AHTNACAS Ahtna Global, LLC
 Project: Fort Ord Groundwater Monitoring

Sample: VO2354-CC2352
 Lab FileID: O61155.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\jo...-2020\vo2354\O61155.d Vial: 3
 Acq On : 10 Sep 2020 8:05 am Operator: melissam
 Sample : cc2352-5 Inst : MSVOA12
 Misc : MS47137,VO2354,,,,, Multiplr: 1.00
 MS Integration Params: rteint.p

Method : C:\msdchem\1\methods\SIMCL090820.M (RTE Integrator)
 Title : Standard Methods 6200B
 Last Update : Wed Sep 09 12:10:38 2020
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	Fluorobenzene	1.000	1.000	0.0	91	0.00	7.35
	----- True	Calc.	% Drift	-----			
2	Vinyl Chloride	10.000	11.834	-18.3	108	0.00	2.91
3	Chloromethane	10.000	12.164	-21.6#	111	0.00	2.81
	----- AvgRF	CCRF	% Dev	-----			
4	1,1-Dichloroethene	0.677	0.743	-9.7	104	0.00	4.09
	----- True	Calc.	% Drift	-----			
5	Methylene Chloride	10.000	10.658	-6.6	104	0.00	4.70
6	trans-1,2-Dichloroethene	10.000	10.993	-9.9	102	0.00	4.87
	----- AvgRF	CCRF	% Dev	-----			
7	1,1-Dichloroethane	0.939	1.001	-6.6	100	0.00	5.51
8	cis-1,2-Dichloroethene	0.418	0.404	3.3	91	0.00	6.07
9	Chloroform	0.761	0.756	0.7	95	0.00	6.33
10	Carbon Tetrachloride	0.475	0.431	9.3	84	0.00	6.51
11	1,1,1-Trichloroethane	0.549	0.517	5.8	88	0.00	6.58
	----- True	Calc.	% Drift	-----			
12	Benzene	10.000	10.141	-1.4	94	0.00	6.94
	----- AvgRF	CCRF	% Dev	-----			
13 S	1,2-Dichloroethane-d4	0.439	0.469	-6.8	97	0.00	7.07
14	1,2-Dichloroethane	0.821	0.864	-5.2	99	0.00	7.14
15	Trichloroethene	0.435	0.423	2.8	91	0.00	7.51
	----- True	Calc.	% Drift	-----			
16	1,2-Dichloropropane	10.000	10.704	-7.0	99	0.00	8.04
	----- AvgRF	CCRF	% Dev	-----			
17	cis-1,3-Dichloropropene	0.608	0.604	0.7	91	0.00	8.71
18 I	Chlorobenzene-d5	1.000	1.000	0.0	88	0.00	10.44
19 S	Toluene-d8	1.222	1.212	0.8	88	0.00	8.90
20	trans-1,3-Dichloropropene	0.762	0.810	-6.3	92	0.00	9.34
	----- True	Calc.	% Drift	-----			
21	Tetrachloroethene	10.000	9.130	8.7	83	0.00	9.34
	----- AvgRF	CCRF	% Dev	-----			

Continuing Calibration Summary

Job Number: FA78549
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Sample: VO2354-CC2352
Lab FileID: O61155.D

22	1,4-Dichlorobenzene	1.053	0.953	9.5	83	0.00	12.82
23	1,2-Dibromo-3-Chloropropa	0.277	0.255	7.9	83	0.00	14.04

(#) = Out of Range
061120.D SIMCL090820.M

SPCC's out = 0 CCC's out = 0
Fri Sep 11 05:49:58 2020

Continuing Calibration Summary

Job Number: FA78549
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Sample: VO2354-ECC2352
Lab FileID: O61178.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\jo...-2020\vo2354\O61178.d Vial: 26
 Acq On : 10 Sep 2020 4:26 pm Operator: melissam
 Sample : ecc2352-5 Inst : MSVOA12
 Misc : MS47173,VO2354,,,,, Multiplr: 1.00
 MS Integration Params: rteint.p

Method : C:\msdchem\1\methods\SIMCL090820.M (RTE Integrator)
 Title : Standard Methods 6200B
 Last Update : Wed Sep 09 12:10:38 2020
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 50% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	Fluorobenzene	1.000	1.000	0.0	67	0.00	7.35
	----- True	Calc.	% Drift	-----			
2	Vinyl Chloride	10.000	14.190	-41.9	93	0.00	2.90
3	Chloromethane	10.000	15.151	-51.5#	99	0.00	2.80
	----- AvgRF	CCRF	% Dev	-----			
4	1,1-Dichloroethene	0.677	0.844	-24.7	87	0.00	4.09
	----- True	Calc.	% Drift	-----			
5	Methylene Chloride	10.000	12.127	-21.3	85	0.00	4.70
6	trans-1,2-Dichloroethene	10.000	12.440	-24.4	84	0.00	4.87
	----- AvgRF	CCRF	% Dev	-----			
7	1,1-Dichloroethane	0.939	1.127	-20.0	82	0.00	5.51
8	cis-1,2-Dichloroethene	0.418	0.435	-4.1	72	0.00	6.07
9	Chloroform	0.761	0.833	-9.5	77	0.00	6.33
10	Carbon Tetrachloride	0.475	0.469	1.3	67	0.00	6.50
11	1,1,1-Trichloroethane	0.549	0.566	-3.1	70	0.00	6.58
	----- True	Calc.	% Drift	-----			
12	Benzene	10.000	11.391	-13.9	77	0.00	6.94
	----- AvgRF	CCRF	% Dev	-----			
13 S	1,2-Dichloroethane-d4	0.439	0.471	-7.3	72	0.00	7.07
14	1,2-Dichloroethane	0.821	0.935	-13.9	79	0.00	7.14
15	Trichloroethene	0.435	0.485	-11.5	77	0.00	7.51
	----- True	Calc.	% Drift	-----			
16	1,2-Dichloropropane	10.000	12.247	-22.5	83	0.00	8.04
	----- AvgRF	CCRF	% Dev	-----			
17	cis-1,3-Dichloropropene	0.608	0.634	-4.3	70	0.00	8.71
18 I	Chlorobenzene-d5	1.000	1.000	0.0	65	0.00	10.44
19 S	Toluene-d8	1.222	1.187	2.9	63	0.00	8.90
20	trans-1,3-Dichloropropene	0.762	0.856	-12.3	72	0.00	9.34
	----- True	Calc.	% Drift	-----			
21	Tetrachloroethene	10.000	10.344	-3.4	69	0.00	9.34
	----- AvgRF	CCRF	% Dev	-----			

Continuing Calibration Summary

Job Number: FA78549
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Sample: VO2354-ECC2352
Lab FileID: O61178.D

22	1,4-Dichlorobenzene	1.053	1.074	-2.0	69	0.00	12.83
23	1,2-Dibromo-3-Chloropropa	0.277	0.274	1.1	66	0.00	14.04

(#) = Out of Range

O61120.D SIMCL090820.M

SPCC's out = 0 CCC's out = 0

Fri Sep 11 05:50:32 2020

Initial Calibration Summary

Job Number: FA78549
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Sample: VO2356-ICC2356
Lab FileID: O61234.D

Response Factor Report MSVOA12

Method : C:\msdchem\2\methods\SIMCL091120.M (RTE Integrator)
 Title : Standard Methods 6200B
 Last Update : Sun Sep 13 19:20:40 2020
 Response via : Initial Calibration

Calibration Files

1 =O61230.D 2 =O61231.D 3 =O61232.D 4 =O61233.D
 5 =O61234.D 6 =O61235.D 7 =O61236.D

Compound	1	2	3	4	5	6	7	Avg	%RSD
1) I Fluorobenzene	-----ISTD-----								
2) Vinyl Chloride	0.558	0.633	0.571	0.573	0.524	0.492	0.473	0.546	9.96
	---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9997								
	Response Ratio = 0.00000 + 0.59060 *A + -0.03053 *A^2								
3) Chloromethane	1.395	1.093	0.857	0.828	0.737	0.682	0.649	0.892	29.90
	---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9992								
	Response Ratio = 0.00000 + 0.88497 *A + -0.06257 *A^2								
4) 1,1-Dichloroethen	0.648	0.725	0.662	0.734	0.703	0.672	0.694	0.691	4.67
5) Methylene Chlorid	2.151	0.418	0.186	0.117	0.102	0.095	0.094	0.452	E1 167.87
	---- Linear regr., Force(0,0) ---- Coefficient = 0.9916								
	Response Ratio = 0.00000 + 1.08258 *A								
6) trans-1,2-Dichlor	0.823	0.909	0.775	0.847	0.805	0.778	0.808	0.821	5.65
	---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9992								
	Response Ratio = 0.00000 + 0.79595 *A + 0.00117 *A^2								
7) 1,1-Dichloroethan	0.920	0.983	0.903	0.972	0.919	0.884	0.906	0.927	3.97
8) cis-1,2-Dichloroe	0.471	0.472	0.435	0.472	0.454	0.444	0.460	0.458	3.24
9) Chloroform	0.840	0.844	0.764	0.827	0.779	0.754	0.774	0.798	4.79
10) Carbon Tetrachlor	0.502	0.562	0.506	0.571	0.556	0.537	0.571	0.544	5.38
11) 1,1,1-Trichloroet	0.593	0.629	0.576	0.645	0.621	0.604	0.636	0.615	4.06
12) Benzene	1.681	1.663	1.504	1.628	1.554	1.503	1.551	1.583	4.64
	---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9993								
	Response Ratio = 0.00000 + 1.54480 *A + -0.00157 *A^2								
13)S 1,2-Dichloroethan	0.407	0.407	0.413	0.434	0.389	0.389	0.387	0.404	4.23
14) 1,2-Dichloroethan	0.768	0.789	0.746	0.780	0.737	0.728	0.733	0.754	3.24
15) Trichloroethene	0.466	0.487	0.444	0.487	0.472	0.461	0.476	0.470	3.22
16) 1,2-Dichloropropa	0.514	0.567	0.519	0.548	0.517	0.503	0.519	0.527	4.30
	---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9993								
	Response Ratio = 0.00000 + 0.51595 *A + -0.00029 *A^2								
17) cis-1,3-Dichlorop	0.485	0.515	0.497	0.552	0.551	0.561	0.582	0.535	6.69
18) I Chlorobenzene-d5	-----ISTD-----								
19)S Toluene-d8	1.161	1.150	1.123	1.108	1.100	1.117	1.132	1.127	1.95
20) trans-1,3-Dichlor	0.576	0.606	0.611	0.681	0.682	0.706	0.738	0.657	9.10
21) Tetrachloroethene	0.563	0.631	0.539	0.583	0.555	0.541	0.566	0.568	5.54
	---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9992								
	Response Ratio = 0.00000 + 0.54272 *A + 0.00447 *A^2								
22) 1,4-Dichlorobenze	1.098	1.175	1.110	1.205	1.177	1.154	1.188	1.158	3.46
23) 1,2-Dibromo-3-Chl	0.334	0.260	0.190	0.205	0.209	0.220	0.225	0.235	20.90
	---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9994								

6.7.5
6

Initial Calibration Summary

Job Number: FA78549
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Sample: VO2356-ICC2356
Lab FileID: O61234.D

$$\text{Response Ratio} = 0.00000 + 0.20028 * A + 0.00615 * A^2$$

(#) = Out of Range

SIMCL091120.M

Sun Sep 13 19:41:25 2020

Initial Calibration Verification

Job Number: FA78549
 Account: AHTNACAS Ahtna Global, LLC
 Project: Fort Ord Groundwater Monitoring

Sample: VO2356-ICV2356
 Lab FileID: O61238.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\2\data\091120\O61238.D Vial: 10
 Acq On : 11 Sep 2020 6:16 pm Operator: stutip
 Sample : icv2356-5 Inst : MSVOA12
 Misc : MS47201,VO2356,,,,, Multiplr: 1.00
 MS Integration Params: rteint.p

Method : C:\msdchem\2\methods\SIMCL091120.M (RTE Integrator)
 Title : Standard Methods 6200B
 Last Update : Sun Sep 13 19:20:40 2020
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	Fluorobenzene	1.000	1.000	0.0	107	0.00	7.35
	----- Amount	Calc.	%Drift	-----			
2	Vinyl Chloride	10.000	8.489	15.1	93	0.00	2.90
3	Chloromethane	10.000	8.270	17.3	94	0.00	2.80
	----- AvgRF	CCRF	%Dev	-----			
4	1,1-Dichloroethene	0.691	0.646	6.5	98	0.00	4.09
	----- Amount	Calc.	%Drift	-----			
5	Methylene Chloride	10.000	8.887	11.1	101	0.00	4.70
6	trans-1,2-Dichloroethene	10.000	9.532	4.7	101	0.00	4.87
	----- AvgRF	CCRF	%Dev	-----			
7	1,1-Dichloroethane	0.927	0.885	4.5	103	0.00	5.51
8	cis-1,2-Dichloroethene	0.458	0.443	3.3	104	0.00	6.07
9	Chloroform	0.798	0.745	6.6	102	0.00	6.33
10	Carbon Tetrachloride	0.544	0.522	4.0	100	0.00	6.51
11	1,1,1-Trichloroethane	0.615	0.580	5.7	100	0.00	6.58
	----- Amount	Calc.	%Drift	-----			
12	Benzene	10.000	10.095	-1.0	107	0.00	6.94
	----- AvgRF	CCRF	%Dev	-----			
13 S	1,2-Dichloroethane-d4	0.404	0.386	4.5	106	0.00	7.07
14	1,2-Dichloroethane	0.754	0.741	1.7	107	0.00	7.14
15	Trichloroethene	0.470	0.466	0.9	105	0.00	7.52
	----- Amount	Calc.	%Drift	-----			
16	1,2-Dichloropropane	10.000	10.102	-1.0	108	0.00	8.04
	----- AvgRF	CCRF	%Dev	-----			
17	cis-1,3-Dichloropropene	0.535	0.573	-7.1	111	0.00	8.71
18 I	Chlorobenzene-d5	1.000	1.000	0.0	106	0.00	10.45
19 S	Toluene-d8	1.127	1.117	0.9	108	0.00	8.90
20	trans-1,3-Dichloropropene	0.657	0.726	-10.5	113	0.00	9.34
	----- Amount	Calc.	%Drift	-----			
21	Tetrachloroethene	10.000	9.602	4.0	101	0.00	9.34
	----- AvgRF	CCRF	%Dev	-----			

Initial Calibration Verification

Job Number: FA78549
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Sample: VO2356-ICV2356
Lab FileID: O61238.D

22	1,4-Dichlorobenzene	1.158	1.170	-1.0	105	0.00	12.83
	-----	Amount	Calc.	%Drift	-----		
23	1,2-Dibromo-3-Chloropropa	10.000	10.133	-1.3	109	0.00	14.04
	-----				-----		

(#) = Out of Range SPCC's out = 0 CCC's out = 0
061234.D SIMCL091120.M Sun Sep 13 19:41:09 2020

6.7.6

6

Continuing Calibration Summary

Job Number: FA78549
 Account: AHTNACAS Ahtna Global, LLC
 Project: Fort Ord Groundwater Monitoring

Sample: VO2360-CC2356
 Lab FileID: O61325.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\je...-2020\VO2360\O61325.d Vial: 1
 Acq On : 13 Sep 2020 11:41 am Operator: stutip
 Sample : cc2356-5 Inst : MSVOA12
 Misc : MS47193,VO2360,,,,, Multiplr: 1.00
 MS Integration Params: rteint.p

Method : C:\msdchem\1\methods\SIMCL091120.M (RTE Integrator)
 Title : Standard Methods 6200B
 Last Update : Sun Sep 13 19:20:40 2020
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	Fluorobenzene	1.000	1.000	0.0	78	0.00	7.34
	----- True	Calc.	% Drift	-----			
2	Vinyl Chloride	10.000	10.148	-1.5	80	0.00	2.90
3	Chloromethane	10.000	10.520	-5.2	84	0.00	2.80
	----- AvgRF	CCRF	% Dev	-----			
4	1,1-Dichloroethene	0.691	0.774	-12.0	86	-0.01	4.08
	----- True	Calc.	% Drift	-----			
5	Methylene Chloride	10.000	10.669	-6.7	89	0.00	4.70
6	trans-1,2-Dichloroethene	10.000	10.665	-6.6	82	0.00	4.87
	----- AvgRF	CCRF	% Dev	-----			
7	1,1-Dichloroethane	0.927	0.999	-7.8	85	0.00	5.51
8	cis-1,2-Dichloroethene	0.458	0.468	-2.2	80	0.00	6.07
9	Chloroform	0.798	0.819	-2.6	82	0.00	6.33
10	Carbon Tetrachloride	0.544	0.545	-0.2	76	0.00	6.50
11	1,1,1-Trichloroethane	0.615	0.613	0.3	77	0.00	6.58
	----- True	Calc.	% Drift	-----			
12	Benzene	10.000	10.620	-6.2	82	0.00	6.94
	----- AvgRF	CCRF	% Dev	-----			
13 S	1,2-Dichloroethane-d4	0.404	0.396	2.0	79	0.00	7.07
14	1,2-Dichloroethane	0.754	0.791	-4.9	84	0.00	7.14
15	Trichloroethene	0.470	0.480	-2.1	79	0.00	7.51
	----- True	Calc.	% Drift	-----			
16	1,2-Dichloropropane	10.000	10.767	-7.7	84	0.00	8.04
	----- AvgRF	CCRF	% Dev	-----			
17	cis-1,3-Dichloropropene	0.535	0.555	-3.7	79	0.00	8.71
18 I	Chlorobenzene-d5	1.000	1.000	0.0	81	0.00	10.44
19 S	Toluene-d8	1.127	1.030	8.6	76	0.00	8.90
20	trans-1,3-Dichloropropene	0.657	0.678	-3.2	80	0.00	9.34
	----- True	Calc.	% Drift	-----			
21	Tetrachloroethene	10.000	9.903	1.0	80	0.00	9.34
	----- AvgRF	CCRF	% Dev	-----			

Continuing Calibration Summary

Job Number: FA78549
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Sample: VO2360-CC2356
Lab FileID: O61325.D

22	1,4-Dichlorobenzene	1.158	1.208	-4.3	83	0.00	12.82
	----- True	Calc.	% Drift	-----			
23	1,2-Dibromo-3-Chloropropa	10.000	9.956	0.4	82	0.00	14.04

(#) = Out of Range SPCC's out = 0 CCC's out = 0
061234.D SIMCL091120.M Mon Sep 14 08:29:14 2020

6.7.7
6

Continuing Calibration Summary

Job Number: FA78549
 Account: AHTNACAS Ahtna Global, LLC
 Project: Fort Ord Groundwater Monitoring

Sample: VO2360-ECC2356
 Lab FileID: O61351.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\je...-2020\VO2360\O61351.d Vial: 26
 Acq On : 13 Sep 2020 8:32 pm Operator: stutip
 Sample : ecc2356-5 Inst : MSVOA12
 Misc : MS47201,VO2360,,,,, Multiplr: 1.00
 MS Integration Params: rteint.p

Method : C:\msdchem\1\methods\SIMCL091120.M (RTE Integrator)
 Title : Standard Methods 6200B
 Last Update : Sun Sep 13 19:20:40 2020
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 50% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	Fluorobenzene	1.000	1.000	0.0	69	0.00	7.35
	----- True	Calc.	% Drift	-----			
2	Vinyl Chloride	10.000	8.875	11.3	63	0.00	2.90
3	Chloromethane	10.000	8.999	10.0	65	0.00	2.80
	----- AvgRF	CCRF	% Dev	-----			
4	1,1-Dichloroethene	0.691	0.636	8.0	63	0.00	4.09
	----- True	Calc.	% Drift	-----			
5	Methylene Chloride	10.000	9.224	7.8	68	0.00	4.70
6	trans-1,2-Dichloroethene	10.000	8.920	10.8	61	0.00	4.87
	----- AvgRF	CCRF	% Dev	-----			
7	1,1-Dichloroethane	0.927	0.824	11.1	62	0.00	5.51
8	cis-1,2-Dichloroethene	0.458	0.381	16.8	58	0.00	6.07
9	Chloroform	0.798	0.685	14.2	61	0.00	6.33
10	Carbon Tetrachloride	0.544	0.463	14.9	58	0.00	6.51
11	1,1,1-Trichloroethane	0.615	0.515	16.3	57	0.00	6.58
	----- True	Calc.	% Drift	-----			
12	Benzene	10.000	8.575	14.3	59	0.00	6.94
	----- AvgRF	CCRF	% Dev	-----			
13 S	1,2-Dichloroethane-d4	0.404	0.397	1.7	70	0.00	7.07
14	1,2-Dichloroethane	0.754	0.643	14.7	60	0.00	7.14
15	Trichloroethene	0.470	0.394	16.2	58	0.00	7.51
	----- True	Calc.	% Drift	-----			
16	1,2-Dichloropropane	10.000	8.702	13.0	60	0.00	8.04
	----- AvgRF	CCRF	% Dev	-----			
17	cis-1,3-Dichloropropene	0.535	0.424	20.7	53	0.00	8.71
18 I	Chlorobenzene-d5	1.000	1.000	0.0	72	0.00	10.45
19 S	Toluene-d8	1.127	0.989	12.2	65	0.00	8.90
20	trans-1,3-Dichloropropene	0.657	0.521	20.7	55	0.00	9.34
	----- True	Calc.	% Drift	-----			
21	Tetrachloroethene	10.000	8.444	15.6	60	0.00	9.34
	----- AvgRF	CCRF	% Dev	-----			

Continuing Calibration Summary

Job Number: FA78549
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Sample: VO2360-ECC2356
Lab FileID: O61351.D

22	1,4-Dichlorobenzene	1.158	0.999	13.7	61	0.00	12.82
	----- True	Calc.	% Drift	-----			
23	1,2-Dibromo-3-Chloropropa	10.000	7.967	20.3	58	0.00	14.04
	-----			-----			

(#) = Out of Range

061234.D SIMCL091120.M

SPCC's out = 0 CCC's out = 0

Mon Sep 14 08:41:23 2020

Initial Calibration Summary

Job Number: FA78549
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Sample: VO2362-ICC2362
Lab FileID: O61390.D

Response Factor Report MSVOA12

Method : C:\msdchem\2\methods\SIMCL091520.M (RTE Integrator)
 Title : Standard Methods 6200B
 Last Update : Wed Sep 16 09:02:25 2020
 Response via : Initial Calibration

Calibration Files

1 =O61386.D 2 =O61387.D 3 =O61388.D 4 =O61389.D
 5 =O61390.D 6 =O61391.D 7 =O61392.D

Compound	1	2	3	4	5	6	7	Avg	%RSD

1) I Fluorobenzene	-----ISTD-----								
2) Vinyl Chloride	0.763	0.768	0.679	0.572	0.569	0.550	0.488	0.627	17.55
	---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9985								
	Response Ratio = 0.00000 + 0.65691 *A + -0.04089 *A^2								
3) Chloromethane	2.259	1.295	1.010	0.835	0.807	0.761	0.666	1.090	50.89
	---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9981								
	Response Ratio = 0.00000 + 0.99722 *A + -0.08338 *A^2								
4) 1,1-Dichloroethen	0.821	0.811	0.741	0.728	0.742	0.702	0.699	0.749	6.52
5) Methylene Chlorid	5.223	2.011	1.397	1.209	1.137	1.053	0.989	1.860	81.86
	---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9969								
	Response Ratio = 0.00000 + 1.42164 *A + -0.11581 *A^2								
6) trans-1,2-Dichlor	0.954	0.958	0.829	0.807	0.833	0.807	0.798	0.855	8.18
7) 1,1-Dichloroethan	1.081	1.055	0.985	0.946	0.951	0.914	0.889	0.975	7.29
8) cis-1,2-Dichloroe	0.475	0.456	0.421	0.420	0.438	0.435	0.435	0.440	4.42
9) Chloroform	0.996	0.901	0.817	0.787	0.786	0.759	0.739	0.827	11.00
10) Carbon Tetrachlor	0.654	0.607	0.558	0.535	0.553	0.539	0.536	0.569	7.98
11) 1,1,1-Trichloroet	0.648	0.689	0.643	0.627	0.644	0.627	0.624	0.643	3.50
12) Benzene	1.647	1.578	1.507	1.517	1.551	1.517	1.494	1.545	3.47
13)S 1,2-Dichloroethan	0.468	0.460	0.429	0.412	0.402	0.394	0.385	0.421	7.62
14) 1,2-Dichloroethan	0.840	0.814	0.770	0.741	0.740	0.717	0.695	0.760	6.86
15) Trichloroethene	0.496	0.473	0.443	0.446	0.460	0.456	0.449	0.461	4.05
16) 1,2-Dichloropropa	0.548	0.540	0.512	0.505	0.510	0.499	0.489	0.515	4.18
17) cis-1,3-Dichlorop	0.441	0.434	0.421	0.448	0.489	0.509	0.525	0.467	8.67

18) I Chlorobenzene-d5	-----ISTD-----								
19)S Toluene-d8	1.082	1.040	1.015	0.980	0.985	0.989	1.052	1.020	3.82
20) trans-1,3-Dichlor	0.509	0.514	0.533	0.554	0.597	0.619	0.657	0.569	9.93
21) Tetrachloroethene	0.641	0.626	0.582	0.552	0.545	0.527	0.534	0.573	7.93
22) 1,4-Dichlorobenze	0.981	1.015	1.117	1.110	1.134	1.161	1.129	1.092	6.15
23) 1,2-Dibromo-3-Chl	0.200	0.180	0.182	0.180	0.189	0.198	0.202	0.190	5.13

(#) = Out of Range

SIMCL091520.M

Wed Sep 16 09:06:27 2020

6.7.9

6

Initial Calibration Verification

Job Number: FA78549
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Sample: VO2362-ICV2362
Lab FileID: O61394.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\2\data\091520\O61394.D
 Acq On : 15 Sep 2020 6:29 pm
 Sample : ICV2362-5
 Misc : MS47193,VO2362,,,,,
 MS Integration Params: rteint.p
 Vial: 15
 Operator: AKARIG
 Inst : MSVOA12
 Multiplr: 1.00

Method : C:\msdchem\2\methods\SIMCL091520.M (RTE Integrator)
 Title : Standard Methods 6200B
 Last Update : Wed Sep 16 09:02:25 2020
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	Fluorobenzene	1.000	1.000	0.0	115	0.00	7.34
	----- Amount	Calc.	%Drift	-----			
2	Vinyl Chloride	10.000	8.114	18.9	97	0.00	2.90
3	Chloromethane	10.000	7.698	23.0#	95	-0.01	2.80
	----- AvgRF	CCRF	%Dev	-----			
4	1,1-Dichloroethene	0.749	0.691	7.7	107	-0.01	4.08
	----- Amount	Calc.	%Drift	-----			
5	Methylene Chloride	10.000	8.784	12.2	108	-0.01	4.70
	----- AvgRF	CCRF	%Dev	-----			
6	trans-1,2-Dichloroethene	0.855	0.802	6.2	111	0.00	4.87
7	1,1-Dichloroethane	0.975	0.925	5.1	112	0.00	5.51
8	cis-1,2-Dichloroethene	0.440	0.440	0.0	115	0.00	6.06
9	Chloroform	0.827	0.757	8.5	111	0.00	6.33
10	Carbon Tetrachloride	0.569	0.530	6.9	110	0.00	6.50
11	1,1,1-Trichloroethane	0.643	0.615	4.4	110	0.00	6.57
12	Benzene	1.545	1.581	-2.3	117	0.00	6.94
13 S	1,2-Dichloroethane-d4	0.421	0.394	6.4	113	0.00	7.07
14	1,2-Dichloroethane	0.760	0.740	2.6	115	0.00	7.14
15	Trichloroethene	0.461	0.462	-0.2	115	0.00	7.51
16	1,2-Dichloropropane	0.515	0.520	-1.0	117	0.00	8.04
17	cis-1,3-Dichloropropene	0.467	0.526	-12.6	123	0.00	8.71
18 I	Chlorobenzene-d5	1.000	1.000	0.0	111	0.00	10.44
19 S	Toluene-d8	1.020	1.039	-1.9	117	0.00	8.90
20	trans-1,3-Dichloropropene	0.569	0.665	-16.9	123	0.00	9.34
21	Tetrachloroethene	0.573	0.534	6.8	108	0.00	9.34
22	1,4-Dichlorobenzene	1.092	1.144	-4.8	112	0.00	12.82
23	1,2-Dibromo-3-Chloropropa	0.190	0.200	-5.3	117	0.00	14.03

(#) = Out of Range
 O61390.D SIMCL091520.M
 SPCC's out = 0 CCC's out = 0
 Wed Sep 16 09:06:17 2020

6.7.10
6

Continuing Calibration Summary

Job Number: FA78549
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Sample: VO2363-CC2362
Lab FileID: O61402.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\jo...-2020\vo2363\O61402.d Vial: 3
 Acq On : 16 Sep 2020 11:32 am Operator: akarig
 Sample : cc2362-5 Inst : MSVOA12
 Misc : MS47193,VO2363,,,,, Multiplr: 1.00
 MS Integration Params: rteint.p

Method : C:\msdchem\1\methods\SIMCL091520.M (RTE Integrator)
 Title : Standard Methods 6200B
 Last Update : Wed Sep 16 09:02:25 2020
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	Fluorobenzene	1.000	1.000	0.0	107	0.00	7.34
	----- True	Calc.	% Drift	-----			
2	Vinyl Chloride	10.000	8.736	12.6	96	0.00	2.90
3	Chloromethane	10.000	8.417	15.8	95	0.00	2.80
	----- AvgRF	CCRF	% Dev	-----			
4	1,1-Dichloroethene	0.749	0.676	9.7	97	-0.01	4.08
	----- True	Calc.	% Drift	-----			
5	Methylene Chloride	10.000	8.267	17.3	95	0.00	4.70
	----- AvgRF	CCRF	% Dev	-----			
6	trans-1,2-Dichloroethene	0.855	0.749	12.4	96	0.00	4.87
7	1,1-Dichloroethane	0.975	0.857	12.1	96	0.00	5.51
8	cis-1,2-Dichloroethene	0.440	0.402	8.6	98	-0.01	6.06
9	Chloroform	0.827	0.709	14.3	96	0.00	6.33
10	Carbon Tetrachloride	0.569	0.497	12.7	96	0.00	6.50
11	1,1,1-Trichloroethane	0.643	0.549	14.6	91	0.00	6.58
12	Benzene	1.545	1.395	9.7	96	0.00	6.94
13 S	1,2-Dichloroethane-d4	0.421	0.396	5.9	105	0.00	7.07
14	1,2-Dichloroethane	0.760	0.666	12.4	96	0.00	7.14
15	Trichloroethene	0.461	0.409	11.3	95	0.00	7.51
16	1,2-Dichloropropane	0.515	0.469	8.9	98	0.00	8.04
17	cis-1,3-Dichloropropene	0.467	0.460	1.5	100	0.00	8.71
18 I	Chlorobenzene-d5	1.000	1.000	0.0	108	0.00	10.44
19 S	Toluene-d8	1.020	1.001	1.9	109	0.00	8.90
20	trans-1,3-Dichloropropene	0.569	0.545	4.2	98	0.00	9.34
21	Tetrachloroethene	0.573	0.477	16.8	94	0.00	9.34
22	1,4-Dichlorobenzene	1.092	1.005	8.0	95	0.00	12.82
23	1,2-Dibromo-3-Chloropropa	0.190	0.171	10.0	98	0.00	14.04

(#) = Out of Range SPCC's out = 0 CCC's out = 0
 O61390.D SIMCL091520.M Thu Sep 17 04:58:34 2020

Continuing Calibration Summary

Job Number: FA78549
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Sample: VO2363-ECC2362
Lab FileID: O61422.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\2\data\091620\O61422.D Vial: 2
 Acq On : 17 Sep 2020 8:05 am Operator: JuanG
 Sample : ecc2362-5 Inst : MSVOA12
 Misc : MS47193,VO2363,,,,, Multiplr: 1.00
 MS Integration Params: rteint.p

Method : C:\msdchem\2\methods\SIMCL091520.M (RTE Integrator)
 Title : Standard Methods 6200B
 Last Update : Wed Sep 16 09:02:25 2020
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 50% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	Fluorobenzene	1.000	1.000	0.0	86	0.00	7.34
	----- Amount	Calc.	%Drift	-----			
2	Vinyl Chloride	10.000	9.533	4.7	84	-0.01	2.90
3	Chloromethane	10.000	9.590	4.1	86	-0.01	2.80
	----- AvgRF	CCRF	%Dev	-----			
4	1,1-Dichloroethene	0.749	0.831	-10.9	97	-0.02	4.08
	----- Amount	Calc.	%Drift	-----			
5	Methylene Chloride	10.000	9.888	1.1	90	-0.02	4.69
	----- AvgRF	CCRF	%Dev	-----			
6	trans-1,2-Dichloroethene	0.855	0.827	3.3	86	-0.02	4.86
7	1,1-Dichloroethane	0.975	0.946	3.0	86	-0.01	5.50
8	cis-1,2-Dichloroethene	0.440	0.415	5.7	82	-0.01	6.06
9	Chloroform	0.827	0.794	4.0	87	-0.01	6.32
10	Carbon Tetrachloride	0.569	0.559	1.8	87	-0.01	6.50
11	1,1,1-Trichloroethane	0.643	0.608	5.4	82	-0.01	6.57
12	Benzene	1.545	1.469	4.9	82	-0.02	6.93
13 S	1,2-Dichloroethane-d4	0.421	0.426	-1.2	92	0.00	7.07
14	1,2-Dichloroethane	0.760	0.742	2.4	87	0.00	7.13
15	Trichloroethene	0.461	0.450	2.4	85	0.00	7.51
16	1,2-Dichloropropane	0.515	0.503	2.3	85	0.00	8.04
17	cis-1,3-Dichloropropene	0.467	0.445	4.7	79	0.00	8.70
18 I	Chlorobenzene-d5	1.000	1.000	0.0	92	0.00	10.44
19 S	Toluene-d8	1.020	0.890	12.7	83	0.00	8.89
20	trans-1,3-Dichloropropene	0.569	0.525	7.7	81	0.00	9.34
21	Tetrachloroethene	0.573	0.519	9.4	88	0.00	9.34
22	1,4-Dichlorobenzene	1.092	1.093	-0.1	89	0.00	12.82
23	1,2-Dibromo-3-Chloropropa	0.190	0.183	3.7	90	0.00	14.04

(#) = Out of Range SPCC's out = 0 CCC's out = 0
 O61390.D SIMCL091520.M Thu Sep 17 15:56:42 2020

Initial Calibration Summary

Job Number: FA78549
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Sample: VO2365-ICC2365
Lab FileID: O61442.D

Response Factor Report MSVOA12

Method : C:\msdchem\2\methods\SIMCL091820.M (RTE Integrator)
 Title : Standard Methods 6200B
 Last Update : Mon Sep 21 11:01:30 2020
 Response via : Initial Calibration

Calibration Files

1 =O61438.D 2 =O61439.D 3 =O61440.D 4 =O61441.D
 5 =O61442.D 6 =O61443.D 7 =O61444.D

Compound	1	2	3	4	5	6	7	Avg	%RSD
1) I Fluorobenzene	-----ISTD-----								
2) Vinyl Chloride	0.399	0.462	0.466	0.409	0.406	0.389	0.363	0.413	9.09
3) Chloromethane	1.423	0.806	0.673	0.598	0.581	0.547	0.502	0.733	43.67
	---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9993								
	Response Ratio = 0.00000 + 0.67846 *A + -0.04479 *A^2								
4) 1,1-Dichloroethen	0.523	0.596	0.623	0.583	0.636	0.599	0.599	0.594	6.07
5) Methylene Chlorid	3.894	1.446	1.092	0.935	0.937	0.899	0.857	1.437	76.67
	---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9972								
	Response Ratio = 0.00000 + 1.08942 *A + -0.06198 *A^2								
6) trans-1,2-Dichlor	0.650	0.746	0.705	0.661	0.733	0.714	0.711	0.703	5.01
7) 1,1-Dichloroethan	0.787	0.817	0.830	0.781	0.849	0.821	0.808	0.813	2.89
8) cis-1,2-Dichloroe	0.383	0.373	0.384	0.372	0.421	0.420	0.421	0.396	5.90
9) Chloroform	0.767	0.737	0.733	0.689	0.745	0.720	0.709	0.728	3.49
10) Carbon Tetrachlor	0.448	0.512	0.527	0.493	0.550	0.521	0.527	0.511	6.40
11) 1,1,1-Trichloroet	0.482	0.555	0.600	0.533	0.625	0.604	0.609	0.573	8.98
12) Benzene	1.257	1.284	1.345	1.305	1.460	1.421	1.413	1.355	5.73
	---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9993								
	Response Ratio = 0.00000 + 1.41593 *A + 0.00042 *A^2								
13)S 1,2-Dichloroethan	0.446	0.449	0.432	0.395	0.392	0.380	0.376	0.410	7.62
14) 1,2-Dichloroethan	0.631	0.651	0.671	0.639	0.683	0.673	0.658	0.658	2.88
15) Trichloroethene	0.383	0.390	0.400	0.392	0.441	0.428	0.431	0.409	5.70
16) 1,2-Dichloroprop	0.416	0.431	0.439	0.426	0.465	0.454	0.448	0.440	3.94
17) cis-1,3-Dichlorop	0.345	0.375	0.399	0.411	0.481	0.495	0.508	0.431	14.82
	---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9992								
	Response Ratio = 0.00000 + 0.40467 *A + 0.02773 *A^2								
18) I Chlorobenzene-d5	-----ISTD-----								
19)S Toluene-d8	1.079	1.080	1.037	1.004	0.998	1.019	1.041	1.037	3.20
20) trans-1,3-Dichlor	0.419	0.454	0.503	0.510	0.578	0.604	0.619	0.527	14.49
	---- Linear regr., Force(0,0) ---- Coefficient = 0.9963								
	Response Ratio = 0.00000 + 0.59013 *A								
21) Tetrachloroethene	0.442	0.507	0.531	0.486	0.527	0.505	0.519	0.503	6.09
22) 1,4-Dichlorobenze	0.813	0.865	1.001	0.979	1.089	1.097	1.107	0.993	11.78
	---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9995								
	Response Ratio = 0.00000 + 0.98556 *A + 0.03344 *A^2								
23) 1,2-Dibromo-3-Chl	0.239	0.164	0.176	0.173	0.191	0.202	0.196	0.192	12.93

(#) = Out of Range

6.7.13
 6

Initial Calibration Verification

Job Number: FA78549
 Account: AHTNACAS Ahtna Global, LLC
 Project: Fort Ord Groundwater Monitoring

Sample: VO2365-ICV2365
 Lab FileID: O61449.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\2\data\091820\O61449.D Vial: 12
 Acq On : 18 Sep 2020 1:45 pm Operator: JuanG
 Sample : icv2365-5 Inst : MSVOA12
 Misc : MS47193,VO2365,,,,, Multiplr: 1.00
 MS Integration Params: rteint.p

Method : C:\msdchem\2\methods\SIMCL091820.M (RTE Integrator)
 Title : Standard Methods 6200B
 Last Update : Mon Sep 21 11:01:30 2020
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	Fluorobenzene	1.000	1.000	0.0	109	0.00	7.34
2	Vinyl Chloride	0.413	0.403	2.4	108	0.01	2.92
	----- Amount	Calc.	%Drift	-----			
3	Chloromethane	10.000	9.381	6.2	104	0.02	2.81
	----- AvgRF	CCRF	%Dev	-----			
4	1,1-Dichloroethene	0.594	0.656	-10.4	112	0.00	4.09
	----- Amount	Calc.	%Drift	-----			
5	Methylene Chloride	10.000	9.694	3.1	109	0.00	4.71
	----- AvgRF	CCRF	%Dev	-----			
6	trans-1,2-Dichloroethene	0.703	0.746	-6.1	111	0.00	4.87
7	1,1-Dichloroethane	0.813	0.870	-7.0	112	0.00	5.51
8	cis-1,2-Dichloroethene	0.396	0.438	-10.6	113	0.00	6.07
9	Chloroform	0.728	0.750	-3.0	110	0.00	6.33
10	Carbon Tetrachloride	0.511	0.563	-10.2	111	0.00	6.51
11	1,1,1-Trichloroethane	0.573	0.633	-10.5	110	0.00	6.58
	----- Amount	Calc.	%Drift	-----			
12	Benzene	10.000	10.916	-9.2	115	0.00	6.94
	----- AvgRF	CCRF	%Dev	-----			
13 S	1,2-Dichloroethane-d4	0.410	0.383	6.6	106	0.00	7.07
14	1,2-Dichloroethane	0.658	0.712	-8.2	113	0.00	7.14
15	Trichloroethene	0.409	0.464	-13.4	115	0.00	7.51
16	1,2-Dichloropropane	0.440	0.491	-11.6	115	0.00	8.04
	----- Amount	Calc.	%Drift	-----			
17	cis-1,3-Dichloropropene	10.000	11.290	-12.9	119	0.00	8.71
	----- AvgRF	CCRF	%Dev	-----			
18 I	Chlorobenzene-d5	1.000	1.000	0.0	107	0.00	10.44
19 S	Toluene-d8	1.037	1.027	1.0	110	0.00	8.90
	----- Amount	Calc.	%Drift	-----			
20	trans-1,3-Dichloropropene	10.000	11.046	-10.5	120	0.00	9.34
	----- AvgRF	CCRF	%Dev	-----			
21	Tetrachloroethene	0.503	0.544	-8.2	110	0.00	9.34

Initial Calibration Verification

Job Number: FA78549
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Sample: VO2365-ICV2365
Lab FileID: O61449.D

	-----	Amount	Calc.	%Drift	-----		
22	1,4-Dichlorobenzene	10.000	10.973	-9.7	114	0.00	12.82
	-----	AvgRF	CCRF	%Dev	-----		
23	1,2-Dibromo-3-Chloropropa	0.192	0.210	-9.4	117	0.00	14.03
	-----				-----		

(#) = Out of Range SPCC's out = 0 CCC's out = 0
O61442.D SIMCL091820.M Mon Sep 21 11:49:47 2020

6.7.14

6

Continuing Calibration Summary

Job Number: FA78549
 Account: AHTNACAS Ahtna Global, LLC
 Project: Fort Ord Groundwater Monitoring

Sample: VO2365-ECC2365
 Lab FileID: O61458.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\2\data\091820\O61458.D Vial: 21
 Acq On : 18 Sep 2020 5:07 pm Operator: JuanG
 Sample : ECC2365-5 Inst : MSVOA12
 Misc : MS47173,VO2365,,,,, Multiplr: 1.00
 MS Integration Params: rteint.p

Method : C:\msdchem\2\methods\SIMCL091820.M (RTE Integrator)
 Title : Standard Methods 6200B
 Last Update : Mon Sep 21 11:01:30 2020
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 50% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	Fluorobenzene	1.000	1.000	0.0	93	0.00	7.34
2	Vinyl Chloride	0.413	0.443	-7.3	102	0.01	2.92
	----- Amount	Calc.	%Drift	-----			
3	Chloromethane	10.000	10.943	-9.4	102	0.01	2.81
	----- AvgRF	CCRF	%Dev	-----			
4	1,1-Dichloroethene	0.594	0.674	-13.5	99	0.00	4.10
	----- Amount	Calc.	%Drift	-----			
5	Methylene Chloride	10.000	10.278	-2.8	98	0.00	4.71
	----- AvgRF	CCRF	%Dev	-----			
6	trans-1,2-Dichloroethene	0.703	0.775	-10.2	99	0.00	4.87
7	1,1-Dichloroethane	0.813	0.902	-10.9	99	0.00	5.51
8	cis-1,2-Dichloroethene	0.396	0.447	-12.9	99	0.00	6.07
9	Chloroform	0.728	0.789	-8.4	99	0.00	6.33
10	Carbon Tetrachloride	0.511	0.586	-14.7	99	0.00	6.51
11	1,1,1-Trichloroethane	0.573	0.669	-16.8	100	0.00	6.58
	----- Amount	Calc.	%Drift	-----			
12	Benzene	10.000	10.957	-9.6	99	0.00	6.95
	----- AvgRF	CCRF	%Dev	-----			
13 S	1,2-Dichloroethane-d4	0.410	0.387	5.6	92	0.00	7.08
14	1,2-Dichloroethane	0.658	0.723	-9.9	99	0.00	7.14
15	Trichloroethene	0.409	0.471	-15.2	100	0.00	7.51
16	1,2-Dichloropropane	0.440	0.493	-12.0	99	0.00	8.04
	----- Amount	Calc.	%Drift	-----			
17	cis-1,3-Dichloropropene	10.000	10.839	-8.4	98	0.00	8.71
	----- AvgRF	CCRF	%Dev	-----			
18 I	Chlorobenzene-d5	1.000	1.000	0.0	93	0.00	10.44
19 S	Toluene-d8	1.037	1.002	3.4	93	0.00	8.90
	----- Amount	Calc.	%Drift	-----			
20	trans-1,3-Dichloropropene	10.000	10.293	-2.9	98	0.00	9.35
	----- AvgRF	CCRF	%Dev	-----			
21	Tetrachloroethene	0.503	0.561	-11.5	99	0.00	9.34

Initial Calibration Summary

Job Number: FA78549
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Sample: VZ2414-ICC2414
Lab FileID: Z62211.D

Response Factor Report MSVOA15

Method : C:\msdchem\1\methods\SIMCL091120.M (RTE Integrator)
 Title : WATER-EPA 8260B
 Last Update : Sun Sep 13 13:38:26 2020
 Response via : Initial Calibration

Calibration Files

1 =Z62207.D 2 =Z62208.D 3 =Z62209.D 4 =Z62210.D
 5 =Z62211.D 6 =Z62212.D 7 =Z62213.D

Compound	1	2	3	4	5	6	7	Avg	%RSD
1) I Fluorobenzene	-----ISTD-----								
2) Vinyl Chloride	0.745	0.530	0.472	0.398	0.398	0.410	0.429	0.483	25.87
	---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9983								
	Response Ratio = 0.00000 + 0.41463 *A + 0.00115 *A^2								
3) Chloromethane	0.663	0.498	0.481	0.368	0.359	0.379	0.420	0.453	23.78
	---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9980								
	Response Ratio = 0.00000 + 0.31946 *A + 0.02378 *A^2								
4) 1,1-Dichloroethen	0.306	0.298	0.281	0.309	0.292	0.302	0.306	0.299	3.29
	---- Linear regr., Force(0,0) ---- Coefficient = 0.9995								
	Response Ratio = 0.00000 + 0.30297 *A								
5) Methylene Chlorid	2.740	0.838	0.457	0.451	0.392	0.409	0.402	0.813	106.36
	---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9908								
	Response Ratio = 0.00000 + 0.49775 *A + -0.02806 *A^2								
6)T trans-1,2-Dichlor	0.358	0.379	0.341	0.385	0.360	0.379	0.382	0.369	4.44
7) 1,1-Dichloroethan	0.575	0.661	0.582	0.662	0.612	0.647	0.644	0.626	5.82
8) cis-1,2-Dichloroe	0.419	0.429	0.375	0.427	0.391	0.416	0.414	0.410	4.85
9) Chloroform	0.777	0.786	0.680	0.784	0.718	0.760	0.756	0.752	5.23
10) Carbon Tetrachlor	0.498	0.489	0.462	0.529	0.514	0.540	0.540	0.510	5.69
11) 1,1,1-Trichloroet	0.636	0.660	0.612	0.687	0.654	0.683	0.676	0.658	4.12
12) Benzene	1.341	1.460	1.286	1.457	1.351	1.425	1.421	1.392	4.75
13)S 1,2-Dichloroethan	0.304	0.310	0.307	0.309	0.314	0.310	0.310	0.309	0.92
14) 1,2-Dichloroethan	0.501	0.562	0.476	0.554	0.506	0.539	0.534	0.525	5.98
15) Trichloroethene	0.414	0.428	0.389	0.442	0.415	0.440	0.460	0.427	5.41
16) 1,2-Dichloropropa	0.344	0.377	0.320	0.372	0.342	0.363	0.361	0.354	5.62
17) cis-1,3-Dichlorop	0.353	0.328	0.296	0.411	0.409	0.472	0.460	0.390	17.03
	---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9970								
	Response Ratio = 0.00000 + 0.35911 *A + 0.02868 *A^2								
18) I Chlorobenzene-d5	-----ISTD-----								
19)S Toluene-d8	1.254	1.248	1.248	1.237	1.232	1.224	1.055	1.214	5.83
20)T trans-1,3-Dichlor	0.334	0.340	0.304	0.429	0.428	0.497	0.416	0.393	17.45
	---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9900								
	Response Ratio = 0.00000 + 0.41206 *A + 0.00891 *A^2								
21) Tetrachloroethene	0.505	0.538	0.491	0.550	0.516	0.540	0.467	0.515	5.78
	---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9961								
	Response Ratio = 0.00000 + 0.59840 *A + -0.03017 *A^2								

(#) = Out of Range

6.7.16
6

Initial Calibration Summary

Job Number: FA78549
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Sample: VZ2414-ICC2414
Lab FileID: Z62211.D

SIMCL091120.M

Sun Sep 13 14:24:15 2020

Initial Calibration Verification

Job Number: FA78549
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Sample: VZ2414-ICV2414
Lab FileID: Z62215.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\091120\Z62215.D Vial: 10
 Acq On : 11 Sep 2020 8:51 pm Operator: SHANICAO
 Sample : ICV2414-5 Inst : MSVOA15
 Misc : MS47171,VZ2414,,,,, Multiplr: 1.00
 MS Integration Params: RTEINT.P

Method : C:\msdchem\1\methods\SIMCL091120.M (RTE Integrator)
 Title : WATER-EPA 8260B
 Last Update : Sun Sep 13 13:38:26 2020
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I Fluorobenzene	1.000	1.000	0.0	102	0.00	7.40
----- Amount Calc. %Drift -----						
2 Vinyl Chloride	10.000	10.131	-1.3	108	0.00	2.84
3 Chloromethane	10.000	9.964	0.4	104	0.00	2.73
4 1,1-Dichloroethene	10.000	10.988	-9.9	116	0.00	4.08
5 Methylene Chloride	10.000	9.188	8.1	107	0.00	4.71
----- AvgRF CCRF %Dev -----						
6 T trans-1,2-Dichloroethene	0.369	0.379	-2.7	108	0.00	4.89
7 1,1-Dichloroethane	0.626	0.649	-3.7	108	0.00	5.55
8 cis-1,2-Dichloroethene	0.410	0.412	-0.5	108	0.00	6.11
9 Chloroform	0.752	0.748	0.5	106	0.00	6.38
10 Carbon Tetrachloride	0.510	0.540	-5.9	107	0.00	6.54
11 1,1,1-Trichloroethane	0.658	0.683	-3.8	107	0.00	6.61
12 Benzene	1.392	1.466	-5.3	111	0.00	6.99
13 S 1,2-Dichloroethane-d4	0.309	0.315	-1.9	102	0.00	7.13
14 1,2-Dichloroethane	0.525	0.541	-3.0	109	0.00	7.20
15 Trichloroethene	0.427	0.446	-4.4	110	0.00	7.57
16 1,2-Dichloropropane	0.354	0.368	-4.0	110	0.00	8.11
----- Amount Calc. %Drift -----						
17 cis-1,3-Dichloropropene	10.000	10.889	-8.9	115	0.00	8.77
----- AvgRF CCRF %Dev -----						
18 I Chlorobenzene-d5	1.000	1.000	0.0	102	0.00	10.51
19 S Toluene-d8	1.214	1.231	-1.4	102	0.00	8.96
----- Amount Calc. %Drift -----						
20 T trans-1,3-Dichloropropene	10.000	11.393	-13.9	117	0.00	9.41
21 Tetrachloroethene	10.000	10.356	-3.6	109	0.00	9.40

(#) = Out of Range SPCC's out = 0 CCC's out = 0
 Z62211.D SIMCL091120.M Sun Sep 13 14:23:50 2020

6.7.17
6

Continuing Calibration Summary

Job Number: FA78549
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Sample: VZ2417-CC2414
Lab FileID: Z62289.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\jo...-2020\vz2417\Z62289.d Vial: 1
 Acq On : 13 Sep 2020 11:28 am Operator: stutip
 Sample : CC2414-5 Inst : MSVOA15
 Misc : MS47199,VZ2417,,,,, Multiplr: 1.00
 MS Integration Params: RTEINT.P

Method : C:\msdchem\1\methods\SIMCL091120.M (RTE Integrator)
 Title : WATER-EPA 8260B
 Last Update : Sun Sep 13 13:38:26 2020
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	Fluorobenzene	1.000	1.000	0.0	106	0.00	7.40
----- True		Calc.	% Drift	-----			
2	Vinyl Chloride	10.000	11.050	-10.5	123	0.00	2.84
3	Chloromethane	10.000	11.366	-13.7	125	0.00	2.73
4	1,1-Dichloroethene	10.000	9.259	7.4	102	0.00	4.08
5	Methylene Chloride	10.000	9.101	9.0	110	0.00	4.71
----- AvgRF		CCRF	% Dev	-----			
6 T	trans-1,2-Dichloroethene	0.369	0.357	3.3	105	0.00	4.88
7	1,1-Dichloroethane	0.626	0.634	-1.3	110	0.00	5.54
8	cis-1,2-Dichloroethene	0.410	0.382	6.8	104	0.00	6.10
9	Chloroform	0.752	0.717	4.7	106	0.00	6.37
10	Carbon Tetrachloride	0.510	0.463	9.2	96	0.00	6.54
11	1,1,1-Trichloroethane	0.658	0.617	6.2	100	0.00	6.61
12	Benzene	1.392	1.370	1.6	107	0.00	6.99
13 S	1,2-Dichloroethane-d4	0.309	0.325	-5.2	110	0.00	7.12
14	1,2-Dichloroethane	0.525	0.507	3.4	106	0.00	7.19
15	Trichloroethene	0.427	0.400	6.3	102	0.00	7.56
16	1,2-Dichloropropane	0.354	0.332	6.2	103	0.00	8.10
----- True		Calc.	% Drift	-----			
17	cis-1,3-Dichloropropene	10.000	9.385	6.2	100	0.00	8.77
----- AvgRF		CCRF	% Dev	-----			
18 I	Chlorobenzene-d5	1.000	1.000	0.0	107	0.00	10.51
19 S	Toluene-d8	1.214	1.205	0.7	105	0.00	8.96
----- True		Calc.	% Drift	-----			
20 T	trans-1,3-Dichloropropene	10.000	9.397	6.0	101	0.00	9.41
21	Tetrachloroethene	10.000	8.947	10.5	101	0.00	9.40

(#) = Out of Range SPCC's out = 0 CCC's out = 0
 Z62211.D SIMCL091120.M Mon Sep 14 07:18:29 2020

6.7.18

6

Continuing Calibration Summary

Job Number: FA78549
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Sample: VZ2417-ECC2414
Lab FileID: Z62318.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\jo...-2020\vz2417\Z62318.d Vial: 29
 Acq On : 13 Sep 2020 8:54 pm Operator: stutip
 Sample : ecc2414-5 Inst : MSVOA15
 Misc : MS47203,VZ2417,,,,, Multiplr: 1.00
 MS Integration Params: RTEINT.P

Method : C:\msdchem\1\methods\SIMCL091120.M (RTE Integrator)
 Title : WATER-EPA 8260B
 Last Update : Sun Sep 13 13:38:26 2020
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 50% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	Fluorobenzene	1.000	1.000	0.0	87	0.00	7.40
	----- True	Calc.	% Drift	-----			
2	Vinyl Chloride	10.000	12.787	-27.9	117	0.00	2.84
3	Chloromethane	10.000	12.393	-23.9	114	0.00	2.73
4	1,1-Dichloroethene	10.000	10.614	-6.1	96	0.00	4.09
5	Methylene Chloride	10.000	10.738	-7.4	105	0.00	4.71
	----- AvgRF	CCRF	% Dev	-----			
6 T	trans-1,2-Dichloroethene	0.369	0.411	-11.4	100	0.00	4.89
7	1,1-Dichloroethane	0.626	0.732	-16.9	104	0.00	5.55
8	cis-1,2-Dichloroethene	0.410	0.444	-8.3	99	0.00	6.11
9	Chloroform	0.752	0.859	-14.2	105	0.00	6.38
10	Carbon Tetrachloride	0.510	0.510	0.0	87	0.00	6.55
11	1,1,1-Trichloroethane	0.658	0.717	-9.0	96	0.00	6.62
12	Benzene	1.392	1.581	-13.6	102	0.00	6.99
13 S	1,2-Dichloroethane-d4	0.309	0.337	-9.1	94	0.00	7.13
14	1,2-Dichloroethane	0.525	0.611	-16.4	106	0.00	7.20
15	Trichloroethene	0.427	0.474	-11.0	100	0.00	7.57
16	1,2-Dichloropropane	0.354	0.398	-12.4	102	0.00	8.10
	----- True	Calc.	% Drift	-----			
17	cis-1,3-Dichloropropene	10.000	8.931	10.7	78	0.00	8.77
	----- AvgRF	CCRF	% Dev	-----			
18 I	Chlorobenzene-d5	1.000	1.000	0.0	91	0.00	10.51
19 S	Toluene-d8	1.214	1.151	5.2	85	0.00	8.96
	----- True	Calc.	% Drift	-----			
20 T	trans-1,3-Dichloropropene	10.000	8.701	13.0	79	0.00	9.41
21	Tetrachloroethene	10.000	10.319	-3.2	98	0.00	9.40

(#) = Out of Range SPCC's out = 0 CCC's out = 0
 Z62211.D SIMCL091120.M Mon Sep 14 07:18:49 2020

6.7.19

6

Continuing Calibration Summary

Job Number: FA78549
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Sample: VZ2418-CC2414
Lab FileID: Z62322.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\091420\Z62322.D Vial: 1
 Acq On : 14 Sep 2020 12:22 pm Operator: JuanG
 Sample : CC2414-5 Inst : MSVOA15
 Misc : MS47199,VZ2418,,,,, Multiplr: 1.00
 MS Integration Params: RTEINT.P

Method : C:\msdchem\1\methods\SIMCL091120.M (RTE Integrator)
 Title : WATER-EPA 8260B
 Last Update : Sun Sep 13 13:38:26 2020
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I Fluorobenzene	1.000	1.000	0.0	106	0.00	7.40
----- Amount Calc. %Drift -----						
2 Vinyl Chloride	10.000	12.650	-26.5#	141	0.00	2.84
3 Chloromethane	10.000	12.991	-29.9#	147	0.00	2.73
4 1,1-Dichloroethene	10.000	10.544	-5.4	116	0.00	4.08
5 Methylene Chloride	10.000	10.422	-4.2	124	0.00	4.71
----- AvgRF CCRF %Dev -----						
6 T trans-1,2-Dichloroethene	0.369	0.405	-9.8	120	0.00	4.88
7 1,1-Dichloroethane	0.626	0.705	-12.6	122	0.00	5.54
8 cis-1,2-Dichloroethene	0.410	0.424	-3.4	115	0.00	6.10
9 Chloroform	0.752	0.810	-7.7	120	0.00	6.37
10 Carbon Tetrachloride	0.510	0.529	-3.7	109	0.00	6.54
11 1,1,1-Trichloroethane	0.658	0.708	-7.6	115	0.00	6.61
12 Benzene	1.392	1.507	-8.3	119	0.00	6.99
13 S 1,2-Dichloroethane-d4	0.309	0.336	-8.7	114	0.00	7.12
14 1,2-Dichloroethane	0.525	0.562	-7.0	118	0.00	7.19
15 Trichloroethene	0.427	0.439	-2.8	112	0.00	7.57
16 1,2-Dichloropropane	0.354	0.366	-3.4	114	0.00	8.10
----- Amount Calc. %Drift -----						
17 cis-1,3-Dichloropropene	10.000	10.729	-7.3	117	0.00	8.77
----- AvgRF CCRF %Dev -----						
18 I Chlorobenzene-d5	1.000	1.000	0.0	110	0.00	10.51
19 S Toluene-d8	1.214	1.176	3.1	105	0.00	8.96
----- Amount Calc. %Drift -----						
20 T trans-1,3-Dichloropropene	10.000	10.906	-9.1	121	0.00	9.41
21 Tetrachloroethene	10.000	9.919	0.8	114	0.00	9.40

(#) = Out of Range SPCC's out = 0 CCC's out = 0
 Z62211.D SIMCL091120.M Tue Sep 15 19:11:21 2020

6.7.20

6

Continuing Calibration Summary

Job Number: FA78549
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Sample: VZ2418-ECC2414
Lab FileID: Z62350.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\091420\Z62350.D Vial: 28
 Acq On : 14 Sep 2020 10:45 pm Operator: JuanG
 Sample : ECC2414-5 Inst : MSVOA15
 Misc : MS47199,VZ2418,,,,, Multiplr: 1.00
 MS Integration Params: RTEINT.P

Method : C:\msdchem\1\methods\SIMCL091120.M (RTE Integrator)
 Title : WATER-EPA 8260B
 Last Update : Sun Sep 13 13:38:26 2020
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 50% Max. Rel. Area : 200%

Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I Fluorobenzene	1.000	1.000	0.0	77	0.00	7.40
----- Amount Calc. %Drift -----						
2 Vinyl Chloride	10.000	13.173	-31.7	107	0.00	2.83
3 Chloromethane	10.000	12.057	-20.6	98	0.00	2.73
4 1,1-Dichloroethene	10.000	10.978	-9.8	88	0.00	4.08
5 Methylene Chloride	10.000	11.075	-10.7	95	0.00	4.71
----- AvgRF CCRF %Dev -----						
6 T trans-1,2-Dichloroethene	0.369	0.404	-9.5	87	0.00	4.89
7 1,1-Dichloroethane	0.626	0.730	-16.6	92	0.00	5.55
8 cis-1,2-Dichloroethene	0.410	0.425	-3.7	84	0.00	6.11
9 Chloroform	0.752	0.854	-13.6	92	0.00	6.38
10 Carbon Tetrachloride	0.510	0.507	0.6	76	0.00	6.54
11 1,1,1-Trichloroethane	0.658	0.716	-8.8	84	0.00	6.61
12 Benzene	1.392	1.565	-12.4	89	0.00	6.99
13 S 1,2-Dichloroethane-d4	0.309	0.351	-13.6	86	0.00	7.13
14 1,2-Dichloroethane	0.525	0.586	-11.6	89	0.00	7.20
15 Trichloroethene	0.427	0.478	-11.9	89	0.00	7.57
16 1,2-Dichloropropane	0.354	0.386	-9.0	87	0.00	8.10
----- Amount Calc. %Drift -----						
17 cis-1,3-Dichloropropene	10.000	7.316	26.8	55	0.00	8.77
----- AvgRF CCRF %Dev -----						
18 I Chlorobenzene-d5	1.000	1.000	0.0	84	0.00	10.51
19 S Toluene-d8	1.214	1.091	10.1	74	0.00	8.96
----- Amount Calc. %Drift -----						
20 T trans-1,3-Dichloropropene	10.000	6.864	31.4	57	0.00	9.41
21 Tetrachloroethene	10.000	9.779	2.2	86	0.00	9.40

(#) = Out of Range SPCC's out = 0 CCC's out = 0
 Z62211.D SIMCL091120.M Tue Sep 15 19:11:40 2020

6.7.21

6

Run Sequence Report

Job Number: FA78549
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Run ID: VO2352	Method: SW846 8260B BY SIM	Instrument ID: GCMSO
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Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
VO2352-BFB	O61115.D	09/08/20 11:44	n/a	BFB Tune
VO2352-IC2352	O61116.D	09/08/20 12:14	n/a	Initial cal 1
VO2352-IC2352	O61117.D	09/08/20 12:34	n/a	Initial cal 2
VO2352-IC2352	O61118.D	09/08/20 12:55	n/a	Initial cal 3
VO2352-IC2352	O61119.D	09/08/20 13:15	n/a	Initial cal 4
VO2352-ICC2352	O61120.D	09/08/20 13:55	n/a	Initial cal 5
VO2352-IC2352	O61121.D	09/08/20 14:15	n/a	Initial cal 6
VO2352-IC2352	O61122.D	09/08/20 14:36	n/a	Initial cal 7
VO2352-ICV2352	O61124.D	09/08/20 15:16	n/a	Initial cal verification 5

Run Sequence Report

Job Number: FA78549
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Run ID: VO2354	Method: SW846 8260B BY SIM	Instrument ID: GCMSO
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Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
VO2354-BFB	O61154.D	09/10/20 07:42	n/a	BFB Tune
VO2354-CC2352	O61155.D	09/10/20 08:05	n/a	Continuing cal 5
VO2354-BS	O61156.D	09/10/20 08:38	n/a	Blank Spike
VO2354-MB	O61158.D	09/10/20 09:36	n/a	Method Blank
FA78549-1	O61159.D	09/10/20 09:56	n/a	2036MOU2177A
FA78549-2	O61160.D	09/10/20 10:17	n/a	2036MOU2179F
FA78549-3	O61161.D	09/10/20 10:37	n/a	2036MOU2180F
FA78549-4	O61162.D	09/10/20 10:57	n/a	2036MOU2181F
FA78549-2MS	O61163.D	09/10/20 11:17	n/a	Matrix Spike
FA78549-2MSD	O61164.D	09/10/20 11:38	n/a	Matrix Spike Duplicate
FA78549-5	O61165.D	09/10/20 11:58	n/a	2036MOU2182D
FA78549-6	O61166.D	09/10/20 12:18	n/a	2036MOU2183F
FA78549-7	O61167.D	09/10/20 12:38	n/a	2036MOU2184F
FA78549-8	O61168.D	09/10/20 12:59	n/a	2036MOU2185F
FA78549-9	O61169.D	09/10/20 13:19	n/a	2036MOU2186F
FA78549-10	O61170.D	09/10/20 13:39	n/a	2036MOU2187F
FA78549-11	O61171.D	09/10/20 14:00	n/a	2036MOU2188F
FA78549-12	O61172.D	09/10/20 14:20	n/a	2036MOU2189F
FA78549-13	O61173.D	09/10/20 14:40	n/a	2036MOU2190F
FA78549-14	O61174.D	09/10/20 15:01	n/a	2036MOU2191F
FA78549-15	O61175.D	09/10/20 15:21	n/a	2036MOU2192F
VO2354-ECC2352	O61178.D	09/10/20 16:26	n/a	Ending cal 5

Run Sequence Report

Job Number: FA78549
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Run ID: VO2356	Method: SW846 8260B BY SIM	Instrument ID: GCMSO
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Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
VO2356-BFB	O61227.D	09/11/20 14:01	n/a	BFB Tune
VO2356-IC2356	O61230.D	09/11/20 15:34	n/a	Initial cal 1
VO2356-IC2356	O61231.D	09/11/20 15:54	n/a	Initial cal 2
VO2356-IC2356	O61232.D	09/11/20 16:14	n/a	Initial cal 3
VO2356-IC2356	O61233.D	09/11/20 16:35	n/a	Initial cal 4
VO2356-ICC2356	O61234.D	09/11/20 16:55	n/a	Initial cal 5
VO2356-IC2356	O61235.D	09/11/20 17:15	n/a	Initial cal 6
VO2356-IC2356	O61236.D	09/11/20 17:36	n/a	Initial cal 7
VO2356-ICV2356	O61238.D	09/11/20 18:16	n/a	Initial cal verification 5

Run Sequence Report

Job Number: FA78549
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Run ID: VO2360 **Method:** SW846 8260B BY SIM **Instrument ID:** GCMSO

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
VO2360-BFB	O61324.D	09/13/20 11:21	n/a	BFB Tune
VO2360-CC2356	O61325.D	09/13/20 11:41	n/a	Continuing cal 5
VO2360-BS	O61326.D	09/13/20 12:06	n/a	Blank Spike
VO2360-MB	O61328.D	09/13/20 12:47	n/a	Method Blank
ZZZZZZ	O61329.D	09/13/20 13:07	n/a	(unrelated sample)
ZZZZZZ	O61330.D	09/13/20 13:27	n/a	(unrelated sample)
ZZZZZZ	O61331.D	09/13/20 13:48	n/a	(unrelated sample)
FA78549-30	O61332.D	09/13/20 14:08	n/a	2036YOU2406F
FA78549-31	O61333.D	09/13/20 14:28	n/a	2036YOU2407D
FA78549-32	O61334.D	09/13/20 14:48	n/a	2036YOU2408F
FA78549-33	O61335.D	09/13/20 15:09	n/a	2036YOU2409F
FA78549-34	O61336.D	09/13/20 15:29	n/a	2036YOU2410F
FA78549-35	O61337.D	09/13/20 15:49	n/a	2036YOU2411F
FA78549-36	O61338.D	09/13/20 16:09	n/a	2036YOU2412F
FA78549-37	O61339.D	09/13/20 16:30	n/a	2036YOU2413F
FA78549-38	O61340.D	09/13/20 16:50	n/a	2036YOU2414F
FA78549-39	O61341.D	09/13/20 17:10	n/a	2036YOU2417F
FA78549-40	O61342.D	09/13/20 17:30	n/a	2036YOU2418F
FA78549-41	O61343.D	09/13/20 17:51	n/a	2036YOU2419C
FA78549-42	O61344.D	09/13/20 18:11	n/a	2036YOU2420F
FA78564-1	O61345.D	09/13/20 18:31	n/a	(used for QC only; not part of job FA78549)
ZZZZZZ	O61346.D	09/13/20 18:51	n/a	(unrelated sample)
ZZZZZZ	O61347.D	09/13/20 19:11	n/a	(unrelated sample)
ZZZZZZ	O61348.D	09/13/20 19:32	n/a	(unrelated sample)
FA78564-1MS	O61349.D	09/13/20 19:52	n/a	Matrix Spike
FA78564-1MSD	O61350.D	09/13/20 20:12	n/a	Matrix Spike Duplicate
VO2360-ECC2356	O61351.D	09/13/20 20:32	n/a	Ending cal 5

Run Sequence Report

Job Number: FA78549
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Run ID: VO2362	Method: SW846 8260B BY SIM	Instrument ID: GCMSO
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Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
VO2362-BFB	O61385.D	09/15/20 14:52	n/a	BFB Tune
VO2362-IC2362	O61386.D	09/15/20 15:46	n/a	Initial cal 1
VO2362-IC2362	O61387.D	09/15/20 16:06	n/a	Initial cal 2
VO2362-IC2362	O61388.D	09/15/20 16:26	n/a	Initial cal 3
VO2362-IC2362	O61389.D	09/15/20 16:47	n/a	Initial cal 4
VO2362-ICC2362	O61390.D	09/15/20 17:07	n/a	Initial cal 5
VO2362-IC2362	O61391.D	09/15/20 17:28	n/a	Initial cal 6
VO2362-IC2362	O61392.D	09/15/20 17:48	n/a	Initial cal 7
VO2362-ICV2362	O61394.D	09/15/20 18:29	n/a	Initial cal verification 5

Run Sequence Report

Job Number: FA78549
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Run ID: VO2363	Method: SW846 8260B BY SIM	Instrument ID: GCMSO
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Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
VO2363-BFB	O61401.D	09/16/20 11:07	n/a	BFB Tune
VO2363-CC2362	O61402.D	09/16/20 11:32	n/a	Continuing cal 5
VO2363-BS	O61403.D	09/16/20 12:11	n/a	Blank Spike
VO2363-MB	O61405.D	09/16/20 13:09	n/a	Method Blank
ZZZZZZ	O61406.D	09/16/20 13:29	n/a	(unrelated sample)
ZZZZZZ	O61407.D	09/16/20 13:50	n/a	(unrelated sample)
ZZZZZZ	O61408.D	09/16/20 14:10	n/a	(unrelated sample)
ZZZZZZ	O61409.D	09/16/20 14:30	n/a	(unrelated sample)
ZZZZZZ	O61410.D	09/16/20 14:51	n/a	(unrelated sample)
ZZZZZZ	O61411.D	09/16/20 15:11	n/a	(unrelated sample)
ZZZZZZ	O61412.D	09/16/20 15:32	n/a	(unrelated sample)
FA78549-2	O61414.D	09/16/20 16:13	n/a	2036MOU2179F
FA78549-6	O61415.D	09/16/20 16:33	n/a	2036MOU2183F
FA78549-7	O61416.D	09/16/20 16:53	n/a	2036MOU2184F
FA78549-8	O61417.D	09/16/20 17:14	n/a	2036MOU2185F
FA78549-11	O61418.D	09/16/20 17:34	n/a	2036MOU2188F
FA78549-12	O61419.D	09/16/20 17:55	n/a	2036MOU2189F
FA78549-13	O61420.D	09/16/20 18:15	n/a	2036MOU2190F
VO2363-ECC2362	O61422.D	09/17/20 08:05	n/a	Ending cal 5

Run Sequence Report

Job Number: FA78549
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Run ID: VO2365	Method: SW846 8260B BY SIM	Instrument ID: GCMSO
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Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
VO2365-BFB	O61437.D	09/18/20 08:17	n/a	BFB Tune
VO2365-IC2365	O61438.D	09/18/20 08:59	n/a	Initial cal 1
VO2365-IC2365	O61439.D	09/18/20 09:19	n/a	Initial cal 2
VO2365-IC2365	O61440.D	09/18/20 09:39	n/a	Initial cal 3
VO2365-IC2365	O61441.D	09/18/20 09:59	n/a	Initial cal 4
VO2365-ICC2365	O61442.D	09/18/20 10:20	n/a	Initial cal 5
VO2365-IC2365	O61443.D	09/18/20 10:40	n/a	Initial cal 6
VO2365-IC2365	O61444.D	09/18/20 11:00	n/a	Initial cal 7
VO2365-ICV2365	O61449.D	09/18/20 13:45	n/a	Initial cal verification 5
VO2365-BS	O61450.D	09/18/20 14:23	n/a	Blank Spike
VO2365-MB	O61452.D	09/18/20 15:04	n/a	Method Blank
FA78549-14	O61453.D	09/18/20 15:24	n/a	2036MOU2191F
FA78549-15	O61454.D	09/18/20 15:45	n/a	2036MOU2192F
ZZZZZZ	O61455.D	09/18/20 16:05	n/a	(unrelated sample)
FA78549-15MS	O61456.D	09/18/20 16:26	n/a	Matrix Spike
FA78549-15MSD	O61457.D	09/18/20 16:46	n/a	Matrix Spike Duplicate
VO2365-ECC2365	O61458.D	09/18/20 17:07	n/a	Ending cal 5

Run Sequence Report

Job Number: FA78549
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Run ID: VZ2414 **Method:** SW846 8260B BY SIM **Instrument ID:** GCMSZ

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
VZ2414-BFB	Z62205.D	09/11/20 17:20	n/a	BFB Tune
VZ2414-IC2414	Z62207.D	09/11/20 18:15	n/a	Initial cal 1
VZ2414-IC2414	Z62208.D	09/11/20 18:34	n/a	Initial cal 2
VZ2414-IC2414	Z62209.D	09/11/20 18:53	n/a	Initial cal 3
VZ2414-IC2414	Z62210.D	09/11/20 19:13	n/a	Initial cal 4
VZ2414-ICC2414	Z62211.D	09/11/20 19:32	n/a	Initial cal 5
VZ2414-IC2414	Z62212.D	09/11/20 19:51	n/a	Initial cal 6
VZ2414-IC2414	Z62213.D	09/11/20 20:13	n/a	Initial cal 7
VZ2414-ICV2414	Z62215.D	09/11/20 20:51	n/a	Initial cal verification 5
VZ2414-BS	Z62216.D	09/11/20 21:10	n/a	Blank Spike
VZ2414-MB	Z62218.D	09/11/20 21:49	n/a	Method Blank
FA78573-1	Z62219.D	09/11/20 22:08	n/a	(used for QC only; not part of job FA78549)
ZZZZZZ	Z62220.D	09/11/20 22:27	n/a	(unrelated sample)
ZZZZZZ	Z62221.D	09/11/20 22:47	n/a	(unrelated sample)
ZZZZZZ	Z62222.D	09/11/20 23:06	n/a	(unrelated sample)
ZZZZZZ	Z62223.D	09/11/20 23:26	n/a	(unrelated sample)
ZZZZZZ	Z62224.D	09/11/20 23:45	n/a	(unrelated sample)
ZZZZZZ	Z62225.D	09/12/20 00:04	n/a	(unrelated sample)
ZZZZZZ	Z62226.D	09/12/20 00:23	n/a	(unrelated sample)
ZZZZZZ	Z62227.D	09/12/20 00:42	n/a	(unrelated sample)
ZZZZZZ	Z62228.D	09/12/20 01:02	n/a	(unrelated sample)
ZZZZZZ	Z62229.D	09/12/20 01:21	n/a	(unrelated sample)
ZZZZZZ	Z62230.D	09/12/20 01:40	n/a	(unrelated sample)
ZZZZZZ	Z62231.D	09/12/20 02:00	n/a	(unrelated sample)
ZZZZZZ	Z62232.D	09/12/20 02:19	n/a	(unrelated sample)
FA78573-1MS	Z62233.D	09/12/20 02:38	n/a	Matrix Spike
FA78573-1MSD	Z62234.D	09/12/20 02:57	n/a	Matrix Spike Duplicate
VZ2414-ECC2414	Z62235.D	09/12/20 03:16	n/a	Ending cal 5

Run Sequence Report

Job Number: FA78549
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Run ID: VZ2417 **Method:** SW846 8260B BY SIM **Instrument ID:** GCMSZ

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
VZ2417-BFB	Z62288.D	09/13/20 11:05	n/a	BFB Tune
VZ2417-CC2414	Z62289.D	09/13/20 11:28	n/a	Continuing cal 5
VZ2417-BS	Z62290.D	09/13/20 11:55	n/a	Blank Spike
VZ2417-MB	Z62292.D	09/13/20 12:33	n/a	Method Blank
FA78549-16	Z62293.D	09/13/20 12:52	n/a	2036MOU2193F
FA78549-17	Z62294.D	09/13/20 13:12	n/a	2036MOU2194F
FA78549-18	Z62295.D	09/13/20 13:31	n/a	2036MOU2195F
FA78549-19	Z62296.D	09/13/20 13:50	n/a	2036MOU2196F
FA78549-20	Z62297.D	09/13/20 14:10	n/a	2036MOU2197F
FA78549-21	Z62298.D	09/13/20 14:29	n/a	2036MOU2198F
FA78549-22	Z62299.D	09/13/20 14:48	n/a	2036MOU2199F
FA78549-23	Z62300.D	09/13/20 15:08	n/a	2036MOU2200D
FA78549-24	Z62301.D	09/13/20 15:27	n/a	2036MOU2201F
FA78549-25	Z62302.D	09/13/20 15:46	n/a	2036YOU2401A
FA78549-26	Z62303.D	09/13/20 16:06	n/a	2036Y0BW402F
FA78549-27	Z62304.D	09/13/20 16:25	n/a	2036Y0BW403F
FA78549-28	Z62305.D	09/13/20 16:44	n/a	2036YOU2404F
FA78549-29	Z62306.D	09/13/20 17:04	n/a	2036YOU2405F
ZZZZZZ	Z62307.D	09/13/20 17:23	n/a	(unrelated sample)
ZZZZZZ	Z62308.D	09/13/20 17:42	n/a	(unrelated sample)
ZZZZZZ	Z62309.D	09/13/20 18:02	n/a	(unrelated sample)
FA78576-2	Z62310.D	09/13/20 18:21	n/a	(used for QC only; not part of job FA78549)
ZZZZZZ	Z62311.D	09/13/20 18:40	n/a	(unrelated sample)
ZZZZZZ	Z62312.D	09/13/20 18:59	n/a	(unrelated sample)
ZZZZZZ	Z62313.D	09/13/20 19:18	n/a	(unrelated sample)
FA78549-16MS	Z62314.D	09/13/20 19:38	n/a	Matrix Spike
FA78549-16MSD	Z62315.D	09/13/20 19:57	n/a	Matrix Spike Duplicate
FA78576-2MS	Z62316.D	09/13/20 20:16	n/a	Matrix Spike
FA78576-2MSD	Z62317.D	09/13/20 20:35	n/a	Matrix Spike Duplicate
VZ2417-ECC2414	Z62318.D	09/13/20 20:54	n/a	Ending cal 5

Run Sequence Report

Job Number: FA78549
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Run ID: VZ2418 **Method:** SW846 8260B BY SIM **Instrument ID:** GCMSZ

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
VZ2418-BFB	Z62321.D	09/14/20 11:56	n/a	BFB Tune
VZ2418-CC2414	Z62322.D	09/14/20 12:22	n/a	Continuing cal 5
VZ2418-BS	Z62323.D	09/14/20 13:18	n/a	Blank Spike
VZ2418-MB	Z62325.D	09/14/20 13:57	n/a	Method Blank
FA78549-30	Z62326.D	09/14/20 15:04	n/a	2036YOU2406F
FA78549-31	Z62327.D	09/14/20 15:23	n/a	2036YOU2407D
FA78549-32	Z62328.D	09/14/20 15:42	n/a	2036YOU2408F
FA78549-33	Z62329.D	09/14/20 16:02	n/a	2036YOU2409F
FA78549-34	Z62330.D	09/14/20 16:21	n/a	2036YOU2410F
FA78549-35	Z62331.D	09/14/20 16:41	n/a	2036YOU2411F
FA78549-36	Z62332.D	09/14/20 17:00	n/a	2036YOU2412F
FA78549-37	Z62333.D	09/14/20 17:19	n/a	2036YOU2413F
FA78551-15	Z62334.D	09/14/20 17:38	n/a	(used for QC only; not part of job FA78549)
FA78551-15MS	Z62335.D	09/14/20 17:57	n/a	Matrix Spike
FA78551-15MSD	Z62336.D	09/14/20 18:16	n/a	Matrix Spike Duplicate
FA78549-38	Z62337.D	09/14/20 18:36	n/a	2036YOU2414F
FA78549-39	Z62338.D	09/14/20 18:55	n/a	2036YOU2417F
FA78549-40	Z62339.D	09/14/20 19:14	n/a	2036YOU2418F
FA78549-41	Z62340.D	09/14/20 19:33	n/a	2036YOU2419C
FA78549-42	Z62341.D	09/14/20 19:52	n/a	2036YOU2420F
FA78551-16	Z62342.D	09/14/20 20:12	n/a	(used for QC only; not part of job FA78549)
FA78551-16MS	Z62343.D	09/14/20 20:31	n/a	Matrix Spike
FA78551-16MSD	Z62344.D	09/14/20 20:50	n/a	Matrix Spike Duplicate
ZZZZZZ	Z62345.D	09/14/20 21:09	n/a	(unrelated sample)
ZZZZZZ	Z62346.D	09/14/20 21:28	n/a	(unrelated sample)
ZZZZZZ	Z62347.D	09/14/20 21:48	n/a	(unrelated sample)
ZZZZZZ	Z62348.D	09/14/20 22:07	n/a	(unrelated sample)
ZZZZZZ	Z62349.D	09/14/20 22:26	n/a	(unrelated sample)
VZ2418-ECC2414	Z62350.D	09/14/20 22:45	n/a	Ending cal 5

MS Volatiles

Raw Data

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-11-2020\vo2354\
 Data File : O61159.d
 Acq On : 10 Sep 2020 9:56 am
 Operator : melissam
 Sample : FA78549-1
 Misc : MS47173,VO2354,,,,,
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 11 05:42:49 2020
 Quant Method : C:\msdchem\1\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)

Internal Standards						
1) Fluorobenzene	7.346	96	208024	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.447	117	146146	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.074	65	101570	5.56	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	111.20%	
19) Toluene-d8	8.900	98	182708	5.11	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	102.20%	
Target Compounds						
3) Chloromethane	2.803	50	18043	0.60	ug/L	89
5) Methylene Chloride	4.703	49	134298	2.65	ug/L	87
9) Chloroform	6.333	83	714	0.02	ug/L #	1
21) Tetrachloroethene	9.343	166	29946	2.11	ug/L	94

(#) = qualifier out of range (m) = manual integration (+) = signals summed

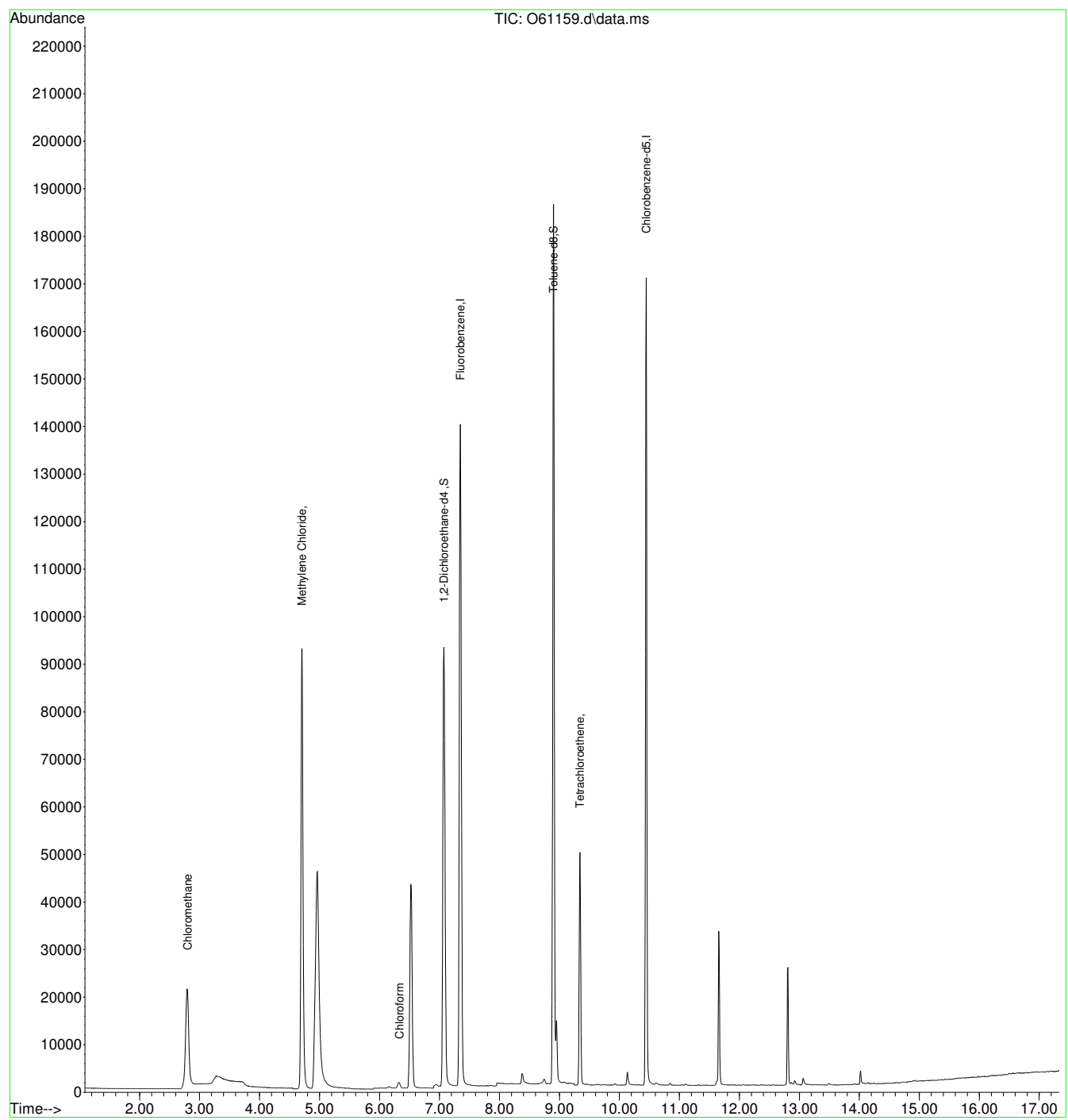
7.1.1
7



Quantitation Report (QT Reviewed)

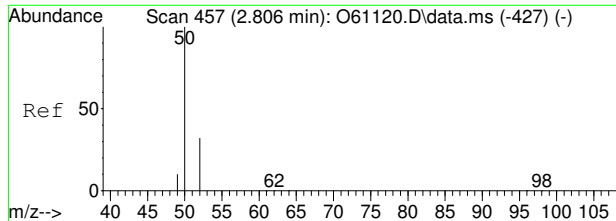
Data Path : C:\msdchem\1\data\johnm\September 2020\09-11-2020\vo2354\
Data File : O61159.d
Acq On : 10 Sep 2020 9:56 am
Operator : melissam
Sample : FA78549-1
Misc : MS47173,VO2354,,,,,
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 11 05:42:49 2020
Quant Method : C:\msdchem\1\methods\SIMCL090820.M
Quant Title : Standard Methods 6200B
QLast Update : Wed Sep 09 12:10:38 2020
Response via : Initial Calibration



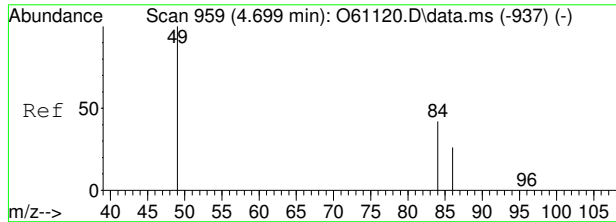
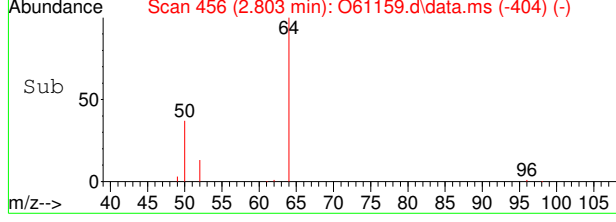
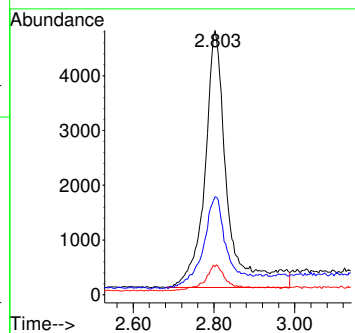
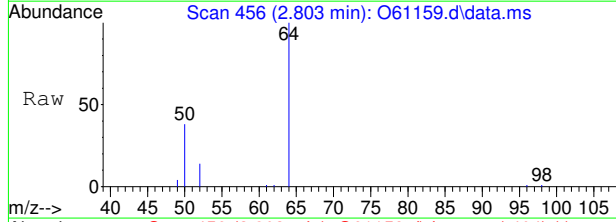
7.1.1
7





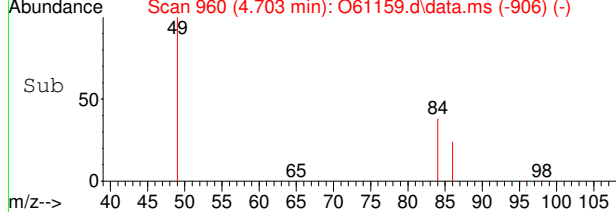
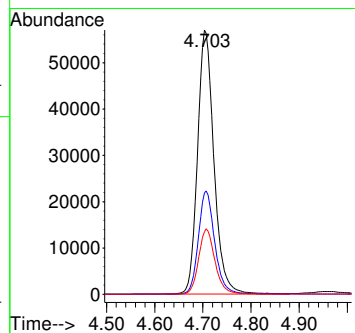
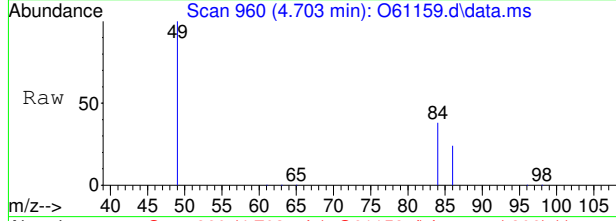
#3
 Chloromethane
 Concen: 0.60 ug/L
 RT: 2.803 min Scan# 456
 Delta R.T. -0.004 min
 Lab File: O61159.d
 Acq: 10 Sep 2020 9:56 am

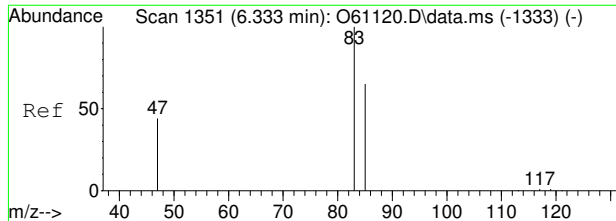
Tgt Ion	Resp	Lower	Upper
50	18043		
52	35.3	7.8	47.8
49	9.2	0.0	30.5



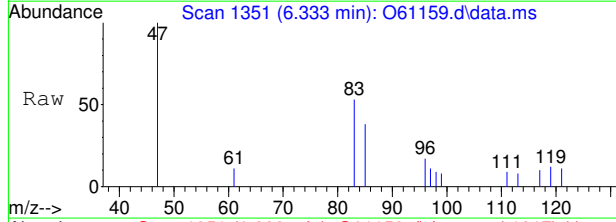
#5
 Methylene Chloride
 Concen: 2.65 ug/L
 RT: 4.703 min Scan# 960
 Delta R.T. 0.004 min
 Lab File: O61159.d
 Acq: 10 Sep 2020 9:56 am

Tgt Ion	Resp	Lower	Upper
49	134298		
84	38.3	17.9	77.9
86	23.6	0.0	59.8



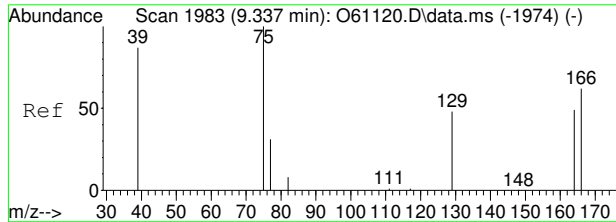
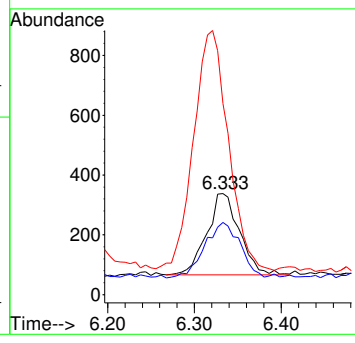
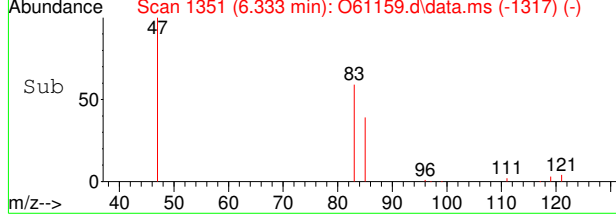


#9
 Chloroform
 Concen: 0.02 ug/L
 RT: 6.333 min Scan# 1351
 Delta R.T. 0.000 min
 Lab File: O61159.d
 Acq: 10 Sep 2020 9:56 am

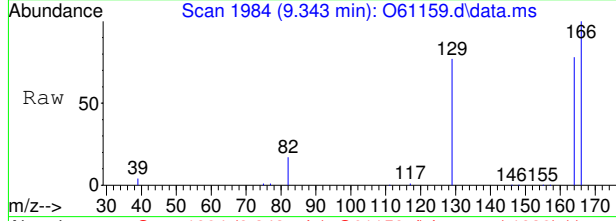


Tgt Ion: 83 Resp: 714

Ion	Ratio	Lower	Upper
83	100		
85	68.4	33.0	93.0
47	200.7	8.1	68.1#

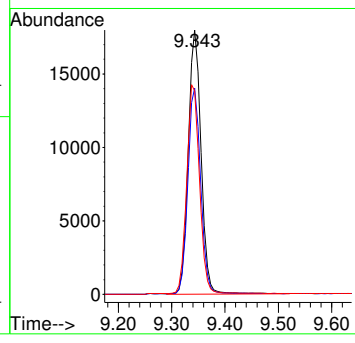
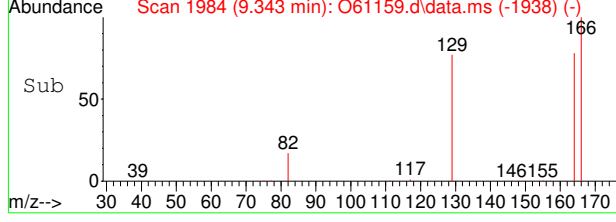


#21
 Tetrachloroethene
 Concen: 2.11 ug/L
 RT: 9.343 min Scan# 1984
 Delta R.T. 0.006 min
 Lab File: O61159.d
 Acq: 10 Sep 2020 9:56 am



Tgt Ion: 166 Resp: 29946

Ion	Ratio	Lower	Upper
166	100		
164	78.0	47.3	107.3
129	76.8	37.5	97.5



7.1.1
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Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-11-2020\vo2354\
Data File : O61160.d
Acq On : 10 Sep 2020 10:17 am
Operator : melissam
Sample : FA78549-2
Misc : MS47173,VO2354,,,,,
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 14 07:50:06 2020
Quant Method : C:\msdchem\1\methods\SIMCL090820.M
Quant Title : Standard Methods 6200B
QLast Update : Wed Sep 09 12:10:38 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)	

Internal Standards							
1) Fluorobenzene	7.346	96	199847	5.00	ug/L	0.00	
18) Chlorobenzene-d5	10.447	117	140702	5.00	ug/L	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.073	65	98359	5.60	ug/L	0.00	
Spiked Amount	5.000	Range 74 - 125	Recovery	=	112.00%		
19) Toluene-d8	8.900	98	175739	5.11	ug/L	0.00	
Spiked Amount	5.000	Range 88 - 111	Recovery	=	102.20%		
Target Compounds							
3) Chloromethane	2.803	50	16734	0.58	ug/L	93	Qvalue
4) 1,1-Dichloroethene	4.096	61	2760	0.10	ug/L	76	
5) Methylene Chloride	4.707	49	6004	0.12	ug/L	87	
7) 1,1-Dichloroethane	5.514	63	13817	0.37	ug/L	98	
8) cis-1,2-Dichloroethene	6.066	96	896	0.05	ug/L #	64	
9) Chloroform	6.333	83	7659	0.25	ug/L #	79	
12) Benzene	6.937	78	1326m	0.02	ug/L		
15) Trichloroethene	7.518	95	32318	1.86	ug/L	98	
16) 1,2-Dichloropropane	8.043	63	442m	0.02	ug/L		
21) Tetrachloroethene	9.343	166	1191m	0.09	ug/L		

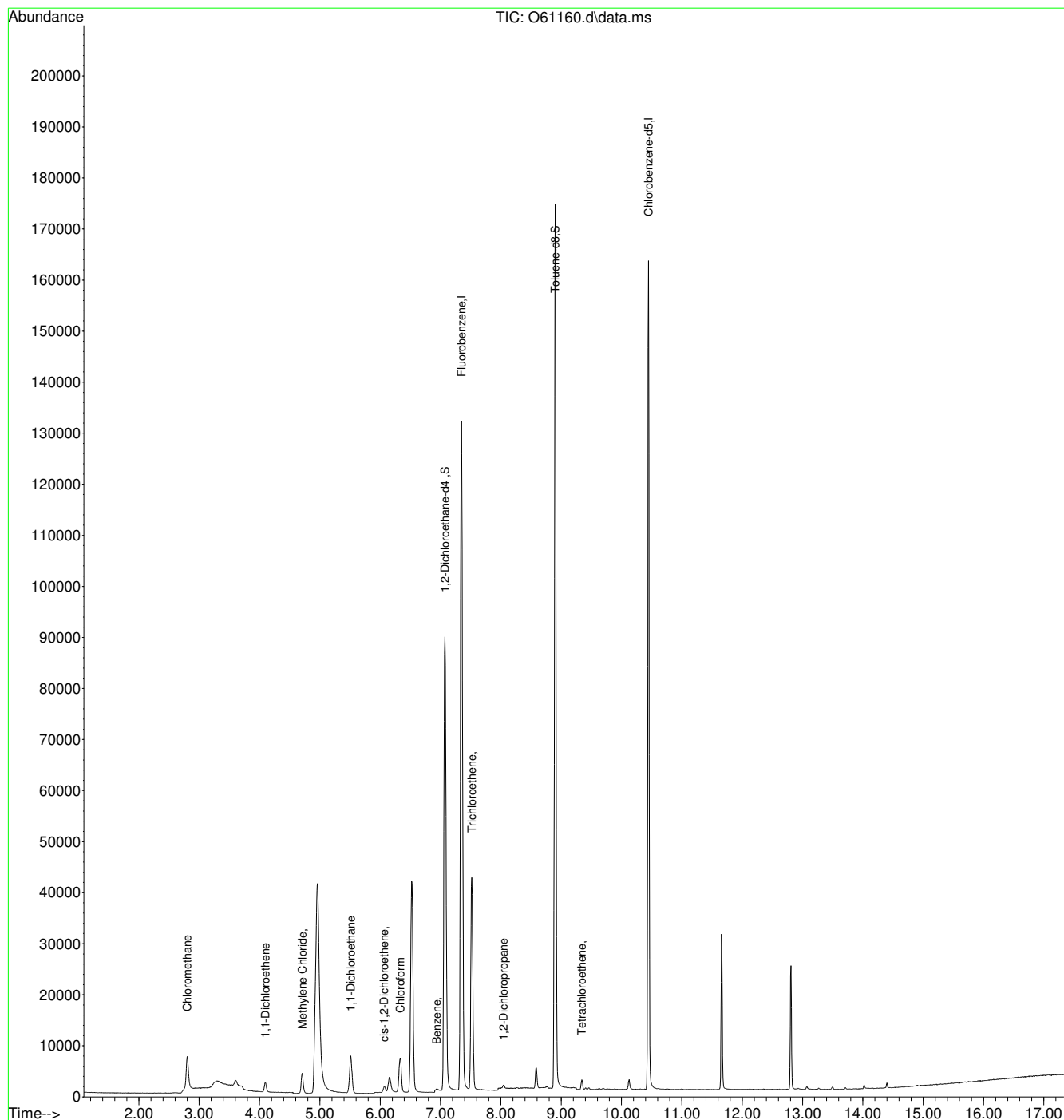
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.12
7

Quantitation Report (QT Reviewed)

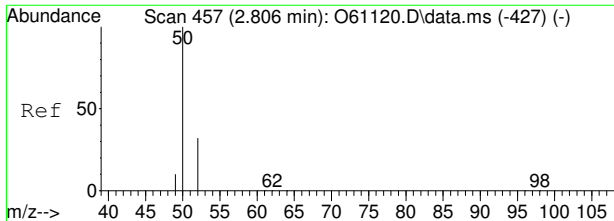
Data Path : C:\msdchem\1\data\johnm\September 2020\09-11-2020\vo2354\
 Data File : O61160.d
 Acq On : 10 Sep 2020 10:17 am
 Operator : melissam
 Sample : FA78549-2
 Misc : MS47173,VO2354,,,,,
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 14 07:50:06 2020
 Quant Method : C:\msdchem\1\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration



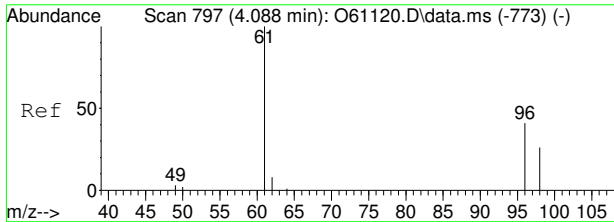
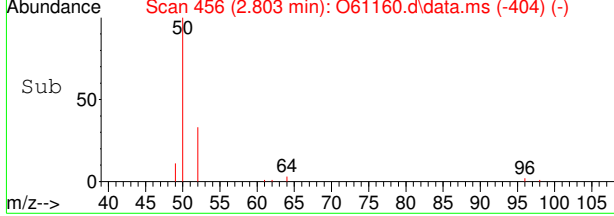
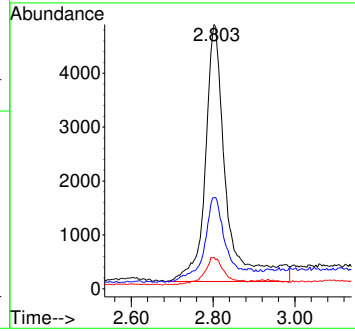
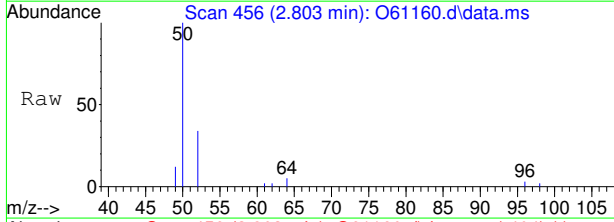
7.1.2
7





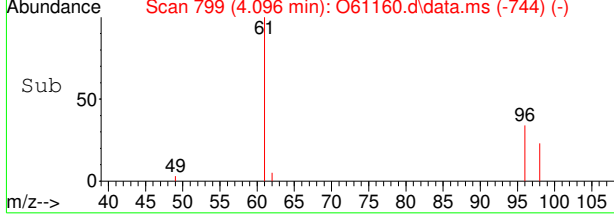
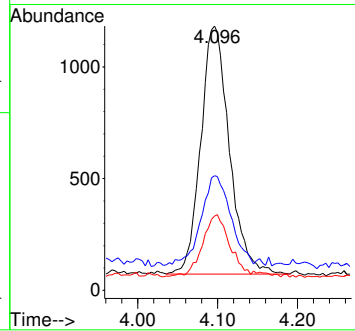
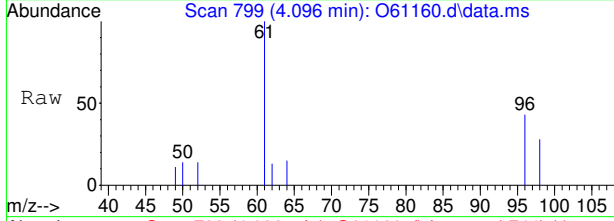
#3
 Chloromethane
 Concen: 0.58 ug/L
 RT: 2.803 min Scan# 456
 Delta R.T. -0.004 min
 Lab File: O61160.d
 Acq: 10 Sep 2020 10:17 am

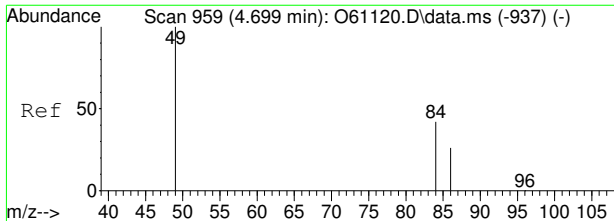
Tgt Ion	Resp	Lower	Upper
50	16734		
52	32.6	7.8	47.8
49	10.5	0.0	30.5



#4
 1,1-Dichloroethene
 Concen: 0.10 ug/L
 RT: 4.096 min Scan# 799
 Delta R.T. 0.008 min
 Lab File: O61160.d
 Acq: 10 Sep 2020 10:17 am

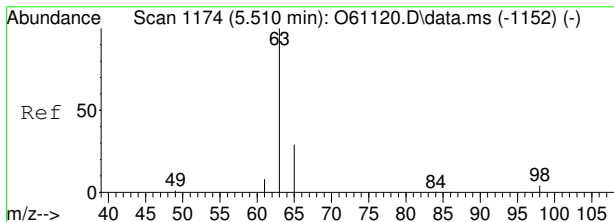
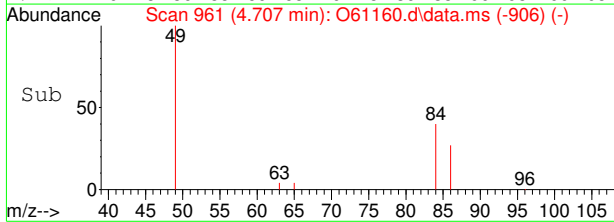
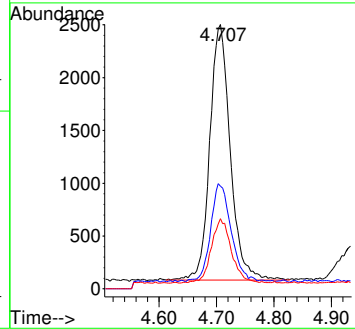
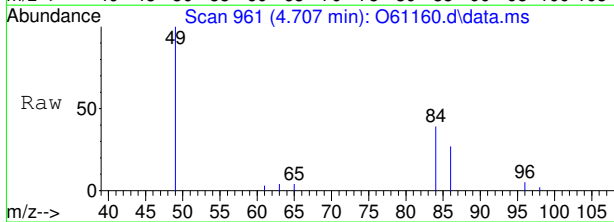
Tgt Ion	Resp	Lower	Upper
61	2760		
96	35.9	25.4	85.4
98	24.7	5.9	65.9





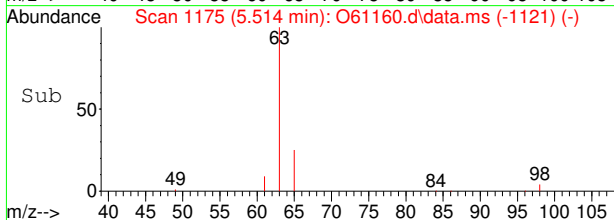
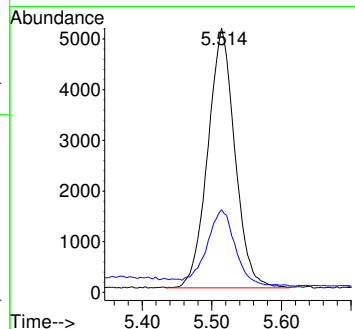
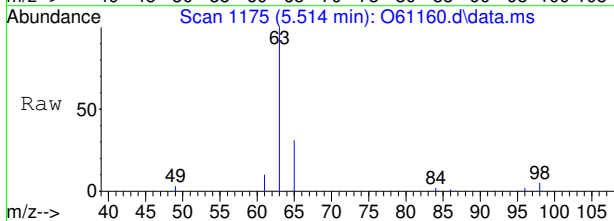
#5
 Methylene Chloride
 Concen: 0.12 ug/L
 RT: 4.707 min Scan# 961
 Delta R.T. 0.008 min
 Lab File: O61160.d
 Acq: 10 Sep 2020 10:17 am

Tgt Ion	Ratio	Lower	Upper
49	100		
84	37.7	17.9	77.9
86	25.1	0.0	59.8

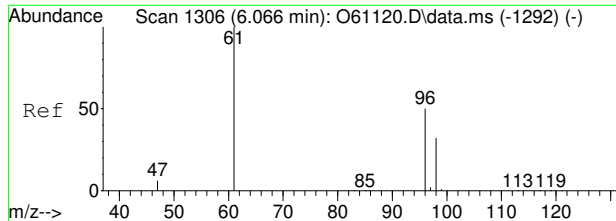


#7
 1,1-Dichloroethane
 Concen: 0.37 ug/L
 RT: 5.514 min Scan# 1175
 Delta R.T. 0.004 min
 Lab File: O61160.d
 Acq: 10 Sep 2020 10:17 am

Tgt Ion	Ratio	Lower	Upper
63	100		
65	29.4	0.7	60.7

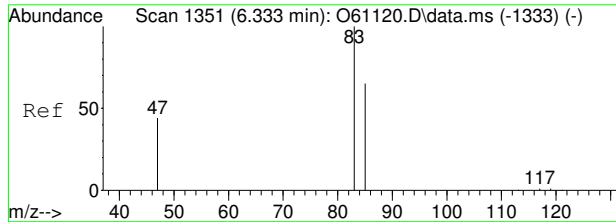
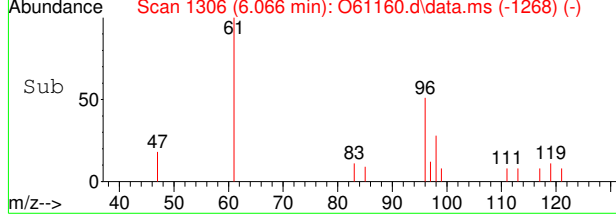
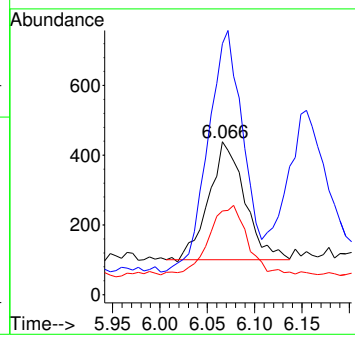
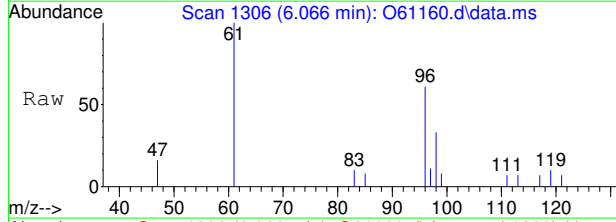


7.12
7



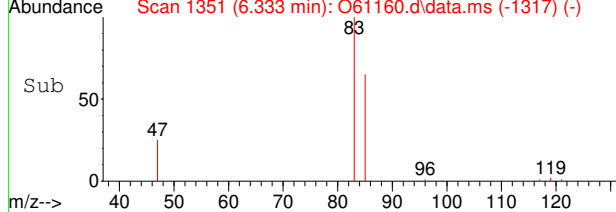
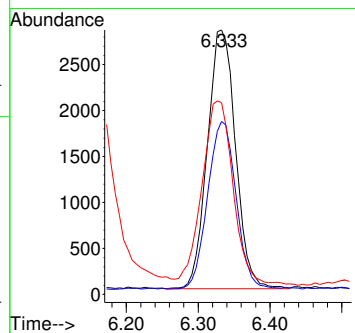
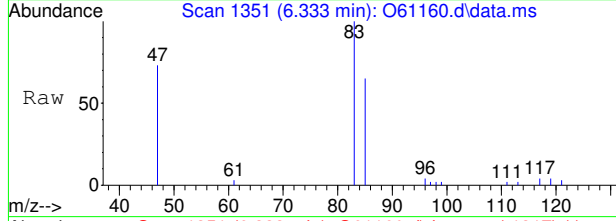
#8
 cis-1,2-Dichloroethene
 Concen: 0.05 ug/L
 RT: 6.066 min Scan# 1306
 Delta R.T. 0.000 min
 Lab File: O61160.d
 Acq: 10 Sep 2020 10:17 am

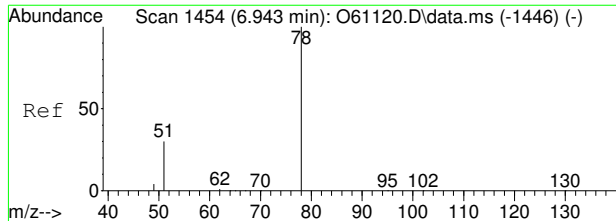
Tgt Ion	Resp	Lower	Upper
96	896		
61	192.3	107.0	167.0#
98	51.9	34.1	94.1



#9
 Chloroform
 Concen: 0.25 ug/L
 RT: 6.333 min Scan# 1351
 Delta R.T. -0.000 min
 Lab File: O61160.d
 Acq: 10 Sep 2020 10:17 am

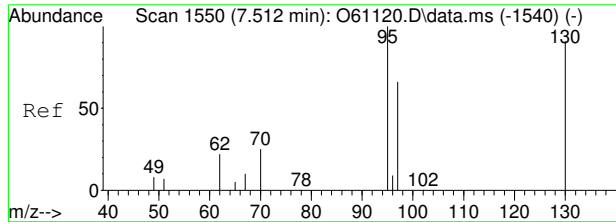
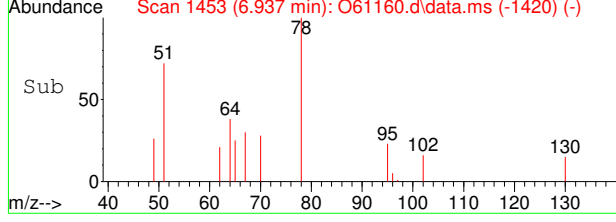
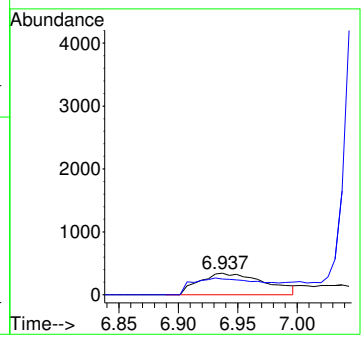
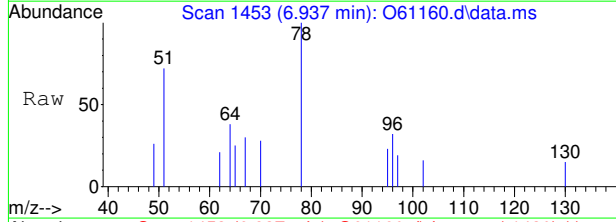
Tgt Ion	Resp	Lower	Upper
83	7659		
83	100		
85	64.7	33.0	93.0
47	70.1	8.1	68.1#





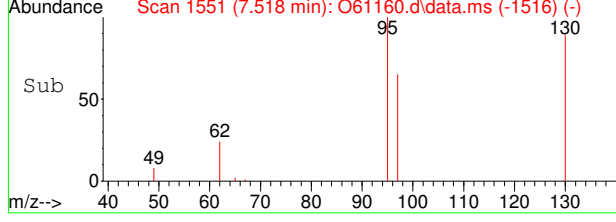
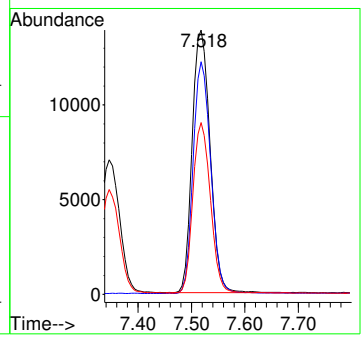
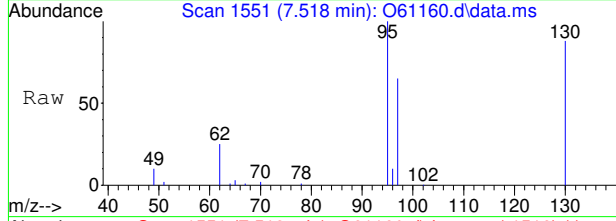
#12
Benzene
Concen: 0.02 ug/L m
RT: 6.937 min Scan# 1453
Delta R.T. -0.006 min
Lab File: O61160.d
Acq: 10 Sep 2020 10:17 am

Tgt Ion	Ratio	Lower	Upper
78	100		
51	72.3	0.0	56.2#



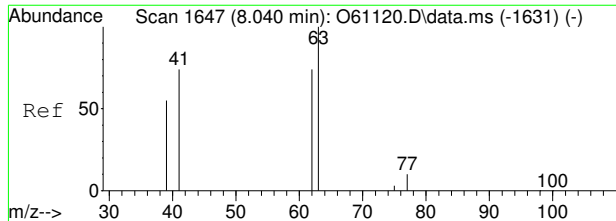
#15
Trichloroethene
Concen: 1.86 ug/L
RT: 7.518 min Scan# 1551
Delta R.T. 0.006 min
Lab File: O61160.d
Acq: 10 Sep 2020 10:17 am

Tgt Ion	Ratio	Lower	Upper
95	100		
130	88.2	60.4	120.4
97	64.9	34.6	94.6

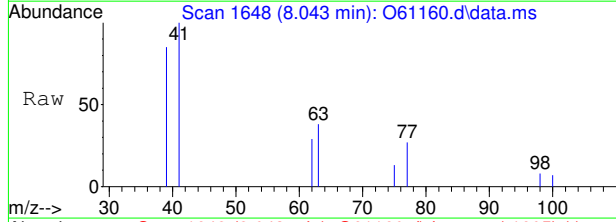


7.12
7



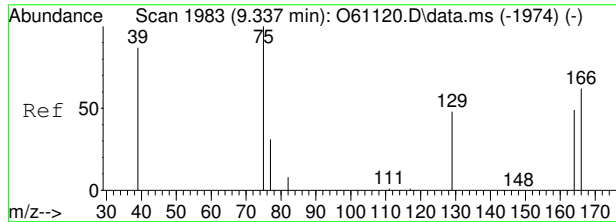
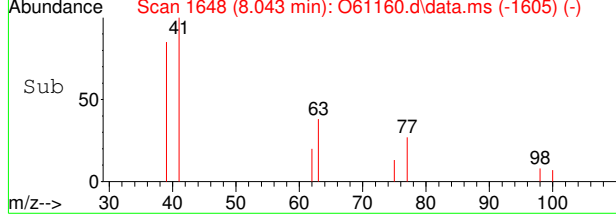
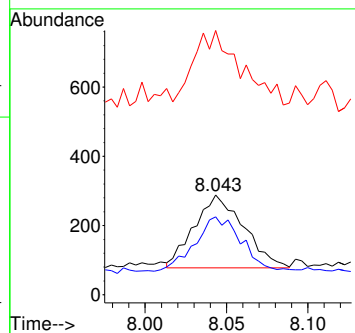


#16
1,2-Dichloropropane
Concen: 0.02 ug/L m
RT: 8.043 min Scan# 1648
Delta R.T. 0.004 min
Lab File: O61160.d
Acq: 10 Sep 2020 10:17 am

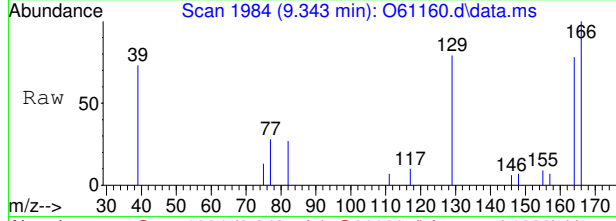


Tgt Ion: 63 Resp: 442

Ion	Ratio	Lower	Upper
63	100		
62	78.1	42.7	102.7
41	265.3	54.5	114.5#

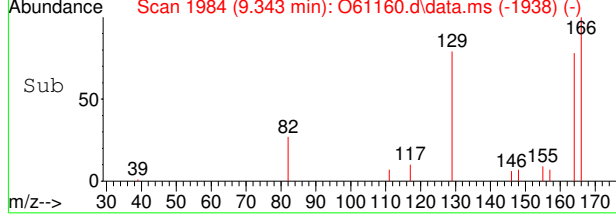
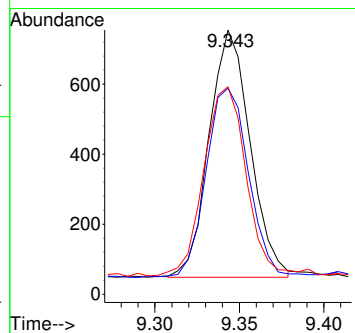


#21
Tetrachloroethene
Concen: 0.09 ug/L m
RT: 9.343 min Scan# 1984
Delta R.T. 0.006 min
Lab File: O61160.d
Acq: 10 Sep 2020 10:17 am



Tgt Ion: 166 Resp: 1191

Ion	Ratio	Lower	Upper
166	100		
164	78.0	47.3	107.3
129	78.5	37.5	97.5



Manual Integration Approval Summary

Sample Number: FA78549-2 **Method:** SW846 8260B BY SIM
Lab FileID: O61160.D **Analyst approved:** 09/14/20 08:06 John Matthew de Guzman
Injection Time: 09/10/20 10:17 **Supervisor approved:** 09/18/20 14:37 Melissa Mangual

Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzene	71-43-2		6.94	Poor instrument integration
1,2-Dichloropropane	78-87-5		8.04	Poor instrument integration
Tetrachloroethylene	127-18-4		9.34	Poor instrument integration

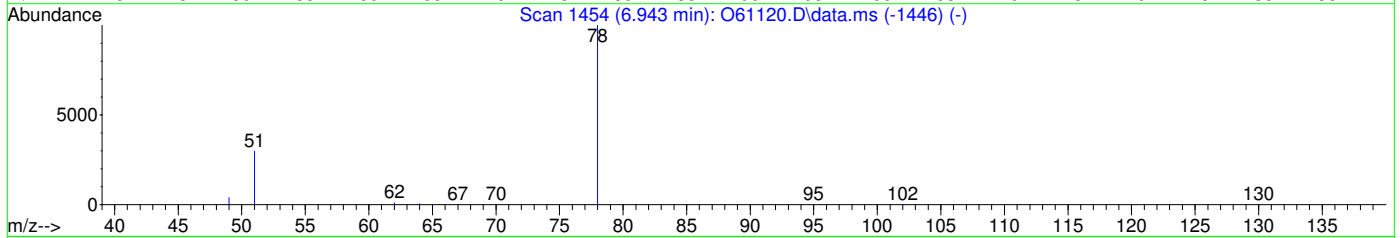
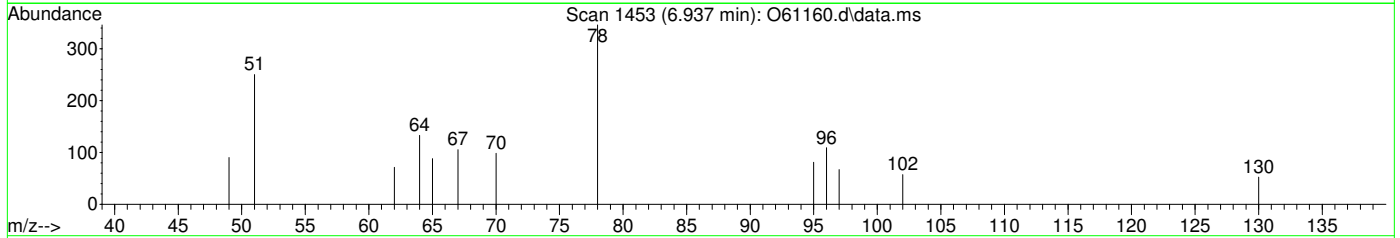
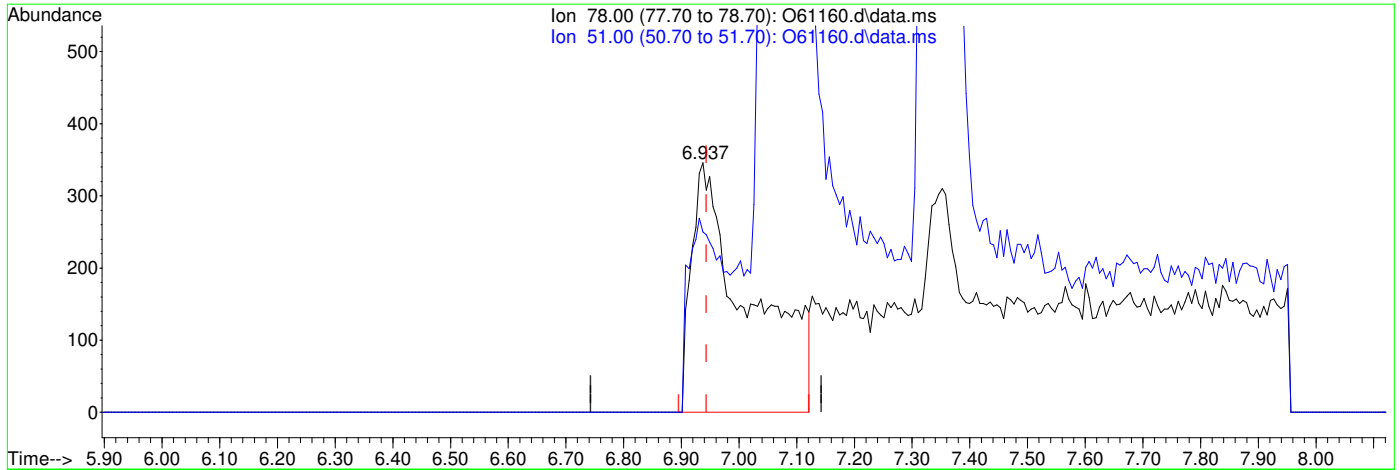
7.1.2.1

7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-11-2020\vo2354\
 Data File : O61160.d
 Acq On : 10 Sep 2020 10:17 am
 Operator : melissam
 Sample : FA78549-2
 Misc : MS47173,VO2354,,,,,
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 14 07:45:48 2020
 Quant Method : C:\msdchem\1\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration



(12) Benzene ()
 6.937min (-0.006) 0.04ug/L
 response 2389

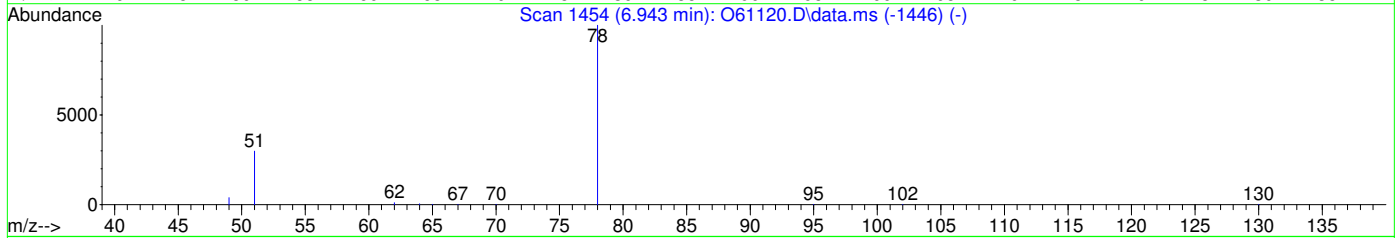
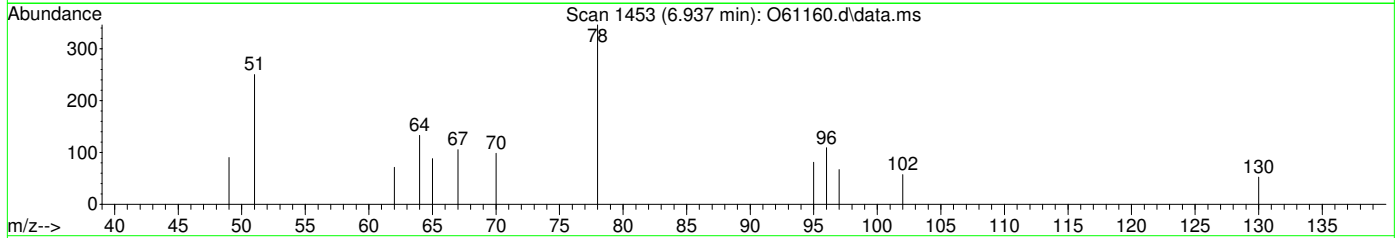
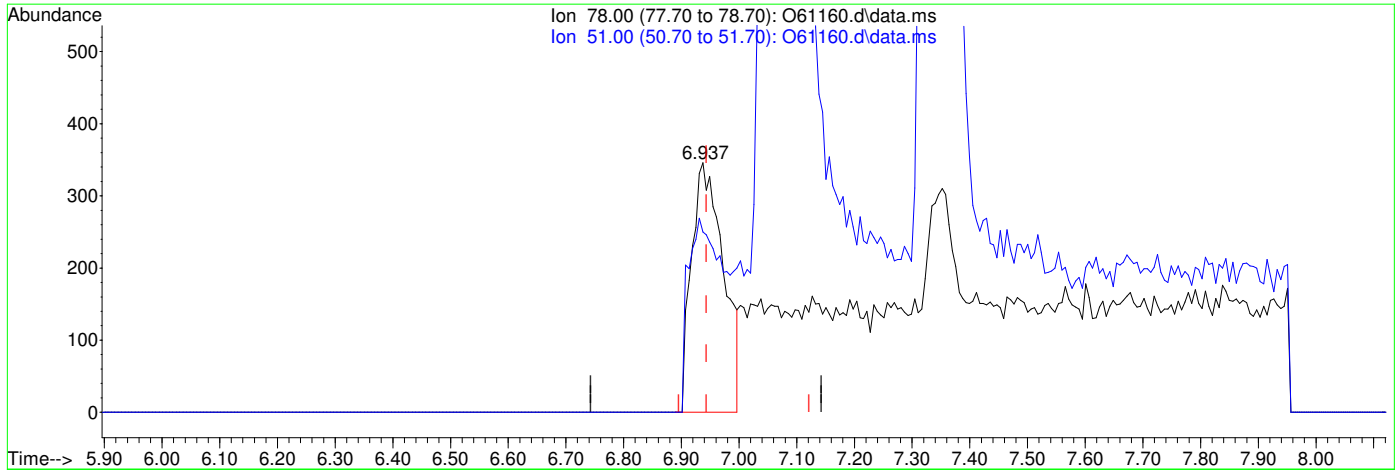
Ion	Exp%	Act%
78.00	100	100
51.00	26.20	72.25#
0.00	0.00	0.00
0.00	0.00	0.00

7.1.22
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-11-2020\vo2354\
 Data File : O61160.d
 Acq On : 10 Sep 2020 10:17 am
 Operator : melissam
 Sample : FA78549-2
 Misc : MS47173,VO2354,,,,,
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 14 07:45:48 2020
 Quant Method : C:\msdchem\1\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration



(12) Benzene ()

6.937min (-0.006) 0.02ug/L m

response 1326

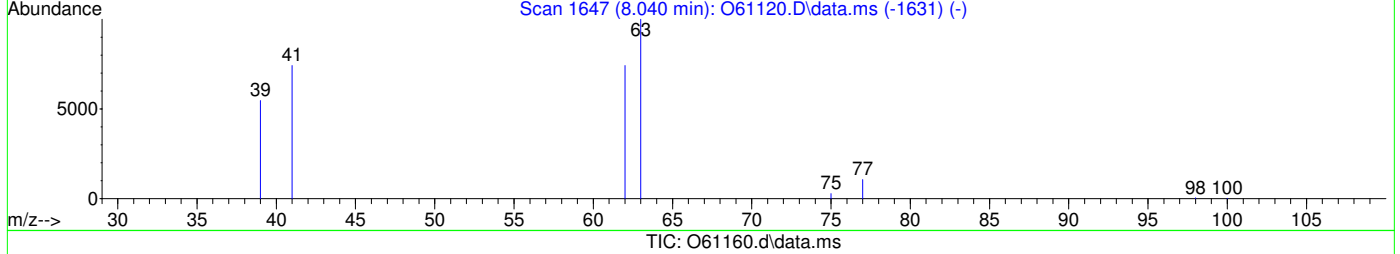
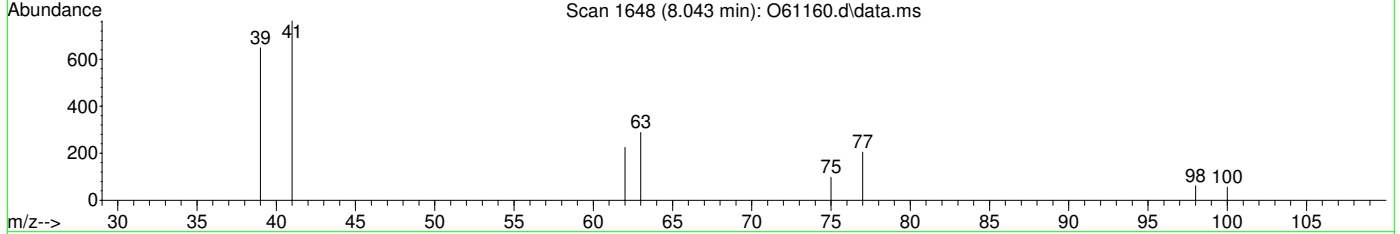
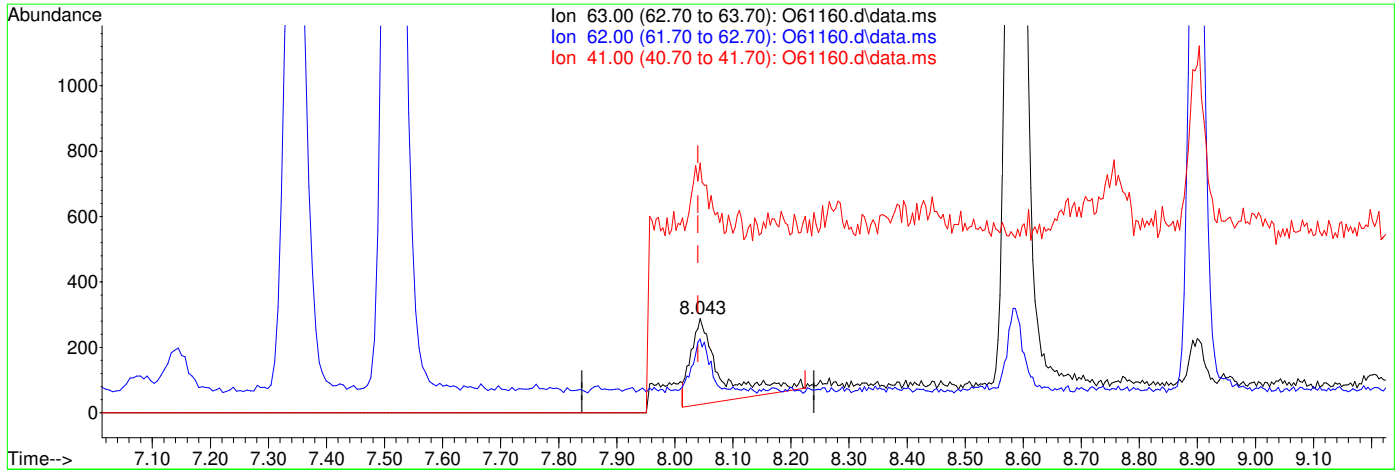
Ion	Exp%	Act%
78.00	100	100
51.00	26.20	72.25#
0.00	0.00	0.00
0.00	0.00	0.00

7.1.2.3
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-11-2020\vo2354\
 Data File : O61160.d
 Acq On : 10 Sep 2020 10:17 am
 Operator : melissam
 Sample : FA78549-2
 Misc : MS47173,VO2354,,,,,
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 14 07:45:48 2020
 Quant Method : C:\msdchem\1\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration



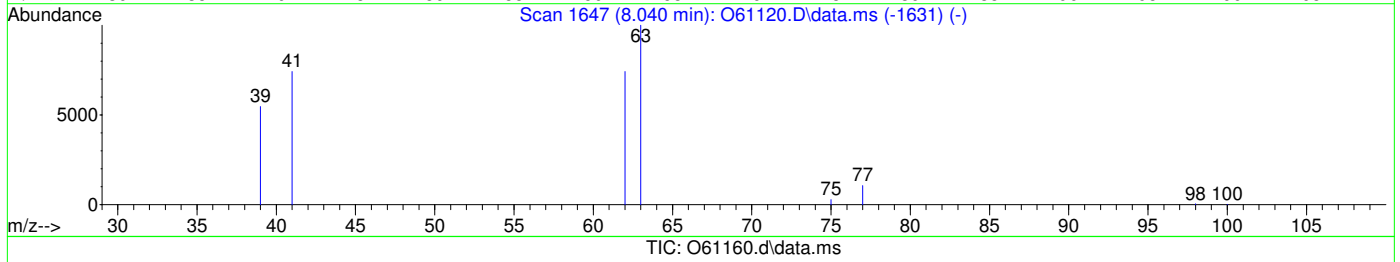
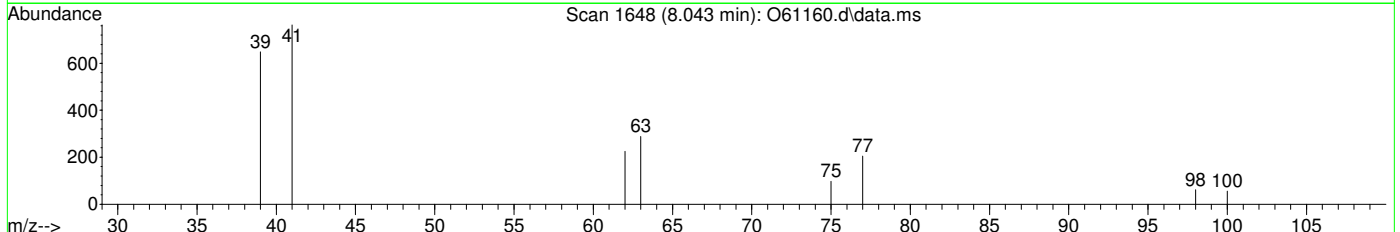
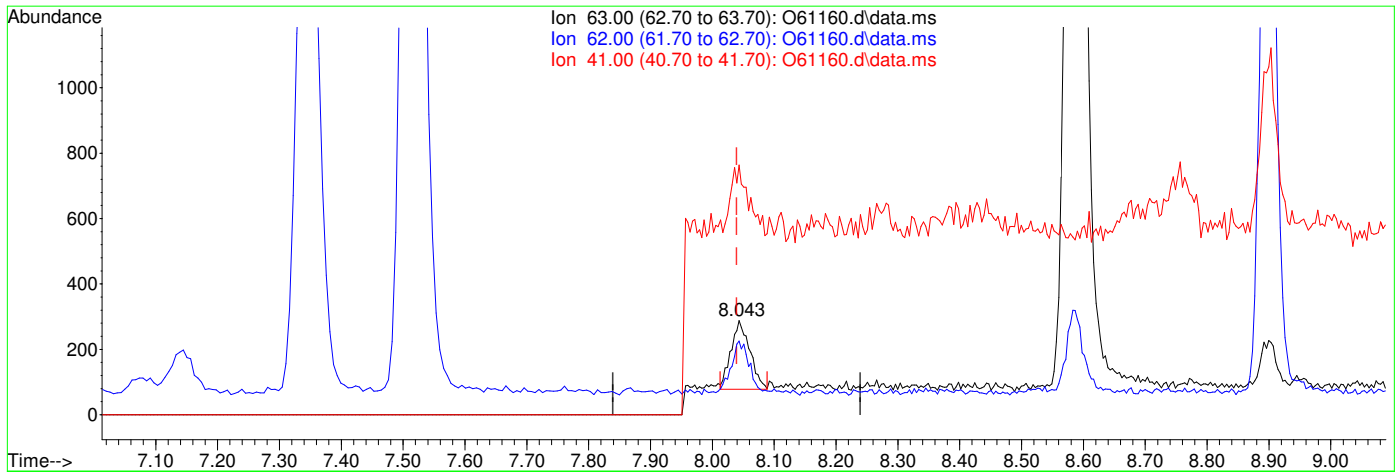
(16) 1,2-Dichloropropane
 8.043min (+0.004) 0.04ug/L
 response 924

Ion	Exp%	Act%
63.00	100	100
62.00	72.70	75.59
41.00	84.50	78.87
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-11-2020\vo2354\
Data File : O61160.d
Acq On : 10 Sep 2020 10:17 am
Operator : melissam
Sample : FA78549-2
Misc : MS47173,VO2354,,,,,
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 14 07:45:48 2020
Quant Method : C:\msdchem\1\methods\SIMCL090820.M
Quant Title : Standard Methods 6200B
QLast Update : Wed Sep 09 12:10:38 2020
Response via : Initial Calibration



(16) 1,2-Dichloropropane
8.043min (+0.004) 0.02ug/L m
response 442
lon Exp% Act%
63.00 100 100
62.00 72.70 78.13
41.00 84.50 265.28#
0.00 0.00 0.00

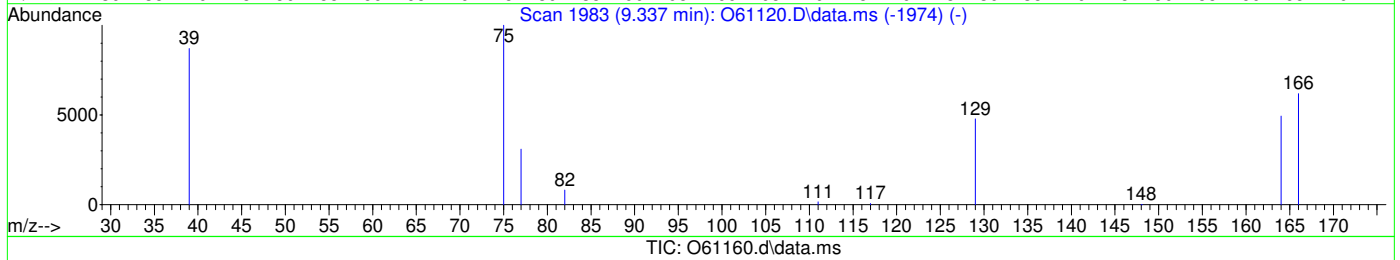
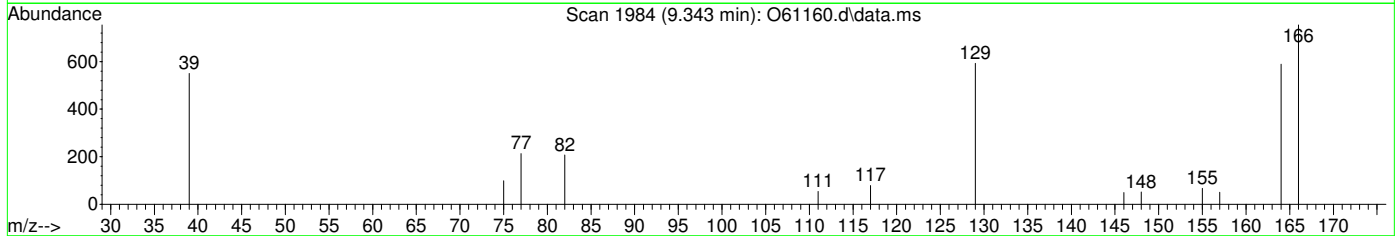
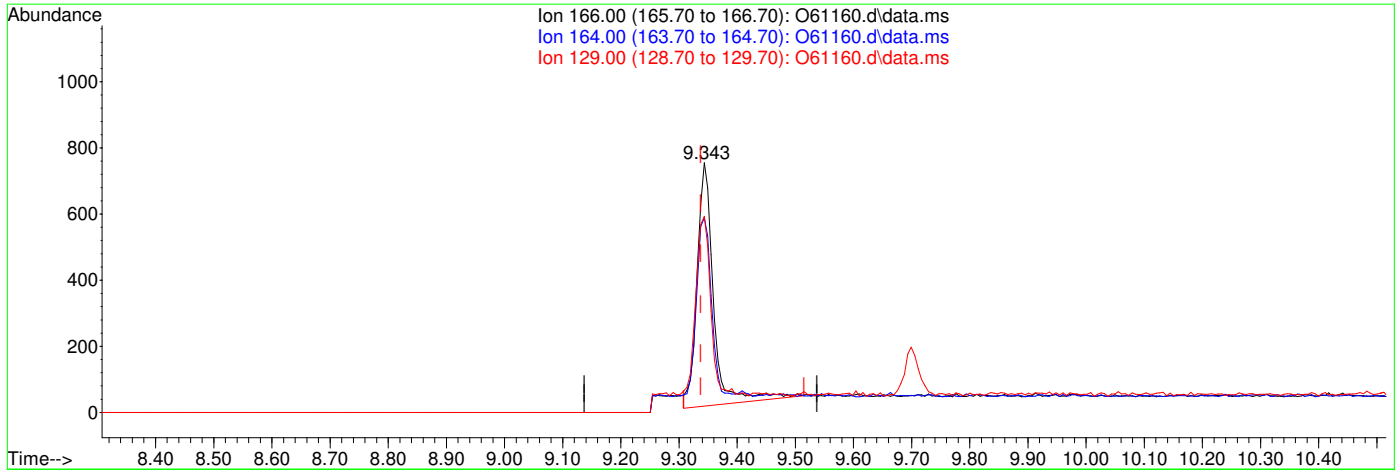


7.1.2.5
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-11-2020\vo2354\
 Data File : O61160.d
 Acq On : 10 Sep 2020 10:17 am
 Operator : melissam
 Sample : FA78549-2
 Misc : MS47173,VO2354,,,,,
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 14 07:45:48 2020
 Quant Method : C:\msdchem\1\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration



(21) Tetrachloroethene ()

9.343min (+0.006) 0.11ug/L

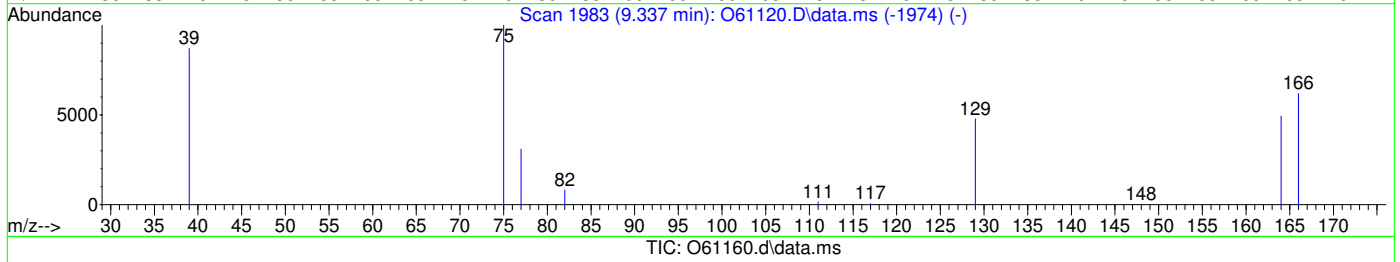
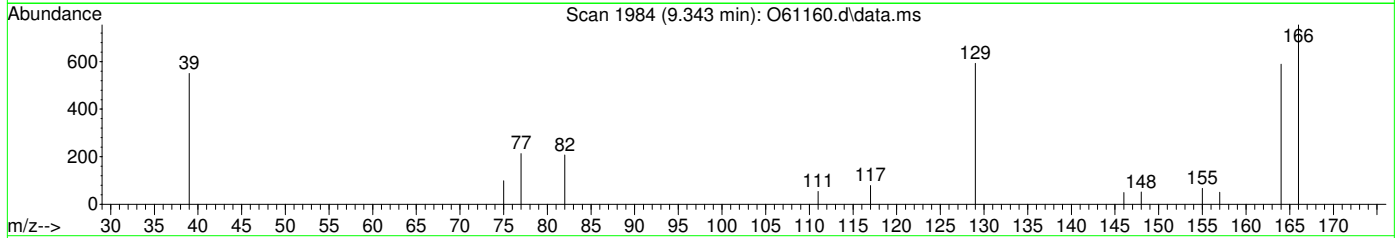
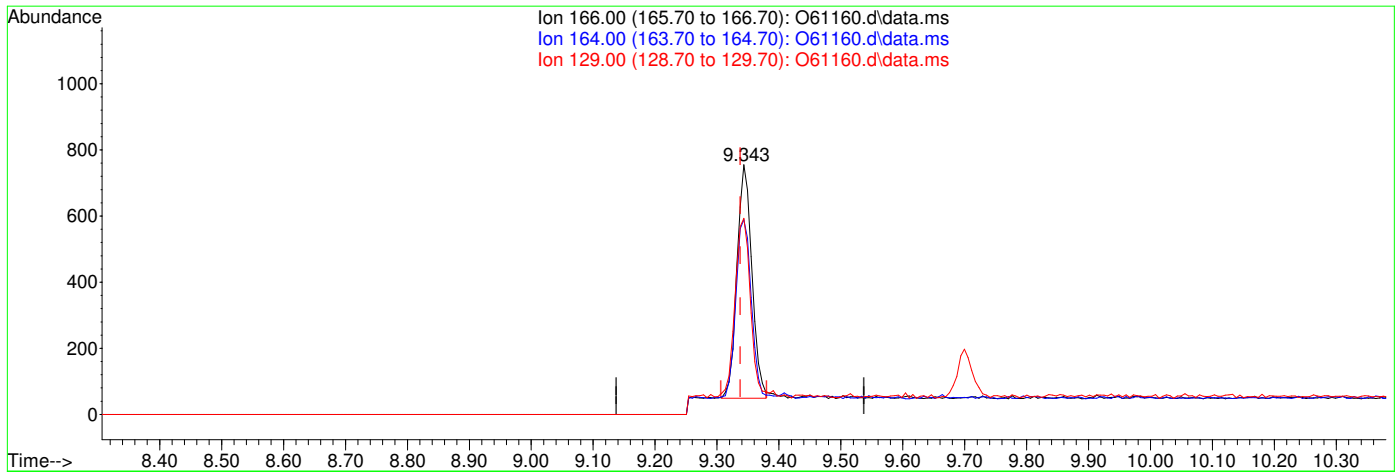
response 1446

Ion	Exp%	Act%
166.00	100	100
164.00	77.30	76.56
129.00	67.50	75.28
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-11-2020\vo2354\
Data File : O61160.d
Acq On : 10 Sep 2020 10:17 am
Operator : melissam
Sample : FA78549-2
Misc : MS47173,VO2354,,,,,
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 14 07:45:48 2020
Quant Method : C:\msdchem\1\methods\SIMCL090820.M
Quant Title : Standard Methods 6200B
QLast Update : Wed Sep 09 12:10:38 2020
Response via : Initial Calibration



(21) Tetrachloroethene ()
9.343min (+0.006) 0.09ug/L m
response 1191

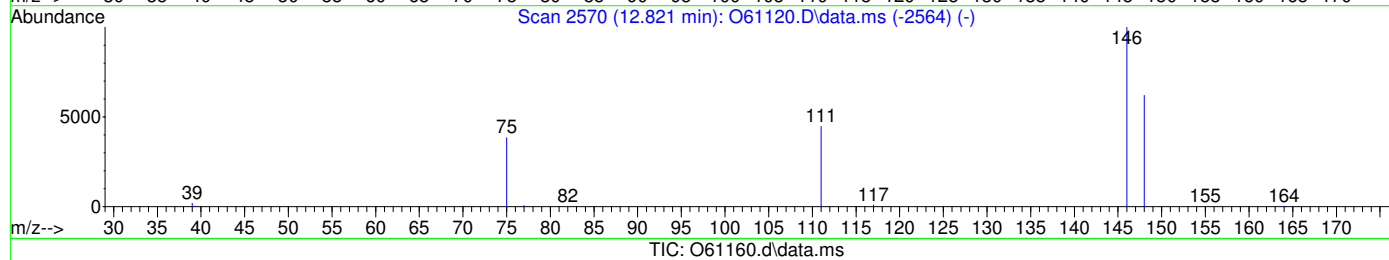
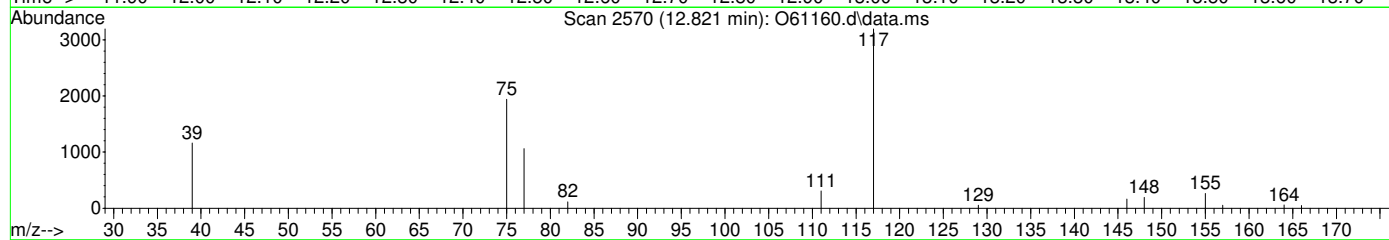
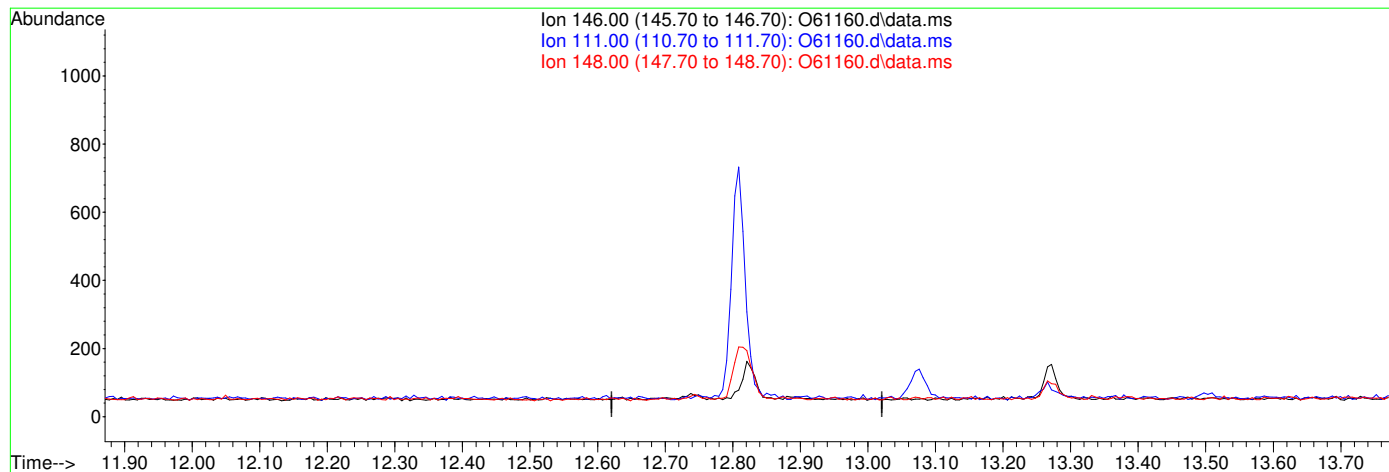
Ion	Exp%	Act%
166.00	100	100
164.00	77.30	78.01
129.00	67.50	78.54
0.00	0.00	0.00

7.1.27
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-11-2020\vo2354\
 Data File : O61160.d
 Acq On : 10 Sep 2020 10:17 am
 Operator : melissam
 Sample : FA78549-2
 Misc : MS47173,VO2354,,,,,
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 14 07:45:48 2020
 Quant Method : C:\msdchem\1\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration



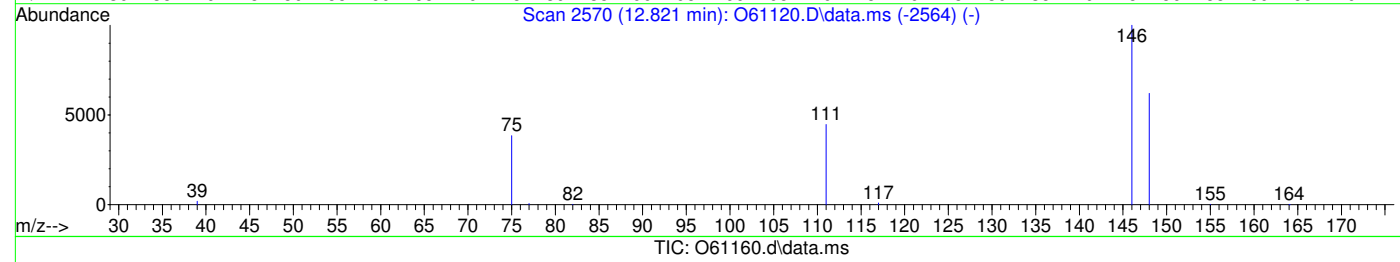
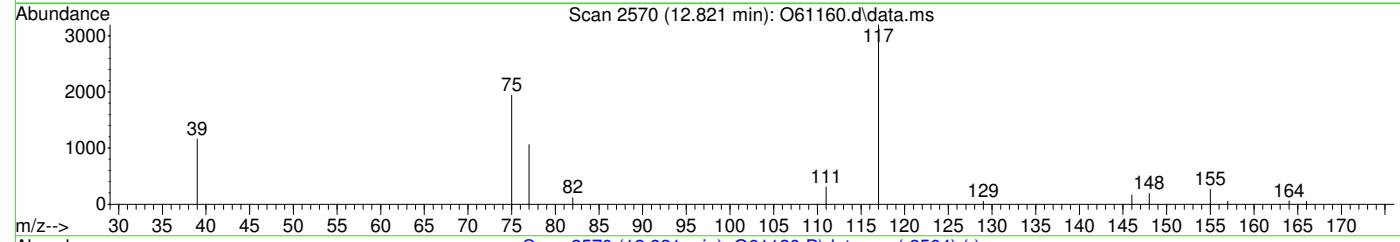
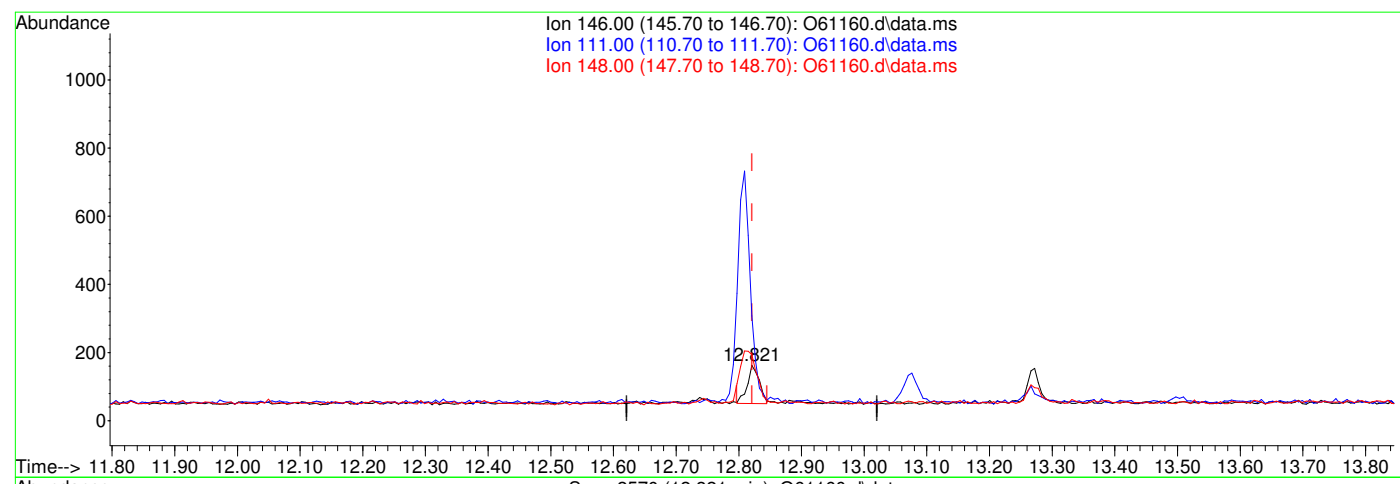
(22) 1,4-Dichlorobenzene
 12.821min (-12.821) 0.00ug/L
 response 0

Ion	Exp%	Act%
146.00	100	0.00
111.00	37.00	0.00#
148.00	63.70	0.00#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-11-2020\vo2354\
Data File : O61160.d
Acq On : 10 Sep 2020 10:17 am
Operator : melissam
Sample : FA78549-2
Misc : MS47173,VO2354,,,,,
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 14 07:45:48 2020
Quant Method : C:\msdchem\1\methods\SIMCL090820.M
Quant Title : Standard Methods 6200B
QLast Update : Wed Sep 09 12:10:38 2020
Response via : Initial Calibration



(22) 1,4-Dichlorobenzene
12.821min (-0.000) 0.01ug/L m
response 149
lon Exp% Act%
146.00 100 100
111.00 37.00 188.34#
148.00 63.70 119.02#
0.00 0.00 0.00



7.1.2.9
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-17-2020\vo2363\
 Data File : O61414.d
 Acq On : 16 Sep 2020 4:13 pm
 Operator : akarig
 Sample : FA78549-2
 Misc : MS47193,VO2363,,,,,
 ALS Vial : 15 Sample Multiplier: 1

Quant Time: Sep 17 04:53:39 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091520.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 16 09:02:25 2020
 Response via : Initial Calibration

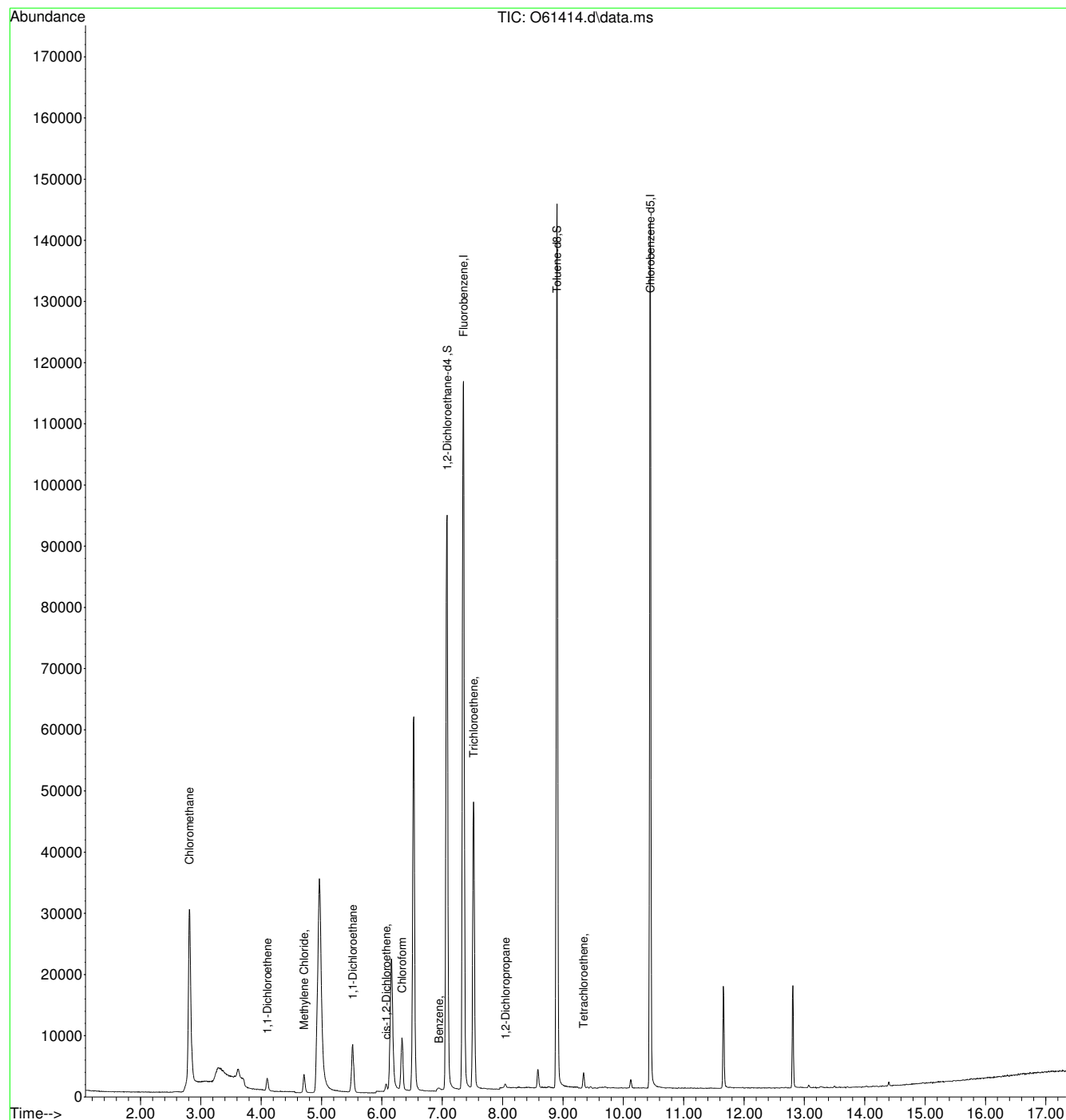
Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)	Qvalue
Internal Standards							
1) Fluorobenzene	7.352	96	174772	5.00	ug/L	0.00	
18) Chlorobenzene-d5	10.447	117	135780	5.00	ug/L	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.080	65	87817	5.96	ug/L	0.00	
Spiked Amount	5.000	Range 74 - 125	Recovery	=	119.20%		
19) Toluene-d8	8.900	98	143665	5.18	ug/L	0.00	
Spiked Amount	5.000	Range 88 - 111	Recovery	=	103.60%		
Target Compounds							
3) Chloromethane	2.810	50	64345	1.91	ug/L		100
4) 1,1-Dichloroethene	4.100	61	2413	0.09	ug/L		94
5) Methylene Chloride	4.707	49	3870	0.08	ug/L		98
7) 1,1-Dichloroethane	5.518	63	12850	0.38	ug/L		98
8) cis-1,2-Dichloroethene	6.072	96	976	0.06	ug/L		97
9) Chloroform	6.333	83	8216	0.28	ug/L		87
12) Benzene	6.949	78	1278m	0.02	ug/L		
15) Trichloroethene	7.518	95	30988	1.93	ug/L		94
16) 1,2-Dichloropropane	8.047	63	431m	0.02	ug/L		
21) Tetrachloroethene	9.343	166	1863	0.12	ug/L		95

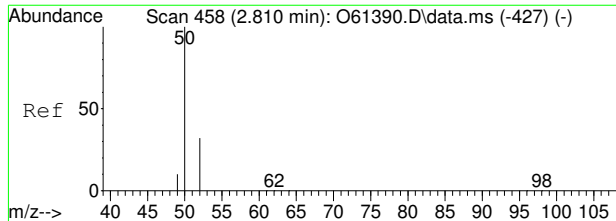
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-17-2020\vo2363\
Data File : O61414.d
Acq On : 16 Sep 2020 4:13 pm
Operator : akarig
Sample : FA78549-2
Misc : MS47193,VO2363,,,,,
ALS Vial : 15 Sample Multiplier: 1

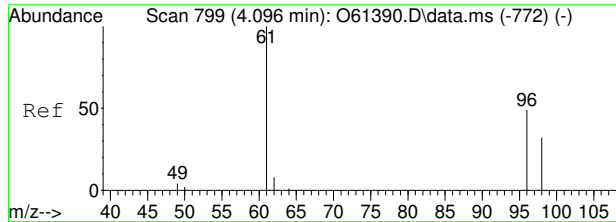
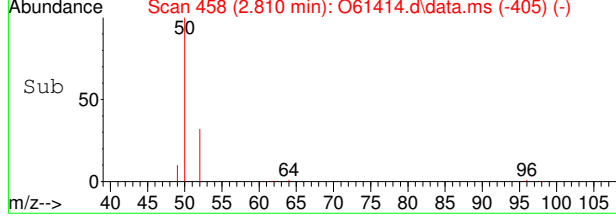
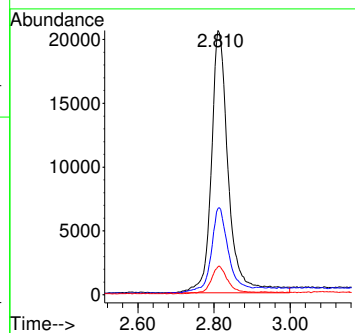
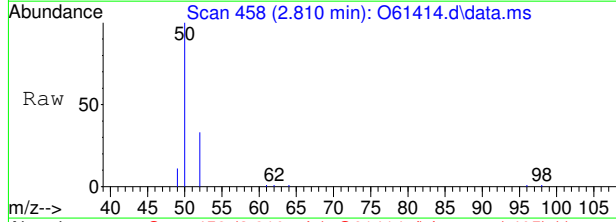
Quant Time: Sep 17 04:53:39 2020
Quant Method : C:\msdchem\1\methods\SIMCL091520.M
Quant Title : Standard Methods 6200B
QLast Update : Wed Sep 16 09:02:25 2020
Response via : Initial Calibration





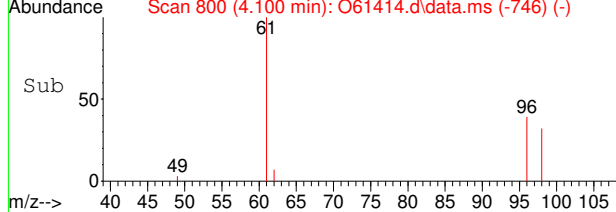
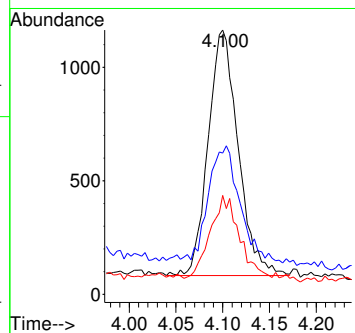
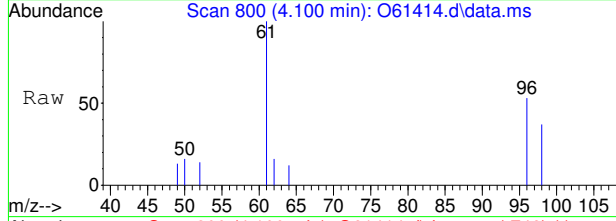
#3
 Chloromethane
 Concen: 1.91 ug/L
 RT: 2.810 min Scan# 458
 Delta R.T. 0.000 min
 Lab File: O61414.d
 Acq: 16 Sep 2020 4:13 pm

Tgt Ion	Ratio	Lower	Upper
50	100		
52	32.2	12.1	52.1
49	10.3	0.0	30.3

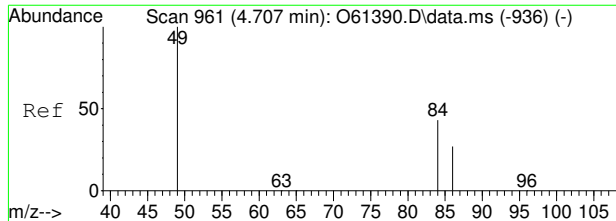


#4
 1,1-Dichloroethene
 Concen: 0.09 ug/L
 RT: 4.100 min Scan# 800
 Delta R.T. 0.004 min
 Lab File: O61414.d
 Acq: 16 Sep 2020 4:13 pm

Tgt Ion	Ratio	Lower	Upper
61	100		
96	44.4	19.3	79.3
98	33.8	1.9	61.9

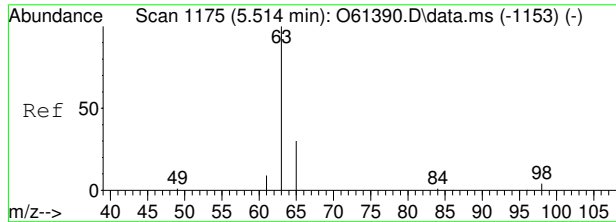
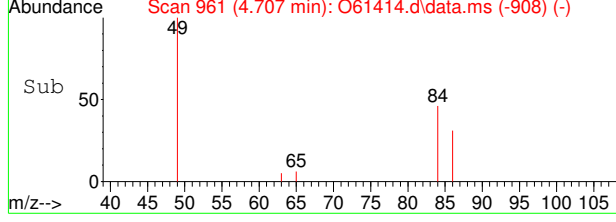
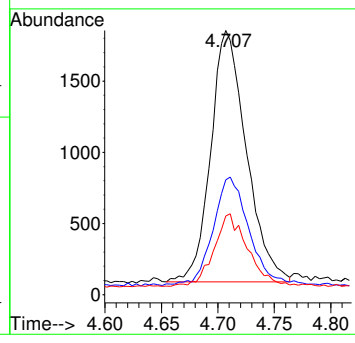
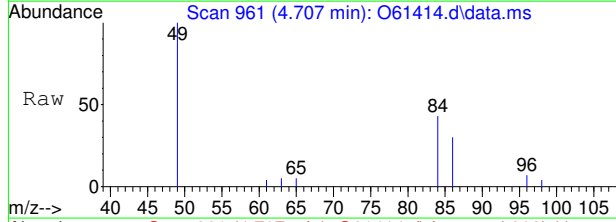


7.1.3
7



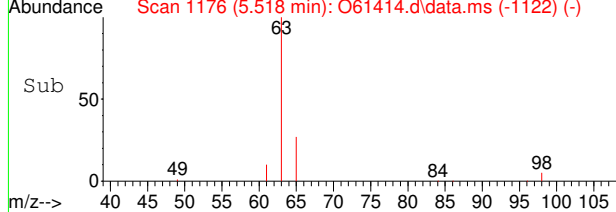
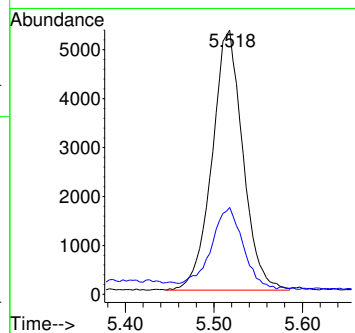
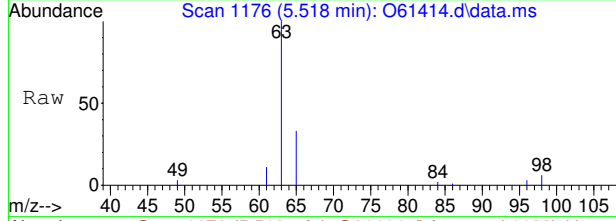
#5
 Methylene Chloride
 Concen: 0.08 ug/L
 RT: 4.707 min Scan# 961
 Delta R.T. 0.000 min
 Lab File: O61414.d
 Acq: 16 Sep 2020 4:13 pm

Tgt Ion	Ratio	Lower	Upper
49	100		
84	41.4	13.2	73.2
86	27.8	0.0	57.3

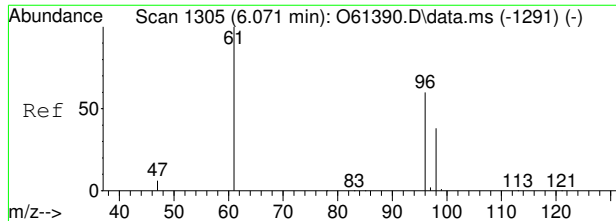


#7
 1,1-Dichloroethane
 Concen: 0.38 ug/L
 RT: 5.518 min Scan# 1176
 Delta R.T. 0.004 min
 Lab File: O61414.d
 Acq: 16 Sep 2020 4:13 pm

Tgt Ion	Ratio	Lower	Upper
63	100		
65	31.1	0.2	60.2

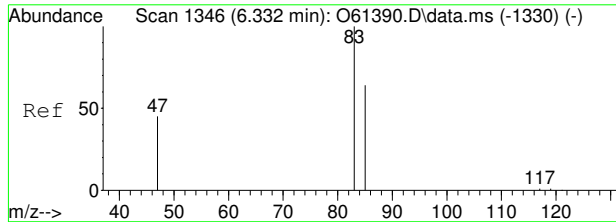
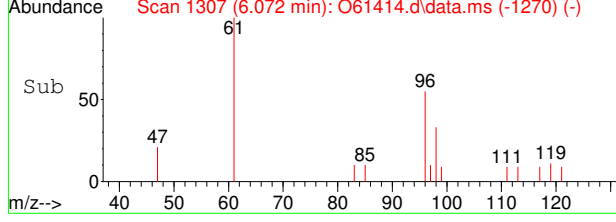
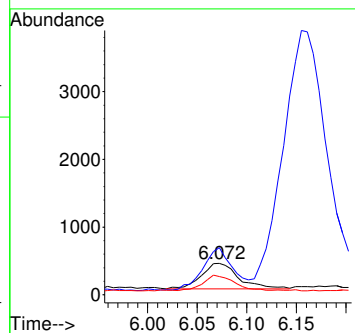
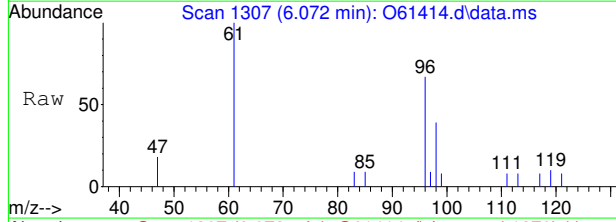


7.13
7



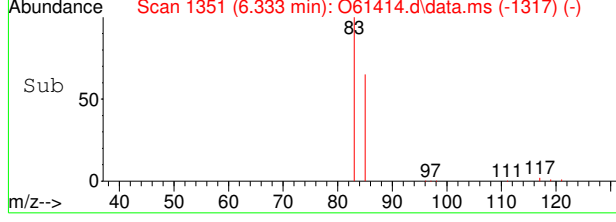
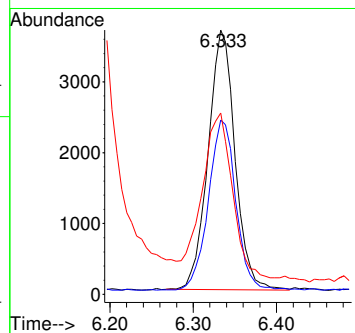
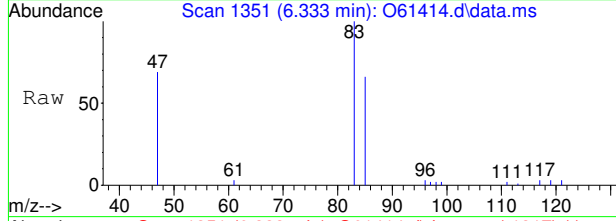
#8
 cis-1,2-Dichloroethene
 Concen: 0.06 ug/L
 RT: 6.072 min Scan# 1307
 Delta R.T. 0.001 min
 Lab File: O61414.d
 Acq: 16 Sep 2020 4:13 pm

Tgt Ion	Resp	Lower	Upper
96	976		
61	165.7	135.7	195.7
98	54.0	33.1	93.1

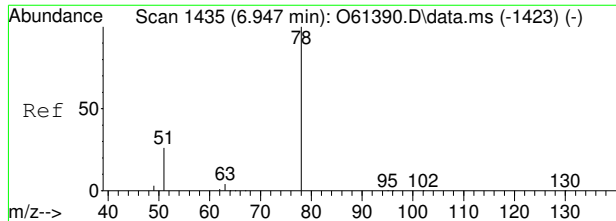


#9
 Chloroform
 Concen: 0.28 ug/L
 RT: 6.333 min Scan# 1351
 Delta R.T. 0.001 min
 Lab File: O61414.d
 Acq: 16 Sep 2020 4:13 pm

Tgt Ion	Resp	Lower	Upper
83	8216		
85	65.6	33.9	93.9
47	63.8	14.9	74.9



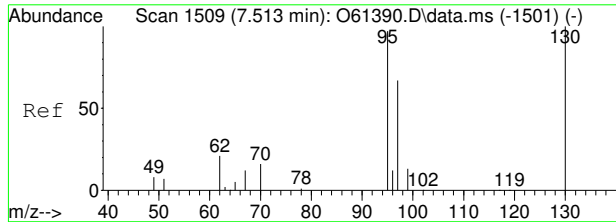
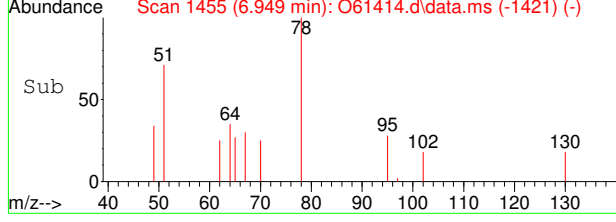
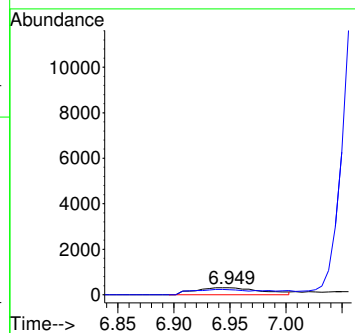
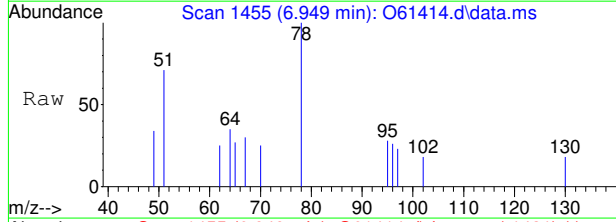
7.13
7



#12
Benzene
Concen: 0.02 ug/L m
RT: 6.949 min Scan# 1455
Delta R.T. 0.002 min
Lab File: O61414.d
Acq: 16 Sep 2020 4:13 pm

Tgt Ion: 78 Resp: 1278

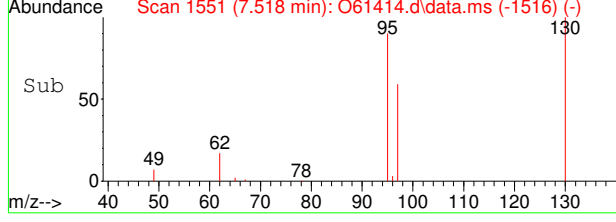
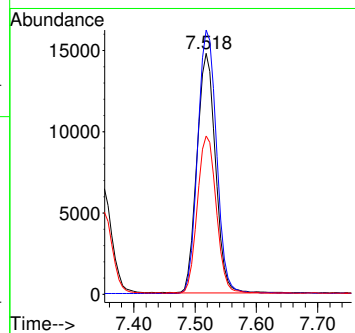
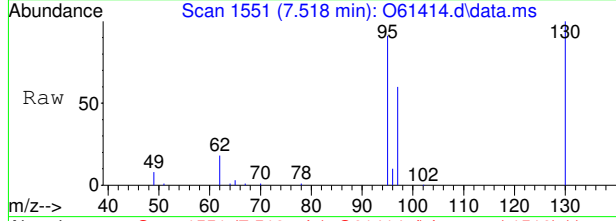
Ion	Ratio	Lower	Upper
78	100		
51	70.6	0.0	56.0#



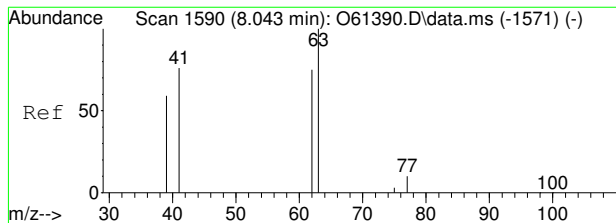
#15
Trichloroethene
Concen: 1.93 ug/L
RT: 7.518 min Scan# 1551
Delta R.T. 0.005 min
Lab File: O61414.d
Acq: 16 Sep 2020 4:13 pm

Tgt Ion: 95 Resp: 30988

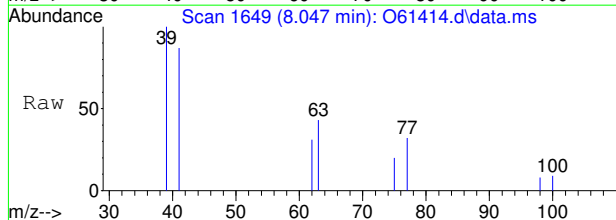
Ion	Ratio	Lower	Upper
95	100		
130	110.1	72.6	132.6
97	65.7	38.6	98.6



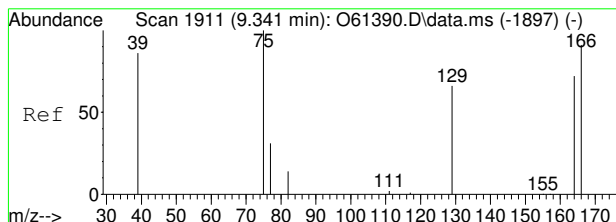
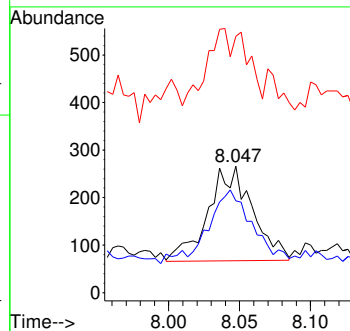
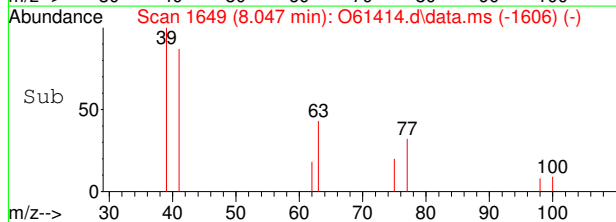
7.1.3
7



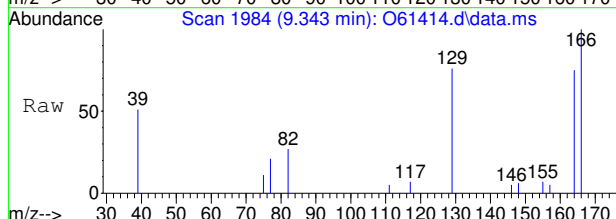
#16
 1,2-Dichloropropane
 Concen: 0.02 ug/L m
 RT: 8.047 min Scan# 1649
 Delta R.T. 0.004 min
 Lab File: O61414.d
 Acq: 16 Sep 2020 4:13 pm



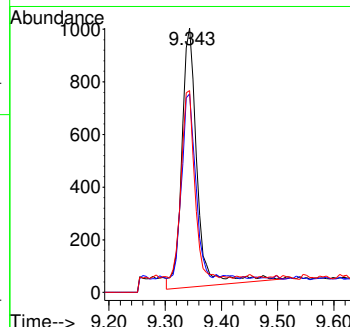
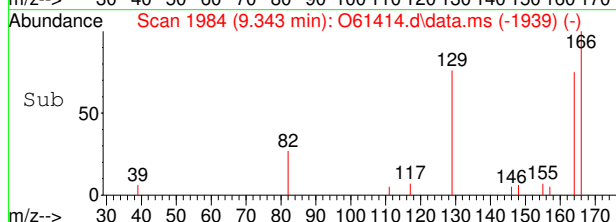
Tgt Ion	Resp	Lower	Upper
63	431		
62	72.6	44.5	104.5
41	202.6	45.9	105.9#



#21
 Tetrachloroethene
 Concen: 0.12 ug/L
 RT: 9.343 min Scan# 1984
 Delta R.T. 0.002 min
 Lab File: O61414.d
 Acq: 16 Sep 2020 4:13 pm



Tgt Ion	Resp	Lower	Upper
166	1863		
164	73.6	49.1	109.1
129	74.4	42.2	102.2



Manual Integration Approval Summary

Sample Number: FA78549-2 **Method:** SW846 8260B BY SIM
Lab FileID: O61414.D **Analyst approved:** 09/17/20 16:01 Juan Garcia
Injection Time: 09/16/20 16:13 **Supervisor approved:** 09/18/20 14:37 Melissa Mangual

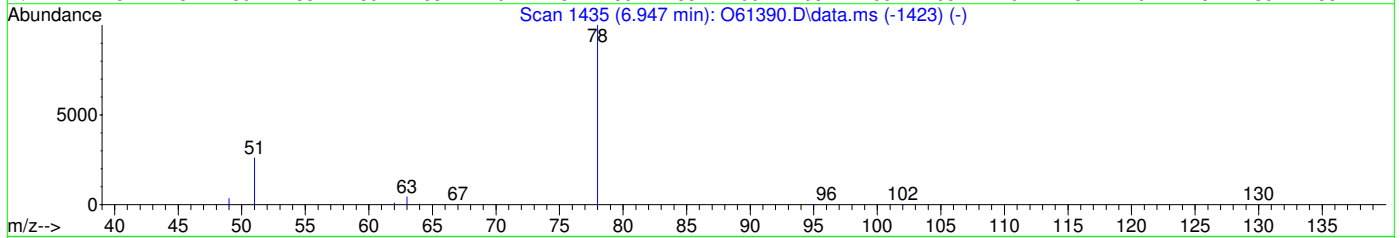
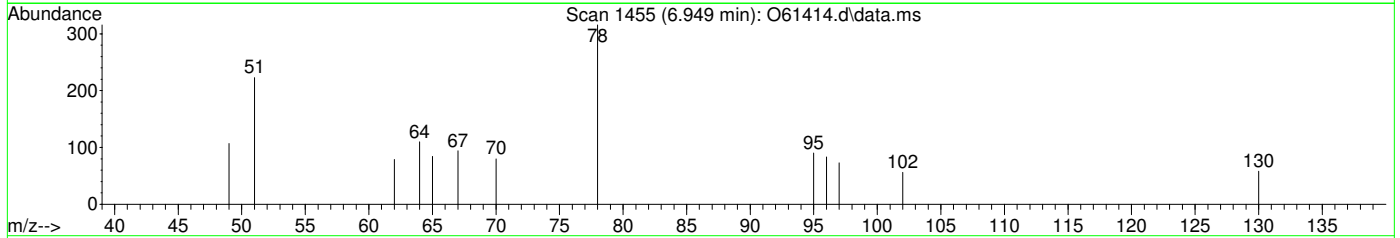
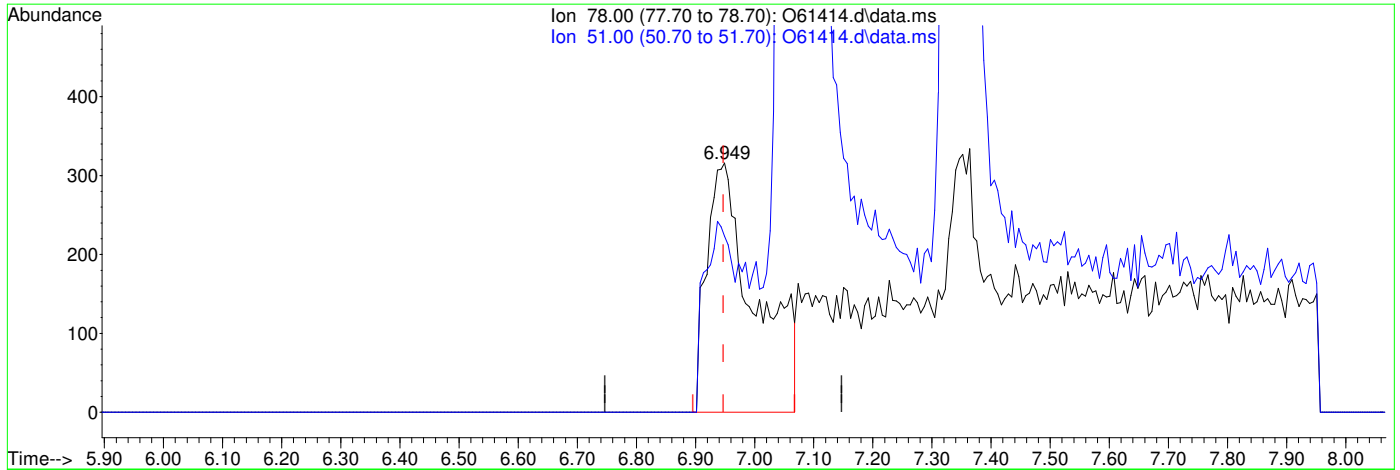
Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzene	71-43-2		6.95	Poor instrument integration
1,2-Dichloropropane	78-87-5		8.05	Poor instrument integration

7131
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-17-2020\vo2363\
 Data File : O61414.d
 Acq On : 16 Sep 2020 4:13 pm
 Operator : akarig
 Sample : FA78549-2
 Misc : MS47193,VO2363,,,,,
 ALS Vial : 15 Sample Multiplier: 1

Quant Time: Sep 17 04:42:52 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091520.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 16 09:02:25 2020
 Response via : Initial Calibration



TIC: O61414.d\data.ms

(12) Benzene ()

6.949min (+0.002) 0.03ug/L

response 1786

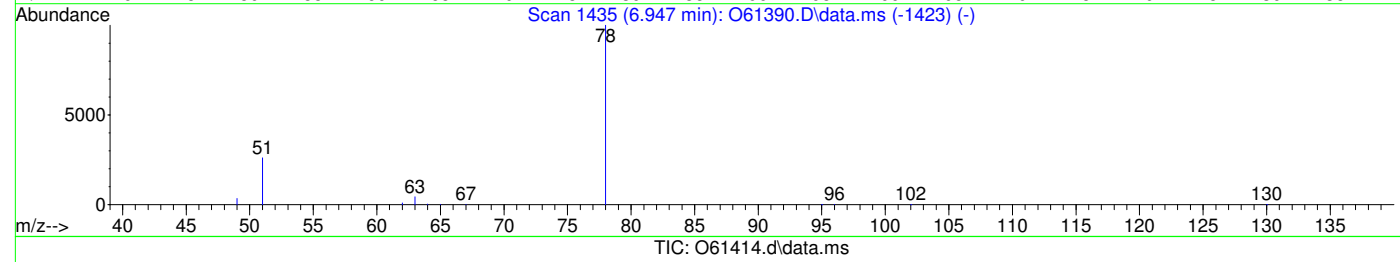
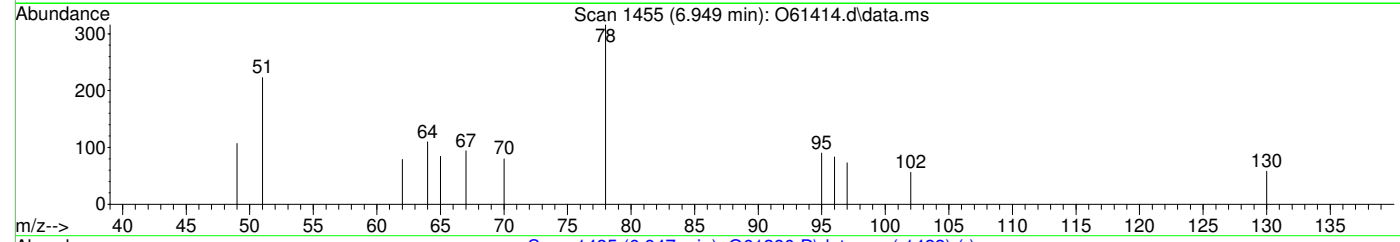
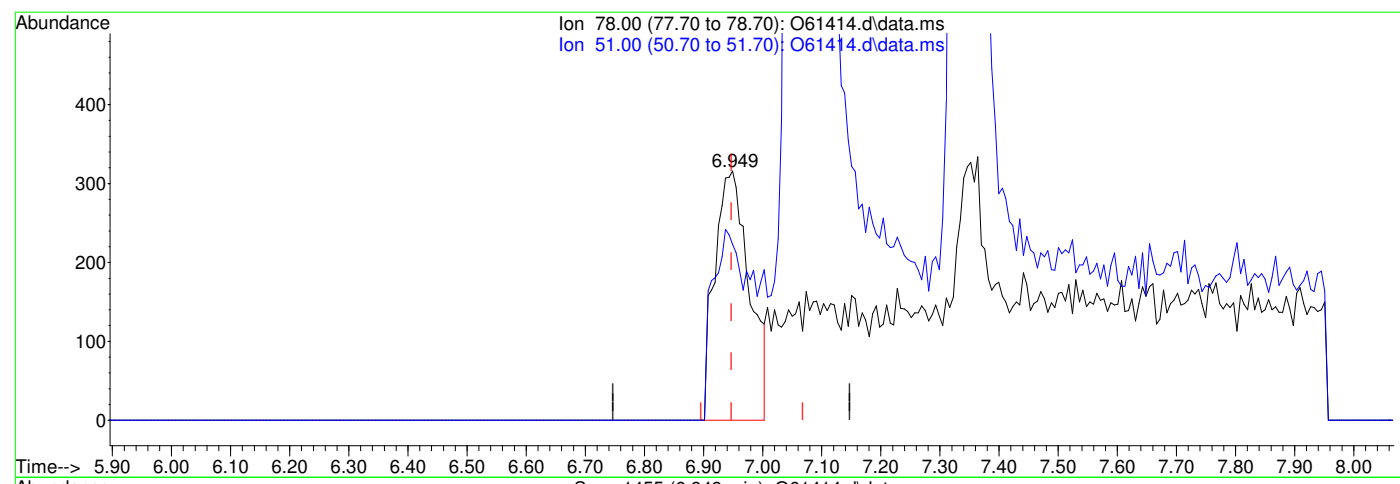
Ion	Exp%	Act%
78.00	100	100
51.00	26.00	70.57#
0.00	0.00	0.00
0.00	0.00	0.00

7.1.3.2
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-17-2020\vo2363\
Data File : O61414.d
Acq On : 16 Sep 2020 4:13 pm
Operator : akarig
Sample : FA78549-2
Misc : MS47193,VO2363,,,,,
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Sep 17 04:42:52 2020
Quant Method : C:\msdchem\1\methods\SIMCL091520.M
Quant Title : Standard Methods 6200B
QLast Update : Wed Sep 16 09:02:25 2020
Response via : Initial Calibration



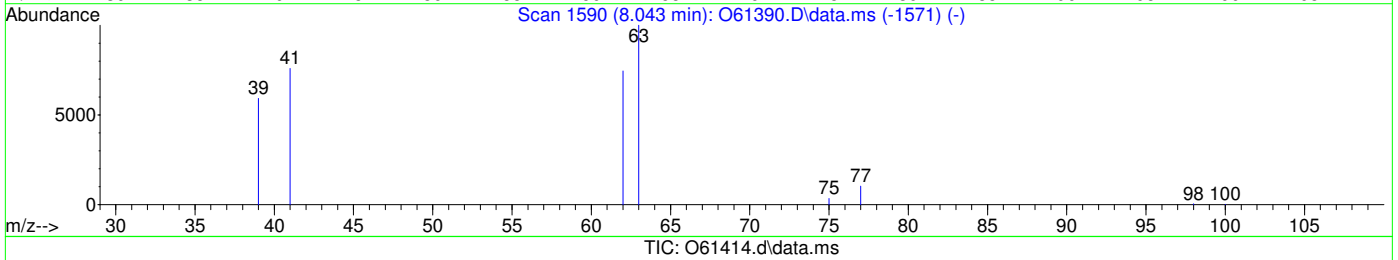
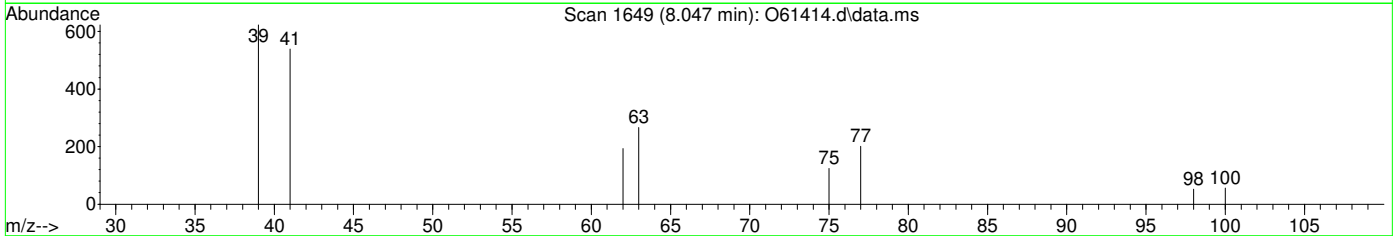
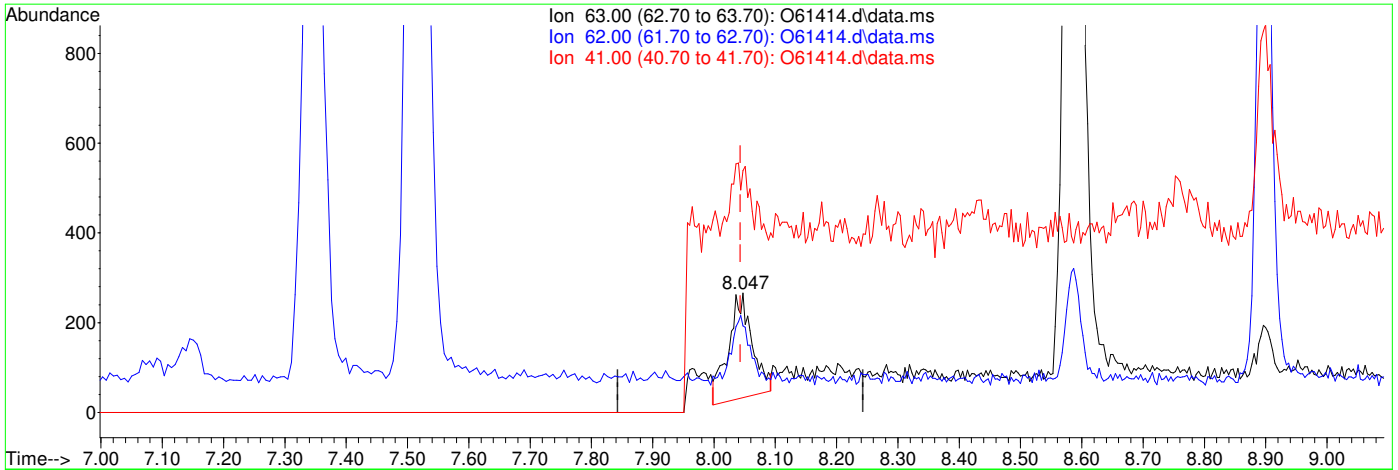
(12) Benzene (
6.949min (+0.002) 0.02ug/L m
response 1278
Ion Exp% Act%
78.00 100 100
51.00 26.00 70.57#
0.00 0.00 0.00
0.00 0.00 0.00

71.3.3
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-17-2020\vo2363\
 Data File : O61414.d
 Acq On : 16 Sep 2020 4:13 pm
 Operator : akarig
 Sample : FA78549-2
 Misc : MS47193,VO2363,,,,,
 ALS Vial : 15 Sample Multiplier: 1

Quant Time: Sep 17 04:42:52 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091520.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 16 09:02:25 2020
 Response via : Initial Calibration



(16) 1,2-Dichloropropane

8.047min (+0.004) 0.04ug/L

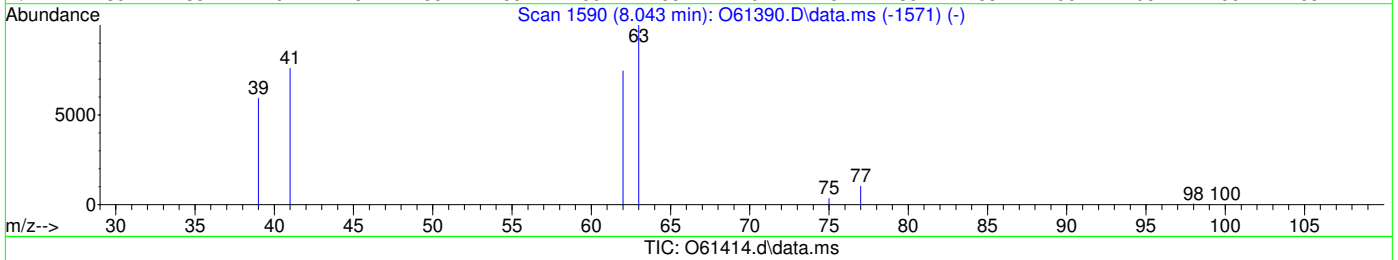
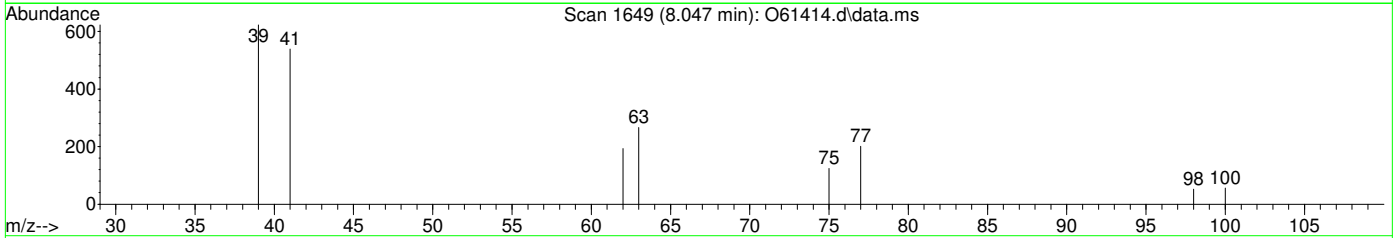
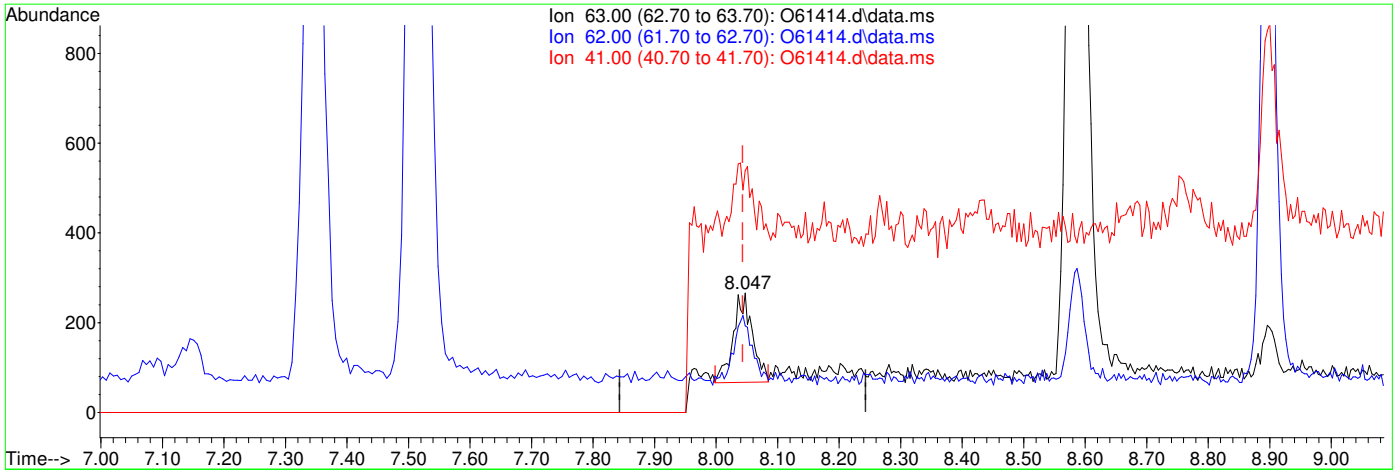
response 634

Ion	Exp%	Act%
63.00	100	100
62.00	74.50	60.91
41.00	75.90	70.56
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-17-2020\vo2363\
 Data File : O61414.d
 Acq On : 16 Sep 2020 4:13 pm
 Operator : akarig
 Sample : FA78549-2
 Misc : MS47193,VO2363,,,,,
 ALS Vial : 15 Sample Multiplier: 1

Quant Time: Sep 17 04:42:52 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091520.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 16 09:02:25 2020
 Response via : Initial Calibration



(16) 1,2-Dichloropropane
 8.047min (+0.004) 0.02ug/L m

response 431

Ion	Exp%	Act%
63.00	100	100
62.00	74.50	72.56
41.00	75.90	202.63#
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-11-2020\vo2354\
Data File : O61161.d
Acq On : 10 Sep 2020 10:37 am
Operator : melissam
Sample : FA78549-3
Misc : MS47173,VO2354,,,,,
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 11 05:43:34 2020
Quant Method : C:\msdchem\1\methods\SIMCL090820.M
Quant Title : Standard Methods 6200B
QLast Update : Wed Sep 09 12:10:38 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)	

Internal Standards							
1) Fluorobenzene	7.346	96	193630	5.00	ug/L	0.00	
18) Chlorobenzene-d5	10.447	117	137025	5.00	ug/L	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.074	65	96087	5.65	ug/L	0.00	
Spiked Amount	5.000	Range 74 - 125	Recovery	=	113.00%		
19) Toluene-d8	8.900	98	171034	5.11	ug/L	0.00	
Spiked Amount	5.000	Range 88 - 111	Recovery	=	102.20%		
Target Compounds							
							Qvalue
4) 1,1-Dichloroethene	4.089	61	959	0.04	ug/L		80
5) Methylene Chloride	4.700	49	5827	0.12	ug/L		88
6) trans-1,2-Dichloroethene	4.869	61	912	0.03	ug/L		74
7) 1,1-Dichloroethane	5.510	63	16615	0.46	ug/L		100
8) cis-1,2-Dichloroethene	6.066	96	13780	0.85	ug/L #		52
9) Chloroform	6.333	83	10786	0.37	ug/L		83
14) 1,2-Dichloroethane	7.139	62	9452	0.30	ug/L		93
15) Trichloroethene	7.512	95	65342	3.88	ug/L		98
16) 1,2-Dichloropropane	8.044	63	2161	0.10	ug/L		96
21) Tetrachloroethene	9.343	166	6631	0.50	ug/L		97

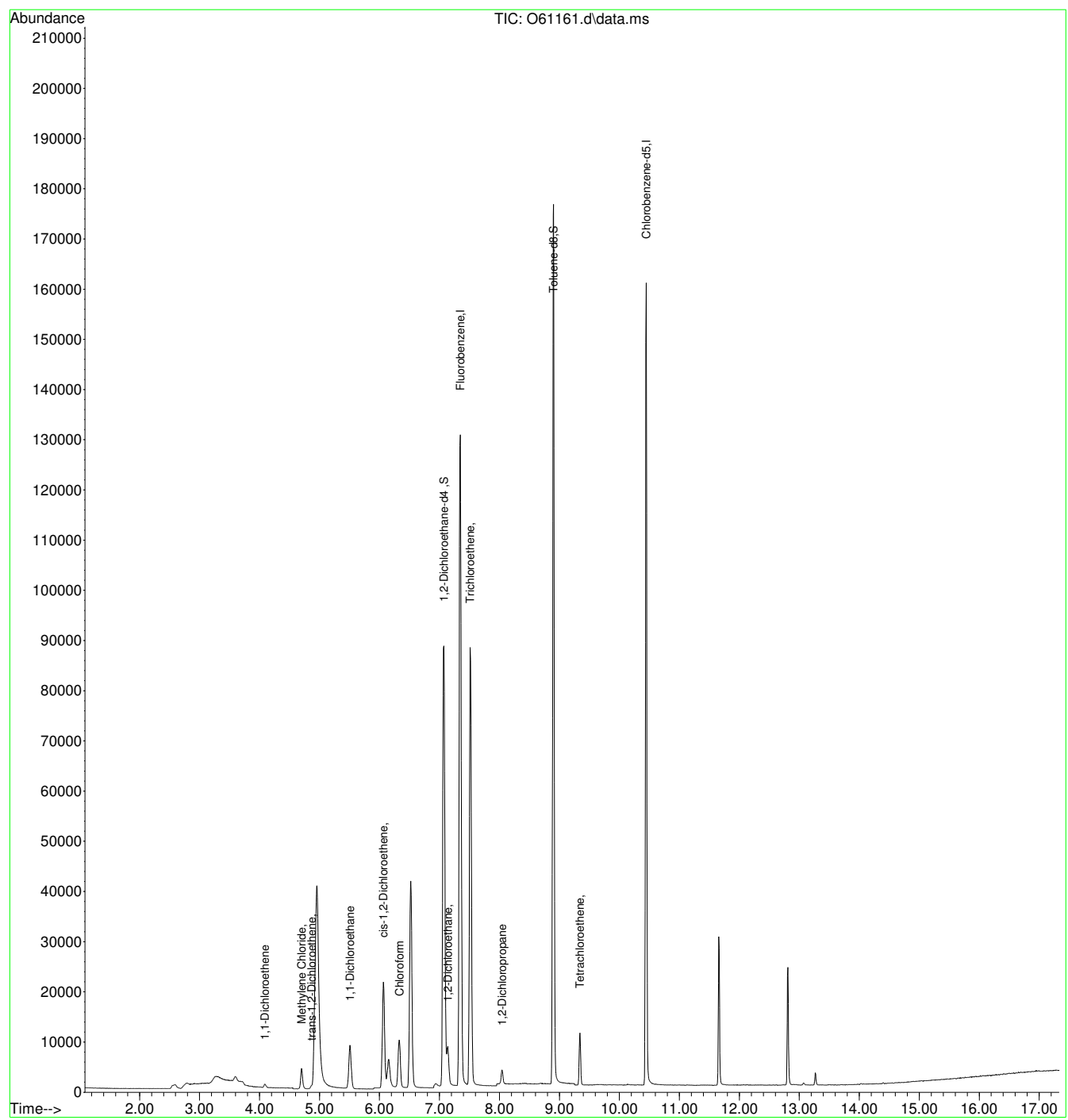
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.14
7

Quantitation Report (QT Reviewed)

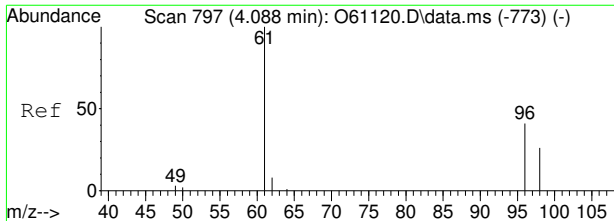
Data Path : C:\msdchem\1\data\johnm\September 2020\09-11-2020\vo2354\
Data File : O61161.d
Acq On : 10 Sep 2020 10:37 am
Operator : melissam
Sample : FA78549-3
Misc : MS47173,VO2354,,,,,
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 11 05:43:34 2020
Quant Method : C:\msdchem\1\methods\SIMCL090820.M
Quant Title : Standard Methods 6200B
QLast Update : Wed Sep 09 12:10:38 2020
Response via : Initial Calibration



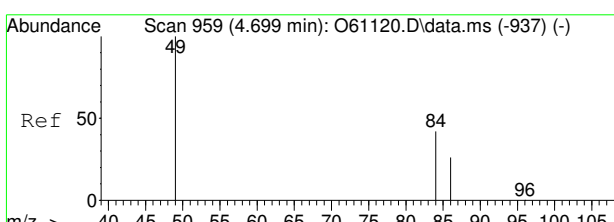
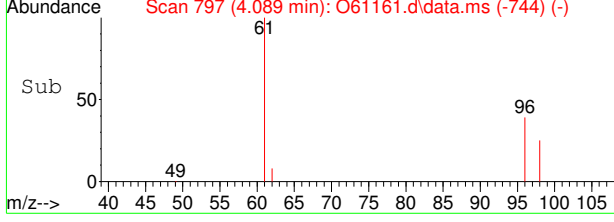
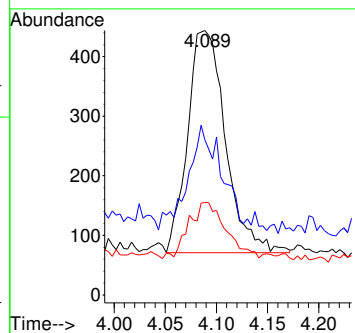
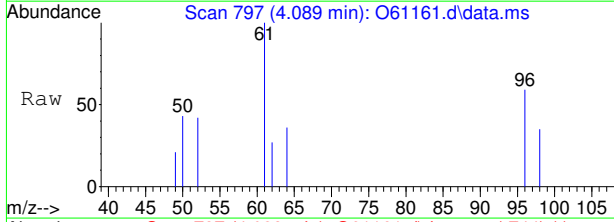
7.14
7





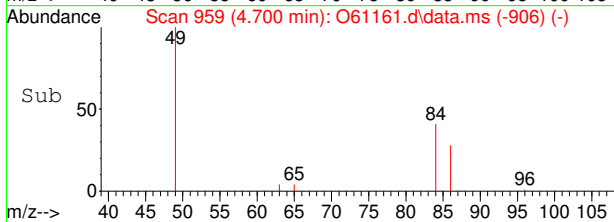
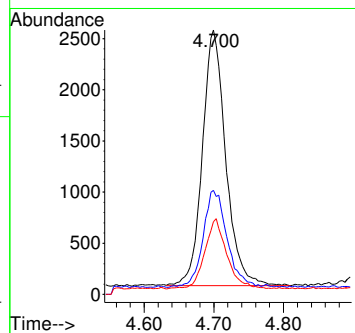
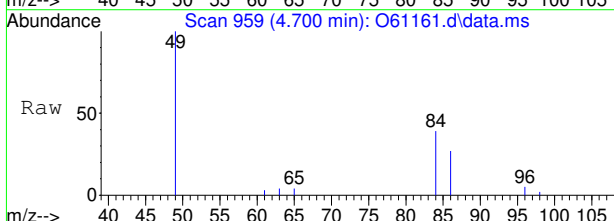
#4
 1,1-Dichloroethene
 Concen: 0.04 ug/L
 RT: 4.089 min Scan# 797
 Delta R.T. 0.000 min
 Lab File: O61161.d
 Acq: 10 Sep 2020 10:37 am

Tgt Ion	Resp	Lower	Upper
61	100		
96	39.7	25.4	85.4
98	24.9	5.9	65.9



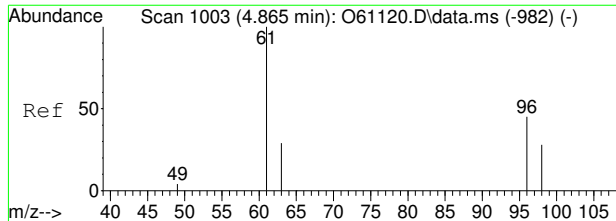
#5
 Methylene Chloride
 Concen: 0.12 ug/L
 RT: 4.700 min Scan# 959
 Delta R.T. 0.000 min
 Lab File: O61161.d
 Acq: 10 Sep 2020 10:37 am

Tgt Ion	Resp	Lower	Upper
49	100		
84	37.8	17.9	77.9
86	26.3	0.0	59.8



7.14
7

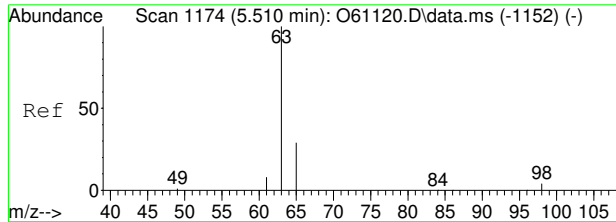
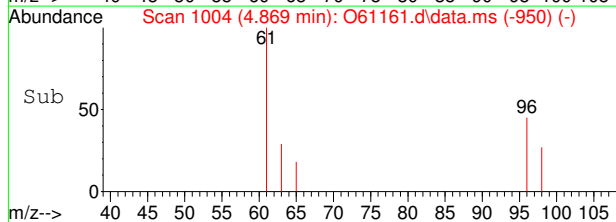
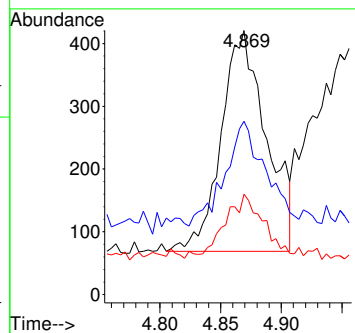
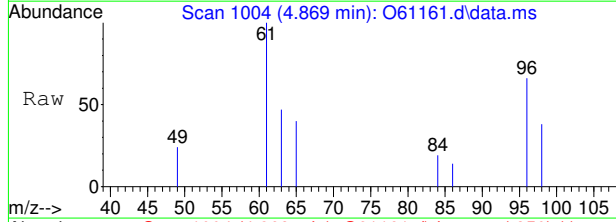




#6
 trans-1,2-Dichloroethene
 Concen: 0.03 ug/L
 RT: 4.869 min Scan# 1004
 Delta R.T. 0.004 min
 Lab File: O61161.d
 Acq: 10 Sep 2020 10:37 am

Tgt Ion: 61 Resp: 912

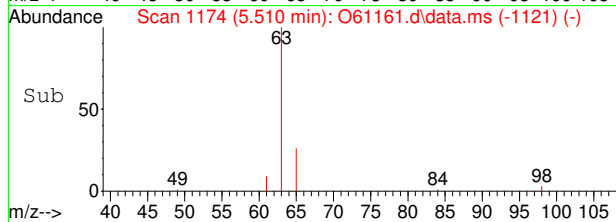
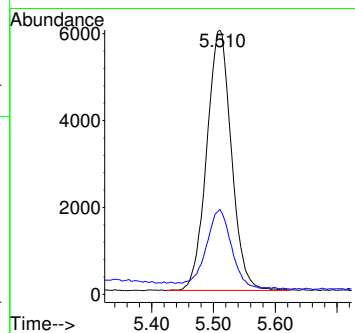
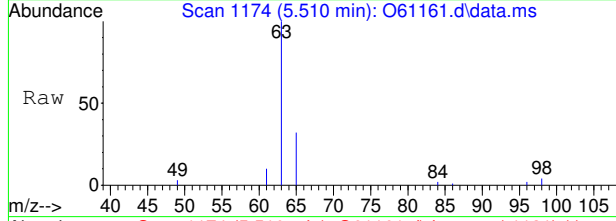
Ion	Ratio	Lower	Upper
61	100		
96	43.8	36.9	96.9
98	28.1	11.1	71.1

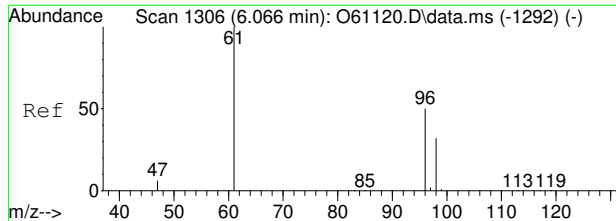


#7
 1,1-Dichloroethane
 Concen: 0.46 ug/L
 RT: 5.510 min Scan# 1174
 Delta R.T. 0.000 min
 Lab File: O61161.d
 Acq: 10 Sep 2020 10:37 am

Tgt Ion: 63 Resp: 16615

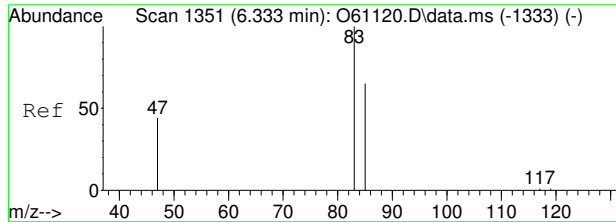
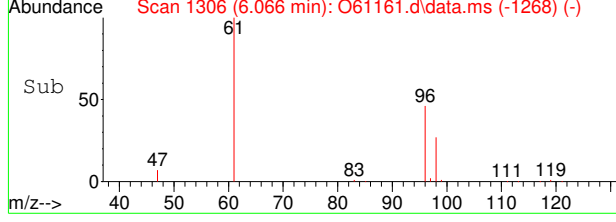
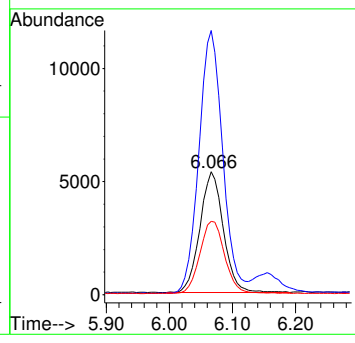
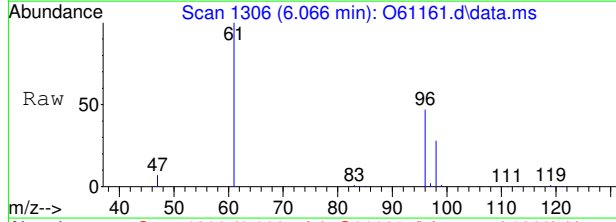
Ion	Ratio	Lower	Upper
63	100		
65	30.5	0.7	60.7





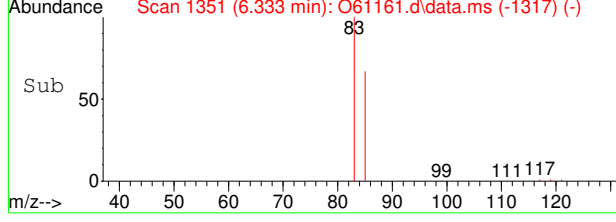
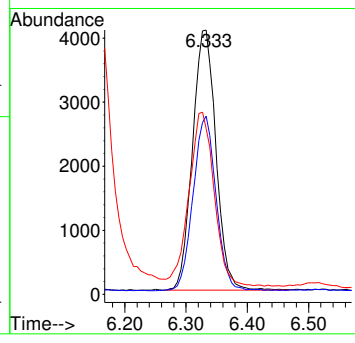
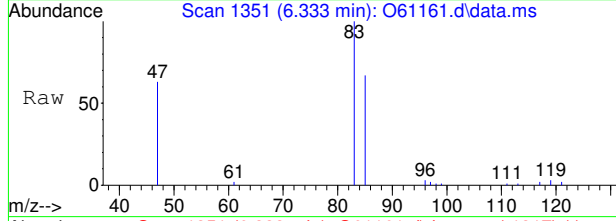
#8
 cis-1,2-Dichloroethene
 Concen: 0.85 ug/L
 RT: 6.066 min Scan# 1306
 Delta R.T. 0.000 min
 Lab File: O61161.d
 Acq: 10 Sep 2020 10:37 am

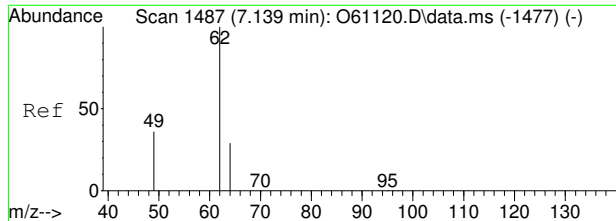
Tgt Ion	Resp	Lower	Upper
96	13780		
61	217.8	107.0	167.0#
98	59.6	34.1	94.1



#9
 Chloroform
 Concen: 0.37 ug/L
 RT: 6.333 min Scan# 1351
 Delta R.T. 0.000 min
 Lab File: O61161.d
 Acq: 10 Sep 2020 10:37 am

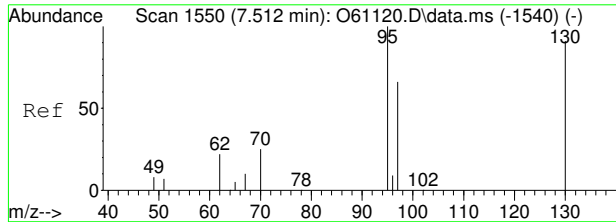
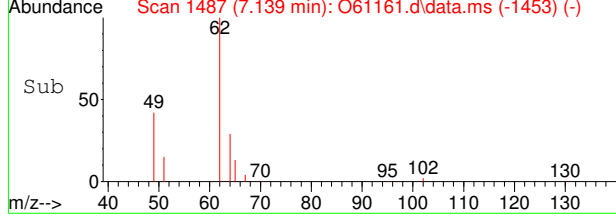
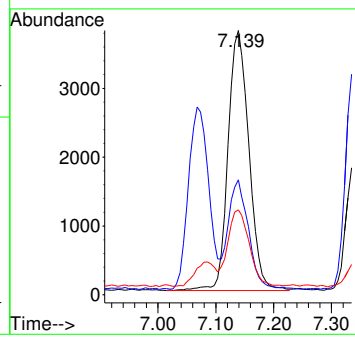
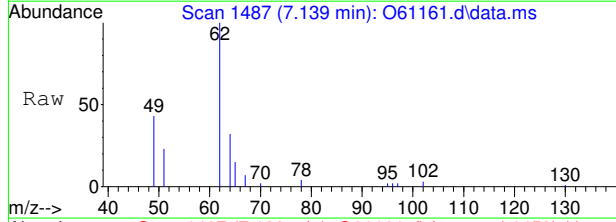
Tgt Ion	Resp	Lower	Upper
83	10786		
85	66.8	33.0	93.0
47	60.2	8.1	68.1





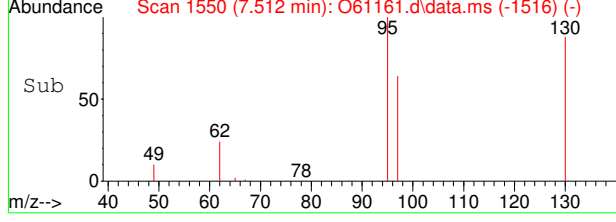
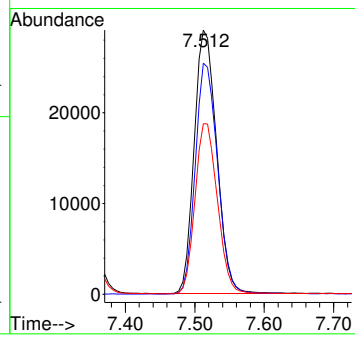
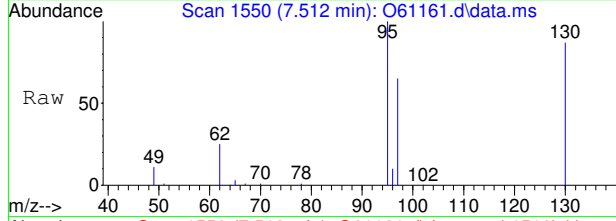
#14
 1,2-Dichloroethane
 Concen: 0.30 ug/L
 RT: 7.139 min Scan# 1487
 Delta R.T. 0.000 min
 Lab File: O61161.d
 Acq: 10 Sep 2020 10:37 am

Tgt Ion	Ratio	Lower	Upper
62	100		
49	41.8	18.0	78.0
64	29.0	1.5	61.5



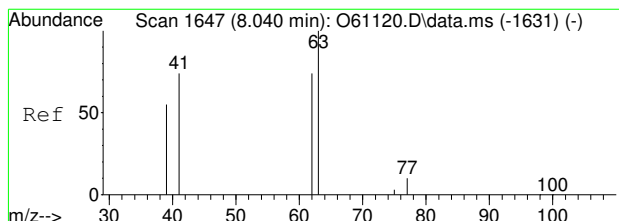
#15
 Trichloroethene
 Concen: 3.88 ug/L
 RT: 7.512 min Scan# 1550
 Delta R.T. 0.000 min
 Lab File: O61161.d
 Acq: 10 Sep 2020 10:37 am

Tgt Ion	Ratio	Lower	Upper
95	100		
130	87.5	60.4	120.4
97	64.5	34.6	94.6

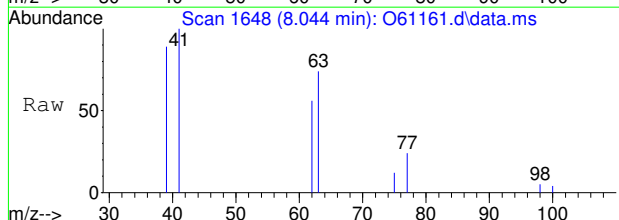


7.14
7



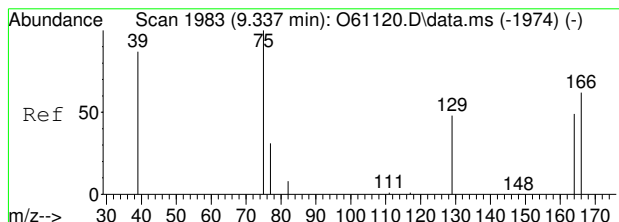
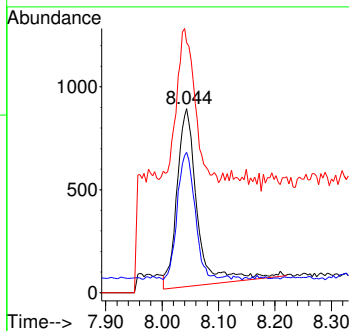
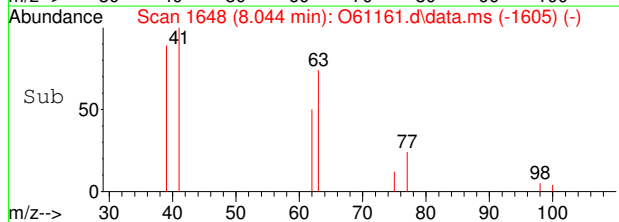


#16
 1,2-Dichloropropane
 Concen: 0.10 ug/L
 RT: 8.044 min Scan# 1648
 Delta R.T. 0.004 min
 Lab File: O61161.d
 Acq: 10 Sep 2020 10:37 am

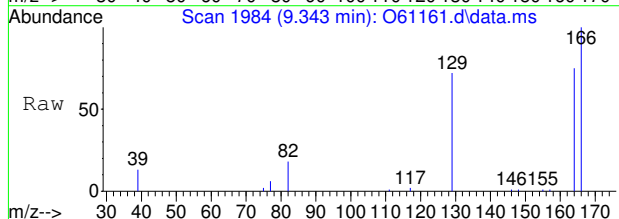


Tgt Ion: 63 Resp: 2161

Ion	Ratio	Lower	Upper
63	100		
62	76.2	42.7	102.7
41	80.3	54.5	114.5

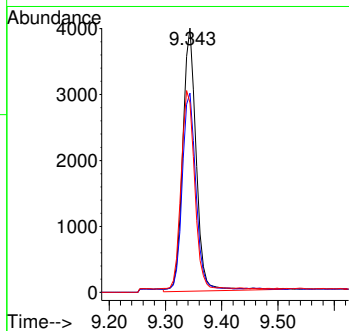
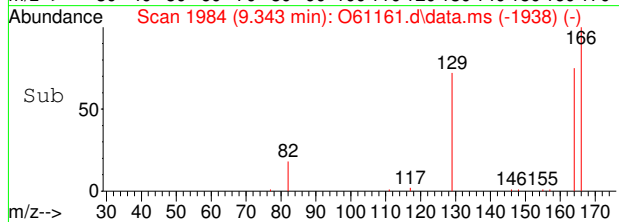


#21
 Tetrachloroethene
 Concen: 0.50 ug/L
 RT: 9.343 min Scan# 1984
 Delta R.T. 0.006 min
 Lab File: O61161.d
 Acq: 10 Sep 2020 10:37 am



Tgt Ion: 166 Resp: 6631

Ion	Ratio	Lower	Upper
166	100		
164	75.1	47.3	107.3
129	71.0	37.5	97.5



7.14
 7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-11-2020\vo2354\
Data File : O61162.d
Acq On : 10 Sep 2020 10:57 am
Operator : melissam
Sample : FA78549-4
Misc : MS47173,VO2354,,,,,
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 11 05:43:57 2020
Quant Method : C:\msdchem\1\methods\SIMCL090820.M
Quant Title : Standard Methods 6200B
QLast Update : Wed Sep 09 12:10:38 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)

Internal Standards						
1) Fluorobenzene	7.346	96	192407	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.447	117	135894	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.074	65	95199	5.63	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	112.60%	
19) Toluene-d8	8.900	98	169702	5.11	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	102.20%	
Target Compounds						
5) Methylene Chloride	4.703	49	4678	0.10	ug/L	89
7) 1,1-Dichloroethane	5.518	63	6916	0.19	ug/L	99
8) cis-1,2-Dichloroethene	6.072	96	9203	0.57	ug/L #	48
9) Chloroform	6.333	83	8731	0.30	ug/L	80
14) 1,2-Dichloroethane	7.145	62	1878	0.06	ug/L	87
15) Trichloroethene	7.518	95	51692	3.09	ug/L	98
16) 1,2-Dichloropropane	8.043	63	1644	0.08	ug/L	97
21) Tetrachloroethene	9.343	166	3505	0.27	ug/L	95

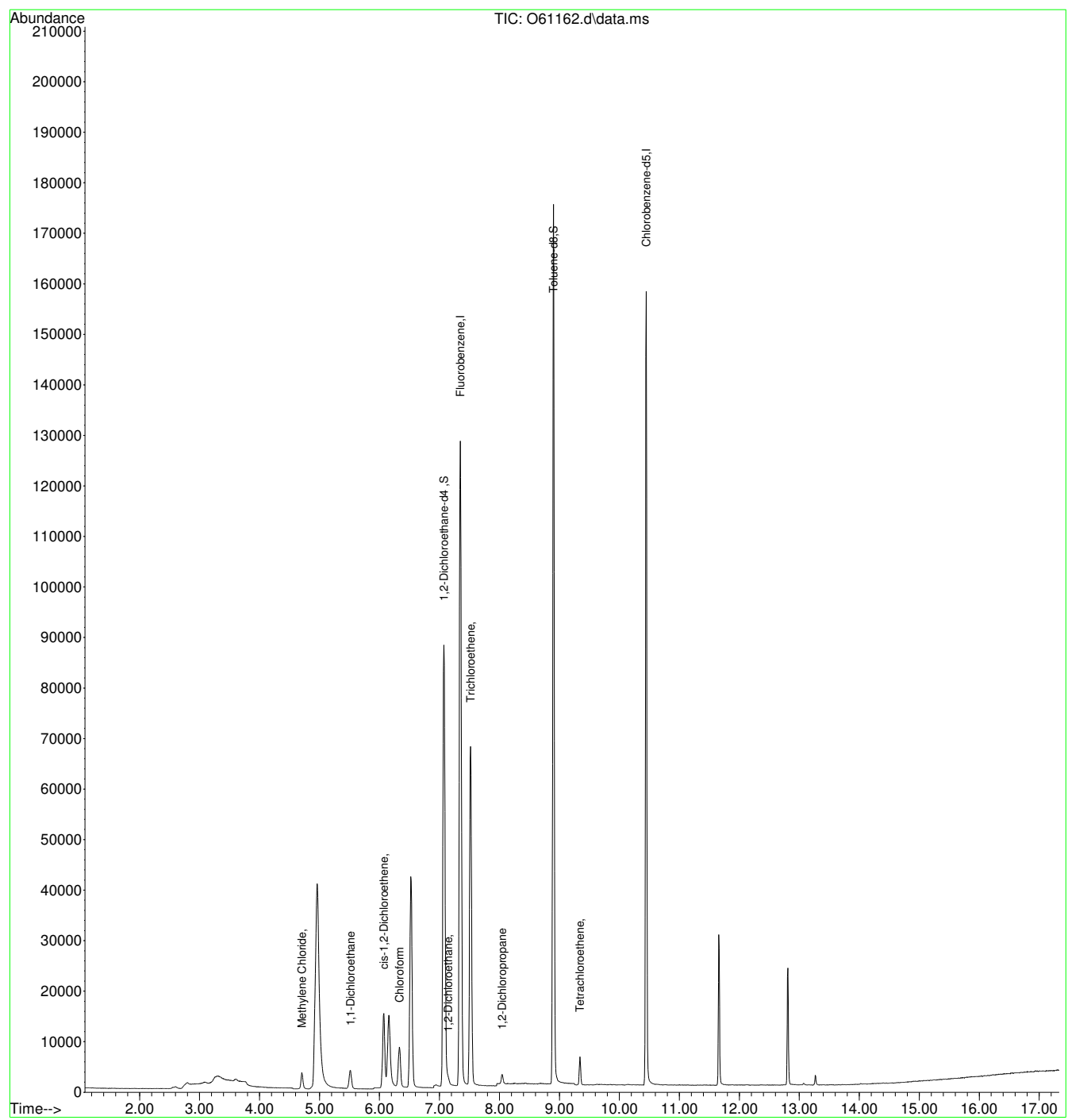
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.15
7

Quantitation Report (QT Reviewed)

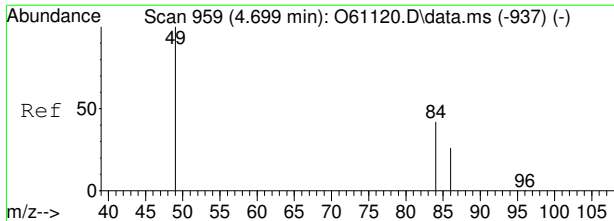
Data Path : C:\msdchem\1\data\johnm\September 2020\09-11-2020\vo2354\
Data File : O61162.d
Acq On : 10 Sep 2020 10:57 am
Operator : melissam
Sample : FA78549-4
Misc : MS47173,VO2354,,,,,
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 11 05:43:57 2020
Quant Method : C:\msdchem\1\methods\SIMCL090820.M
Quant Title : Standard Methods 6200B
QLast Update : Wed Sep 09 12:10:38 2020
Response via : Initial Calibration



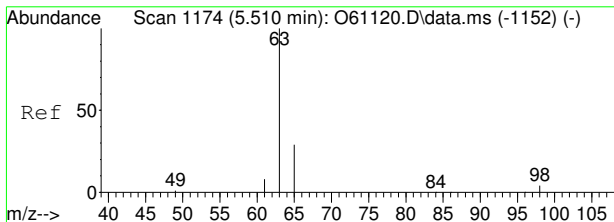
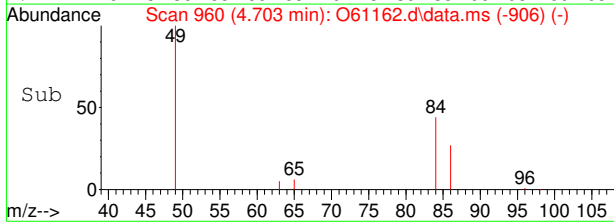
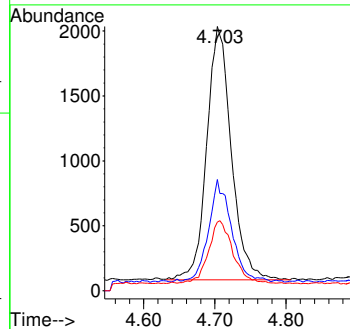
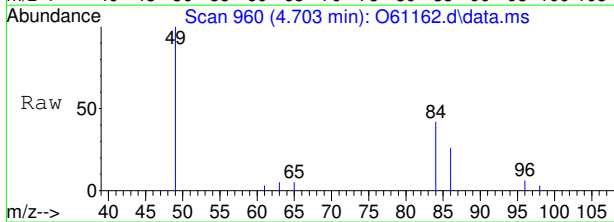
7.15
7





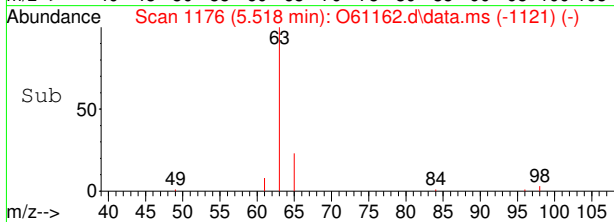
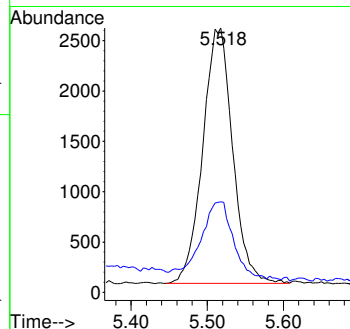
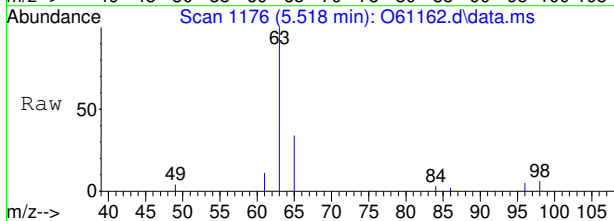
#5
 Methylene Chloride
 Concen: 0.10 ug/L
 RT: 4.703 min Scan# 960
 Delta R.T. 0.004 min
 Lab File: O61162.d
 Acq: 10 Sep 2020 10:57 am

Tgt Ion	Ratio	Lower	Upper
49	100		
84	40.1	17.9	77.9
86	24.2	0.0	59.8

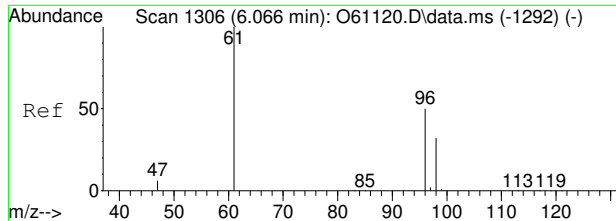


#7
 1,1-Dichloroethane
 Concen: 0.19 ug/L
 RT: 5.518 min Scan# 1176
 Delta R.T. 0.008 min
 Lab File: O61162.d
 Acq: 10 Sep 2020 10:57 am

Tgt Ion	Ratio	Lower	Upper
63	100		
65	31.0	0.7	60.7

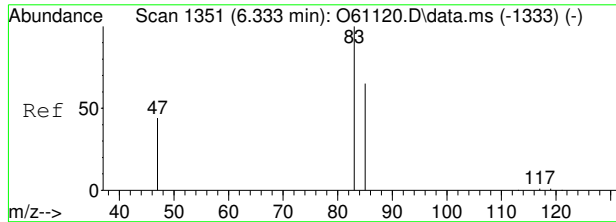
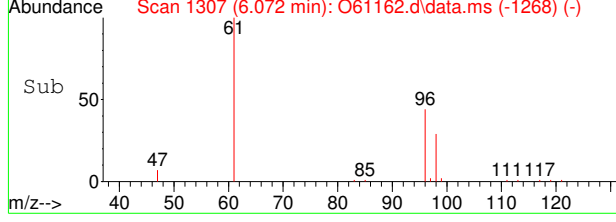
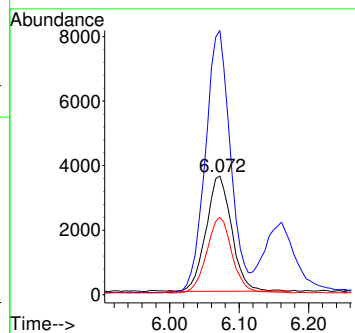
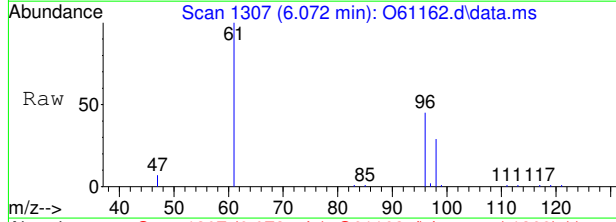


7.15
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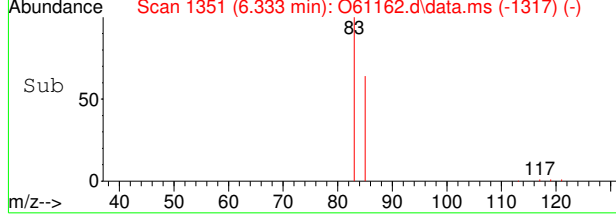
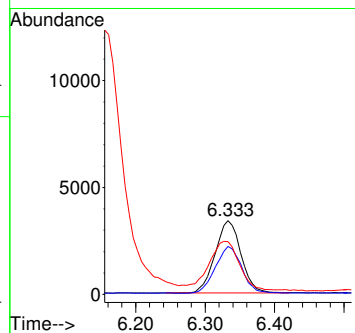
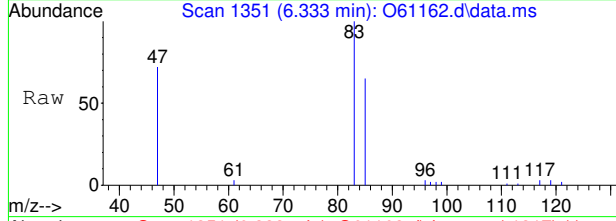
#8
 cis-1,2-Dichloroethene
 Concen: 0.57 ug/L
 RT: 6.072 min Scan# 1307
 Delta R.T. 0.006 min
 Lab File: O61162.d
 Acq: 10 Sep 2020 10:57 am

Tgt Ion	Ratio	Lower	Upper
96	100		
61	227.7	107.0	167.0#
98	65.5	34.1	94.1

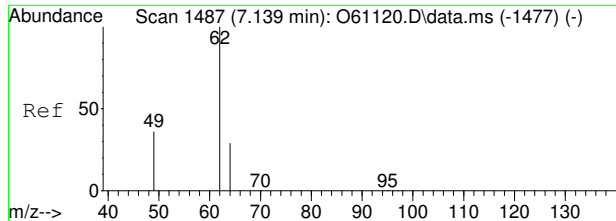


#9
 Chloroform
 Concen: 0.30 ug/L
 RT: 6.333 min Scan# 1351
 Delta R.T. 0.000 min
 Lab File: O61162.d
 Acq: 10 Sep 2020 10:57 am

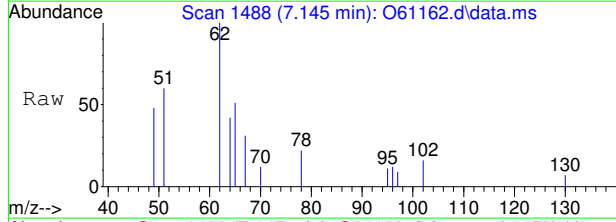
Tgt Ion	Ratio	Lower	Upper
83	100		
85	64.5	33.0	93.0
47	67.4	8.1	68.1



7.15
7

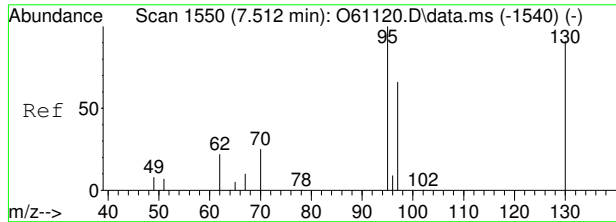
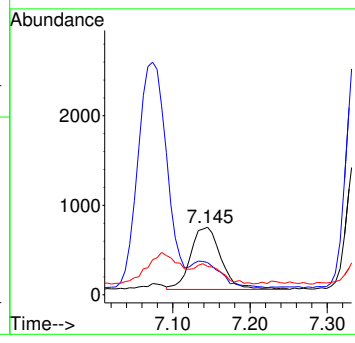
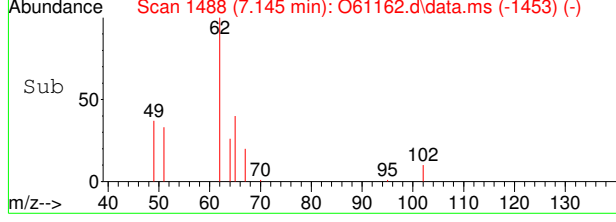


#14
 1,2-Dichloroethane
 Concen: 0.06 ug/L
 RT: 7.145 min Scan# 1488
 Delta R.T. 0.006 min
 Lab File: O61162.d
 Acq: 10 Sep 2020 10:57 am

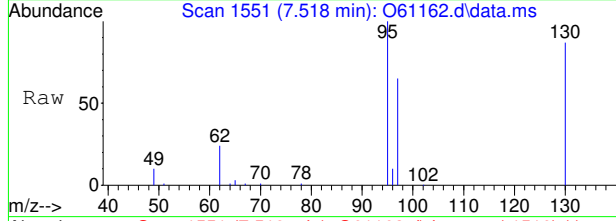


Tgt Ion: 62 Resp: 1878

Ion	Ratio	Lower	Upper
62	100		
49	39.2	18.0	78.0
64	24.8	1.5	61.5

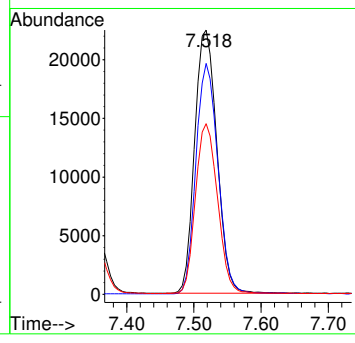
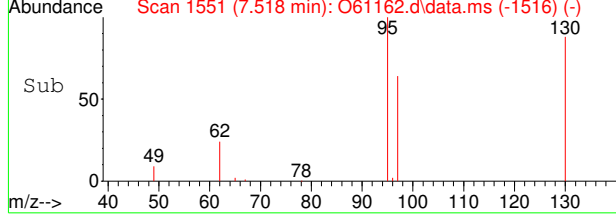


#15
 Trichloroethene
 Concen: 3.09 ug/L
 RT: 7.518 min Scan# 1551
 Delta R.T. 0.006 min
 Lab File: O61162.d
 Acq: 10 Sep 2020 10:57 am

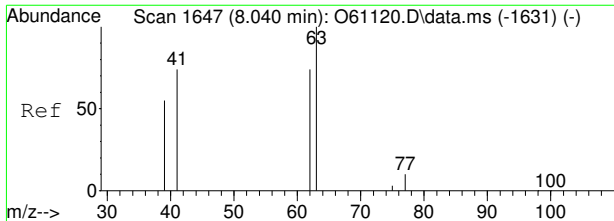


Tgt Ion: 95 Resp: 51692

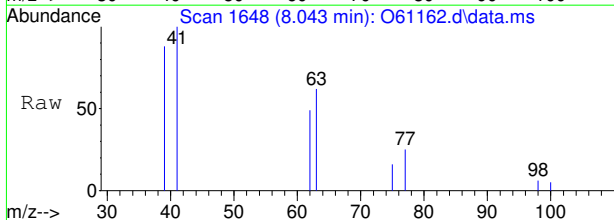
Ion	Ratio	Lower	Upper
95	100		
130	87.5	60.4	120.4
97	64.5	34.6	94.6



7.15
 7

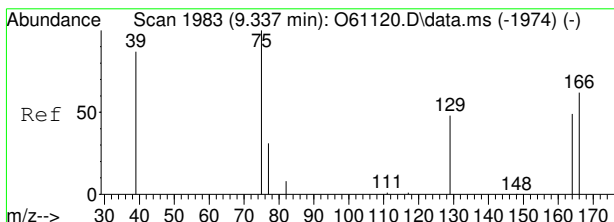
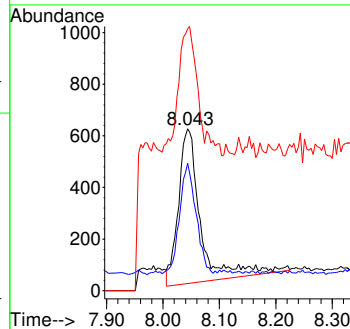
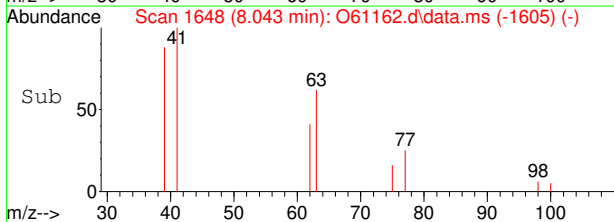


#16
 1,2-Dichloropropane
 Concen: 0.08 ug/L
 RT: 8.043 min Scan# 1648
 Delta R.T. 0.004 min
 Lab File: O61162.d
 Acq: 10 Sep 2020 10:57 am

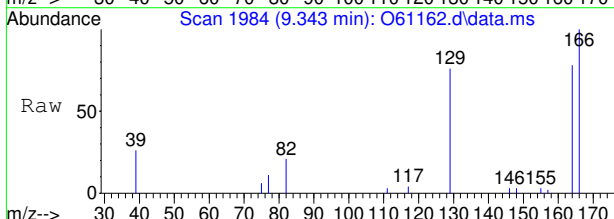


Tgt Ion: 63 Resp: 1644

Ion	Ratio	Lower	Upper
63	100		
62	76.1	42.7	102.7
41	81.9	54.5	114.5

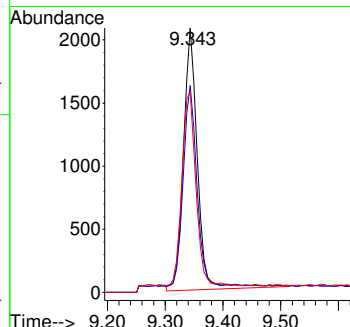
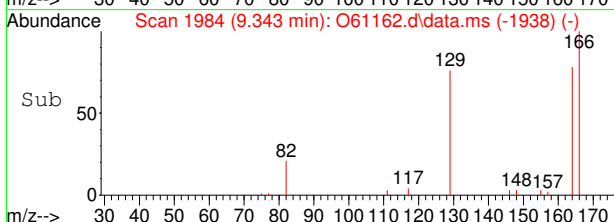


#21
 Tetrachloroethene
 Concen: 0.27 ug/L
 RT: 9.343 min Scan# 1984
 Delta R.T. 0.006 min
 Lab File: O61162.d
 Acq: 10 Sep 2020 10:57 am



Tgt Ion: 166 Resp: 3505

Ion	Ratio	Lower	Upper
166	100		
164	77.6	47.3	107.3
129	75.3	37.5	97.5



7.15
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-11-2020\vo2354\
Data File : O61165.d
Acq On : 10 Sep 2020 11:58 am
Operator : melissam
Sample : FA78549-5
Misc : MS47173,VO2354,,,,,
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 11 05:44:44 2020
Quant Method : C:\msdchem\1\methods\SIMCL090820.M
Quant Title : Standard Methods 6200B
QLast Update : Wed Sep 09 12:10:38 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Fluorobenzene	7.346	96	196848	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.447	117	138169	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.074	65	96507	5.58	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	111.60%	
19) Toluene-d8	8.900	98	173399	5.13	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	102.60%	
Target Compounds						
5) Methylene Chloride	4.699	49	4658	0.09	ug/L	84
7) 1,1-Dichloroethane	5.514	63	7147	0.19	ug/L	99
8) cis-1,2-Dichloroethene	6.066	96	9882	0.60	ug/L #	53
9) Chloroform	6.327	83	9133	0.30	ug/L	81
14) 1,2-Dichloroethane	7.139	62	1842	0.06	ug/L	92
15) Trichloroethene	7.512	95	54115	3.16	ug/L	95
16) 1,2-Dichloropropane	8.043	63	1744	0.08	ug/L	93
21) Tetrachloroethene	9.343	166	3770	0.28	ug/L	94

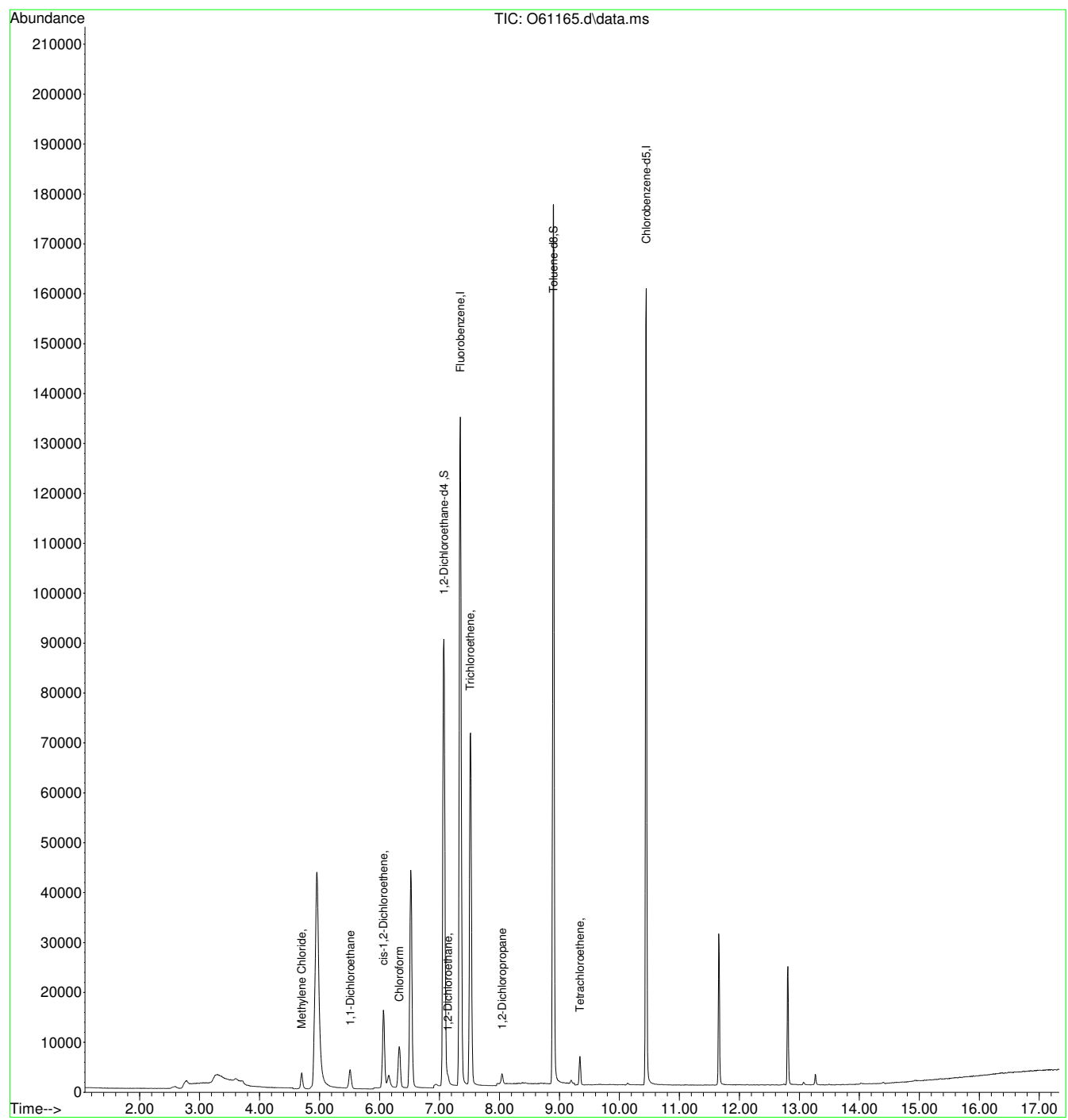
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.1.6
7

Quantitation Report (QT Reviewed)

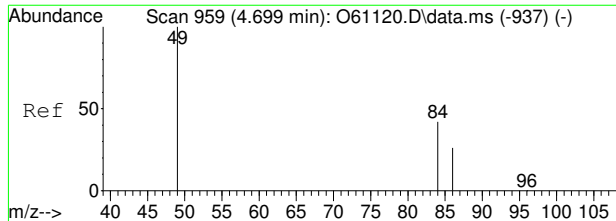
Data Path : C:\msdchem\1\data\johnm\September 2020\09-11-2020\vo2354\
Data File : O61165.d
Acq On : 10 Sep 2020 11:58 am
Operator : melissam
Sample : FA78549-5
Misc : MS47173,VO2354,,,,,
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 11 05:44:44 2020
Quant Method : C:\msdchem\1\methods\SIMCL090820.M
Quant Title : Standard Methods 6200B
QLast Update : Wed Sep 09 12:10:38 2020
Response via : Initial Calibration



7.1.7

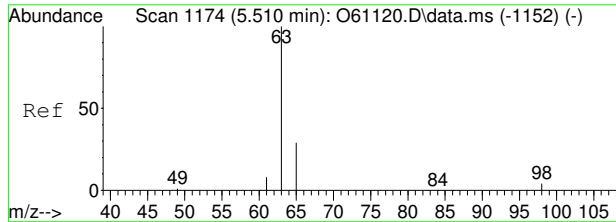
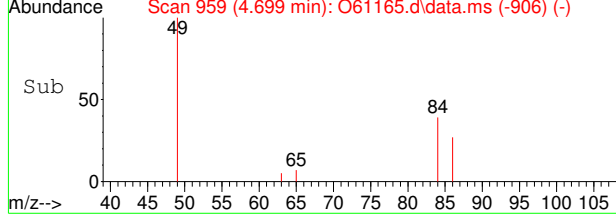
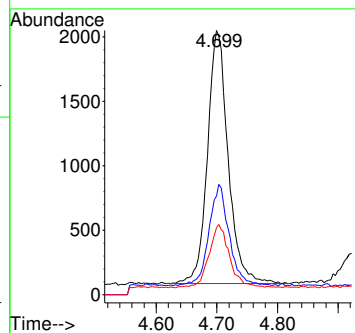
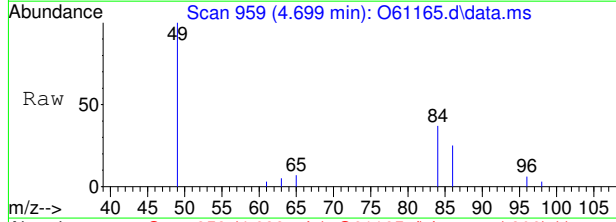




#5
 Methylene Chloride
 Concen: 0.09 ug/L
 RT: 4.699 min Scan# 959
 Delta R.T. 0.000 min
 Lab File: O61165.d
 Acq: 10 Sep 2020 11:58 am

Tgt Ion: 49 Resp: 4658

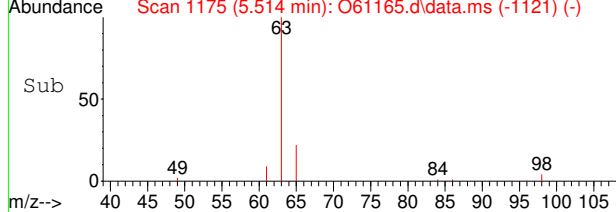
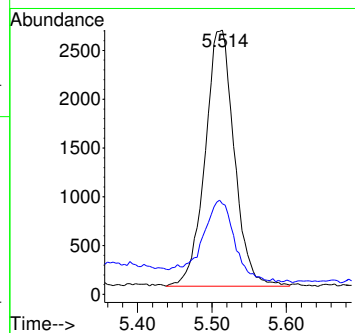
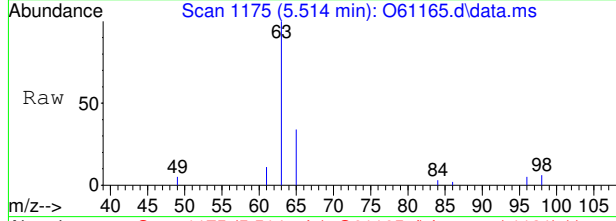
Ion	Ratio	Lower	Upper
49	100		
84	35.4	17.9	77.9
86	23.5	0.0	59.8



#7
 1,1-Dichloroethane
 Concen: 0.19 ug/L
 RT: 5.514 min Scan# 1175
 Delta R.T. 0.004 min
 Lab File: O61165.d
 Acq: 10 Sep 2020 11:58 am

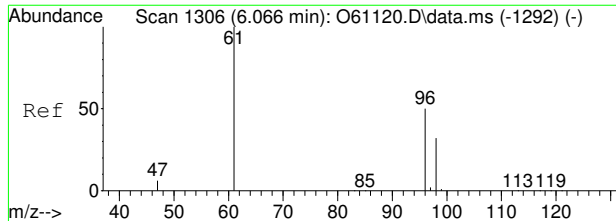
Tgt Ion: 63 Resp: 7147

Ion	Ratio	Lower	Upper
63	100		
65	30.2	0.7	60.7



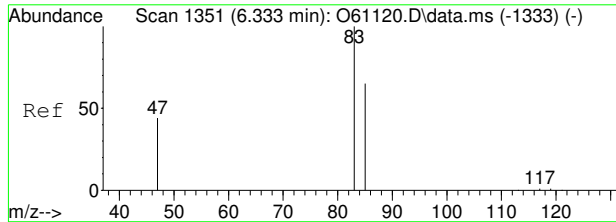
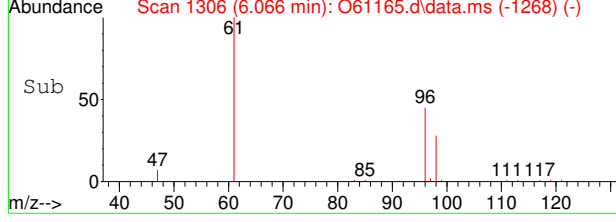
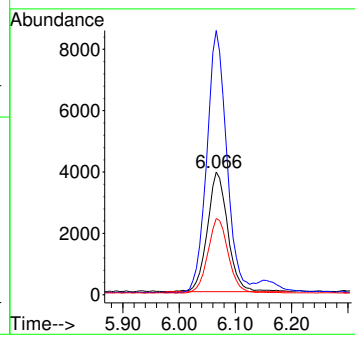
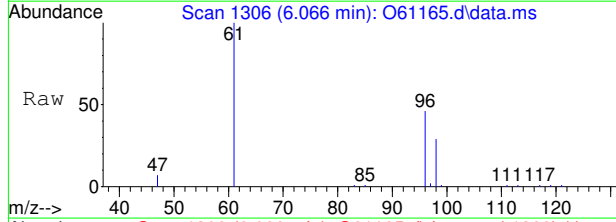
7.16
7





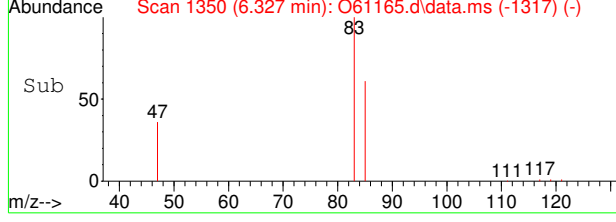
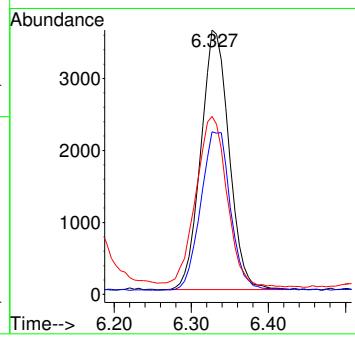
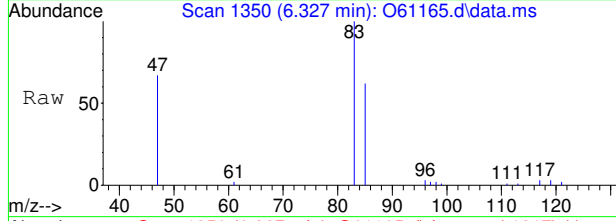
#8
 cis-1,2-Dichloroethene
 Concen: 0.60 ug/L
 RT: 6.066 min Scan# 1306
 Delta R.T. 0.000 min
 Lab File: O61165.d
 Acq: 10 Sep 2020 11:58 am

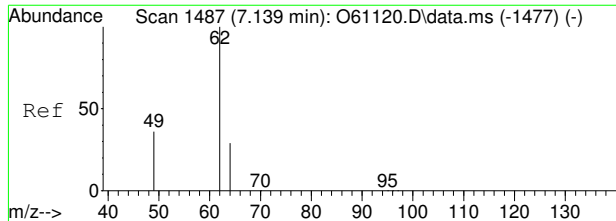
Tgt Ion	Resp	Lower	Upper
96	9882		
61	218.9	107.0	167.0#
98	62.1	34.1	94.1



#9
 Chloroform
 Concen: 0.30 ug/L
 RT: 6.327 min Scan# 1350
 Delta R.T. -0.006 min
 Lab File: O61165.d
 Acq: 10 Sep 2020 11:58 am

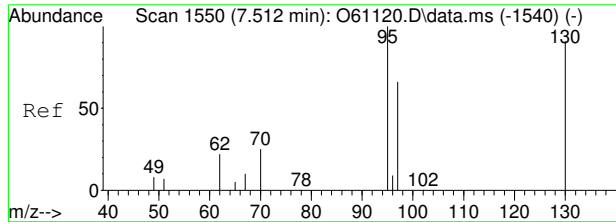
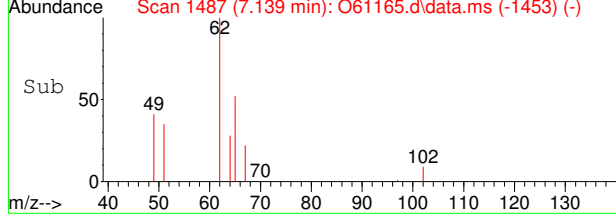
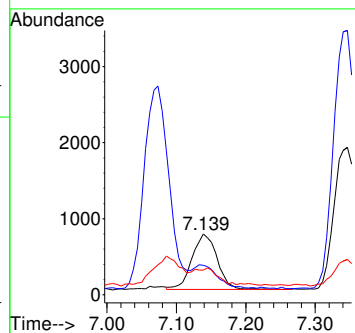
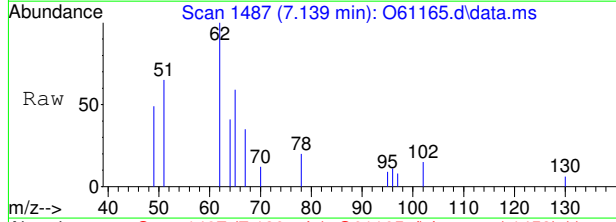
Tgt Ion	Resp	Lower	Upper
83	9133		
85	60.9	33.0	93.0
47	65.4	8.1	68.1





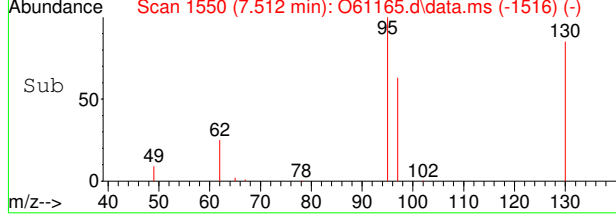
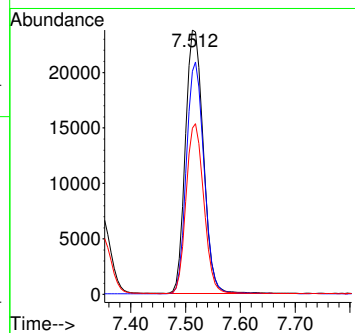
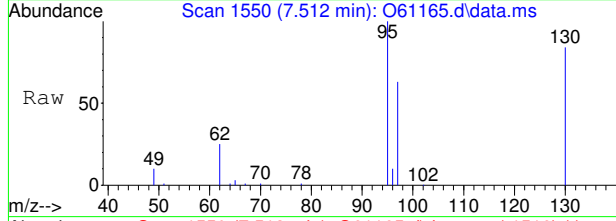
#14
 1,2-Dichloroethane
 Concen: 0.06 ug/L
 RT: 7.139 min Scan# 1487
 Delta R.T. 0.000 min
 Lab File: O61165.d
 Acq: 10 Sep 2020 11:58 am

Tgt Ion	Ratio	Lower	Upper
62	100		
49	41.9	18.0	78.0
64	28.0	1.5	61.5



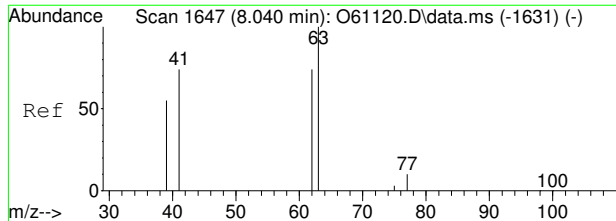
#15
 Trichloroethene
 Concen: 3.16 ug/L
 RT: 7.512 min Scan# 1550
 Delta R.T. 0.000 min
 Lab File: O61165.d
 Acq: 10 Sep 2020 11:58 am

Tgt Ion	Ratio	Lower	Upper
95	100		
130	84.4	60.4	120.4
97	62.8	34.6	94.6

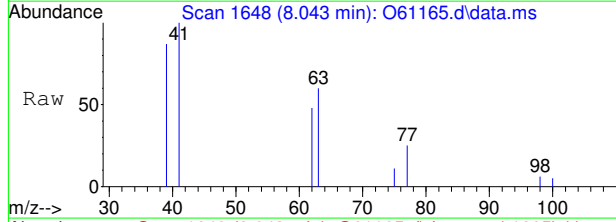


7.16
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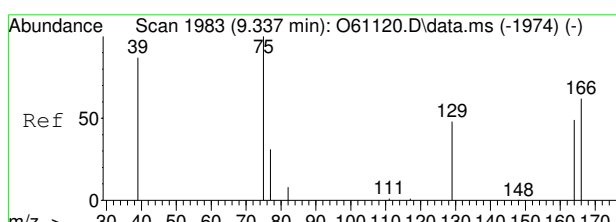
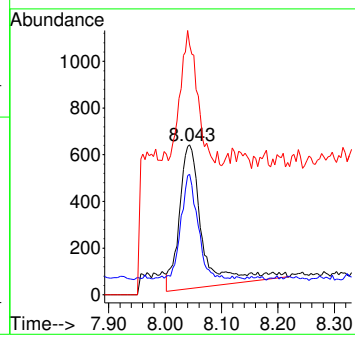
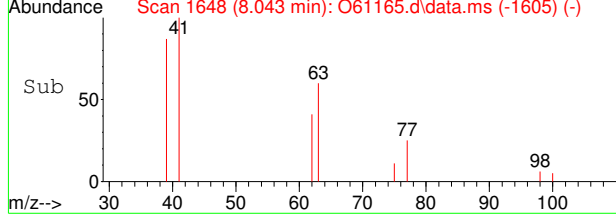


#16
 1,2-Dichloropropane
 Concen: 0.08 ug/L
 RT: 8.043 min Scan# 1648
 Delta R.T. 0.004 min
 Lab File: O61165.d
 Acq: 10 Sep 2020 11:58 am

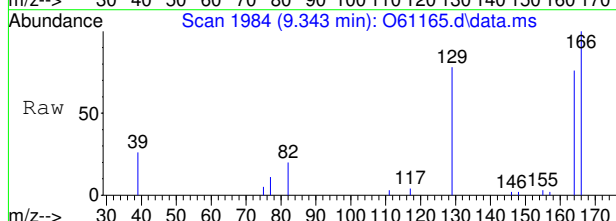


Tgt Ion: 63 Resp: 1744

Ion	Ratio	Lower	Upper
63	100		
62	77.7	42.7	102.7
41	92.4	54.5	114.5

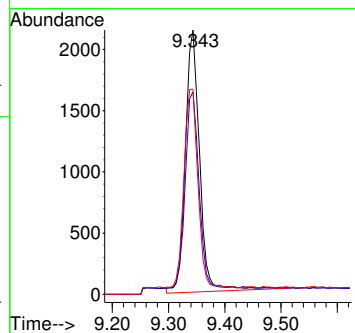
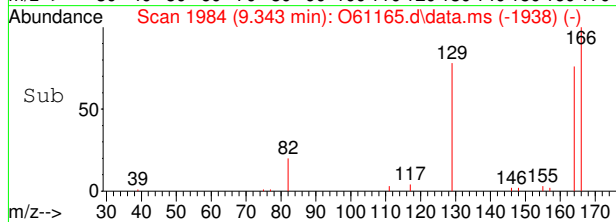


#21
 Tetrachloroethene
 Concen: 0.28 ug/L
 RT: 9.343 min Scan# 1984
 Delta R.T. 0.006 min
 Lab File: O61165.d
 Acq: 10 Sep 2020 11:58 am



Tgt Ion: 166 Resp: 3770

Ion	Ratio	Lower	Upper
166	100		
164	75.9	47.3	107.3
129	76.7	37.5	97.5



7.16
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-11-2020\vo2354\
Data File : O61166.d
Acq On : 10 Sep 2020 12:18 pm
Operator : melissam
Sample : FA78549-6
Misc : MS47173,VO2354,,,,,
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 14 07:52:03 2020
Quant Method : C:\msdchem\1\methods\SIMCL090820.M
Quant Title : Standard Methods 6200B
QLast Update : Wed Sep 09 12:10:38 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)	

Internal Standards							
1) Fluorobenzene	7.346	96	189608	5.00	ug/L	0.00	
18) Chlorobenzene-d5	10.447	117	133015	5.00	ug/L	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.074	65	93677	5.63	ug/L	0.00	
Spiked Amount	5.000	Range 74 - 125	Recovery	=	112.60%		
19) Toluene-d8	8.900	98	165951	5.10	ug/L	0.00	
Spiked Amount	5.000	Range 88 - 111	Recovery	=	102.00%		
Target Compounds							
2) Vinyl Chloride	2.908	62	963	0.05	ug/L		91
3) Chloromethane	2.776	50	6351	0.23	ug/L		82
5) Methylene Chloride	4.703	49	5375	0.11	ug/L		90
7) 1,1-Dichloroethane	5.510	63	1785	0.05	ug/L		99
8) cis-1,2-Dichloroethene	6.066	96	958	0.06	ug/L #		59
12) Benzene	6.949	78	2558m	0.05	ug/L		
14) 1,2-Dichloroethane	7.139	62	2825	0.09	ug/L		93
15) Trichloroethene	7.512	95	2255	0.14	ug/L		94
16) 1,2-Dichloropropane	8.040	63	526m	0.03	ug/L		
21) Tetrachloroethene	9.343	166	2163m	0.17	ug/L		
22) 1,4-Dichlorobenzene	12.827	146	29948	1.07	ug/L		96

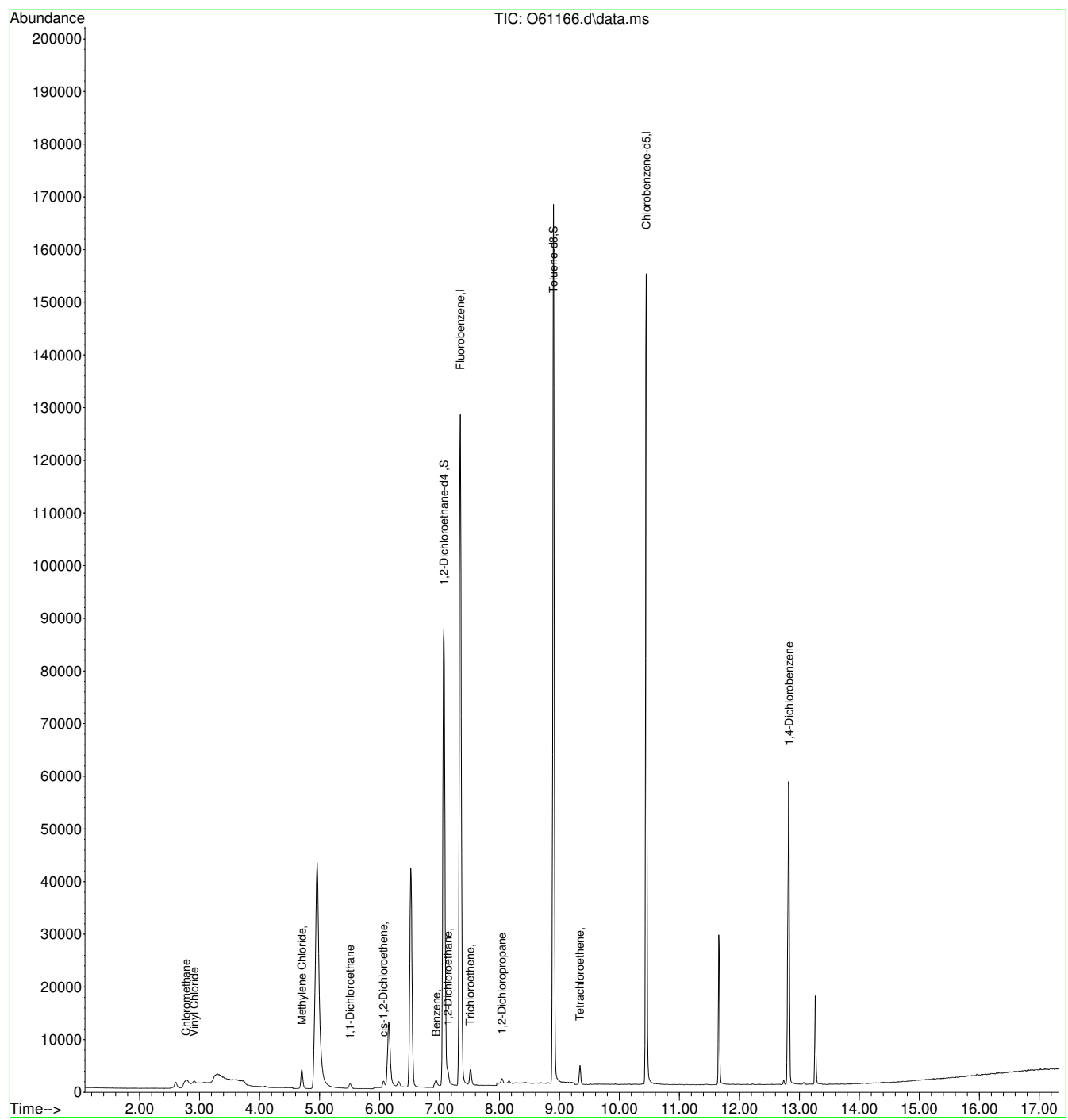
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.17
7

Quantitation Report (QT Reviewed)

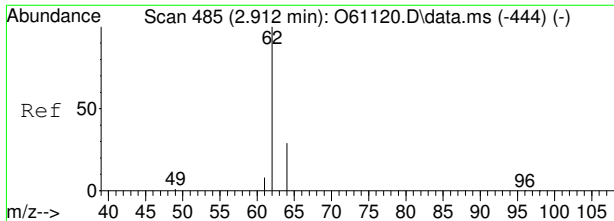
Data Path : C:\msdchem\1\data\johnm\September 2020\09-11-2020\vo2354\
Data File : O61166.d
Acq On : 10 Sep 2020 12:18 pm
Operator : melissam
Sample : FA78549-6
Misc : MS47173,VO2354,,,,,
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 14 07:52:03 2020
Quant Method : C:\msdchem\1\methods\SIMCL090820.M
Quant Title : Standard Methods 6200B
QLast Update : Wed Sep 09 12:10:38 2020
Response via : Initial Calibration



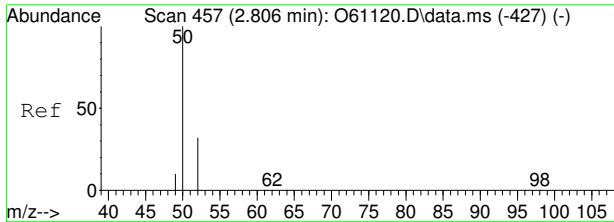
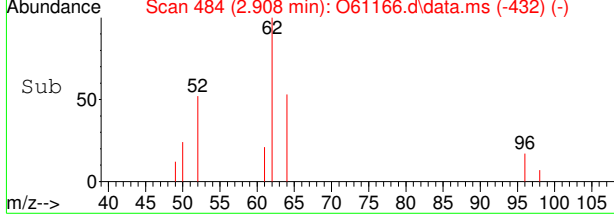
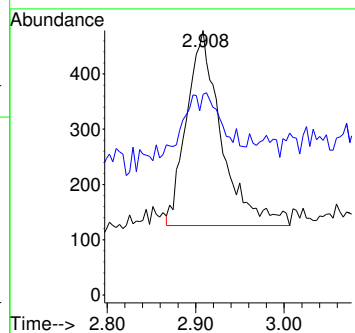
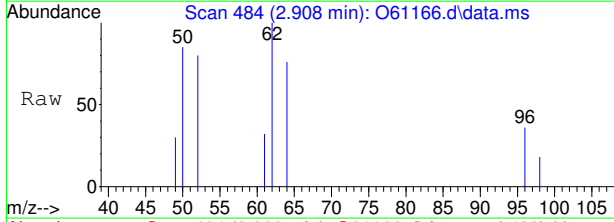
7.17





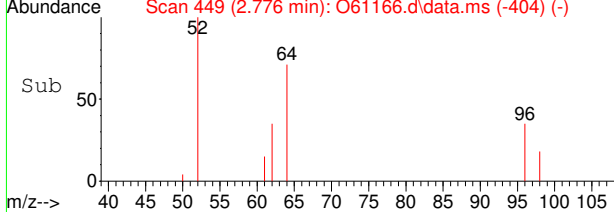
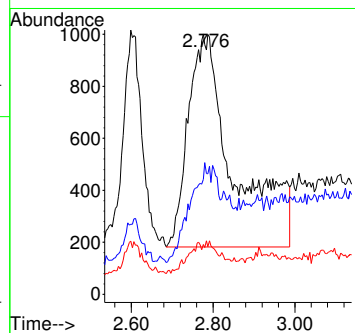
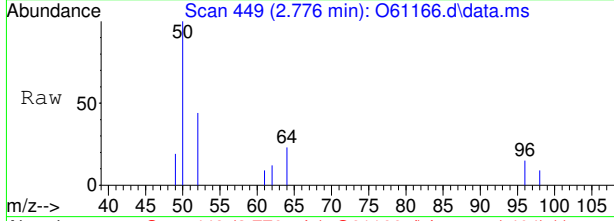
#2
 Vinyl Chloride
 Concen: 0.05 ug/L
 RT: 2.908 min Scan# 484
 Delta R.T. -0.004 min
 Lab File: O61166.d
 Acq: 10 Sep 2020 12:18 pm

Tgt Ion	Resp	Lower	Upper
62	100		
64	25.8	0.9	60.9

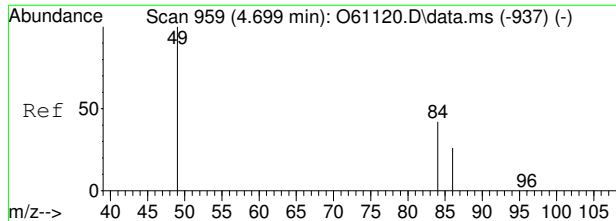


#3
 Chloromethane
 Concen: 0.23 ug/L
 RT: 2.776 min Scan# 449
 Delta R.T. -0.030 min
 Lab File: O61166.d
 Acq: 10 Sep 2020 12:18 pm

Tgt Ion	Resp	Lower	Upper
50	100		
52	39.1	7.8	47.8
49	13.7	0.0	30.5



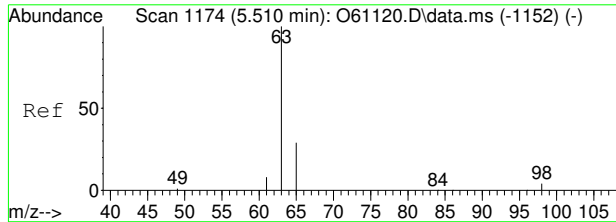
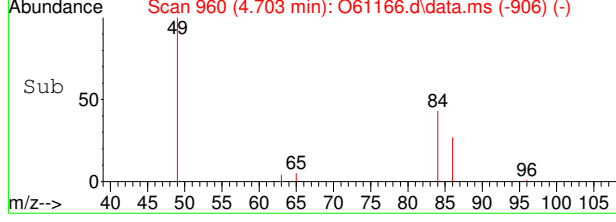
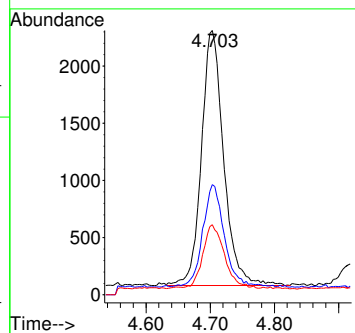
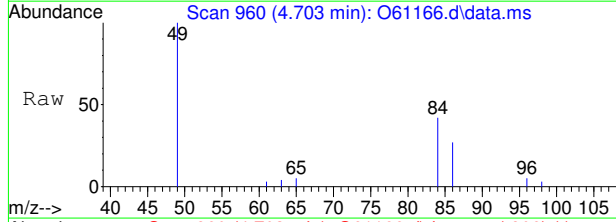
7.17
7



#5
 Methylene Chloride
 Concen: 0.11 ug/L
 RT: 4.703 min Scan# 960
 Delta R.T. 0.004 min
 Lab File: O61166.d
 Acq: 10 Sep 2020 12:18 pm

Tgt Ion: 49 Resp: 5375

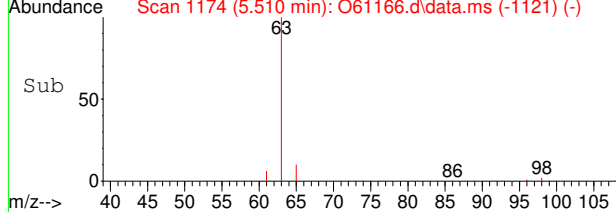
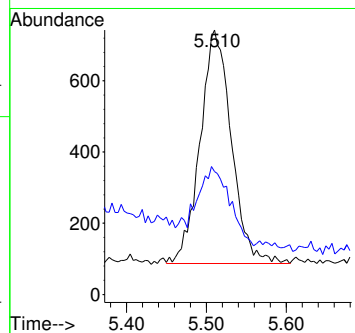
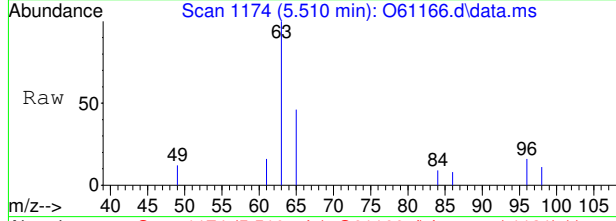
Ion	Ratio	Lower	Upper
49	100		
84	40.2	17.9	77.9
86	25.1	0.0	59.8



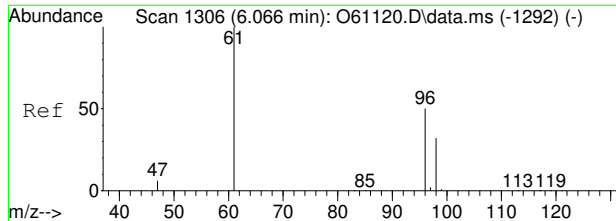
#7
 1,1-Dichloroethane
 Concen: 0.05 ug/L
 RT: 5.510 min Scan# 1174
 Delta R.T. 0.000 min
 Lab File: O61166.d
 Acq: 10 Sep 2020 12:18 pm

Tgt Ion: 63 Resp: 1785

Ion	Ratio	Lower	Upper
63	100		
65	31.3	0.7	60.7

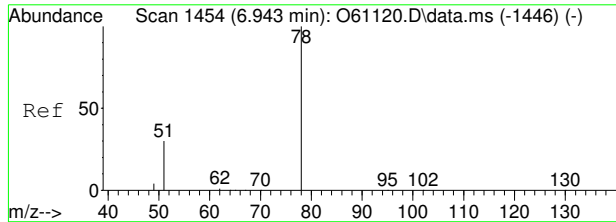
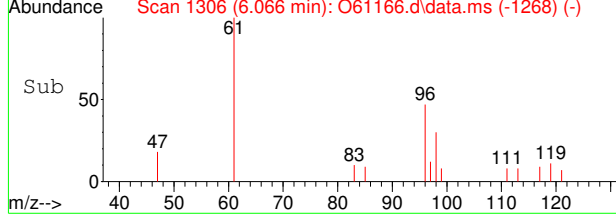
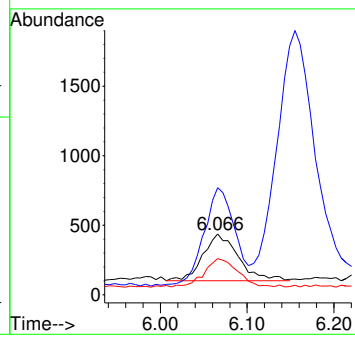
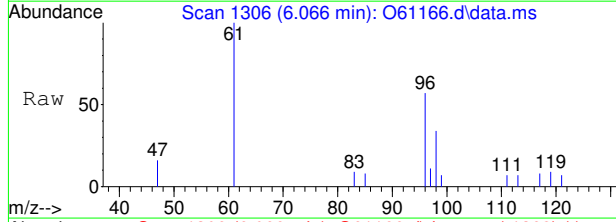


7.17
7



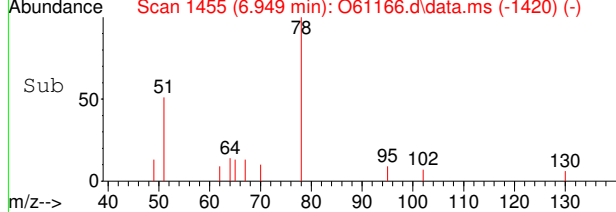
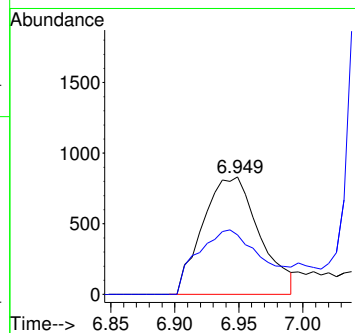
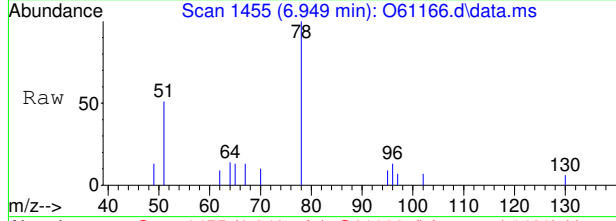
#8
 cis-1,2-Dichloroethene
 Concen: 0.06 ug/L
 RT: 6.066 min Scan# 1306
 Delta R.T. 0.000 min
 Lab File: O61166.d
 Acq: 10 Sep 2020 12:18 pm

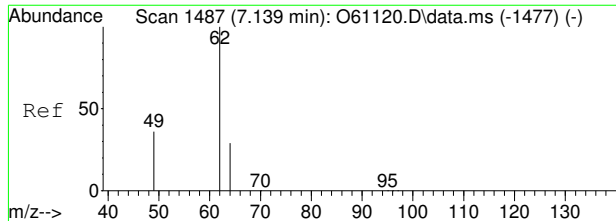
Tgt Ion	Resp	Lower	Upper
96	958		
61	206.5	107.0	167.0#
98	59.9	34.1	94.1



#12
 Benzene
 Concen: 0.05 ug/L m
 RT: 6.949 min Scan# 1455
 Delta R.T. 0.006 min
 Lab File: O61166.d
 Acq: 10 Sep 2020 12:18 pm

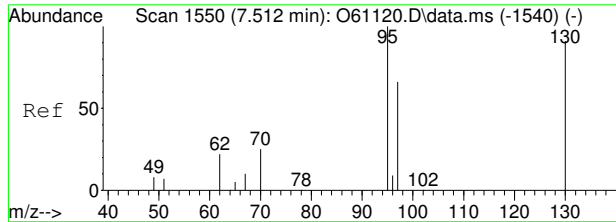
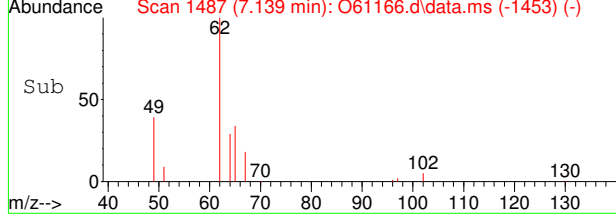
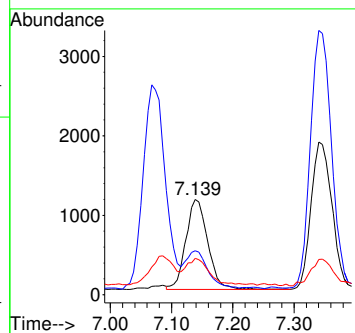
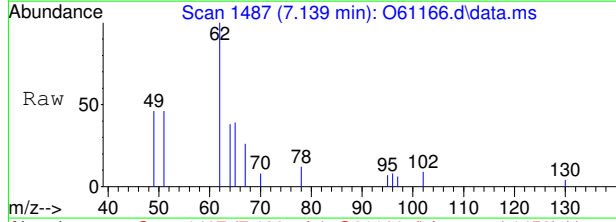
Tgt Ion	Resp	Lower	Upper
78	2558		
78	100		
51	50.6	0.0	56.2





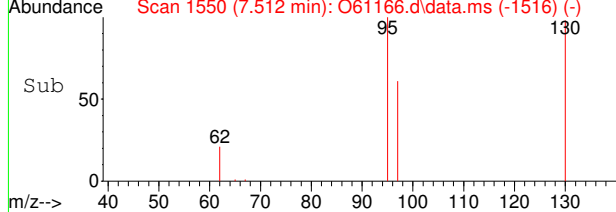
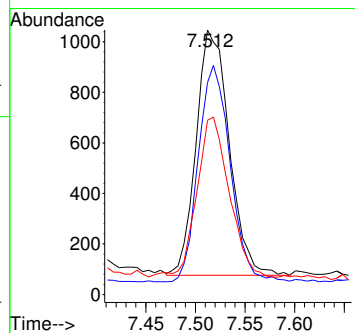
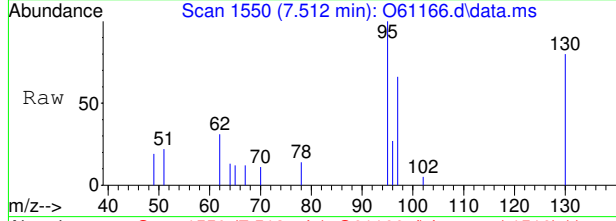
#14
 1,2-Dichloroethane
 Concen: 0.09 ug/L
 RT: 7.139 min Scan# 1487
 Delta R.T. 0.000 min
 Lab File: O61166.d
 Acq: 10 Sep 2020 12:18 pm

Tgt Ion	Ratio	Lower	Upper
62	100		
49	41.1	18.0	78.0
64	30.5	1.5	61.5



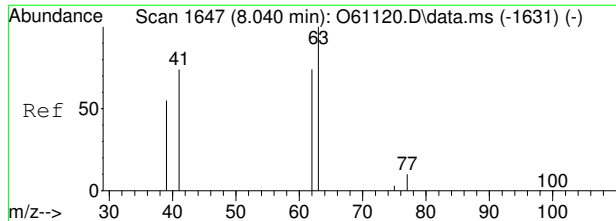
#15
 Trichloroethene
 Concen: 0.14 ug/L
 RT: 7.512 min Scan# 1550
 Delta R.T. 0.000 min
 Lab File: O61166.d
 Acq: 10 Sep 2020 12:18 pm

Tgt Ion	Ratio	Lower	Upper
95	100		
130	81.2	60.4	120.4
97	63.6	34.6	94.6



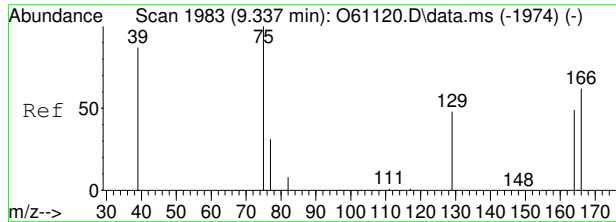
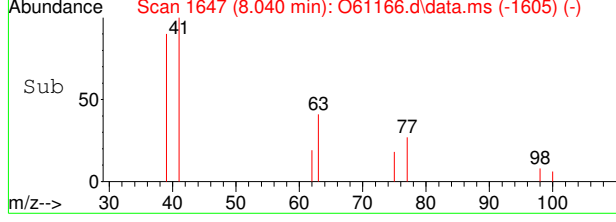
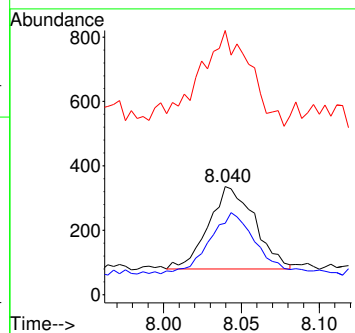
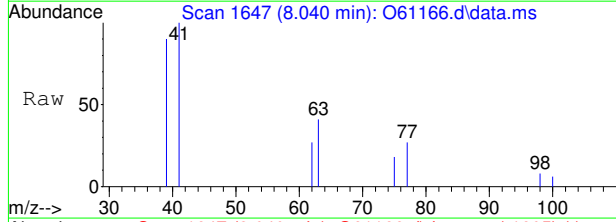
7.17
7





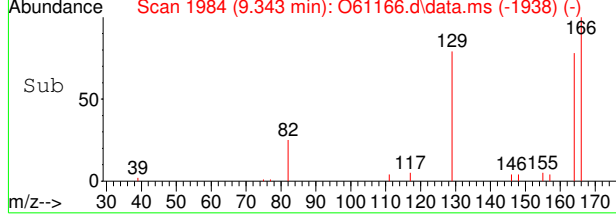
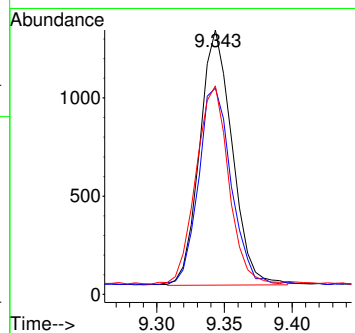
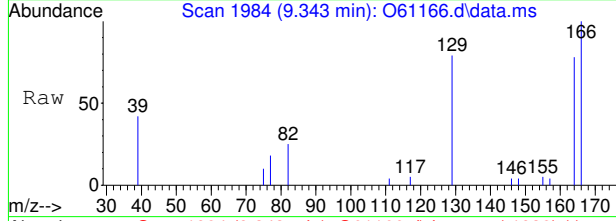
#16
 1,2-Dichloropropane
 Concen: 0.03 ug/L m
 RT: 8.040 min Scan# 1647
 Delta R.T. 0.000 min
 Lab File: O61166.d
 Acq: 10 Sep 2020 12:18 pm

Tgt Ion	Resp	Lower	Upper
63	526		
62	66.1	42.7	102.7
41	244.3	54.5	114.5#

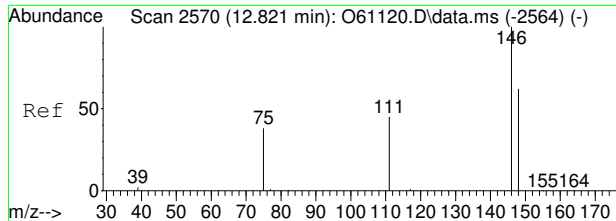


#21
 Tetrachloroethene
 Concen: 0.17 ug/L m
 RT: 9.343 min Scan# 1984
 Delta R.T. 0.006 min
 Lab File: O61166.d
 Acq: 10 Sep 2020 12:18 pm

Tgt Ion	Resp	Lower	Upper
166	2163		
166	100		
164	78.0	47.3	107.3
129	78.8	37.5	97.5

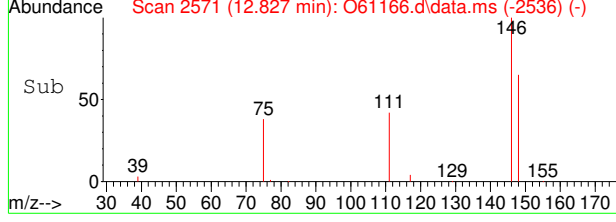
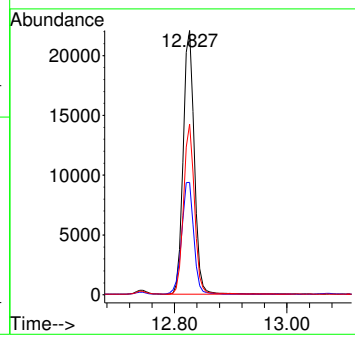
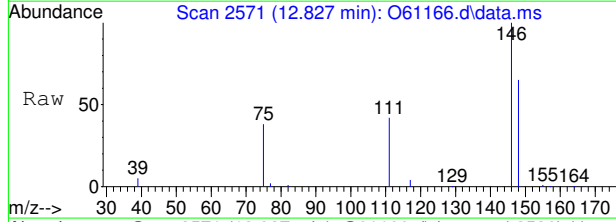


7.17
7



#22
1,4-Dichlorobenzene
Concen: 1.07 ug/L
RT: 12.827 min Scan# 2571
Delta R.T. 0.006 min
Lab File: O61166.d
Acq: 10 Sep 2020 12:18 pm

Tgt Ion	Ratio	Lower	Upper
146	100		
111	42.3	17.0	57.0
148	64.5	43.7	83.7



7.17
7



Manual Integration Approval Summary

Sample Number: FA78549-6 **Method:** SW846 8260B BY SIM
Lab FileID: O61166.D **Analyst approved:** 09/17/20 16:04 Juan Garcia
Injection Time: 09/10/20 12:18 **Supervisor approved:** 09/18/20 14:38 Melissa Mangual

Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzene	71-43-2		6.95	Poor instrument integration
1,2-Dichloropropane	78-87-5		8.04	Poor instrument integration
Tetrachloroethylene	127-18-4		9.34	Poor instrument integration

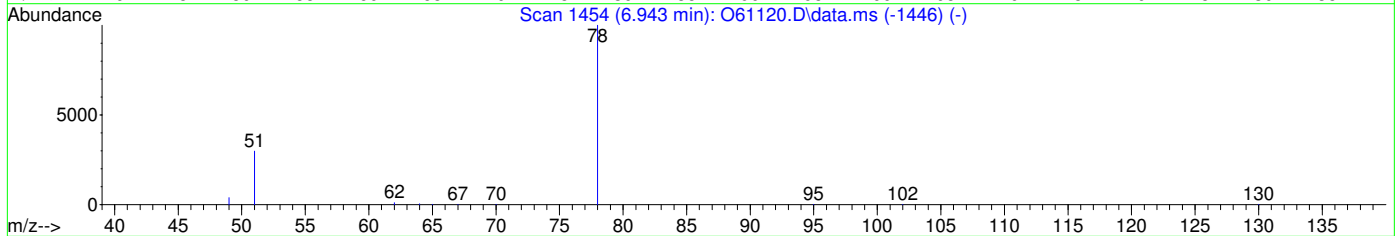
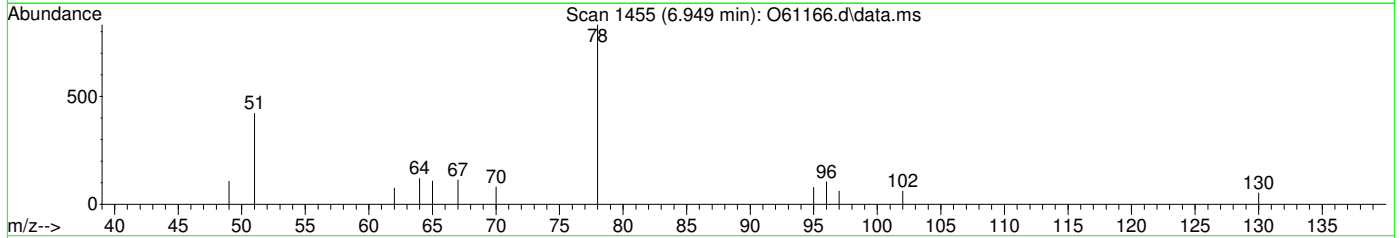
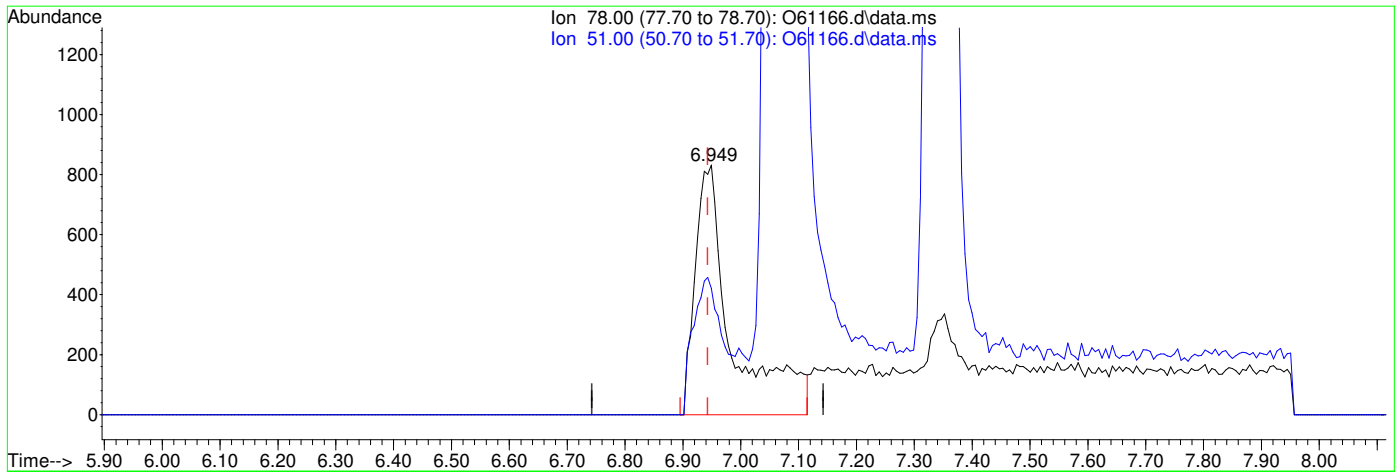
7.1.7.1

7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-11-2020\vo2354\
Data File : O61166.d
Acq On : 10 Sep 2020 12:18 pm
Operator : melissam
Sample : FA78549-6
Misc : MS47173,VO2354,,,,,
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 11 05:39:33 2020
Quant Method : C:\msdchem\1\methods\SIMCL090820.M
Quant Title : Standard Methods 6200B
QLast Update : Wed Sep 09 12:10:38 2020
Response via : Initial Calibration



TIC: O61166.d\data.ms

(12) Benzene ()

6.949min (+0.006) 0.06ug/L

response 3652

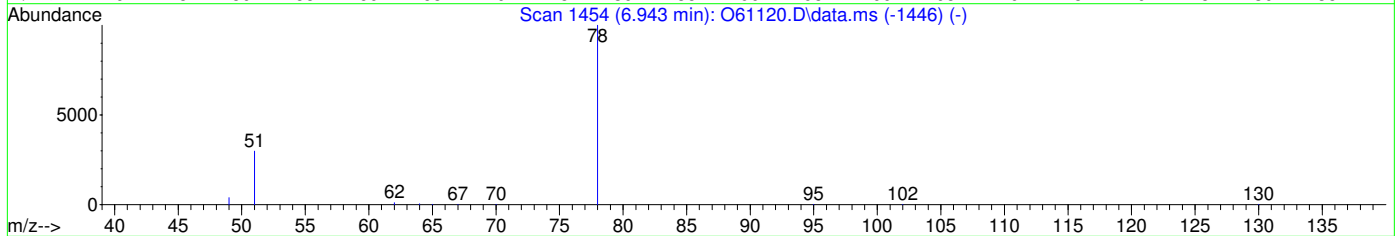
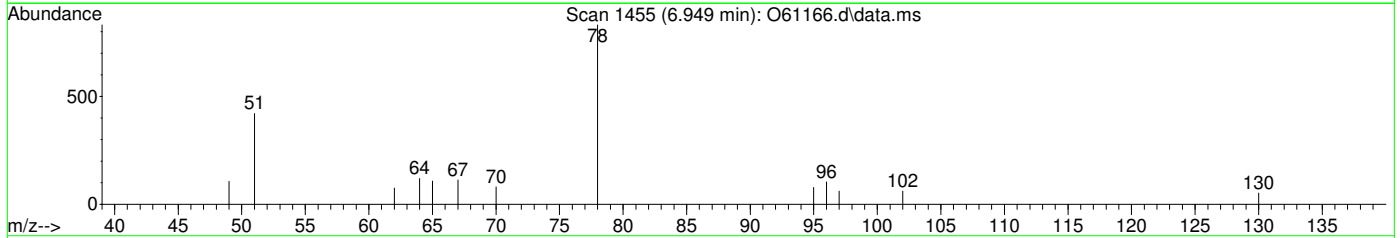
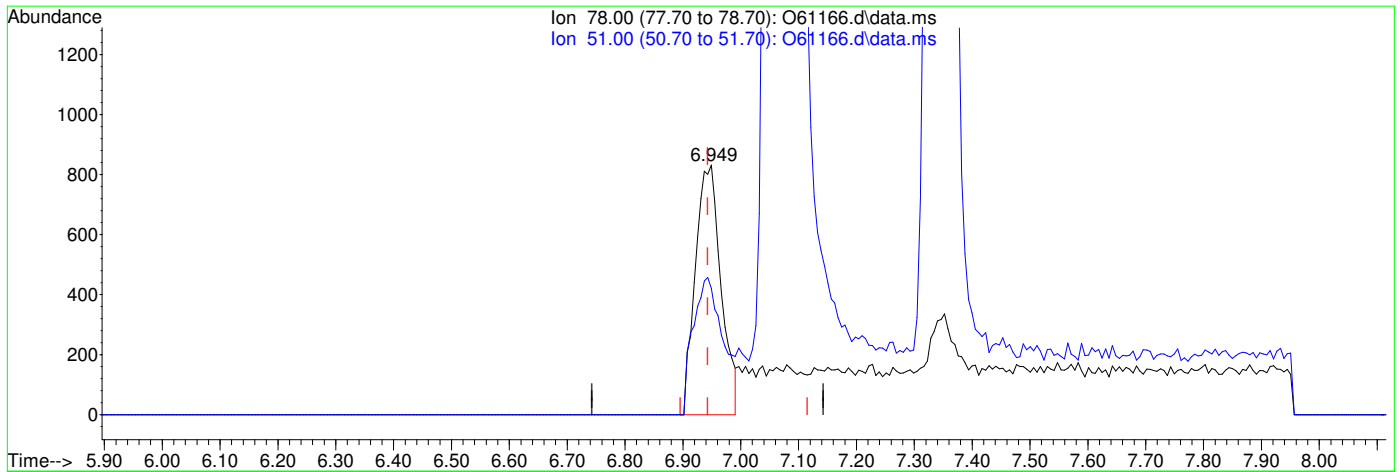
Ion	Exp%	Act%
78.00	100	100
51.00	26.20	50.60
0.00	0.00	0.00
0.00	0.00	0.00

7.1.7.2
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-11-2020\vo2354\
Data File : O61166.d
Acq On : 10 Sep 2020 12:18 pm
Operator : melissam
Sample : FA78549-6
Misc : MS47173,VO2354,,,,,
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 11 05:39:33 2020
Quant Method : C:\msdchem\1\methods\SIMCL090820.M
Quant Title : Standard Methods 6200B
QLast Update : Wed Sep 09 12:10:38 2020
Response via : Initial Calibration



TIC: O61166.d\data.ms

(12) Benzene ()

6.949min (+0.006) 0.05ug/L m

response 2558

Ion	Exp%	Act%
78.00	100	100
51.00	26.20	50.60
0.00	0.00	0.00
0.00	0.00	0.00

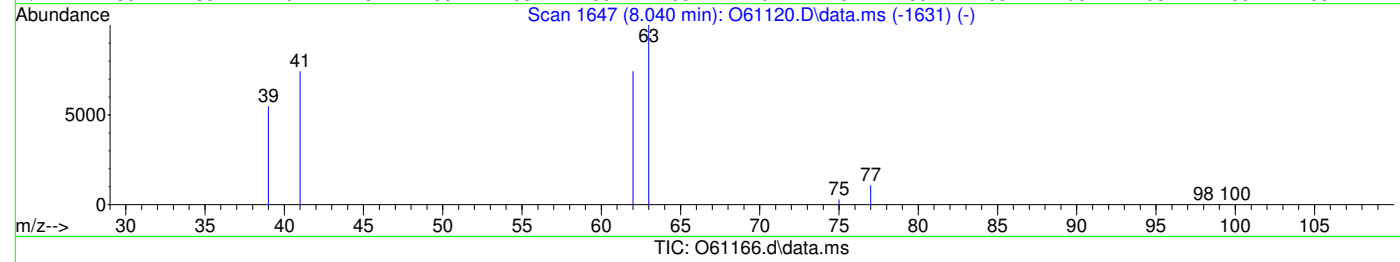
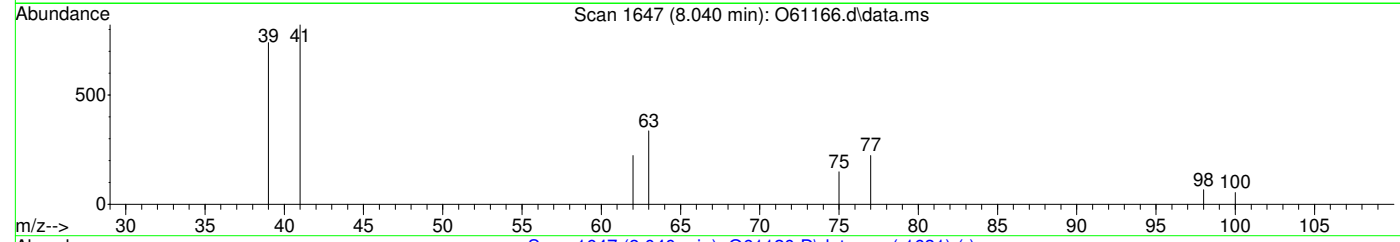
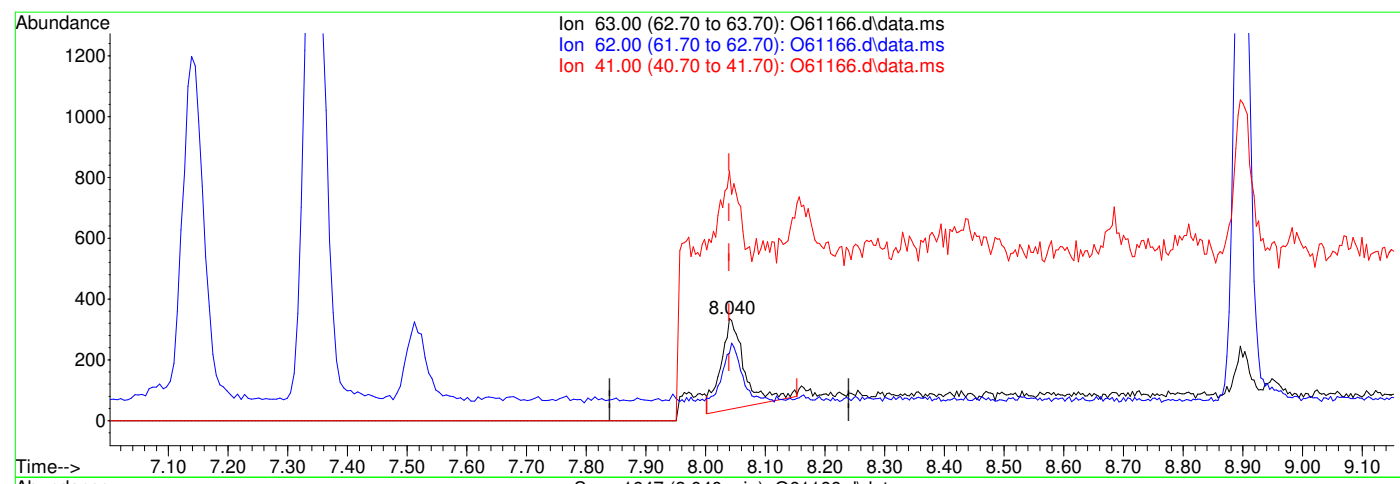
7.1.7.3
7



Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-11-2020\vo2354\
Data File : O61166.d
Acq On : 10 Sep 2020 12:18 pm
Operator : melissam
Sample : FA78549-6
Misc : MS47173,VO2354,,,,,
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 11 05:39:33 2020
Quant Method : C:\msdchem\1\methods\SIMCL090820.M
Quant Title : Standard Methods 6200B
QLast Update : Wed Sep 09 12:10:38 2020
Response via : Initial Calibration



(16) 1,2-Dichloropropane
8.040min (+0.000) 0.04ug/L
response 819

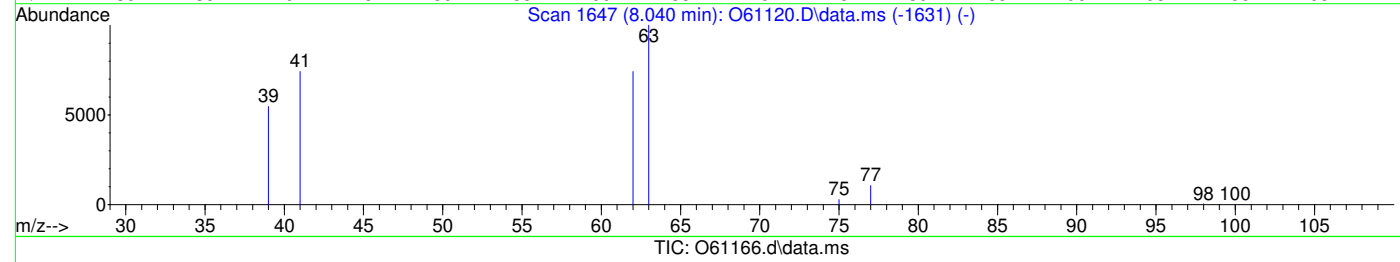
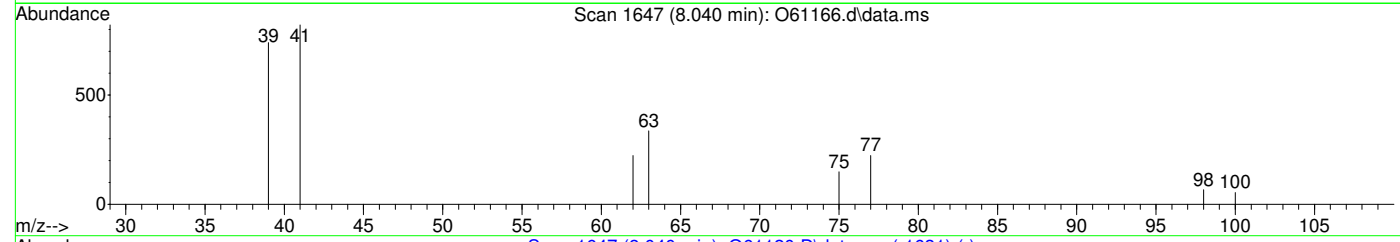
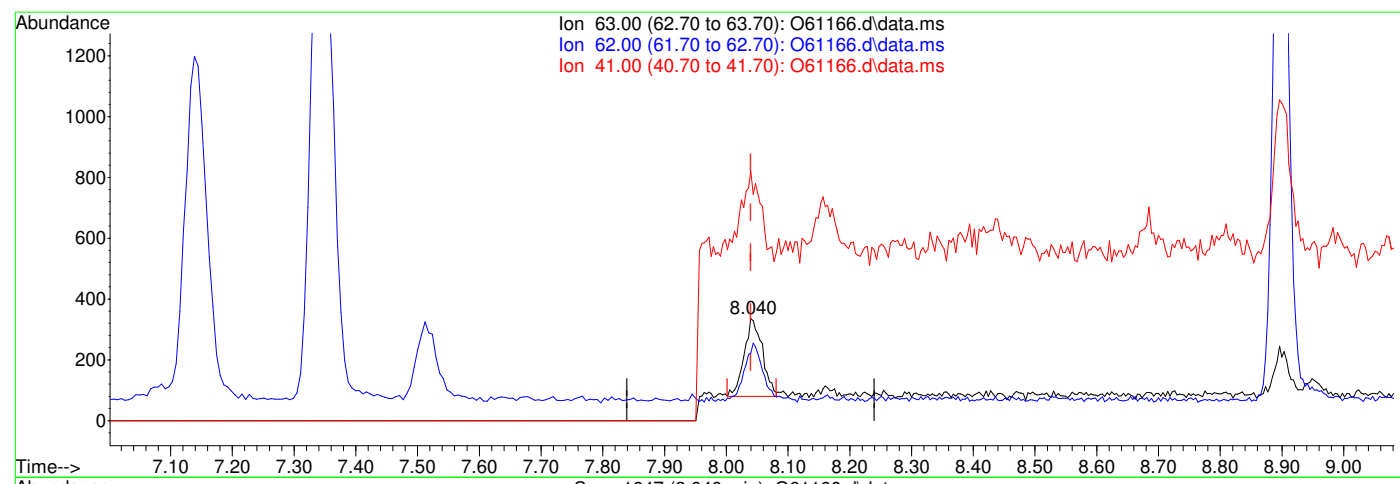
Ion	Exp%	Act%
63.00	100	100
62.00	72.70	58.20
41.00	84.50	101.17
0.00	0.00	0.00

7.1.7.4
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-11-2020\vo2354\
Data File : O61166.d
Acq On : 10 Sep 2020 12:18 pm
Operator : melissam
Sample : FA78549-6
Misc : MS47173,VO2354,,,,,
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 11 05:39:33 2020
Quant Method : C:\msdchem\1\methods\SIMCL090820.M
Quant Title : Standard Methods 6200B
QLast Update : Wed Sep 09 12:10:38 2020
Response via : Initial Calibration



(16) 1,2-Dichloropropane
8.040min (+0.000) 0.03ug/L m
response 526

Ion	Exp%	Act%
63.00	100	100
62.00	72.70	66.07
41.00	84.50	244.35#
0.00	0.00	0.00

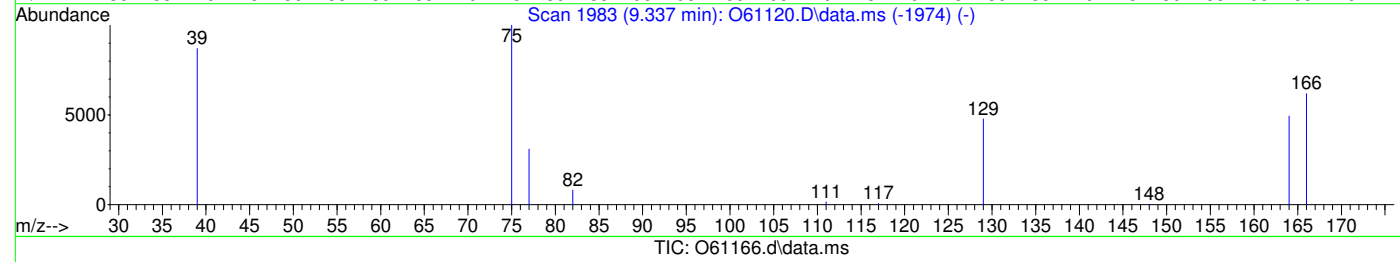
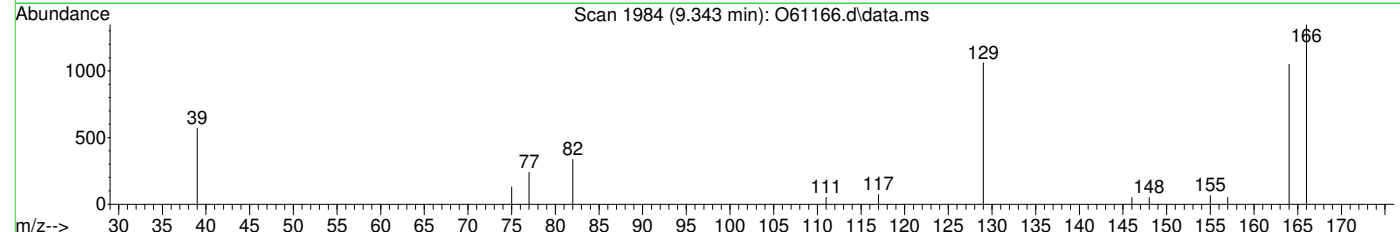
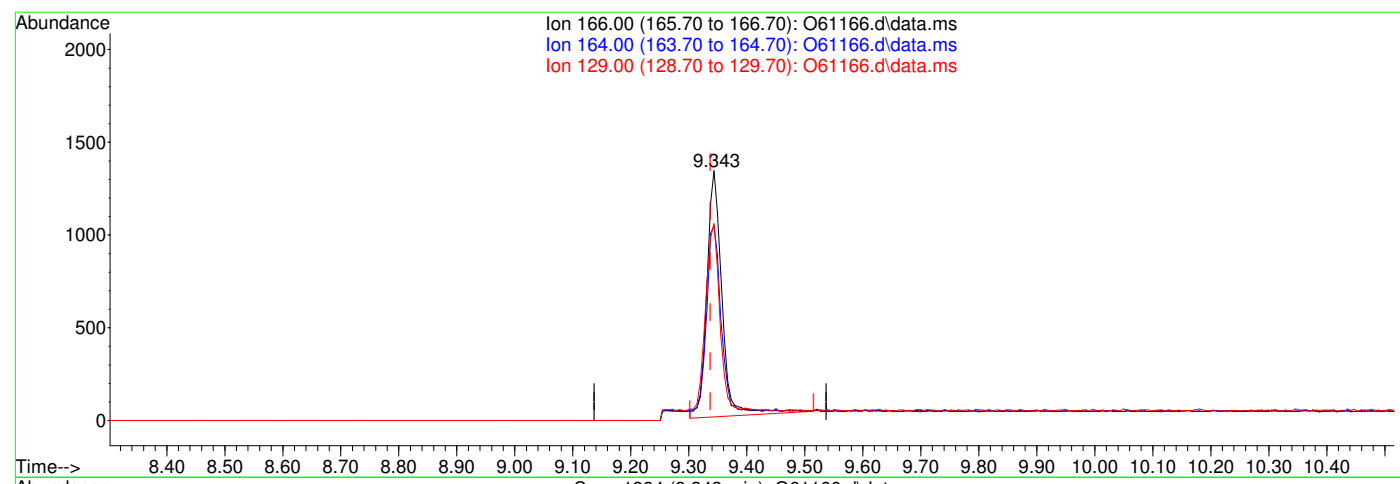
7.1.7.5
7



Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-11-2020\vo2354\
Data File : O61166.d
Acq On : 10 Sep 2020 12:18 pm
Operator : melissam
Sample : FA78549-6
Misc : MS47173,VO2354,,,,,
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 11 05:39:33 2020
Quant Method : C:\msdchem\1\methods\SIMCL090820.M
Quant Title : Standard Methods 6200B
QLast Update : Wed Sep 09 12:10:38 2020
Response via : Initial Calibration



(21) Tetrachloroethene ()
9.343min (+0.006) 0.19ug/L
response 2426

Ion	Exp%	Act%
166.00	100	100
164.00	77.30	77.01
129.00	67.50	77.62
0.00	0.00	0.00

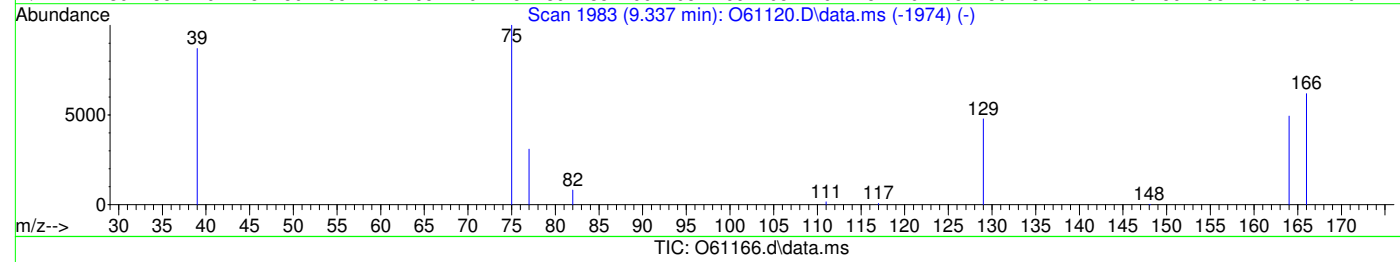
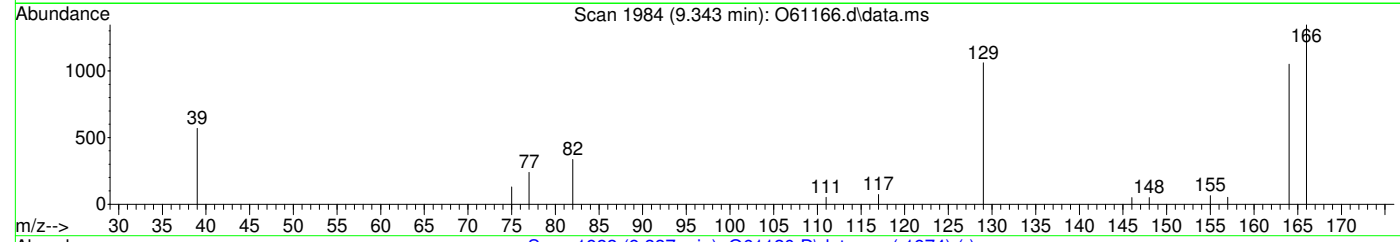
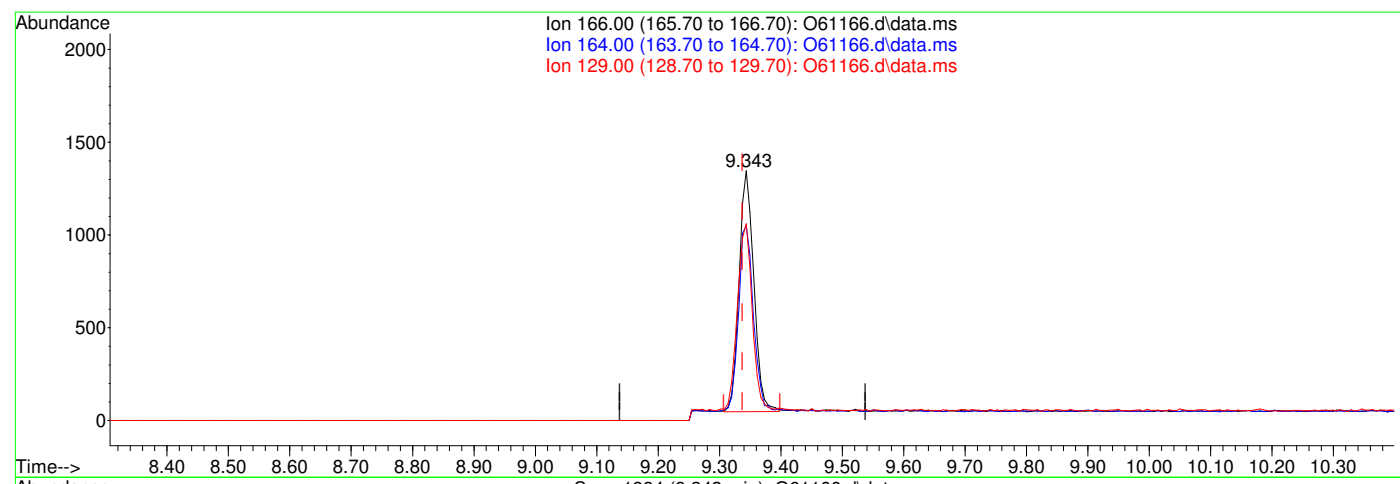
7.1.7.6
7



Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-11-2020\vo2354\
Data File : O61166.d
Acq On : 10 Sep 2020 12:18 pm
Operator : melissam
Sample : FA78549-6
Misc : MS47173,VO2354,,,,,
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 11 05:39:33 2020
Quant Method : C:\msdchem\1\methods\SIMCL090820.M
Quant Title : Standard Methods 6200B
QLast Update : Wed Sep 09 12:10:38 2020
Response via : Initial Calibration



(21) Tetrachloroethene ()

9.343min (+0.006) 0.17ug/L m

response 2163

Ion	Exp%	Act%
166.00	100	100
164.00	77.30	78.01
129.00	67.50	78.83
0.00	0.00	0.00



7.1.7.7
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-17-2020\vo2363\
 Data File : O61415.d
 Acq On : 16 Sep 2020 4:33 pm
 Operator : akarig
 Sample : FA78549-6
 Misc : MS47193,VO2363,,,,,
 ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 17 04:54:40 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091520.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 16 09:02:25 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)	

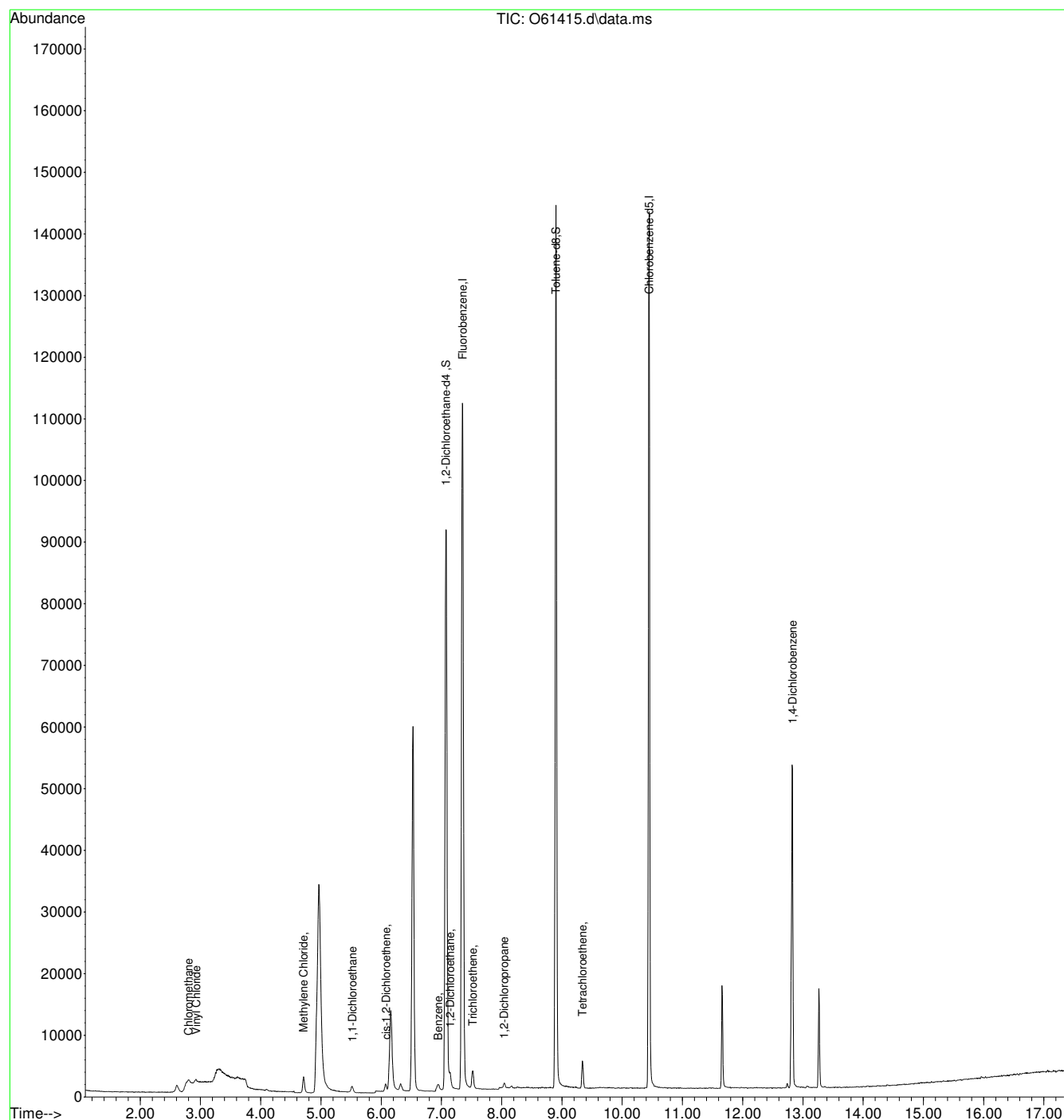
Internal Standards							
1) Fluorobenzene	7.352	96	172443	5.00	ug/L	0.00	
18) Chlorobenzene-d5	10.447	117	135200	5.00	ug/L	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.073	65	86778	5.97	ug/L	0.00	
Spiked Amount	5.000	Range 74 - 125	Recovery	=	119.40%		
19) Toluene-d8	8.900	98	142426	5.16	ug/L	0.00	
Spiked Amount	5.000	Range 88 - 111	Recovery	=	103.20%		
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.927	62	1442	0.06	ug/L		90
3) Chloromethane	2.803	50	7490	0.22	ug/L		73
5) Methylene Chloride	4.711	49	3366	0.07	ug/L		98
7) 1,1-Dichloroethane	5.521	63	1657	0.05	ug/L		90
8) cis-1,2-Dichloroethene	6.078	96	755	0.05	ug/L		96
12) Benzene	6.949	78	2497m	0.05	ug/L		
14) 1,2-Dichloroethane	7.145	62	2401	0.09	ug/L		97
15) Trichloroethene	7.518	95	1989	0.13	ug/L		91
16) 1,2-Dichloropropane	8.040	63	425m	0.02	ug/L		
21) Tetrachloroethene	9.343	166	3174	0.21	ug/L		92
22) 1,4-Dichlorobenzene	12.827	146	30615	1.04	ug/L		98

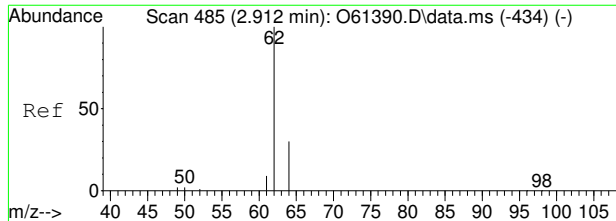
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-17-2020\vo2363\
Data File : O61415.d
Acq On : 16 Sep 2020 4:33 pm
Operator : akarig
Sample : FA78549-6
Misc : MS47193,VO2363,,,,,
ALS Vial : 16 Sample Multiplier: 1

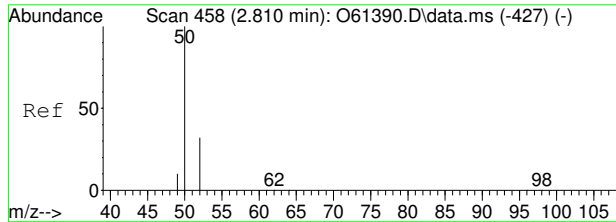
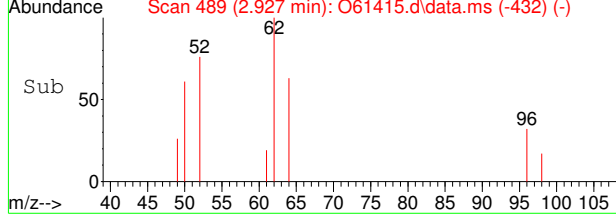
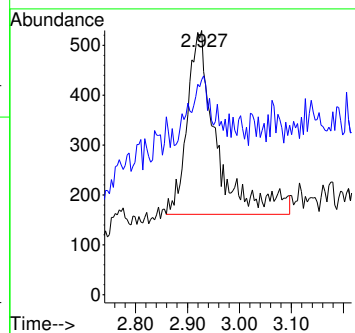
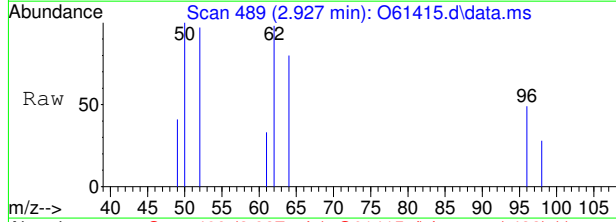
Quant Time: Sep 17 04:54:40 2020
Quant Method : C:\msdchem\1\methods\SIMCL091520.M
Quant Title : Standard Methods 6200B
QLast Update : Wed Sep 16 09:02:25 2020
Response via : Initial Calibration





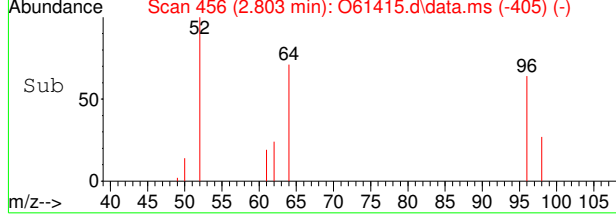
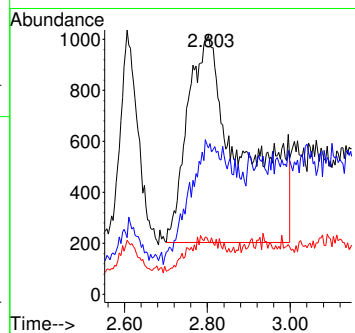
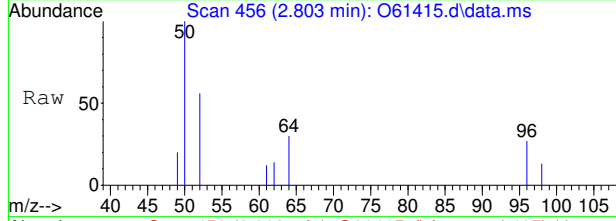
#2
 Vinyl Chloride
 Concen: 0.06 ug/L
 RT: 2.927 min Scan# 489
 Delta R.T. 0.015 min
 Lab File: O61415.d
 Acq: 16 Sep 2020 4:33 pm

Tgt Ion	Resp	Lower	Upper
62	1442		
64	24.7	0.0	59.8

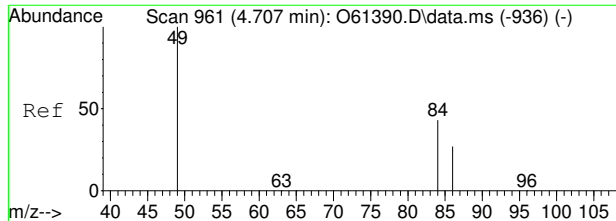


#3
 Chloromethane
 Concen: 0.22 ug/L
 RT: 2.803 min Scan# 456
 Delta R.T. -0.007 min
 Lab File: O61415.d
 Acq: 16 Sep 2020 4:33 pm

Tgt Ion	Resp	Lower	Upper
50	7490		
52	50.2	12.1	52.1
49	14.5	0.0	30.3

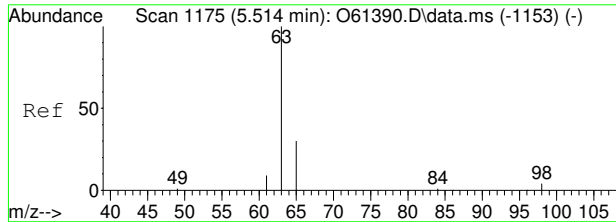
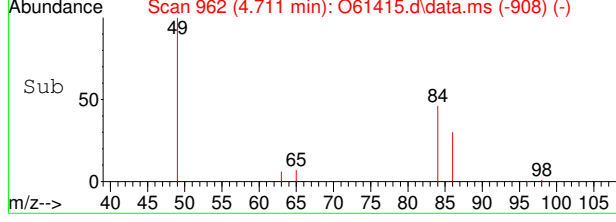
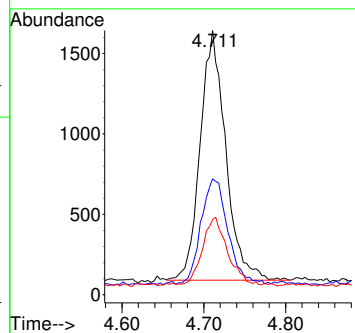
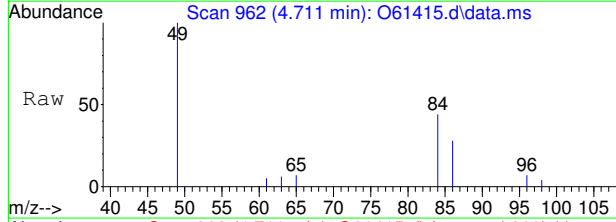


7.18
7



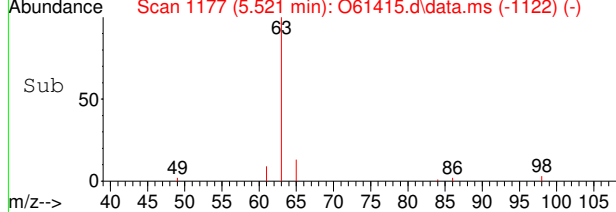
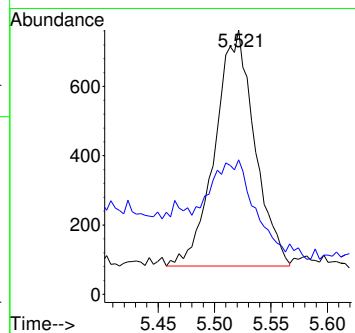
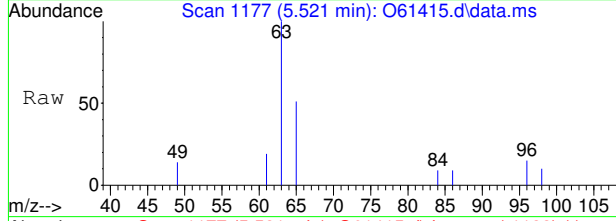
#5
 Methylene Chloride
 Concen: 0.07 ug/L
 RT: 4.711 min Scan# 962
 Delta R.T. 0.004 min
 Lab File: O61415.d
 Acq: 16 Sep 2020 4:33 pm

Tgt Ion	Resp	Lower	Upper
49	3366		
84	41.8	13.2	73.2
86	26.1	0.0	57.3

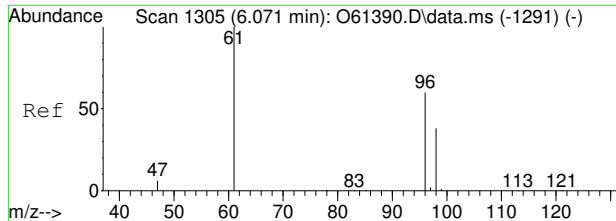


#7
 1,1-Dichloroethane
 Concen: 0.05 ug/L
 RT: 5.521 min Scan# 1177
 Delta R.T. 0.007 min
 Lab File: O61415.d
 Acq: 16 Sep 2020 4:33 pm

Tgt Ion	Resp	Lower	Upper
63	1657		
65	35.5	0.2	60.2

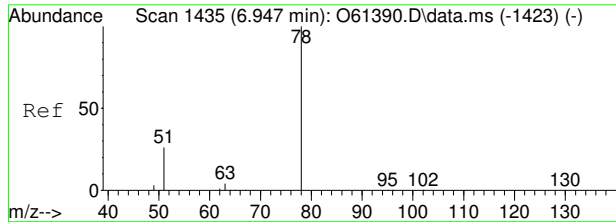
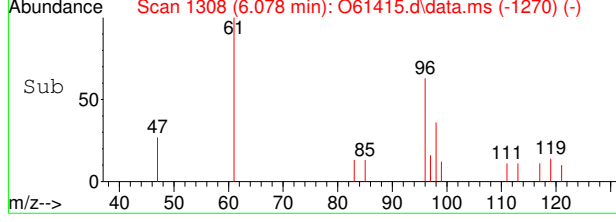
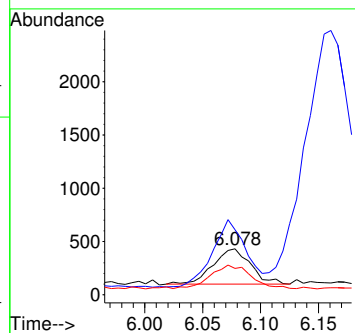
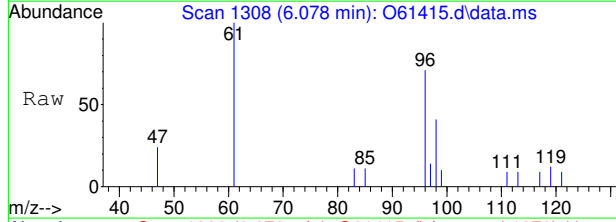


7.18
7



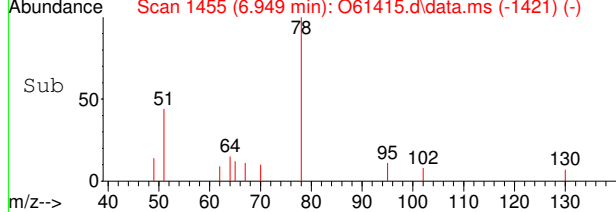
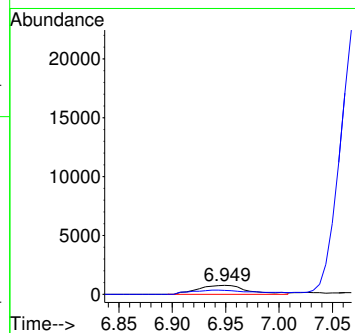
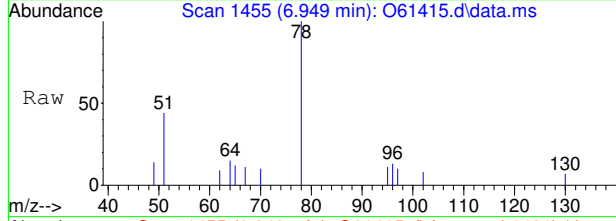
#8
 cis-1,2-Dichloroethene
 Concen: 0.05 ug/L
 RT: 6.078 min Scan# 1308
 Delta R.T. 0.007 min
 Lab File: O61415.d
 Acq: 16 Sep 2020 4:33 pm

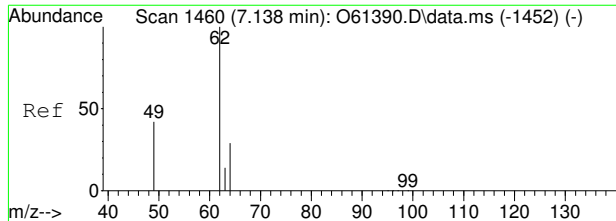
Tgt Ion	Resp	Lower	Upper
96	755		
Ion Ratio			
96	100		
61	162.0	135.7	195.7
98	56.0	33.1	93.1



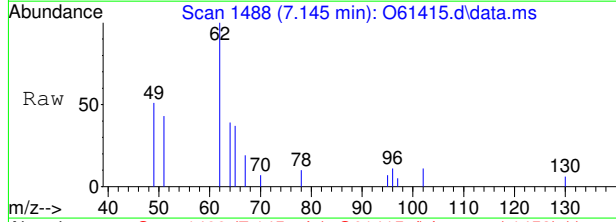
#12
 Benzene
 Concen: 0.05 ug/L m
 RT: 6.949 min Scan# 1455
 Delta R.T. 0.002 min
 Lab File: O61415.d
 Acq: 16 Sep 2020 4:33 pm

Tgt Ion	Resp	Lower	Upper
78	2497		
Ion Ratio			
78	100		
51	44.0	0.0	56.0



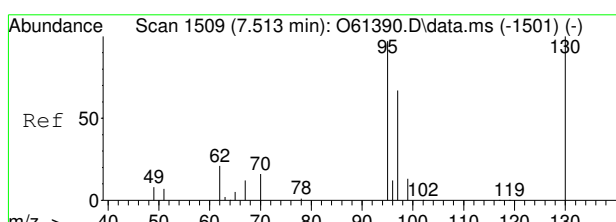
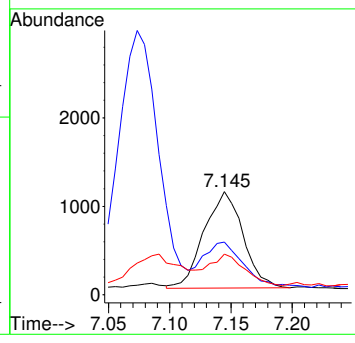
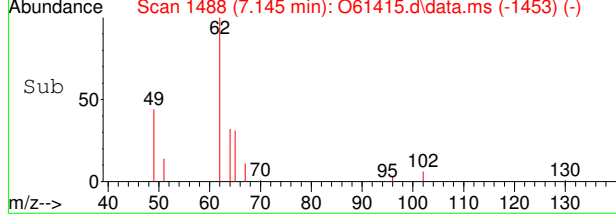


#14
 1,2-Dichloroethane
 Concen: 0.09 ug/L
 RT: 7.145 min Scan# 1488
 Delta R.T. 0.007 min
 Lab File: O61415.d
 Acq: 16 Sep 2020 4:33 pm

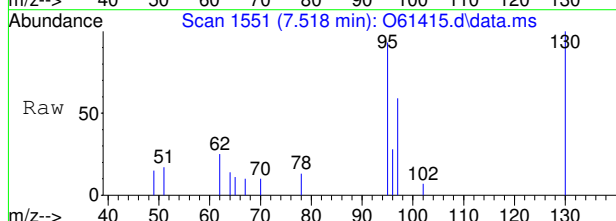


Tgt Ion: 62 Resp: 2401

Ion	Ratio	Lower	Upper
62	100		
49	45.0	13.6	73.6
64	31.0	0.0	58.8

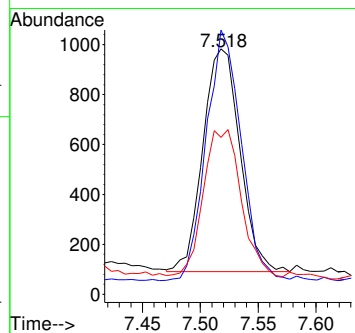
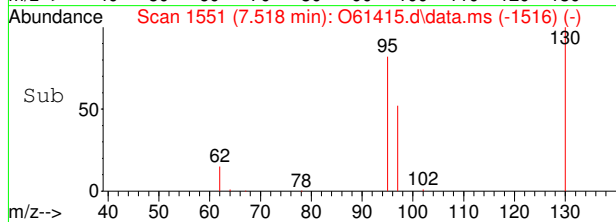


#15
 Trichloroethene
 Concen: 0.13 ug/L
 RT: 7.518 min Scan# 1551
 Delta R.T. 0.005 min
 Lab File: O61415.d
 Acq: 16 Sep 2020 4:33 pm

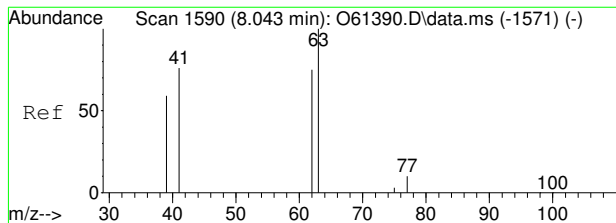


Tgt Ion: 95 Resp: 1989

Ion	Ratio	Lower	Upper
95	100		
130	112.4	72.6	132.6
97	62.1	38.6	98.6

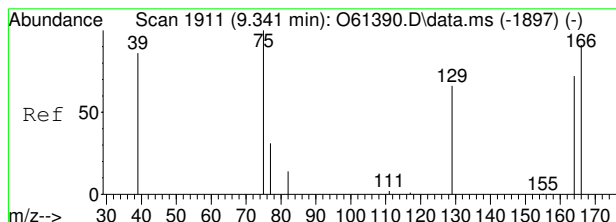
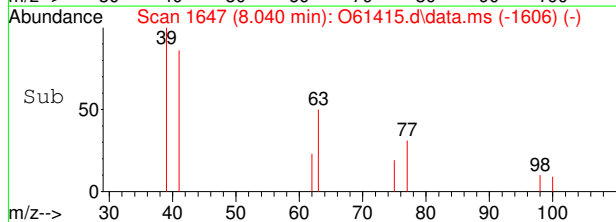
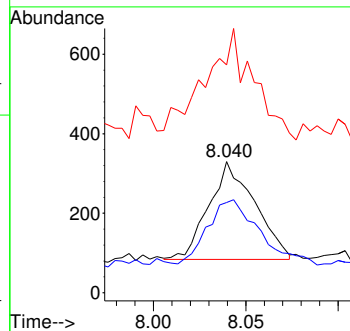
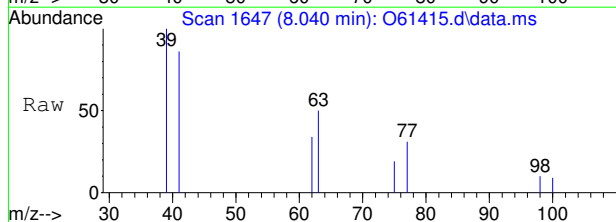


7.18
7



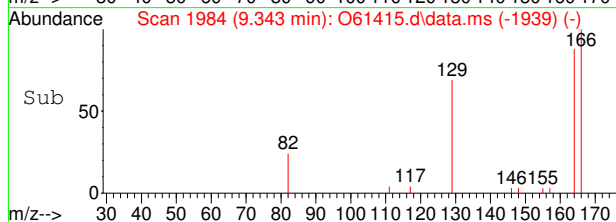
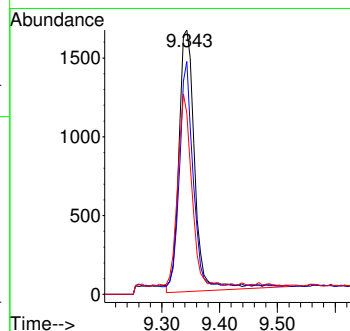
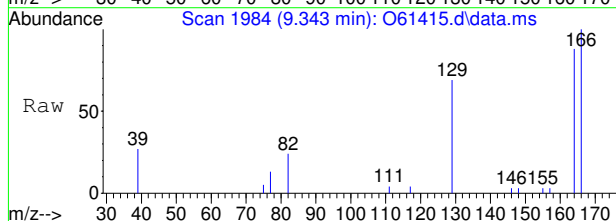
#16
 1,2-Dichloropropane
 Concen: 0.02 ug/L m
 RT: 8.040 min Scan# 1647
 Delta R.T. -0.003 min
 Lab File: O61415.d
 Acq: 16 Sep 2020 4:33 pm

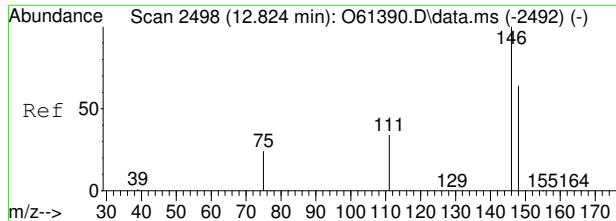
Tgt Ion	Resp	Lower	Upper
63	425		
62	68.8	44.5	104.5
41	173.6	45.9	105.9#



#21
 Tetrachloroethene
 Concen: 0.21 ug/L
 RT: 9.343 min Scan# 1984
 Delta R.T. 0.002 min
 Lab File: O61415.d
 Acq: 16 Sep 2020 4:33 pm

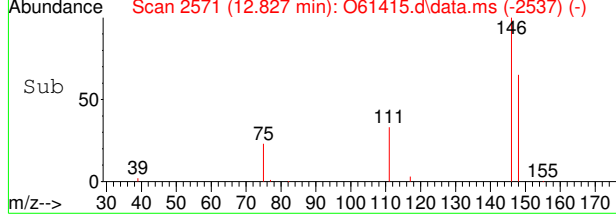
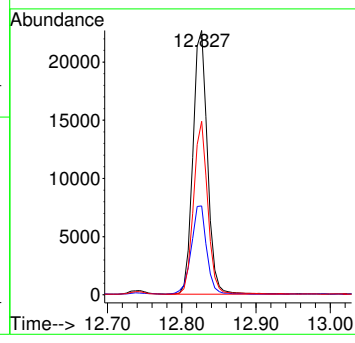
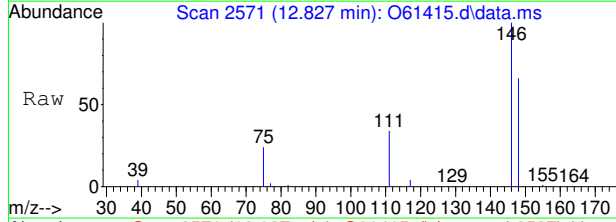
Tgt Ion	Resp	Lower	Upper
166	3174		
164	87.7	49.1	109.1
129	67.0	42.2	102.2





#22
 1,4-Dichlorobenzene
 Concen: 1.04 ug/L
 RT: 12.827 min Scan# 2571
 Delta R.T. 0.003 min
 Lab File: O61415.d
 Acq: 16 Sep 2020 4:33 pm

Tgt Ion	Ratio	Lower	Upper
146	100		
111	33.4	14.3	54.3
148	65.5	43.7	83.7



7.1.8
7

Manual Integration Approval Summary

Sample Number: FA78549-6 **Method:** SW846 8260B BY SIM
Lab FileID: O61415.D **Analyst approved:** 09/17/20 16:04 Juan Garcia
Injection Time: 09/16/20 16:33 **Supervisor approved:** 09/18/20 14:38 Melissa Mangual

Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzene	71-43-2		6.95	Poor instrument integration
1,2-Dichloropropane	78-87-5		8.04	Poor instrument integration

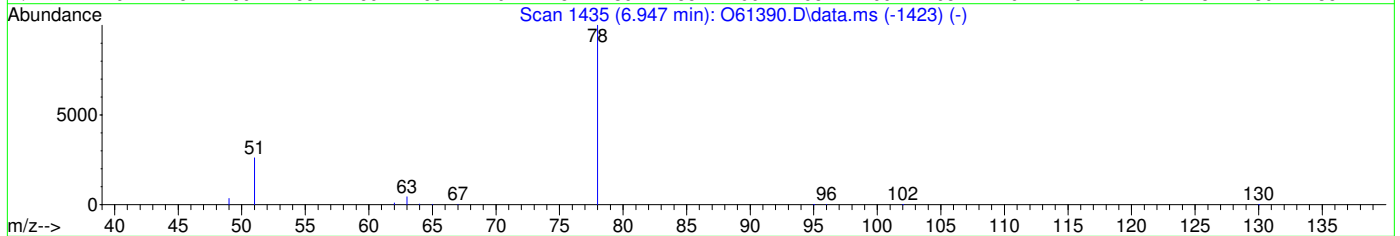
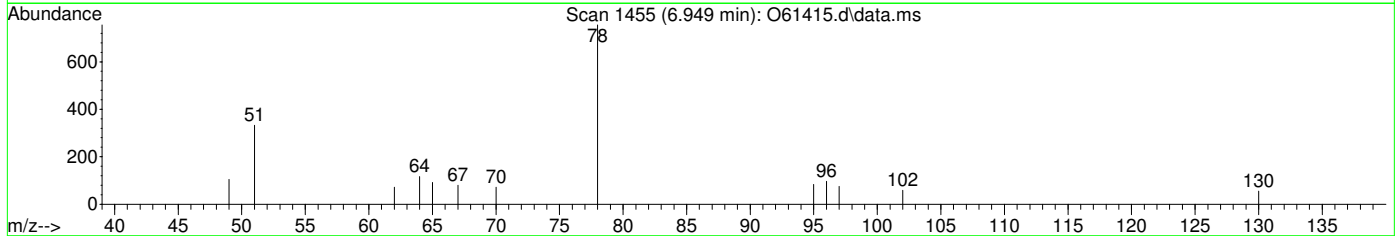
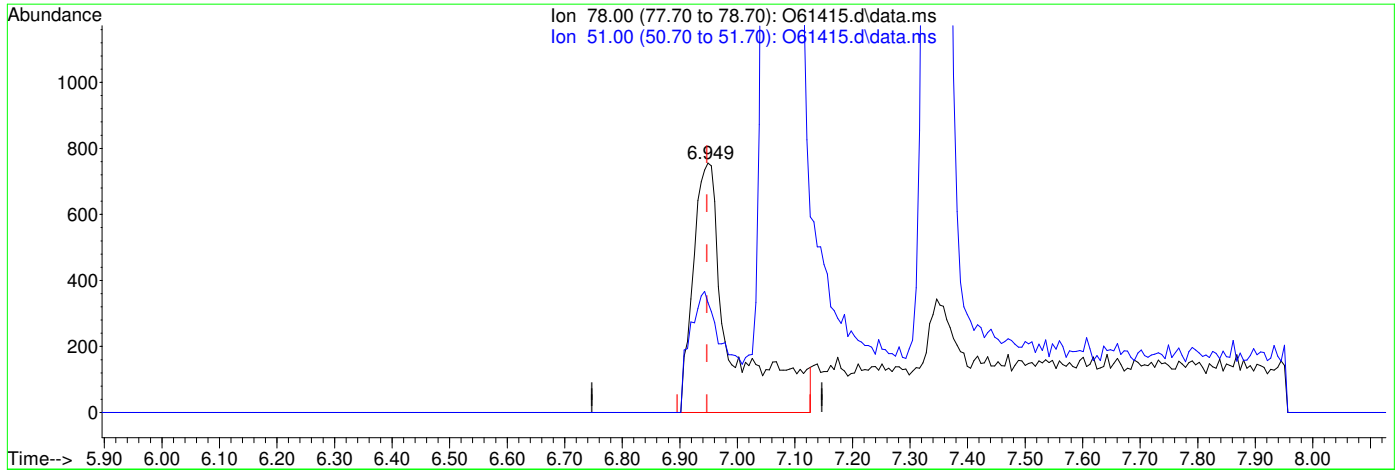
7.1.8.1

7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-17-2020\vo2363\
 Data File : O61415.d
 Acq On : 16 Sep 2020 4:33 pm
 Operator : akarig
 Sample : FA78549-6
 Misc : MS47193,VO2363,,,,,
 ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 17 04:42:55 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091520.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 16 09:02:25 2020
 Response via : Initial Calibration



(12) Benzene ()

6.949min (+0.002) 0.06ug/L

response 3459

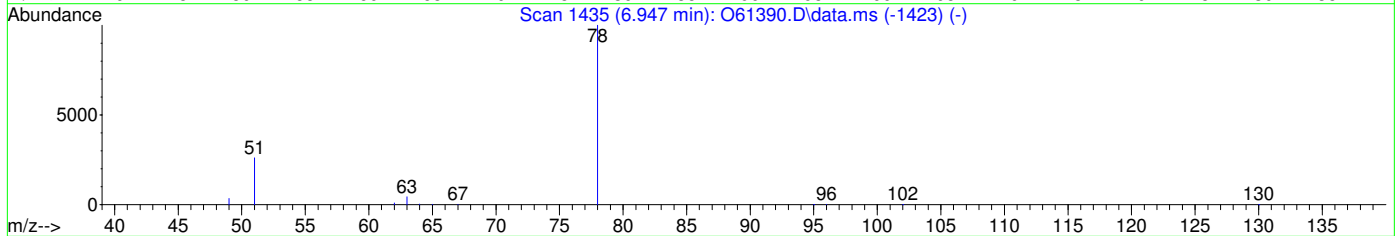
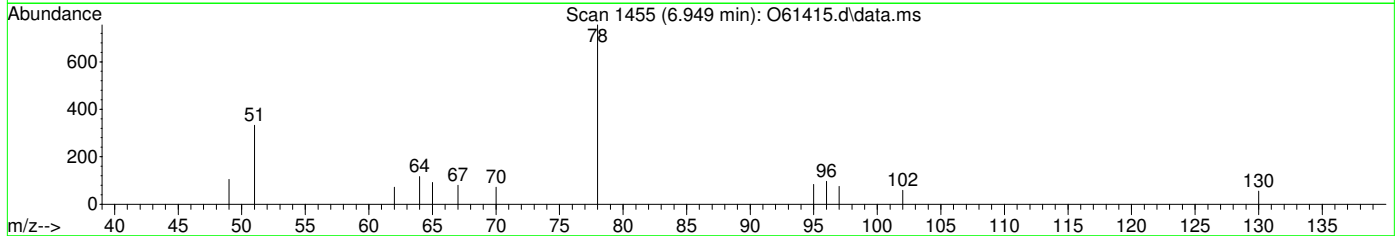
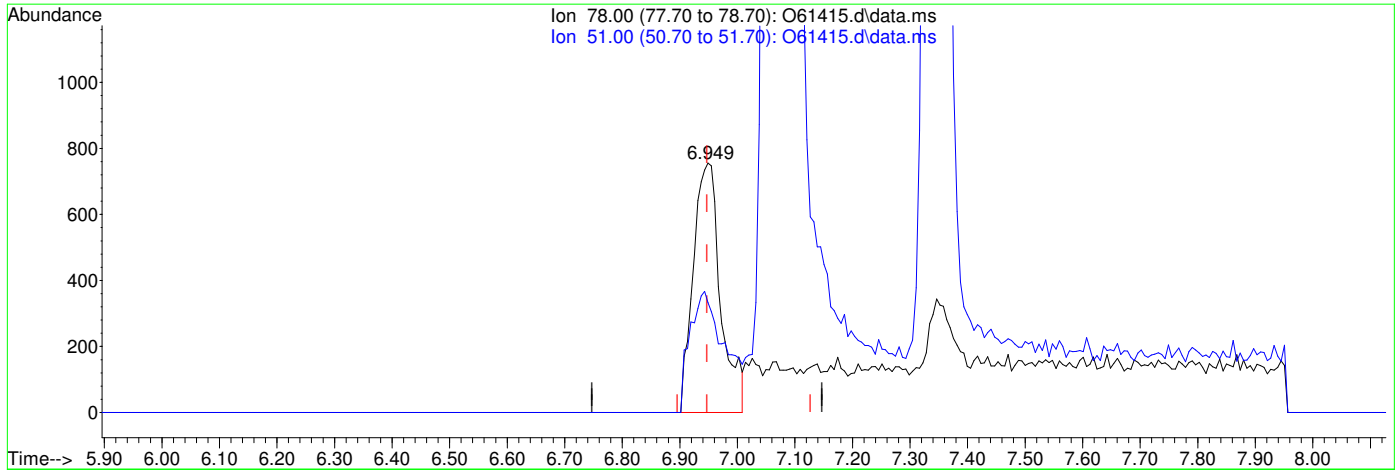
Ion	Exp%	Act%
78.00	100	100
51.00	26.00	44.05
0.00	0.00	0.00
0.00	0.00	0.00

7.1.8.2
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-17-2020\vo2363\
 Data File : O61415.d
 Acq On : 16 Sep 2020 4:33 pm
 Operator : akarig
 Sample : FA78549-6
 Misc : MS47193,VO2363,,,,,
 ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 17 04:42:55 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091520.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 16 09:02:25 2020
 Response via : Initial Calibration



(12) Benzene ()

6.949min (+0.002) 0.05ug/L m

response 2497

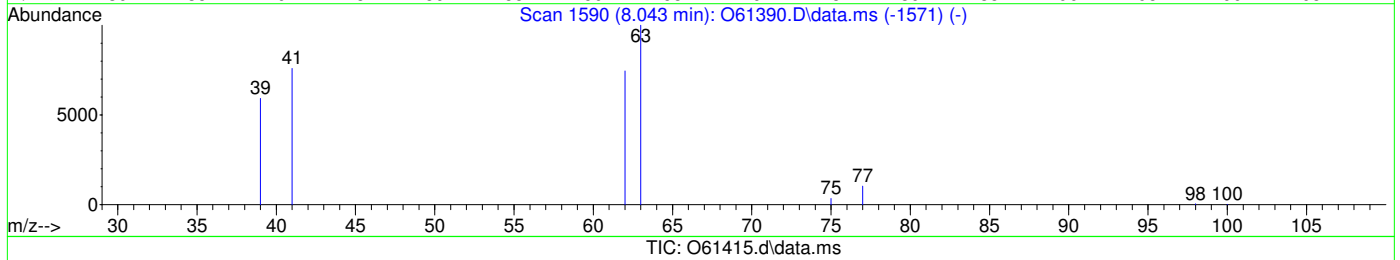
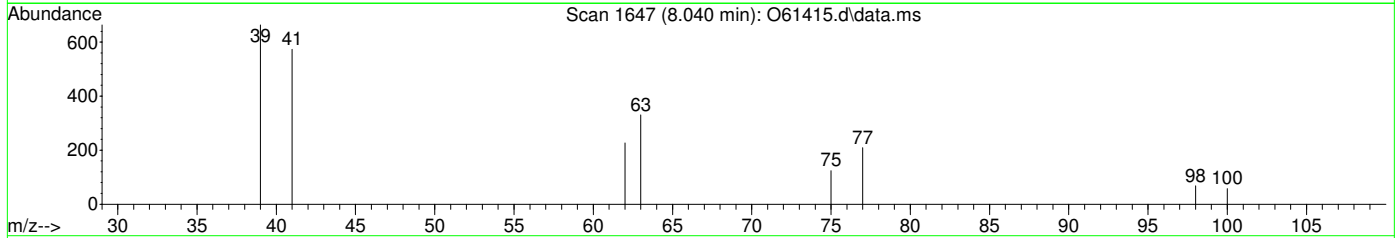
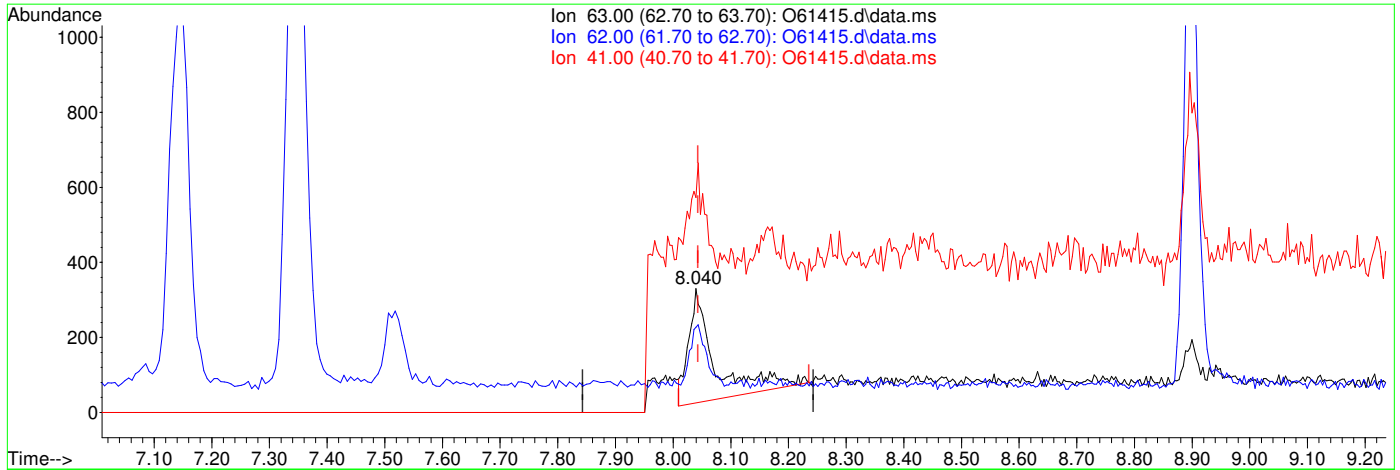
Ion	Exp%	Act%
78.00	100	100
51.00	26.00	44.05
0.00	0.00	0.00
0.00	0.00	0.00

71.8.3
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-17-2020\vo2363\
 Data File : O61415.d
 Acq On : 16 Sep 2020 4:33 pm
 Operator : akarig
 Sample : FA78549-6
 Misc : MS47193,VO2363,,,,,
 ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 17 04:42:55 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091520.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 16 09:02:25 2020
 Response via : Initial Calibration



(16) 1,2-Dichloropropane
 8.040min (-0.003) 0.05ug/L
 response 966

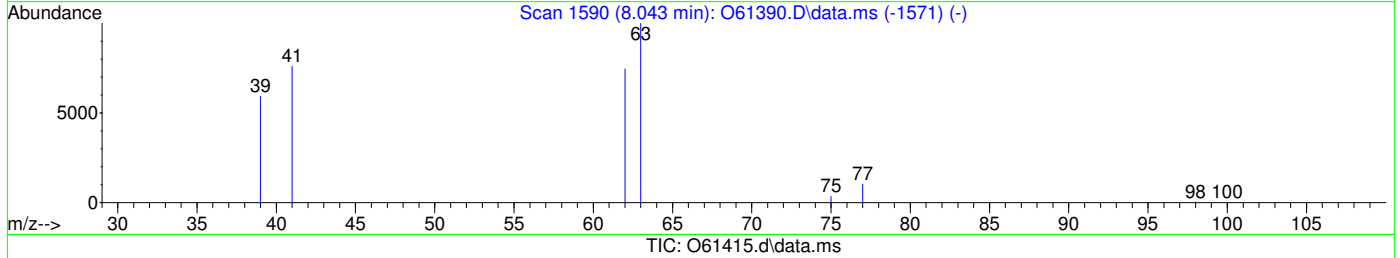
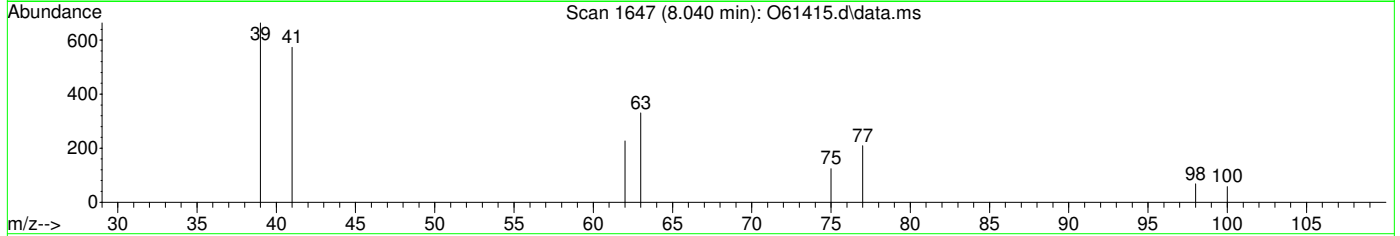
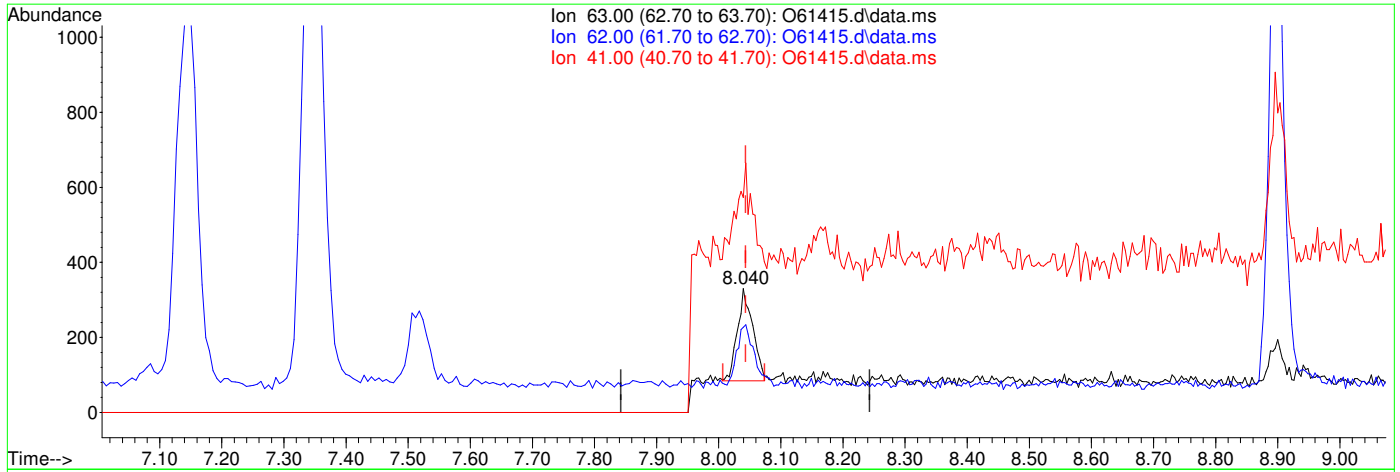
Ion	Exp%	Act%
63.00	100	100
62.00	74.50	62.40
41.00	75.90	65.60
0.00	0.00	0.00

7.1.8.4
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-17-2020\vo2363\
 Data File : O61415.d
 Acq On : 16 Sep 2020 4:33 pm
 Operator : akarig
 Sample : FA78549-6
 Misc : MS47193,VO2363,,,,,
 ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 17 04:42:55 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091520.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 16 09:02:25 2020
 Response via : Initial Calibration



(16) 1,2-Dichloropropane

8.040min (-0.003) 0.02ug/L m

response 425

Ion	Exp%	Act%
63.00	100	100
62.00	74.50	68.79
41.00	75.90	173.64#
0.00	0.00	0.00

7.1.8.5
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-11-2020\vo2354\
Data File : O61167.d
Acq On : 10 Sep 2020 12:38 pm
Operator : melissam
Sample : FA78549-7
Misc : MS47173,VO2354,,,,,
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Sep 14 07:53:05 2020
Quant Method : C:\msdchem\1\methods\SIMCL090820.M
Quant Title : Standard Methods 6200B
QLast Update : Wed Sep 09 12:10:38 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)	

Internal Standards							
1) Fluorobenzene	7.346	96	184076	5.00	ug/L	0.00	
18) Chlorobenzene-d5	10.447	117	128884	5.00	ug/L	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.074	65	91322	5.65	ug/L	0.00	
Spiked Amount	5.000	Range 74 - 125	Recovery	=	113.00%		
19) Toluene-d8	8.900	98	161477	5.13	ug/L	0.00	
Spiked Amount	5.000	Range 88 - 111	Recovery	=	102.60%		
Target Compounds							
2) Vinyl Chloride	2.912	62	961	0.05	ug/L		84
3) Chloromethane	2.784	50	5197	0.19	ug/L		73
4) 1,1-Dichloroethene	4.092	61	546	0.02	ug/L		69
5) Methylene Chloride	4.703	49	5525	0.12	ug/L		88
6) trans-1,2-Dichloroethene	4.873	61	801	0.03	ug/L #		63
7) 1,1-Dichloroethane	5.514	63	8802	0.25	ug/L		93
8) cis-1,2-Dichloroethene	6.072	96	15781	1.03	ug/L #		56
9) Chloroform	6.333	83	1535	0.05	ug/L #		34
12) Benzene	6.943	78	2648m	0.05	ug/L		
14) 1,2-Dichloroethane	7.139	62	15346	0.51	ug/L		92
15) Trichloroethene	7.518	95	11284	0.70	ug/L		97
16) 1,2-Dichloropropane	8.044	63	1546m	0.08	ug/L		
21) Tetrachloroethene	9.343	166	7662	0.61	ug/L		91
22) 1,4-Dichlorobenzene	12.827	146	23054	0.85	ug/L		95

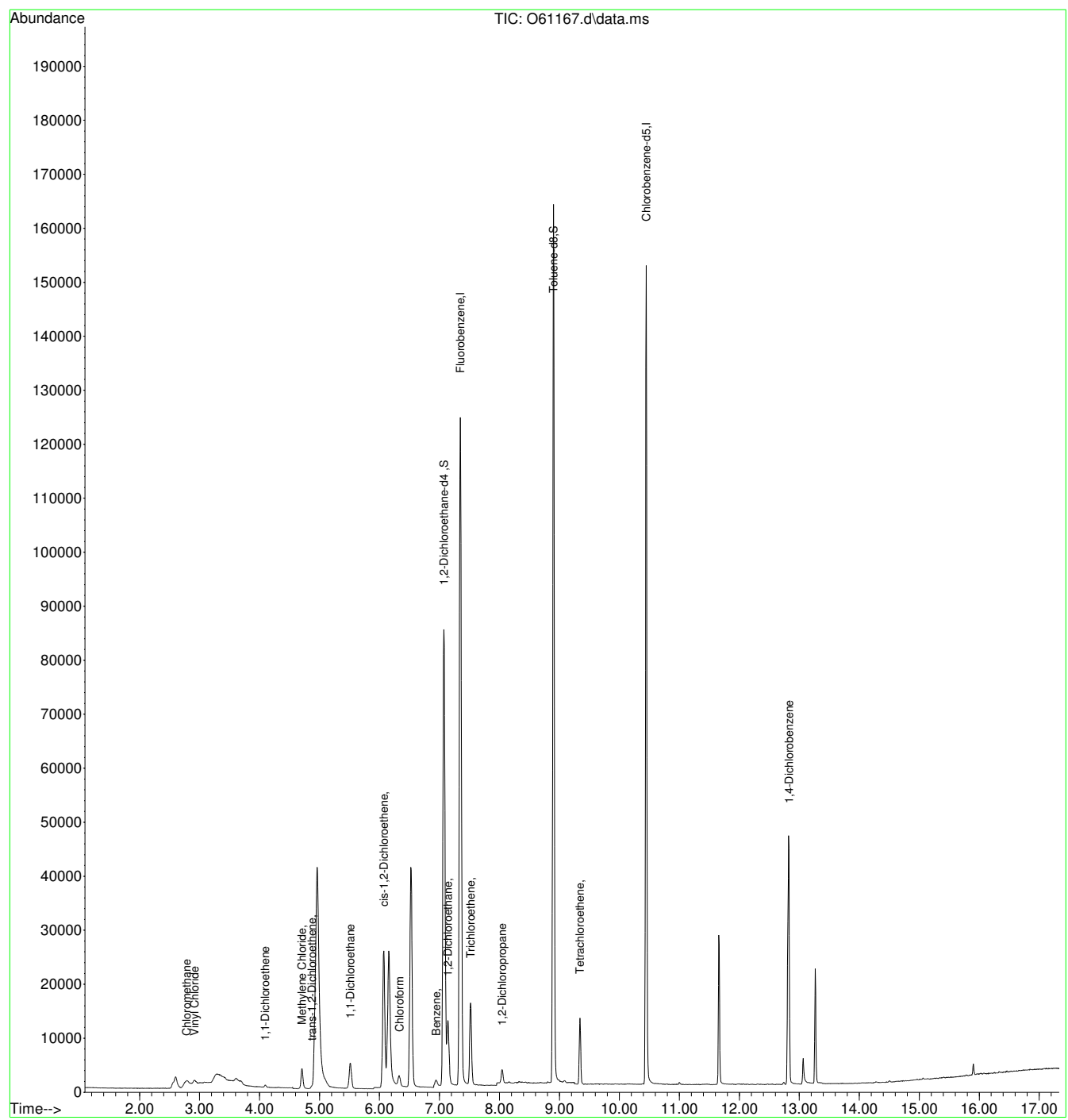
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.19
7

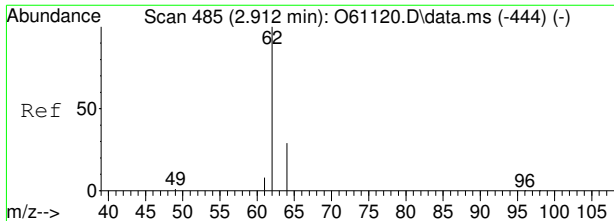
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-11-2020\vo2354\
Data File : O61167.d
Acq On : 10 Sep 2020 12:38 pm
Operator : melissam
Sample : FA78549-7
Misc : MS47173,VO2354,,,,,
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Sep 14 07:53:05 2020
Quant Method : C:\msdchem\1\methods\SIMCL090820.M
Quant Title : Standard Methods 6200B
QLast Update : Wed Sep 09 12:10:38 2020
Response via : Initial Calibration

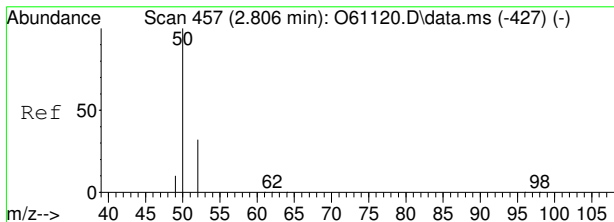
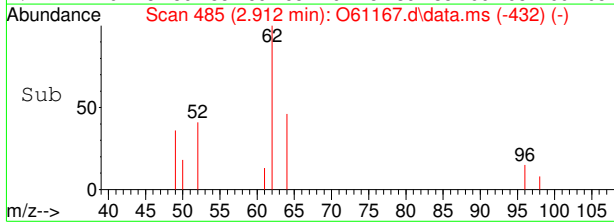
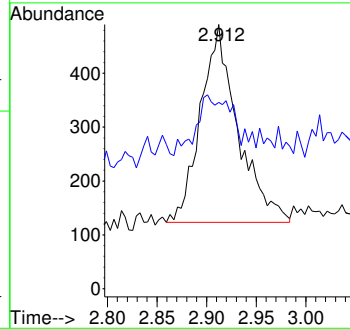
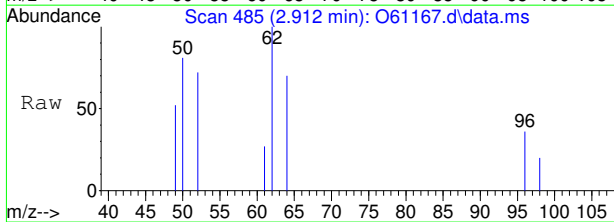


7.1.9



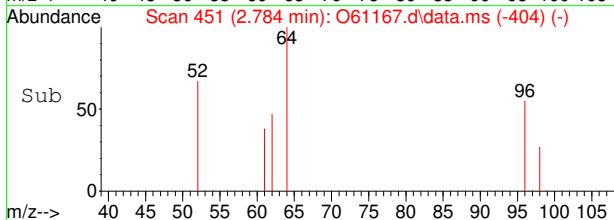
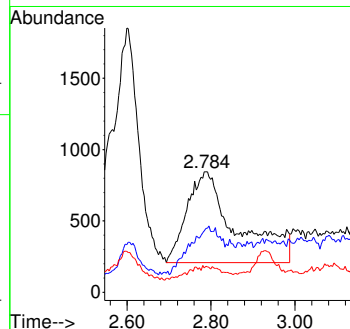
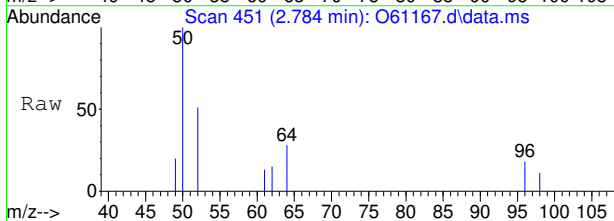
#2
 Vinyl Chloride
 Concen: 0.05 ug/L
 RT: 2.912 min Scan# 485
 Delta R.T. 0.000 min
 Lab File: O61167.d
 Acq: 10 Sep 2020 12:38 pm

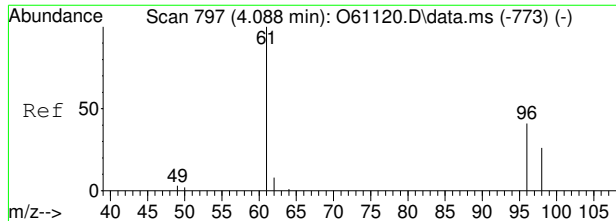
Tgt Ion	Ratio	Lower	Upper
62	100		
64	22.0	0.9	60.9



#3
 Chloromethane
 Concen: 0.19 ug/L
 RT: 2.784 min Scan# 451
 Delta R.T. -0.022 min
 Lab File: O61167.d
 Acq: 10 Sep 2020 12:38 pm

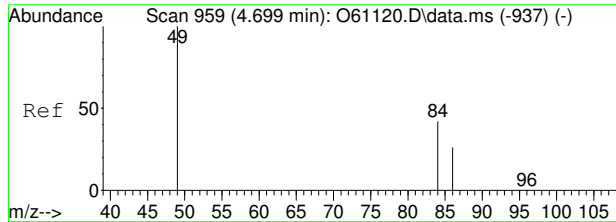
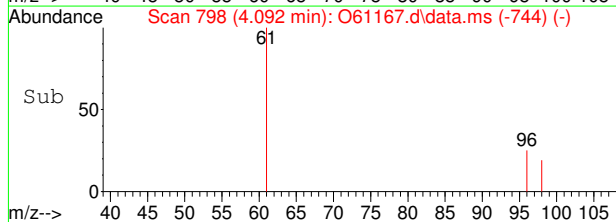
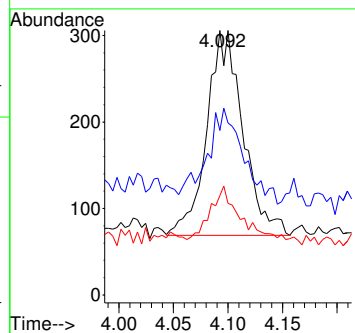
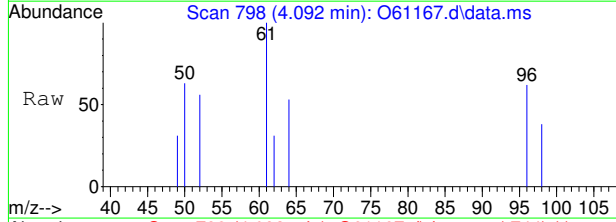
Tgt Ion	Ratio	Lower	Upper
50	100		
52	46.6	7.8	47.8
49	11.1	0.0	30.5





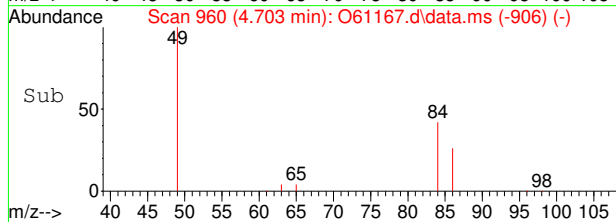
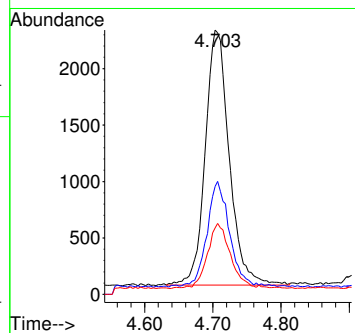
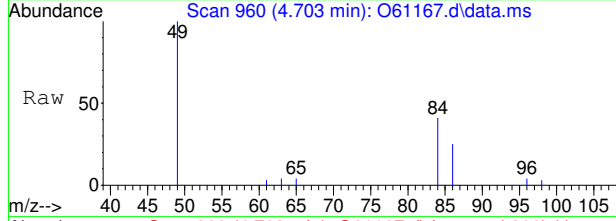
#4
1,1-Dichloroethene
Concen: 0.02 ug/L
RT: 4.092 min Scan# 798
Delta R.T. 0.004 min
Lab File: O61167.d
Acq: 10 Sep 2020 12:38 pm

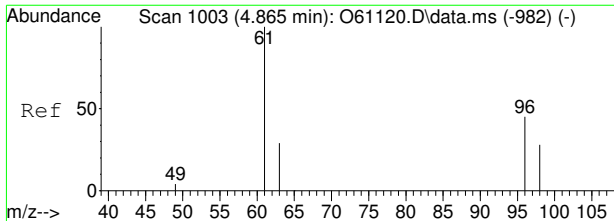
Tgt Ion	Resp	Lower	Upper
61	546		
61	100		
96	30.4	25.4	85.4
98	21.1	5.9	65.9



#5
Methylene Chloride
Concen: 0.12 ug/L
RT: 4.703 min Scan# 960
Delta R.T. 0.004 min
Lab File: O61167.d
Acq: 10 Sep 2020 12:38 pm

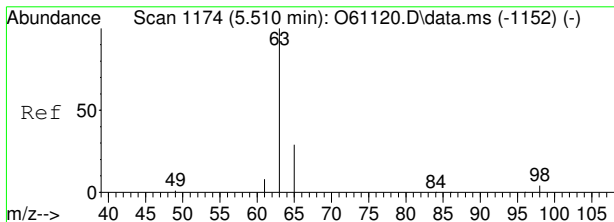
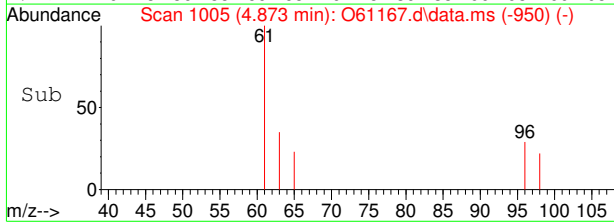
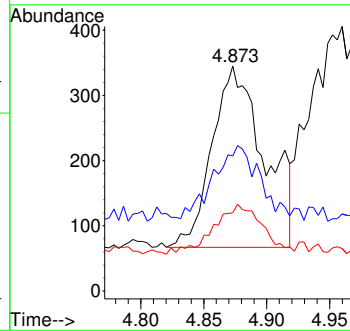
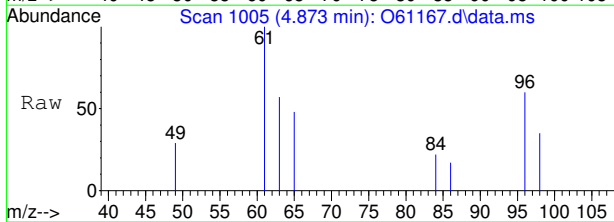
Tgt Ion	Resp	Lower	Upper
49	5525		
49	100		
84	39.2	17.9	77.9
86	23.5	0.0	59.8





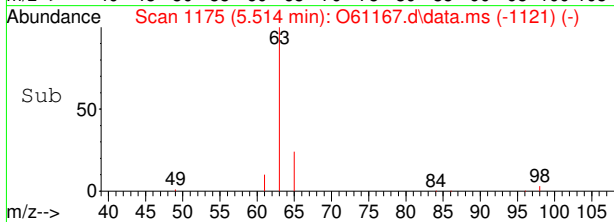
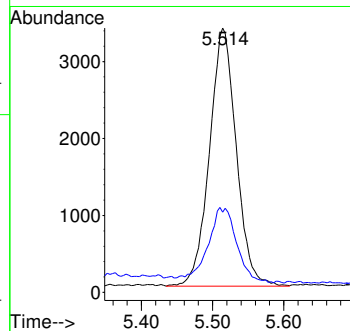
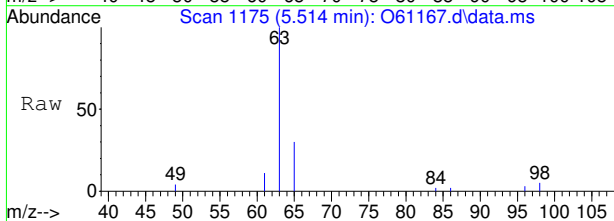
#6
 trans-1,2-Dichloroethene
 Concen: 0.03 ug/L
 RT: 4.873 min Scan# 1005
 Delta R.T. 0.008 min
 Lab File: O61167.d
 Acq: 10 Sep 2020 12:38 pm

Tgt Ion	Ratio	Lower	Upper
61	100		
96	33.1	36.9	96.9#
98	23.0	11.1	71.1

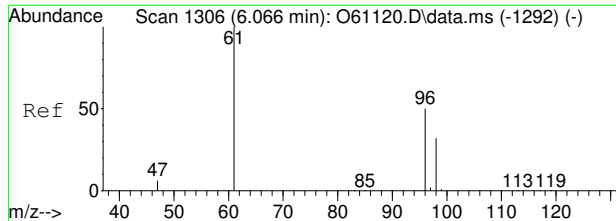


#7
 1,1-Dichloroethane
 Concen: 0.25 ug/L
 RT: 5.514 min Scan# 1175
 Delta R.T. 0.004 min
 Lab File: O61167.d
 Acq: 10 Sep 2020 12:38 pm

Tgt Ion	Ratio	Lower	Upper
63	100		
65	26.8	0.7	60.7

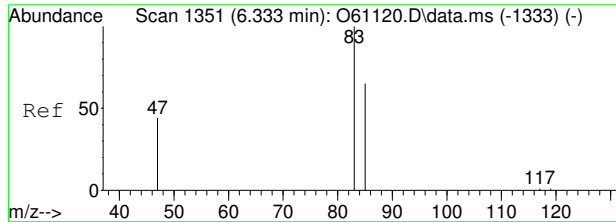
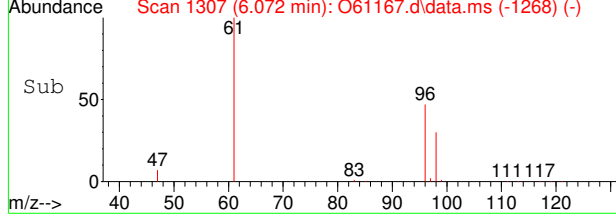
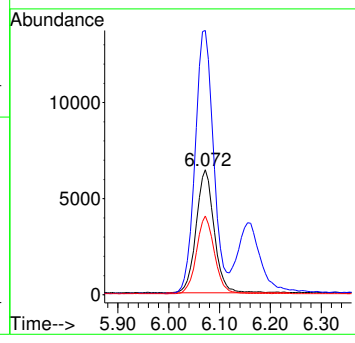
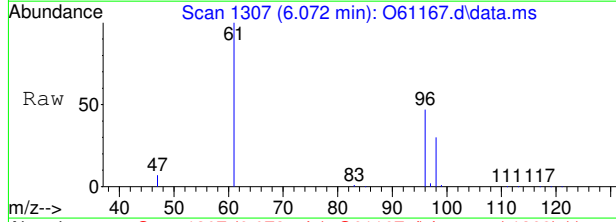


7.19
7



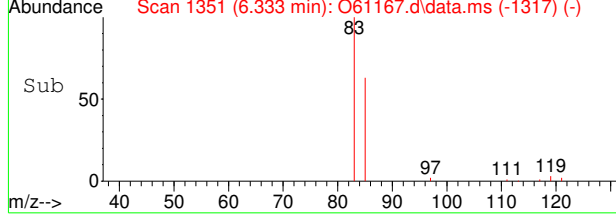
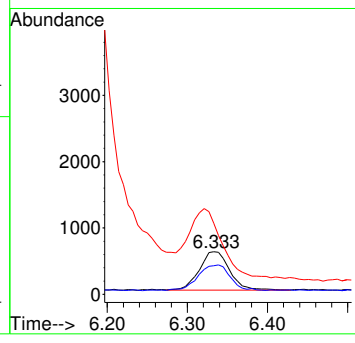
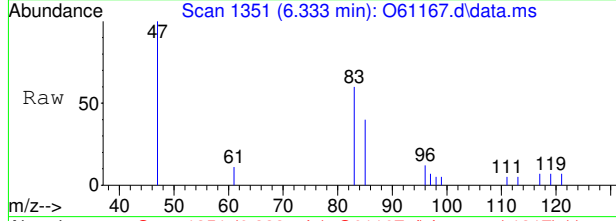
#8
 cis-1,2-Dichloroethene
 Concen: 1.03 ug/L
 RT: 6.072 min Scan# 1307
 Delta R.T. 0.006 min
 Lab File: O61167.d
 Acq: 10 Sep 2020 12:38 pm

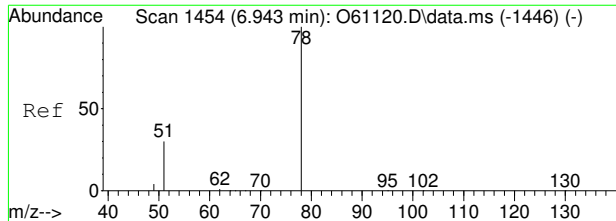
Tgt Ion	Resp	Lower	Upper
96	15781		
61	214.1	107.0	167.0#
98	63.3	34.1	94.1



#9
 Chloroform
 Concen: 0.05 ug/L
 RT: 6.333 min Scan# 1351
 Delta R.T. 0.000 min
 Lab File: O61167.d
 Acq: 10 Sep 2020 12:38 pm

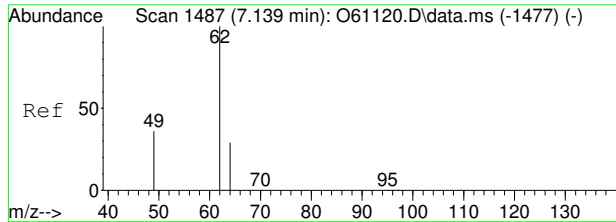
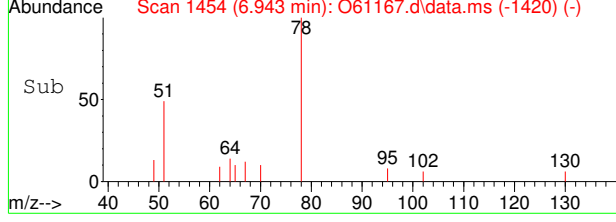
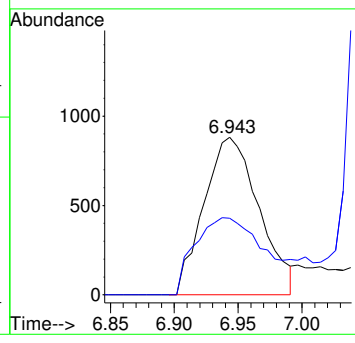
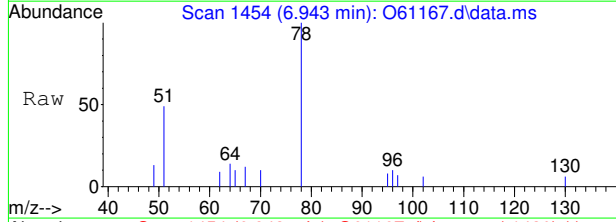
Tgt Ion	Resp	Lower	Upper
83	1535		
83	100		
85	64.2	33.0	93.0
47	141.5	8.1	68.1#





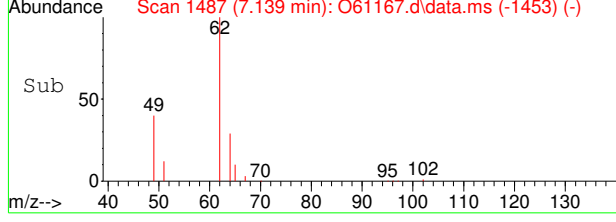
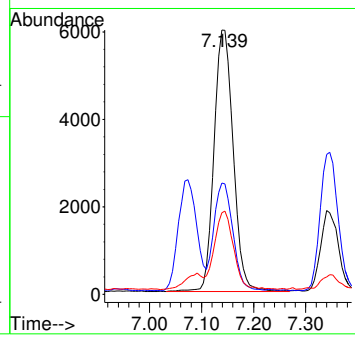
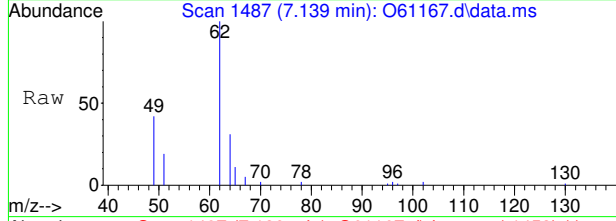
#12
Benzene
Concen: 0.05 ug/L m
RT: 6.943 min Scan# 1454
Delta R.T. 0.000 min
Lab File: O61167.d
Acq: 10 Sep 2020 12:38 pm

Tgt Ion	Resp	Lower	Upper
78	100		
51	48.6	0.0	56.2



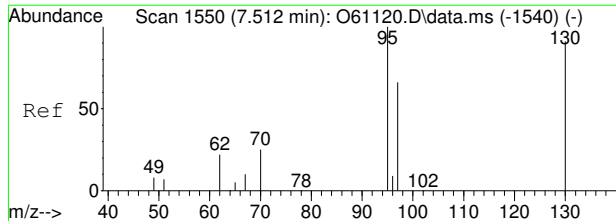
#14
1,2-Dichloroethane
Concen: 0.51 ug/L
RT: 7.139 min Scan# 1487
Delta R.T. 0.000 min
Lab File: O61167.d
Acq: 10 Sep 2020 12:38 pm

Tgt Ion	Resp	Lower	Upper
62	100		
49	41.1	18.0	78.0
64	29.2	1.5	61.5



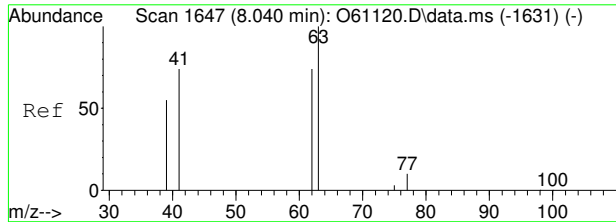
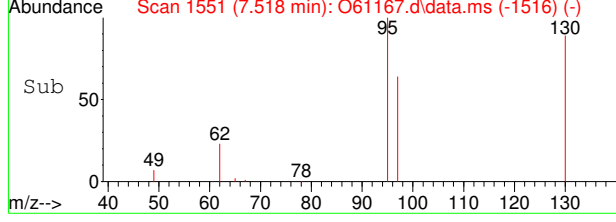
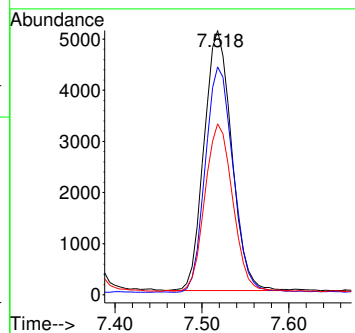
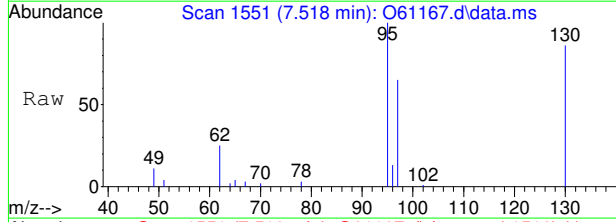
7.19
7





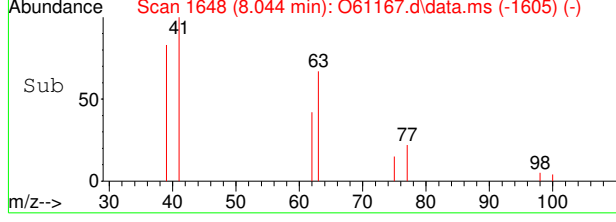
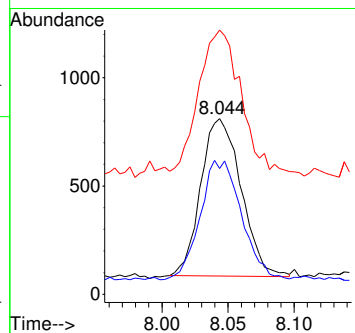
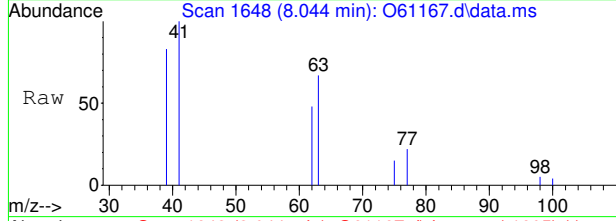
#15
 Trichloroethene
 Concen: 0.70 ug/L
 RT: 7.518 min Scan# 1551
 Delta R.T. 0.006 min
 Lab File: O61167.d
 Acq: 10 Sep 2020 12:38 pm

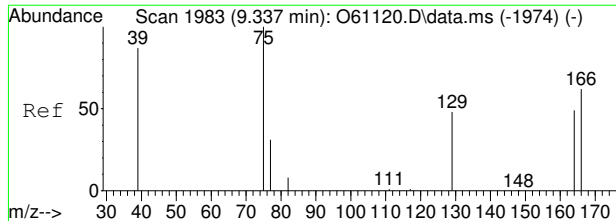
Tgt Ion	Resp	Lower	Upper
95	11284		
130	86.6	60.4	120.4
97	64.2	34.6	94.6



#16
 1,2-Dichloropropane
 Concen: 0.08 ug/L m
 RT: 8.044 min Scan# 1648
 Delta R.T. 0.004 min
 Lab File: O61167.d
 Acq: 10 Sep 2020 12:38 pm

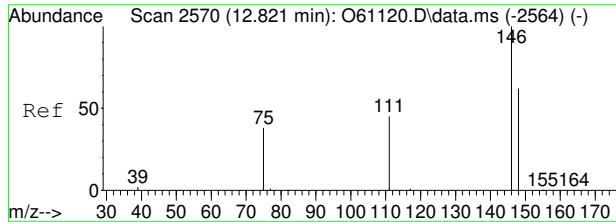
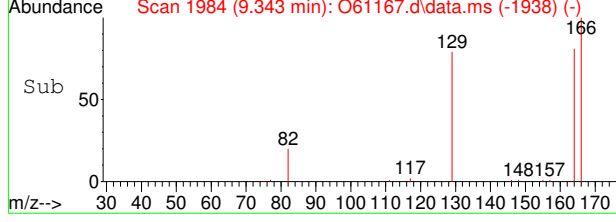
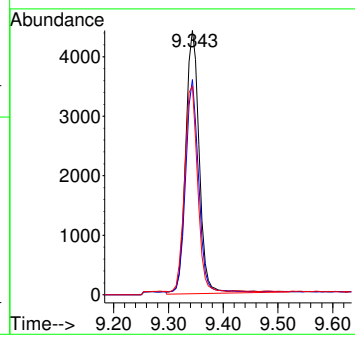
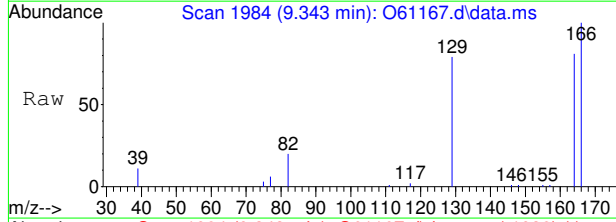
Tgt Ion	Resp	Lower	Upper
63	1546		
62	71.6	42.7	102.7
41	150.4	54.5	114.5#





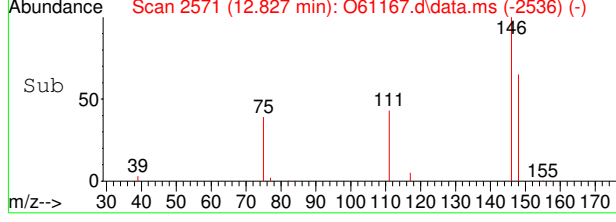
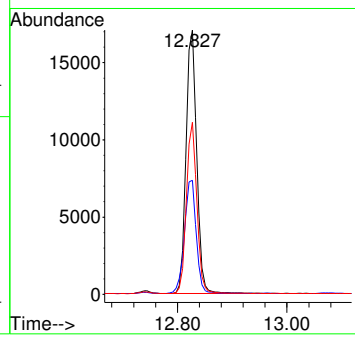
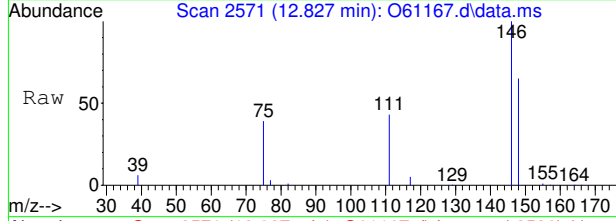
#21
 Tetrachloroethene
 Concen: 0.61 ug/L
 RT: 9.343 min Scan# 1984
 Delta R.T. 0.006 min
 Lab File: O61167.d
 Acq: 10 Sep 2020 12:38 pm

Tgt Ion	Resp	Lower	Upper
166	7662		
166	100		
164	81.2	47.3	107.3
129	78.6	37.5	97.5



#22
 1,4-Dichlorobenzene
 Concen: 0.85 ug/L
 RT: 12.827 min Scan# 2571
 Delta R.T. 0.006 min
 Lab File: O61167.d
 Acq: 10 Sep 2020 12:38 pm

Tgt Ion	Resp	Lower	Upper
146	23054		
146	100		
111	42.9	17.0	57.0
148	65.0	43.7	83.7



7.19
7



Manual Integration Approval Summary

Sample Number: FA78549-7 **Method:** SW846 8260B BY SIM
Lab FileID: O61167.D **Analyst approved:** 09/14/20 08:06 John Matthew de Guzman
Injection Time: 09/10/20 12:38 **Supervisor approved:** 09/18/20 14:38 Melissa Mangual

Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzene	71-43-2		6.94	Poor instrument integration
1,2-Dichloropropane	78-87-5		8.04	Poor instrument integration

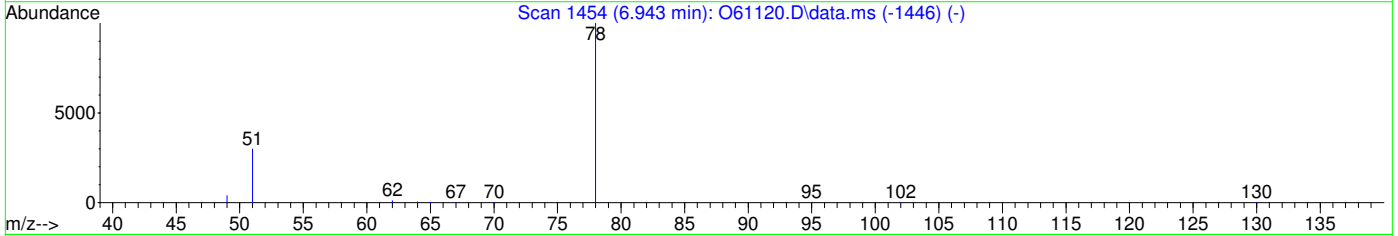
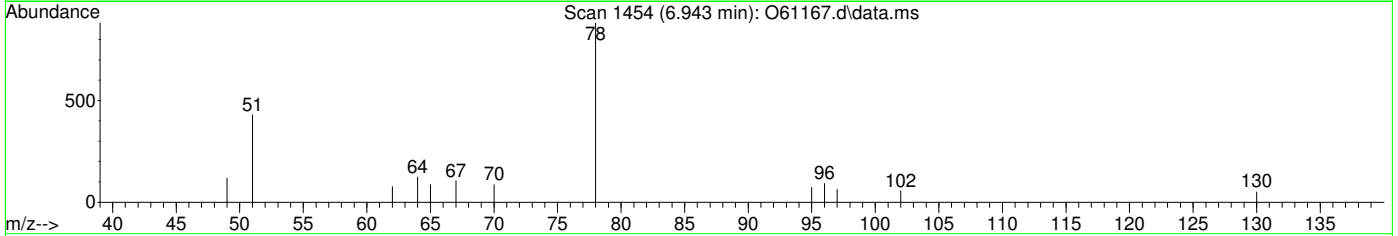
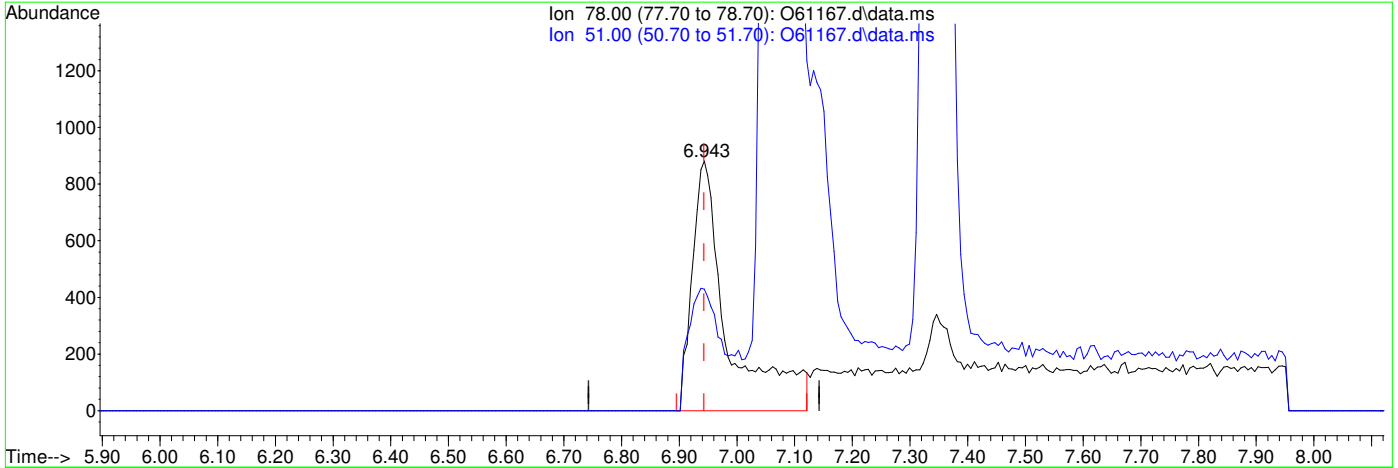
7.1.9.1

7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-11-2020\vo2354\
 Data File : O61167.d
 Acq On : 10 Sep 2020 12:38 pm
 Operator : melissam
 Sample : FA78549-7
 Misc : MS47173,VO2354,,,,,
 ALS Vial : 15 Sample Multiplier: 1

Quant Time: Sep 14 07:52:18 2020
 Quant Method : C:\msdchem\1\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration



(12) Benzene ()

6.943min (+0.000) 0.07ug/L

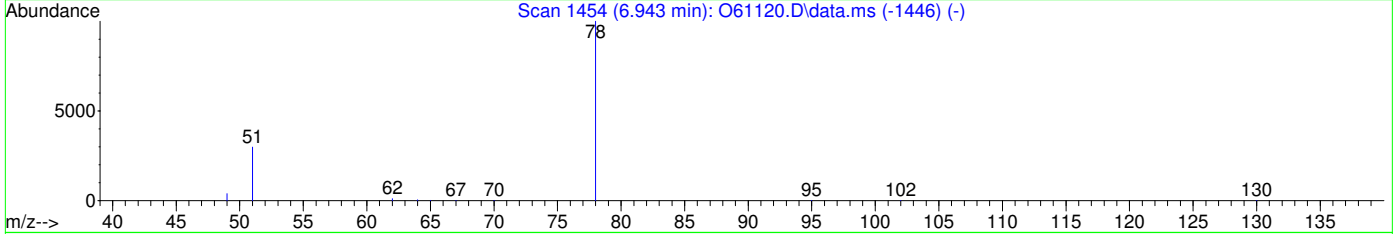
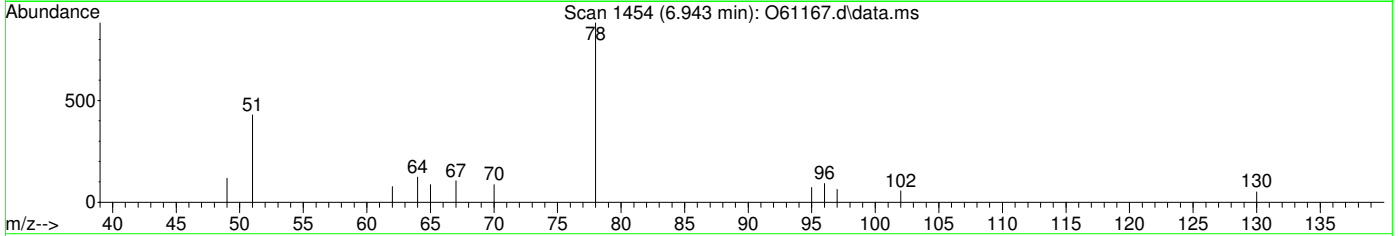
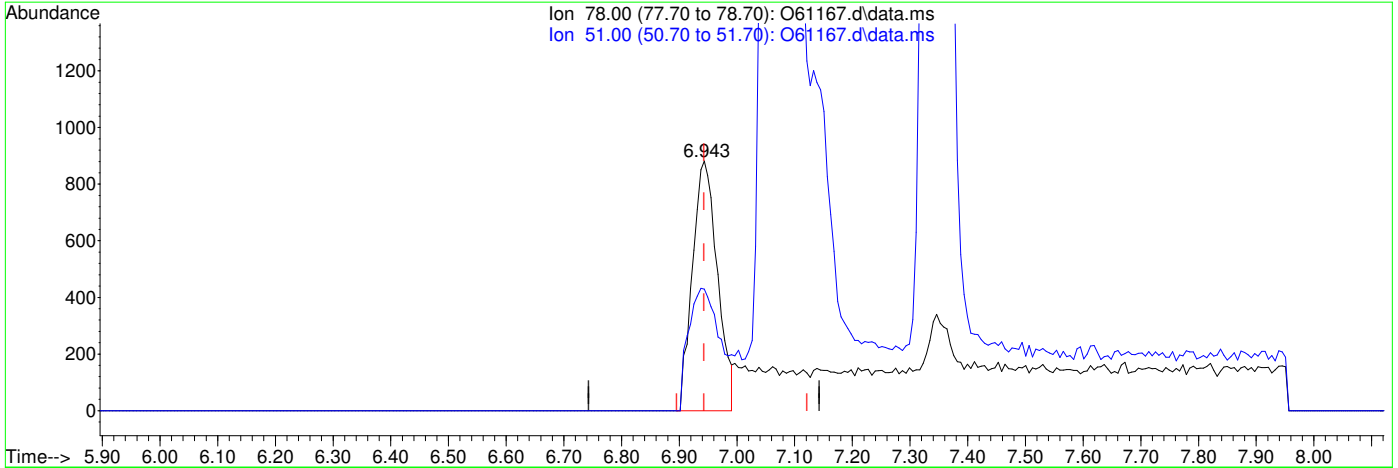
response 3762

Ion	Exp%	Act%
78.00	100	100
51.00	26.20	48.64
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-11-2020\vo2354\
 Data File : O61167.d
 Acq On : 10 Sep 2020 12:38 pm
 Operator : melissam
 Sample : FA78549-7
 Misc : MS47173,VO2354,,,,,
 ALS Vial : 15 Sample Multiplier: 1

Quant Time: Sep 14 07:52:18 2020
 Quant Method : C:\msdchem\1\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration



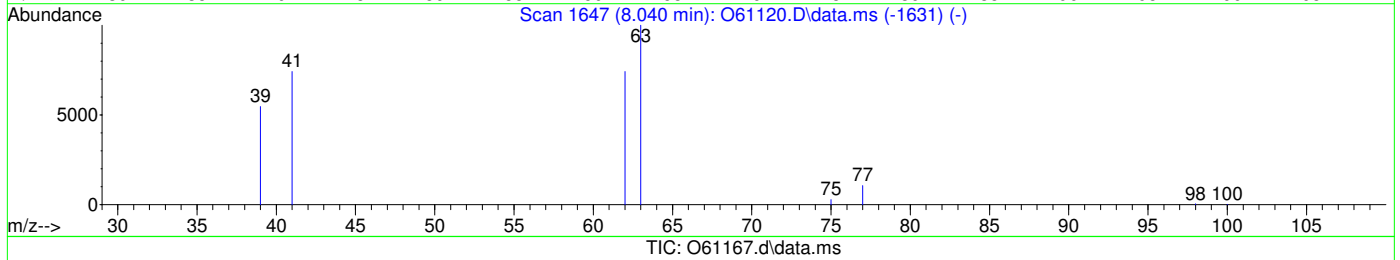
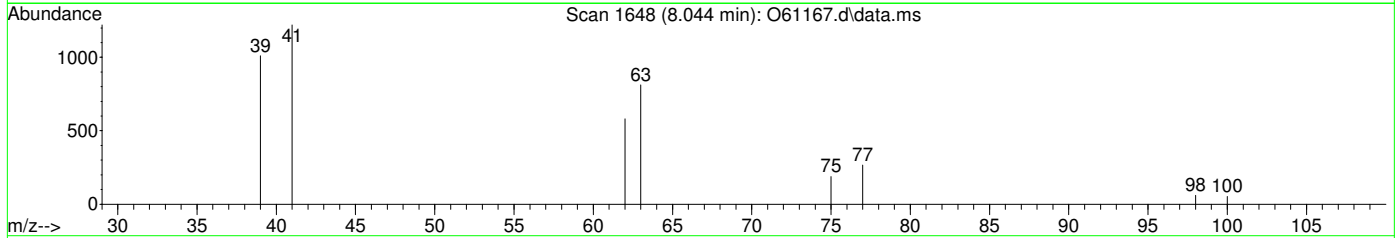
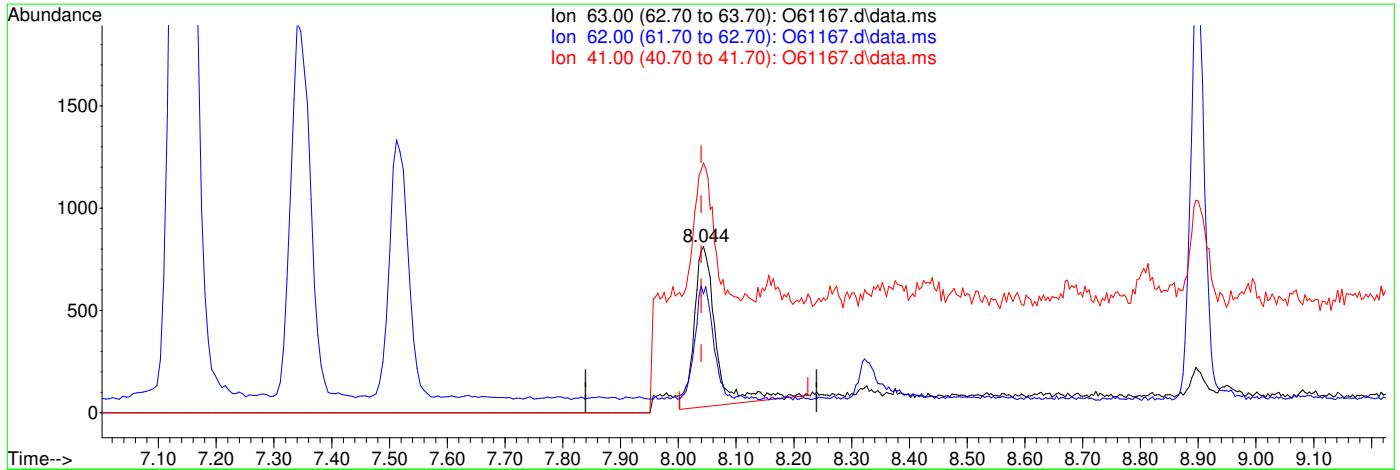
(12) Benzene ()
 6.943min (+0.000) 0.05ug/L m
 response 2648

Ion	Exp%	Act%
78.00	100	100
51.00	26.20	48.64
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-11-2020\vo2354\
 Data File : O61167.d
 Acq On : 10 Sep 2020 12:38 pm
 Operator : melissam
 Sample : FA78549-7
 Misc : MS47173,VO2354,,,,,
 ALS Vial : 15 Sample Multiplier: 1

Quant Time: Sep 14 07:52:18 2020
 Quant Method : C:\msdchem\1\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration



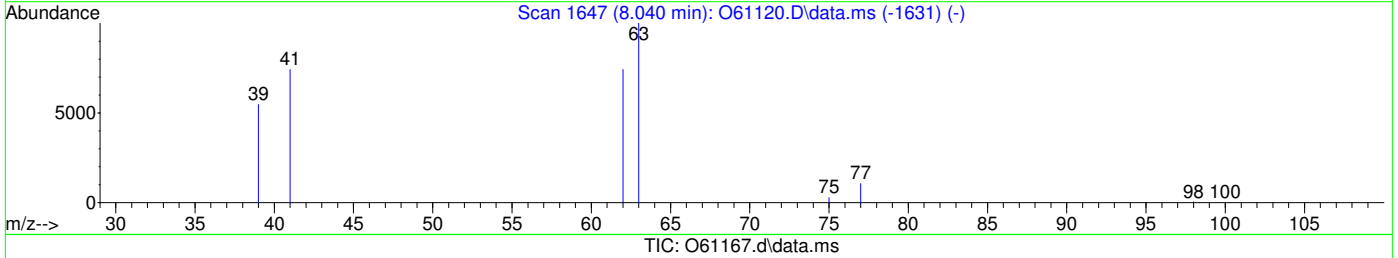
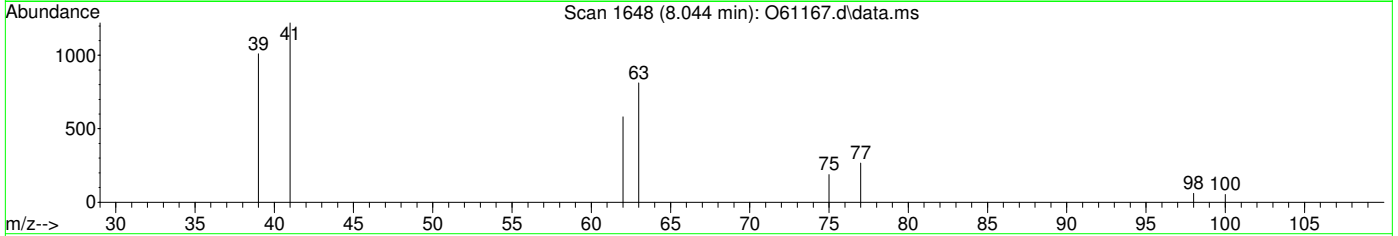
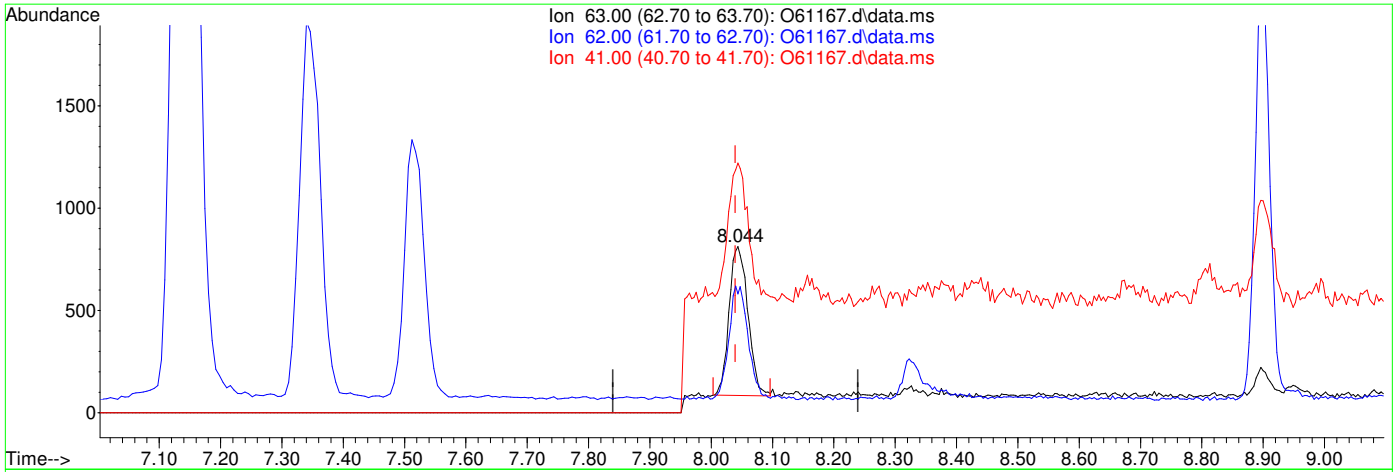
(16) 1,2-Dichloropropane
 8.044min (+0.004) 0.10ug/L
 response 2038

Ion	Exp%	Act%
63.00	100	100
62.00	72.70	70.47
41.00	84.50	88.05
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-11-2020\vo2354\
 Data File : O61167.d
 Acq On : 10 Sep 2020 12:38 pm
 Operator : melissam
 Sample : FA78549-7
 Misc : MS47173,VO2354,,,,,
 ALS Vial : 15 Sample Multiplier: 1

Quant Time: Sep 14 07:52:18 2020
 Quant Method : C:\msdchem\1\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration



(16) 1,2-Dichloropropane
 8.044min (+0.004) 0.08ug/L m

response 1546

Ion	Exp%	Act%
63.00	100	100
62.00	72.70	71.55
41.00	84.50	150.37#
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-17-2020\vo2363\
 Data File : O61416.d
 Acq On : 16 Sep 2020 4:53 pm
 Operator : akarig
 Sample : FA78549-7
 Misc : MS47193,VO2363,,,,,
 ALS Vial : 17 Sample Multiplier: 1

Quant Time: Sep 17 04:55:18 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091520.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 16 09:02:25 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)

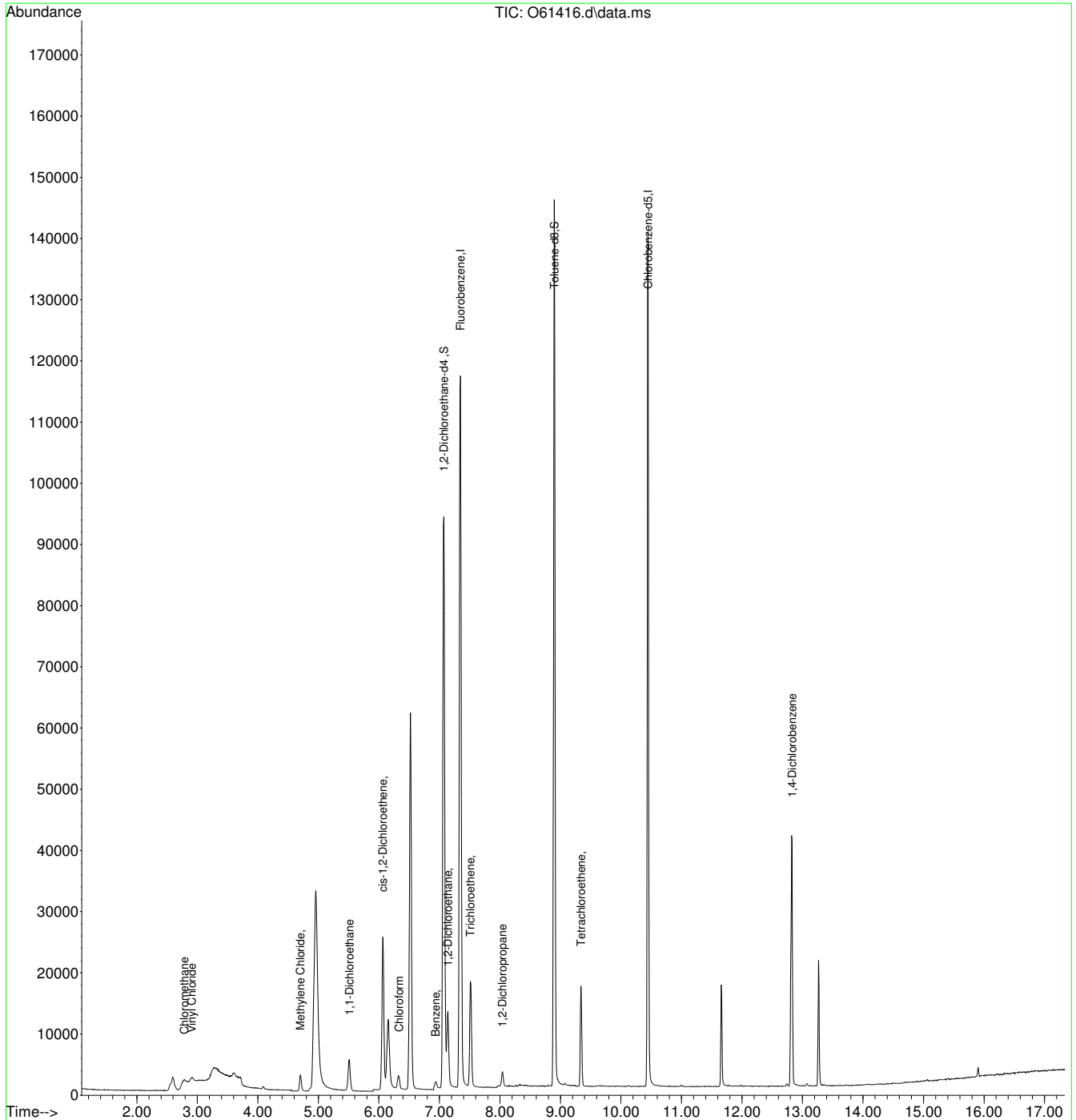
Internal Standards						
1) Fluorobenzene	7.346	96	172782	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.447	117	134116	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.074	65	88459	6.08	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	121.60%	
19) Toluene-d8	8.896	98	143784	5.25	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	105.00%	
Target Compounds						
						Qvalue
2) Vinyl Chloride	2.905	62	1204	0.05	ug/L	94
3) Chloromethane	2.784	50	6196	0.18	ug/L #	57
5) Methylene Chloride	4.700	49	3571	0.07	ug/L	92
7) 1,1-Dichloroethane	5.514	63	8587	0.25	ug/L	98
8) cis-1,2-Dichloroethene	6.066	96	16060	1.06	ug/L	97
9) Chloroform	6.333	83	1784	0.06	ug/L #	63
12) Benzene	6.937	78	2539m	0.05	ug/L	
14) 1,2-Dichloroethane	7.139	62	13695	0.52	ug/L	95
15) Trichloroethene	7.512	95	11379	0.72	ug/L	96
16) 1,2-Dichloropropane	8.040	63	1817	0.10	ug/L	94
21) Tetrachloroethene	9.343	166	10047	0.65	ug/L	94
22) 1,4-Dichlorobenzene	12.827	146	23948	0.82	ug/L	97

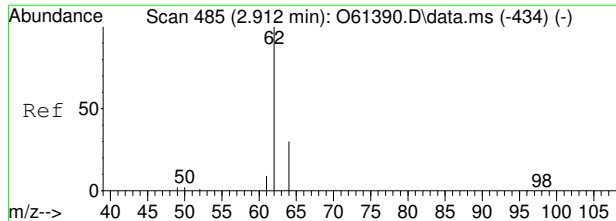
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-17-2020\vo2363\
Data File : O61416.d
Acq On : 16 Sep 2020 4:53 pm
Operator : akarig
Sample : FA78549-7
Misc : MS47193,VO2363,,,,,
ALS Vial : 17 Sample Multiplier: 1

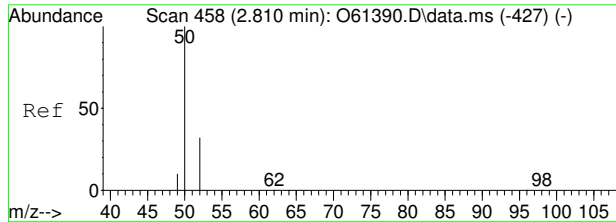
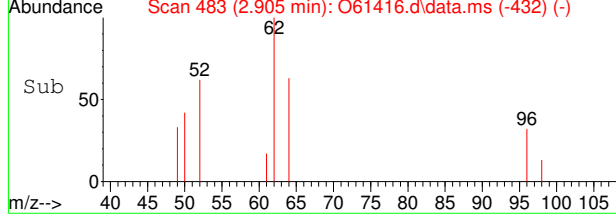
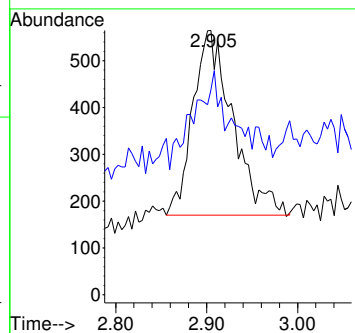
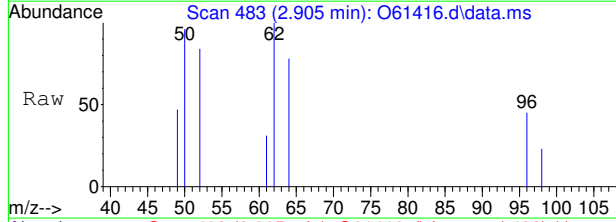
Quant Time: Sep 17 04:55:18 2020
Quant Method : C:\msdchem\1\methods\SIMCL091520.M
Quant Title : Standard Methods 6200B
QLast Update : Wed Sep 16 09:02:25 2020
Response via : Initial Calibration





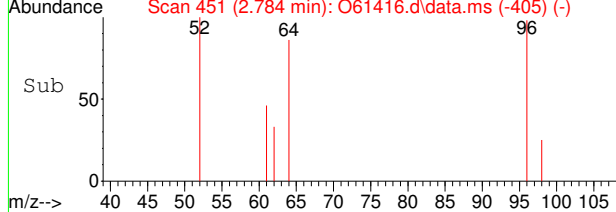
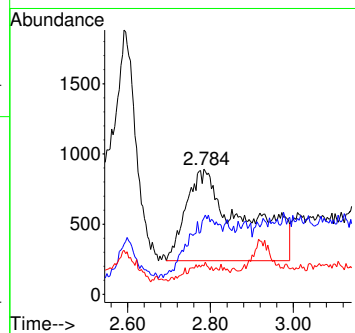
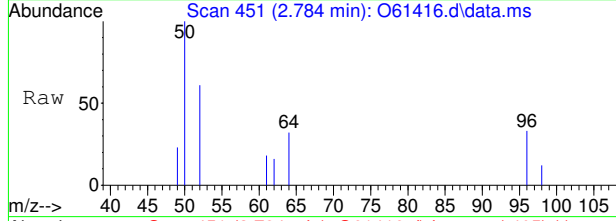
#2
 Vinyl Chloride
 Concen: 0.05 ug/L
 RT: 2.905 min Scan# 483
 Delta R.T. -0.007 min
 Lab File: O61416.d
 Acq: 16 Sep 2020 4:53 pm

Tgt Ion	Resp	Lower	Upper
62	1204		
64	26.3	0.0	59.8

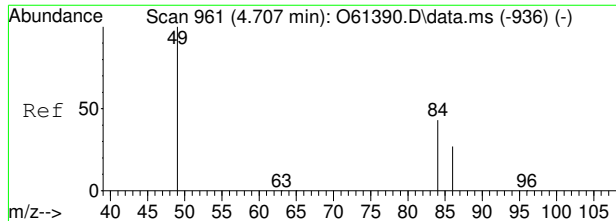


#3
 Chloromethane
 Concen: 0.18 ug/L
 RT: 2.784 min Scan# 451
 Delta R.T. -0.026 min
 Lab File: O61416.d
 Acq: 16 Sep 2020 4:53 pm

Tgt Ion	Resp	Lower	Upper
50	6196		
52	61.8	12.1	52.1#
49	14.9	0.0	30.3

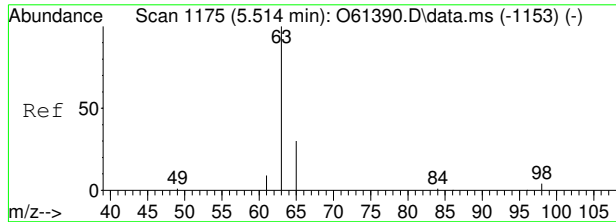
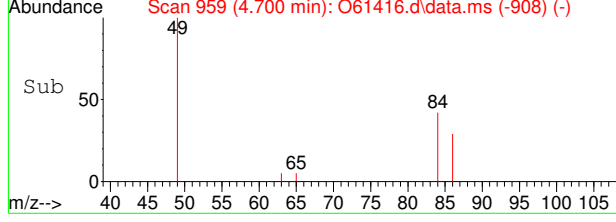
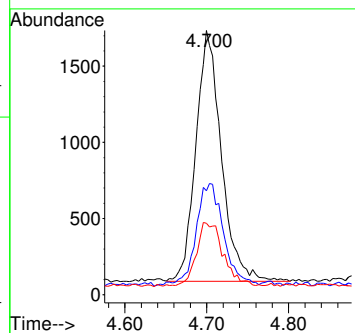
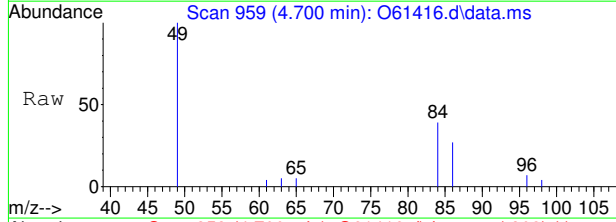


7.1.10
7



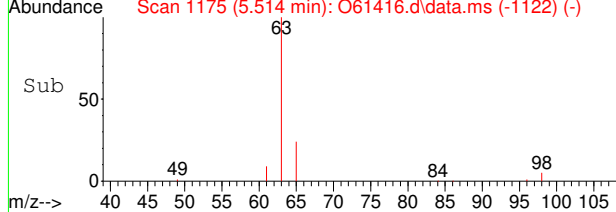
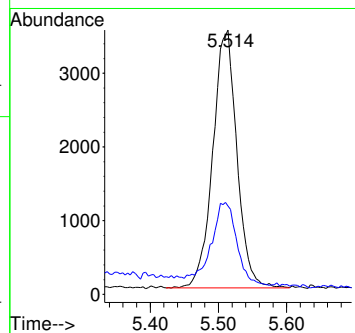
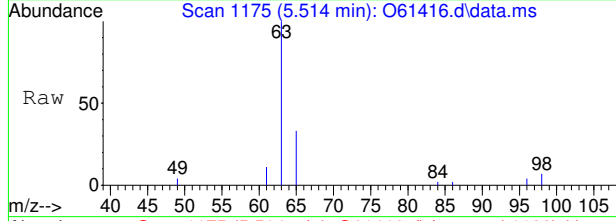
#5
 Methylene Chloride
 Concen: 0.07 ug/L
 RT: 4.700 min Scan# 959
 Delta R.T. -0.007 min
 Lab File: O61416.d
 Acq: 16 Sep 2020 4:53 pm

Tgt Ion	Ratio	Lower	Upper
49	100		
84	37.0	13.2	73.2
86	24.7	0.0	57.3

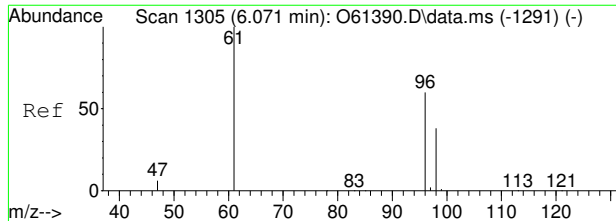


#7
 1,1-Dichloroethane
 Concen: 0.25 ug/L
 RT: 5.514 min Scan# 1175
 Delta R.T. 0.000 min
 Lab File: O61416.d
 Acq: 16 Sep 2020 4:53 pm

Tgt Ion	Ratio	Lower	Upper
63	100		
65	31.0	0.2	60.2

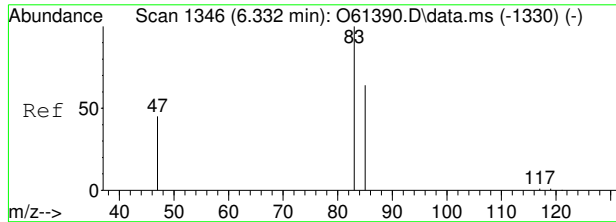
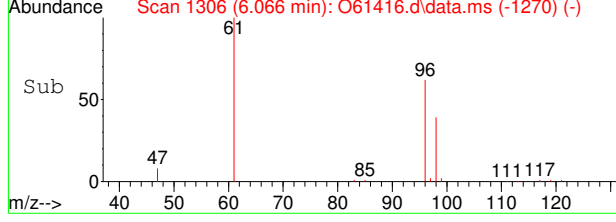
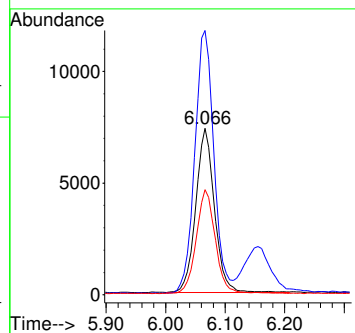
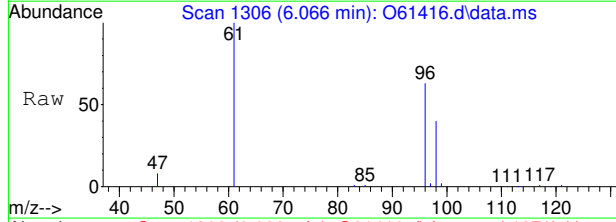


7.1.10
7



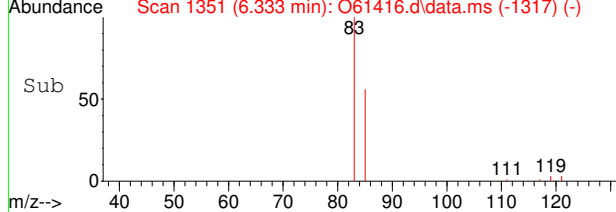
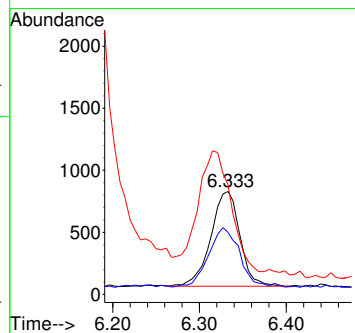
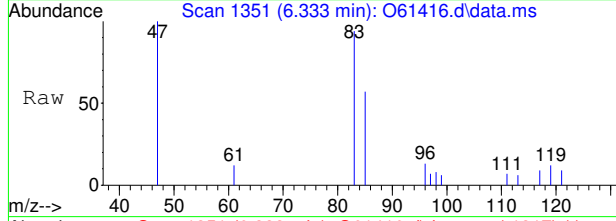
#8
 cis-1,2-Dichloroethene
 Concen: 1.06 ug/L
 RT: 6.066 min Scan# 1306
 Delta R.T. -0.005 min
 Lab File: O61416.d
 Acq: 16 Sep 2020 4:53 pm

Tgt Ion	Resp	Lower	Upper
96	16060		
61	160.1	135.7	195.7
98	63.2	33.1	93.1

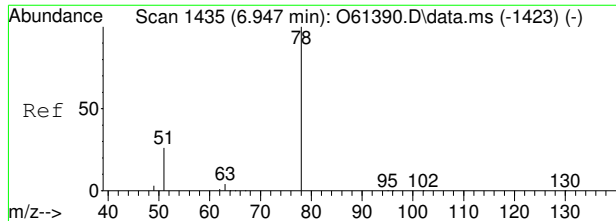


#9
 Chloroform
 Concen: 0.06 ug/L
 RT: 6.333 min Scan# 1351
 Delta R.T. 0.001 min
 Lab File: O61416.d
 Acq: 16 Sep 2020 4:53 pm

Tgt Ion	Resp	Lower	Upper
83	1784		
85	57.3	33.9	93.9
47	95.2	14.9	74.9#

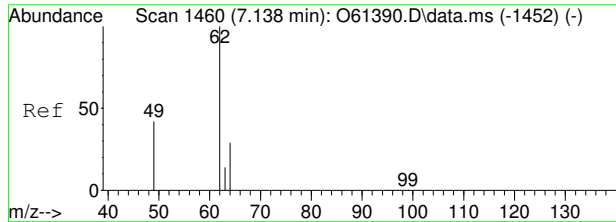
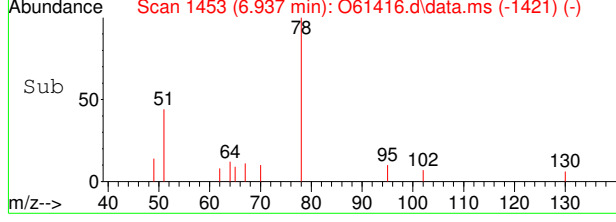
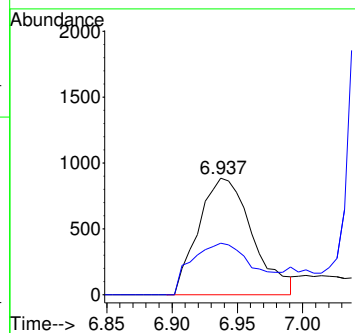
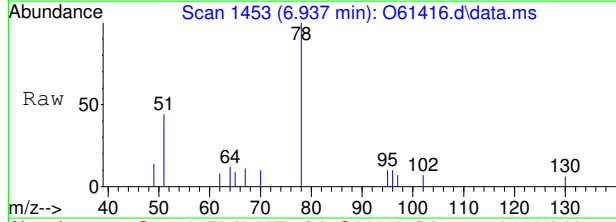


7.1.10
7



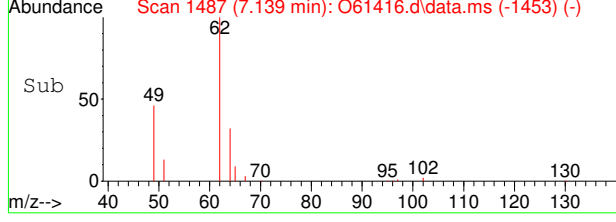
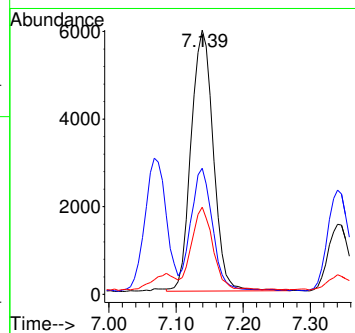
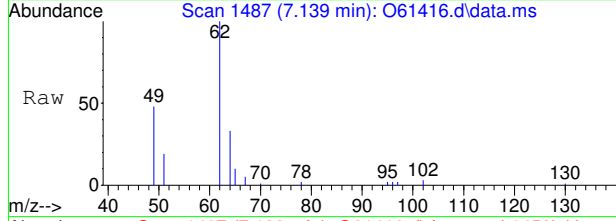
#12
Benzene
Concen: 0.05 ug/L m
RT: 6.937 min Scan# 1453
Delta R.T. -0.010 min
Lab File: O61416.d
Acq: 16 Sep 2020 4:53 pm

Tgt Ion	Resp	Lower	Upper
78	2539	100	
51	44.4	0.0	56.0

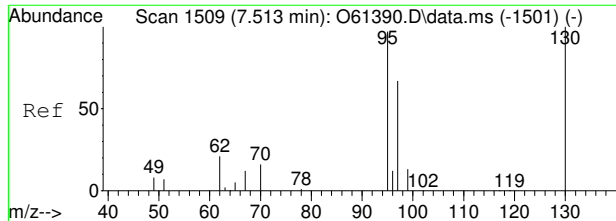


#14
1,2-Dichloroethane
Concen: 0.52 ug/L
RT: 7.139 min Scan# 1487
Delta R.T. 0.001 min
Lab File: O61416.d
Acq: 16 Sep 2020 4:53 pm

Tgt Ion	Resp	Lower	Upper
62	13695	100	
49	46.9	13.6	73.6
64	31.6	0.0	58.8



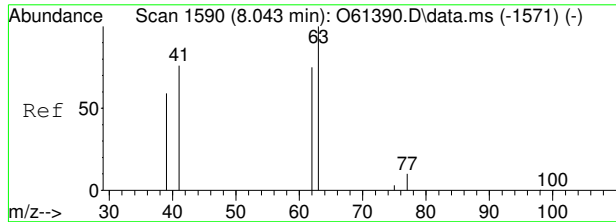
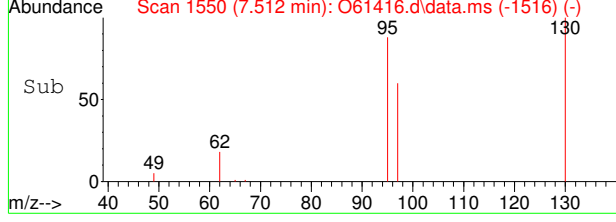
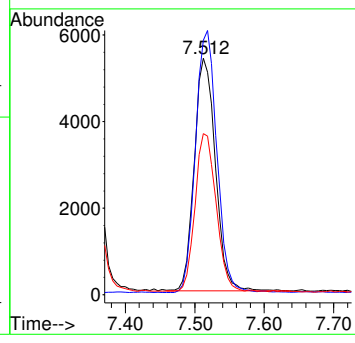
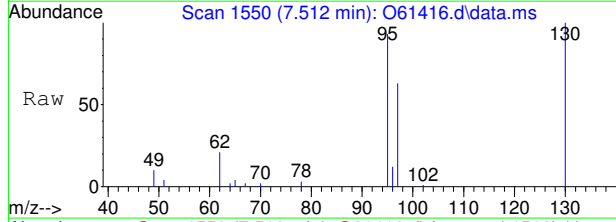
7.1.10
7



#15
 Trichloroethene
 Concen: 0.72 ug/L
 RT: 7.512 min Scan# 1550
 Delta R.T. -0.001 min
 Lab File: O61416.d
 Acq: 16 Sep 2020 4:53 pm

Tgt Ion: 95 Resp: 11379

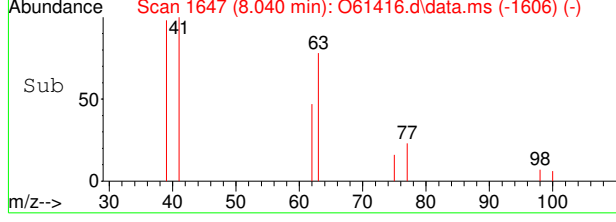
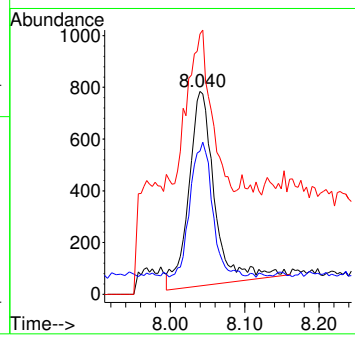
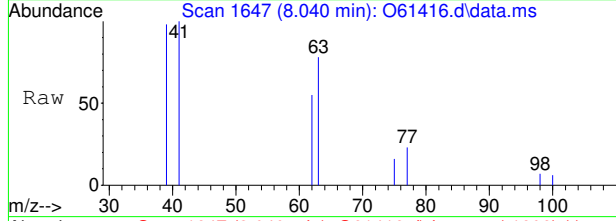
Ion	Ratio	Lower	Upper
95	100		
130	108.4	72.6	132.6
97	67.8	38.6	98.6



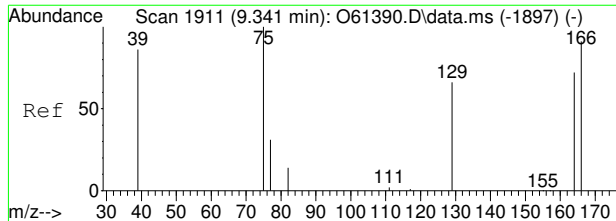
#16
 1,2-Dichloropropane
 Concen: 0.10 ug/L
 RT: 8.040 min Scan# 1647
 Delta R.T. -0.003 min
 Lab File: O61416.d
 Acq: 16 Sep 2020 4:53 pm

Tgt Ion: 63 Resp: 1817

Ion	Ratio	Lower	Upper
63	100		
62	67.8	44.5	104.5
41	79.2	45.9	105.9



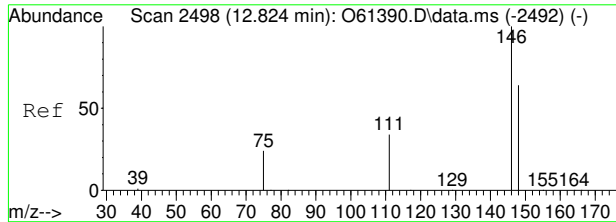
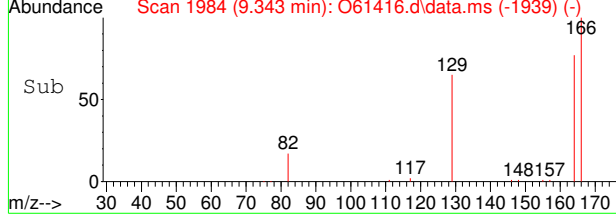
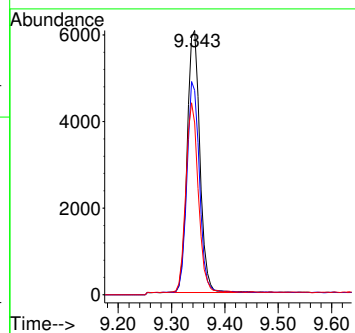
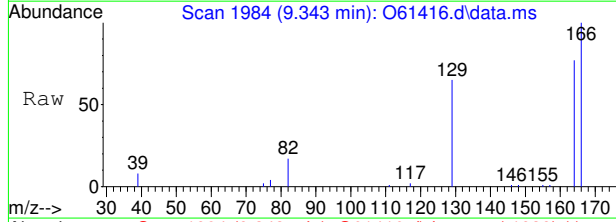
7.1.10
7



#21
 Tetrachloroethene
 Concen: 0.65 ug/L
 RT: 9.343 min Scan# 1984
 Delta R.T. 0.002 min
 Lab File: O61416.d
 Acq: 16 Sep 2020 4:53 pm

Tgt Ion:166 Resp: 10047

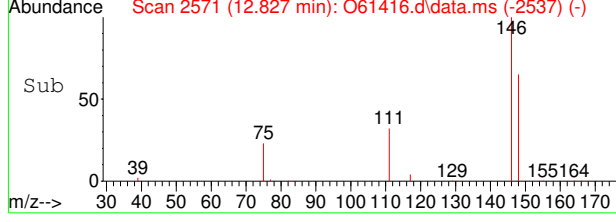
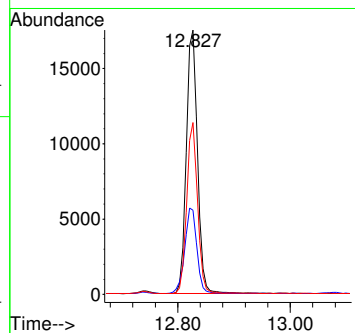
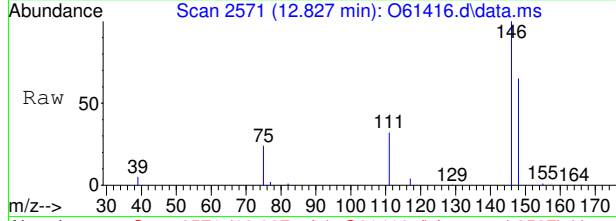
Ion	Ratio	Lower	Upper
166	100		
164	77.0	49.1	109.1
129	64.7	42.2	102.2



#22
 1,4-Dichlorobenzene
 Concen: 0.82 ug/L
 RT: 12.827 min Scan# 2571
 Delta R.T. 0.003 min
 Lab File: O61416.d
 Acq: 16 Sep 2020 4:53 pm

Tgt Ion:146 Resp: 23948

Ion	Ratio	Lower	Upper
146	100		
111	31.6	14.3	54.3
148	64.9	43.7	83.7



7.1.10
7

Manual Integration Approval Summary

Sample Number: FA78549-7 **Method:** SW846 8260B BY SIM
Lab FileID: O61416.D **Analyst approved:** 09/17/20 16:05 Juan Garcia
Injection Time: 09/16/20 16:53 **Supervisor approved:** 09/18/20 14:38 Melissa Mangual

Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzene	71-43-2		6.94	Poor instrument integration

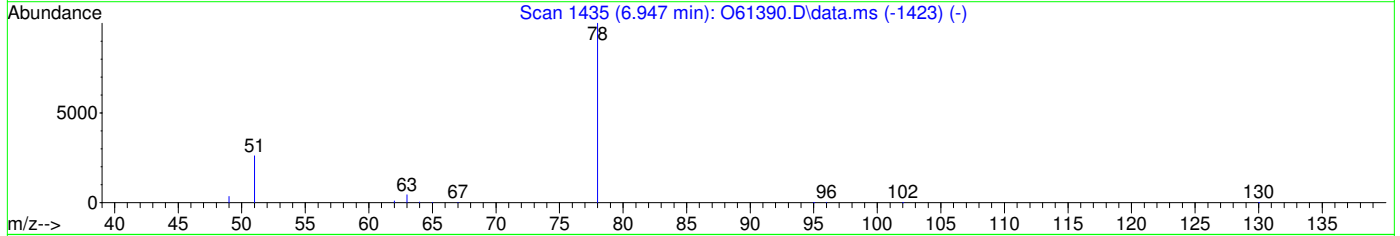
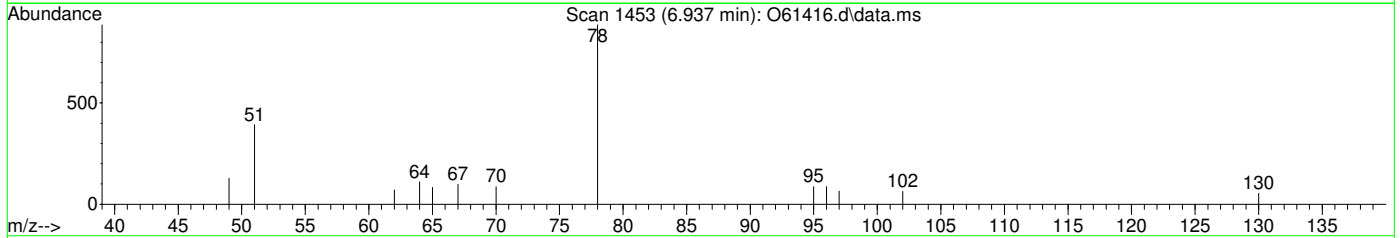
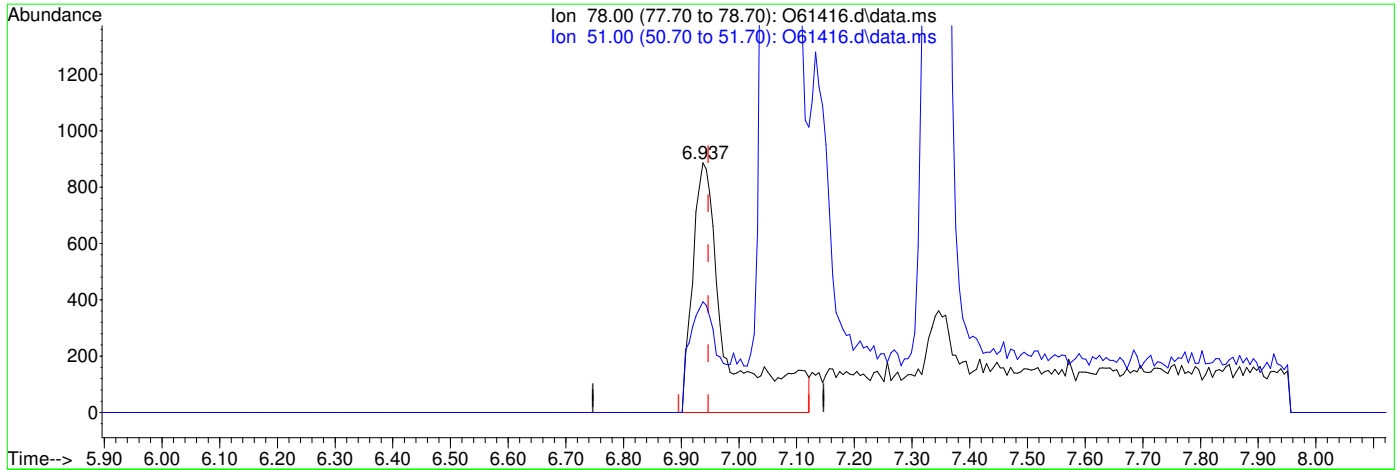
7.1.10.1

7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-17-2020\vo2363\
 Data File : O61416.d
 Acq On : 16 Sep 2020 4:53 pm
 Operator : akarig
 Sample : FA78549-7
 Misc : MS47193,VO2363,,,,,
 ALS Vial : 17 Sample Multiplier: 1

Quant Time: Sep 17 04:42:58 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091520.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 16 09:02:25 2020
 Response via : Initial Calibration



TIC: O61416.d\data.ms

(12) Benzene ()

6.937min (-0.010) 0.07ug/L

response 3607

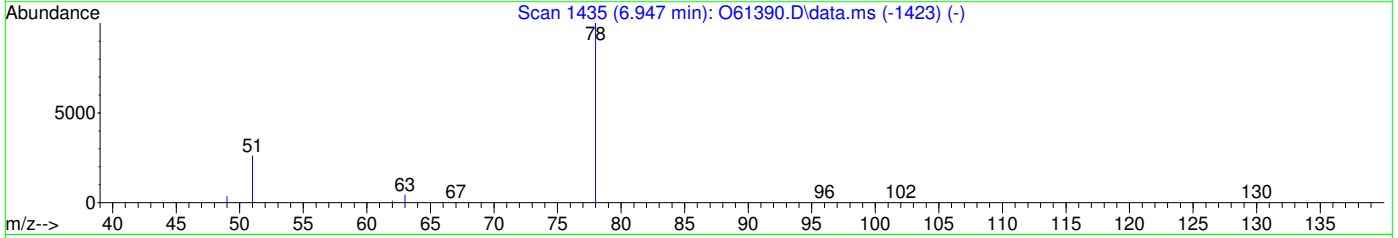
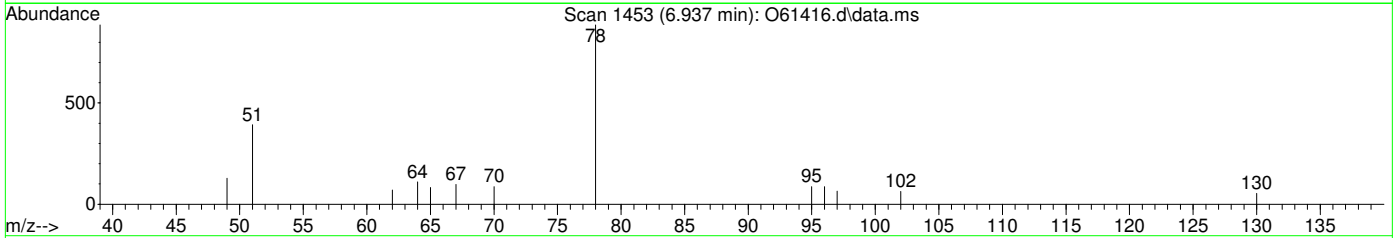
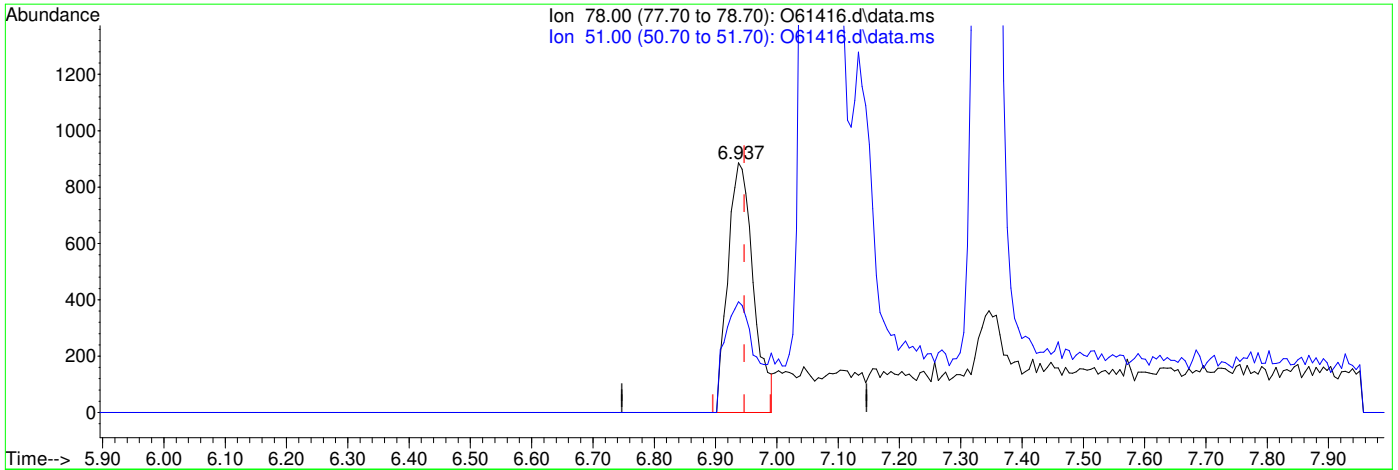
Ion	Exp%	Act%
78.00	100	100
51.00	26.00	44.36
0.00	0.00	0.00
0.00	0.00	0.00

7.1.102
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-17-2020\vo2363\
 Data File : O61416.d
 Acq On : 16 Sep 2020 4:53 pm
 Operator : akarig
 Sample : FA78549-7
 Misc : MS47193,VO2363,,,,,
 ALS Vial : 17 Sample Multiplier: 1

Quant Time: Sep 17 04:42:58 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091520.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 16 09:02:25 2020
 Response via : Initial Calibration



TIC: O61416.d\data.ms

(12) Benzene ()

6.937min (-0.010) 0.05ug/L m

response 2539

Ion	Exp%	Act%
78.00	100	100
51.00	26.00	44.36
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-11-2020\vo2354\
Data File : O61168.d
Acq On : 10 Sep 2020 12:59 pm
Operator : melissam
Sample : FA78549-8
Misc : MS47173,VO2354,,,,,
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 14 07:54:22 2020
Quant Method : C:\msdchem\1\methods\SIMCL090820.M
Quant Title : Standard Methods 6200B
QLast Update : Wed Sep 09 12:10:38 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)

Internal Standards						
1) Fluorobenzene	7.346	96	179641	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.447	117	126277	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.074	65	89608	5.68	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	113.60%	
19) Toluene-d8	8.900	98	157562	5.10	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	102.00%	
Target Compounds						
3) Chloromethane	2.807	50	4823	0.18	ug/L	73
5) Methylene Chloride	4.707	49	5525	0.12	ug/L	87
6) trans-1,2-Dichloroethene	4.873	61	1270	0.04	ug/L #	60
7) 1,1-Dichloroethane	5.514	63	6939	0.21	ug/L	99
8) cis-1,2-Dichloroethene	6.072	96	18884	1.26	ug/L #	50
9) Chloroform	6.333	83	10558	0.39	ug/L #	79
10) Carbon Tetrachloride	6.517	117	508	0.03	ug/L	80
12) Benzene	6.943	78	1180m	0.02	ug/L	
14) 1,2-Dichloroethane	7.145	62	2066	0.07	ug/L	94
15) Trichloroethene	7.518	95	81598	5.22	ug/L	98
16) 1,2-Dichloropropane	8.047	63	1897m	0.10	ug/L	
21) Tetrachloroethene	9.343	166	3938	0.32	ug/L	94

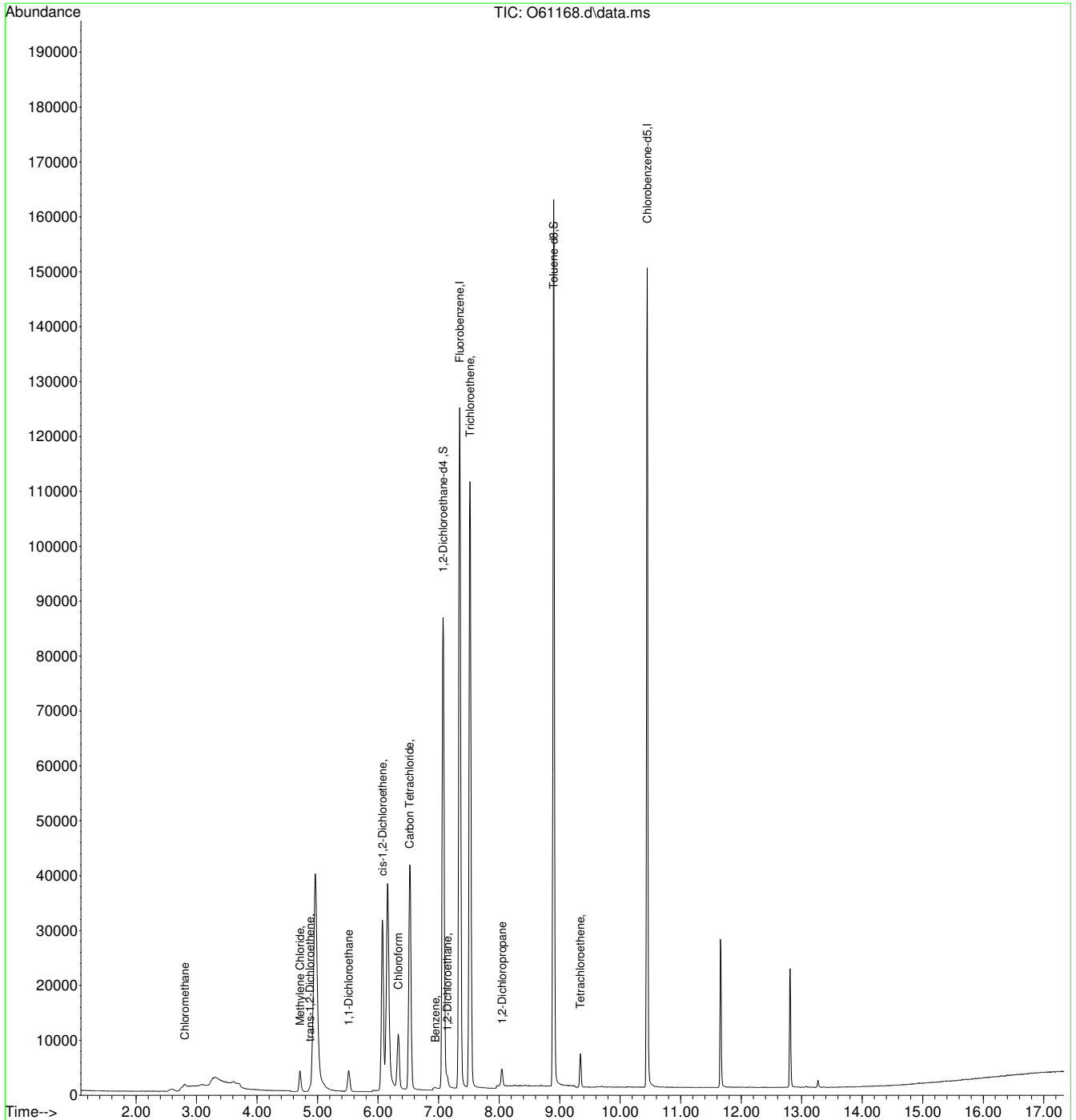
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.1.11
7

Quantitation Report (QT Reviewed)

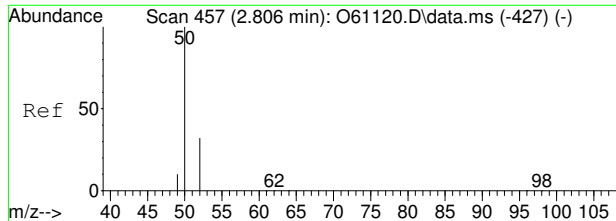
Data Path : C:\msdchem\1\data\johnm\September 2020\09-11-2020\vo2354\
 Data File : O61168.d
 Acq On : 10 Sep 2020 12:59 pm
 Operator : melissam
 Sample : FA78549-8
 Misc : MS47173,VO2354,,,,,
 ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 14 07:54:22 2020
 Quant Method : C:\msdchem\1\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration



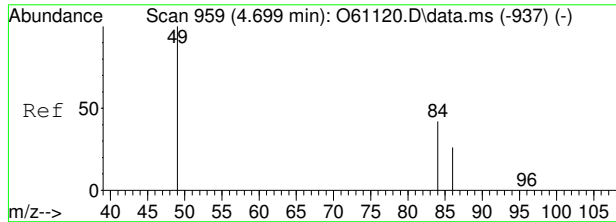
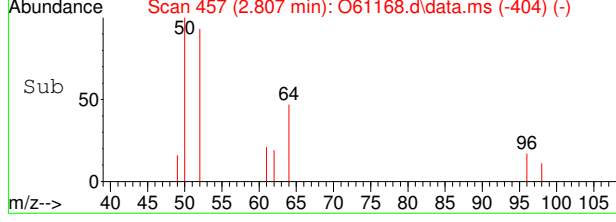
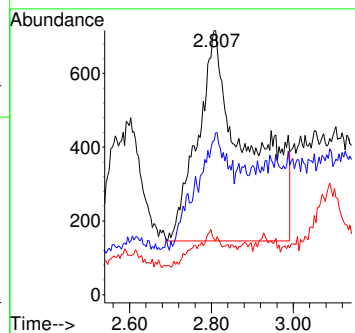
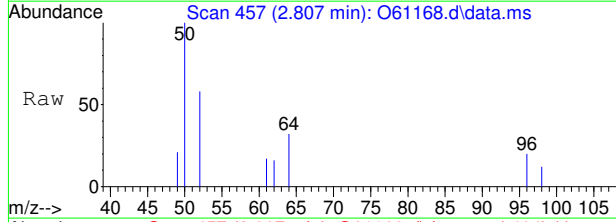
7.1.11
7





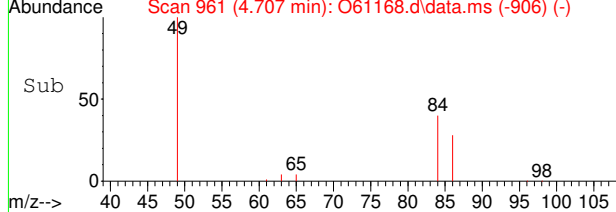
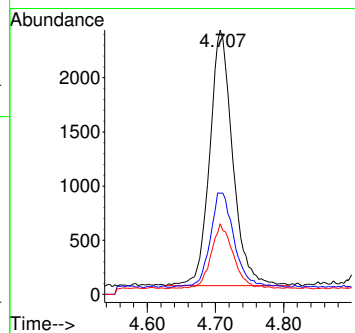
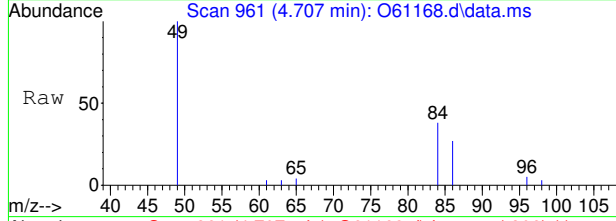
#3
 Chloromethane
 Concen: 0.18 ug/L
 RT: 2.807 min Scan# 457
 Delta R.T. 0.000 min
 Lab File: O61168.d
 Acq: 10 Sep 2020 12:59 pm

Tgt Ion	Ratio	Lower	Upper
50	100		
52	46.2	7.8	47.8
49	13.0	0.0	30.5

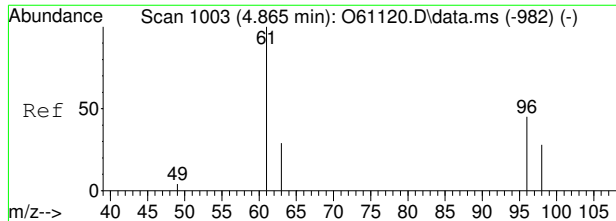


#5
 Methylene Chloride
 Concen: 0.12 ug/L
 RT: 4.707 min Scan# 961
 Delta R.T. 0.008 min
 Lab File: O61168.d
 Acq: 10 Sep 2020 12:59 pm

Tgt Ion	Ratio	Lower	Upper
49	100		
84	36.7	17.9	77.9
86	25.4	0.0	59.8

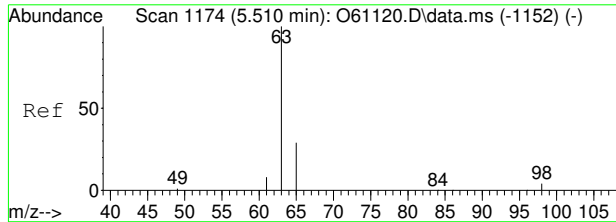
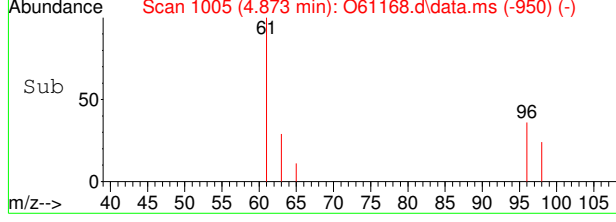
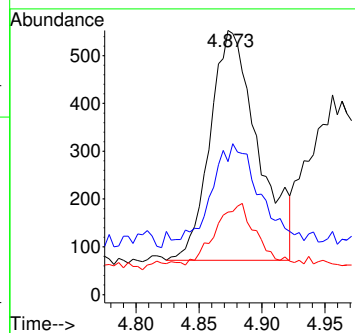
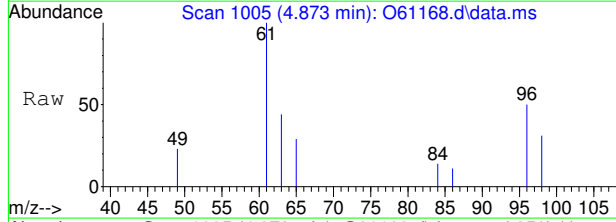


7.1.11
7



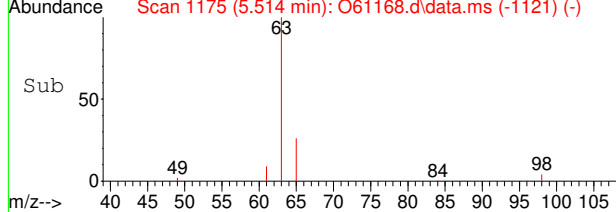
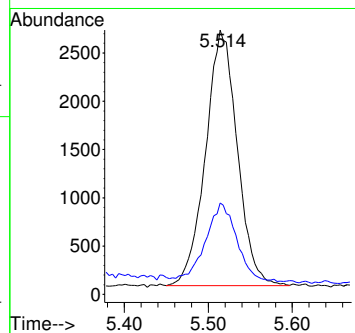
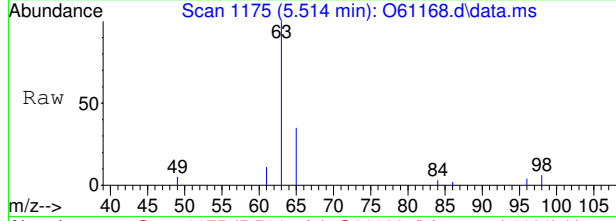
#6
 trans-1,2-Dichloroethene
 Concen: 0.04 ug/L
 RT: 4.873 min Scan# 1005
 Delta R.T. 0.008 min
 Lab File: O61168.d
 Acq: 10 Sep 2020 12:59 pm

Tgt Ion	Ratio	Lower	Upper
61	100		
96	30.4	36.9	96.9#
98	22.5	11.1	71.1

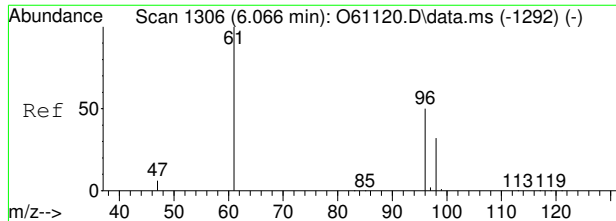


#7
 1,1-Dichloroethane
 Concen: 0.21 ug/L
 RT: 5.514 min Scan# 1175
 Delta R.T. 0.004 min
 Lab File: O61168.d
 Acq: 10 Sep 2020 12:59 pm

Tgt Ion	Ratio	Lower	Upper
63	100		
65	30.4	0.7	60.7

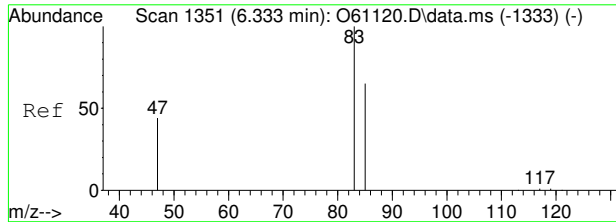
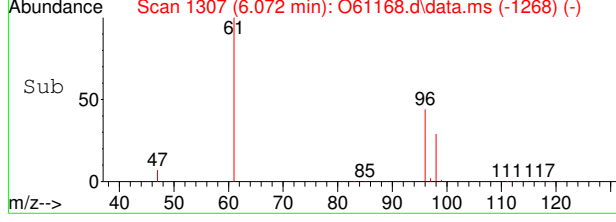
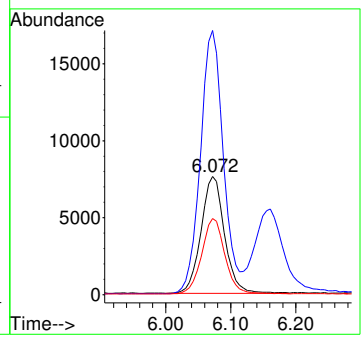
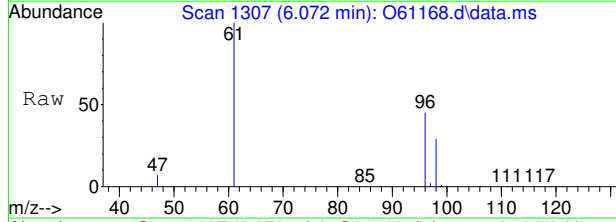


7.1.11
7



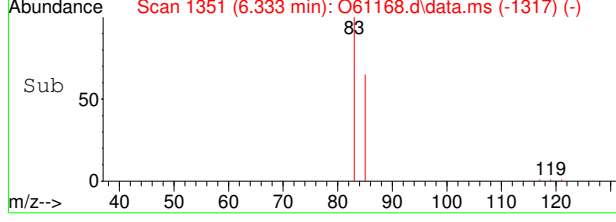
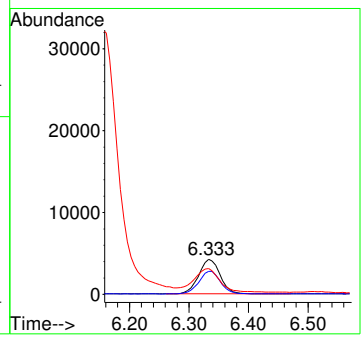
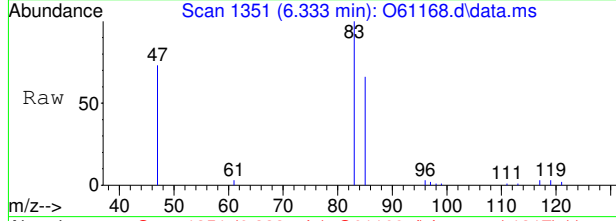
#8
 cis-1,2-Dichloroethene
 Concen: 1.26 ug/L
 RT: 6.072 min Scan# 1307
 Delta R.T. 0.006 min
 Lab File: O61168.d
 Acq: 10 Sep 2020 12:59 pm

Tgt Ion	Resp	Lower	Upper
96	18884		
61	225.5	107.0	167.0#
98	64.5	34.1	94.1



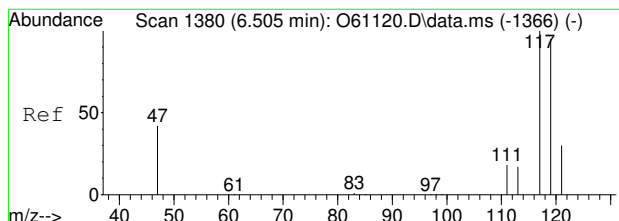
#9
 Chloroform
 Concen: 0.39 ug/L
 RT: 6.333 min Scan# 1351
 Delta R.T. 0.000 min
 Lab File: O61168.d
 Acq: 10 Sep 2020 12:59 pm

Tgt Ion	Resp	Lower	Upper
83	10558		
83	100		
85	65.1	33.0	93.0
47	68.3	8.1	68.1#



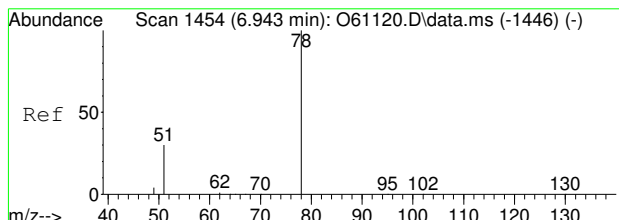
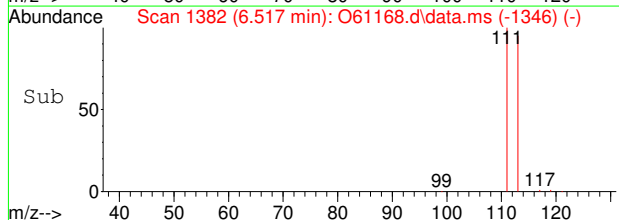
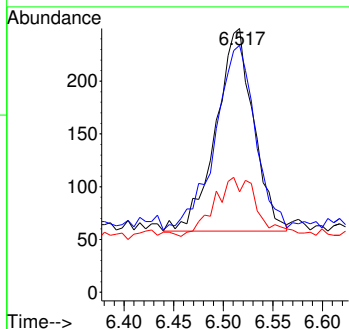
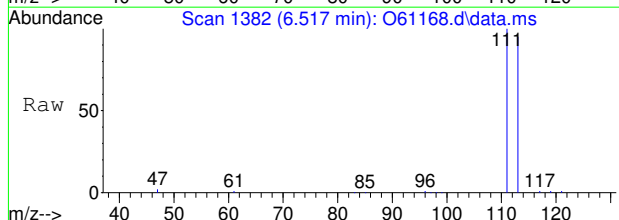
7.1.11
7





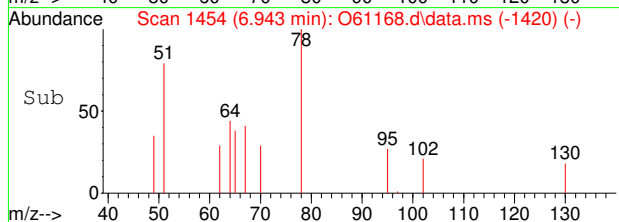
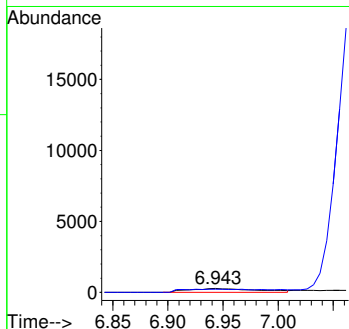
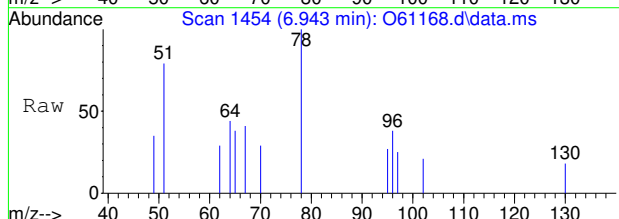
#10
 Carbon Tetrachloride
 Concen: 0.03 ug/L
 RT: 6.517 min Scan# 1382
 Delta R.T. 0.012 min
 Lab File: O61168.d
 Acq: 10 Sep 2020 12:59 pm

Tgt Ion	Resp	Lower	Upper
117	508		
119	91.1	80.9	140.9
121	19.8	4.1	64.1

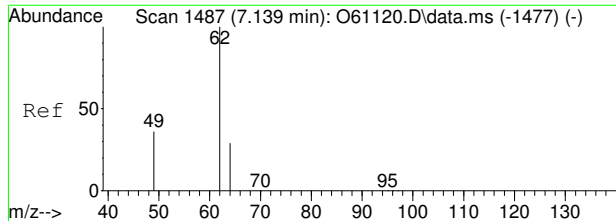


#12
 Benzene
 Concen: 0.02 ug/L m
 RT: 6.943 min Scan# 1454
 Delta R.T. 0.000 min
 Lab File: O61168.d
 Acq: 10 Sep 2020 12:59 pm

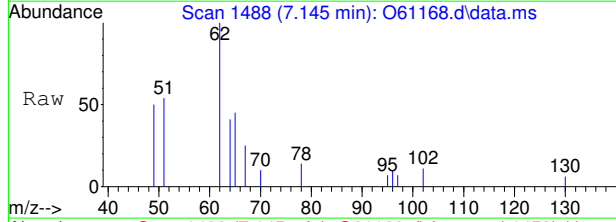
Tgt Ion	Resp	Lower	Upper
78	1180		
78	100		
51	79.1	0.0	56.2#



7.1.11
7

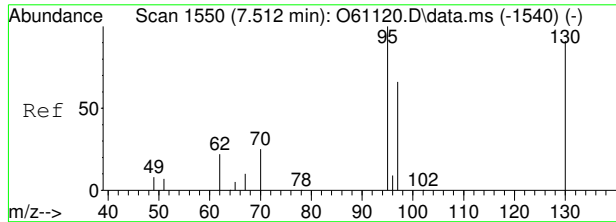
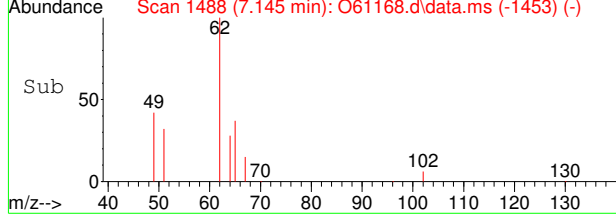
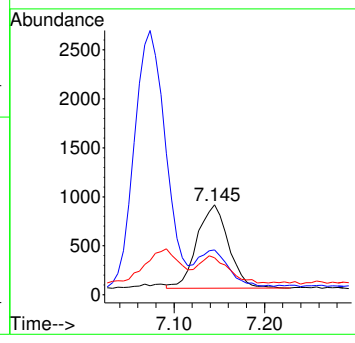


#14
 1,2-Dichloroethane
 Concen: 0.07 ug/L
 RT: 7.145 min Scan# 1488
 Delta R.T. 0.006 min
 Lab File: O61168.d
 Acq: 10 Sep 2020 12:59 pm

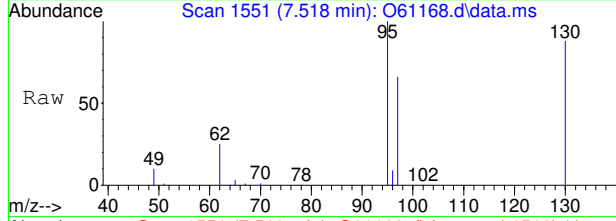


Tgt Ion: 62 Resp: 2066

Ion	Ratio	Lower	Upper
62	100		
49	42.1	18.0	78.0
64	30.2	1.5	61.5

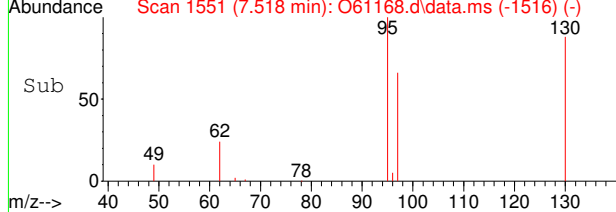
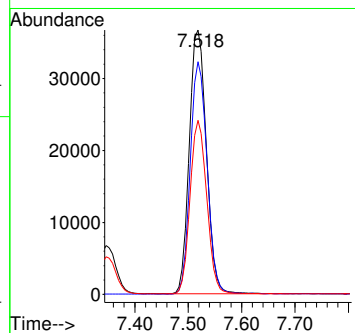


#15
 Trichloroethene
 Concen: 5.22 ug/L
 RT: 7.518 min Scan# 1551
 Delta R.T. 0.006 min
 Lab File: O61168.d
 Acq: 10 Sep 2020 12:59 pm

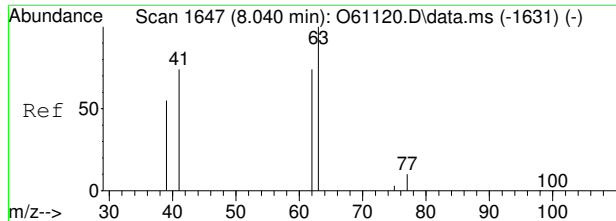


Tgt Ion: 95 Resp: 81598

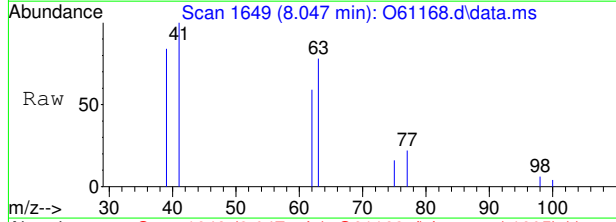
Ion	Ratio	Lower	Upper
95	100		
130	88.1	60.4	120.4
97	65.7	34.6	94.6



7.1.11
7

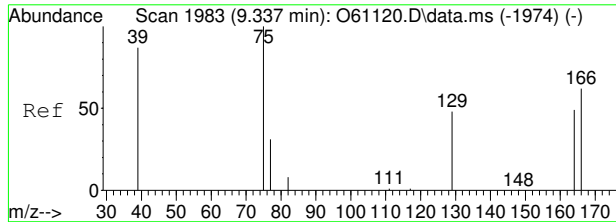
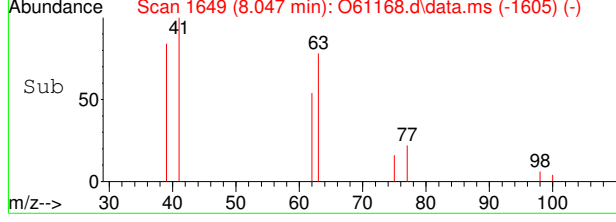
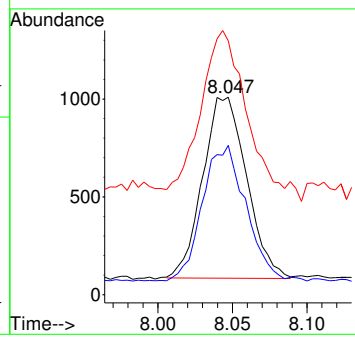


#16
 1,2-Dichloropropane
 Concen: 0.10 ug/L m
 RT: 8.047 min Scan# 1649
 Delta R.T. 0.008 min
 Lab File: O61168.d
 Acq: 10 Sep 2020 12:59 pm

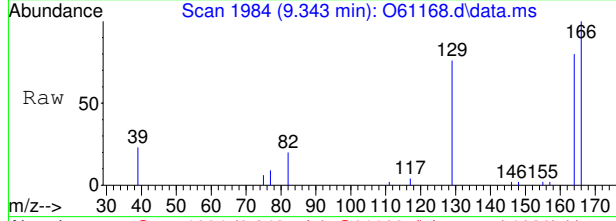


Tgt Ion: 63 Resp: 1897

Ion	Ratio	Lower	Upper
63	100		
62	75.5	42.7	102.7
41	128.5	54.5	114.5#

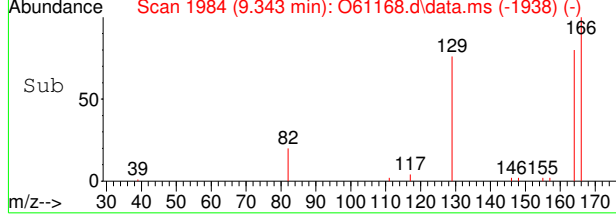
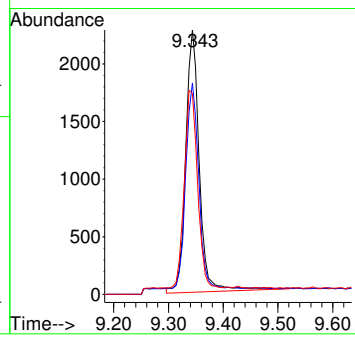


#21
 Tetrachloroethene
 Concen: 0.32 ug/L
 RT: 9.343 min Scan# 1984
 Delta R.T. 0.006 min
 Lab File: O61168.d
 Acq: 10 Sep 2020 12:59 pm



Tgt Ion: 166 Resp: 3938

Ion	Ratio	Lower	Upper
166	100		
164	79.2	47.3	107.3
129	75.2	37.5	97.5



7.1.11
 7



Manual Integration Approval Summary

Sample Number: FA78549-8 **Method:** SW846 8260B BY SIM
Lab FileID: O61168.D **Analyst approved:** 09/14/20 08:06 John Matthew de Guzman
Injection Time: 09/10/20 12:59 **Supervisor approved:** 09/18/20 14:39 Melissa Mangual

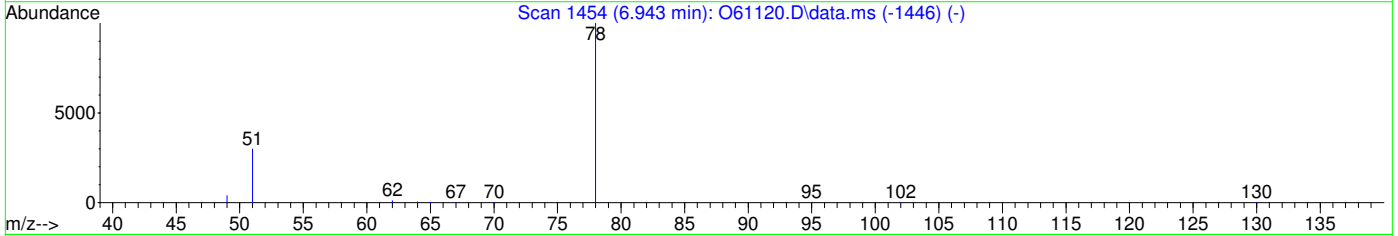
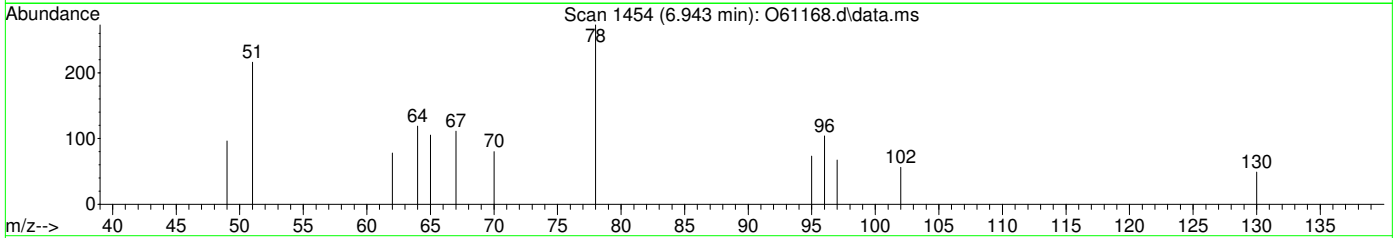
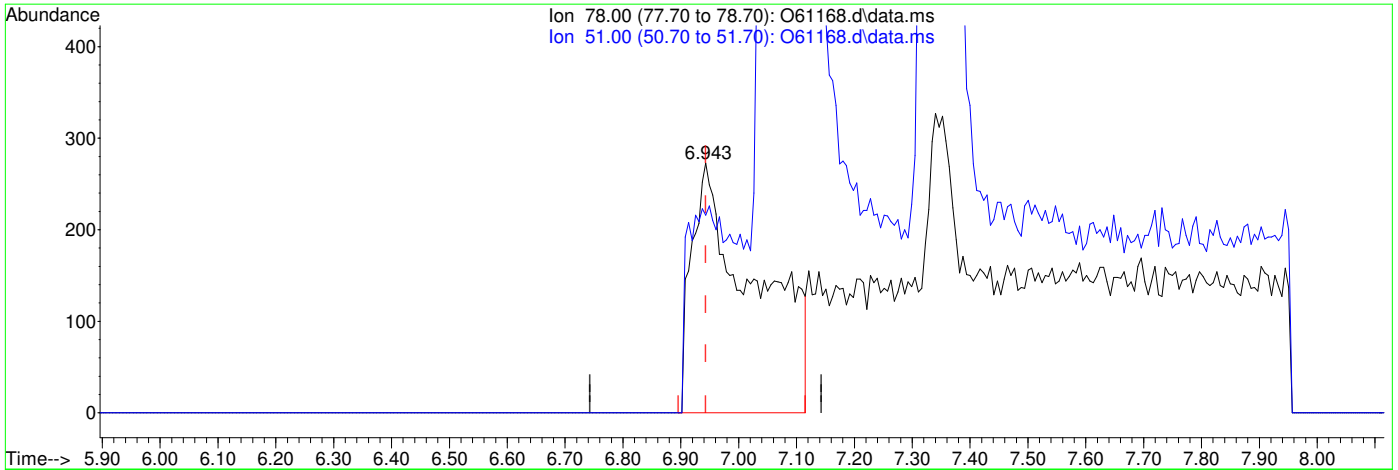
Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzene	71-43-2		6.94	Poor instrument integration
1,2-Dichloropropane	78-87-5		8.05	Poor instrument integration

7.1.11.1
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-11-2020\vo2354\
 Data File : O61168.d
 Acq On : 10 Sep 2020 12:59 pm
 Operator : melissam
 Sample : FA78549-8
 Misc : MS47173,VO2354,,,,,
 ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 14 07:53:29 2020
 Quant Method : C:\msdchem\1\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration



TIC: O61168.d\data.ms

(12) Benzene ()

6.943min (+0.000) 0.04ug/L

response 2069

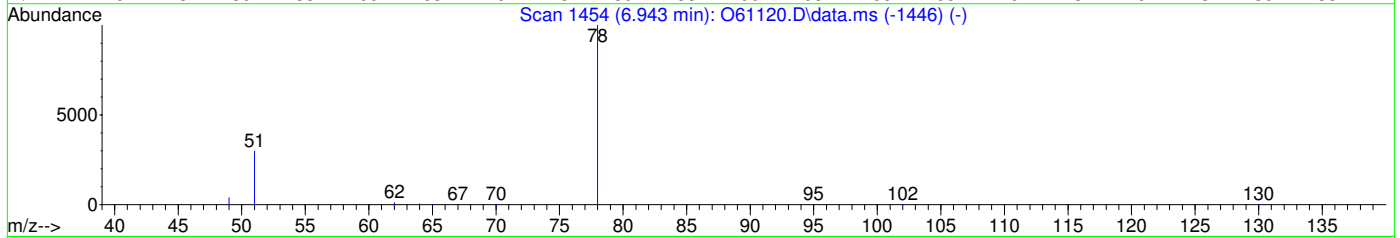
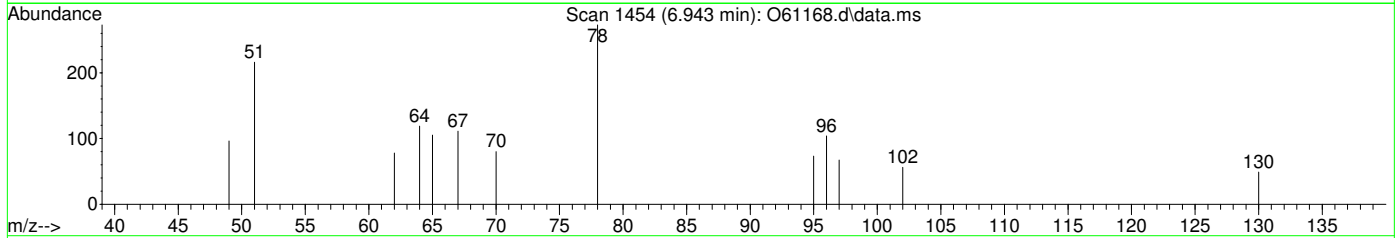
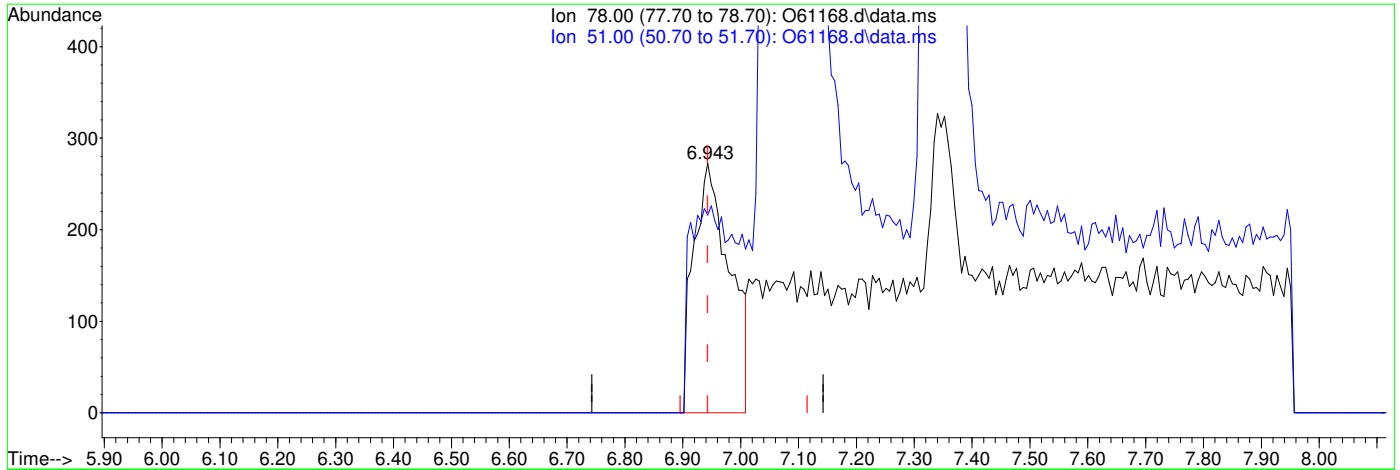
Ion	Exp%	Act%
78.00	100	100
51.00	26.20	79.12#
0.00	0.00	0.00
0.00	0.00	0.00

7.1.11.2
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-11-2020\vo2354\
 Data File : O61168.d
 Acq On : 10 Sep 2020 12:59 pm
 Operator : melissam
 Sample : FA78549-8
 Misc : MS47173,VO2354,,,,,
 ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 14 07:53:29 2020
 Quant Method : C:\msdchem\1\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration



(12) Benzene ()
 6.943min (+0.000) 0.02ug/L m
 response 1180

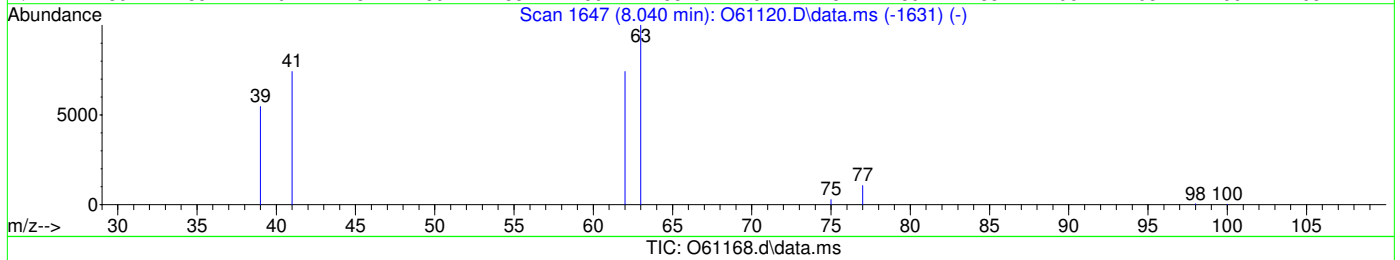
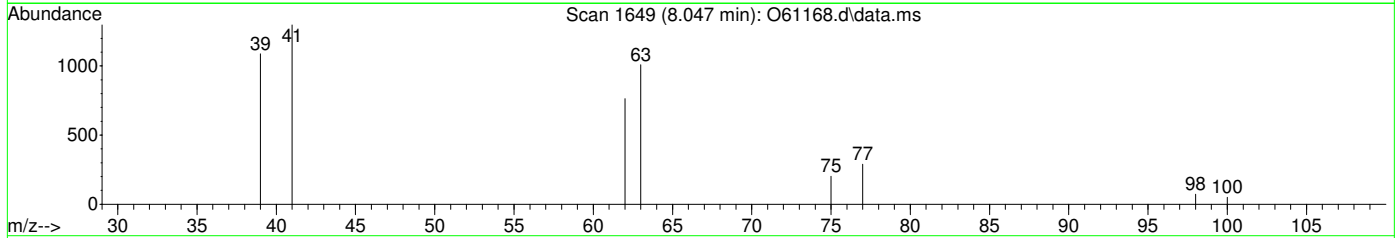
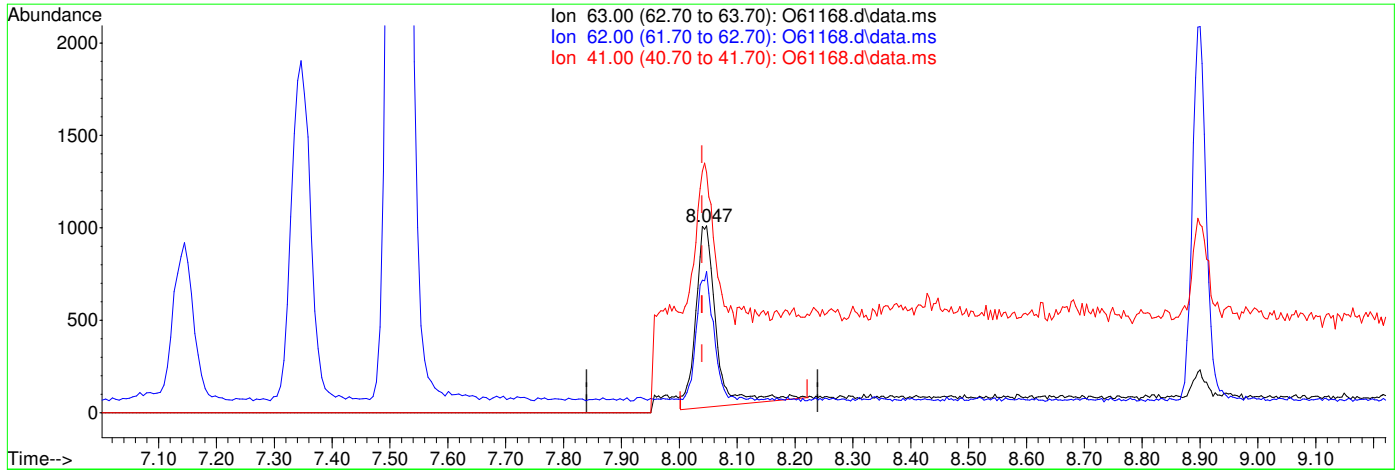
Ion	Exp%	Act%
78.00	100	100
51.00	26.20	79.12#
0.00	0.00	0.00
0.00	0.00	0.00

7.1.11.3
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-11-2020\vo2354\
 Data File : O61168.d
 Acq On : 10 Sep 2020 12:59 pm
 Operator : melissam
 Sample : FA78549-8
 Misc : MS47173,VO2354,,,,,
 ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 14 07:53:29 2020
 Quant Method : C:\msdchem\1\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration



(16) 1,2-Dichloropropane
 8.047min (+0.008) 0.12ug/L
 response 2397

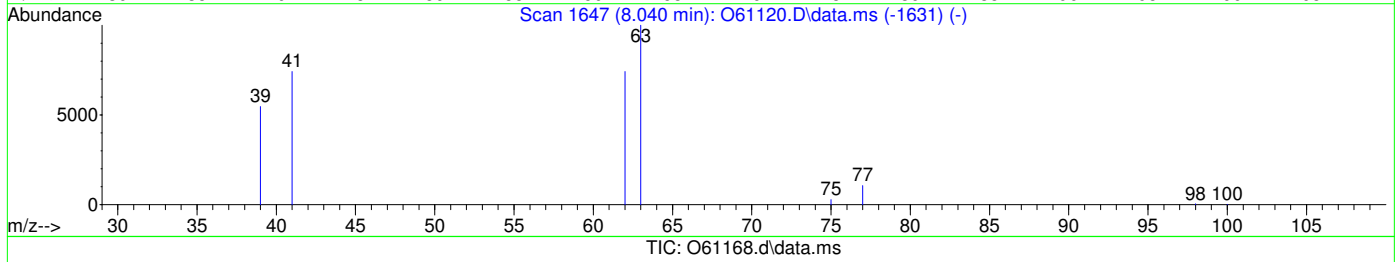
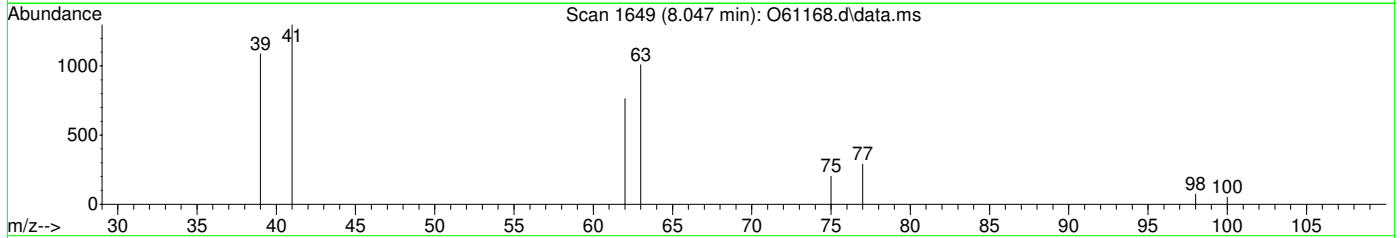
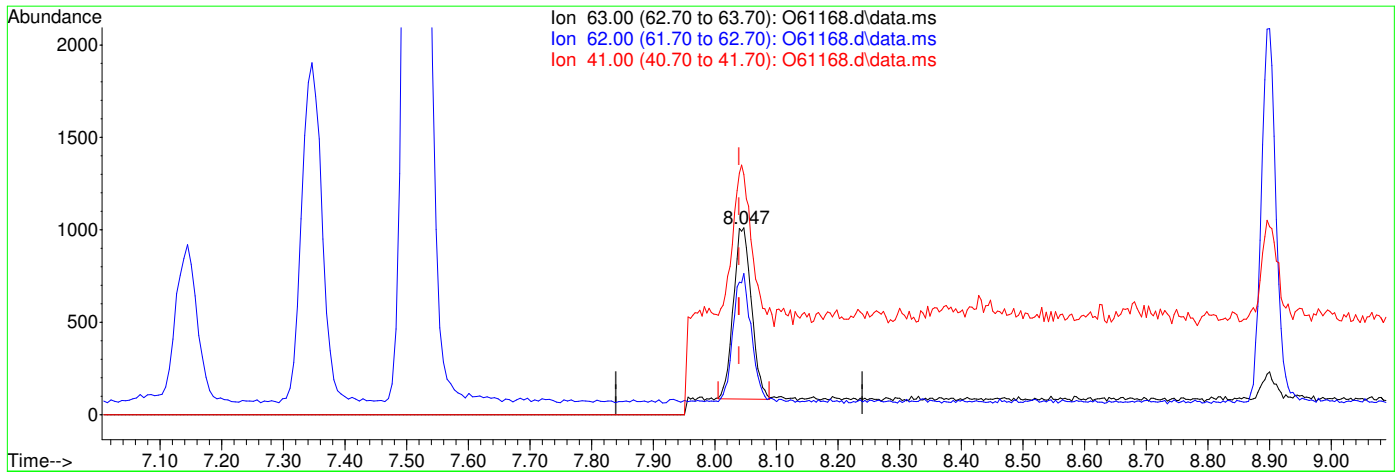
Ion	Exp%	Act%
63.00	100	100
62.00	72.70	75.13
41.00	84.50	82.35
0.00	0.00	0.00

7.1.11.4
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-11-2020\vo2354\
Data File : O61168.d
Acq On : 10 Sep 2020 12:59 pm
Operator : melissam
Sample : FA78549-8
Misc : MS47173,VO2354,,,,,
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 14 07:53:29 2020
Quant Method : C:\msdchem\1\methods\SIMCL090820.M
Quant Title : Standard Methods 6200B
QLast Update : Wed Sep 09 12:10:38 2020
Response via : Initial Calibration



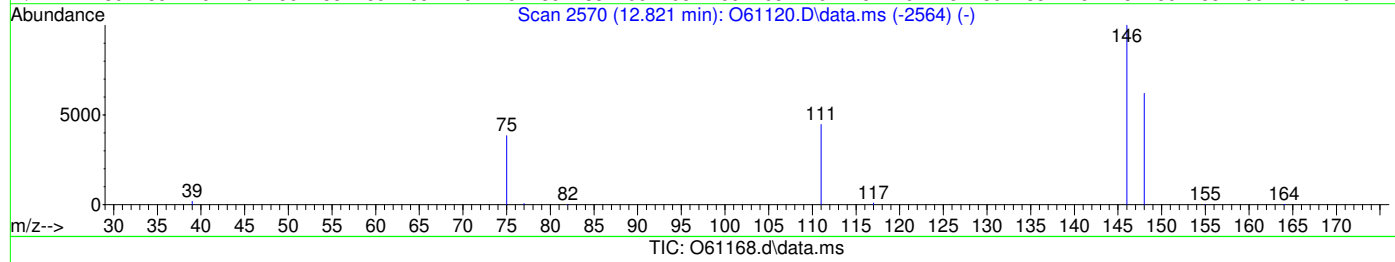
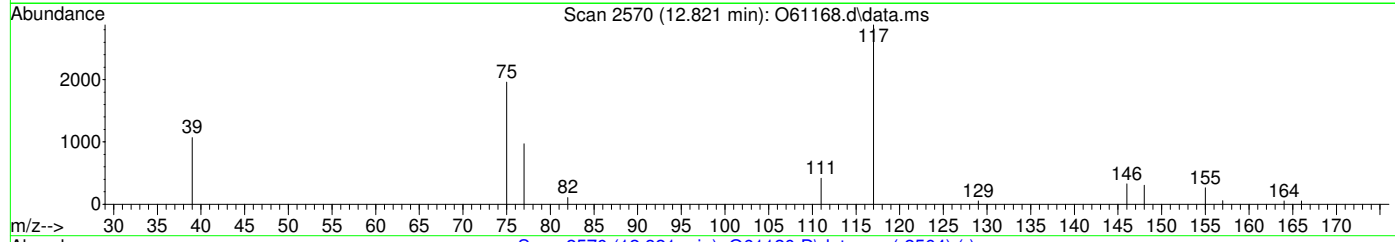
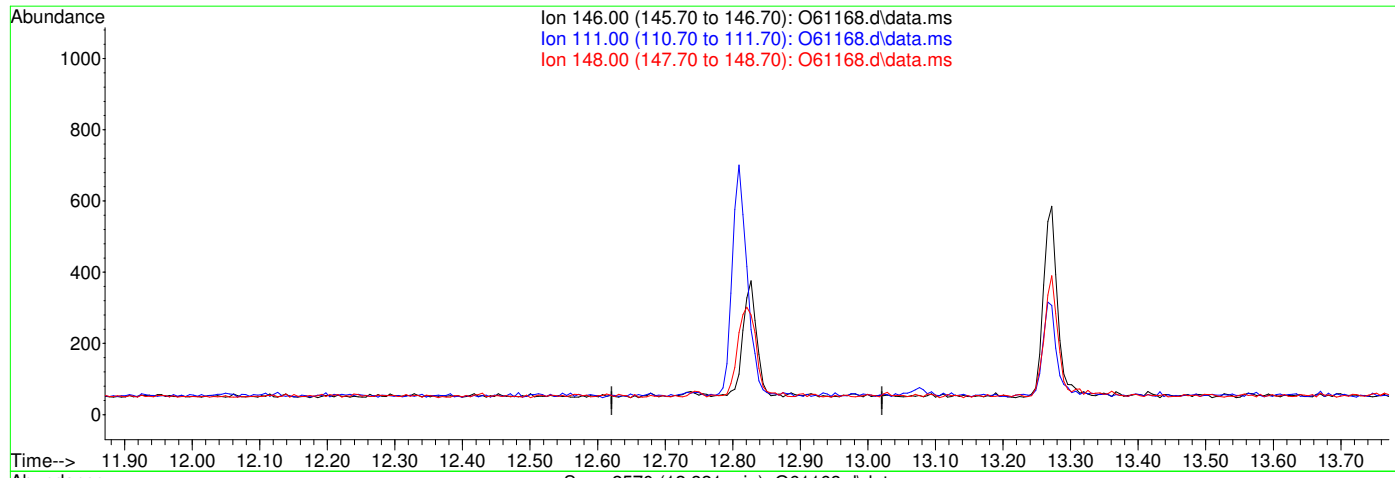
(16) 1,2-Dichloropropane
8.047min (+0.008) 0.10ug/L m
response 1897
Ion Exp% Act%
63.00 100 100
62.00 72.70 75.54
41.00 84.50 128.51#
0.00 0.00 0.00

7.1.11.5
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-11-2020\vo2354\
Data File : O61168.d
Acq On : 10 Sep 2020 12:59 pm
Operator : melissam
Sample : FA78549-8
Misc : MS47173,VO2354,,,,,
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 14 07:53:29 2020
Quant Method : C:\msdchem\1\methods\SIMCL090820.M
Quant Title : Standard Methods 6200B
QLast Update : Wed Sep 09 12:10:38 2020
Response via : Initial Calibration



(22) 1,4-Dichlorobenzene
12.821min (-12.821) 0.00ug/L
response 0

Ion	Exp%	Act%
146.00	100	0.00
111.00	37.00	0.00#
148.00	63.70	0.00#
0.00	0.00	0.00

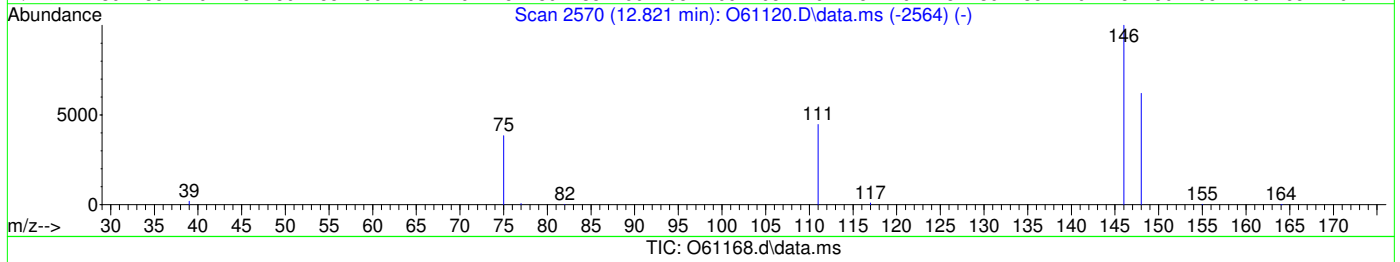
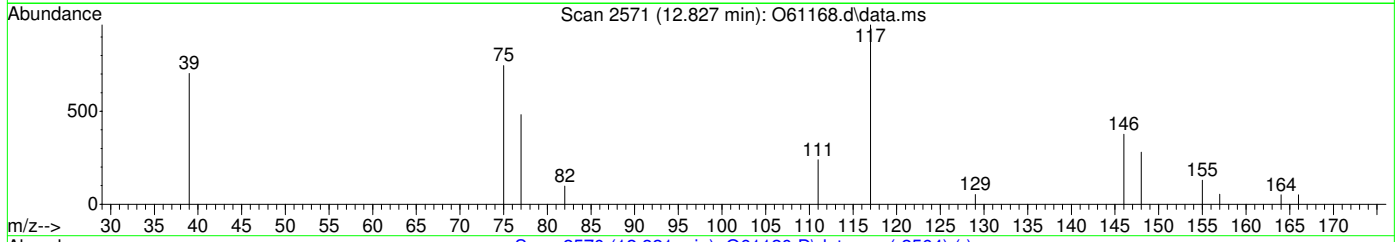
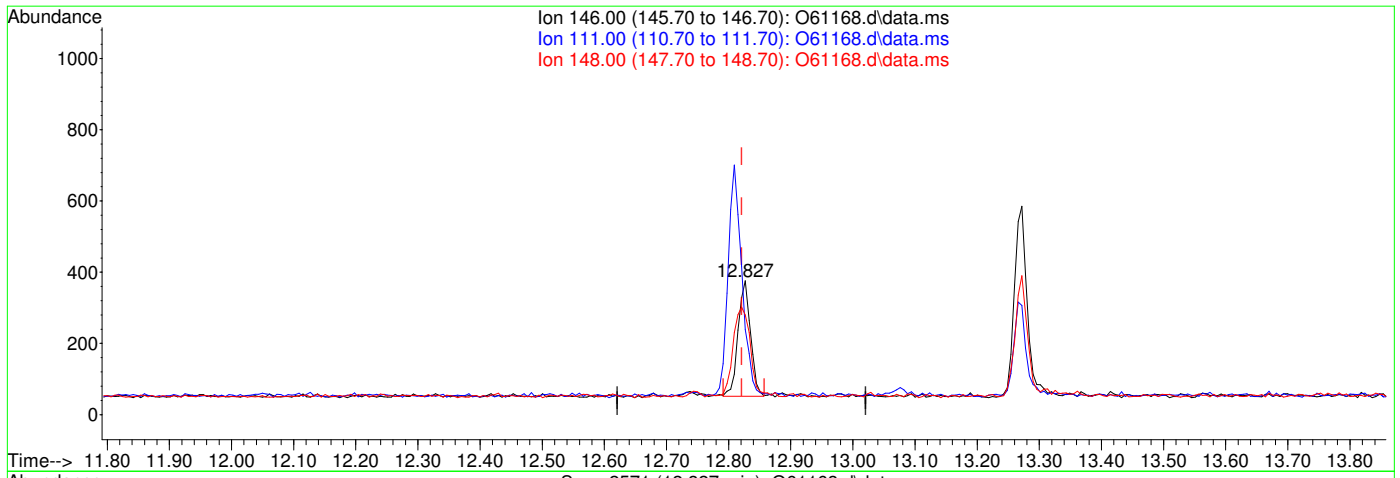


7.1.11.6
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-11-2020\vo2354\
Data File : O61168.d
Acq On : 10 Sep 2020 12:59 pm
Operator : melissam
Sample : FA78549-8
Misc : MS47173,VO2354,,,,,
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 14 07:53:29 2020
Quant Method : C:\msdchem\1\methods\SIMCL090820.M
Quant Title : Standard Methods 6200B
QLast Update : Wed Sep 09 12:10:38 2020
Response via : Initial Calibration



TIC: O61168.d\data.ms

(22) 1,4-Dichlorobenzene

12.827min (+0.006) 0.02ug/L m

response 448

Ion	Exp%	Act%
146.00	100	100
111.00	37.00	63.56#
148.00	63.70	74.47
0.00	0.00	0.00



7.1.11.7
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-17-2020\vo2363\
 Data File : O61417.d
 Acq On : 16 Sep 2020 5:14 pm
 Operator : akarig
 Sample : FA78549-8
 Misc : MS47193,VO2363,,,,,
 ALS Vial : 18 Sample Multiplier: 1

Quant Time: Sep 17 04:43:01 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091520.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 16 09:02:25 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)

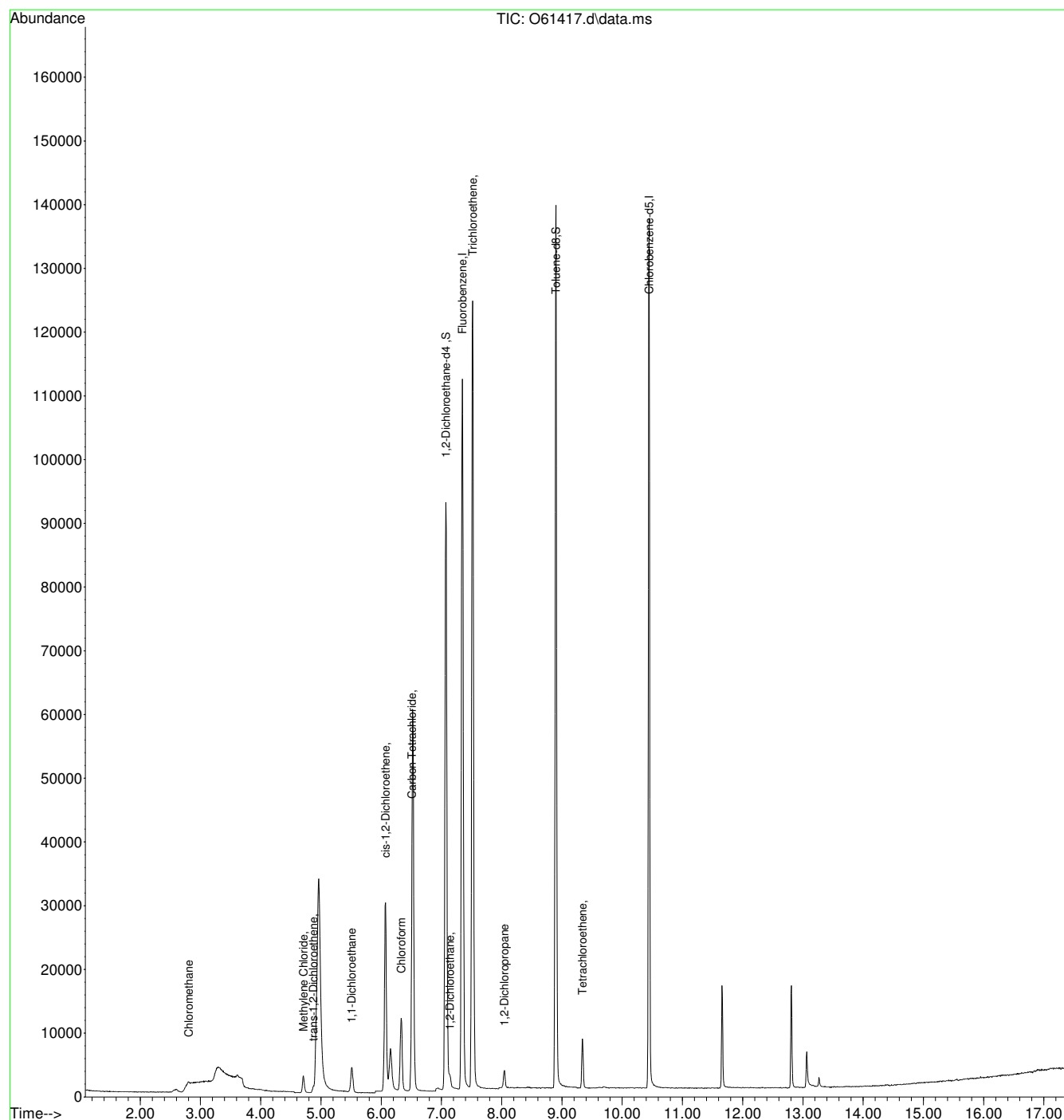
Internal Standards						
1) Fluorobenzene	7.346	96	165610	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.447	117	131594	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.074	65	86305	6.19	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	123.80%	
19) Toluene-d8	8.900	98	138669	5.16	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	103.20%	
Target Compounds						
						Qvalue
3) Chloromethane	2.806	50	5990	0.18	ug/L	# 50
5) Methylene Chloride	4.707	49	3486	0.07	ug/L	95
6) trans-1,2-Dichloroethene	4.877	61	1023	0.04	ug/L	93
7) 1,1-Dichloroethane	5.510	63	6771	0.21	ug/L	98
8) cis-1,2-Dichloroethene	6.072	96	18923	1.30	ug/L	99
9) Chloroform	6.333	83	11804	0.43	ug/L	95
10) Carbon Tetrachloride	6.511	117	738	0.04	ug/L	95
14) 1,2-Dichloroethane	7.139	62	1900	0.08	ug/L	94
15) Trichloroethene	7.518	95	80547	5.28	ug/L	94
16) 1,2-Dichloropropane	8.043	63	2160	0.13	ug/L	99
21) Tetrachloroethene	9.343	166	5186	0.34	ug/L	97

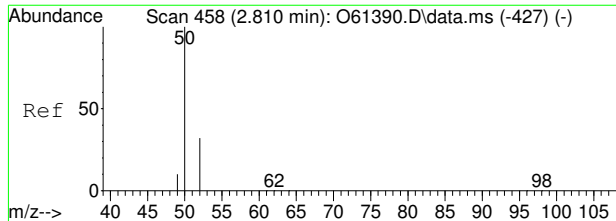
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-17-2020\vo2363\
Data File : O61417.d
Acq On : 16 Sep 2020 5:14 pm
Operator : akarig
Sample : FA78549-8
Misc : MS47193,VO2363,,,,,
ALS Vial : 18 Sample Multiplier: 1

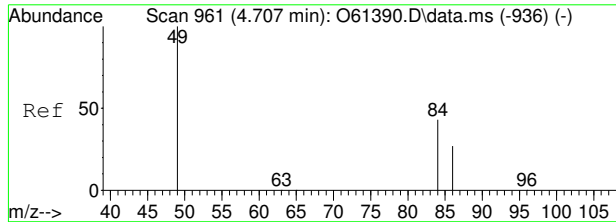
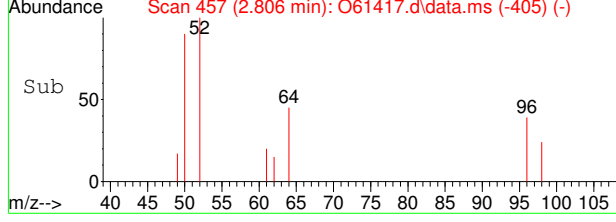
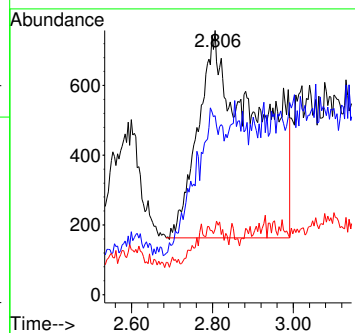
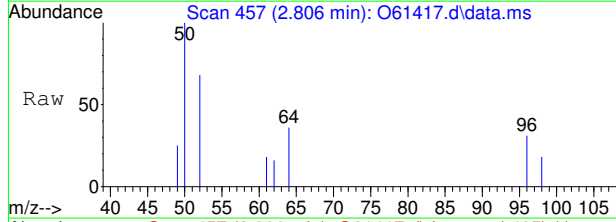
Quant Time: Sep 17 04:43:01 2020
Quant Method : C:\msdchem\1\methods\SIMCL091520.M
Quant Title : Standard Methods 6200B
QLast Update : Wed Sep 16 09:02:25 2020
Response via : Initial Calibration





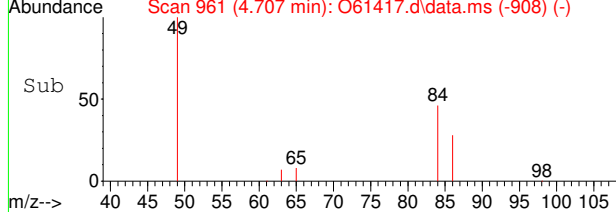
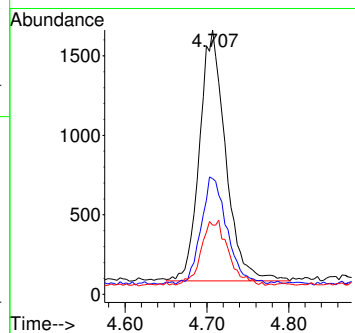
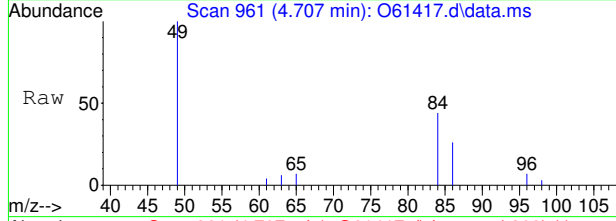
#3
 Chloromethane
 Concen: 0.18 ug/L
 RT: 2.806 min Scan# 457
 Delta R.T. -0.004 min
 Lab File: O61417.d
 Acq: 16 Sep 2020 5:14 pm

Tgt Ion	Resp	Lower	Upper
50	5990		
52	66.2	12.1	52.1#
49	16.0	0.0	30.3

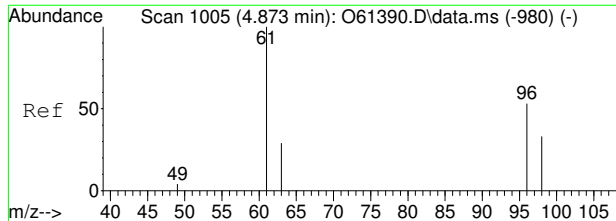


#5
 Methylene Chloride
 Concen: 0.07 ug/L
 RT: 4.707 min Scan# 961
 Delta R.T. -0.000 min
 Lab File: O61417.d
 Acq: 16 Sep 2020 5:14 pm

Tgt Ion	Resp	Lower	Upper
49	3486		
84	41.4	13.2	73.2
86	23.4	0.0	57.3

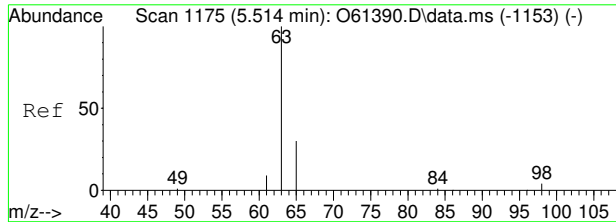
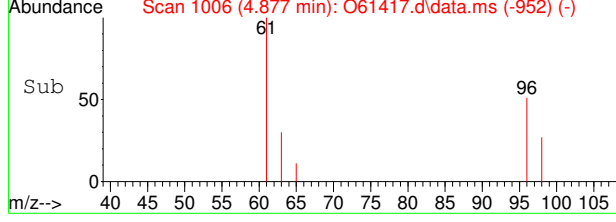
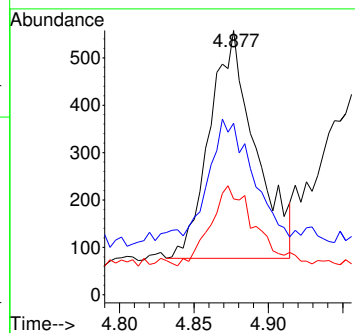
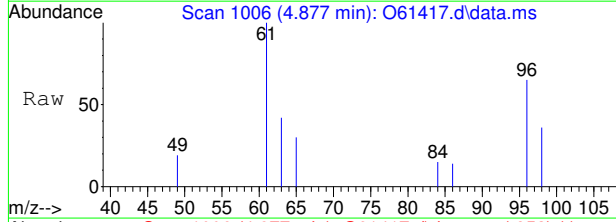


7.1.12
7



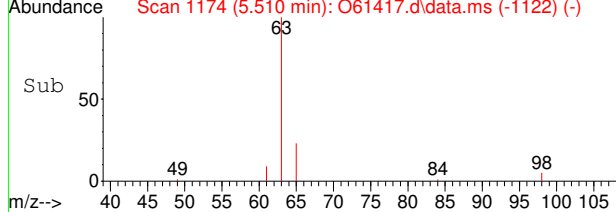
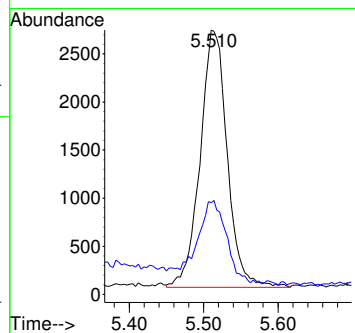
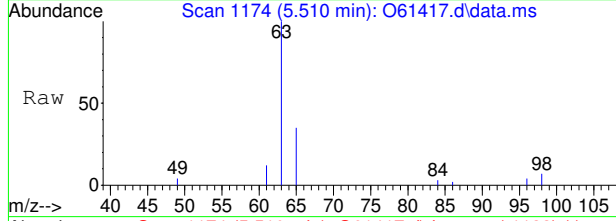
#6
 trans-1,2-Dichloroethene
 Concen: 0.04 ug/L
 RT: 4.877 min Scan# 1006
 Delta R.T. 0.004 min
 Lab File: O61417.d
 Acq: 16 Sep 2020 5:14 pm

Tgt Ion	Resp	Lower	Upper
61	1023		
96	49.9	23.0	83.0
98	27.0	2.9	62.9

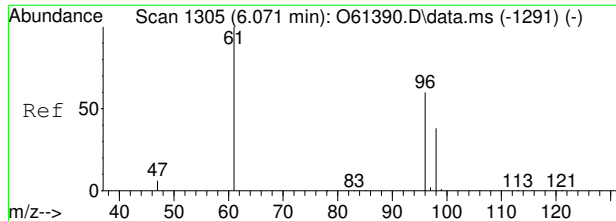


#7
 1,1-Dichloroethane
 Concen: 0.21 ug/L
 RT: 5.510 min Scan# 1174
 Delta R.T. -0.004 min
 Lab File: O61417.d
 Acq: 16 Sep 2020 5:14 pm

Tgt Ion	Resp	Lower	Upper
63	6771		
65	31.4	0.2	60.2



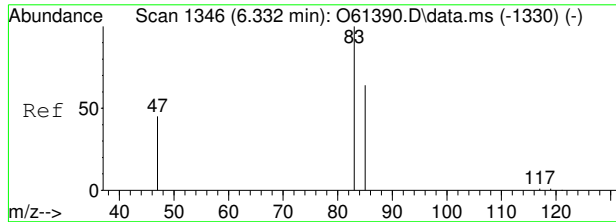
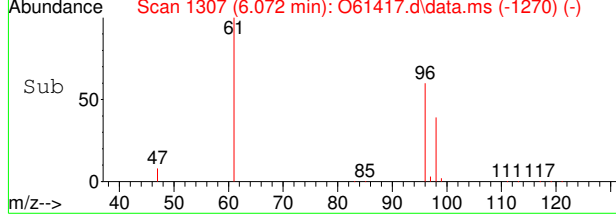
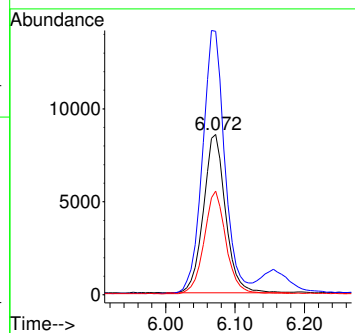
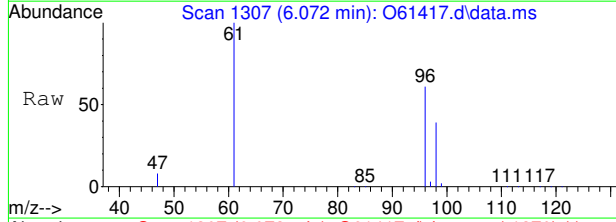
7.1.12
 7



#8
 cis-1,2-Dichloroethene
 Concen: 1.30 ug/L
 RT: 6.072 min Scan# 1307
 Delta R.T. 0.001 min
 Lab File: O61417.d
 Acq: 16 Sep 2020 5:14 pm

Tgt Ion: 96 Resp: 18923

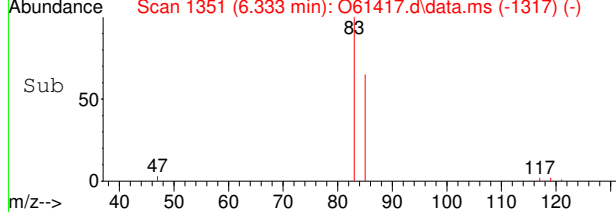
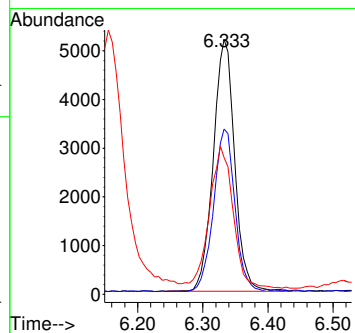
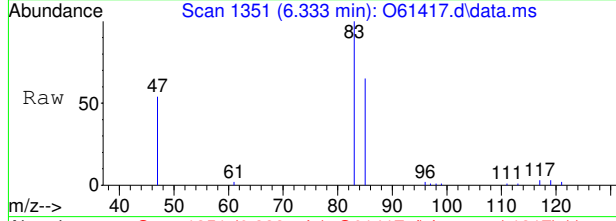
Ion	Ratio	Lower	Upper
96	100		
61	165.3	135.7	195.7
98	64.7	33.1	93.1



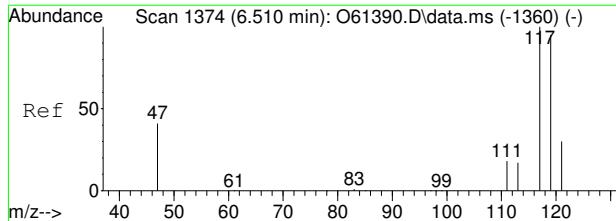
#9
 Chloroform
 Concen: 0.43 ug/L
 RT: 6.333 min Scan# 1351
 Delta R.T. 0.001 min
 Lab File: O61417.d
 Acq: 16 Sep 2020 5:14 pm

Tgt Ion: 83 Resp: 11804

Ion	Ratio	Lower	Upper
83	100		
85	64.5	33.9	93.9
47	51.9	14.9	74.9

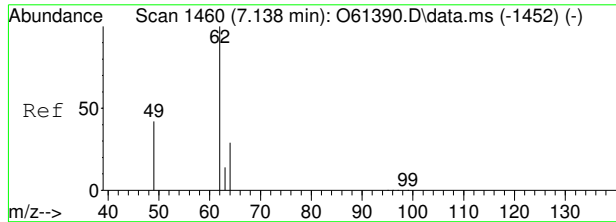
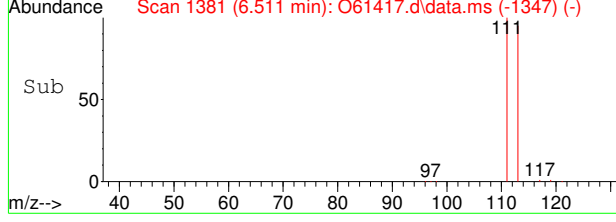
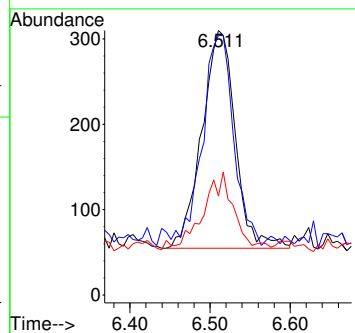
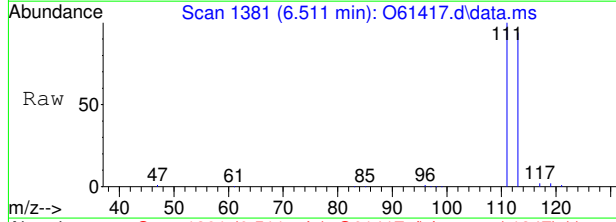


7.1.12
 7



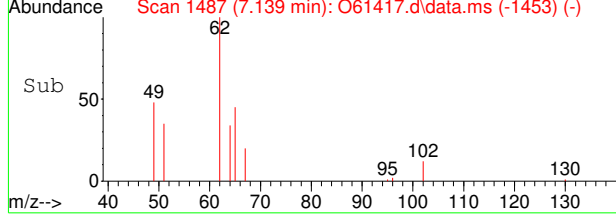
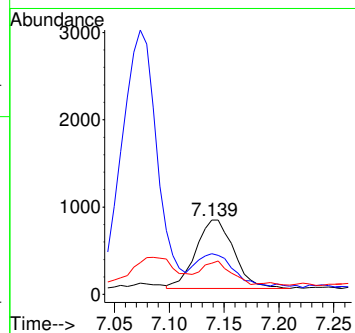
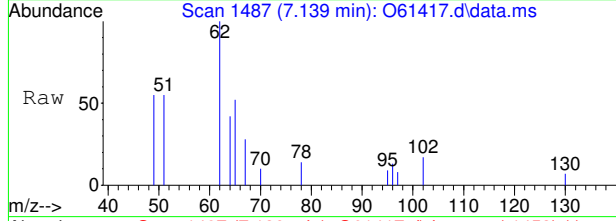
#10
 Carbon Tetrachloride
 Concen: 0.04 ug/L
 RT: 6.511 min Scan# 1381
 Delta R.T. 0.001 min
 Lab File: O61417.d
 Acq: 16 Sep 2020 5:14 pm

Tgt Ion	Resp	Lower	Upper
117	738		
119	94.1	65.4	125.4
121	20.8	0.1	60.1

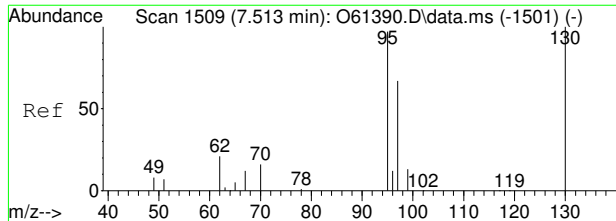


#14
 1,2-Dichloroethane
 Concen: 0.08 ug/L
 RT: 7.139 min Scan# 1487
 Delta R.T. 0.001 min
 Lab File: O61417.d
 Acq: 16 Sep 2020 5:14 pm

Tgt Ion	Resp	Lower	Upper
62	1900		
49	47.3	13.6	73.6
64	31.7	0.0	58.8



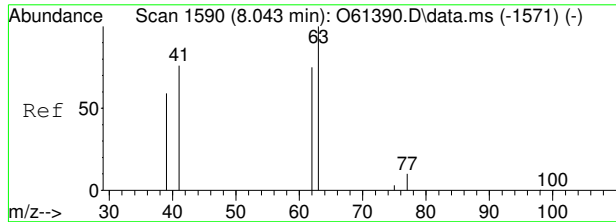
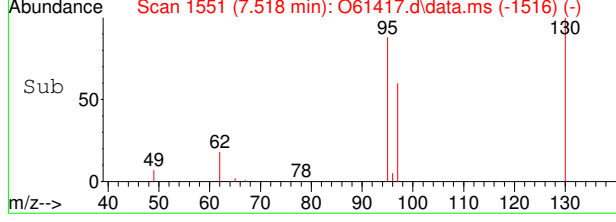
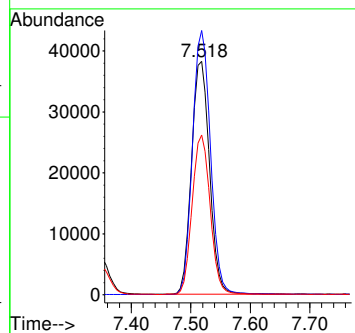
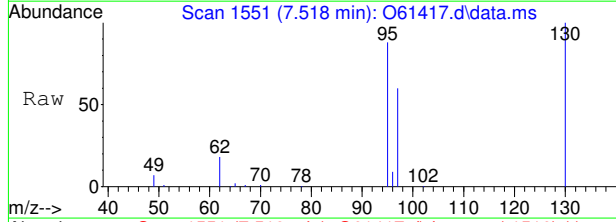
7.1.12
7



#15
 Trichloroethene
 Concen: 5.28 ug/L
 RT: 7.518 min Scan# 1551
 Delta R.T. 0.005 min
 Lab File: O61417.d
 Acq: 16 Sep 2020 5:14 pm

Tgt Ion: 95 Resp: 80547

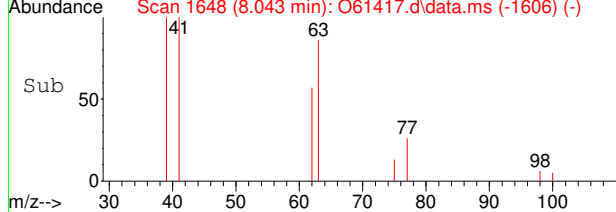
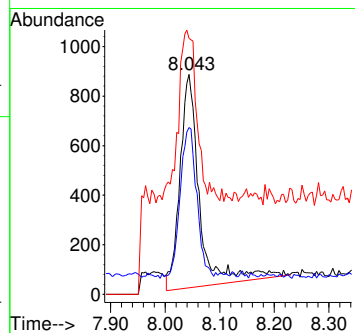
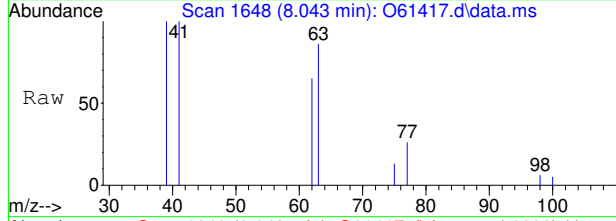
Ion	Ratio	Lower	Upper
95	100		
130	113.4	72.6	132.6
97	68.4	38.6	98.6



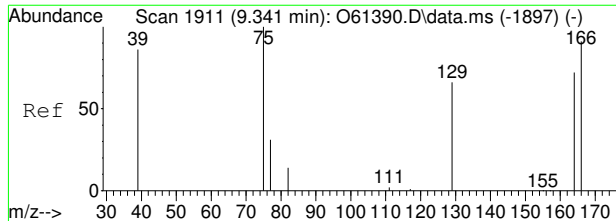
#16
 1,2-Dichloropropane
 Concen: 0.13 ug/L
 RT: 8.043 min Scan# 1648
 Delta R.T. 0.000 min
 Lab File: O61417.d
 Acq: 16 Sep 2020 5:14 pm

Tgt Ion: 63 Resp: 2160

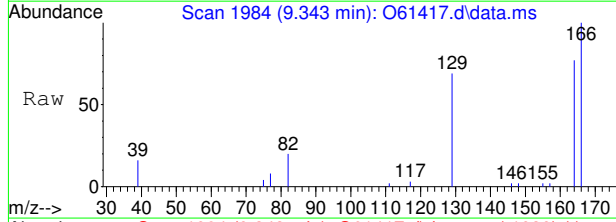
Ion	Ratio	Lower	Upper
63	100		
62	74.3	44.5	104.5
41	74.4	45.9	105.9



7.1.12
7

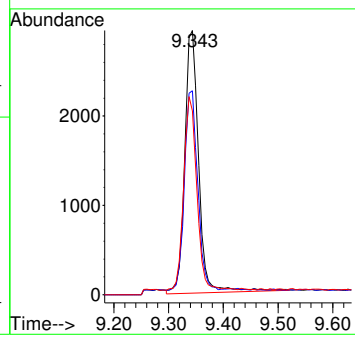
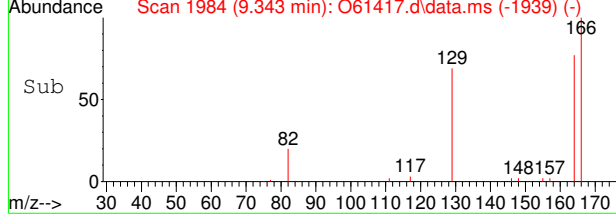


#21
 Tetrachloroethene
 Concen: 0.34 ug/L
 RT: 9.343 min Scan# 1984
 Delta R.T. 0.002 min
 Lab File: O61417.d
 Acq: 16 Sep 2020 5:14 pm



Tgt Ion: 166 Resp: 5186

Ion	Ratio	Lower	Upper
166	100		
164	76.7	49.1	109.1
129	68.9	42.2	102.2



7.1.12
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-11-2020\vo2354\
Data File : O61169.d
Acq On : 10 Sep 2020 1:19 pm
Operator : melissam
Sample : FA78549-9
Misc : MS47173,VO2354,,,,,
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Sep 11 05:46:22 2020
Quant Method : C:\msdchem\1\methods\SIMCL090820.M
Quant Title : Standard Methods 6200B
QLast Update : Wed Sep 09 12:10:38 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)

Internal Standards						
1) Fluorobenzene	7.346	96	172236	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.447	117	120993	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.073	65	86323	5.71	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	114.20%	
19) Toluene-d8	8.900	98	151470	5.12	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	102.40%	
Target Compounds						
3) Chloromethane	2.791	50	3626	0.14	ug/L #	62
4) 1,1-Dichloroethene	4.092	61	6731	0.29	ug/L	75
5) Methylene Chloride	4.703	49	6523	0.15	ug/L	84
6) trans-1,2-Dichloroethene	4.865	61	953	0.03	ug/L	73
7) 1,1-Dichloroethane	5.510	63	43999	1.36	ug/L	97
8) cis-1,2-Dichloroethene	6.066	96	14969	1.04	ug/L #	48
9) Chloroform	6.333	83	5657	0.22	ug/L #	77
14) 1,2-Dichloroethane	7.139	62	8448	0.30	ug/L	93
15) Trichloroethene	7.518	95	26431	1.76	ug/L	97
16) 1,2-Dichloropropane	8.043	63	2289	0.12	ug/L	94
21) Tetrachloroethene	9.343	166	9090	0.77	ug/L	95
22) 1,4-Dichlorobenzene	12.827	146	8847	0.35	ug/L	98

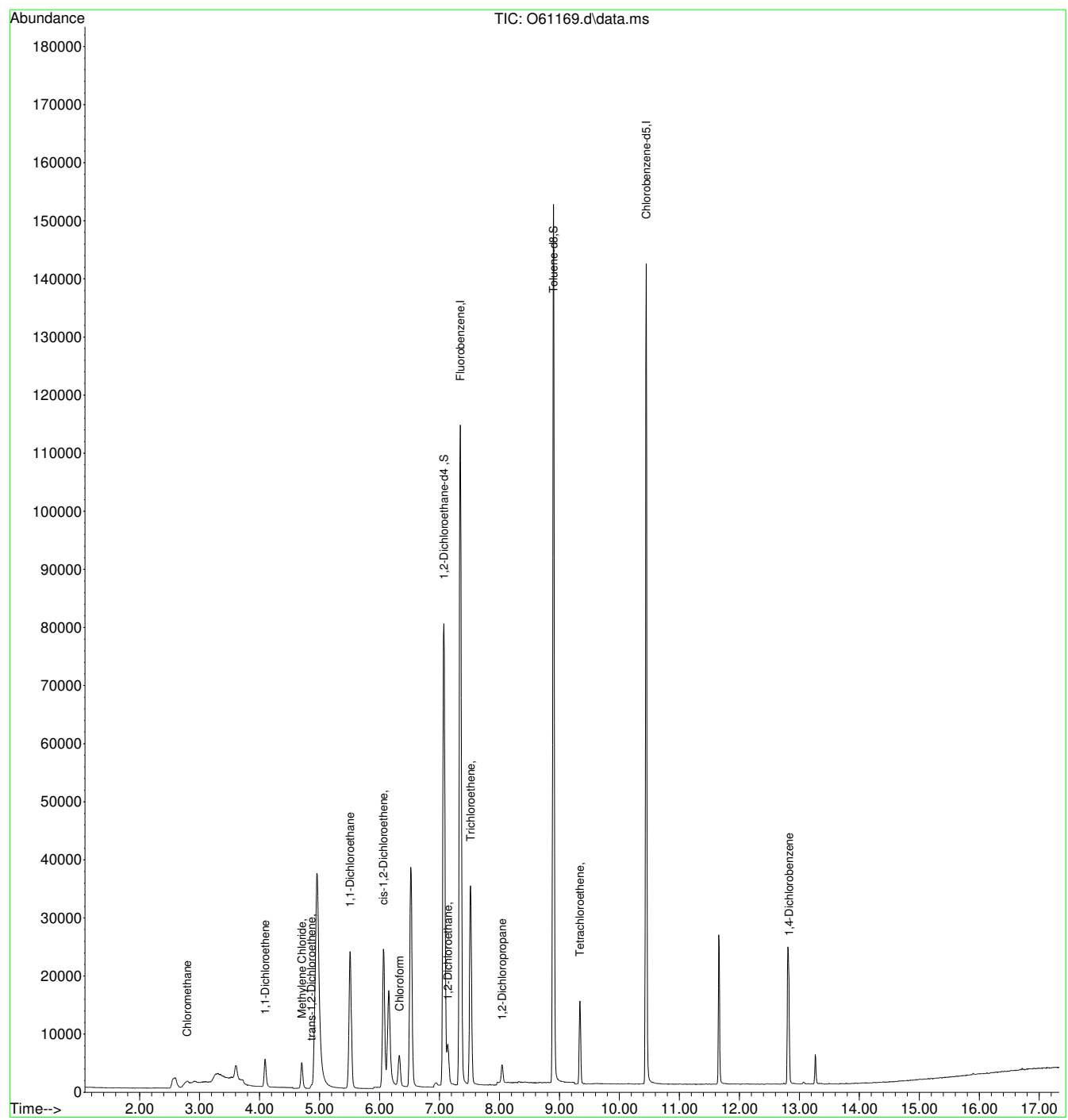
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.1.13
7

Quantitation Report (QT Reviewed)

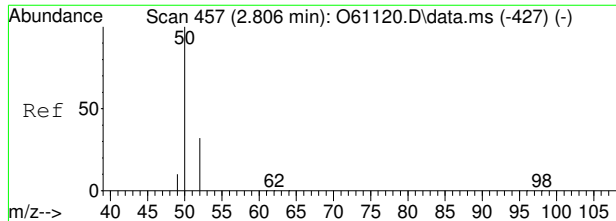
Data Path : C:\msdchem\1\data\johnm\September 2020\09-11-2020\vo2354\
Data File : O61169.d
Acq On : 10 Sep 2020 1:19 pm
Operator : melissam
Sample : FA78549-9
Misc : MS47173,VO2354,,,,,
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Sep 11 05:46:22 2020
Quant Method : C:\msdchem\1\methods\SIMCL090820.M
Quant Title : Standard Methods 6200B
QLast Update : Wed Sep 09 12:10:38 2020
Response via : Initial Calibration



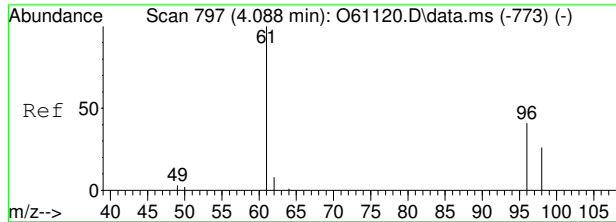
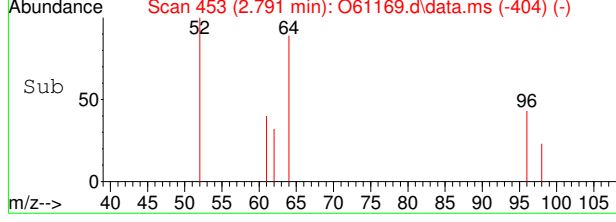
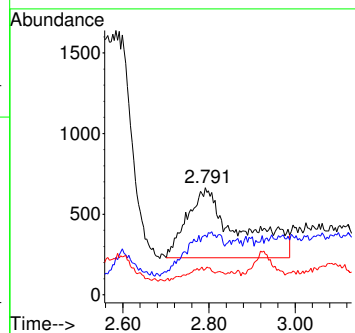
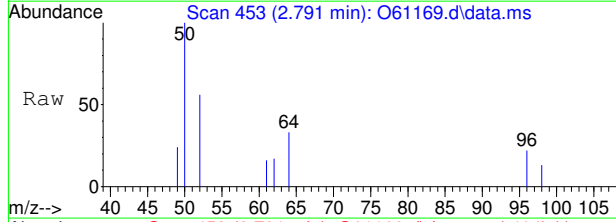
7.1.13
7





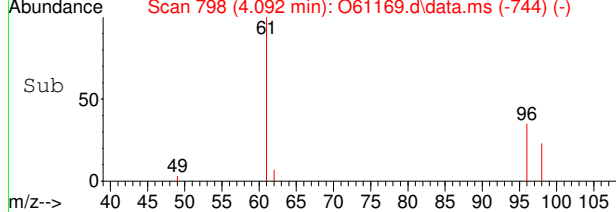
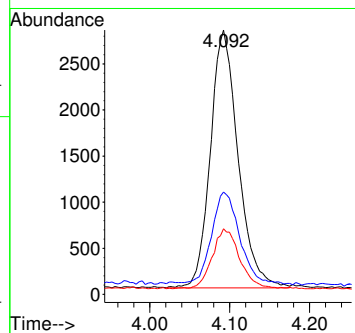
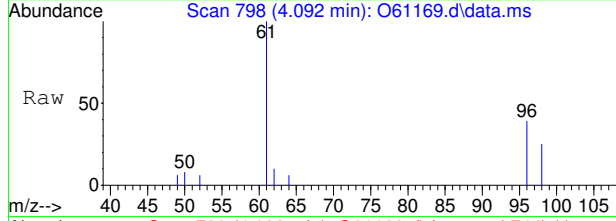
#3
Chloromethane
Concen: 0.14 ug/L
RT: 2.791 min Scan# 453
Delta R.T. -0.015 min
Lab File: O61169.d
Acq: 10 Sep 2020 1:19 pm

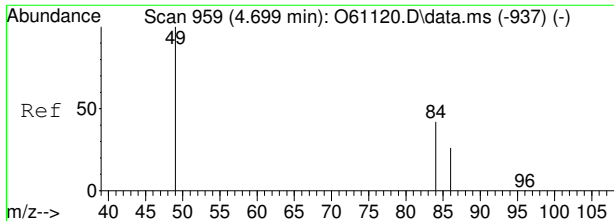
Tgt Ion	Ratio	Lower	Upper
50	100		
52	53.1	7.8	47.8#
49	14.7	0.0	30.5



#4
1,1-Dichloroethene
Concen: 0.29 ug/L
RT: 4.092 min Scan# 798
Delta R.T. 0.004 min
Lab File: O61169.d
Acq: 10 Sep 2020 1:19 pm

Tgt Ion	Ratio	Lower	Upper
61	100		
96	35.5	25.4	85.4
98	23.2	5.9	65.9

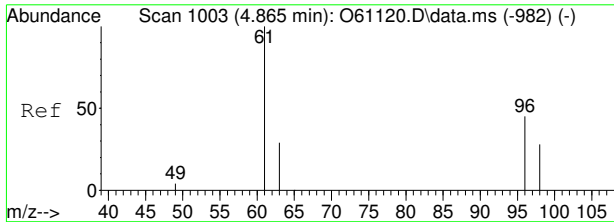
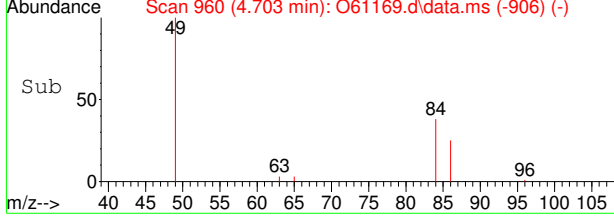
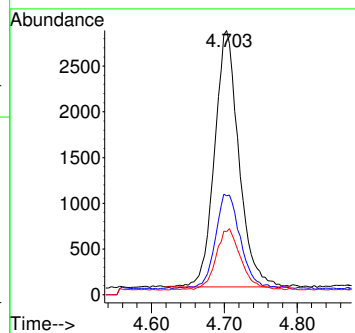
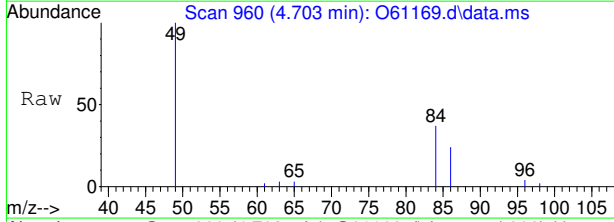




#5
 Methylene Chloride
 Concen: 0.15 ug/L
 RT: 4.703 min Scan# 960
 Delta R.T. 0.004 min
 Lab File: O61169.d
 Acq: 10 Sep 2020 1:19 pm

Tgt Ion: 49 Resp: 6523

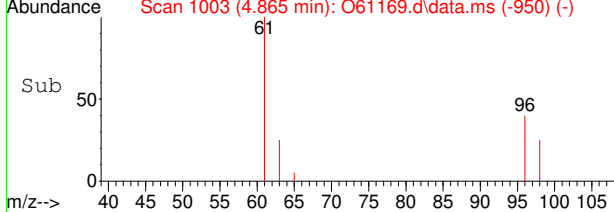
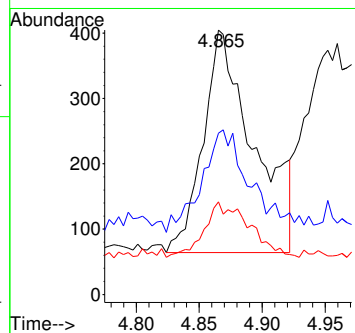
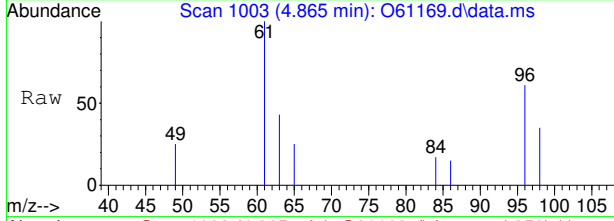
Ion	Ratio	Lower	Upper
49	100		
84	36.0	17.9	77.9
86	22.7	0.0	59.8



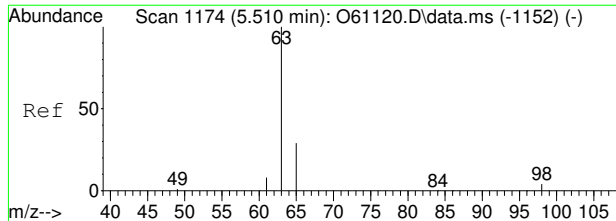
#6
 trans-1,2-Dichloroethene
 Concen: 0.03 ug/L
 RT: 4.865 min Scan# 1003
 Delta R.T. 0.000 min
 Lab File: O61169.d
 Acq: 10 Sep 2020 1:19 pm

Tgt Ion: 61 Resp: 953

Ion	Ratio	Lower	Upper
61	100		
96	44.6	36.9	96.9
98	24.9	11.1	71.1

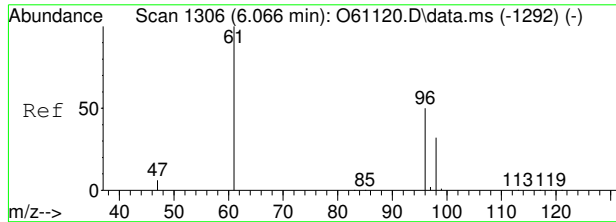
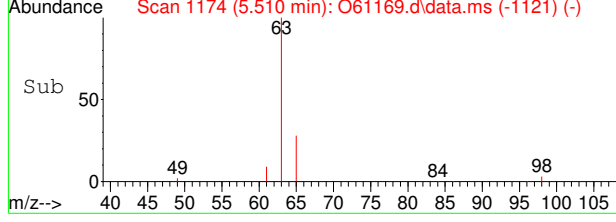
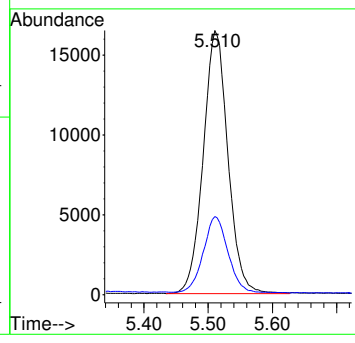
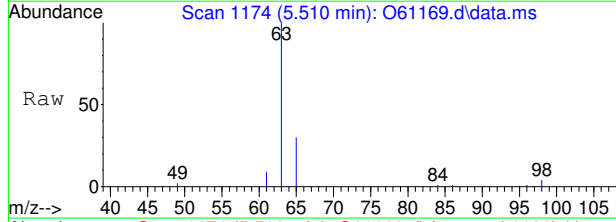


7.1.13
7



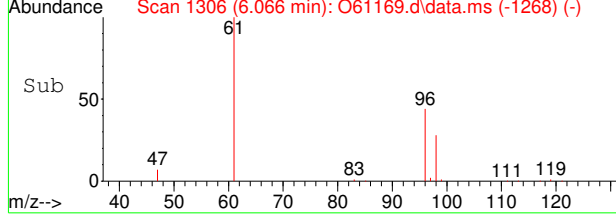
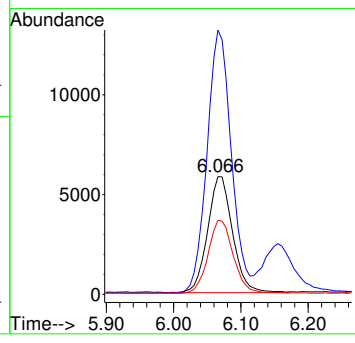
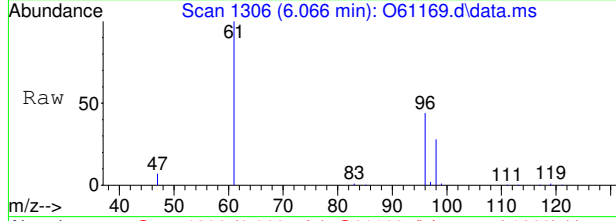
#7
 1,1-Dichloroethane
 Concen: 1.36 ug/L
 RT: 5.510 min Scan# 1174
 Delta R.T. 0.000 min
 Lab File: O61169.d
 Acq: 10 Sep 2020 1:19 pm

Tgt Ion	Resp	Lower	Upper
63	43999		
65	28.9	0.7	60.7



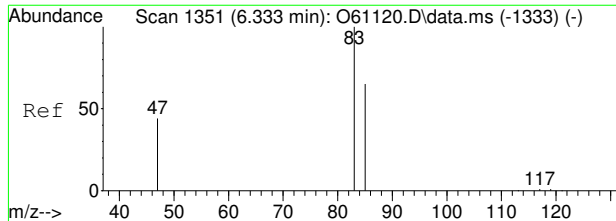
#8
 cis-1,2-Dichloroethene
 Concen: 1.04 ug/L
 RT: 6.066 min Scan# 1306
 Delta R.T. 0.000 min
 Lab File: O61169.d
 Acq: 10 Sep 2020 1:19 pm

Tgt Ion	Resp	Lower	Upper
96	14969		
61	227.0	107.0	167.0#
98	62.9	34.1	94.1



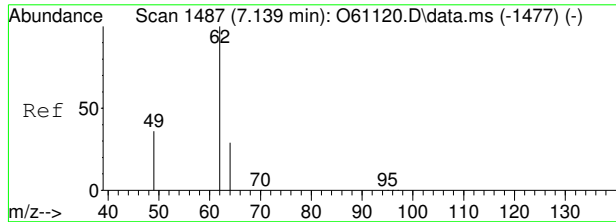
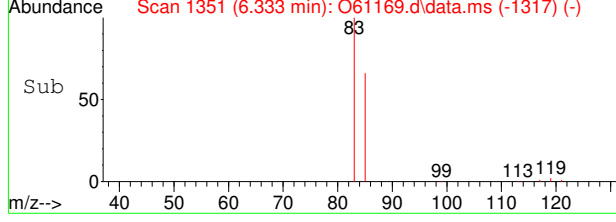
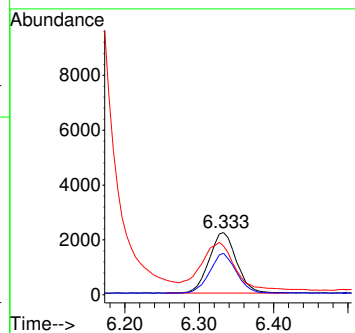
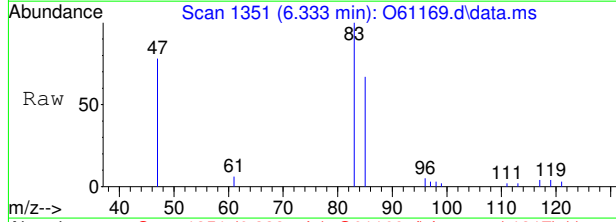
7.1.13
7





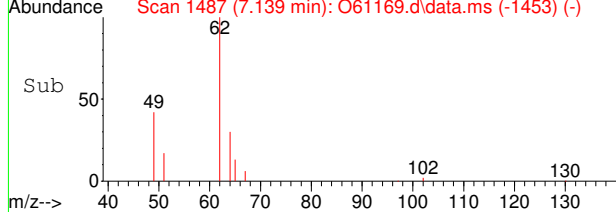
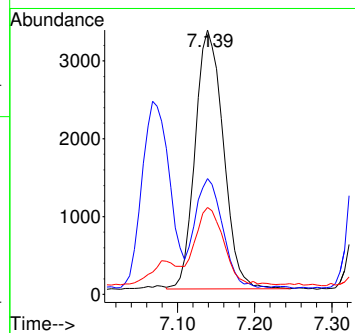
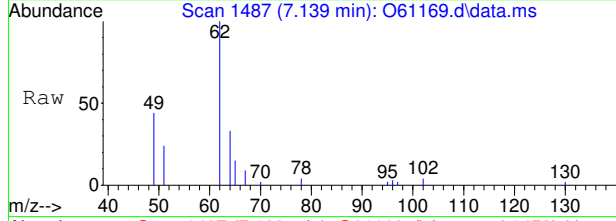
#9
 Chloroform
 Concen: 0.22 ug/L
 RT: 6.333 min Scan# 1351
 Delta R.T. 0.000 min
 Lab File: O61169.d
 Acq: 10 Sep 2020 1:19 pm

Tgt Ion	Resp	Lower	Upper
83	5657		
85	65.6	33.0	93.0
47	71.9	8.1	68.1#

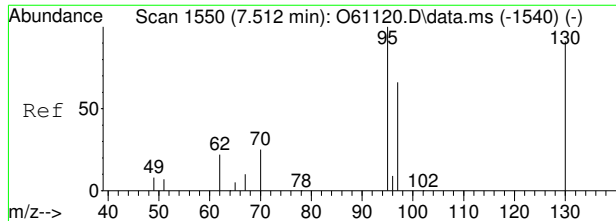


#14
 1,2-Dichloroethane
 Concen: 0.30 ug/L
 RT: 7.139 min Scan# 1487
 Delta R.T. 0.000 min
 Lab File: O61169.d
 Acq: 10 Sep 2020 1:19 pm

Tgt Ion	Resp	Lower	Upper
62	8448		
62	100		
49	42.1	18.0	78.0
64	29.5	1.5	61.5

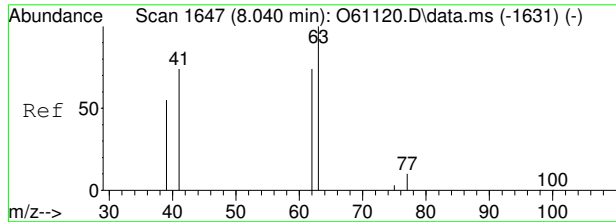
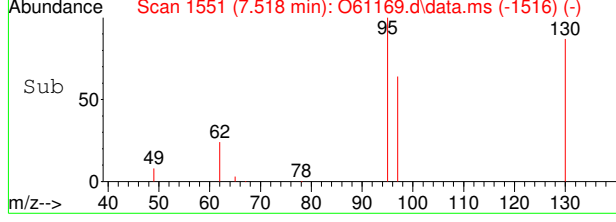
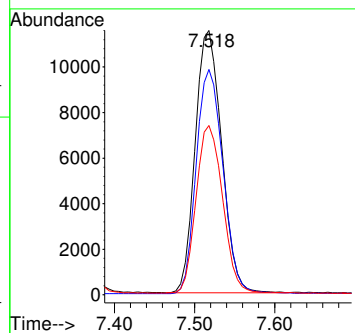
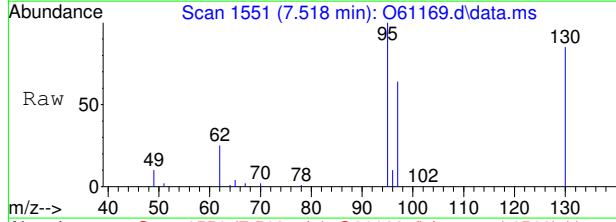


7.1.13
 7



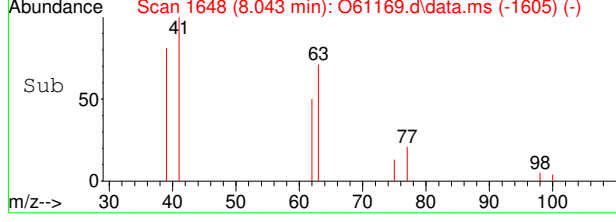
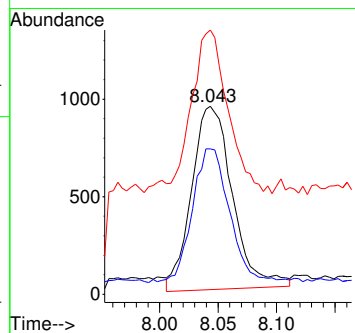
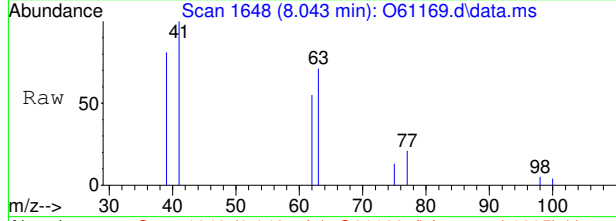
#15
 Trichloroethene
 Concen: 1.76 ug/L
 RT: 7.518 min Scan# 1551
 Delta R.T. 0.006 min
 Lab File: O61169.d
 Acq: 10 Sep 2020 1:19 pm

Tgt Ion	Resp	Lower	Upper
95	26431		
130	85.4	60.4	120.4
97	63.9	34.6	94.6

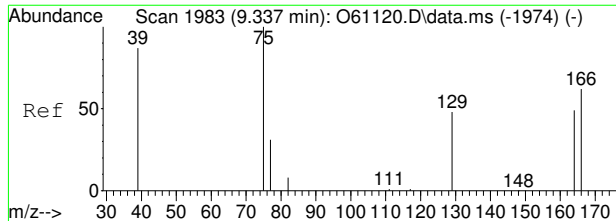


#16
 1,2-Dichloropropane
 Concen: 0.12 ug/L
 RT: 8.043 min Scan# 1648
 Delta R.T. 0.004 min
 Lab File: O61169.d
 Acq: 10 Sep 2020 1:19 pm

Tgt Ion	Resp	Lower	Upper
63	2289		
62	76.1	42.7	102.7
41	91.5	54.5	114.5

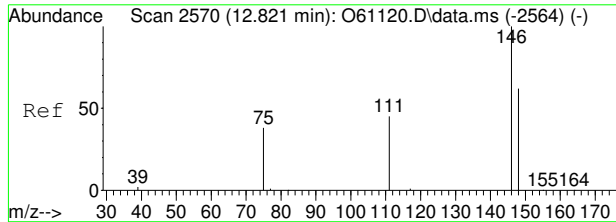
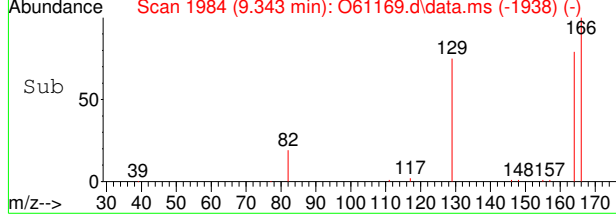
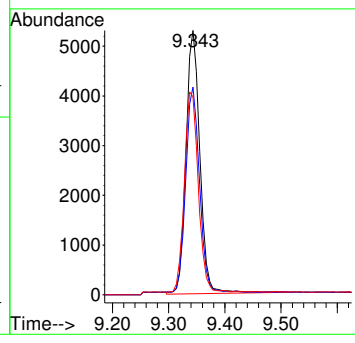
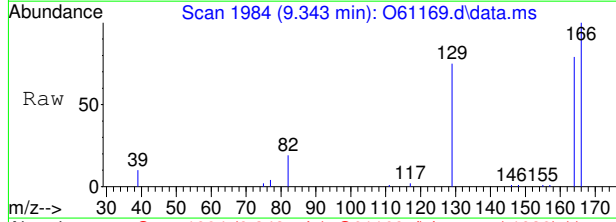


7.1.13
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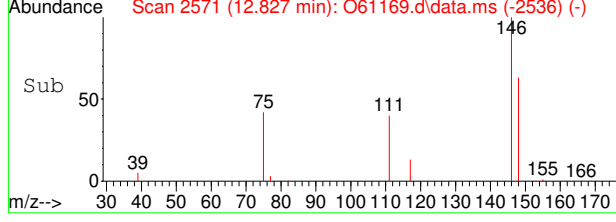
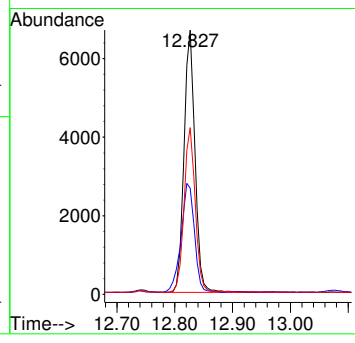
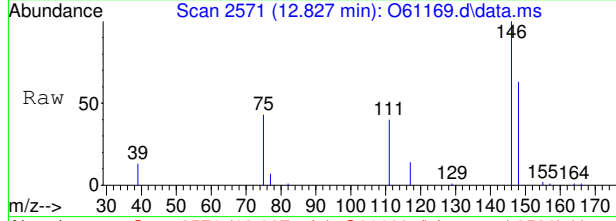
#21
 Tetrachloroethene
 Concen: 0.77 ug/L
 RT: 9.343 min Scan# 1984
 Delta R.T. 0.006 min
 Lab File: O61169.d
 Acq: 10 Sep 2020 1:19 pm

Tgt Ion	Resp	Lower	Upper
166	100		
164	78.3	47.3	107.3
129	74.5	37.5	97.5



#22
 1,4-Dichlorobenzene
 Concen: 0.35 ug/L
 RT: 12.827 min Scan# 2571
 Delta R.T. 0.006 min
 Lab File: O61169.d
 Acq: 10 Sep 2020 1:19 pm

Tgt Ion	Resp	Lower	Upper
146	100		
111	39.6	17.0	57.0
148	62.7	43.7	83.7



7.1.13
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Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-11-2020\vo2354\
Data File : O61170.d
Acq On : 10 Sep 2020 1:39 pm
Operator : melissam
Sample : FA78549-10
Misc : MS47173,VO2354,,,,,
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Sep 11 05:39:44 2020
Quant Method : C:\msdchem\1\methods\SIMCL090820.M
Quant Title : Standard Methods 6200B
QLast Update : Wed Sep 09 12:10:38 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)

Internal Standards						
1) Fluorobenzene	7.346	96	174131	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.447	117	122777	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.074	65	88827	5.81	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	116.20%	
19) Toluene-d8	8.900	98	153381	5.11	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	102.20%	
Target Compounds						
2) Vinyl Chloride	2.908	62	1947	0.11	ug/L	99
4) 1,1-Dichloroethene	4.092	61	19324	0.82	ug/L	74
5) Methylene Chloride	4.703	49	11736	0.27	ug/L	87
6) trans-1,2-Dichloroethene	4.873	61	3721	0.13	ug/L	69
7) 1,1-Dichloroethane	5.514	63	175438	5.36	ug/L	97
8) cis-1,2-Dichloroethene	6.072	96	59202	4.06	ug/L #	53
9) Chloroform	6.333	83	18011	0.68	ug/L	85
11) 1,1,1-Trichloroethane	6.576	97	474	0.02	ug/L #	79
12) Benzene	6.949	78	4630	0.09	ug/L	74
14) 1,2-Dichloroethane	7.139	62	59768	2.09	ug/L	92
15) Trichloroethene	7.518	95	97777	6.45	ug/L	98
16) 1,2-Dichloropropane	8.043	63	6806	0.36	ug/L	99
21) Tetrachloroethene	9.343	166	49754	4.18	ug/L	95
22) 1,4-Dichlorobenzene	12.827	146	11413	0.44	ug/L	96

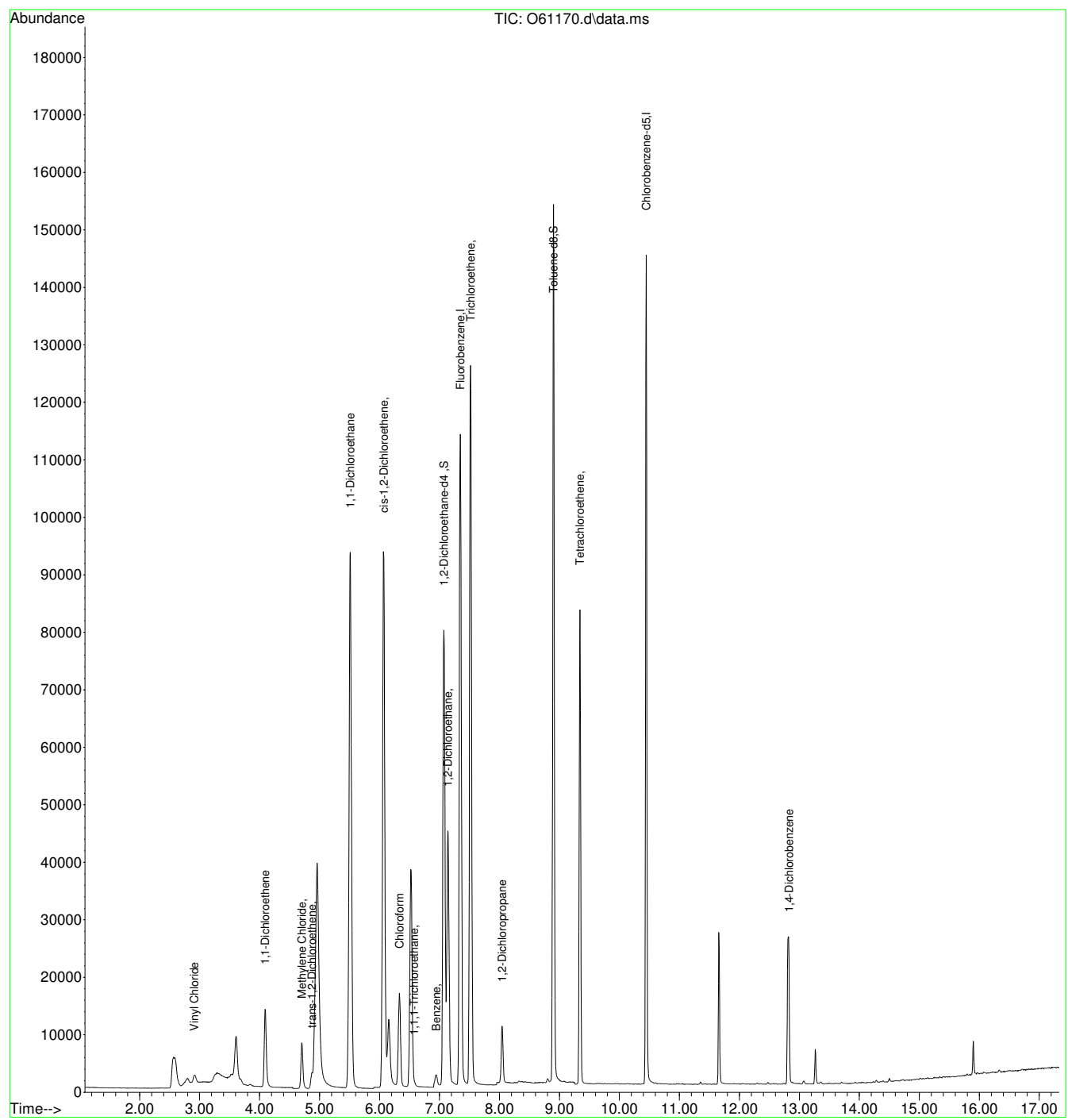
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.1.14
7

Quantitation Report (QT Reviewed)

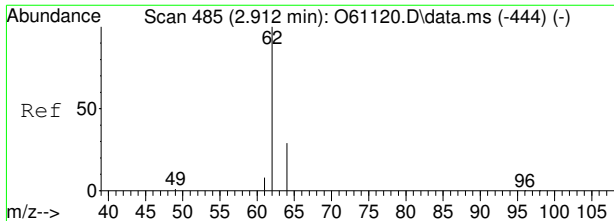
Data Path : C:\msdchem\1\data\johnm\September 2020\09-11-2020\vo2354\
Data File : O61170.d
Acq On : 10 Sep 2020 1:39 pm
Operator : melissam
Sample : FA78549-10
Misc : MS47173,VO2354,,,,,
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Sep 11 05:39:44 2020
Quant Method : C:\msdchem\1\methods\SIMCL090820.M
Quant Title : Standard Methods 6200B
QLast Update : Wed Sep 09 12:10:38 2020
Response via : Initial Calibration



7.1.14
7

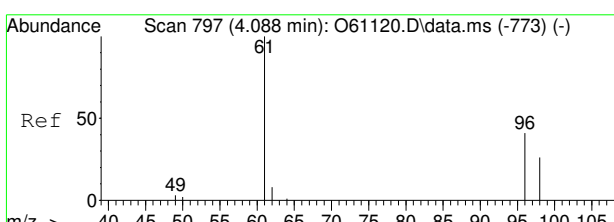
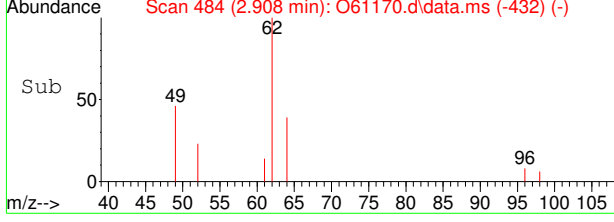
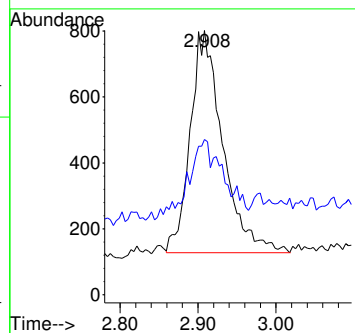
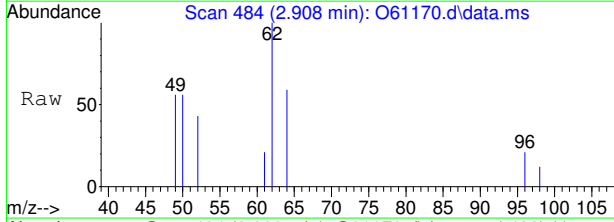




#2
 Vinyl Chloride
 Concen: 0.11 ug/L
 RT: 2.908 min Scan# 484
 Delta R.T. -0.004 min
 Lab File: O61170.d
 Acq: 10 Sep 2020 1:39 pm

Tgt Ion: 62 Resp: 1947

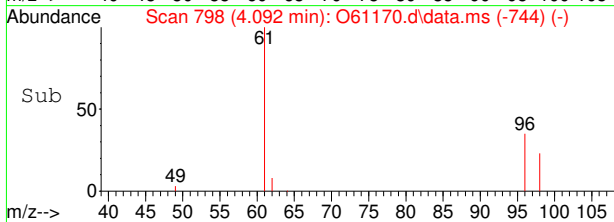
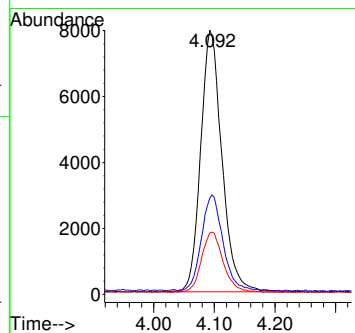
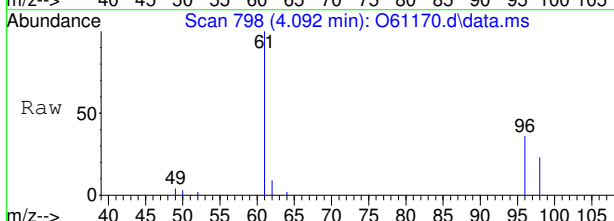
Ion	Ratio	Lower	Upper
62	100		
64	30.3	0.9	60.9



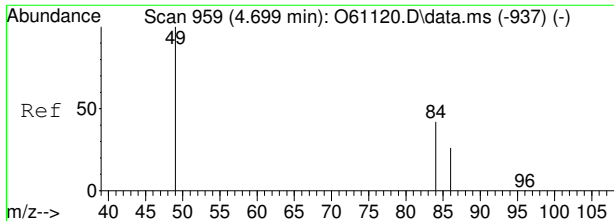
#4
 1,1-Dichloroethene
 Concen: 0.82 ug/L
 RT: 4.092 min Scan# 798
 Delta R.T. 0.004 min
 Lab File: O61170.d
 Acq: 10 Sep 2020 1:39 pm

Tgt Ion: 61 Resp: 19324

Ion	Ratio	Lower	Upper
61	100		
96	35.2	25.4	85.4
98	22.6	5.9	65.9



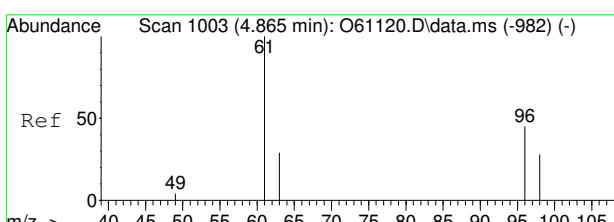
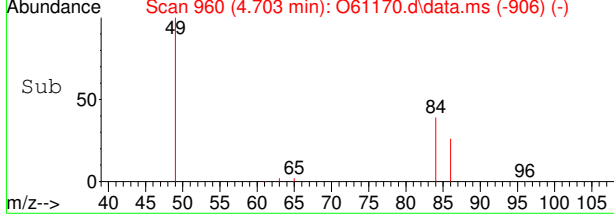
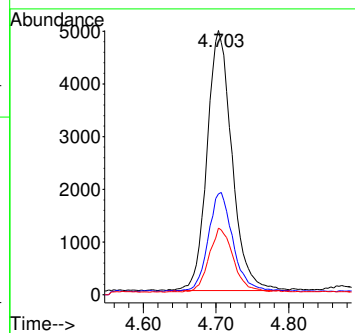
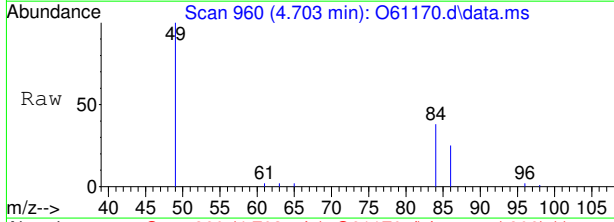
7.1.14
7



#5
 Methylene Chloride
 Concen: 0.27 ug/L
 RT: 4.703 min Scan# 960
 Delta R.T. 0.004 min
 Lab File: O61170.d
 Acq: 10 Sep 2020 1:39 pm

Tgt Ion: 49 Resp: 11736

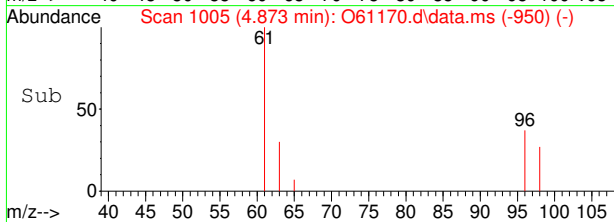
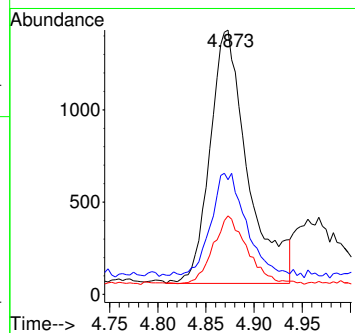
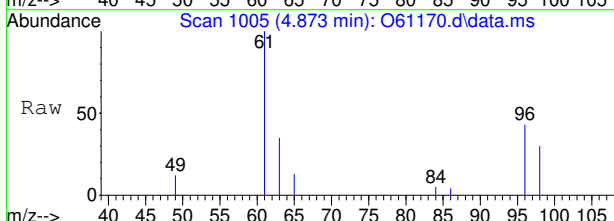
Ion	Ratio	Lower	Upper
49	100		
84	37.4	17.9	77.9
86	24.5	0.0	59.8



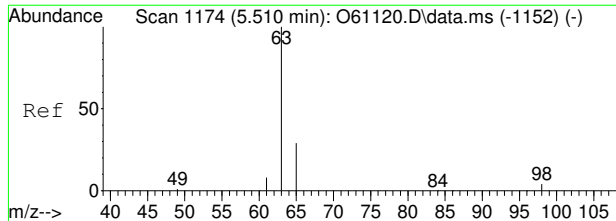
#6
 trans-1,2-Dichloroethene
 Concen: 0.13 ug/L
 RT: 4.873 min Scan# 1005
 Delta R.T. 0.008 min
 Lab File: O61170.d
 Acq: 10 Sep 2020 1:39 pm

Tgt Ion: 61 Resp: 3721

Ion	Ratio	Lower	Upper
61	100		
96	37.7	36.9	96.9
98	26.6	11.1	71.1



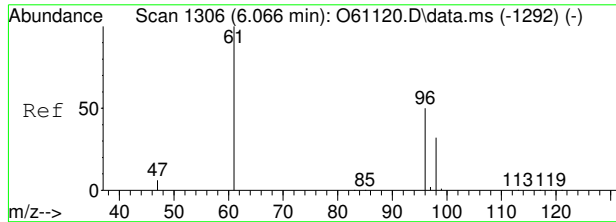
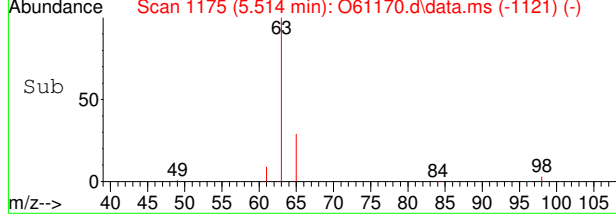
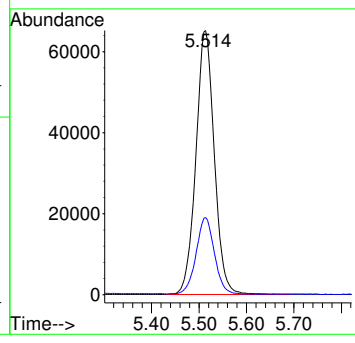
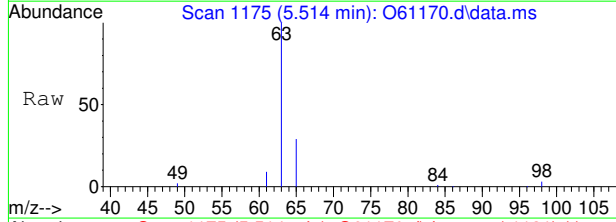
7.1.14
7



#7
 1,1-Dichloroethane
 Concen: 5.36 ug/L
 RT: 5.514 min Scan# 1175
 Delta R.T. 0.004 min
 Lab File: O61170.d
 Acq: 10 Sep 2020 1:39 pm

Tgt Ion: 63 Resp: 175438

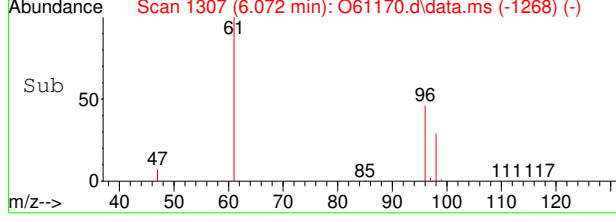
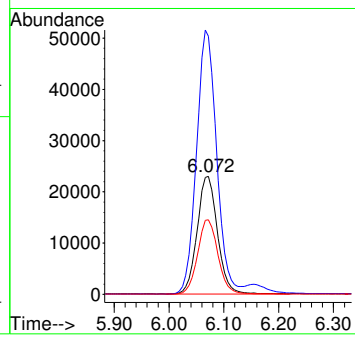
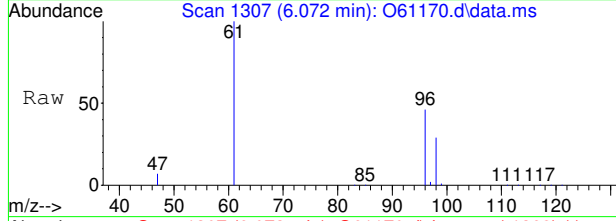
Ion	Ratio	Lower	Upper
63	100		
65	29.1	0.7	60.7



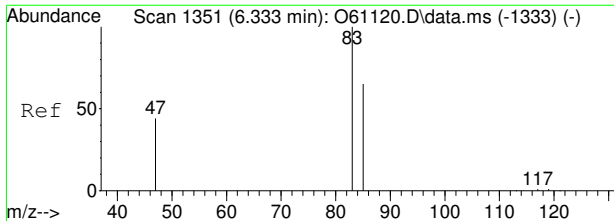
#8
 cis-1,2-Dichloroethene
 Concen: 4.06 ug/L
 RT: 6.072 min Scan# 1307
 Delta R.T. 0.006 min
 Lab File: O61170.d
 Acq: 10 Sep 2020 1:39 pm

Tgt Ion: 96 Resp: 59202

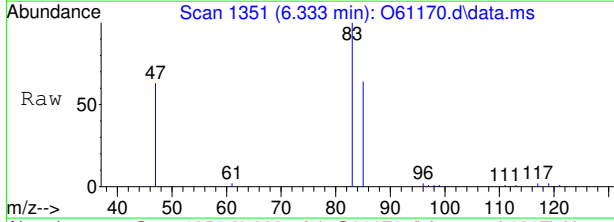
Ion	Ratio	Lower	Upper
96	100		
61	219.1	107.0	167.0#
98	63.1	34.1	94.1



7.1.14
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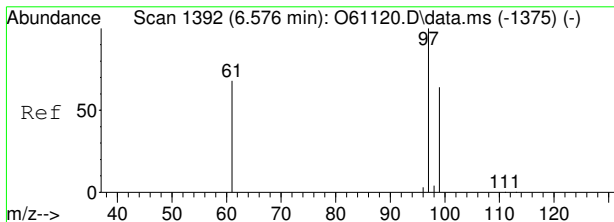
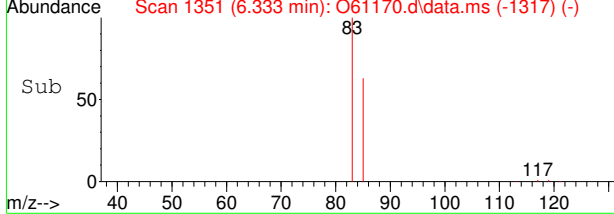
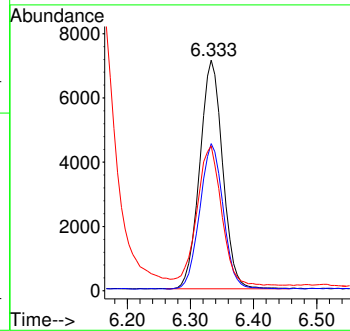


#9
 Chloroform
 Concen: 0.68 ug/L
 RT: 6.333 min Scan# 1351
 Delta R.T. 0.000 min
 Lab File: O61170.d
 Acq: 10 Sep 2020 1:39 pm

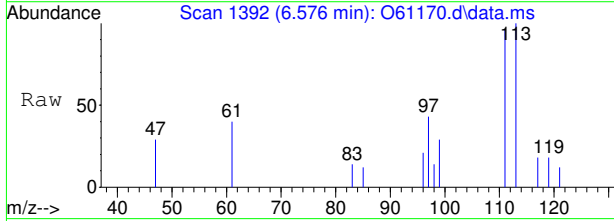


Tgt Ion: 83 Resp: 18011

Ion	Ratio	Lower	Upper
83	100		
85	63.5	33.0	93.0
47	60.9	8.1	68.1

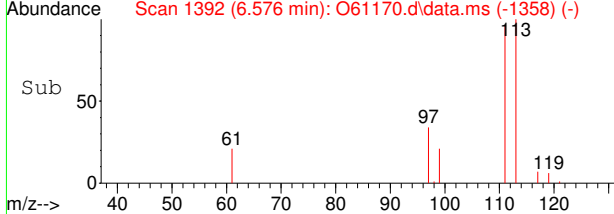
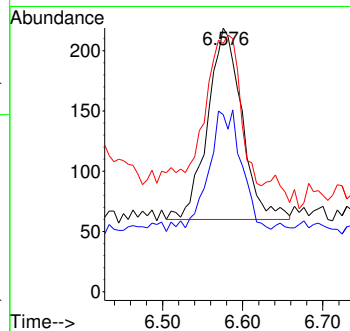


#11
 1,1,1-Trichloroethane
 Concen: 0.02 ug/L
 RT: 6.576 min Scan# 1392
 Delta R.T. 0.000 min
 Lab File: O61170.d
 Acq: 10 Sep 2020 1:39 pm

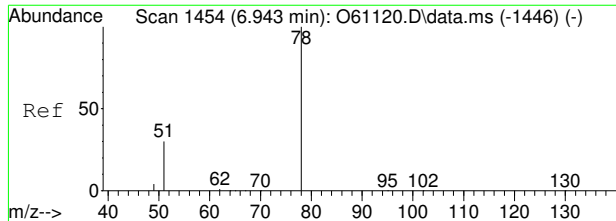


Tgt Ion: 97 Resp: 474

Ion	Ratio	Lower	Upper
97	100		
99	61.0	31.9	91.9
61	83.0	21.8	81.8#

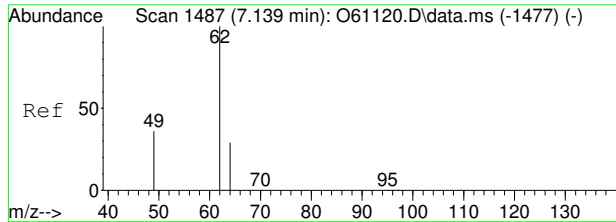
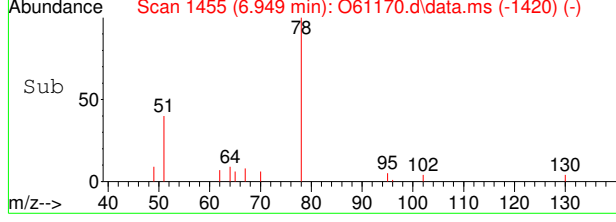
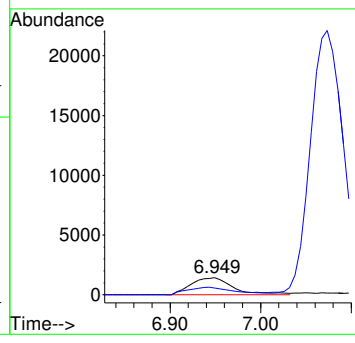
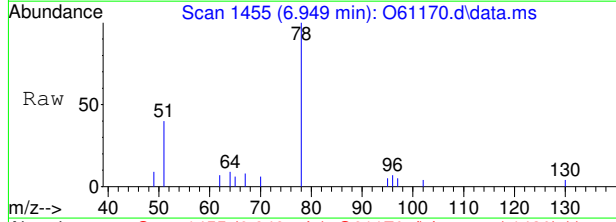


7.1.14
 7



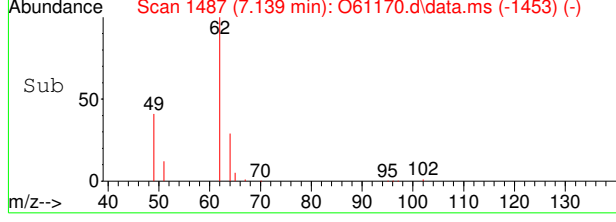
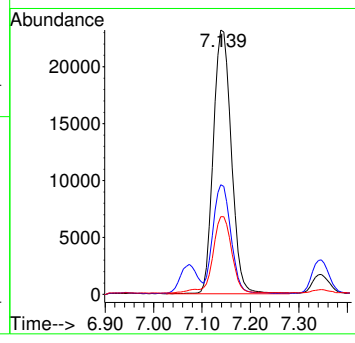
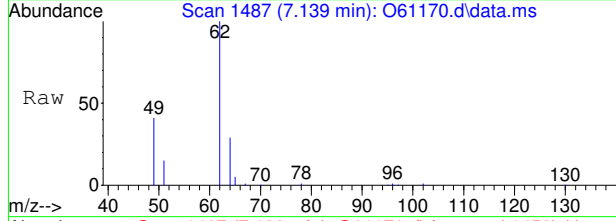
#12
Benzene
Concen: 0.09 ug/L
RT: 6.949 min Scan# 1455
Delta R.T. 0.006 min
Lab File: O61170.d
Acq: 10 Sep 2020 1:39 pm

Tgt Ion	Resp	Lower	Upper
78	4630	100	
51	39.7	0.0	56.2



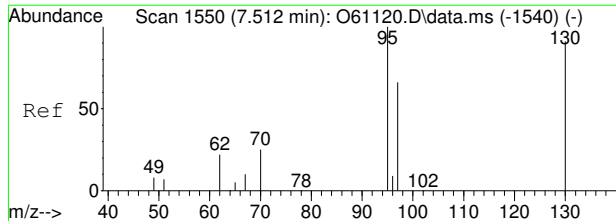
#14
1,2-Dichloroethane
Concen: 2.09 ug/L
RT: 7.139 min Scan# 1487
Delta R.T. 0.000 min
Lab File: O61170.d
Acq: 10 Sep 2020 1:39 pm

Tgt Ion	Resp	Lower	Upper
62	59768	100	
49	41.1	18.0	78.0
64	28.9	1.5	61.5



7.1.14
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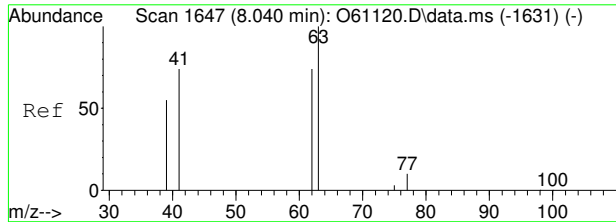
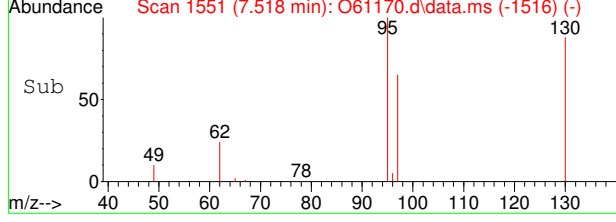
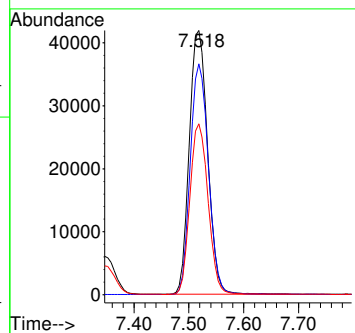
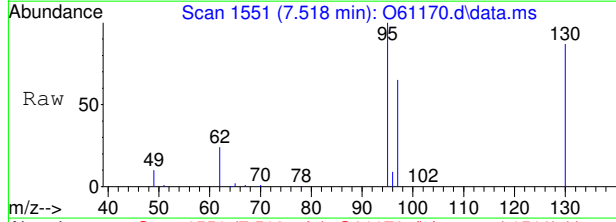




#15
 Trichloroethene
 Concen: 6.45 ug/L
 RT: 7.518 min Scan# 1551
 Delta R.T. 0.006 min
 Lab File: O61170.d
 Acq: 10 Sep 2020 1:39 pm

Tgt Ion: 95 Resp: 97777

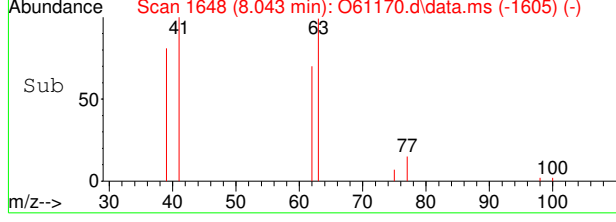
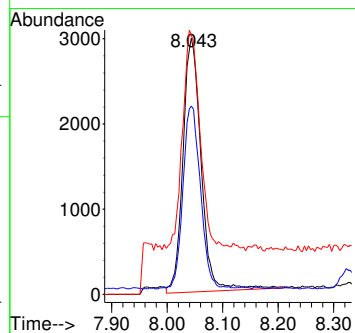
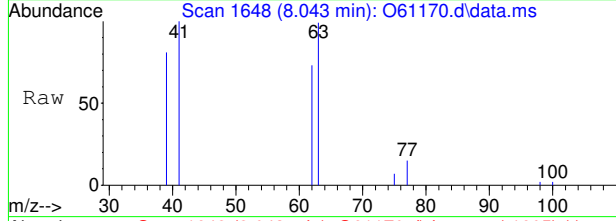
Ion	Ratio	Lower	Upper
95	100		
130	87.4	60.4	120.4
97	64.6	34.6	94.6



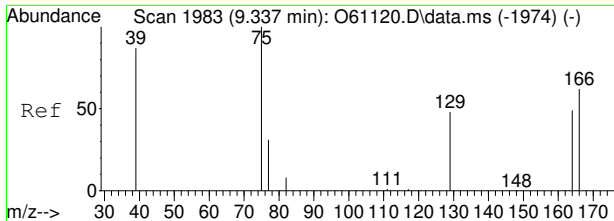
#16
 1,2-Dichloropropane
 Concen: 0.36 ug/L
 RT: 8.043 min Scan# 1648
 Delta R.T. 0.004 min
 Lab File: O61170.d
 Acq: 10 Sep 2020 1:39 pm

Tgt Ion: 63 Resp: 6806

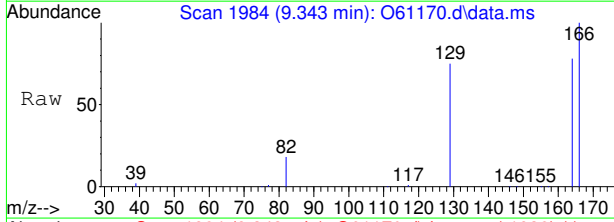
Ion	Ratio	Lower	Upper
63	100		
62	73.0	42.7	102.7
41	85.7	54.5	114.5



7.1.14
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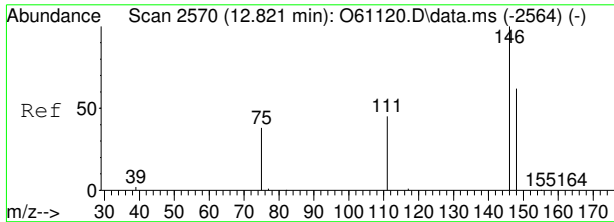
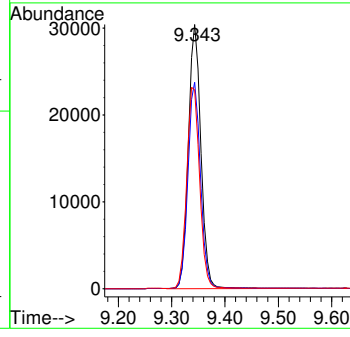
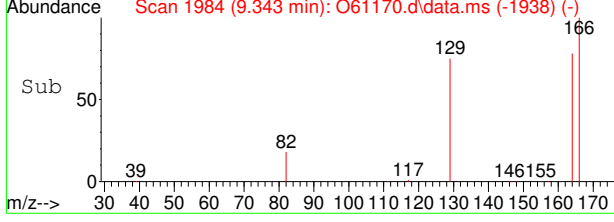


#21
 Tetrachloroethene
 Concen: 4.18 ug/L
 RT: 9.343 min Scan# 1984
 Delta R.T. 0.006 min
 Lab File: O61170.d
 Acq: 10 Sep 2020 1:39 pm

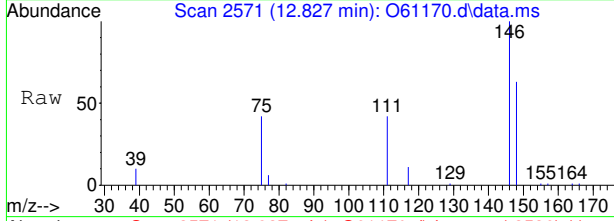


Tgt Ion:166 Resp: 49754

Ion	Ratio	Lower	Upper
166	100		
164	78.1	47.3	107.3
129	75.1	37.5	97.5

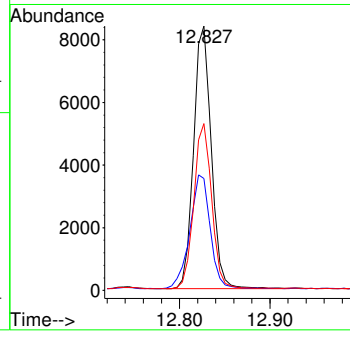
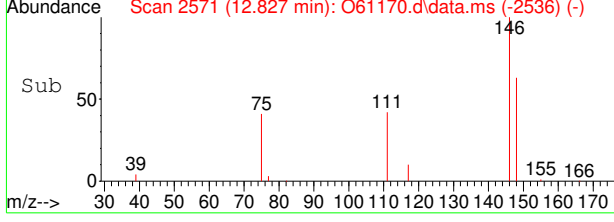


#22
 1,4-Dichlorobenzene
 Concen: 0.44 ug/L
 RT: 12.827 min Scan# 2571
 Delta R.T. 0.006 min
 Lab File: O61170.d
 Acq: 10 Sep 2020 1:39 pm



Tgt Ion:146 Resp: 11413

Ion	Ratio	Lower	Upper
146	100		
111	41.8	17.0	57.0
148	62.9	43.7	83.7



7.1.14
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Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-11-2020\vo2354\
Data File : O61171.d
Acq On : 10 Sep 2020 2:00 pm
Operator : melissam
Sample : FA78549-11
Misc : MS47173,VO2354,,,,,
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Sep 14 07:55:35 2020
Quant Method : C:\msdchem\1\methods\SIMCL090820.M
Quant Title : Standard Methods 6200B
QLast Update : Wed Sep 09 12:10:38 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)

Internal Standards						
1) Fluorobenzene	7.346	96	166662	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.447	117	117846	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.074	65	87918	6.01	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	120.20%	
19) Toluene-d8	8.900	98	147320	5.11	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	102.20%	
Target Compounds						
4) 1,1-Dichloroethene	4.100	61	5473	0.24	ug/L	76
5) Methylene Chloride	4.707	49	9598	0.23	ug/L	84
6) trans-1,2-Dichloroethene	4.873	61	1880	0.07	ug/L #	65
7) 1,1-Dichloroethane	5.514	63	46200	1.48	ug/L	95
8) cis-1,2-Dichloroethene	6.072	96	27858	2.00	ug/L #	50
9) Chloroform	6.333	83	16792	0.66	ug/L	86
14) 1,2-Dichloroethane	7.145	62	112287	4.10	ug/L	93
15) Trichloroethene	7.518	95	85880	5.92	ug/L	96
16) 1,2-Dichloropropane	8.044	63	3120m	0.17	ug/L	
21) Tetrachloroethene	9.343	166	23711	2.07	ug/L	96
22) 1,4-Dichlorobenzene	12.827	146	510m	0.02	ug/L	

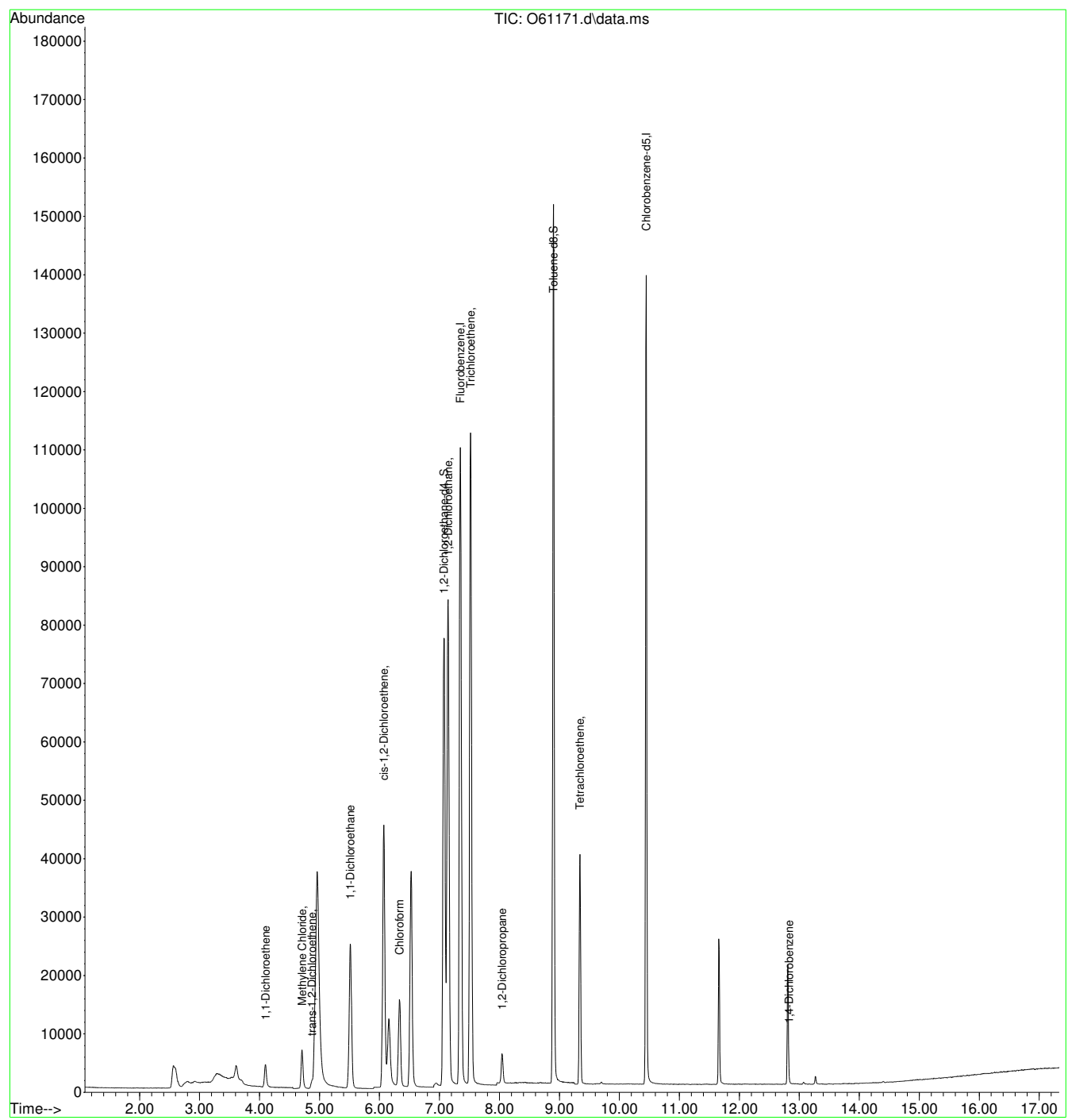
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.1.15
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Quantitation Report (QT Reviewed)

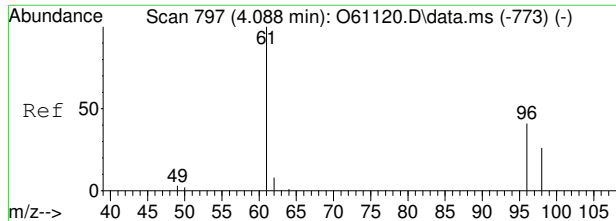
Data Path : C:\msdchem\1\data\johnm\September 2020\09-11-2020\vo2354\
Data File : O61171.d
Acq On : 10 Sep 2020 2:00 pm
Operator : melissam
Sample : FA78549-11
Misc : MS47173,VO2354,,,,,
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Sep 14 07:55:35 2020
Quant Method : C:\msdchem\1\methods\SIMCL090820.M
Quant Title : Standard Methods 6200B
QLast Update : Wed Sep 09 12:10:38 2020
Response via : Initial Calibration



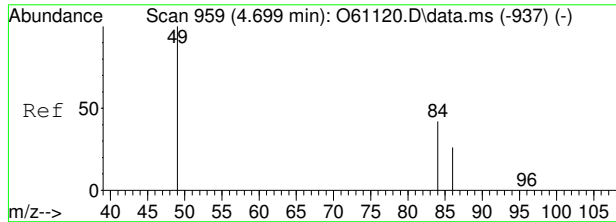
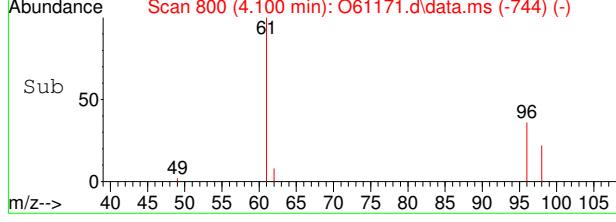
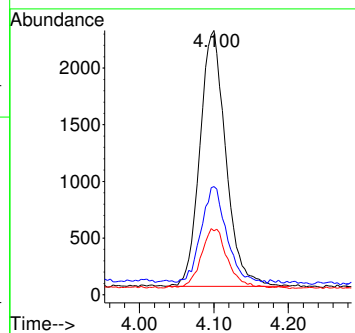
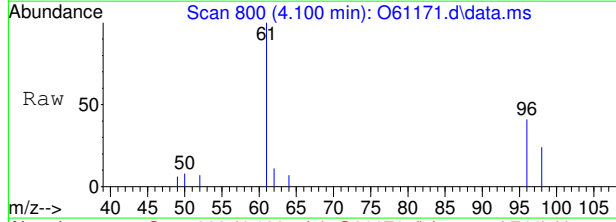
7.1.15
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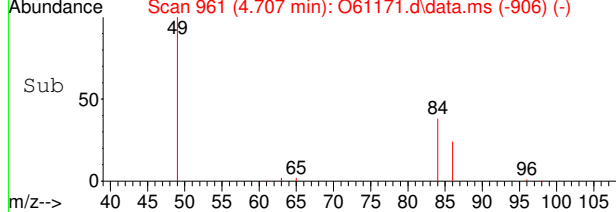
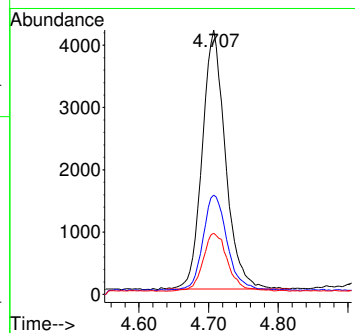
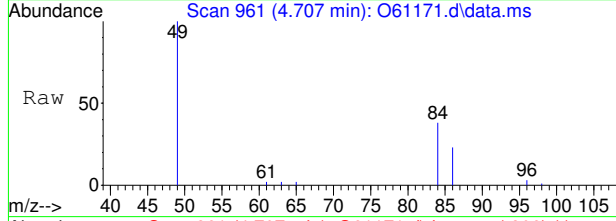
#4
 1,1-Dichloroethene
 Concen: 0.24 ug/L
 RT: 4.100 min Scan# 800
 Delta R.T. 0.012 min
 Lab File: O61171.d
 Acq: 10 Sep 2020 2:00 pm

Tgt Ion	Resp	Lower	Upper
61	5473		
96	37.5	25.4	85.4
98	22.5	5.9	65.9



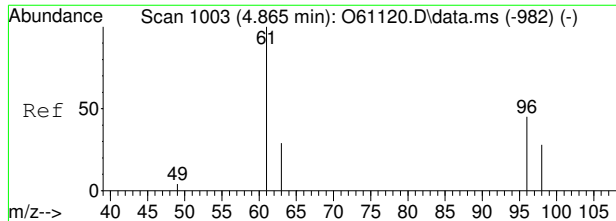
#5
 Methylene Chloride
 Concen: 0.23 ug/L
 RT: 4.707 min Scan# 961
 Delta R.T. 0.008 min
 Lab File: O61171.d
 Acq: 10 Sep 2020 2:00 pm

Tgt Ion	Resp	Lower	Upper
49	9598		
84	36.6	17.9	77.9
86	22.3	0.0	59.8



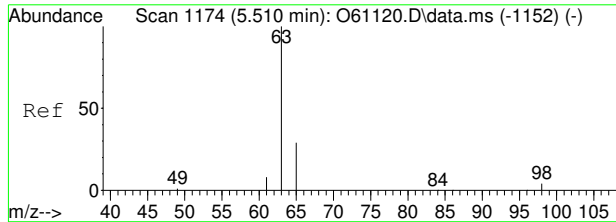
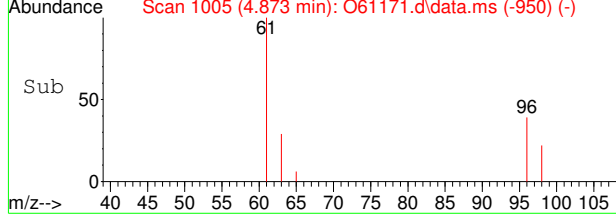
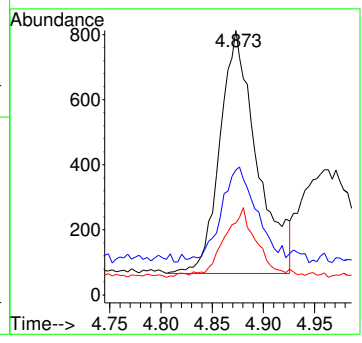
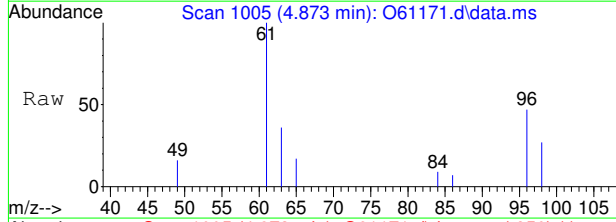
7.1.15
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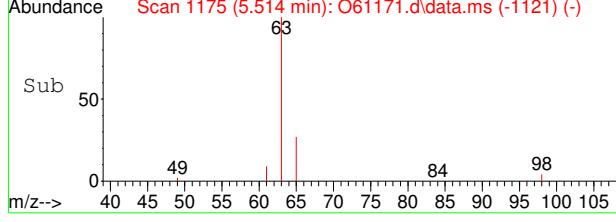
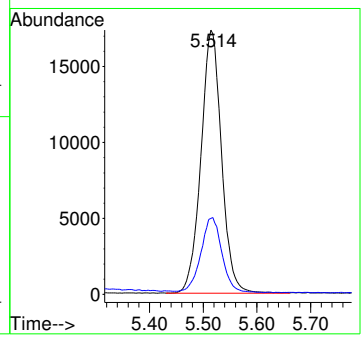
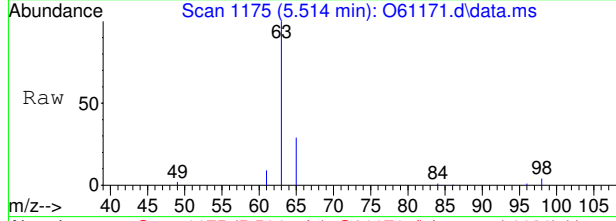
#6
 trans-1,2-Dichloroethene
 Concen: 0.07 ug/L
 RT: 4.873 min Scan# 1005
 Delta R.T. 0.008 min
 Lab File: O61171.d
 Acq: 10 Sep 2020 2:00 pm

Tgt Ion	Resp	Lower	Upper
61	1880		
96	36.8	36.9	96.9#
98	22.4	11.1	71.1

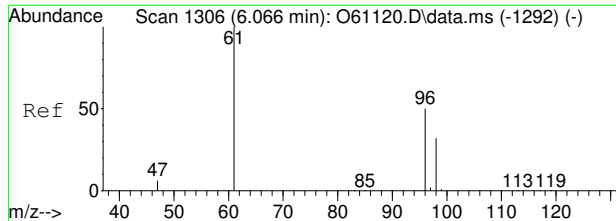


#7
 1,1-Dichloroethane
 Concen: 1.48 ug/L
 RT: 5.514 min Scan# 1175
 Delta R.T. 0.004 min
 Lab File: O61171.d
 Acq: 10 Sep 2020 2:00 pm

Tgt Ion	Resp	Lower	Upper
63	46200		
65	28.1	0.7	60.7

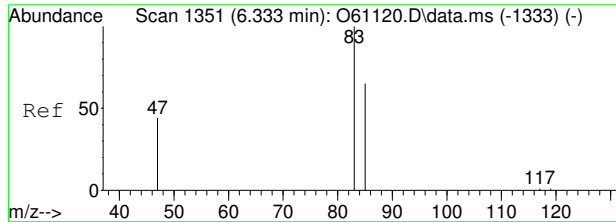
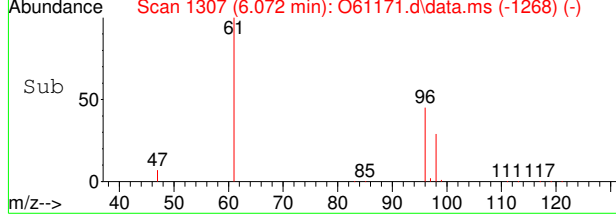
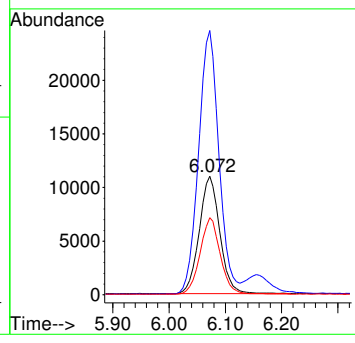
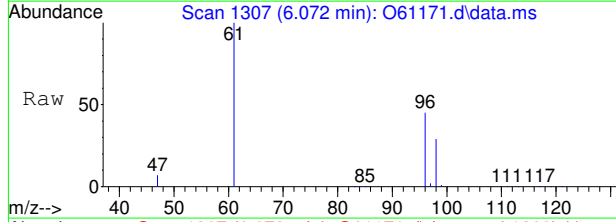


7.1.15
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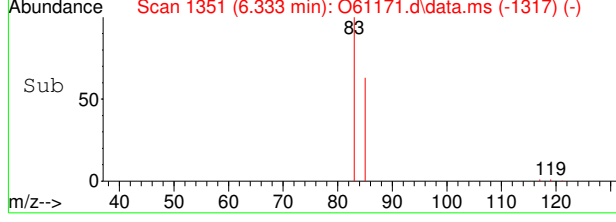
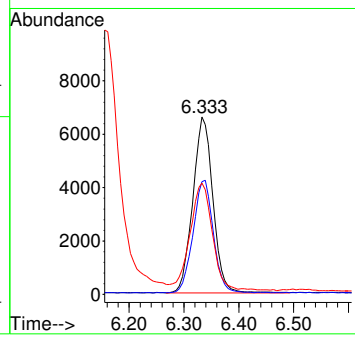
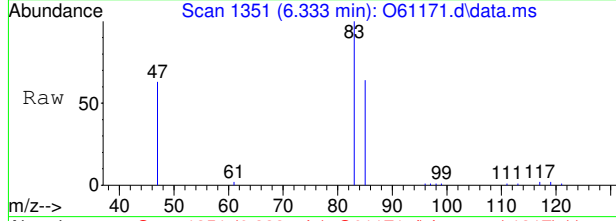
#8
 cis-1,2-Dichloroethene
 Concen: 2.00 ug/L
 RT: 6.072 min Scan# 1307
 Delta R.T. 0.006 min
 Lab File: O61171.d
 Acq: 10 Sep 2020 2:00 pm

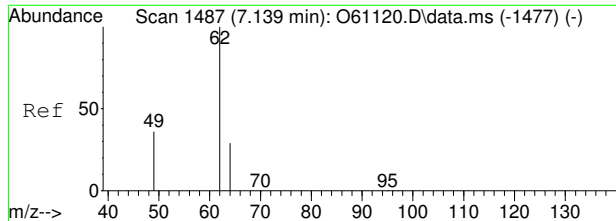
Tgt Ion	Resp	Lower	Upper
96	27858		
61	224.4	107.0	167.0#
98	65.1	34.1	94.1



#9
 Chloroform
 Concen: 0.66 ug/L
 RT: 6.333 min Scan# 1351
 Delta R.T. 0.000 min
 Lab File: O61171.d
 Acq: 10 Sep 2020 2:00 pm

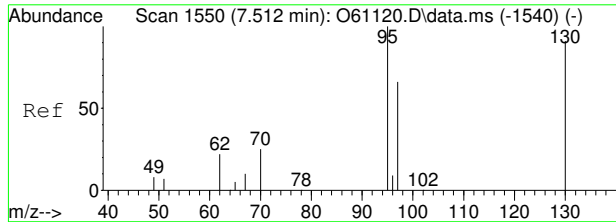
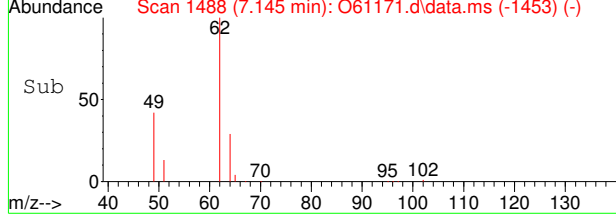
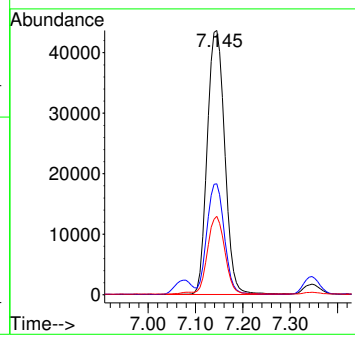
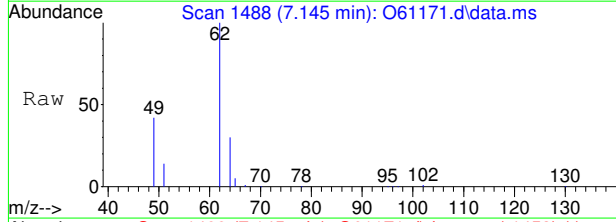
Tgt Ion	Resp	Lower	Upper
83	16792		
85	63.2	33.0	93.0
47	60.6	8.1	68.1





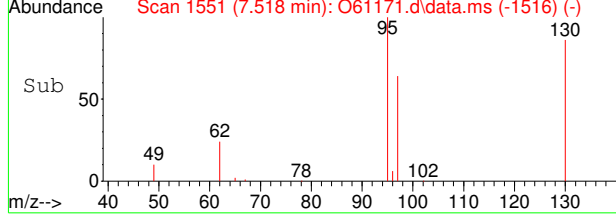
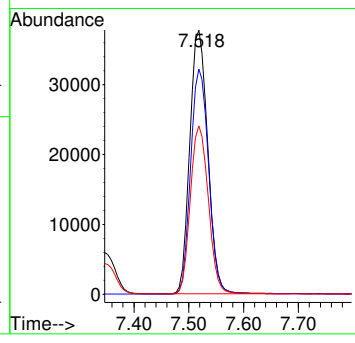
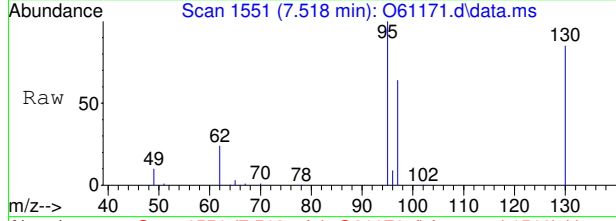
#14
 1,2-Dichloroethane
 Concen: 4.10 ug/L
 RT: 7.145 min Scan# 1488
 Delta R.T. 0.006 min
 Lab File: O61171.d
 Acq: 10 Sep 2020 2:00 pm

Tgt Ion	Ratio	Lower	Upper
62	100		
49	41.8	18.0	78.0
64	29.4	1.5	61.5



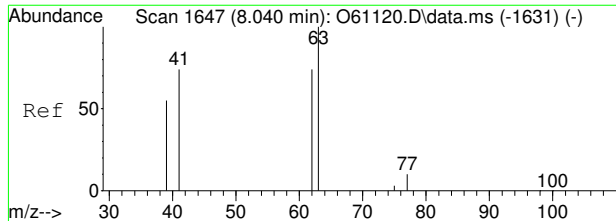
#15
 Trichloroethene
 Concen: 5.92 ug/L
 RT: 7.518 min Scan# 1551
 Delta R.T. 0.006 min
 Lab File: O61171.d
 Acq: 10 Sep 2020 2:00 pm

Tgt Ion	Ratio	Lower	Upper
95	100		
130	85.3	60.4	120.4
97	63.7	34.6	94.6

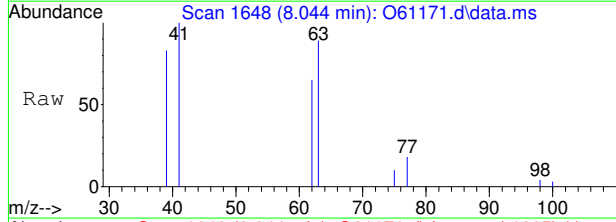


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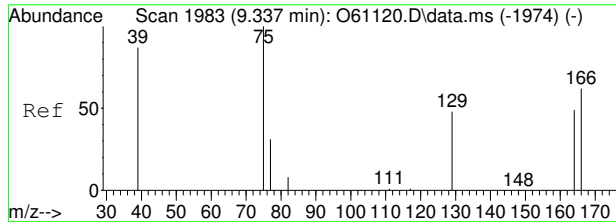
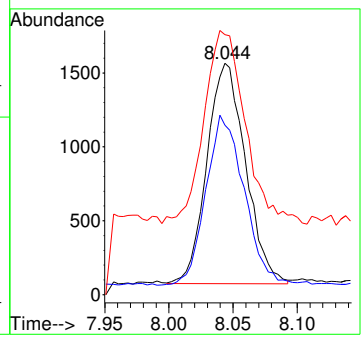
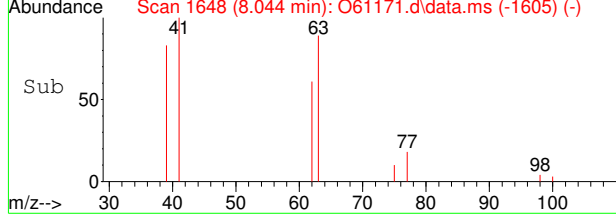


#16
 1,2-Dichloropropane
 Concen: 0.17 ug/L m
 RT: 8.044 min Scan# 1648
 Delta R.T. 0.004 min
 Lab File: O61171.d
 Acq: 10 Sep 2020 2:00 pm

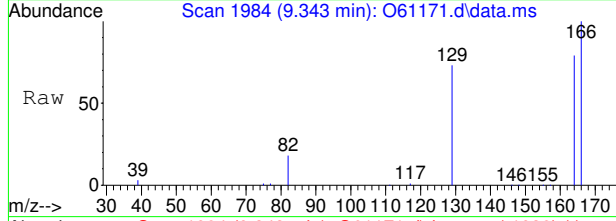


Tgt Ion: 63 Resp: 3120

Ion	Ratio	Lower	Upper
63	100		
62	73.2	42.7	102.7
41	112.3	54.5	114.5

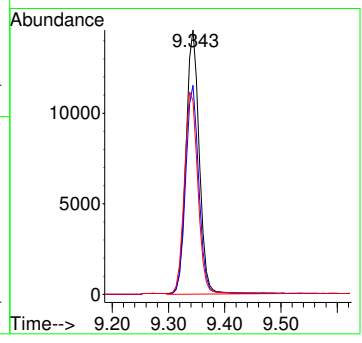
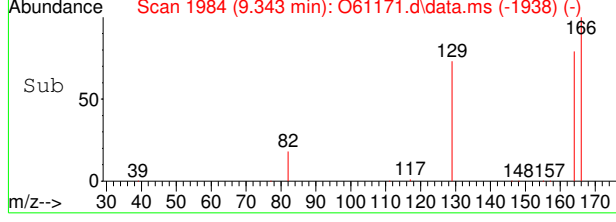


#21
 Tetrachloroethene
 Concen: 2.07 ug/L
 RT: 9.343 min Scan# 1984
 Delta R.T. 0.006 min
 Lab File: O61171.d
 Acq: 10 Sep 2020 2:00 pm

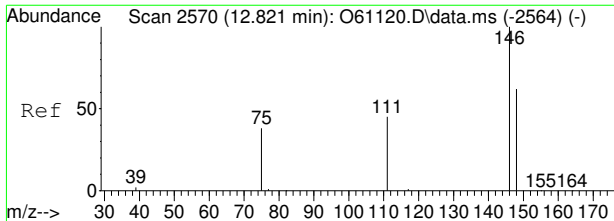


Tgt Ion: 166 Resp: 23711

Ion	Ratio	Lower	Upper
166	100		
164	79.0	47.3	107.3
129	73.2	37.5	97.5

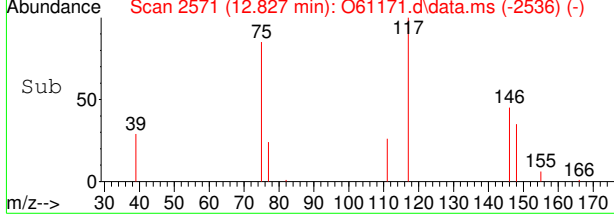
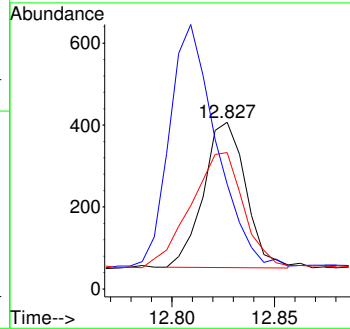
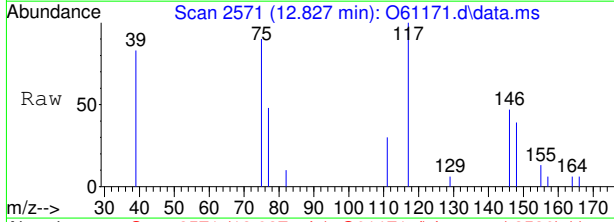


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#22
 1,4-Dichlorobenzene
 Concen: 0.02 ug/L m
 RT: 12.827 min Scan# 2571
 Delta R.T. 0.006 min
 Lab File: O61171.d
 Acq: 10 Sep 2020 2:00 pm

Tgt Ion	Ratio	Lower	Upper
146	100		
111	62.9	17.0	57.0#
148	81.8	43.7	83.7



7.1.15
7

Manual Integration Approval Summary

Sample Number: FA78549-11
Lab FileID: O61171.D
Injection Time: 09/10/20 14:00

Method: SW846 8260B BY SIM
Analyst approved: 09/14/20 08:06 John Matthew de Guzman
Supervisor approved: 09/18/20 14:39 Melissa Mangual

Parameter	CAS	Sig#	R.T. (min.)	Reason
1,2-Dichloropropane	78-87-5		8.04	Poor instrument integration
1,4-Dichlorobenzene	106-46-7		12.83	Missed peak

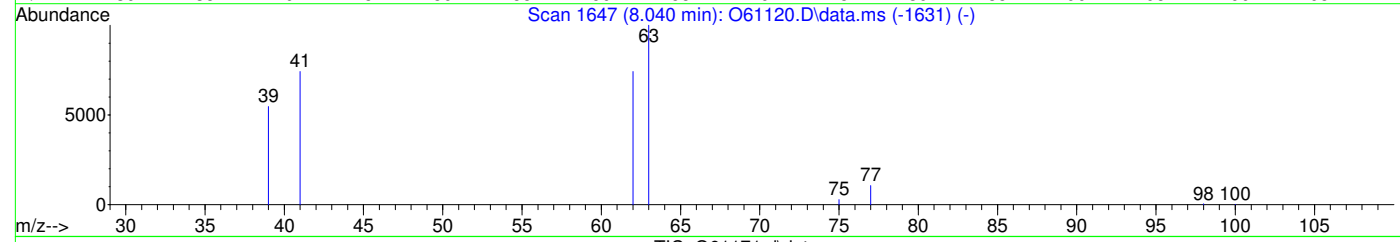
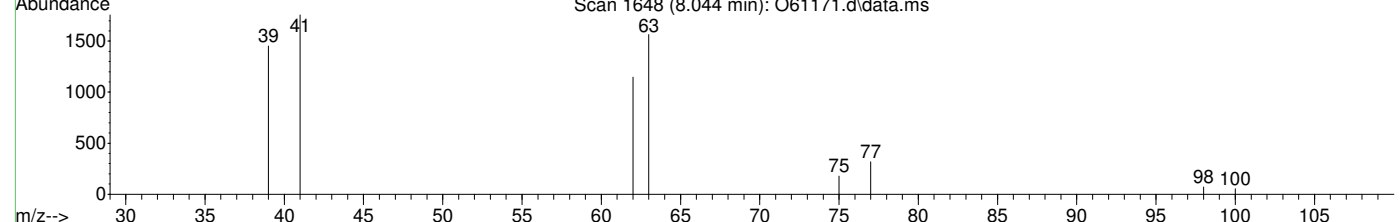
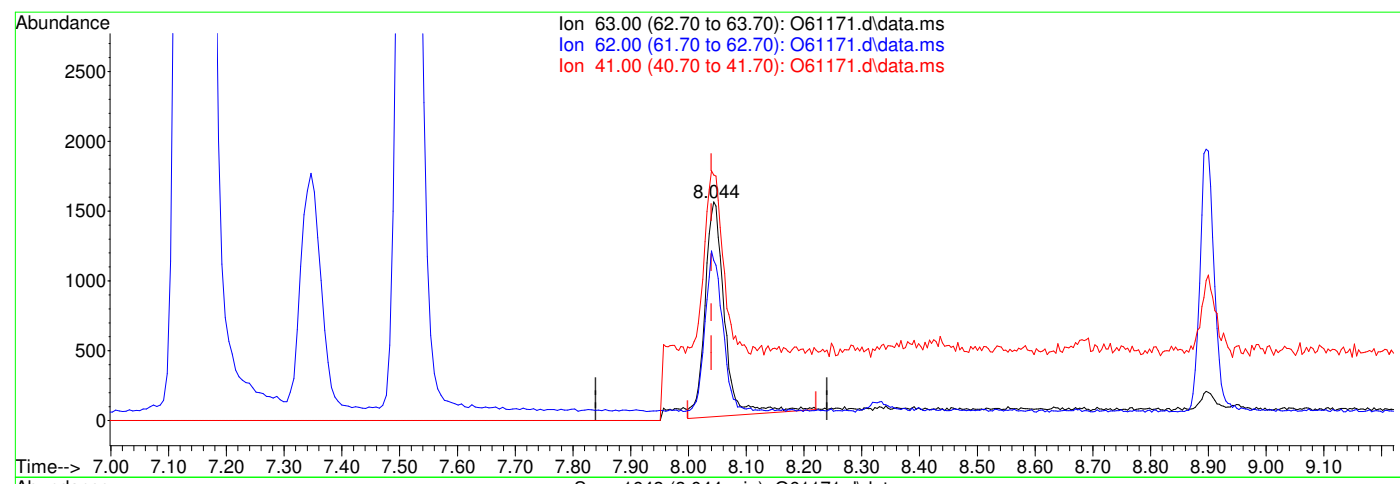
7.1.15.1

7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-11-2020\vo2354\
Data File : O61171.d
Acq On : 10 Sep 2020 2:00 pm
Operator : melissam
Sample : FA78549-11
Misc : MS47173,VO2354,,,,,
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Sep 11 05:47:08 2020
Quant Method : C:\msdchem\1\methods\SIMCL090820.M
Quant Title : Standard Methods 6200B
QLast Update : Wed Sep 09 12:10:38 2020
Response via : Initial Calibration



(16) 1,2-Dichloropropane
8.044min (+0.004) 0.20ug/L
response 3604
lon Exp% Act%
63.00 100 100
62.00 72.70 72.41
41.00 84.50 84.32
0.00 0.00 0.00

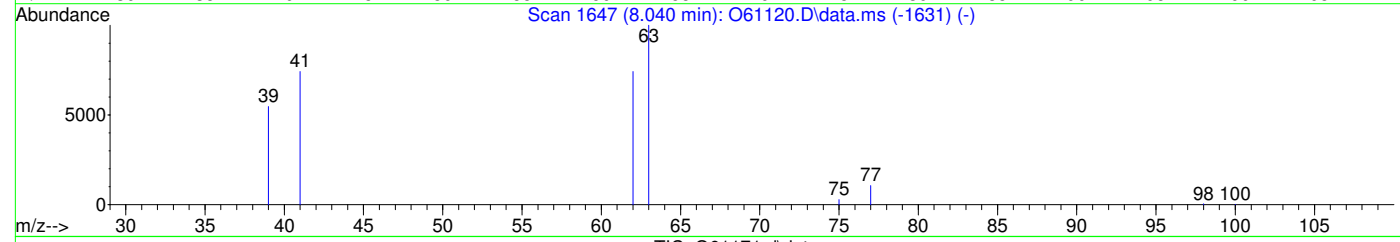
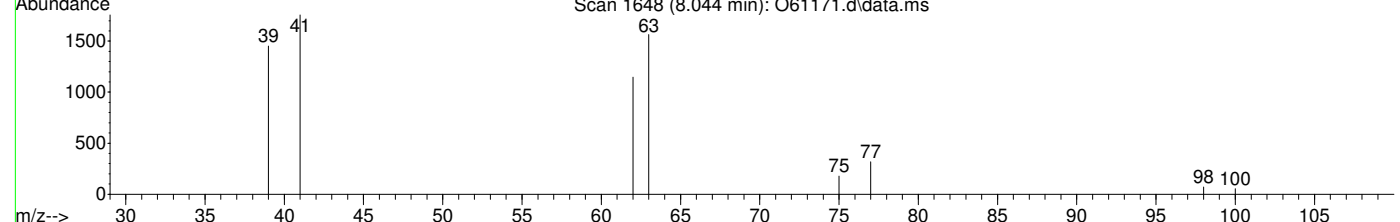
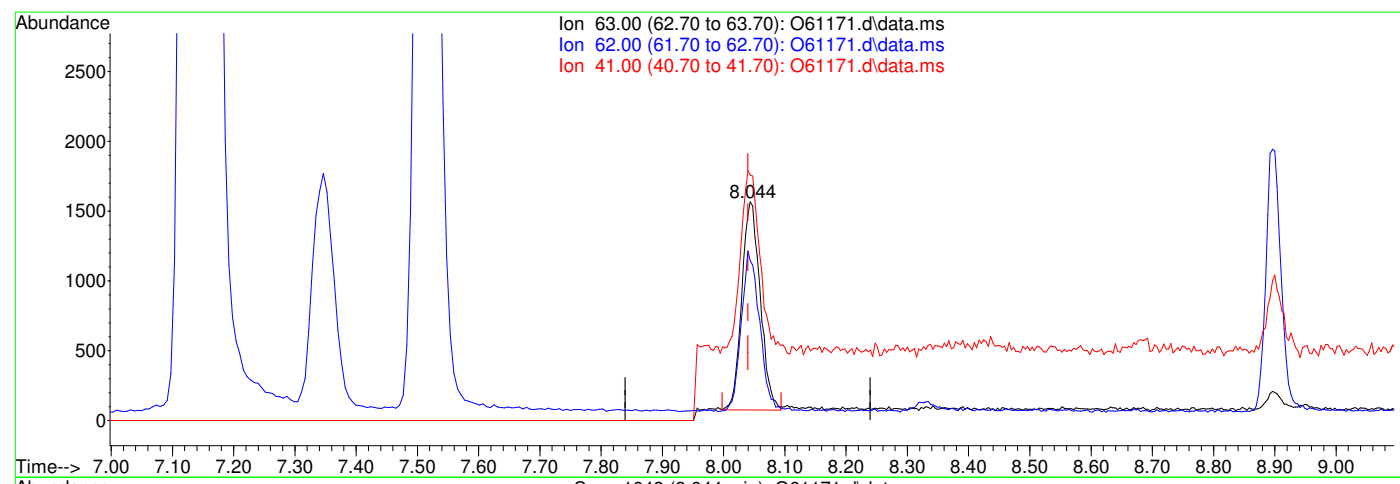


7.1.152
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-11-2020\vo2354\
Data File : O61171.d
Acq On : 10 Sep 2020 2:00 pm
Operator : melissam
Sample : FA78549-11
Misc : MS47173,VO2354,,,,,
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Sep 11 05:47:08 2020
Quant Method : C:\msdchem\1\methods\SIMCL090820.M
Quant Title : Standard Methods 6200B
QLast Update : Wed Sep 09 12:10:38 2020
Response via : Initial Calibration



(16) 1,2-Dichloropropane
8.044min (+0.004) 0.17ug/L m
response 3120

Ion	Exp%	Act%
63.00	100	100
62.00	72.70	73.23
41.00	84.50	112.33
0.00	0.00	0.00

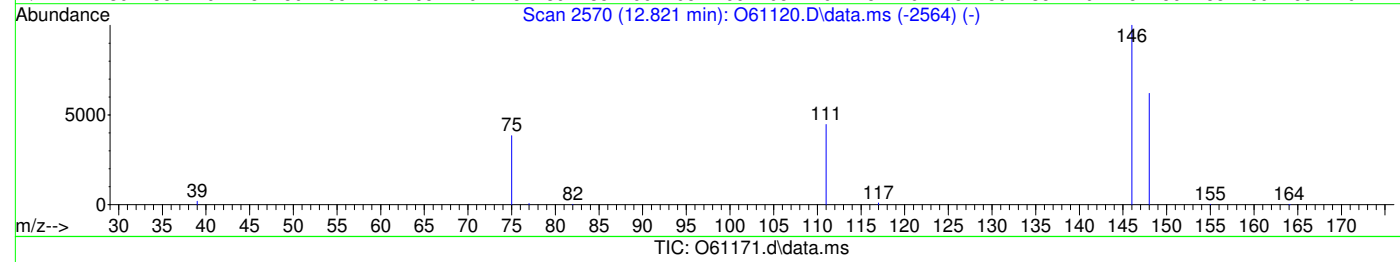
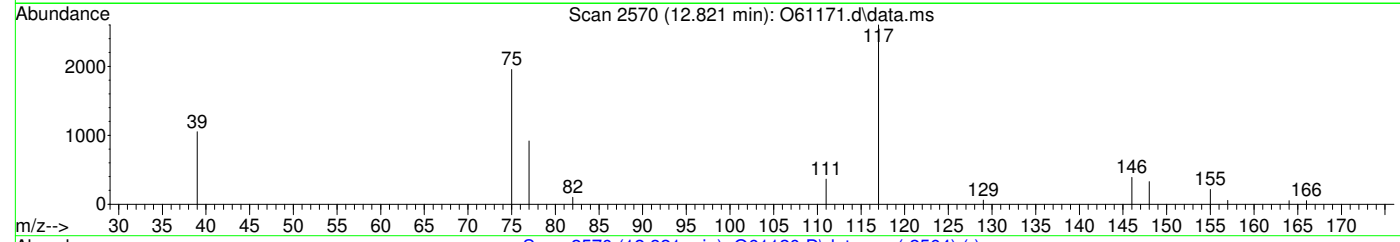
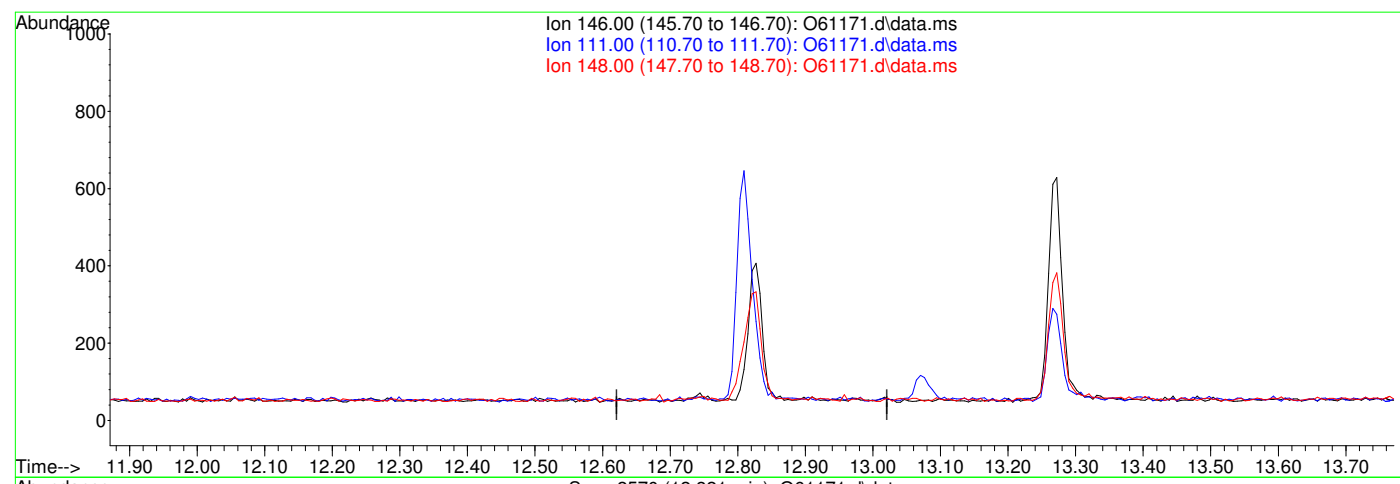
7.1.15.3
7



Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-11-2020\vo2354\
Data File : O61171.d
Acq On : 10 Sep 2020 2:00 pm
Operator : melissam
Sample : FA78549-11
Misc : MS47173,VO2354,,,,,
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Sep 11 05:47:08 2020
Quant Method : C:\msdchem\1\methods\SIMCL090820.M
Quant Title : Standard Methods 6200B
QLast Update : Wed Sep 09 12:10:38 2020
Response via : Initial Calibration



(22) 1,4-Dichlorobenzene
12.821min (-12.821) 0.00ug/L
response 0

Ion	Exp%	Act%
146.00	100	0.00
111.00	37.00	0.00#
148.00	63.70	0.00#
0.00	0.00	0.00

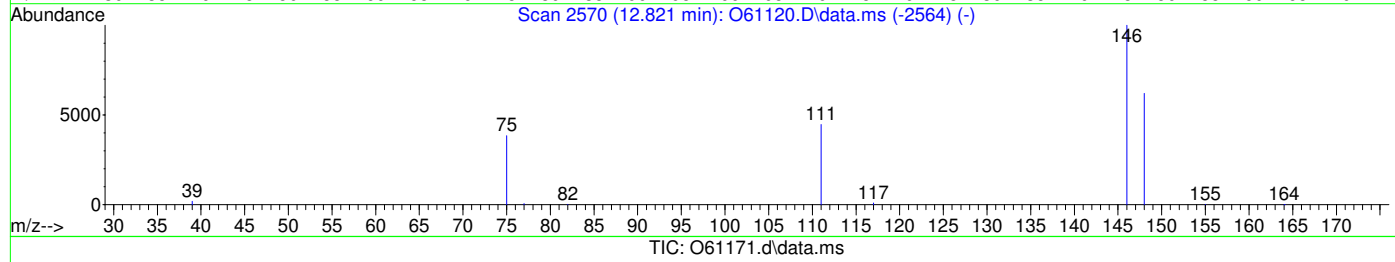
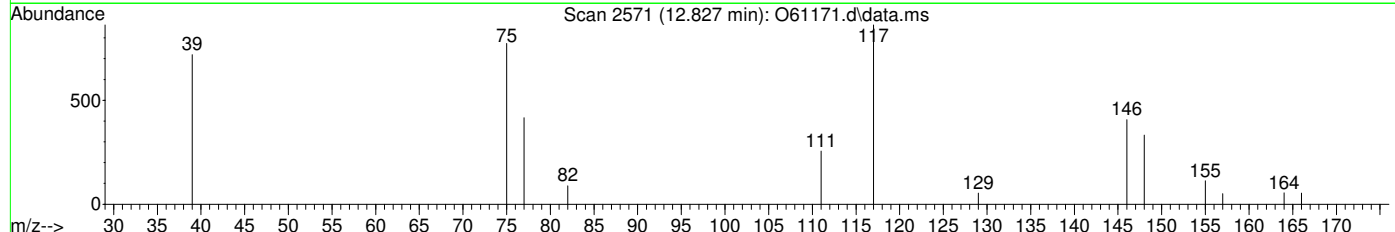
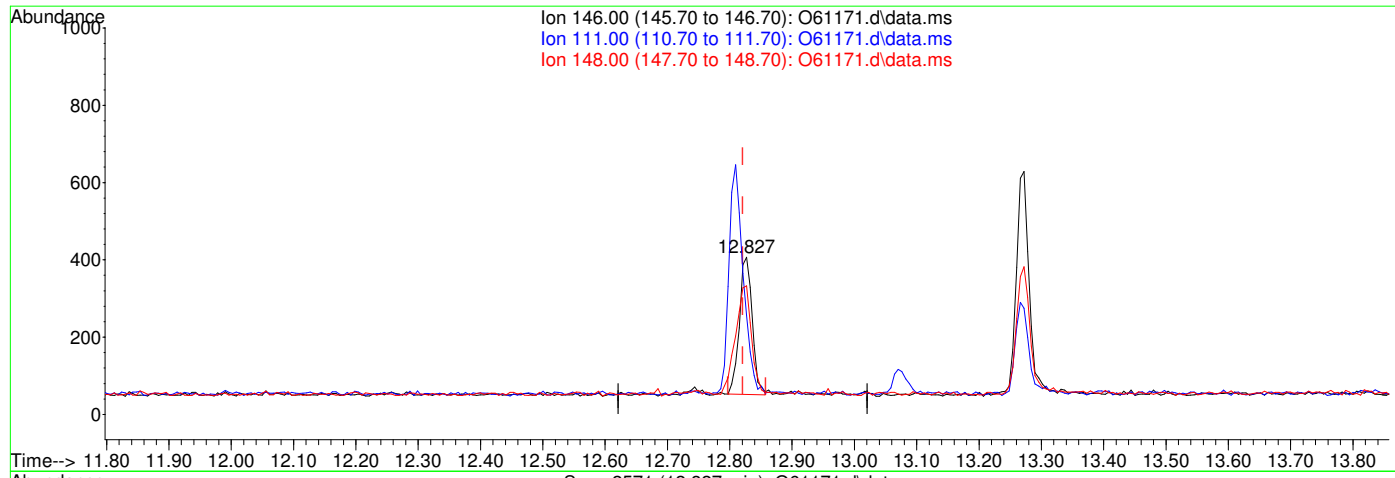
7.1.154
7



Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-11-2020\vo2354\
Data File : O61171.d
Acq On : 10 Sep 2020 2:00 pm
Operator : melissam
Sample : FA78549-11
Misc : MS47173,VO2354,,,,,
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Sep 11 05:47:08 2020
Quant Method : C:\msdchem\1\methods\SIMCL090820.M
Quant Title : Standard Methods 6200B
QLast Update : Wed Sep 09 12:10:38 2020
Response via : Initial Calibration



(22) 1,4-Dichlorobenzene

12.827min (+0.006) 0.02ug/L m

response 510

Ion	Exp%	Act%
146.00	100	100
111.00	37.00	62.90#
148.00	63.70	81.82
0.00	0.00	0.00



7.1.15.5
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-17-2020\vo2363\
 Data File : O61418.d
 Acq On : 16 Sep 2020 5:34 pm
 Operator : akarig
 Sample : FA78549-11
 Misc : MS47193,VO2363,,,,,
 ALS Vial : 19 Sample Multiplier: 1

Quant Time: Sep 17 04:43:04 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091520.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 16 09:02:25 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)

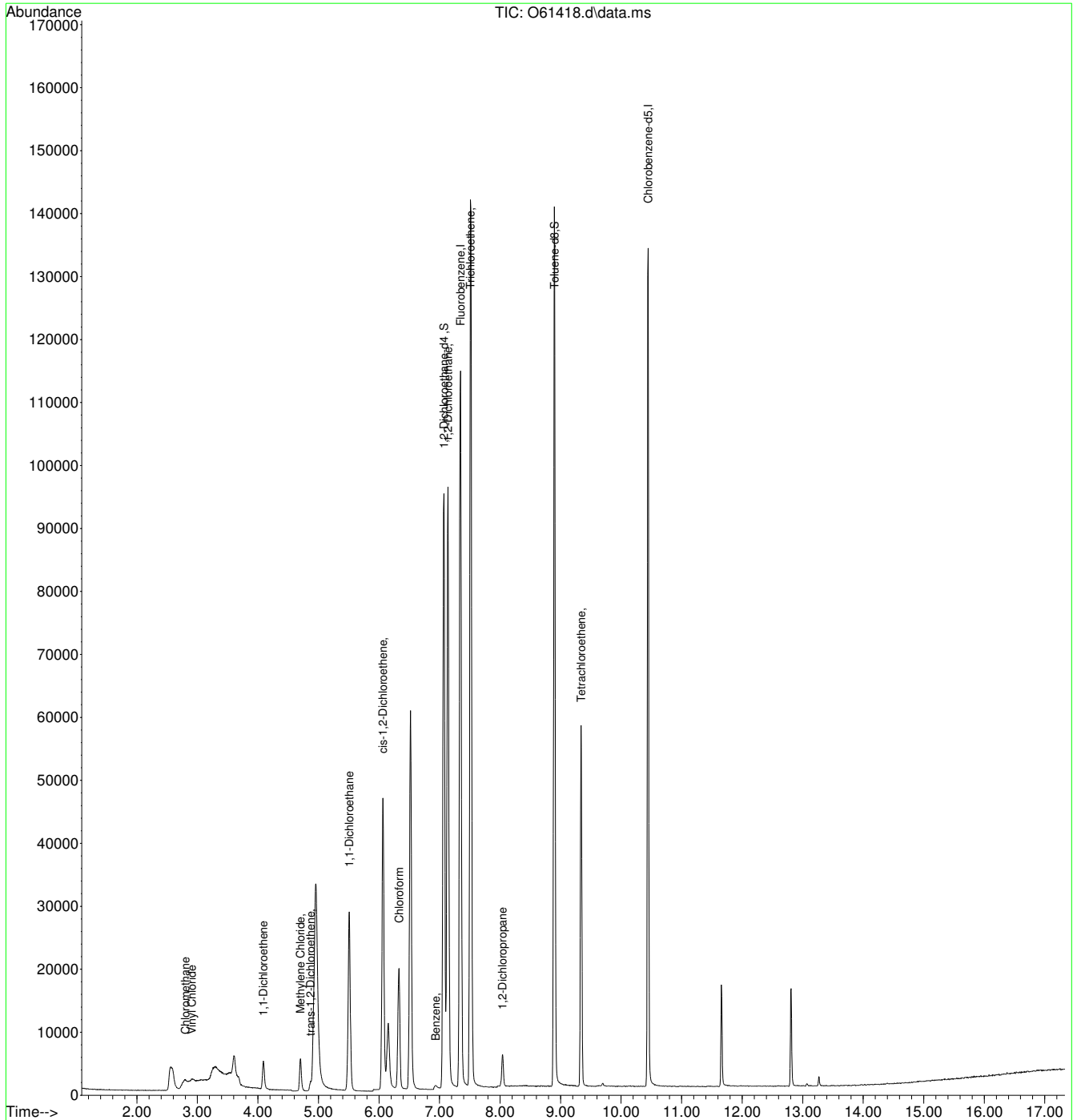
Internal Standards						
1) Fluorobenzene	7.346	96	167325	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.447	117	130941	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.073	65	86601	6.14	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	122.80%	
19) Toluene-d8	8.896	98	138988	5.20	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	104.00%	
Target Compounds						
						Qvalue
2) Vinyl Chloride	2.904	62	604	0.03	ug/L	82
3) Chloromethane	2.803	50	2751	0.08	ug/L #	47
4) 1,1-Dichloroethene	4.088	61	5351	0.21	ug/L	96
5) Methylene Chloride	4.699	49	6804	0.14	ug/L	97
6) trans-1,2-Dichloroethene	4.869	61	1568	0.05	ug/L	93
7) 1,1-Dichloroethane	5.510	63	46870	1.44	ug/L	99
8) cis-1,2-Dichloroethene	6.066	96	30280	2.06	ug/L	97
9) Chloroform	6.333	83	19837	0.72	ug/L	96
12) Benzene	6.937	78	1539	0.03	ug/L	51
14) 1,2-Dichloroethane	7.139	62	107313	4.22	ug/L	99
15) Trichloroethene	7.512	95	90585	5.88	ug/L	95
16) 1,2-Dichloropropane	8.040	63	3337	0.19	ug/L	91
21) Tetrachloroethene	9.343	166	34382	2.29	ug/L	96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

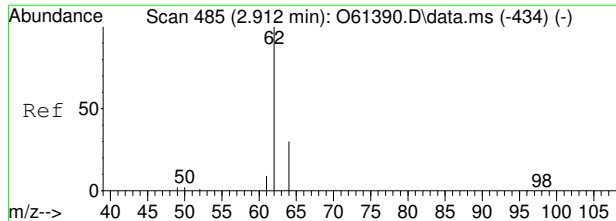
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-17-2020\vo2363\
 Data File : O61418.d
 Acq On : 16 Sep 2020 5:34 pm
 Operator : akarig
 Sample : FA78549-11
 Misc : MS47193,VO2363,,,,,
 ALS Vial : 19 Sample Multiplier: 1

Quant Time: Sep 17 04:43:04 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091520.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 16 09:02:25 2020
 Response via : Initial Calibration

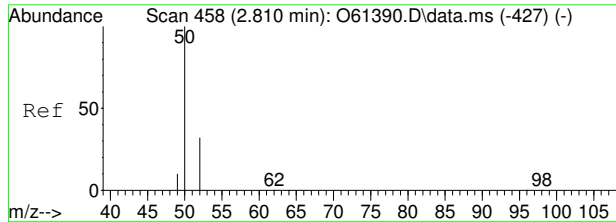
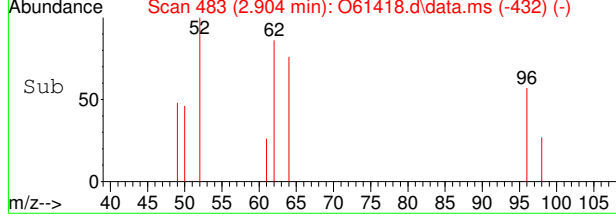
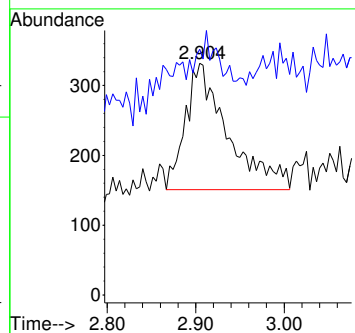
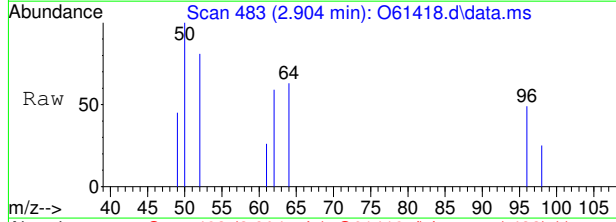


7.1.16
7



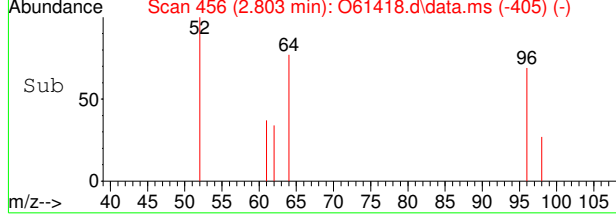
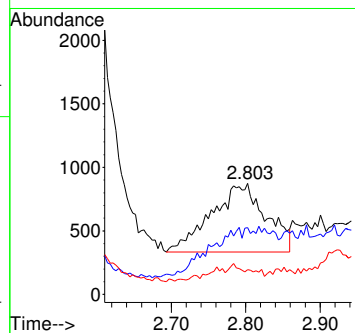
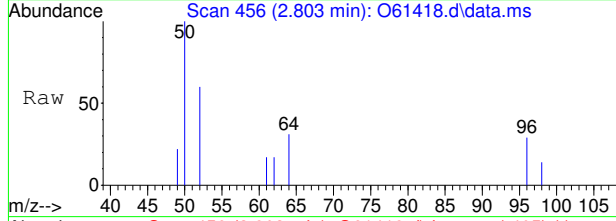
#2
 Vinyl Chloride
 Concen: 0.03 ug/L
 RT: 2.904 min Scan# 483
 Delta R.T. -0.008 min
 Lab File: O61418.d
 Acq: 16 Sep 2020 5:34 pm

Tgt Ion	Ratio	Lower	Upper
62	100		
64	19.9	0.0	59.8

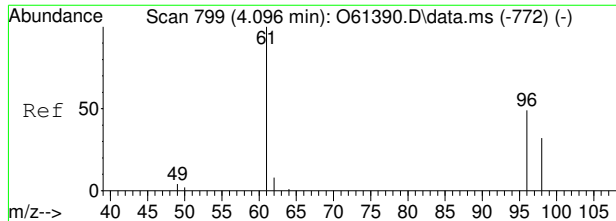


#3
 Chloromethane
 Concen: 0.08 ug/L
 RT: 2.803 min Scan# 456
 Delta R.T. -0.007 min
 Lab File: O61418.d
 Acq: 16 Sep 2020 5:34 pm

Tgt Ion	Ratio	Lower	Upper
50	100		
52	67.8	12.1	52.1#
49	17.7	0.0	30.3

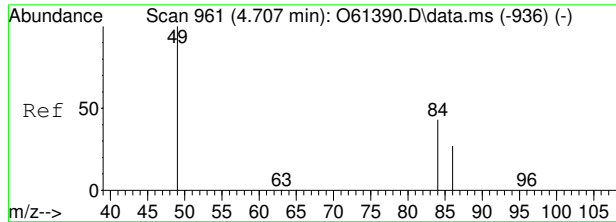
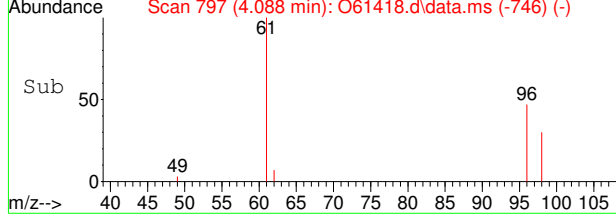
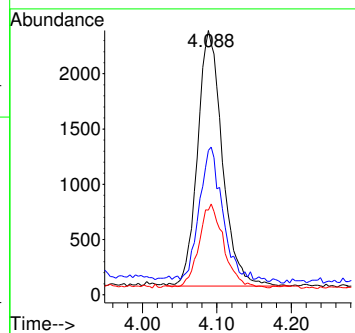
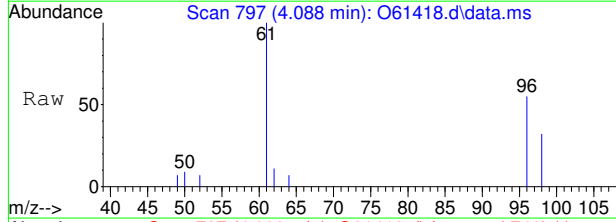


7.1.16
7



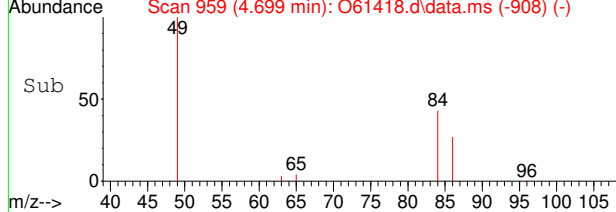
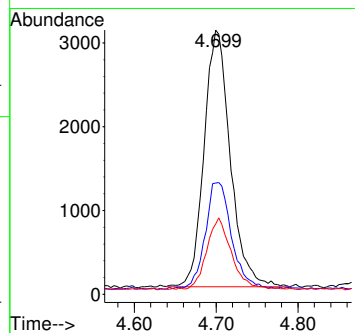
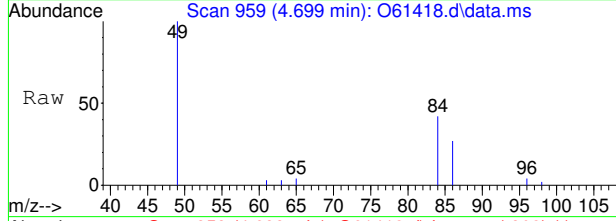
#4
 1,1-Dichloroethene
 Concen: 0.21 ug/L
 RT: 4.088 min Scan# 797
 Delta R.T. -0.008 min
 Lab File: O61418.d
 Acq: 16 Sep 2020 5:34 pm

Tgt Ion	Resp	Lower	Upper
61	5351		
96	51.9	19.3	79.3
98	29.8	1.9	61.9



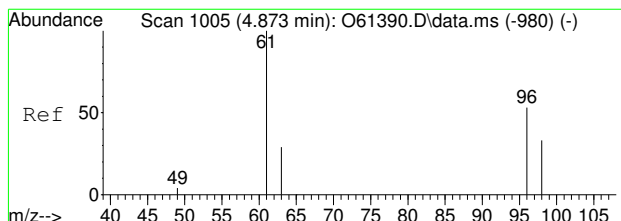
#5
 Methylene Chloride
 Concen: 0.14 ug/L
 RT: 4.699 min Scan# 959
 Delta R.T. -0.008 min
 Lab File: O61418.d
 Acq: 16 Sep 2020 5:34 pm

Tgt Ion	Resp	Lower	Upper
49	6804		
84	41.3	13.2	73.2
86	25.5	0.0	57.3



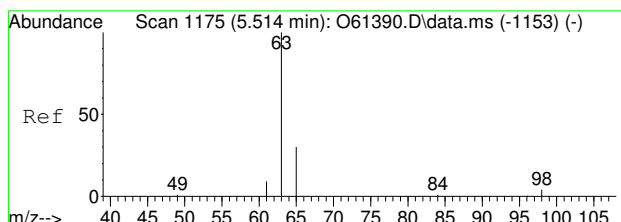
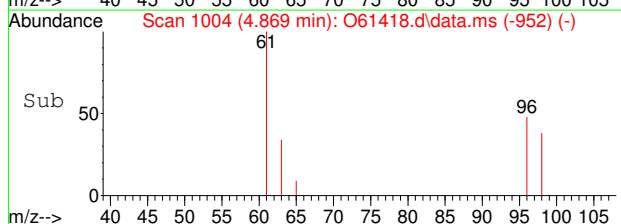
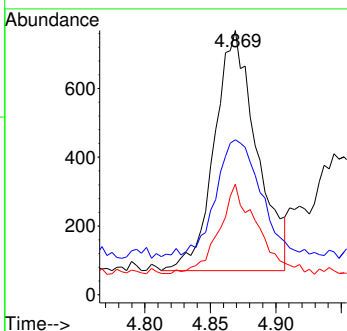
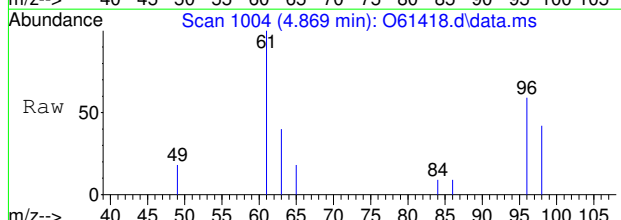
7.1.16
 7





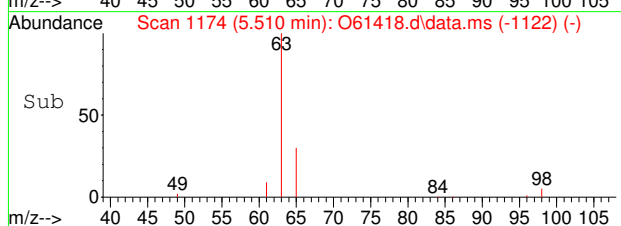
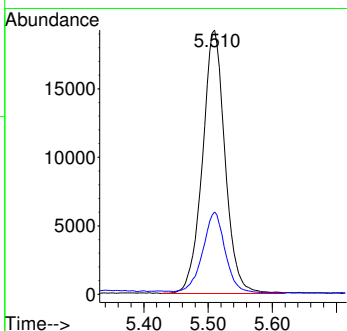
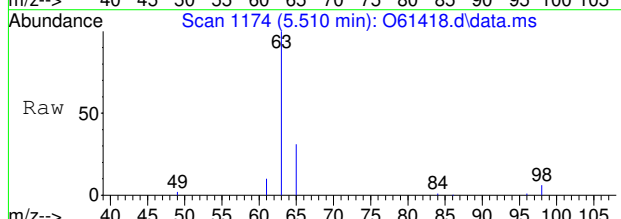
#6
 trans-1,2-Dichloroethene
 Concen: 0.05 ug/L
 RT: 4.869 min Scan# 1004
 Delta R.T. -0.004 min
 Lab File: O61418.d
 Acq: 16 Sep 2020 5:34 pm

Tgt Ion	Resp	Lower	Upper
61	1568		
61	100		
96	48.6	23.0	83.0
98	37.2	2.9	62.9

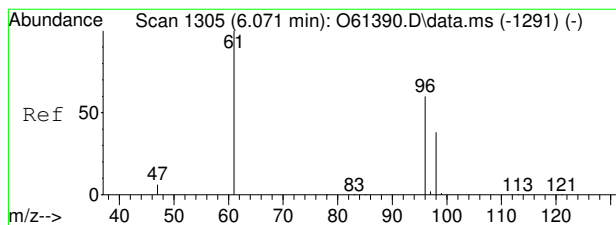


#7
 1,1-Dichloroethane
 Concen: 1.44 ug/L
 RT: 5.510 min Scan# 1174
 Delta R.T. -0.004 min
 Lab File: O61418.d
 Acq: 16 Sep 2020 5:34 pm

Tgt Ion	Resp	Lower	Upper
63	46870		
63	100		
65	30.7	0.2	60.2

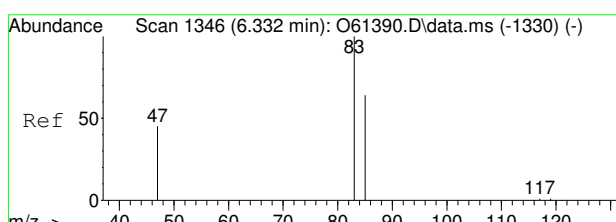
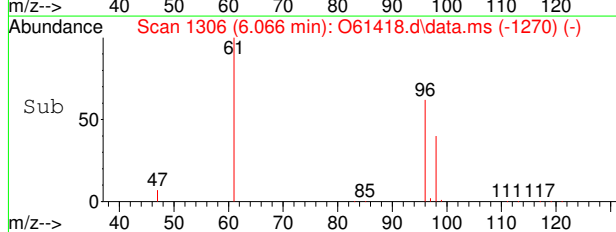
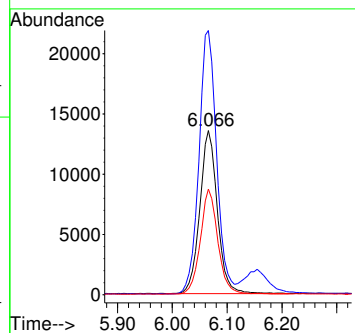
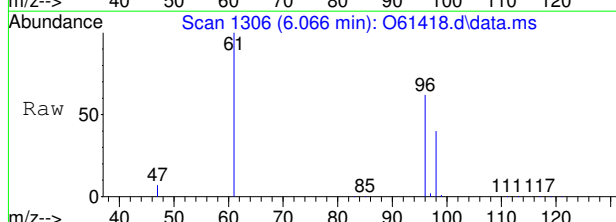


7.1.16
7



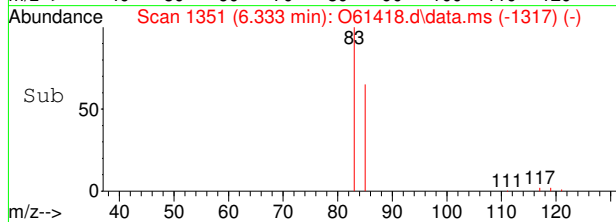
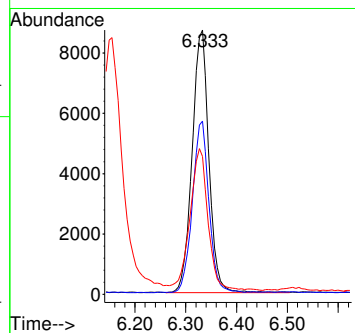
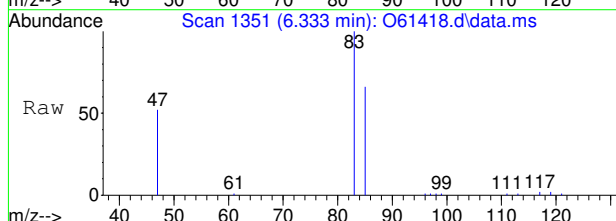
#8
 cis-1,2-Dichloroethene
 Concen: 2.06 ug/L
 RT: 6.066 min Scan# 1306
 Delta R.T. -0.005 min
 Lab File: O61418.d
 Acq: 16 Sep 2020 5:34 pm

Tgt Ion	Resp	Lower	Upper
96	30280		
61	161.5	135.7	195.7
98	64.3	33.1	93.1



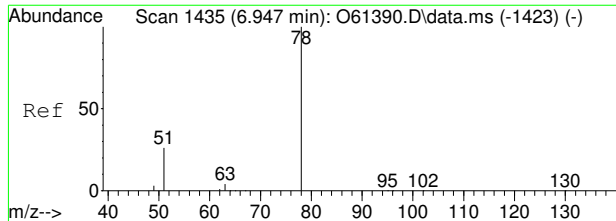
#9
 Chloroform
 Concen: 0.72 ug/L
 RT: 6.333 min Scan# 1351
 Delta R.T. 0.001 min
 Lab File: O61418.d
 Acq: 16 Sep 2020 5:34 pm

Tgt Ion	Resp	Lower	Upper
83	19837		
85	65.2	33.9	93.9
47	50.1	14.9	74.9



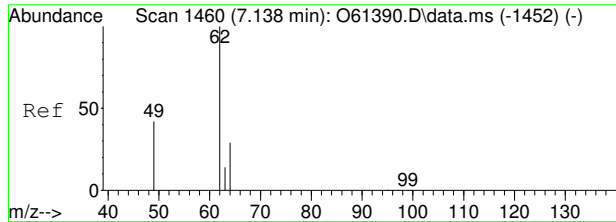
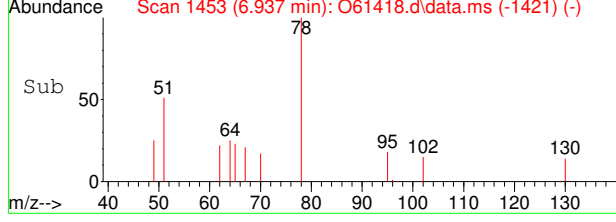
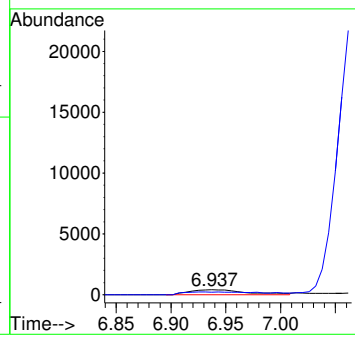
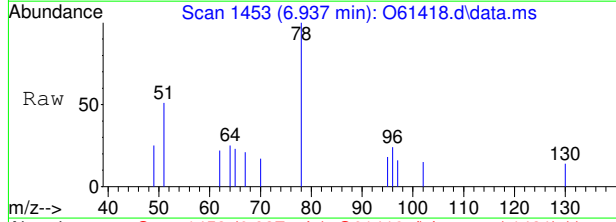
7.1.16
7





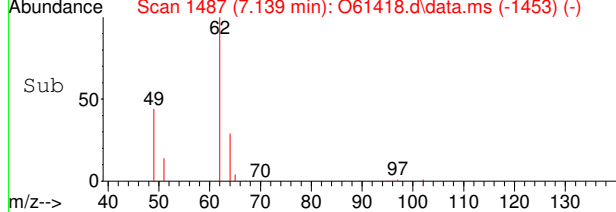
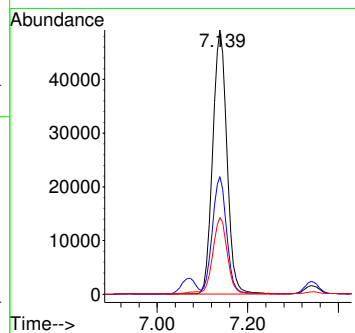
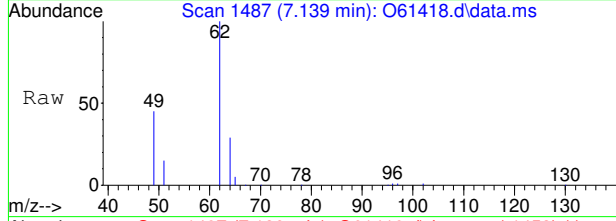
#12
Benzene
Concen: 0.03 ug/L
RT: 6.937 min Scan# 1453
Delta R.T. -0.010 min
Lab File: O61418.d
Acq: 16 Sep 2020 5:34 pm

Tgt Ion	Resp	Lower	Upper
78	1539	100	
51	51.2	0.0	56.0

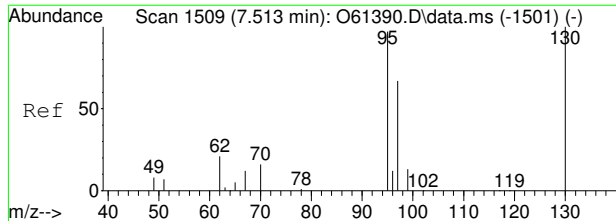


#14
1,2-Dichloroethane
Concen: 4.22 ug/L
RT: 7.139 min Scan# 1487
Delta R.T. 0.001 min
Lab File: O61418.d
Acq: 16 Sep 2020 5:34 pm

Tgt Ion	Resp	Lower	Upper
62	107313	100	
49	44.4	13.6	73.6
64	28.8	0.0	58.8



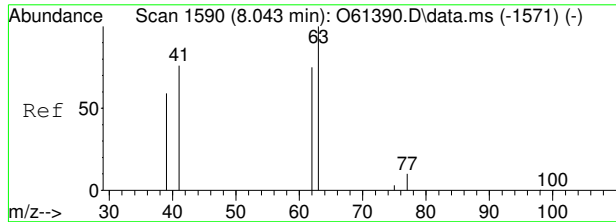
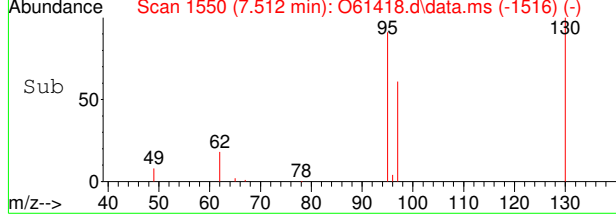
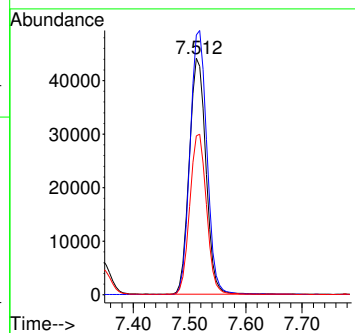
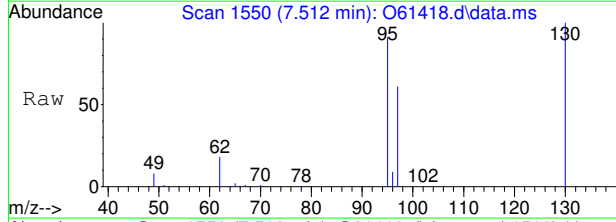
7.1.16
7



#15
 Trichloroethene
 Concen: 5.88 ug/L
 RT: 7.512 min Scan# 1550
 Delta R.T. -0.001 min
 Lab File: O61418.d
 Acq: 16 Sep 2020 5:34 pm

Tgt Ion: 95 Resp: 90585

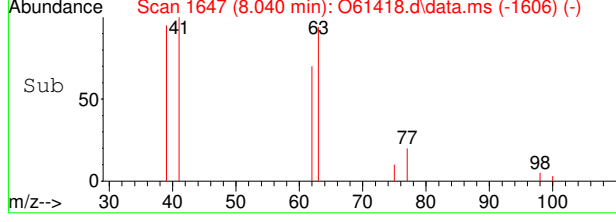
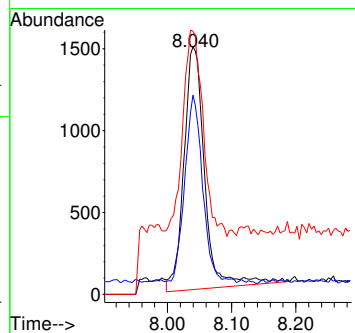
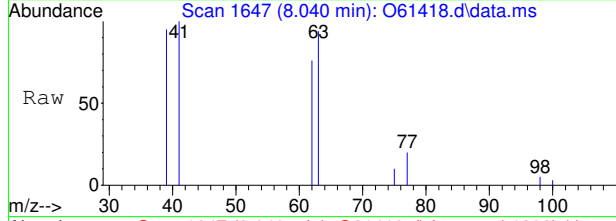
Ion	Ratio	Lower	Upper
95	100		
130	109.9	72.6	132.6
97	67.2	38.6	98.6



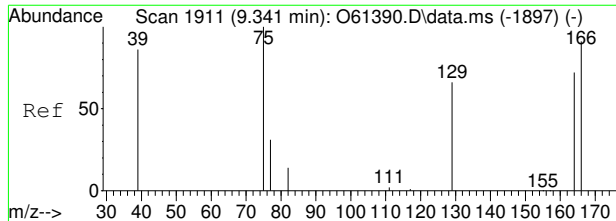
#16
 1,2-Dichloropropane
 Concen: 0.19 ug/L
 RT: 8.040 min Scan# 1647
 Delta R.T. -0.003 min
 Lab File: O61418.d
 Acq: 16 Sep 2020 5:34 pm

Tgt Ion: 63 Resp: 3337

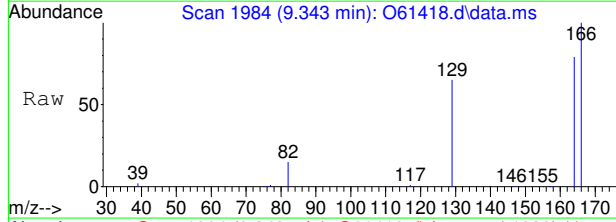
Ion	Ratio	Lower	Upper
63	100		
62	79.7	44.5	104.5
41	85.8	45.9	105.9



7.1.16
7

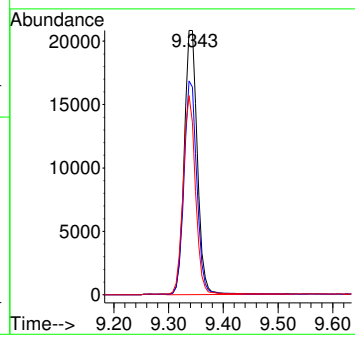
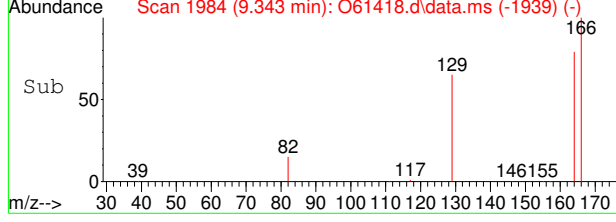


#21
 Tetrachloroethene
 Concen: 2.29 ug/L
 RT: 9.343 min Scan# 1984
 Delta R.T. 0.002 min
 Lab File: O61418.d
 Acq: 16 Sep 2020 5:34 pm



Tgt Ion: 166 Resp: 34382

Ion	Ratio	Lower	Upper
166	100		
164	78.5	49.1	109.1
129	65.1	42.2	102.2



7.1.16
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-11-2020\vo2354\
Data File : O61172.d
Acq On : 10 Sep 2020 2:20 pm
Operator : melissam
Sample : FA78549-12
Misc : MS47173,VO2354,,,,,
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Sep 14 07:56:10 2020
Quant Method : C:\msdchem\1\methods\SIMCL090820.M
Quant Title : Standard Methods 6200B
QLast Update : Wed Sep 09 12:10:38 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)	

Internal Standards							
1) Fluorobenzene	7.346	96	177233	5.00	ug/L	0.00	
18) Chlorobenzene-d5	10.447	117	120435	5.00	ug/L	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.074	65	89384	5.74	ug/L	0.00	
Spiked Amount	5.000	Range	74 - 125	Recovery	=	114.80%	
19) Toluene-d8	8.896	98	151234	5.14	ug/L	0.00	
Spiked Amount	5.000	Range	88 - 111	Recovery	=	102.80%	
Target Compounds							
2) Vinyl Chloride	2.901	62	9980	0.57	ug/L	96	Qvalue
3) Chloromethane	2.780	50	8262	0.32	ug/L	87	
4) 1,1-Dichloroethene	4.092	61	6844	0.29	ug/L	76	
5) Methylene Chloride	4.700	49	19132	0.43	ug/L	84	
6) trans-1,2-Dichloroethene	4.869	61	3267	0.11	ug/L	68	
7) 1,1-Dichloroethane	5.510	63	189259	5.68	ug/L	97	
8) cis-1,2-Dichloroethene	6.066	96	132082	8.91	ug/L #	50	
9) Chloroform	6.333	83	7486	0.28	ug/L #	76	
12) Benzene	6.937	78	8103m	0.15	ug/L		
14) 1,2-Dichloroethane	7.139	62	57601	1.98	ug/L	93	
15) Trichloroethene	7.518	95	37835	2.45	ug/L	97	
16) 1,2-Dichloropropane	8.040	63	13327	0.69	ug/L	97	
21) Tetrachloroethene	9.343	166	26146	2.24	ug/L	99	
22) 1,4-Dichlorobenzene	12.827	146	100627	3.97	ug/L	97	

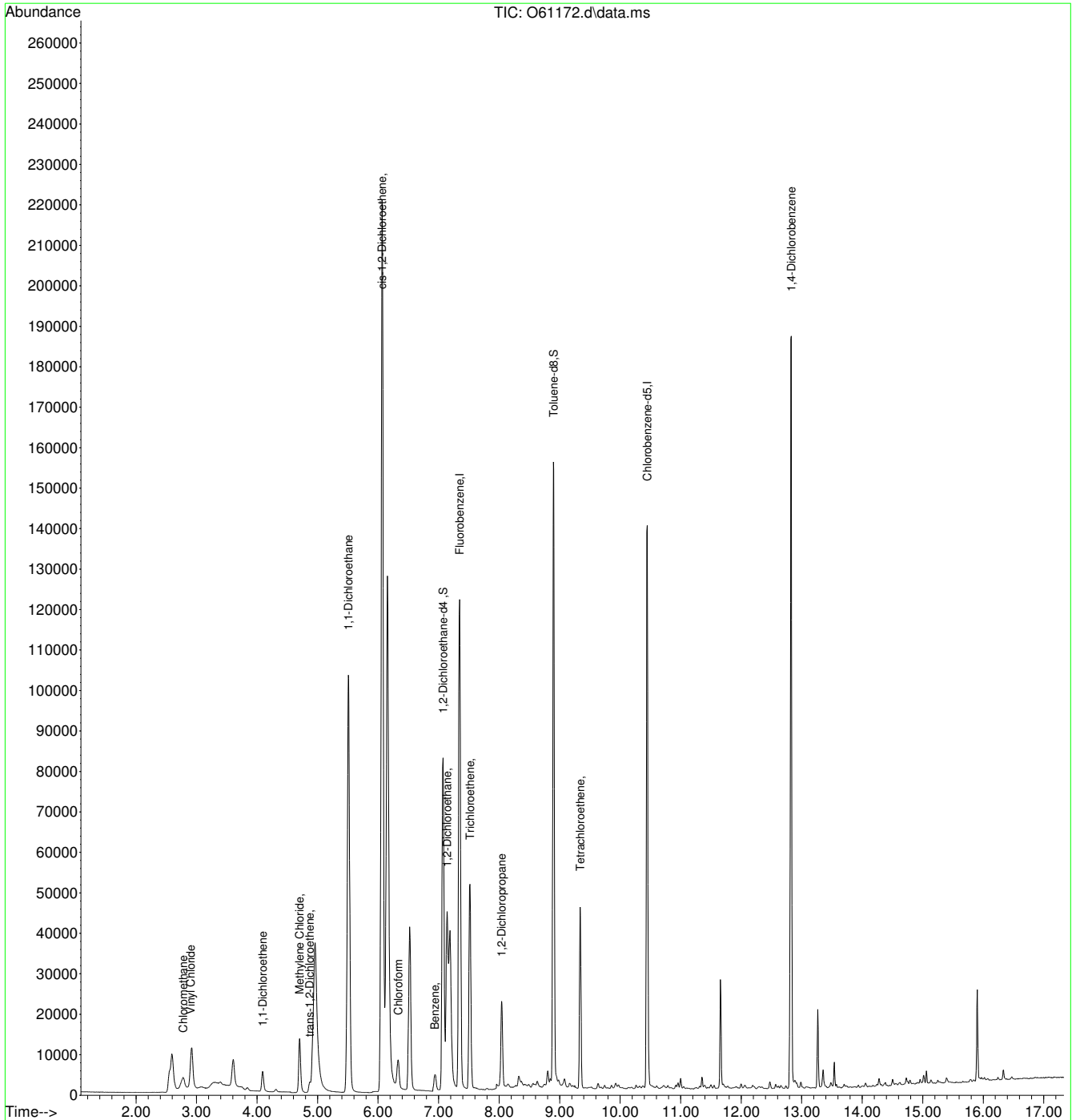
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.1.17
7

Quantitation Report (QT Reviewed)

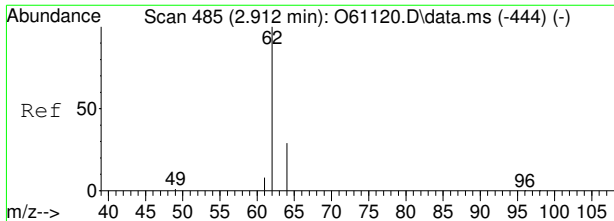
Data Path : C:\msdchem\1\data\johnm\September 2020\09-11-2020\vo2354\
 Data File : O61172.d
 Acq On : 10 Sep 2020 2:20 pm
 Operator : melissam
 Sample : FA78549-12
 Misc : MS47173,VO2354,,,,,
 ALS Vial : 20 Sample Multiplier: 1

Quant Time: Sep 14 07:56:10 2020
 Quant Method : C:\msdchem\1\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration



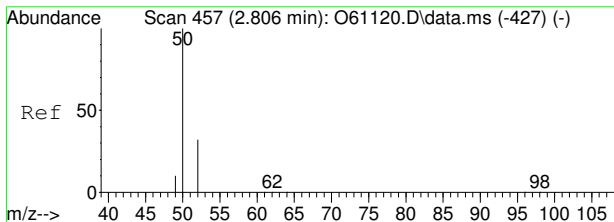
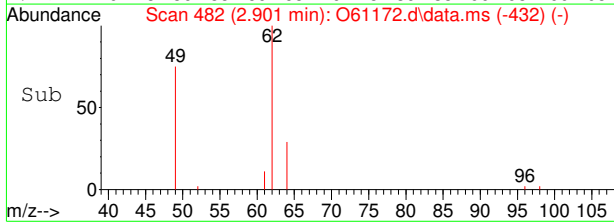
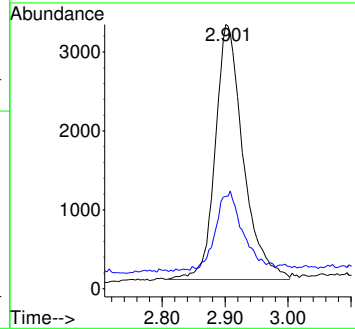
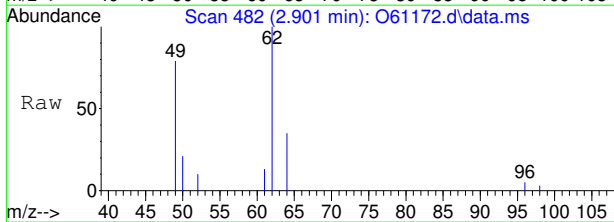
7.1.17
7





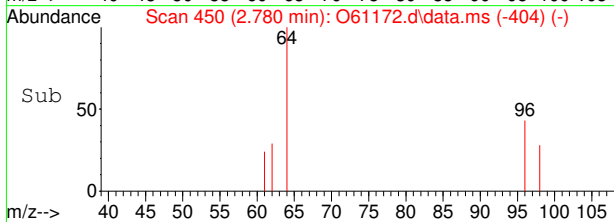
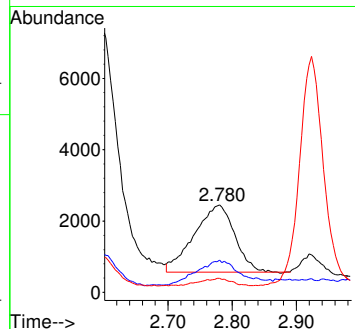
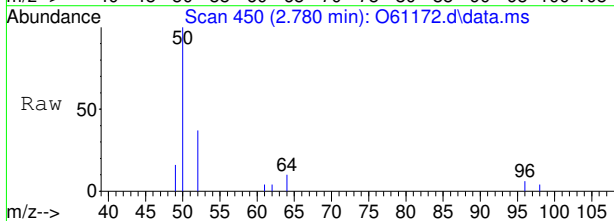
#2
 Vinyl Chloride
 Concen: 0.57 ug/L
 RT: 2.901 min Scan# 482
 Delta R.T. -0.011 min
 Lab File: O61172.d
 Acq: 10 Sep 2020 2:20 pm

Tgt Ion	Resp	Lower	Upper
62	9980		
64	28.9	0.9	60.9

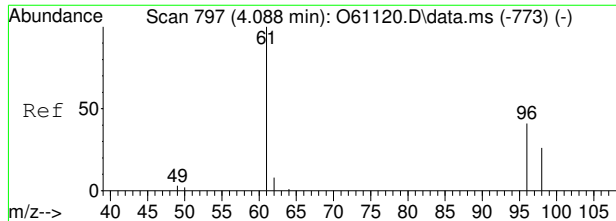


#3
 Chloromethane
 Concen: 0.32 ug/L
 RT: 2.780 min Scan# 450
 Delta R.T. -0.026 min
 Lab File: O61172.d
 Acq: 10 Sep 2020 2:20 pm

Tgt Ion	Resp	Lower	Upper
50	8262		
52	36.8	7.8	47.8
49	10.3	0.0	30.5

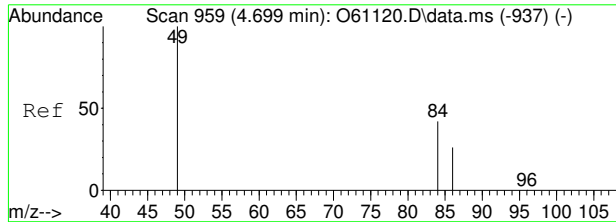
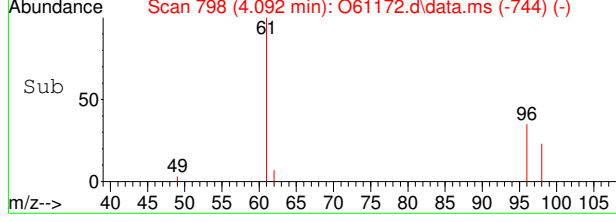
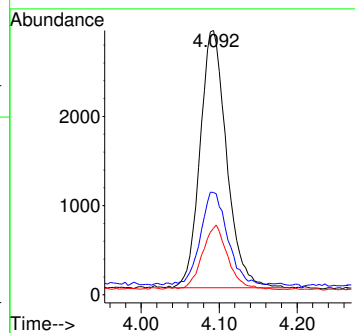
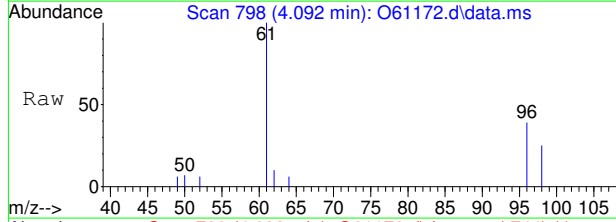


7.1.17
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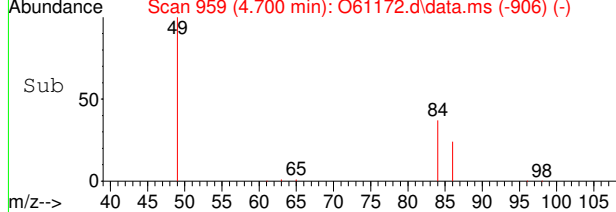
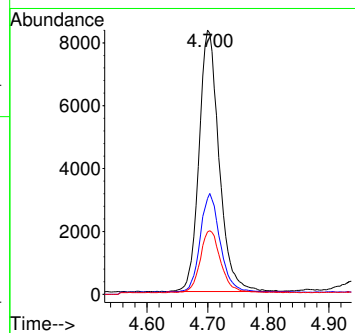
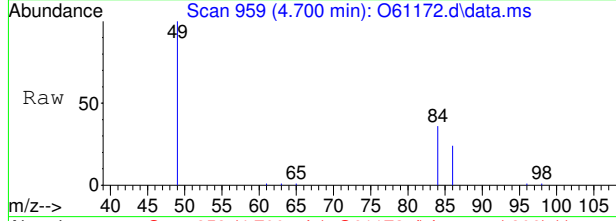
#4
 1,1-Dichloroethene
 Concen: 0.29 ug/L
 RT: 4.092 min Scan# 798
 Delta R.T. 0.004 min
 Lab File: O61172.d
 Acq: 10 Sep 2020 2:20 pm

Tgt Ion	Ratio	Lower	Upper
61	100		
96	36.1	25.4	85.4
98	23.6	5.9	65.9



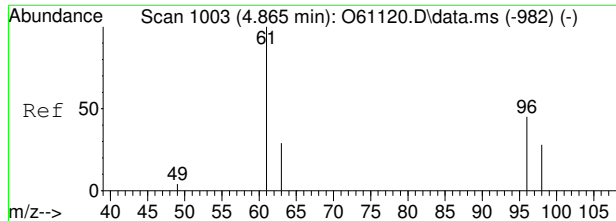
#5
 Methylene Chloride
 Concen: 0.43 ug/L
 RT: 4.700 min Scan# 959
 Delta R.T. 0.000 min
 Lab File: O61172.d
 Acq: 10 Sep 2020 2:20 pm

Tgt Ion	Ratio	Lower	Upper
49	100		
84	35.8	17.9	77.9
86	23.2	0.0	59.8



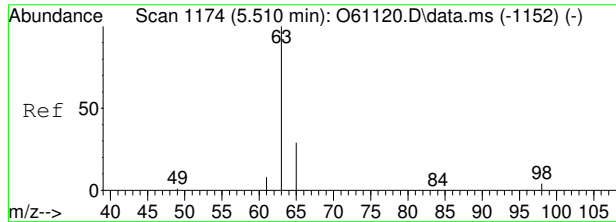
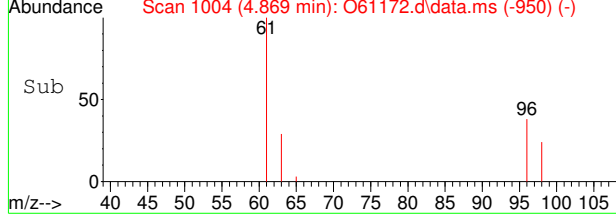
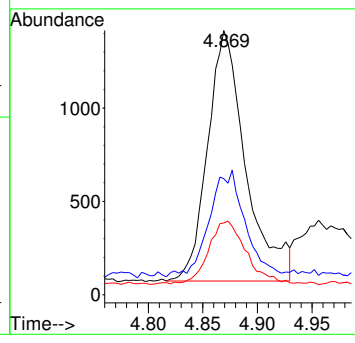
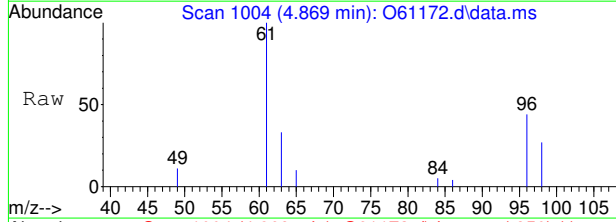
7.1.17





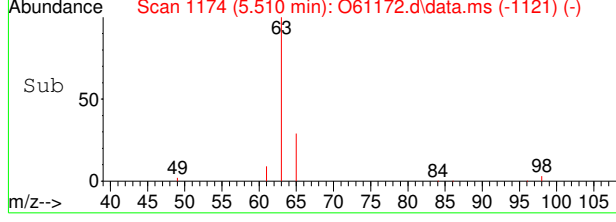
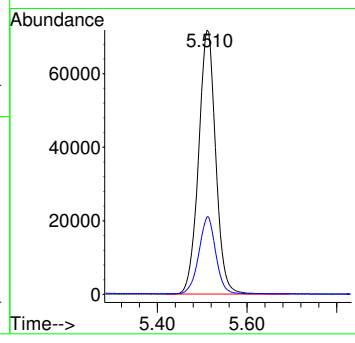
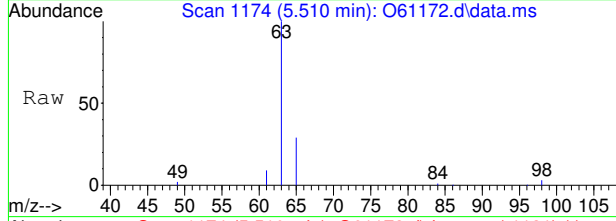
#6
 trans-1,2-Dichloroethene
 Concen: 0.11 ug/L
 RT: 4.869 min Scan# 1004
 Delta R.T. 0.004 min
 Lab File: O61172.d
 Acq: 10 Sep 2020 2:20 pm

Tgt Ion	Resp	Lower	Upper
61	3267		
61	100		
96	39.1	36.9	96.9
98	23.8	11.1	71.1



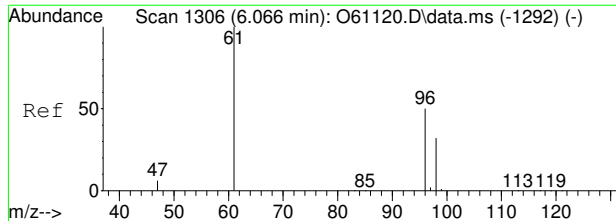
#7
 1,1-Dichloroethane
 Concen: 5.68 ug/L
 RT: 5.510 min Scan# 1174
 Delta R.T. 0.000 min
 Lab File: O61172.d
 Acq: 10 Sep 2020 2:20 pm

Tgt Ion	Resp	Lower	Upper
63	189259		
63	100		
65	29.2	0.7	60.7



7.1.17
7

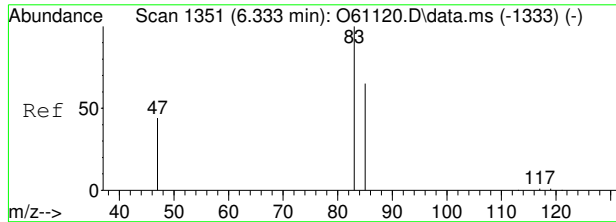
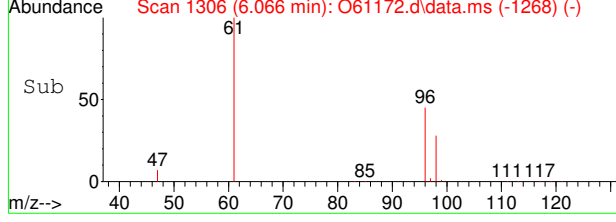
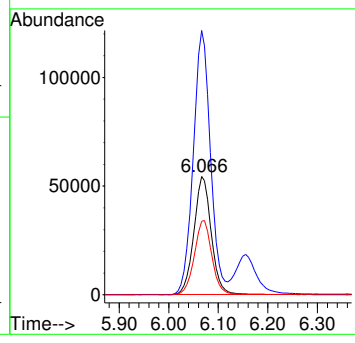
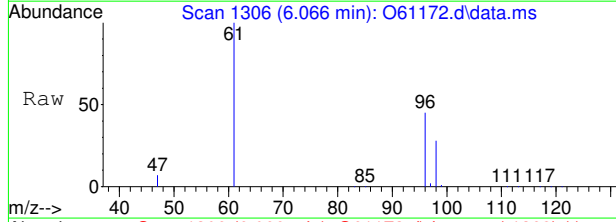




#8
 cis-1,2-Dichloroethene
 Concen: 8.91 ug/L
 RT: 6.066 min Scan# 1306
 Delta R.T. 0.000 min
 Lab File: O61172.d
 Acq: 10 Sep 2020 2:20 pm

Tgt Ion: 96 Resp: 132082

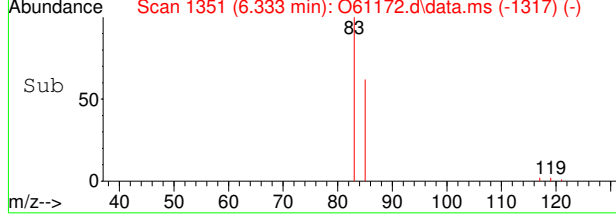
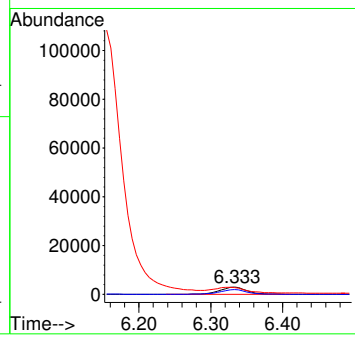
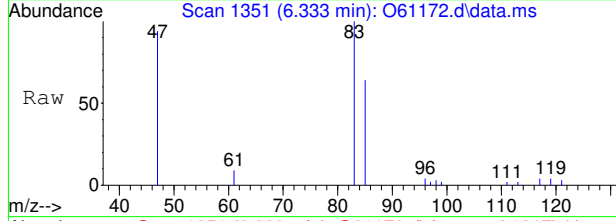
Ion	Ratio	Lower	Upper
96	100		
61	223.8	107.0	167.0#
98	62.2	34.1	94.1



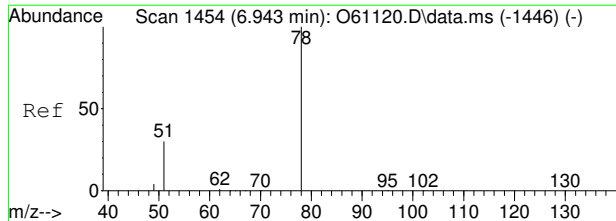
#9
 Chloroform
 Concen: 0.28 ug/L
 RT: 6.333 min Scan# 1351
 Delta R.T. 0.000 min
 Lab File: O61172.d
 Acq: 10 Sep 2020 2:20 pm

Tgt Ion: 83 Resp: 7486

Ion	Ratio	Lower	Upper
83	100		
85	63.5	33.0	93.0
47	76.0	8.1	68.1#

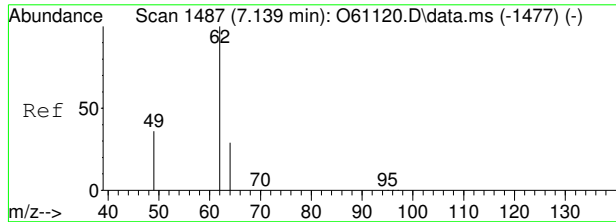
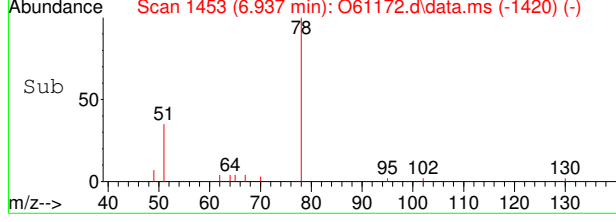
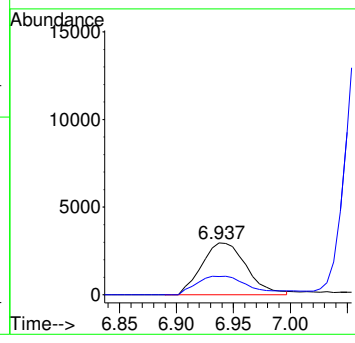
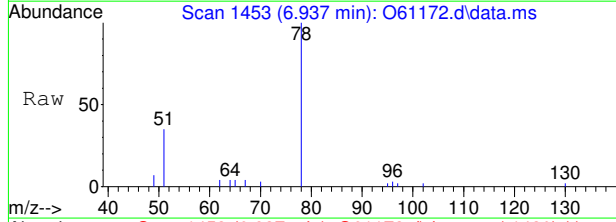


7.1.17



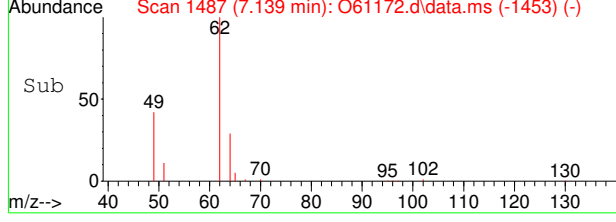
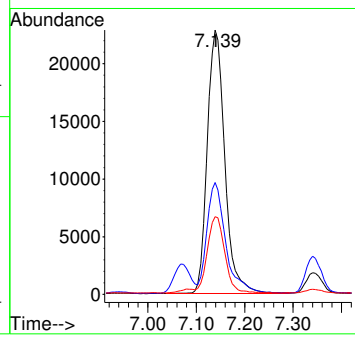
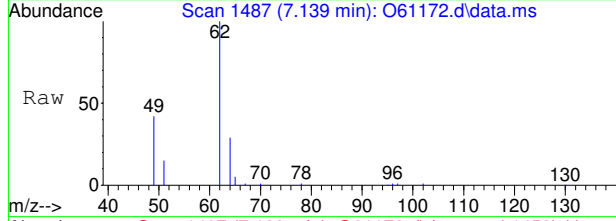
#12
Benzene
Concen: 0.15 ug/L m
RT: 6.937 min Scan# 1453
Delta R.T. -0.006 min
Lab File: O61172.d
Acq: 10 Sep 2020 2:20 pm

Tgt Ion	Resp	Lower	Upper
78	8103	100	
51	35.2	0.0	56.2



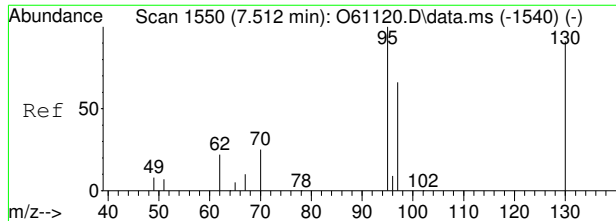
#14
1,2-Dichloroethane
Concen: 1.98 ug/L
RT: 7.139 min Scan# 1487
Delta R.T. 0.000 min
Lab File: O61172.d
Acq: 10 Sep 2020 2:20 pm

Tgt Ion	Resp	Lower	Upper
62	57601	100	
49	41.8	18.0	78.0
64	29.0	1.5	61.5



7.1.17
7

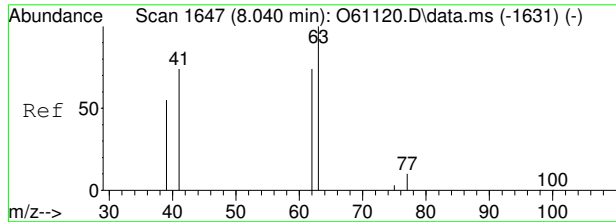
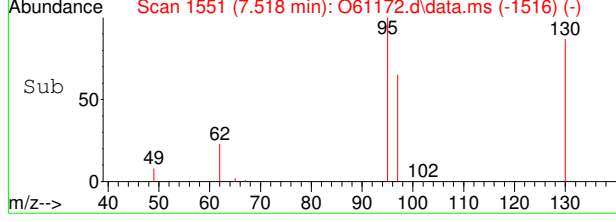
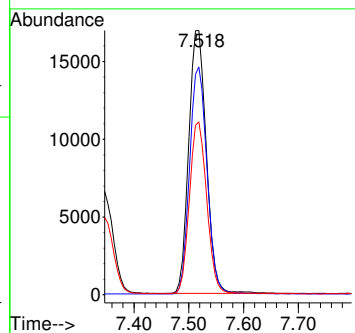
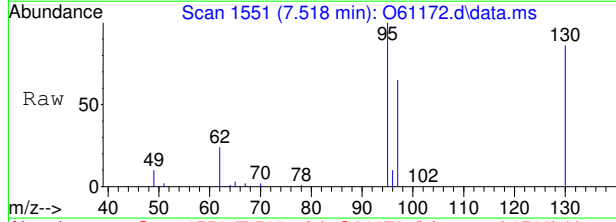




#15
 Trichloroethene
 Concen: 2.45 ug/L
 RT: 7.518 min Scan# 1551
 Delta R.T. 0.006 min
 Lab File: O61172.d
 Acq: 10 Sep 2020 2:20 pm

Tgt Ion: 95 Resp: 37835

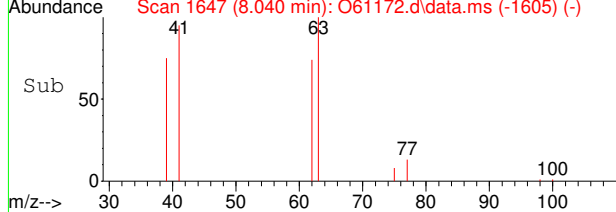
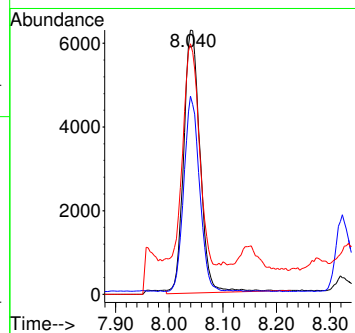
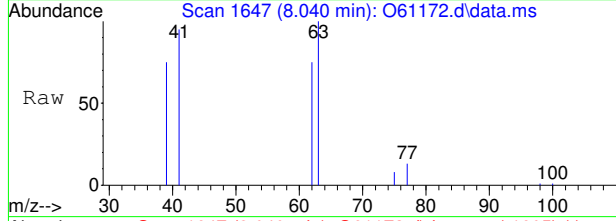
Ion	Ratio	Lower	Upper
95	100		
130	86.4	60.4	120.4
97	65.3	34.6	94.6



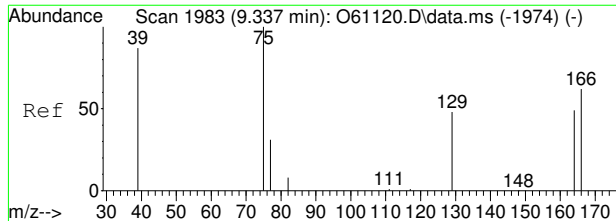
#16
 1,2-Dichloropropane
 Concen: 0.69 ug/L
 RT: 8.040 min Scan# 1647
 Delta R.T. 0.000 min
 Lab File: O61172.d
 Acq: 10 Sep 2020 2:20 pm

Tgt Ion: 63 Resp: 13327

Ion	Ratio	Lower	Upper
63	100		
62	74.8	42.7	102.7
41	86.9	54.5	114.5

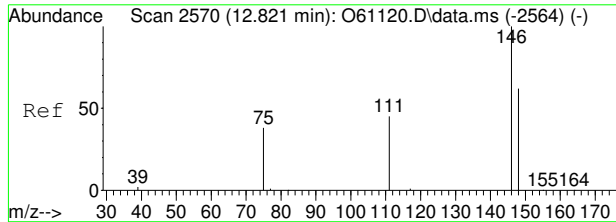
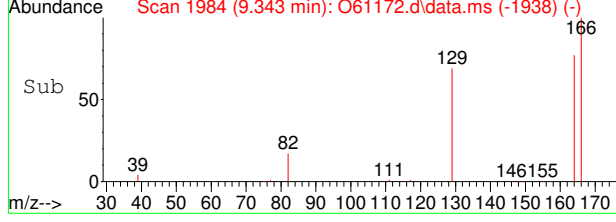
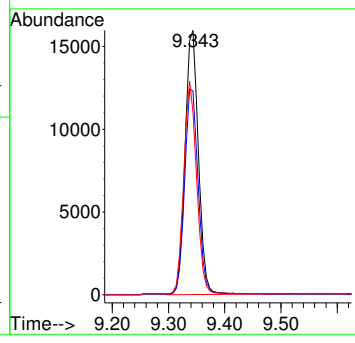
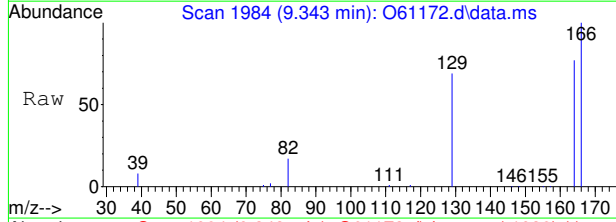


7.1.17



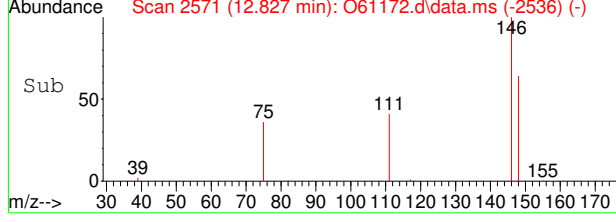
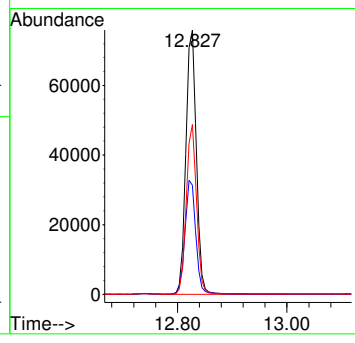
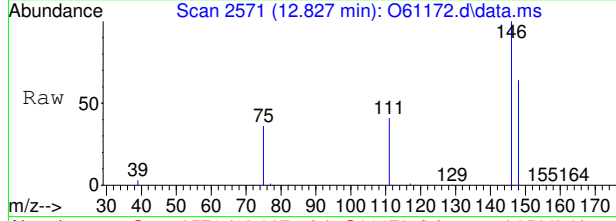
#21
 Tetrachloroethene
 Concen: 2.24 ug/L
 RT: 9.343 min Scan# 1984
 Delta R.T. 0.006 min
 Lab File: O61172.d
 Acq: 10 Sep 2020 2:20 pm

Tgt Ion	Resp	Lower	Upper
166	26146		
166	100		
164	77.0	47.3	107.3
129	69.0	37.5	97.5



#22
 1,4-Dichlorobenzene
 Concen: 3.97 ug/L
 RT: 12.827 min Scan# 2571
 Delta R.T. 0.006 min
 Lab File: O61172.d
 Acq: 10 Sep 2020 2:20 pm

Tgt Ion	Resp	Lower	Upper
146	100627		
146	100		
111	41.2	17.0	57.0
148	64.2	43.7	83.7



7.1.17



Manual Integration Approval Summary

Sample Number: FA78549-12 **Method:** SW846 8260B BY SIM
Lab FileID: O61172.D **Analyst approved:** 09/17/20 16:09 Juan Garcia
Injection Time: 09/10/20 14:20 **Supervisor approved:** 09/18/20 14:40 Melissa Mangual

Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzene	71-43-2		6.94	Poor instrument integration

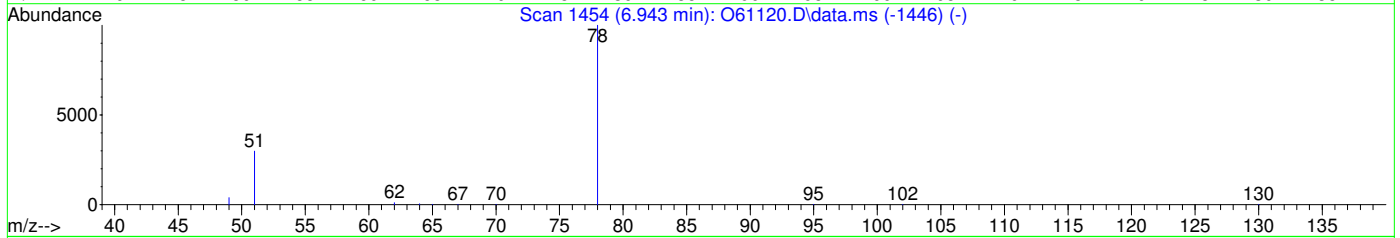
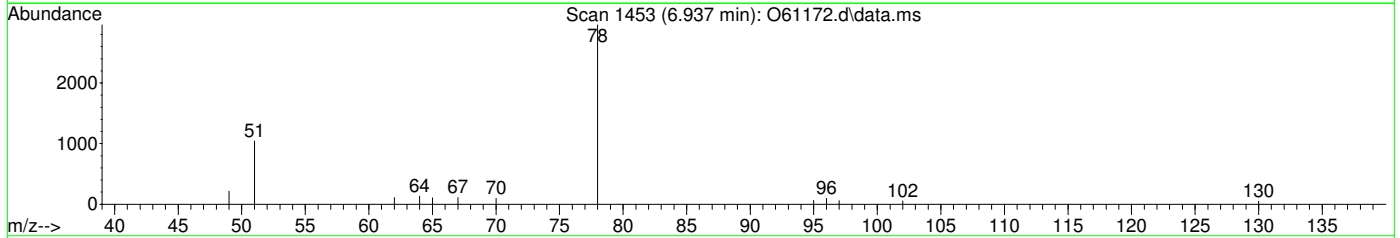
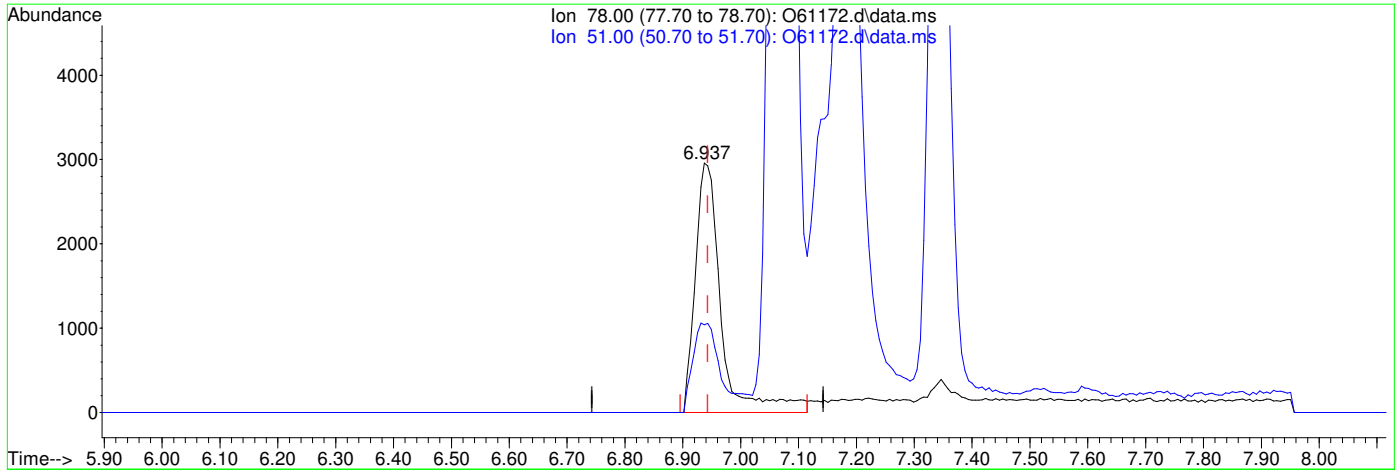
7.1.17.1

7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-11-2020\vo2354\
 Data File : O61172.d
 Acq On : 10 Sep 2020 2:20 pm
 Operator : melissam
 Sample : FA78549-12
 Misc : MS47173,VO2354,,,,,
 ALS Vial : 20 Sample Multiplier: 1

Quant Time: Sep 14 07:55:56 2020
 Quant Method : C:\msdchem\1\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration



(12) Benzene ()

6.937min (-0.006) 0.17ug/L

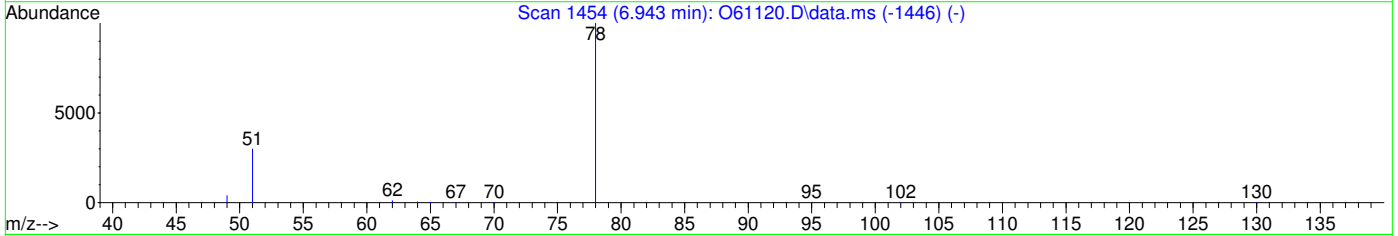
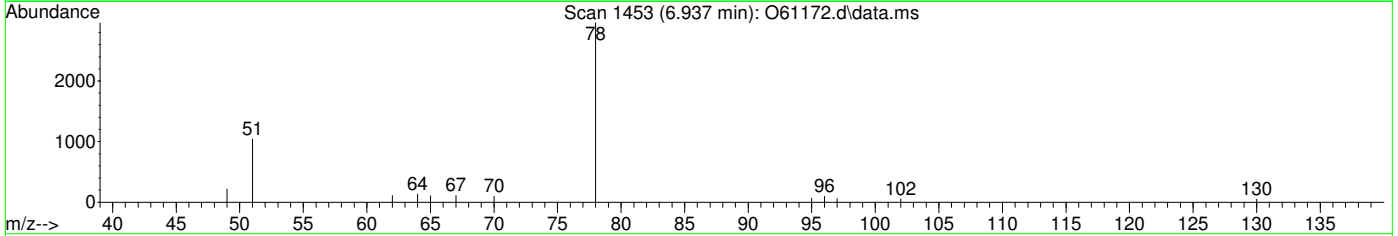
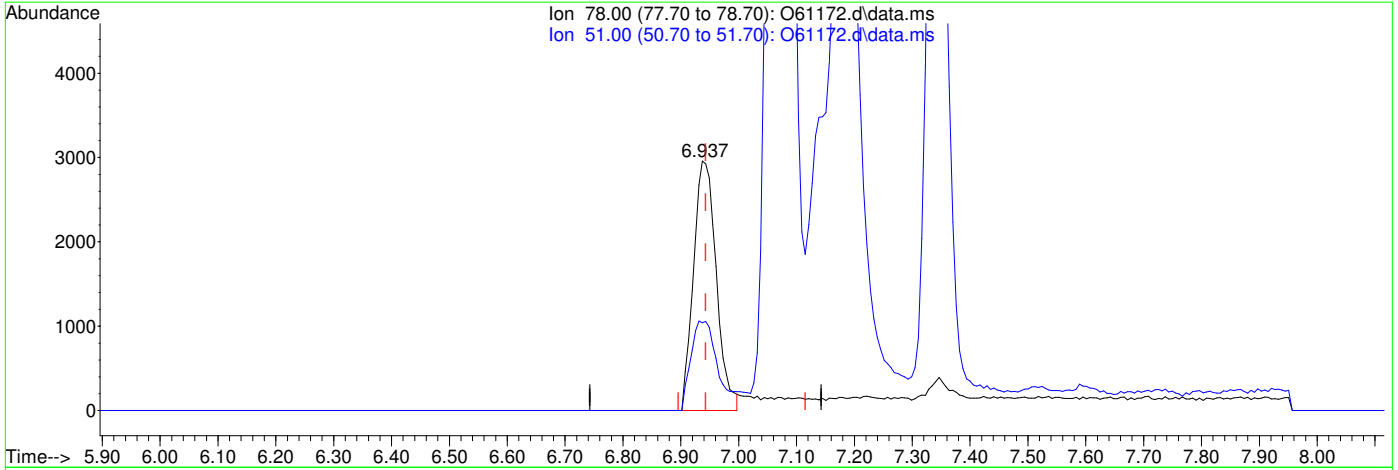
response 9184

Ion	Exp%	Act%
78.00	100	100
51.00	26.20	35.24
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-11-2020\vo2354\
 Data File : O61172.d
 Acq On : 10 Sep 2020 2:20 pm
 Operator : melissam
 Sample : FA78549-12
 Misc : MS47173,VO2354,,,,,
 ALS Vial : 20 Sample Multiplier: 1

Quant Time: Sep 14 07:55:56 2020
 Quant Method : C:\msdchem\1\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration



(12) Benzene ()

6.937min (-0.006) 0.15ug/L m

response 8103

Ion	Exp%	Act%
78.00	100	100
51.00	26.20	35.24
0.00	0.00	0.00
0.00	0.00	0.00

7.1.17.3
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-17-2020\vo2363\
 Data File : O61419.d
 Acq On : 16 Sep 2020 5:55 pm
 Operator : akarig
 Sample : FA78549-12
 Misc : MS47193,VO2363,,,,,
 ALS Vial : 20 Sample Multiplier: 1

Quant Time: Sep 17 04:57:08 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091520.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 16 09:02:25 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)	

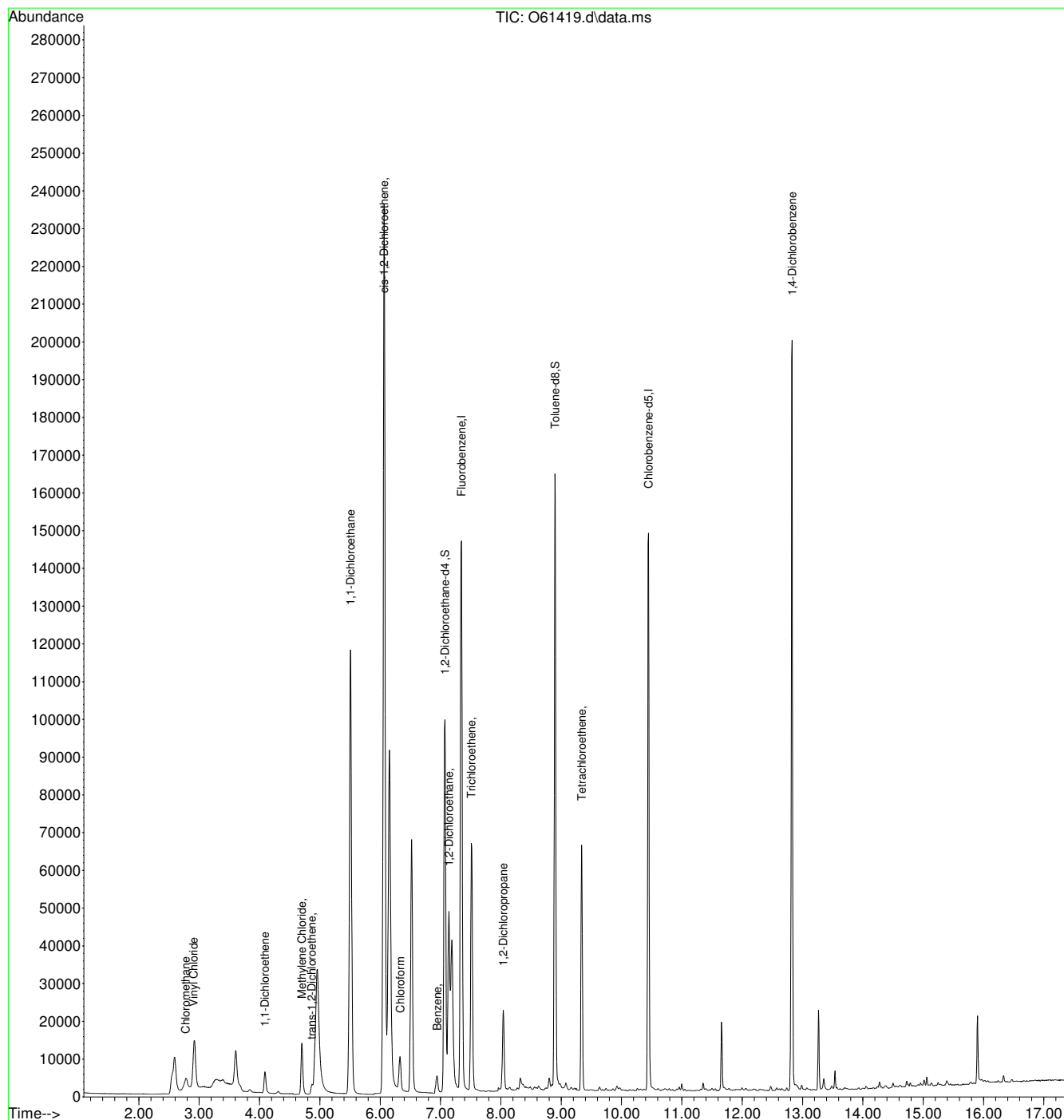
Internal Standards							
1) Fluorobenzene	7.346	96	217133	5.00	ug/L	0.00	
18) Chlorobenzene-d5	10.447	117	142690	5.00	ug/L	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.074	65	97493	5.33	ug/L	0.00	
Spiked Amount	5.000	Range 74 - 125	Recovery	=	106.60%		
19) Toluene-d8	8.896	98	159675	5.48	ug/L	0.00	
Spiked Amount	5.000	Range 88 - 111	Recovery	=	109.60%		
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.905	62	12910	0.46	ug/L		99
3) Chloromethane	2.776	50	7786	0.18	ug/L		93
4) 1,1-Dichloroethene	4.089	61	6617	0.20	ug/L		98
5) Methylene Chloride	4.699	49	17912	0.29	ug/L		99
6) trans-1,2-Dichloroethene	4.865	61	2664	0.07	ug/L		94
7) 1,1-Dichloroethane	5.510	63	195209	4.61	ug/L		100
8) cis-1,2-Dichloroethene	6.066	96	150202	7.86	ug/L		99
9) Chloroform	6.333	83	8965	0.25	ug/L		91
12) Benzene	6.943	78	8417m	0.13	ug/L		
14) 1,2-Dichloroethane	7.139	62	56178	1.70	ug/L		99
15) Trichloroethene	7.512	95	41965	2.10	ug/L		93
16) 1,2-Dichloropropane	8.040	63	12485	0.56	ug/L		94
21) Tetrachloroethene	9.337	166	38672	2.37	ug/L		99
22) 1,4-Dichlorobenzene	12.827	146	118657	3.81	ug/L		98

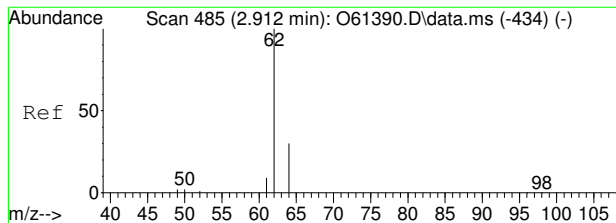
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-17-2020\vo2363\
 Data File : O61419.d
 Acq On : 16 Sep 2020 5:55 pm
 Operator : akarig
 Sample : FA78549-12
 Misc : MS47193,VO2363,,,,,
 ALS Vial : 20 Sample Multiplier: 1

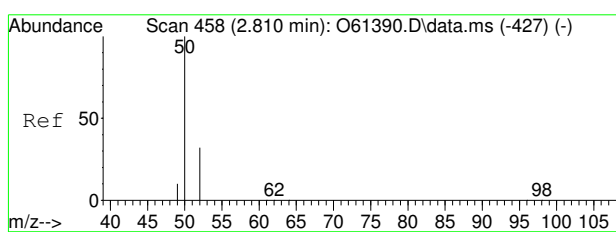
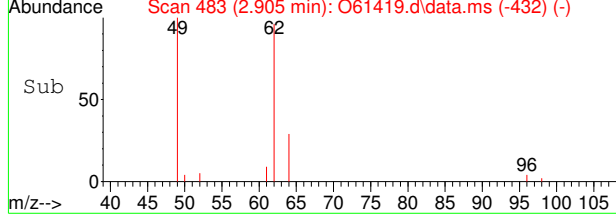
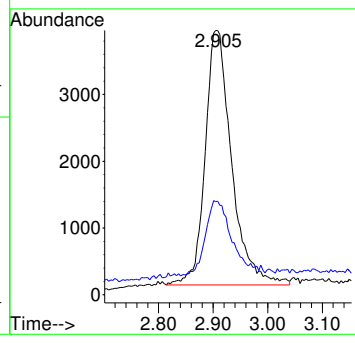
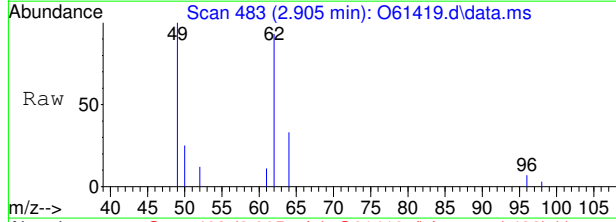
Quant Time: Sep 17 04:57:08 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091520.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 16 09:02:25 2020
 Response via : Initial Calibration





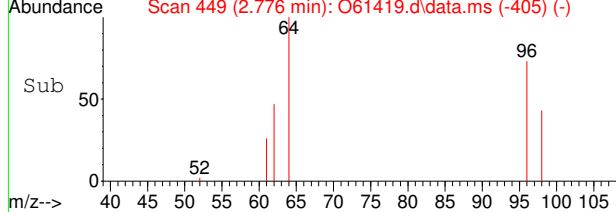
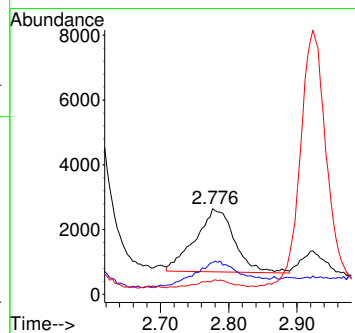
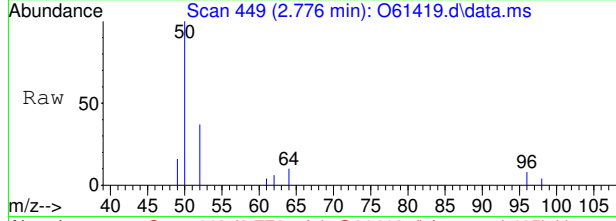
#2
 Vinyl Chloride
 Concen: 0.46 ug/L
 RT: 2.905 min Scan# 483
 Delta R.T. -0.007 min
 Lab File: O61419.d
 Acq: 16 Sep 2020 5:55 pm

Tgt Ion	Resp	Lower	Upper
62	12910		
64	29.4	0.0	59.8

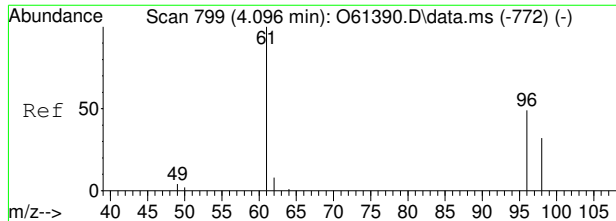


#3
 Chloromethane
 Concen: 0.18 ug/L
 RT: 2.776 min Scan# 449
 Delta R.T. -0.034 min
 Lab File: O61419.d
 Acq: 16 Sep 2020 5:55 pm

Tgt Ion	Resp	Lower	Upper
50	7786		
52	36.3	12.1	52.1
49	11.8	0.0	30.3

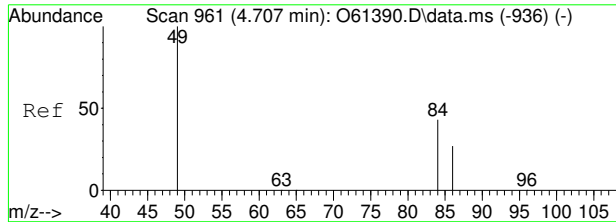
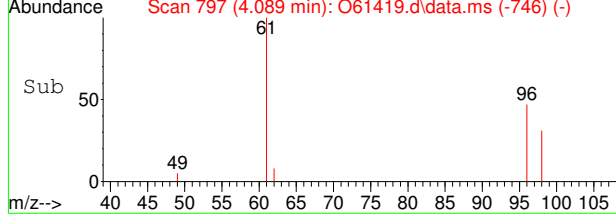
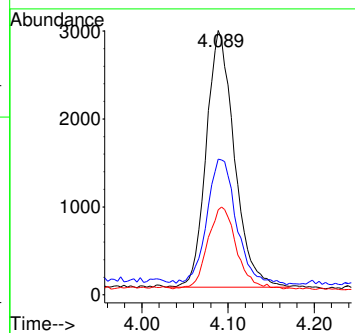
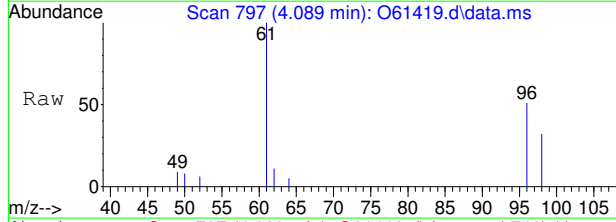


7.1.18
7



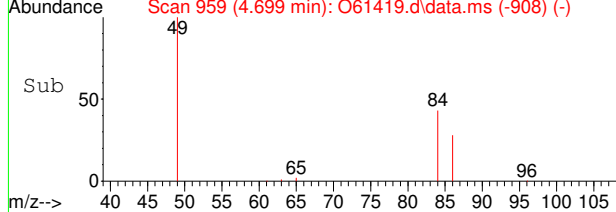
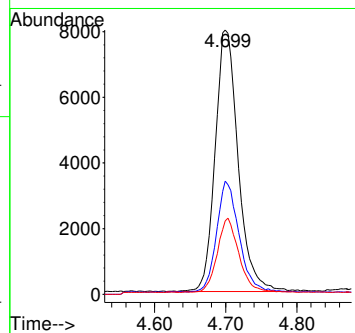
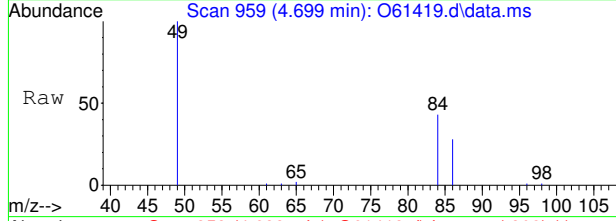
#4
 1,1-Dichloroethene
 Concen: 0.20 ug/L
 RT: 4.089 min Scan# 797
 Delta R.T. -0.007 min
 Lab File: O61419.d
 Acq: 16 Sep 2020 5:55 pm

Tgt Ion	Ratio	Lower	Upper
61	100		
96	48.3	19.3	79.3
98	30.4	1.9	61.9

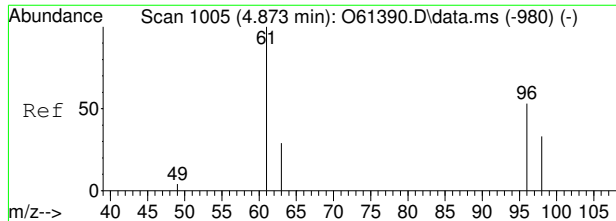


#5
 Methylene Chloride
 Concen: 0.29 ug/L
 RT: 4.699 min Scan# 959
 Delta R.T. -0.008 min
 Lab File: O61419.d
 Acq: 16 Sep 2020 5:55 pm

Tgt Ion	Ratio	Lower	Upper
49	100		
84	42.4	13.2	73.2
86	27.4	0.0	57.3

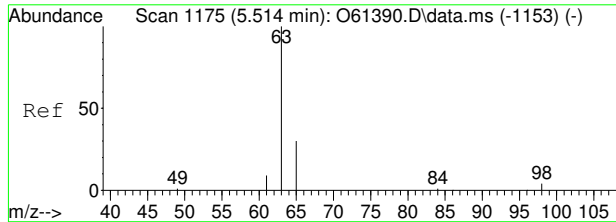
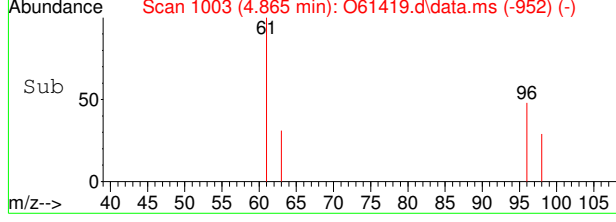
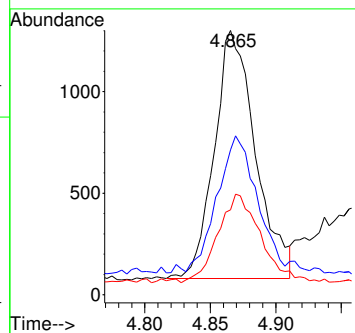
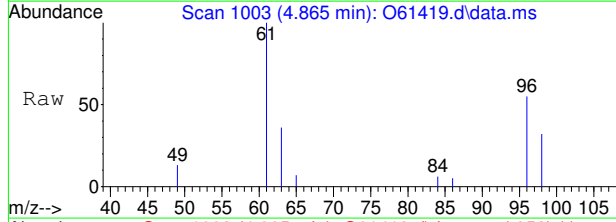


7.1.18
 7



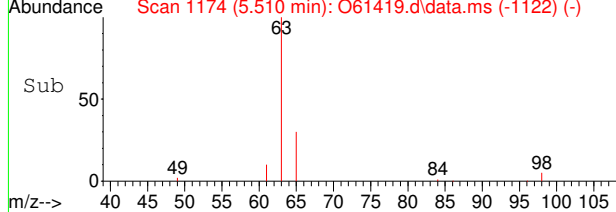
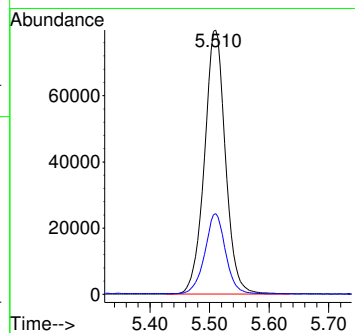
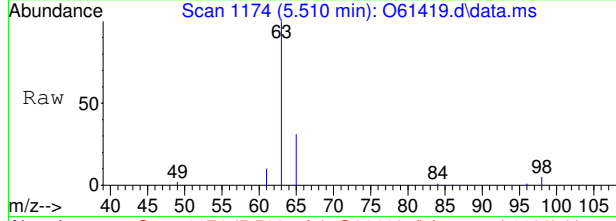
#6
 trans-1,2-Dichloroethene
 Concen: 0.07 ug/L
 RT: 4.865 min Scan# 1003
 Delta R.T. -0.008 min
 Lab File: O61419.d
 Acq: 16 Sep 2020 5:55 pm

Tgt Ion	Resp	Lower	Upper
61	2664		
96	49.6	23.0	83.0
98	28.6	2.9	62.9



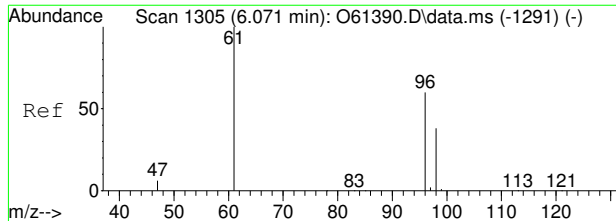
#7
 1,1-Dichloroethane
 Concen: 4.61 ug/L
 RT: 5.510 min Scan# 1174
 Delta R.T. -0.004 min
 Lab File: O61419.d
 Acq: 16 Sep 2020 5:55 pm

Tgt Ion	Resp	Lower	Upper
63	195209		
65	30.4	0.2	60.2



7.1.18
7

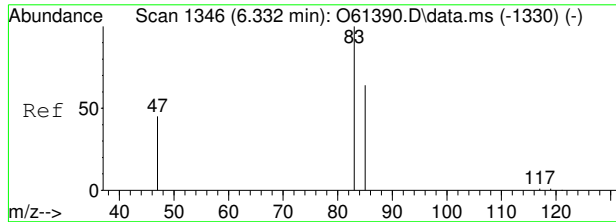
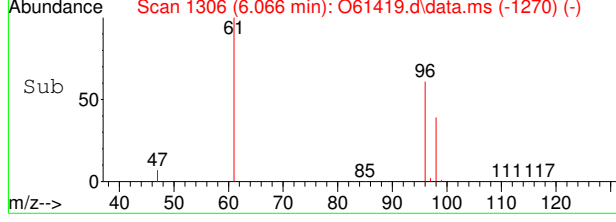
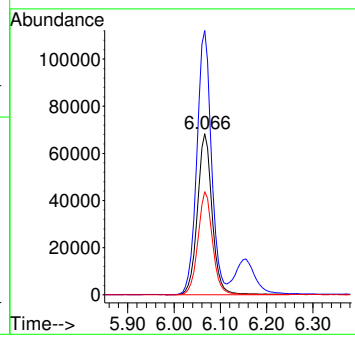
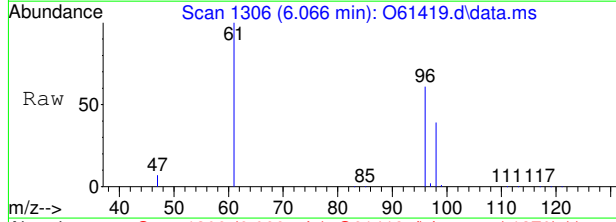




#8
 cis-1,2-Dichloroethene
 Concen: 7.86 ug/L
 RT: 6.066 min Scan# 1306
 Delta R.T. -0.005 min
 Lab File: O61419.d
 Acq: 16 Sep 2020 5:55 pm

Tgt Ion: 96 Resp: 150202

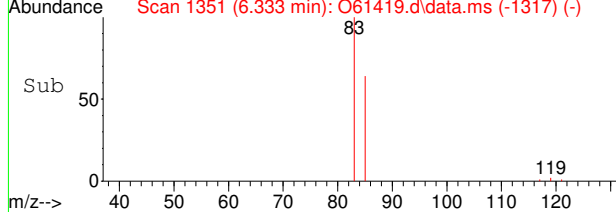
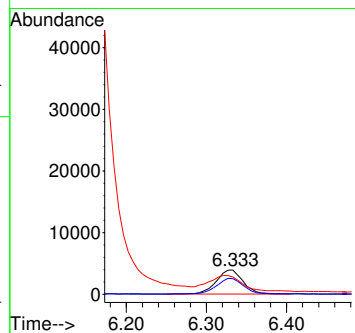
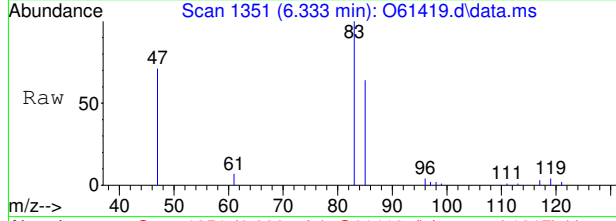
Ion	Ratio	Lower	Upper
96	100		
61	164.0	135.7	195.7
98	64.0	33.1	93.1



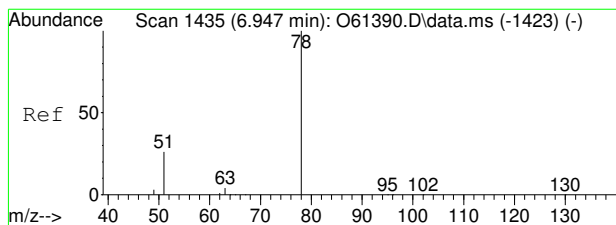
#9
 Chloroform
 Concen: 0.25 ug/L
 RT: 6.333 min Scan# 1351
 Delta R.T. 0.001 min
 Lab File: O61419.d
 Acq: 16 Sep 2020 5:55 pm

Tgt Ion: 83 Resp: 8965

Ion	Ratio	Lower	Upper
83	100		
85	63.8	33.9	93.9
47	58.2	14.9	74.9

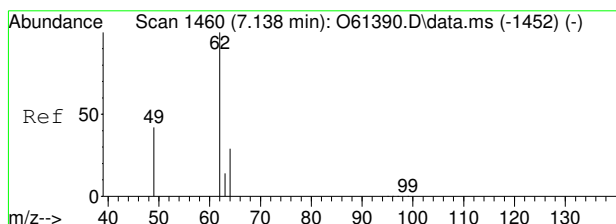
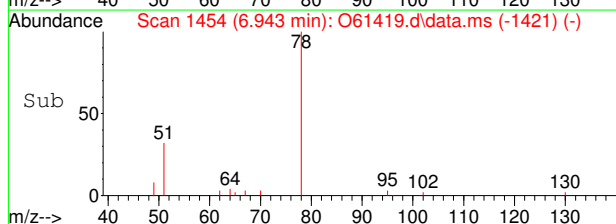
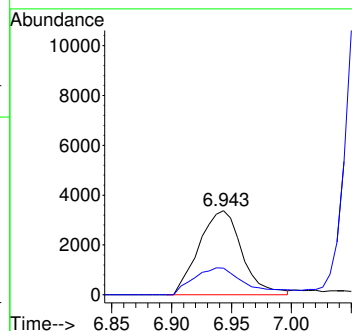
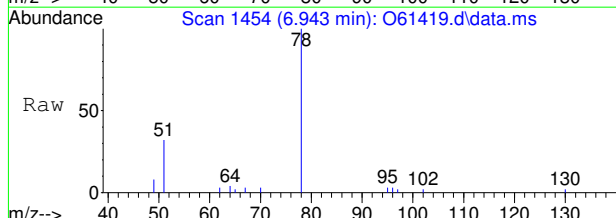


7.1.18
7



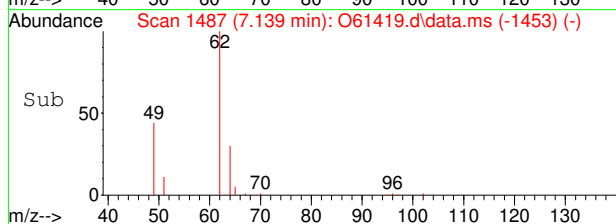
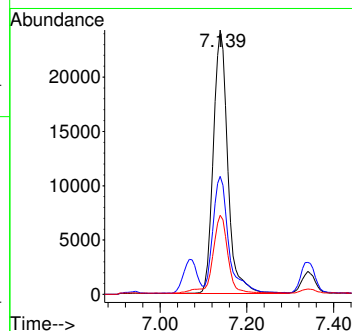
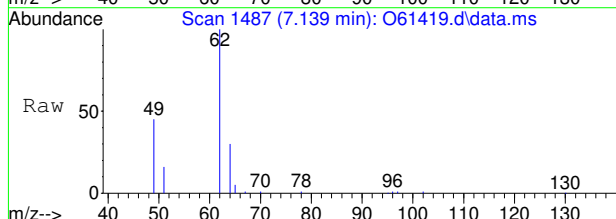
#12
Benzene
Concen: 0.13 ug/L m
RT: 6.943 min Scan# 1454
Delta R.T. -0.004 min
Lab File: O61419.d
Acq: 16 Sep 2020 5:55 pm

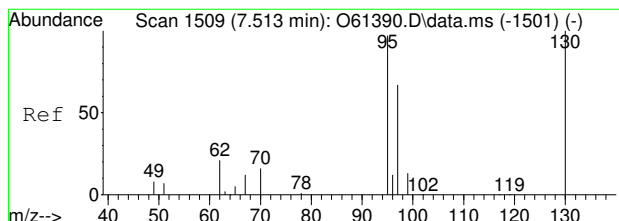
Tgt Ion	Resp	Lower	Upper
78	8417	100	
51	31.8	0.0	56.0



#14
1,2-Dichloroethane
Concen: 1.70 ug/L
RT: 7.139 min Scan# 1487
Delta R.T. 0.001 min
Lab File: O61419.d
Acq: 16 Sep 2020 5:55 pm

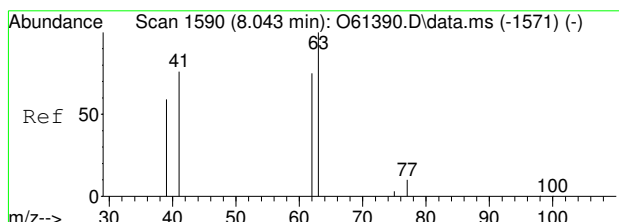
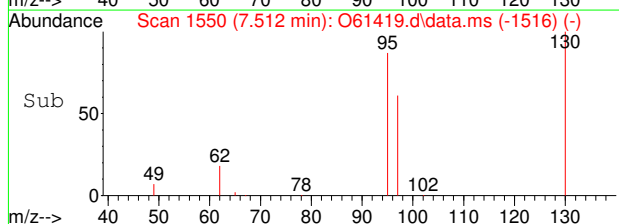
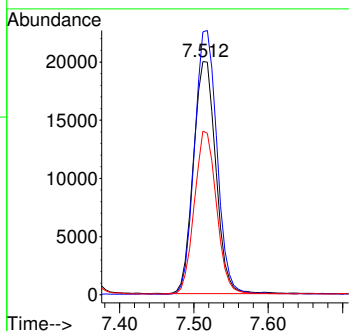
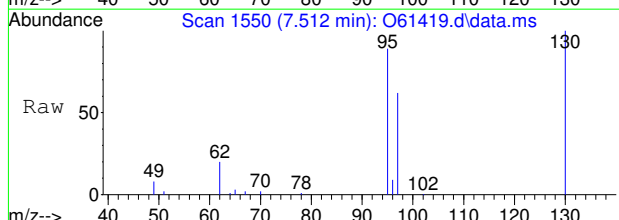
Tgt Ion	Resp	Lower	Upper
62	56178	100	
49	44.4	13.6	73.6
64	29.6	0.0	58.8





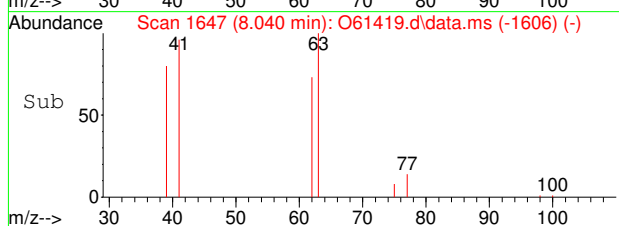
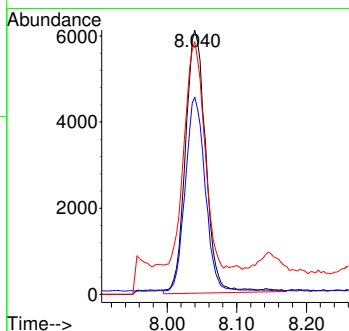
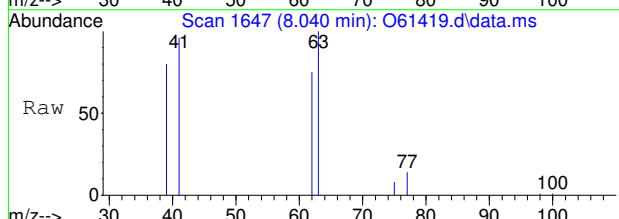
#15
 Trichloroethene
 Concen: 2.10 ug/L
 RT: 7.512 min Scan# 1550
 Delta R.T. -0.001 min
 Lab File: O61419.d
 Acq: 16 Sep 2020 5:55 pm

Tgt Ion	Resp	Lower	Upper
95	41965		
130	113.1	72.6	132.6
97	70.1	38.6	98.6

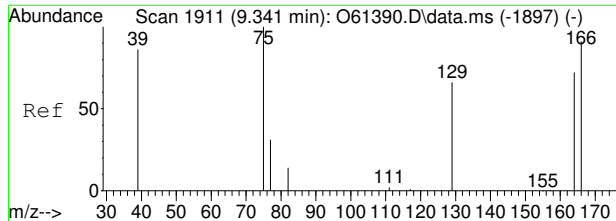


#16
 1,2-Dichloropropane
 Concen: 0.56 ug/L
 RT: 8.040 min Scan# 1647
 Delta R.T. -0.003 min
 Lab File: O61419.d
 Acq: 16 Sep 2020 5:55 pm

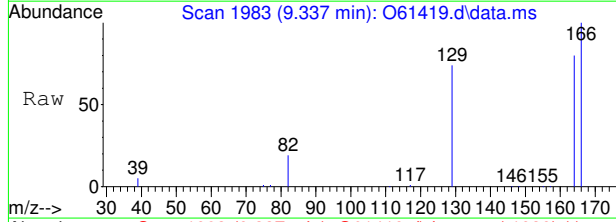
Tgt Ion	Resp	Lower	Upper
63	12485		
62	74.2	44.5	104.5
41	86.2	45.9	105.9



7.1.18
7

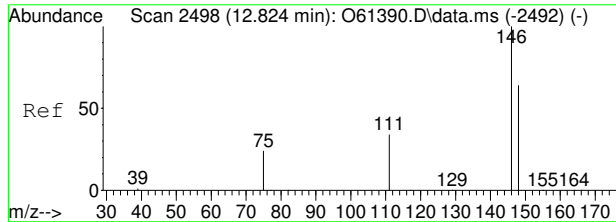
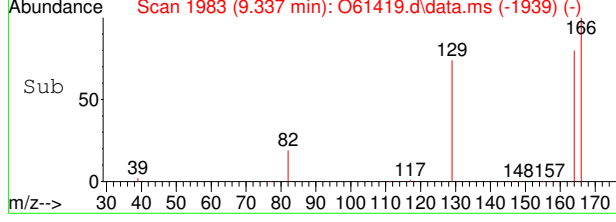
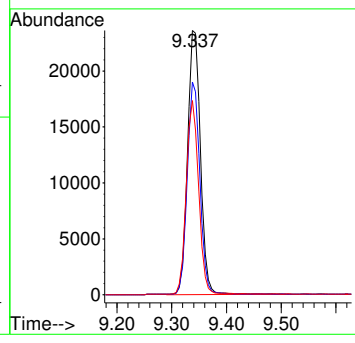


#21
 Tetrachloroethene
 Concen: 2.37 ug/L
 RT: 9.337 min Scan# 1983
 Delta R.T. -0.004 min
 Lab File: O61419.d
 Acq: 16 Sep 2020 5:55 pm

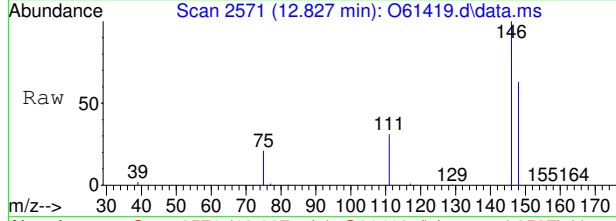


Tgt Ion:166 Resp: 38672

Ion	Ratio	Lower	Upper
166	100		
164	80.4	49.1	109.1
129	73.4	42.2	102.2

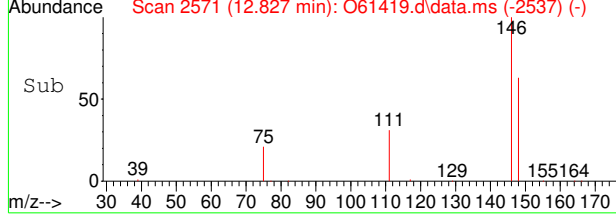
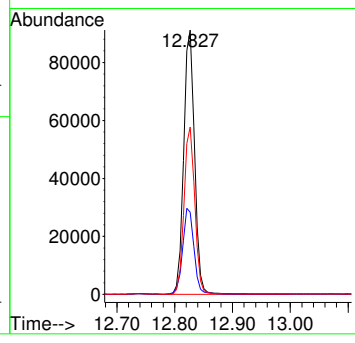


#22
 1,4-Dichlorobenzene
 Concen: 3.81 ug/L
 RT: 12.827 min Scan# 2571
 Delta R.T. 0.003 min
 Lab File: O61419.d
 Acq: 16 Sep 2020 5:55 pm



Tgt Ion:146 Resp: 118657

Ion	Ratio	Lower	Upper
146	100		
111	31.0	14.3	54.3
148	63.3	43.7	83.7



7.1.18
7

Manual Integration Approval Summary

Sample Number: FA78549-12 **Method:** SW846 8260B BY SIM
Lab FileID: O61419.D **Analyst approved:** 09/17/20 16:09 Juan Garcia
Injection Time: 09/16/20 17:55 **Supervisor approved:** 09/18/20 14:40 Melissa Mangual

Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzene	71-43-2		6.94	Poor instrument integration

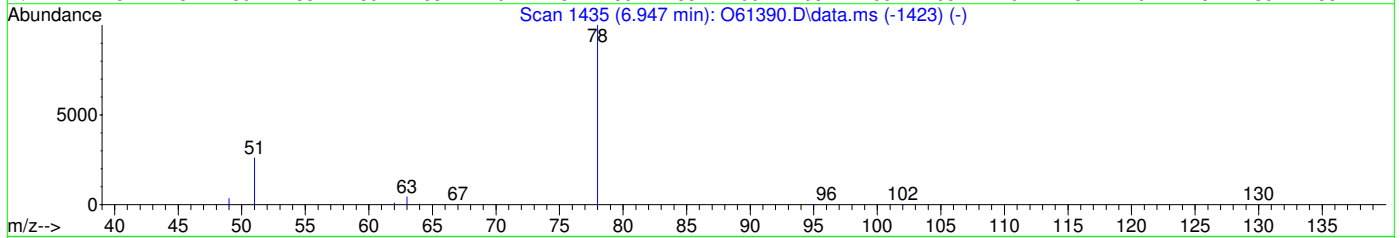
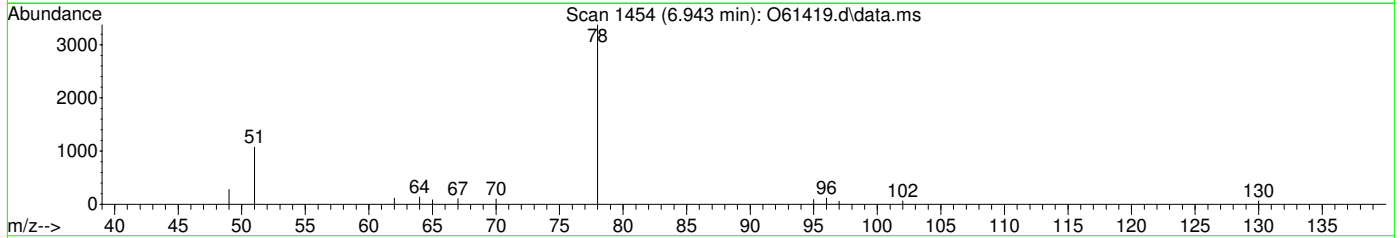
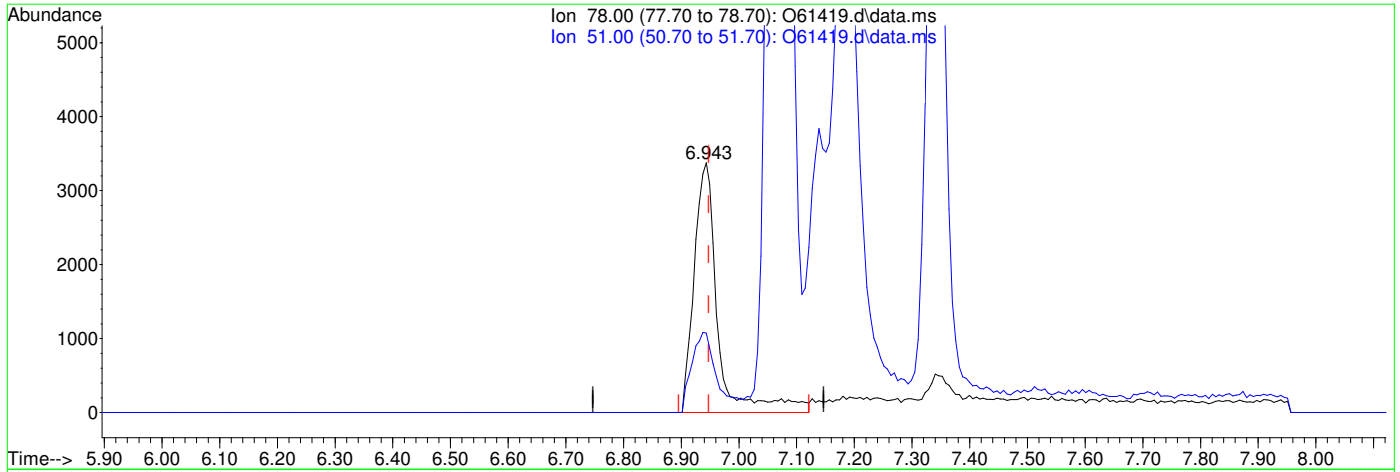
7.1.18.1

7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-17-2020\vo2363\
 Data File : O61419.d
 Acq On : 16 Sep 2020 5:55 pm
 Operator : akarig
 Sample : FA78549-12
 Misc : MS47193,VO2363,,,,,
 ALS Vial : 20 Sample Multiplier: 1

Quant Time: Sep 17 04:43:08 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091520.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 16 09:02:25 2020
 Response via : Initial Calibration



(12) Benzene ()

6.943min (-0.004) 0.14ug/L

response 9587

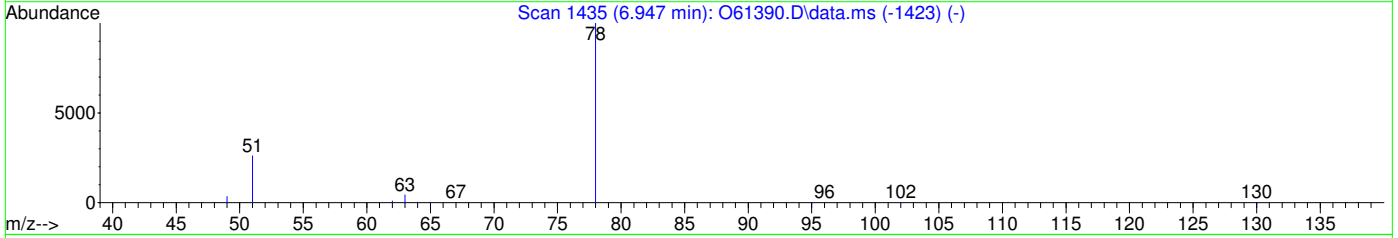
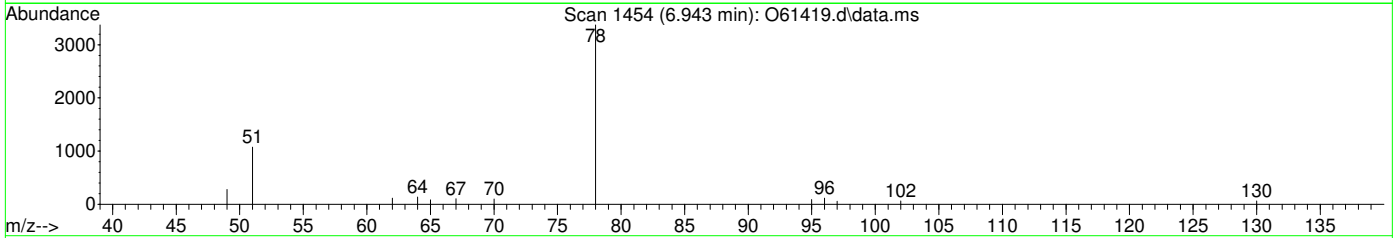
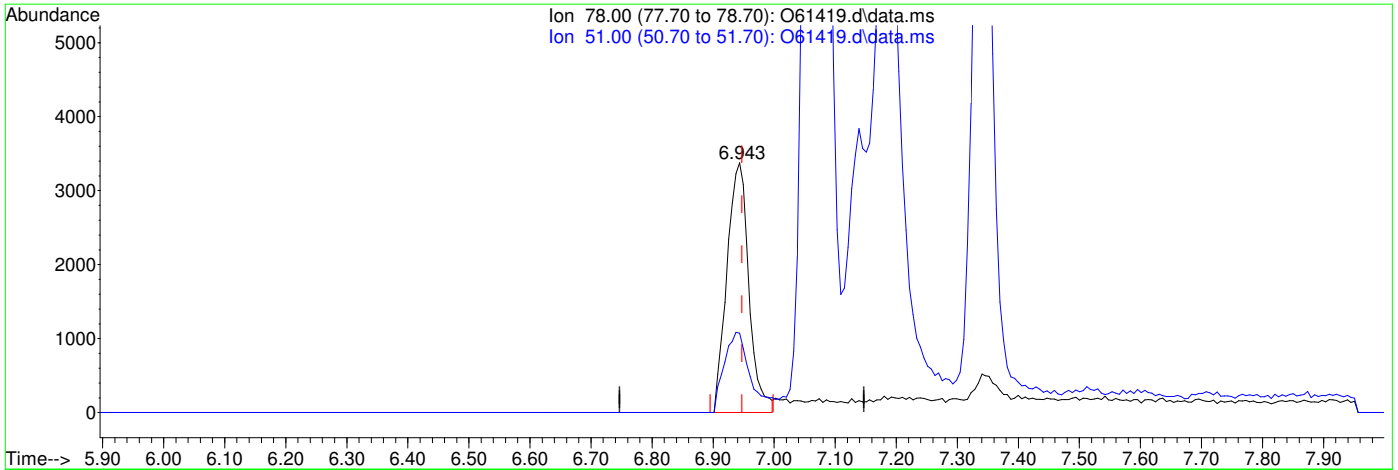
Ion	Exp%	Act%
78.00	100	100
51.00	26.00	31.76
0.00	0.00	0.00
0.00	0.00	0.00

7.1.18.2
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-17-2020\vo2363\
 Data File : O61419.d
 Acq On : 16 Sep 2020 5:55 pm
 Operator : akarig
 Sample : FA78549-12
 Misc : MS47193,VO2363,,,,,
 ALS Vial : 20 Sample Multiplier: 1

Quant Time: Sep 17 04:43:08 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091520.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 16 09:02:25 2020
 Response via : Initial Calibration



TIC: O61419.d\data.ms

(12) Benzene ()

6.943min (-0.004) 0.13ug/L m

response 8417

Ion	Exp%	Act%
78.00	100	100
51.00	26.00	31.76
0.00	0.00	0.00
0.00	0.00	0.00

7.1.18.3
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-11-2020\vo2354\
Data File : O61173.d
Acq On : 10 Sep 2020 2:40 pm
Operator : melissam
Sample : FA78549-13
Misc : MS47173,VO2354,,,,,
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Sep 14 07:57:06 2020
Quant Method : C:\msdchem\1\methods\SIMCL090820.M
Quant Title : Standard Methods 6200B
QLast Update : Wed Sep 09 12:10:38 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)

Internal Standards						
1) Fluorobenzene	7.346	96	162116	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.447	117	113956	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.073	65	81348	5.71	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	114.20%	
19) Toluene-d8	8.900	98	141874	5.09	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	101.80%	
Target Compounds						
3) Chloromethane	2.791	50	5028	0.21	ug/L #	70
5) Methylene Chloride	4.707	49	6128	0.15	ug/L	83
7) 1,1-Dichloroethane	5.518	63	1382	0.05	ug/L	98
8) cis-1,2-Dichloroethene	6.072	96	4888	0.36	ug/L #	53
9) Chloroform	6.333	83	4780	0.19	ug/L #	73
10) Carbon Tetrachloride	6.516	117	505	0.03	ug/L	85
12) Benzene	6.943	78	1090m	0.02	ug/L	
15) Trichloroethene	7.518	95	37902	2.69	ug/L	97
16) 1,2-Dichloropropane	8.051	63	509m	0.03	ug/L	
21) Tetrachloroethene	9.343	166	3804	0.34	ug/L	93

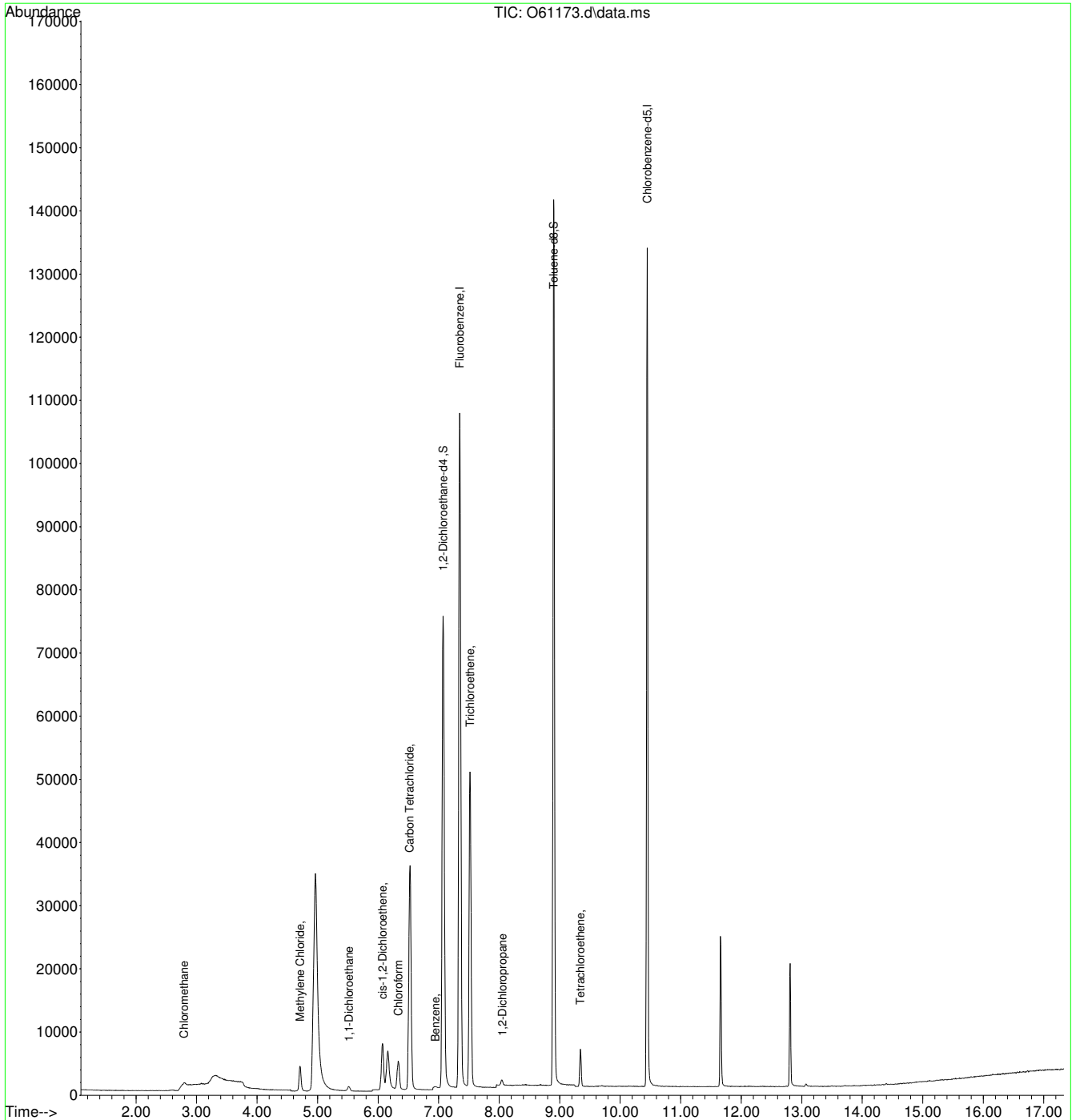
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.1.19
7

Quantitation Report (QT Reviewed)

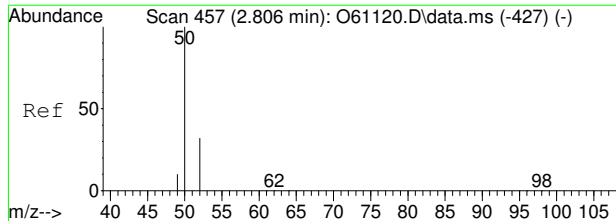
Data Path : C:\msdchem\1\data\johnm\September 2020\09-11-2020\vo2354\
 Data File : O61173.d
 Acq On : 10 Sep 2020 2:40 pm
 Operator : melissam
 Sample : FA78549-13
 Misc : MS47173,VO2354,,,,,
 ALS Vial : 21 Sample Multiplier: 1

Quant Time: Sep 14 07:57:06 2020
 Quant Method : C:\msdchem\1\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration



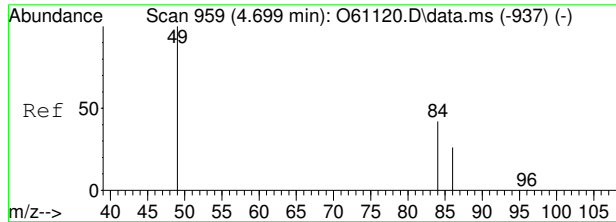
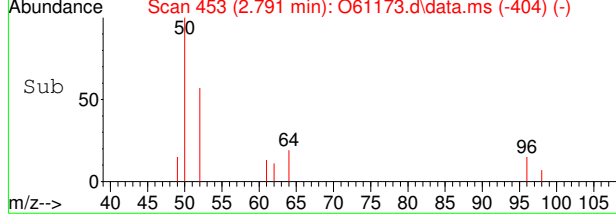
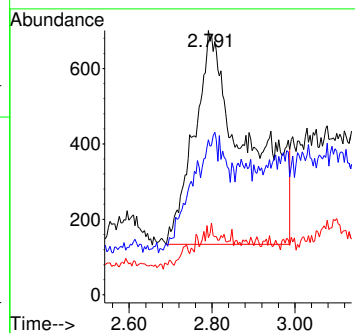
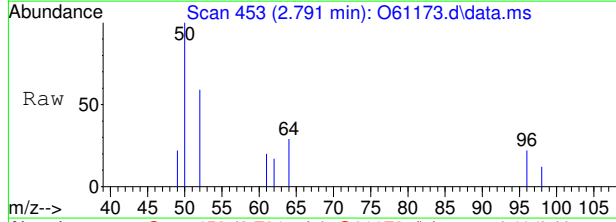
7.1.19
7





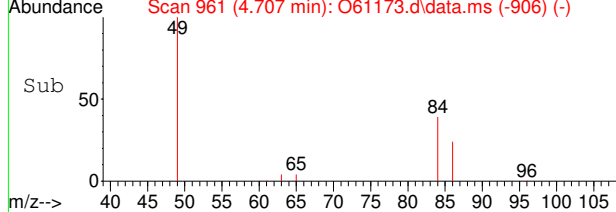
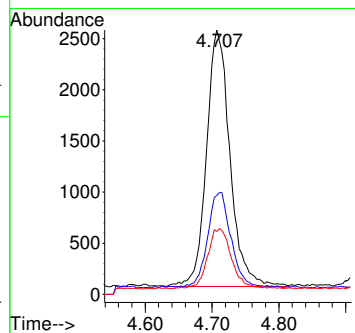
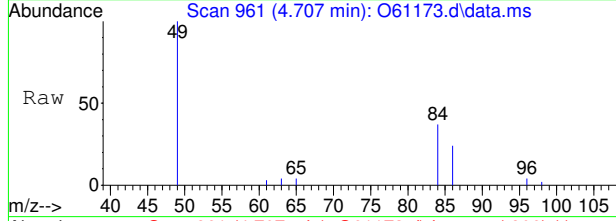
#3
 Chloromethane
 Concen: 0.21 ug/L
 RT: 2.791 min Scan# 453
 Delta R.T. -0.015 min
 Lab File: O61173.d
 Acq: 10 Sep 2020 2:40 pm

Tgt Ion	Resp	Lower	Upper
50	5028		
52	48.5	7.8	47.8#
49	12.2	0.0	30.5

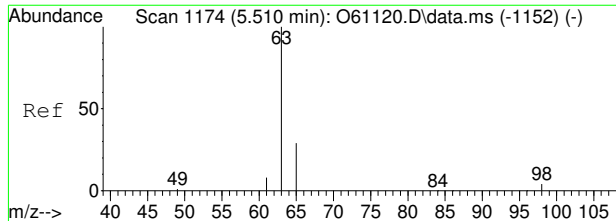


#5
 Methylene Chloride
 Concen: 0.15 ug/L
 RT: 4.707 min Scan# 961
 Delta R.T. 0.008 min
 Lab File: O61173.d
 Acq: 10 Sep 2020 2:40 pm

Tgt Ion	Resp	Lower	Upper
49	6128		
49	100		
84	35.8	17.9	77.9
86	22.0	0.0	59.8

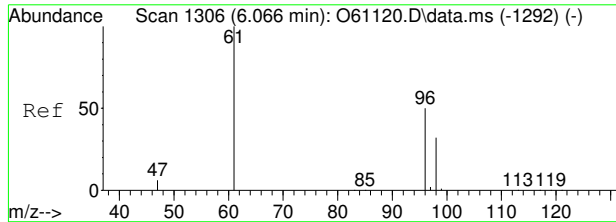
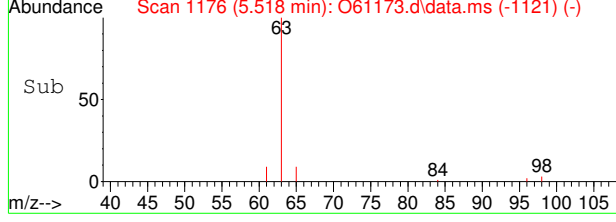
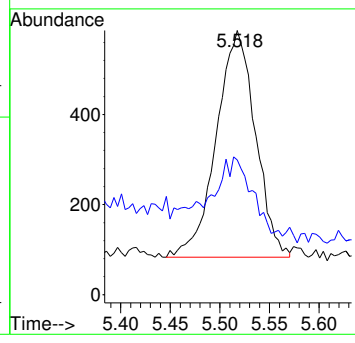
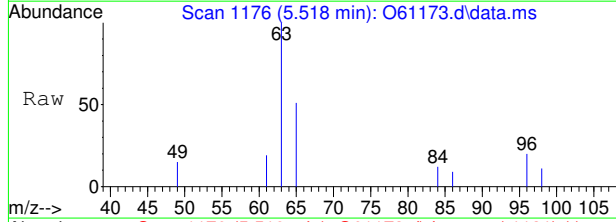


7.1.19
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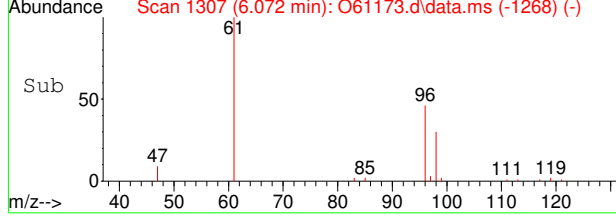
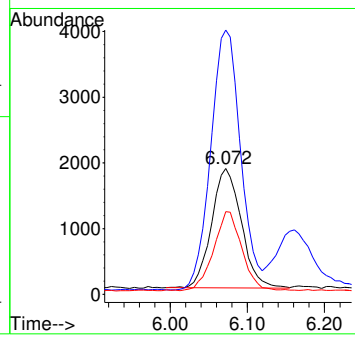
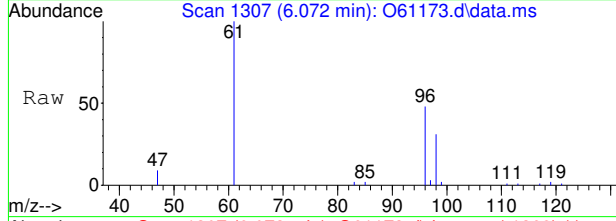
#7
 1,1-Dichloroethane
 Concen: 0.05 ug/L
 RT: 5.518 min Scan# 1176
 Delta R.T. 0.008 min
 Lab File: O61173.d
 Acq: 10 Sep 2020 2:40 pm

Tgt Ion	Resp	Lower	Upper
63	1382		
65	29.6	0.7	60.7



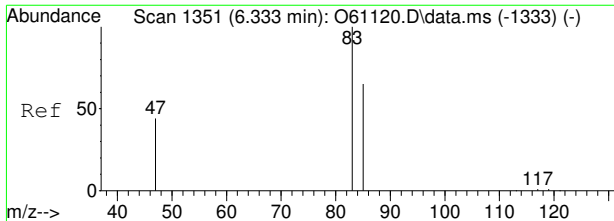
#8
 cis-1,2-Dichloroethene
 Concen: 0.36 ug/L
 RT: 6.072 min Scan# 1307
 Delta R.T. 0.006 min
 Lab File: O61173.d
 Acq: 10 Sep 2020 2:40 pm

Tgt Ion	Resp	Lower	Upper
96	4888		
61	217.9	107.0	167.0#
98	65.8	34.1	94.1

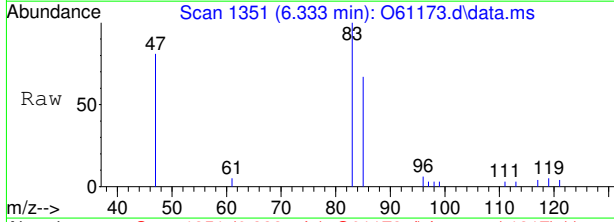


7.1.19
7

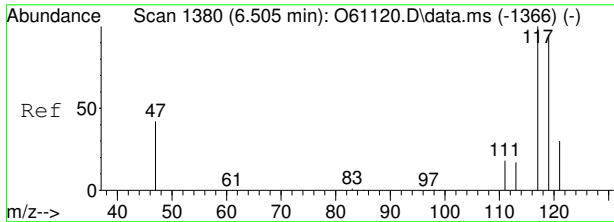
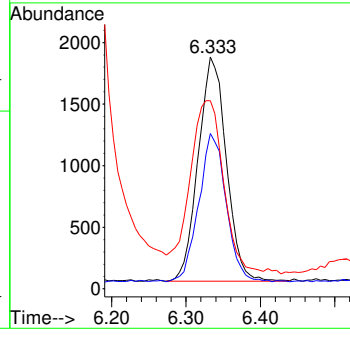
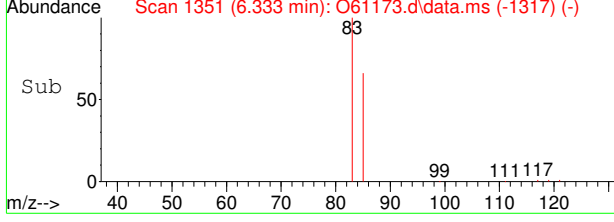




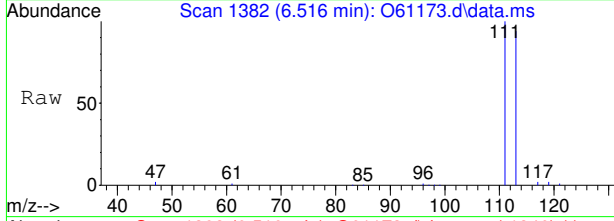
#9
 Chloroform
 Concen: 0.19 ug/L
 RT: 6.333 min Scan# 1351
 Delta R.T. 0.000 min
 Lab File: O61173.d
 Acq: 10 Sep 2020 2:40 pm



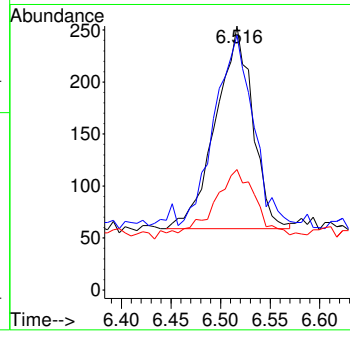
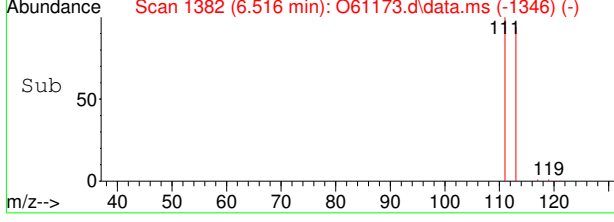
Tgt Ion	Resp	Lower	Upper
83	4780		
85	66.2	33.0	93.0
47	76.7	8.1	68.1#



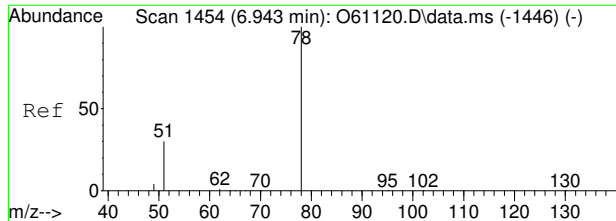
#10
 Carbon Tetrachloride
 Concen: 0.03 ug/L
 RT: 6.516 min Scan# 1382
 Delta R.T. 0.012 min
 Lab File: O61173.d
 Acq: 10 Sep 2020 2:40 pm



Tgt Ion	Resp	Lower	Upper
117	505		
119	91.8	80.9	140.9
121	32.3	4.1	64.1

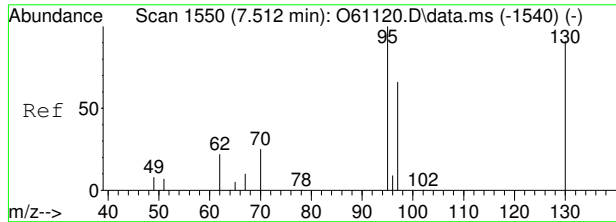
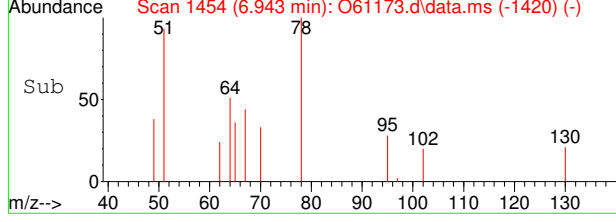
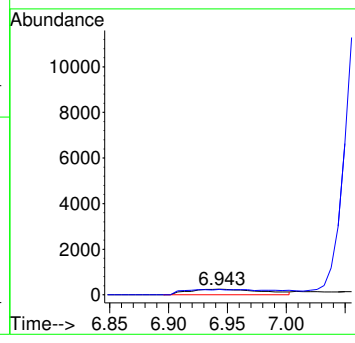
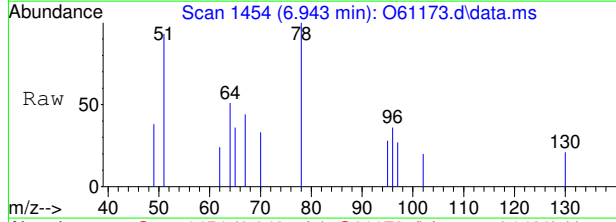


7.1.19
7



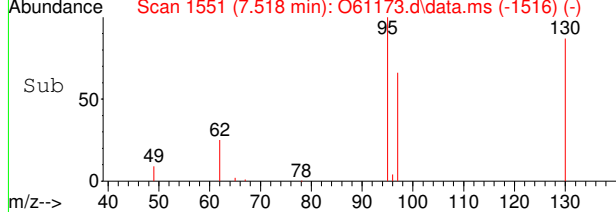
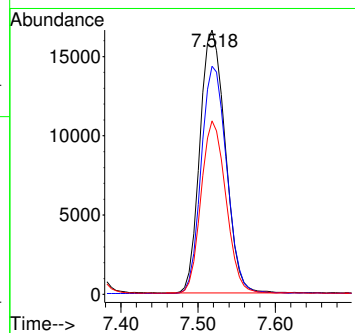
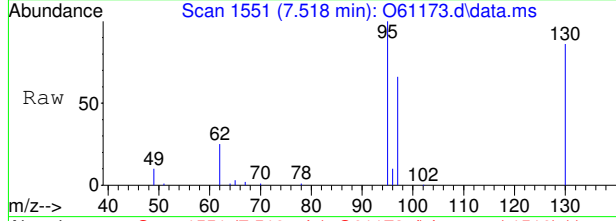
#12
Benzene
Concen: 0.02 ug/L m
RT: 6.943 min Scan# 1454
Delta R.T. 0.000 min
Lab File: O61173.d
Acq: 10 Sep 2020 2:40 pm

Tgt Ion	Ratio	Lower	Upper
78	100		
51	92.8	0.0	56.2#



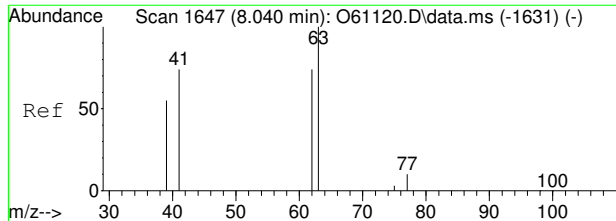
#15
Trichloroethene
Concen: 2.69 ug/L
RT: 7.518 min Scan# 1551
Delta R.T. 0.006 min
Lab File: O61173.d
Acq: 10 Sep 2020 2:40 pm

Tgt Ion	Ratio	Lower	Upper
95	100		
130	86.4	60.4	120.4
97	65.6	34.6	94.6

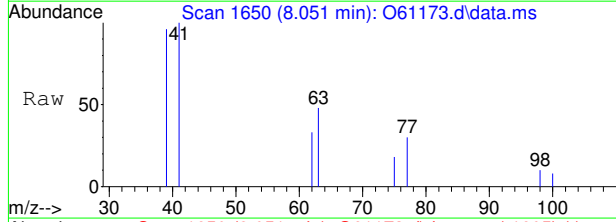


7.1.19
7



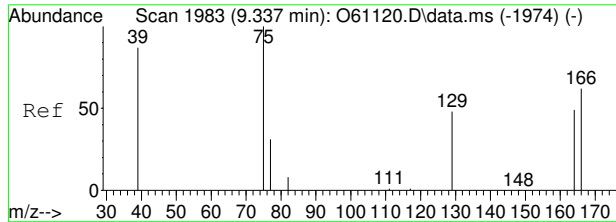
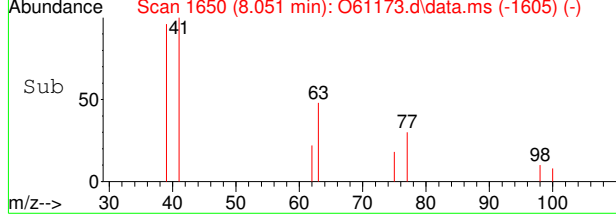
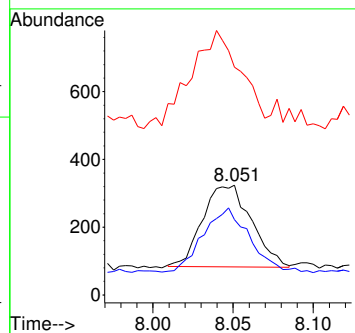


#16
 1,2-Dichloropropane
 Concen: 0.03 ug/L m
 RT: 8.051 min Scan# 1650
 Delta R.T. 0.011 min
 Lab File: O61173.d
 Acq: 10 Sep 2020 2:40 pm

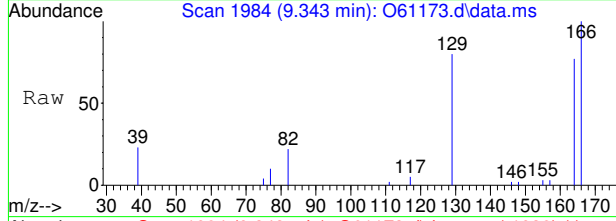


Tgt Ion: 63 Resp: 509

Ion	Ratio	Lower	Upper
63	100		
62	68.5	42.7	102.7
41	207.4	54.5	114.5#

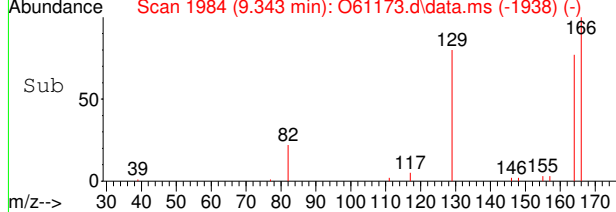
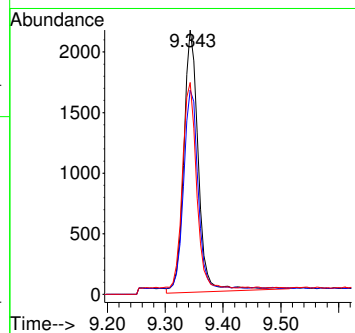


#21
 Tetrachloroethene
 Concen: 0.34 ug/L
 RT: 9.343 min Scan# 1984
 Delta R.T. 0.006 min
 Lab File: O61173.d
 Acq: 10 Sep 2020 2:40 pm



Tgt Ion: 166 Resp: 3804

Ion	Ratio	Lower	Upper
166	100		
164	76.6	47.3	107.3
129	79.3	37.5	97.5



Manual Integration Approval Summary

Sample Number: FA78549-13
Lab FileID: O61173.D
Injection Time: 09/10/20 14:40

Method: SW846 8260B BY SIM
Analyst approved: 09/14/20 08:06 John Matthew de Guzman
Supervisor approved: 09/18/20 14:41 Melissa Mangual

Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzene	71-43-2		6.94	Poor instrument integration
1,2-Dichloropropane	78-87-5		8.05	Poor instrument integration

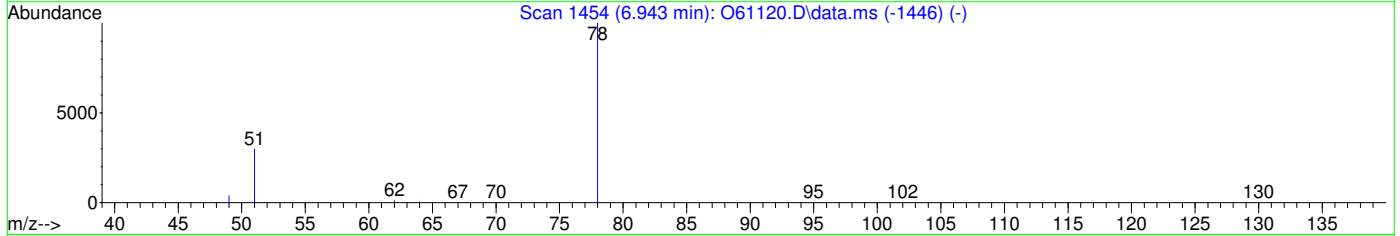
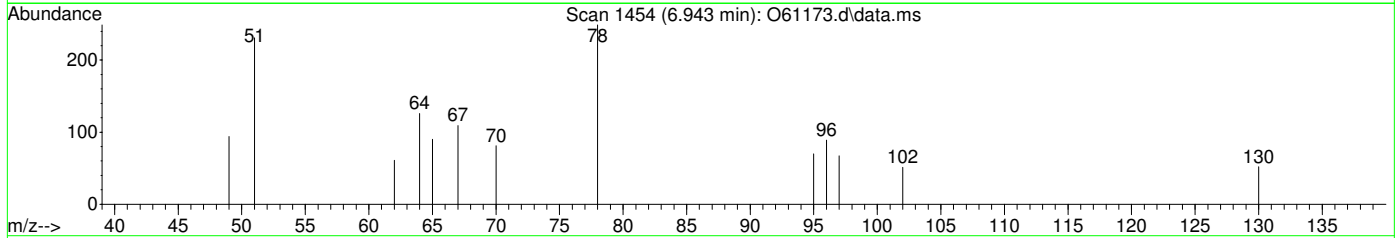
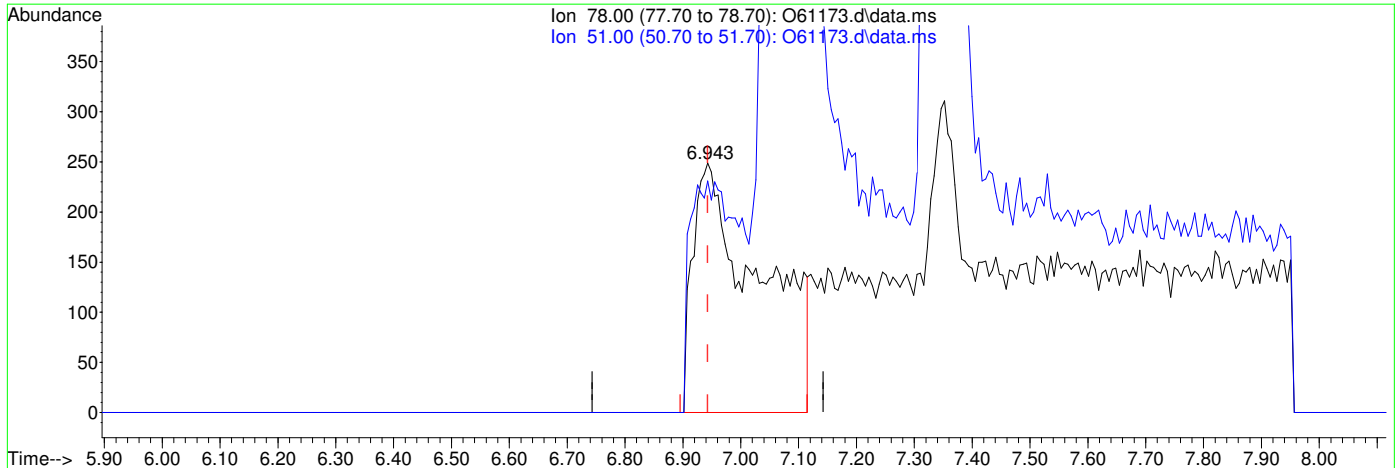
7.1.19.1

7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-11-2020\vo2354\
 Data File : O61173.d
 Acq On : 10 Sep 2020 2:40 pm
 Operator : melissam
 Sample : FA78549-13
 Misc : MS47173,VO2354,,,,,
 ALS Vial : 21 Sample Multiplier: 1

Quant Time: Sep 14 07:56:35 2020
 Quant Method : C:\msdchem\1\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration



TIC: O61173.d\data.ms

(12) Benzene ()

6.943min (+0.000) 0.04ug/L

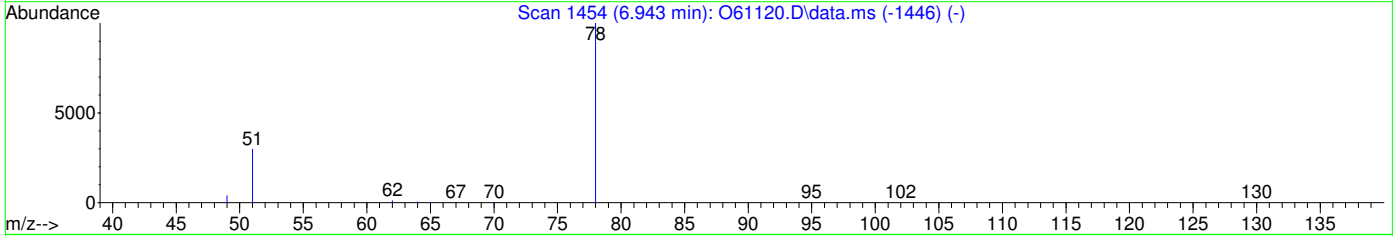
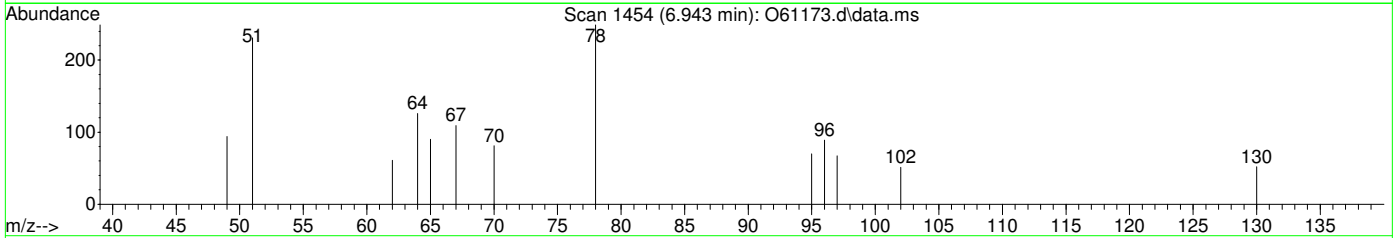
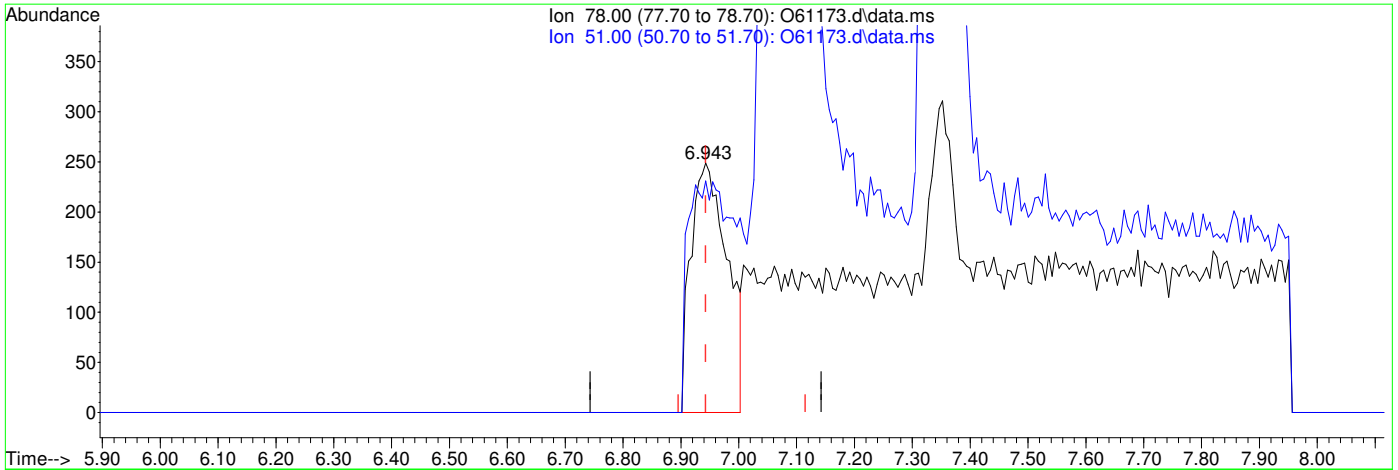
response 2002

Ion	Exp%	Act%
78.00	100	100
51.00	26.20	92.77#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-11-2020\vo2354\
 Data File : O61173.d
 Acq On : 10 Sep 2020 2:40 pm
 Operator : melissam
 Sample : FA78549-13
 Misc : MS47173,VO2354,,,,,
 ALS Vial : 21 Sample Multiplier: 1

Quant Time: Sep 14 07:56:35 2020
 Quant Method : C:\msdchem\1\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration



TIC: O61173.d\data.ms

(12) Benzene ()

6.943min (+0.000) 0.02ug/L m

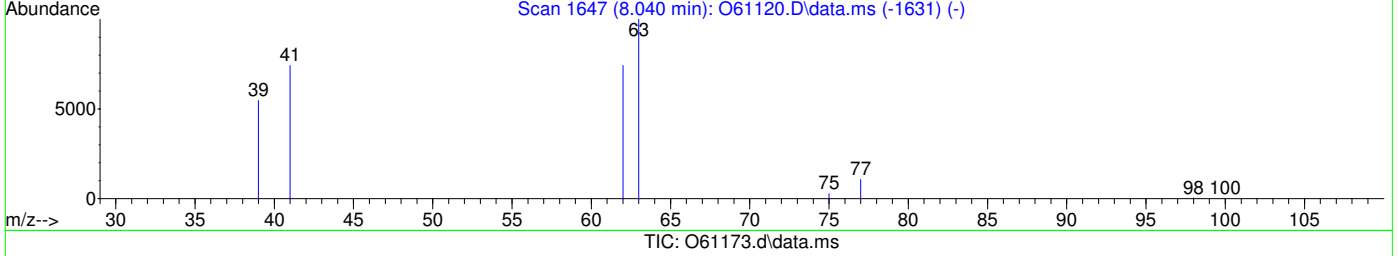
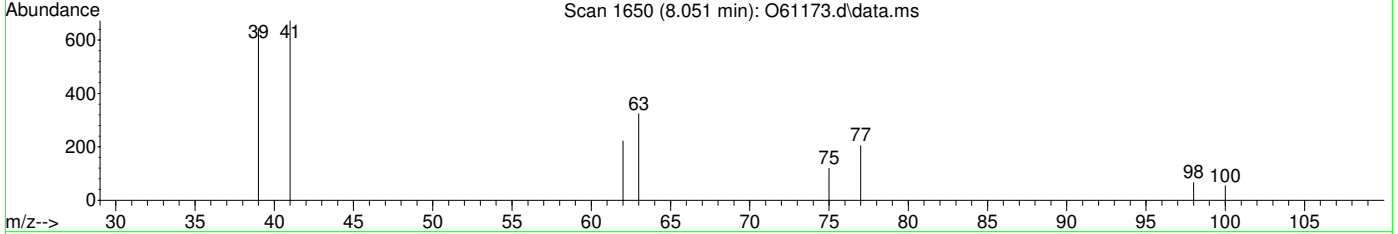
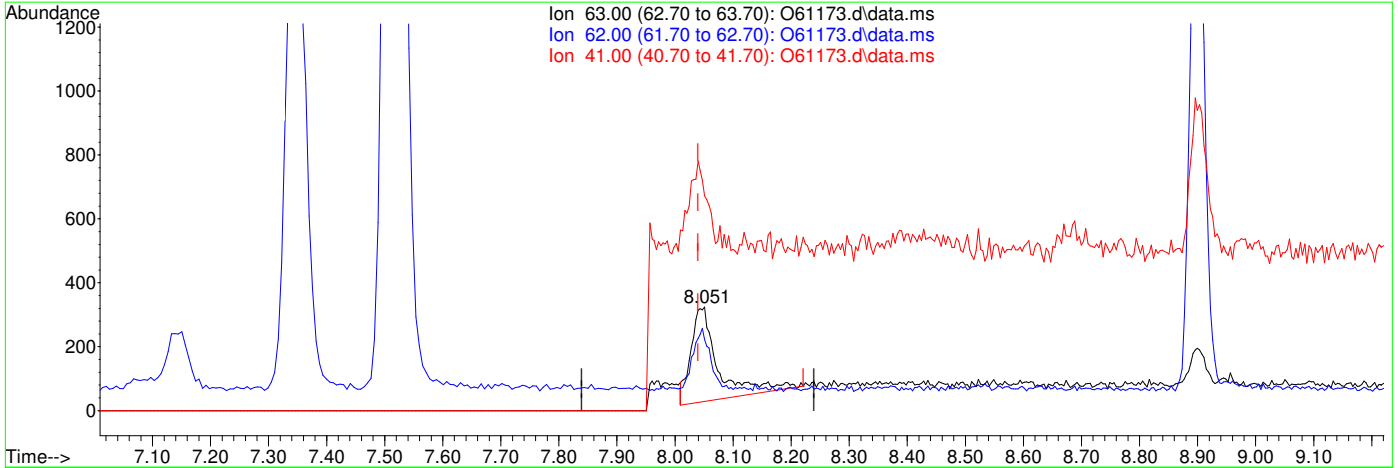
response 1090

Ion	Exp%	Act%
78.00	100	100
51.00	26.20	92.77#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-11-2020\vo2354\
 Data File : O61173.d
 Acq On : 10 Sep 2020 2:40 pm
 Operator : melissam
 Sample : FA78549-13
 Misc : MS47173,VO2354,,,,,
 ALS Vial : 21 Sample Multiplier: 1

Quant Time: Sep 14 07:56:35 2020
 Quant Method : C:\msdchem\1\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration



(16) 1,2-Dichloropropane
 8.051min (+0.011) 0.05ug/L
 response 964

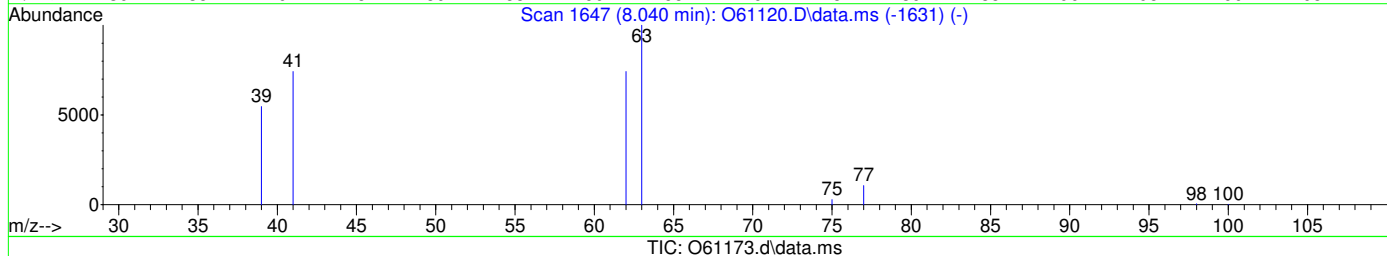
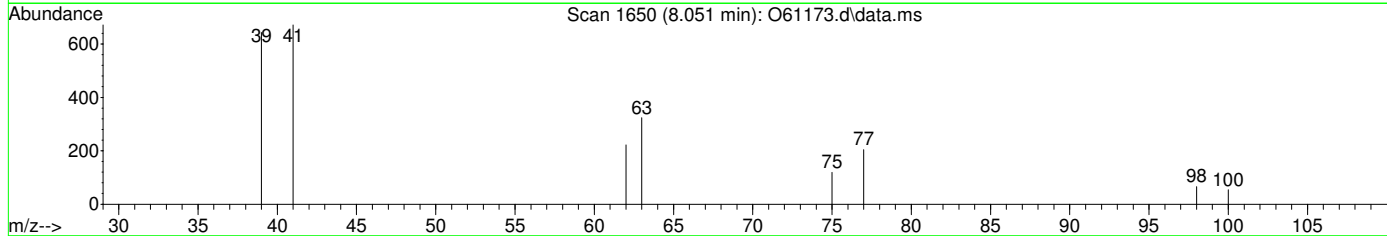
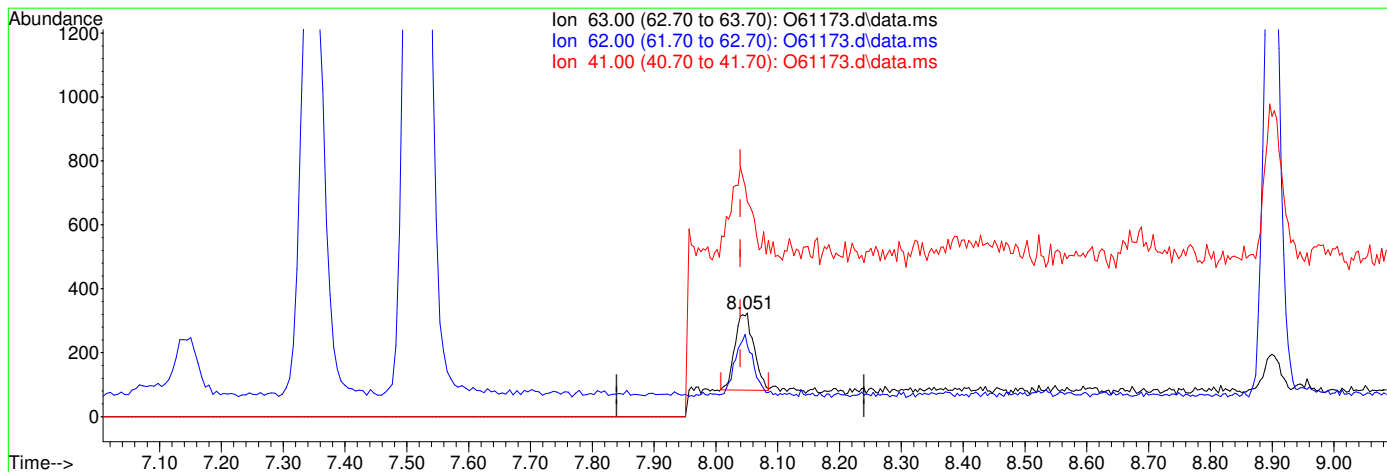
Ion	Exp%	Act%
63.00	100	100
62.00	72.70	63.16
41.00	84.50	52.63#
0.00	0.00	0.00

7.1.19.4
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-11-2020\vo2354\
 Data File : O61173.d
 Acq On : 10 Sep 2020 2:40 pm
 Operator : melissam
 Sample : FA78549-13
 Misc : MS47173,VO2354,,,,,
 ALS Vial : 21 Sample Multiplier: 1

Quant Time: Sep 14 07:56:35 2020
 Quant Method : C:\msdchem\1\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration



(16) 1,2-Dichloropropane
 8.051min (+0.011) 0.03ug/L m

response 509

Ion	Exp%	Act%
63.00	100	100
62.00	72.70	68.52
41.00	84.50	207.41#
0.00	0.00	0.00

7.1.19.5
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-17-2020\vo2363\
 Data File : O61420.d
 Acq On : 16 Sep 2020 6:15 pm
 Operator : akarig
 Sample : FA78549-13
 Misc : MS47193,VO2363,,,,,
 ALS Vial : 21 Sample Multiplier: 1

Quant Time: Sep 17 04:57:54 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091520.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 16 09:02:25 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)

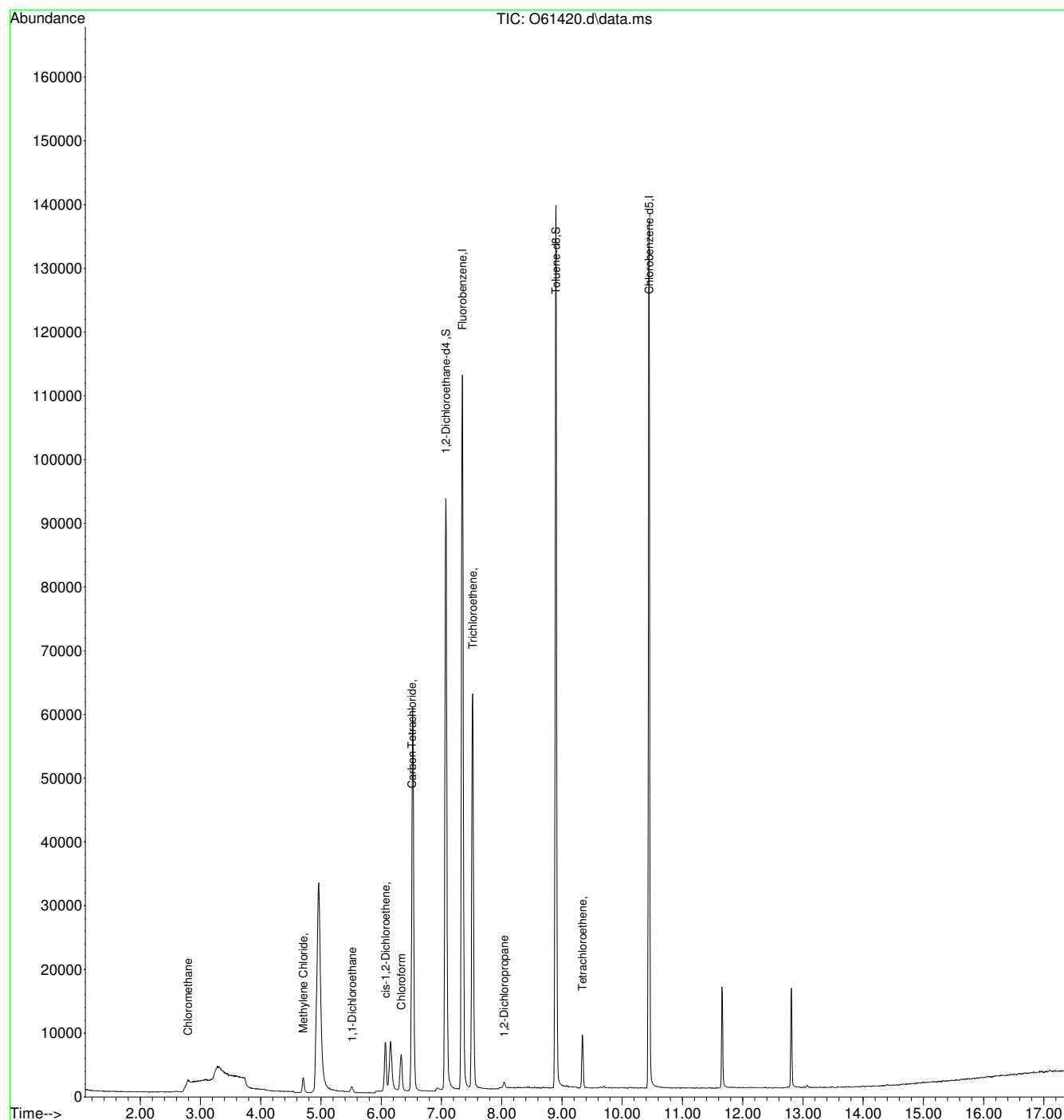
Internal Standards						
1) Fluorobenzene	7.346	96	164510	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.447	117	131208	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.073	65	87016	6.28	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	125.60%#	
19) Toluene-d8	8.900	98	138486	5.17	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	103.40%	
Target Compounds						
						Qvalue
3) Chloromethane	2.791	50	7325	0.22	ug/L	# 65
5) Methylene Chloride	4.703	49	3121	0.07	ug/L	95
7) 1,1-Dichloroethane	5.518	63	1404	0.04	ug/L	66
8) cis-1,2-Dichloroethene	6.072	96	5293	0.37	ug/L	98
9) Chloroform	6.333	83	5614	0.21	ug/L	86
10) Carbon Tetrachloride	6.510	117	726	0.04	ug/L	98
15) Trichloroethene	7.518	95	40396	2.67	ug/L	93
16) 1,2-Dichloropropane	8.040	63	487m	0.03	ug/L	
21) Tetrachloroethene	9.343	166	5492	0.37	ug/L	93

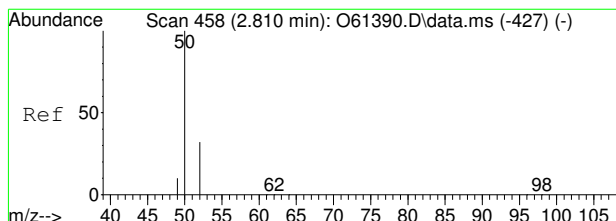
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-17-2020\vo2363\
Data File : O61420.d
Acq On : 16 Sep 2020 6:15 pm
Operator : akarig
Sample : FA78549-13
Misc : MS47193,VO2363,,,,,
ALS Vial : 21 Sample Multiplier: 1

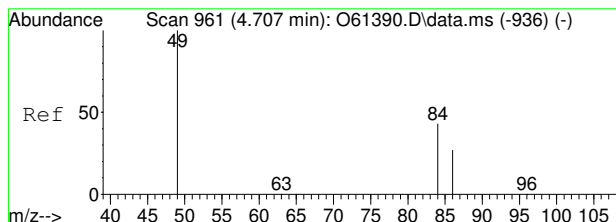
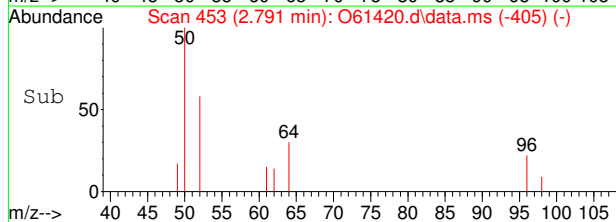
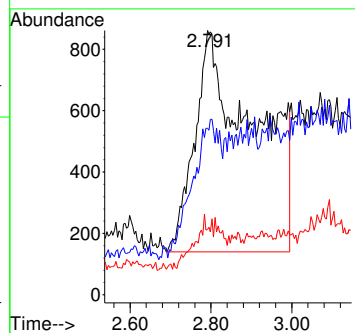
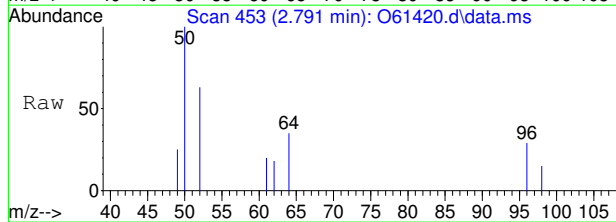
Quant Time: Sep 17 04:57:54 2020
Quant Method : C:\msdchem\1\methods\SIMCL091520.M
Quant Title : Standard Methods 6200B
QLast Update : Wed Sep 16 09:02:25 2020
Response via : Initial Calibration





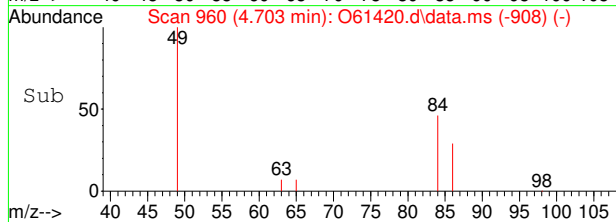
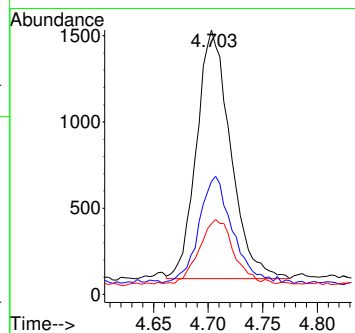
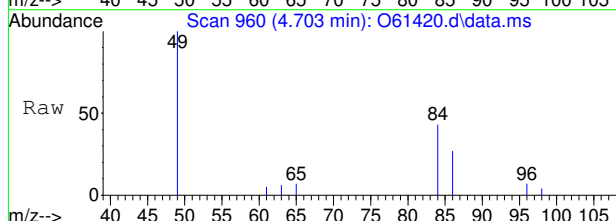
#3
 Chloromethane
 Concen: 0.22 ug/L
 RT: 2.791 min Scan# 453
 Delta R.T. -0.019 min
 Lab File: O61420.d
 Acq: 16 Sep 2020 6:15 pm

Tgt Ion	Resp	Lower	Upper
50	7325		
52	54.0	12.1	52.1#
49	18.0	0.0	30.3

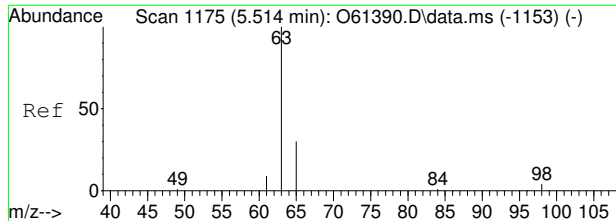


#5
 Methylene Chloride
 Concen: 0.07 ug/L
 RT: 4.703 min Scan# 960
 Delta R.T. -0.004 min
 Lab File: O61420.d
 Acq: 16 Sep 2020 6:15 pm

Tgt Ion	Resp	Lower	Upper
49	3121		
84	40.3	13.2	73.2
86	23.9	0.0	57.3

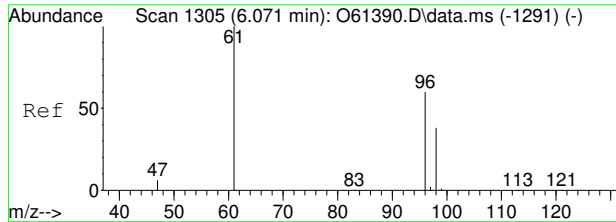
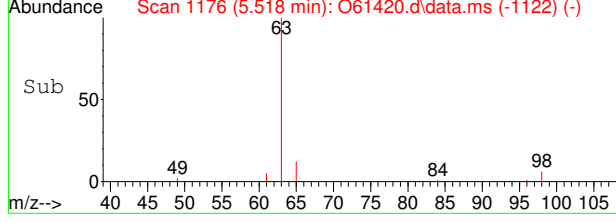
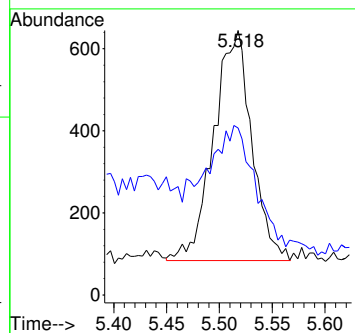
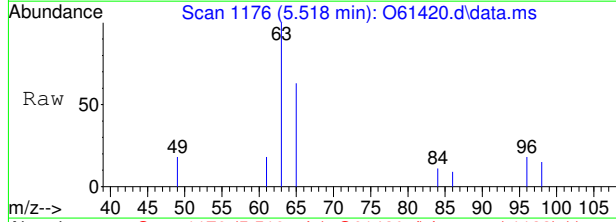


7.1.20
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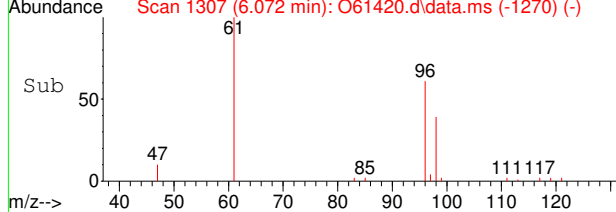
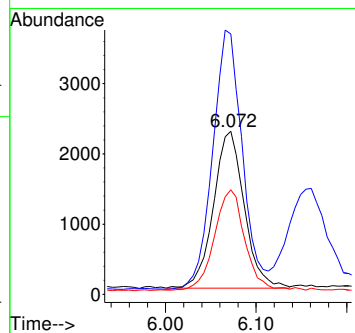
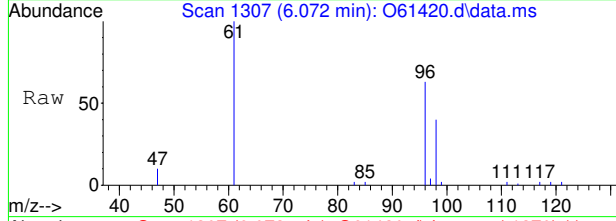
#7
 1,1-Dichloroethane
 Concen: 0.04 ug/L
 RT: 5.518 min Scan# 1176
 Delta R.T. 0.004 min
 Lab File: O61420.d
 Acq: 16 Sep 2020 6:15 pm

Tgt Ion	Resp	Lower	Upper
63	1404		
65	48.7	0.2	60.2

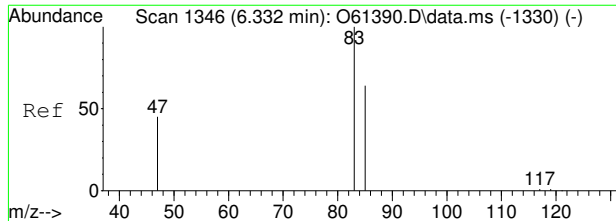


#8
 cis-1,2-Dichloroethene
 Concen: 0.37 ug/L
 RT: 6.072 min Scan# 1307
 Delta R.T. 0.001 min
 Lab File: O61420.d
 Acq: 16 Sep 2020 6:15 pm

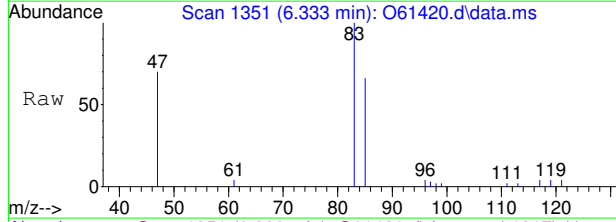
Tgt Ion	Resp	Lower	Upper
96	5293		
61	162.5	135.7	195.7
98	63.9	33.1	93.1



7.1.20
7

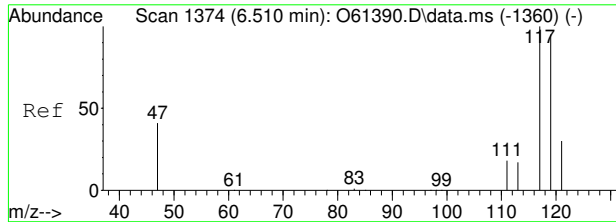
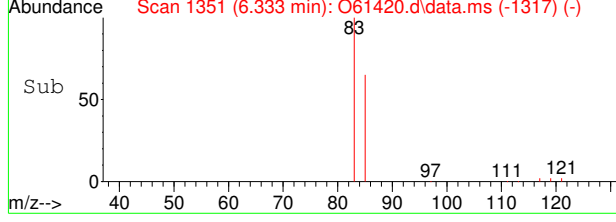
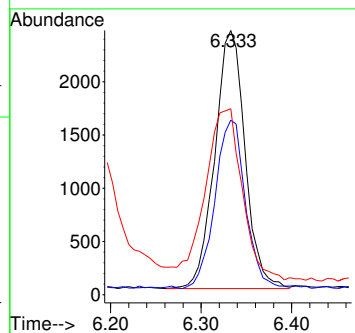


#9
 Chloroform
 Concen: 0.21 ug/L
 RT: 6.333 min Scan# 1351
 Delta R.T. 0.001 min
 Lab File: O61420.d
 Acq: 16 Sep 2020 6:15 pm

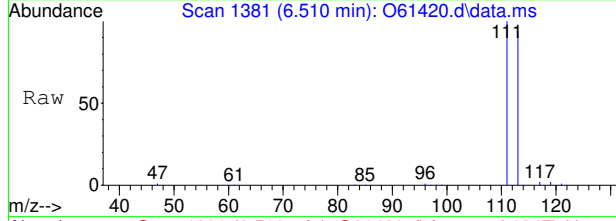


Tgt Ion: 83 Resp: 5614

Ion	Ratio	Lower	Upper
83	100		
85	64.8	33.9	93.9
47	65.5	14.9	74.9

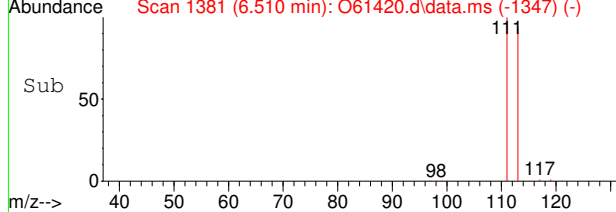
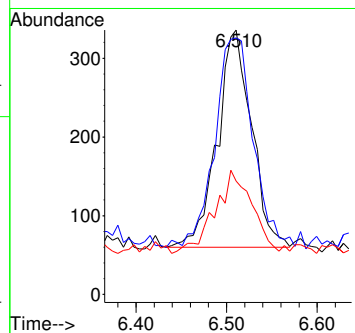


#10
 Carbon Tetrachloride
 Concen: 0.04 ug/L
 RT: 6.510 min Scan# 1381
 Delta R.T. 0.000 min
 Lab File: O61420.d
 Acq: 16 Sep 2020 6:15 pm

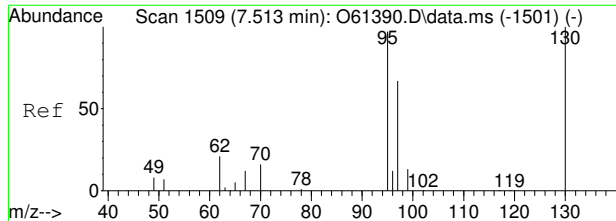


Tgt Ion: 117 Resp: 726

Ion	Ratio	Lower	Upper
117	100		
119	96.4	65.4	125.4
121	32.2	0.1	60.1



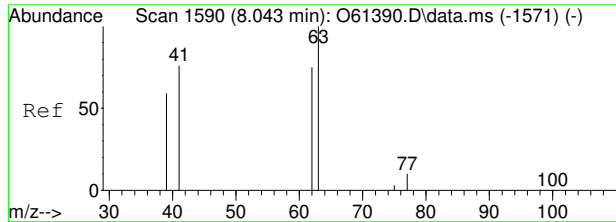
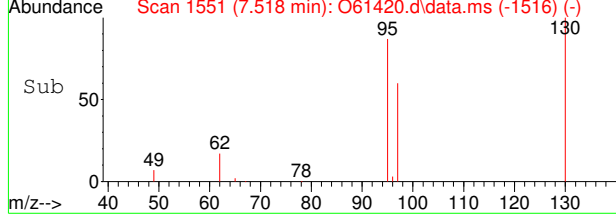
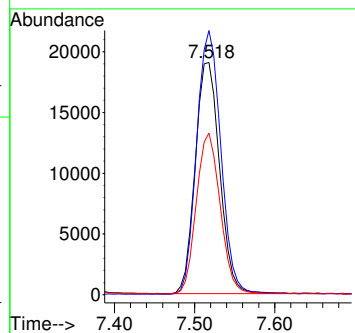
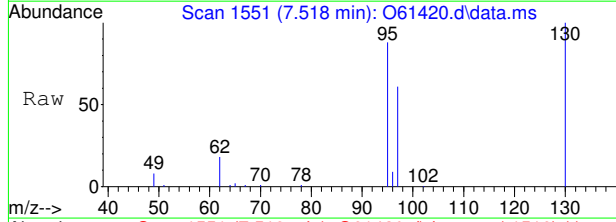
7.1.20
7



#15
 Trichloroethene
 Concen: 2.67 ug/L
 RT: 7.518 min Scan# 1551
 Delta R.T. 0.005 min
 Lab File: O61420.d
 Acq: 16 Sep 2020 6:15 pm

Tgt Ion: 95 Resp: 40396

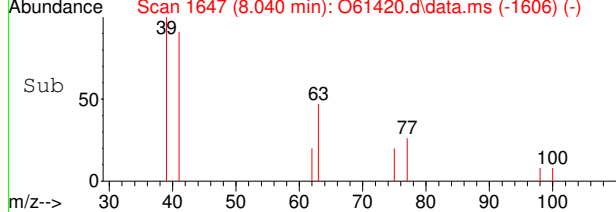
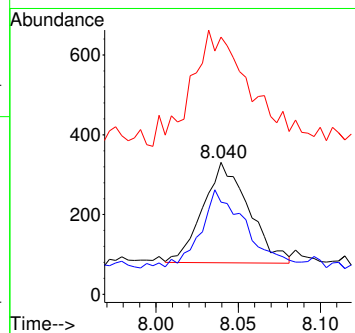
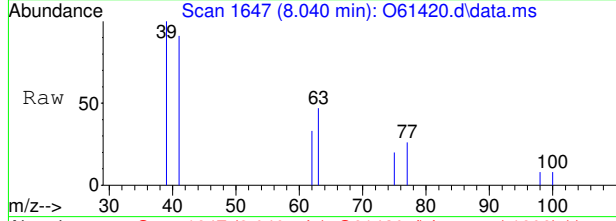
Ion	Ratio	Lower	Upper
95	100		
130	114.1	72.6	132.6
97	69.5	38.6	98.6



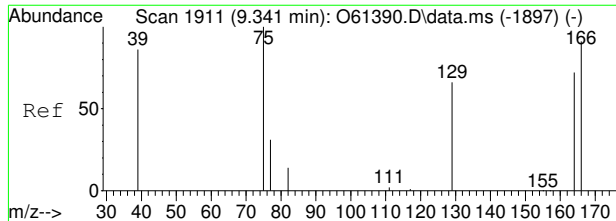
#16
 1,2-Dichloropropane
 Concen: 0.03 ug/L m
 RT: 8.040 min Scan# 1647
 Delta R.T. -0.003 min
 Lab File: O61420.d
 Acq: 16 Sep 2020 6:15 pm

Tgt Ion: 63 Resp: 487

Ion	Ratio	Lower	Upper
63	100		
62	69.8	44.5	104.5
41	194.9	45.9	105.9#

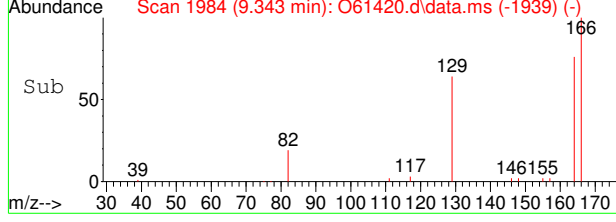
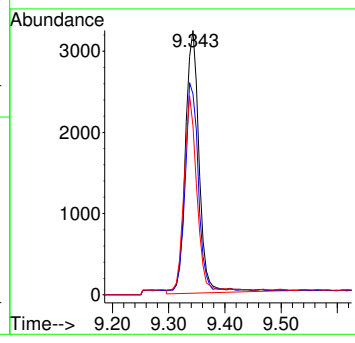
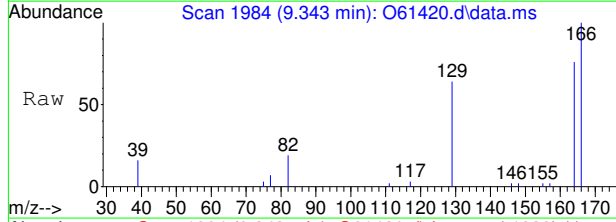


7.1.20
7



#21
 Tetrachloroethene
 Concen: 0.37 ug/L
 RT: 9.343 min Scan# 1984
 Delta R.T. 0.002 min
 Lab File: O61420.d
 Acq: 16 Sep 2020 6:15 pm

Tgt Ion	Resp
166	5492
166	100
164	75.5
129	63.1



7.1.20
7



Manual Integration Approval Summary

Sample Number: FA78549-13 **Method:** SW846 8260B BY SIM
Lab FileID: O61420.D **Analyst approved:** 09/17/20 16:10 Juan Garcia
Injection Time: 09/16/20 18:15 **Supervisor approved:** 09/18/20 14:41 Melissa Mangual

Parameter	CAS	Sig#	R.T. (min.)	Reason
1,2-Dichloropropane	78-87-5		8.04	Poor instrument integration

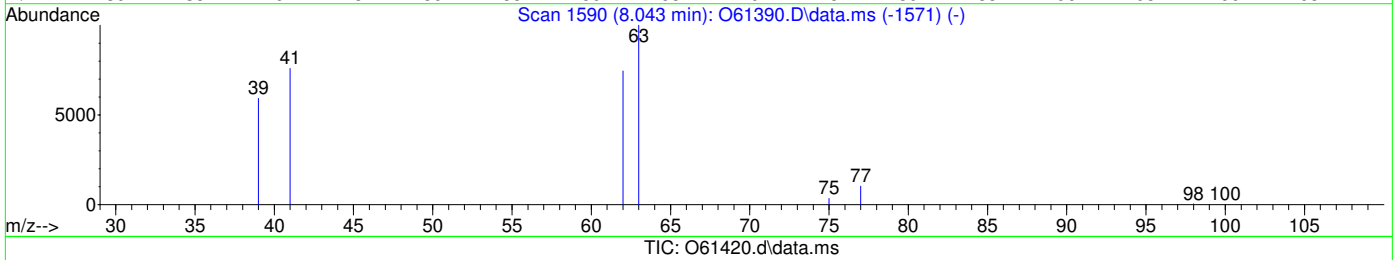
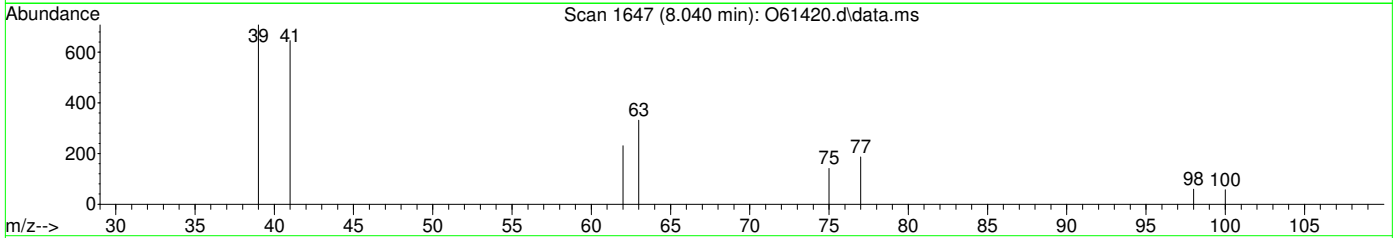
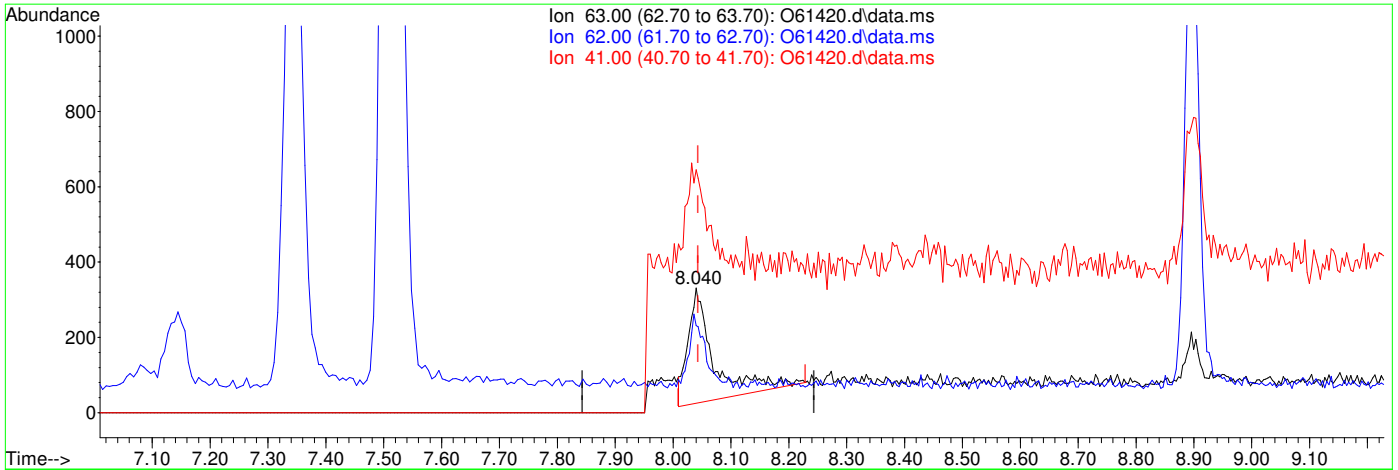
7.1.20.1

7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-17-2020\vo2363\
 Data File : O61420.d
 Acq On : 16 Sep 2020 6:15 pm
 Operator : akarig
 Sample : FA78549-13
 Misc : MS47193,VO2363,,,,,
 ALS Vial : 21 Sample Multiplier: 1

Quant Time: Sep 17 04:43:11 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091520.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 16 09:02:25 2020
 Response via : Initial Calibration



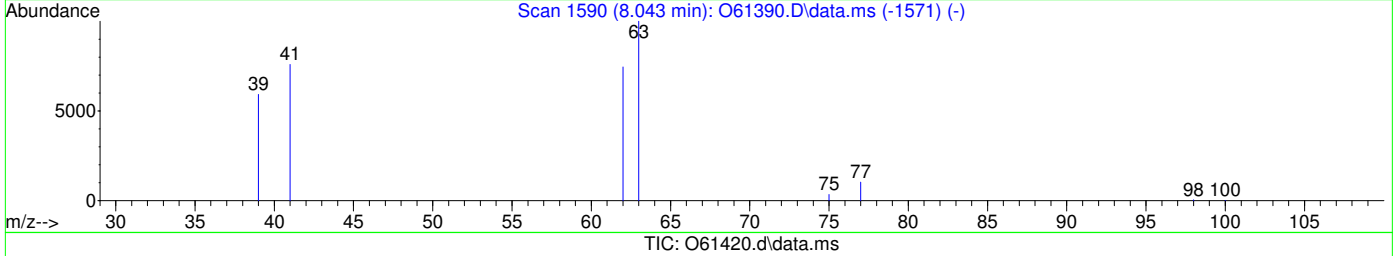
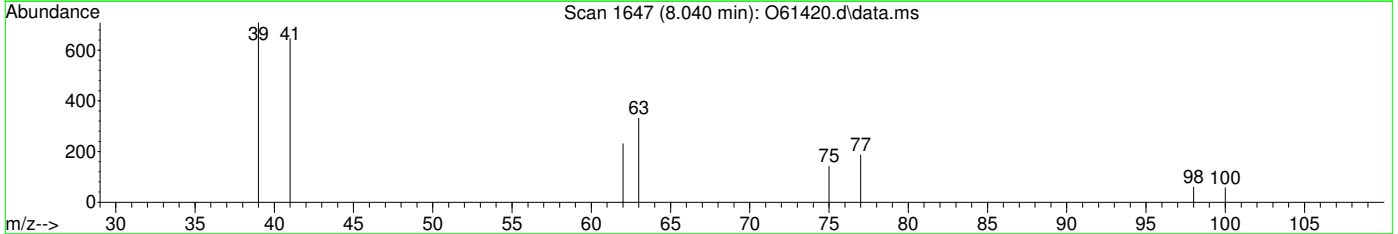
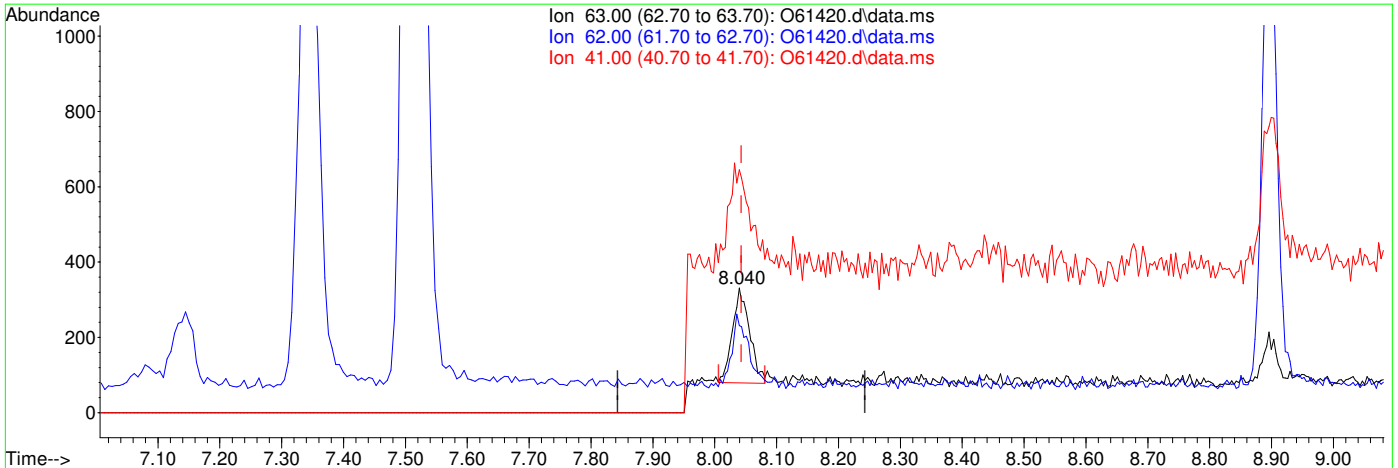
(16) 1,2-Dichloropropane
 8.040min (-0.003) 0.06ug/L
 response 955

Ion	Exp%	Act%
63.00	100	100
62.00	74.50	64.94
41.00	75.90	110.36#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-17-2020\vo2363\
 Data File : O61420.d
 Acq On : 16 Sep 2020 6:15 pm
 Operator : akarig
 Sample : FA78549-13
 Misc : MS47193,VO2363,,,,,
 ALS Vial : 21 Sample Multiplier: 1

Quant Time: Sep 17 04:43:11 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091520.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 16 09:02:25 2020
 Response via : Initial Calibration



(16) 1,2-Dichloropropane
 8.040min (-0.003) 0.03ug/L m
 response 487

Ion	Exp%	Act%
63.00	100	100
62.00	74.50	69.79
41.00	75.90	194.86#
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-11-2020\vo2354\
Data File : O61174.d
Acq On : 10 Sep 2020 3:01 pm
Operator : melissam
Sample : FA78549-14
Misc : MS47173,VO2354,,,,,
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Sep 14 07:57:56 2020
Quant Method : C:\msdchem\1\methods\SIMCL090820.M
Quant Title : Standard Methods 6200B
QLast Update : Wed Sep 09 12:10:38 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)

Internal Standards						
1) Fluorobenzene	7.346	96	156781	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.447	117	110523	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.073	65	78855	5.73	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	114.60%	
19) Toluene-d8	8.900	98	137122	5.08	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	101.60%	
Target Compounds						
3) Chloromethane	2.803	50	4232	0.19	ug/L #	56
5) Methylene Chloride	4.711	49	6652	0.17	ug/L	87
6) trans-1,2-Dichloroethene	4.880	61	999	0.04	ug/L #	65
7) 1,1-Dichloroethane	5.514	63	5368	0.18	ug/L	95
8) cis-1,2-Dichloroethene	6.072	96	17254	1.32	ug/L #	50
9) Chloroform	6.339	83	9106	0.38	ug/L	84
10) Carbon Tetrachloride	6.516	117	1193	0.08	ug/L	79
12) Benzene	6.937	78	1253m	0.03	ug/L	
14) 1,2-Dichloroethane	7.139	62	1534	0.06	ug/L	94
15) Trichloroethene	7.518	95	56808	4.16	ug/L	97
16) 1,2-Dichloropropane	8.047	63	2125	0.12	ug/L	96
21) Tetrachloroethene	9.343	166	8270	0.77	ug/L	96

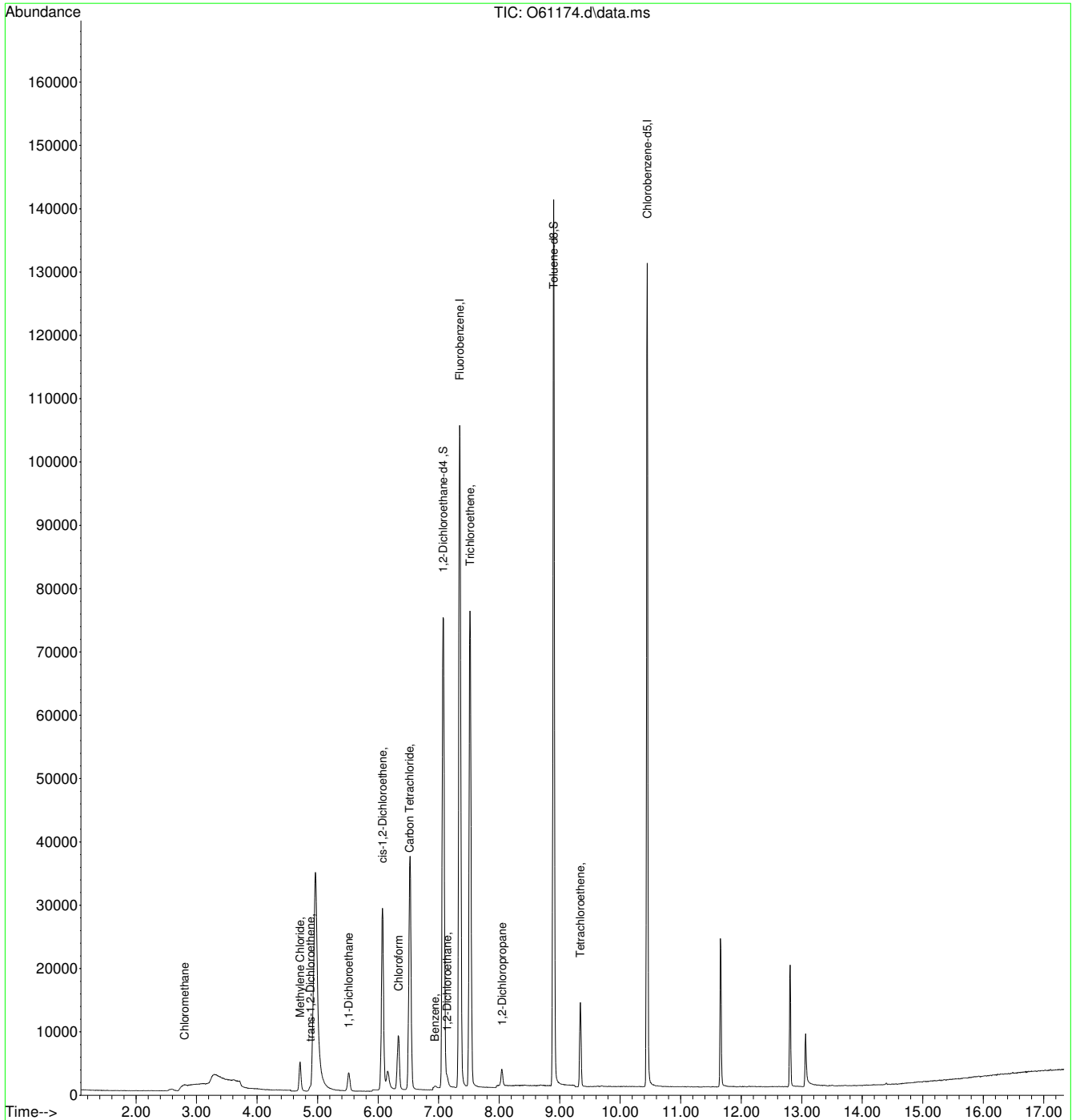
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.1.21
7

Quantitation Report (QT Reviewed)

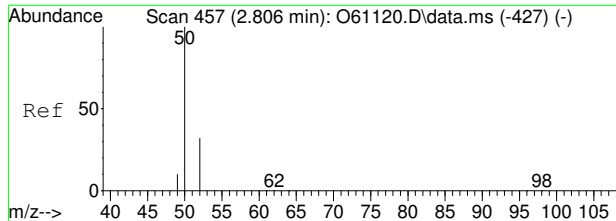
Data Path : C:\msdchem\1\data\johnm\September 2020\09-11-2020\vo2354\
 Data File : O61174.d
 Acq On : 10 Sep 2020 3:01 pm
 Operator : melissam
 Sample : FA78549-14
 Misc : MS47173,VO2354,,,,,
 ALS Vial : 22 Sample Multiplier: 1

Quant Time: Sep 14 07:57:56 2020
 Quant Method : C:\msdchem\1\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration

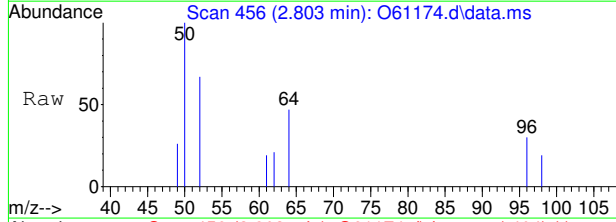


7.1.21
7



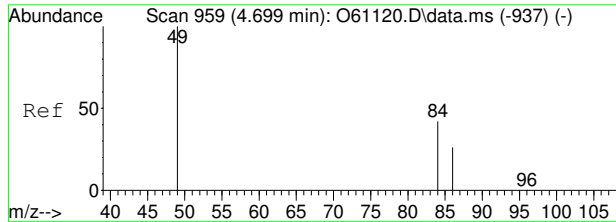
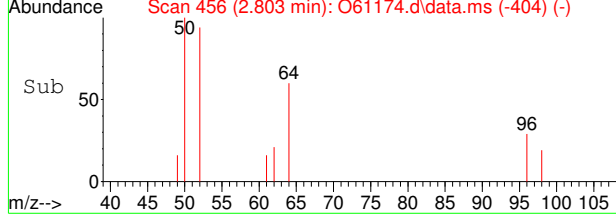
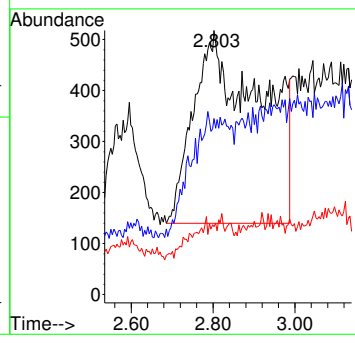


#3
 Chloromethane
 Concen: 0.19 ug/L
 RT: 2.803 min Scan# 456
 Delta R.T. -0.004 min
 Lab File: O61174.d
 Acq: 10 Sep 2020 3:01 pm

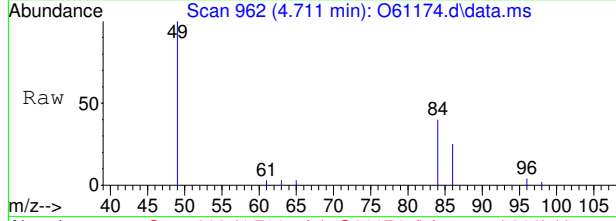


Tgt Ion: 50 Resp: 4232

Ion	Ratio	Lower	Upper
50	100		
52	57.1	7.8	47.8#
49	14.8	0.0	30.5

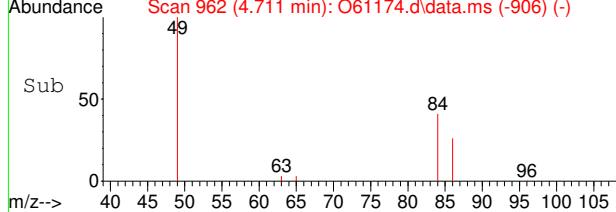
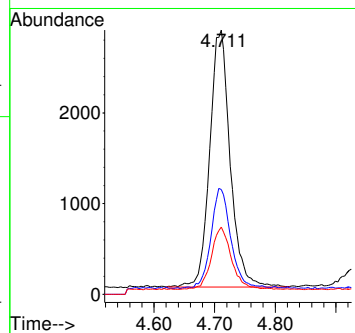


#5
 Methylene Chloride
 Concen: 0.17 ug/L
 RT: 4.711 min Scan# 962
 Delta R.T. 0.011 min
 Lab File: O61174.d
 Acq: 10 Sep 2020 3:01 pm



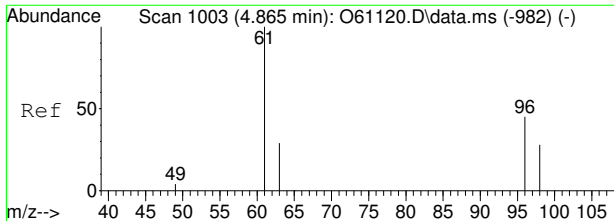
Tgt Ion: 49 Resp: 6652

Ion	Ratio	Lower	Upper
49	100		
84	38.3	17.9	77.9
86	24.2	0.0	59.8



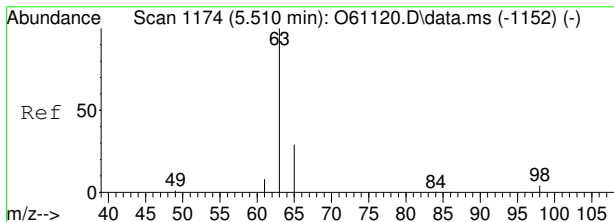
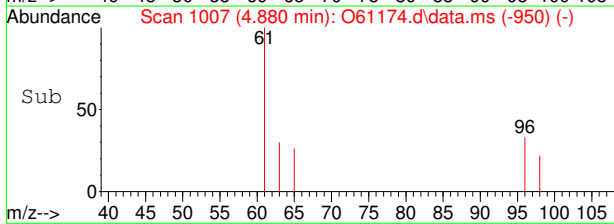
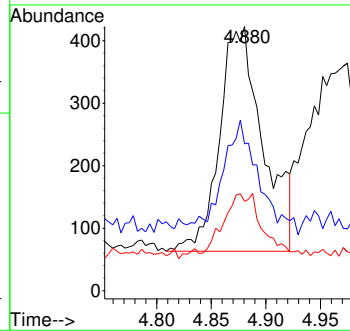
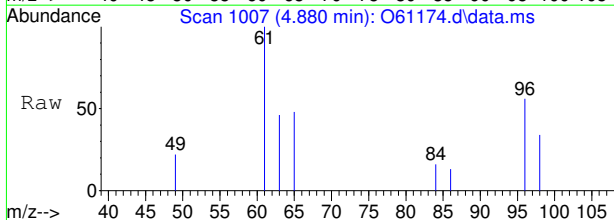
7.1.21
7





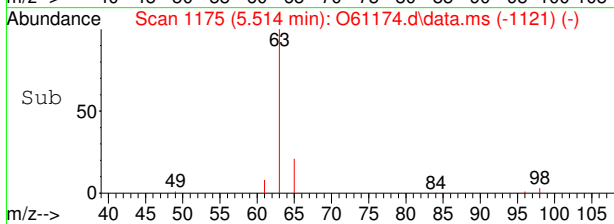
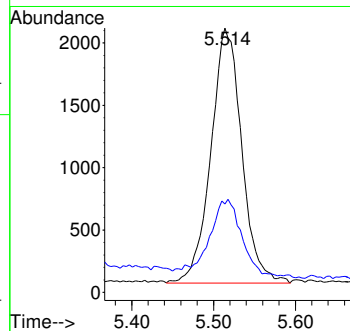
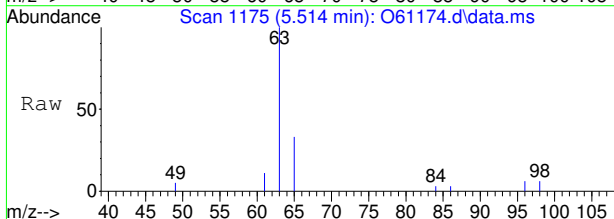
#6
 trans-1,2-Dichloroethene
 Concen: 0.04 ug/L
 RT: 4.880 min Scan# 1007
 Delta R.T. 0.015 min
 Lab File: O61174.d
 Acq: 10 Sep 2020 3:01 pm

Tgt Ion	Resp	Lower	Upper
61	999		
96	34.7	36.9	96.9#
98	24.2	11.1	71.1

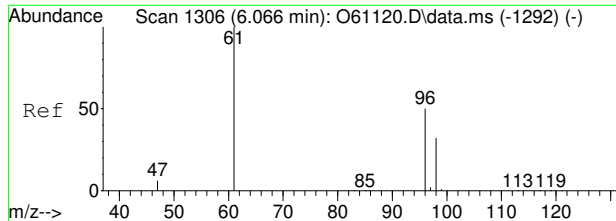


#7
 1,1-Dichloroethane
 Concen: 0.18 ug/L
 RT: 5.514 min Scan# 1175
 Delta R.T. 0.004 min
 Lab File: O61174.d
 Acq: 10 Sep 2020 3:01 pm

Tgt Ion	Resp	Lower	Upper
63	5368		
65	27.8	0.7	60.7

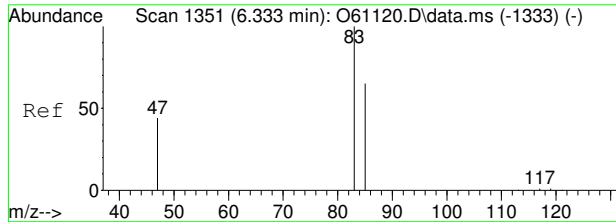
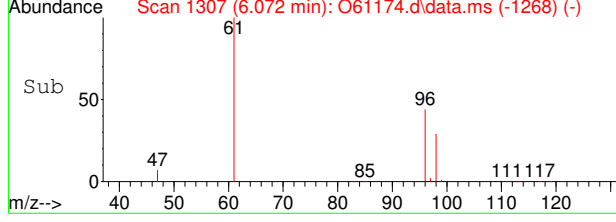
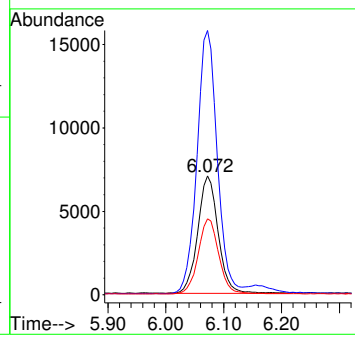
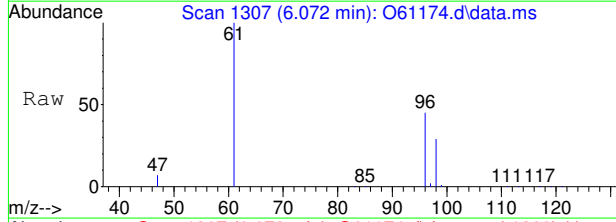


7.1.21
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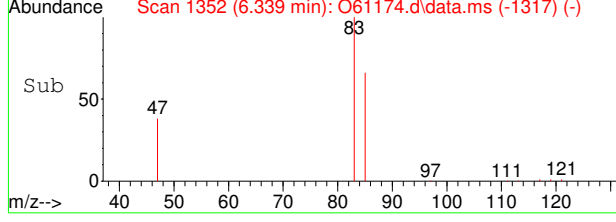
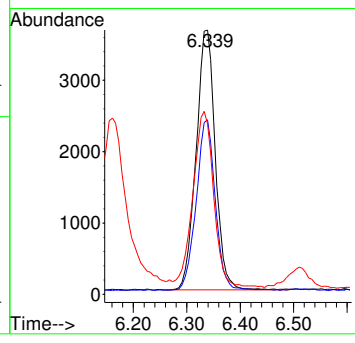
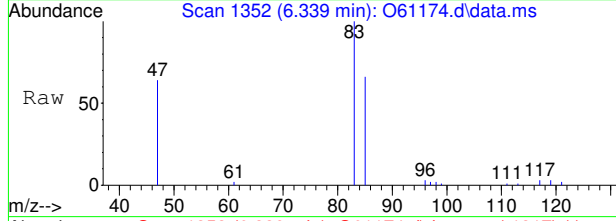
#8
 cis-1,2-Dichloroethene
 Concen: 1.32 ug/L
 RT: 6.072 min Scan# 1307
 Delta R.T. 0.006 min
 Lab File: O61174.d
 Acq: 10 Sep 2020 3:01 pm

Tgt Ion	Resp	Lower	Upper
96	17254		
61	224.4	107.0	167.0#
98	64.0	34.1	94.1



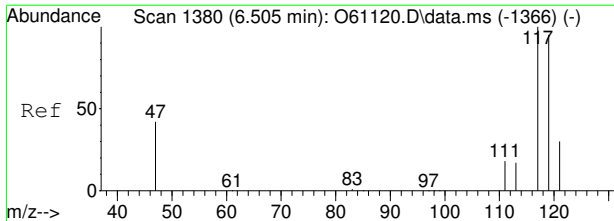
#9
 Chloroform
 Concen: 0.38 ug/L
 RT: 6.339 min Scan# 1352
 Delta R.T. 0.006 min
 Lab File: O61174.d
 Acq: 10 Sep 2020 3:01 pm

Tgt Ion	Resp	Lower	Upper
83	9106		
83	100		
85	65.5	33.0	93.0
47	60.7	8.1	68.1



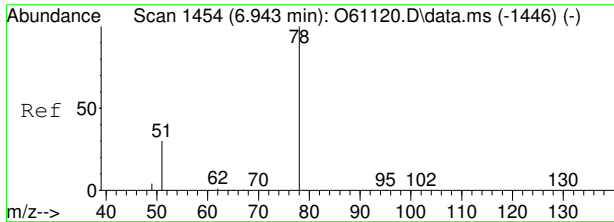
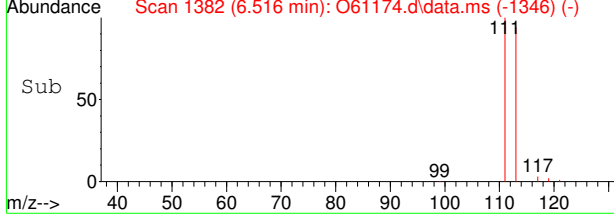
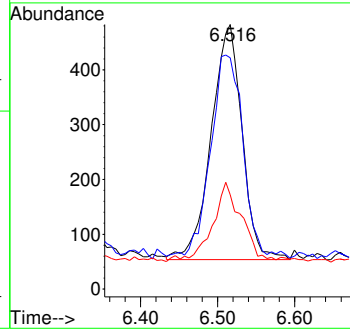
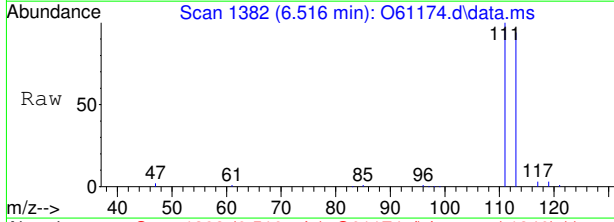
7.1.21
7





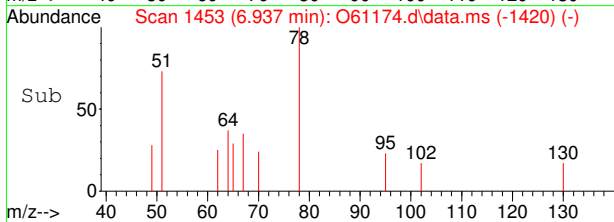
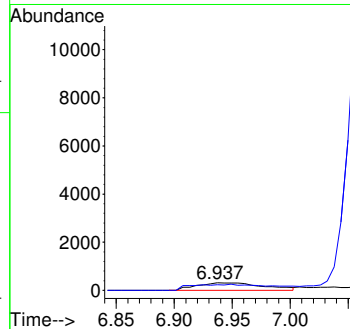
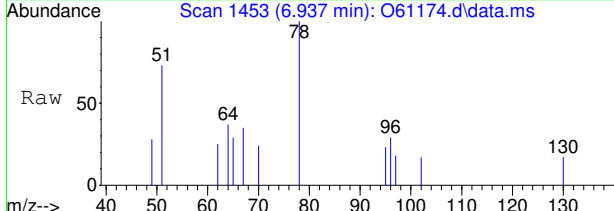
#10
 Carbon Tetrachloride
 Concen: 0.08 ug/L
 RT: 6.516 min Scan# 1382
 Delta R.T. 0.012 min
 Lab File: O61174.d
 Acq: 10 Sep 2020 3:01 pm

Tgt Ion	Resp	Lower	Upper
117	1193		
117	100		
119	85.1	80.9	140.9
121	28.4	4.1	64.1

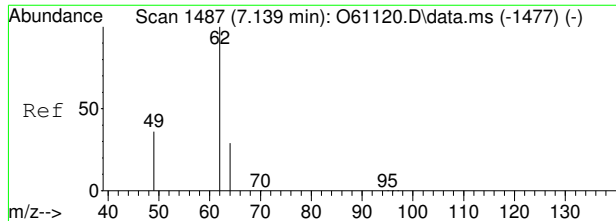


#12
 Benzene
 Concen: 0.03 ug/L m
 RT: 6.937 min Scan# 1453
 Delta R.T. -0.006 min
 Lab File: O61174.d
 Acq: 10 Sep 2020 3:01 pm

Tgt Ion	Resp	Lower	Upper
78	1253		
78	100		
51	72.6	0.0	56.2#

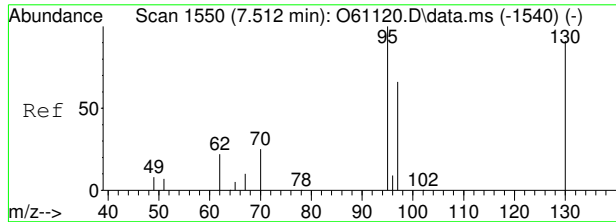
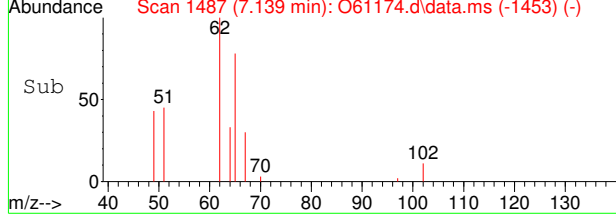
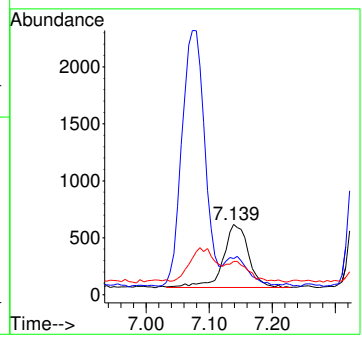
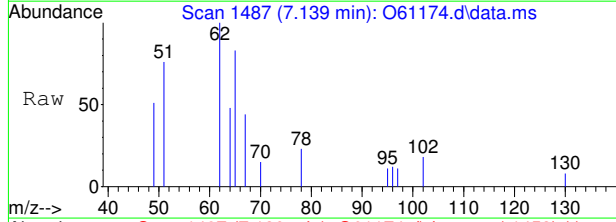


7.1.21
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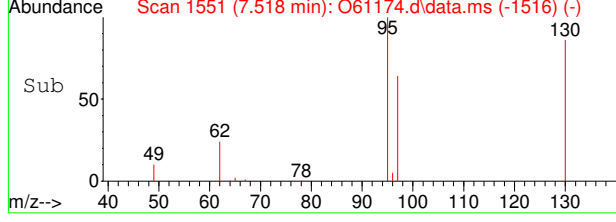
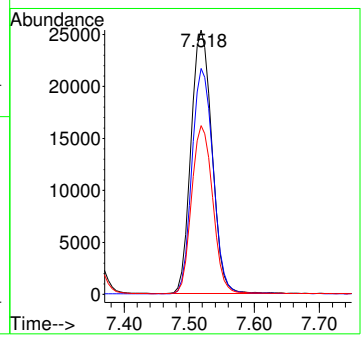
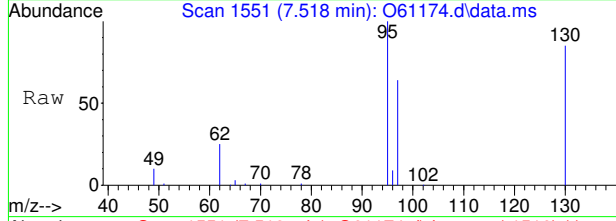
#14
 1,2-Dichloroethane
 Concen: 0.06 ug/L
 RT: 7.139 min Scan# 1487
 Delta R.T. 0.000 min
 Lab File: O61174.d
 Acq: 10 Sep 2020 3:01 pm

Tgt Ion	Ratio	Lower	Upper
62	100		
49	41.2	18.0	78.0
64	31.8	1.5	61.5



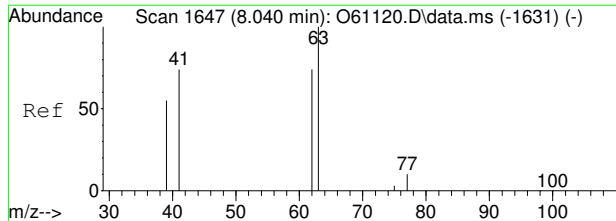
#15
 Trichloroethene
 Concen: 4.16 ug/L
 RT: 7.518 min Scan# 1551
 Delta R.T. 0.006 min
 Lab File: O61174.d
 Acq: 10 Sep 2020 3:01 pm

Tgt Ion	Ratio	Lower	Upper
95	100		
130	85.5	60.4	120.4
97	63.8	34.6	94.6

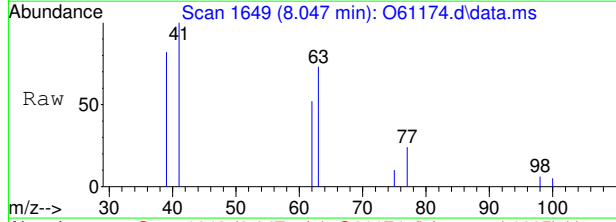


7.1.21
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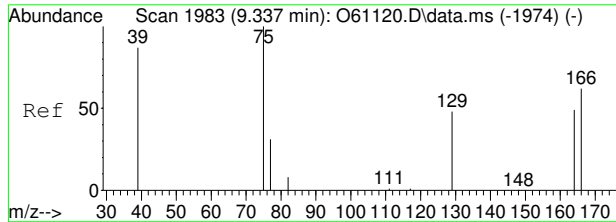
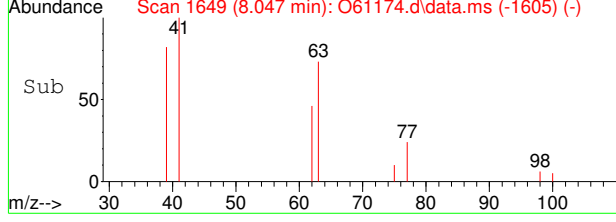
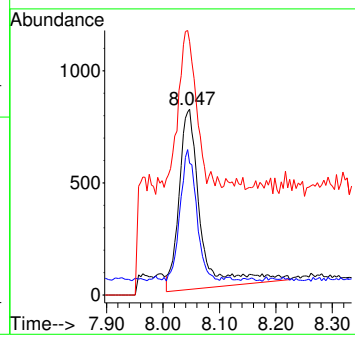


#16
 1,2-Dichloropropane
 Concen: 0.12 ug/L
 RT: 8.047 min Scan# 1649
 Delta R.T. 0.008 min
 Lab File: O61174.d
 Acq: 10 Sep 2020 3:01 pm

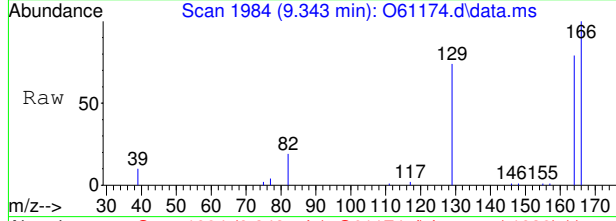


Tgt Ion: 63 Resp: 2125

Ion	Ratio	Lower	Upper
63	100		
62	69.1	42.7	102.7
41	80.8	54.5	114.5

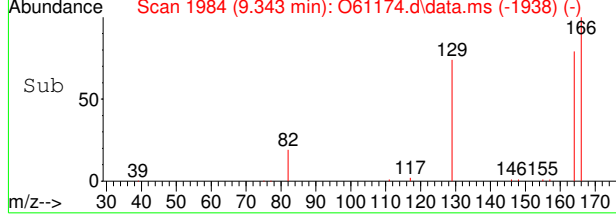
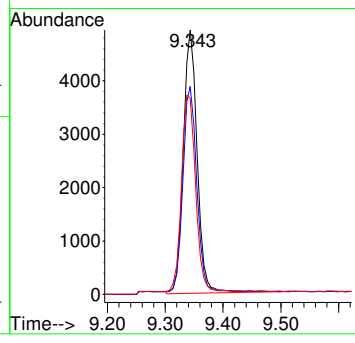


#21
 Tetrachloroethene
 Concen: 0.77 ug/L
 RT: 9.343 min Scan# 1984
 Delta R.T. 0.006 min
 Lab File: O61174.d
 Acq: 10 Sep 2020 3:01 pm



Tgt Ion: 166 Resp: 8270

Ion	Ratio	Lower	Upper
166	100		
164	78.5	47.3	107.3
129	73.9	37.5	97.5



7.1.21
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Manual Integration Approval Summary

Sample Number: FA78549-14
Lab FileID: O61174.D
Injection Time: 09/10/20 15:01

Method: SW846 8260B BY SIM
Analyst approved: 09/14/20 08:06 John Matthew de Guzman
Supervisor approved: 09/28/20 09:25 Melissa Mangual

Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzene	71-43-2		6.94	Poor instrument integration

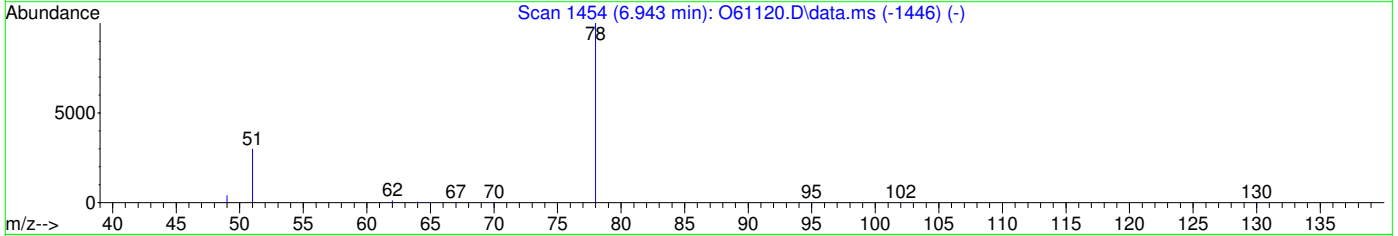
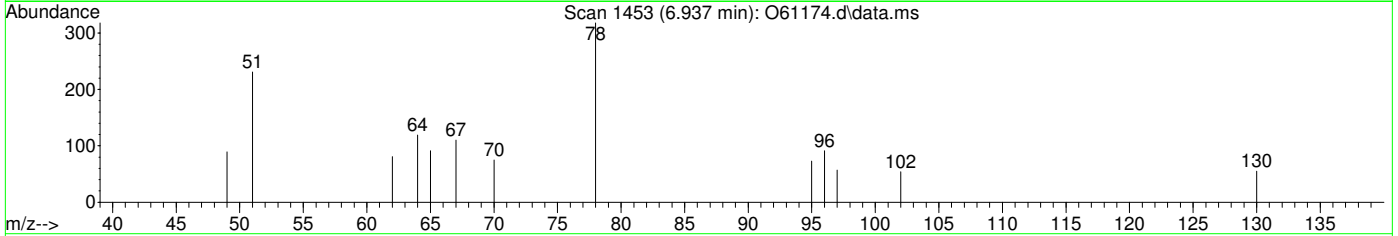
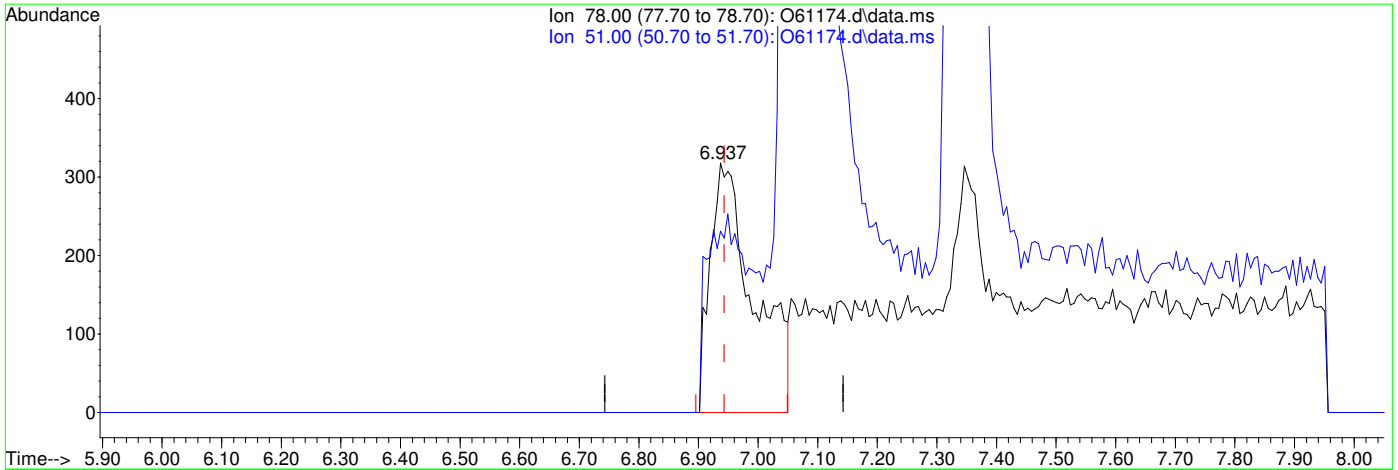
7.1.21.1

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Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-11-2020\vo2354\
 Data File : O61174.d
 Acq On : 10 Sep 2020 3:01 pm
 Operator : melissam
 Sample : FA78549-14
 Misc : MS47173,VO2354,,,,,
 ALS Vial : 22 Sample Multiplier: 1

Quant Time: Sep 14 07:57:38 2020
 Quant Method : C:\msdchem\1\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration



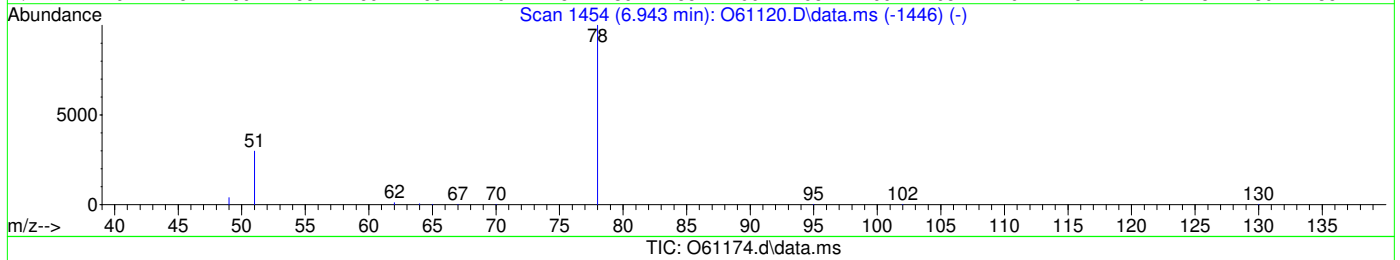
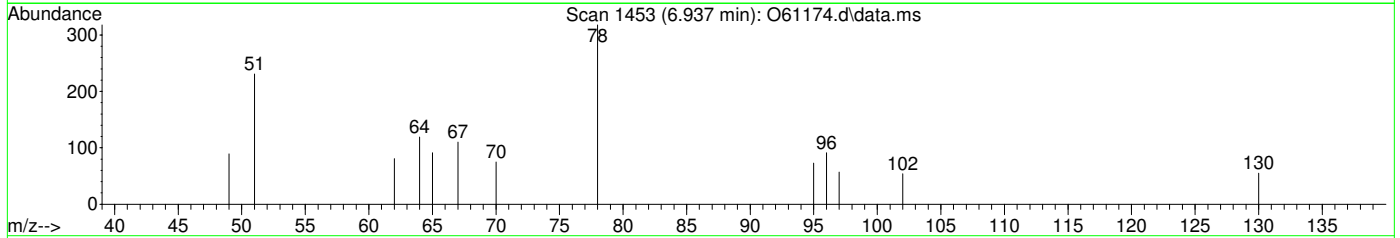
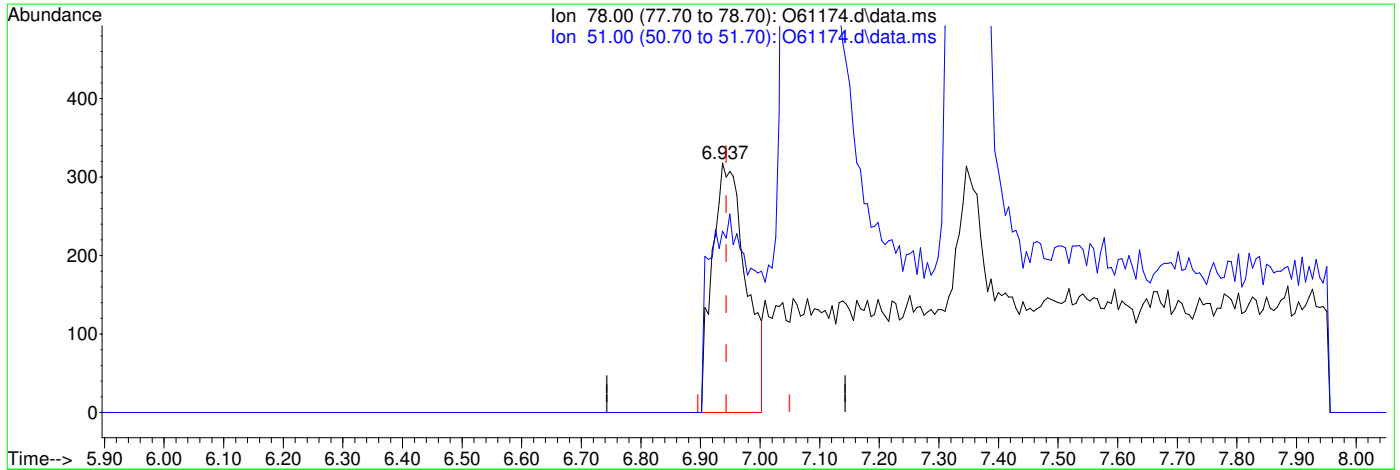
(12) Benzene ()
 6.937min (-0.006) 0.03ug/L
 response 1619

Ion	Exp%	Act%
78.00	100	100
51.00	26.20	72.64#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-11-2020\vo2354\
 Data File : O61174.d
 Acq On : 10 Sep 2020 3:01 pm
 Operator : melissam
 Sample : FA78549-14
 Misc : MS47173,VO2354,,,,,
 ALS Vial : 22 Sample Multiplier: 1

Quant Time: Sep 14 07:57:38 2020
 Quant Method : C:\msdchem\1\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration



(12) Benzene ()

6.937min (-0.006) 0.03ug/L m

response 1253

Ion	Exp%	Act%
78.00	100	100
51.00	26.20	72.64#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\091820\
 Data File : O61453.D
 Acq On : 18 Sep 2020 3:24 pm
 Operator : manager
 Sample : FA78549-14 Inst : MSVOA12
 Misc : MS47173,VO2365,,,,,
 ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 21 11:04:44 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Mon Sep 21 11:01:30 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.345	96	235447	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.444	117	184659	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.077	65	106206	5.50	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	110.00%	
19) Toluene-d8	8.900	98	199522	5.21	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	104.20%	
Target Compounds						
						Qvalue
5) Methylene Chloride	4.707	49	4636	0.09	ug/L	97
6) trans-1,2-Dichloroethene	4.877	61	1027	0.03	ug/L	95
7) 1,1-Dichloroethane	5.518	63	6456	0.17	ug/L	97
8) cis-1,2-Dichloroethene	6.071	96	26421	1.42	ug/L	98
9) Chloroform	6.332	83	13754	0.40	ug/L	90
10) Carbon Tetrachloride	6.516	117	2235	0.09	ug/L	98
14) 1,2-Dichloroethane	7.138	62	1720	0.06	ug/L	94
15) Trichloroethene	7.513	95	83836	4.35	ug/L	99
16) 1,2-Dichloropropane	8.043	63	1883	0.09	ug/L	97
21) Tetrachloroethene	9.341	166	15007	0.81	ug/L	99

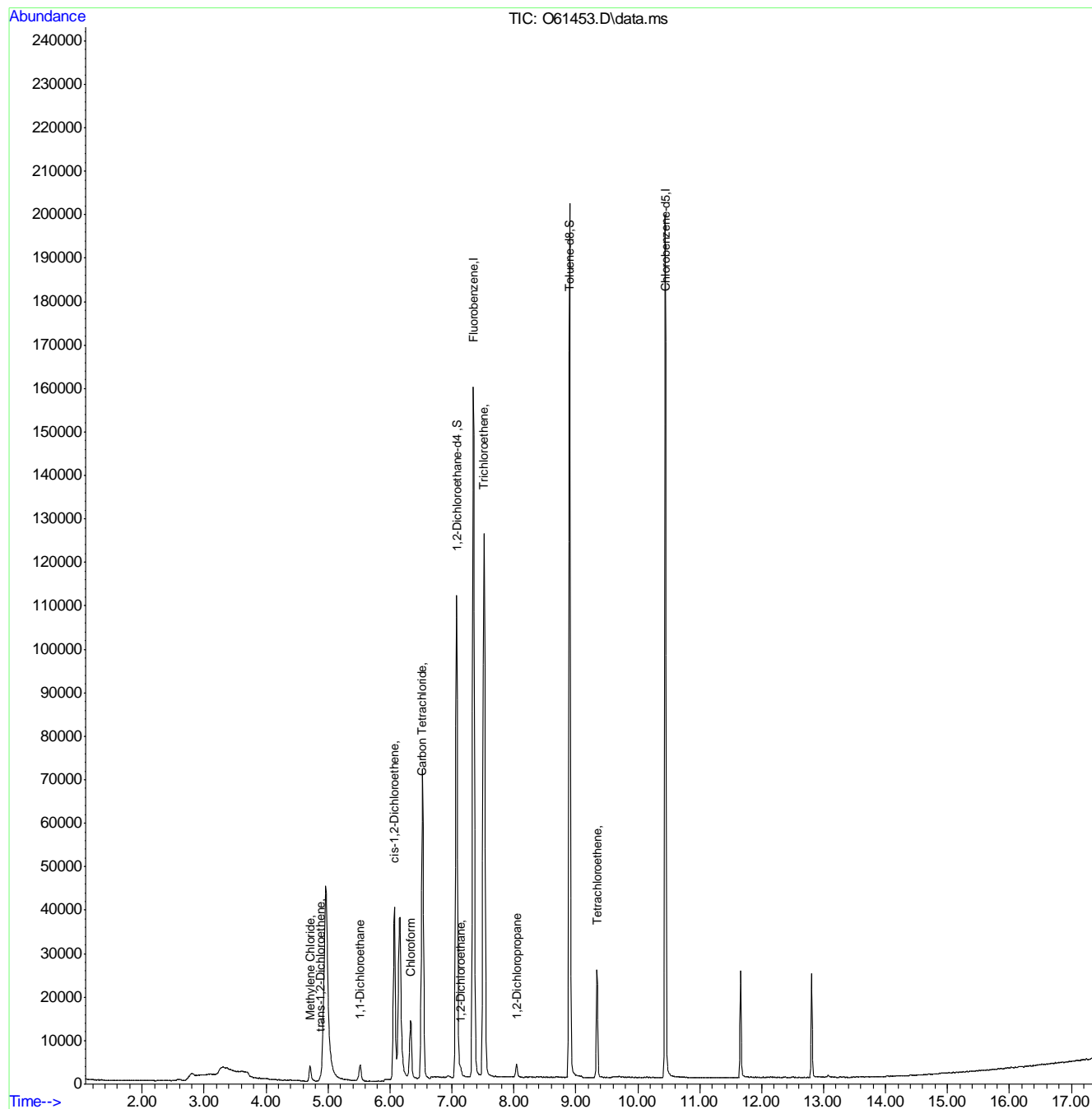
(#) = qualifier out of range (m) = manual integration (+) = signals summed

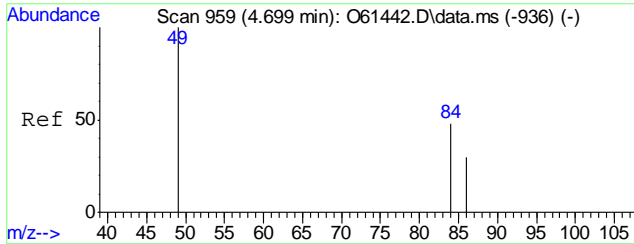
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\091820\
Data File : 061453.D
Acq On : 18 Sep 2020 3:24 pm
Operator : manager
Sample : FA78549-14
Misc : MS47173,VO2365,,,,,
ALS Vial : 16 Sample Multiplier: 1

Inst : MSVOA12

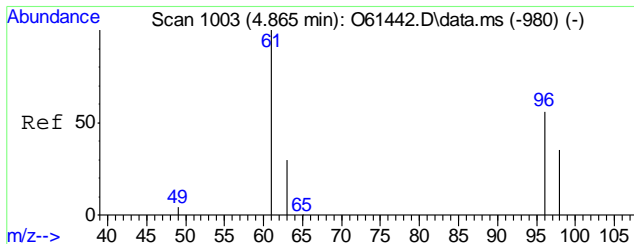
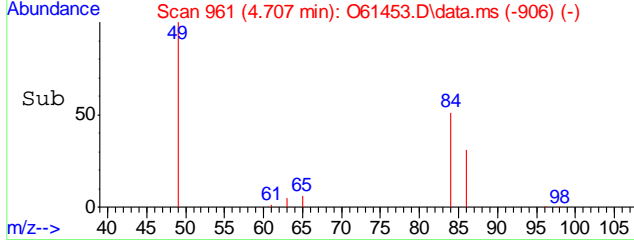
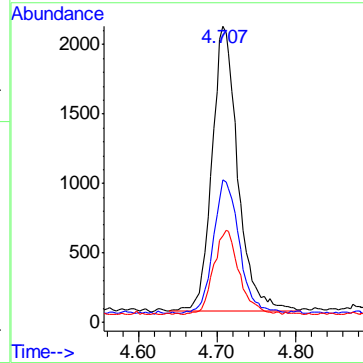
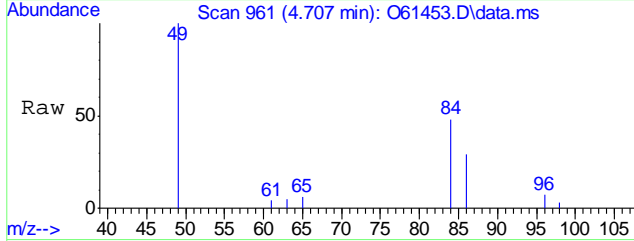
Quant Time: Sep 21 11:04:44 2020
Quant Method : C:\msdchem\2\methods\SIMCL091820.M
Quant Title : Standard Methods 6200B
QLast Update : Mon Sep 21 11:01:30 2020
Response via : Initial Calibration





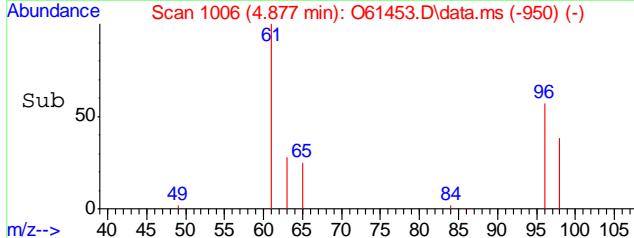
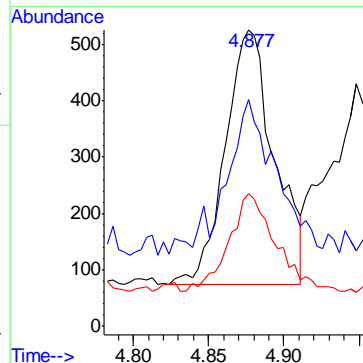
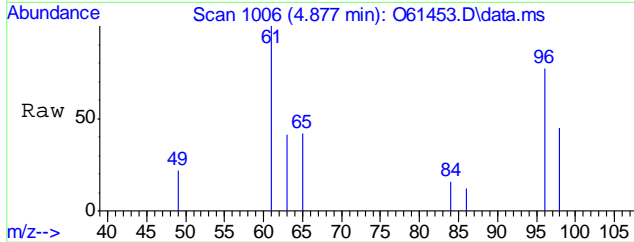
#5
Methylene Chloride
Concen: 0.09 ug/L
RT: 4.707 min Scan# 961
Delta R.T. 0.008 min
Lab File: O61453.D
Acq: 18 Sep 2020 3:24 pm

Tgt Ion	Resp	Lower	Upper
49	100		
84	46.9	17.8	77.8
86	27.4	0.3	60.3

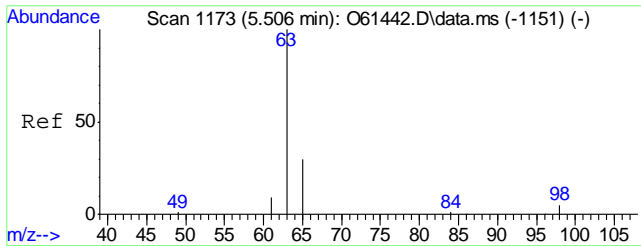


#6
trans-1,2-Dichloroethene
Concen: 0.03 ug/L
RT: 4.877 min Scan# 1006
Delta R.T. 0.011 min
Lab File: O61453.D
Acq: 18 Sep 2020 3:24 pm

Tgt Ion	Resp	Lower	Upper
61	100		
96	61.1	25.7	85.7
98	35.8	5.3	65.3

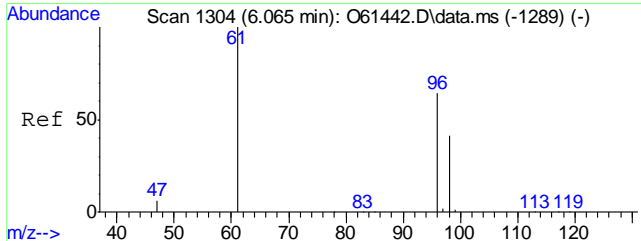
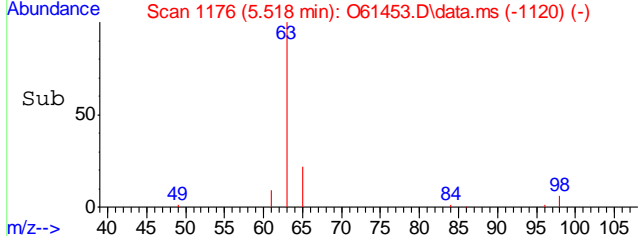
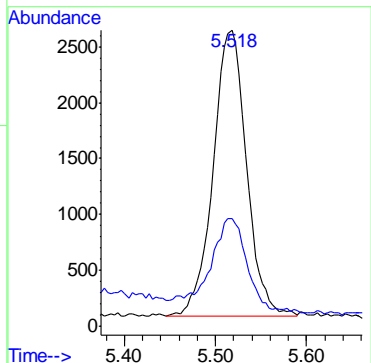
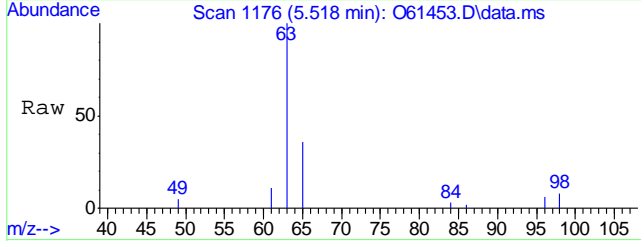


7.1.22
7



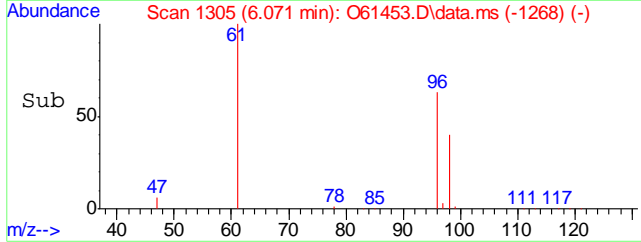
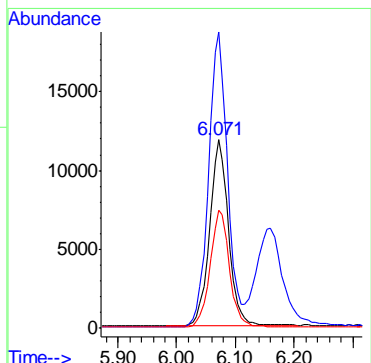
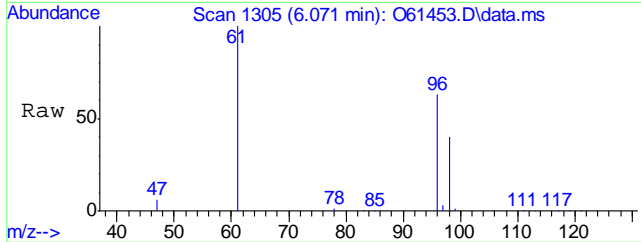
#7
1,1-Dichloroethane
Concen: 0.17 ug/L
RT: 5.518 min Scan# 1176
Delta R.T. 0.011 min
Lab File: O61453.D
Acq: 18 Sep 2020 3:24 pm

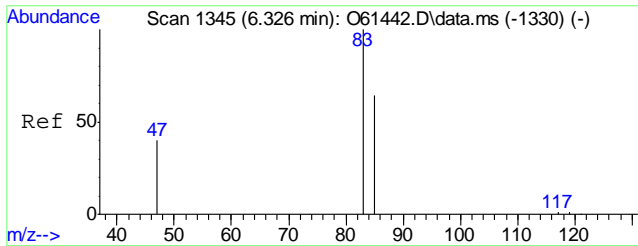
Tgt Ion	Resp	Lower	Upper
63	100		
65	32.1	0.2	60.2



#8
cis-1,2-Dichloroethene
Concen: 1.42 ug/L
RT: 6.071 min Scan# 1305
Delta R.T. 0.006 min
Lab File: O61453.D
Acq: 18 Sep 2020 3:24 pm

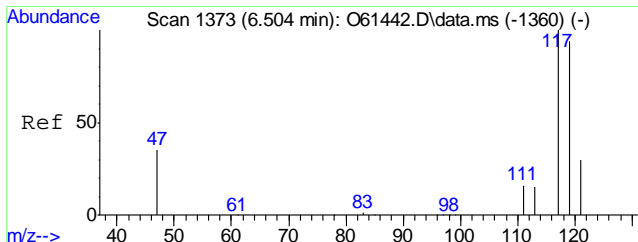
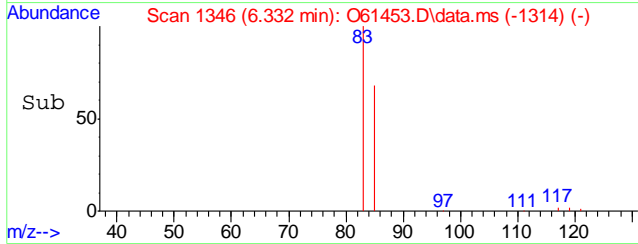
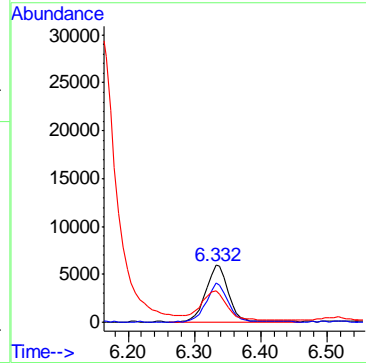
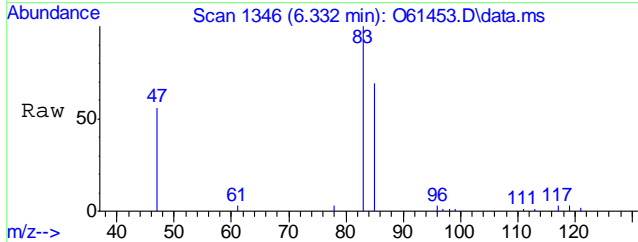
Tgt Ion	Resp	Lower	Upper
96	100		
61	158.6	126.5	186.5
98	62.8	34.2	94.2





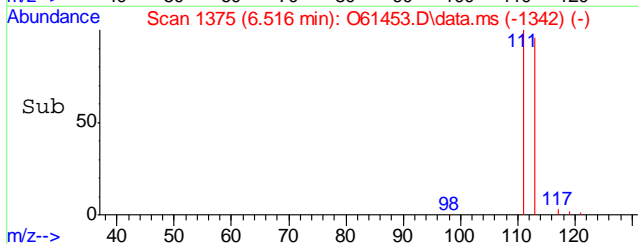
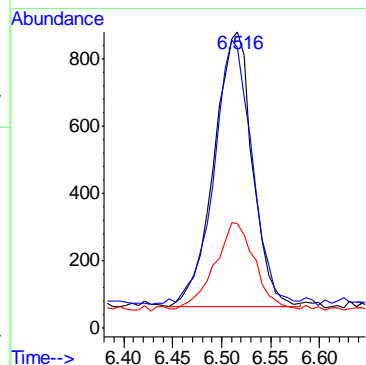
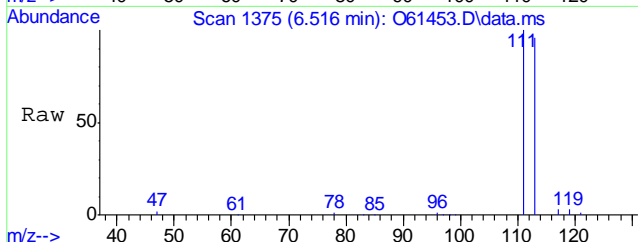
#9
 Chloroform
 Concen: 0.40 ug/L
 RT: 6.332 min Scan# 1346
 Delta R.T. 0.006 min
 Lab File: O61453.D
 Acq: 18 Sep 2020 3:24 pm

Tgt Ion	Resp	Lower	Upper
83	13754		
85	68.2	34.2	94.2
47	51.9	10.4	70.4

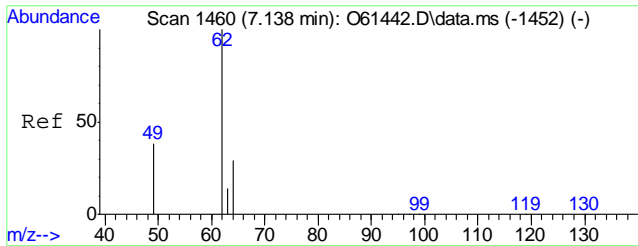


#10
 Carbon Tetrachloride
 Concen: 0.09 ug/L
 RT: 6.516 min Scan# 1375
 Delta R.T. 0.013 min
 Lab File: O61453.D
 Acq: 18 Sep 2020 3:24 pm

Tgt Ion	Resp	Lower	Upper
117	2235		
119	92.3	64.4	124.4
121	31.2	0.0	59.7

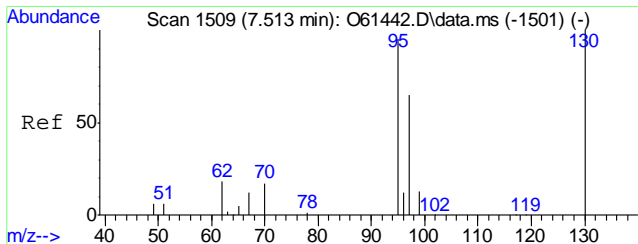
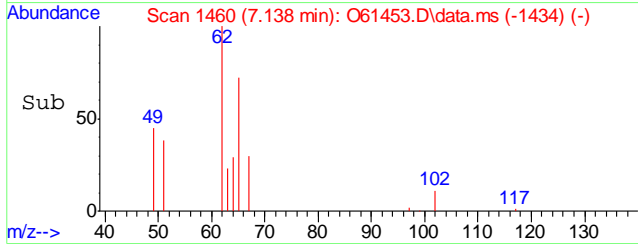
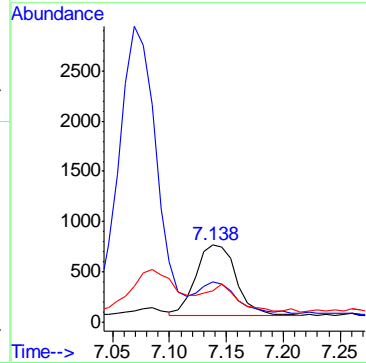
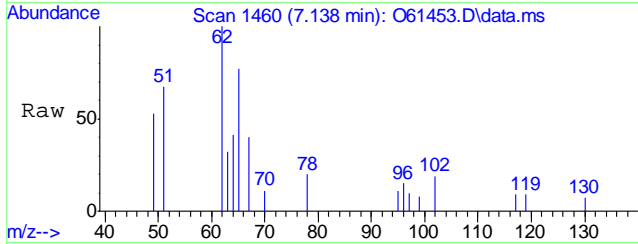


7.1.22
7



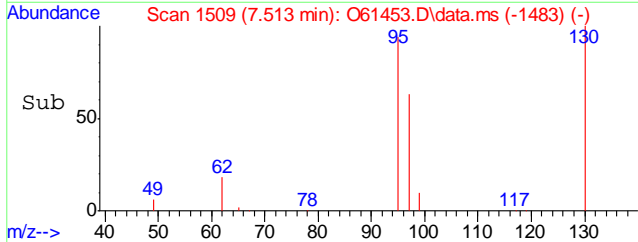
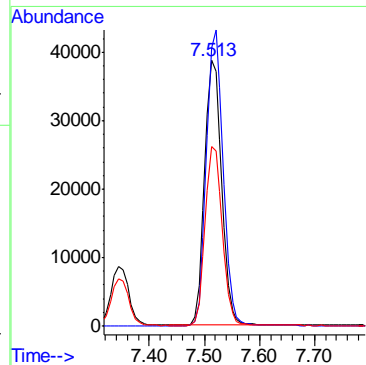
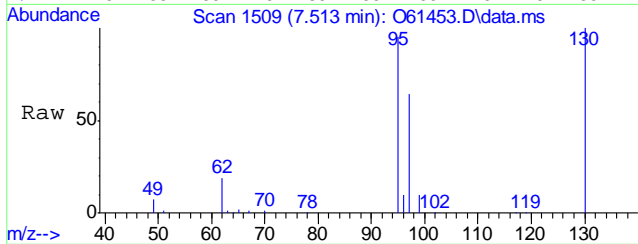
#14
 1,2-Dichloroethane
 Concen: 0.06 ug/L
 RT: 7.138 min Scan# 1460
 Delta R.T. 0.000 min
 Lab File: O61453.D
 Acq: 18 Sep 2020 3:24 pm

Tgt Ion	Resp	Lower	Upper
62	1720		
49	44.8	9.3	69.3
64	30.2	0.0	59.6

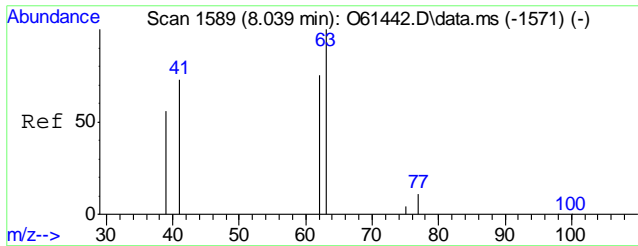


#15
 Trichloroethene
 Concen: 4.35 ug/L
 RT: 7.513 min Scan# 1509
 Delta R.T. 0.000 min
 Lab File: O61453.D
 Acq: 18 Sep 2020 3:24 pm

Tgt Ion	Resp	Lower	Upper
95	83836		
130	105.0	75.8	135.8
97	67.4	39.2	99.2

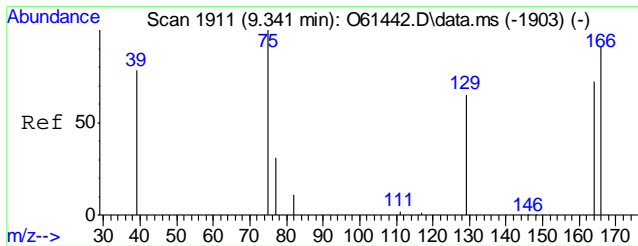
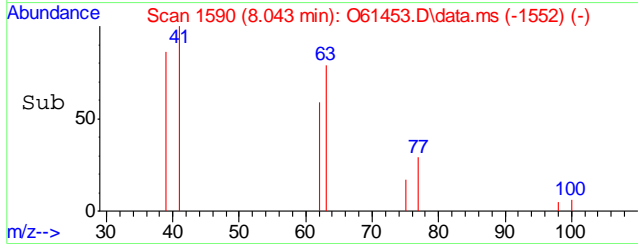
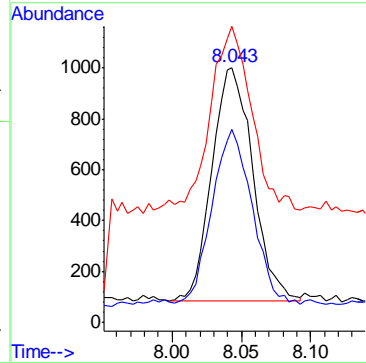
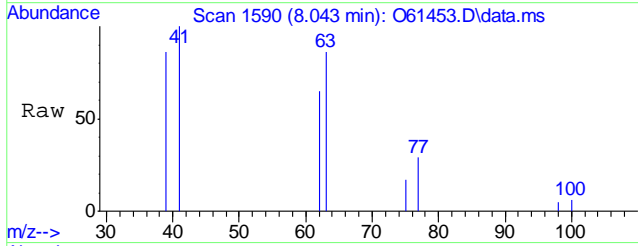


7.1.22
7



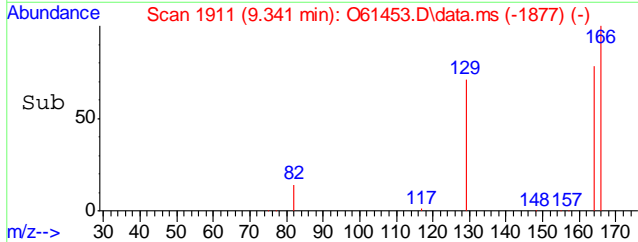
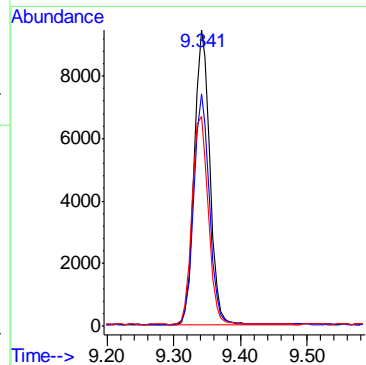
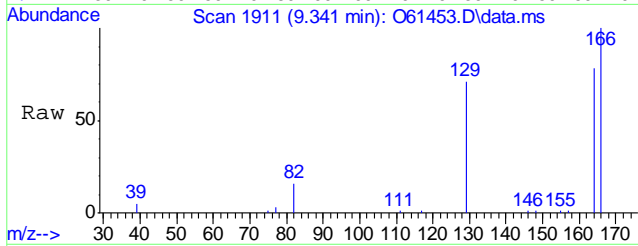
#16
 1,2-Dichloropropane
 Concen: 0.09 ug/L
 RT: 8.043 min Scan# 1590
 Delta R.T. 0.004 min
 Lab File: O61453.D
 Acq: 18 Sep 2020 3:24 pm

Tgt Ion	Resp	Lower	Upper
63	100		
62	74.5	44.6	104.6
41	78.9	43.3	103.3



#21
 Tetrachloroethene
 Concen: 0.81 ug/L
 RT: 9.341 min Scan# 1911
 Delta R.T. 0.000 min
 Lab File: O61453.D
 Acq: 18 Sep 2020 3:24 pm

Tgt Ion	Resp	Lower	Upper
166	100		
164	78.2	48.9	108.9
129	70.6	41.3	101.3



7.1.22
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-11-2020\vo2354\
Data File : O61175.d
Acq On : 10 Sep 2020 3:21 pm
Operator : melissam
Sample : FA78549-15
Misc : MS47173,VO2354,,,,,
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Sep 11 05:48:47 2020
Quant Method : C:\msdchem\1\methods\SIMCL090820.M
Quant Title : Standard Methods 6200B
QLast Update : Wed Sep 09 12:10:38 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)

Internal Standards						
1) Fluorobenzene	7.346	96	154595	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.447	117	109410	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.074	65	78289	5.77	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	115.40%	
19) Toluene-d8	8.896	98	135675	5.07	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	101.40%	
Target Compounds						
5) Methylene Chloride	4.700	49	6833	0.18	ug/L	86
6) trans-1,2-Dichloroethene	4.869	61	989	0.04	ug/L	69
7) 1,1-Dichloroethane	5.506	63	2790	0.10	ug/L	93
8) cis-1,2-Dichloroethene	6.066	96	19527	1.51	ug/L #	48
9) Chloroform	6.333	83	9932	0.42	ug/L	83
10) Carbon Tetrachloride	6.511	117	1830	0.12	ug/L	90
14) 1,2-Dichloroethane	7.145	62	1123	0.04	ug/L	92
15) Trichloroethene	7.512	95	47449	3.53	ug/L	96
16) 1,2-Dichloropropane	8.040	63	1964	0.12	ug/L	100
21) Tetrachloroethene	9.343	166	8383	0.79	ug/L	98

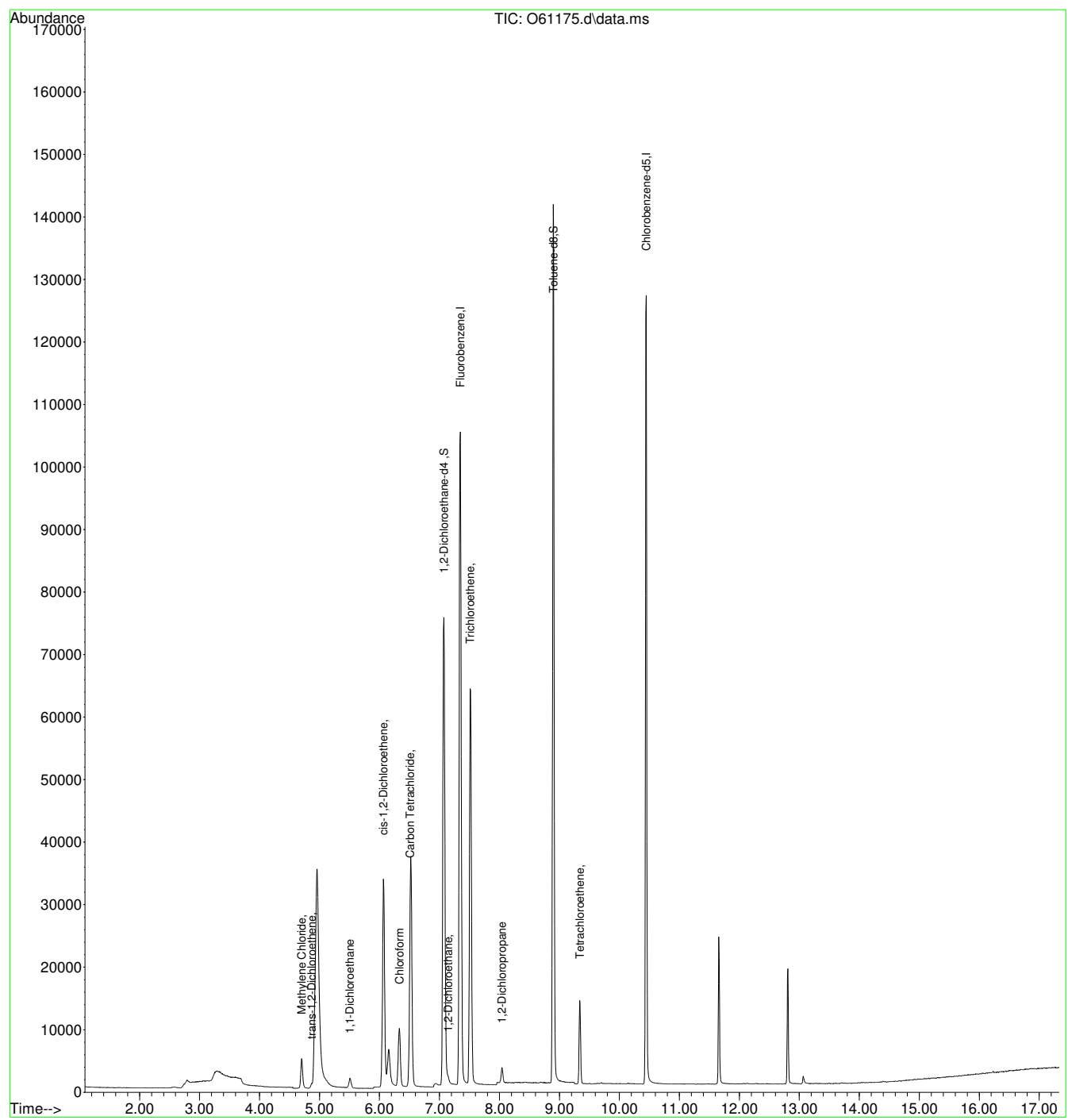
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.1.23
7

Quantitation Report (QT Reviewed)

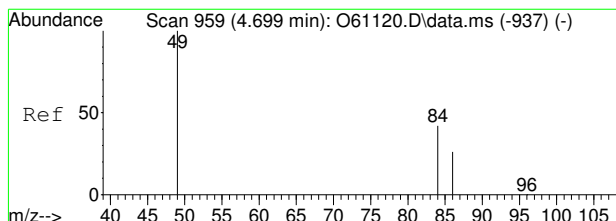
Data Path : C:\msdchem\1\data\johnm\September 2020\09-11-2020\vo2354\
Data File : O61175.d
Acq On : 10 Sep 2020 3:21 pm
Operator : melissam
Sample : FA78549-15
Misc : MS47173,VO2354,,,,,
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Sep 11 05:48:47 2020
Quant Method : C:\msdchem\1\methods\SIMCL090820.M
Quant Title : Standard Methods 6200B
QLast Update : Wed Sep 09 12:10:38 2020
Response via : Initial Calibration



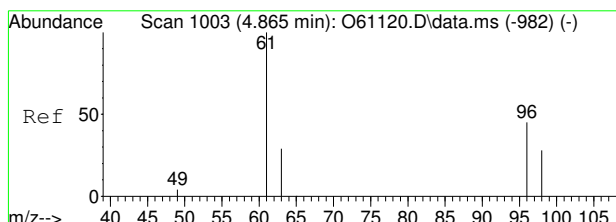
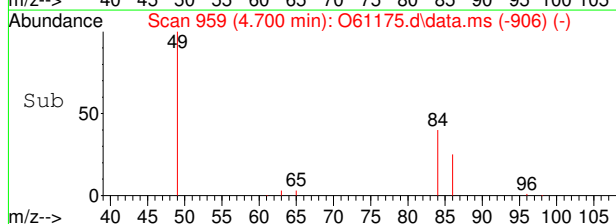
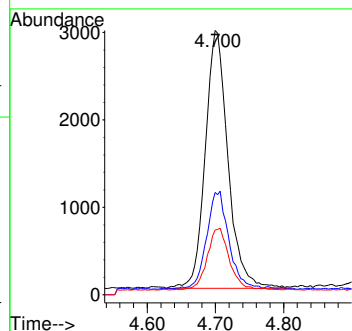
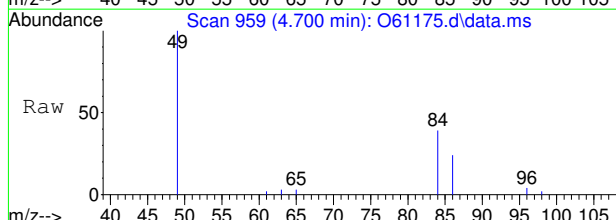
7.1.23
7





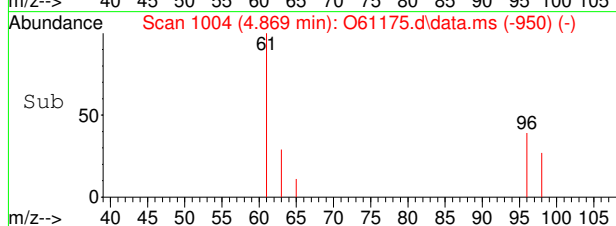
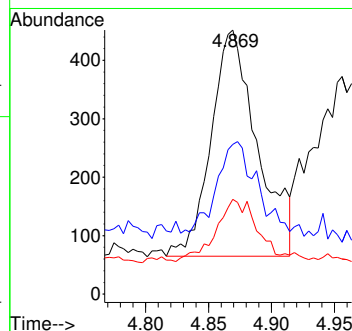
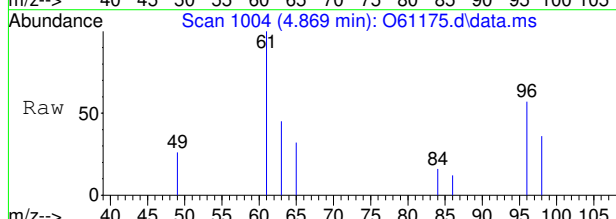
#5
 Methylene Chloride
 Concen: 0.18 ug/L
 RT: 4.700 min Scan# 959
 Delta R.T. 0.000 min
 Lab File: O61175.d
 Acq: 10 Sep 2020 3:21 pm

Tgt Ion	Resp	Lower	Upper
49	6833		
49	100		
84	37.3	17.9	77.9
86	23.0	0.0	59.8

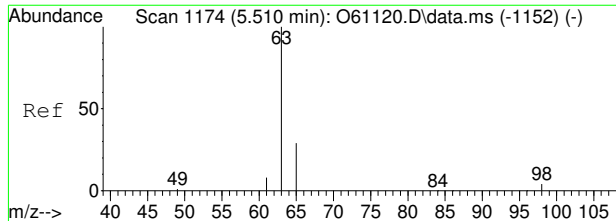


#6
 trans-1,2-Dichloroethene
 Concen: 0.04 ug/L
 RT: 4.869 min Scan# 1004
 Delta R.T. 0.004 min
 Lab File: O61175.d
 Acq: 10 Sep 2020 3:21 pm

Tgt Ion	Resp	Lower	Upper
61	989		
61	100		
96	38.5	36.9	96.9
98	26.9	11.1	71.1

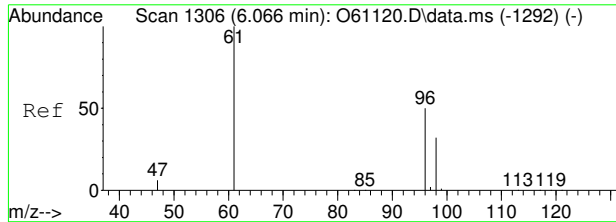
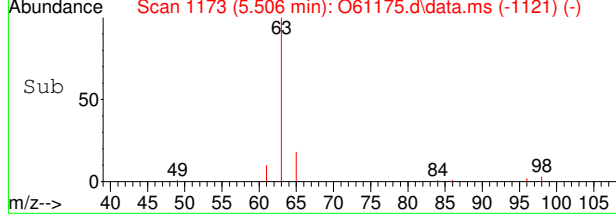
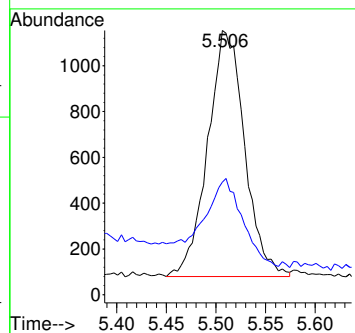
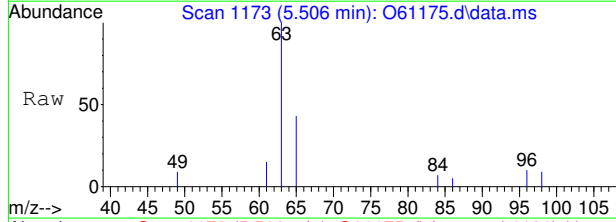


7.1.23
7



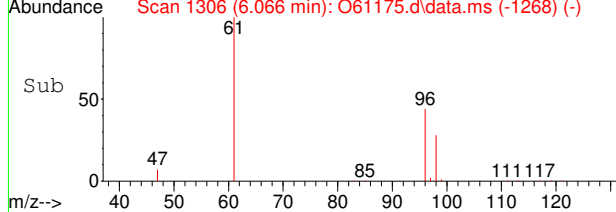
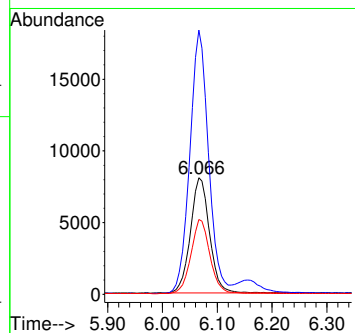
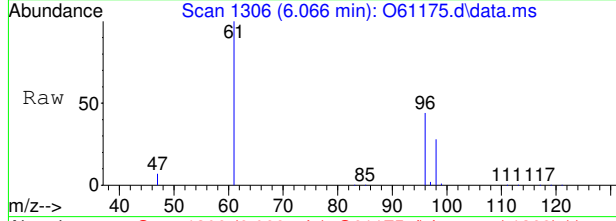
#7
 1,1-Dichloroethane
 Concen: 0.10 ug/L
 RT: 5.506 min Scan# 1173
 Delta R.T. -0.004 min
 Lab File: O61175.d
 Acq: 10 Sep 2020 3:21 pm

Tgt Ion	Resp	Lower	Upper
63	2790		
65	34.7	0.7	60.7

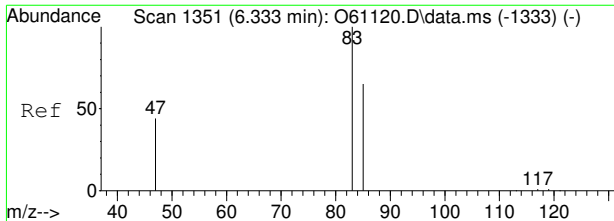


#8
 cis-1,2-Dichloroethene
 Concen: 1.51 ug/L
 RT: 6.066 min Scan# 1306
 Delta R.T. 0.000 min
 Lab File: O61175.d
 Acq: 10 Sep 2020 3:21 pm

Tgt Ion	Resp	Lower	Upper
96	19527		
61	228.5	107.0	167.0#
98	64.3	34.1	94.1

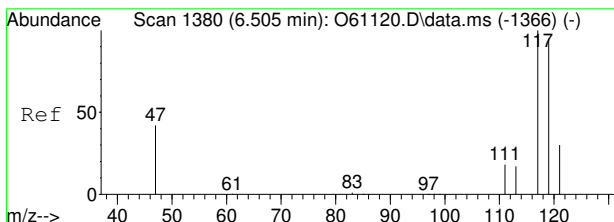
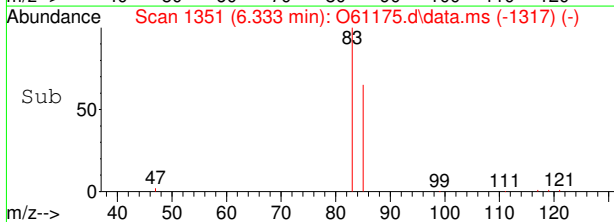
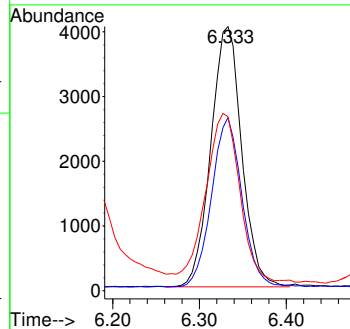
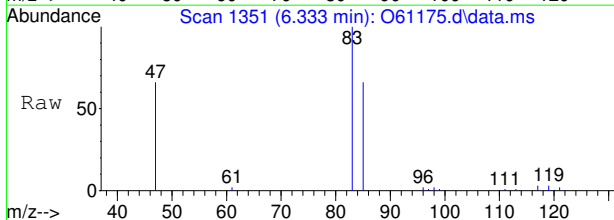


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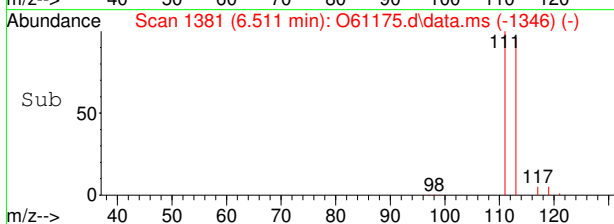
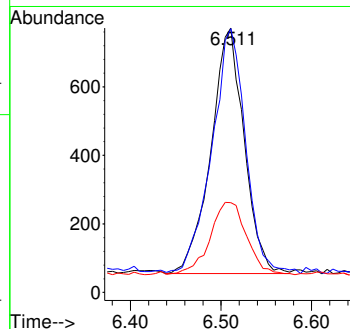
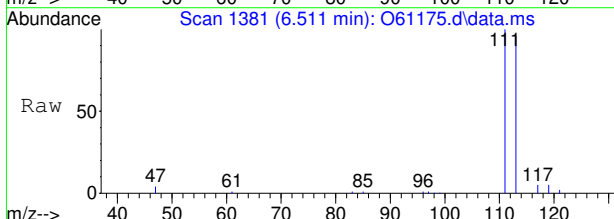
#9
 Chloroform
 Concen: 0.42 ug/L
 RT: 6.333 min Scan# 1351
 Delta R.T. 0.000 min
 Lab File: O61175.d
 Acq: 10 Sep 2020 3:21 pm

Tgt Ion	Resp	Lower	Upper
83	9932		
85	65.0	33.0	93.0
47	62.8	8.1	68.1

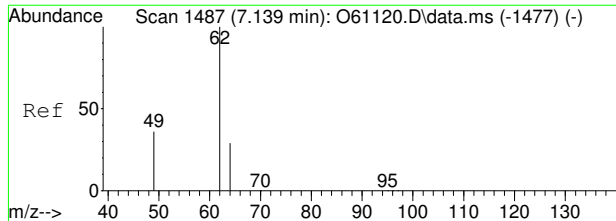


#10
 Carbon Tetrachloride
 Concen: 0.12 ug/L
 RT: 6.511 min Scan# 1381
 Delta R.T. 0.006 min
 Lab File: O61175.d
 Acq: 10 Sep 2020 3:21 pm

Tgt Ion	Resp	Lower	Upper
117	1830		
119	99.3	80.9	140.9
121	29.1	4.1	64.1



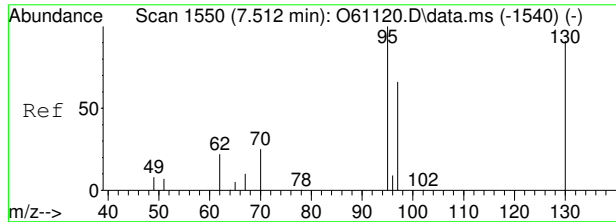
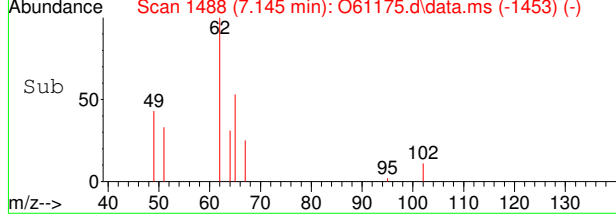
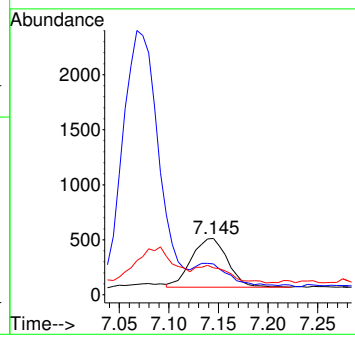
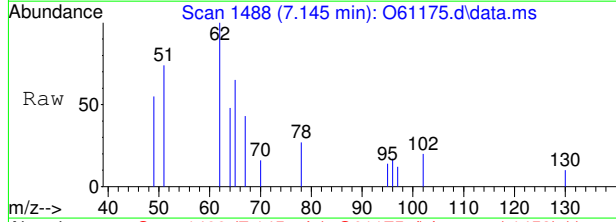
7.1.23
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#14
1,2-Dichloroethane
Concen: 0.04 ug/L
RT: 7.145 min Scan# 1488
Delta R.T. 0.006 min
Lab File: O61175.d
Acq: 10 Sep 2020 3:21 pm

Tgt Ion: 62 Resp: 1123

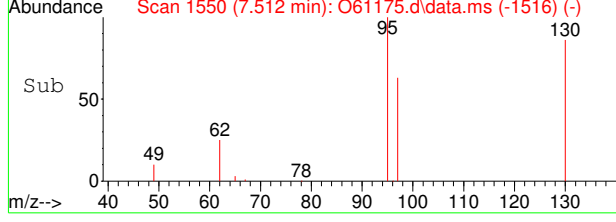
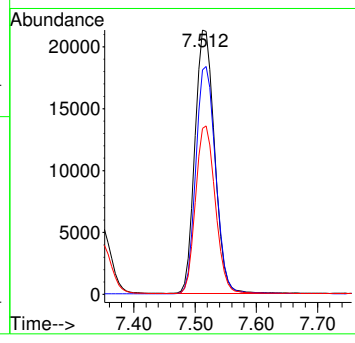
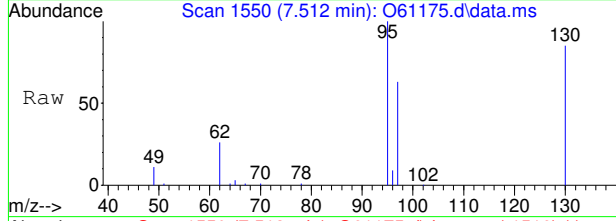
Ion	Ratio	Lower	Upper
62	100		
49	43.1	18.0	78.0
64	26.4	1.5	61.5

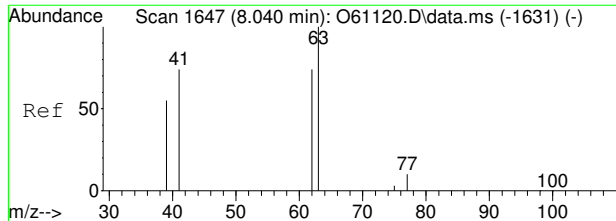


#15
Trichloroethene
Concen: 3.53 ug/L
RT: 7.512 min Scan# 1550
Delta R.T. 0.000 min
Lab File: O61175.d
Acq: 10 Sep 2020 3:21 pm

Tgt Ion: 95 Resp: 47449

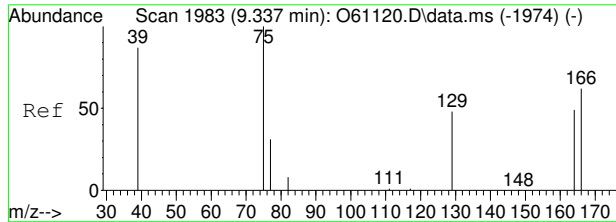
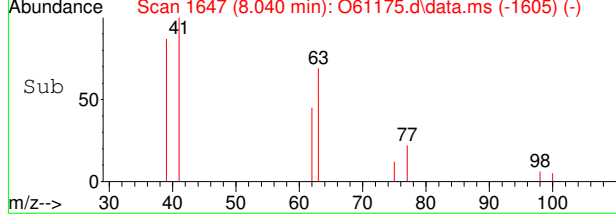
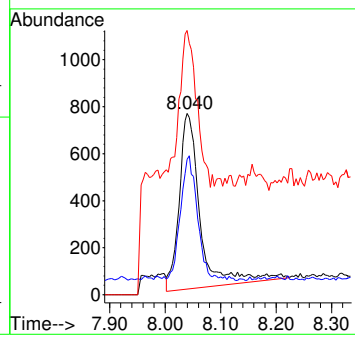
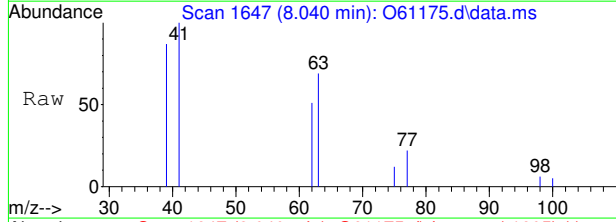
Ion	Ratio	Lower	Upper
95	100		
130	85.0	60.4	120.4
97	62.7	34.6	94.6





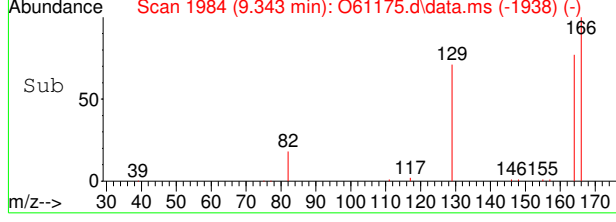
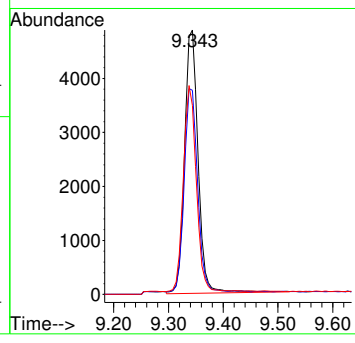
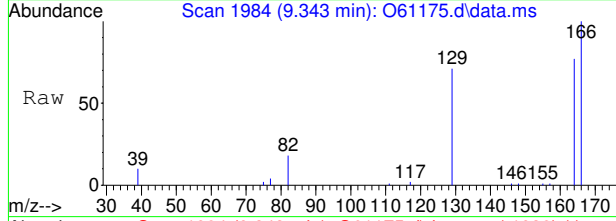
#16
 1,2-Dichloropropane
 Concen: 0.12 ug/L
 RT: 8.040 min Scan# 1647
 Delta R.T. 0.000 min
 Lab File: O61175.d
 Acq: 10 Sep 2020 3:21 pm

Tgt Ion	Resp	Lower	Upper
63	1964		
62	73.0	42.7	102.7
41	84.8	54.5	114.5



#21
 Tetrachloroethene
 Concen: 0.79 ug/L
 RT: 9.343 min Scan# 1984
 Delta R.T. 0.006 min
 Lab File: O61175.d
 Acq: 10 Sep 2020 3:21 pm

Tgt Ion	Resp	Lower	Upper
166	8383		
164	76.9	47.3	107.3
129	71.1	37.5	97.5



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Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\091820\
 Data File : O61454.D
 Acq On : 18 Sep 2020 3:45 pm
 Operator : manager
 Sample : FA78549-15 Inst : MSVOA12
 Misc : MS47173,VO2365,,,,,
 ALS Vial : 17 Sample Multiplier: 1

Quant Time: Sep 21 11:05:39 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Mon Sep 21 11:01:30 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.344	96	219299	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.448	117	171101	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.077	65	100997	5.62	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	112.40%	
19) Toluene-d8	8.899	98	184629	5.20	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	104.00%	
Target Compounds						
						Qvalue
5) Methylene Chloride	4.711	49	3455	0.07	ug/L	97
6) trans-1,2-Dichloroethene	4.880	61	1138	0.04	ug/L	95
7) 1,1-Dichloroethane	5.521	63	3437	0.10	ug/L	98
8) cis-1,2-Dichloroethene	6.071	96	30167	1.74	ug/L	97
9) Chloroform	6.332	83	14948	0.47	ug/L	96
10) Carbon Tetrachloride	6.516	117	3625	0.16	ug/L	96
14) 1,2-Dichloroethane	7.146	62	1405	0.05	ug/L	98
15) Trichloroethene	7.513	95	68901	3.84	ug/L	98
16) 1,2-Dichloropropane	8.043	63	1699	0.09	ug/L	99
21) Tetrachloroethene	9.344	166	15162	0.88	ug/L	96

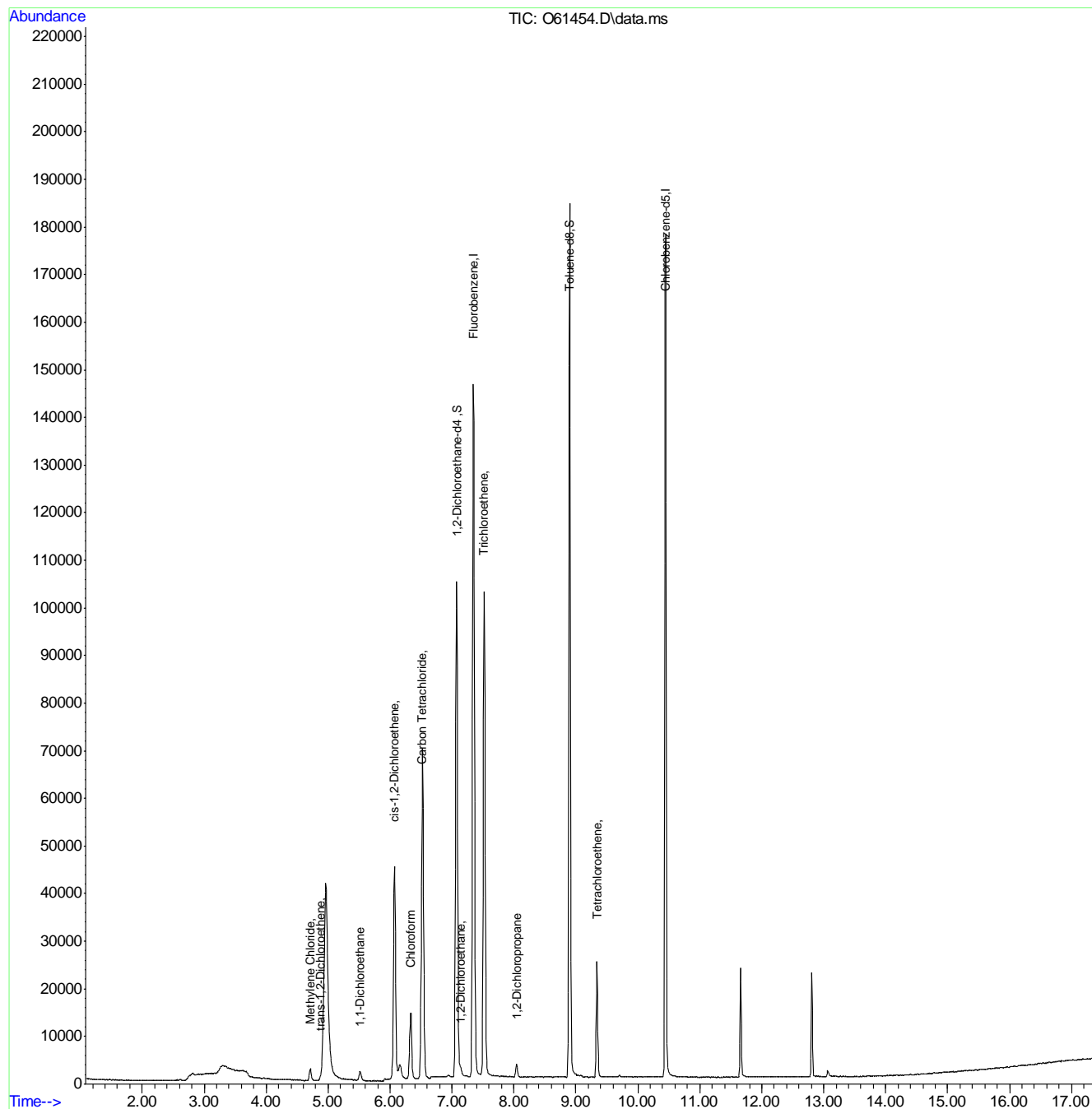
(#) = qualifier out of range (m) = manual integration (+) = signals summed

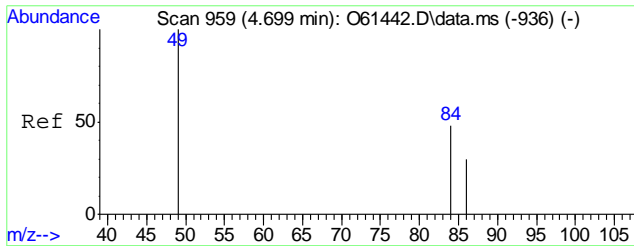
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\091820\
Data File : 061454.D
Acq On : 18 Sep 2020 3:45 pm
Operator : manager
Sample : FA78549-15
Misc : MS47173,VO2365,,,,,
ALS Vial : 17 Sample Multiplier: 1

Inst : MSVOA12

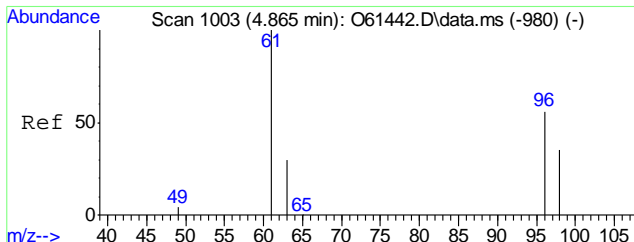
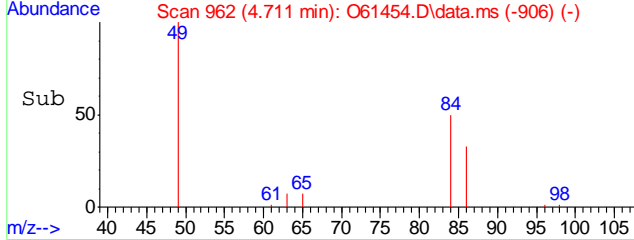
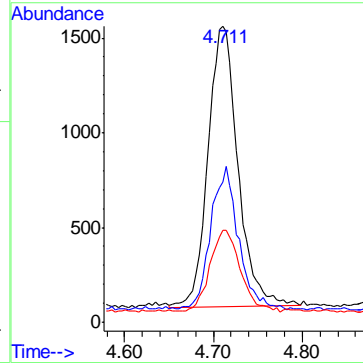
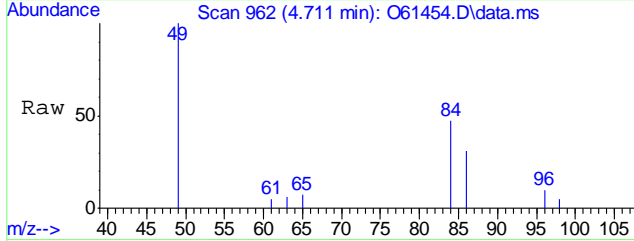
Quant Time: Sep 21 11:05:39 2020
Quant Method : C:\msdchem\2\methods\SIMCL091820.M
Quant Title : Standard Methods 6200B
QLast Update : Mon Sep 21 11:01:30 2020
Response via : Initial Calibration





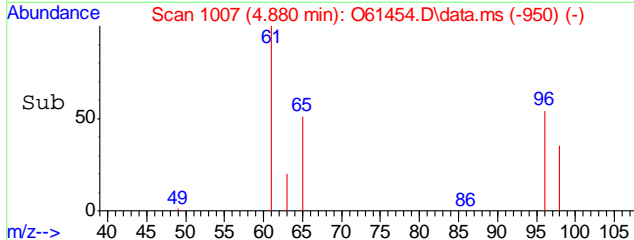
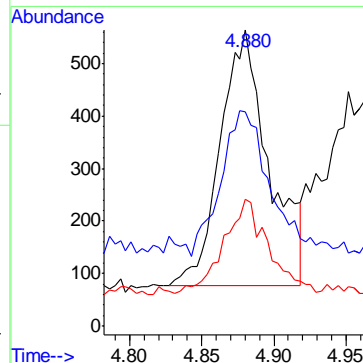
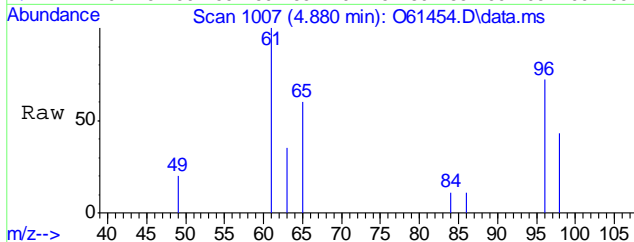
#5
 Methylene Chloride
 Concen: 0.07 ug/L
 RT: 4.711 min Scan# 962
 Delta R.T. 0.011 min
 Lab File: O61454.D
 Acq: 18 Sep 2020 3:45 pm

Tgt Ion	Resp	Lower	Upper
49	3455	100	
84	45.6	17.8	77.8
86	28.6	0.3	60.3

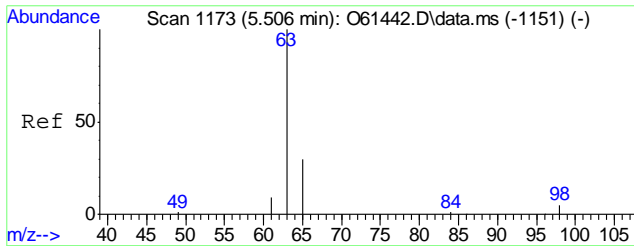


#6
 trans-1,2-Dichloroethene
 Concen: 0.04 ug/L
 RT: 4.880 min Scan# 1007
 Delta R.T. 0.015 min
 Lab File: O61454.D
 Acq: 18 Sep 2020 3:45 pm

Tgt Ion	Resp	Lower	Upper
61	1138	100	
96	49.8	25.7	85.7
98	36.0	5.3	65.3

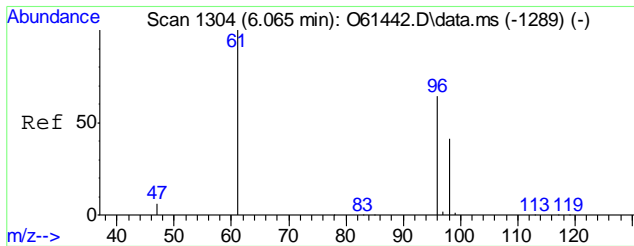
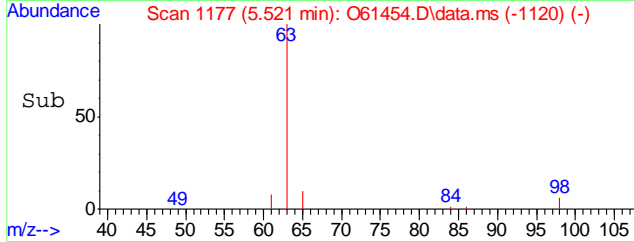
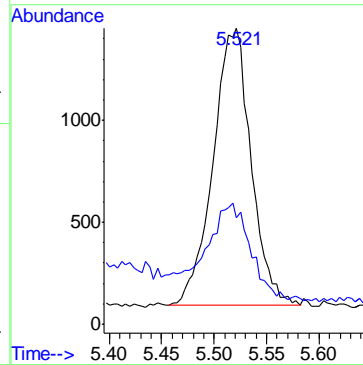
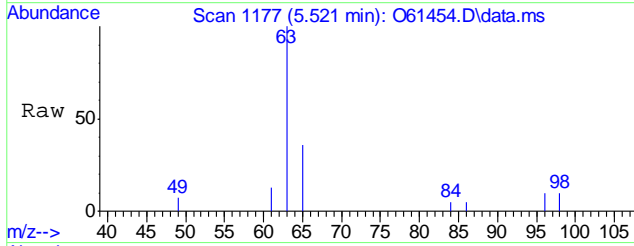


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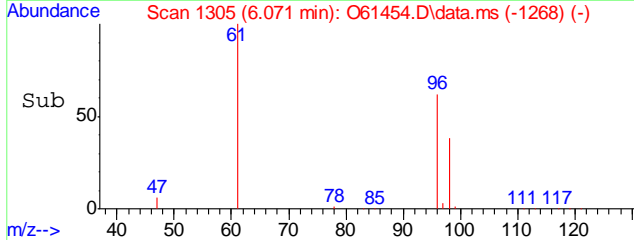
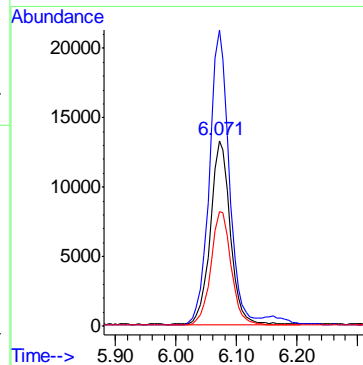
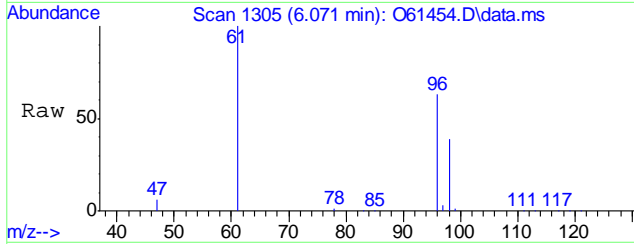
#7
 1,1-Dichloroethane
 Concen: 0.10 ug/L
 RT: 5.521 min Scan# 1177
 Delta R.T. 0.015 min
 Lab File: O61454.D
 Acq: 18 Sep 2020 3:45 pm

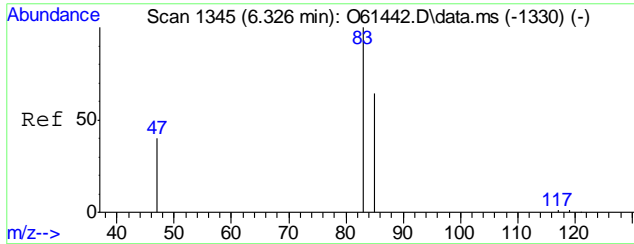
Tgt Ion	Resp	Lower	Upper
63	3437		
65	29.0	0.2	60.2



#8
 cis-1,2-Dichloroethene
 Concen: 1.74 ug/L
 RT: 6.071 min Scan# 1305
 Delta R.T. 0.006 min
 Lab File: O61454.D
 Acq: 18 Sep 2020 3:45 pm

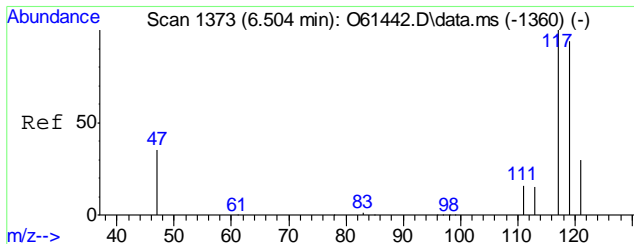
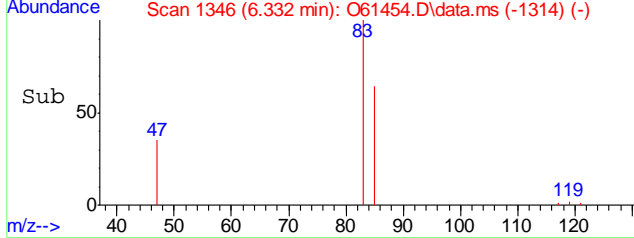
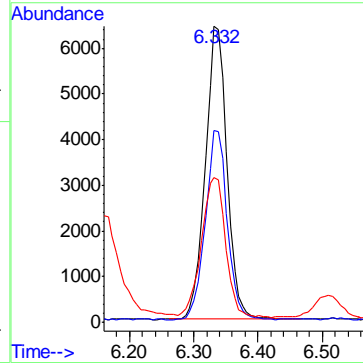
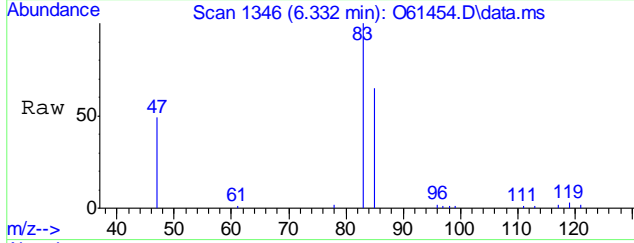
Tgt Ion	Resp	Lower	Upper
96	30167		
61	160.7	126.5	186.5
98	61.8	34.2	94.2





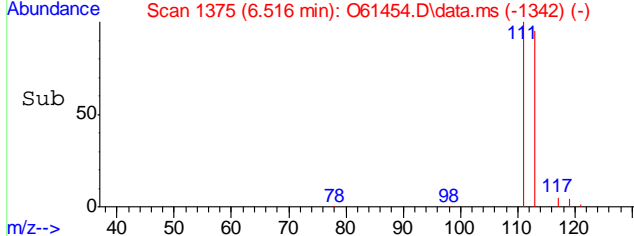
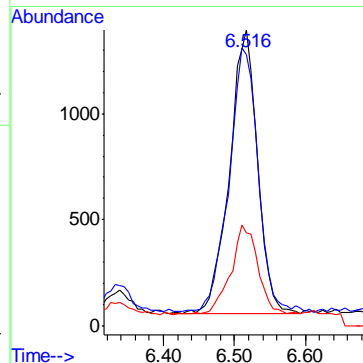
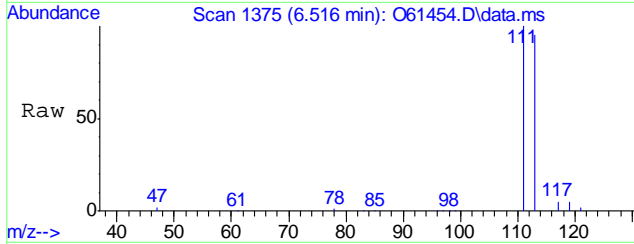
#9
Chloroform
Concen: 0.47 ug/L
RT: 6.332 min Scan# 1346
Delta R.T. 0.006 min
Lab File: O61454.D
Acq: 18 Sep 2020 3:45 pm

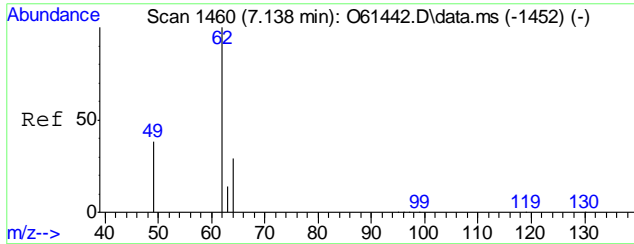
Tgt Ion	Resp	Lower	Upper
83	14948		
85	64.4	34.2	94.2
47	46.8	10.4	70.4



#10
Carbon Tetrachloride
Concen: 0.16 ug/L
RT: 6.516 min Scan# 1375
Delta R.T. 0.013 min
Lab File: O61454.D
Acq: 18 Sep 2020 3:45 pm

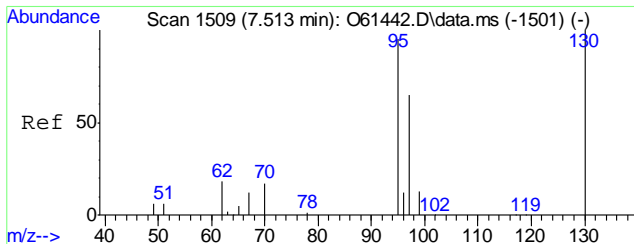
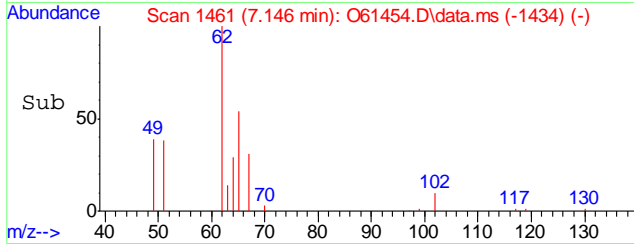
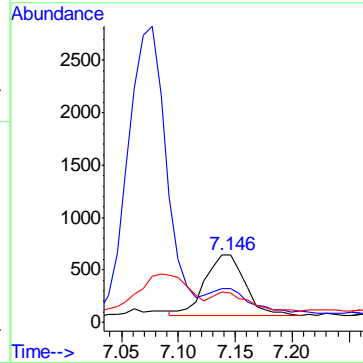
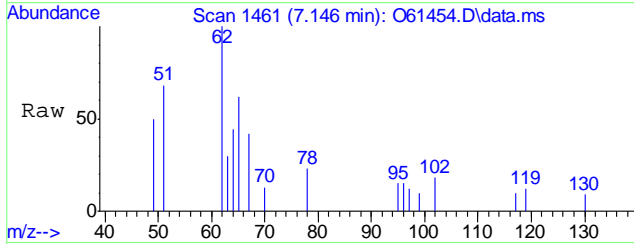
Tgt Ion	Resp	Lower	Upper
117	3625		
119	90.0	64.4	124.4
121	28.3	0.0	59.7





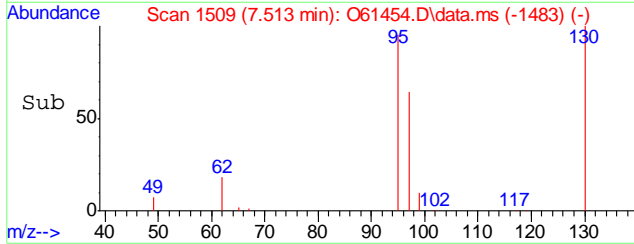
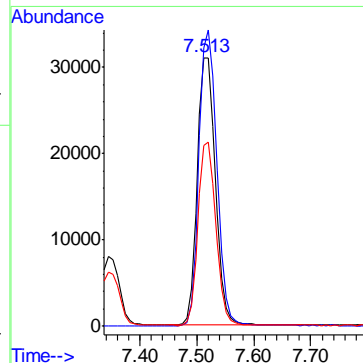
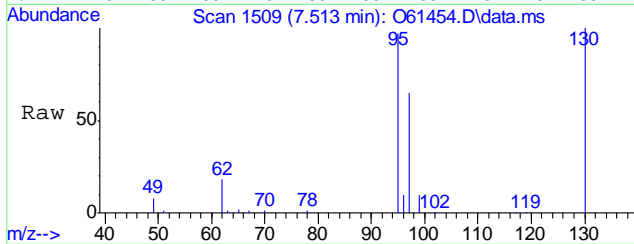
#14
 1,2-Dichloroethane
 Concen: 0.05 ug/L
 RT: 7.146 min Scan# 1461
 Delta R.T. 0.008 min
 Lab File: O61454.D
 Acq: 18 Sep 2020 3:45 pm

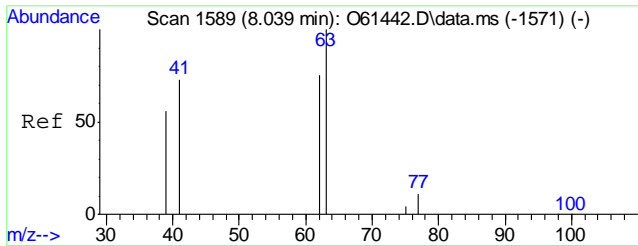
Tgt Ion	Resp	Lower	Upper
62	1405		
49	37.9	9.3	69.3
64	29.3	0.0	59.6



#15
 Trichloroethene
 Concen: 3.84 ug/L
 RT: 7.513 min Scan# 1509
 Delta R.T. -0.000 min
 Lab File: O61454.D
 Acq: 18 Sep 2020 3:45 pm

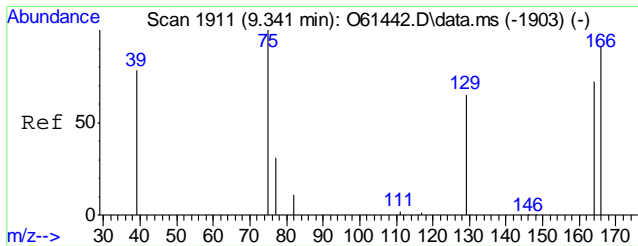
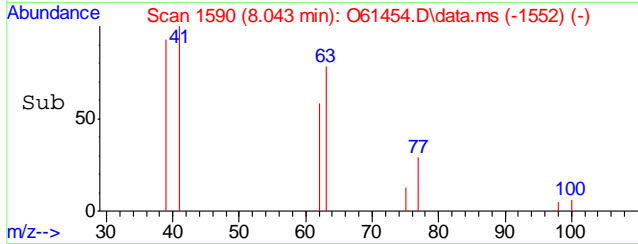
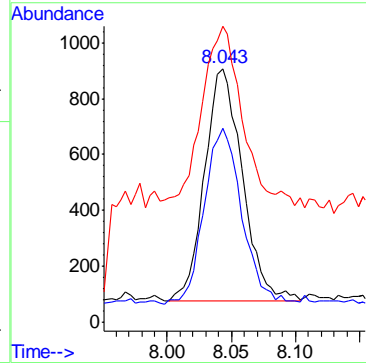
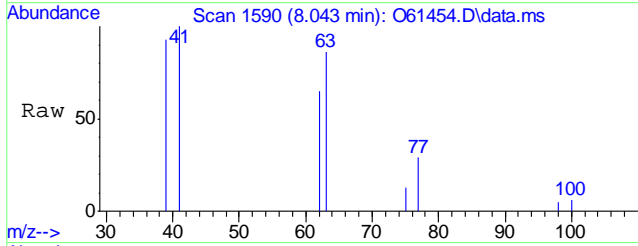
Tgt Ion	Resp	Lower	Upper
95	68901		
130	103.7	75.8	135.8
97	67.5	39.2	99.2





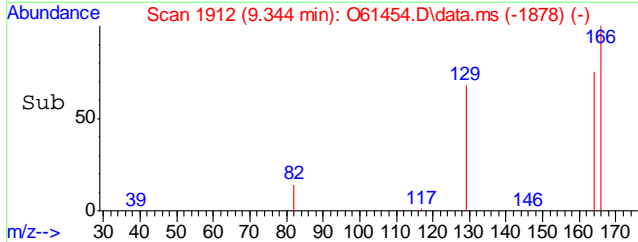
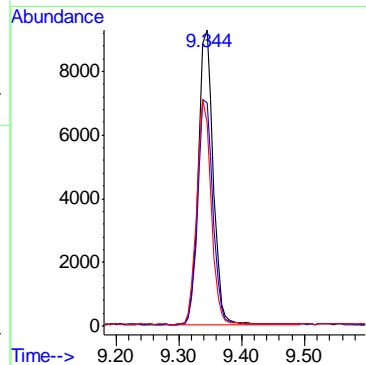
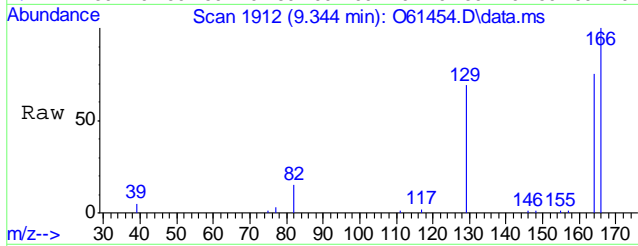
#16
 1,2-Dichloropropane
 Concen: 0.09 ug/L
 RT: 8.043 min Scan# 1590
 Delta R.T. 0.004 min
 Lab File: O61454.D
 Acq: 18 Sep 2020 3:45 pm

Tgt Ion	Resp	Lower	Upper
63	100		
62	74.7	44.6	104.6
41	74.1	43.3	103.3



#21
 Tetrachloroethene
 Concen: 0.88 ug/L
 RT: 9.344 min Scan# 1912
 Delta R.T. 0.004 min
 Lab File: O61454.D
 Acq: 18 Sep 2020 3:45 pm

Tgt Ion	Resp	Lower	Upper
166	100		
164	75.2	48.9	108.9
129	68.4	41.3	101.3



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Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-14-2020\ vz2417\
Data File : Z62293.d
Acq On : 13 Sep 2020 12:52 pm
Operator : stutip
Sample : fa78549-16
Misc : MS47174,VZ2417,,,,,
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 14 07:07:19 2020
Quant Method : C:\msdchem\1\methods\SIMCL091120.M
Quant Title : WATER-EPA 8260B
QLast Update : Sun Sep 13 13:38:26 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Fluorobenzene	7.401	96	1709438	5.00	ppb	0.00
18) Chlorobenzene-d5	10.511	117	1372484	5.00	ppb	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.130	65	576412	5.45	ppb	0.00
Spiked Amount	5.000	Range	79 - 125	Recovery	=	109.00%
19) Toluene-d8	8.961	98	1677141	5.03	ppb	0.00
Spiked Amount	5.000	Range	70 - 130	Recovery	=	100.60%
Target Compounds						
4) 1,1-Dichloroethene	4.083	96	20653	0.20	ppb	# 87
5) Methylene Chloride	4.713	84	35365	0.21	ppb	# 88
7) 1,1-Dichloroethane	5.543	63	307694	1.44	ppb	# 99
8) cis-1,2-Dichloroethene	6.110	96	60032	0.43	ppb	93
9) Chloroform	6.377	83	211059	0.82	ppb	98
11) 1,1,1-Trichloroethane	6.614	97	14587	0.06	ppb	83
14) 1,2-Dichloroethane	7.198	62	22134	0.12	ppb	100
15) Trichloroethene	7.571	95	1382228	9.47	ppb	# 84
21) Tetrachloroethene	9.399	166	915325	5.93	ppb	100

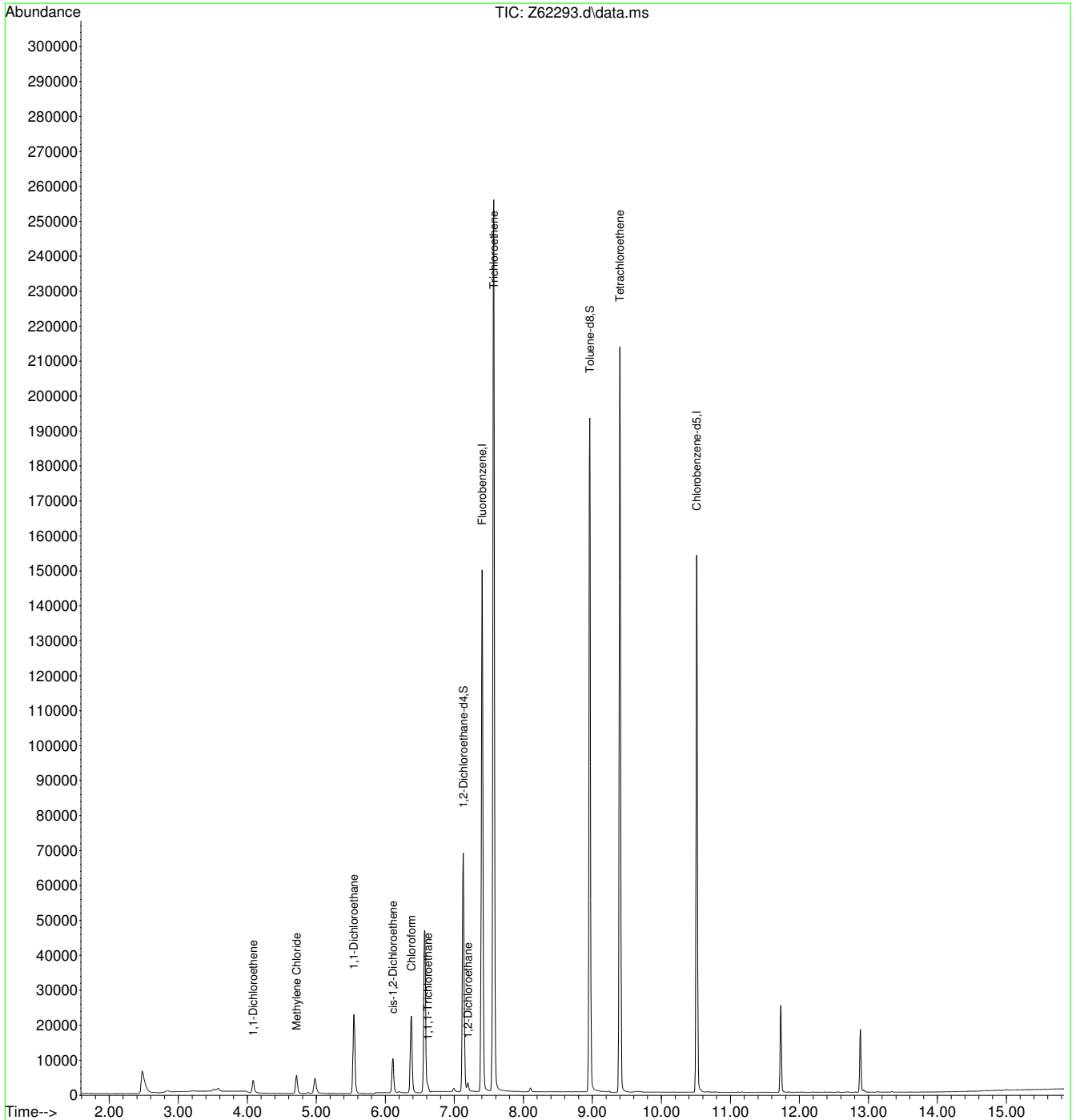
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.1.25
7

Quantitation Report (QT Reviewed)

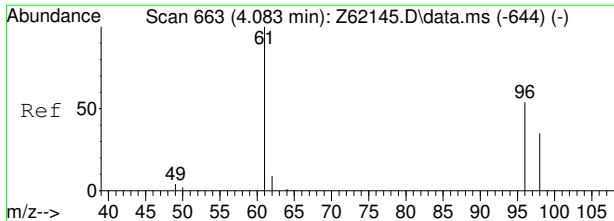
Data Path : C:\msdchem\1\data\johnm\September 2020\09-14-2020\ vz2417\
 Data File : Z62293.d
 Acq On : 13 Sep 2020 12:52 pm
 Operator : stutip
 Sample : fa78549-16
 Misc : MS47174,VZ2417,,,,,
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 14 07:07:19 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Sun Sep 13 13:38:26 2020
 Response via : Initial Calibration



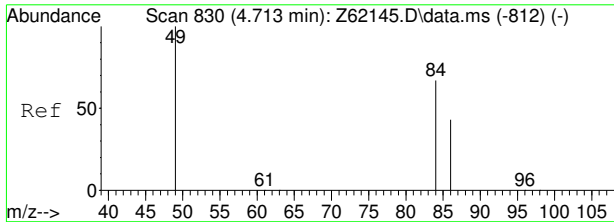
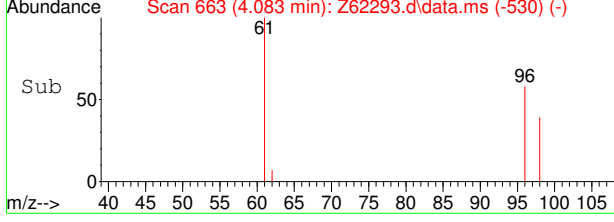
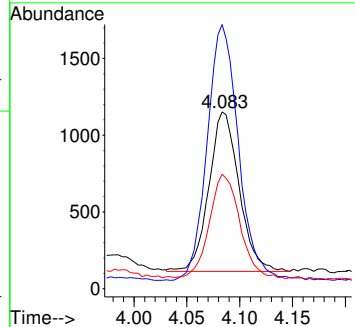
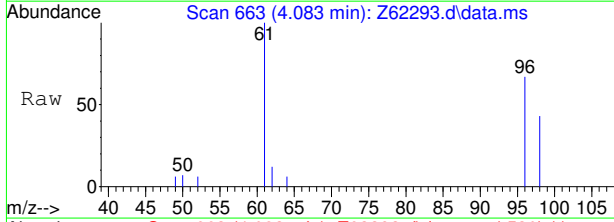
7.1.25
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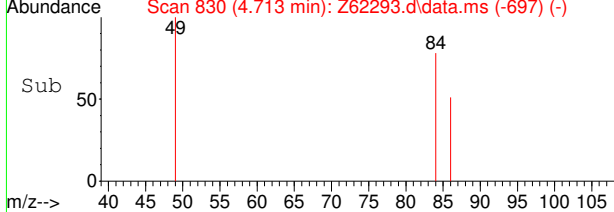
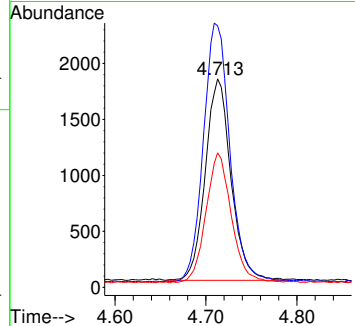
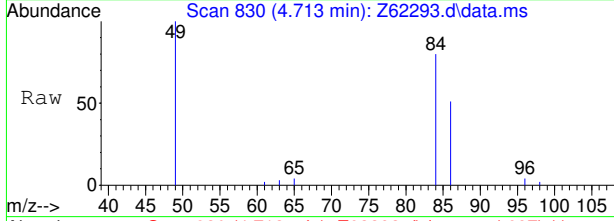
#4
 1,1-Dichloroethene
 Concen: 0.20 ppb
 RT: 4.083 min Scan# 663
 Delta R.T. 0.000 min
 Lab File: Z62293.d
 Acq: 13 Sep 2020 12:52 pm

Tgt Ion	Resp	Lower	Upper
96	20653		
61	160.5	164.8	204.8#
98	64.9	45.1	85.1

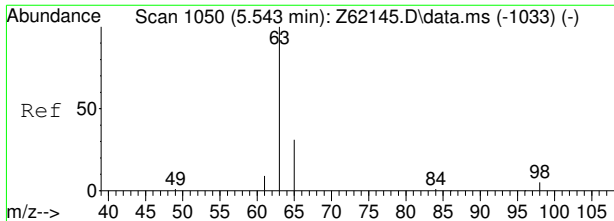


#5
 Methylene Chloride
 Concen: 0.21 ppb
 RT: 4.713 min Scan# 830
 Delta R.T. -0.000 min
 Lab File: Z62293.d
 Acq: 13 Sep 2020 12:52 pm

Tgt Ion	Resp	Lower	Upper
84	35365		
49	126.9	128.7	168.7#
86	64.1	43.9	83.9

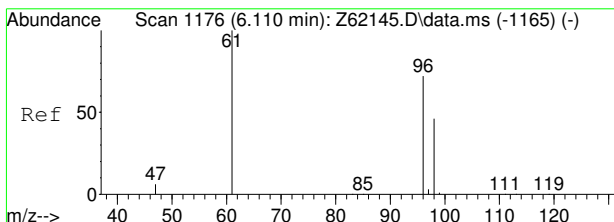
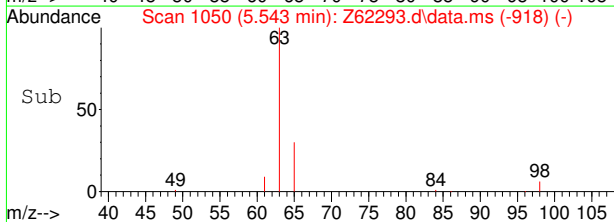
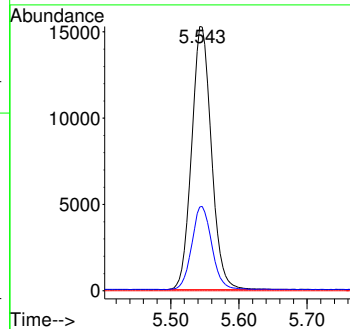
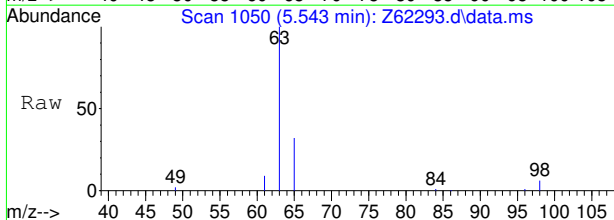


7.1.25
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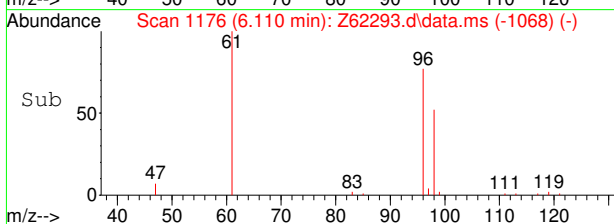
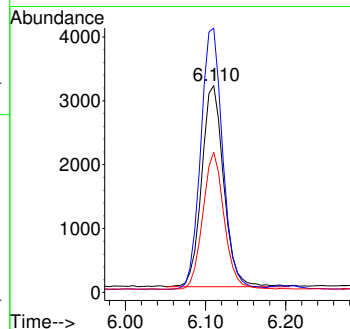
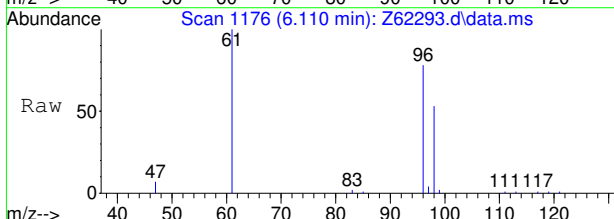
#7
 1,1-Dichloroethane
 Concen: 1.44 ppb
 RT: 5.543 min Scan# 1050
 Delta R.T. -0.003 min
 Lab File: Z62293.d
 Acq: 13 Sep 2020 12:52 pm

Tgt Ion	Resp	Lower	Upper
63	307694		
65	31.9	11.3	51.3
83	0.0	0.0	30.0

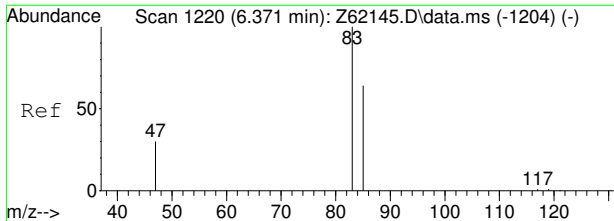


#8
 cis-1,2-Dichloroethene
 Concen: 0.43 ppb
 RT: 6.110 min Scan# 1176
 Delta R.T. 0.000 min
 Lab File: Z62293.d
 Acq: 13 Sep 2020 12:52 pm

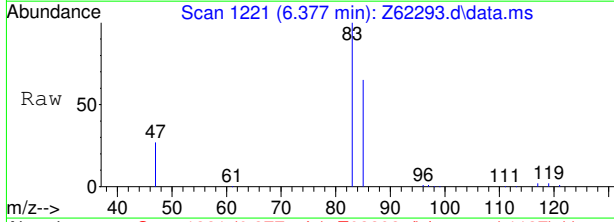
Tgt Ion	Resp	Lower	Upper
96	60032		
61	129.9	119.3	159.3
98	68.1	44.5	84.5



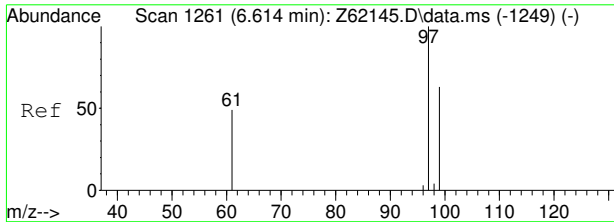
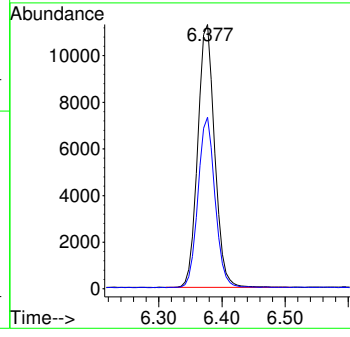
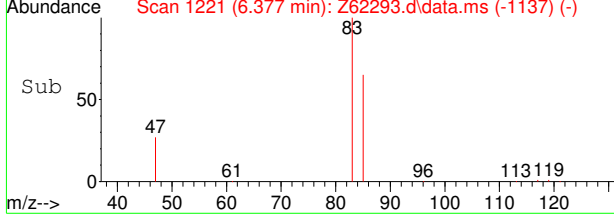
7.1.25
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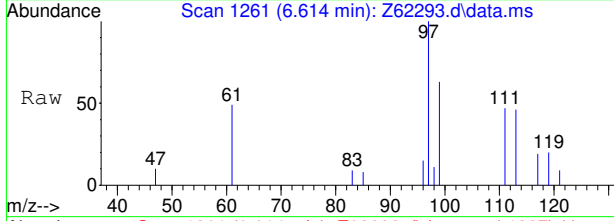
#9
 Chloroform
 Concen: 0.82 ppb
 RT: 6.377 min Scan# 1221
 Delta R.T. -0.000 min
 Lab File: Z62293.d
 Acq: 13 Sep 2020 12:52 pm



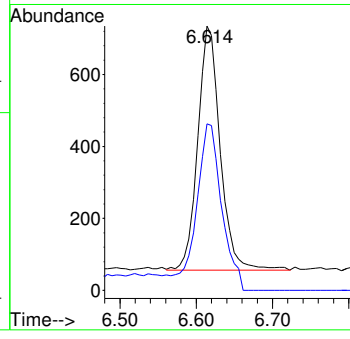
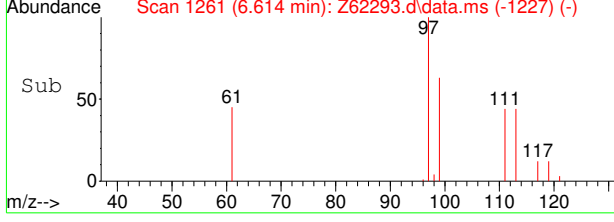
Tgt Ion: 83 Resp: 211059
 Ion Ratio Lower Upper
 83 100
 85 64.6 46.1 86.1



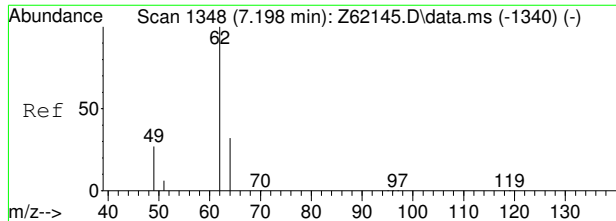
#11
 1,1,1-Trichloroethane
 Concen: 0.06 ppb
 RT: 6.614 min Scan# 1261
 Delta R.T. 0.000 min
 Lab File: Z62293.d
 Acq: 13 Sep 2020 12:52 pm



Tgt Ion: 97 Resp: 14587
 Ion Ratio Lower Upper
 97 100
 99 73.9 0.0 123.8

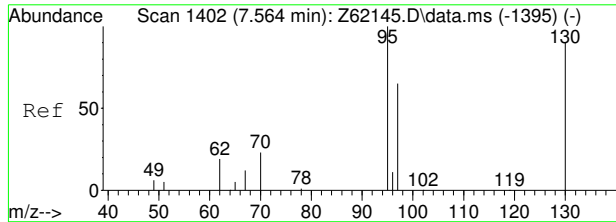
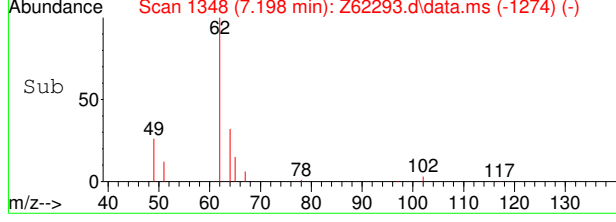
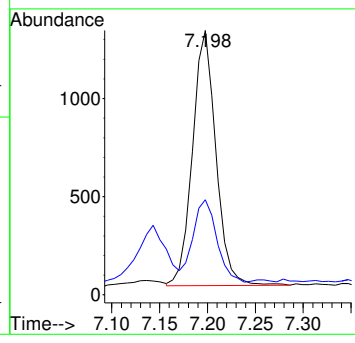
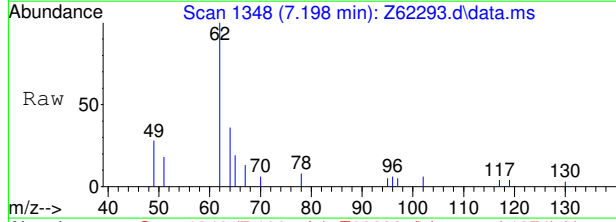


7.1.25
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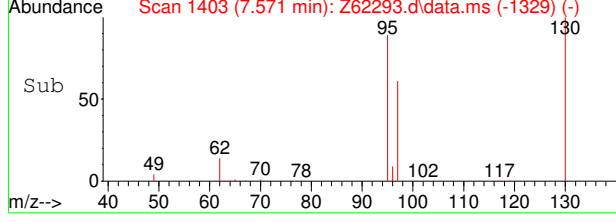
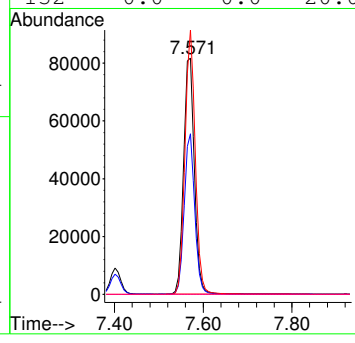
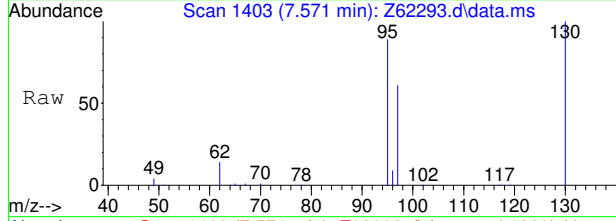
#14
 1,2-Dichloroethane
 Concen: 0.12 ppb
 RT: 7.198 min Scan# 1348
 Delta R.T. -0.000 min
 Lab File: Z62293.d
 Acq: 13 Sep 2020 12:52 pm

Tgt Ion	Resp	Lower	Upper
62	22134		
64	32.2	12.3	52.3



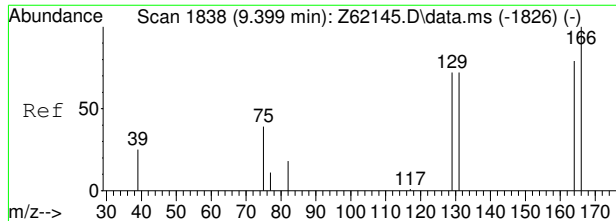
#15
 Trichloroethene
 Concen: 9.47 ppb
 RT: 7.571 min Scan# 1403
 Delta R.T. 0.000 min
 Lab File: Z62293.d
 Acq: 13 Sep 2020 12:52 pm

Tgt Ion	Resp	Lower	Upper
95	1382228		
97	68.0	44.5	84.5
130	112.0	69.7	109.7#
132	0.0	0.0	20.0



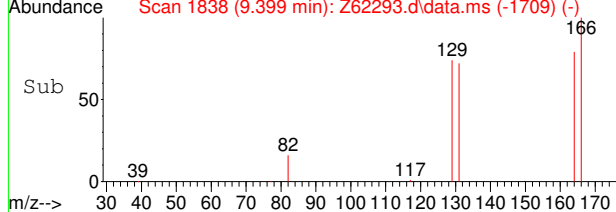
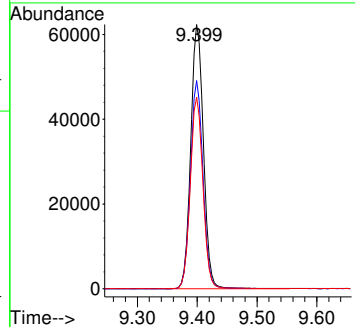
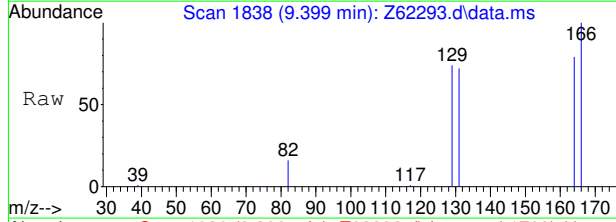
7.1.25
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#21
 Tetrachloroethene
 Concen: 5.93 ppb
 RT: 9.399 min Scan# 1838
 Delta R.T. -0.000 min
 Lab File: Z62293.d
 Acq: 13 Sep 2020 12:52 pm

Tgt Ion	Resp	Lower	Upper
166	915325		
166	100		
164	78.7	58.7	98.7
131	72.5	51.6	91.6



7.1.25
7



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-14-2020\vz2417\
 Data File : Z62294.d
 Acq On : 13 Sep 2020 1:12 pm
 Operator : stutip
 Sample : fa78549-17
 Misc : MS47174,VZ2417,,,,,
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 14 07:07:21 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Sun Sep 13 13:38:26 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	

Internal Standards							
1) Fluorobenzene	7.401	96	1649211	5.00	ppb	0.00	
18) Chlorobenzene-d5	10.511	117	1331083	5.00	ppb	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.130	65	551893	5.41	ppb	0.00	
Spiked Amount	5.000	Range	79 - 125	Recovery	=	108.20%	
19) Toluene-d8	8.961	98	1620846	5.01	ppb	0.00	
Spiked Amount	5.000	Range	70 - 130	Recovery	=	100.20%	
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.839	62	69565	0.51	ppb		99
4) 1,1-Dichloroethene	4.083	96	26006	0.26	ppb	#	86
5) Methylene Chloride	4.713	84	251273	1.56	ppb		90
6) trans-1,2-Dichloroethene	4.886	96	17077	0.14	ppb		94
7) 1,1-Dichloroethane	5.546	63	1364668	6.61	ppb	#	99
8) cis-1,2-Dichloroethene	6.110	96	477474	3.53	ppb		92
9) Chloroform	6.377	83	129575	0.52	ppb		97
12) Benzene	6.994	78	80447	0.18	ppb		94
14) 1,2-Dichloroethane	7.198	62	180859	1.05	ppb		100
15) Trichloroethene	7.564	95	1418091	10.07	ppb		95
16) 1,2-Dichloropropane	8.105	63	29837	0.26	ppb		98
21) Tetrachloroethene	9.399	166	807533	5.36	ppb		99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

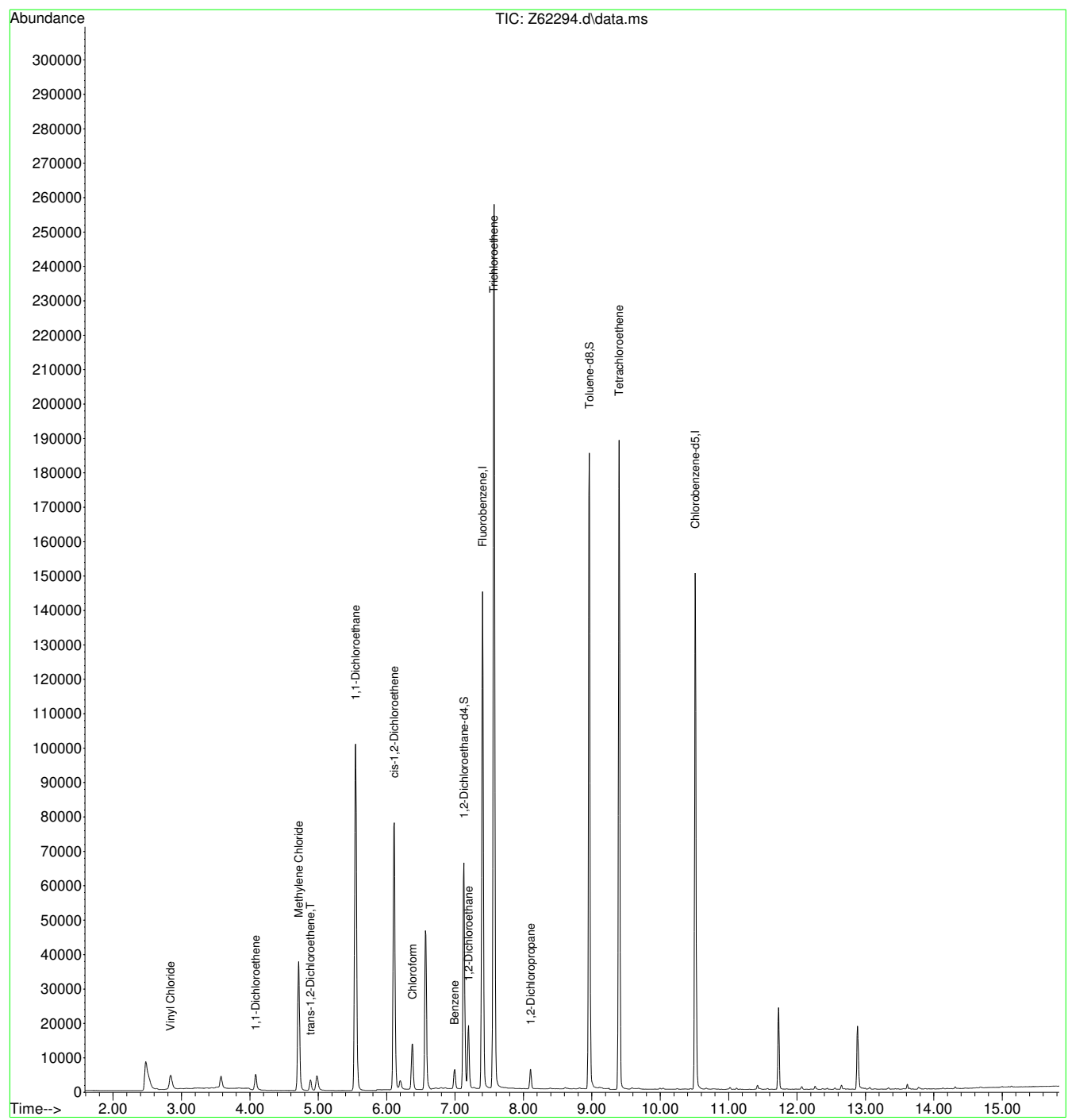
7.1.26
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Quantitation Report (QT Reviewed)

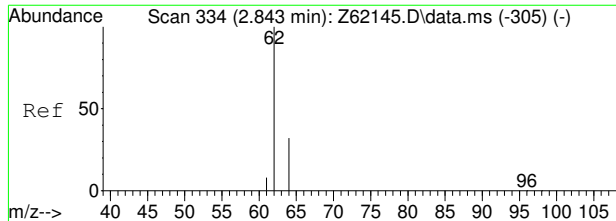
Data Path : C:\msdchem\1\data\johnm\September 2020\09-14-2020\ vz2417\
Data File : Z62294.d
Acq On : 13 Sep 2020 1:12 pm
Operator : stutip
Sample : fa78549-17
Misc : MS47174,VZ2417,,,,,
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 14 07:07:21 2020
Quant Method : C:\msdchem\1\methods\SIMCL091120.M
Quant Title : WATER-EPA 8260B
QLast Update : Sun Sep 13 13:38:26 2020
Response via : Initial Calibration



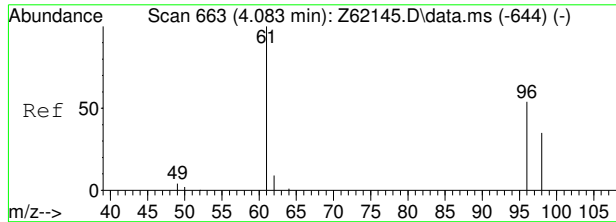
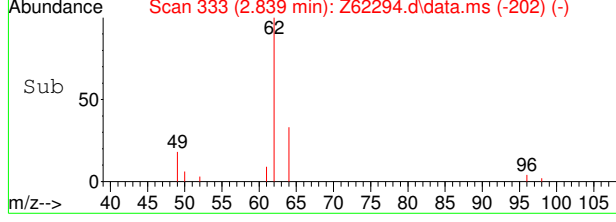
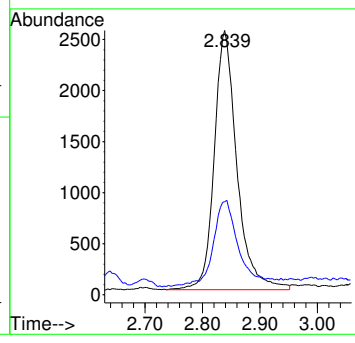
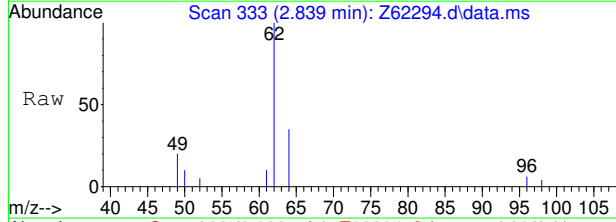
7.1.26
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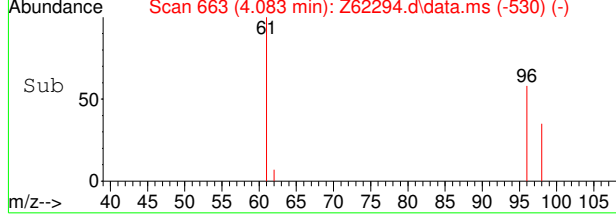
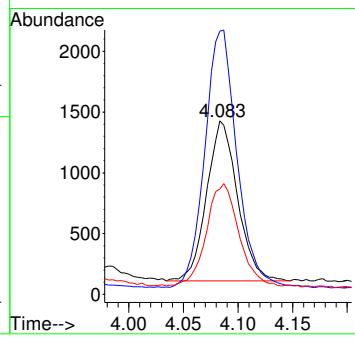
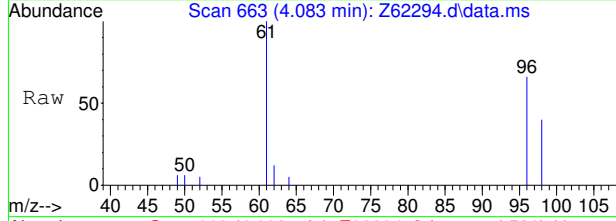
#2
 Vinyl Chloride
 Concen: 0.51 ppb
 RT: 2.839 min Scan# 333
 Delta R.T. -0.004 min
 Lab File: Z62294.d
 Acq: 13 Sep 2020 1:12 pm

Tgt Ion	Resp	Lower	Upper
62	69565		
64	32.7	11.9	51.9

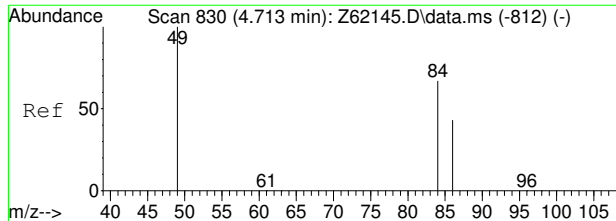


#4
 1,1-Dichloroethene
 Concen: 0.26 ppb
 RT: 4.083 min Scan# 663
 Delta R.T. 0.000 min
 Lab File: Z62294.d
 Acq: 13 Sep 2020 1:12 pm

Tgt Ion	Resp	Lower	Upper
96	26006		
61	159.7	164.8	204.8#
98	60.5	45.1	85.1



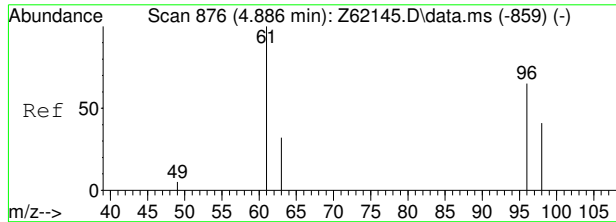
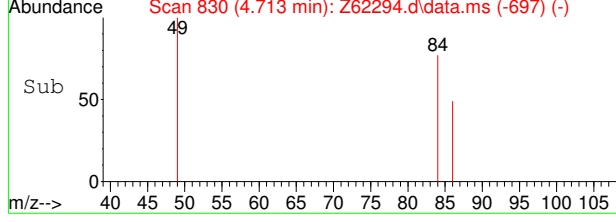
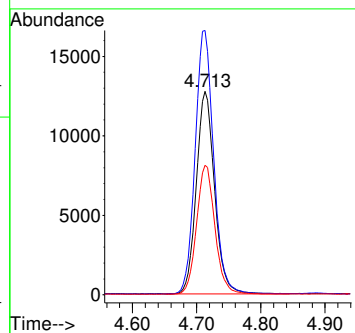
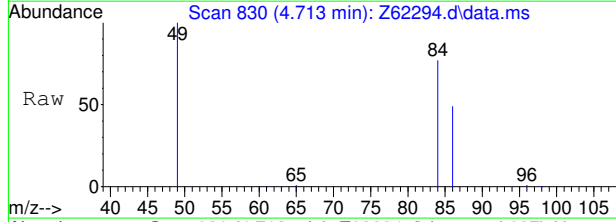
7.1.26
7



#5
 Methylene Chloride
 Concen: 1.56 ppb
 RT: 4.713 min Scan# 830
 Delta R.T. -0.000 min
 Lab File: Z62294.d
 Acq: 13 Sep 2020 1:12 pm

Tgt Ion: 84 Resp: 251273

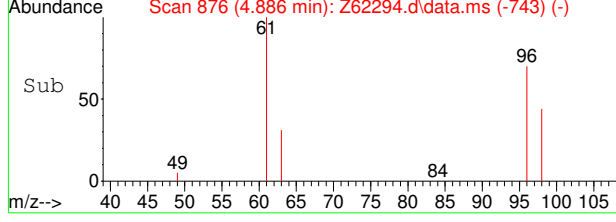
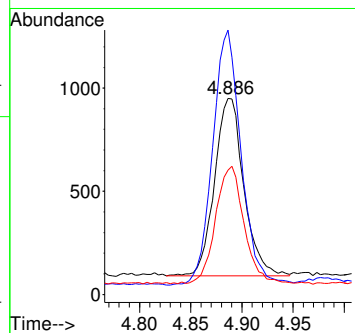
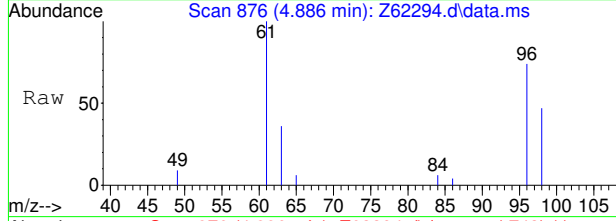
Ion	Ratio	Lower	Upper
84	100		
49	130.2	128.7	168.7
86	63.7	43.9	83.9



#6
 trans-1,2-Dichloroethene
 Concen: 0.14 ppb
 RT: 4.886 min Scan# 876
 Delta R.T. 0.000 min
 Lab File: Z62294.d
 Acq: 13 Sep 2020 1:12 pm

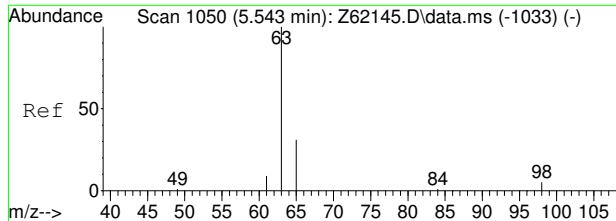
Tgt Ion: 96 Resp: 17077

Ion	Ratio	Lower	Upper
96	100		
61	143.9	134.2	174.2
98	63.4	43.4	83.4

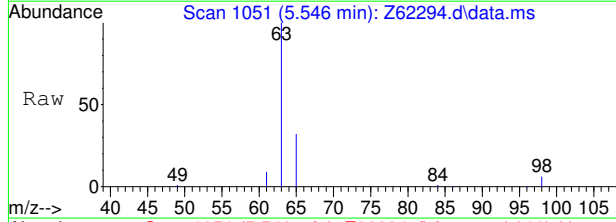


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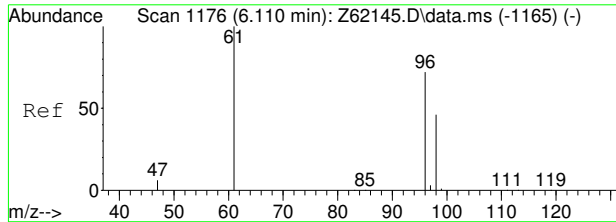
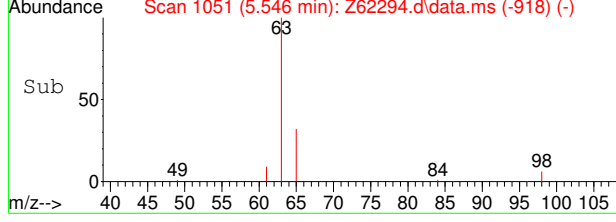
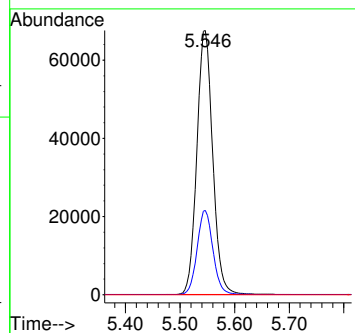


#7
 1,1-Dichloroethane
 Concen: 6.61 ppb
 RT: 5.546 min Scan# 1051
 Delta R.T. 0.000 min
 Lab File: Z62294.d
 Acq: 13 Sep 2020 1:12 pm

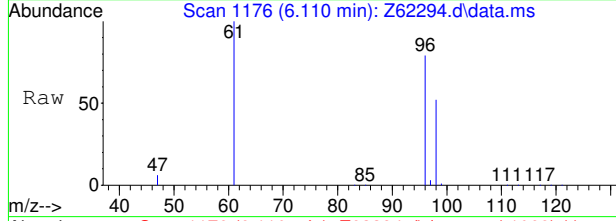


Tgt Ion: 63 Resp: 1364668

Ion	Ratio	Lower	Upper
63	100		
65	31.8	11.3	51.3
83	0.0	0.0	30.0

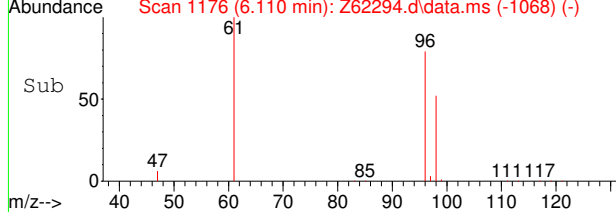
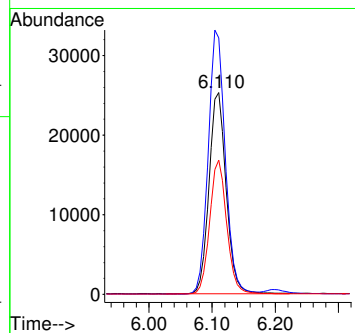


#8
 cis-1,2-Dichloroethene
 Concen: 3.53 ppb
 RT: 6.110 min Scan# 1176
 Delta R.T. 0.000 min
 Lab File: Z62294.d
 Acq: 13 Sep 2020 1:12 pm



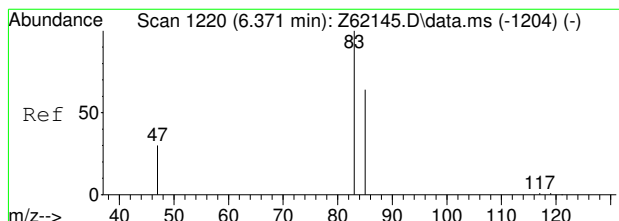
Tgt Ion: 96 Resp: 477474

Ion	Ratio	Lower	Upper
96	100		
61	127.3	119.3	159.3
98	66.6	44.5	84.5



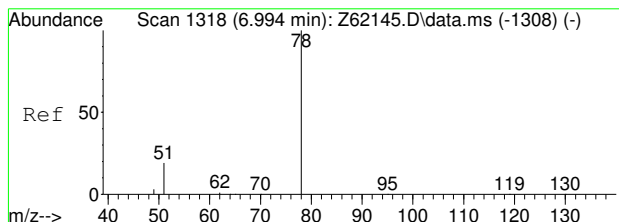
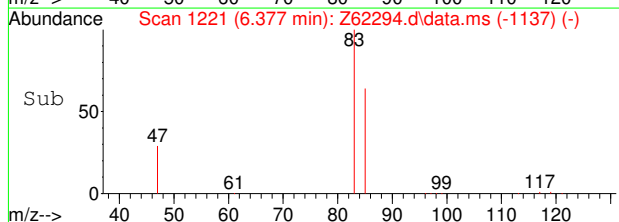
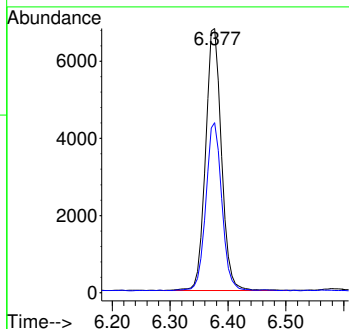
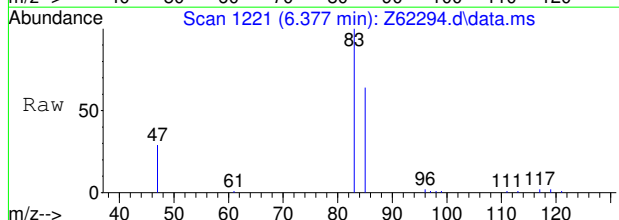
7.1.26
7





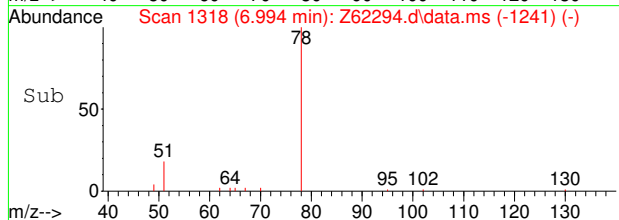
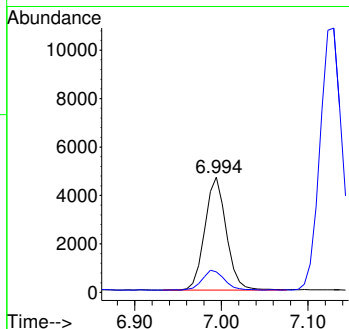
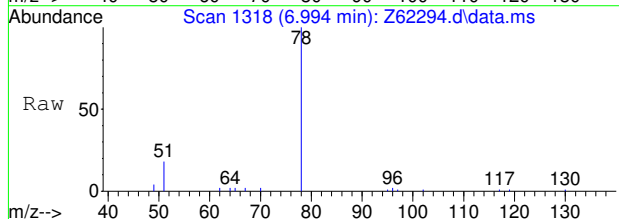
#9
 Chloroform
 Concen: 0.52 ppb
 RT: 6.377 min Scan# 1221
 Delta R.T. -0.000 min
 Lab File: Z62294.d
 Acq: 13 Sep 2020 1:12 pm

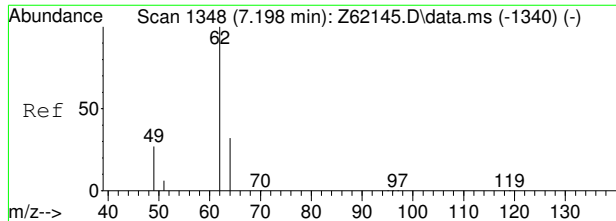
Tgt Ion	Ratio	Lower	Upper
83	100		
85	64.1	46.1	86.1



#12
 Benzene
 Concen: 0.18 ppb
 RT: 6.994 min Scan# 1318
 Delta R.T. 0.000 min
 Lab File: Z62294.d
 Acq: 13 Sep 2020 1:12 pm

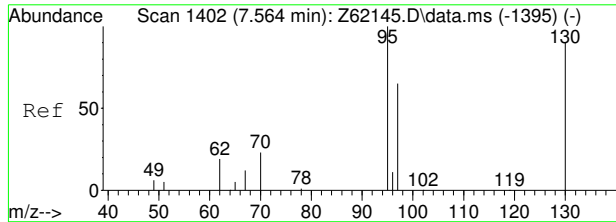
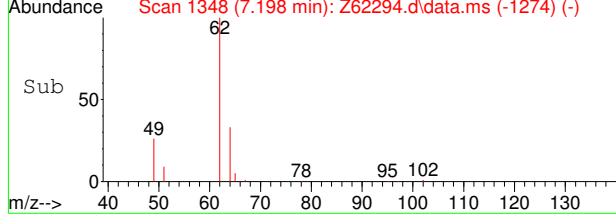
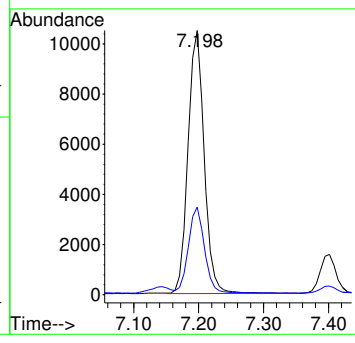
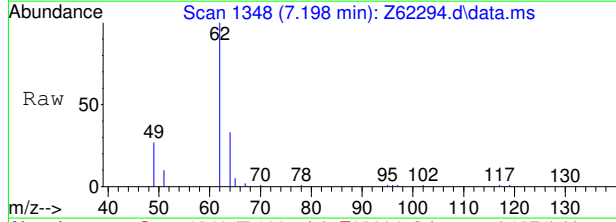
Tgt Ion	Ratio	Lower	Upper
78	100		
51	16.2	0.0	38.9





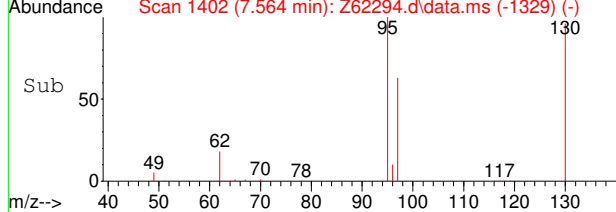
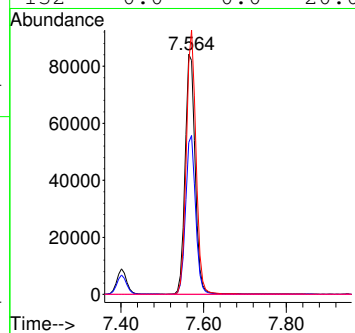
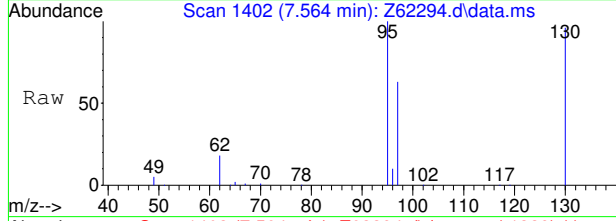
#14
 1,2-Dichloroethane
 Concen: 1.05 ppb
 RT: 7.198 min Scan# 1348
 Delta R.T. -0.000 min
 Lab File: Z62294.d
 Acq: 13 Sep 2020 1:12 pm

Tgt Ion	Resp	Lower	Upper
62	180859		
64	32.5	12.3	52.3



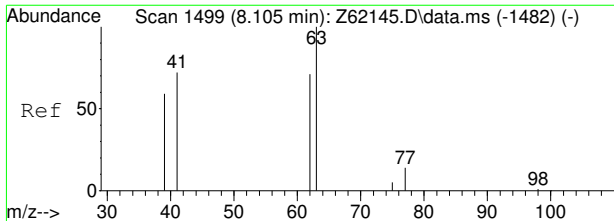
#15
 Trichloroethene
 Concen: 10.07 ppb
 RT: 7.564 min Scan# 1402
 Delta R.T. -0.007 min
 Lab File: Z62294.d
 Acq: 13 Sep 2020 1:12 pm

Tgt Ion	Resp	Lower	Upper
95	1418091		
97	63.2	44.5	84.5
130	96.4	69.7	109.7
132	0.0	0.0	20.0



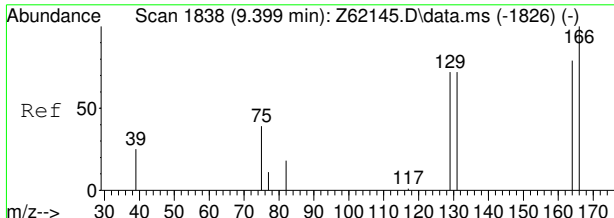
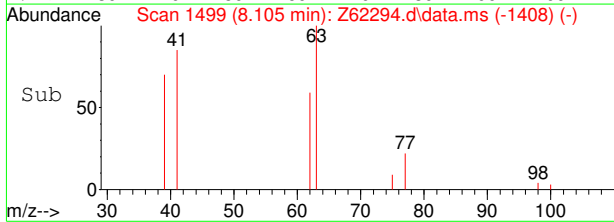
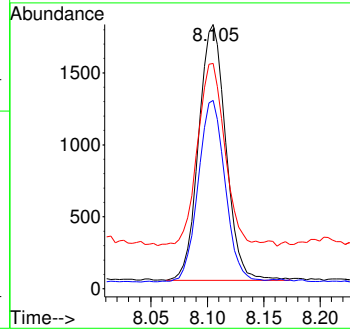
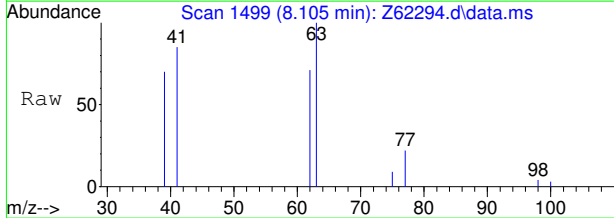
7.1.26
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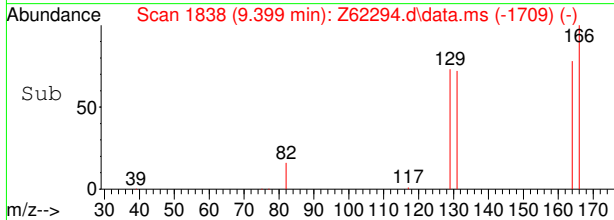
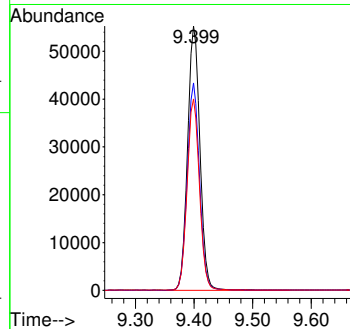
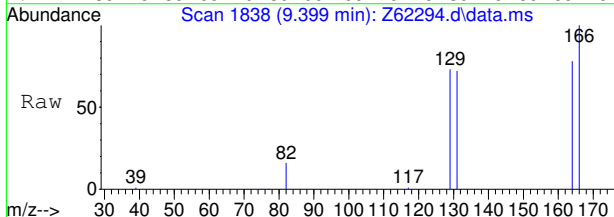
#16
 1,2-Dichloropropane
 Concen: 0.26 ppb
 RT: 8.105 min Scan# 1499
 Delta R.T. 0.000 min
 Lab File: Z62294.d
 Acq: 13 Sep 2020 1:12 pm

Tgt Ion	Ratio	Lower	Upper
63	100		
62	69.9	51.6	91.6
41	72.1	43.7	103.7



#21
 Tetrachloroethene
 Concen: 5.36 ppb
 RT: 9.399 min Scan# 1838
 Delta R.T. -0.000 min
 Lab File: Z62294.d
 Acq: 13 Sep 2020 1:12 pm

Tgt Ion	Ratio	Lower	Upper
166	100		
164	78.4	58.7	98.7
131	72.4	51.6	91.6



7.1.26
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\091320\
 Data File : Z62295.D
 Acq On : 13 Sep 2020 1:31 pm
 Operator : stutip
 Sample : fa78549-18
 Misc : MS47174,VZ2417,,,,,
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 15 17:41:45 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Sun Sep 13 13:38:26 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	

Internal Standards							
1) Fluorobenzene	7.401	96	1650106	5.00	ppb	0.00	
18) Chlorobenzene-d5	10.511	117	1324546	5.00	ppb	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.130	65	554963	5.44	ppb	0.00	
Spiked Amount	5.000	Range	79 - 125	Recovery	=	108.80%	
19) Toluene-d8	8.961	98	1608602	5.00	ppb	0.00	
Spiked Amount	5.000	Range	70 - 130	Recovery	=	100.00%	
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.835	62	173402	1.27	ppb		99
4) 1,1-Dichloroethene	4.083	96	36606	0.37	ppb		91
5) Methylene Chloride	4.713	84	62043	0.38	ppb		90
6) trans-1,2-Dichloroethene	4.886	96	49654	0.41	ppb		92
7) 1,1-Dichloroethane	5.546	63	2597650	12.57	ppb	#	99
8) cis-1,2-Dichloroethene	6.110	96	1498564	11.07	ppb		93
9) Chloroform	6.377	83	59969	0.24	ppb		97
12) Benzene	6.994	78	104634	0.23	ppb		97
14) 1,2-Dichloroethane	7.198	62	336541	1.94	ppb		100
15) Trichloroethene	7.571	95	752038	5.34	ppb	#	85
16) 1,2-Dichloropropane	8.105	63	63900	0.55	ppb		98
21) Tetrachloroethene	9.399	166	806464	5.38	ppb		100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

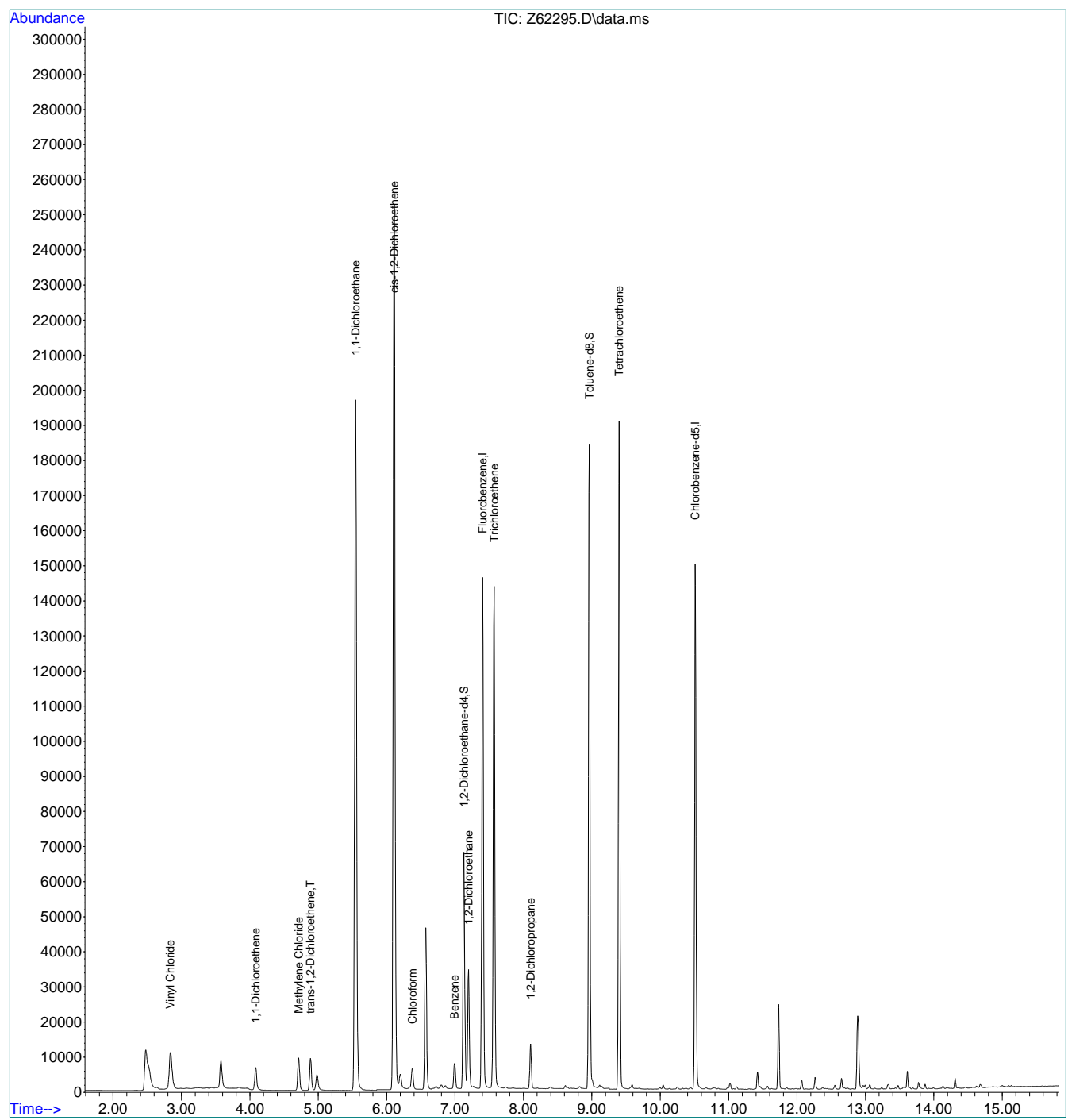
7.1.27
7



Quantitation Report (QT Reviewed)

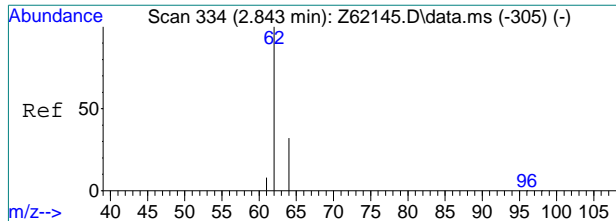
Data Path : C:\msdchem\1\data\091320\
Data File : Z62295.D
Acq On : 13 Sep 2020 1:31 pm
Operator : stutip
Sample : fa78549-18
Misc : MS47174,VZ2417,,,,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 15 17:41:45 2020
Quant Method : C:\msdchem\1\methods\SIMCL091120.M
Quant Title : WATER-EPA 8260B
QLast Update : Sun Sep 13 13:38:26 2020
Response via : Initial Calibration



7.1.27
7

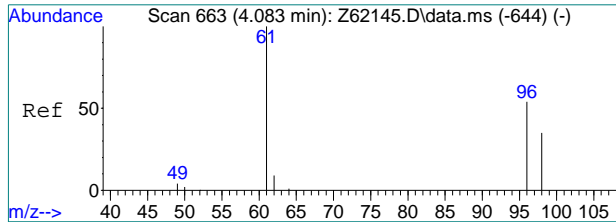
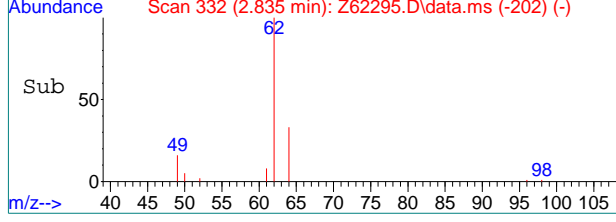
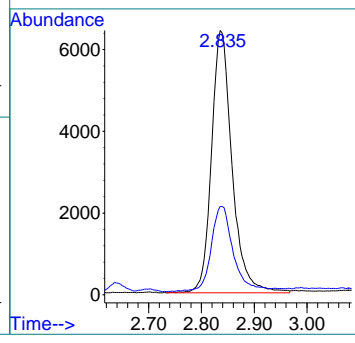
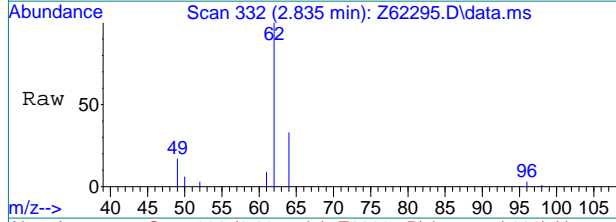




#2
 Vinyl Chloride
 Concen: 1.27 ppb
 RT: 2.835 min Scan# 332
 Delta R.T. -0.008 min
 Lab File: Z62295.D
 Acq: 13 Sep 2020 1:31 pm

Tgt Ion: 62 Resp: 173402

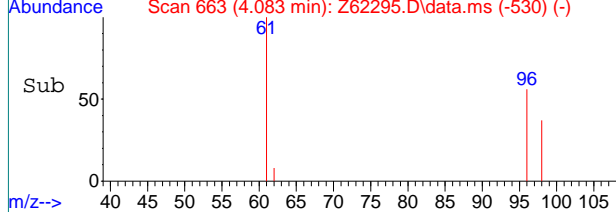
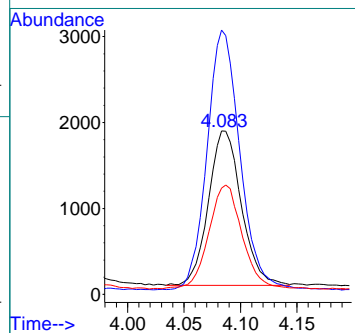
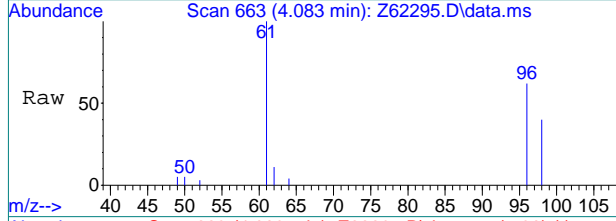
Ion	Ratio	Lower	Upper
62	100		
64	32.5	11.9	51.9



#4
 1,1-Dichloroethene
 Concen: 0.37 ppb
 RT: 4.083 min Scan# 663
 Delta R.T. 0.000 min
 Lab File: Z62295.D
 Acq: 13 Sep 2020 1:31 pm

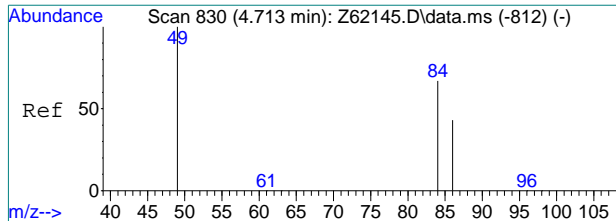
Tgt Ion: 96 Resp: 36606

Ion	Ratio	Lower	Upper
96	100		
61	168.2	164.8	204.8
98	64.7	45.1	85.1



7.1.27
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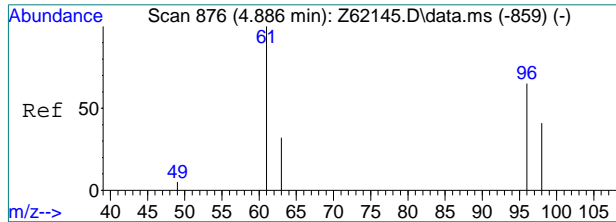
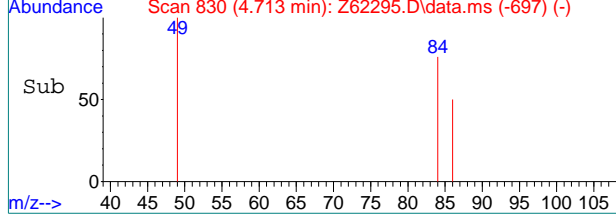
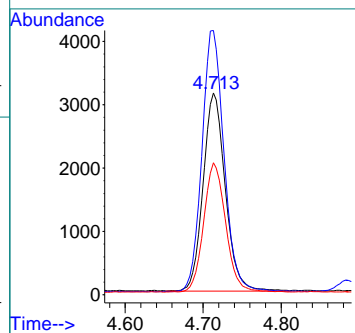
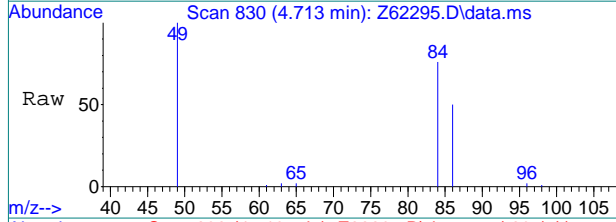




#5
 Methylene Chloride
 Concen: 0.38 ppb
 RT: 4.713 min Scan# 830
 Delta R.T. -0.000 min
 Lab File: Z62295.D
 Acq: 13 Sep 2020 1:31 pm

Tgt Ion: 84 Resp: 62043

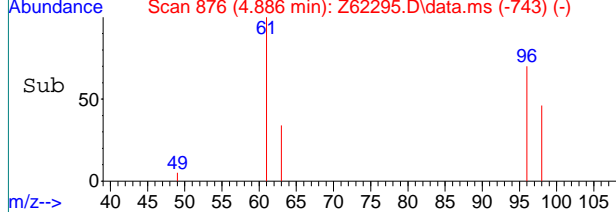
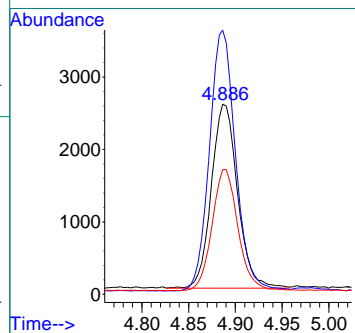
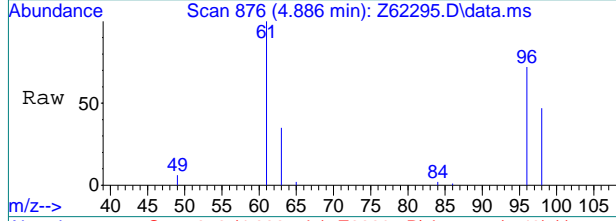
Ion	Ratio	Lower	Upper
84	100		
49	131.7	128.7	168.7
86	65.2	43.9	83.9



#6
 trans-1,2-Dichloroethene
 Concen: 0.41 ppb
 RT: 4.886 min Scan# 876
 Delta R.T. 0.000 min
 Lab File: Z62295.D
 Acq: 13 Sep 2020 1:31 pm

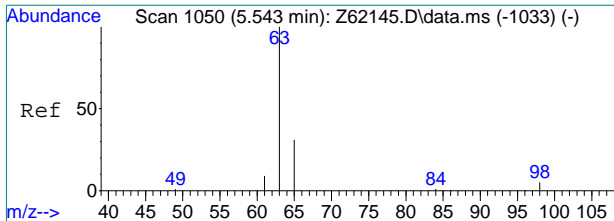
Tgt Ion: 96 Resp: 49654

Ion	Ratio	Lower	Upper
96	100		
61	141.7	134.2	174.2
98	65.6	43.4	83.4



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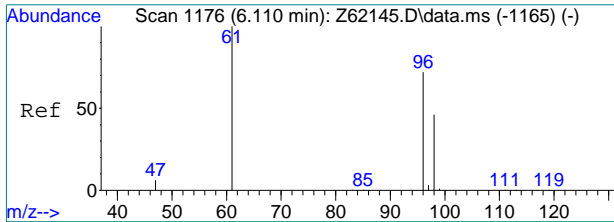
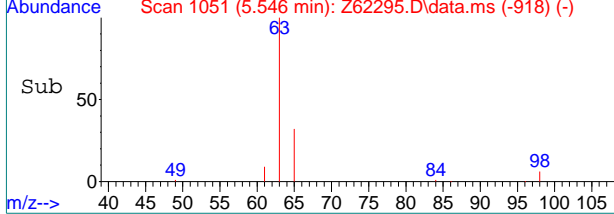
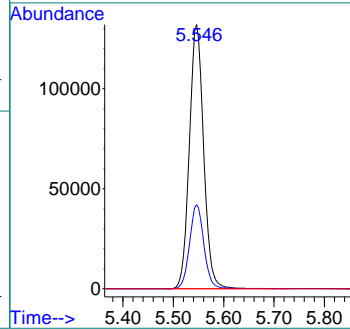
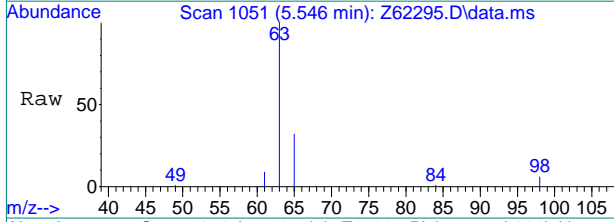




#7
 1,1-Dichloroethane
 Concen: 12.57 ppb
 RT: 5.546 min Scan# 1051
 Delta R.T. 0.000 min
 Lab File: Z62295.D
 Acq: 13 Sep 2020 1:31 pm

Tgt Ion: 63 Resp: 2597650

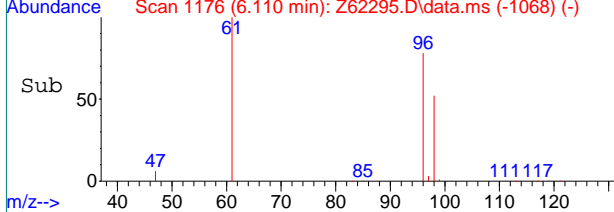
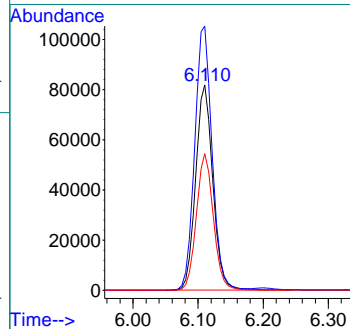
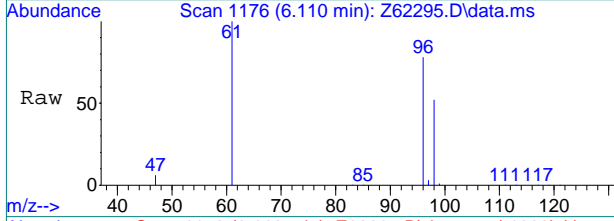
Ion	Ratio	Lower	Upper
63	100		
65	31.8	11.3	51.3
83	0.0	0.0	30.0



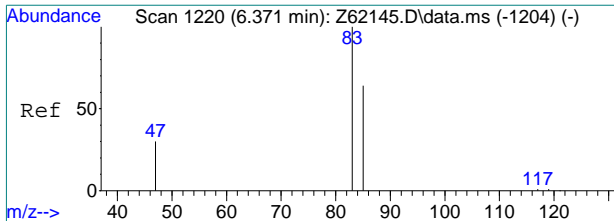
#8
 cis-1,2-Dichloroethene
 Concen: 11.07 ppb
 RT: 6.110 min Scan# 1176
 Delta R.T. 0.000 min
 Lab File: Z62295.D
 Acq: 13 Sep 2020 1:31 pm

Tgt Ion: 96 Resp: 1498564

Ion	Ratio	Lower	Upper
96	100		
61	128.8	119.3	159.3
98	66.6	44.5	84.5

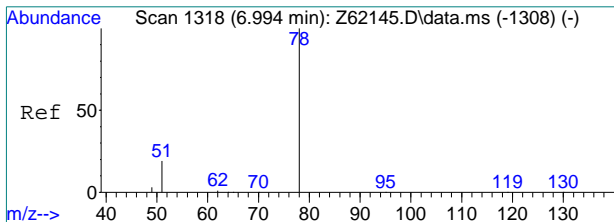
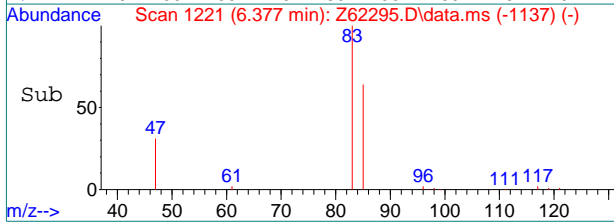
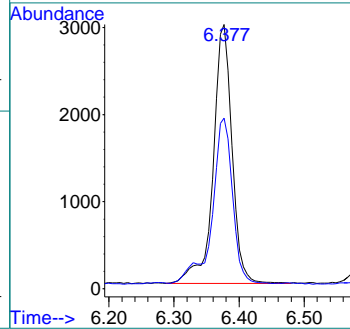
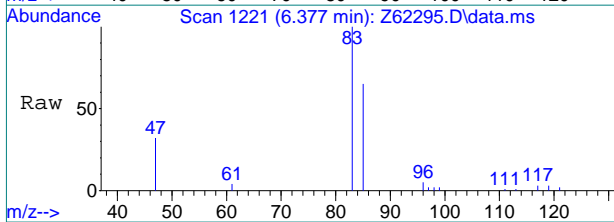


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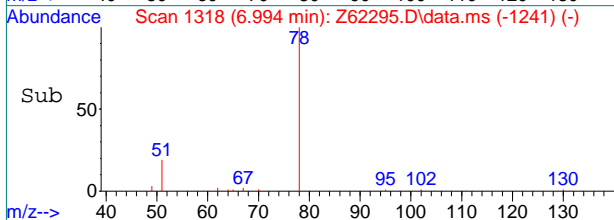
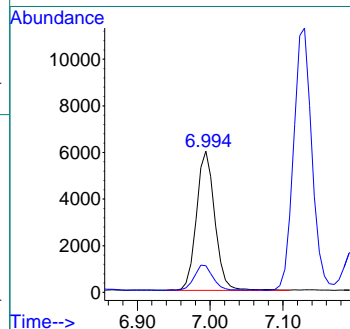
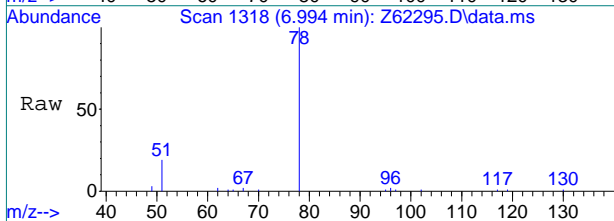
#9
 Chloroform
 Concen: 0.24 ppb
 RT: 6.377 min Scan# 1221
 Delta R.T. 0.000 min
 Lab File: Z62295.D
 Acq: 13 Sep 2020 1:31 pm

Tgt Ion	Resp	Lower	Upper
83	59969		
85	68.6	46.1	86.1

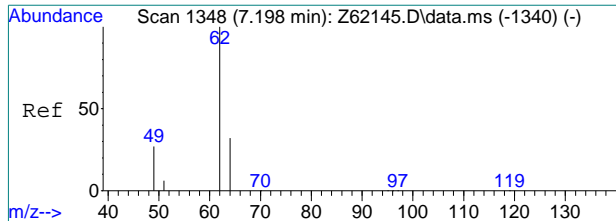


#12
 Benzene
 Concen: 0.23 ppb
 RT: 6.994 min Scan# 1318
 Delta R.T. 0.000 min
 Lab File: Z62295.D
 Acq: 13 Sep 2020 1:31 pm

Tgt Ion	Resp	Lower	Upper
78	104634		
51	17.5	0.0	38.9



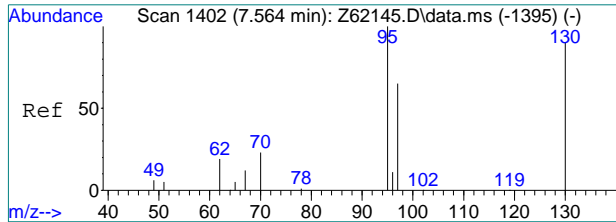
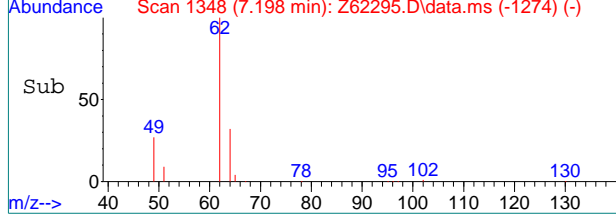
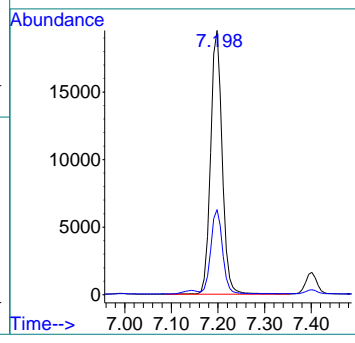
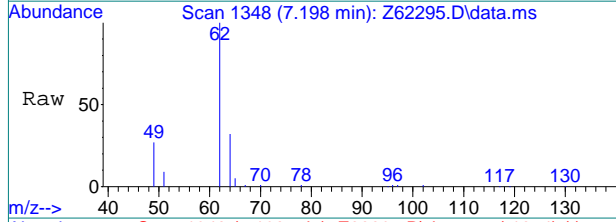
7.1.27
7



#14
 1,2-Dichloroethane
 Concen: 1.94 ppb
 RT: 7.198 min Scan# 1348
 Delta R.T. -0.000 min
 Lab File: Z62295.D
 Acq: 13 Sep 2020 1:31 pm

Tgt Ion: 62 Resp: 336541

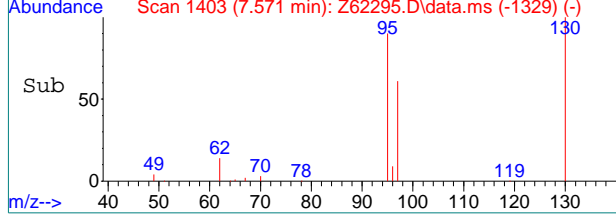
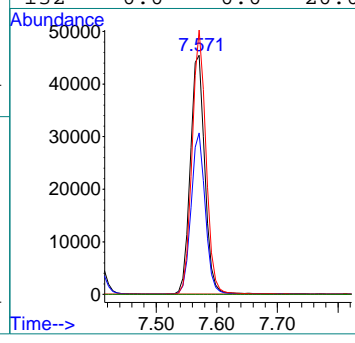
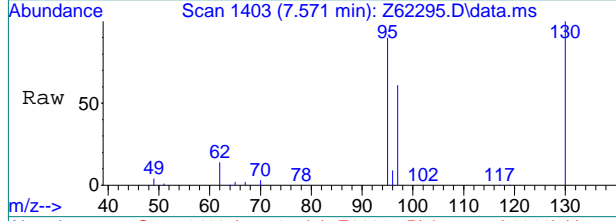
Ion	Ratio	Lower	Upper
62	100		
64	32.2	12.3	52.3



#15
 Trichloroethene
 Concen: 5.34 ppb
 RT: 7.571 min Scan# 1403
 Delta R.T. 0.000 min
 Lab File: Z62295.D
 Acq: 13 Sep 2020 1:31 pm

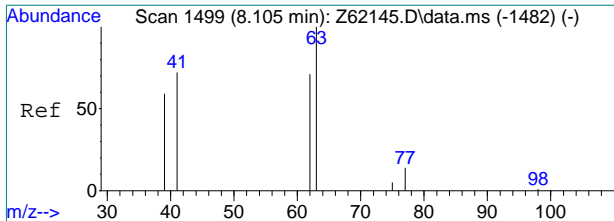
Tgt Ion: 95 Resp: 752038

Ion	Ratio	Lower	Upper
95	100		
97	67.5	44.5	84.5
130	110.7	69.7	109.7#
132	0.0	0.0	20.0



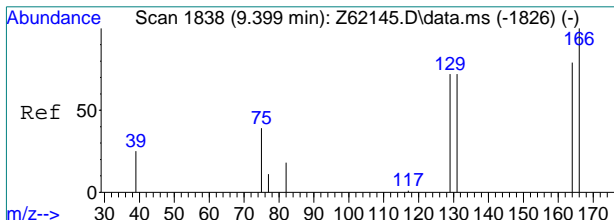
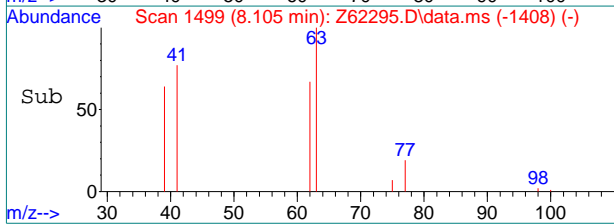
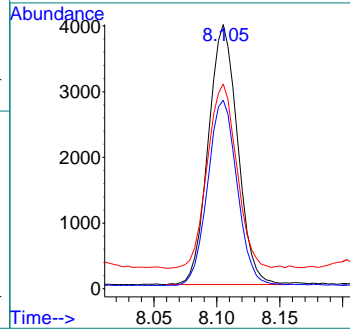
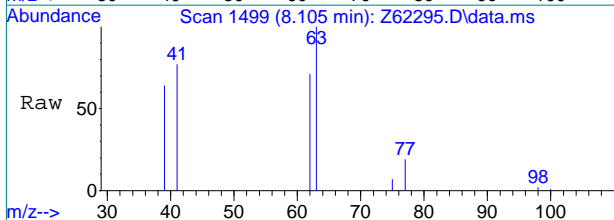
7.1.27
7





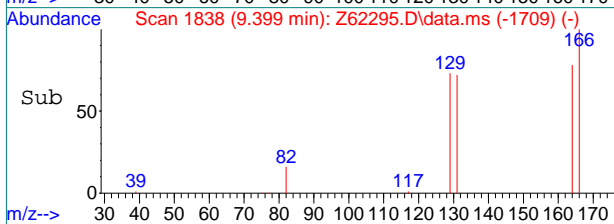
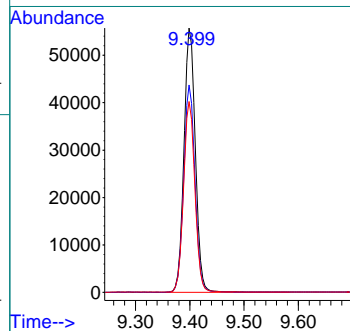
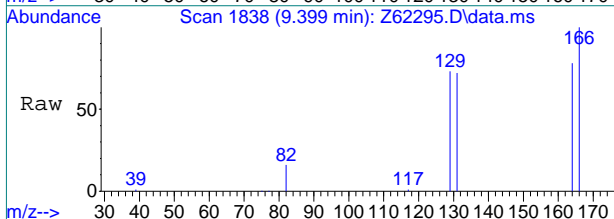
#16
 1,2-Dichloropropane
 Concen: 0.55 ppb
 RT: 8.105 min Scan# 1499
 Delta R.T. 0.000 min
 Lab File: Z62295.D
 Acq: 13 Sep 2020 1:31 pm

Tgt Ion	Ratio	Lower	Upper
63	100		
62	71.9	51.6	91.6
41	69.9	43.7	103.7



#21
 Tetrachloroethene
 Concen: 5.38 ppb
 RT: 9.399 min Scan# 1838
 Delta R.T. -0.000 min
 Lab File: Z62295.D
 Acq: 13 Sep 2020 1:31 pm

Tgt Ion	Ratio	Lower	Upper
166	100		
164	78.4	58.7	98.7
131	72.1	51.6	91.6



7.1.27
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-14-2020\vz2417\
Data File : Z62296.d
Acq On : 13 Sep 2020 1:50 pm
Operator : stutip
Sample : fa78549-19
Misc : MS47174,VZ2417,,,,,
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 14 07:07:26 2020
Quant Method : C:\msdchem\1\methods\SIMCL091120.M
Quant Title : WATER-EPA 8260B
QLast Update : Sun Sep 13 13:38:26 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)	

Internal Standards							
1) Fluorobenzene	7.401	96	1629061	5.00	ppb	0.00	
18) Chlorobenzene-d5	10.511	117	1312360	5.00	ppb	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.130	65	549576	5.45	ppb	0.00	
Spiked Amount	5.000	Range 79 - 125	Recovery	=	109.00%		
19) Toluene-d8	8.961	98	1589953	4.99	ppb	0.00	
Spiked Amount	5.000	Range 70 - 130	Recovery	=	99.80%		
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.843	62	116195	0.86	ppb		97
4) 1,1-Dichloroethene	4.087	96	15119	0.15	ppb	#	87
5) Methylene Chloride	4.717	84	32173	0.20	ppb	#	89
6) trans-1,2-Dichloroethene	4.890	96	10156	0.08	ppb		90
7) 1,1-Dichloroethane	5.546	63	1048986	5.14	ppb	#	99
8) cis-1,2-Dichloroethene	6.110	96	1024202	7.66	ppb		94
12) Benzene	6.994	78	75521	0.17	ppb		97
14) 1,2-Dichloroethane	7.198	62	122263	0.72	ppb		100
15) Trichloroethene	7.571	95	181816	1.31	ppb		85
16) 1,2-Dichloropropane	8.105	63	28064	0.24	ppb		97
21) Tetrachloroethene	9.399	166	194716	1.26	ppb		99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

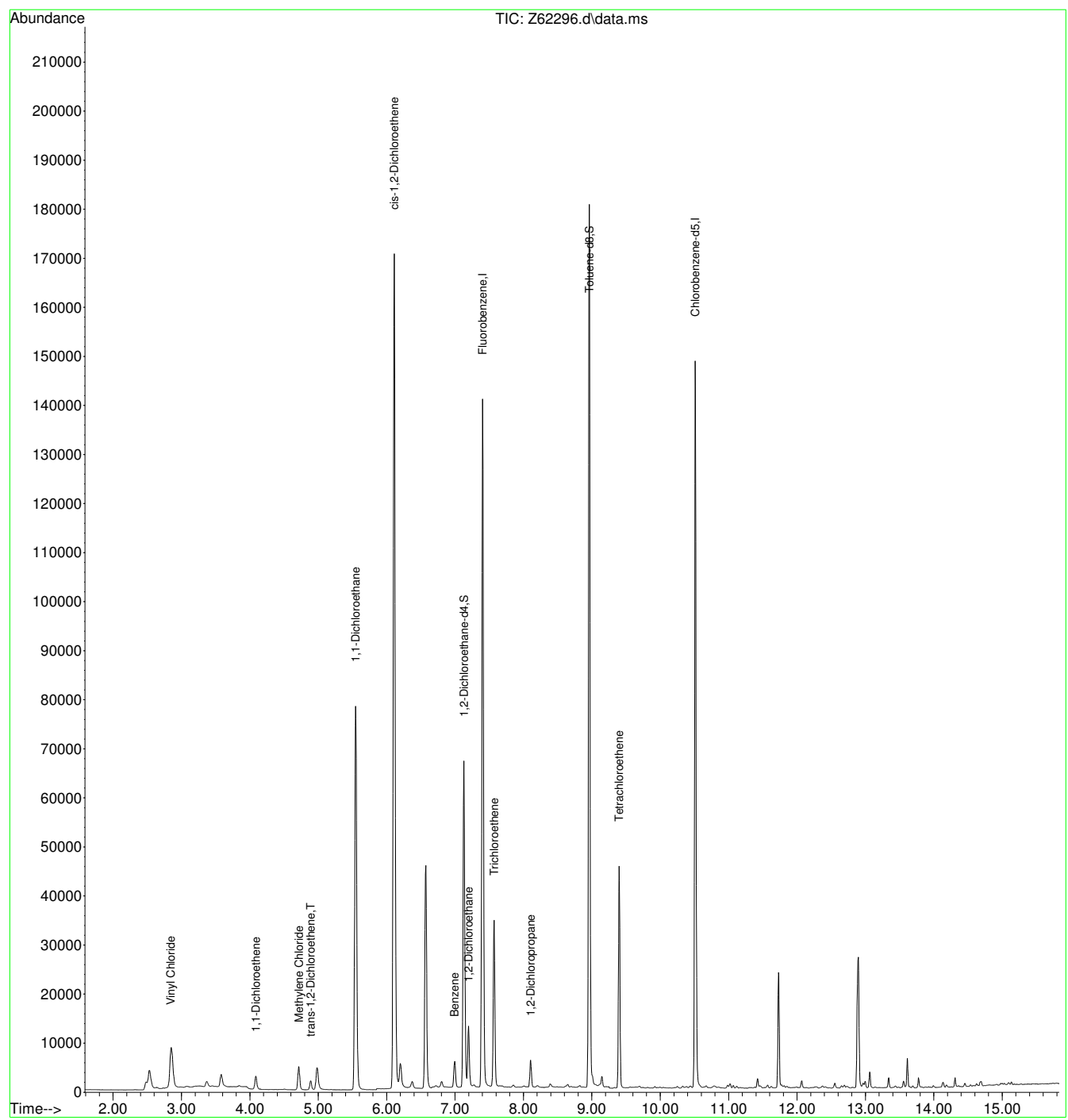
7.1.28
7



Quantitation Report (QT Reviewed)

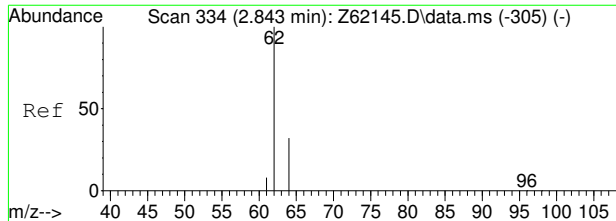
Data Path : C:\msdchem\1\data\johnm\September 2020\09-14-2020\ vz2417\
Data File : Z62296.d
Acq On : 13 Sep 2020 1:50 pm
Operator : stutip
Sample : fa78549-19
Misc : MS47174,VZ2417,,,,,
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 14 07:07:26 2020
Quant Method : C:\msdchem\1\methods\SIMCL091120.M
Quant Title : WATER-EPA 8260B
QLast Update : Sun Sep 13 13:38:26 2020
Response via : Initial Calibration



7.1.28
7

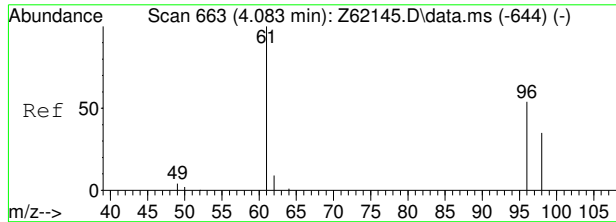
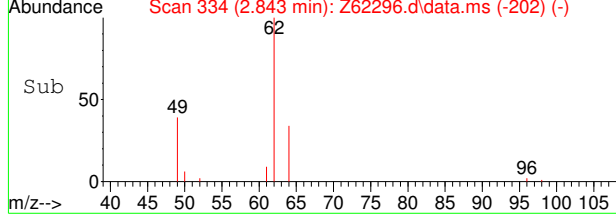
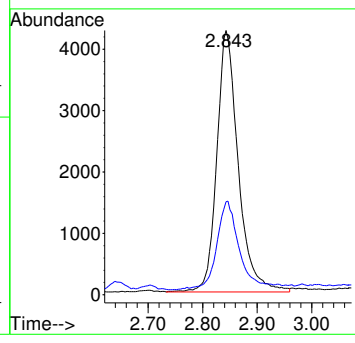
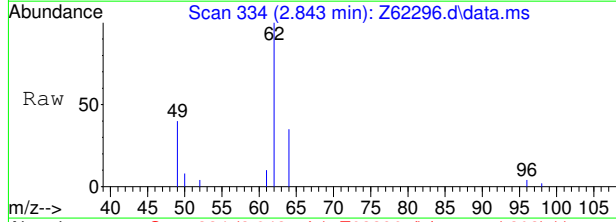




#2
 Vinyl Chloride
 Concen: 0.86 ppb
 RT: 2.843 min Scan# 334
 Delta R.T. -0.000 min
 Lab File: Z62296.d
 Acq: 13 Sep 2020 1:50 pm

Tgt Ion: 62 Resp: 116195

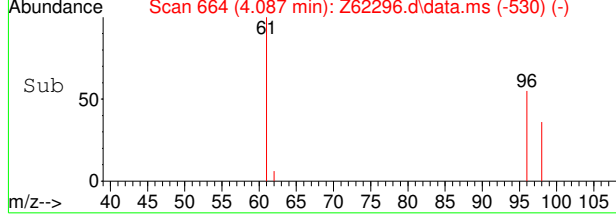
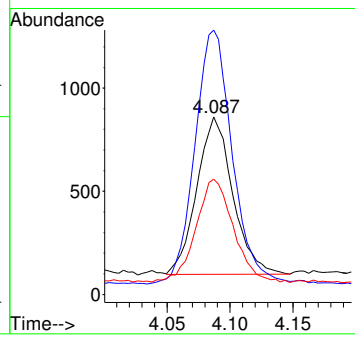
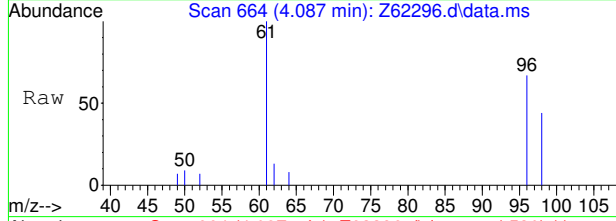
Ion	Ratio	Lower	Upper
62	100		
64	33.5	11.9	51.9



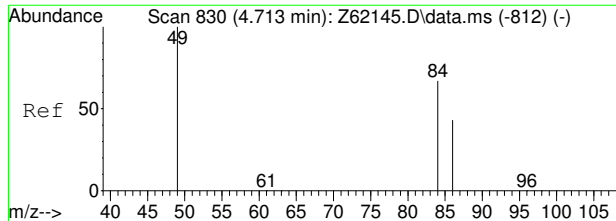
#4
 1,1-Dichloroethene
 Concen: 0.15 ppb
 RT: 4.087 min Scan# 664
 Delta R.T. 0.004 min
 Lab File: Z62296.d
 Acq: 13 Sep 2020 1:50 pm

Tgt Ion: 96 Resp: 15119

Ion	Ratio	Lower	Upper
96	100		
61	160.2	164.8	204.8#
98	65.8	45.1	85.1



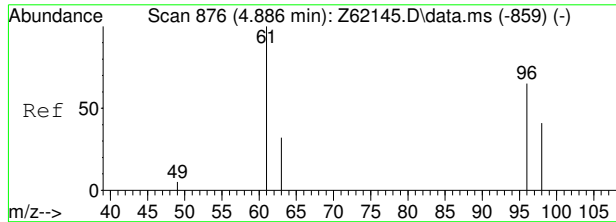
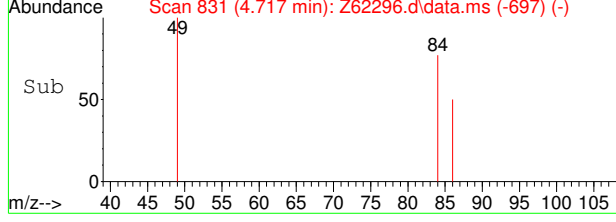
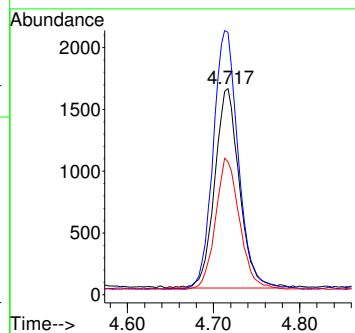
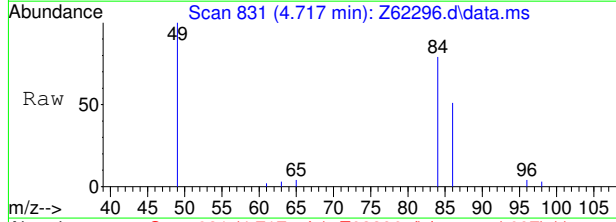
7.1.28
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#5
 Methylene Chloride
 Concen: 0.20 ppb
 RT: 4.717 min Scan# 831
 Delta R.T. 0.004 min
 Lab File: Z62296.d
 Acq: 13 Sep 2020 1:50 pm

Tgt Ion: 84 Resp: 32173

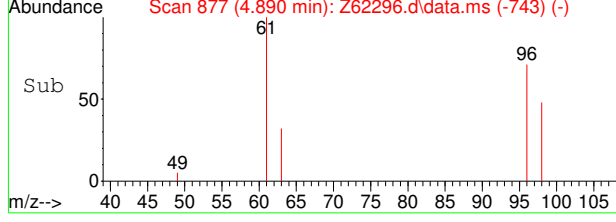
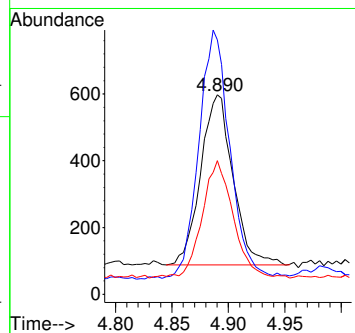
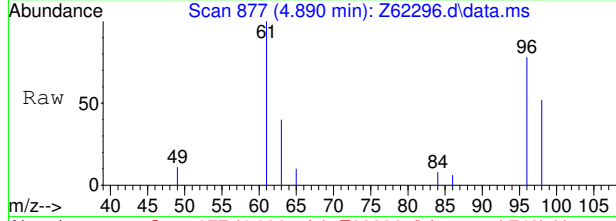
Ion	Ratio	Lower	Upper
84	100		
49	128.5	128.7	168.7#
86	63.8	43.9	83.9



#6
 trans-1,2-Dichloroethene
 Concen: 0.08 ppb
 RT: 4.890 min Scan# 877
 Delta R.T. 0.004 min
 Lab File: Z62296.d
 Acq: 13 Sep 2020 1:50 pm

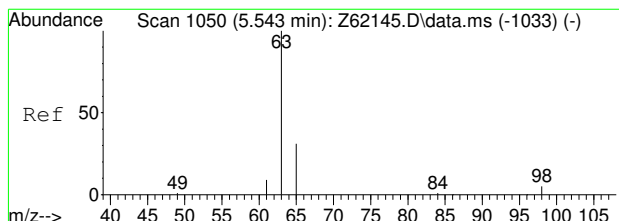
Tgt Ion: 96 Resp: 10156

Ion	Ratio	Lower	Upper
96	100		
61	139.0	134.2	174.2
98	68.8	43.4	83.4



7.1.28
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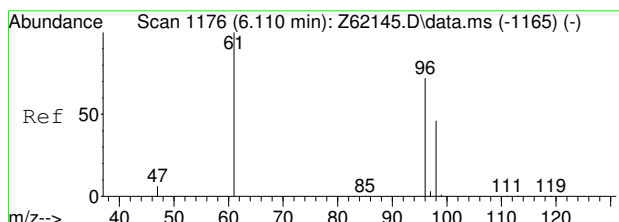
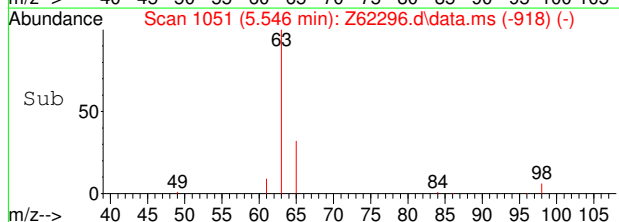
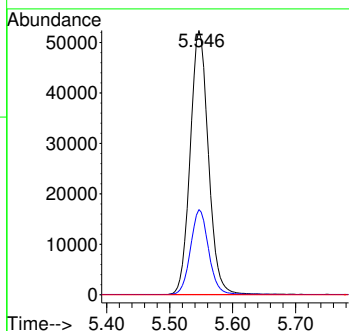
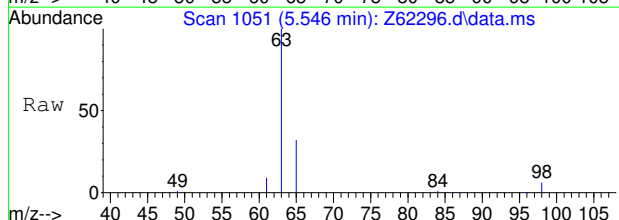




#7
 1,1-Dichloroethane
 Concen: 5.14 ppb
 RT: 5.546 min Scan# 1051
 Delta R.T. 0.000 min
 Lab File: Z62296.d
 Acq: 13 Sep 2020 1:50 pm

Tgt Ion: 63 Resp: 1048986

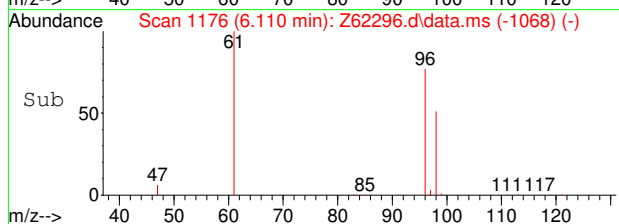
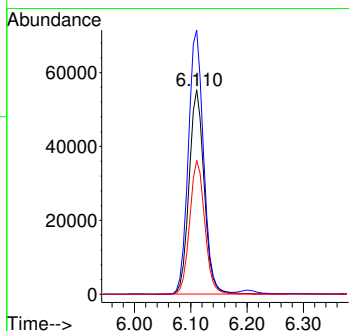
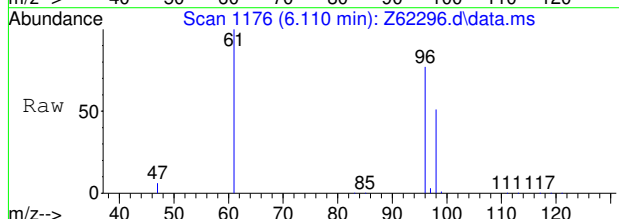
Ion	Ratio	Lower	Upper
63	100		
65	31.8	11.3	51.3
83	0.0	0.0	30.0

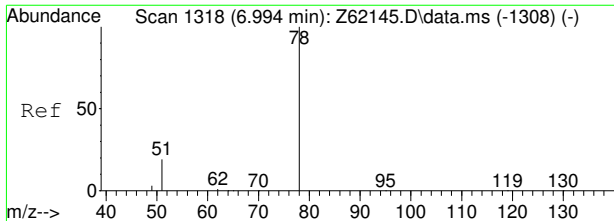


#8
 cis-1,2-Dichloroethene
 Concen: 7.66 ppb
 RT: 6.110 min Scan# 1176
 Delta R.T. 0.000 min
 Lab File: Z62296.d
 Acq: 13 Sep 2020 1:50 pm

Tgt Ion: 96 Resp: 1024202

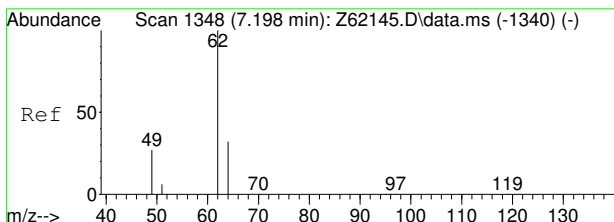
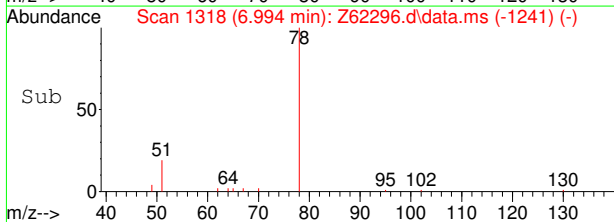
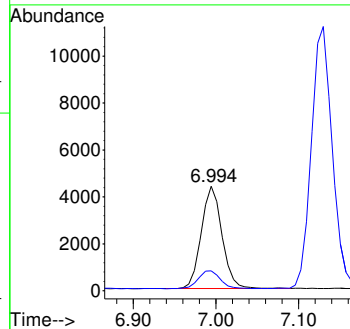
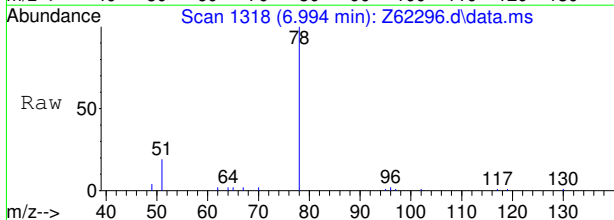
Ion	Ratio	Lower	Upper
96	100		
61	129.3	119.3	159.3
98	65.5	44.5	84.5





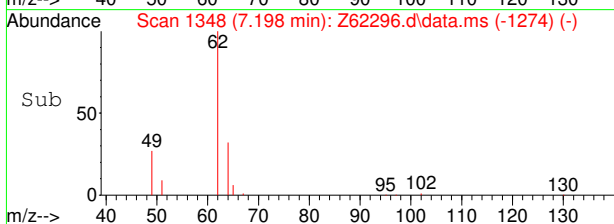
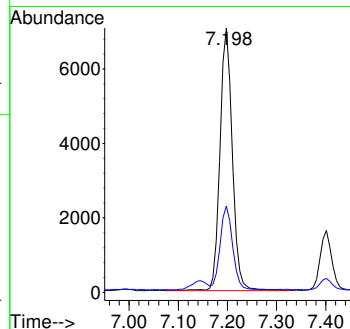
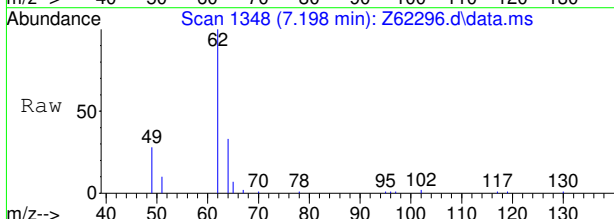
#12
Benzene
Concen: 0.17 ppb
RT: 6.994 min Scan# 1318
Delta R.T. 0.000 min
Lab File: Z62296.d
Acq: 13 Sep 2020 1:50 pm

Tgt Ion	Ratio	Lower	Upper
78	100		
51	17.4	0.0	38.9

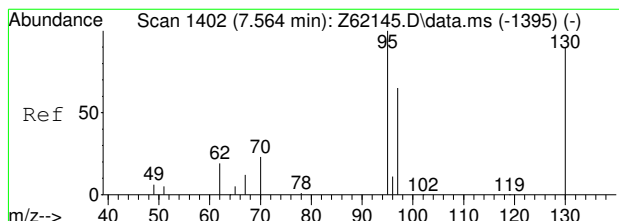


#14
1,2-Dichloroethane
Concen: 0.72 ppb
RT: 7.198 min Scan# 1348
Delta R.T. -0.000 min
Lab File: Z62296.d
Acq: 13 Sep 2020 1:50 pm

Tgt Ion	Ratio	Lower	Upper
62	100		
64	32.5	12.3	52.3

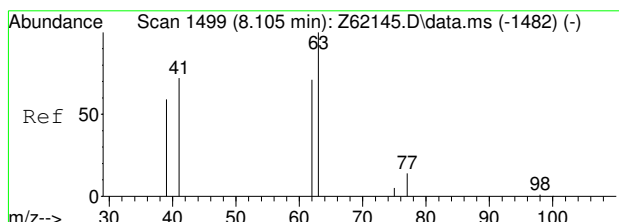
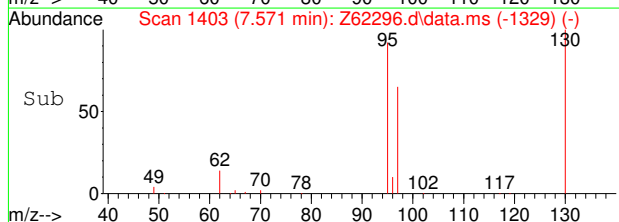
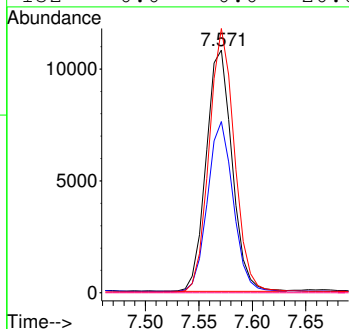
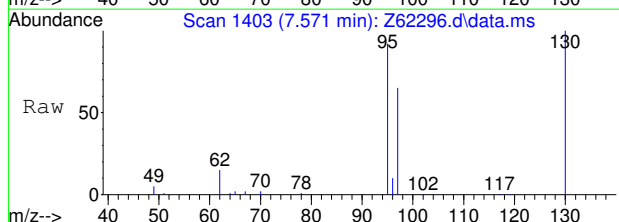


7.1.28
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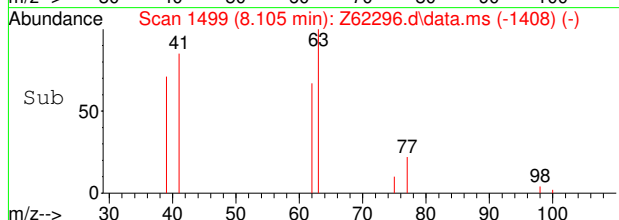
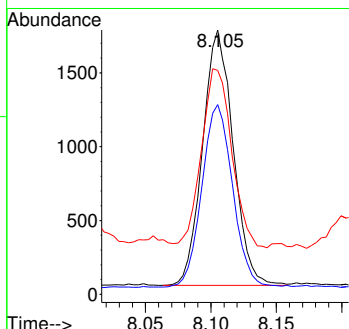
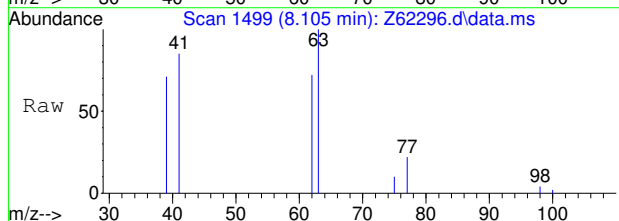
#15
 Trichloroethene
 Concen: 1.31 ppb
 RT: 7.571 min Scan# 1403
 Delta R.T. 0.000 min
 Lab File: Z62296.d
 Acq: 13 Sep 2020 1:50 pm

Tgt Ion	Resp	Lower	Upper
95	181816		
95	100		
97	70.4	44.5	84.5
130	109.3	69.7	109.7
132	0.0	0.0	20.0

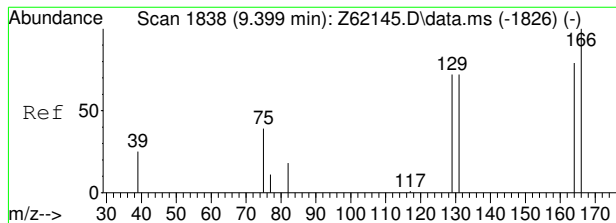


#16
 1,2-Dichloropropane
 Concen: 0.24 ppb
 RT: 8.105 min Scan# 1499
 Delta R.T. 0.000 min
 Lab File: Z62296.d
 Acq: 13 Sep 2020 1:50 pm

Tgt Ion	Resp	Lower	Upper
63	28064		
63	100		
62	72.1	51.6	91.6
41	69.5	43.7	103.7

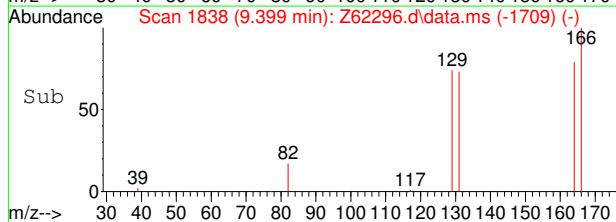
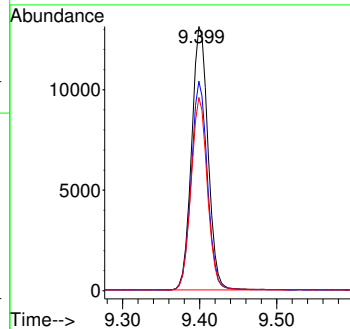
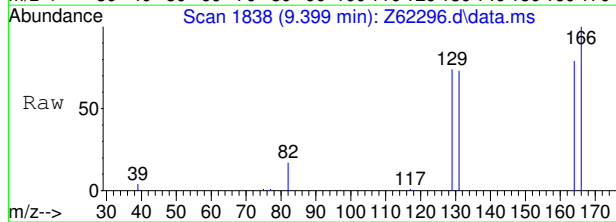


7.1.28
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#21
 Tetrachloroethene
 Concen: 1.26 ppb
 RT: 9.399 min Scan# 1838
 Delta R.T. -0.000 min
 Lab File: Z62296.d
 Acq: 13 Sep 2020 1:50 pm

Tgt Ion	Resp	Lower	Upper
166	194716		
166	100		
164	79.2	58.7	98.7
131	73.0	51.6	91.6



7.1.28
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-14-2020\vz2417\
 Data File : Z62297.d
 Acq On : 13 Sep 2020 2:10 pm
 Operator : stutip
 Sample : fa78549-20
 Misc : MS47174,VZ2417,,,,,
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 14 07:07:28 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Sun Sep 13 13:38:26 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)	

Internal Standards							
1) Fluorobenzene	7.401	96	1518270	5.00	ppb	0.00	
18) Chlorobenzene-d5	10.511	117	1219465	5.00	ppb	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.130	65	523431	5.57	ppb	0.00	
Spiked Amount	5.000	Range	79 - 125	Recovery	=	111.40%	
19) Toluene-d8	8.961	98	1479074	4.99	ppb	0.00	
Spiked Amount	5.000	Range	70 - 130	Recovery	=	99.80%	
Target Compounds							
							Qvalue
5) Methylene Chloride	4.717	84	17693	0.12	ppb		89
8) cis-1,2-Dichloroethene	6.110	96	26288	0.21	ppb		94
9) Chloroform	6.377	83	30605	0.13	ppb		99
15) Trichloroethene	7.571	95	218660	1.69	ppb		87
21) Tetrachloroethene	9.399	166	31443	0.22	ppb		99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

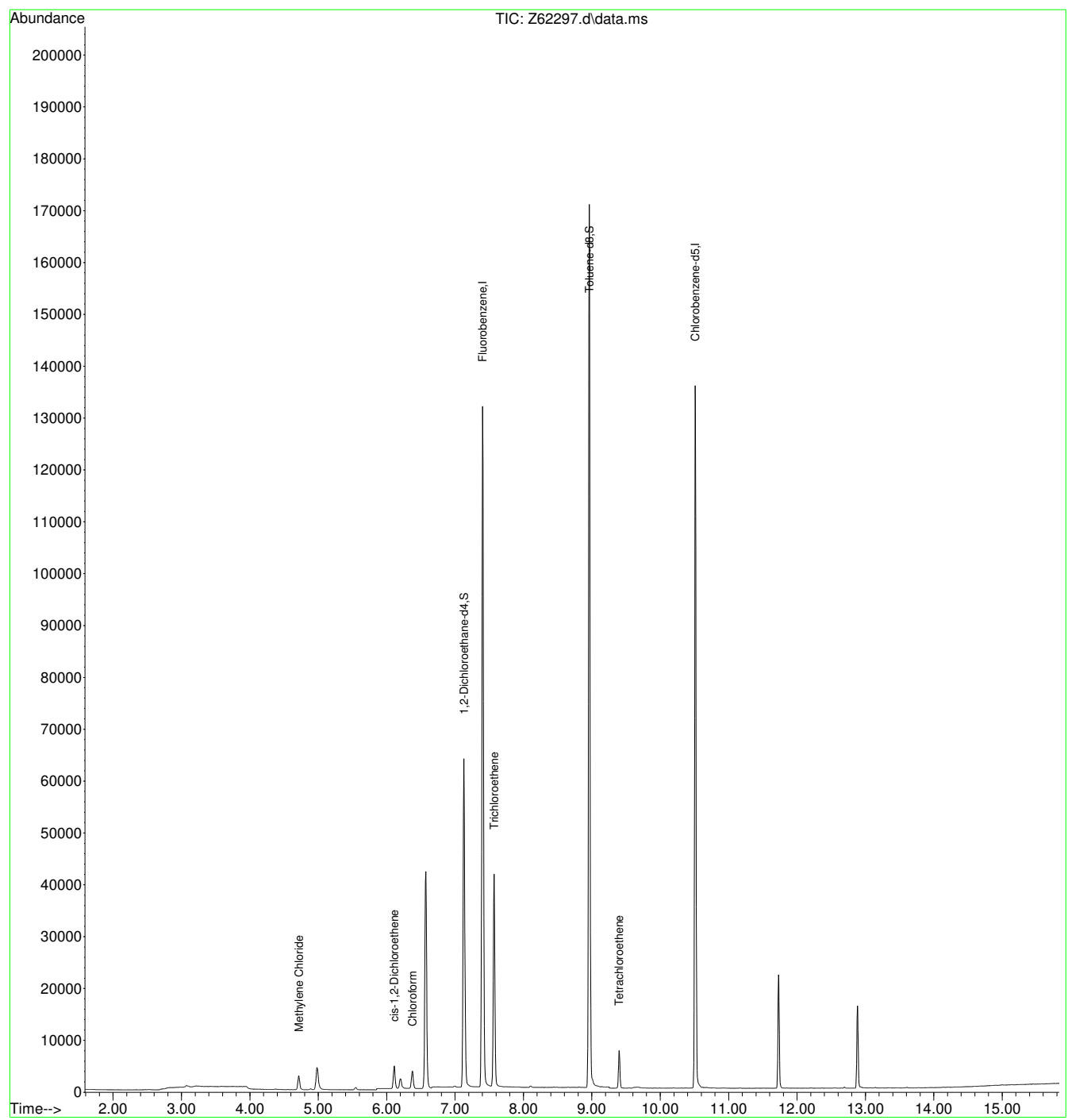
7.1.29
7



Quantitation Report (QT Reviewed)

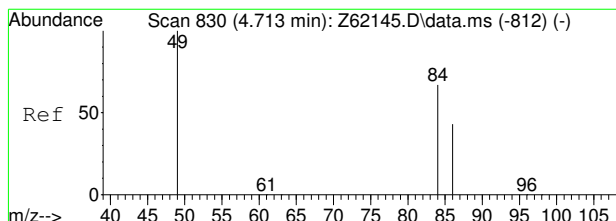
Data Path : C:\msdchem\1\data\johnm\September 2020\09-14-2020\ vz2417\
Data File : Z62297.d
Acq On : 13 Sep 2020 2:10 pm
Operator : stutip
Sample : fa78549-20
Misc : MS47174,VZ2417,,,,,
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 14 07:07:28 2020
Quant Method : C:\msdchem\1\methods\SIMCL091120.M
Quant Title : WATER-EPA 8260B
QLast Update : Sun Sep 13 13:38:26 2020
Response via : Initial Calibration



7.1.29
7

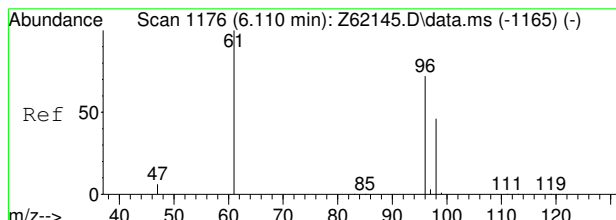
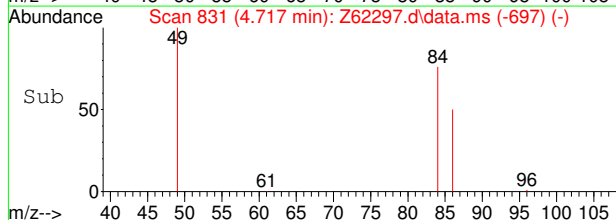
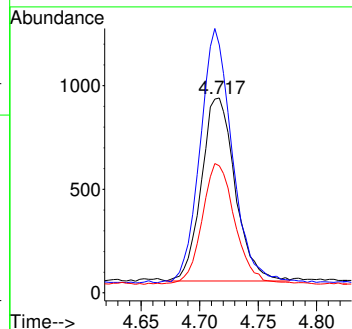
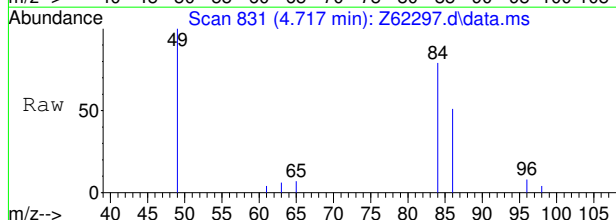




#5
 Methylene Chloride
 Concen: 0.12 ppb
 RT: 4.717 min Scan# 831
 Delta R.T. 0.004 min
 Lab File: Z62297.d
 Acq: 13 Sep 2020 2:10 pm

Tgt Ion: 84 Resp: 17693

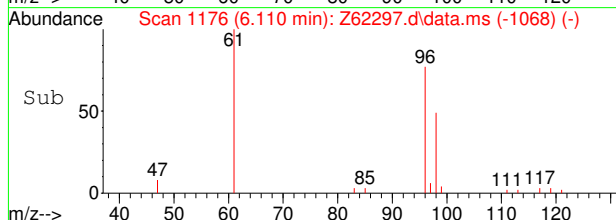
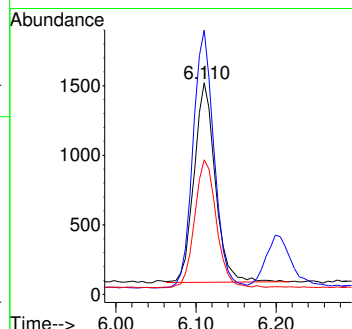
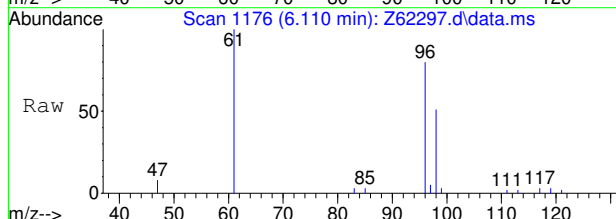
Ion	Ratio	Lower	Upper
84	100		
49	128.8	128.7	168.7
86	64.3	43.9	83.9

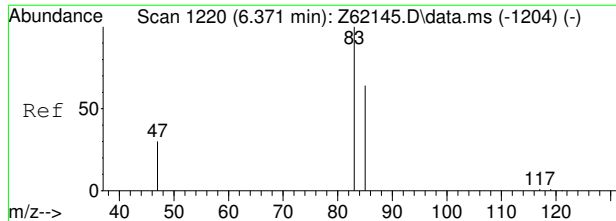


#8
 cis-1,2-Dichloroethene
 Concen: 0.21 ppb
 RT: 6.110 min Scan# 1176
 Delta R.T. 0.000 min
 Lab File: Z62297.d
 Acq: 13 Sep 2020 2:10 pm

Tgt Ion: 96 Resp: 26288

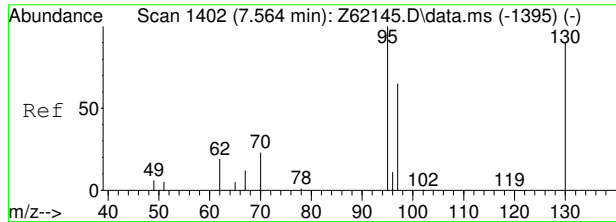
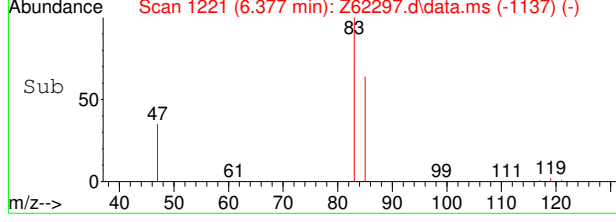
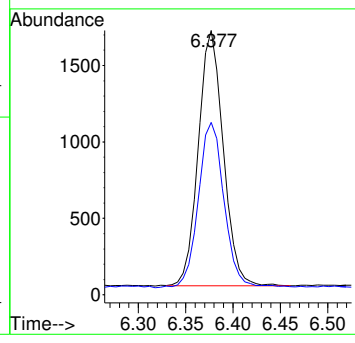
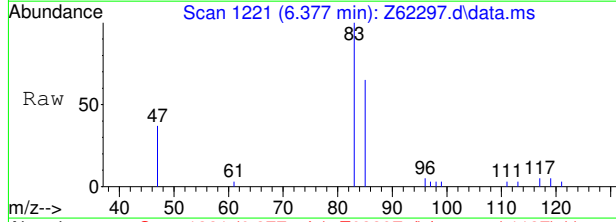
Ion	Ratio	Lower	Upper
96	100		
61	129.5	119.3	159.3
98	64.0	44.5	84.5





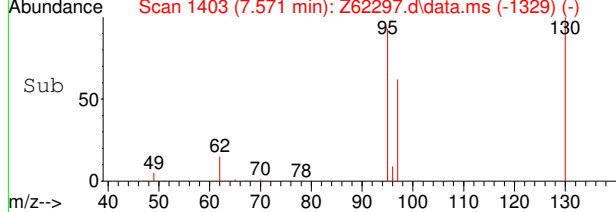
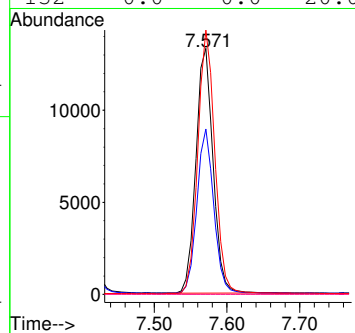
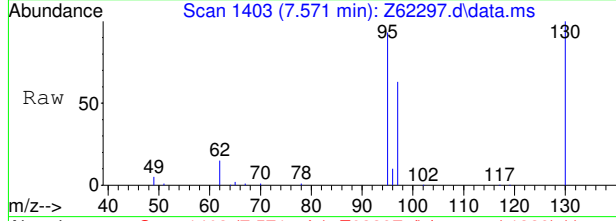
#9
 Chloroform
 Concen: 0.13 ppb
 RT: 6.377 min Scan# 1221
 Delta R.T. -0.000 min
 Lab File: Z62297.d
 Acq: 13 Sep 2020 2:10 pm

Tgt Ion	Resp	Lower	Upper
83	30605		
85	66.5	46.1	86.1

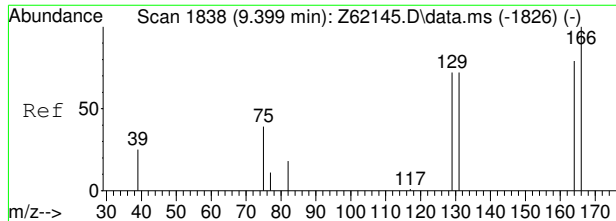


#15
 Trichloroethene
 Concen: 1.69 ppb
 RT: 7.571 min Scan# 1403
 Delta R.T. -0.000 min
 Lab File: Z62297.d
 Acq: 13 Sep 2020 2:10 pm

Tgt Ion	Resp	Lower	Upper
95	218660		
97	67.2	44.5	84.5
130	107.8	69.7	109.7
132	0.0	0.0	20.0

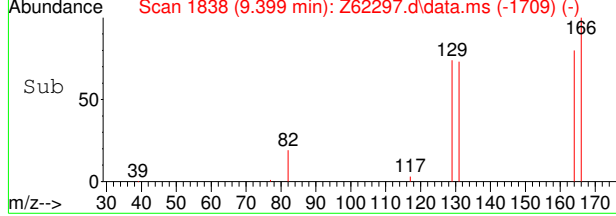
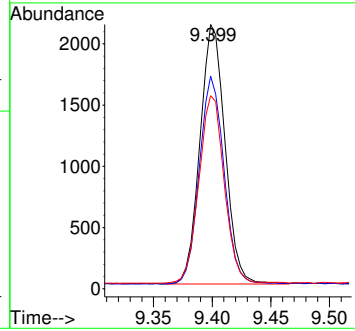
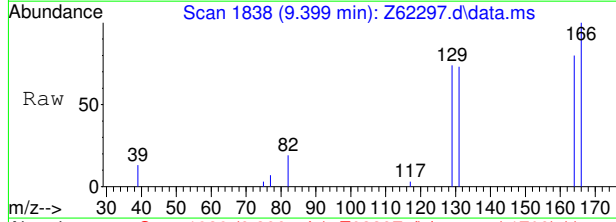


7.1.29
 7



#21
 Tetrachloroethene
 Concen: 0.22 ppb
 RT: 9.399 min Scan# 1838
 Delta R.T. -0.000 min
 Lab File: Z62297.d
 Acq: 13 Sep 2020 2:10 pm

Tgt Ion	Resp	Lower	Upper
166	31443		
166	100		
164	80.0	58.7	98.7
131	72.2	51.6	91.6



7.1.29
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-14-2020\vz2417\
Data File : Z62298.d
Acq On : 13 Sep 2020 2:29 pm
Operator : stutip
Sample : fa78549-21
Misc : MS47174,VZ2417,,,,,
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 14 07:07:30 2020
Quant Method : C:\msdchem\1\methods\SIMCL091120.M
Quant Title : WATER-EPA 8260B
QLast Update : Sun Sep 13 13:38:26 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	

Internal Standards							
1) Fluorobenzene	7.401	96	1576716	5.00	ppb	0.00	
18) Chlorobenzene-d5	10.511	117	1259291	5.00	ppb	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.130	65	545857	5.60	ppb	0.00	
Spiked Amount	5.000	Range	79 - 125	Recovery	=	112.00%	
19) Toluene-d8	8.961	98	1533278	5.01	ppb	0.00	
Spiked Amount	5.000	Range	70 - 130	Recovery	=	100.20%	
Target Compounds							
5) Methylene Chloride	4.713	84	17422	0.11	ppb	90	Qvalue
7) 1,1-Dichloroethane	5.546	63	14470	0.07	ppb	#	97
8) cis-1,2-Dichloroethene	6.110	96	499796	3.86	ppb		94
9) Chloroform	6.377	83	16146	0.07	ppb		97
15) Trichloroethene	7.571	95	23430	0.17	ppb	#	85
21) Tetrachloroethene	9.399	166	127268	0.85	ppb		99

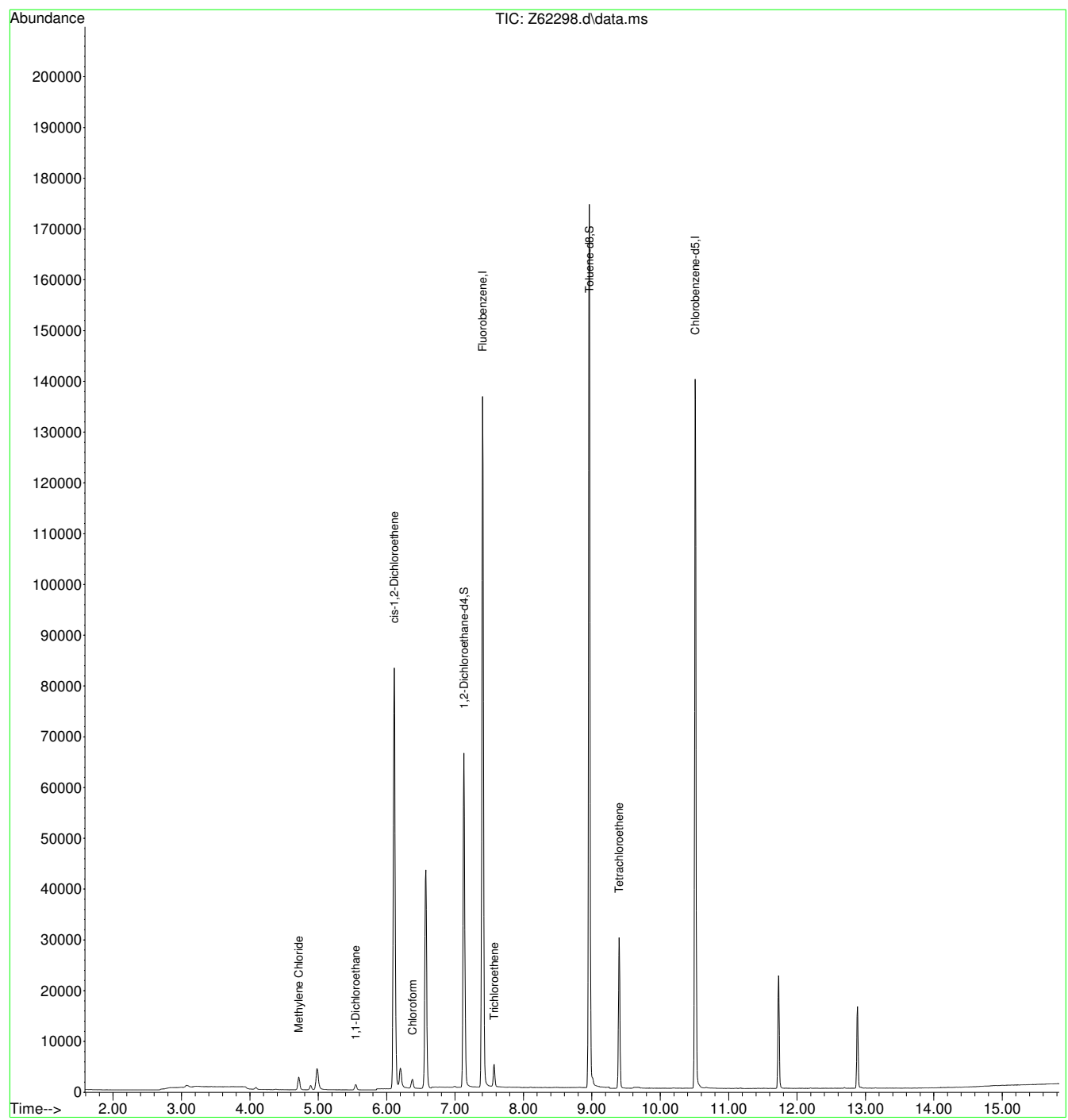
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.1.30
7

Quantitation Report (QT Reviewed)

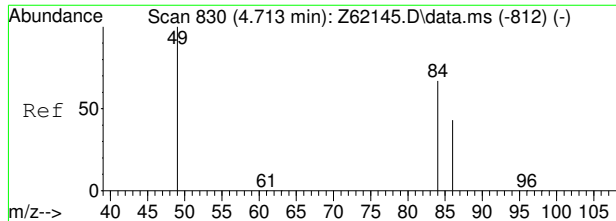
Data Path : C:\msdchem\1\data\johnm\September 2020\09-14-2020\ vz2417\
Data File : Z62298.d
Acq On : 13 Sep 2020 2:29 pm
Operator : stutip
Sample : fa78549-21
Misc : MS47174,VZ2417,,,,,
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 14 07:07:30 2020
Quant Method : C:\msdchem\1\methods\SIMCL091120.M
Quant Title : WATER-EPA 8260B
QLast Update : Sun Sep 13 13:38:26 2020
Response via : Initial Calibration



7.1.30
7

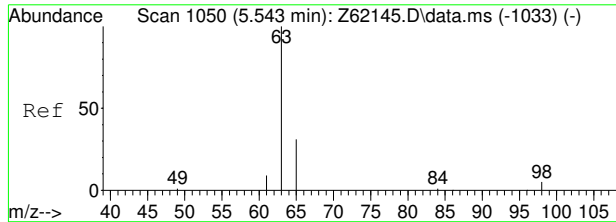
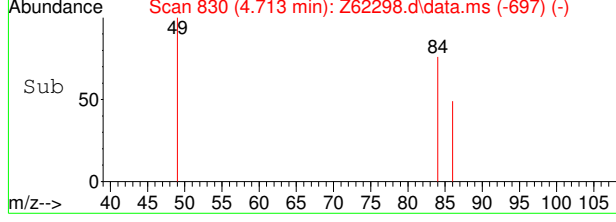
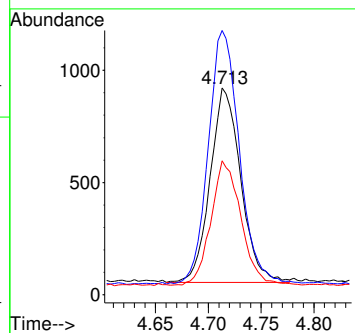
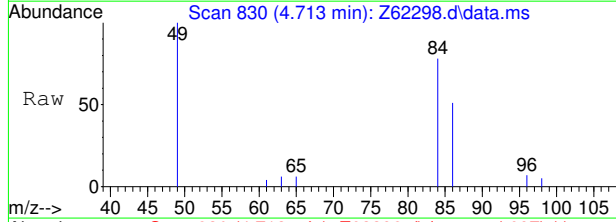




#5
 Methylene Chloride
 Concen: 0.11 ppb
 RT: 4.713 min Scan# 830
 Delta R.T. -0.000 min
 Lab File: Z62298.d
 Acq: 13 Sep 2020 2:29 pm

Tgt Ion: 84 Resp: 17422

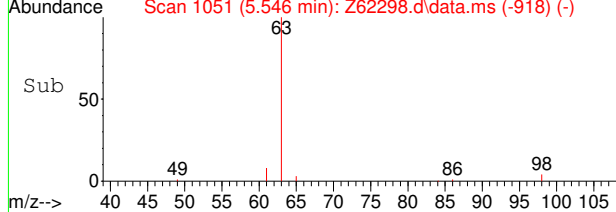
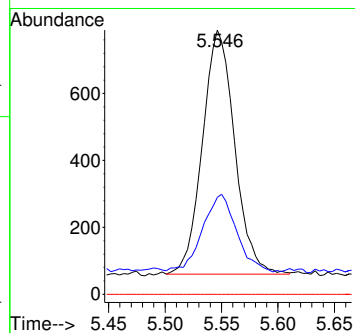
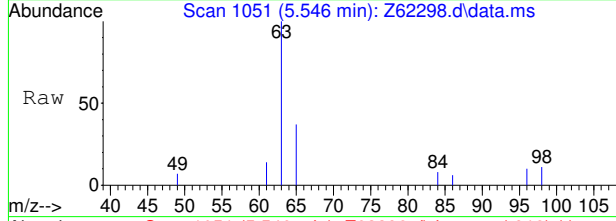
Ion	Ratio	Lower	Upper
84	100		
49	130.5	128.7	168.7
86	63.7	43.9	83.9



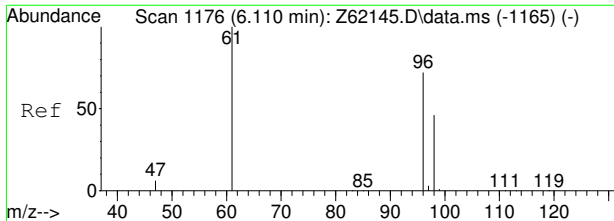
#7
 1,1-Dichloroethane
 Concen: 0.07 ppb
 RT: 5.546 min Scan# 1051
 Delta R.T. 0.000 min
 Lab File: Z62298.d
 Acq: 13 Sep 2020 2:29 pm

Tgt Ion: 63 Resp: 14470

Ion	Ratio	Lower	Upper
63	100		
65	33.2	11.3	51.3
83	0.0	0.0	30.0

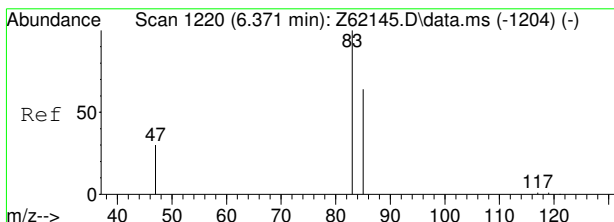
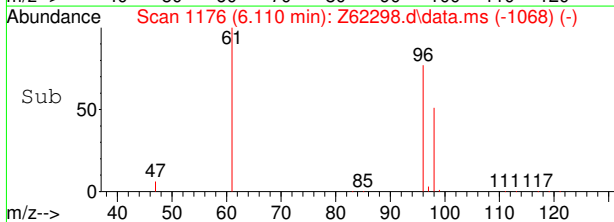
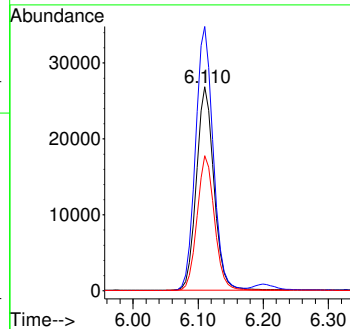
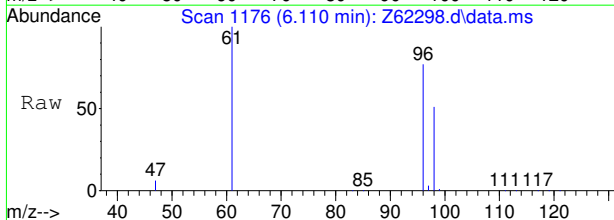


7.1.30
7



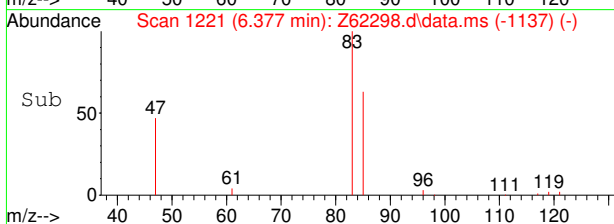
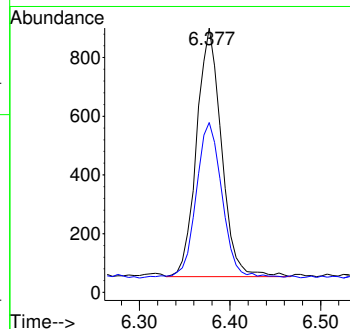
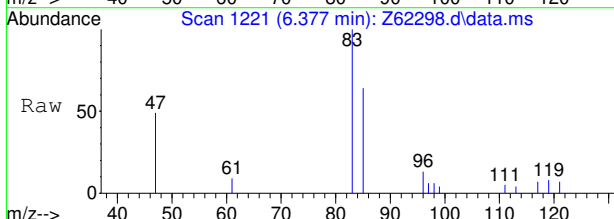
#8
 cis-1,2-Dichloroethene
 Concen: 3.86 ppb
 RT: 6.110 min Scan# 1176
 Delta R.T. 0.000 min
 Lab File: Z62298.d
 Acq: 13 Sep 2020 2:29 pm

Tgt Ion	Resp	Lower	Upper
96	499796		
96	100		
61	129.8	119.3	159.3
98	66.2	44.5	84.5



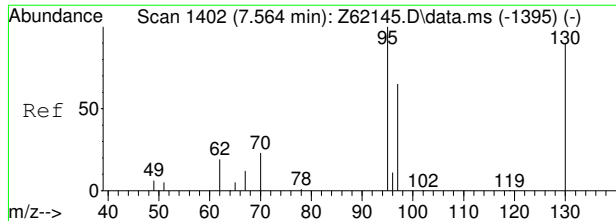
#9
 Chloroform
 Concen: 0.07 ppb
 RT: 6.377 min Scan# 1221
 Delta R.T. -0.000 min
 Lab File: Z62298.d
 Acq: 13 Sep 2020 2:29 pm

Tgt Ion	Resp	Lower	Upper
83	16146		
83	100		
85	63.8	46.1	86.1

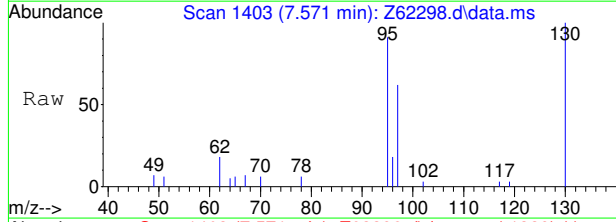


7.1.30
7



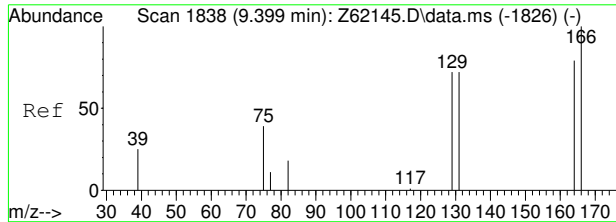
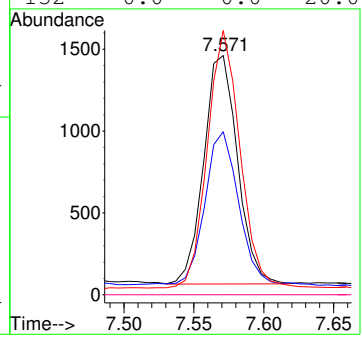
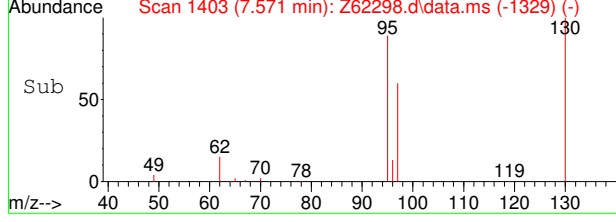


#15
 Trichloroethene
 Concen: 0.17 ppb
 RT: 7.571 min Scan# 1403
 Delta R.T. 0.000 min
 Lab File: Z62298.d
 Acq: 13 Sep 2020 2:29 pm

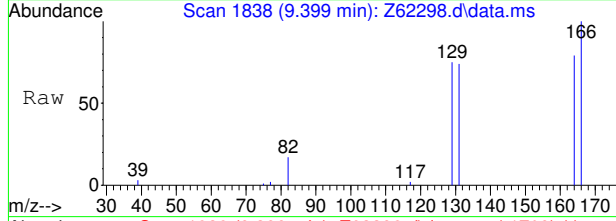


Tgt Ion: 95 Resp: 23430

Ion	Ratio	Lower	Upper
95	100		
97	66.6	44.5	84.5
130	112.7	69.7	109.7#
132	0.0	0.0	20.0

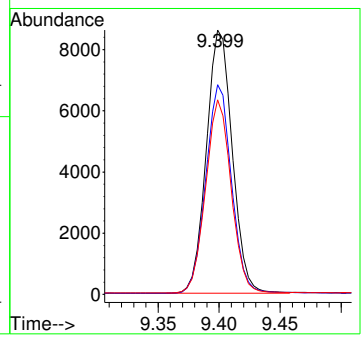
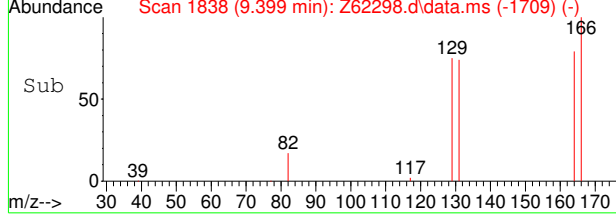


#21
 Tetrachloroethene
 Concen: 0.85 ppb
 RT: 9.399 min Scan# 1838
 Delta R.T. -0.000 min
 Lab File: Z62298.d
 Acq: 13 Sep 2020 2:29 pm



Tgt Ion: 166 Resp: 127268

Ion	Ratio	Lower	Upper
166	100		
164	79.1	58.7	98.7
131	73.3	51.6	91.6



7.1.30
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-14-2020\vz2417\
 Data File : Z62299.d
 Acq On : 13 Sep 2020 2:48 pm
 Operator : stutip
 Sample : fa78549-22
 Misc : MS47174,VZ2417,,,,,
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 14 07:07:33 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Sun Sep 13 13:38:26 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)

Internal Standards						
1) Fluorobenzene	7.401	96	1559515	5.00	ppb	0.00
18) Chlorobenzene-d5	10.511	117	1248471	5.00	ppb	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.130	65	541319	5.61	ppb	0.00
Spiked Amount	5.000	Range	79 - 125	Recovery	=	112.20%
19) Toluene-d8	8.961	98	1514025	4.99	ppb	0.00
Spiked Amount	5.000	Range	70 - 130	Recovery	=	99.80%
Target Compounds						
5) Methylene Chloride	4.717	84	17926	0.12	ppb	# 88
7) 1,1-Dichloroethane	5.546	63	31836	0.16	ppb	# 99
8) cis-1,2-Dichloroethene	6.110	96	145915	1.14	ppb	94
9) Chloroform	6.377	83	83547	0.36	ppb	98
10) Carbon Tetrachloride	6.543	117	14841	0.09	ppb	94
15) Trichloroethene	7.571	95	1011597	7.60	ppb	# 86
16) 1,2-Dichloropropane	8.105	63	7249	0.07	ppb	95
21) Tetrachloroethene	9.399	166	132491	0.89	ppb	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

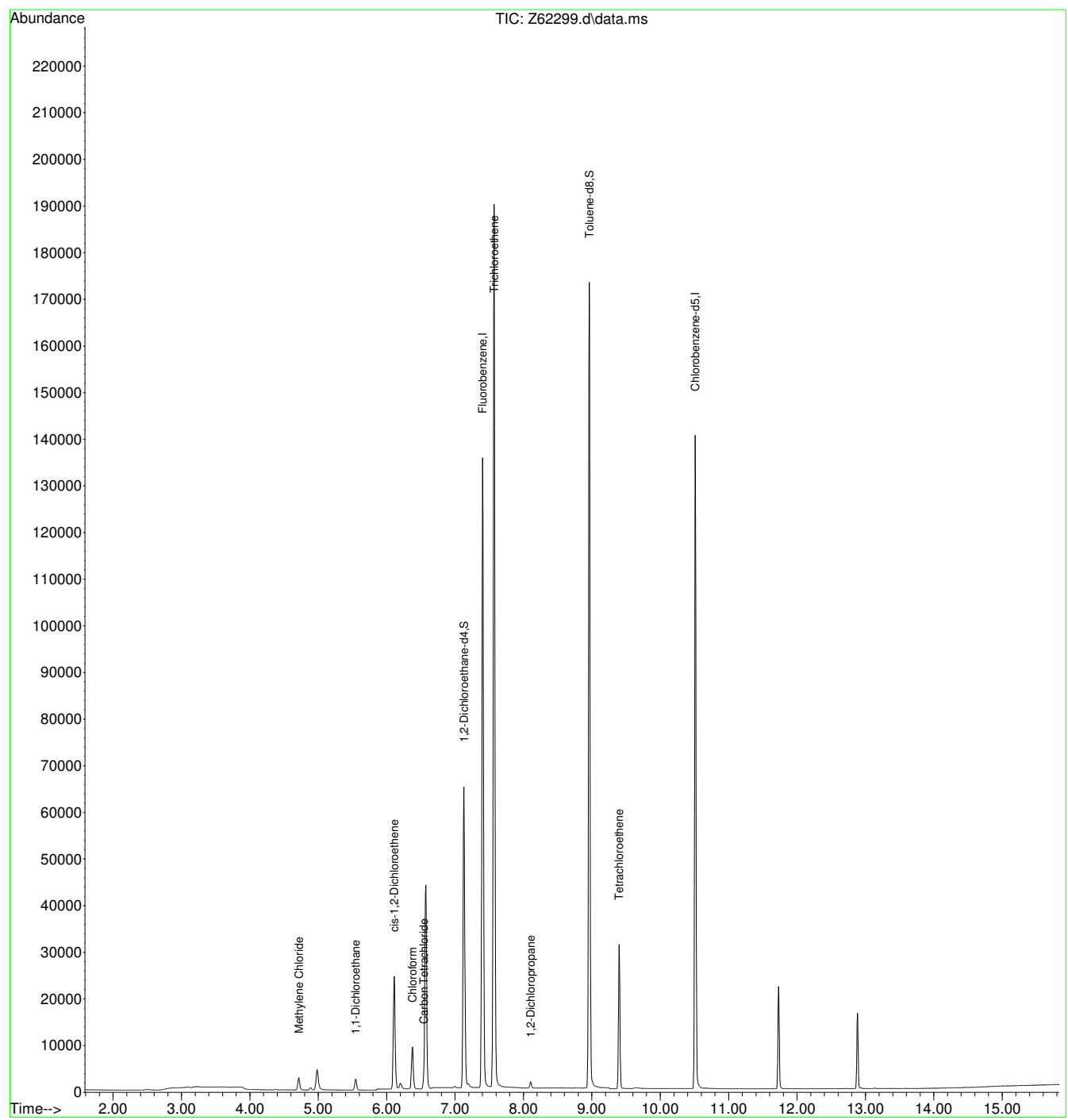
7.1.31
7



Quantitation Report (QT Reviewed)

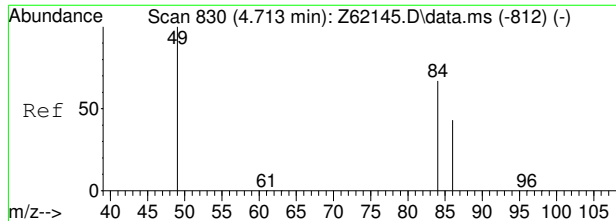
Data Path : C:\msdchem\1\data\johnm\September 2020\09-14-2020\ vz2417\
Data File : Z62299.d
Acq On : 13 Sep 2020 2:48 pm
Operator : stutip
Sample : fa78549-22
Misc : MS47174,VZ2417,,,,,
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 14 07:07:33 2020
Quant Method : C:\msdchem\1\methods\SIMCL091120.M
Quant Title : WATER-EPA 8260B
QLast Update : Sun Sep 13 13:38:26 2020
Response via : Initial Calibration



7.1.31
7

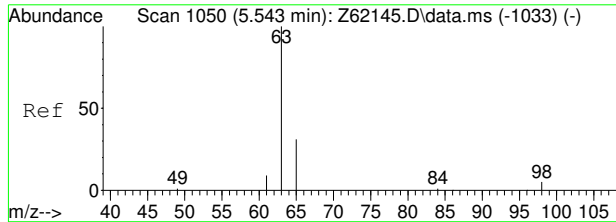
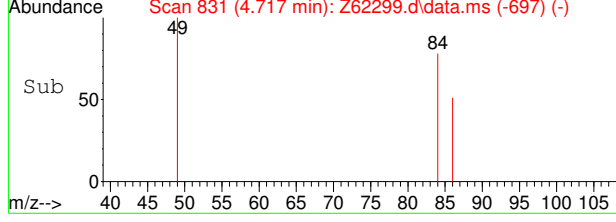
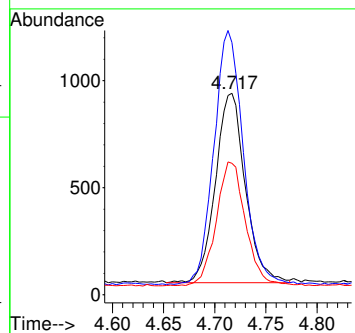
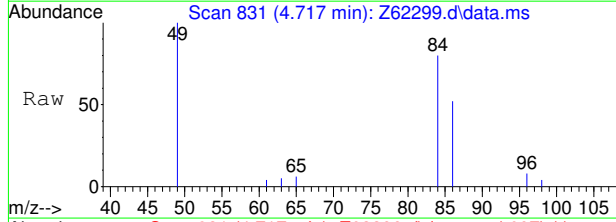




#5
 Methylene Chloride
 Concen: 0.12 ppb
 RT: 4.717 min Scan# 831
 Delta R.T. 0.004 min
 Lab File: Z62299.d
 Acq: 13 Sep 2020 2:48 pm

Tgt Ion: 84 Resp: 17926

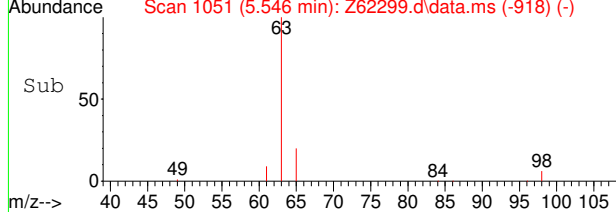
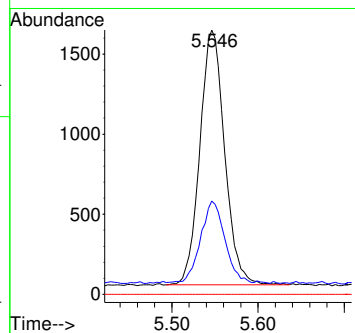
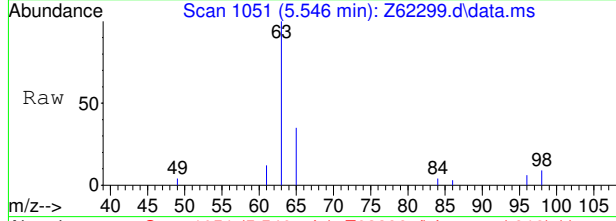
Ion	Ratio	Lower	Upper
84	100		
49	127.8	128.7	168.7#
86	64.6	43.9	83.9



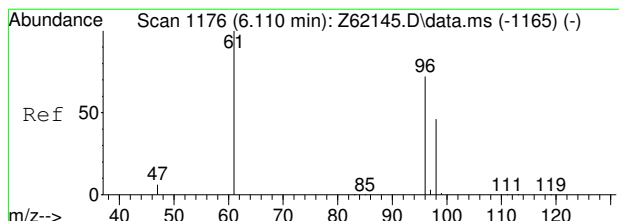
#7
 1,1-Dichloroethane
 Concen: 0.16 ppb
 RT: 5.546 min Scan# 1051
 Delta R.T. 0.000 min
 Lab File: Z62299.d
 Acq: 13 Sep 2020 2:48 pm

Tgt Ion: 63 Resp: 31836

Ion	Ratio	Lower	Upper
63	100		
65	30.6	11.3	51.3
83	0.0	0.0	30.0

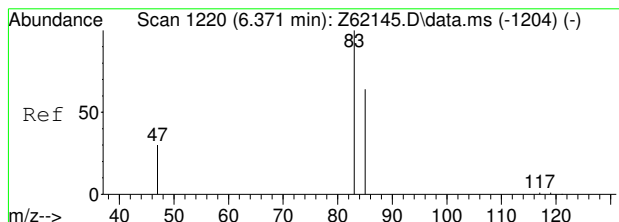
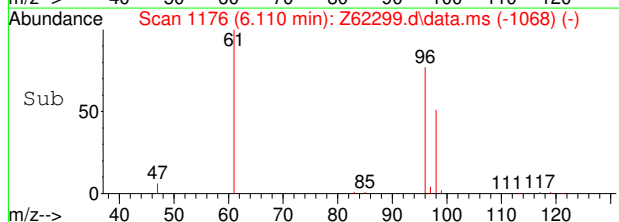
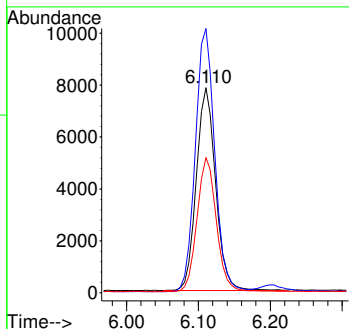
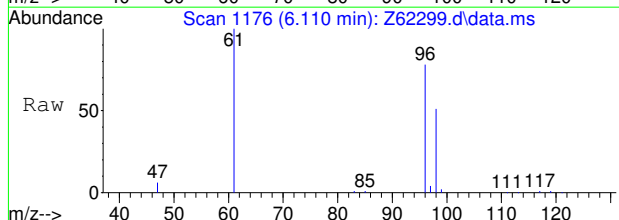


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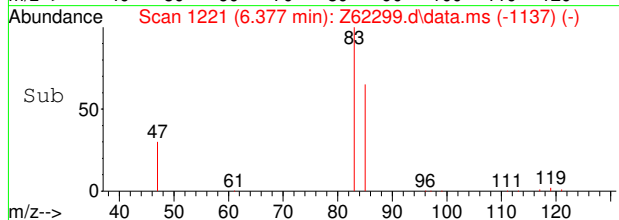
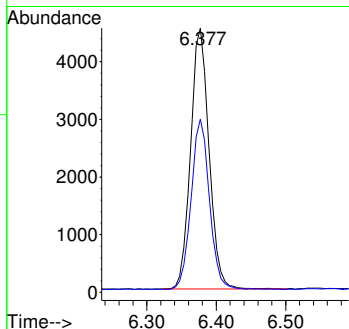
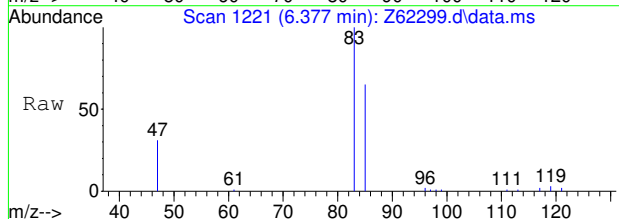
#8
 cis-1,2-Dichloroethene
 Concen: 1.14 ppb
 RT: 6.110 min Scan# 1176
 Delta R.T. 0.000 min
 Lab File: Z62299.d
 Acq: 13 Sep 2020 2:48 pm

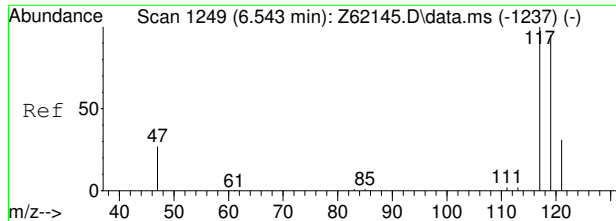
Tgt Ion	Resp	Lower	Upper
96	145915		
96	100		
61	129.8	119.3	159.3
98	66.1	44.5	84.5



#9
 Chloroform
 Concen: 0.36 ppb
 RT: 6.377 min Scan# 1221
 Delta R.T. 0.000 min
 Lab File: Z62299.d
 Acq: 13 Sep 2020 2:48 pm

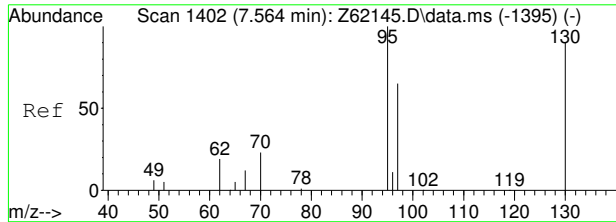
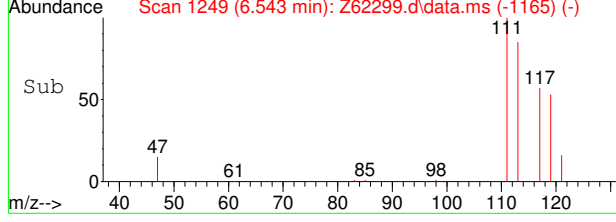
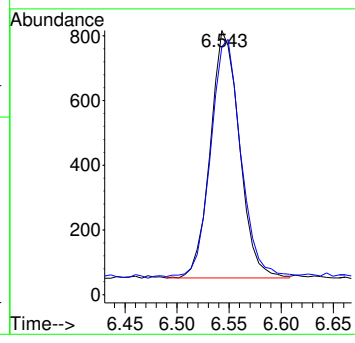
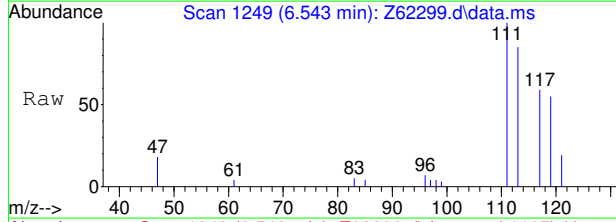
Tgt Ion	Resp	Lower	Upper
83	83547		
83	100		
85	64.7	46.1	86.1





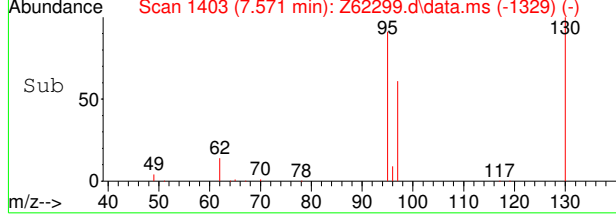
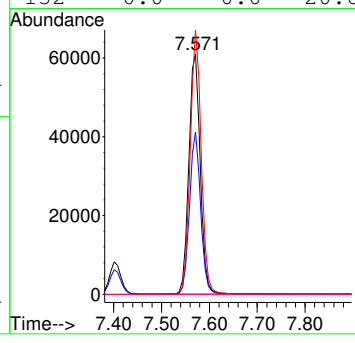
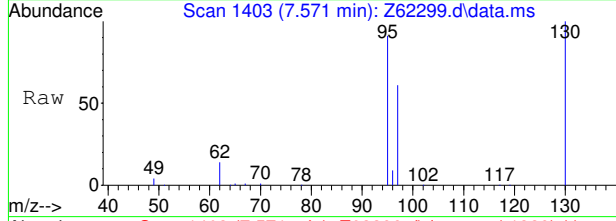
#10
 Carbon Tetrachloride
 Concen: 0.09 ppb
 RT: 6.543 min Scan# 1249
 Delta R.T. -0.000 min
 Lab File: Z62299.d
 Acq: 13 Sep 2020 2:48 pm

Tgt Ion	Resp	Lower	Upper
117	14841		
117	100		
119	101.6	75.5	115.5

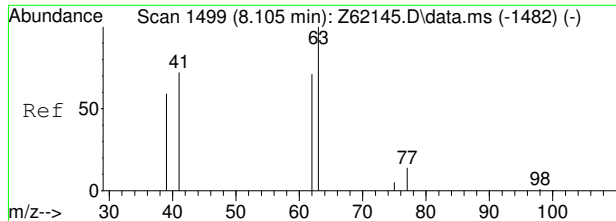


#15
 Trichloroethene
 Concen: 7.60 ppb
 RT: 7.571 min Scan# 1403
 Delta R.T. 0.000 min
 Lab File: Z62299.d
 Acq: 13 Sep 2020 2:48 pm

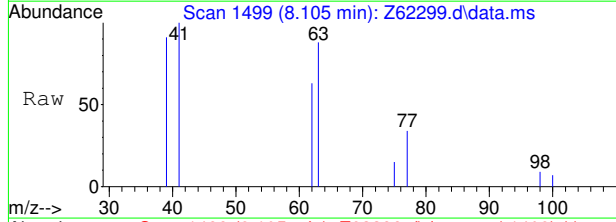
Tgt Ion	Resp	Lower	Upper
95	1011597		
95	100		
97	67.5	44.5	84.5
130	110.0	69.7	109.7#
132	0.0	0.0	20.0



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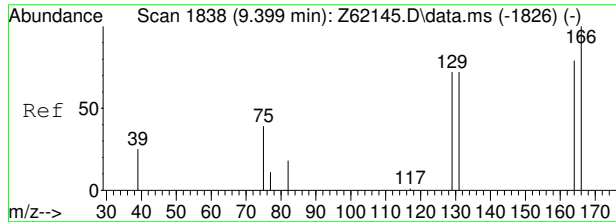
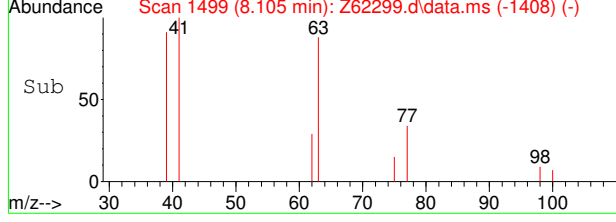
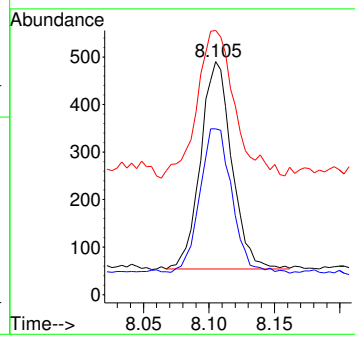


#16
 1,2-Dichloropropane
 Concen: 0.07 ppb
 RT: 8.105 min Scan# 1499
 Delta R.T. 0.000 min
 Lab File: Z62299.d
 Acq: 13 Sep 2020 2:48 pm

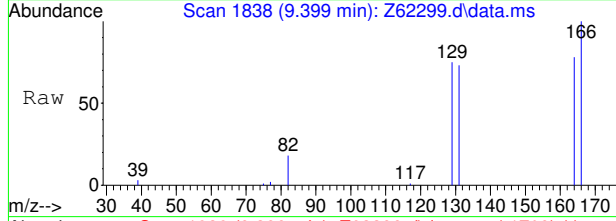


Tgt Ion: 63 Resp: 7249

Ion	Ratio	Lower	Upper
63	100		
62	72.2	51.6	91.6
41	80.9	43.7	103.7

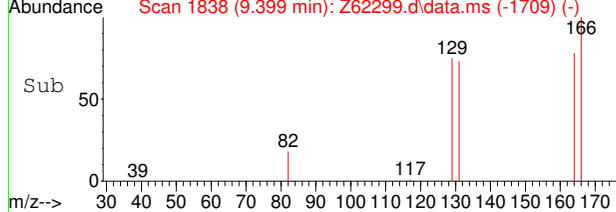
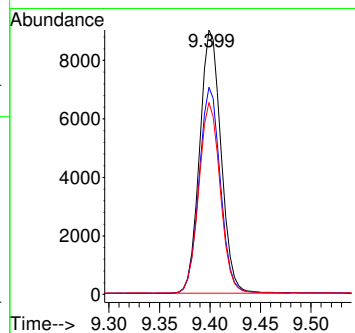


#21
 Tetrachloroethene
 Concen: 0.89 ppb
 RT: 9.399 min Scan# 1838
 Delta R.T. -0.000 min
 Lab File: Z62299.d
 Acq: 13 Sep 2020 2:48 pm



Tgt Ion: 166 Resp: 132491

Ion	Ratio	Lower	Upper
166	100		
164	78.2	58.7	98.7
131	72.4	51.6	91.6



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Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-14-2020\vz2417\
Data File : Z62300.d
Acq On : 13 Sep 2020 3:08 pm
Operator : stutip
Sample : fa78549-23
Misc : MS47174,VZ2417,,,,,
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 14 07:07:35 2020
Quant Method : C:\msdchem\1\methods\SIMCL091120.M
Quant Title : WATER-EPA 8260B
QLast Update : Sun Sep 13 13:38:26 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)

Internal Standards						
1) Fluorobenzene	7.401	96	1521040	5.00	ppb	0.00
18) Chlorobenzene-d5	10.511	117	1227184	5.00	ppb	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.130	65	533996	5.68	ppb	0.00
Spiked Amount	5.000	Range	79 - 125	Recovery	=	113.60%
19) Toluene-d8	8.961	98	1488197	4.99	ppb	0.00
Spiked Amount	5.000	Range	70 - 130	Recovery	=	99.80%
Target Compounds						
5) Methylene Chloride	4.717	84	16811	0.11	ppb	91
7) 1,1-Dichloroethane	5.546	63	31315	0.16	ppb	# 96
8) cis-1,2-Dichloroethene	6.110	96	143254	1.15	ppb	95
9) Chloroform	6.377	83	82812	0.36	ppb	98
10) Carbon Tetrachloride	6.543	117	14824	0.10	ppb	98
15) Trichloroethene	7.571	95	990558	7.63	ppb	87
16) 1,2-Dichloropropane	8.105	63	7193	0.07	ppb	98
21) Tetrachloroethene	9.399	166	130682	0.90	ppb	98

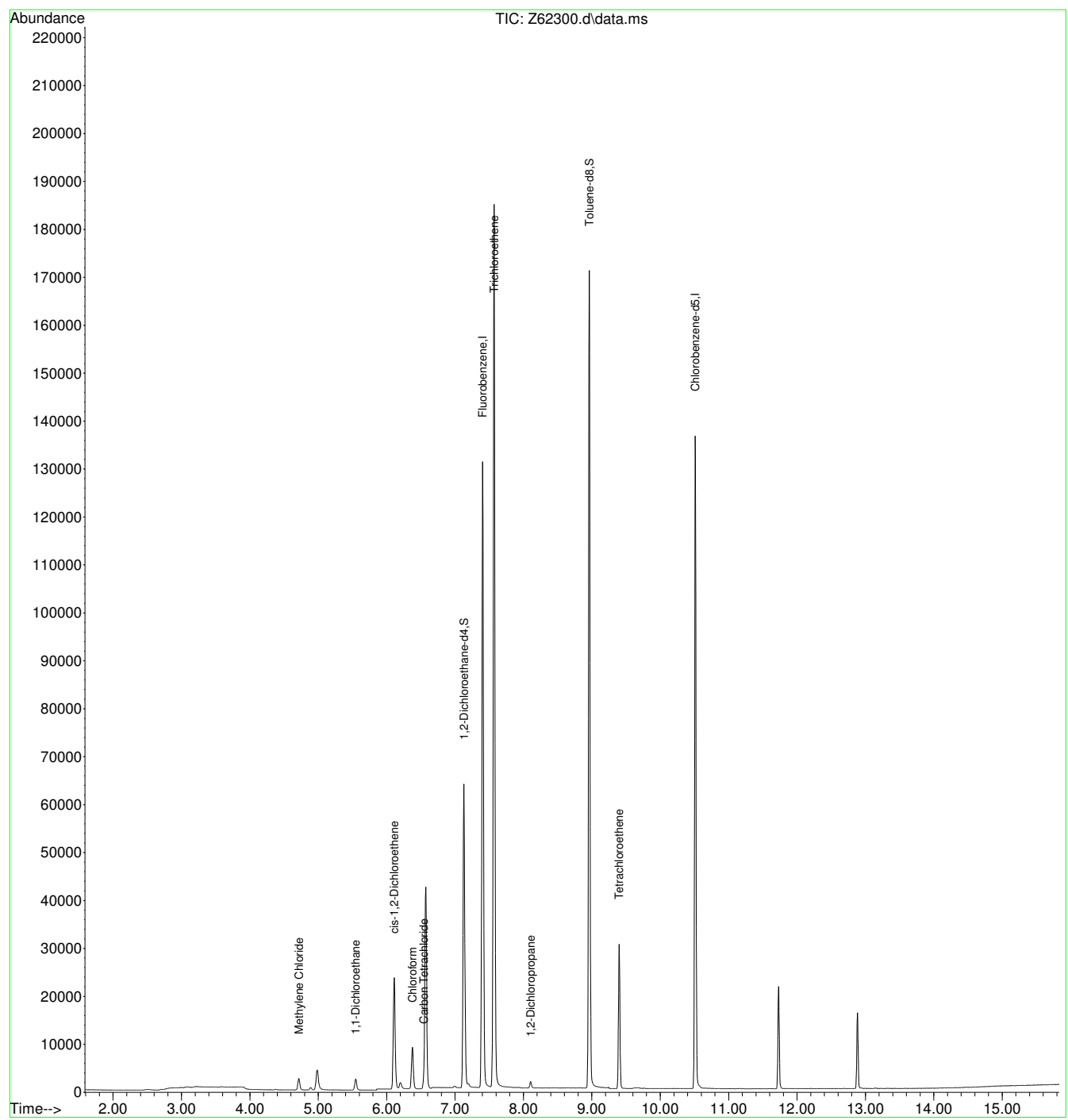
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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Quantitation Report (QT Reviewed)

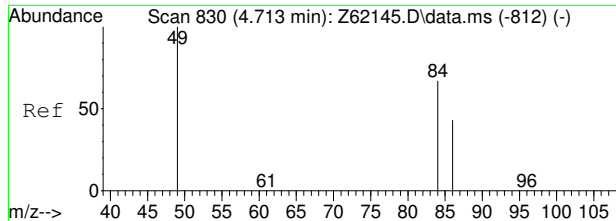
Data Path : C:\msdchem\1\data\johnm\September 2020\09-14-2020\ vz2417\
Data File : Z62300.d
Acq On : 13 Sep 2020 3:08 pm
Operator : stutip
Sample : fa78549-23
Misc : MS47174,VZ2417,,,,,
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 14 07:07:35 2020
Quant Method : C:\msdchem\1\methods\SIMCL091120.M
Quant Title : WATER-EPA 8260B
QLast Update : Sun Sep 13 13:38:26 2020
Response via : Initial Calibration



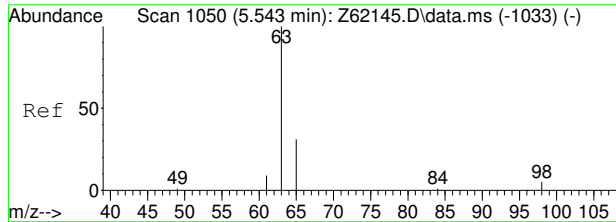
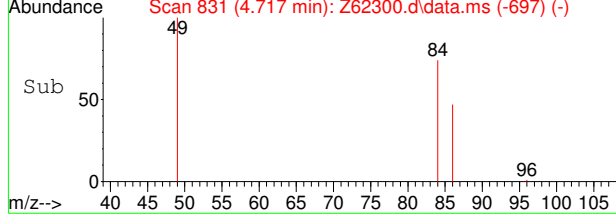
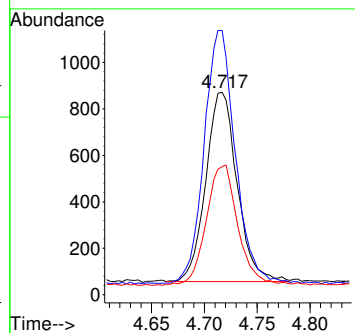
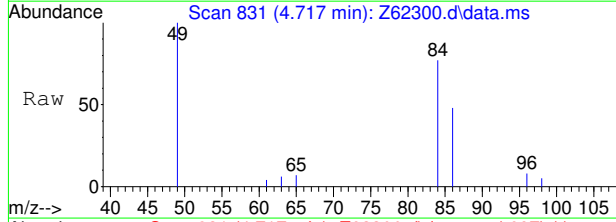
7.1.32
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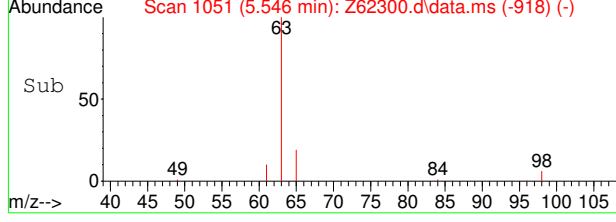
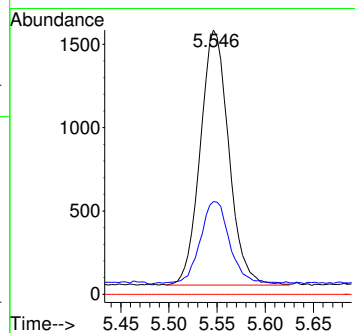
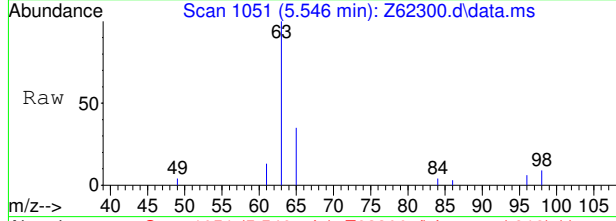
#5
 Methylene Chloride
 Concen: 0.11 ppb
 RT: 4.717 min Scan# 831
 Delta R.T. 0.004 min
 Lab File: Z62300.d
 Acq: 13 Sep 2020 3:08 pm

Tgt Ion	Resp	Lower	Upper
84	16811		
84	100		
49	133.5	128.7	168.7
86	62.2	43.9	83.9



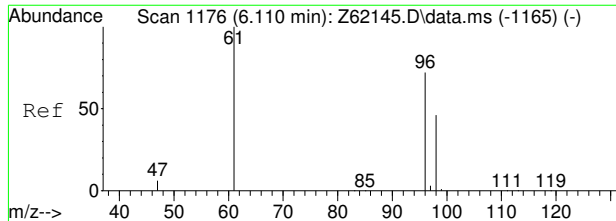
#7
 1,1-Dichloroethane
 Concen: 0.16 ppb
 RT: 5.546 min Scan# 1051
 Delta R.T. 0.000 min
 Lab File: Z62300.d
 Acq: 13 Sep 2020 3:08 pm

Tgt Ion	Resp	Lower	Upper
63	31315		
63	100		
65	33.7	11.3	51.3
83	0.0	0.0	30.0



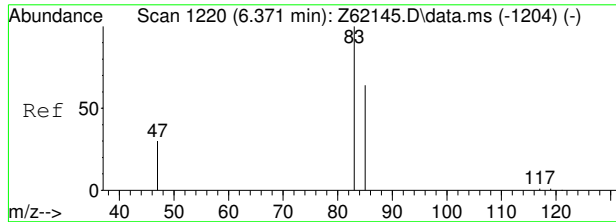
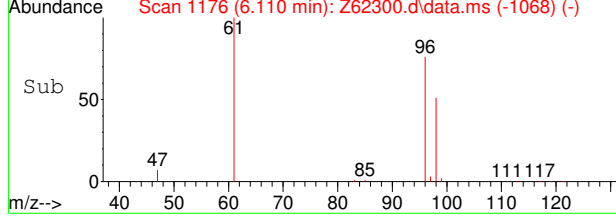
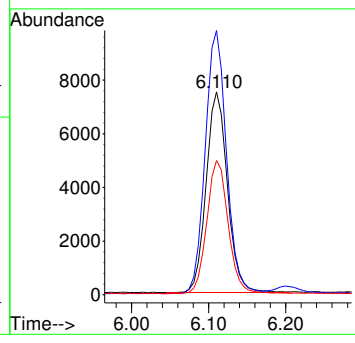
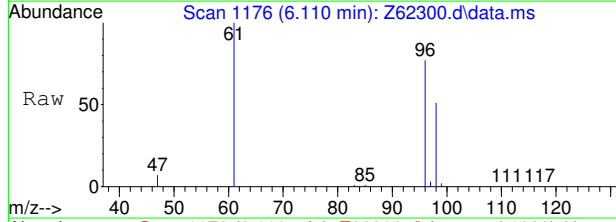
7.1.32
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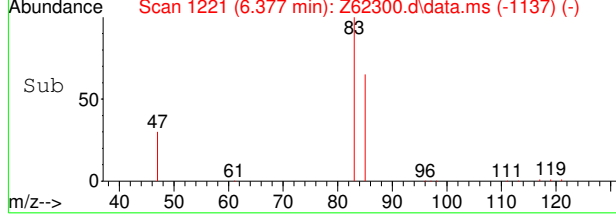
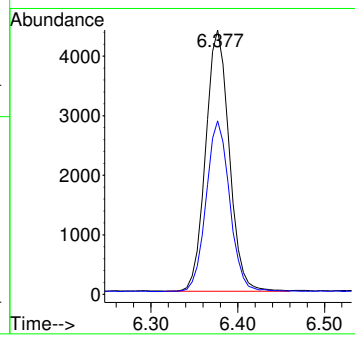
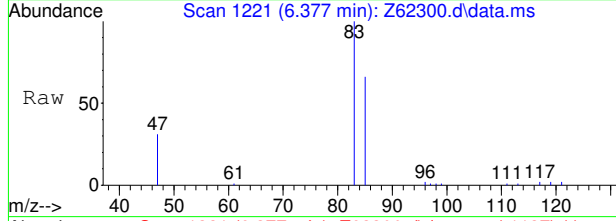
#8
 cis-1,2-Dichloroethene
 Concen: 1.15 ppb
 RT: 6.110 min Scan# 1176
 Delta R.T. 0.000 min
 Lab File: Z62300.d
 Acq: 13 Sep 2020 3:08 pm

Tgt Ion	Resp	Lower	Upper
96	143254		
96	100		
61	131.2	119.3	159.3
98	66.3	44.5	84.5

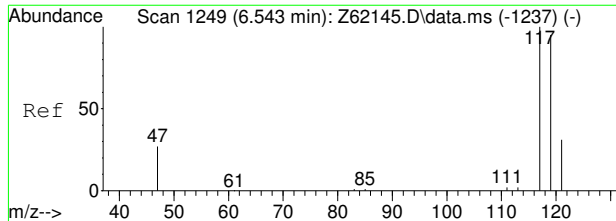


#9
 Chloroform
 Concen: 0.36 ppb
 RT: 6.377 min Scan# 1221
 Delta R.T. -0.000 min
 Lab File: Z62300.d
 Acq: 13 Sep 2020 3:08 pm

Tgt Ion	Resp	Lower	Upper
83	82812		
83	100		
85	64.9	46.1	86.1



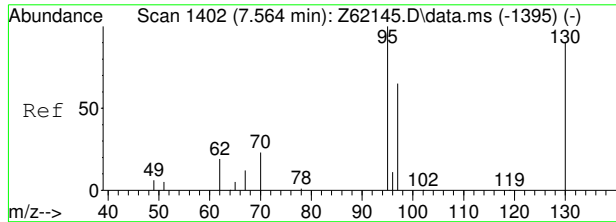
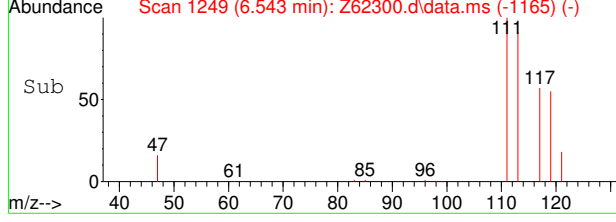
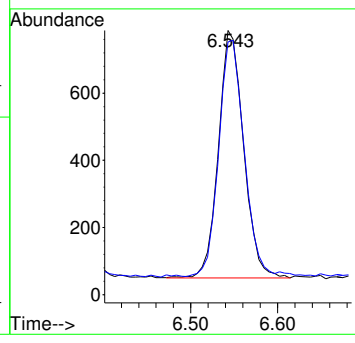
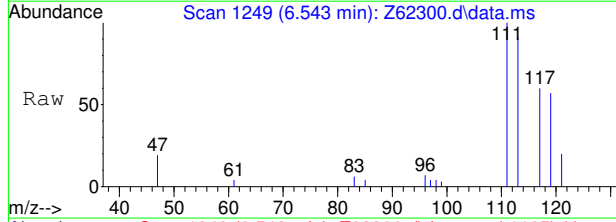
7.1.32
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#10
 Carbon Tetrachloride
 Concen: 0.10 ppb
 RT: 6.543 min Scan# 1249
 Delta R.T. -0.000 min
 Lab File: Z62300.d
 Acq: 13 Sep 2020 3:08 pm

Tgt Ion: 117 Resp: 14824

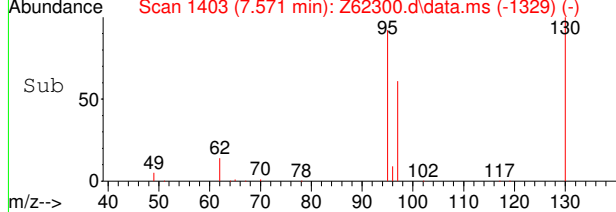
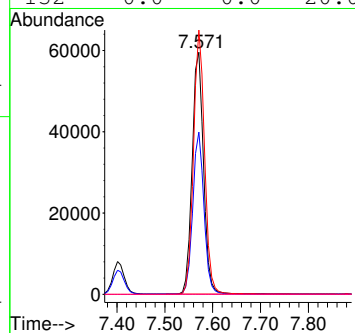
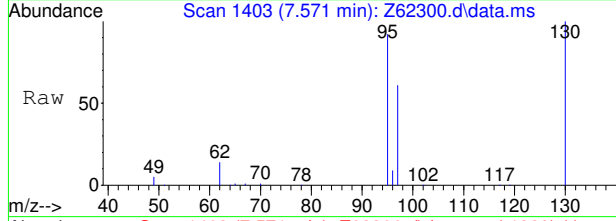
Ion	Ratio	Lower	Upper
117	100		
119	97.3	75.5	115.5



#15
 Trichloroethene
 Concen: 7.63 ppb
 RT: 7.571 min Scan# 1403
 Delta R.T. -0.000 min
 Lab File: Z62300.d
 Acq: 13 Sep 2020 3:08 pm

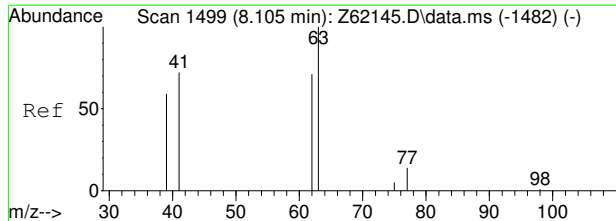
Tgt Ion: 95 Resp: 990558

Ion	Ratio	Lower	Upper
95	100		
97	66.9	44.5	84.5
130	109.2	69.7	109.7
132	0.0	0.0	20.0

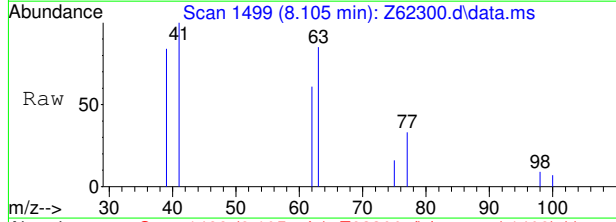


7.1.32
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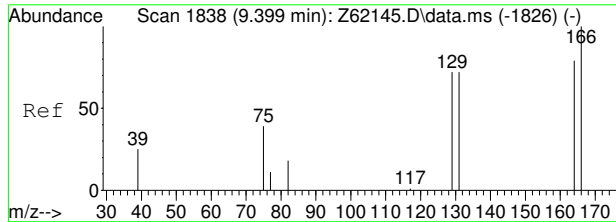
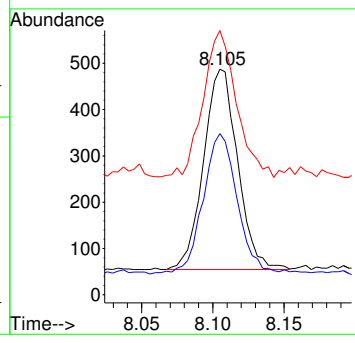
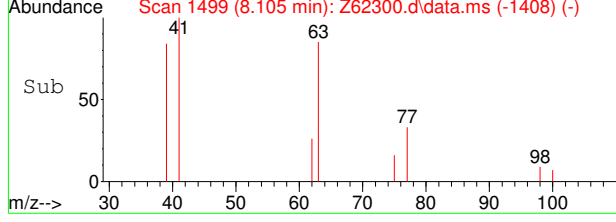


#16
 1,2-Dichloropropane
 Concen: 0.07 ppb
 RT: 8.105 min Scan# 1499
 Delta R.T. -0.000 min
 Lab File: Z62300.d
 Acq: 13 Sep 2020 3:08 pm

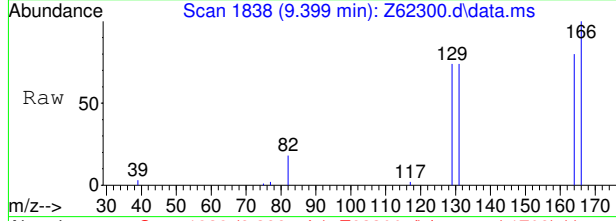


Tgt Ion: 63 Resp: 7193

Ion	Ratio	Lower	Upper
63	100		
62	70.3	51.6	91.6
41	71.2	43.7	103.7

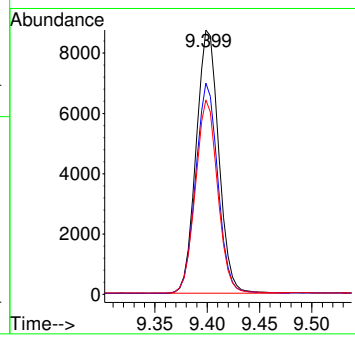
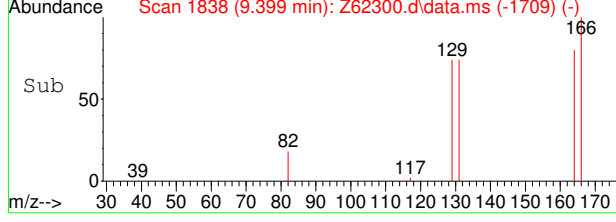


#21
 Tetrachloroethene
 Concen: 0.90 ppb
 RT: 9.399 min Scan# 1838
 Delta R.T. -0.000 min
 Lab File: Z62300.d
 Acq: 13 Sep 2020 3:08 pm



Tgt Ion: 166 Resp: 130682

Ion	Ratio	Lower	Upper
166	100		
164	79.8	58.7	98.7
131	73.4	51.6	91.6



7.1.32
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-14-2020\ vz2417\
Data File : Z62301.d
Acq On : 13 Sep 2020 3:27 pm
Operator : stutip
Sample : fa78549-24
Misc : MS47174,VZ2417,,,,,
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 14 07:07:37 2020
Quant Method : C:\msdchem\1\methods\SIMCL091120.M
Quant Title : WATER-EPA 8260B
QLast Update : Sun Sep 13 13:38:26 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)	

Internal Standards							
1) Fluorobenzene	7.401	96	1526414	5.00	ppb	0.00	
18) Chlorobenzene-d5	10.511	117	1229202	5.00	ppb	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.130	65	537921	5.70	ppb	0.00	
Spiked Amount	5.000	Range	79 - 125	Recovery	=	114.00%	
19) Toluene-d8	8.961	98	1485524	4.98	ppb	0.00	
Spiked Amount	5.000	Range	70 - 130	Recovery	=	99.60%	
Target Compounds							
							Qvalue
5) Methylene Chloride	4.713	84	15827	0.10	ppb		88
8) cis-1,2-Dichloroethene	6.110	96	74272	0.59	ppb		94
9) Chloroform	6.377	83	35611	0.16	ppb		99
10) Carbon Tetrachloride	6.543	117	18629	0.12	ppb		97
15) Trichloroethene	7.571	95	955913	7.33	ppb		86
21) Tetrachloroethene	9.399	166	69024	0.47	ppb		99

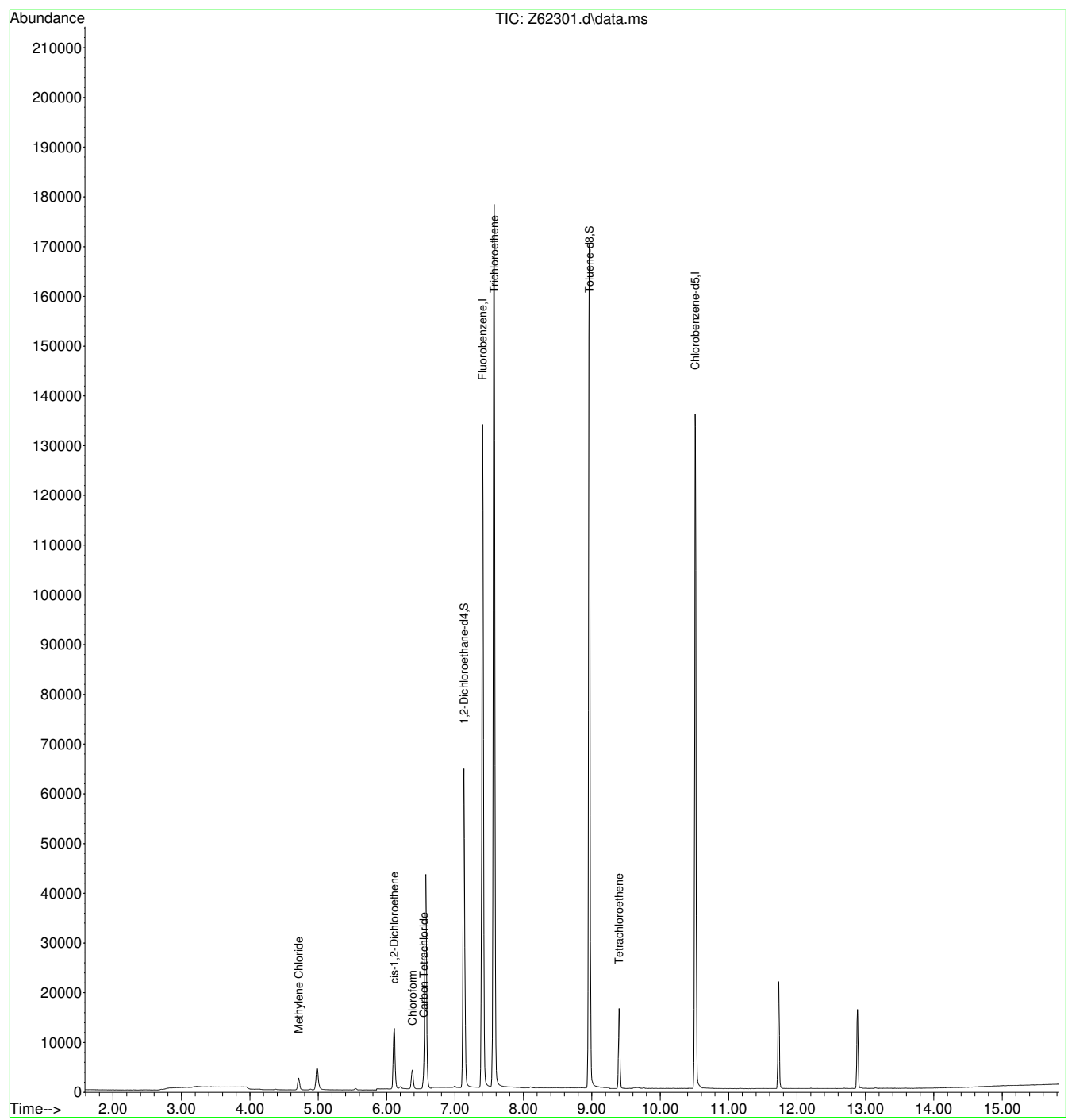
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.1.33
7

Quantitation Report (QT Reviewed)

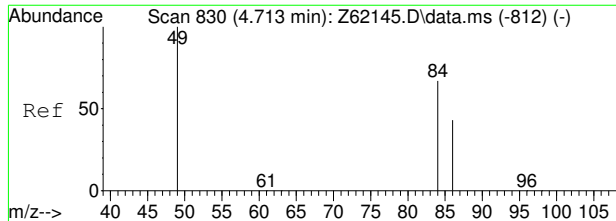
Data Path : C:\msdchem\1\data\johnm\September 2020\09-14-2020\ vz2417\
Data File : Z62301.d
Acq On : 13 Sep 2020 3:27 pm
Operator : stutip
Sample : fa78549-24
Misc : MS47174,VZ2417,,,,,
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 14 07:07:37 2020
Quant Method : C:\msdchem\1\methods\SIMCL091120.M
Quant Title : WATER-EPA 8260B
QLast Update : Sun Sep 13 13:38:26 2020
Response via : Initial Calibration



7.1.33
7

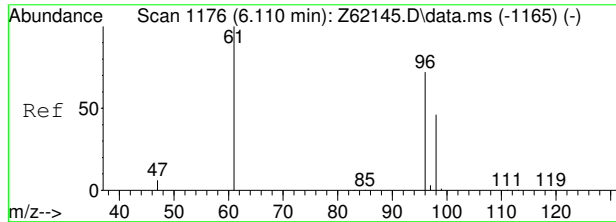
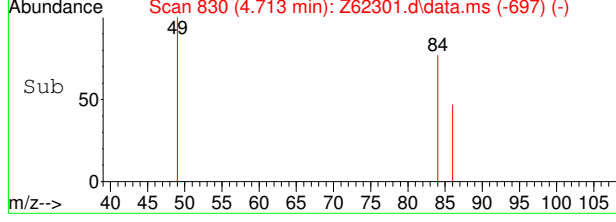
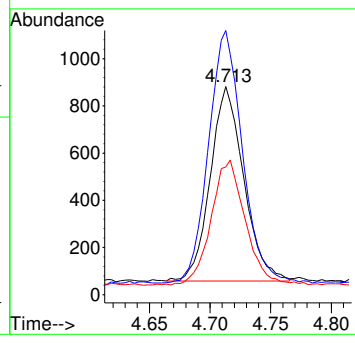
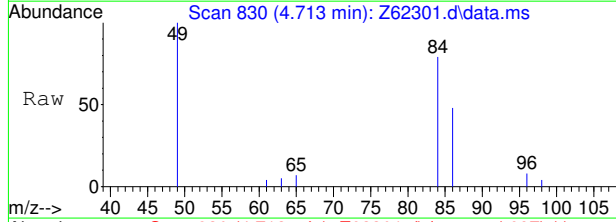




#5
Methylene Chloride
Concen: 0.10 ppb
RT: 4.713 min Scan# 830
Delta R.T. -0.000 min
Lab File: Z62301.d
Acq: 13 Sep 2020 3:27 pm

Tgt Ion: 84 Resp: 15827

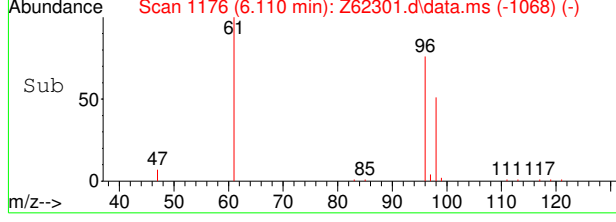
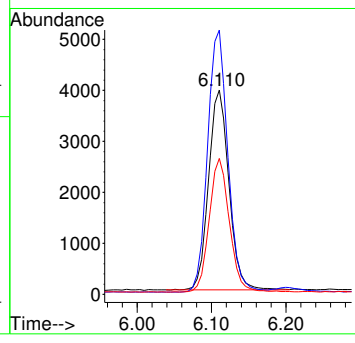
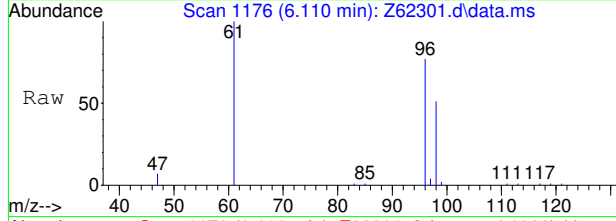
Ion	Ratio	Lower	Upper
84	100		
49	129.7	128.7	168.7
86	60.2	43.9	83.9

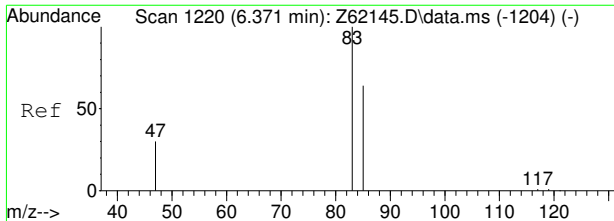


#8
cis-1,2-Dichloroethene
Concen: 0.59 ppb
RT: 6.110 min Scan# 1176
Delta R.T. 0.000 min
Lab File: Z62301.d
Acq: 13 Sep 2020 3:27 pm

Tgt Ion: 96 Resp: 74272

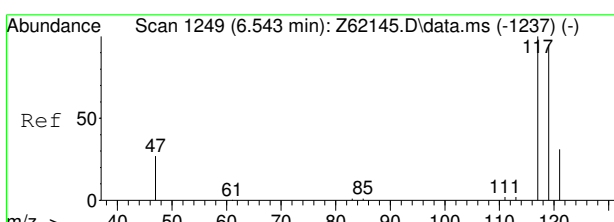
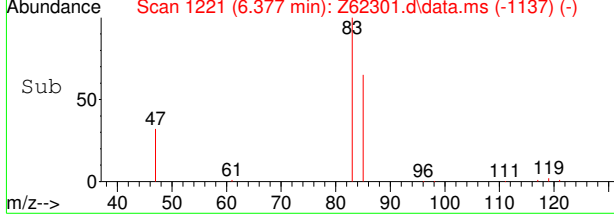
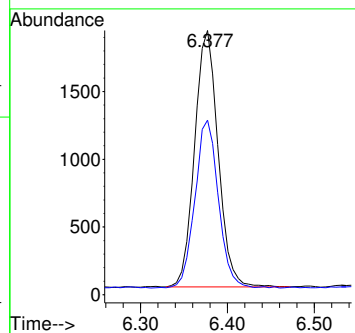
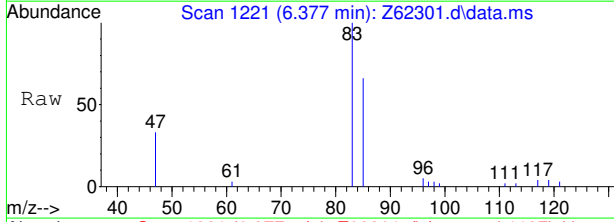
Ion	Ratio	Lower	Upper
96	100		
61	131.2	119.3	159.3
98	66.9	44.5	84.5





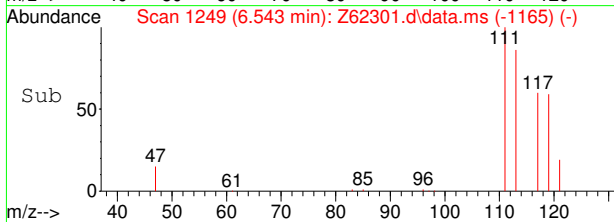
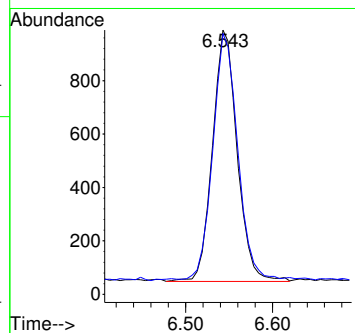
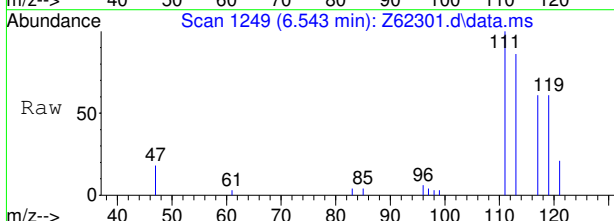
#9
 Chloroform
 Concen: 0.16 ppb
 RT: 6.377 min Scan# 1221
 Delta R.T. -0.000 min
 Lab File: Z62301.d
 Acq: 13 Sep 2020 3:27 pm

Tgt Ion	Resp	Lower	Upper
83	35611	100	
85	65.2	46.1	86.1

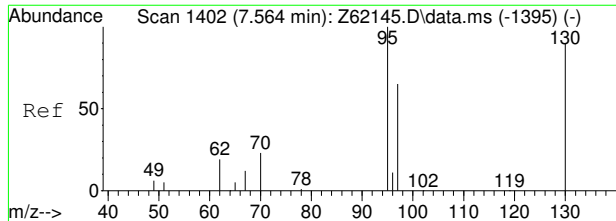


#10
 Carbon Tetrachloride
 Concen: 0.12 ppb
 RT: 6.543 min Scan# 1249
 Delta R.T. -0.000 min
 Lab File: Z62301.d
 Acq: 13 Sep 2020 3:27 pm

Tgt Ion	Resp	Lower	Upper
117	18629	100	
119	97.9	75.5	115.5



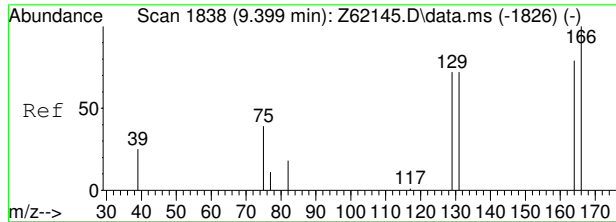
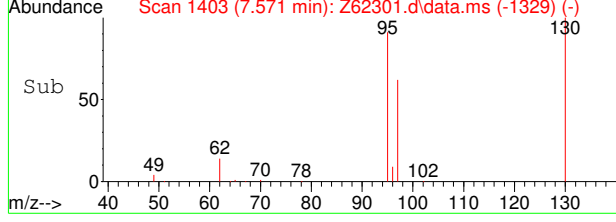
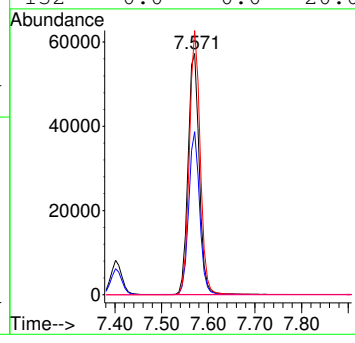
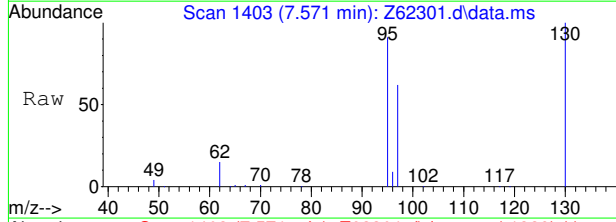
7.1.33
7



#15
 Trichloroethene
 Concen: 7.33 ppb
 RT: 7.571 min Scan# 1403
 Delta R.T. -0.000 min
 Lab File: Z62301.d
 Acq: 13 Sep 2020 3:27 pm

Tgt Ion: 95 Resp: 955913

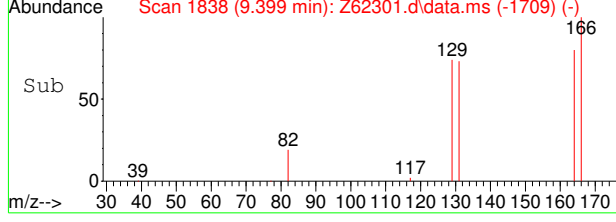
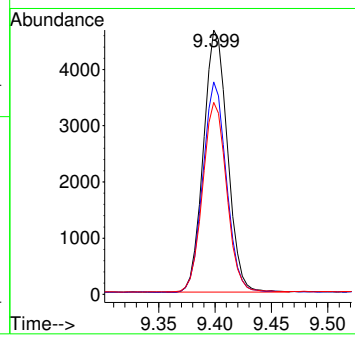
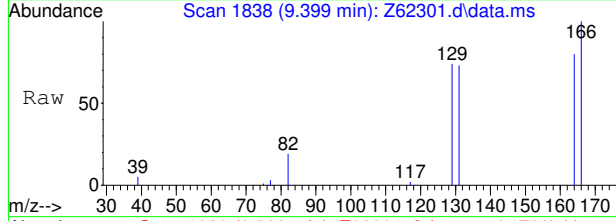
Ion	Ratio	Lower	Upper
95	100		
97	67.6	44.5	84.5
130	109.6	69.7	109.7
132	0.0	0.0	20.0



#21
 Tetrachloroethene
 Concen: 0.47 ppb
 RT: 9.399 min Scan# 1838
 Delta R.T. -0.000 min
 Lab File: Z62301.d
 Acq: 13 Sep 2020 3:27 pm

Tgt Ion: 166 Resp: 69024

Ion	Ratio	Lower	Upper
166	100		
164	80.2	58.7	98.7
131	72.3	51.6	91.6



7.1.33
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-14-2020\vz2417\
 Data File : Z62302.d
 Acq On : 13 Sep 2020 3:46 pm
 Operator : stutip
 Sample : fa78549-25
 Misc : MS47174,VZ2417,,,,,
 ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 14 07:07:40 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Sun Sep 13 13:38:26 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)

Internal Standards						
1) Fluorobenzene	7.401	96	1452209	5.00	ppb	0.00
18) Chlorobenzene-d5	10.511	117	1164213	5.00	ppb	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.130	65	509119	5.67	ppb	0.00
Spiked Amount	5.000	Range	79 - 125	Recovery	=	113.40%
19) Toluene-d8	8.961	98	1400886	4.96	ppb	0.00
Spiked Amount	5.000	Range	70 - 130	Recovery	=	99.20%
Target Compounds						
5) Methylene Chloride	4.713	84	16707	0.12	ppb	Qvalue 90

(#) = qualifier out of range (m) = manual integration (+) = signals summed

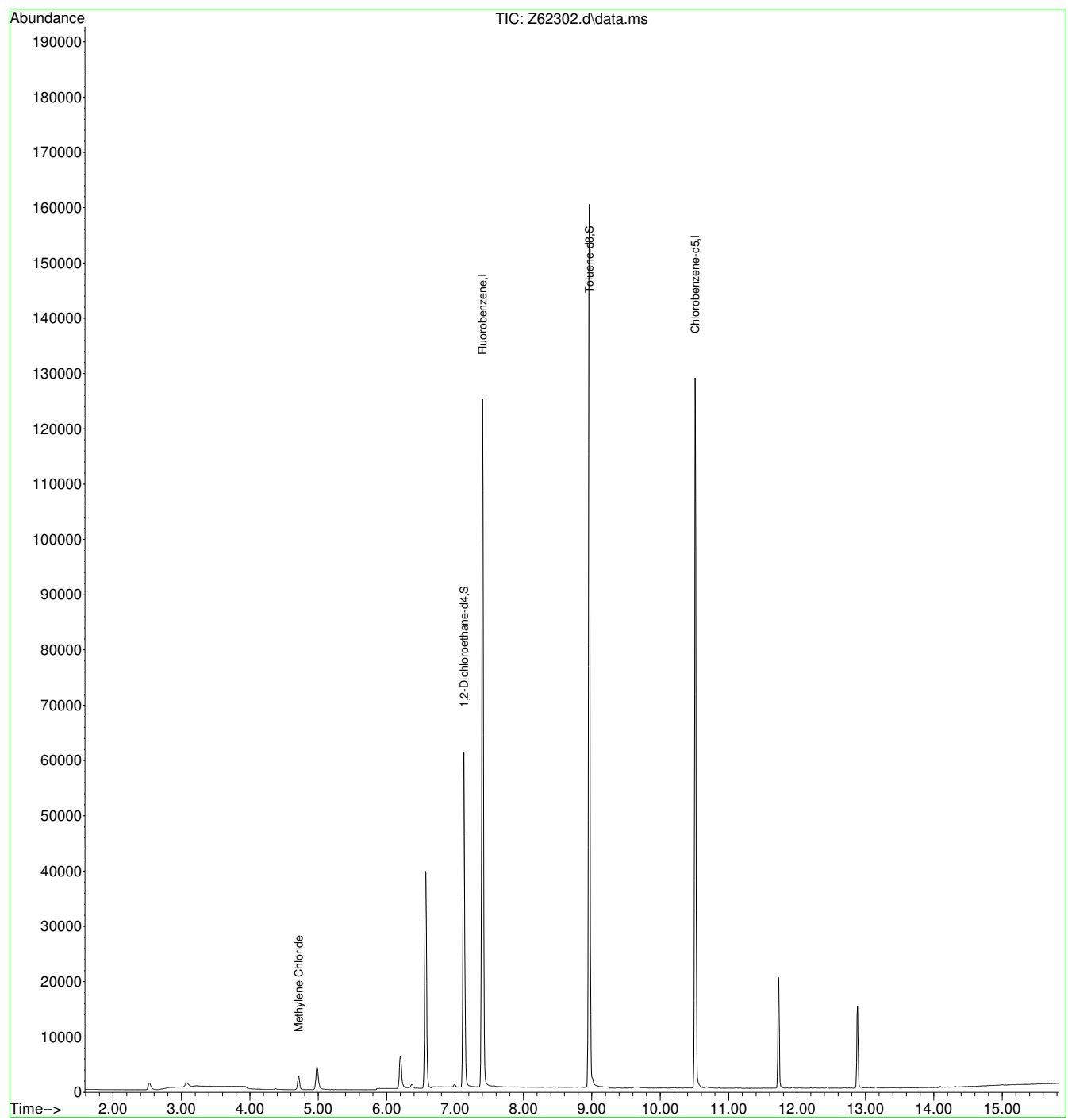
7.1.34
7



Quantitation Report (QT Reviewed)

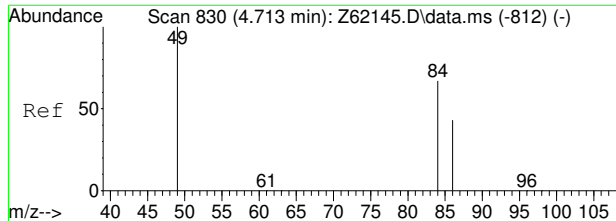
Data Path : C:\msdchem\1\data\johnm\September 2020\09-14-2020\ vz2417\
Data File : Z62302.d
Acq On : 13 Sep 2020 3:46 pm
Operator : stutip
Sample : fa78549-25
Misc : MS47174,VZ2417,,,,,
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 14 07:07:40 2020
Quant Method : C:\msdchem\1\methods\SIMCL091120.M
Quant Title : WATER-EPA 8260B
QLast Update : Sun Sep 13 13:38:26 2020
Response via : Initial Calibration



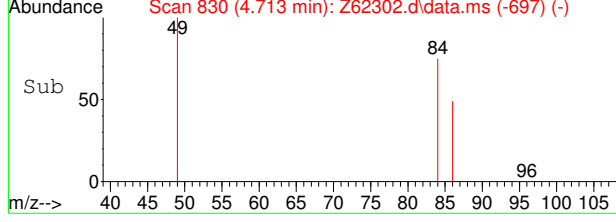
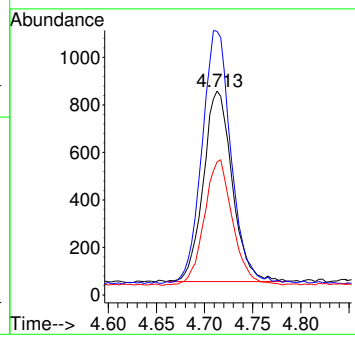
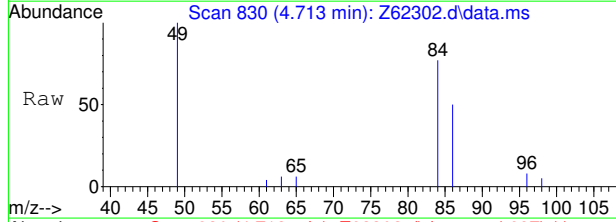
7.1.34
7





#5
 Methylene Chloride
 Concen: 0.12 ppb
 RT: 4.713 min Scan# 830
 Delta R.T. 0.000 min
 Lab File: Z62302.d
 Acq: 13 Sep 2020 3:46 pm

Tgt Ion	Ratio	Lower	Upper
84	100		
49	131.3	128.7	168.7
86	64.3	43.9	83.9



7.1.34
7



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\091320\
Data File : Z62303.D
Acq On : 13 Sep 2020 4:06 pm
Operator : stutip
Sample : fa78549-26
Misc : MS47174,VZ2417,,,,,
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 15 17:41:49 2020
Quant Method : C:\msdchem\1\methods\SIMCL091120.M
Quant Title : WATER-EPA 8260B
QLast Update : Sun Sep 13 13:38:26 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Fluorobenzene	7.401	96	1447476	5.00	ppb	0.00
18) Chlorobenzene-d5	10.511	117	1166073	5.00	ppb	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.130	65	517640	5.78	ppb	0.00
Spiked Amount	5.000	Range	79 - 125	Recovery	=	115.60%
19) Toluene-d8	8.961	98	1402040	4.95	ppb	0.00
Spiked Amount	5.000	Range	70 - 130	Recovery	=	99.00%
Target Compounds						
4) 1,1-Dichloroethene	4.087	96	20215	0.23	ppb	92
5) Methylene Chloride	4.713	84	18898	0.13	ppb	95
7) 1,1-Dichloroethane	5.546	63	160578	0.89	ppb #	99
8) cis-1,2-Dichloroethene	6.110	96	8530	0.07	ppb	91
9) Chloroform	6.377	83	80310	0.37	ppb	99
15) Trichloroethene	7.571	95	288970	2.34	ppb #	85
21) Tetrachloroethene	9.399	166	16780	0.12	ppb	97

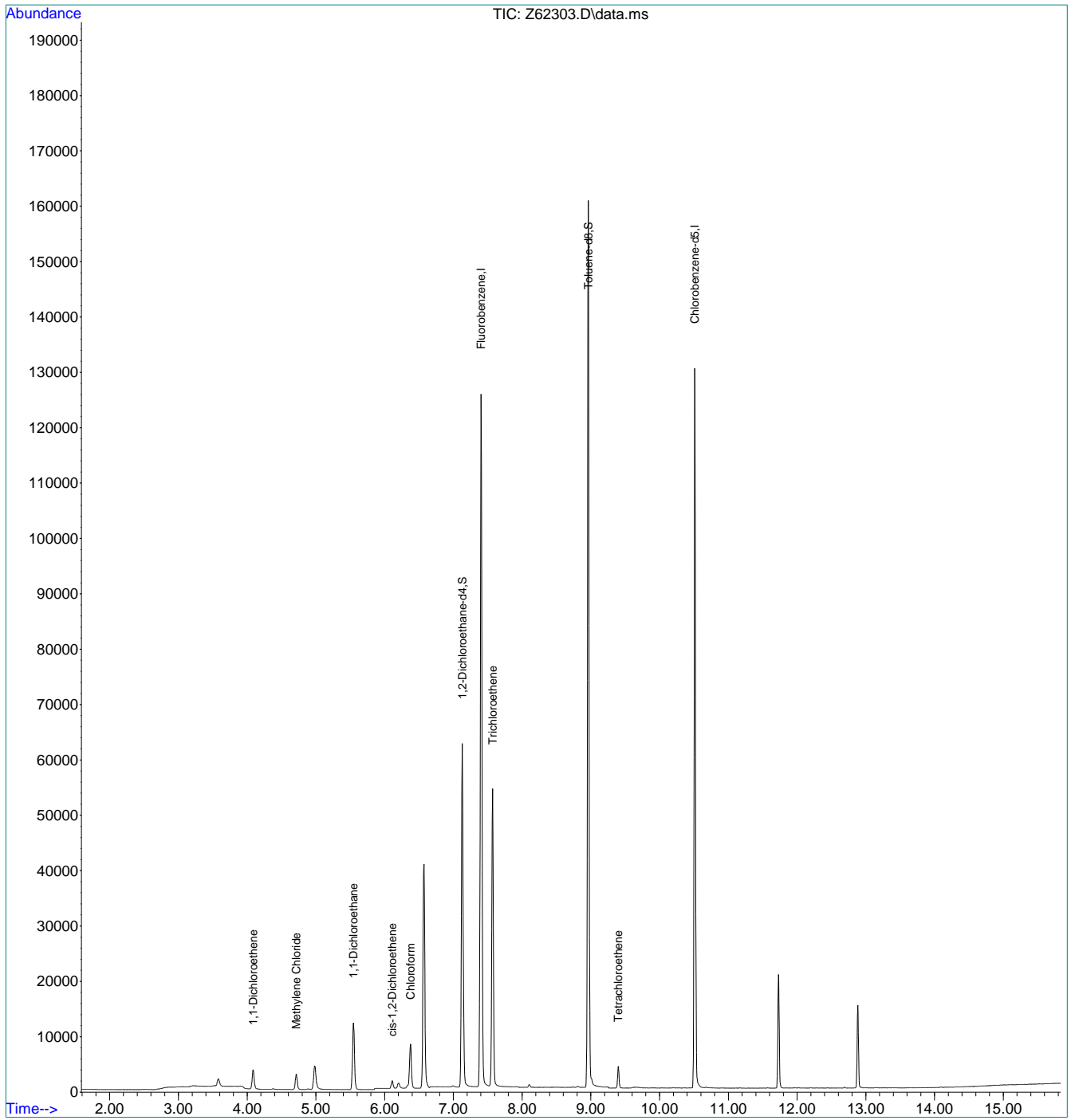
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.1.35
7

Quantitation Report (QT Reviewed)

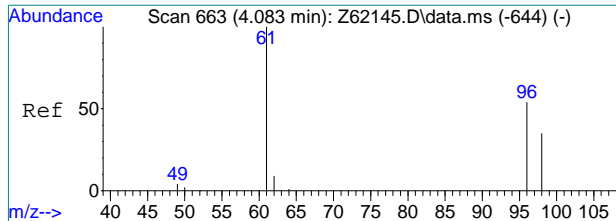
Data Path : C:\msdchem\1\data\091320\
Data File : Z62303.D
Acq On : 13 Sep 2020 4:06 pm
Operator : stutip
Sample : fa78549-26
Misc : MS47174,VZ2417,,,,,
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 15 17:41:49 2020
Quant Method : C:\msdchem\1\methods\SIMCL091120.M
Quant Title : WATER-EPA 8260B
QLast Update : Sun Sep 13 13:38:26 2020
Response via : Initial Calibration



7.1.35
7

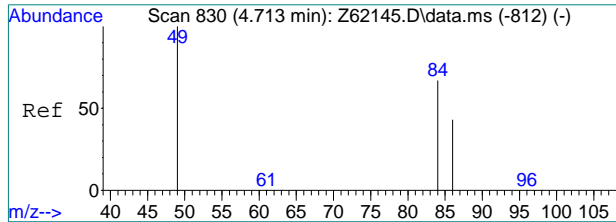
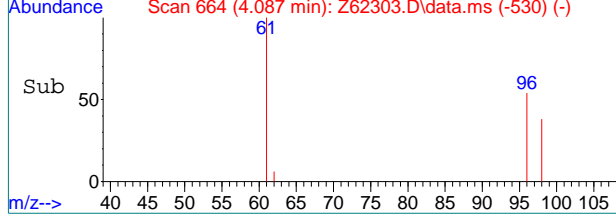
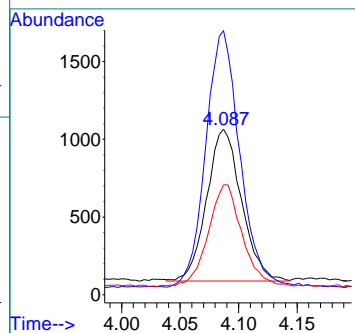
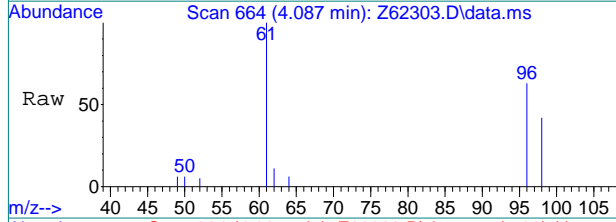




#4
 1,1-Dichloroethene
 Concen: 0.23 ppb
 RT: 4.087 min Scan# 664
 Delta R.T. 0.004 min
 Lab File: Z62303.D
 Acq: 13 Sep 2020 4:06 pm

Tgt Ion: 96 Resp: 20215

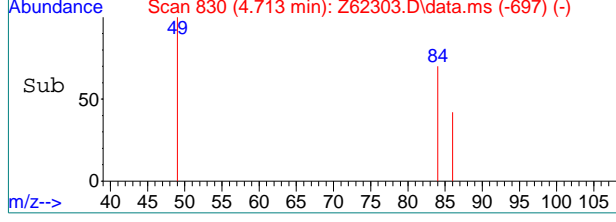
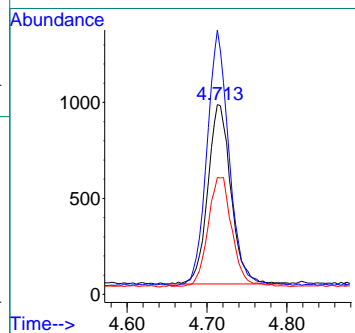
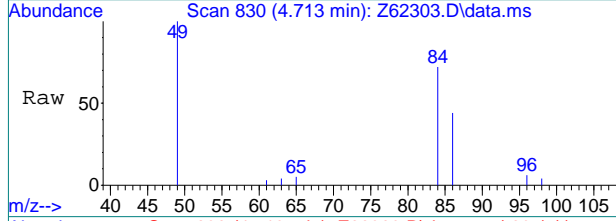
Ion	Ratio	Lower	Upper
96	100		
61	169.6	164.8	204.8
98	66.6	45.1	85.1

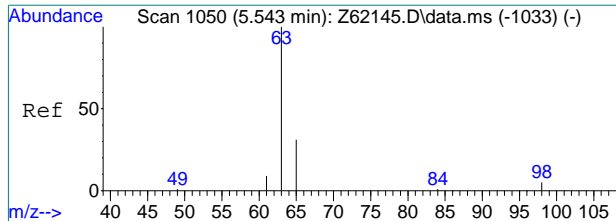


#5
 Methylene Chloride
 Concen: 0.13 ppb
 RT: 4.713 min Scan# 830
 Delta R.T. 0.000 min
 Lab File: Z62303.D
 Acq: 13 Sep 2020 4:06 pm

Tgt Ion: 84 Resp: 18898

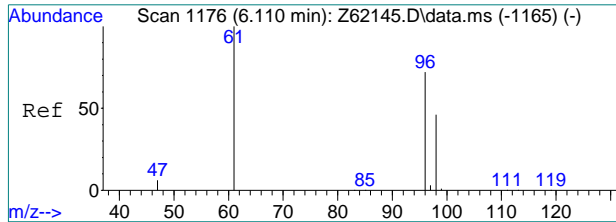
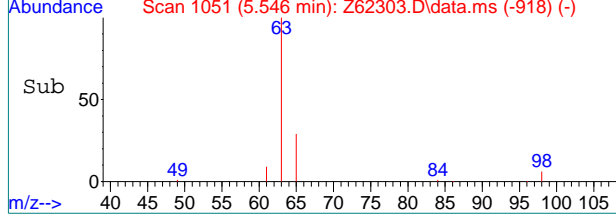
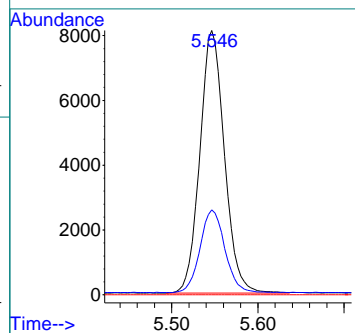
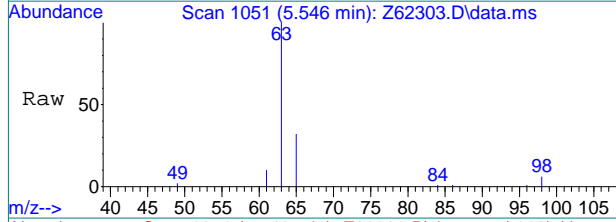
Ion	Ratio	Lower	Upper
84	100		
49	141.9	128.7	168.7
86	60.9	43.9	83.9





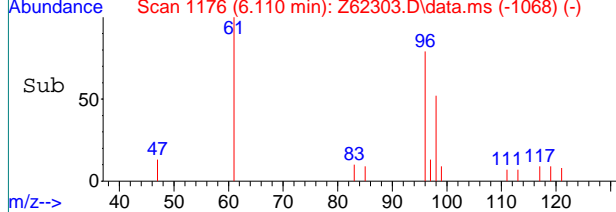
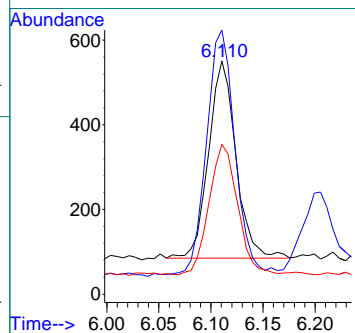
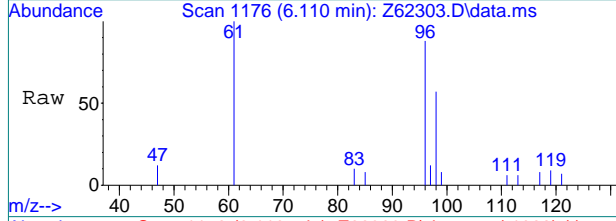
#7
 1,1-Dichloroethane
 Concen: 0.89 ppb
 RT: 5.546 min Scan# 1051
 Delta R.T. 0.000 min
 Lab File: Z62303.D
 Acq: 13 Sep 2020 4:06 pm

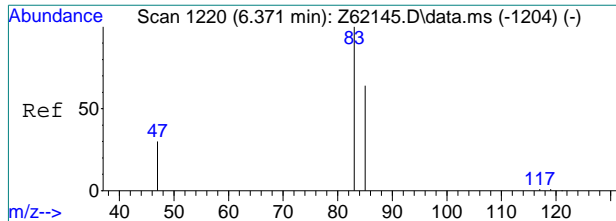
Tgt Ion	Resp	Lower	Upper
63	160578		
65	31.8	11.3	51.3
83	0.0	0.0	30.0



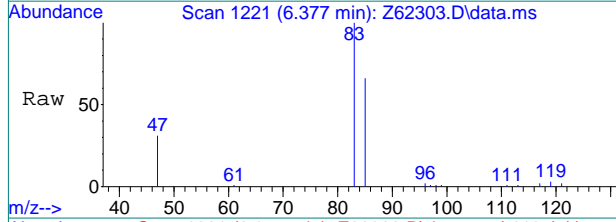
#8
 cis-1,2-Dichloroethene
 Concen: 0.07 ppb
 RT: 6.110 min Scan# 1176
 Delta R.T. 0.000 min
 Lab File: Z62303.D
 Acq: 13 Sep 2020 4:06 pm

Tgt Ion	Resp	Lower	Upper
96	8530		
96	100		
61	123.8	119.3	159.3
98	65.5	44.5	84.5



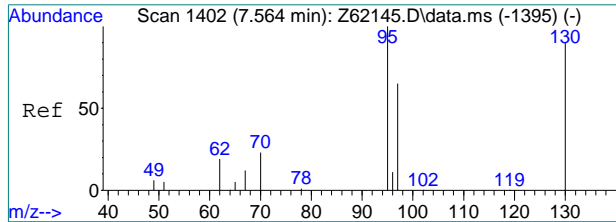
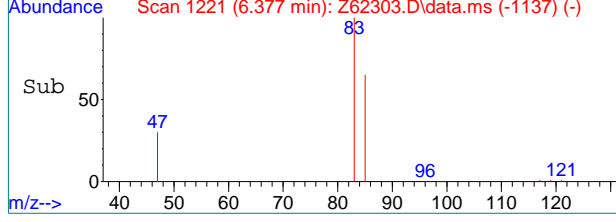
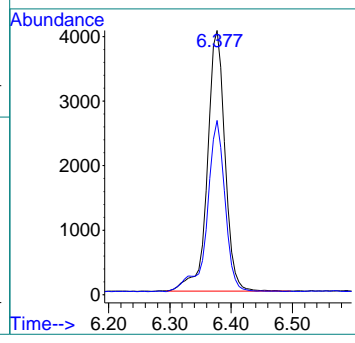


#9
 Chloroform
 Concen: 0.37 ppb
 RT: 6.377 min Scan# 1221
 Delta R.T. 0.000 min
 Lab File: Z62303.D
 Acq: 13 Sep 2020 4:06 pm

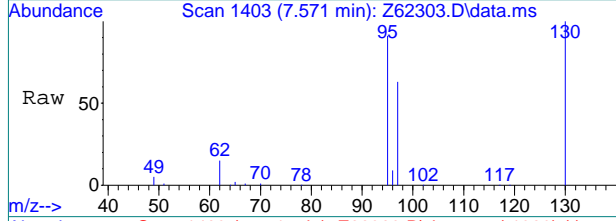


Tgt Ion: 83 Resp: 80310

Ion	Ratio	Lower	Upper
83	100		
85	66.9	46.1	86.1

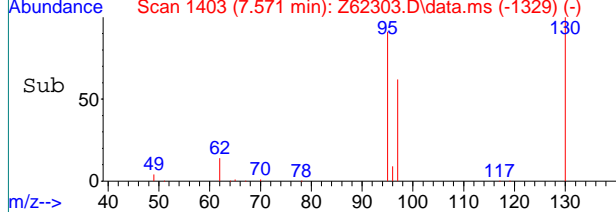
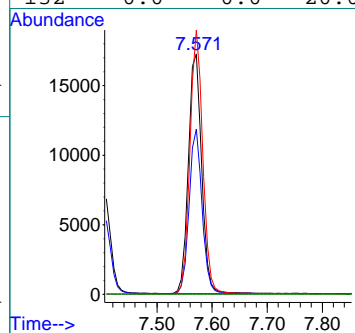


#15
 Trichloroethene
 Concen: 2.34 ppb
 RT: 7.571 min Scan# 1403
 Delta R.T. 0.000 min
 Lab File: Z62303.D
 Acq: 13 Sep 2020 4:06 pm



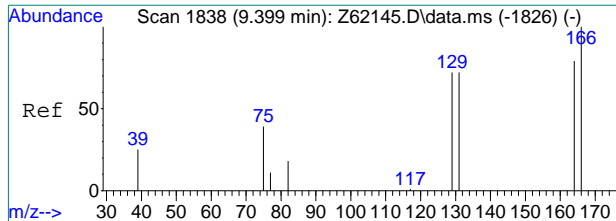
Tgt Ion: 95 Resp: 288970

Ion	Ratio	Lower	Upper
95	100		
97	68.6	44.5	84.5
130	110.1	69.7	109.7#
132	0.0	0.0	20.0



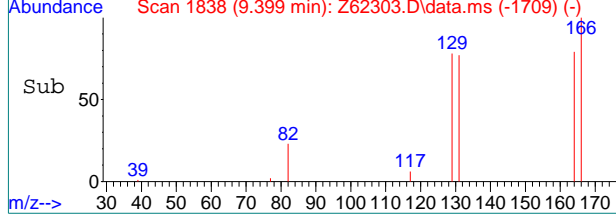
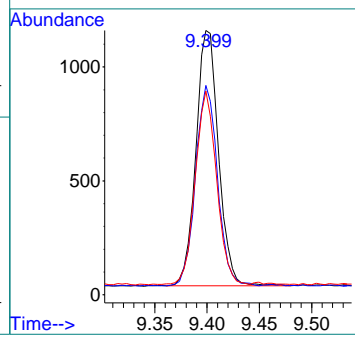
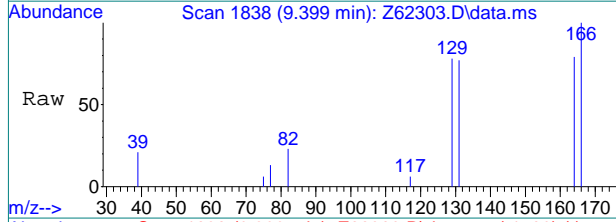
7.1.35
7





#21
 Tetrachloroethene
 Concen: 0.12 ppb
 RT: 9.399 min Scan# 1838
 Delta R.T. -0.000 min
 Lab File: Z62303.D
 Acq: 13 Sep 2020 4:06 pm

Tgt Ion	Ratio	Lower	Upper
166	100		
164	78.3	58.7	98.7
131	75.7	51.6	91.6



7.1.35
7



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\091320\
Data File : Z62304.D
Acq On : 13 Sep 2020 4:25 pm
Operator : stutip
Sample : fa78549-27
Misc : MS47174,VZ2417,,,,,
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Sep 15 17:41:51 2020
Quant Method : C:\msdchem\1\methods\SIMCL091120.M
Quant Title : WATER-EPA 8260B
QLast Update : Sun Sep 13 13:38:26 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	

Internal Standards							
1) Fluorobenzene	7.401	96	1459401	5.00	ppb	0.00	
18) Chlorobenzene-d5	10.511	117	1178363	5.00	ppb	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.130	65	522601	5.79	ppb	0.00	
Spiked Amount	5.000	Range	79 - 125	Recovery	=	115.80%	
19) Toluene-d8	8.961	98	1421570	4.97	ppb	0.00	
Spiked Amount	5.000	Range	70 - 130	Recovery	=	99.40%	
Target Compounds							
5) Methylene Chloride	4.713	84	14939	0.10	ppb		94
7) 1,1-Dichloroethane	5.546	63	20157	0.11	ppb	#	97
8) cis-1,2-Dichloroethene	6.110	96	81431	0.68	ppb		94
9) Chloroform	6.377	83	55119	0.25	ppb		100
15) Trichloroethene	7.571	95	510749	4.10	ppb	#	86
21) Tetrachloroethene	9.403	166	7571	0.05	ppb		99

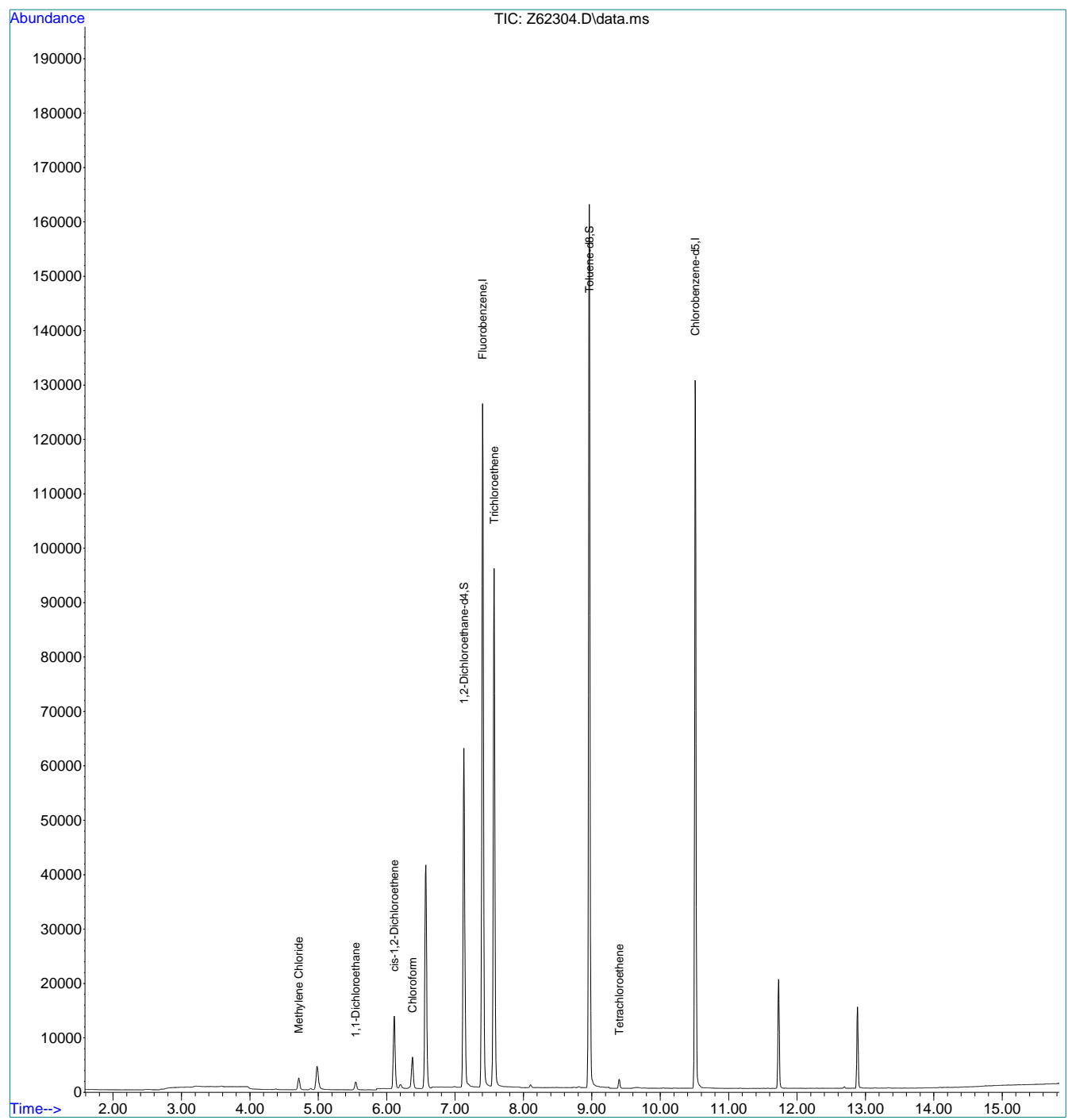
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.1.36
7

Quantitation Report (QT Reviewed)

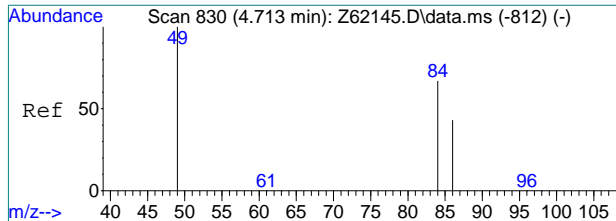
Data Path : C:\msdchem\1\data\091320\
Data File : Z62304.D
Acq On : 13 Sep 2020 4:25 pm
Operator : stutip
Sample : fa78549-27
Misc : MS47174,VZ2417,,,,,
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Sep 15 17:41:51 2020
Quant Method : C:\msdchem\1\methods\SIMCL091120.M
Quant Title : WATER-EPA 8260B
QLast Update : Sun Sep 13 13:38:26 2020
Response via : Initial Calibration



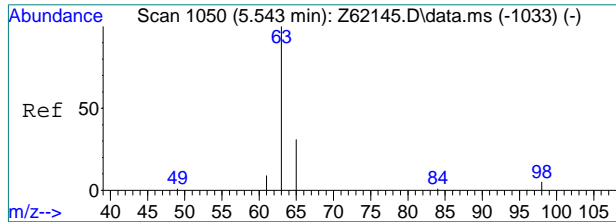
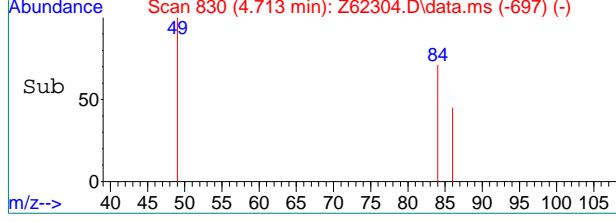
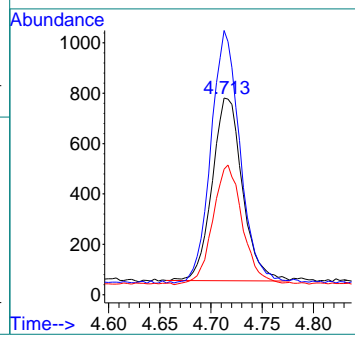
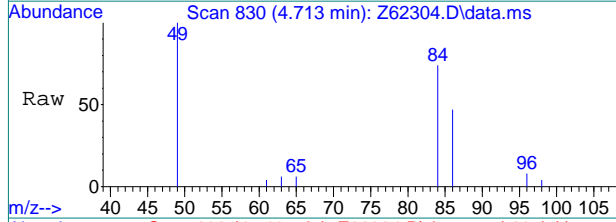
7.1.36
7





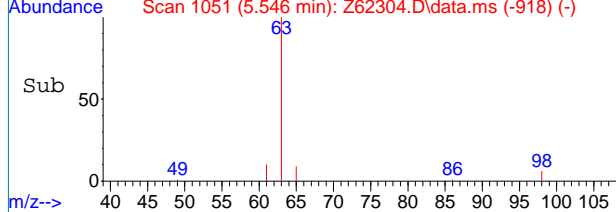
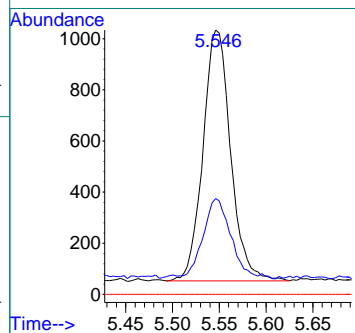
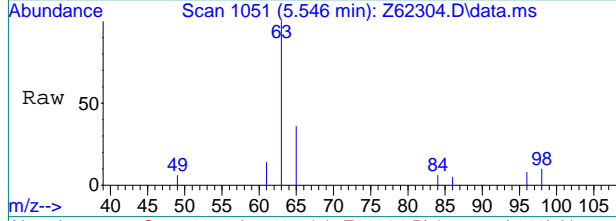
#5
 Methylene Chloride
 Concen: 0.10 ppb
 RT: 4.713 min Scan# 830
 Delta R.T. -0.000 min
 Lab File: Z62304.D
 Acq: 13 Sep 2020 4:25 pm

Tgt Ion	Resp	Lower	Upper
84	14939		
49	138.5	128.7	168.7
86	62.6	43.9	83.9



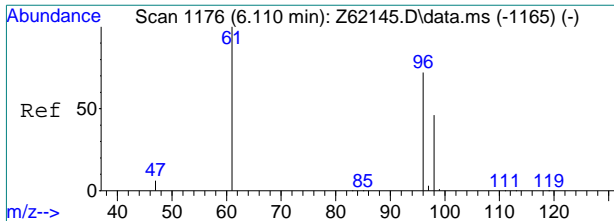
#7
 1,1-Dichloroethane
 Concen: 0.11 ppb
 RT: 5.546 min Scan# 1051
 Delta R.T. 0.000 min
 Lab File: Z62304.D
 Acq: 13 Sep 2020 4:25 pm

Tgt Ion	Resp	Lower	Upper
63	20157		
65	29.5	11.3	51.3
83	0.0	0.0	30.0



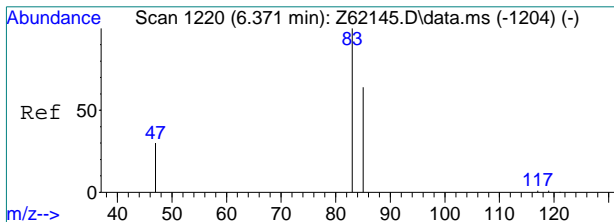
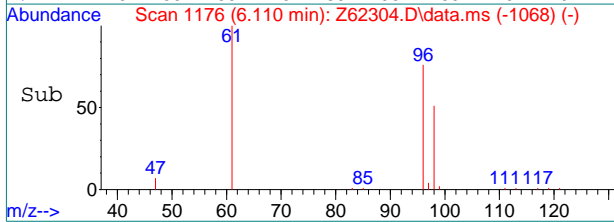
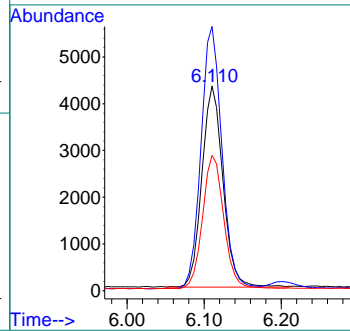
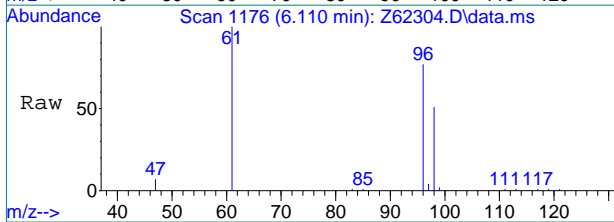
7.1.36
7





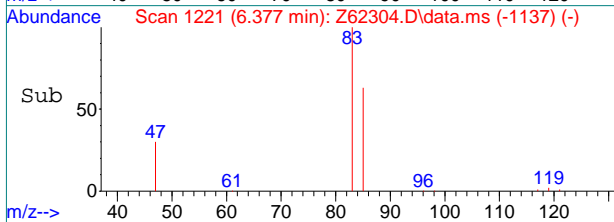
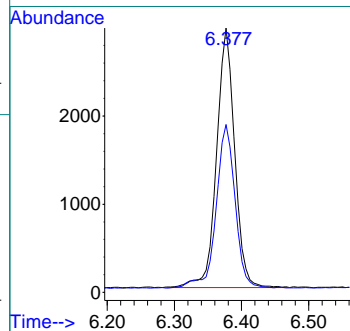
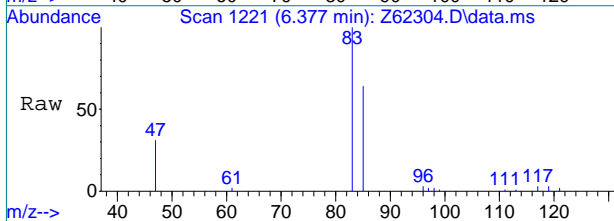
#8
 cis-1,2-Dichloroethene
 Concen: 0.68 ppb
 RT: 6.110 min Scan# 1176
 Delta R.T. 0.000 min
 Lab File: Z62304.D
 Acq: 13 Sep 2020 4:25 pm

Tgt Ion	Resp	Lower	Upper
96	81431		
61	130.4	119.3	159.3
98	66.2	44.5	84.5

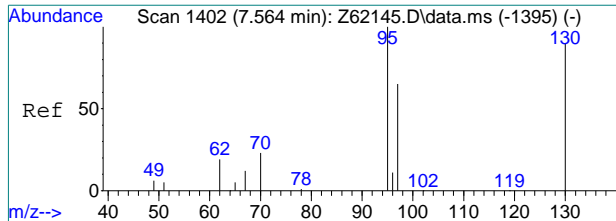


#9
 Chloroform
 Concen: 0.25 ppb
 RT: 6.377 min Scan# 1221
 Delta R.T. -0.000 min
 Lab File: Z62304.D
 Acq: 13 Sep 2020 4:25 pm

Tgt Ion	Resp	Lower	Upper
83	55119		
83	100		
85	66.1	46.1	86.1



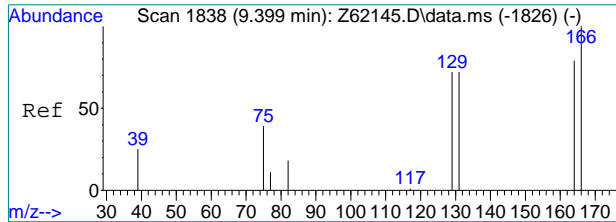
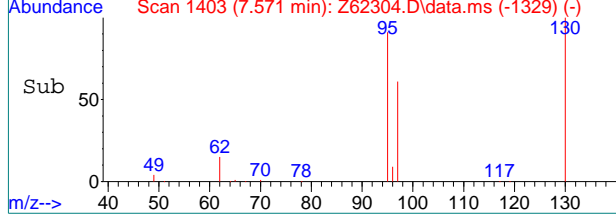
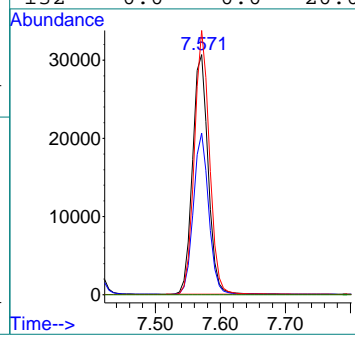
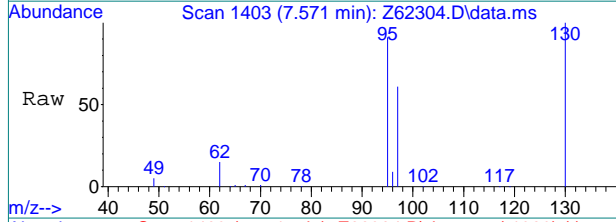
7.1.36
7



#15
 Trichloroethene
 Concen: 4.10 ppb
 RT: 7.571 min Scan# 1403
 Delta R.T. -0.000 min
 Lab File: Z62304.D
 Acq: 13 Sep 2020 4:25 pm

Tgt Ion: 95 Resp: 510749

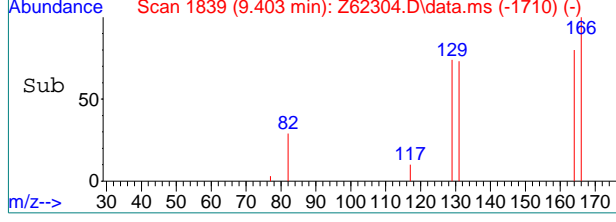
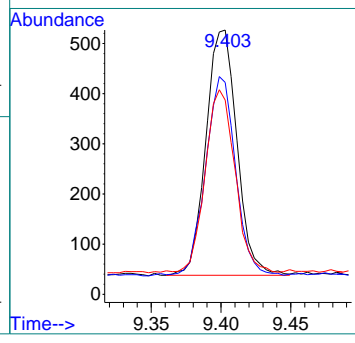
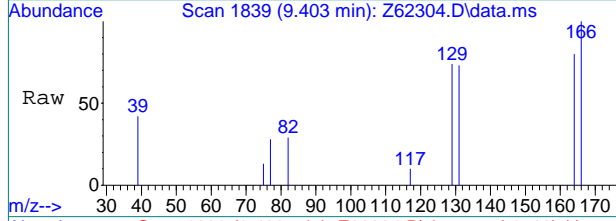
Ion	Ratio	Lower	Upper
95	100		
97	67.3	44.5	84.5
130	110.2	69.7	109.7#
132	0.0	0.0	20.0



#21
 Tetrachloroethene
 Concen: 0.05 ppb
 RT: 9.403 min Scan# 1839
 Delta R.T. 0.004 min
 Lab File: Z62304.D
 Acq: 13 Sep 2020 4:25 pm

Tgt Ion: 166 Resp: 7571

Ion	Ratio	Lower	Upper
166	100		
164	78.3	58.7	98.7
131	69.5	51.6	91.6



7.1.36
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Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\091320\
Data File : Z62305.D
Acq On : 13 Sep 2020 4:44 pm
Operator : stutip
Sample : fa78549-28
Misc : MS47174,VZ2417,,,,,
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 15 17:41:53 2020
Quant Method : C:\msdchem\1\methods\SIMCL091120.M
Quant Title : WATER-EPA 8260B
QLast Update : Sun Sep 13 13:38:26 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	

Internal Standards							
1) Fluorobenzene	7.401	96	1462858	5.00	ppb	0.00	
18) Chlorobenzene-d5	10.511	117	1181382	5.00	ppb	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.130	65	521765	5.77	ppb	0.00	
Spiked Amount	5.000	Range	79 - 125	Recovery	=	115.40%	
19) Toluene-d8	8.961	98	1421104	4.95	ppb	0.00	
Spiked Amount	5.000	Range	70 - 130	Recovery	=	99.00%	
Target Compounds							
5) Methylene Chloride	4.713	84	14505	0.10	ppb	92	Qvalue
8) cis-1,2-Dichloroethene	6.110	96	64637	0.54	ppb	92	
9) Chloroform	6.371	83	44957	0.20	ppb	98	
15) Trichloroethene	7.564	95	311081	2.49	ppb	96	
21) Tetrachloroethene	9.399	166	18962	0.13	ppb	99	

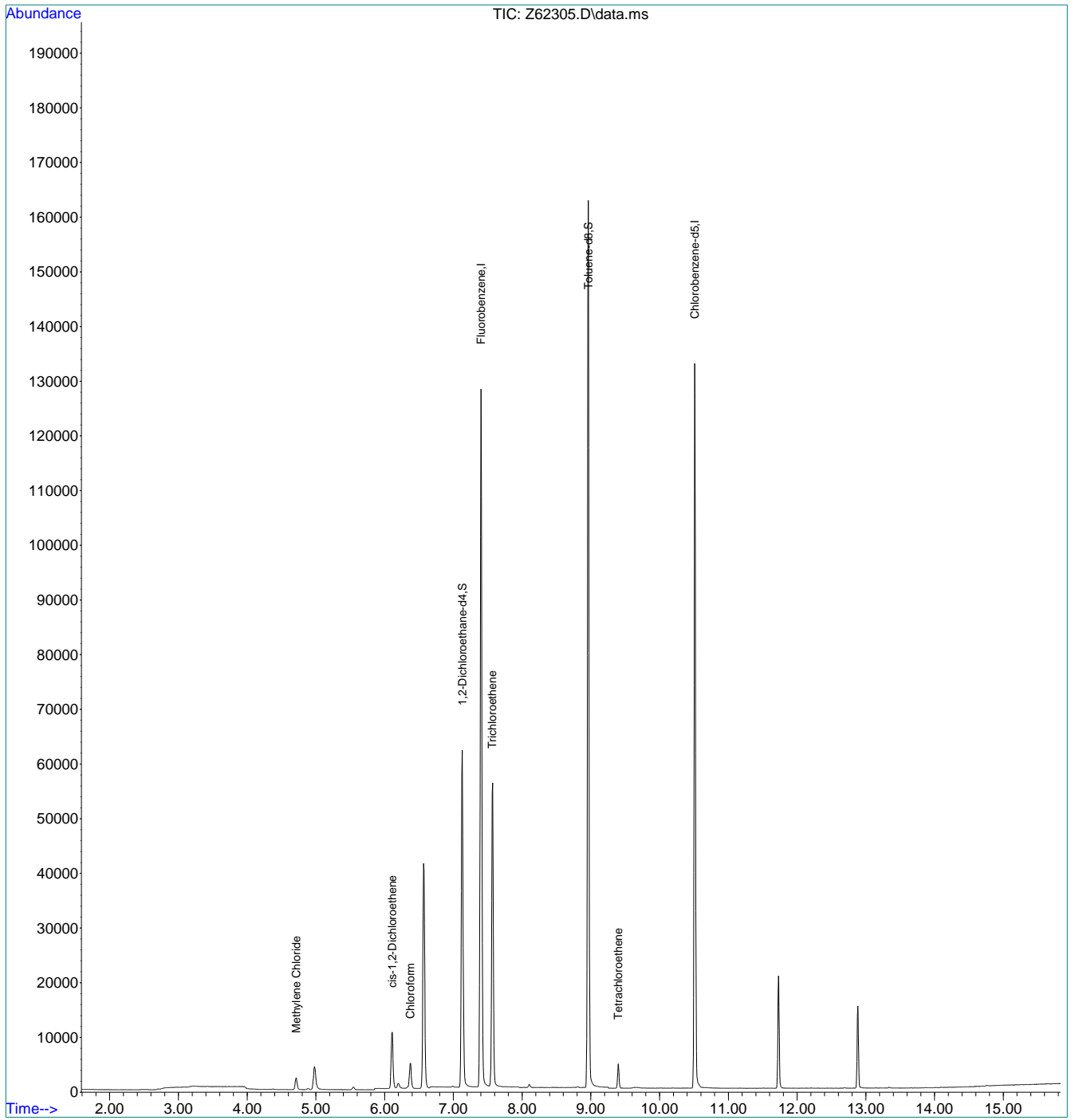
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.1.37
7

Quantitation Report (QT Reviewed)

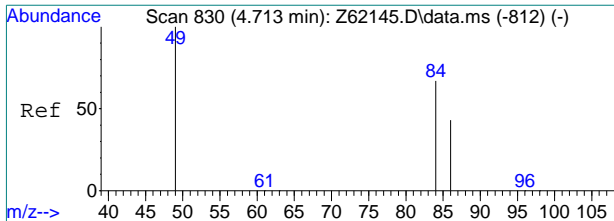
Data Path : C:\msdchem\1\data\091320\
Data File : Z62305.D
Acq On : 13 Sep 2020 4:44 pm
Operator : stutip
Sample : fa78549-28
Misc : MS47174,VZ2417,,,,,
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 15 17:41:53 2020
Quant Method : C:\msdchem\1\methods\SIMCL091120.M
Quant Title : WATER-EPA 8260B
QLast Update : Sun Sep 13 13:38:26 2020
Response via : Initial Calibration



7.1.37
7

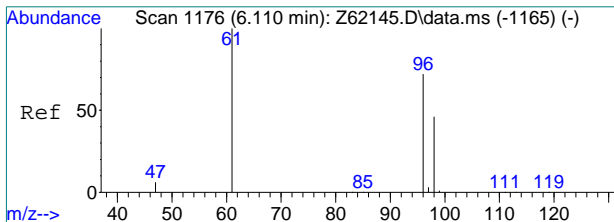
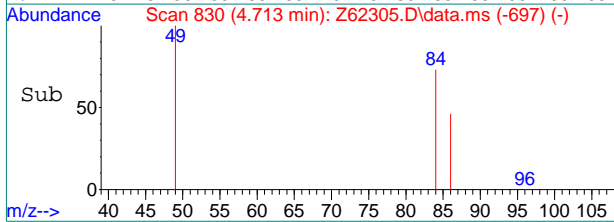
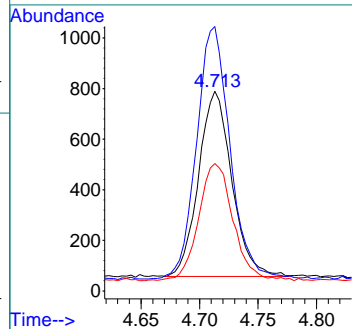
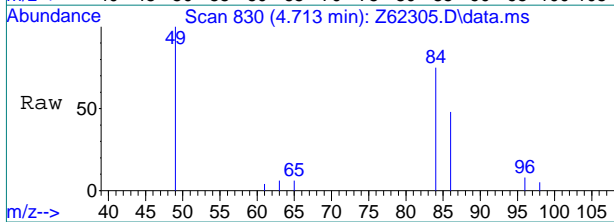




#5
 Methylene Chloride
 Concen: 0.10 ppb
 RT: 4.713 min Scan# 830
 Delta R.T. 0.000 min
 Lab File: Z62305.D
 Acq: 13 Sep 2020 4:44 pm

Tgt Ion: 84 Resp: 14505

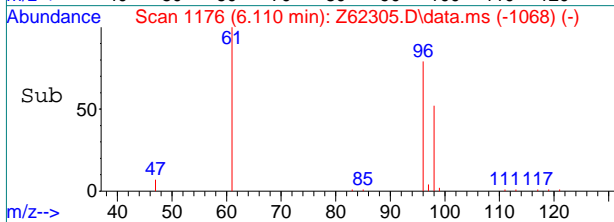
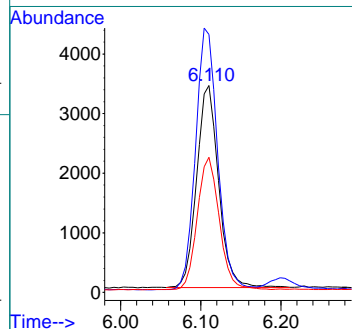
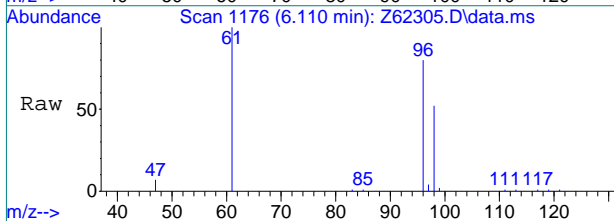
Ion	Ratio	Lower	Upper
84	100		
49	134.8	128.7	168.7
86	62.3	43.9	83.9



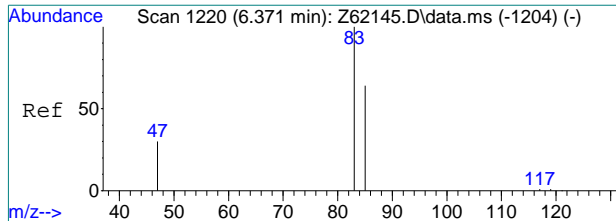
#8
 cis-1,2-Dichloroethene
 Concen: 0.54 ppb
 RT: 6.110 min Scan# 1176
 Delta R.T. 0.000 min
 Lab File: Z62305.D
 Acq: 13 Sep 2020 4:44 pm

Tgt Ion: 96 Resp: 64637

Ion	Ratio	Lower	Upper
96	100		
61	126.3	119.3	159.3
98	65.5	44.5	84.5



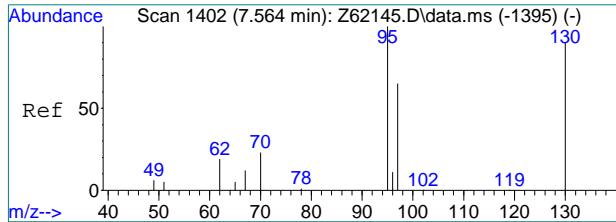
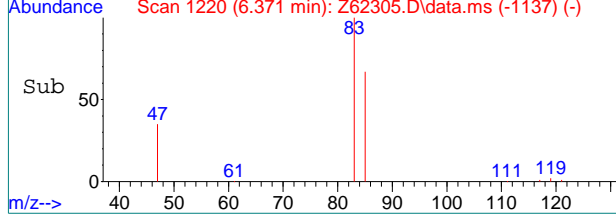
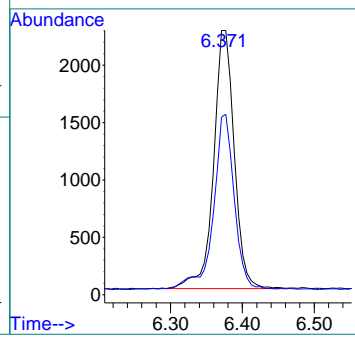
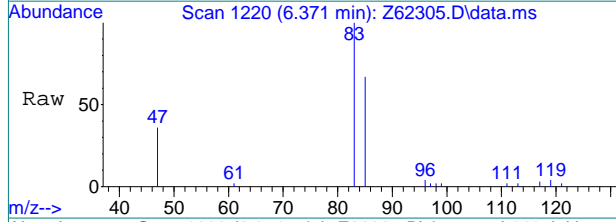
7.1.37
7



#9
 Chloroform
 Concen: 0.20 ppb
 RT: 6.371 min Scan# 1220
 Delta R.T. -0.006 min
 Lab File: Z62305.D
 Acq: 13 Sep 2020 4:44 pm

Tgt Ion: 83 Resp: 44957

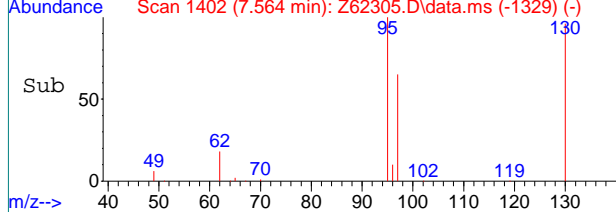
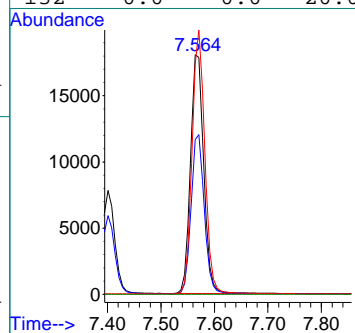
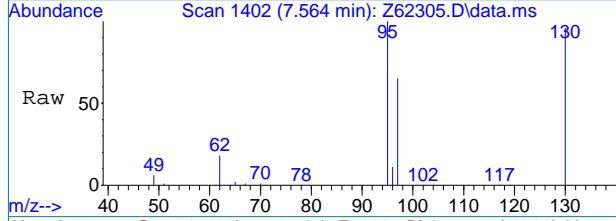
Ion	Ratio	Lower	Upper
83	100		
85	67.6	46.1	86.1



#15
 Trichloroethene
 Concen: 2.49 ppb
 RT: 7.564 min Scan# 1402
 Delta R.T. -0.007 min
 Lab File: Z62305.D
 Acq: 13 Sep 2020 4:44 pm

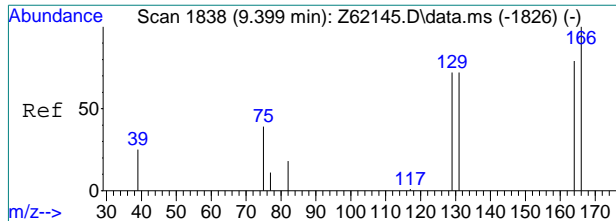
Tgt Ion: 95 Resp: 311081

Ion	Ratio	Lower	Upper
95	100		
97	64.5	44.5	84.5
130	96.3	69.7	109.7
132	0.0	0.0	20.0



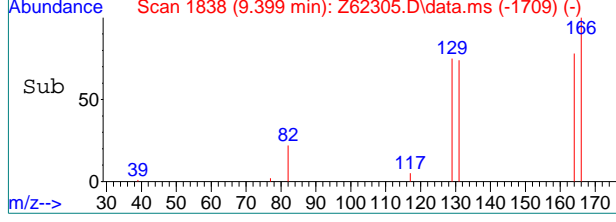
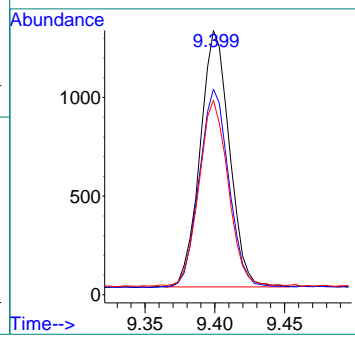
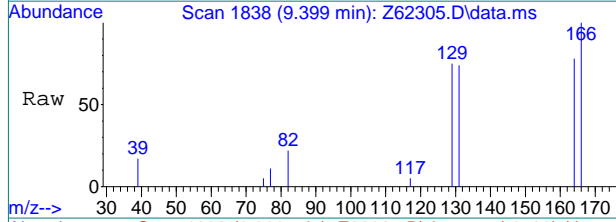
7.1.37
7





#21
 Tetrachloroethene
 Concen: 0.13 ppb
 RT: 9.399 min Scan# 1838
 Delta R.T. -0.000 min
 Lab File: Z62305.D
 Acq: 13 Sep 2020 4:44 pm

Tgt Ion	Ratio	Lower	Upper
166	100		
164	77.0	58.7	98.7
131	72.2	51.6	91.6



7.1.37
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Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\091320\
Data File : Z62306.D
Acq On : 13 Sep 2020 5:04 pm
Operator : stutip
Sample : fa78549-29
Misc : MS47174,VZ2417,,,,,
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Sep 15 17:41:55 2020
Quant Method : C:\msdchem\1\methods\SIMCL091120.M
Quant Title : WATER-EPA 8260B
QLast Update : Sun Sep 13 13:38:26 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	Qvalue

Internal Standards							
1) Fluorobenzene	7.401	96	1428926	5.00	ppb	0.00	
18) Chlorobenzene-d5	10.511	117	1153502	5.00	ppb	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.130	65	509208	5.76	ppb	0.00	
Spiked Amount	5.000	Range	79 - 125	Recovery	=	115.20%	
19) Toluene-d8	8.961	98	1379094	4.92	ppb	0.00	
Spiked Amount	5.000	Range	70 - 130	Recovery	=	98.40%	
Target Compounds							
5) Methylene Chloride	4.713	84	13011	0.09	ppb		88
9) Chloroform	6.377	83	38376	0.18	ppb		94

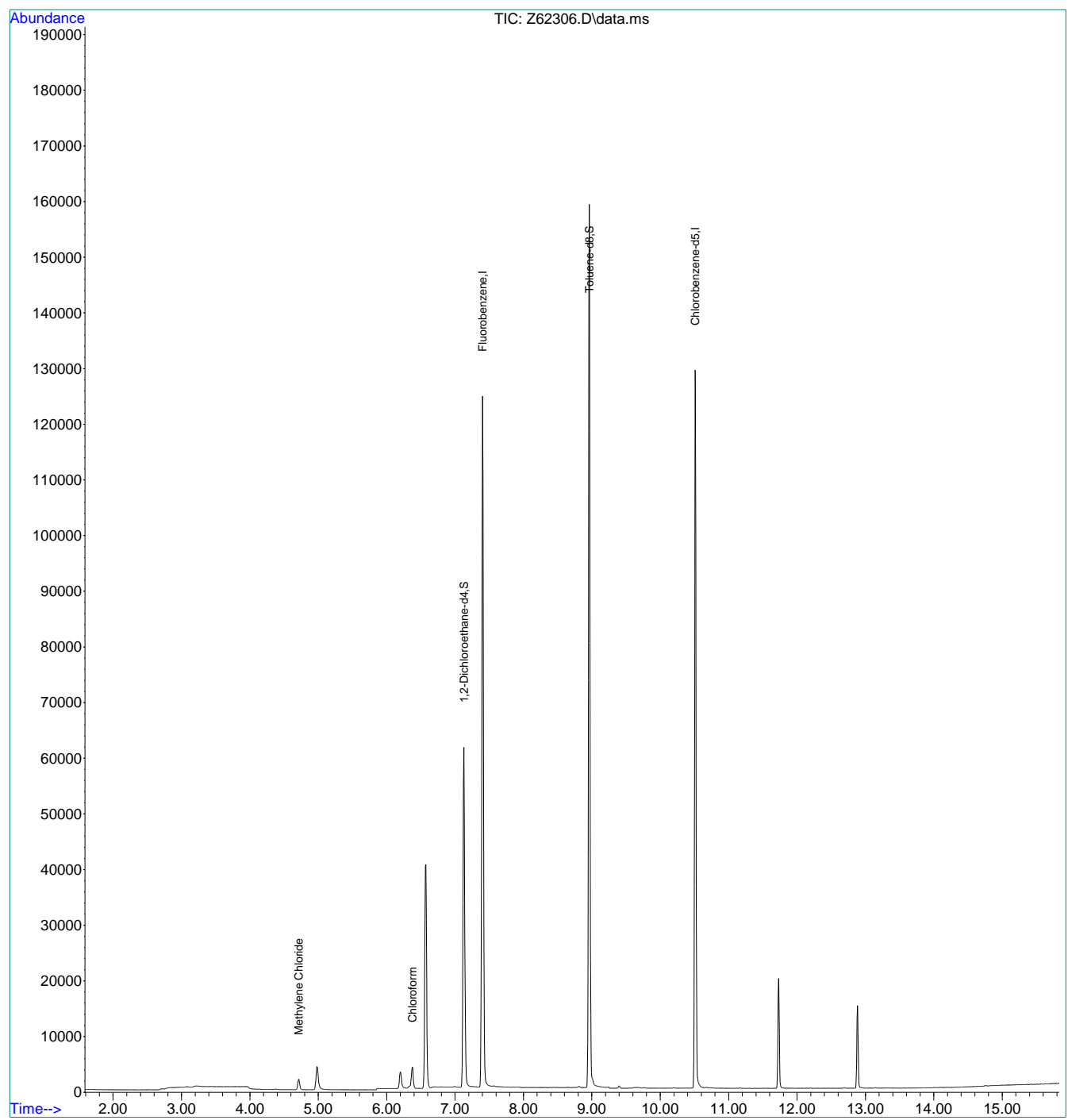
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.1.38
7

Quantitation Report (QT Reviewed)

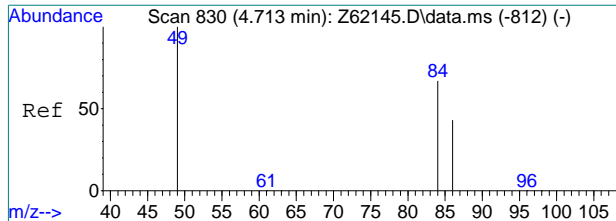
Data Path : C:\msdchem\1\data\091320\
Data File : Z62306.D
Acq On : 13 Sep 2020 5:04 pm
Operator : stutip
Sample : fa78549-29
Misc : MS47174,VZ2417,,,,,
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Sep 15 17:41:55 2020
Quant Method : C:\msdchem\1\methods\SIMCL091120.M
Quant Title : WATER-EPA 8260B
QLast Update : Sun Sep 13 13:38:26 2020
Response via : Initial Calibration



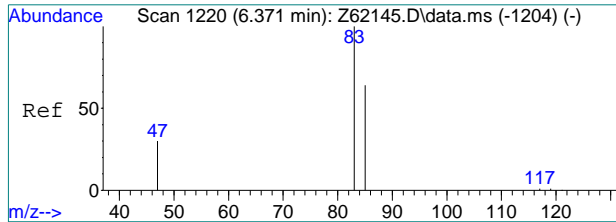
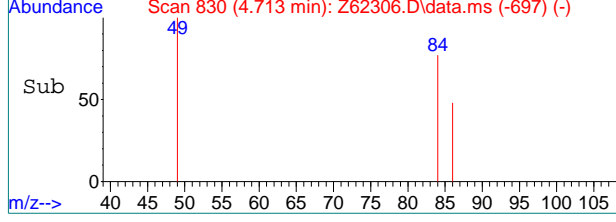
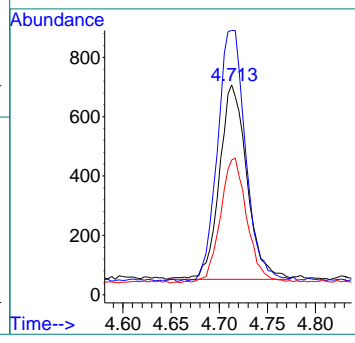
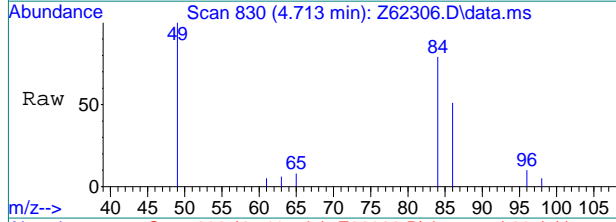
7.1.38
7





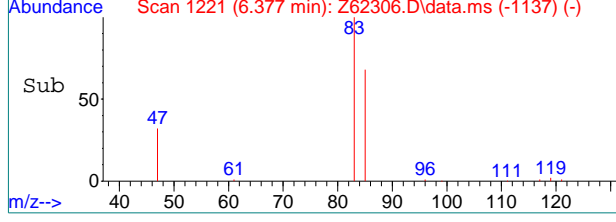
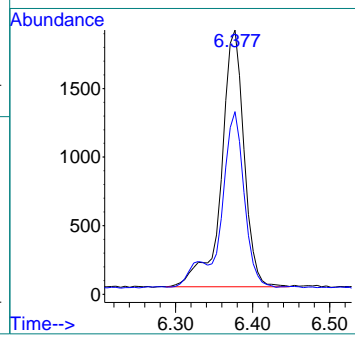
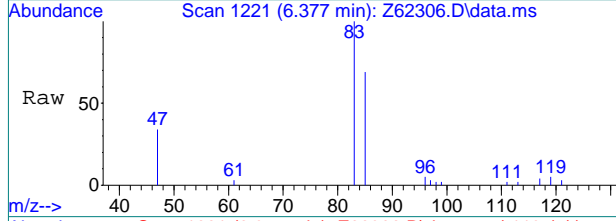
#5
 Methylene Chloride
 Concen: 0.09 ppb
 RT: 4.713 min Scan# 830
 Delta R.T. -0.000 min
 Lab File: Z62306.D
 Acq: 13 Sep 2020 5:04 pm

Tgt Ion	Resp	Lower	Upper
84	13011		
84	100		
49	128.7	128.7	168.7
86	62.4	43.9	83.9



#9
 Chloroform
 Concen: 0.18 ppb
 RT: 6.377 min Scan# 1221
 Delta R.T. -0.000 min
 Lab File: Z62306.D
 Acq: 13 Sep 2020 5:04 pm

Tgt Ion	Resp	Lower	Upper
83	38376		
83	100		
85	61.7	46.1	86.1



7.1.38
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-14-2020\VO2360\
Data File : O61332.d
Acq On : 13 Sep 2020 2:08 pm
Operator : stutip
Sample : fa78549-30
Misc : MS47201,VO2360,,,,,
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 14 08:33:49 2020
Quant Method : C:\msdchem\1\methods\SIMCL091120.M
Quant Title : Standard Methods 6200B
QLast Update : Sun Sep 13 19:20:40 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Fluorobenzene	7.346	96	194853	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.447	117	161681	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.073	65	88036	5.59	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	111.80%	
19) Toluene-d8	8.900	98	165479	4.54	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	90.80%	
Target Compounds						
7) 1,1-Dichloroethane	5.518	63	25219	0.70	ug/L	100
8) cis-1,2-Dichloroethene	6.072	96	22885	1.28	ug/L #	82
14) 1,2-Dichloroethane	7.139	62	18011	0.61	ug/L	93
15) Trichloroethene	7.512	95	46806	2.55	ug/L	89
21) Tetrachloroethene	9.343	166	21982	1.25	ug/L	100

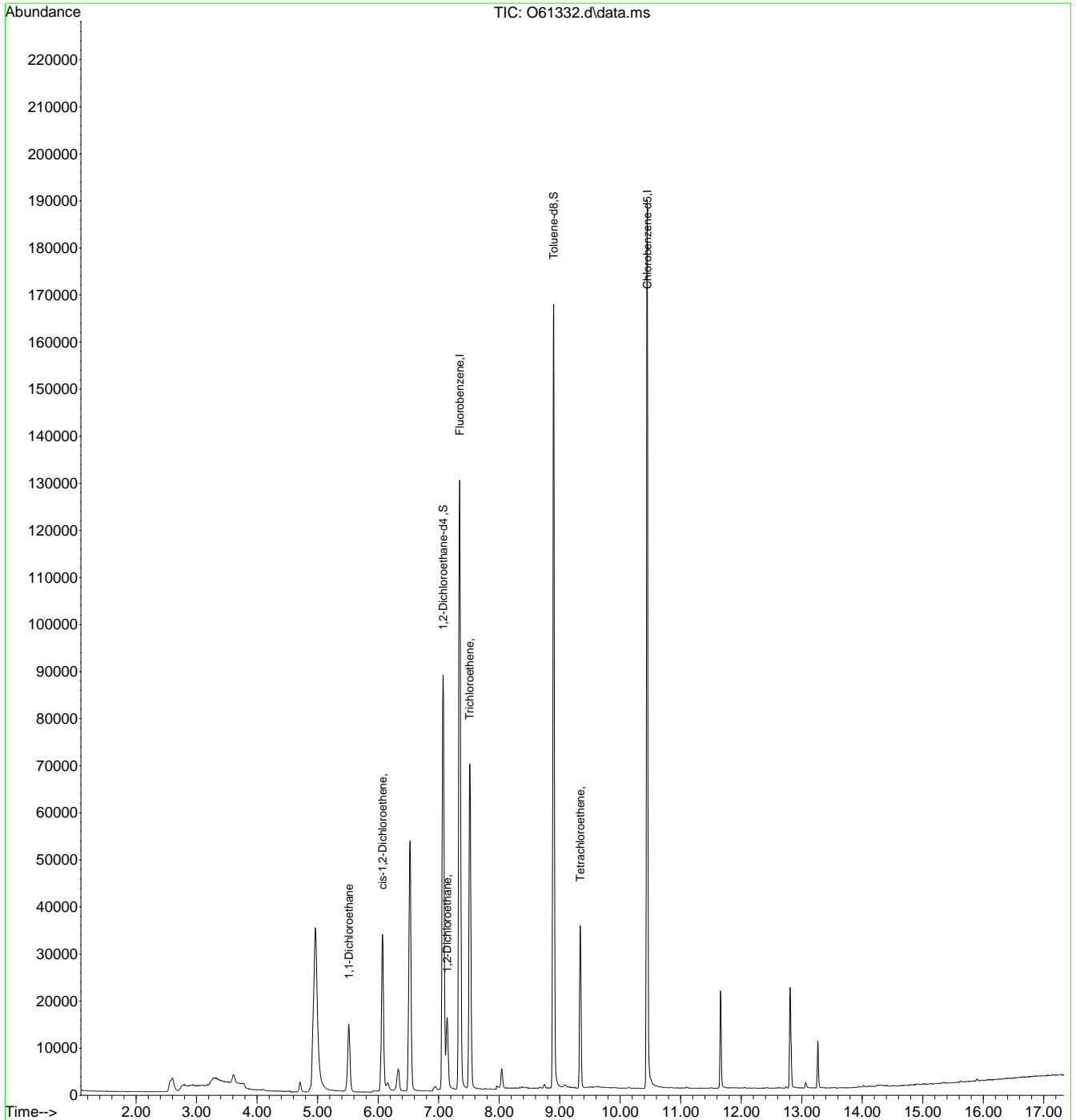
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.1.39
7

Quantitation Report (QT Reviewed)

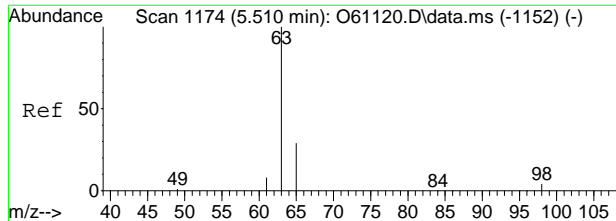
Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-14-2020\VO2360\
 Data File : O61332.d
 Acq On : 13 Sep 2020 2:08 pm
 Operator : stutip
 Sample : fa78549-30
 Misc : MS47201,VO2360,,,,,
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 14 08:33:49 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Sun Sep 13 19:20:40 2020
 Response via : Initial Calibration



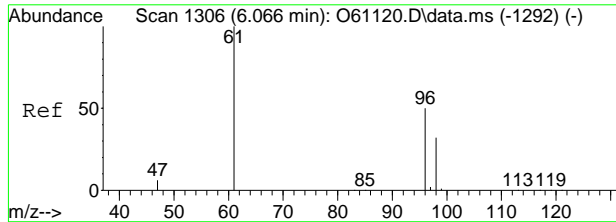
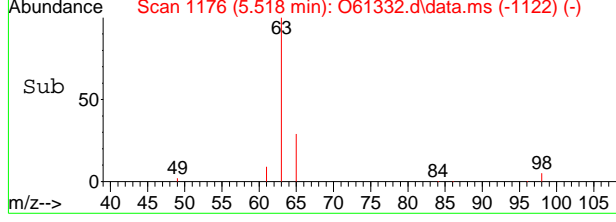
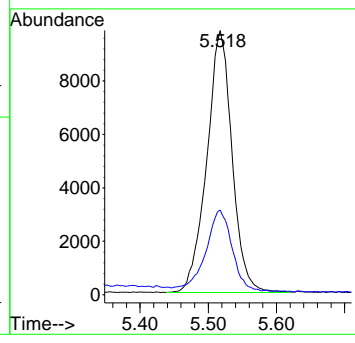
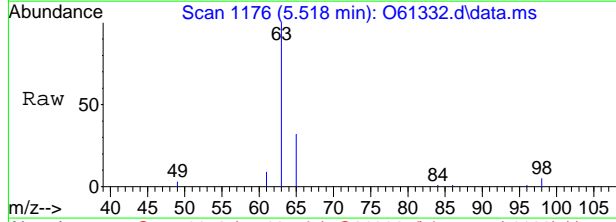
7.1.39
7





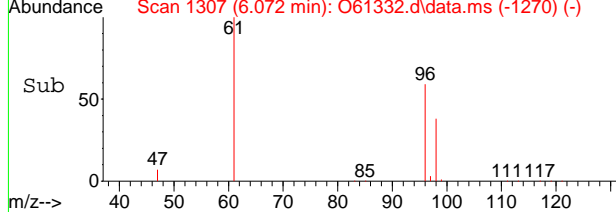
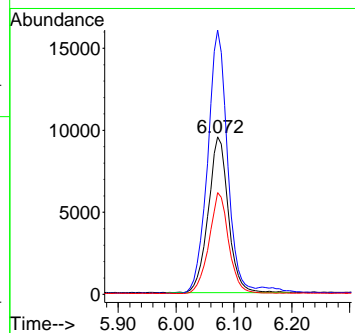
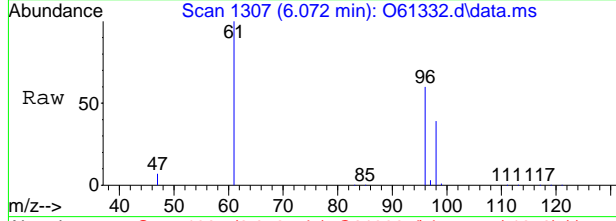
#7
 1,1-Dichloroethane
 Concen: 0.70 ug/L
 RT: 5.518 min Scan# 1176
 Delta R.T. 0.004 min
 Lab File: O61332.d
 Acq: 13 Sep 2020 2:08 pm

Tgt Ion	Resp	Lower	Upper
63	25219	100	
65	30.9	0.7	60.7



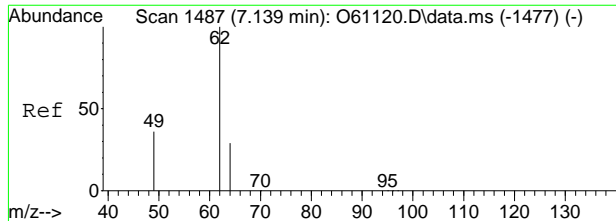
#8
 cis-1,2-Dichloroethene
 Concen: 1.28 ug/L
 RT: 6.072 min Scan# 1307
 Delta R.T. -0.000 min
 Lab File: O61332.d
 Acq: 13 Sep 2020 2:08 pm

Tgt Ion	Resp	Lower	Upper
96	22885	100	
61	168.8	107.0	167.0#
98	64.6	34.1	94.1



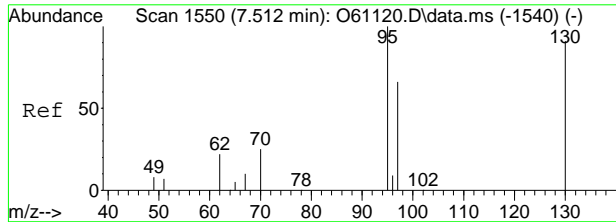
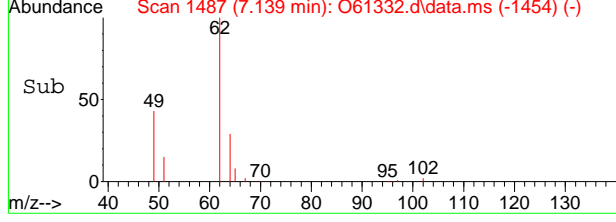
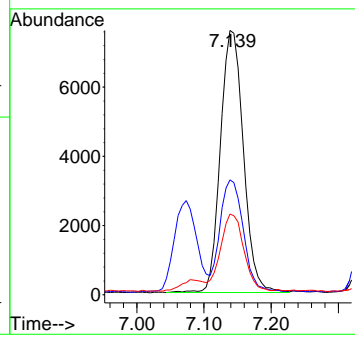
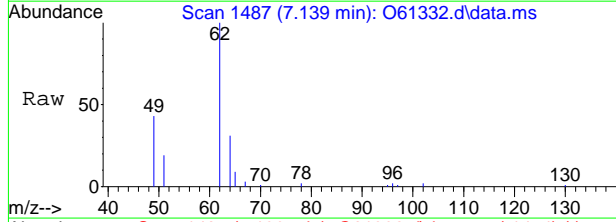
7.1.39
7





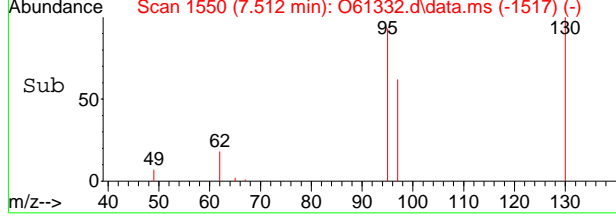
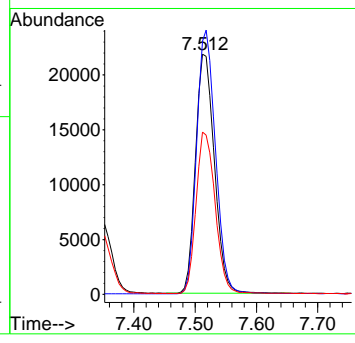
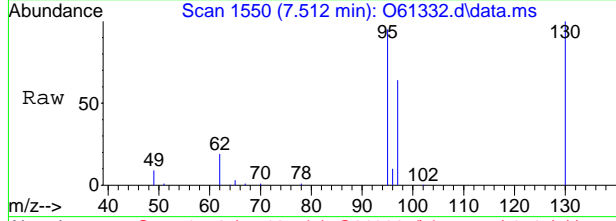
#14
 1,2-Dichloroethane
 Concen: 0.61 ug/L
 RT: 7.139 min Scan# 1487
 Delta R.T. -0.006 min
 Lab File: O61332.d
 Acq: 13 Sep 2020 2:08 pm

Tgt Ion	Resp	Lower	Upper
62	18011		
49	42.3	18.0	78.0
64	29.1	1.5	61.5



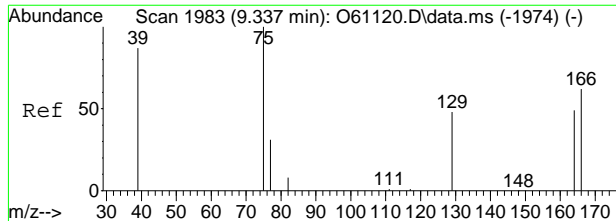
#15
 Trichloroethene
 Concen: 2.55 ug/L
 RT: 7.512 min Scan# 1550
 Delta R.T. -0.006 min
 Lab File: O61332.d
 Acq: 13 Sep 2020 2:08 pm

Tgt Ion	Resp	Lower	Upper
95	46806		
130	105.6	60.4	120.4
97	67.4	34.6	94.6



7.139
7

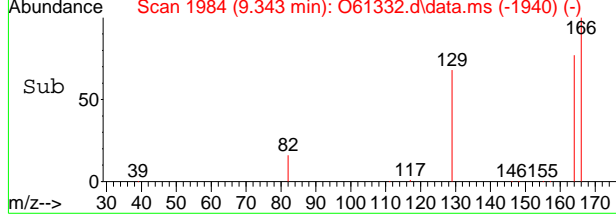
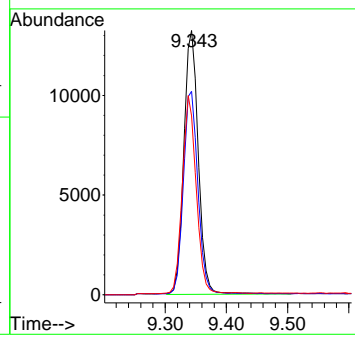
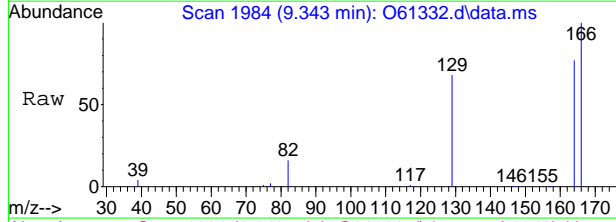




#21
 Tetrachloroethene
 Concen: 1.25 ug/L
 RT: 9.343 min Scan# 1984
 Delta R.T. 0.000 min
 Lab File: O61332.d
 Acq: 13 Sep 2020 2:08 pm

Tgt Ion: 166 Resp: 21982

Ion	Ratio	Lower	Upper
166	100		
164	76.8	47.3	107.3
129	67.3	37.5	97.5



7.1.39
7



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\091420\
 Data File : Z62326.D
 Acq On : 14 Sep 2020 3:04 pm
 Operator : JuanG
 Sample : FA78549-30
 Misc : MS47201,VZ2418,,,,,
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 15 18:50:26 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Sun Sep 13 13:38:26 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

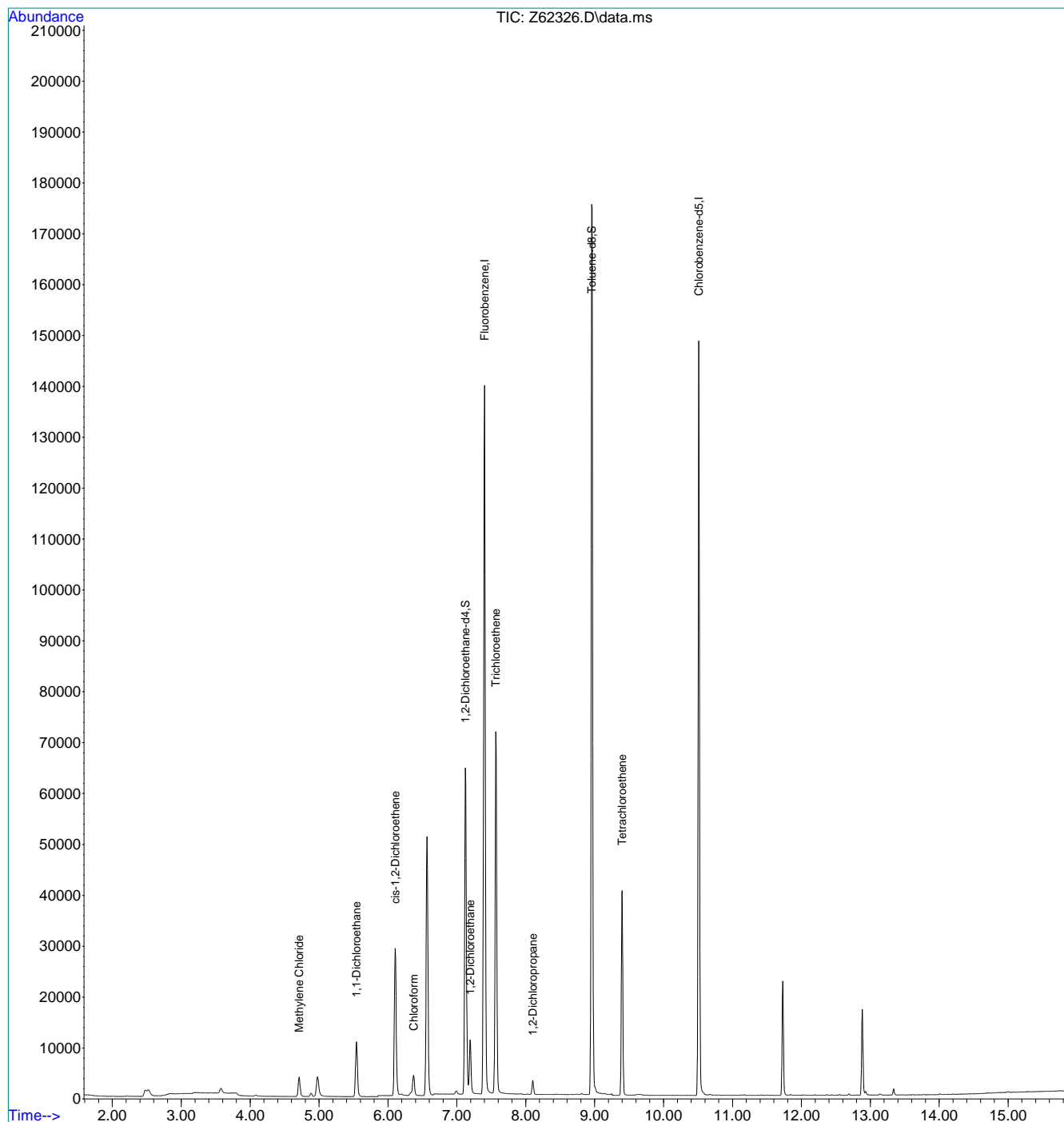
Internal Standards						
1) Fluorobenzene	7.401	96	1602030	5.00	ppb	0.00
18) Chlorobenzene-d5	10.511	117	1286055	5.00	ppb	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.123	65	542365	5.47	ppb	0.00
Spiked Amount	5.000	Range 79 - 125	Recovery	=	109.40%	
19) Toluene-d8	8.958	98	1551532	4.97	ppb	0.00
Spiked Amount	5.000	Range 70 - 130	Recovery	=	99.40%	
Target Compounds						
5) Methylene Chloride	4.709	84	25452	0.16	ppb	93
7) 1,1-Dichloroethane	5.543	63	142872	0.71	ppb	# 98
8) cis-1,2-Dichloroethene	6.104	96	175260	1.33	ppb	97
9) Chloroform	6.371	83	41545	0.17	ppb	91
14) 1,2-Dichloroethane	7.191	62	105336	0.63	ppb	99
15) Trichloroethene	7.564	95	388772	2.84	ppb	93
16) 1,2-Dichloropropane	8.101	63	13761	0.12	ppb	98
21) Tetrachloroethene	9.399	166	176064	1.16	ppb	98

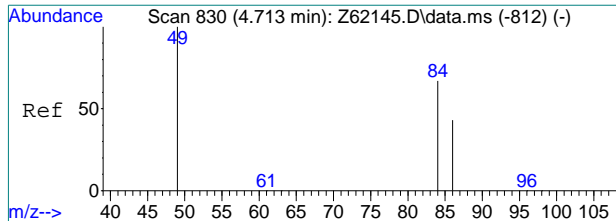
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\091420\
Data File : Z62326.D
Acq On : 14 Sep 2020 3:04 pm
Operator : JuanG
Sample : FA78549-30
Misc : MS47201,VZ2418,,,,,
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 15 18:50:26 2020
Quant Method : C:\msdchem\1\methods\SIMCL091120.M
Quant Title : WATER-EPA 8260B
QLast Update : Sun Sep 13 13:38:26 2020
Response via : Initial Calibration

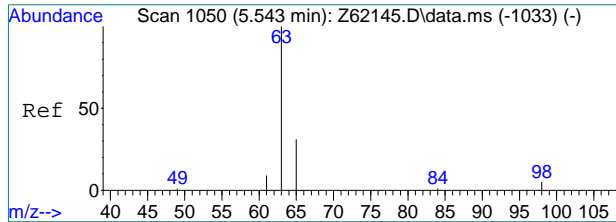
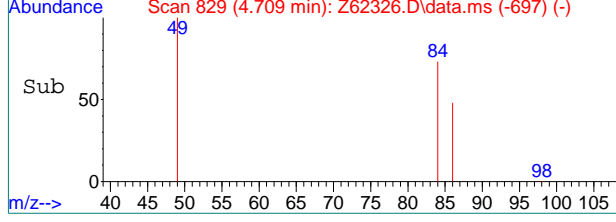
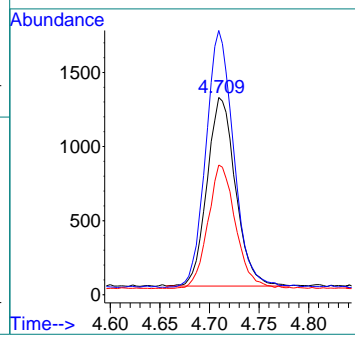
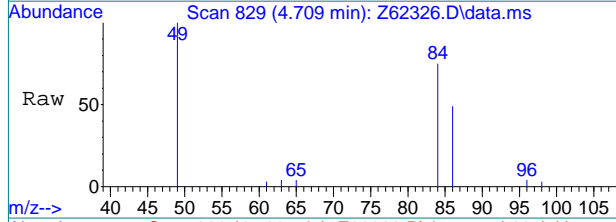




#5
 Methylene Chloride
 Concen: 0.16 ppb
 RT: 4.709 min Scan# 829
 Delta R.T. -0.004 min
 Lab File: Z62326.D
 Acq: 14 Sep 2020 3:04 pm

Tgt Ion: 84 Resp: 25452

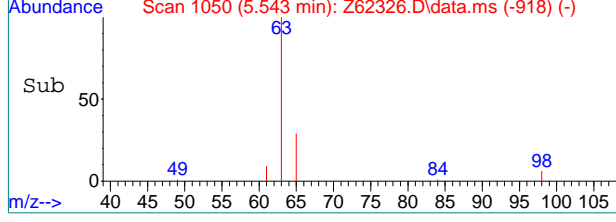
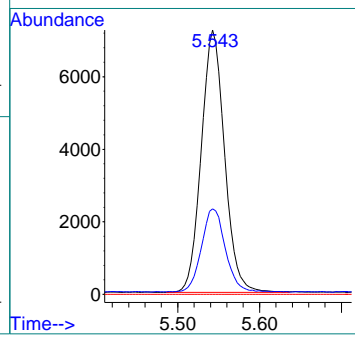
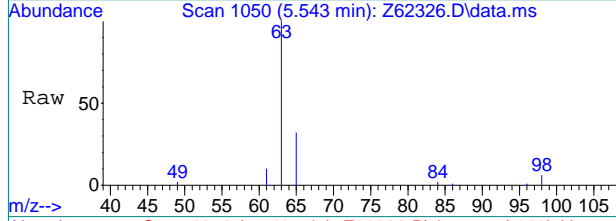
Ion	Ratio	Lower	Upper
84	100		
49	136.2	128.7	168.7
86	65.4	43.9	83.9



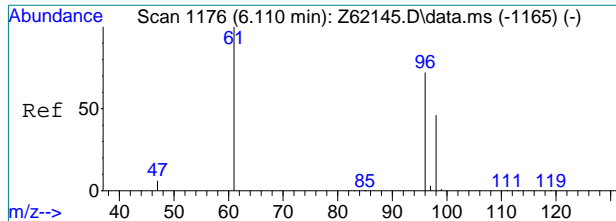
#7
 1,1-Dichloroethane
 Concen: 0.71 ppb
 RT: 5.543 min Scan# 1050
 Delta R.T. -0.003 min
 Lab File: Z62326.D
 Acq: 14 Sep 2020 3:04 pm

Tgt Ion: 63 Resp: 142872

Ion	Ratio	Lower	Upper
63	100		
65	32.4	11.3	51.3
83	0.0	0.0	30.0

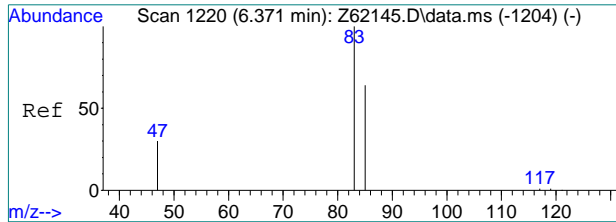
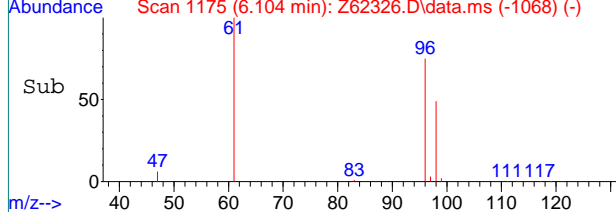
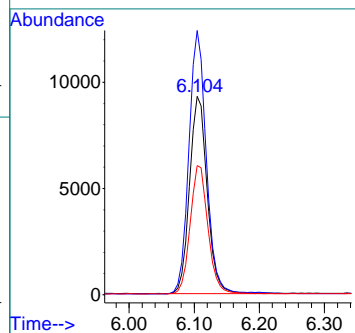
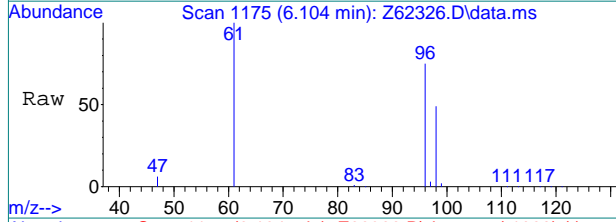


7.1.40
7



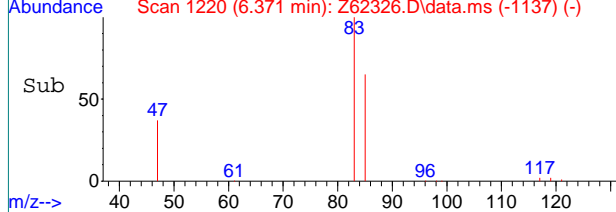
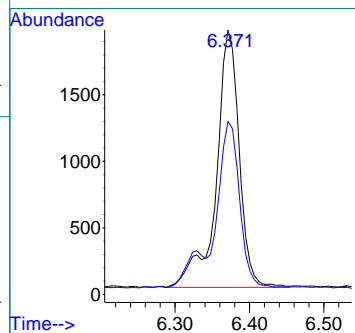
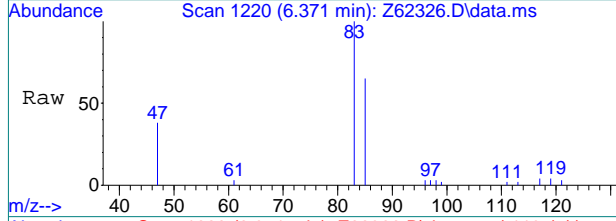
#8
 cis-1,2-Dichloroethene
 Concen: 1.33 ppb
 RT: 6.104 min Scan# 1175
 Delta R.T. -0.006 min
 Lab File: Z62326.D
 Acq: 14 Sep 2020 3:04 pm

Tgt Ion	Resp	Lower	Upper
96	175260		
96	100		
61	133.5	119.3	159.3
98	65.0	44.5	84.5

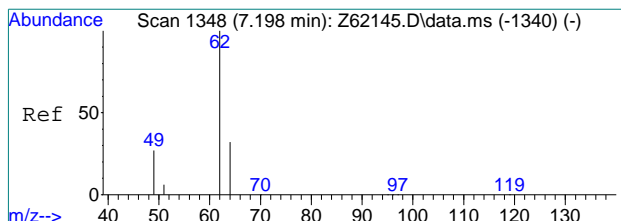


#9
 Chloroform
 Concen: 0.17 ppb
 RT: 6.371 min Scan# 1220
 Delta R.T. -0.006 min
 Lab File: Z62326.D
 Acq: 14 Sep 2020 3:04 pm

Tgt Ion	Resp	Lower	Upper
83	41545		
83	100		
85	59.2	46.1	86.1

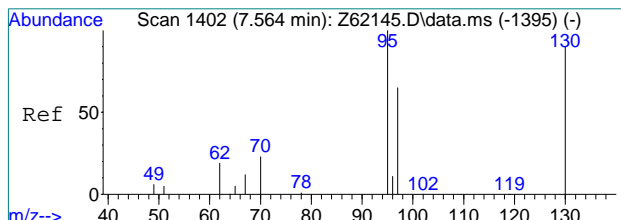
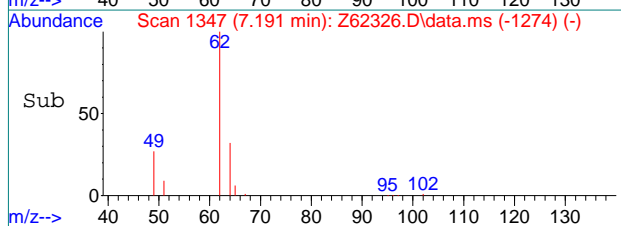
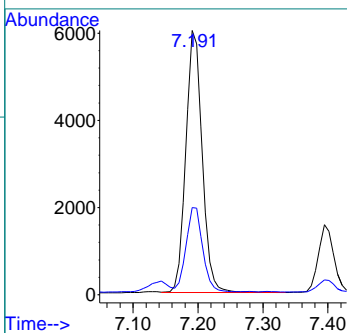
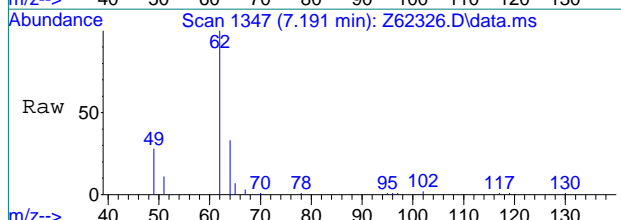


7.1.40
7



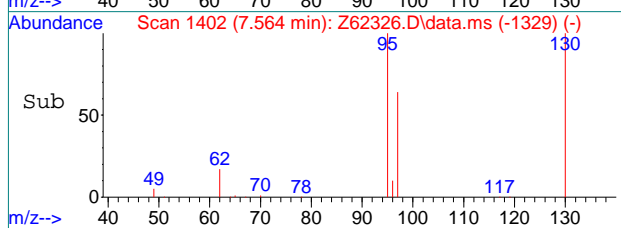
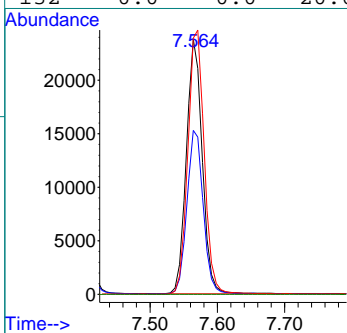
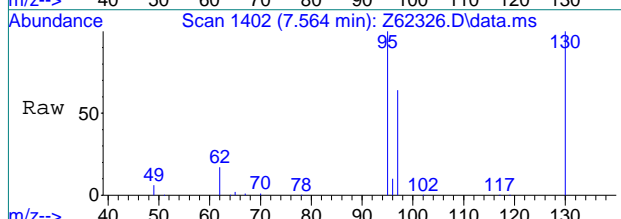
#14
 1,2-Dichloroethane
 Concen: 0.63 ppb
 RT: 7.191 min Scan# 1347
 Delta R.T. -0.007 min
 Lab File: Z62326.D
 Acq: 14 Sep 2020 3:04 pm

Tgt Ion	Resp	Lower	Upper
62	105336		
64	32.6	12.3	52.3

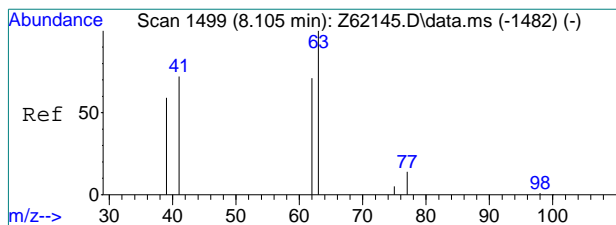


#15
 Trichloroethene
 Concen: 2.84 ppb
 RT: 7.564 min Scan# 1402
 Delta R.T. -0.007 min
 Lab File: Z62326.D
 Acq: 14 Sep 2020 3:04 pm

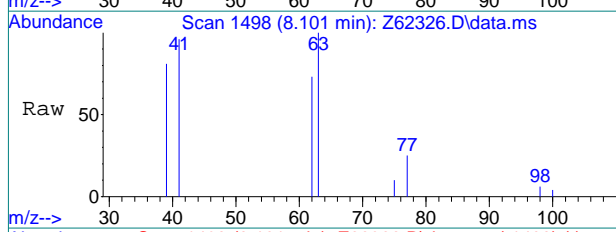
Tgt Ion	Resp	Lower	Upper
95	388772		
97	64.3	44.5	84.5
130	100.5	69.7	109.7
132	0.0	0.0	20.0



7.1.40
7

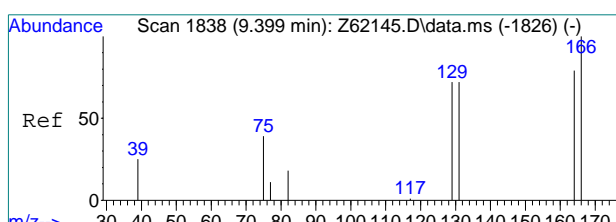
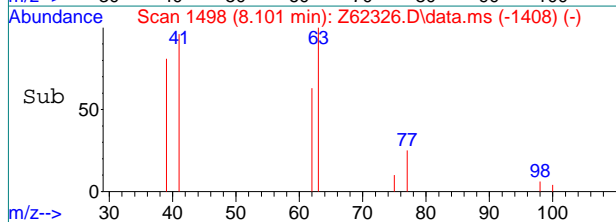
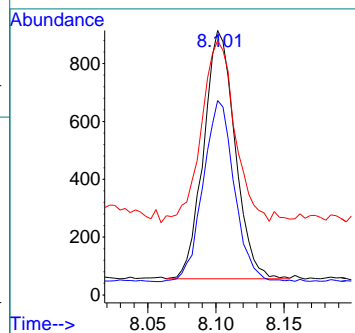


#16
 1,2-Dichloropropane
 Concen: 0.12 ppb
 RT: 8.101 min Scan# 1498
 Delta R.T. -0.004 min
 Lab File: Z62326.D
 Acq: 14 Sep 2020 3:04 pm

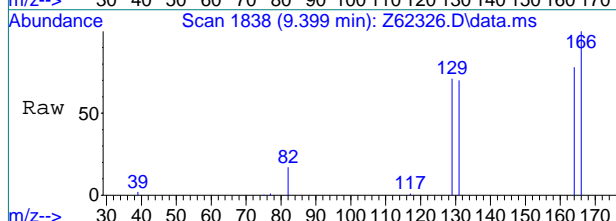


Tgt Ion: 63 Resp: 13761

Ion	Ratio	Lower	Upper
63	100		
62	72.7	51.6	91.6
41	75.9	43.7	103.7

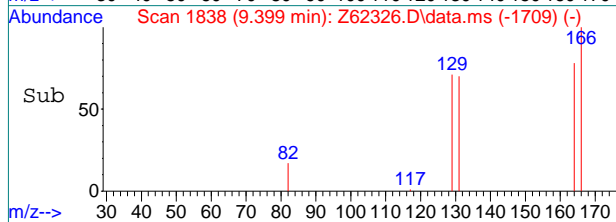
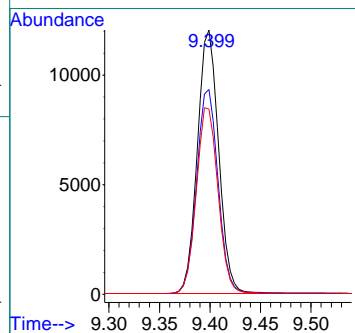


#21
 Tetrachloroethene
 Concen: 1.16 ppb
 RT: 9.399 min Scan# 1838
 Delta R.T. -0.000 min
 Lab File: Z62326.D
 Acq: 14 Sep 2020 3:04 pm



Tgt Ion: 166 Resp: 176064

Ion	Ratio	Lower	Upper
166	100		
164	77.4	58.7	98.7
131	69.9	51.6	91.6



7.1.40
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-14-2020\VO2360\
Data File : O61333.d
Acq On : 13 Sep 2020 2:28 pm
Operator : stutip
Sample : fa78549-31
Misc : MS47201,VO2360,,,,,
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 14 08:34:21 2020
Quant Method : C:\msdchem\1\methods\SIMCL091120.M
Quant Title : Standard Methods 6200B
QLast Update : Sun Sep 13 19:20:40 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Fluorobenzene	7.346	96	186897	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.447	117	155497	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.074	65	85777	5.68	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	113.60%	
19) Toluene-d8	8.896	98	159433	4.55	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	91.00%	
Target Compounds						
7) 1,1-Dichloroethane	5.514	63	24801	0.72	ug/L	97
8) cis-1,2-Dichloroethene	6.072	96	22329	1.30	ug/L #	81
14) 1,2-Dichloroethane	7.139	62	17688	0.63	ug/L	94
15) Trichloroethene	7.512	95	45274	2.58	ug/L	89
21) Tetrachloroethene	9.343	166	21042	1.24	ug/L	99

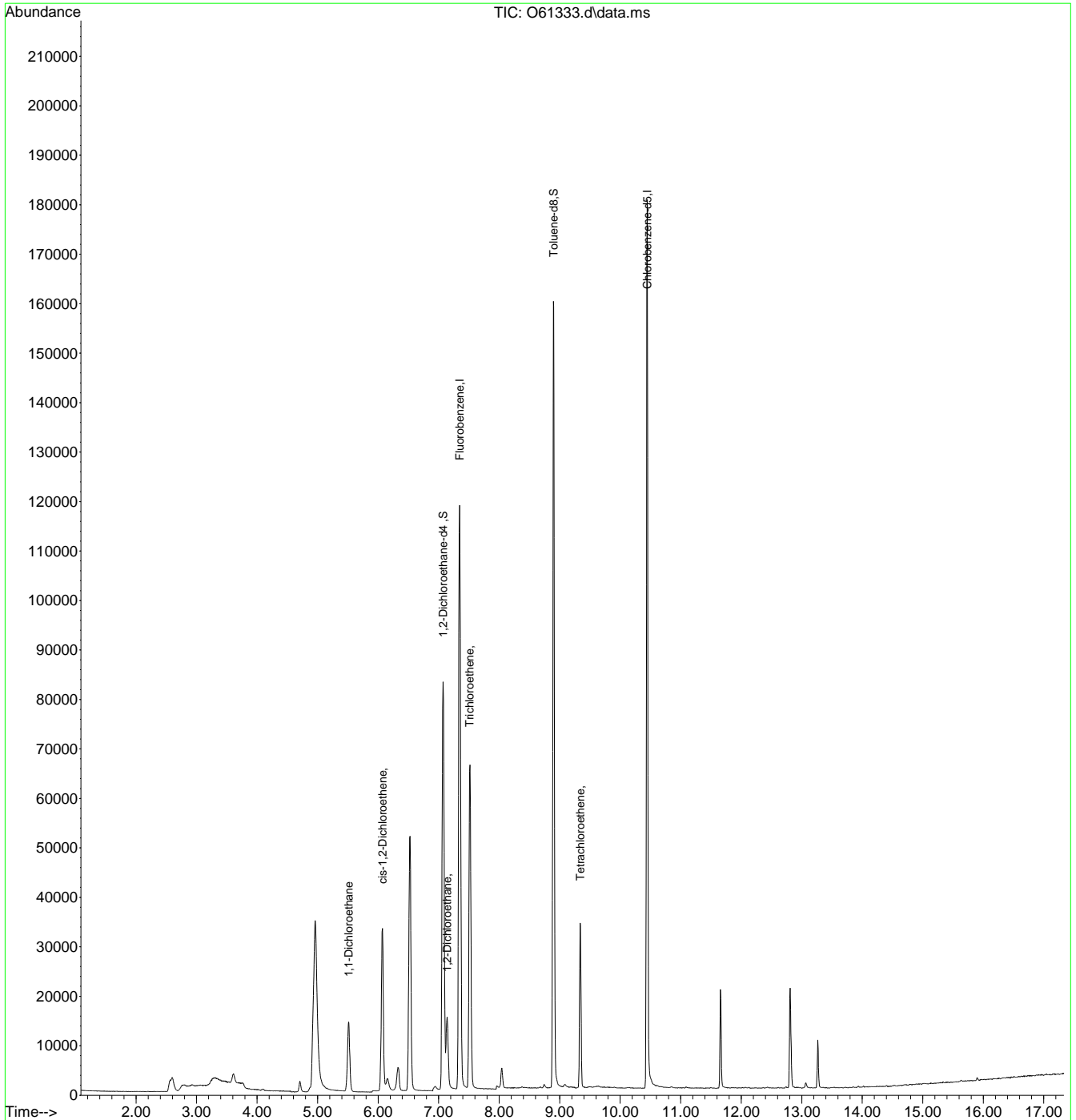
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.1.41
7

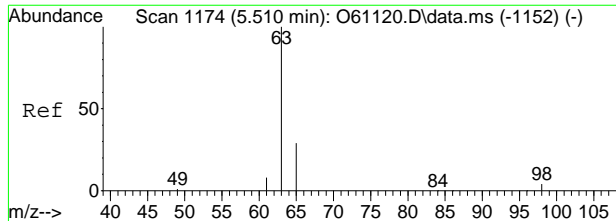
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-14-2020\VO2360\
 Data File : O61333.d
 Acq On : 13 Sep 2020 2:28 pm
 Operator : stutip
 Sample : fa78549-31
 Misc : MS47201,VO2360,,,,,
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 14 08:34:21 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Sun Sep 13 19:20:40 2020
 Response via : Initial Calibration

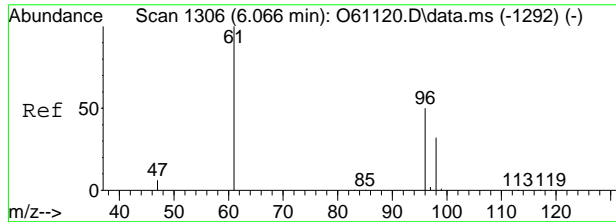
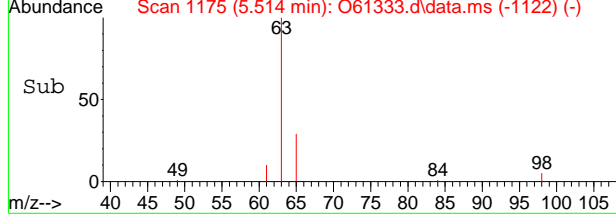
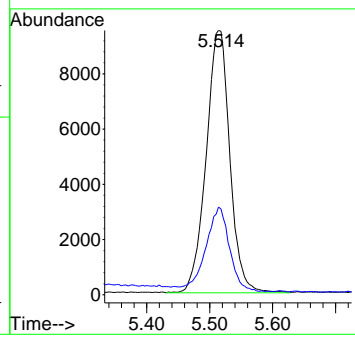
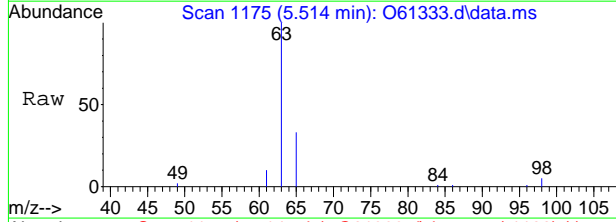


7.1.41
7



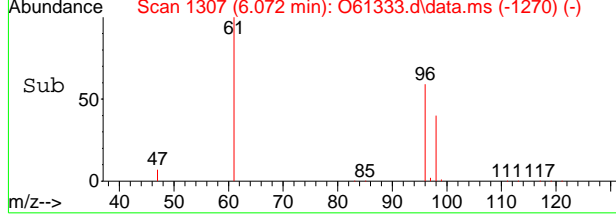
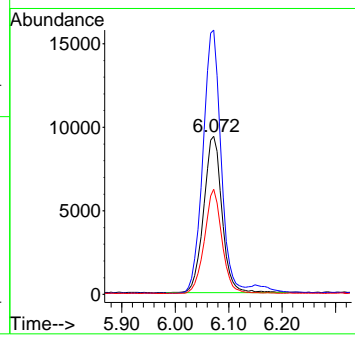
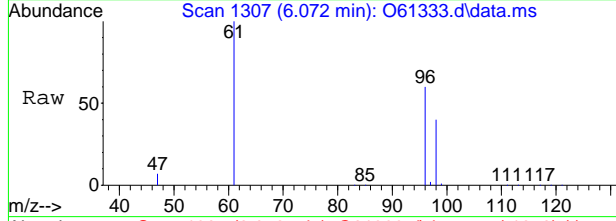
#7
 1,1-Dichloroethane
 Concen: 0.72 ug/L
 RT: 5.514 min Scan# 1175
 Delta R.T. -0.000 min
 Lab File: O61333.d
 Acq: 13 Sep 2020 2:28 pm

Tgt Ion	Ratio	Lower	Upper
63	100		
65	32.4	0.7	60.7



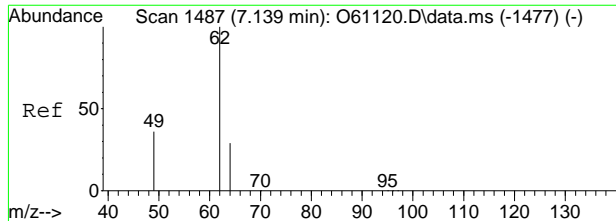
#8
 cis-1,2-Dichloroethene
 Concen: 1.30 ug/L
 RT: 6.072 min Scan# 1307
 Delta R.T. 0.000 min
 Lab File: O61333.d
 Acq: 13 Sep 2020 2:28 pm

Tgt Ion	Ratio	Lower	Upper
96	100		
61	168.2	107.0	167.0#
98	66.5	34.1	94.1



7.1.41
7

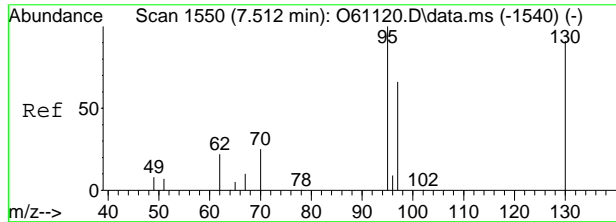
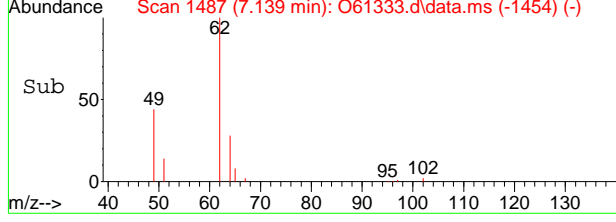
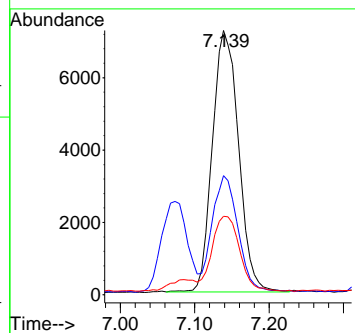
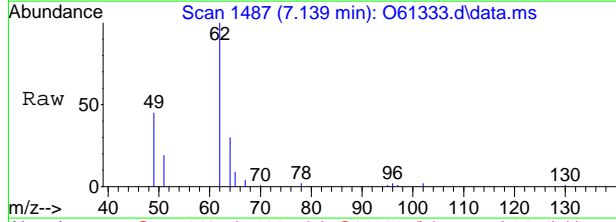




#14
 1,2-Dichloroethane
 Concen: 0.63 ug/L
 RT: 7.139 min Scan# 1487
 Delta R.T. -0.006 min
 Lab File: O61333.d
 Acq: 13 Sep 2020 2:28 pm

Tgt Ion: 62 Resp: 17688

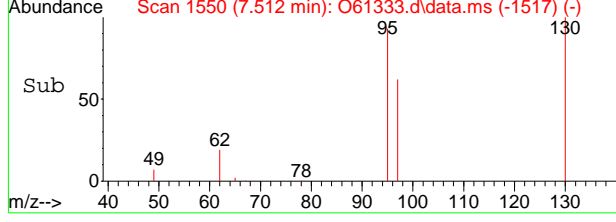
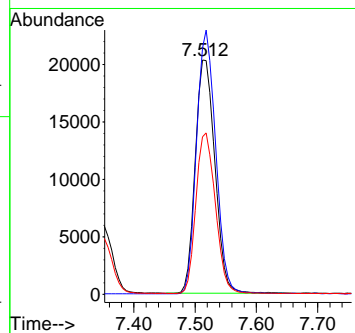
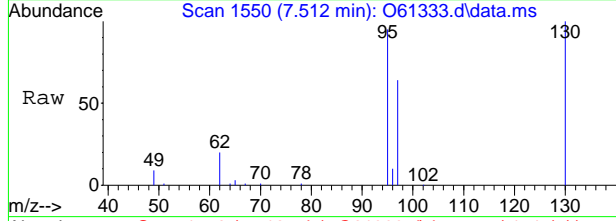
Ion	Ratio	Lower	Upper
62	100		
49	43.8	18.0	78.0
64	28.2	1.5	61.5



#15
 Trichloroethene
 Concen: 2.58 ug/L
 RT: 7.512 min Scan# 1550
 Delta R.T. -0.006 min
 Lab File: O61333.d
 Acq: 13 Sep 2020 2:28 pm

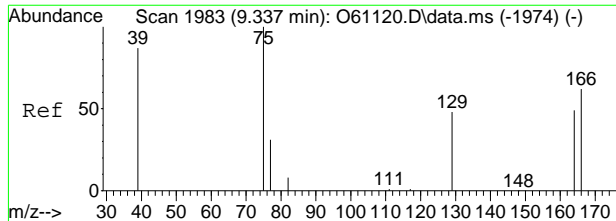
Tgt Ion: 95 Resp: 45274

Ion	Ratio	Lower	Upper
95	100		
130	105.2	60.4	120.4
97	67.1	34.6	94.6



7.141

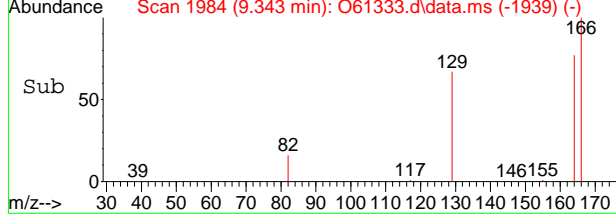
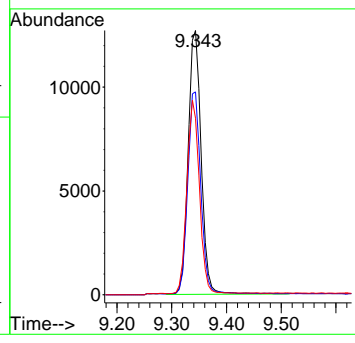
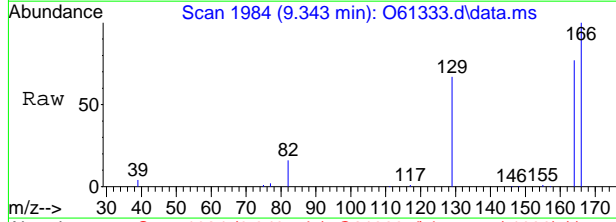




#21
 Tetrachloroethene
 Concen: 1.24 ug/L
 RT: 9.343 min Scan# 1984
 Delta R.T. 0.000 min
 Lab File: O61333.d
 Acq: 13 Sep 2020 2:28 pm

Tgt Ion:166 Resp: 21042

Ion	Ratio	Lower	Upper
166	100		
164	76.6	47.3	107.3
129	66.6	37.5	97.5



7.1.41
7



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\091420\
 Data File : Z62327.D
 Acq On : 14 Sep 2020 3:23 pm
 Operator : JuanG
 Sample : FA78549-31
 Misc : MS47201,VZ2418,,,,,
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 15 18:50:28 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Sun Sep 13 13:38:26 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	

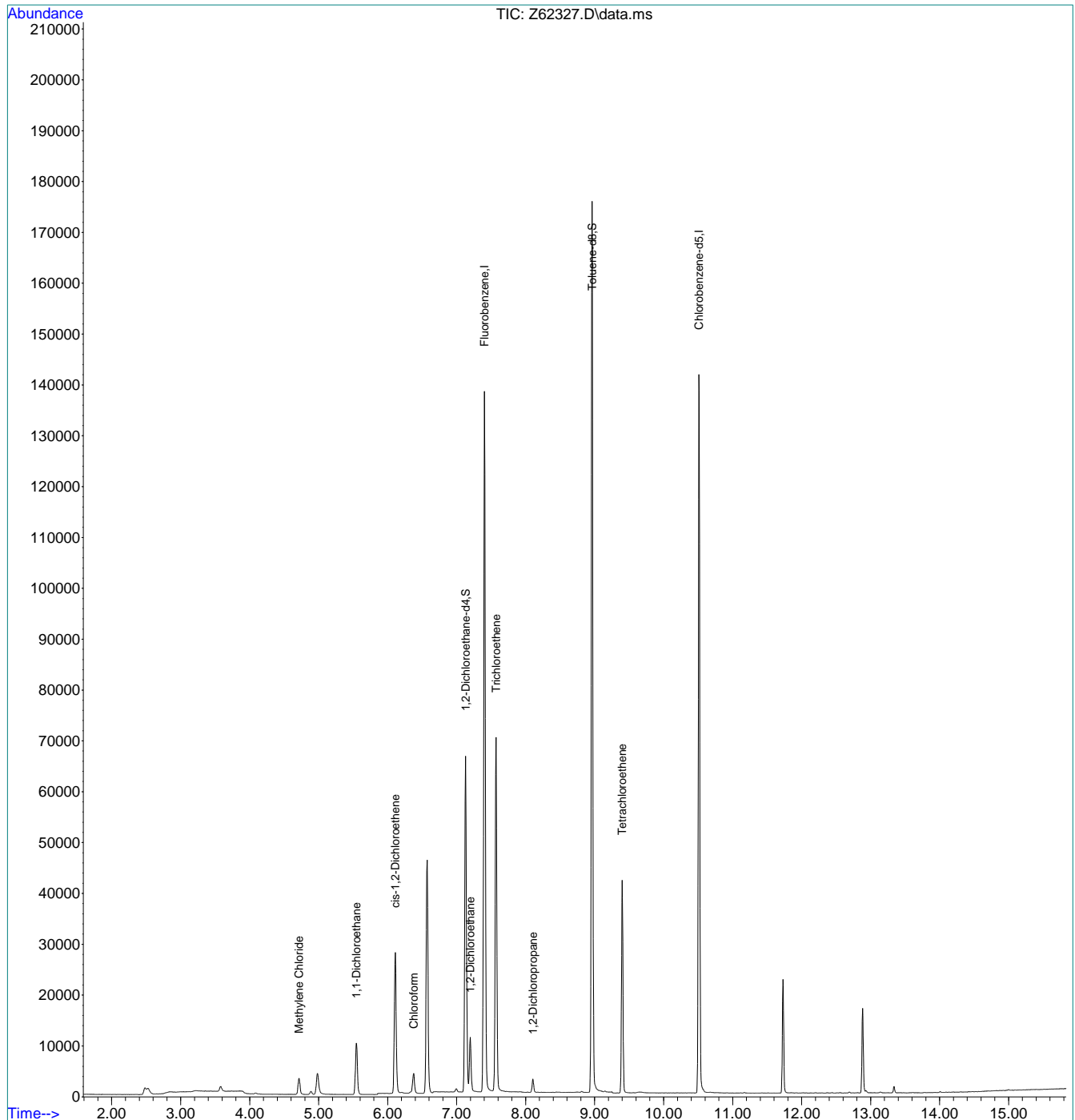
Internal Standards							
1) Fluorobenzene	7.401	96	1576340	5.00	ppb	0.00	
18) Chlorobenzene-d5	10.511	117	1275081	5.00	ppb	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.130	65	553159	5.67	ppb	0.00	
Spiked Amount	5.000	Range	79 - 125	Recovery	=	113.40%	
19) Toluene-d8	8.961	98	1537406	4.97	ppb	0.00	
Spiked Amount	5.000	Range	70 - 130	Recovery	=	99.40%	
Target Compounds							
5) Methylene Chloride	4.713	84	21958	0.14	ppb		Qvalue 89
7) 1,1-Dichloroethane	5.546	63	136384	0.69	ppb	#	99
8) cis-1,2-Dichloroethene	6.110	96	168249	1.30	ppb		94
9) Chloroform	6.377	83	38121	0.16	ppb		96
14) 1,2-Dichloroethane	7.198	62	103957	0.63	ppb		100
15) Trichloroethene	7.571	95	375257	2.79	ppb	#	86
16) 1,2-Dichloropropane	8.105	63	13222	0.12	ppb		98
21) Tetrachloroethene	9.399	166	179660	1.19	ppb		99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

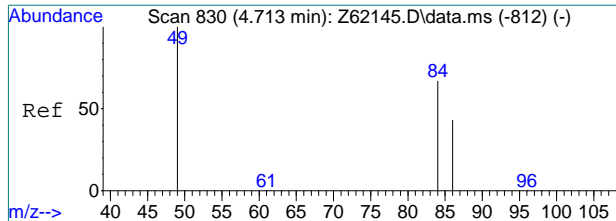
Data Path : C:\msdchem\1\data\091420\
 Data File : Z62327.D
 Acq On : 14 Sep 2020 3:23 pm
 Operator : JuanG
 Sample : FA78549-31
 Misc : MS47201,VZ2418,,,,,
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 15 18:50:28 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Sun Sep 13 13:38:26 2020
 Response via : Initial Calibration



7.1.42
7

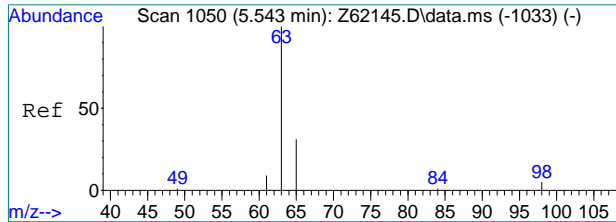
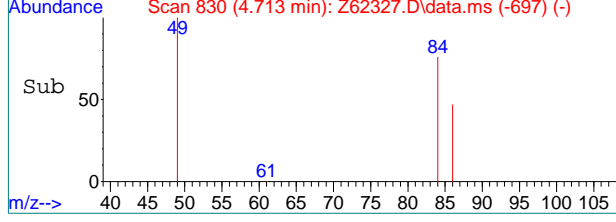
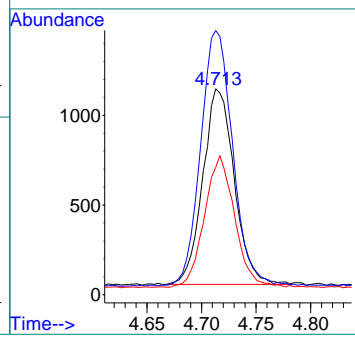
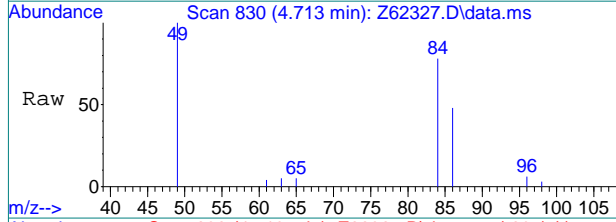




#5
 Methylene Chloride
 Concen: 0.14 ppb
 RT: 4.713 min Scan# 830
 Delta R.T. -0.000 min
 Lab File: Z62327.D
 Acq: 14 Sep 2020 3:23 pm

Tgt Ion: 84 Resp: 21958

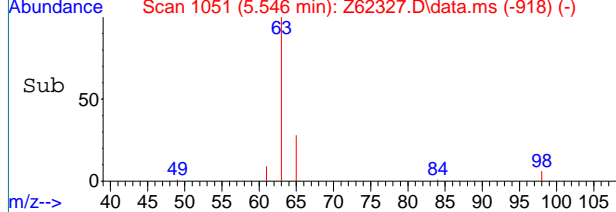
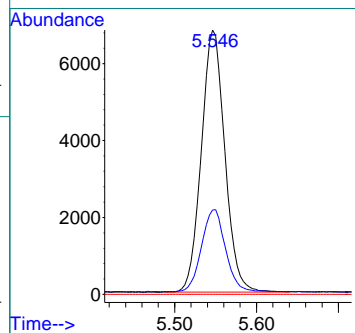
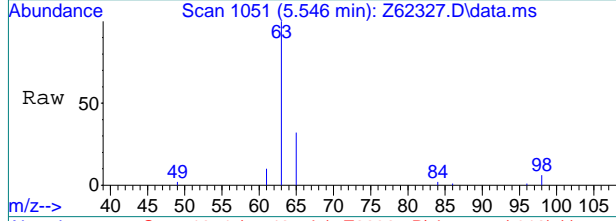
Ion	Ratio	Lower	Upper
84	100		
49	130.2	128.7	168.7
86	61.1	43.9	83.9



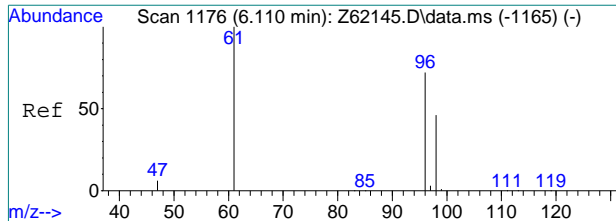
#7
 1,1-Dichloroethane
 Concen: 0.69 ppb
 RT: 5.546 min Scan# 1051
 Delta R.T. 0.000 min
 Lab File: Z62327.D
 Acq: 14 Sep 2020 3:23 pm

Tgt Ion: 63 Resp: 136384

Ion	Ratio	Lower	Upper
63	100		
65	31.7	11.3	51.3
83	0.0	0.0	30.0

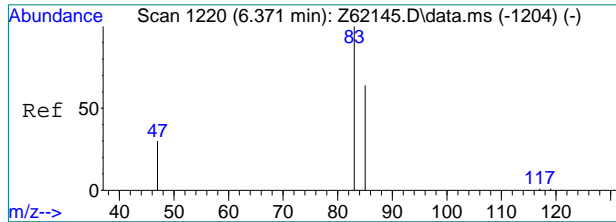
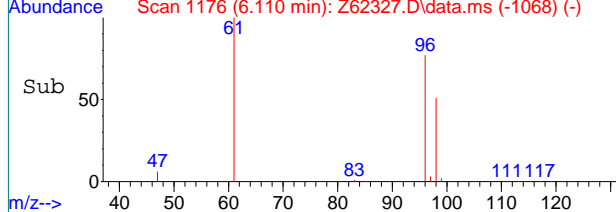
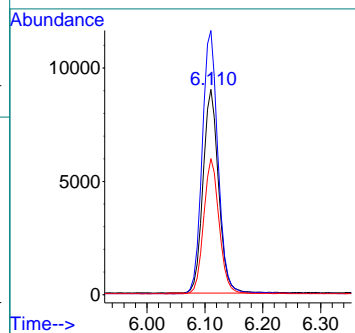
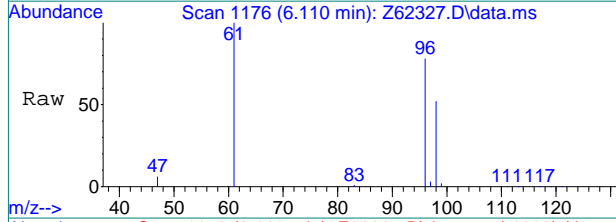


7.1.42
7



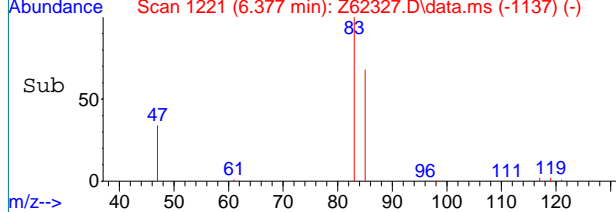
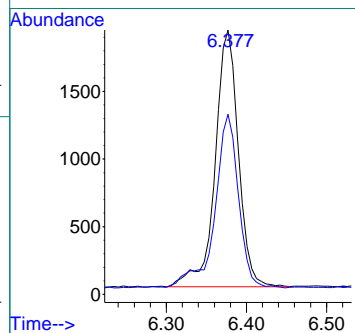
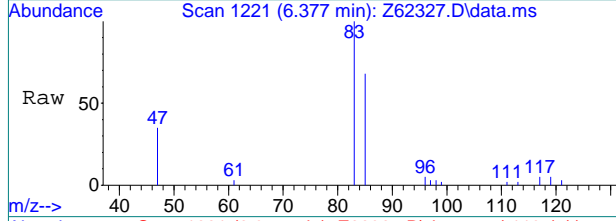
#8
 cis-1,2-Dichloroethene
 Concen: 1.30 ppb
 RT: 6.110 min Scan# 1176
 Delta R.T. 0.000 min
 Lab File: Z62327.D
 Acq: 14 Sep 2020 3:23 pm

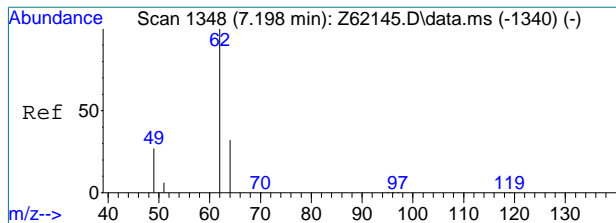
Tgt Ion	Resp	Lower	Upper
96	168249		
61	129.2	119.3	159.3
98	66.4	44.5	84.5



#9
 Chloroform
 Concen: 0.16 ppb
 RT: 6.377 min Scan# 1221
 Delta R.T. -0.000 min
 Lab File: Z62327.D
 Acq: 14 Sep 2020 3:23 pm

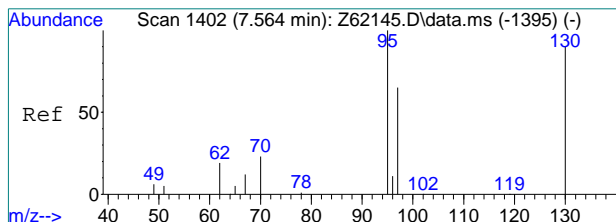
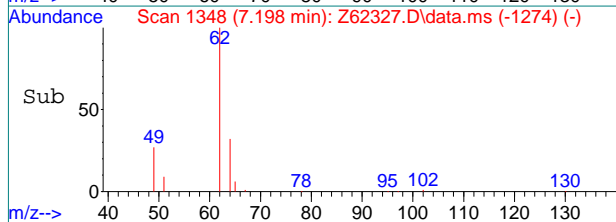
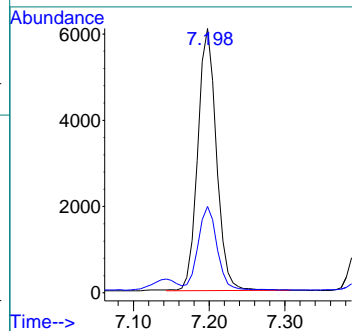
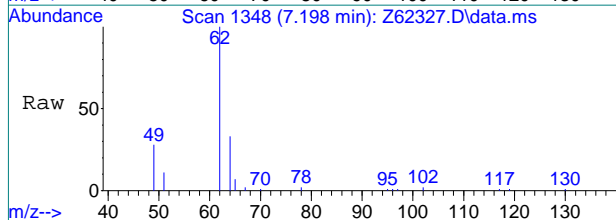
Tgt Ion	Resp	Lower	Upper
83	38121		
85	69.0	46.1	86.1





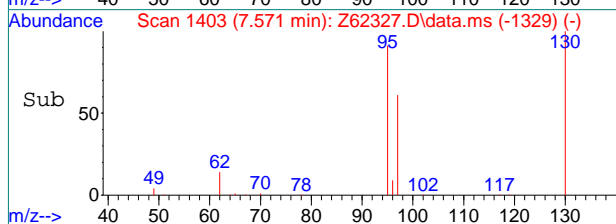
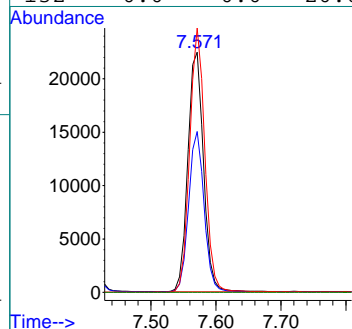
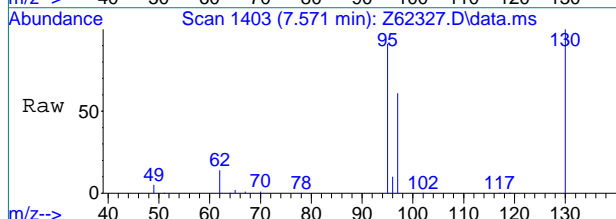
#14
 1,2-Dichloroethane
 Concen: 0.63 ppb
 RT: 7.198 min Scan# 1348
 Delta R.T. -0.000 min
 Lab File: Z62327.D
 Acq: 14 Sep 2020 3:23 pm

Tgt Ion	Resp	Lower	Upper
62	103957		
64	32.0	12.3	52.3



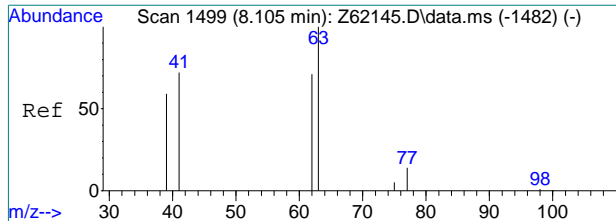
#15
 Trichloroethene
 Concen: 2.79 ppb
 RT: 7.571 min Scan# 1403
 Delta R.T. 0.000 min
 Lab File: Z62327.D
 Acq: 14 Sep 2020 3:23 pm

Tgt Ion	Resp	Lower	Upper
95	375257		
97	67.0	44.5	84.5
130	110.3	69.7	109.7#
132	0.0	0.0	20.0

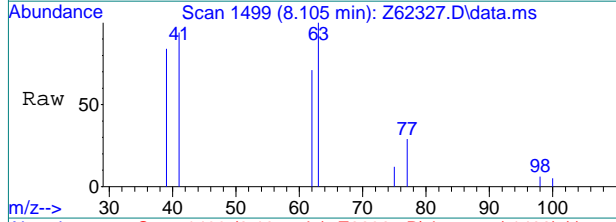


7.1.42
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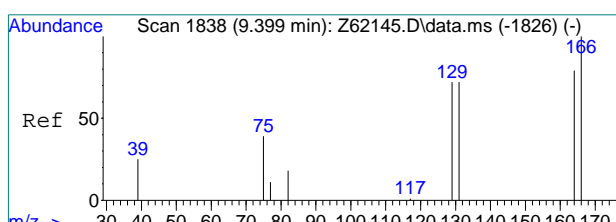
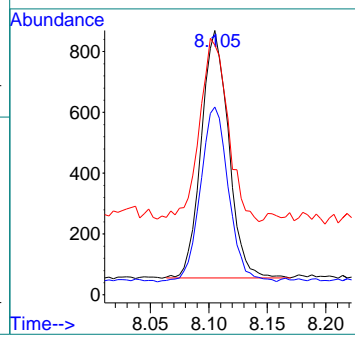
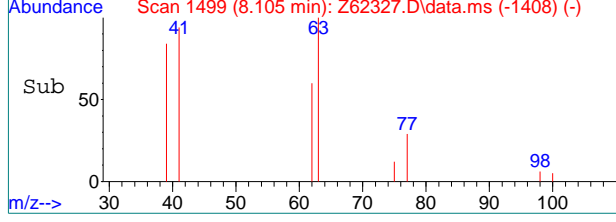


#16
 1,2-Dichloropropane
 Concen: 0.12 ppb
 RT: 8.105 min Scan# 1499
 Delta R.T. 0.000 min
 Lab File: Z62327.D
 Acq: 14 Sep 2020 3:23 pm

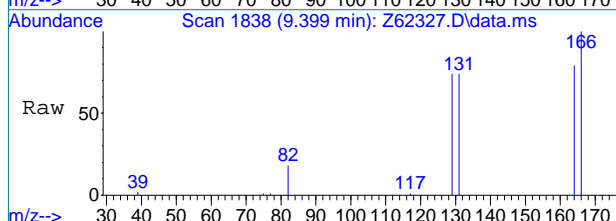


Tgt Ion: 63 Resp: 13222

Ion	Ratio	Lower	Upper
63	100		
62	72.9	51.6	91.6
41	76.1	43.7	103.7

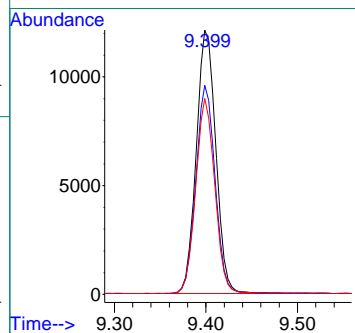
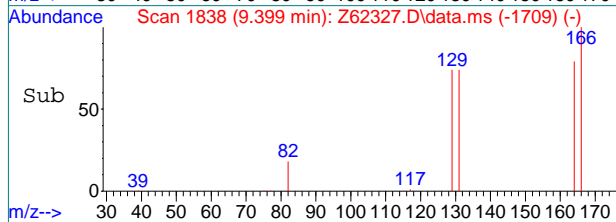


#21
 Tetrachloroethene
 Concen: 1.19 ppb
 RT: 9.399 min Scan# 1838
 Delta R.T. -0.000 min
 Lab File: Z62327.D
 Acq: 14 Sep 2020 3:23 pm



Tgt Ion: 166 Resp: 179660

Ion	Ratio	Lower	Upper
166	100		
164	79.0	58.7	98.7
131	73.9	51.6	91.6



7.1.42
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-14-2020\VO2360\
Data File : O61334.d
Acq On : 13 Sep 2020 2:48 pm
Operator : stutip
Sample : fa78549-32
Misc : MS47201,VO2360,,,,,
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 14 08:34:48 2020
Quant Method : C:\msdchem\1\methods\SIMCL091120.M
Quant Title : Standard Methods 6200B
QLast Update : Sun Sep 13 19:20:40 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Fluorobenzene	7.340	96	184643	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.447	117	153620	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.068	65	84380	5.66	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	113.20%	
19) Toluene-d8	8.896	98	158502	4.58	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	91.60%	
Target Compounds						
8) cis-1,2-Dichloroethene	6.066	96	25036	1.48	ug/L	82
9) Chloroform	6.333	83	18641	0.63	ug/L	89
15) Trichloroethene	7.512	95	166387	9.58	ug/L	86

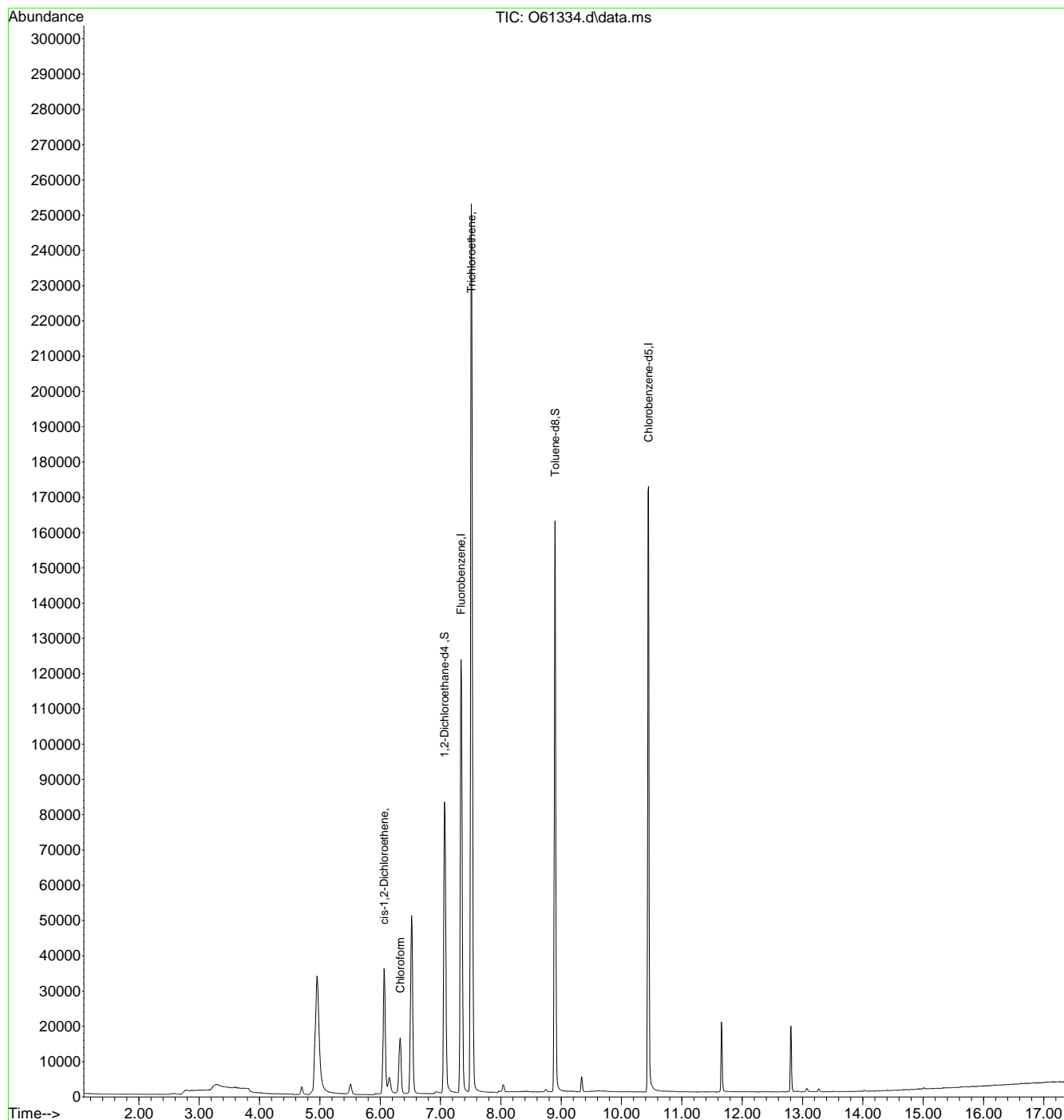
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.1.43
7

Quantitation Report (QT Reviewed)

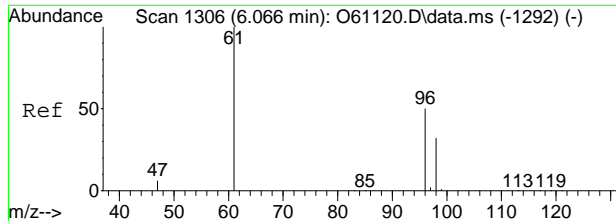
Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-14-2020\VO2360\
Data File : O61334.d
Acq On : 13 Sep 2020 2:48 pm
Operator : stutip
Sample : fa78549-32
Misc : MS47201,VO2360,,,,,
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 14 08:34:48 2020
Quant Method : C:\msdchem\1\methods\SIMCL091120.M
Quant Title : Standard Methods 6200B
QLast Update : Sun Sep 13 19:20:40 2020
Response via : Initial Calibration



7.1.43
7

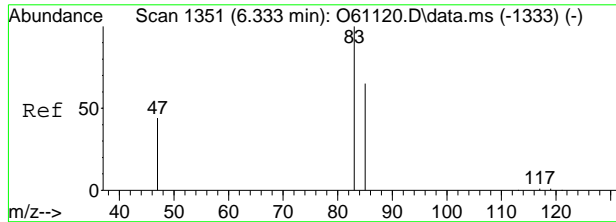
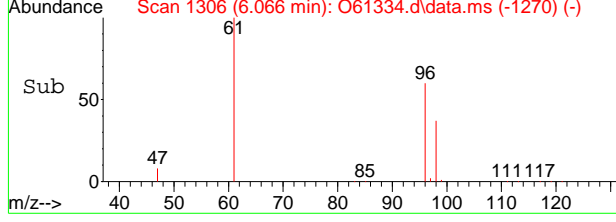
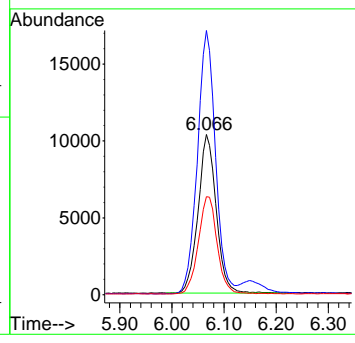
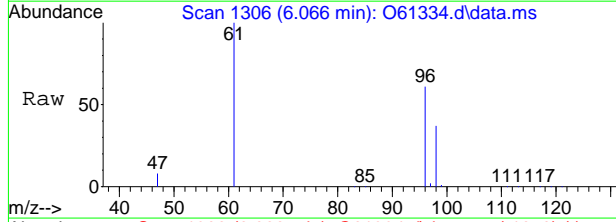




#8
 cis-1,2-Dichloroethene
 Concen: 1.48 ug/L
 RT: 6.066 min Scan# 1306
 Delta R.T. -0.006 min
 Lab File: O61334.d
 Acq: 13 Sep 2020 2:48 pm

Tgt Ion: 96 Resp: 25036

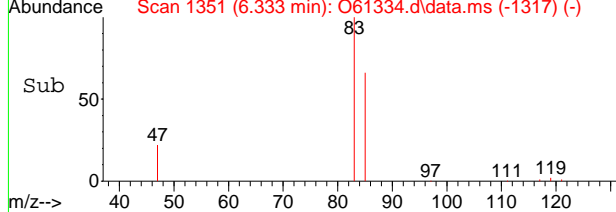
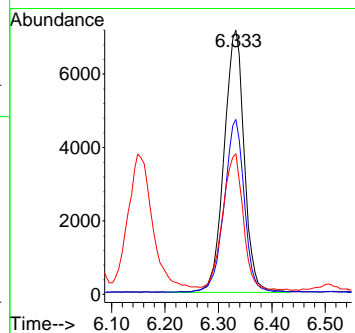
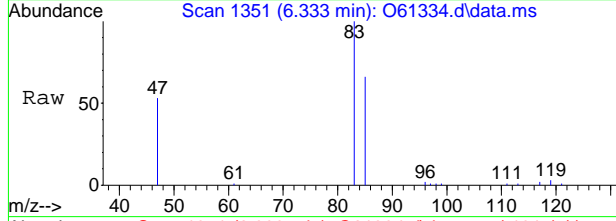
Ion	Ratio	Lower	Upper
96	100		
61	166.0	107.0	167.0
98	61.4	34.1	94.1

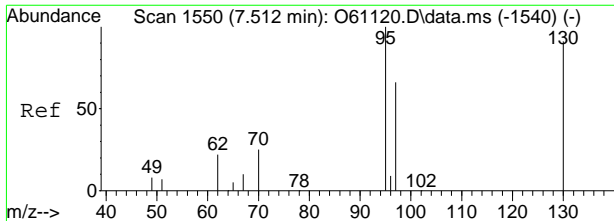


#9
 Chloroform
 Concen: 0.63 ug/L
 RT: 6.333 min Scan# 1351
 Delta R.T. -0.000 min
 Lab File: O61334.d
 Acq: 13 Sep 2020 2:48 pm

Tgt Ion: 83 Resp: 18641

Ion	Ratio	Lower	Upper
83	100		
85	65.8	33.0	93.0
47	52.0	8.1	68.1

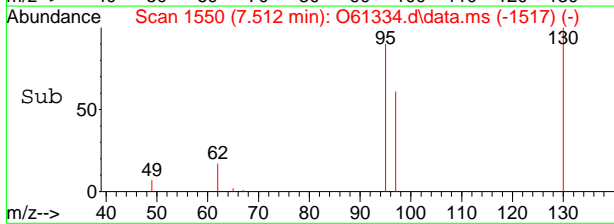
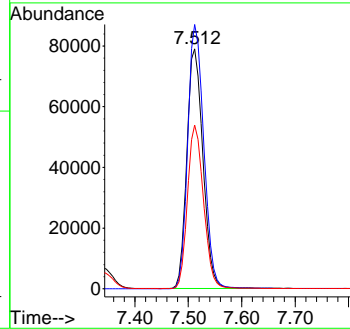
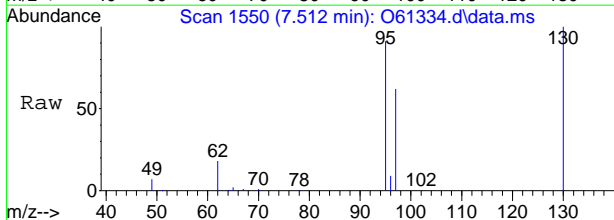




#15
 Trichloroethene
 Concen: 9.58 ug/L
 RT: 7.512 min Scan# 1550
 Delta R.T. -0.006 min
 Lab File: O61334.d
 Acq: 13 Sep 2020 2:48 pm

Tgt Ion: 95 Resp: 166387

Ion	Ratio	Lower	Upper
95	100		
130	110.2	60.4	120.4
97	68.2	34.6	94.6



7.1.43
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\091420\
 Data File : Z62328.D
 Acq On : 14 Sep 2020 3:42 pm
 Operator : JuanG
 Sample : FA78549-32
 Misc : MS47201,VZ2418,,,,,
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 15 18:50:30 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Sun Sep 13 13:38:26 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

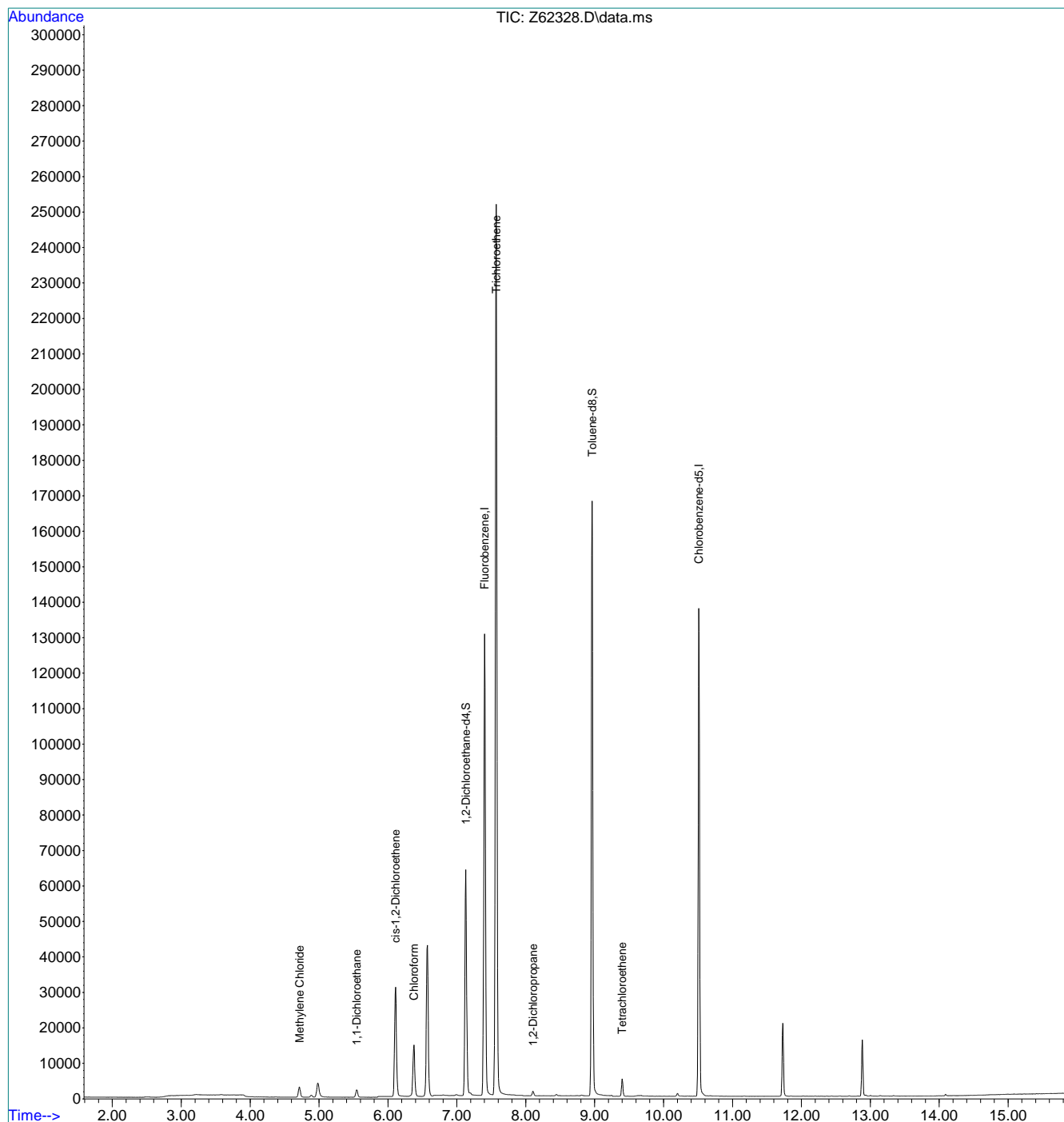
Internal Standards						
1) Fluorobenzene	7.401	96	1512698	5.00	ppb	0.00
18) Chlorobenzene-d5	10.511	117	1225189	5.00	ppb	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.130	65	530803	5.67	ppb	0.00
Spiked Amount	5.000	Range	79 - 125	Recovery	=	113.40%
19) Toluene-d8	8.961	98	1474648	4.96	ppb	0.00
Spiked Amount	5.000	Range	70 - 130	Recovery	=	99.20%
Target Compounds						
5) Methylene Chloride	4.717	84	19907	0.13	ppb	Qvalue # 87
7) 1,1-Dichloroethane	5.546	63	28560	0.15	ppb	# 97
8) cis-1,2-Dichloroethene	6.110	96	190323	1.53	ppb	93
9) Chloroform	6.377	83	140197	0.62	ppb	100
15) Trichloroethene	7.571	95	1369426	10.60	ppb	# 86
16) 1,2-Dichloropropane	8.105	63	7024	0.07	ppb	98
21) Tetrachloroethene	9.399	166	21224	0.14	ppb	97

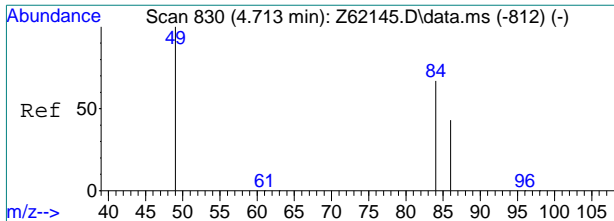
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\091420\
Data File : Z62328.D
Acq On : 14 Sep 2020 3:42 pm
Operator : JuanG
Sample : FA78549-32
Misc : MS47201,VZ2418,,,,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 15 18:50:30 2020
Quant Method : C:\msdchem\1\methods\SIMCL091120.M
Quant Title : WATER-EPA 8260B
QLast Update : Sun Sep 13 13:38:26 2020
Response via : Initial Calibration

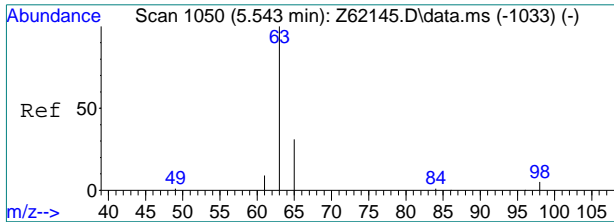
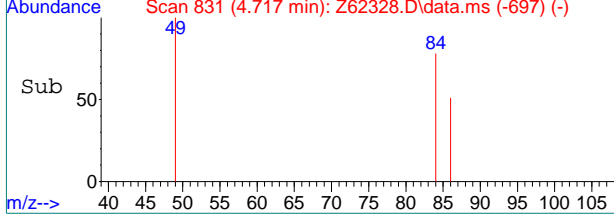
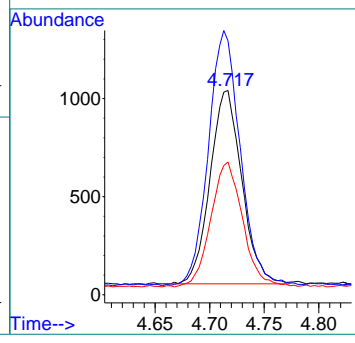
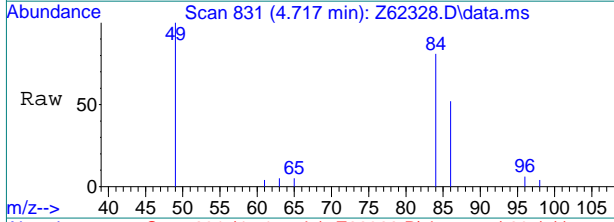




#5
 Methylene Chloride
 Concen: 0.13 ppb
 RT: 4.717 min Scan# 831
 Delta R.T. 0.004 min
 Lab File: Z62328.D
 Acq: 14 Sep 2020 3:42 pm

Tgt Ion: 84 Resp: 19907

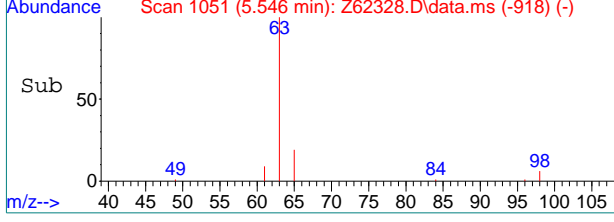
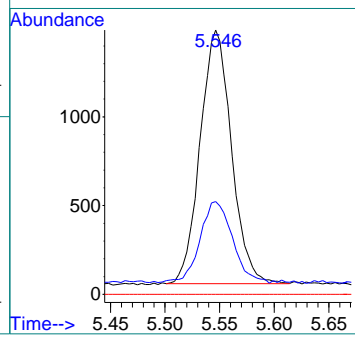
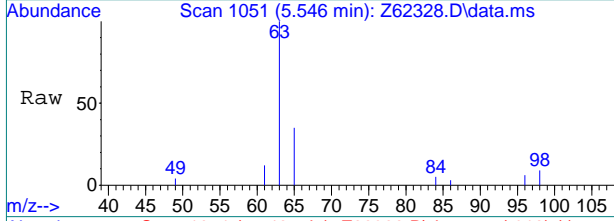
Ion	Ratio	Lower	Upper
84	100		
49	126.0	128.7	168.7#
86	64.1	43.9	83.9



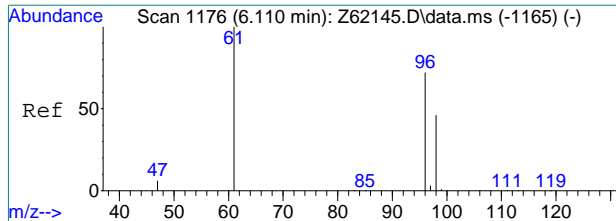
#7
 1,1-Dichloroethane
 Concen: 0.15 ppb
 RT: 5.546 min Scan# 1051
 Delta R.T. 0.000 min
 Lab File: Z62328.D
 Acq: 14 Sep 2020 3:42 pm

Tgt Ion: 63 Resp: 28560

Ion	Ratio	Lower	Upper
63	100		
65	33.0	11.3	51.3
83	0.0	0.0	30.0

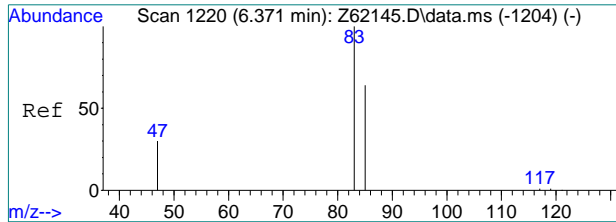
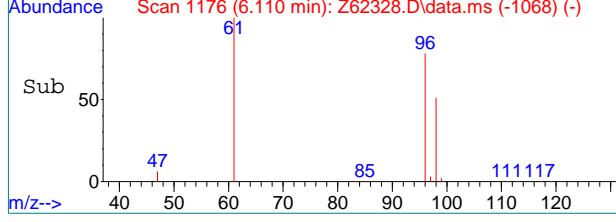
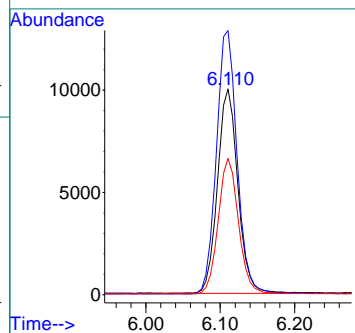
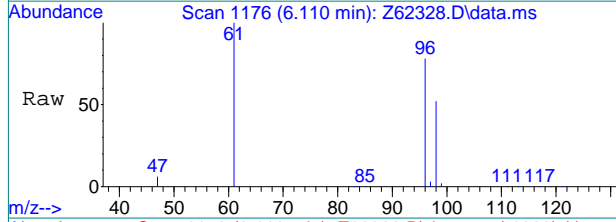


7.1.44
7



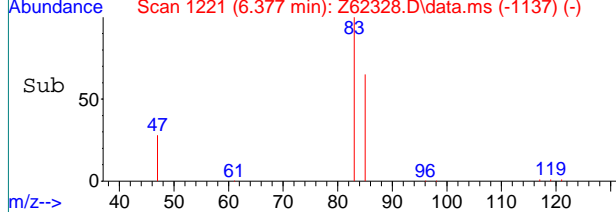
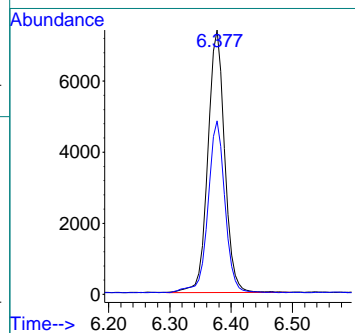
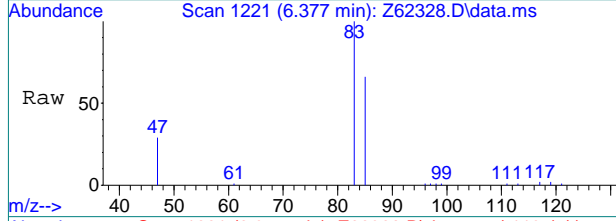
#8
 cis-1,2-Dichloroethene
 Concen: 1.53 ppb
 RT: 6.110 min Scan# 1176
 Delta R.T. 0.000 min
 Lab File: Z62328.D
 Acq: 14 Sep 2020 3:42 pm

Tgt Ion	Resp	Lower	Upper
96	190323		
61	128.8	119.3	159.3
98	66.2	44.5	84.5

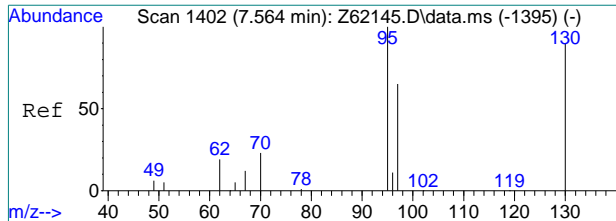


#9
 Chloroform
 Concen: 0.62 ppb
 RT: 6.377 min Scan# 1221
 Delta R.T. 0.000 min
 Lab File: Z62328.D
 Acq: 14 Sep 2020 3:42 pm

Tgt Ion	Resp	Lower	Upper
83	140197		
83	100		
85	66.0	46.1	86.1



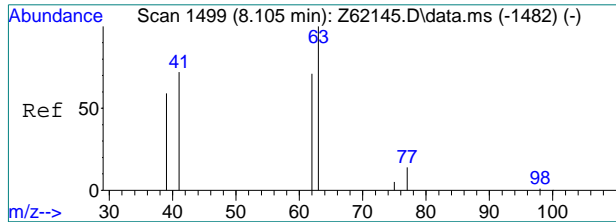
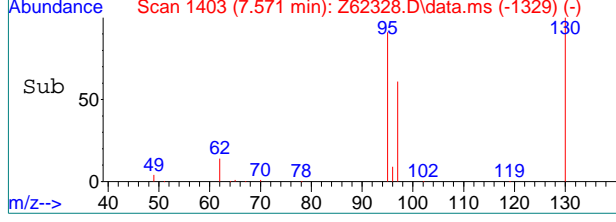
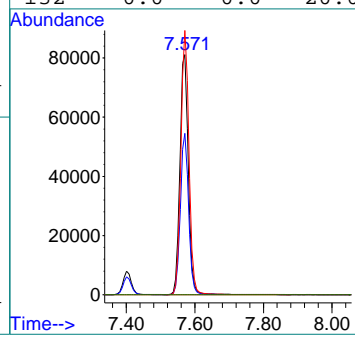
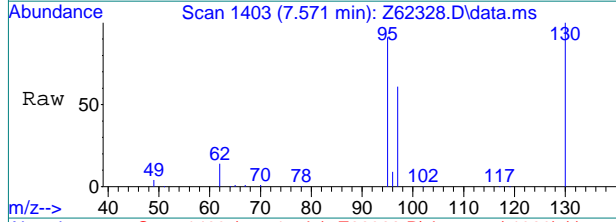
7.1.44
7



#15
 Trichloroethene
 Concen: 10.60 ppb
 RT: 7.571 min Scan# 1403
 Delta R.T. 0.000 min
 Lab File: Z62328.D
 Acq: 14 Sep 2020 3:42 pm

Tgt Ion: 95 Resp: 1369426

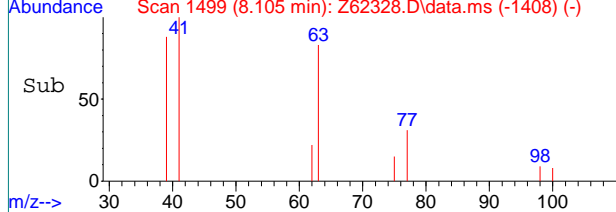
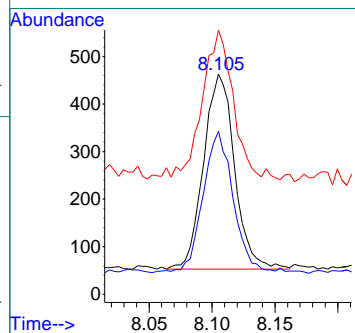
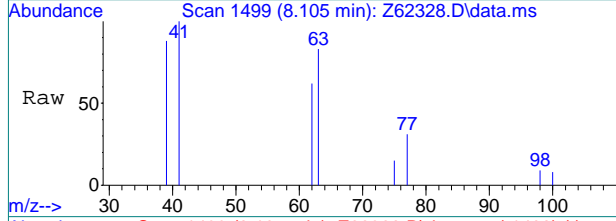
Ion	Ratio	Lower	Upper
95	100		
97	67.2	44.5	84.5
130	110.2	69.7	109.7#
132	0.0	0.0	20.0



#16
 1,2-Dichloropropane
 Concen: 0.07 ppb
 RT: 8.105 min Scan# 1499
 Delta R.T. 0.000 min
 Lab File: Z62328.D
 Acq: 14 Sep 2020 3:42 pm

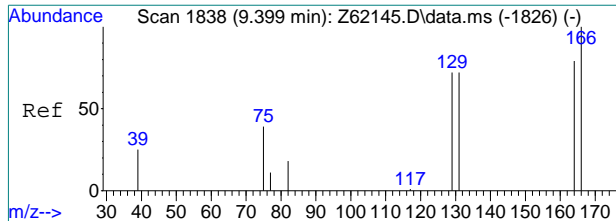
Tgt Ion: 63 Resp: 7024

Ion	Ratio	Lower	Upper
63	100		
62	70.6	51.6	91.6
41	70.6	43.7	103.7



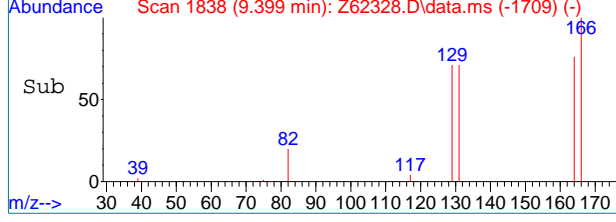
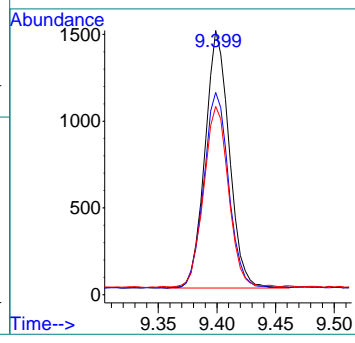
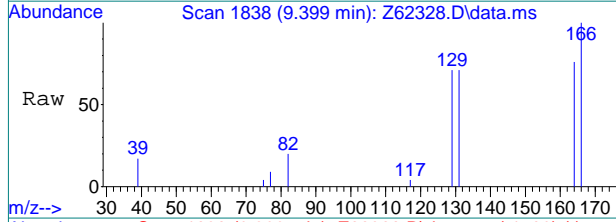
7.1.44
7





#21
 Tetrachloroethene
 Concen: 0.14 ppb
 RT: 9.399 min Scan# 1838
 Delta R.T. -0.000 min
 Lab File: Z62328.D
 Acq: 14 Sep 2020 3:42 pm

Tgt Ion	Ratio	Lower	Upper
166	100		
164	75.9	58.7	98.7
131	69.9	51.6	91.6



7.1.44
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-14-2020\VO2360\
Data File : O61335.d
Acq On : 13 Sep 2020 3:09 pm
Operator : stutip
Sample : fa78549-33
Misc : MS47201,VO2360,,,,,
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 14 08:35:02 2020
Quant Method : C:\msdchem\1\methods\SIMCL091120.M
Quant Title : Standard Methods 6200B
QLast Update : Sun Sep 13 19:20:40 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Fluorobenzene	7.346	96	181234	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.447	117	150472	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.073	65	82876	5.66	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	113.20%	
19) Toluene-d8	8.900	98	153409	4.52	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	90.40%	
Target Compounds						
7) 1,1-Dichloroethane	5.518	63	13848	0.41	ug/L	99
8) cis-1,2-Dichloroethene	6.072	96	16098	0.97	ug/L	83
14) 1,2-Dichloroethane	7.139	62	5503	0.20	ug/L	93
15) Trichloroethene	7.512	95	20291	1.19	ug/L	86
21) Tetrachloroethene	9.343	166	5737	0.35	ug/L	96

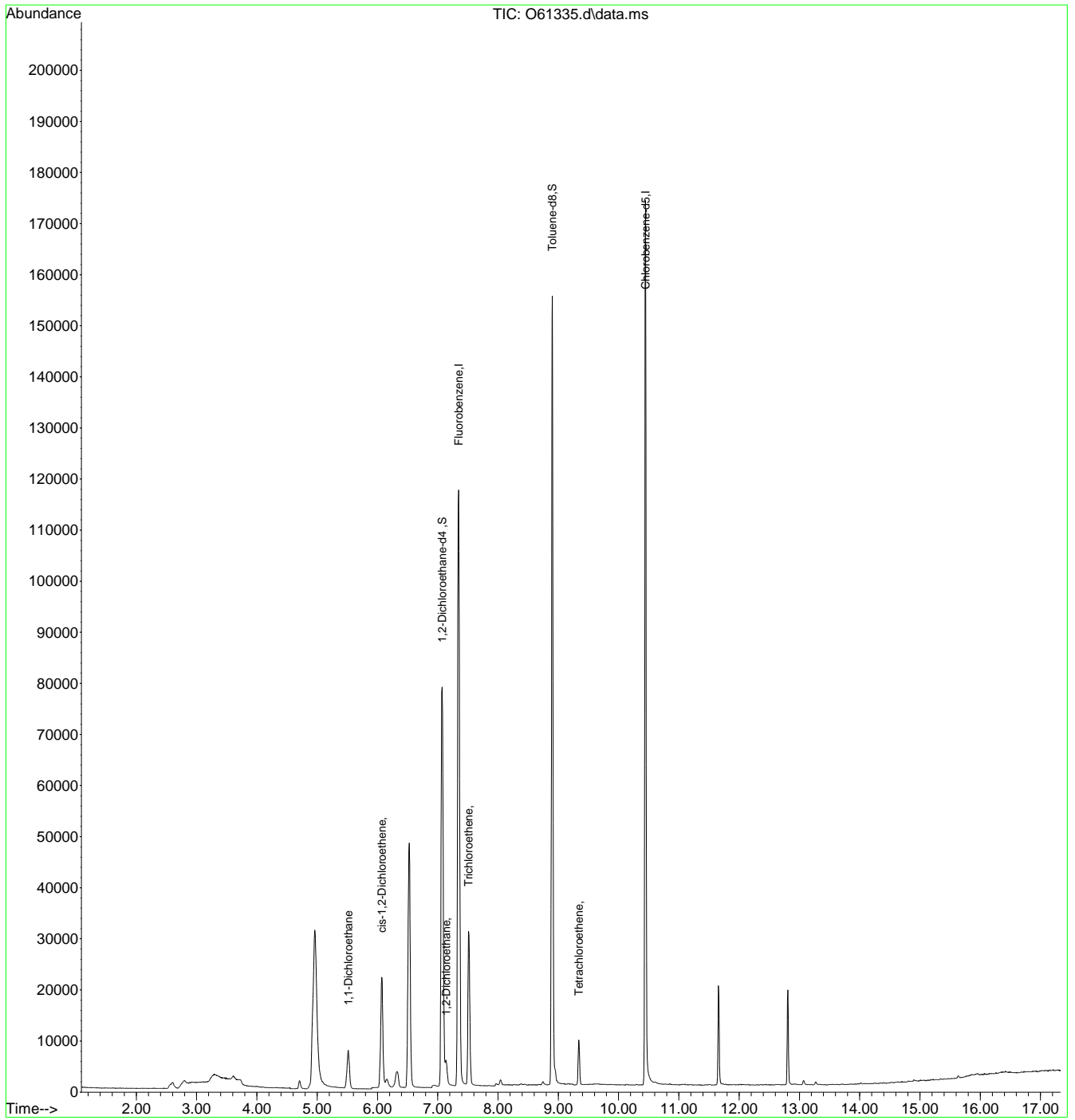
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.1.45
7

Quantitation Report (QT Reviewed)

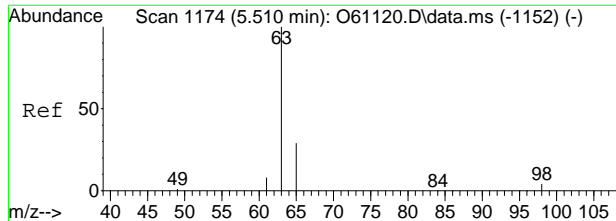
Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-14-2020\VO2360\
Data File : O61335.d
Acq On : 13 Sep 2020 3:09 pm
Operator : stutip
Sample : fa78549-33
Misc : MS47201,VO2360,,,,,
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 14 08:35:02 2020
Quant Method : C:\msdchem\1\methods\SIMCL091120.M
Quant Title : Standard Methods 6200B
QLast Update : Sun Sep 13 19:20:40 2020
Response via : Initial Calibration



7.1.45
7

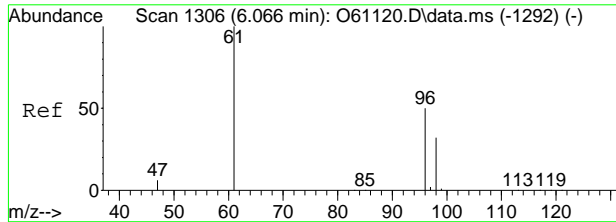
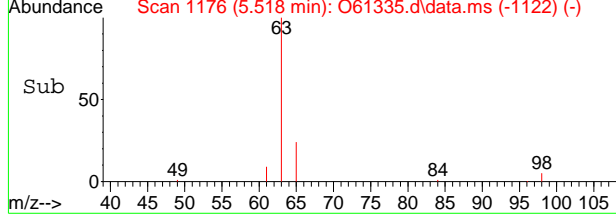
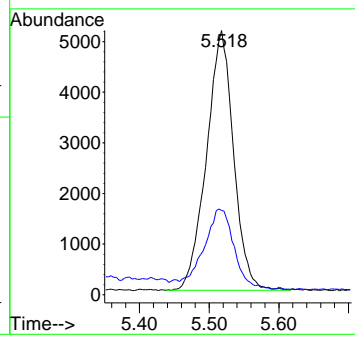
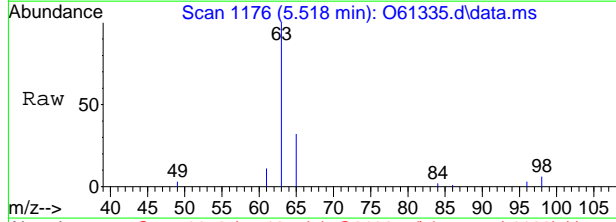




#7
 1,1-Dichloroethane
 Concen: 0.41 ug/L
 RT: 5.518 min Scan# 1176
 Delta R.T. 0.004 min
 Lab File: O61335.d
 Acq: 13 Sep 2020 3:09 pm

Tgt Ion: 63 Resp: 13848

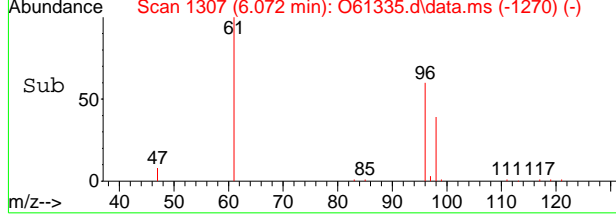
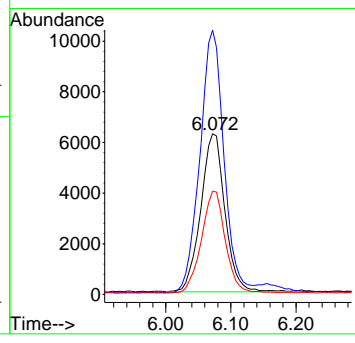
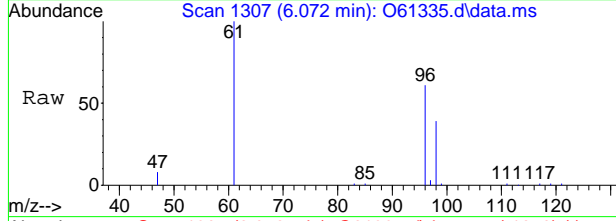
Ion	Ratio	Lower	Upper
63	100		
65	30.3	0.7	60.7



#8
 cis-1,2-Dichloroethene
 Concen: 0.97 ug/L
 RT: 6.072 min Scan# 1307
 Delta R.T. -0.000 min
 Lab File: O61335.d
 Acq: 13 Sep 2020 3:09 pm

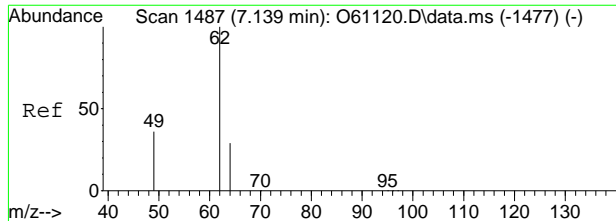
Tgt Ion: 96 Resp: 16098

Ion	Ratio	Lower	Upper
96	100		
61	166.1	107.0	167.0
98	64.3	34.1	94.1



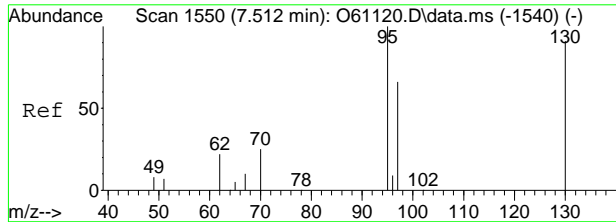
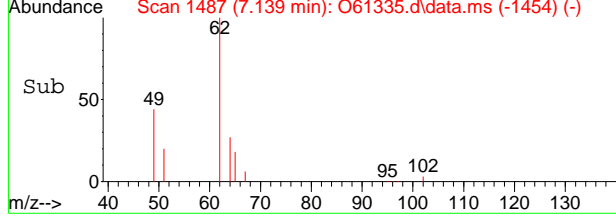
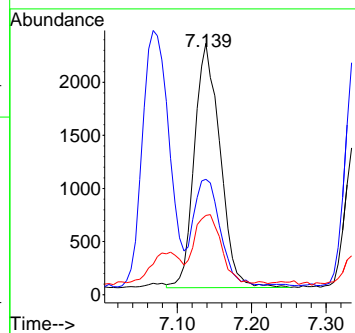
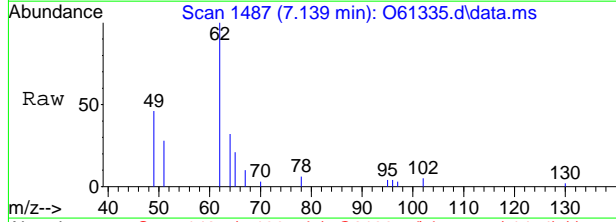
7.1.45
7





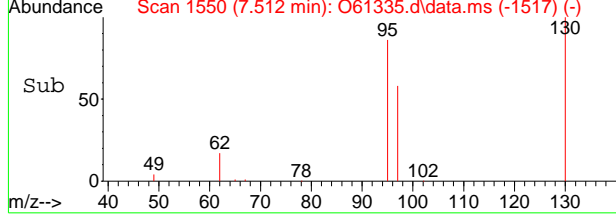
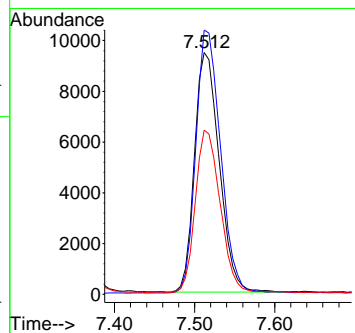
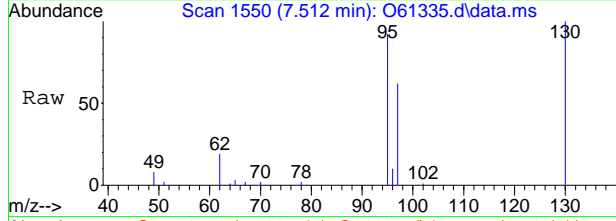
#14
 1,2-Dichloroethane
 Concen: 0.20 ug/L
 RT: 7.139 min Scan# 1487
 Delta R.T. -0.006 min
 Lab File: O61335.d
 Acq: 13 Sep 2020 3:09 pm

Tgt Ion	Ratio	Lower	Upper
62	100		
49	43.4	18.0	78.0
64	27.4	1.5	61.5



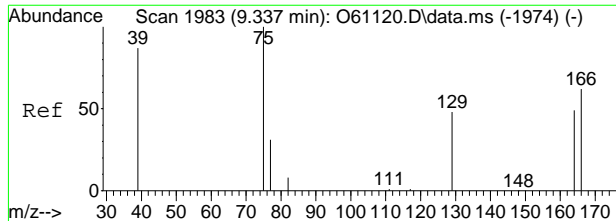
#15
 Trichloroethene
 Concen: 1.19 ug/L
 RT: 7.512 min Scan# 1550
 Delta R.T. -0.006 min
 Lab File: O61335.d
 Acq: 13 Sep 2020 3:09 pm

Tgt Ion	Ratio	Lower	Upper
95	100		
130	109.8	60.4	120.4
97	67.7	34.6	94.6



7.145
7

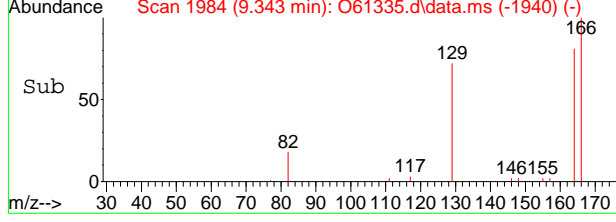
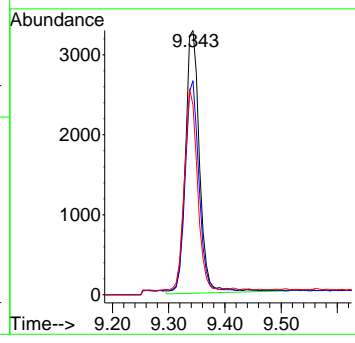
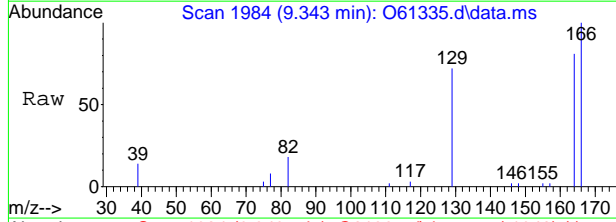




#21
 Tetrachloroethene
 Concen: 0.35 ug/L
 RT: 9.343 min Scan# 1984
 Delta R.T. 0.000 min
 Lab File: O61335.d
 Acq: 13 Sep 2020 3:09 pm

Tgt Ion:166 Resp: 5737

Ion	Ratio	Lower	Upper
166	100		
164	80.6	47.3	107.3
129	71.0	37.5	97.5



7.1.45
7



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\091420\
 Data File : Z62329.D
 Acq On : 14 Sep 2020 4:02 pm
 Operator : JuanG
 Sample : FA78549-33
 Misc : MS47201,VZ2418,,,,,
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 15 18:50:32 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Sun Sep 13 13:38:26 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	

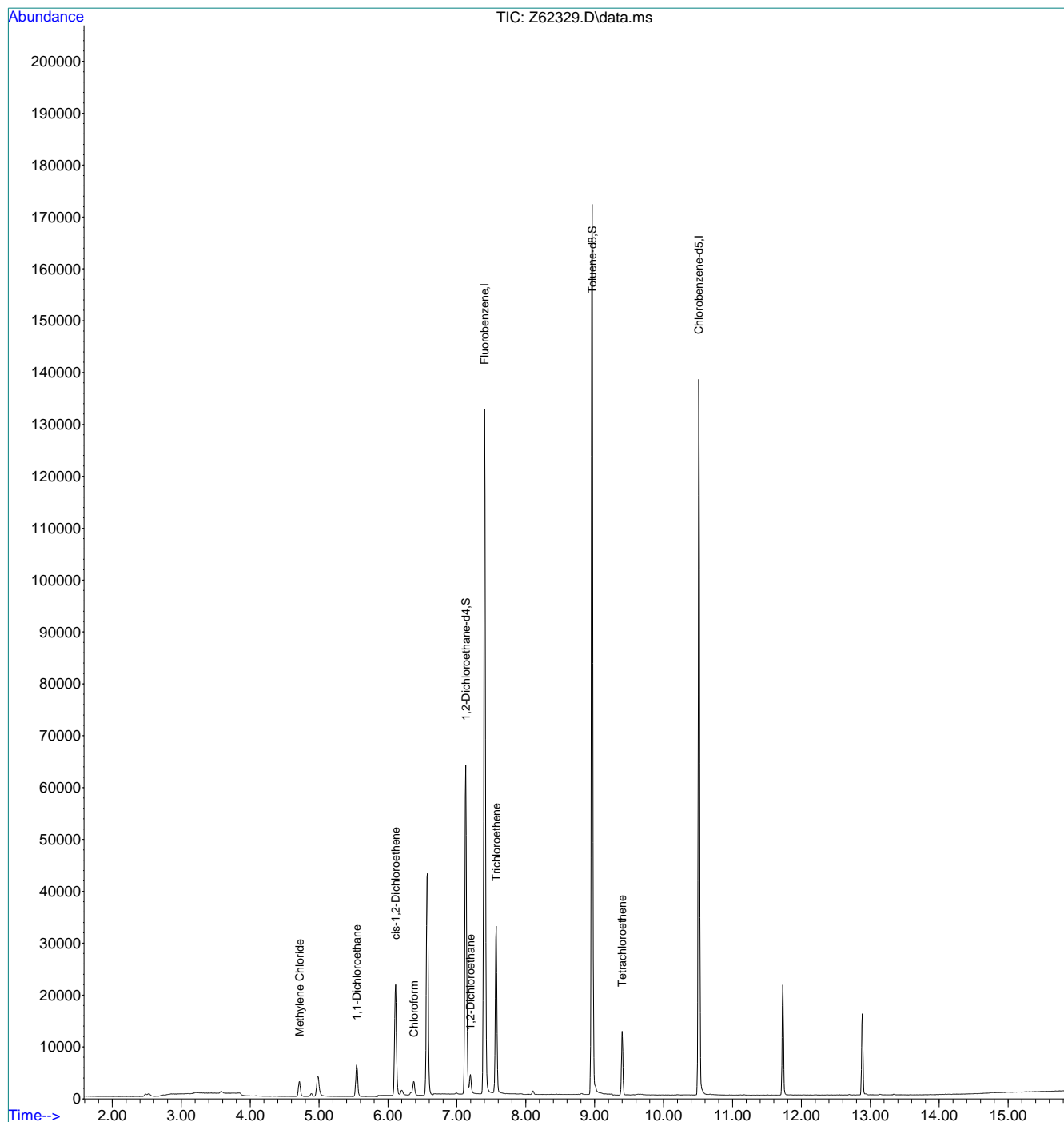
Internal Standards							
1) Fluorobenzene	7.401	96	1527900	5.00	ppb	0.00	
18) Chlorobenzene-d5	10.511	117	1238043	5.00	ppb	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.130	65	540170	5.72	ppb	0.00	
Spiked Amount	5.000	Range	79 - 125	Recovery	=	114.40%	
19) Toluene-d8	8.961	98	1488317	4.95	ppb	0.00	
Spiked Amount	5.000	Range	70 - 130	Recovery	=	99.00%	
Target Compounds							
5) Methylene Chloride	4.717	84	20436	0.13	ppb	#	87
7) 1,1-Dichloroethane	5.546	63	82693	0.43	ppb	#	100
8) cis-1,2-Dichloroethene	6.110	96	130835	1.04	ppb		94
9) Chloroform	6.377	83	24783	0.11	ppb		99
14) 1,2-Dichloroethane	7.198	62	35297	0.22	ppb		99
15) Trichloroethene	7.571	95	175394	1.34	ppb	#	85
21) Tetrachloroethene	9.399	166	52399	0.35	ppb		99

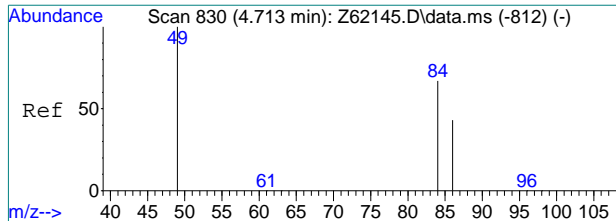
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\091420\
Data File : Z62329.D
Acq On : 14 Sep 2020 4:02 pm
Operator : JuanG
Sample : FA78549-33
Misc : MS47201,VZ2418,,,,,
ALS Vial : 7 Sample Multiplier: 1

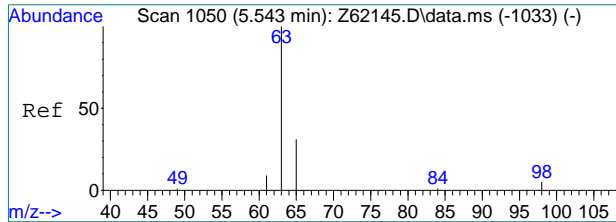
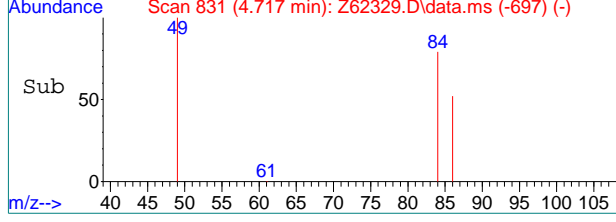
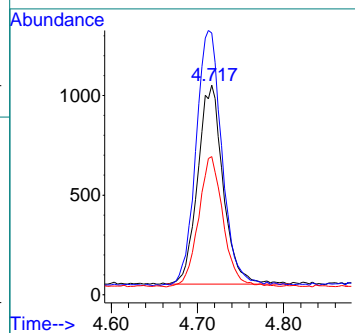
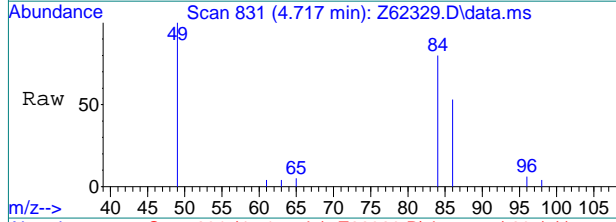
Quant Time: Sep 15 18:50:32 2020
Quant Method : C:\msdchem\1\methods\SIMCL091120.M
Quant Title : WATER-EPA 8260B
QLast Update : Sun Sep 13 13:38:26 2020
Response via : Initial Calibration





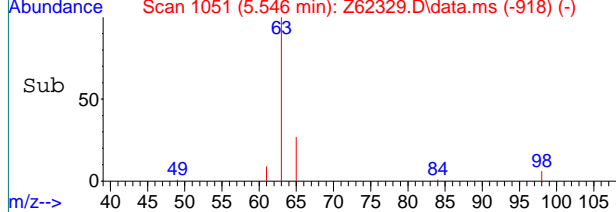
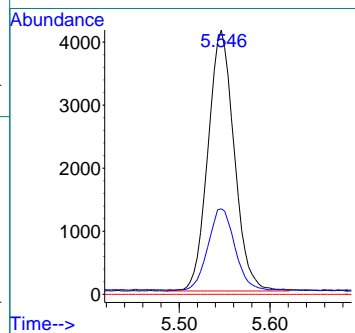
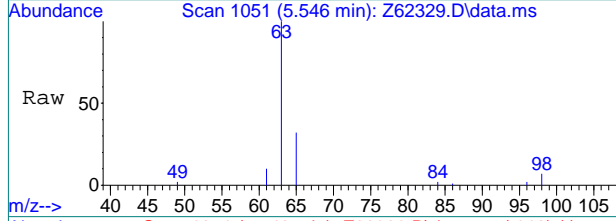
#5
 Methylene Chloride
 Concen: 0.13 ppb
 RT: 4.717 min Scan# 831
 Delta R.T. 0.004 min
 Lab File: Z62329.D
 Acq: 14 Sep 2020 4:02 pm

Tgt Ion	Ratio	Lower	Upper
84	100		
49	126.3	128.7	168.7#
86	65.4	43.9	83.9

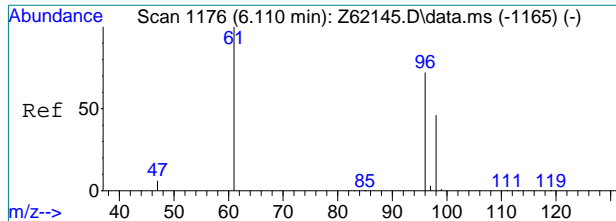


#7
 1,1-Dichloroethane
 Concen: 0.43 ppb
 RT: 5.546 min Scan# 1051
 Delta R.T. 0.000 min
 Lab File: Z62329.D
 Acq: 14 Sep 2020 4:02 pm

Tgt Ion	Ratio	Lower	Upper
63	100		
65	31.5	11.3	51.3
83	0.0	0.0	30.0

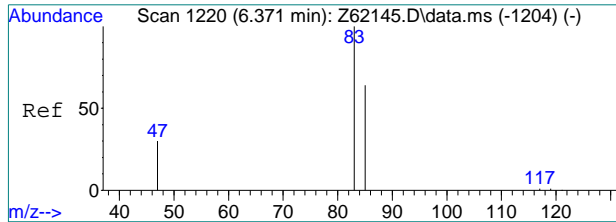
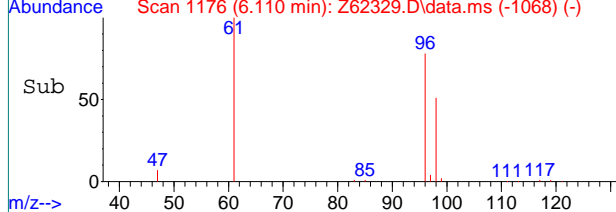
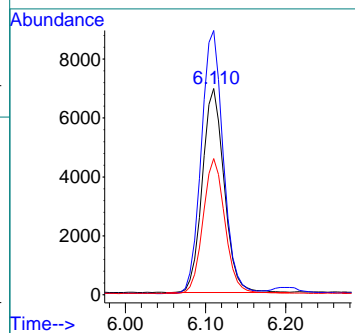
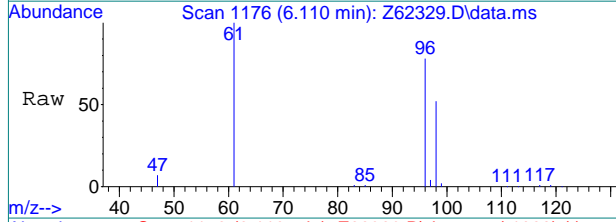


7.1.46
7



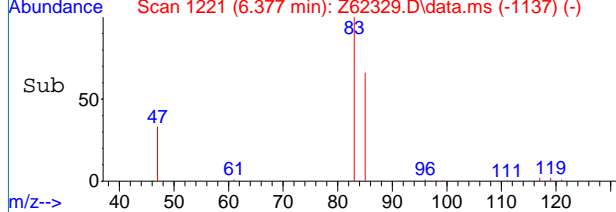
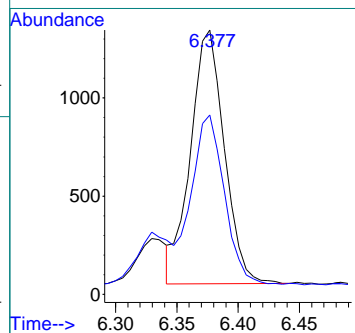
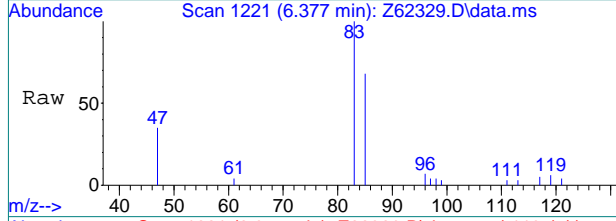
#8
 cis-1,2-Dichloroethene
 Concen: 1.04 ppb
 RT: 6.110 min Scan# 1176
 Delta R.T. 0.000 min
 Lab File: Z62329.D
 Acq: 14 Sep 2020 4:02 pm

Tgt Ion	Resp	Lower	Upper
96	130835		
61	129.0	119.3	159.3
98	66.1	44.5	84.5

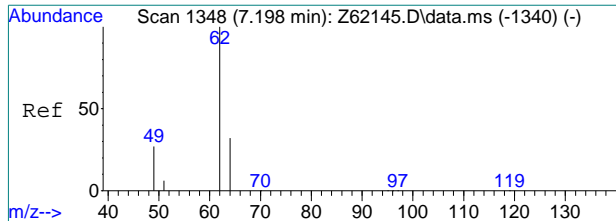


#9
 Chloroform
 Concen: 0.11 ppb
 RT: 6.377 min Scan# 1221
 Delta R.T. -0.000 min
 Lab File: Z62329.D
 Acq: 14 Sep 2020 4:02 pm

Tgt Ion	Resp	Lower	Upper
83	24783		
83	100		
85	65.6	46.1	86.1

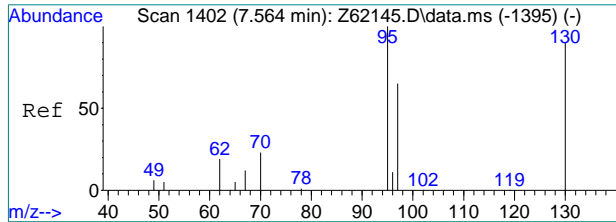
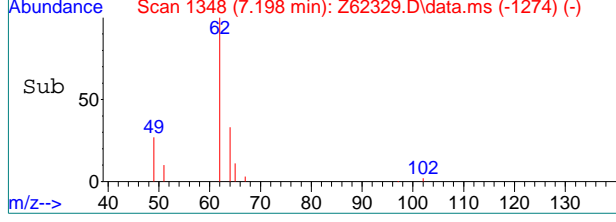
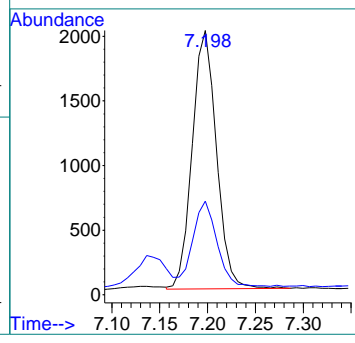
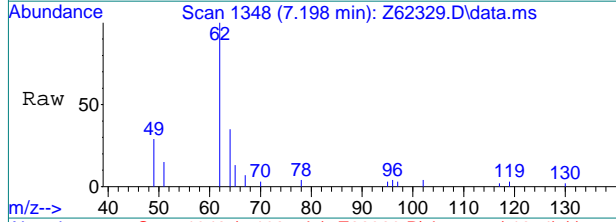


7.1.46
7



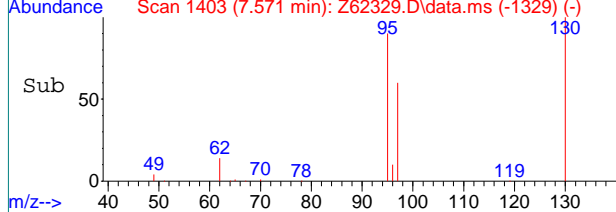
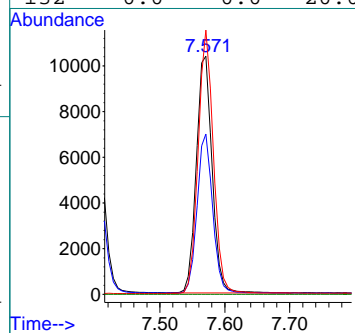
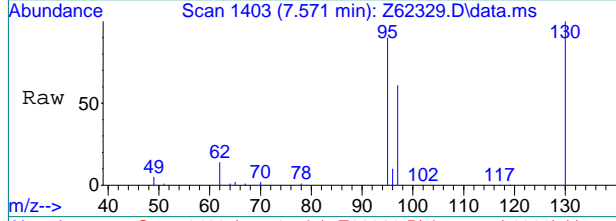
#14
 1,2-Dichloroethane
 Concen: 0.22 ppb
 RT: 7.198 min Scan# 1348
 Delta R.T. -0.000 min
 Lab File: Z62329.D
 Acq: 14 Sep 2020 4:02 pm

Tgt Ion	Resp	Lower	Upper
62	35297	100	
64	32.9	12.3	52.3



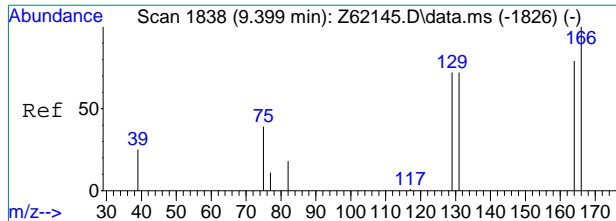
#15
 Trichloroethene
 Concen: 1.34 ppb
 RT: 7.571 min Scan# 1403
 Delta R.T. -0.000 min
 Lab File: Z62329.D
 Acq: 14 Sep 2020 4:02 pm

Tgt Ion	Resp	Lower	Upper
95	175394	100	
97	67.2	44.5	84.5
130	111.3	69.7	109.7#
132	0.0	0.0	20.0



7.1.46
 7

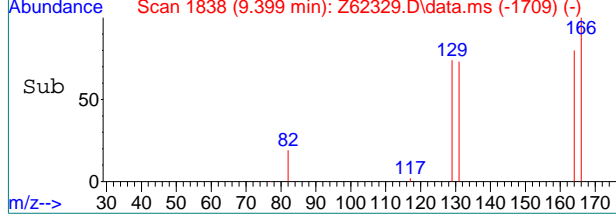
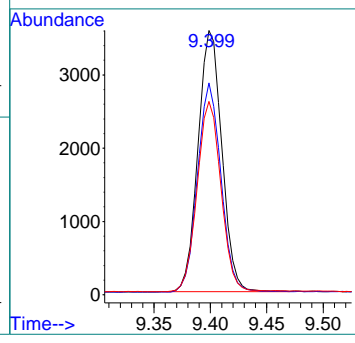
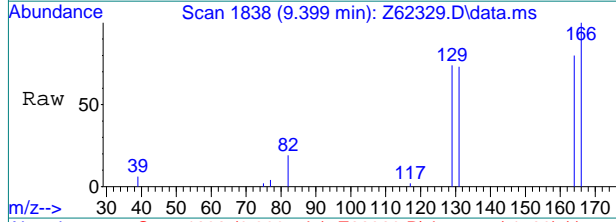




#21
 Tetrachloroethene
 Concen: 0.35 ppb
 RT: 9.399 min Scan# 1838
 Delta R.T. -0.000 min
 Lab File: Z62329.D
 Acq: 14 Sep 2020 4:02 pm

Tgt Ion:166 Resp: 52399

Ion	Ratio	Lower	Upper
166	100		
164	79.9	58.7	98.7
131	72.7	51.6	91.6



7.1.46
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-14-2020\VO2360\
Data File : O61336.d
Acq On : 13 Sep 2020 3:29 pm
Operator : stutip
Sample : fa78549-34
Misc : MS47201,VO2360,,,,,
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 14 08:35:24 2020
Quant Method : C:\msdchem\1\methods\SIMCL091120.M
Quant Title : Standard Methods 6200B
QLast Update : Sun Sep 13 19:20:40 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Fluorobenzene	7.346	96	176052	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.447	117	145910	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.074	65	81769	5.75	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	115.00%	
19) Toluene-d8	8.900	98	149512	4.54	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	90.80%	
Target Compounds						
15) Trichloroethene	7.512	95	13623	0.82	ug/L	Qvalue 92

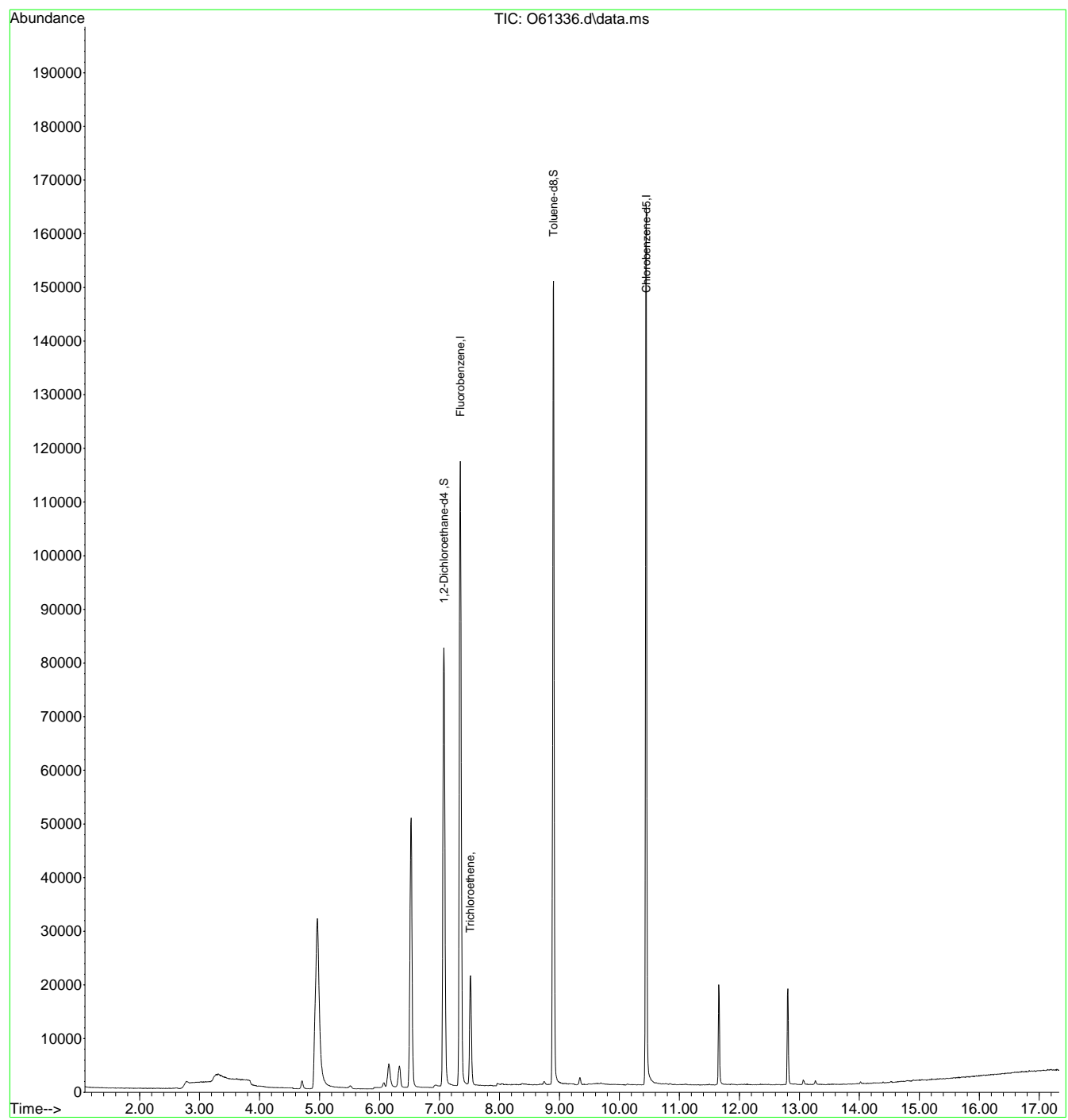
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.1.47
7

Quantitation Report (QT Reviewed)

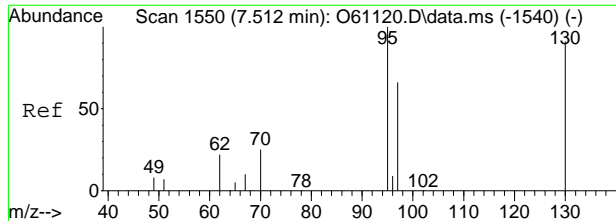
Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-14-2020\VO2360\
Data File : O61336.d
Acq On : 13 Sep 2020 3:29 pm
Operator : stutip
Sample : fa78549-34
Misc : MS47201,VO2360,,,,,
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 14 08:35:24 2020
Quant Method : C:\msdchem\1\methods\SIMCL091120.M
Quant Title : Standard Methods 6200B
QLast Update : Sun Sep 13 19:20:40 2020
Response via : Initial Calibration



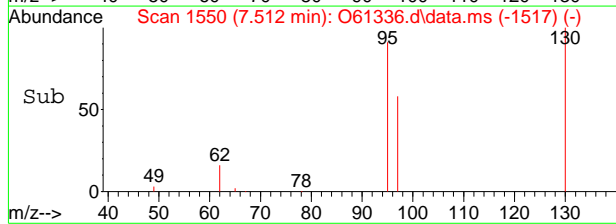
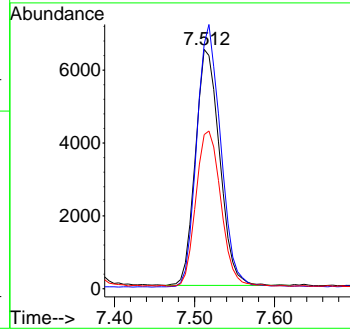
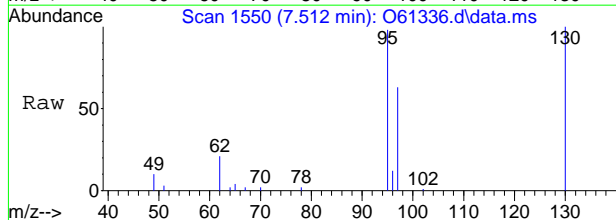
7.1.47
7





#15
 Trichloroethene
 Concen: 0.82 ug/L
 RT: 7.512 min Scan# 1550
 Delta R.T. -0.006 min
 Lab File: O61336.d
 Acq: 13 Sep 2020 3:29 pm

Tgt Ion	Ratio	Lower	Upper
95	100		
130	102.9	60.4	120.4
97	64.2	34.6	94.6



7.1.47
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\091420\
 Data File : Z62330.D
 Acq On : 14 Sep 2020 4:21 pm
 Operator : JuanG
 Sample : FA78549-34
 Misc : MS47201,VZ2418,,,,,
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 15 18:50:34 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Sun Sep 13 13:38:26 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	Qvalue

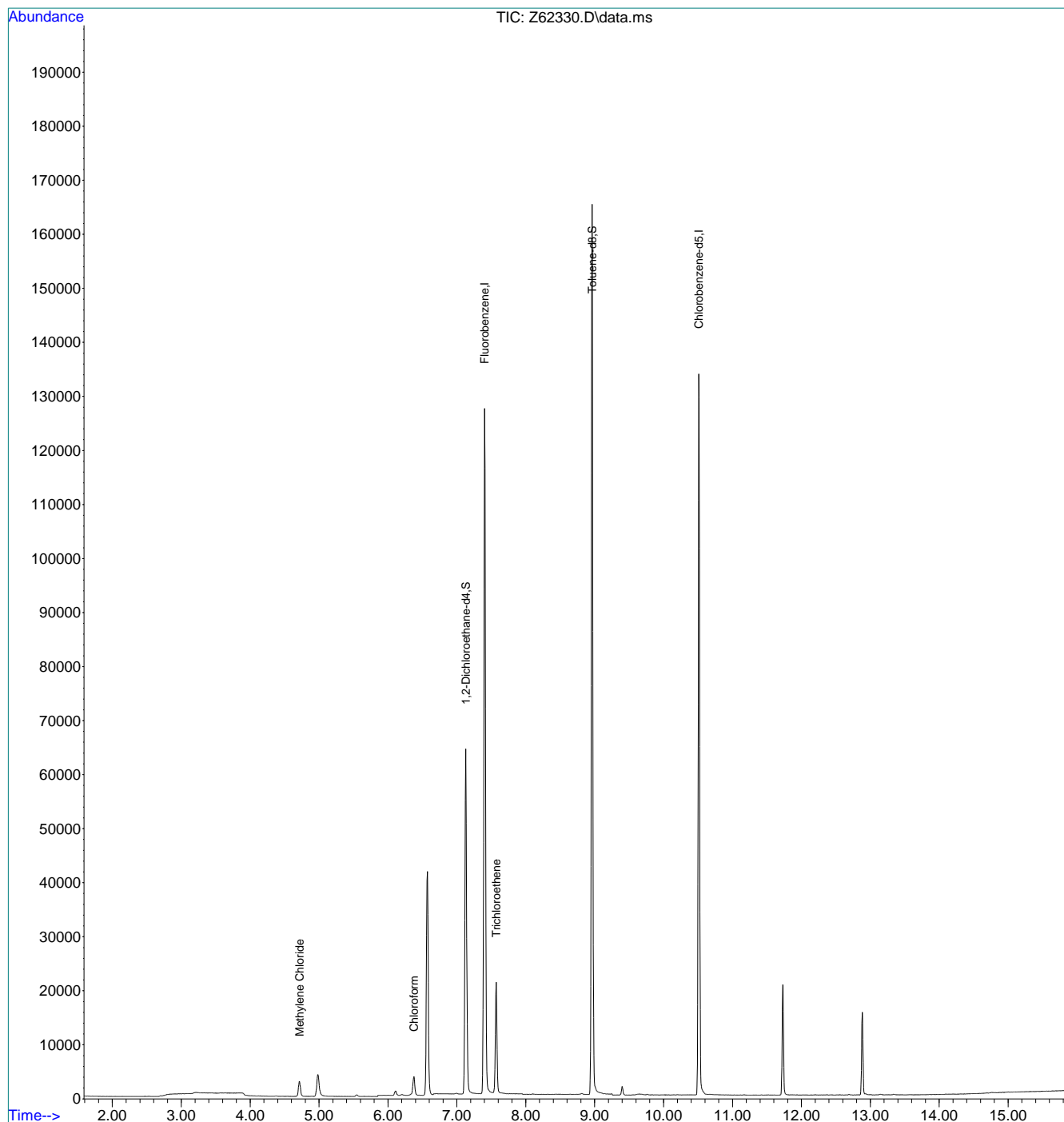
Internal Standards							
1) Fluorobenzene	7.401	96	1485802	5.00	ppb	0.00	
18) Chlorobenzene-d5	10.511	117	1206669	5.00	ppb	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.130	65	526732	5.73	ppb	0.00	
Spiked Amount	5.000	Range	79 - 125	Recovery	=	114.60%	
19) Toluene-d8	8.961	98	1447130	4.94	ppb	0.00	
Spiked Amount	5.000	Range	70 - 130	Recovery	=	98.80%	
Target Compounds							
5) Methylene Chloride	4.717	84	19169	0.13	ppb	90	
9) Chloroform	6.377	83	34426	0.15	ppb	99	
15) Trichloroethene	7.571	95	111411	0.88	ppb	87	

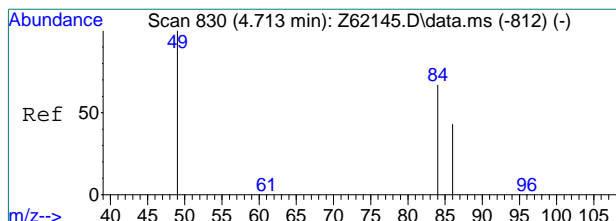
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\091420\
Data File : Z62330.D
Acq On : 14 Sep 2020 4:21 pm
Operator : JuanG
Sample : FA78549-34
Misc : MS47201,VZ2418,,,,,
ALS Vial : 8 Sample Multiplier: 1

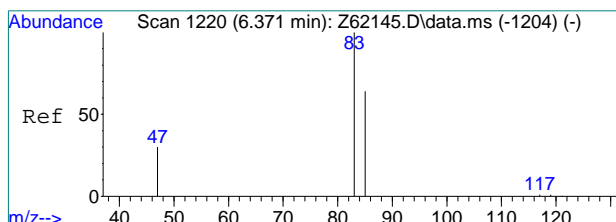
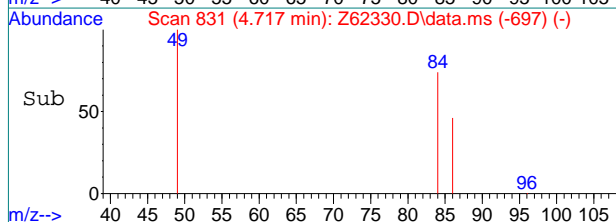
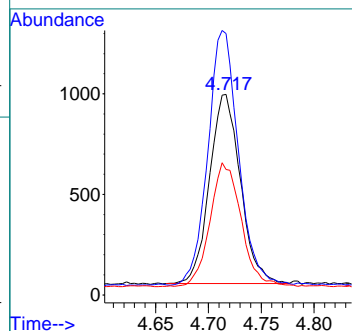
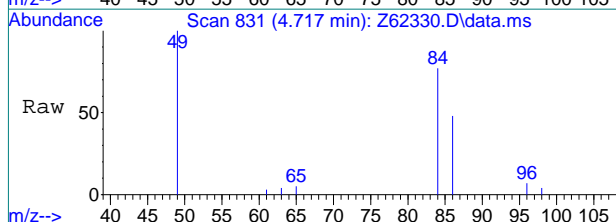
Quant Time: Sep 15 18:50:34 2020
Quant Method : C:\msdchem\1\methods\SIMCL091120.M
Quant Title : WATER-EPA 8260B
QLast Update : Sun Sep 13 13:38:26 2020
Response via : Initial Calibration





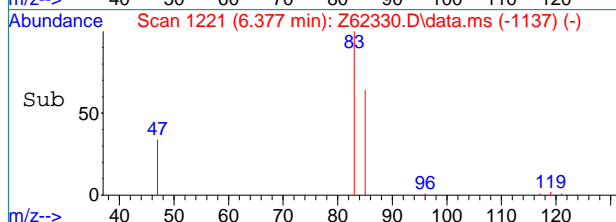
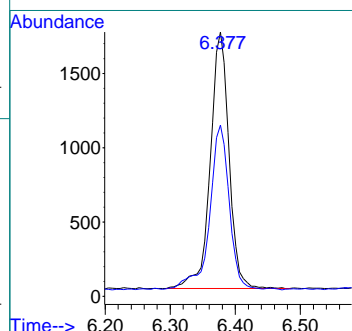
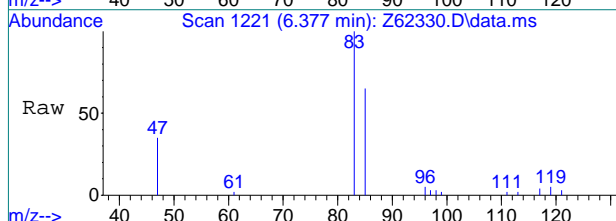
#5
 Methylene Chloride
 Concen: 0.13 ppb
 RT: 4.717 min Scan# 831
 Delta R.T. 0.004 min
 Lab File: Z62330.D
 Acq: 14 Sep 2020 4:21 pm

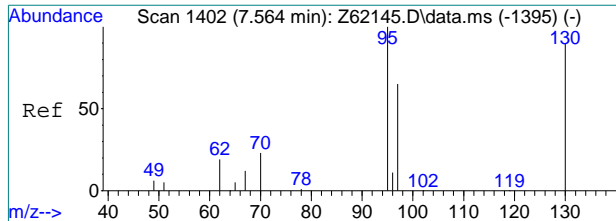
Tgt Ion	Ratio	Lower	Upper
84	100		
49	132.9	128.7	168.7
86	61.7	43.9	83.9



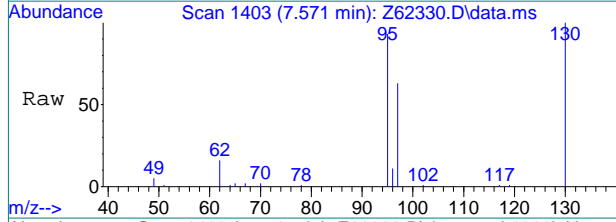
#9
 Chloroform
 Concen: 0.15 ppb
 RT: 6.377 min Scan# 1221
 Delta R.T. -0.000 min
 Lab File: Z62330.D
 Acq: 14 Sep 2020 4:21 pm

Tgt Ion	Ratio	Lower	Upper
83	100		
85	66.7	46.1	86.1



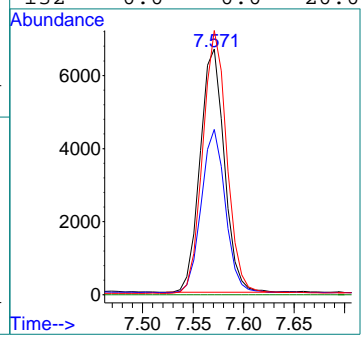
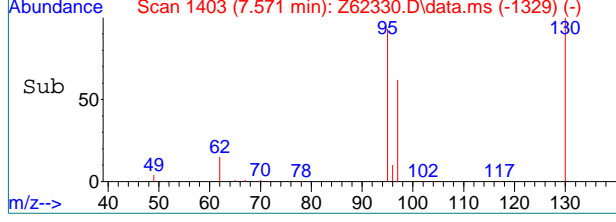


#15
 Trichloroethene
 Concen: 0.88 ppb
 RT: 7.571 min Scan# 1403
 Delta R.T. -0.000 min
 Lab File: Z62330.D
 Acq: 14 Sep 2020 4:21 pm



Tgt Ion: 95 Resp: 111411

Ion	Ratio	Lower	Upper
95	100		
97	67.0	44.5	84.5
130	108.0	69.7	109.7
132	0.0	0.0	20.0



7.148
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-14-2020\VO2360\
 Data File : O61337.d
 Acq On : 13 Sep 2020 3:49 pm
 Operator : stutip
 Sample : fa78549-35
 Misc : MS47201,VO2360,,,,,
 ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 14 08:35:53 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Sun Sep 13 19:20:40 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	

Internal Standards							
1) Fluorobenzene	7.346	96	176231	5.00	ug/L	0.00	
18) Chlorobenzene-d5	10.447	117	148576	5.00	ug/L	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.073	65	82667	5.81	ug/L	0.00	
Spiked Amount	5.000	Range 74 - 125	Recovery	=	116.20%		
19) Toluene-d8	8.896	98	149857	4.47	ug/L	0.00	
Spiked Amount	5.000	Range 88 - 111	Recovery	=	89.40%		
Target Compounds							
							Qvalue
4) 1,1-Dichloroethene	4.088	61	16356	0.67	ug/L		93
7) 1,1-Dichloroethane	5.510	63	78614	2.41	ug/L		100
8) cis-1,2-Dichloroethene	6.066	96	11344	0.70	ug/L		83
9) Chloroform	6.327	83	27381	0.97	ug/L		93
14) 1,2-Dichloroethane	7.139	62	22204	0.84	ug/L		94
15) Trichloroethene	7.512	95	93260	5.63	ug/L		85
21) Tetrachloroethene	9.337	166	39041	2.41	ug/L		95

(#) = qualifier out of range (m) = manual integration (+) = signals summed

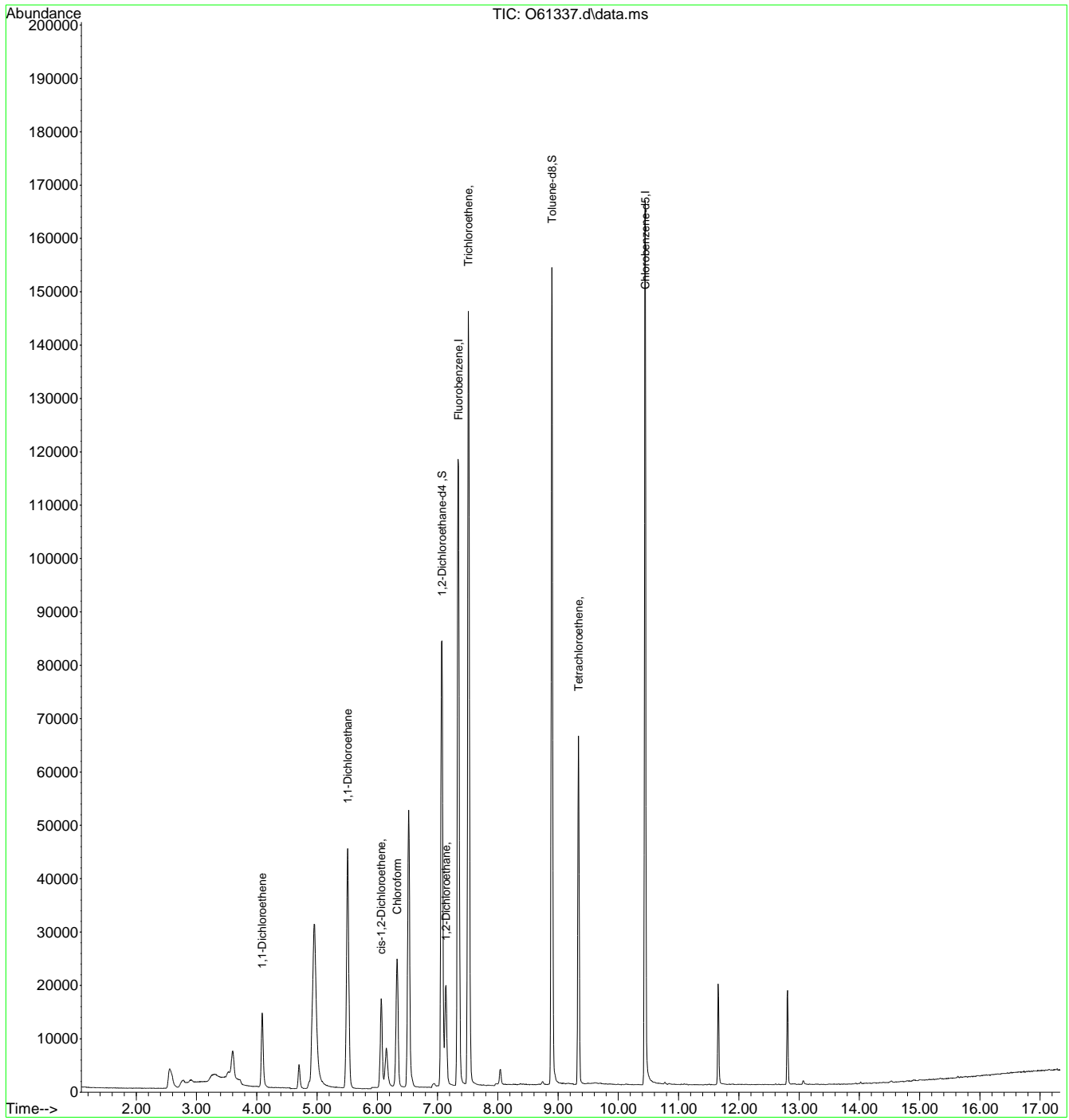
7.1.49
7



Quantitation Report (QT Reviewed)

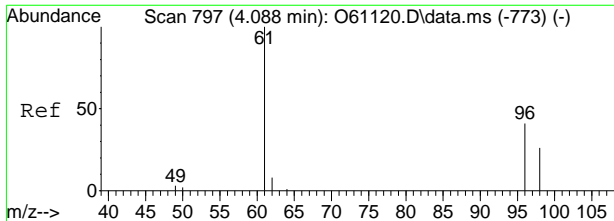
Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-14-2020\VO2360\
Data File : O61337.d
Acq On : 13 Sep 2020 3:49 pm
Operator : stutip
Sample : fa78549-35
Misc : MS47201,VO2360,,,,,
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 14 08:35:53 2020
Quant Method : C:\msdchem\1\methods\SIMCL091120.M
Quant Title : Standard Methods 6200B
QLast Update : Sun Sep 13 19:20:40 2020
Response via : Initial Calibration



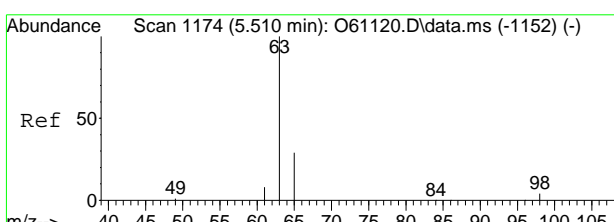
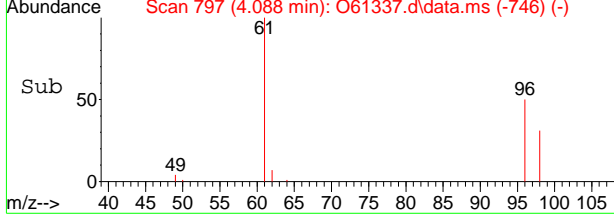
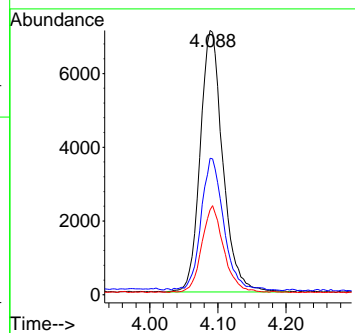
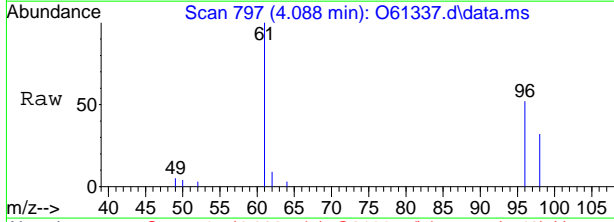
7.1.49
7





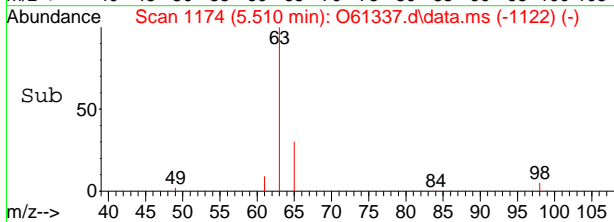
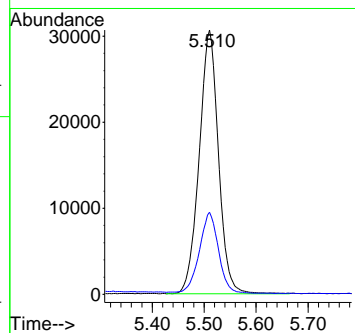
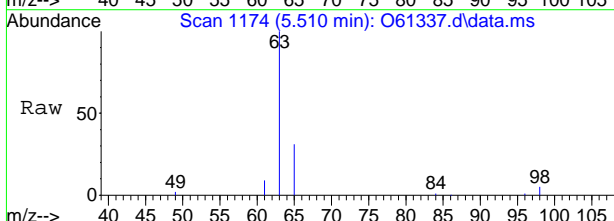
#4
 1,1-Dichloroethene
 Concen: 0.67 ug/L
 RT: 4.088 min Scan# 797
 Delta R.T. -0.008 min
 Lab File: O61337.d
 Acq: 13 Sep 2020 3:49 pm

Tgt Ion	Resp	Lower	Upper
61	16356		
96	50.4	25.4	85.4
98	31.6	5.9	65.9

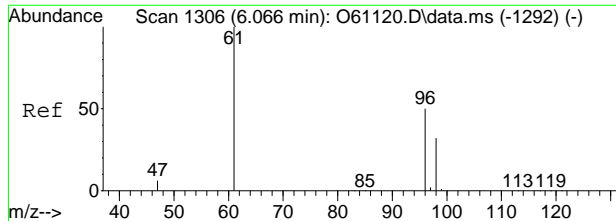


#7
 1,1-Dichloroethane
 Concen: 2.41 ug/L
 RT: 5.510 min Scan# 1174
 Delta R.T. -0.004 min
 Lab File: O61337.d
 Acq: 13 Sep 2020 3:49 pm

Tgt Ion	Resp	Lower	Upper
63	78614		
65	30.7	0.7	60.7



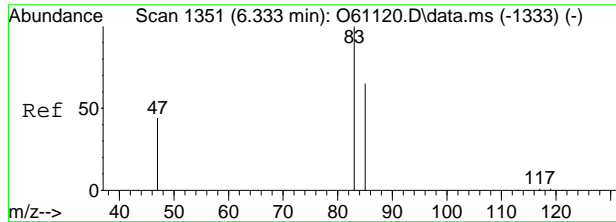
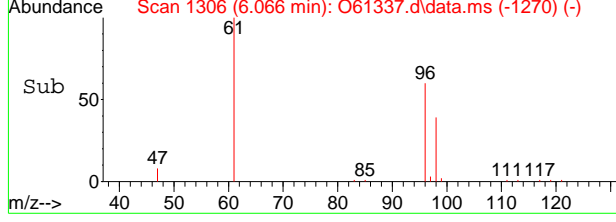
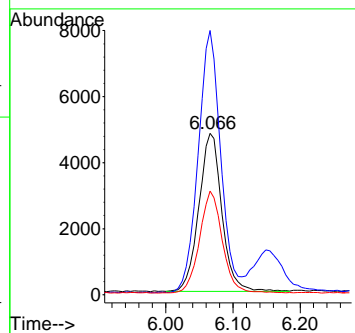
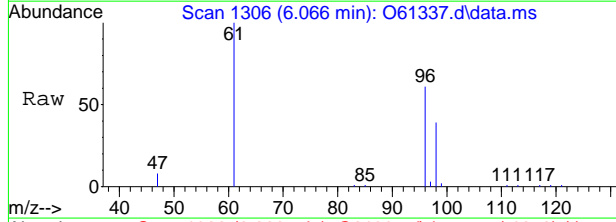
7.1.49
7



#8
 cis-1,2-Dichloroethene
 Concen: 0.70 ug/L
 RT: 6.066 min Scan# 1306
 Delta R.T. -0.006 min
 Lab File: O61337.d
 Acq: 13 Sep 2020 3:49 pm

Tgt Ion: 96 Resp: 11344

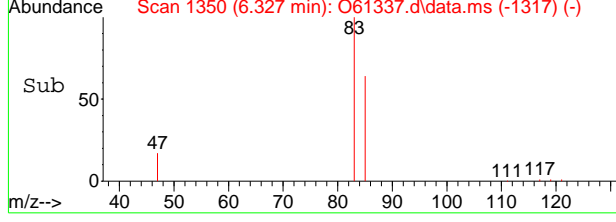
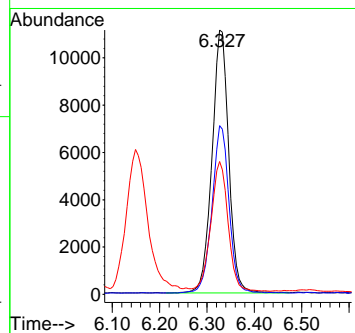
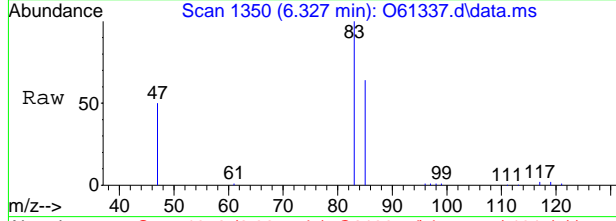
Ion	Ratio	Lower	Upper
96	100		
61	166.1	107.0	167.0
98	64.5	34.1	94.1



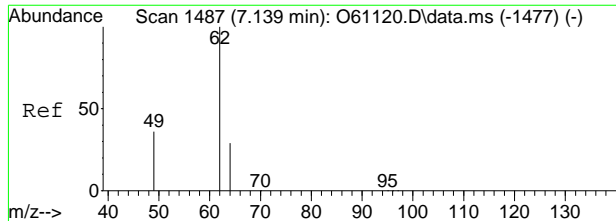
#9
 Chloroform
 Concen: 0.97 ug/L
 RT: 6.327 min Scan# 1350
 Delta R.T. -0.006 min
 Lab File: O61337.d
 Acq: 13 Sep 2020 3:49 pm

Tgt Ion: 83 Resp: 27381

Ion	Ratio	Lower	Upper
83	100		
85	63.6	33.0	93.0
47	49.1	8.1	68.1

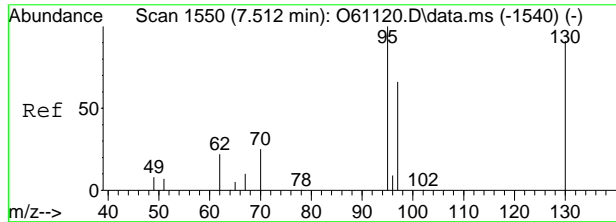
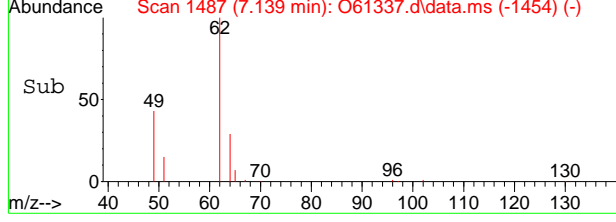
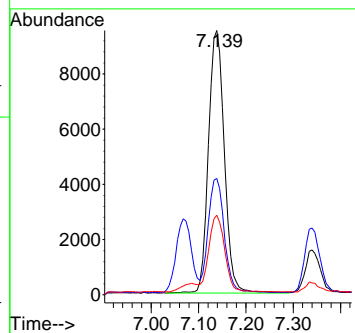
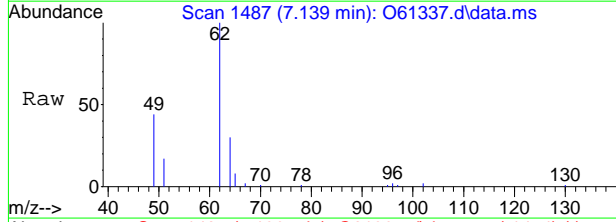


7.1.49
7



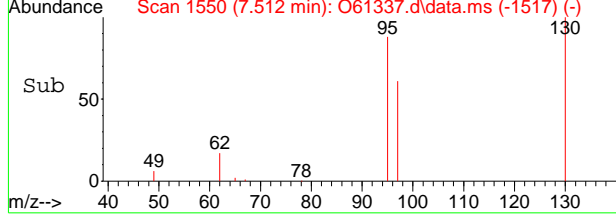
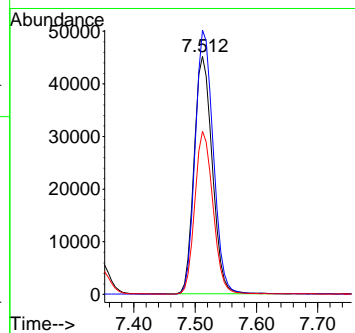
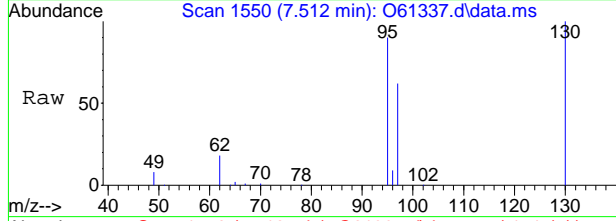
#14
 1,2-Dichloroethane
 Concen: 0.84 ug/L
 RT: 7.139 min Scan# 1487
 Delta R.T. -0.006 min
 Lab File: O61337.d
 Acq: 13 Sep 2020 3:49 pm

Tgt Ion	Ratio	Lower	Upper
62	100		
49	43.2	18.0	78.0
64	29.2	1.5	61.5



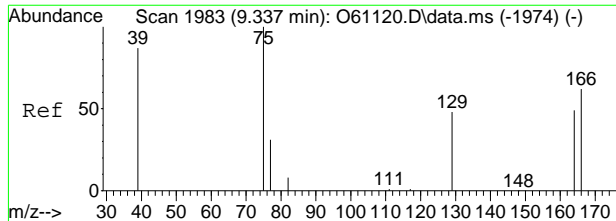
#15
 Trichloroethene
 Concen: 5.63 ug/L
 RT: 7.512 min Scan# 1550
 Delta R.T. -0.006 min
 Lab File: O61337.d
 Acq: 13 Sep 2020 3:49 pm

Tgt Ion	Ratio	Lower	Upper
95	100		
130	111.2	60.4	120.4
97	68.5	34.6	94.6



7.149
7

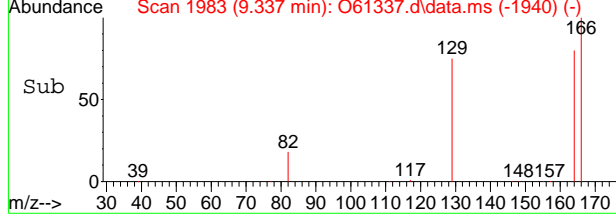
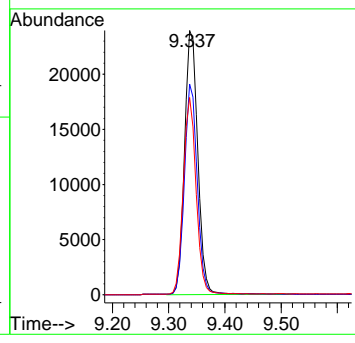
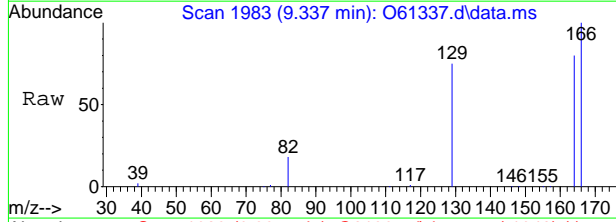




#21
 Tetrachloroethene
 Concen: 2.41 ug/L
 RT: 9.337 min Scan# 1983
 Delta R.T. -0.006 min
 Lab File: O61337.d
 Acq: 13 Sep 2020 3:49 pm

Tgt Ion:166 Resp: 39041

Ion	Ratio	Lower	Upper
166	100		
164	79.6	47.3	107.3
129	74.5	37.5	97.5



7.1.49
7



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\091420\
 Data File : Z62331.D
 Acq On : 14 Sep 2020 4:41 pm
 Operator : JuanG
 Sample : FA78549-35
 Misc : MS47201,VZ2418,,,,,
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 15 18:50:36 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Sun Sep 13 13:38:26 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	

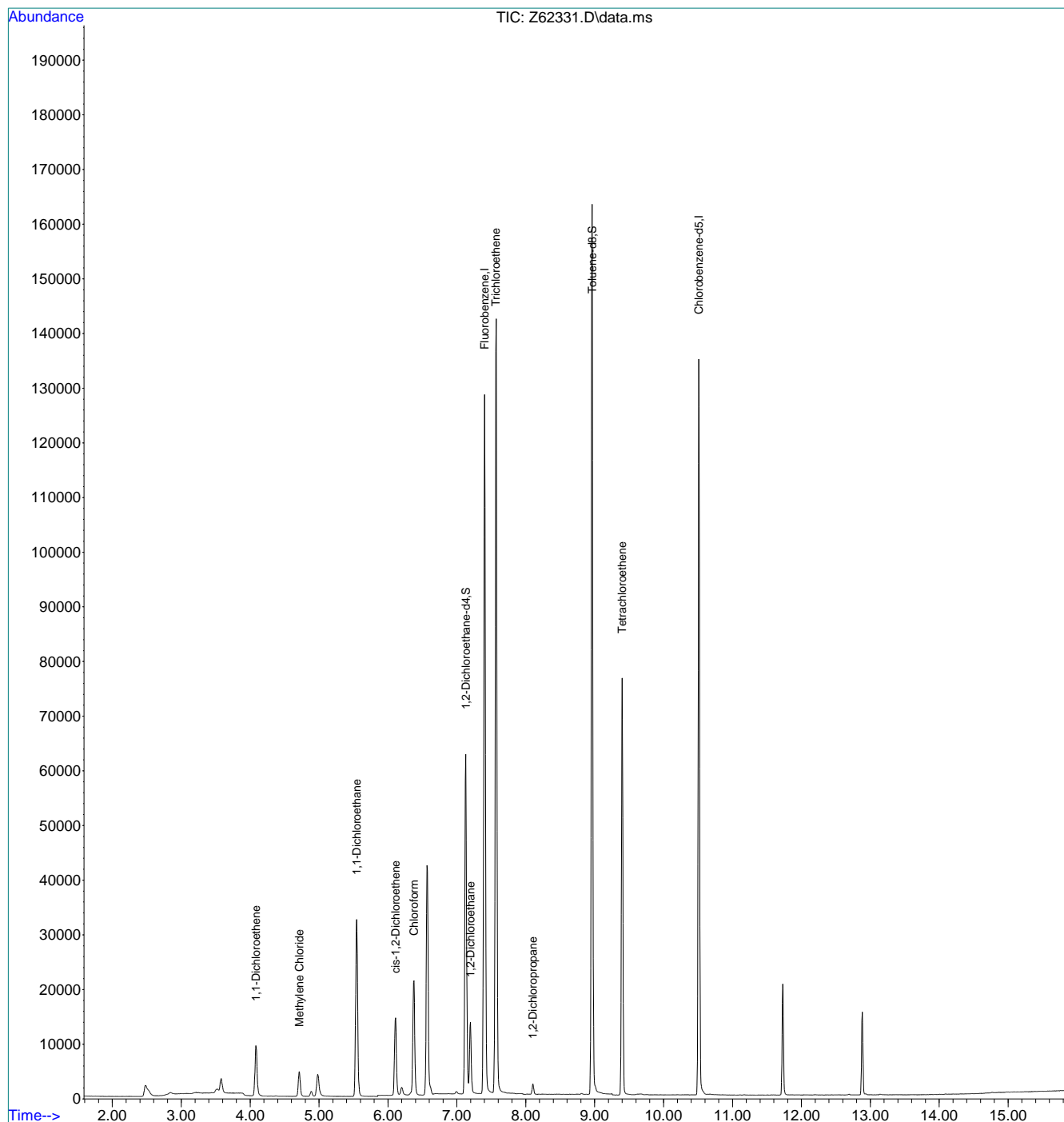
Internal Standards							
1) Fluorobenzene	7.401	96	1473867	5.00	ppb	0.00	
18) Chlorobenzene-d5	10.511	117	1201502	5.00	ppb	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.130	65	521675	5.72	ppb	0.00	
Spiked Amount	5.000	Range	79 - 125	Recovery	=	114.40%	
19) Toluene-d8	8.961	98	1434752	4.92	ppb	0.00	
Spiked Amount	5.000	Range	70 - 130	Recovery	=	98.40%	
Target Compounds							
							Qvalue
4) 1,1-Dichloroethene	4.083	96	54734	0.61	ppb		91
5) Methylene Chloride	4.713	84	31523	0.22	ppb		90
7) 1,1-Dichloroethane	5.546	63	444203	2.41	ppb	#	99
8) cis-1,2-Dichloroethene	6.110	96	88553	0.73	ppb		94
9) Chloroform	6.377	83	208246	0.94	ppb		99
14) 1,2-Dichloroethane	7.198	62	131155	0.85	ppb		99
15) Trichloroethene	7.564	95	780233	6.20	ppb		96
16) 1,2-Dichloropropane	8.101	63	10347	0.10	ppb		95
21) Tetrachloroethene	9.399	166	328461	2.34	ppb		99

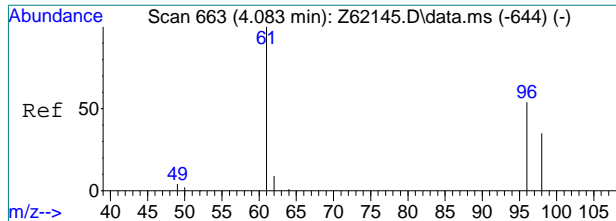
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\091420\
Data File : Z62331.D
Acq On : 14 Sep 2020 4:41 pm
Operator : JuanG
Sample : FA78549-35
Misc : MS47201,VZ2418,,,,,
ALS Vial : 9 Sample Multiplier: 1

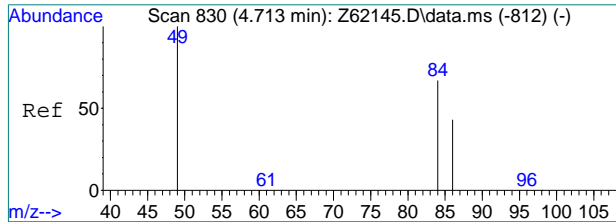
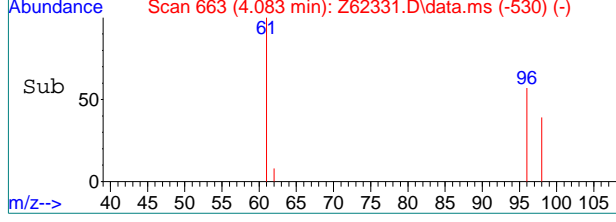
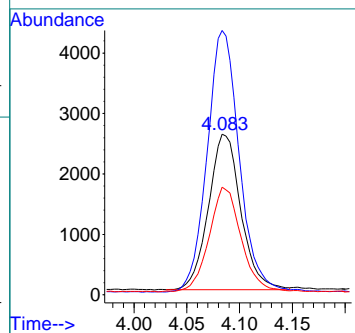
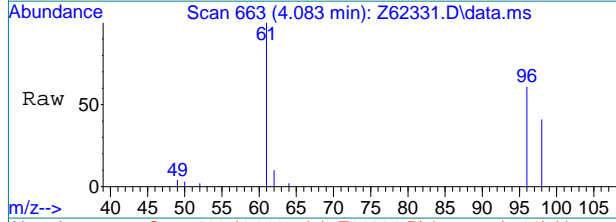
Quant Time: Sep 15 18:50:36 2020
Quant Method : C:\msdchem\1\methods\SIMCL091120.M
Quant Title : WATER-EPA 8260B
QLast Update : Sun Sep 13 13:38:26 2020
Response via : Initial Calibration





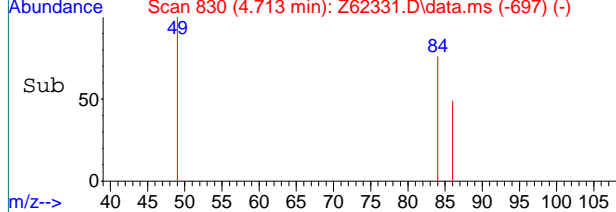
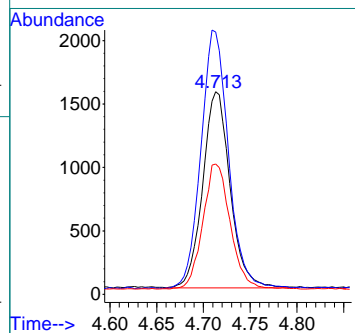
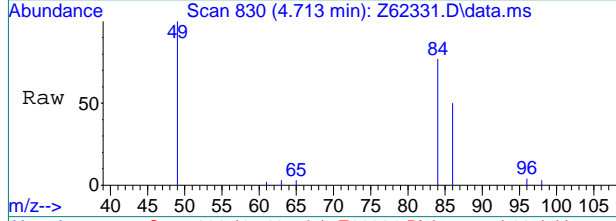
#4
 1,1-Dichloroethene
 Concen: 0.61 ppb
 RT: 4.083 min Scan# 663
 Delta R.T. 0.000 min
 Lab File: Z62331.D
 Acq: 14 Sep 2020 4:41 pm

Tgt Ion	Resp	Lower	Upper
96	54734		
61	168.4	164.8	204.8
98	66.9	45.1	85.1

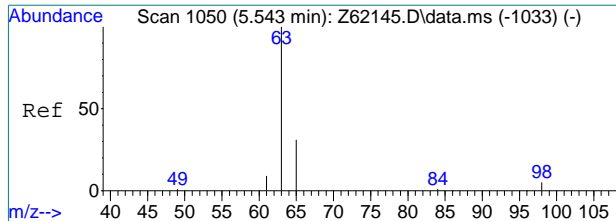


#5
 Methylene Chloride
 Concen: 0.22 ppb
 RT: 4.713 min Scan# 830
 Delta R.T. 0.000 min
 Lab File: Z62331.D
 Acq: 14 Sep 2020 4:41 pm

Tgt Ion	Resp	Lower	Upper
84	31523		
49	130.5	128.7	168.7
86	63.5	43.9	83.9

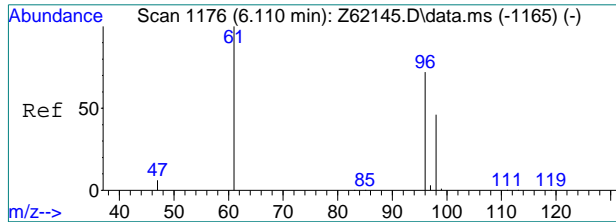
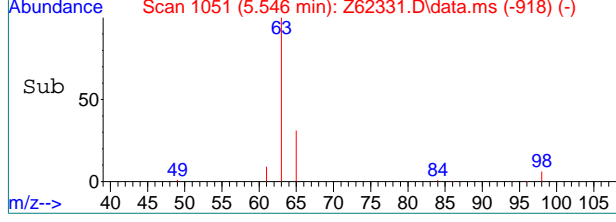
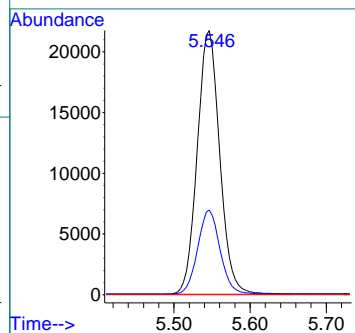
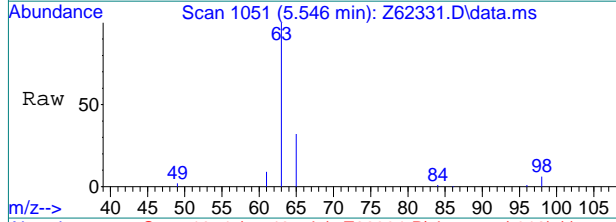


7.1.50
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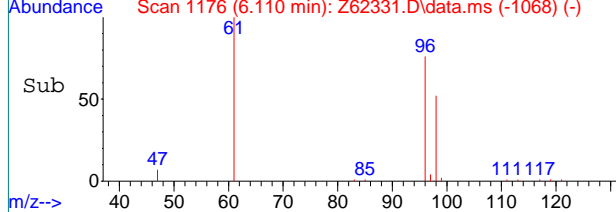
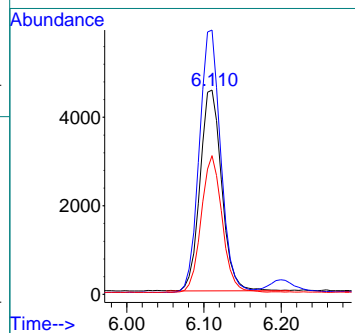
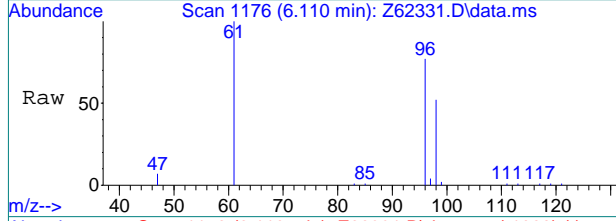
#7
 1,1-Dichloroethane
 Concen: 2.41 ppb
 RT: 5.546 min Scan# 1051
 Delta R.T. 0.000 min
 Lab File: Z62331.D
 Acq: 14 Sep 2020 4:41 pm

Tgt Ion	Resp	Lower	Upper
63	444203		
65	31.7	11.3	51.3
83	0.0	0.0	30.0

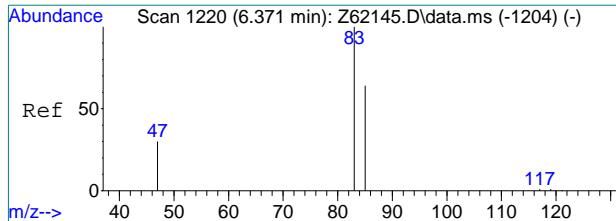


#8
 cis-1,2-Dichloroethene
 Concen: 0.73 ppb
 RT: 6.110 min Scan# 1176
 Delta R.T. 0.000 min
 Lab File: Z62331.D
 Acq: 14 Sep 2020 4:41 pm

Tgt Ion	Resp	Lower	Upper
96	88553		
61	130.7	119.3	159.3
98	67.9	44.5	84.5

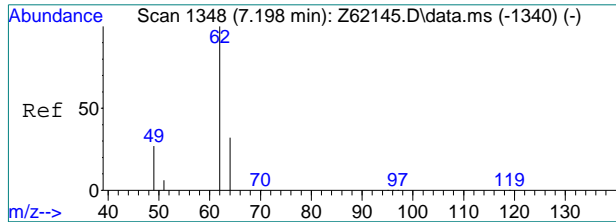
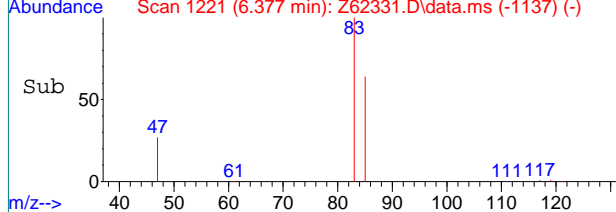
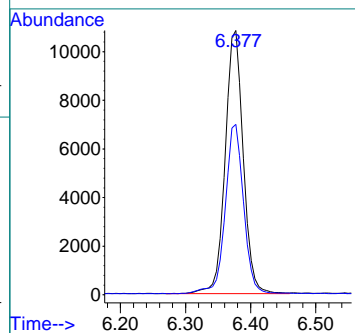
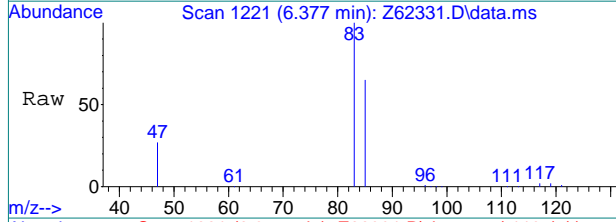


7.1.50
7



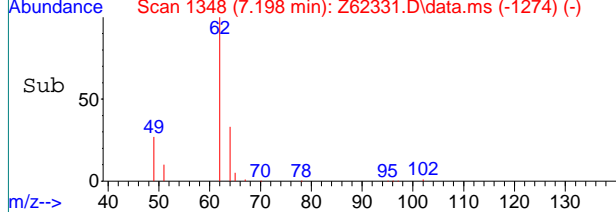
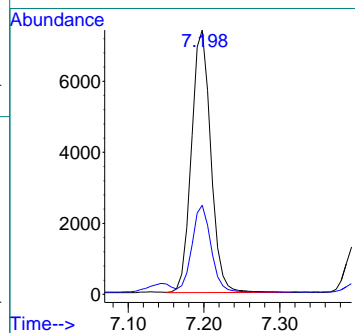
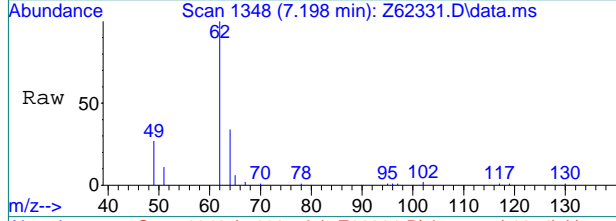
#9
 Chloroform
 Concen: 0.94 ppb
 RT: 6.377 min Scan# 1221
 Delta R.T. 0.000 min
 Lab File: Z62331.D
 Acq: 14 Sep 2020 4:41 pm

Tgt Ion	Resp	Lower	Upper
83	208246		
85	65.1	46.1	86.1

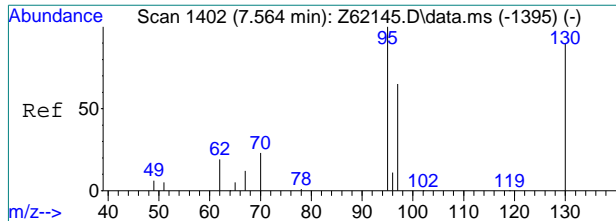


#14
 1,2-Dichloroethane
 Concen: 0.85 ppb
 RT: 7.198 min Scan# 1348
 Delta R.T. -0.000 min
 Lab File: Z62331.D
 Acq: 14 Sep 2020 4:41 pm

Tgt Ion	Resp	Lower	Upper
62	131155		
64	32.6	12.3	52.3



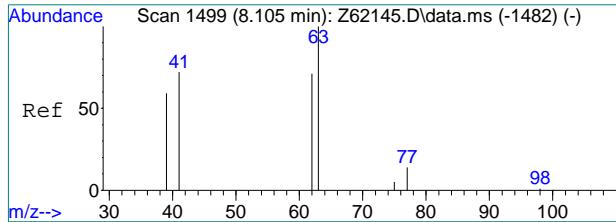
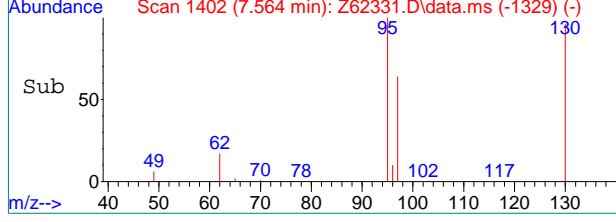
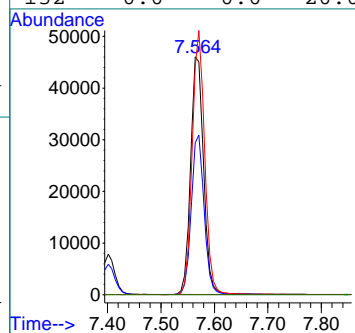
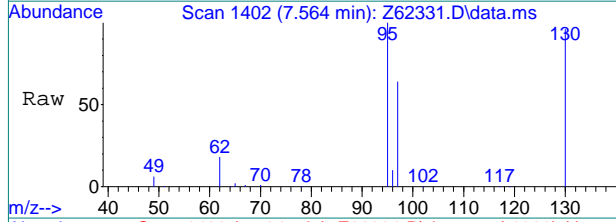
7.1.50
7



#15
 Trichloroethene
 Concen: 6.20 ppb
 RT: 7.564 min Scan# 1402
 Delta R.T. -0.007 min
 Lab File: Z62331.D
 Acq: 14 Sep 2020 4:41 pm

Tgt Ion: 95 Resp: 780233

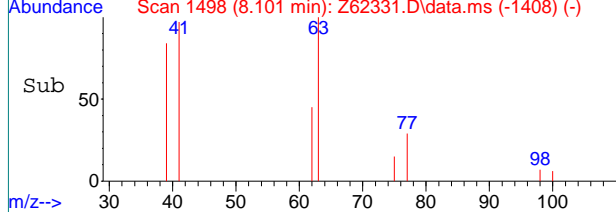
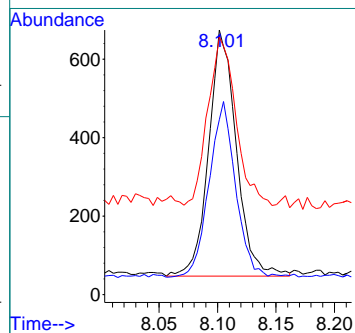
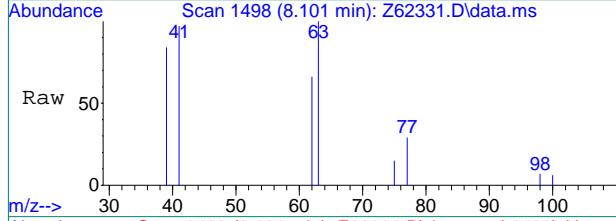
Ion	Ratio	Lower	Upper
95	100		
97	63.8	44.5	84.5
130	95.7	69.7	109.7
132	0.0	0.0	20.0



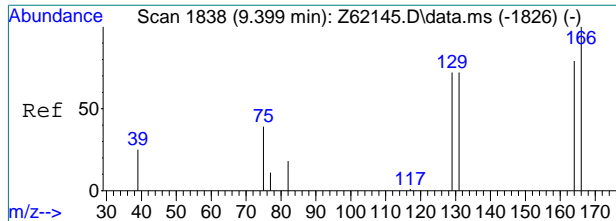
#16
 1,2-Dichloropropane
 Concen: 0.10 ppb
 RT: 8.101 min Scan# 1498
 Delta R.T. -0.004 min
 Lab File: Z62331.D
 Acq: 14 Sep 2020 4:41 pm

Tgt Ion: 63 Resp: 10347

Ion	Ratio	Lower	Upper
63	100		
62	67.7	51.6	91.6
41	68.9	43.7	103.7

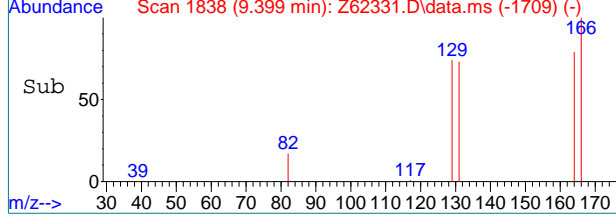
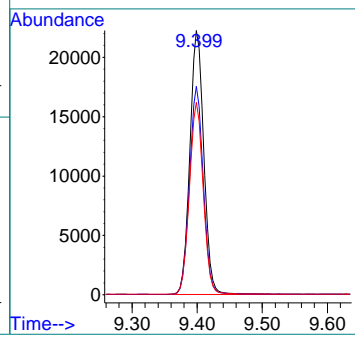
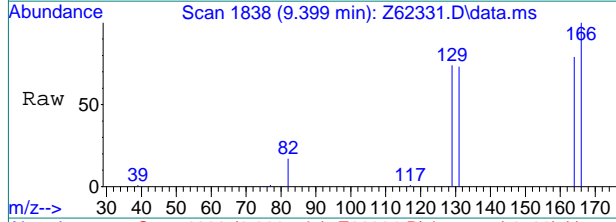


7.1.50
7



#21
 Tetrachloroethene
 Concen: 2.34 ppb
 RT: 9.399 min Scan# 1838
 Delta R.T. -0.000 min
 Lab File: Z62331.D
 Acq: 14 Sep 2020 4:41 pm

Tgt Ion	Ratio	Lower	Upper
166	100		
164	78.8	58.7	98.7
131	72.8	51.6	91.6



7.1.50
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-14-2020\VO2360\
Data File : O61338.d
Acq On : 13 Sep 2020 4:09 pm
Operator : stutip
Sample : fa78549-36
Misc : MS47201,VO2360,,,,,
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 14 08:36:17 2020
Quant Method : C:\msdchem\1\methods\SIMCL091120.M
Quant Title : Standard Methods 6200B
QLast Update : Sun Sep 13 19:20:40 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	

Internal Standards							
1) Fluorobenzene	7.346	96	170866	5.00	ug/L	0.00	
18) Chlorobenzene-d5	10.447	117	143561	5.00	ug/L	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.073	65	80217	5.81	ug/L	0.00	
Spiked Amount	5.000	Range 74 - 125	Recovery	=	116.20%		
19) Toluene-d8	8.900	98	145588	4.50	ug/L	0.00	
Spiked Amount	5.000	Range 88 - 111	Recovery	=	90.00%		
Target Compounds							
							Qvalue
4) 1,1-Dichloroethene	4.096	61	15378	0.65	ug/L		91
5) Methylene Chloride	4.703	49	10603	0.29	ug/L		92
7) 1,1-Dichloroethane	5.514	63	198504	6.27	ug/L		99
8) cis-1,2-Dichloroethene	6.072	96	9068	0.58	ug/L		83
9) Chloroform	6.333	83	21418	0.79	ug/L		91
15) Trichloroethene	7.512	95	8597	0.54	ug/L		89
21) Tetrachloroethene	9.343	166	7907	0.51	ug/L		98

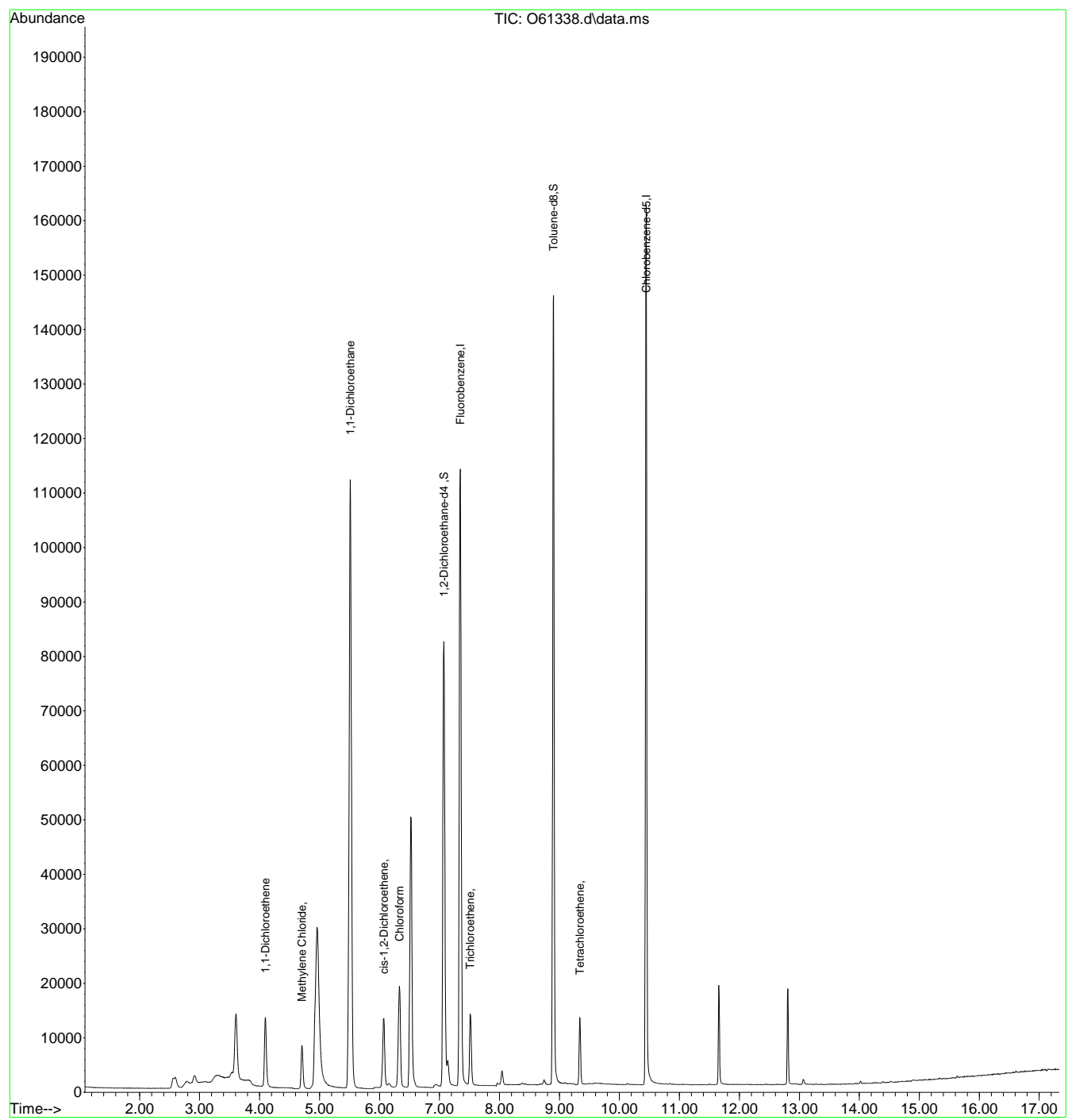
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.1.51
7

Quantitation Report (QT Reviewed)

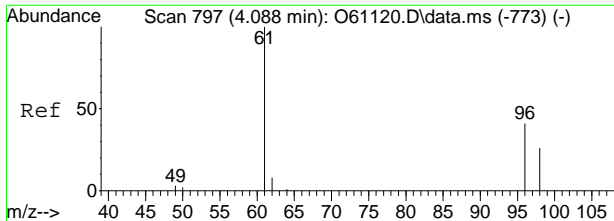
Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-14-2020\VO2360\
Data File : O61338.d
Acq On : 13 Sep 2020 4:09 pm
Operator : stutip
Sample : fa78549-36
Misc : MS47201,VO2360,,,,,
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 14 08:36:17 2020
Quant Method : C:\msdchem\1\methods\SIMCL091120.M
Quant Title : Standard Methods 6200B
QLast Update : Sun Sep 13 19:20:40 2020
Response via : Initial Calibration



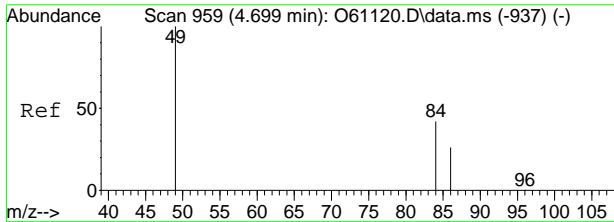
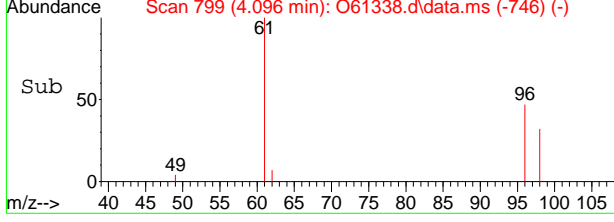
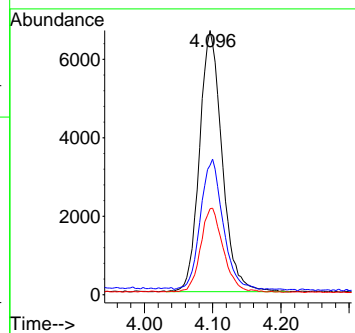
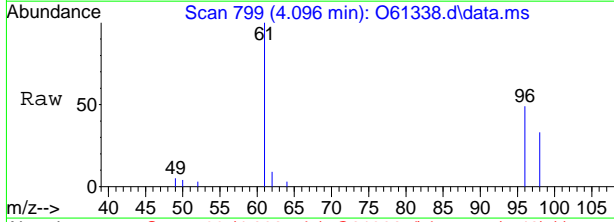
7.1.51
7





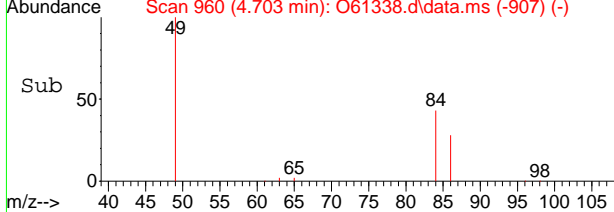
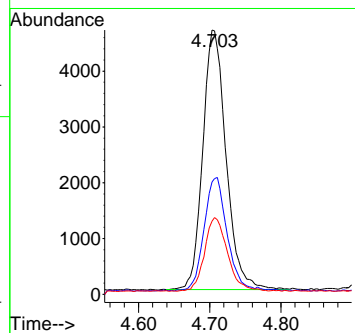
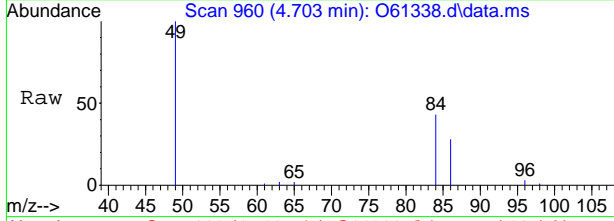
#4
 1,1-Dichloroethene
 Concen: 0.65 ug/L
 RT: 4.096 min Scan# 799
 Delta R.T. 0.000 min
 Lab File: O61338.d
 Acq: 13 Sep 2020 4:09 pm

Tgt Ion	Resp	Lower	Upper
61	15378		
96	47.5	25.4	85.4
98	32.0	5.9	65.9

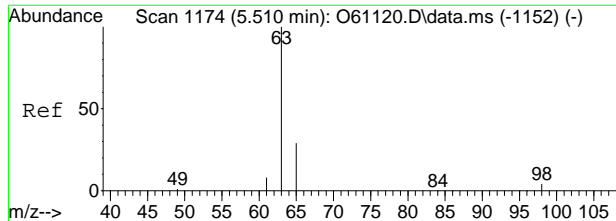


#5
 Methylene Chloride
 Concen: 0.29 ug/L
 RT: 4.703 min Scan# 960
 Delta R.T. 0.000 min
 Lab File: O61338.d
 Acq: 13 Sep 2020 4:09 pm

Tgt Ion	Resp	Lower	Upper
49	10603		
84	41.8	17.9	77.9
86	27.0	0.0	59.8



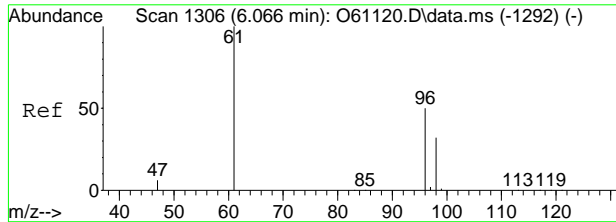
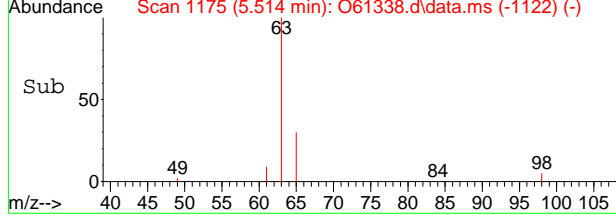
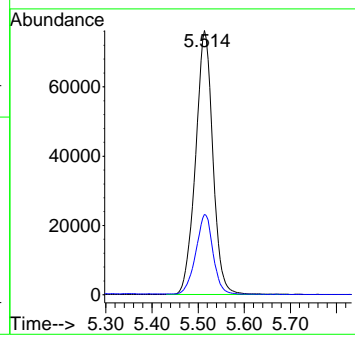
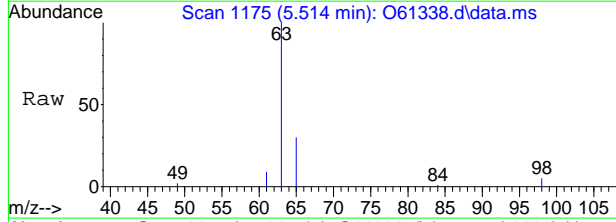
7.1.51
7



#7
 1,1-Dichloroethane
 Concen: 6.27 ug/L
 RT: 5.514 min Scan# 1175
 Delta R.T. -0.000 min
 Lab File: O61338.d
 Acq: 13 Sep 2020 4:09 pm

Tgt Ion: 63 Resp: 198504

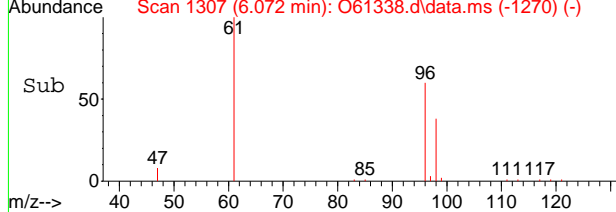
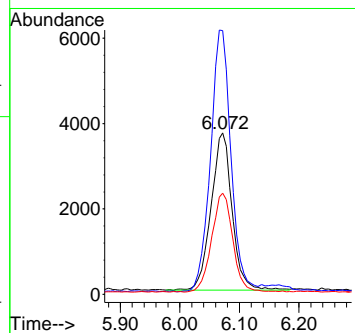
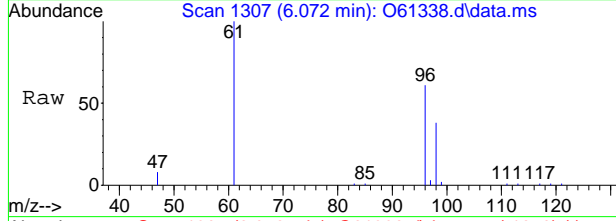
Ion	Ratio	Lower	Upper
63	100		
65	30.3	0.7	60.7



#8
 cis-1,2-Dichloroethene
 Concen: 0.58 ug/L
 RT: 6.072 min Scan# 1307
 Delta R.T. -0.000 min
 Lab File: O61338.d
 Acq: 13 Sep 2020 4:09 pm

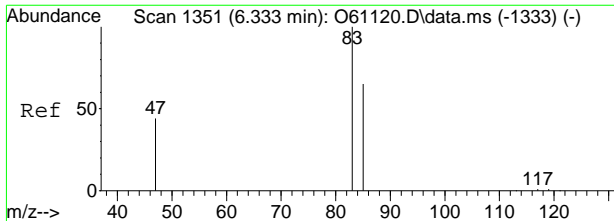
Tgt Ion: 96 Resp: 9068

Ion	Ratio	Lower	Upper
96	100		
61	165.7	107.0	167.0
98	62.8	34.1	94.1



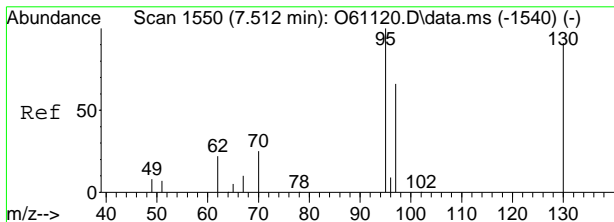
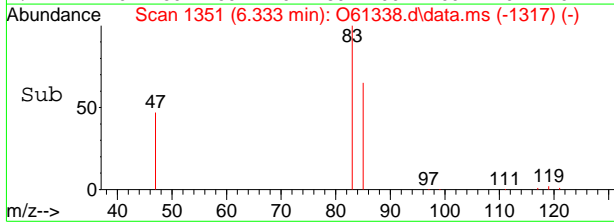
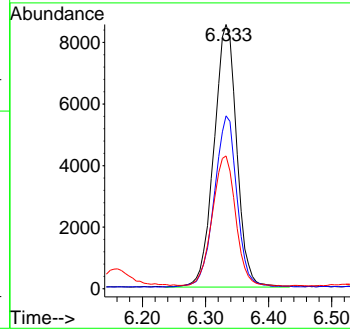
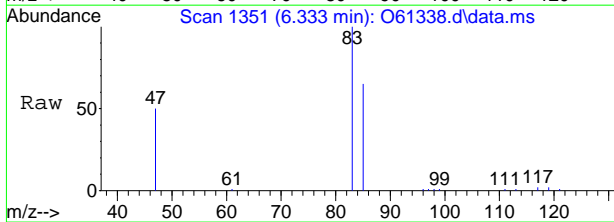
7.1.51
7





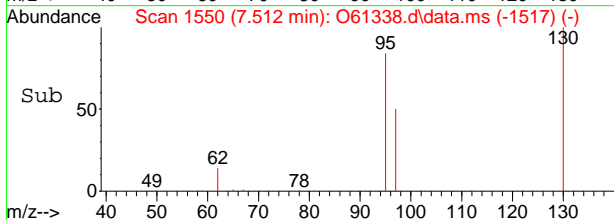
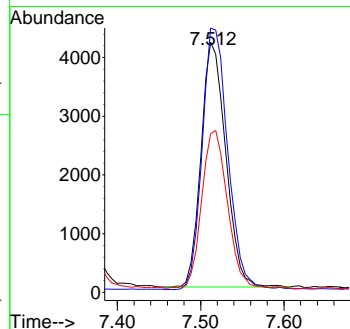
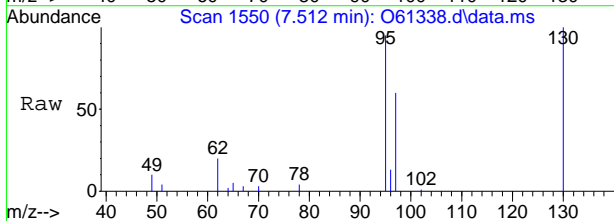
#9
 Chloroform
 Concen: 0.79 ug/L
 RT: 6.333 min Scan# 1351
 Delta R.T. -0.000 min
 Lab File: O61338.d
 Acq: 13 Sep 2020 4:09 pm

Tgt Ion	Resp	Lower	Upper
83	21418		
85	65.1	33.0	93.0
47	49.6	8.1	68.1

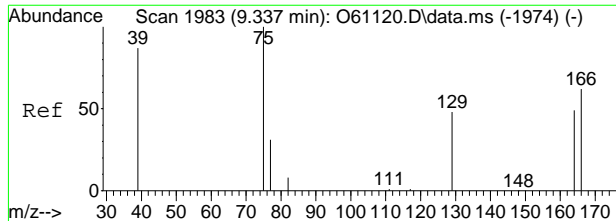


#15
 Trichloroethene
 Concen: 0.54 ug/L
 RT: 7.512 min Scan# 1550
 Delta R.T. -0.006 min
 Lab File: O61338.d
 Acq: 13 Sep 2020 4:09 pm

Tgt Ion	Resp	Lower	Upper
95	8597		
130	106.8	60.4	120.4
97	63.2	34.6	94.6



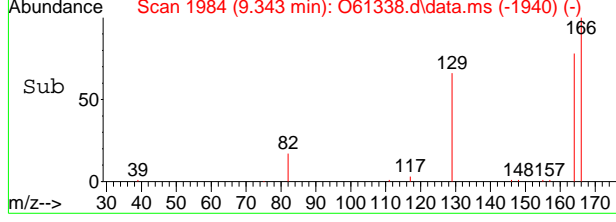
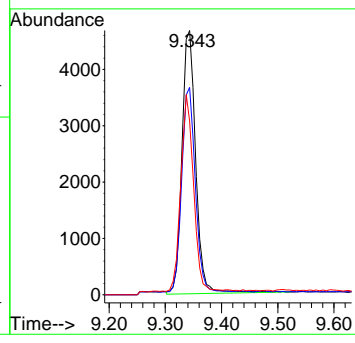
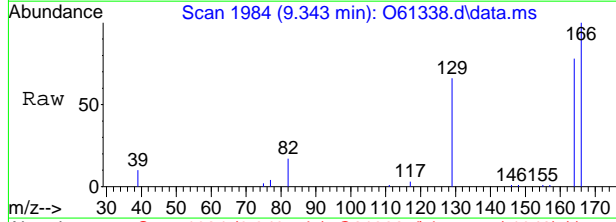
7.1.51
7



#21
 Tetrachloroethene
 Concen: 0.51 ug/L
 RT: 9.343 min Scan# 1984
 Delta R.T. 0.000 min
 Lab File: O61338.d
 Acq: 13 Sep 2020 4:09 pm

Tgt Ion:166 Resp: 7907

Ion	Ratio	Lower	Upper
166	100		
164	78.0	47.3	107.3
129	65.2	37.5	97.5



7.1.51
7



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\091420\
 Data File : Z62332.D
 Acq On : 14 Sep 2020 5:00 pm
 Operator : JuanG
 Sample : FA78549-36
 Misc : MS47201,VZ2418,,,,,
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 15 18:50:38 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Sun Sep 13 13:38:26 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	

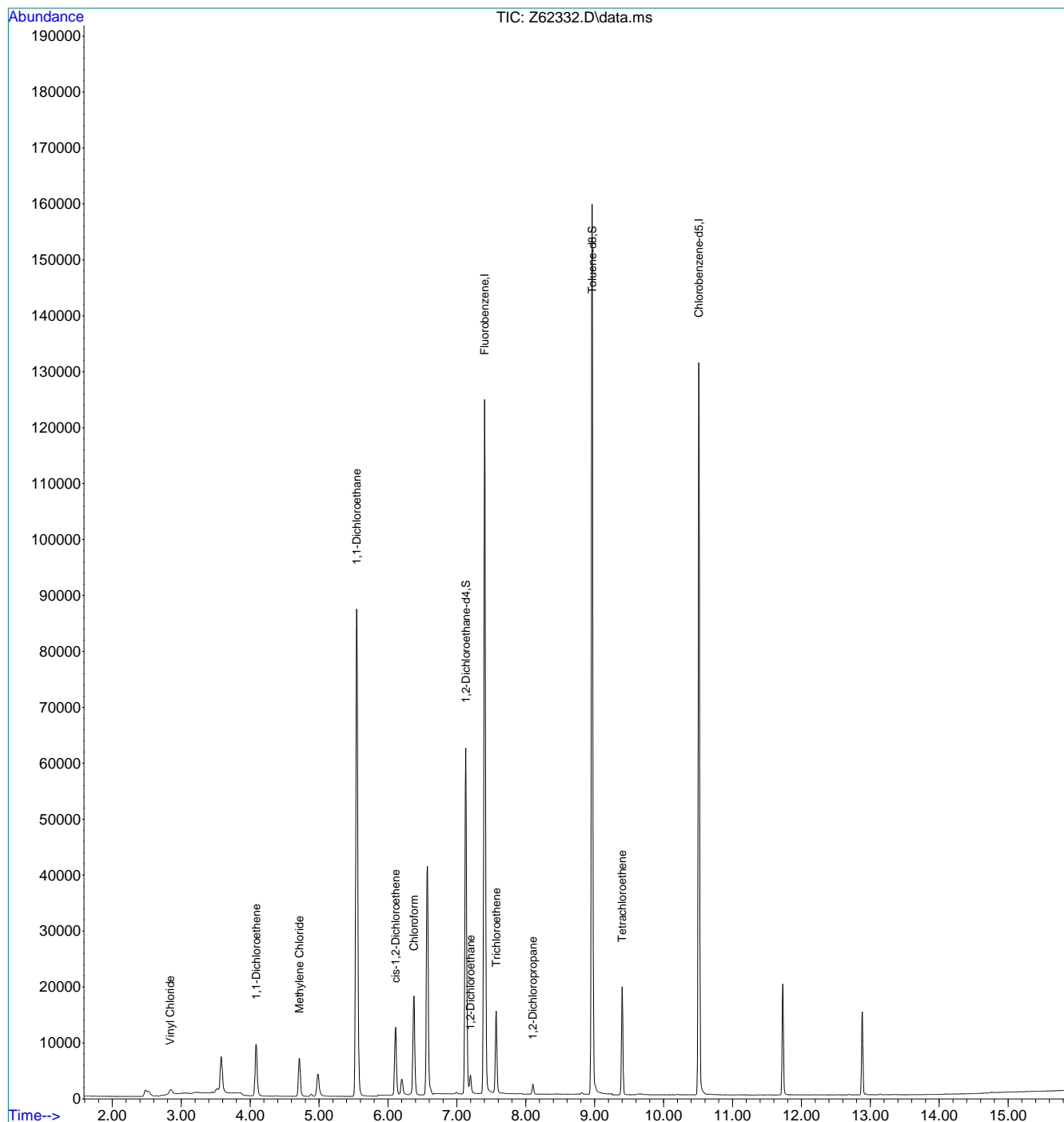
Internal Standards							
1) Fluorobenzene	7.401	96	1444465	5.00	ppb	0.00	
18) Chlorobenzene-d5	10.511	117	1171684	5.00	ppb	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.130	65	519139	5.81	ppb	0.00	
Spiked Amount	5.000	Range	79 - 125	Recovery	=	116.20%	
19) Toluene-d8	8.961	98	1399045	4.92	ppb	0.00	
Spiked Amount	5.000	Range	70 - 130	Recovery	=	98.40%	
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.839	62	13407	0.11	ppb		79
4) 1,1-Dichloroethene	4.087	96	54818	0.63	ppb		90
5) Methylene Chloride	4.713	84	47458	0.33	ppb		91
7) 1,1-Dichloroethane	5.546	63	1179412	6.52	ppb	#	99
8) cis-1,2-Dichloroethene	6.110	96	75069	0.63	ppb		95
9) Chloroform	6.377	83	170601	0.79	ppb		99
14) 1,2-Dichloroethane	7.198	62	31271	0.21	ppb		100
15) Trichloroethene	7.571	95	80402	0.65	ppb	#	86
16) 1,2-Dichloropropane	8.101	63	9301	0.09	ppb		97
21) Tetrachloroethene	9.399	166	82992	0.60	ppb		99

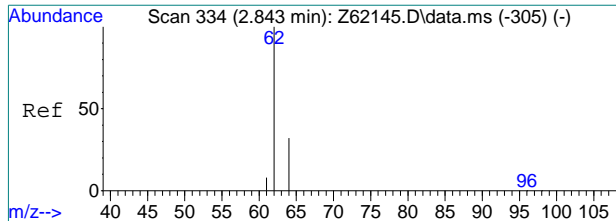
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\091420\
Data File : Z62332.D
Acq On : 14 Sep 2020 5:00 pm
Operator : JuanG
Sample : FA78549-36
Misc : MS47201,VZ2418,,,,,
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 15 18:50:38 2020
Quant Method : C:\msdchem\1\methods\SIMCL091120.M
Quant Title : WATER-EPA 8260B
QLast Update : Sun Sep 13 13:38:26 2020
Response via : Initial Calibration

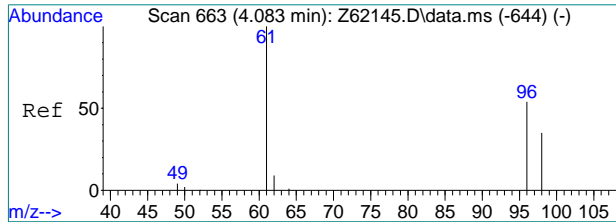
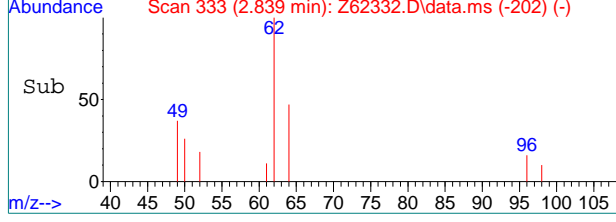
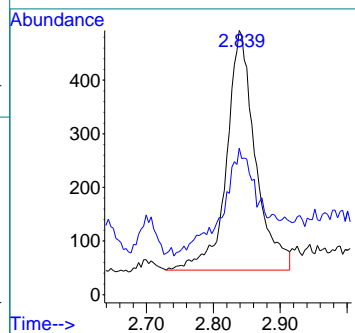
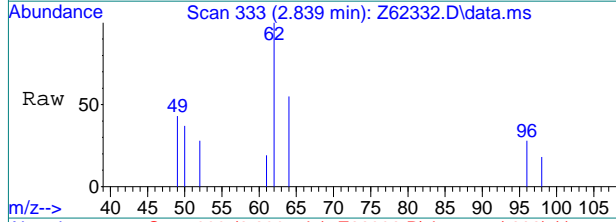




#2
 Vinyl Chloride
 Concen: 0.11 ppb
 RT: 2.839 min Scan# 333
 Delta R.T. -0.004 min
 Lab File: Z62332.D
 Acq: 14 Sep 2020 5:00 pm

Tgt Ion: 62 Resp: 13407

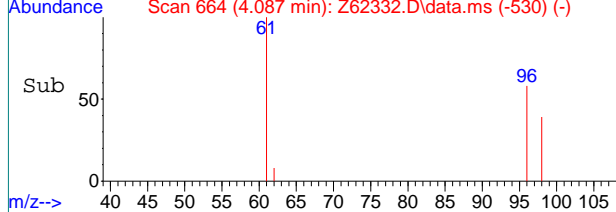
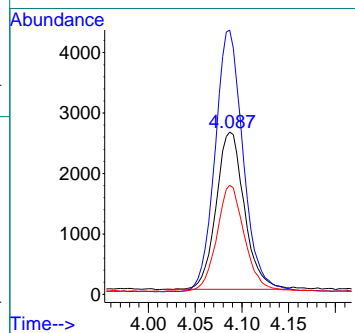
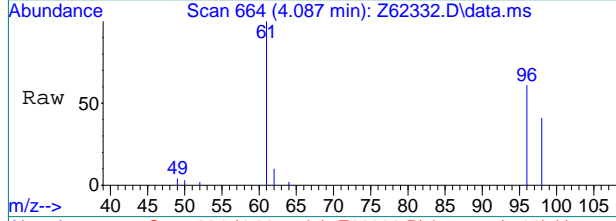
Ion	Ratio	Lower	Upper
62	100		
64	43.8	11.9	51.9



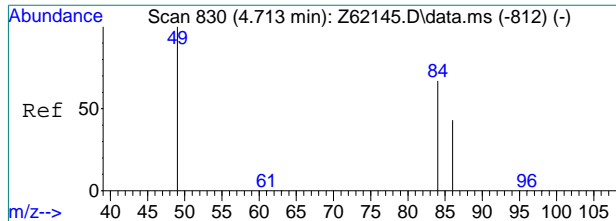
#4
 1,1-Dichloroethene
 Concen: 0.63 ppb
 RT: 4.087 min Scan# 664
 Delta R.T. 0.004 min
 Lab File: Z62332.D
 Acq: 14 Sep 2020 5:00 pm

Tgt Ion: 96 Resp: 54818

Ion	Ratio	Lower	Upper
96	100		
61	166.2	164.8	204.8
98	67.2	45.1	85.1



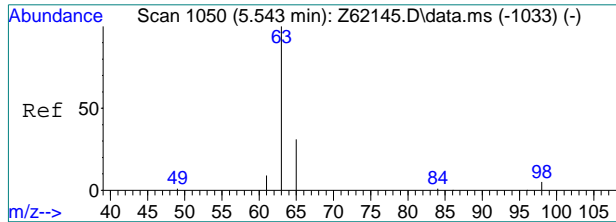
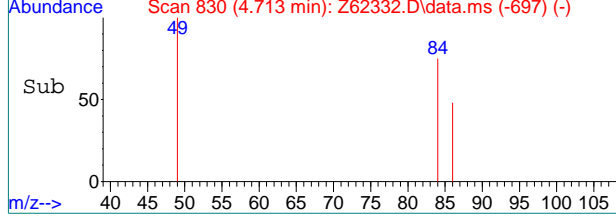
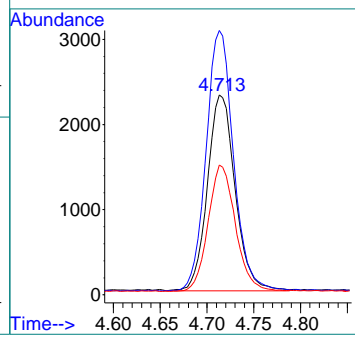
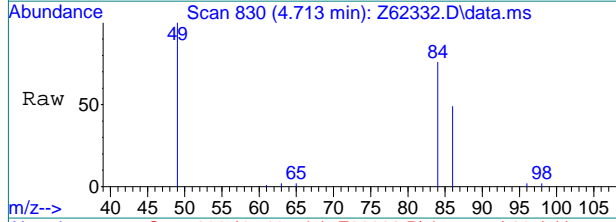
7.1.52
7



#5
 Methylene Chloride
 Concen: 0.33 ppb
 RT: 4.713 min Scan# 830
 Delta R.T. -0.000 min
 Lab File: Z62332.D
 Acq: 14 Sep 2020 5:00 pm

Tgt Ion: 84 Resp: 47458

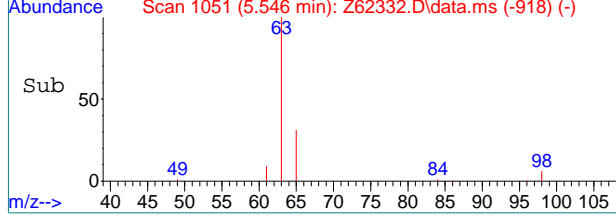
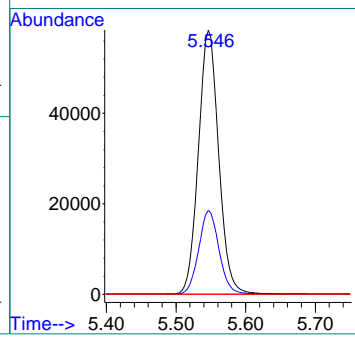
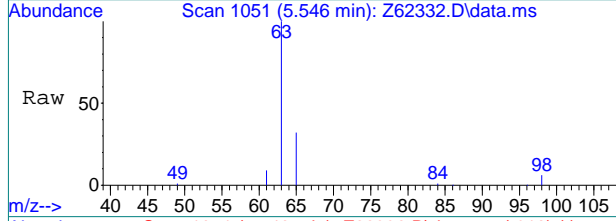
Ion	Ratio	Lower	Upper
84	100		
49	132.8	128.7	168.7
86	64.2	43.9	83.9



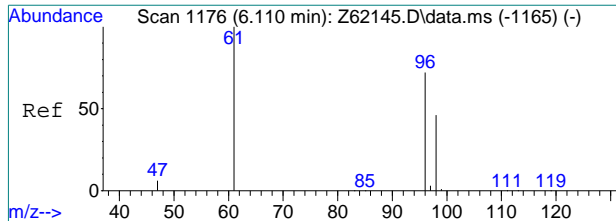
#7
 1,1-Dichloroethane
 Concen: 6.52 ppb
 RT: 5.546 min Scan# 1051
 Delta R.T. 0.000 min
 Lab File: Z62332.D
 Acq: 14 Sep 2020 5:00 pm

Tgt Ion: 63 Resp: 1179412

Ion	Ratio	Lower	Upper
63	100		
65	31.7	11.3	51.3
83	0.0	0.0	30.0

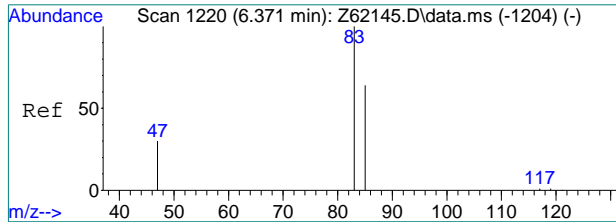
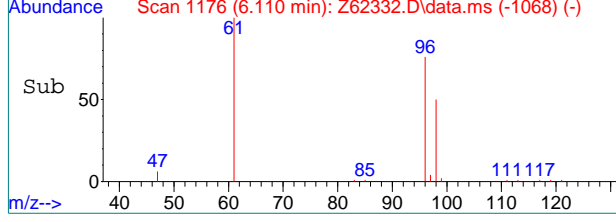
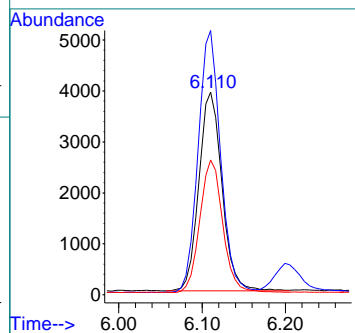
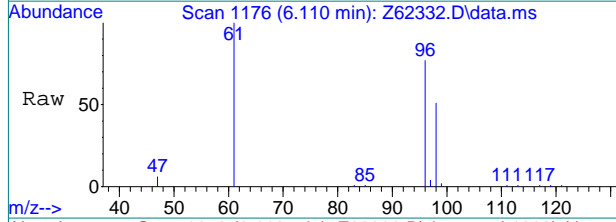


7.1.52
7



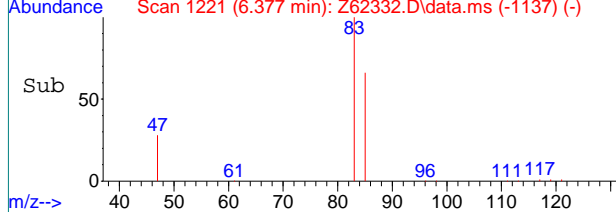
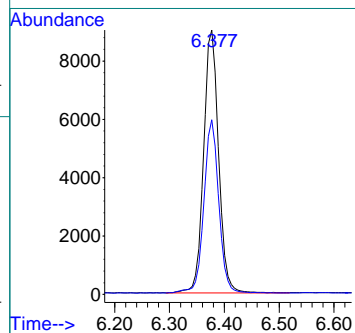
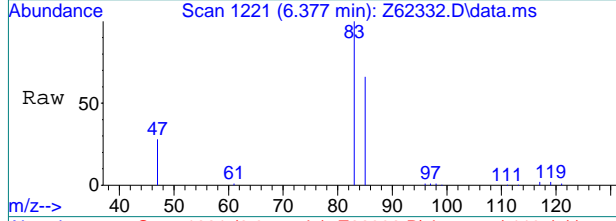
#8
 cis-1,2-Dichloroethene
 Concen: 0.63 ppb
 RT: 6.110 min Scan# 1176
 Delta R.T. 0.000 min
 Lab File: Z62332.D
 Acq: 14 Sep 2020 5:00 pm

Tgt Ion	Resp	Lower	Upper
96	75069		
61	131.7	119.3	159.3
98	66.5	44.5	84.5

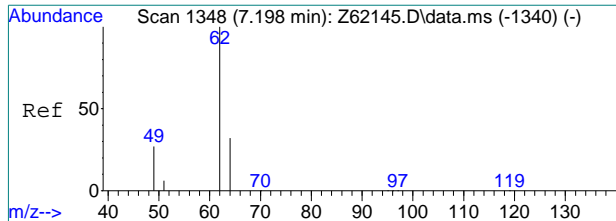


#9
 Chloroform
 Concen: 0.79 ppb
 RT: 6.377 min Scan# 1221
 Delta R.T. 0.000 min
 Lab File: Z62332.D
 Acq: 14 Sep 2020 5:00 pm

Tgt Ion	Resp	Lower	Upper
83	170601		
83	100		
85	65.2	46.1	86.1

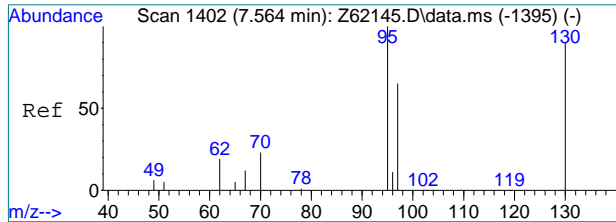
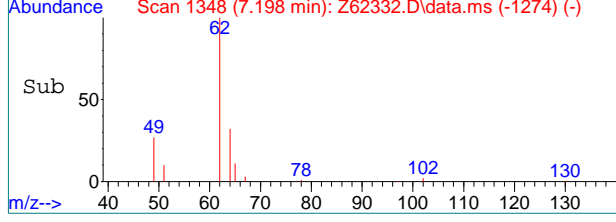
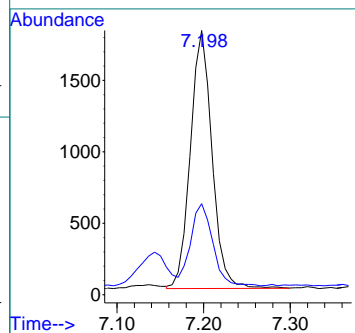
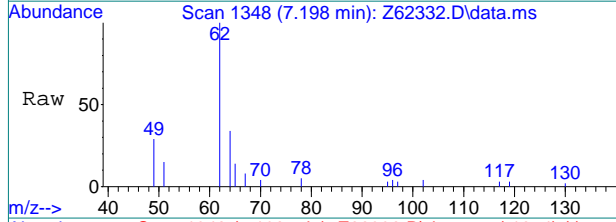


7.1.52
7



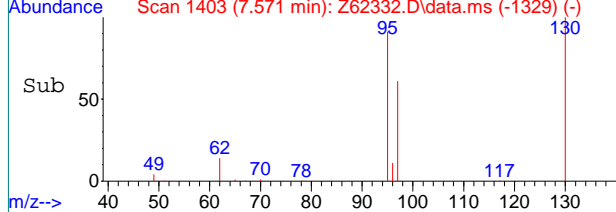
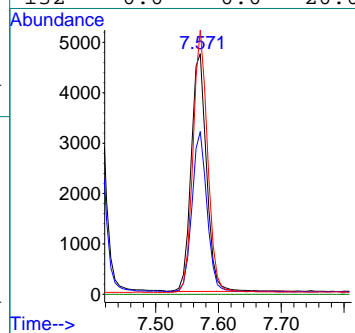
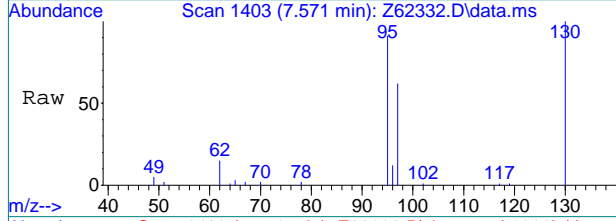
#14
 1,2-Dichloroethane
 Concen: 0.21 ppb
 RT: 7.198 min Scan# 1348
 Delta R.T. -0.000 min
 Lab File: Z62332.D
 Acq: 14 Sep 2020 5:00 pm

Tgt Ion	Resp	Lower	Upper
62	31271		
64	32.2	12.3	52.3

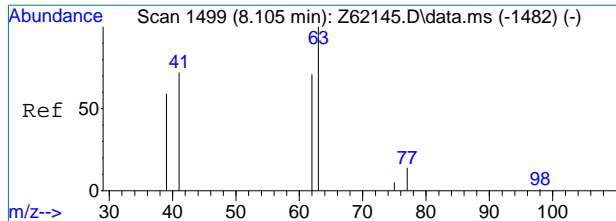


#15
 Trichloroethene
 Concen: 0.65 ppb
 RT: 7.571 min Scan# 1403
 Delta R.T. 0.000 min
 Lab File: Z62332.D
 Acq: 14 Sep 2020 5:00 pm

Tgt Ion	Resp	Lower	Upper
95	80402		
97	67.4	44.5	84.5
130	110.4	69.7	109.7#
132	0.0	0.0	20.0

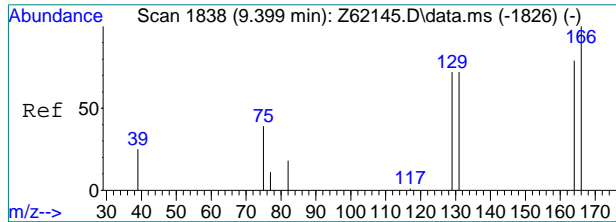
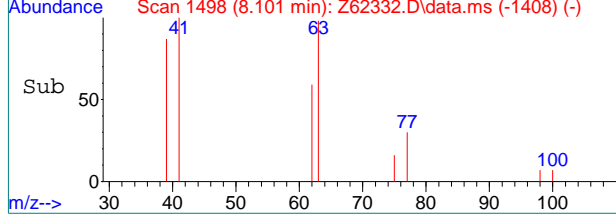
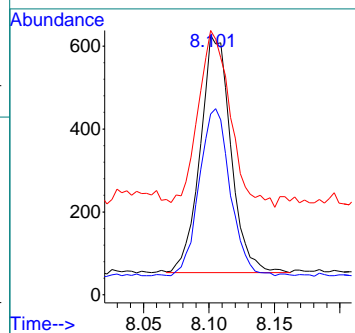
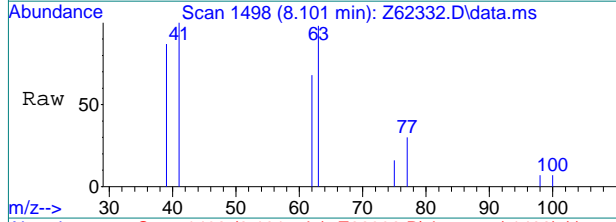


7.1.52
7



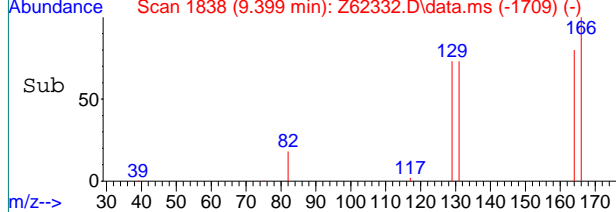
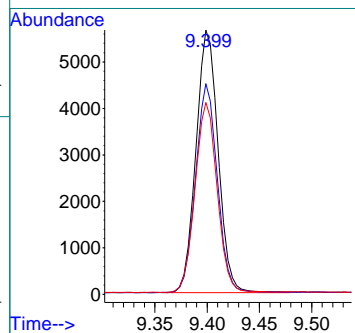
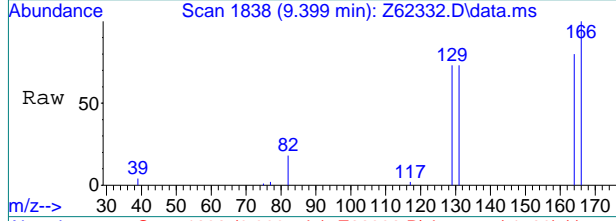
#16
 1,2-Dichloropropane
 Concen: 0.09 ppb
 RT: 8.101 min Scan# 1498
 Delta R.T. -0.004 min
 Lab File: Z62332.D
 Acq: 14 Sep 2020 5:00 pm

Tgt Ion	Ratio	Lower	Upper
63	100		
62	71.1	51.6	91.6
41	78.7	43.7	103.7



#21
 Tetrachloroethene
 Concen: 0.60 ppb
 RT: 9.399 min Scan# 1838
 Delta R.T. -0.000 min
 Lab File: Z62332.D
 Acq: 14 Sep 2020 5:00 pm

Tgt Ion	Ratio	Lower	Upper
166	100		
164	79.5	58.7	98.7
131	72.4	51.6	91.6



7.1.52
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-14-2020\VO2360\
Data File : O61339.d
Acq On : 13 Sep 2020 4:30 pm
Operator : stutip
Sample : fa78549-37
Misc : MS47201,VO2360,,,,,
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 14 08:36:30 2020
Quant Method : C:\msdchem\1\methods\SIMCL091120.M
Quant Title : Standard Methods 6200B
QLast Update : Sun Sep 13 19:20:40 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Fluorobenzene	7.340	96	173988	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.447	117	144405	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.067	65	81284	5.78	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	115.60%	
19) Toluene-d8	8.896	98	147522	4.53	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	90.60%	
Target Compounds						
9) Chloroform	6.333	83	7491	0.27	ug/L	87
15) Trichloroethene	7.512	95	8415	0.51	ug/L	86

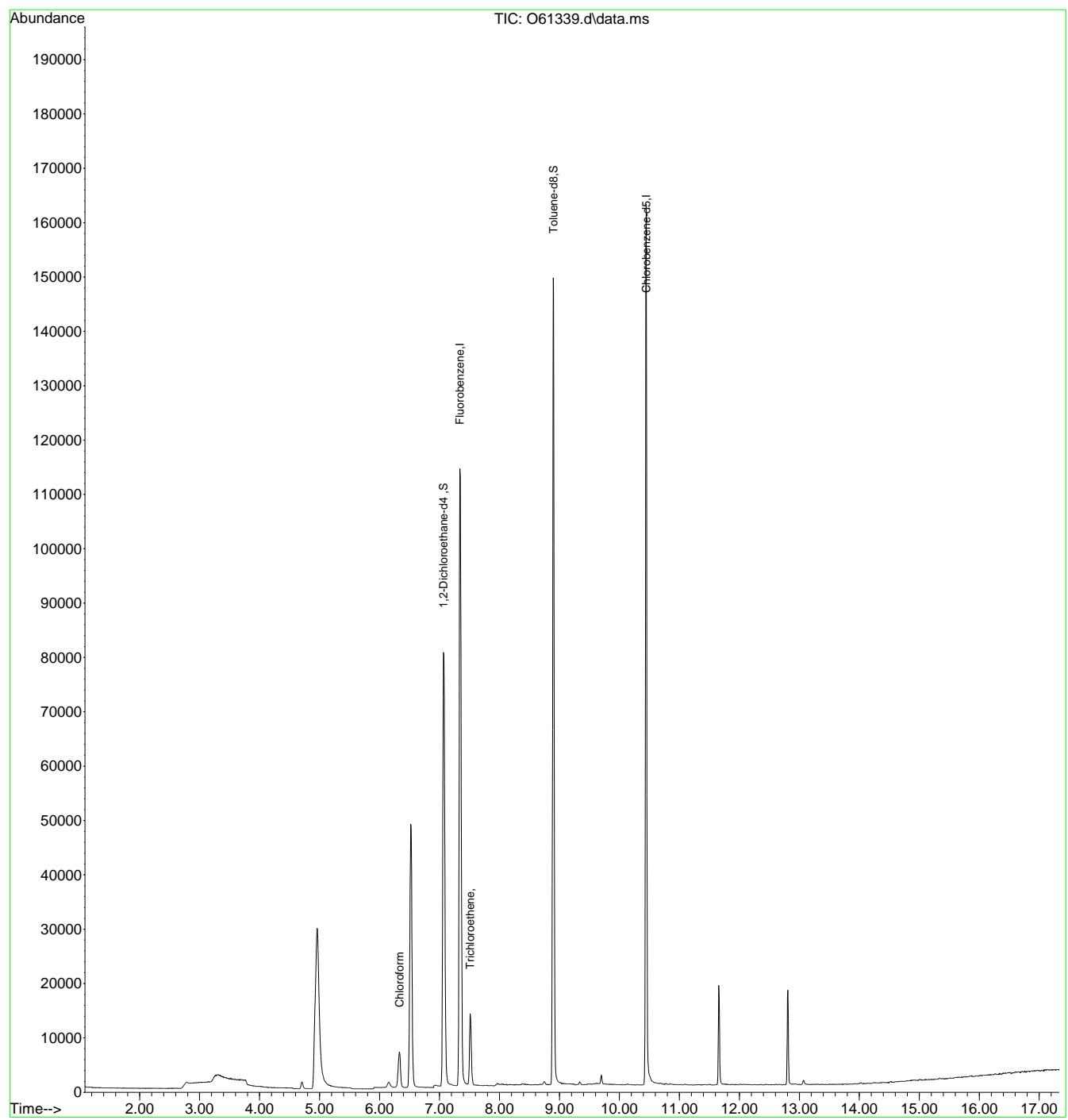
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.1.53
7

Quantitation Report (QT Reviewed)

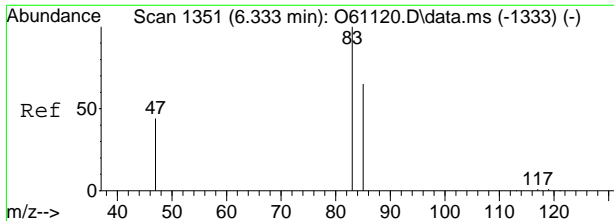
Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-14-2020\VO2360\
Data File : O61339.d
Acq On : 13 Sep 2020 4:30 pm
Operator : stutip
Sample : fa78549-37
Misc : MS47201,VO2360,,,,,
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 14 08:36:30 2020
Quant Method : C:\msdchem\1\methods\SIMCL091120.M
Quant Title : Standard Methods 6200B
QLast Update : Sun Sep 13 19:20:40 2020
Response via : Initial Calibration

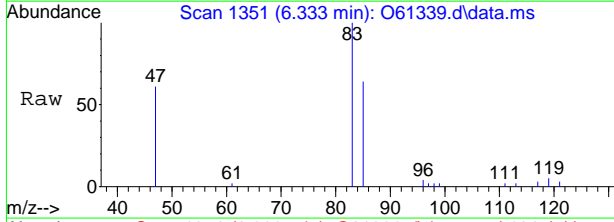


7.1.53
7



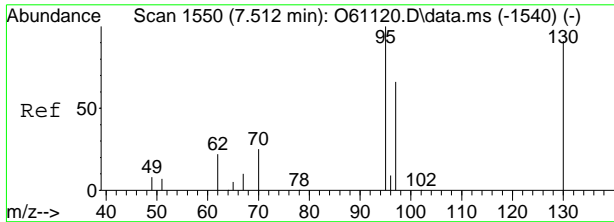
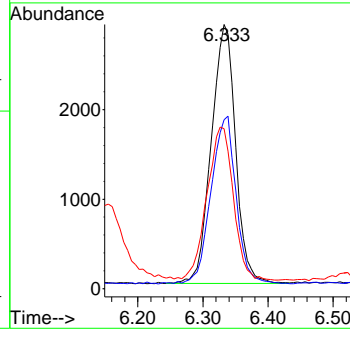
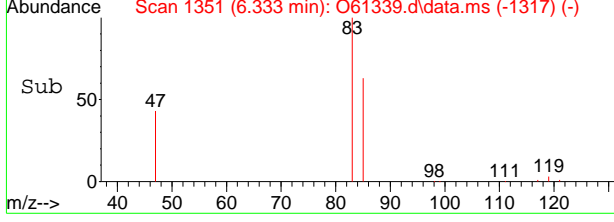


#9
 Chloroform
 Concen: 0.27 ug/L
 RT: 6.333 min Scan# 1351
 Delta R.T. -0.000 min
 Lab File: O61339.d
 Acq: 13 Sep 2020 4:30 pm

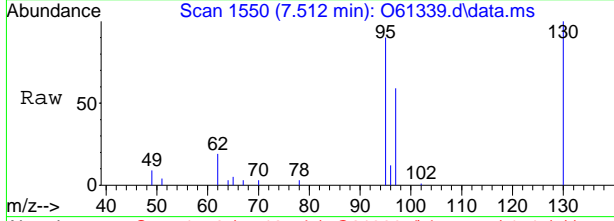


Tgt Ion: 83 Resp: 7491

Ion	Ratio	Lower	Upper
83	100		
85	63.2	33.0	93.0
47	58.3	8.1	68.1

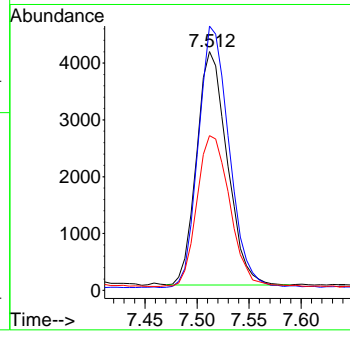
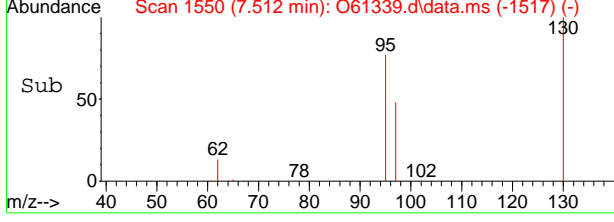


#15
 Trichloroethene
 Concen: 0.51 ug/L
 RT: 7.512 min Scan# 1550
 Delta R.T. -0.006 min
 Lab File: O61339.d
 Acq: 13 Sep 2020 4:30 pm



Tgt Ion: 95 Resp: 8415

Ion	Ratio	Lower	Upper
95	100		
130	112.1	60.4	120.4
97	64.4	34.6	94.6



7.1.53
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\091420\
 Data File : Z62333.D
 Acq On : 14 Sep 2020 5:19 pm
 Operator : JuanG
 Sample : FA78549-37
 Misc : MS47201,VZ2418,,,,,
 ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 15 18:50:40 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Sun Sep 13 13:38:26 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

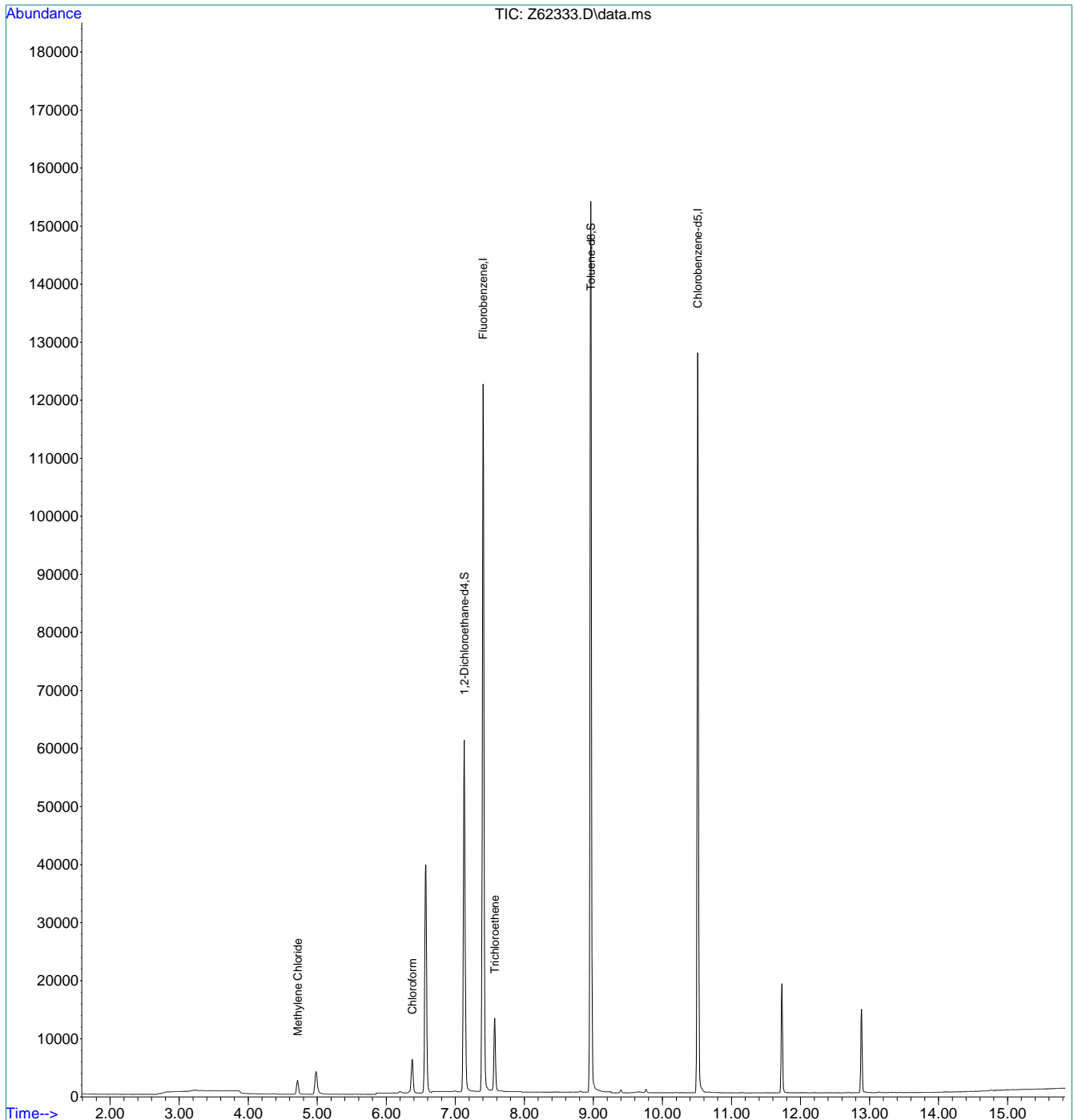
Internal Standards						
1) Fluorobenzene	7.401	96	1402630	5.00	ppb	0.00
18) Chlorobenzene-d5	10.511	117	1138118	5.00	ppb	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.130	65	506053	5.83	ppb	0.00
Spiked Amount	5.000	Range	79 - 125	Recovery	=	116.60%
19) Toluene-d8	8.961	98	1348595	4.88	ppb	0.00
Spiked Amount	5.000	Range	70 - 130	Recovery	=	97.60%
Target Compounds						
5) Methylene Chloride	4.717	84	16492	0.12	ppb	Qvalue # 86
9) Chloroform	6.377	83	56249	0.27	ppb	97
15) Trichloroethene	7.571	95	67277	0.56	ppb	85

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

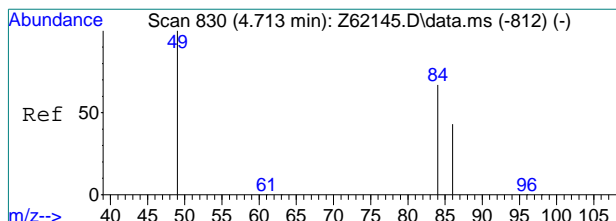
Data Path : C:\msdchem\1\data\091420\
 Data File : Z62333.D
 Acq On : 14 Sep 2020 5:19 pm
 Operator : JuanG
 Sample : FA78549-37
 Misc : MS47201,VZ2418,,,,,
 ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 15 18:50:40 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Sun Sep 13 13:38:26 2020
 Response via : Initial Calibration



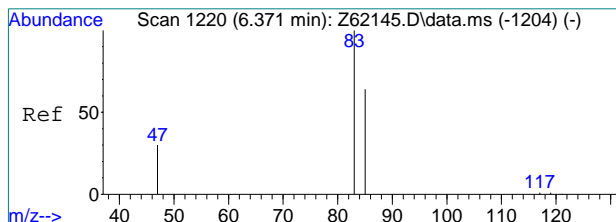
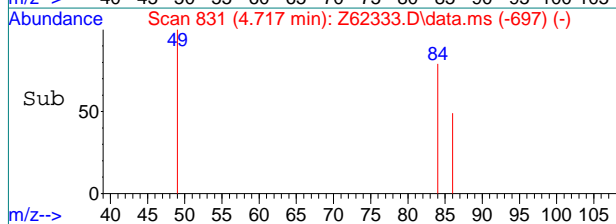
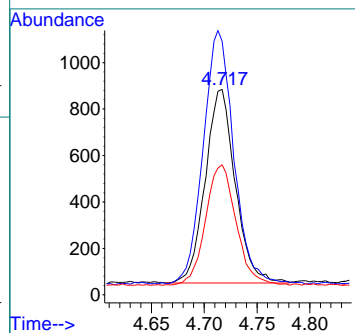
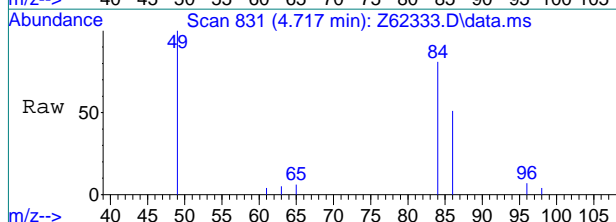
7.1.54
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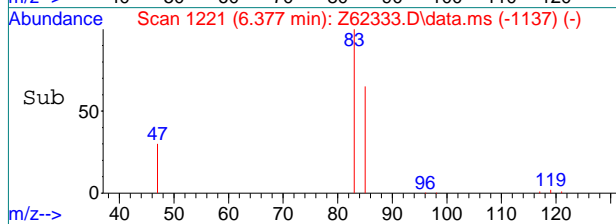
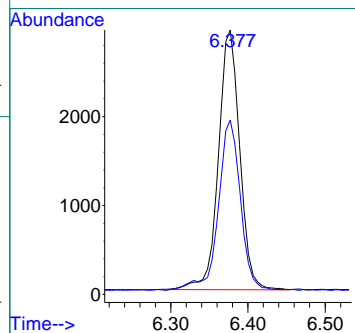
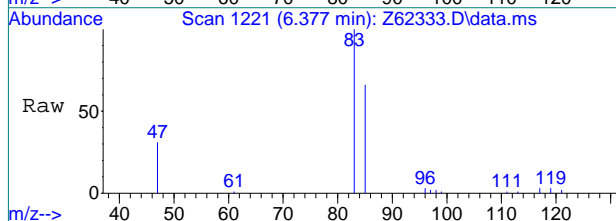
#5
 Methylene Chloride
 Concen: 0.12 ppb
 RT: 4.717 min Scan# 831
 Delta R.T. 0.004 min
 Lab File: Z62333.D
 Acq: 14 Sep 2020 5:19 pm

Tgt Ion	Resp	Lower	Upper
84	16492		
49	125.1	128.7	168.7#
86	62.1	43.9	83.9

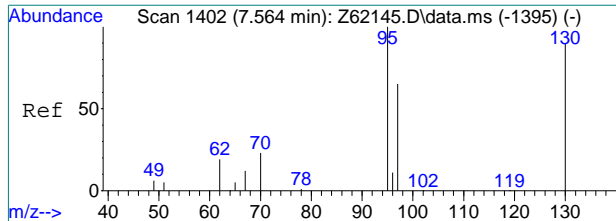


#9
 Chloroform
 Concen: 0.27 ppb
 RT: 6.377 min Scan# 1221
 Delta R.T. 0.000 min
 Lab File: Z62333.D
 Acq: 14 Sep 2020 5:19 pm

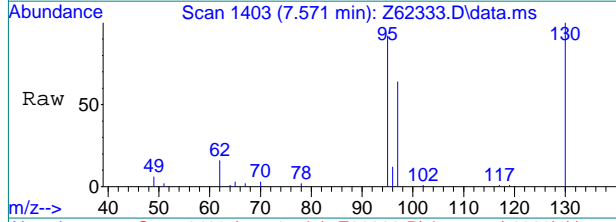
Tgt Ion	Resp	Lower	Upper
83	56249		
83	100		
85	68.3	46.1	86.1



7.1.54
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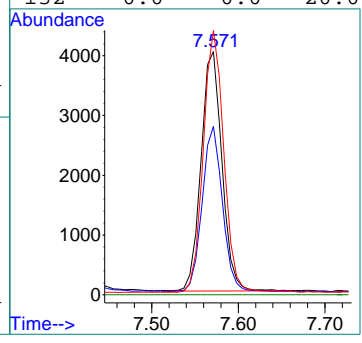
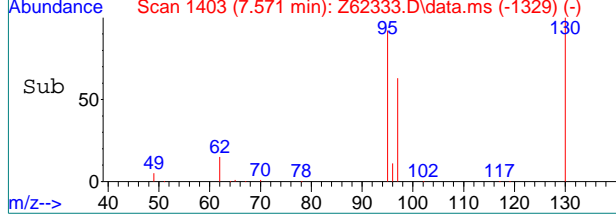


#15
 Trichloroethene
 Concen: 0.56 ppb
 RT: 7.571 min Scan# 1403
 Delta R.T. 0.000 min
 Lab File: Z62333.D
 Acq: 14 Sep 2020 5:19 pm



Tgt Ion: 95 Resp: 67277

Ion	Ratio	Lower	Upper
95	100		
97	69.1	44.5	84.5
130	109.5	69.7	109.7
132	0.0	0.0	20.0



7.1.54
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-14-2020\VO2360\
Data File : O61340.d
Acq On : 13 Sep 2020 4:50 pm
Operator : stutip
Sample : fa78549-38
Misc : MS47201,VO2360,,,,,
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Sep 14 07:53:09 2020
Quant Method : C:\msdchem\1\methods\SIMCL091120.M
Quant Title : Standard Methods 6200B
QLast Update : Sun Sep 13 19:20:40 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Fluorobenzene	7.340	96	173928	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.447	117	143428	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.068	65	81440	5.80	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	116.00%	
19) Toluene-d8	8.896	98	146825	4.54	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	90.80%	
Target Compounds						
7) 1,1-Dichloroethane	5.506	63	10855	0.34	ug/L	95
9) Chloroform	6.327	83	17987	0.65	ug/L	88
21) Tetrachloroethene	9.337	166	64738	4.13	ug/L	97

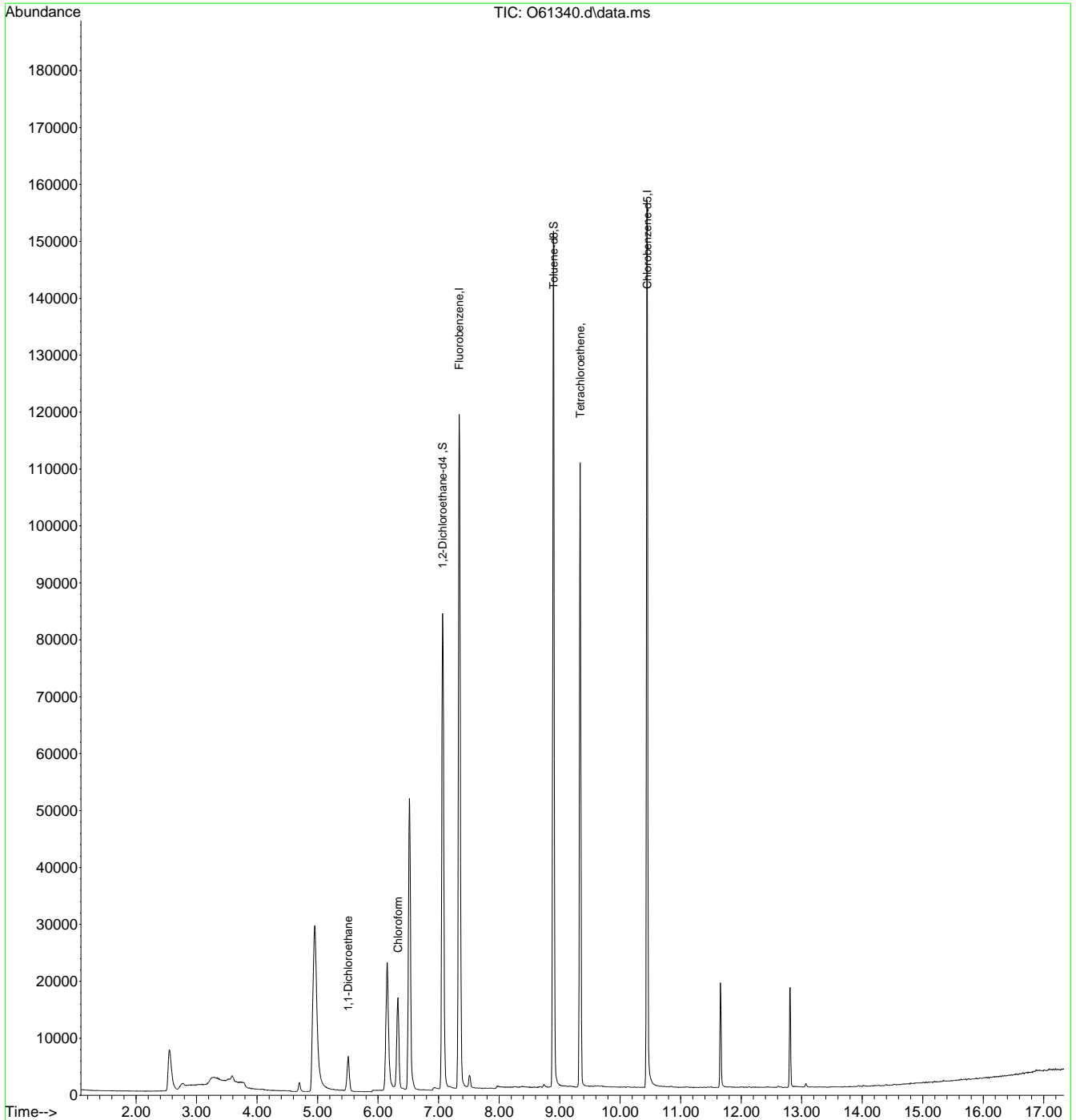
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.1.55
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Quantitation Report (QT Reviewed)

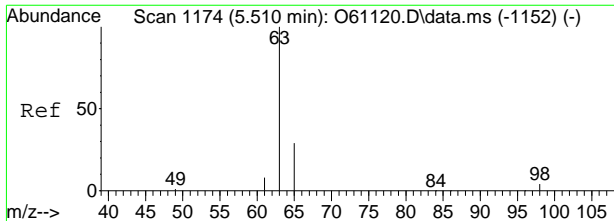
Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-14-2020\VO2360\
 Data File : O61340.d
 Acq On : 13 Sep 2020 4:50 pm
 Operator : stutip
 Sample : fa78549-38
 Misc : MS47201,VO2360,,,,,
 ALS Vial : 15 Sample Multiplier: 1

Quant Time: Sep 14 07:53:09 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Sun Sep 13 19:20:40 2020
 Response via : Initial Calibration



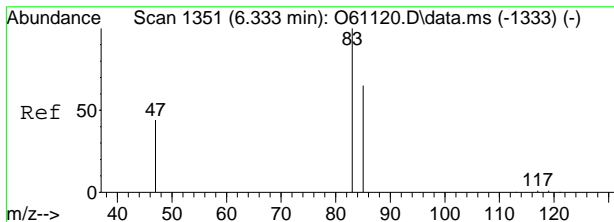
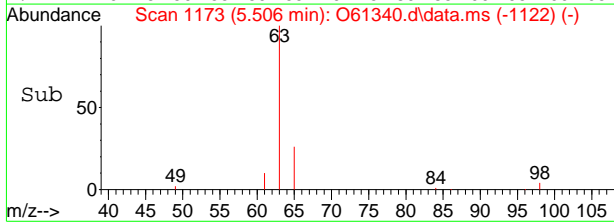
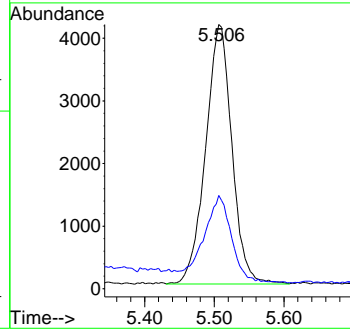
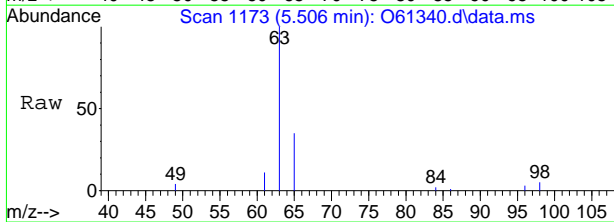
7.1.55
7





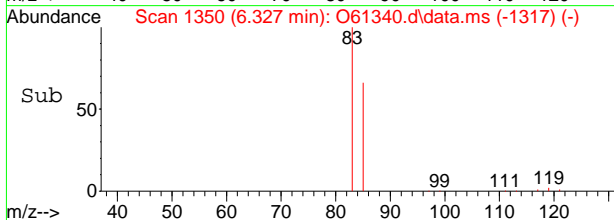
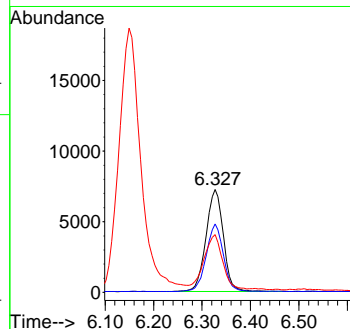
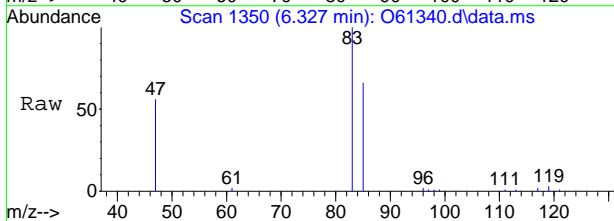
#7
 1,1-Dichloroethane
 Concen: 0.34 ug/L
 RT: 5.506 min Scan# 1173
 Delta R.T. -0.008 min
 Lab File: O61340.d
 Acq: 13 Sep 2020 4:50 pm

Tgt Ion	Resp	Lower	Upper
63	10855		
65	33.5	0.7	60.7

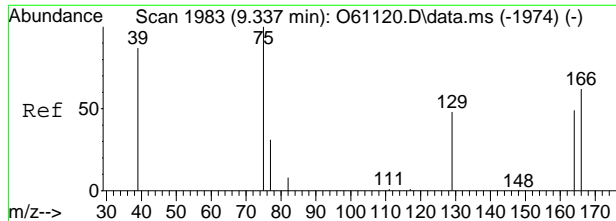


#9
 Chloroform
 Concen: 0.65 ug/L
 RT: 6.327 min Scan# 1350
 Delta R.T. -0.006 min
 Lab File: O61340.d
 Acq: 13 Sep 2020 4:50 pm

Tgt Ion	Resp	Lower	Upper
83	17987		
85	66.2	33.0	93.0
47	53.6	8.1	68.1

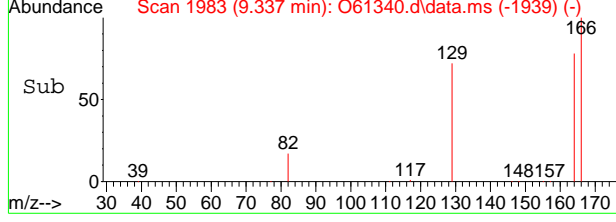
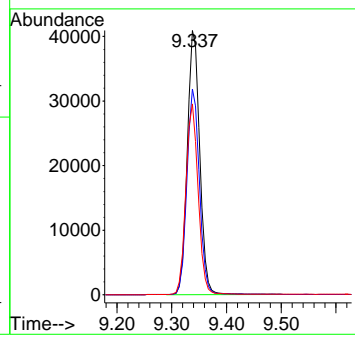
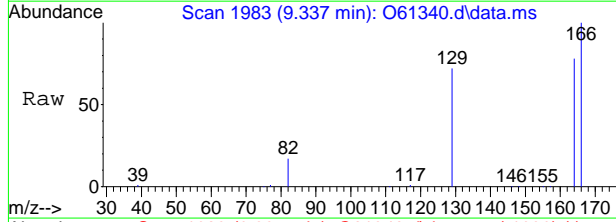


7.1.55
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#21
 Tetrachloroethene
 Concen: 4.13 ug/L
 RT: 9.337 min Scan# 1983
 Delta R.T. -0.006 min
 Lab File: O61340.d
 Acq: 13 Sep 2020 4:50 pm

Tgt Ion	Resp	Lower	Upper
166	64738		
166	100		
164	77.8	47.3	107.3
129	72.1	37.5	97.5



7.1.55
7



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\091420\
 Data File : Z62337.D
 Acq On : 14 Sep 2020 6:36 pm
 Operator : JuanG
 Sample : FA78549-38
 Misc : MS47201,VZ2418,,,,,
 ALS Vial : 15 Sample Multiplier: 1

Quant Time: Sep 15 18:50:48 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Sun Sep 13 13:38:26 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	

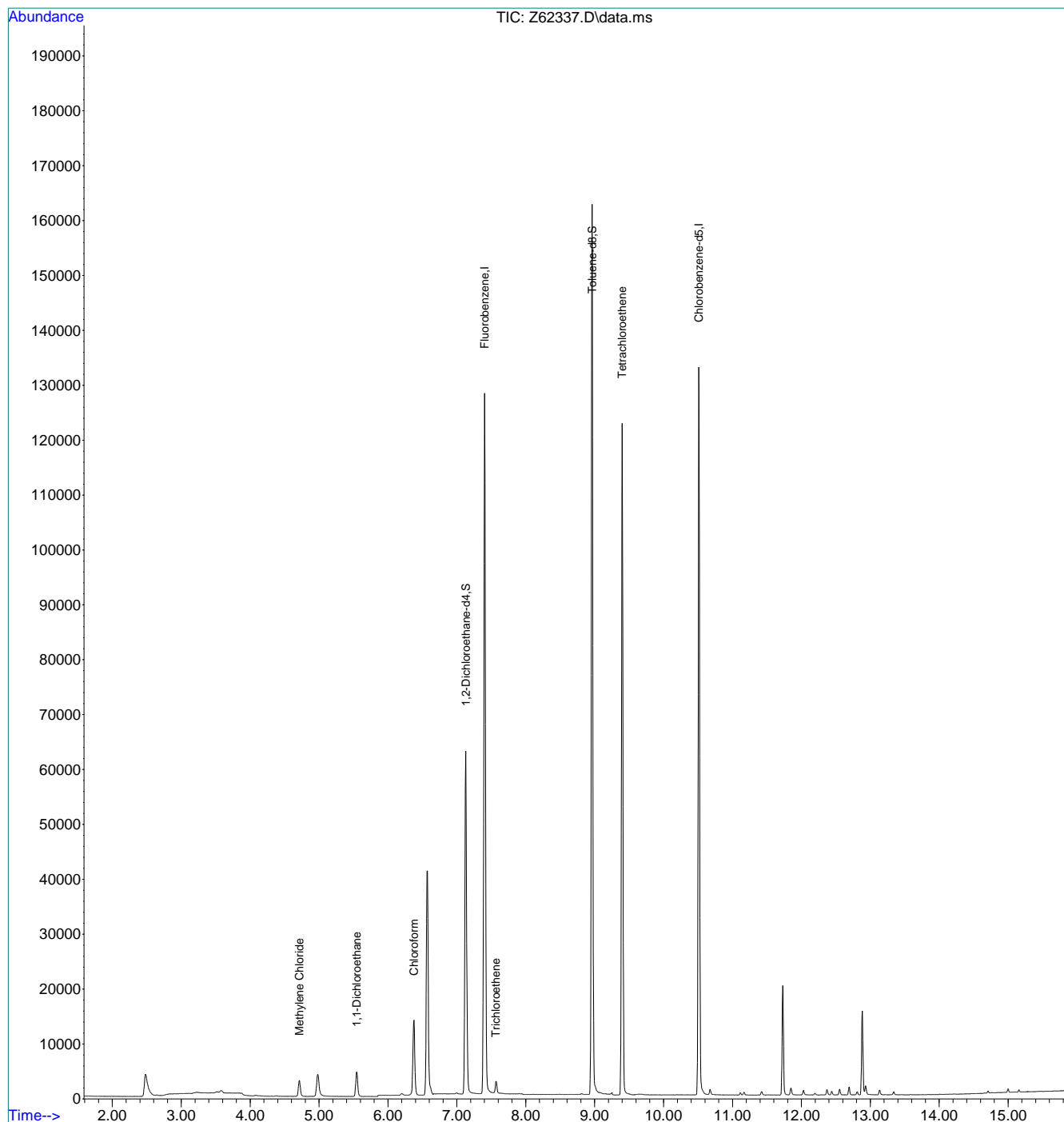
Internal Standards							
1) Fluorobenzene	7.401	96	1474091	5.00	ppb	0.00	
18) Chlorobenzene-d5	10.511	117	1187051	5.00	ppb	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.130	65	524405	5.75	ppb	0.00	
Spiked Amount	5.000	Range	79 - 125	Recovery	=	115.00%	
19) Toluene-d8	8.961	98	1424307	4.94	ppb	0.00	
Spiked Amount	5.000	Range	70 - 130	Recovery	=	98.80%	
Target Compounds							
5) Methylene Chloride	4.713	84	20292	0.14	ppb	90	Qvalue
7) 1,1-Dichloroethane	5.546	63	61601	0.33	ppb	99	#
9) Chloroform	6.377	83	132771	0.60	ppb	100	
15) Trichloroethene	7.564	95	12777	0.10	ppb	99	
21) Tetrachloroethene	9.399	166	516470	3.78	ppb	99	

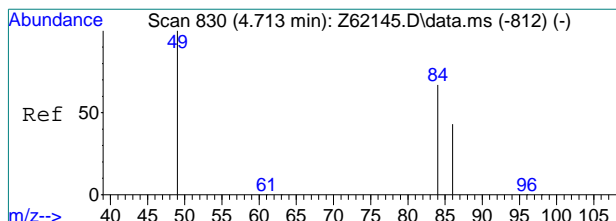
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\091420\
Data File : Z62337.D
Acq On : 14 Sep 2020 6:36 pm
Operator : JuanG
Sample : FA78549-38
Misc : MS47201,VZ2418,,,,,
ALS Vial : 15 Sample Multiplier: 1

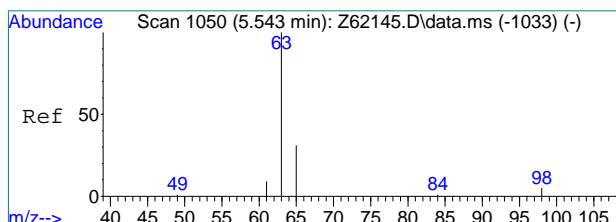
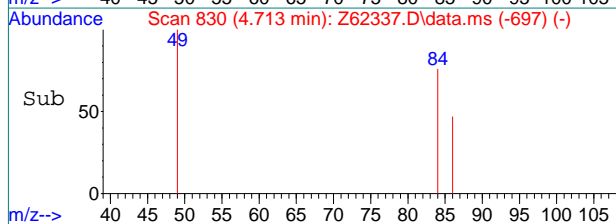
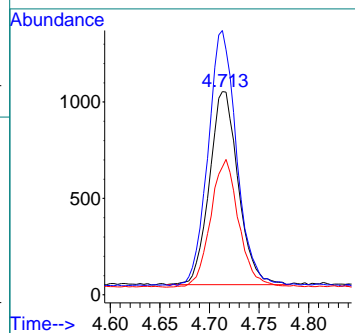
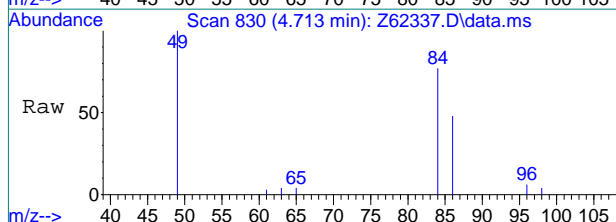
Quant Time: Sep 15 18:50:48 2020
Quant Method : C:\msdchem\1\methods\SIMCL091120.M
Quant Title : WATER-EPA 8260B
QLast Update : Sun Sep 13 13:38:26 2020
Response via : Initial Calibration





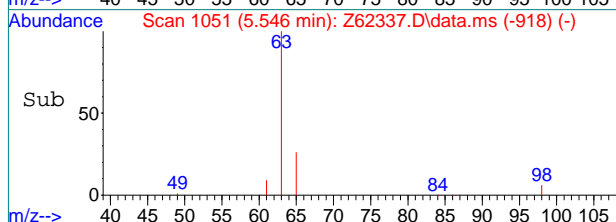
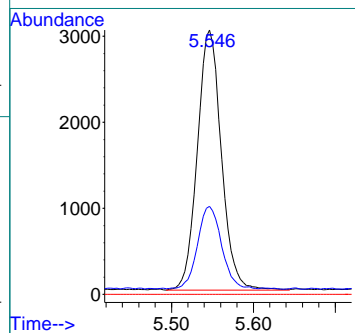
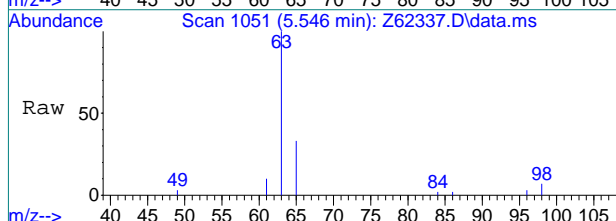
#5
 Methylene Chloride
 Concen: 0.14 ppb
 RT: 4.713 min Scan# 830
 Delta R.T. 0.000 min
 Lab File: Z62337.D
 Acq: 14 Sep 2020 6:36 pm

Tgt Ion	Ratio	Lower	Upper
84	100		
49	131.7	128.7	168.7
86	62.3	43.9	83.9

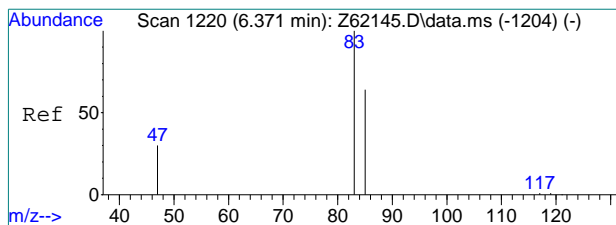


#7
 1,1-Dichloroethane
 Concen: 0.33 ppb
 RT: 5.546 min Scan# 1051
 Delta R.T. 0.000 min
 Lab File: Z62337.D
 Acq: 14 Sep 2020 6:36 pm

Tgt Ion	Ratio	Lower	Upper
63	100		
65	31.7	11.3	51.3
83	0.0	0.0	30.0



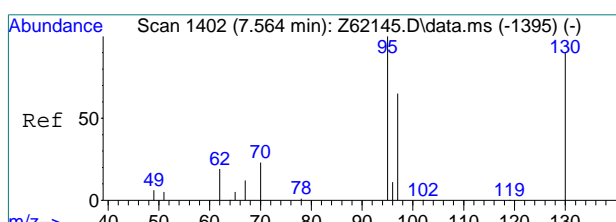
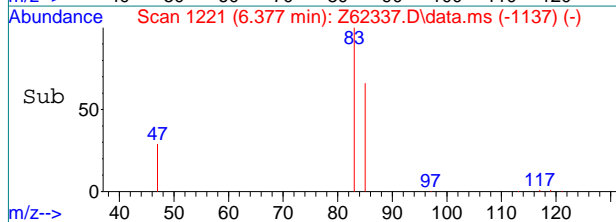
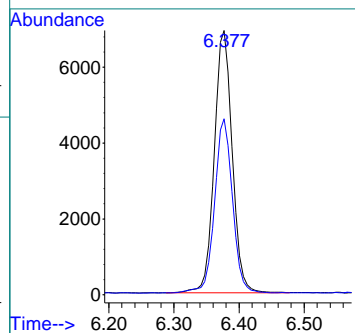
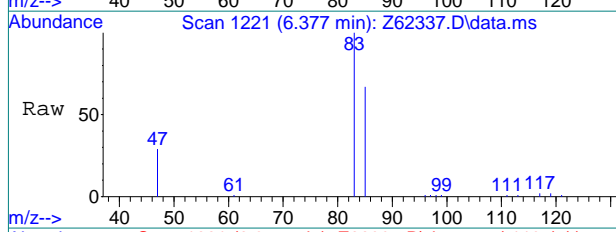
7.1.56
7



#9
 Chloroform
 Concen: 0.60 ppb
 RT: 6.377 min Scan# 1221
 Delta R.T. 0.000 min
 Lab File: Z62337.D
 Acq: 14 Sep 2020 6:36 pm

Tgt Ion: 83 Resp: 132771

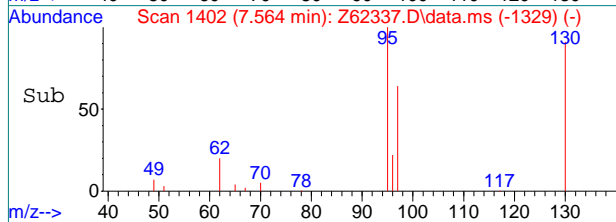
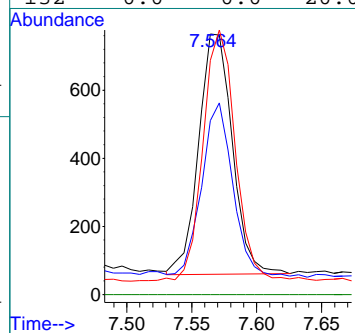
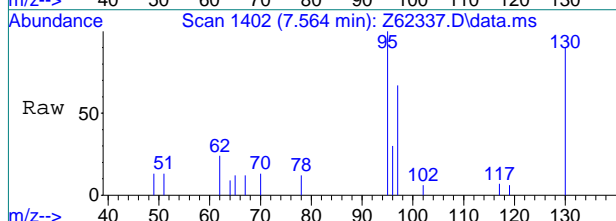
Ion	Ratio	Lower	Upper
83	100		
85	65.9	46.1	86.1



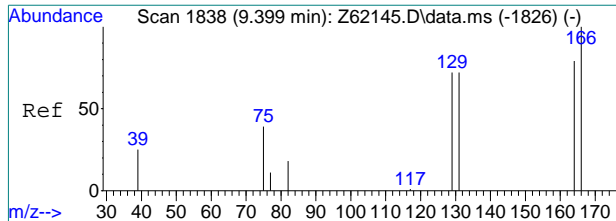
#15
 Trichloroethene
 Concen: 0.10 ppb
 RT: 7.564 min Scan# 1402
 Delta R.T. -0.007 min
 Lab File: Z62337.D
 Acq: 14 Sep 2020 6:36 pm

Tgt Ion: 95 Resp: 12777

Ion	Ratio	Lower	Upper
95	100		
97	64.9	44.5	84.5
130	91.2	69.7	109.7
132	0.0	0.0	20.0

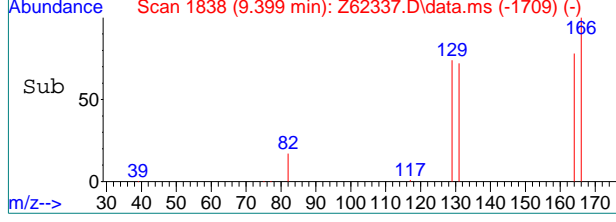
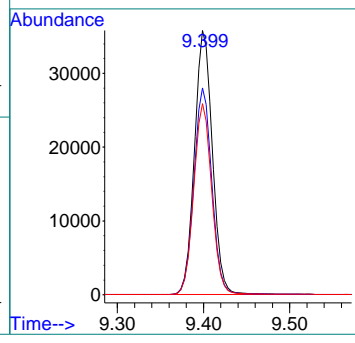
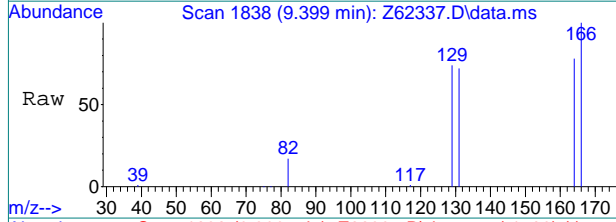


7.1.56
7



#21
 Tetrachloroethene
 Concen: 3.78 ppb
 RT: 9.399 min Scan# 1838
 Delta R.T. -0.000 min
 Lab File: Z62337.D
 Acq: 14 Sep 2020 6:36 pm

Tgt Ion	Ratio	Lower	Upper
166	100		
164	78.2	58.7	98.7
131	72.3	51.6	91.6



7.1.56
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-14-2020\VO2360\
Data File : O61341.d
Acq On : 13 Sep 2020 5:10 pm
Operator : stutip
Sample : fa78549-39
Misc : MS47201,VO2360,,,,,
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 14 07:53:11 2020
Quant Method : C:\msdchem\1\methods\SIMCL091120.M
Quant Title : Standard Methods 6200B
QLast Update : Sun Sep 13 19:20:40 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Fluorobenzene	7.346	96	173088	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.447	117	137078	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.068	65	81469	5.83	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	116.60%	
19) Toluene-d8	8.896	98	145841	4.72	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	94.40%	
Target Compounds						
9) Chloroform	6.333	83	8488	0.31	ug/L	87
21) Tetrachloroethene	9.343	166	9021	0.61	ug/L	97

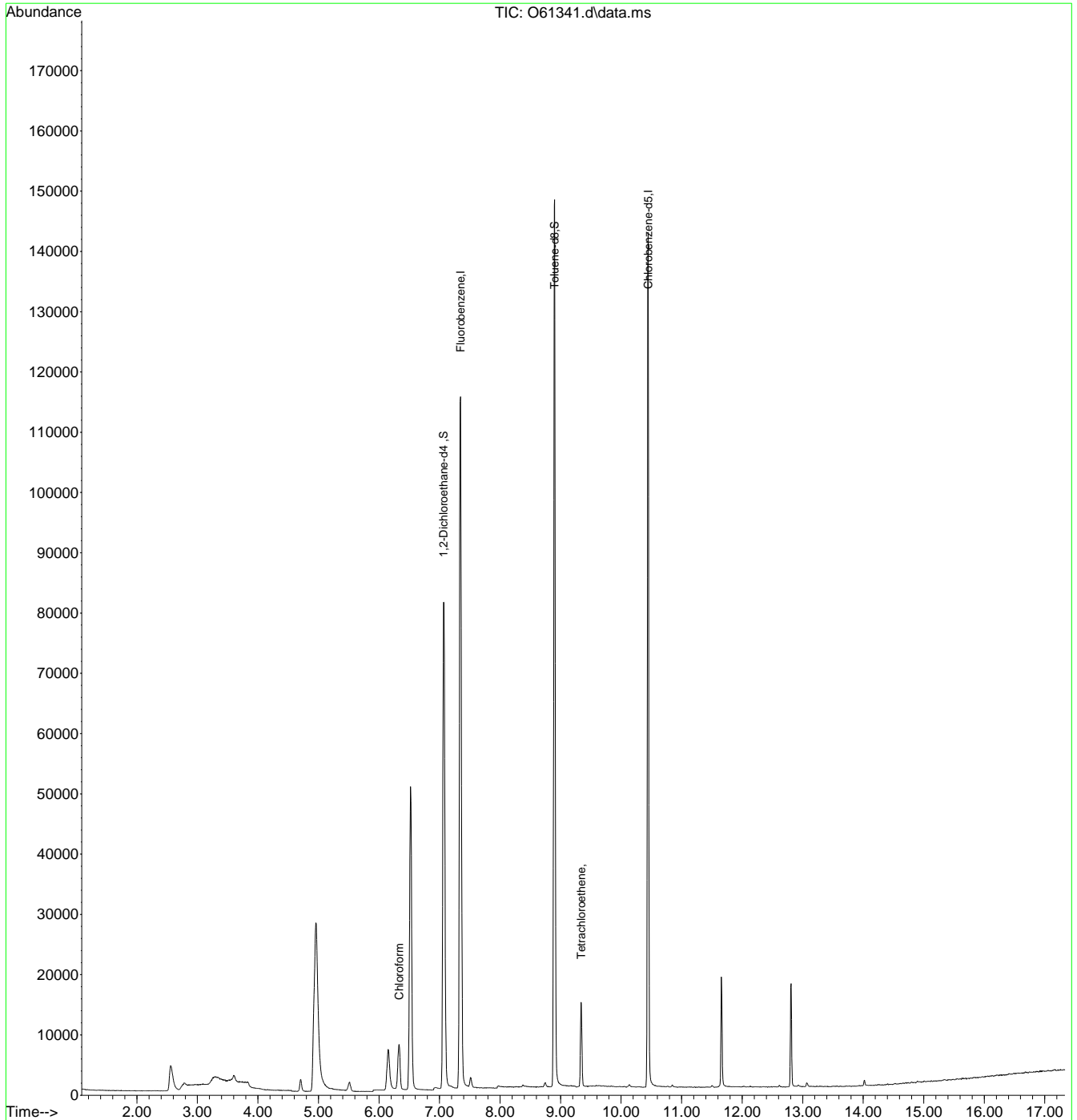
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.1.57
7

Quantitation Report (QT Reviewed)

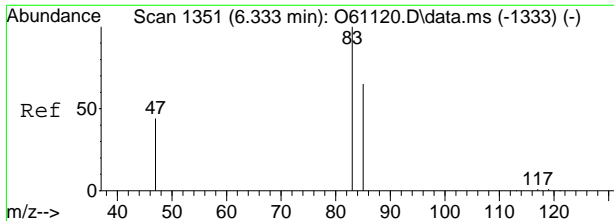
Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-14-2020\VO2360\
Data File : O61341.d
Acq On : 13 Sep 2020 5:10 pm
Operator : stutip
Sample : fa78549-39
Misc : MS47201,VO2360,,,,,
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 14 07:53:11 2020
Quant Method : C:\msdchem\1\methods\SIMCL091120.M
Quant Title : Standard Methods 6200B
QLast Update : Sun Sep 13 19:20:40 2020
Response via : Initial Calibration



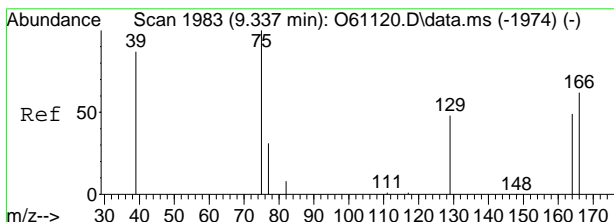
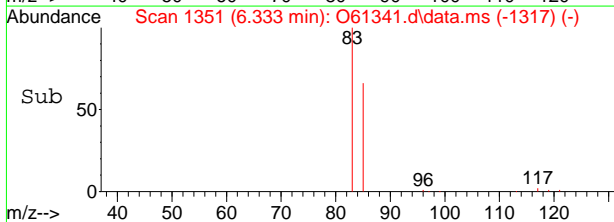
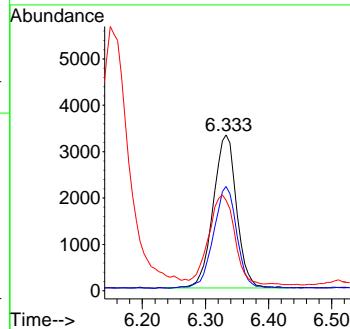
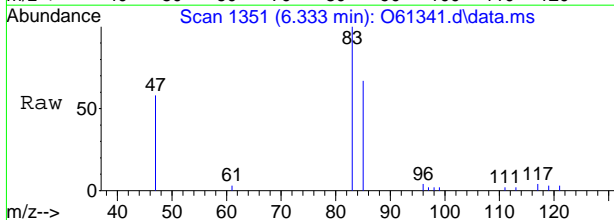
7.1.57
7





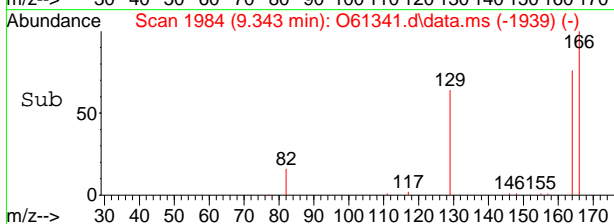
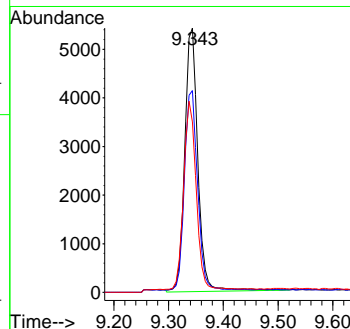
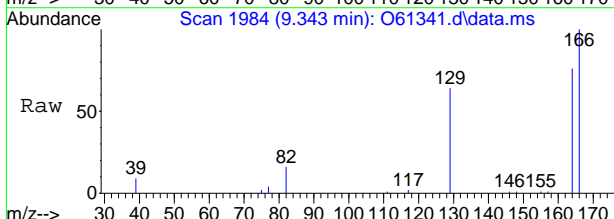
#9
 Chloroform
 Concen: 0.31 ug/L
 RT: 6.333 min Scan# 1351
 Delta R.T. -0.000 min
 Lab File: O61341.d
 Acq: 13 Sep 2020 5:10 pm

Tgt Ion	Resp	Lower	Upper
83	8488		
85	66.3	33.0	93.0
47	55.3	8.1	68.1



#21
 Tetrachloroethene
 Concen: 0.61 ug/L
 RT: 9.343 min Scan# 1984
 Delta R.T. 0.000 min
 Lab File: O61341.d
 Acq: 13 Sep 2020 5:10 pm

Tgt Ion	Resp	Lower	Upper
166	9021		
164	76.1	47.3	107.3
129	63.8	37.5	97.5



7.1.57
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\091420\
 Data File : Z62338.D
 Acq On : 14 Sep 2020 6:55 pm
 Operator : JuanG
 Sample : FA78549-39
 Misc : MS47201,VZ2418,,,,,
 ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 15 18:50:50 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Sun Sep 13 13:38:26 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	

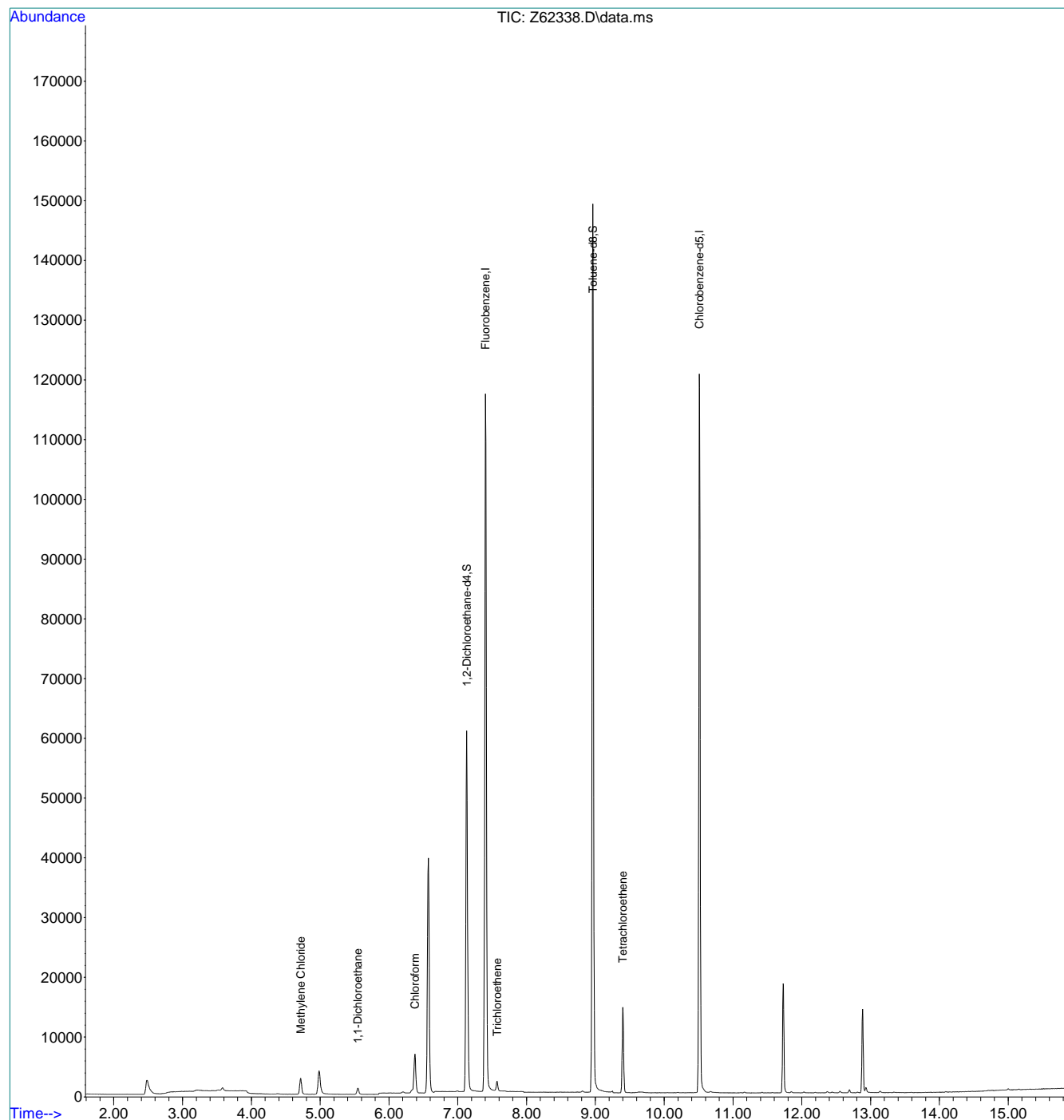
Internal Standards							
1) Fluorobenzene	7.401	96	1361609	5.00	ppb	0.00	
18) Chlorobenzene-d5	10.511	117	1097547	5.00	ppb	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.130	65	492690	5.85	ppb	0.00	
Spiked Amount	5.000	Range	79 - 125	Recovery	=	117.00%	
19) Toluene-d8	8.961	98	1308537	4.91	ppb	0.00	
Spiked Amount	5.000	Range	70 - 130	Recovery	=	98.20%	
Target Compounds							
5) Methylene Chloride	4.717	84	17953	0.13	ppb	93	Qvalue
7) 1,1-Dichloroethane	5.546	63	13770	0.08	ppb	#	95
9) Chloroform	6.377	83	66384	0.32	ppb	#	98
15) Trichloroethene	7.571	95	8667	0.07	ppb	#	80
21) Tetrachloroethene	9.399	166	61876	0.47	ppb	#	99

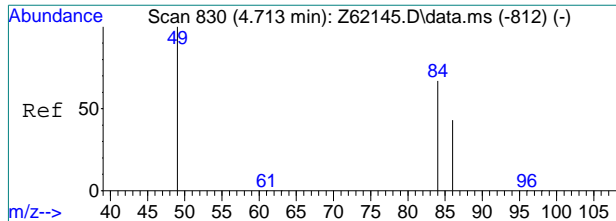
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\091420\
Data File : Z62338.D
Acq On : 14 Sep 2020 6:55 pm
Operator : JuanG
Sample : FA78549-39
Misc : MS47201,VZ2418,,,,,
ALS Vial : 16 Sample Multiplier: 1

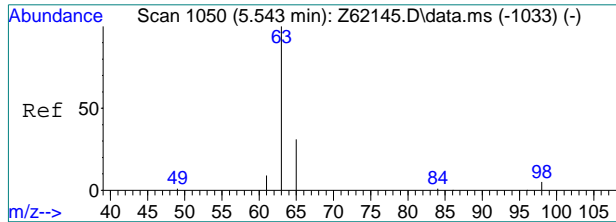
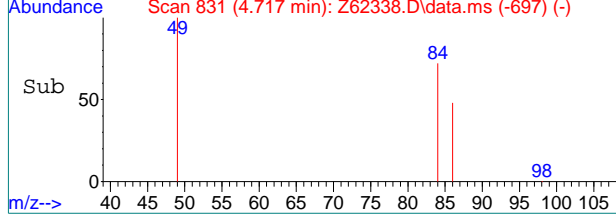
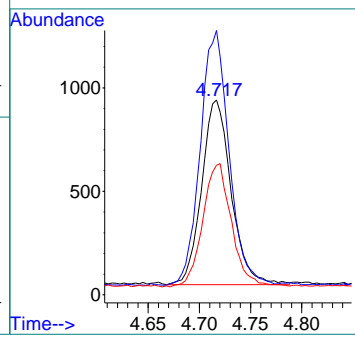
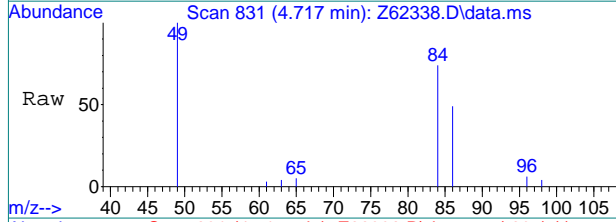
Quant Time: Sep 15 18:50:50 2020
Quant Method : C:\msdchem\1\methods\SIMCL091120.M
Quant Title : WATER-EPA 8260B
QLast Update : Sun Sep 13 13:38:26 2020
Response via : Initial Calibration





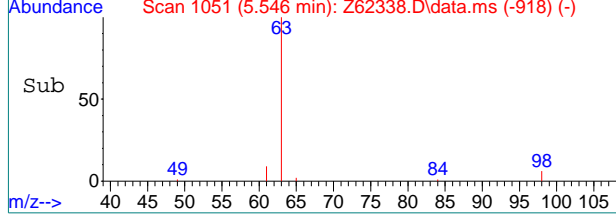
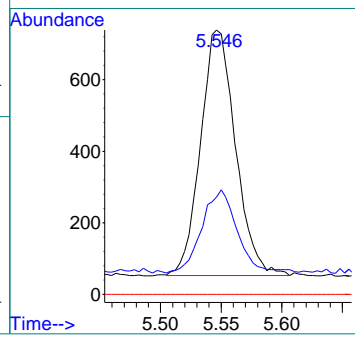
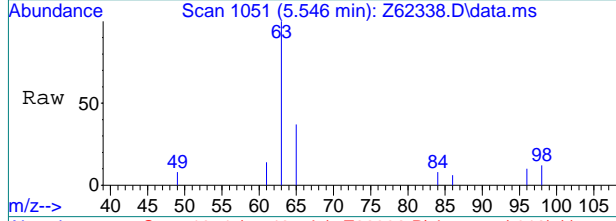
#5
 Methylene Chloride
 Concen: 0.13 ppb
 RT: 4.717 min Scan# 831
 Delta R.T. 0.004 min
 Lab File: Z62338.D
 Acq: 14 Sep 2020 6:55 pm

Tgt Ion	Ratio	Lower	Upper
84	100		
49	138.0	128.7	168.7
86	65.5	43.9	83.9

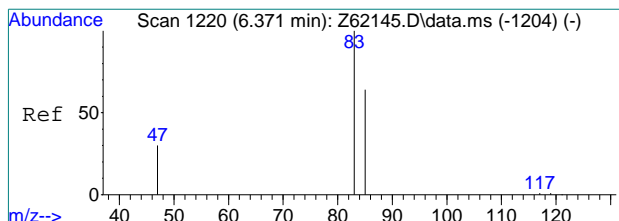


#7
 1,1-Dichloroethane
 Concen: 0.08 ppb
 RT: 5.546 min Scan# 1051
 Delta R.T. 0.000 min
 Lab File: Z62338.D
 Acq: 14 Sep 2020 6:55 pm

Tgt Ion	Ratio	Lower	Upper
63	100		
65	34.2	11.3	51.3
83	0.0	0.0	30.0

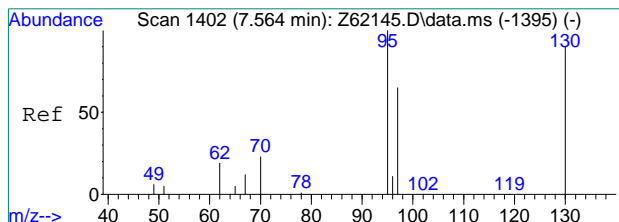
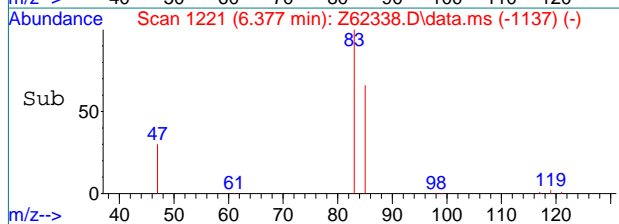
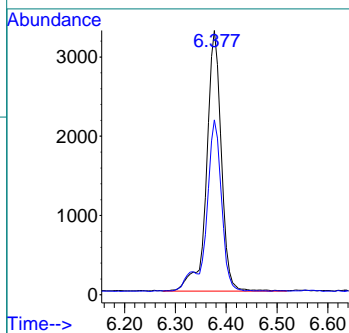
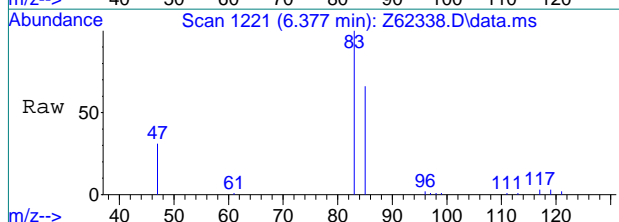


7.1.58
7



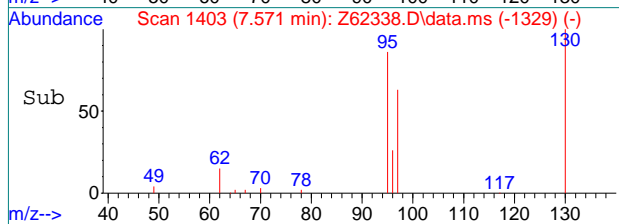
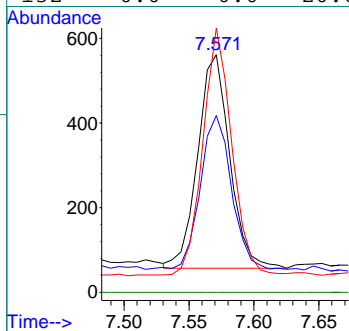
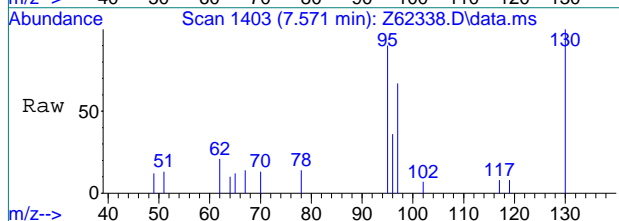
#9
 Chloroform
 Concen: 0.32 ppb
 RT: 6.377 min Scan# 1221
 Delta R.T. -0.000 min
 Lab File: Z62338.D
 Acq: 14 Sep 2020 6:55 pm

Tgt Ion	Resp	Lower	Upper
83	66384		
85	67.7	46.1	86.1

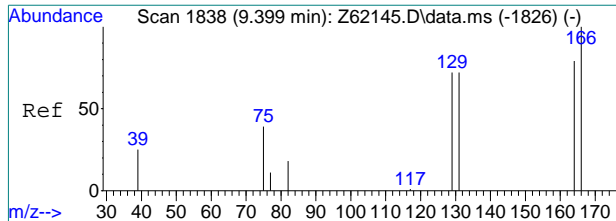


#15
 Trichloroethene
 Concen: 0.07 ppb
 RT: 7.571 min Scan# 1403
 Delta R.T. -0.000 min
 Lab File: Z62338.D
 Acq: 14 Sep 2020 6:55 pm

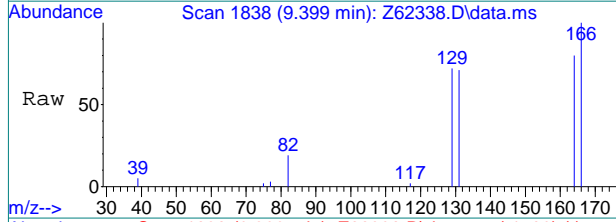
Tgt Ion	Resp	Lower	Upper
95	8667		
97	72.1	44.5	84.5
130	115.6	69.7	109.7#
132	0.0	0.0	20.0



7.1.58
7

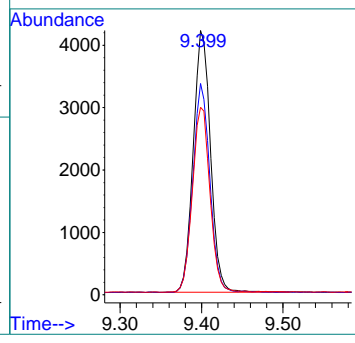
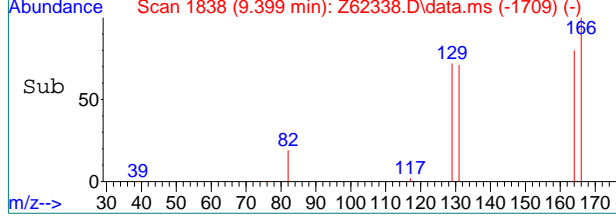


#21
 Tetrachloroethene
 Concen: 0.47 ppb
 RT: 9.399 min Scan# 1838
 Delta R.T. -0.000 min
 Lab File: Z62338.D
 Acq: 14 Sep 2020 6:55 pm



Tgt Ion: 166 Resp: 61876

Ion	Ratio	Lower	Upper
166	100		
164	79.7	58.7	98.7
131	70.6	51.6	91.6



7.1.58
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-14-2020\VO2360\
Data File : O61342.d
Acq On : 13 Sep 2020 5:30 pm
Operator : stutip
Sample : fa78549-40
Misc : MS47201,VO2360,,,,,
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Sep 14 08:37:20 2020
Quant Method : C:\msdchem\1\methods\SIMCL091120.M
Quant Title : Standard Methods 6200B
QLast Update : Sun Sep 13 19:20:40 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Fluorobenzene	7.346	96	172216	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.447	117	140001	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.074	65	81292	5.84	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	116.80%	
19) Toluene-d8	8.900	98	145981	4.62	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	92.40%	
Target Compounds						
8) cis-1,2-Dichloroethene	6.072	96	3592	0.23	ug/L #	78
9) Chloroform	6.333	83	6429	0.23	ug/L #	78
15) Trichloroethene	7.512	95	81990	5.06	ug/L	86
21) Tetrachloroethene	9.343	166	6115	0.40	ug/L	98

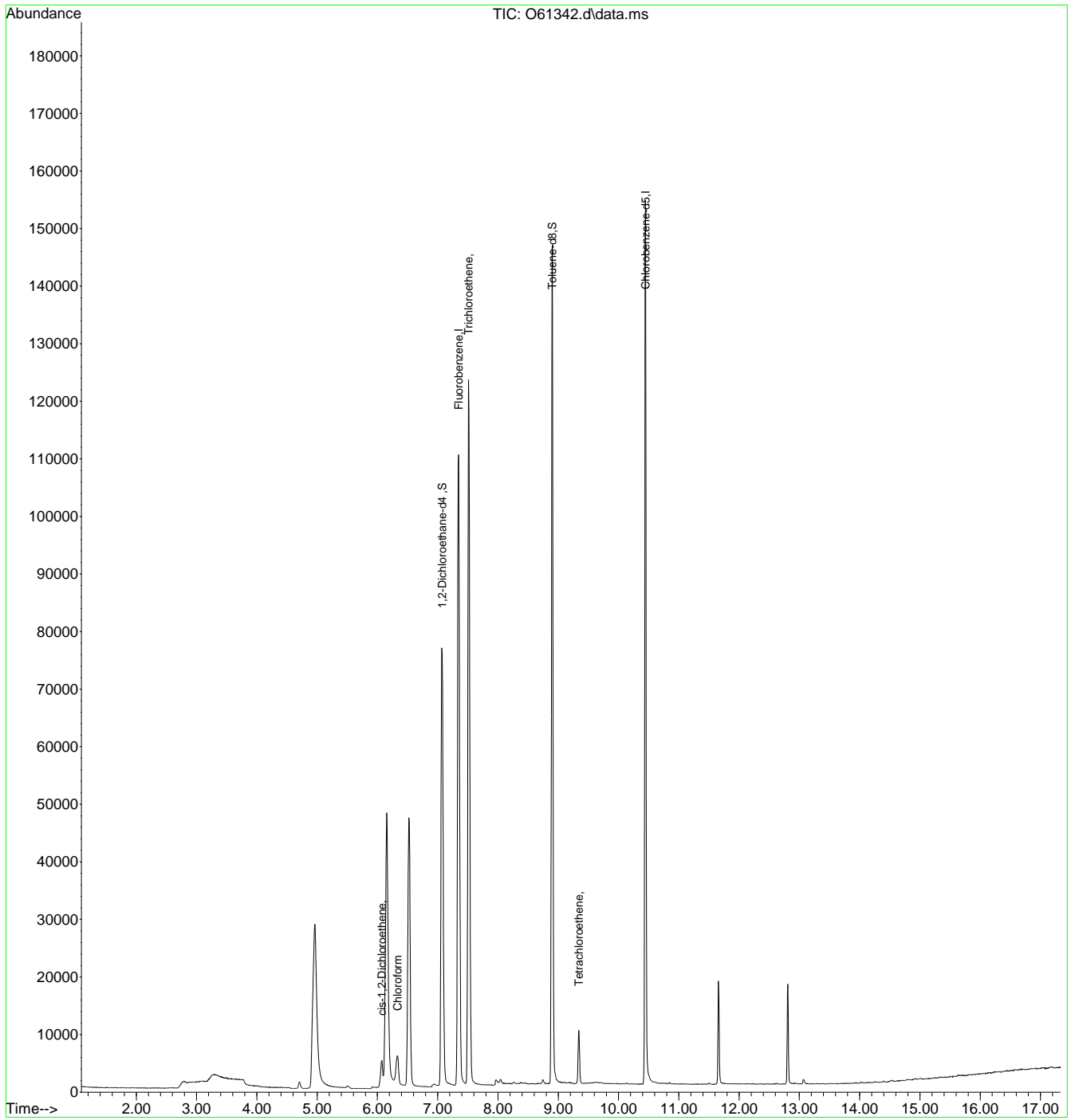
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.1.59
7

Quantitation Report (QT Reviewed)

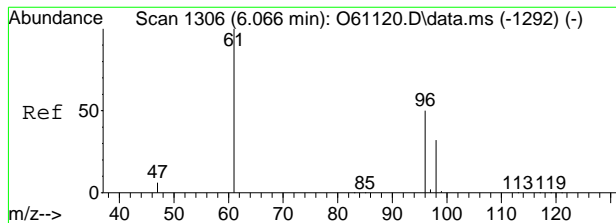
Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-14-2020\VO2360\
Data File : O61342.d
Acq On : 13 Sep 2020 5:30 pm
Operator : stutip
Sample : fa78549-40
Misc : MS47201,VO2360,,,,,
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Sep 14 08:37:20 2020
Quant Method : C:\msdchem\1\methods\SIMCL091120.M
Quant Title : Standard Methods 6200B
QLast Update : Sun Sep 13 19:20:40 2020
Response via : Initial Calibration



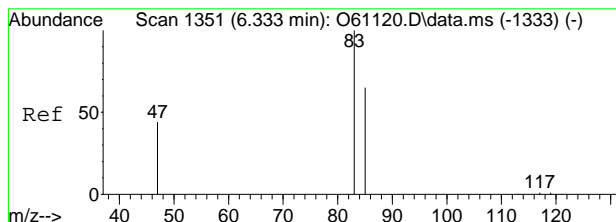
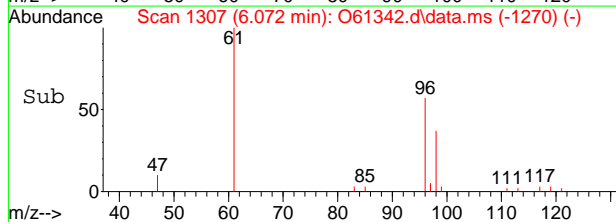
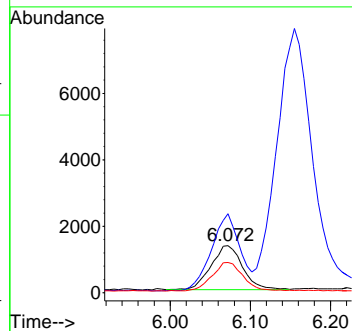
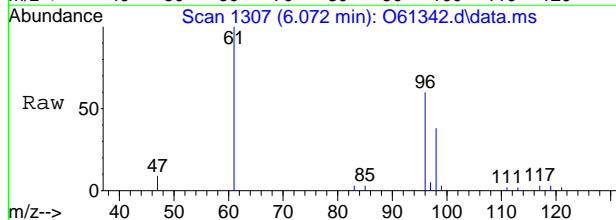
7.1.59
7





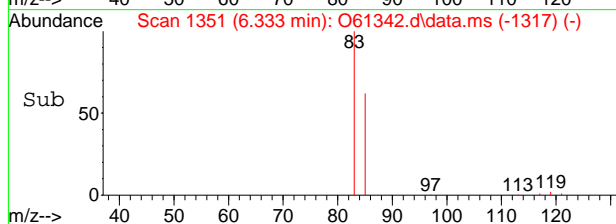
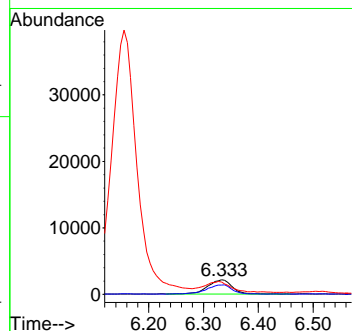
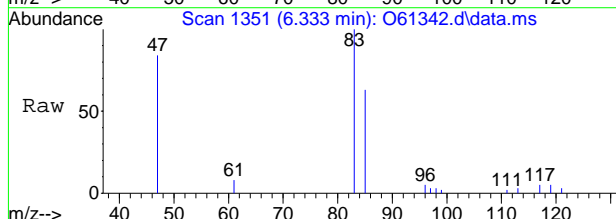
#8
 cis-1,2-Dichloroethene
 Concen: 0.23 ug/L
 RT: 6.072 min Scan# 1307
 Delta R.T. 0.000 min
 Lab File: O61342.d
 Acq: 13 Sep 2020 5:30 pm

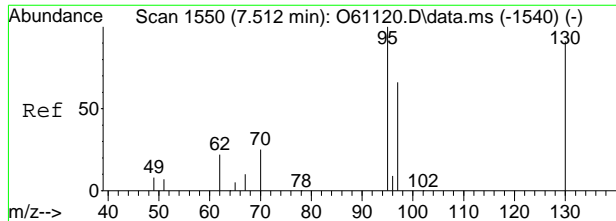
Tgt Ion	Resp	Lower	Upper
96	3592		
61	174.7	107.0	167.0#
98	64.7	34.1	94.1



#9
 Chloroform
 Concen: 0.23 ug/L
 RT: 6.333 min Scan# 1351
 Delta R.T. -0.000 min
 Lab File: O61342.d
 Acq: 13 Sep 2020 5:30 pm

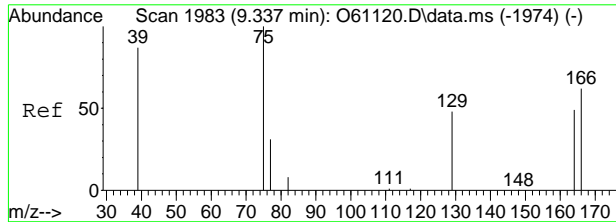
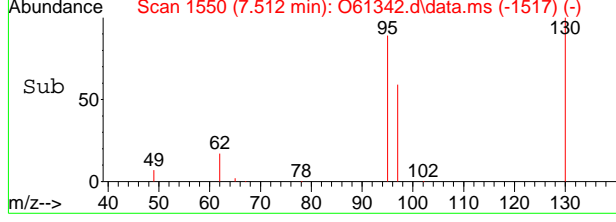
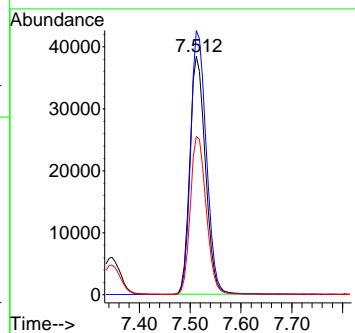
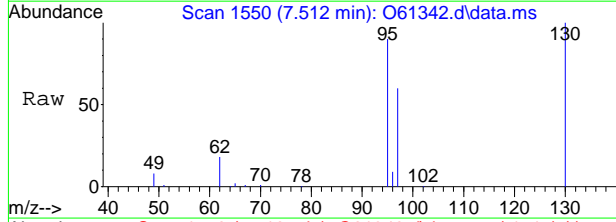
Tgt Ion	Resp	Lower	Upper
83	6429		
83	100		
85	62.4	33.0	93.0
47	71.8	8.1	68.1#





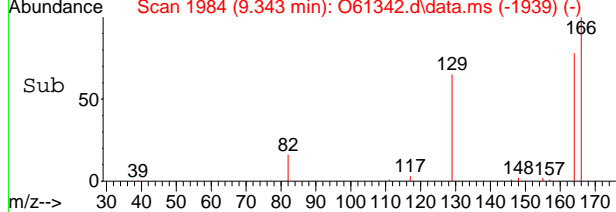
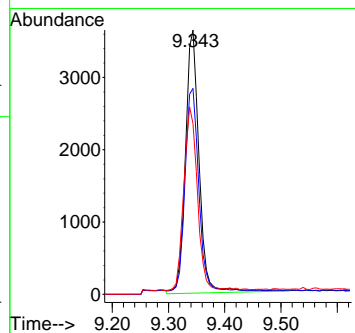
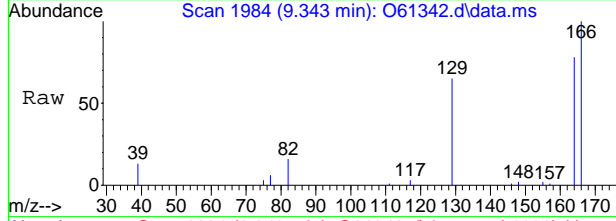
#15
 Trichloroethene
 Concen: 5.06 ug/L
 RT: 7.512 min Scan# 1550
 Delta R.T. -0.006 min
 Lab File: O61342.d
 Acq: 13 Sep 2020 5:30 pm

Tgt Ion	Resp	Lower	Upper
95	81990		
130	111.0	60.4	120.4
97	66.4	34.6	94.6



#21
 Tetrachloroethene
 Concen: 0.40 ug/L
 RT: 9.343 min Scan# 1984
 Delta R.T. 0.000 min
 Lab File: O61342.d
 Acq: 13 Sep 2020 5:30 pm

Tgt Ion	Resp	Lower	Upper
166	6115		
164	77.4	47.3	107.3
129	63.9	37.5	97.5



7.1.59
7



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\091420\
 Data File : Z62339.D
 Acq On : 14 Sep 2020 7:14 pm
 Operator : JuanG
 Sample : FA78549-40
 Misc : MS47201,VZ2418,,,,,
 ALS Vial : 17 Sample Multiplier: 1

Quant Time: Sep 15 18:50:52 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Sun Sep 13 13:38:26 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	

Internal Standards							
1) Fluorobenzene	7.401	96	1391996	5.00	ppb	0.00	
18) Chlorobenzene-d5	10.511	117	1135236	5.00	ppb	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.130	65	506306	5.88	ppb	0.00	
Spiked Amount	5.000	Range	79 - 125	Recovery	=	117.60%	
19) Toluene-d8	8.961	98	1348270	4.89	ppb	0.00	
Spiked Amount	5.000	Range	70 - 130	Recovery	=	97.80%	
Target Compounds							
5) Methylene Chloride	4.713	84	19330	0.14	ppb		Qvalue 90
8) cis-1,2-Dichloroethene	6.110	96	27188	0.24	ppb		92
9) Chloroform	6.377	83	46777	0.22	ppb		94
15) Trichloroethene	7.571	95	655569	5.51	ppb	#	86
21) Tetrachloroethene	9.399	166	44921	0.33	ppb		97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

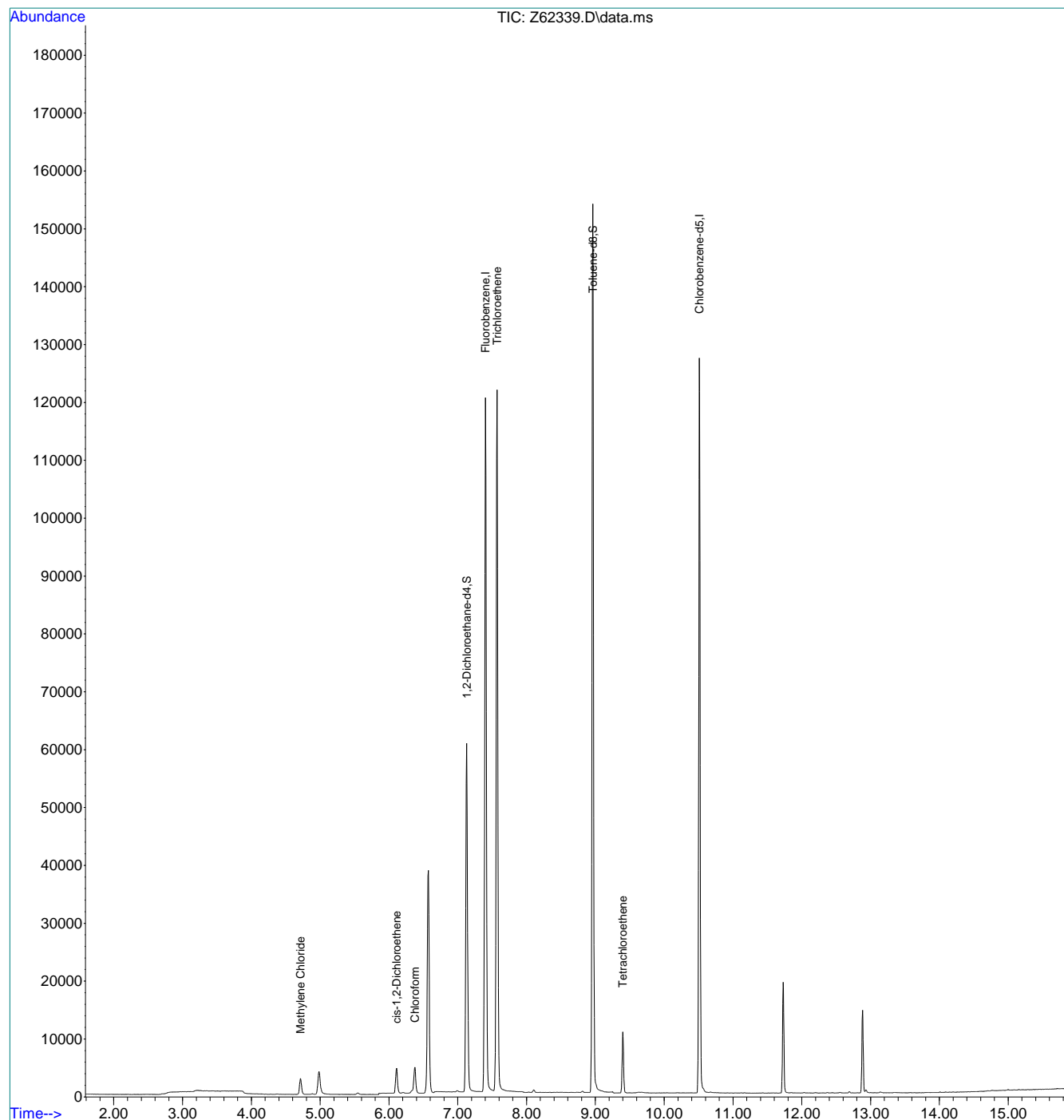
7.1.60

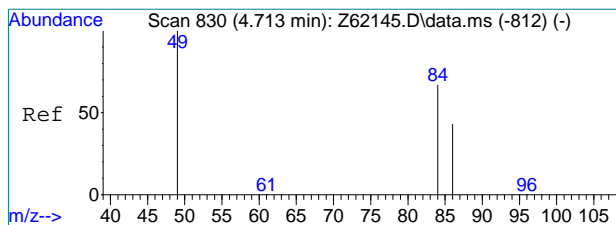
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\091420\
Data File : Z62339.D
Acq On : 14 Sep 2020 7:14 pm
Operator : JuanG
Sample : FA78549-40
Misc : MS47201,VZ2418,,,,,
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Sep 15 18:50:52 2020
Quant Method : C:\msdchem\1\methods\SIMCL091120.M
Quant Title : WATER-EPA 8260B
QLast Update : Sun Sep 13 13:38:26 2020
Response via : Initial Calibration

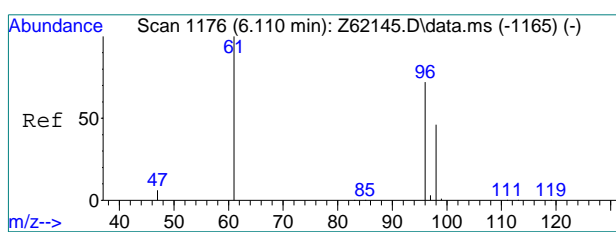
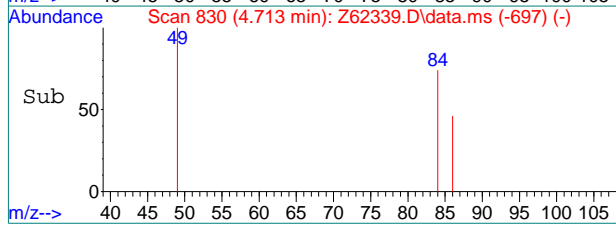
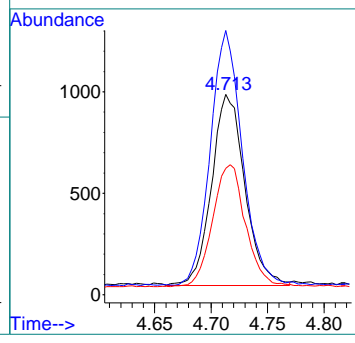
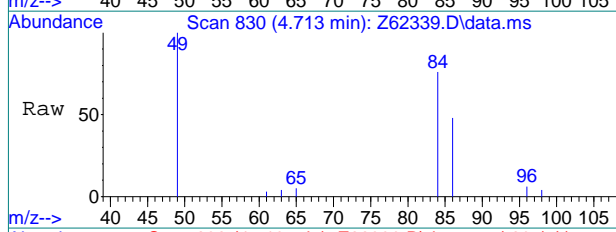




#5
 Methylene Chloride
 Concen: 0.14 ppb
 RT: 4.713 min Scan# 830
 Delta R.T. 0.000 min
 Lab File: Z62339.D
 Acq: 14 Sep 2020 7:14 pm

Tgt Ion: 84 Resp: 19330

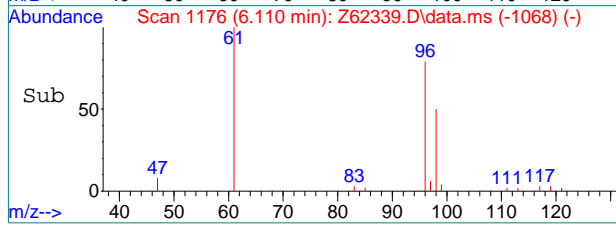
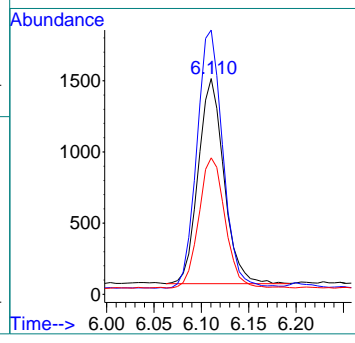
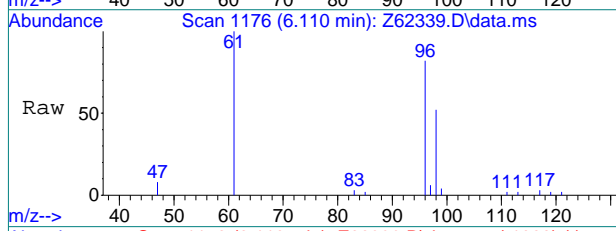
Ion	Ratio	Lower	Upper
84	100		
49	133.0	128.7	168.7
86	61.7	43.9	83.9



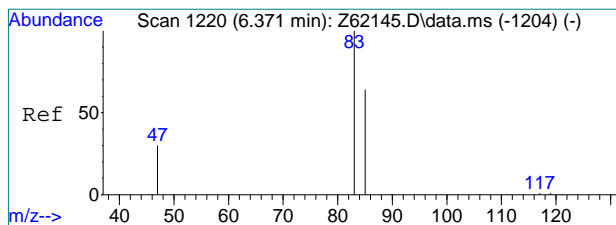
#8
 cis-1,2-Dichloroethene
 Concen: 0.24 ppb
 RT: 6.110 min Scan# 1176
 Delta R.T. 0.000 min
 Lab File: Z62339.D
 Acq: 14 Sep 2020 7:14 pm

Tgt Ion: 96 Resp: 27188

Ion	Ratio	Lower	Upper
96	100		
61	125.9	119.3	159.3
98	63.5	44.5	84.5

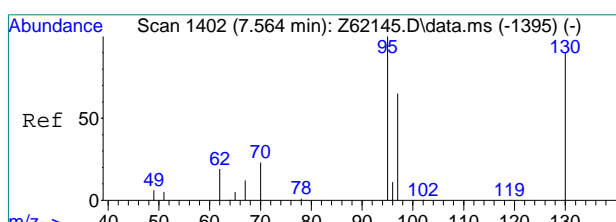
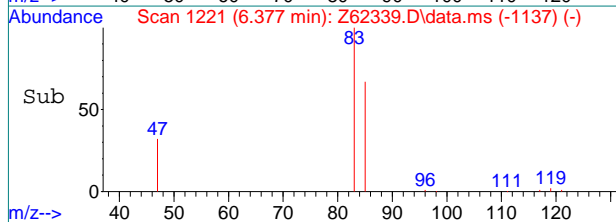
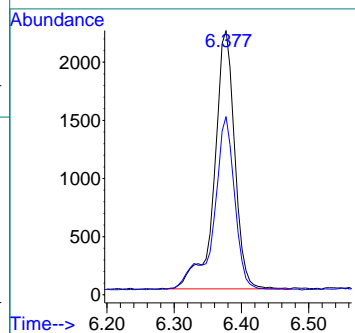
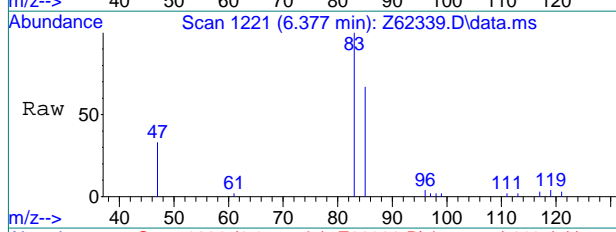


7.1.60
7



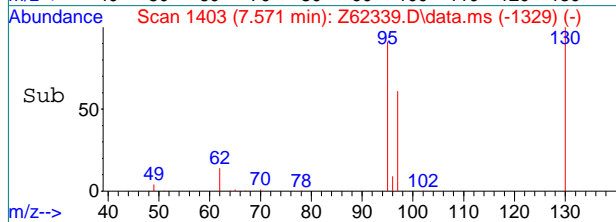
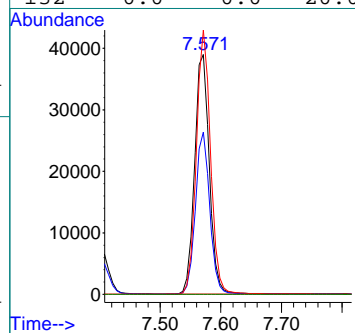
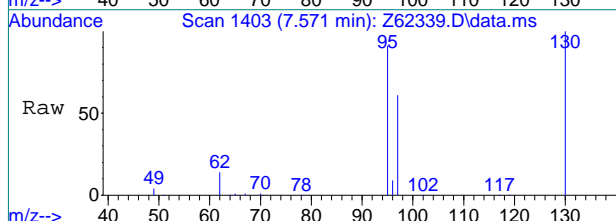
#9
 Chloroform
 Concen: 0.22 ppb
 RT: 6.377 min Scan# 1221
 Delta R.T. 0.000 min
 Lab File: Z62339.D
 Acq: 14 Sep 2020 7:14 pm

Tgt Ion	Resp	Lower	Upper
83	46777		
85	70.5	46.1	86.1

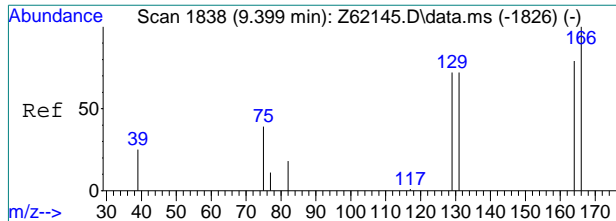


#15
 Trichloroethene
 Concen: 5.51 ppb
 RT: 7.571 min Scan# 1403
 Delta R.T. 0.000 min
 Lab File: Z62339.D
 Acq: 14 Sep 2020 7:14 pm

Tgt Ion	Resp	Lower	Upper
95	655569		
97	67.6	44.5	84.5
130	110.3	69.7	109.7#
132	0.0	0.0	20.0

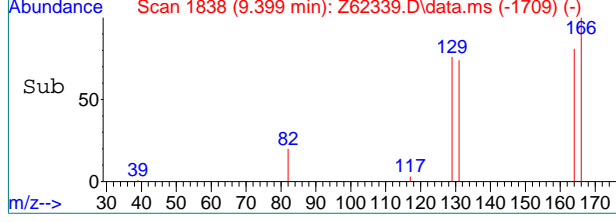
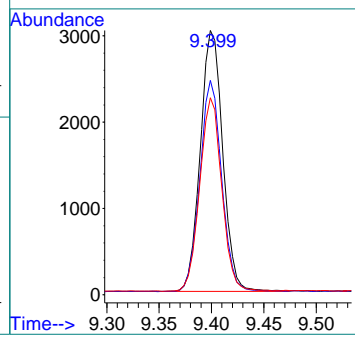
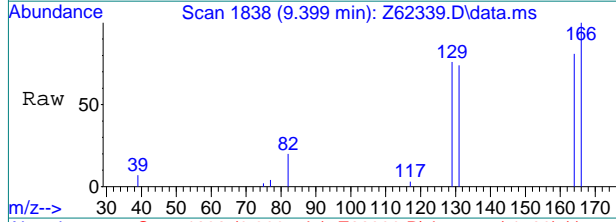


7.1.60



#21
 Tetrachloroethene
 Concen: 0.33 ppb
 RT: 9.399 min Scan# 1838
 Delta R.T. -0.000 min
 Lab File: Z62339.D
 Acq: 14 Sep 2020 7:14 pm

Tgt Ion	Ratio	Lower	Upper
166	100		
164	80.8	58.7	98.7
131	74.0	51.6	91.6



7.1.60
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-14-2020\VO2360\
 Data File : O61343.d
 Acq On : 13 Sep 2020 5:51 pm
 Operator : stutip
 Sample : fa78549-41
 Misc : MS47201,VO2360,,,,,
 ALS Vial : 18 Sample Multiplier: 1

Quant Time: Sep 14 08:37:40 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Sun Sep 13 19:20:40 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

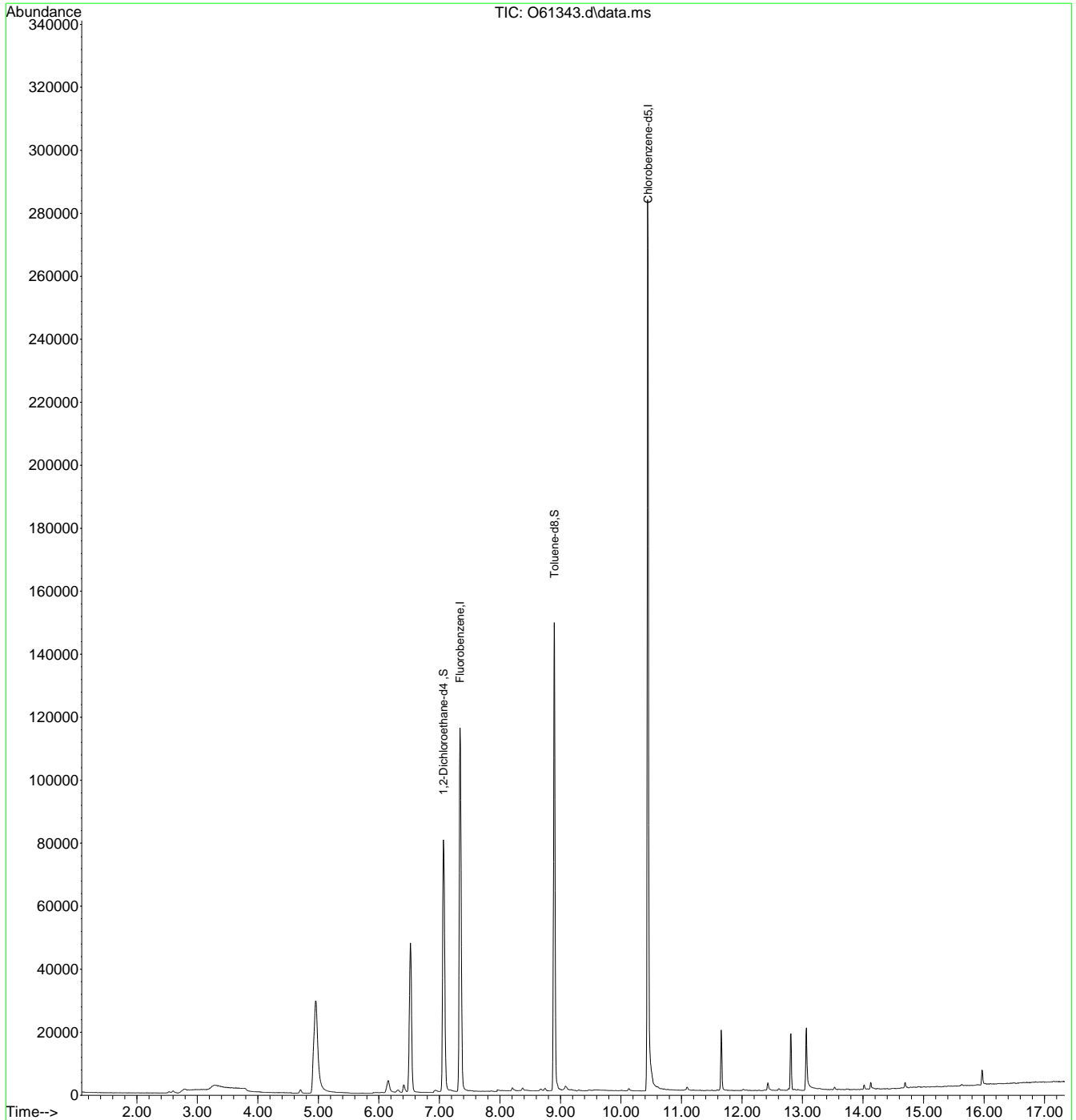
Internal Standards						
1) Fluorobenzene	7.340	96	173487	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.447	117	174735	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.068	65	81170	5.79	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	115.80%	
19) Toluene-d8	8.896	98	146148	3.71	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	74.20%#	
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-14-2020\VO2360\
Data File : O61343.d
Acq On : 13 Sep 2020 5:51 pm
Operator : stutip
Sample : fa78549-41
Misc : MS47201,VO2360,,,,,
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Sep 14 08:37:40 2020
Quant Method : C:\msdchem\1\methods\SIMCL091120.M
Quant Title : Standard Methods 6200B
QLast Update : Sun Sep 13 19:20:40 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\091420\
Data File : Z62340.D
Acq On : 14 Sep 2020 7:33 pm
Operator : JuanG
Sample : FA78549-41
Misc : MS47201,VZ2418,,,,,
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Sep 15 18:50:54 2020
Quant Method : C:\msdchem\1\methods\SIMCL091120.M
Quant Title : WATER-EPA 8260B
QLast Update : Sun Sep 13 13:38:26 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Fluorobenzene	7.401	96	1380259	5.00	ppb	0.00
18) Chlorobenzene-d5	10.511	117	1140028	5.00	ppb	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.130	65	501900	5.88	ppb	0.00
Spiked Amount	5.000	Range	79 - 125	Recovery	=	117.60%
19) Toluene-d8	8.961	98	1326293	4.79	ppb	0.00
Spiked Amount	5.000	Range	70 - 130	Recovery	=	95.80%
Target Compounds						
5) Methylene Chloride	4.717	84	19626	0.14	ppb	Qvalue # 85

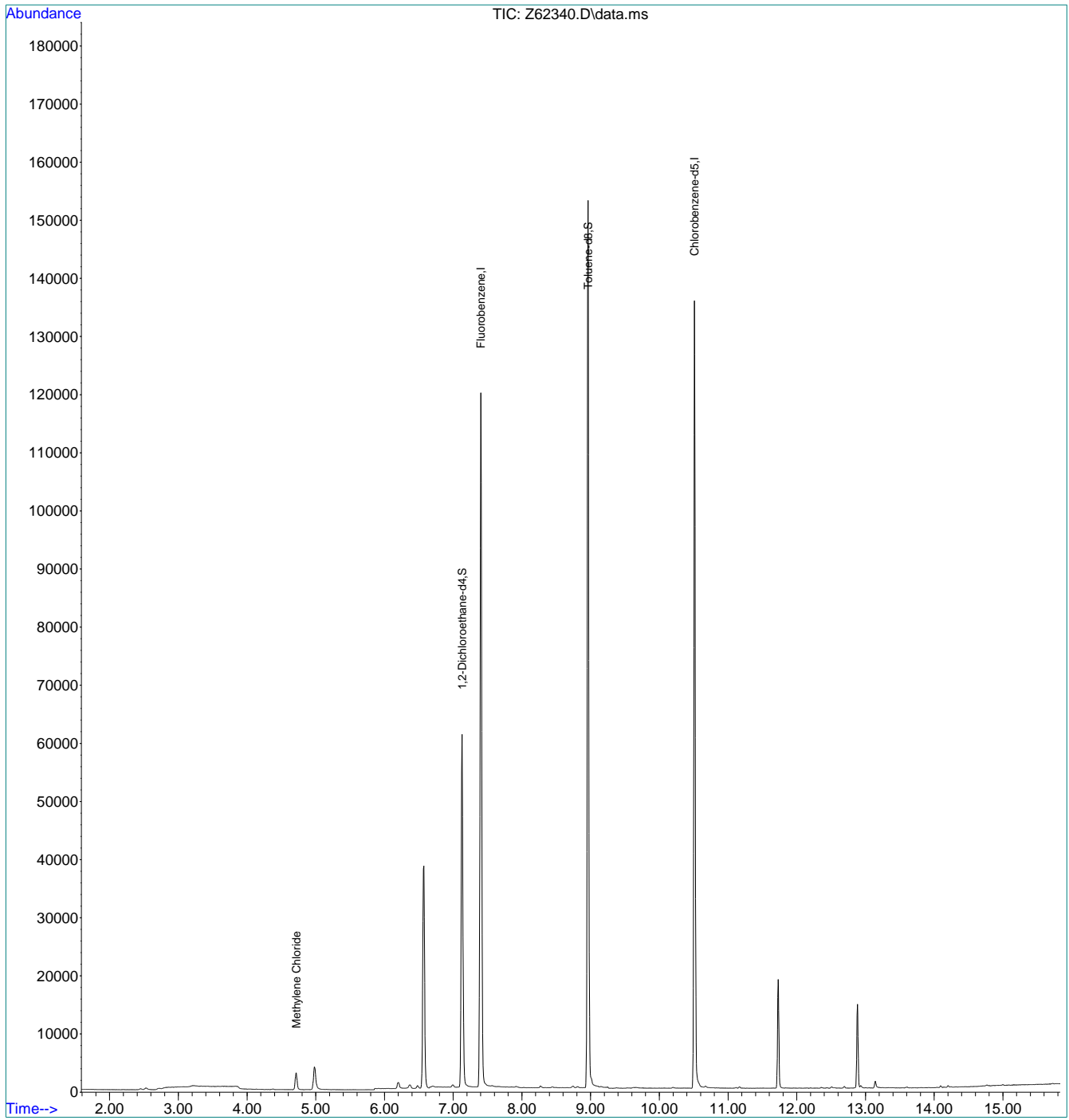
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.1.62
7

Quantitation Report (QT Reviewed)

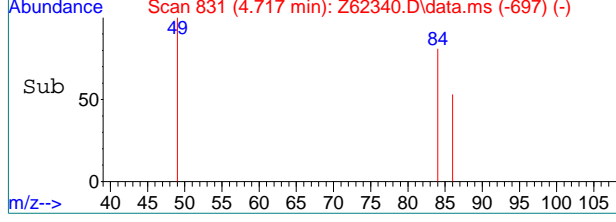
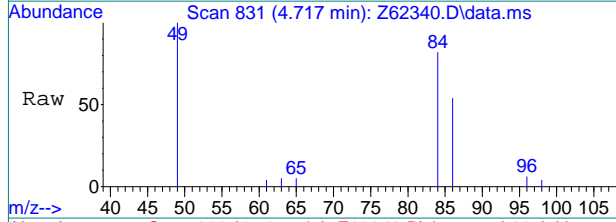
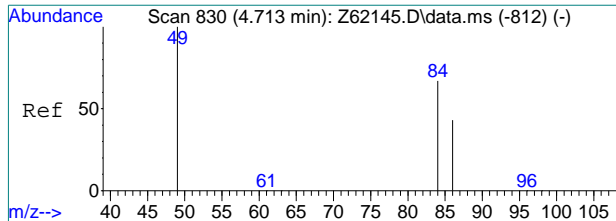
Data Path : C:\msdchem\1\data\091420\
Data File : Z62340.D
Acq On : 14 Sep 2020 7:33 pm
Operator : JuanG
Sample : FA78549-41
Misc : MS47201,VZ2418,,,,,
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Sep 15 18:50:54 2020
Quant Method : C:\msdchem\1\methods\SIMCL091120.M
Quant Title : WATER-EPA 8260B
QLast Update : Sun Sep 13 13:38:26 2020
Response via : Initial Calibration



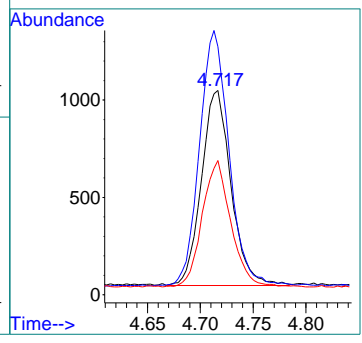
7.1.62
7





#5
 Methylene Chloride
 Concen: 0.14 ppb
 RT: 4.717 min Scan# 831
 Delta R.T. 0.004 min
 Lab File: Z62340.D
 Acq: 14 Sep 2020 7:33 pm

Tgt Ion	Resp	Lower	Upper
84	19626		
49	121.9	128.7	168.7#
86	64.5	43.9	83.9



7.1.62
7



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-14-2020\VO2360\
Data File : O61344.d
Acq On : 13 Sep 2020 6:11 pm
Operator : stutip
Sample : fa78549-42
Misc : MS47201,VO2360,,,,,
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Sep 14 08:37:53 2020
Quant Method : C:\msdchem\1\methods\SIMCL091120.M
Quant Title : Standard Methods 6200B
QLast Update : Sun Sep 13 19:20:40 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Fluorobenzene	7.340	96	172421	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.447	117	137210	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.068	65	81275	5.84	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	116.80%	
19) Toluene-d8	8.896	98	146729	4.74	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	94.80%	
Target Compounds						
15) Trichloroethene	7.512	95	5698	0.35	ug/L	Qvalue 85

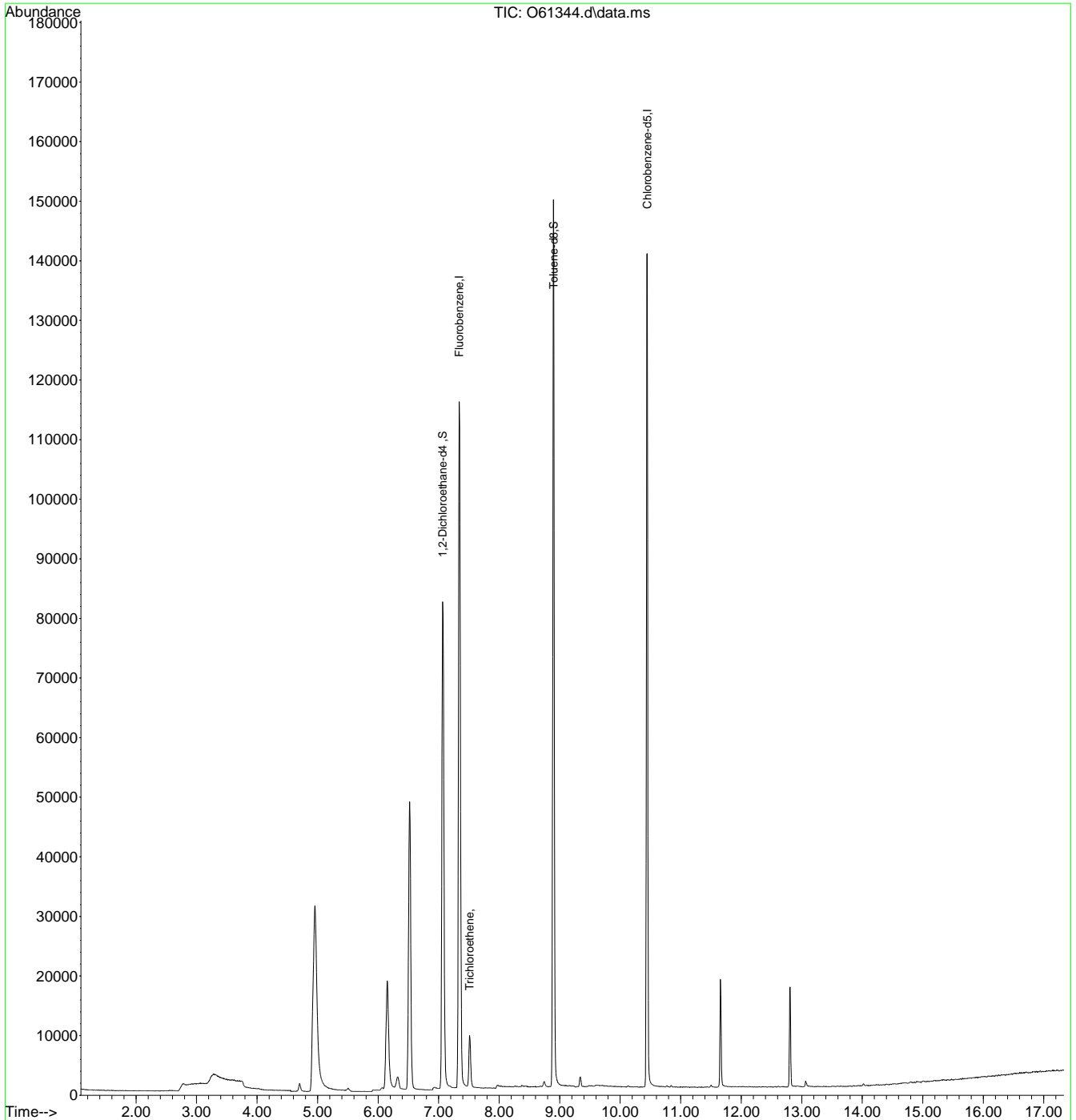
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.1.63
7

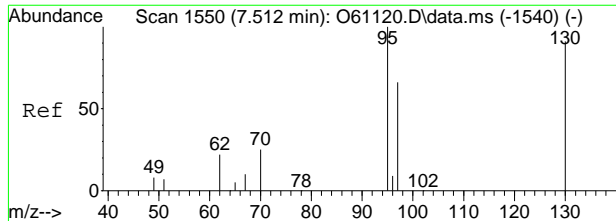
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-14-2020\VO2360\
Data File : O61344.d
Acq On : 13 Sep 2020 6:11 pm
Operator : stutip
Sample : fa78549-42
Misc : MS47201,VO2360,,,,,
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Sep 14 08:37:53 2020
Quant Method : C:\msdchem\1\methods\SIMCL091120.M
Quant Title : Standard Methods 6200B
QLast Update : Sun Sep 13 19:20:40 2020
Response via : Initial Calibration

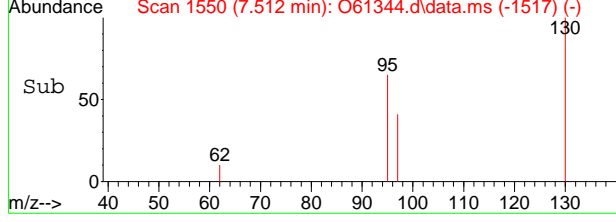
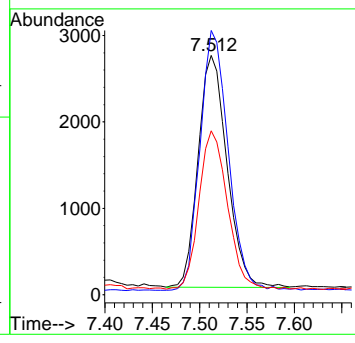
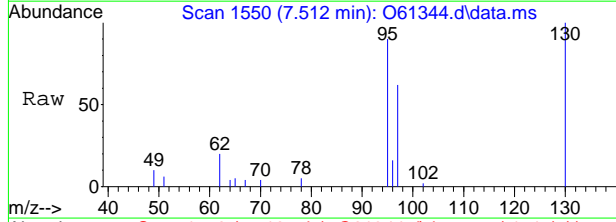


7.1.63
7



#15
 Trichloroethene
 Concen: 0.35 ug/L
 RT: 7.512 min Scan# 1550
 Delta R.T. -0.006 min
 Lab File: O61344.d
 Acq: 13 Sep 2020 6:11 pm

Tgt Ion	Resp	Lower	Upper
95	5698		
95	100		
130	112.1	60.4	120.4
97	68.3	34.6	94.6



7.1.63
7



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\091420\
 Data File : Z62341.D
 Acq On : 14 Sep 2020 7:52 pm
 Operator : JuanG
 Sample : FA78549-42
 Misc : MS47201,VZ2418,,,,,
 ALS Vial : 19 Sample Multiplier: 1

Quant Time: Sep 15 18:50:56 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Sun Sep 13 13:38:26 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	

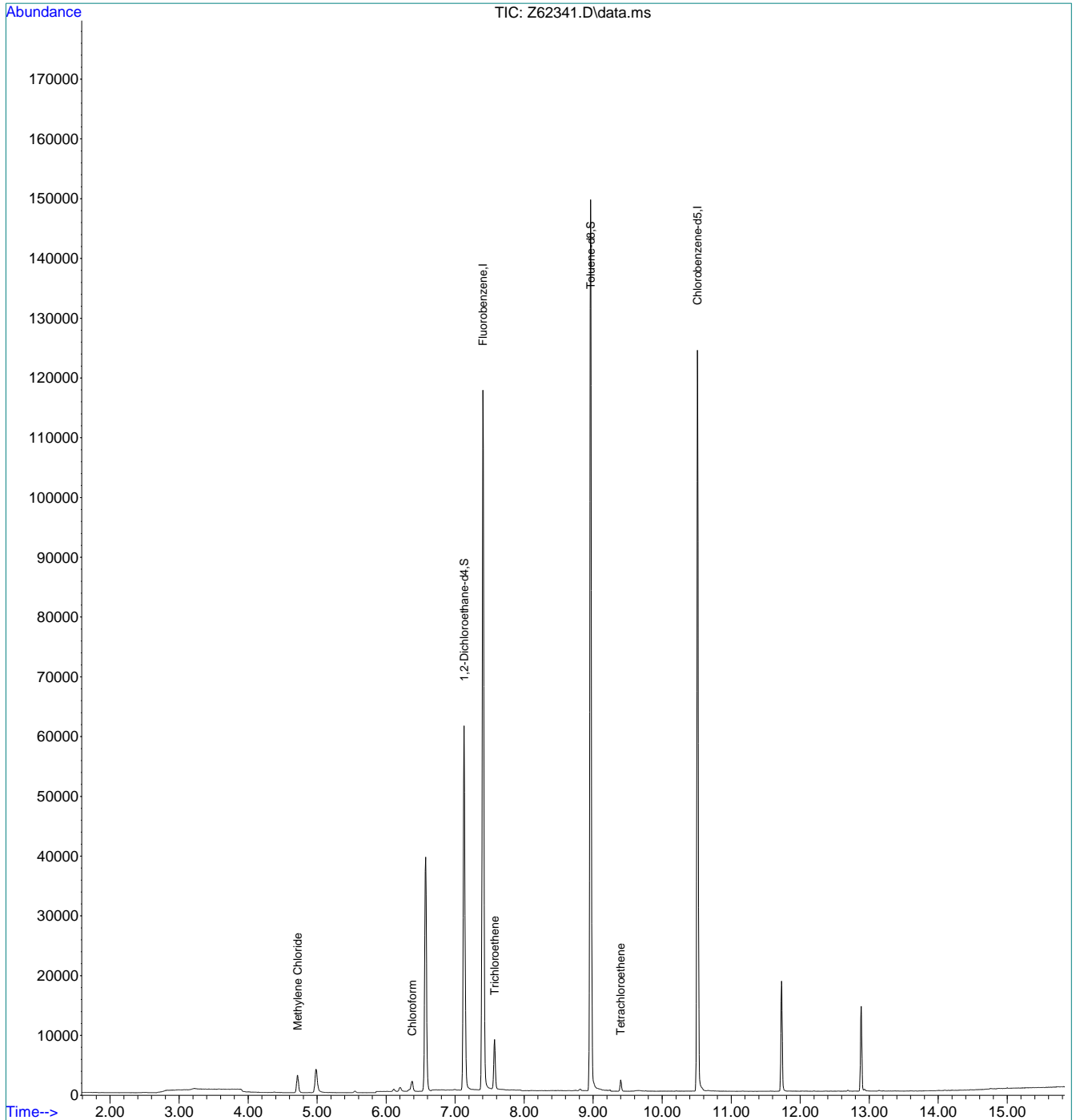
Internal Standards							
1) Fluorobenzene	7.401	96	1368340	5.00	ppb	0.00	
18) Chlorobenzene-d5	10.511	117	1112637	5.00	ppb	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.130	65	501972	5.93	ppb	0.00	
Spiked Amount	5.000	Range	79 - 125	Recovery	=	118.60%	
19) Toluene-d8	8.961	98	1319751	4.88	ppb	0.00	
Spiked Amount	5.000	Range	70 - 130	Recovery	=	97.60%	
Target Compounds							
5) Methylene Chloride	4.717	84	19877	0.15	ppb	90	Qvalue
9) Chloroform	6.377	83	17999	0.09	ppb	89	
15) Trichloroethene	7.571	95	44636	0.38	ppb	85	
21) Tetrachloroethene	9.399	166	8200	0.06	ppb	96	

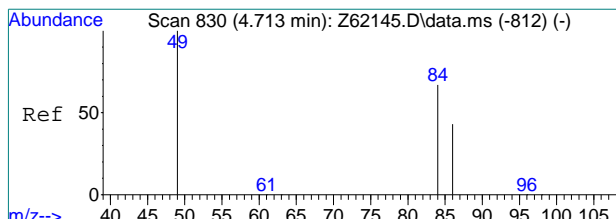
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\091420\
Data File : Z62341.D
Acq On : 14 Sep 2020 7:52 pm
Operator : JuanG
Sample : FA78549-42
Misc : MS47201,VZ2418,,,,,
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Sep 15 18:50:56 2020
Quant Method : C:\msdchem\1\methods\SIMCL091120.M
Quant Title : WATER-EPA 8260B
QLast Update : Sun Sep 13 13:38:26 2020
Response via : Initial Calibration

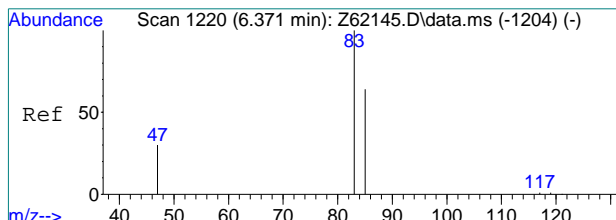
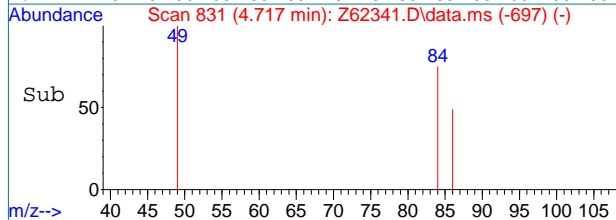
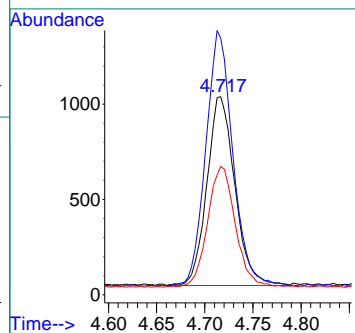
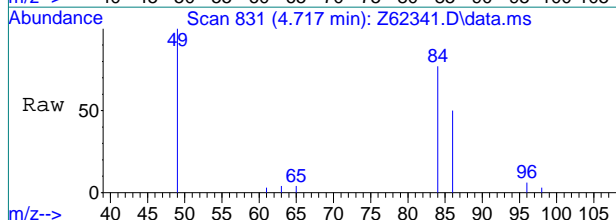




#5
 Methylene Chloride
 Concen: 0.15 ppb
 RT: 4.717 min Scan# 831
 Delta R.T. 0.004 min
 Lab File: Z62341.D
 Acq: 14 Sep 2020 7:52 pm

Tgt Ion: 84 Resp: 19877

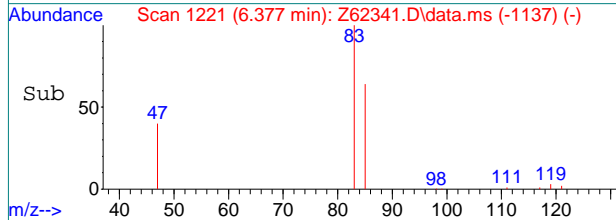
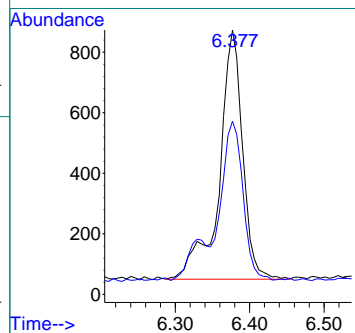
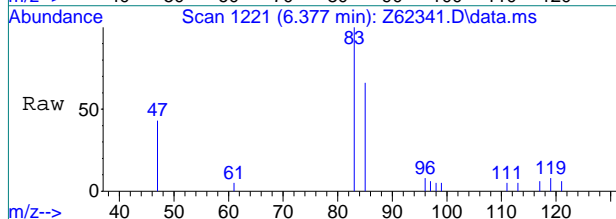
Ion	Ratio	Lower	Upper
84	100		
49	131.1	128.7	168.7
86	63.7	43.9	83.9

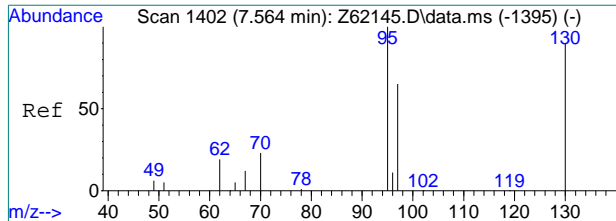


#9
 Chloroform
 Concen: 0.09 ppb
 RT: 6.377 min Scan# 1221
 Delta R.T. -0.000 min
 Lab File: Z62341.D
 Acq: 14 Sep 2020 7:52 pm

Tgt Ion: 83 Resp: 17999

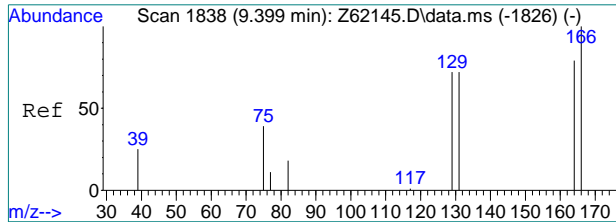
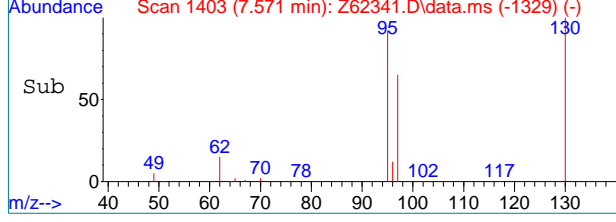
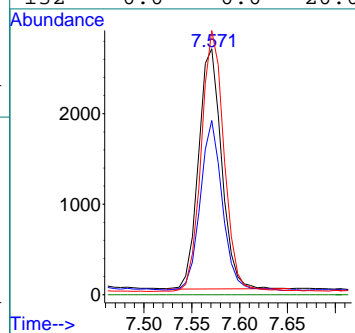
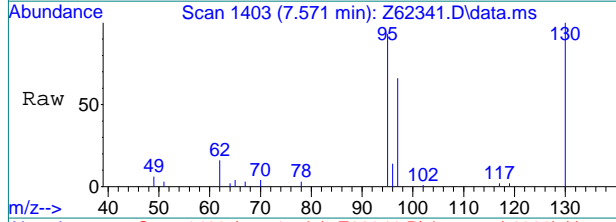
Ion	Ratio	Lower	Upper
83	100		
85	57.2	46.1	86.1





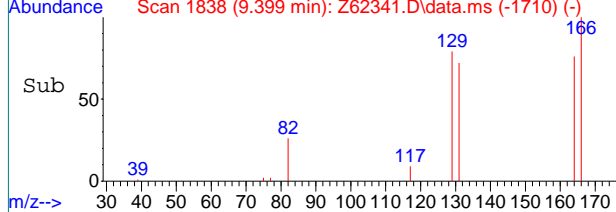
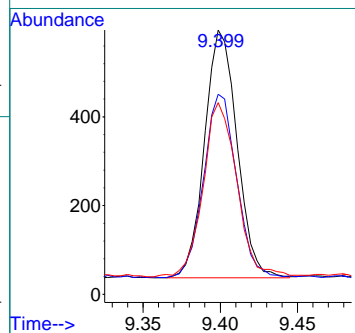
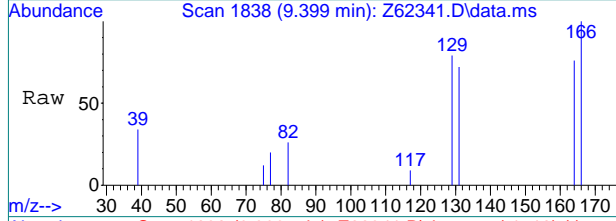
#15
 Trichloroethene
 Concen: 0.38 ppb
 RT: 7.571 min Scan# 1403
 Delta R.T. -0.000 min
 Lab File: Z62341.D
 Acq: 14 Sep 2020 7:52 pm

Tgt Ion	Resp	Lower	Upper
95	44636		
97	70.8	44.5	84.5
130	108.6	69.7	109.7
132	0.0	0.0	20.0



#21
 Tetrachloroethene
 Concen: 0.06 ppb
 RT: 9.399 min Scan# 1838
 Delta R.T. -0.000 min
 Lab File: Z62341.D
 Acq: 14 Sep 2020 7:52 pm

Tgt Ion	Resp	Lower	Upper
166	8200		
164	73.9	58.7	98.7
131	69.6	51.6	91.6



7.1.64
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-11-2020\vo2354\
 Data File : O61158.d
 Acq On : 10 Sep 2020 9:36 am
 Operator : melissam
 Sample : mb
 Misc : MS47173,VO2354,,,,,
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 11 05:42:28 2020
 Quant Method : C:\msdchem\1\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)

Internal Standards						
1) Fluorobenzene	7.346	96	215683	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.447	117	151395	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.074	65	105301	5.56	ug/L	0.00
Spiked Amount	5.000	Range	74 - 125	Recovery	=	111.20%
19) Toluene-d8	8.900	98	190516	5.15	ug/L	0.00
Spiked Amount	5.000	Range	88 - 111	Recovery	=	103.00%
Target Compounds						
5) Methylene Chloride	4.703	49	11873	0.22	ug/L	Qvalue 89

(#) = qualifier out of range (m) = manual integration (+) = signals summed

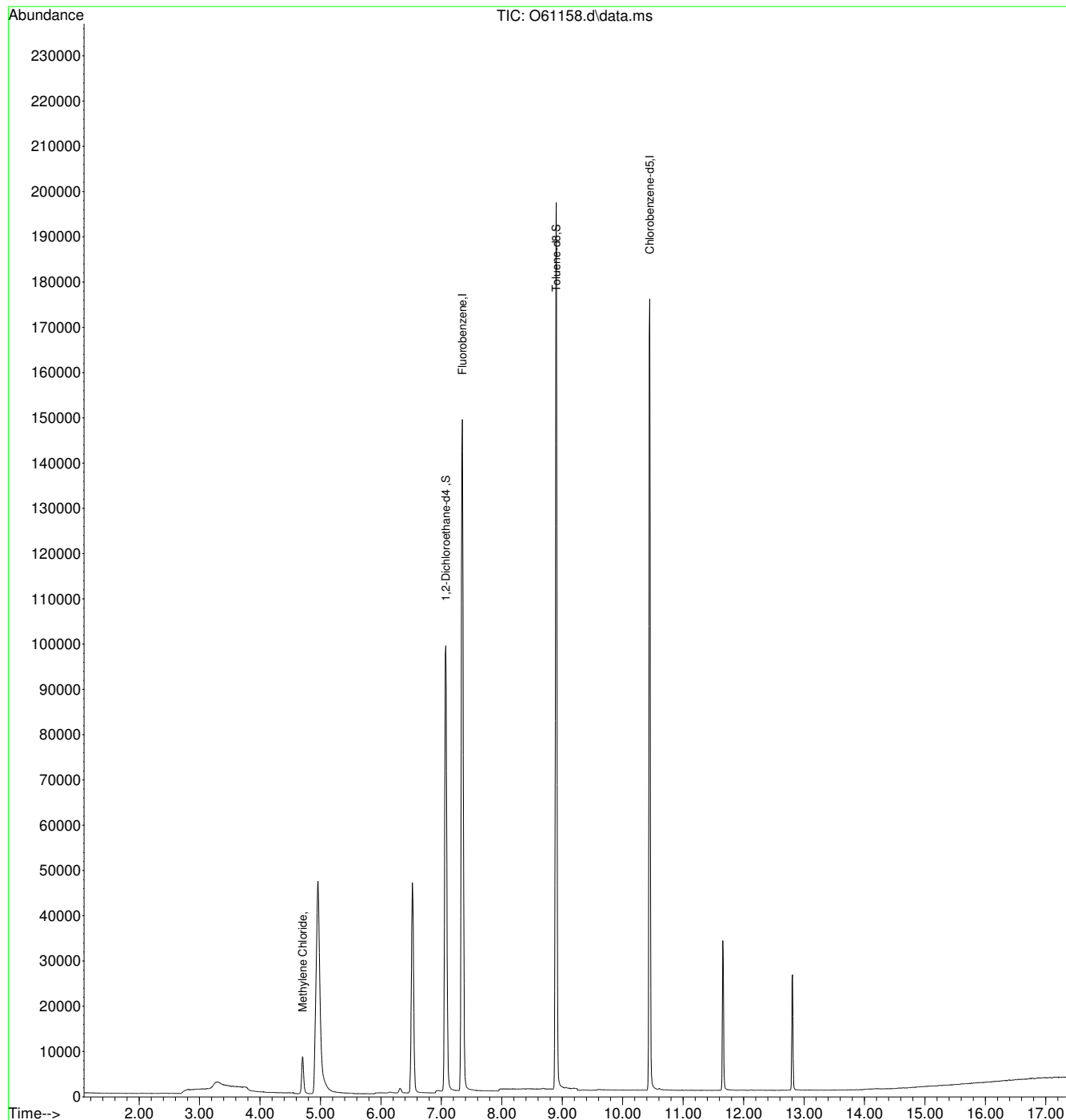
7.2.1
7



Quantitation Report (QT Reviewed)

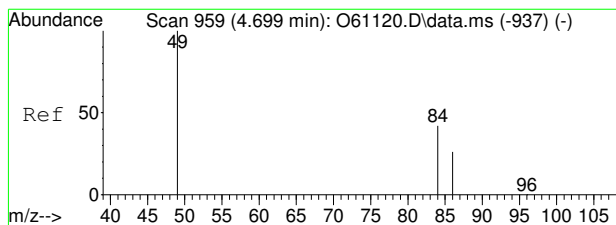
Data Path : C:\msdchem\1\data\johnm\September 2020\09-11-2020\vo2354\
Data File : O61158.d
Acq On : 10 Sep 2020 9:36 am
Operator : melissam
Sample : mb
Misc : MS47173,VO2354,,,,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 11 05:42:28 2020
Quant Method : C:\msdchem\1\methods\SIMCL090820.M
Quant Title : Standard Methods 6200B
QLast Update : Wed Sep 09 12:10:38 2020
Response via : Initial Calibration



7.2.1
7

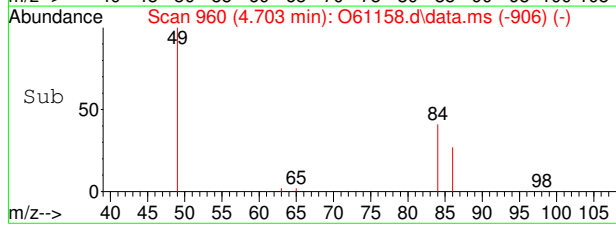
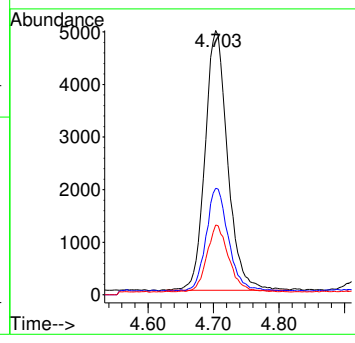
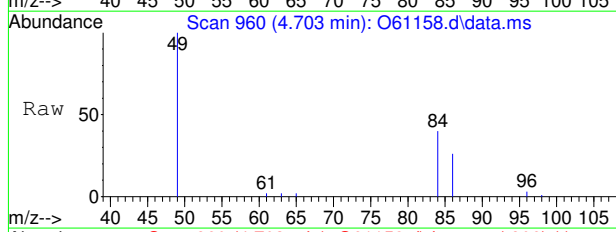




#5
 Methylene Chloride
 Concen: 0.22 ug/L
 RT: 4.703 min Scan# 960
 Delta R.T. 0.004 min
 Lab File: O61158.d
 Acq: 10 Sep 2020 9:36 am

Tgt Ion: 49 Resp: 11873

Ion	Ratio	Lower	Upper
49	100		
84	39.4	17.9	77.9
86	25.7	0.0	59.8



7.2.1
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-14-2020\vz2417\
 Data File : Z62292.d
 Acq On : 13 Sep 2020 12:33 pm
 Operator : stutip
 Sample : MB
 Misc : MS47199,VZ2417,,,,,
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 14 07:07:16 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Sun Sep 13 13:38:26 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)

Internal Standards						
1) Fluorobenzene	7.401	96	1742686	5.00	ppb	0.00
18) Chlorobenzene-d5	10.511	117	1397616	5.00	ppb	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.130	65	605847	5.62	ppb	0.00
Spiked Amount	5.000	Range	79 - 125	Recovery	=	112.40%
19) Toluene-d8	8.961	98	1704424	5.02	ppb	0.00
Spiked Amount	5.000	Range	70 - 130	Recovery	=	100.40%
Target Compounds						
5) Methylene Chloride	4.713	84	37852	0.22	ppb	Qvalue # 88

(#) = qualifier out of range (m) = manual integration (+) = signals summed

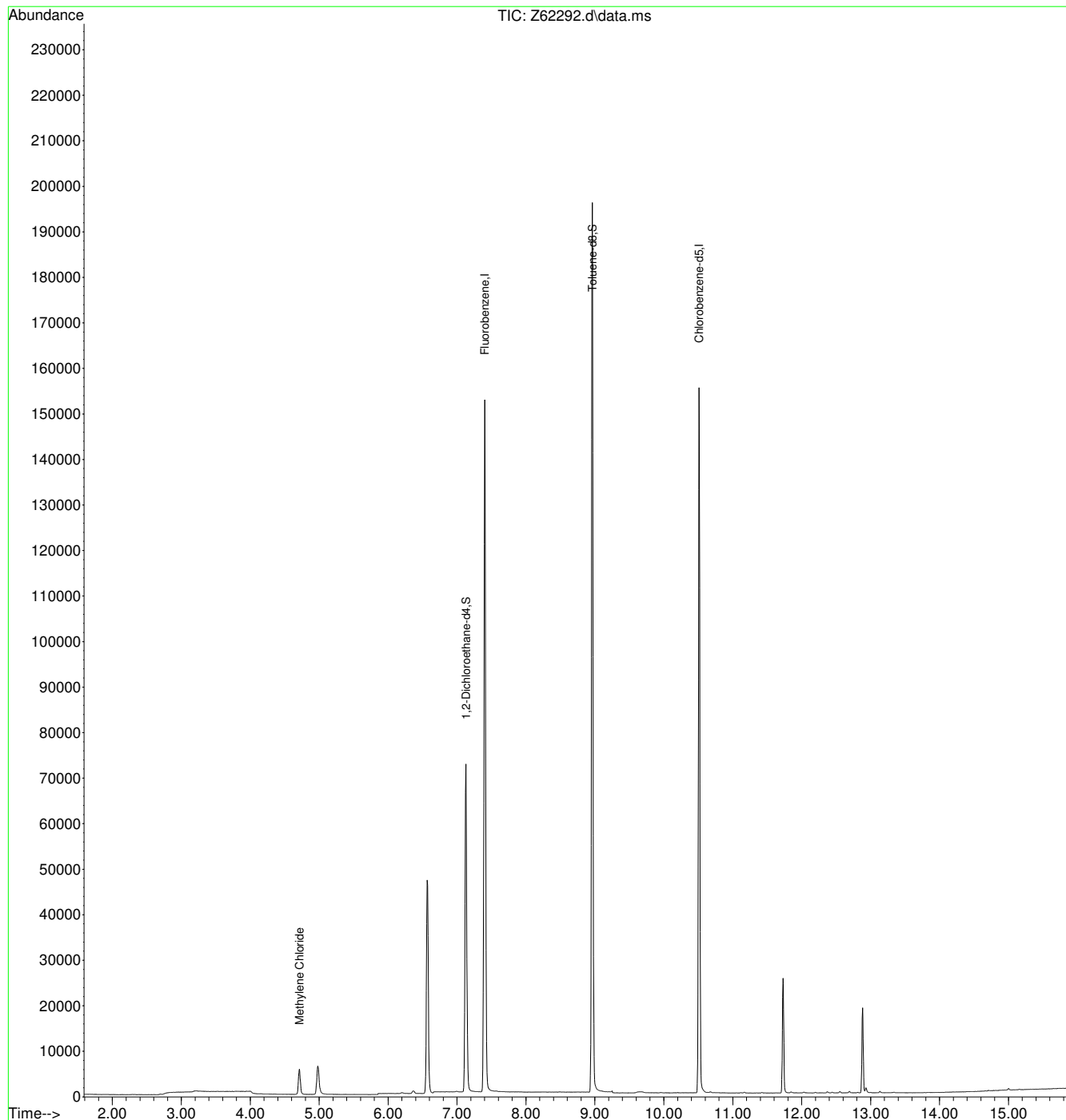
7.22
7



Quantitation Report (QT Reviewed)

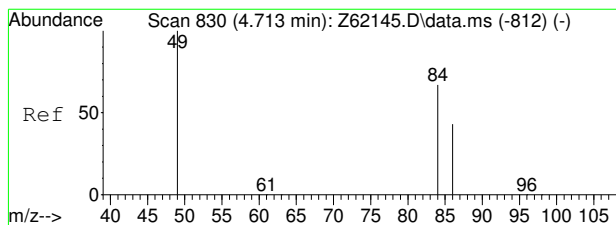
Data Path : C:\msdchem\1\data\johnm\September 2020\09-14-2020\ vz2417\
 Data File : Z62292.d
 Acq On : 13 Sep 2020 12:33 pm
 Operator : stutip
 Sample : MB
 Misc : MS47199,VZ2417,,,,,
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 14 07:07:16 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Sun Sep 13 13:38:26 2020
 Response via : Initial Calibration



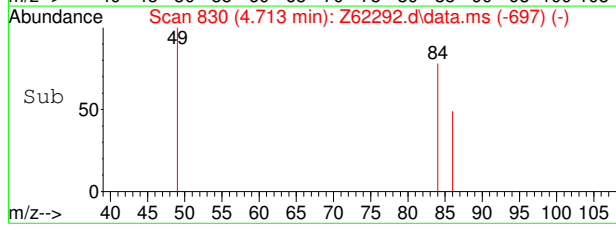
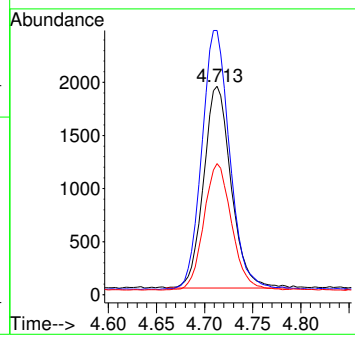
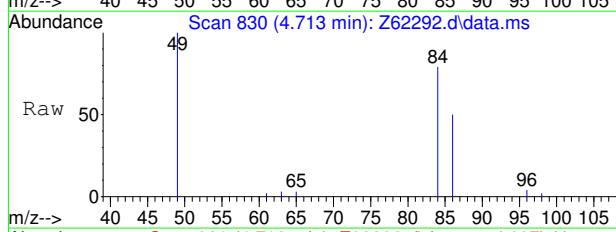
7.2.2
7





#5
 Methylene Chloride
 Concen: 0.22 ppb
 RT: 4.713 min Scan# 830
 Delta R.T. 0.000 min
 Lab File: Z62292.d
 Acq: 13 Sep 2020 12:33 pm

Tgt Ion	Ratio	Lower	Upper
84	100		
49	128.2	128.7	168.7#
86	62.5	43.9	83.9



7.22
7



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-14-2020\VO2360\
 Data File : O61328.d
 Acq On : 13 Sep 2020 12:47 pm
 Operator : stutip
 Sample : mb
 Misc : MS47193,VO2360,,,,,
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 14 08:32:51 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Sun Sep 13 19:20:40 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Fluorobenzene	7.346	96	219622	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.447	117	169409	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.073	65	95368	5.38	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	107.60%	
19) Toluene-d8	8.896	98	187861	4.92	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	98.40%	

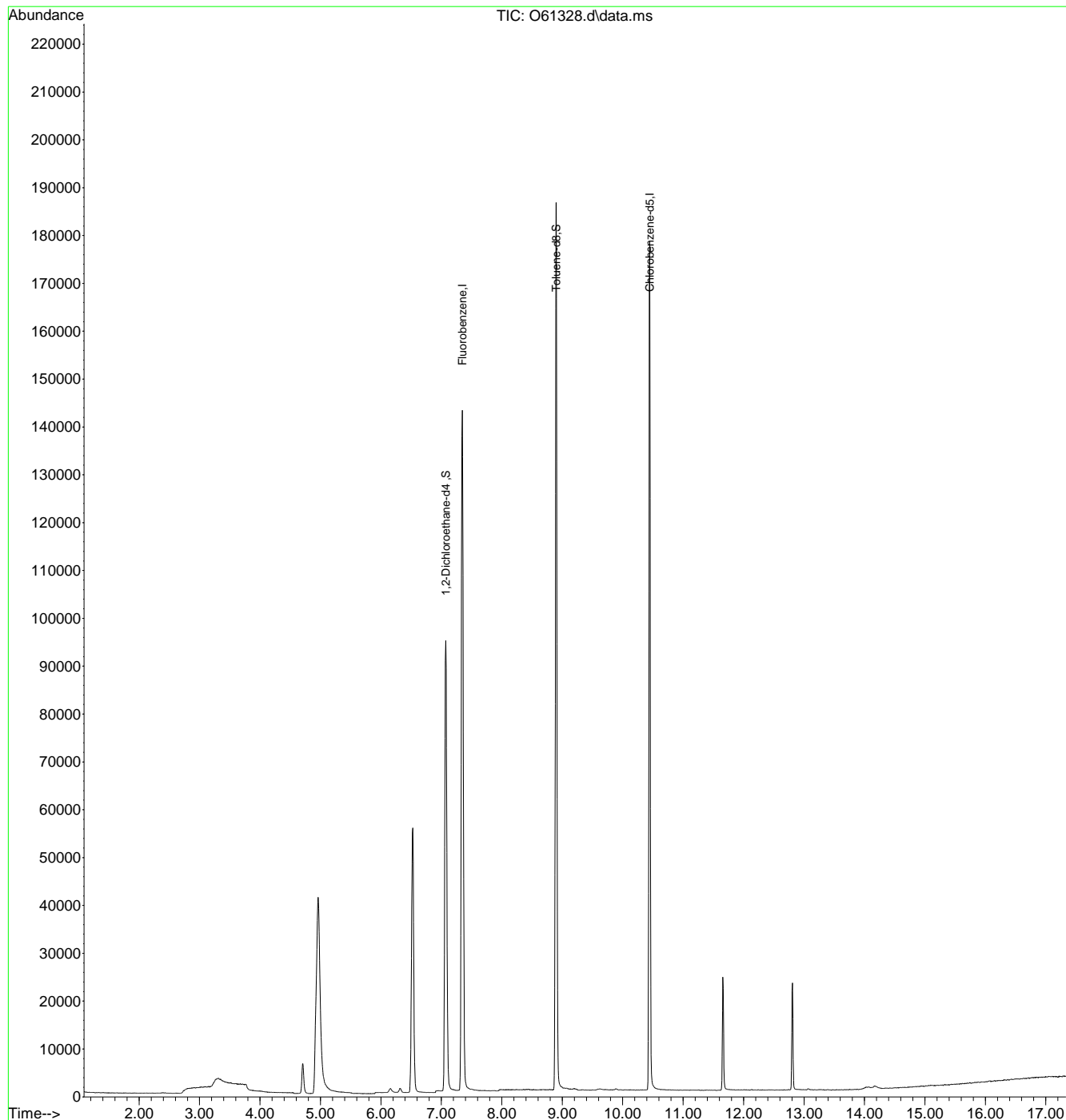
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-14-2020\VO2360\
 Data File : O61328.d
 Acq On : 13 Sep 2020 12:47 pm
 Operator : stutip
 Sample : mb
 Misc : MS47193,VO2360,,,,,
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 14 08:32:51 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Sun Sep 13 19:20:40 2020
 Response via : Initial Calibration



7.2.3
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\091420\
 Data File : Z62325.D
 Acq On : 14 Sep 2020 1:57 pm
 Operator : JuanG
 Sample : MB
 Misc : MS47199,VZ2417,,,,,
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 15 18:50:24 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Sun Sep 13 13:38:26 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Fluorobenzene	7.401	96	1691138	5.00	ppb	0.00
18) Chlorobenzene-d5	10.511	117	1358393	5.00	ppb	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.130	65	586969	5.61	ppb	0.00
Spiked Amount	5.000	Range	79 - 125	Recovery	=	112.20%
19) Toluene-d8	8.961	98	1652313	5.01	ppb	0.00
Spiked Amount	5.000	Range	70 - 130	Recovery	=	100.20%
Target Compounds						
5) Methylene Chloride	4.713	84	82977	0.50	ppb	Qvalue 91

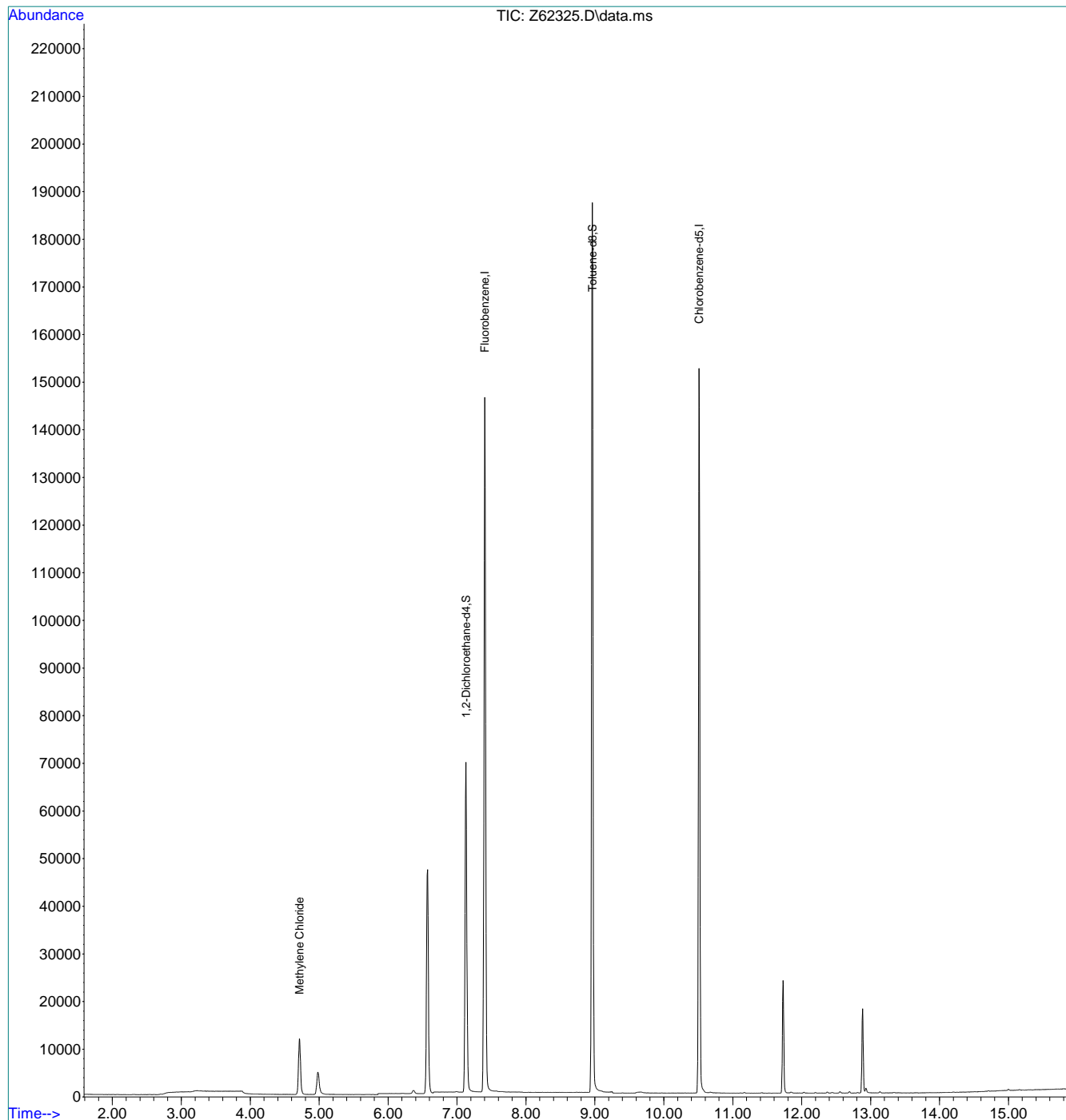
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.24
7

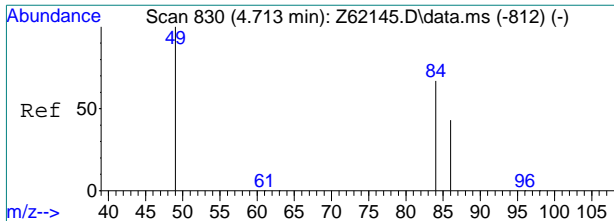
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\091420\
Data File : Z62325.D
Acq On : 14 Sep 2020 1:57 pm
Operator : JuanG
Sample : MB
Misc : MS47199,VZ2417,,,,,
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 15 18:50:24 2020
Quant Method : C:\msdchem\1\methods\SIMCL091120.M
Quant Title : WATER-EPA 8260B
QLast Update : Sun Sep 13 13:38:26 2020
Response via : Initial Calibration

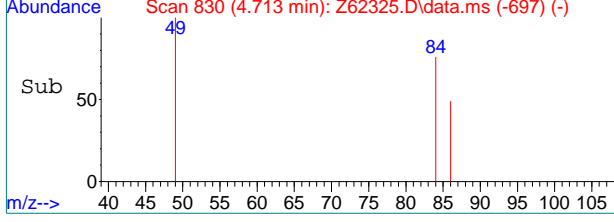
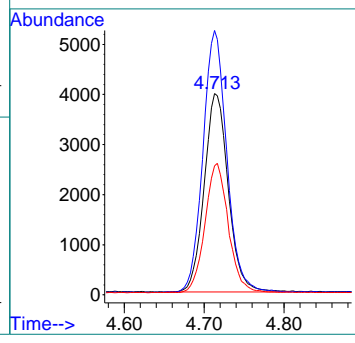
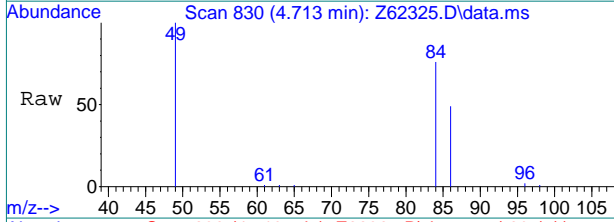


7.2.4
7



#5
 Methylene Chloride
 Concen: 0.50 ppb
 RT: 4.713 min Scan# 830
 Delta R.T. -0.000 min
 Lab File: Z62325.D
 Acq: 14 Sep 2020 1:57 pm

Tgt Ion	Ratio	Lower	Upper
84	100		
49	131.9	128.7	168.7
86	63.9	43.9	83.9



7.2.4
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-11-2020\vo2354\
 Data File : O61156.d
 Acq On : 10 Sep 2020 8:38 am
 Operator : melissam
 Sample : bs
 Misc : MS47137,VO2354,,,,,
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 11 05:39:05 2020
 Quant Method : C:\msdchem\1\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)	

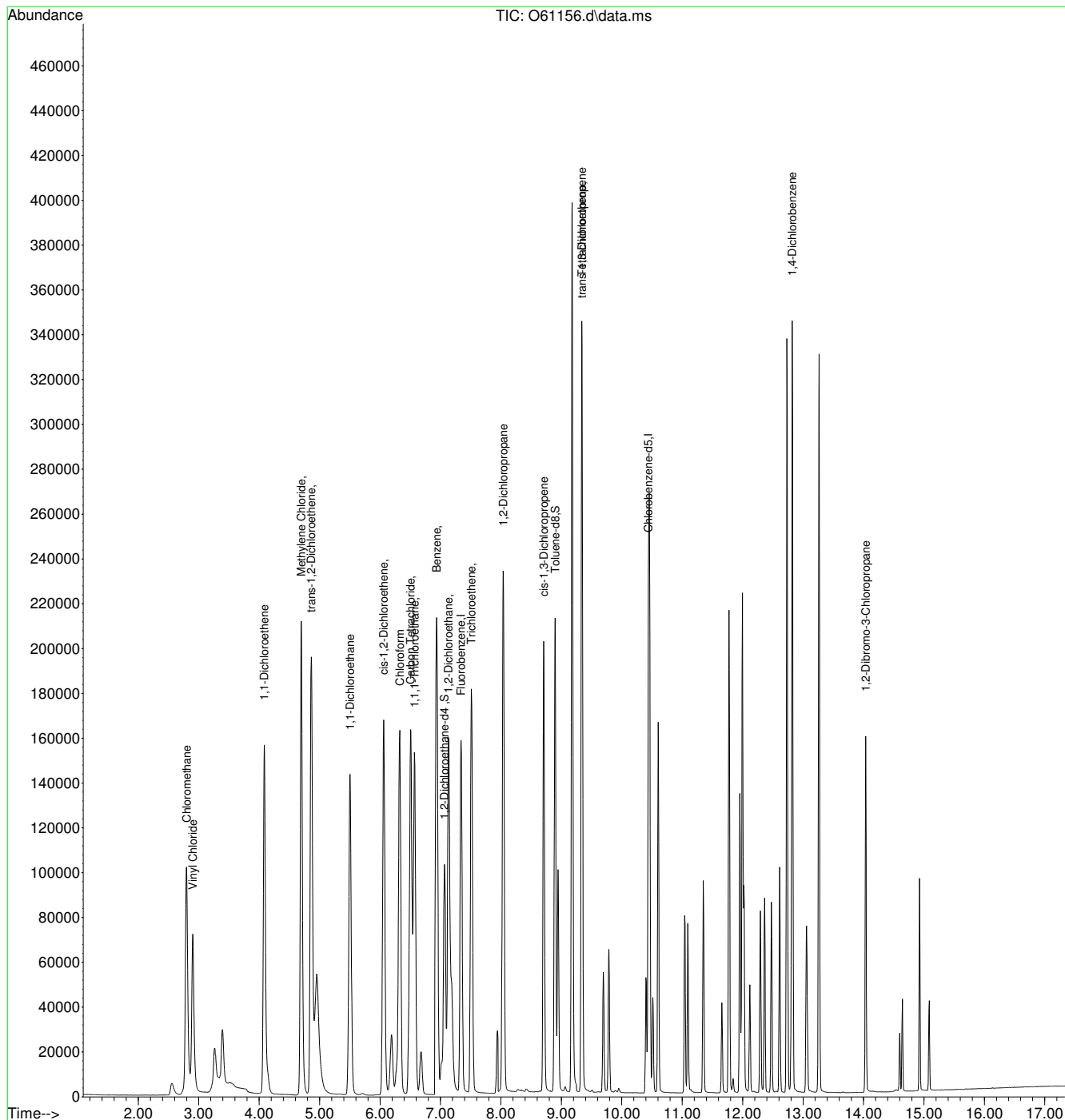
Internal Standards							
1) Fluorobenzene	7.340	96	241740	5.00	ug/L	0.00	
18) Chlorobenzene-d5	10.441	117	173006	5.00	ug/L	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.068	65	123630	5.82	ug/L	0.00	
Spiked Amount	5.000	Range 74 - 125	Recovery	=	116.40%		
19) Toluene-d8	8.896	98	211465	5.00	ug/L	0.00	
Spiked Amount	5.000	Range 88 - 111	Recovery	=	100.00%		
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.901	62	139368	6.12	ug/L		98
3) Chloromethane	2.799	50	203849	6.10	ug/L		94
4) 1,1-Dichloroethene	4.085	61	216481	6.61	ug/L		78
5) Methylene Chloride	4.696	49	296499	5.21	ug/L		91
6) trans-1,2-Dichloroethene	4.862	61	245240	6.24	ug/L		71
7) 1,1-Dichloroethane	5.506	63	272690	6.00	ug/L		97
8) cis-1,2-Dichloroethene	6.060	96	106839	5.28	ug/L #		54
9) Chloroform	6.327	83	198763	5.40	ug/L		92
10) Carbon Tetrachloride	6.505	117	122429	5.33	ug/L		88
11) 1,1,1-Trichloroethane	6.570	97	140913	5.31	ug/L		82
12) Benzene	6.937	78	413420	5.77	ug/L		89
14) 1,2-Dichloroethane	7.133	62	219911	5.54	ug/L		90
15) Trichloroethene	7.512	95	117343	5.58	ug/L		97
16) 1,2-Dichloropropane	8.036	63	153989	5.88	ug/L		96
17) cis-1,3-Dichloropropene	8.707	75	153045	5.21	ug/L		90
20) trans-1,3-Dichloropropene	9.343	75	145886	5.53	ug/L		92
21) Tetrachloroethene	9.337	166	88324	5.27	ug/L		92
22) 1,4-Dichlorobenzene	12.821	146	178865	4.91	ug/L		94
23) 1,2-Dibromo-3-Chloropr...	14.038	75	41805	4.37	ug/L		80

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-11-2020\vo2354\
 Data File : O61156.d
 Acq On : 10 Sep 2020 8:38 am
 Operator : melissam
 Sample : bs
 Misc : MS47137,VO2354,,,,,
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 11 05:39:05 2020
 Quant Method : C:\msdchem\1\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration

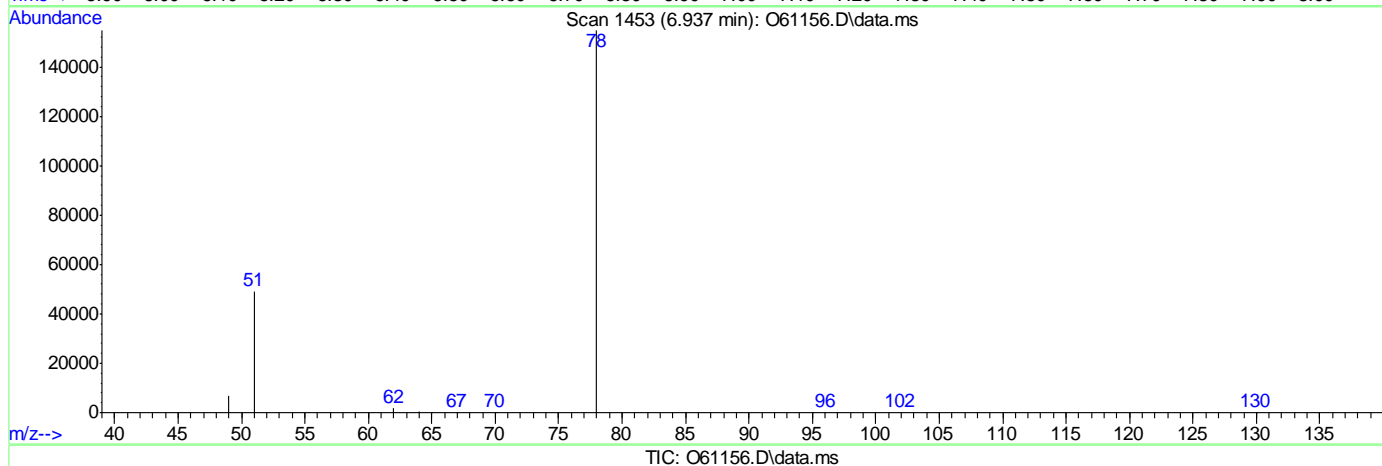
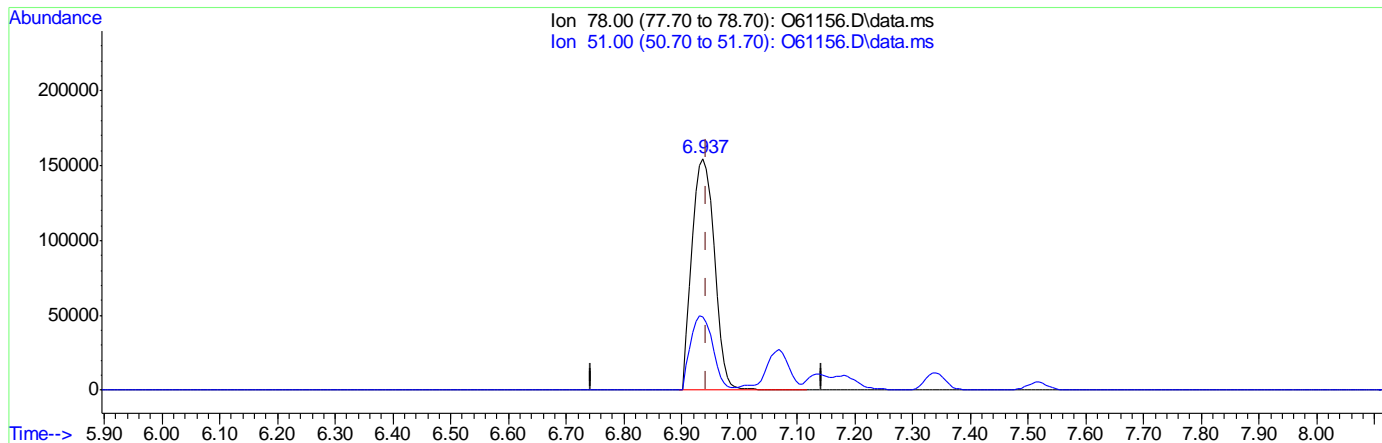


7.3.1
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\091020\
 Data File : O61156.D
 Acq On : 10 Sep 2020 8:38 am
 Operator : melissam
 Sample : bs Inst : MSVOA12
 Misc : MS47137,VO2354,,,,,
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 10 09:00:20 2020
 Quant Method : C:\msdchem\2\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration



(12) Benzene ()
 6.937min (-0.006) 5.77ug/L
 response 413420

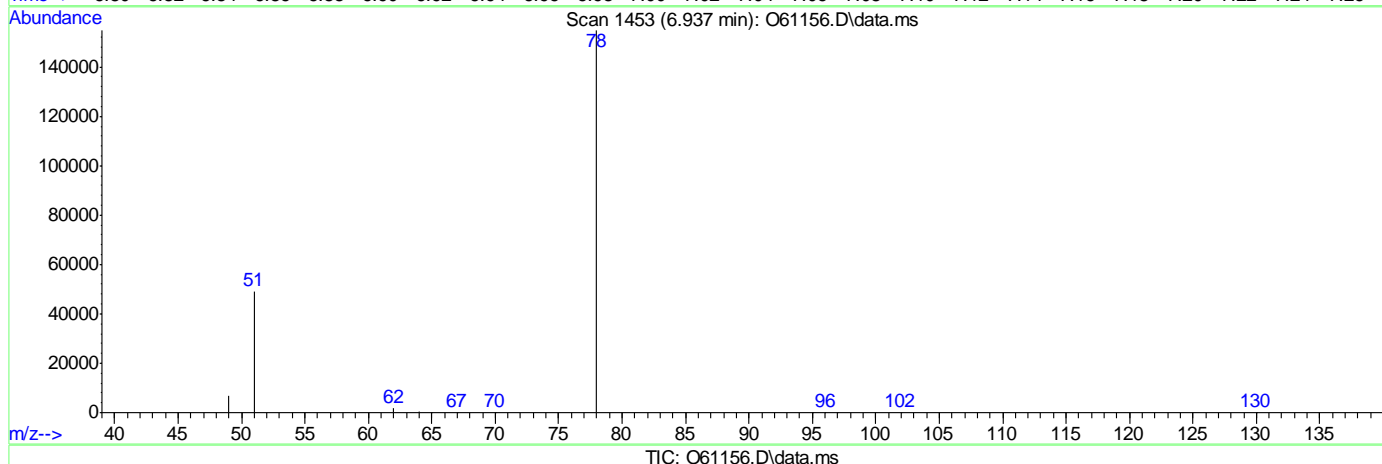
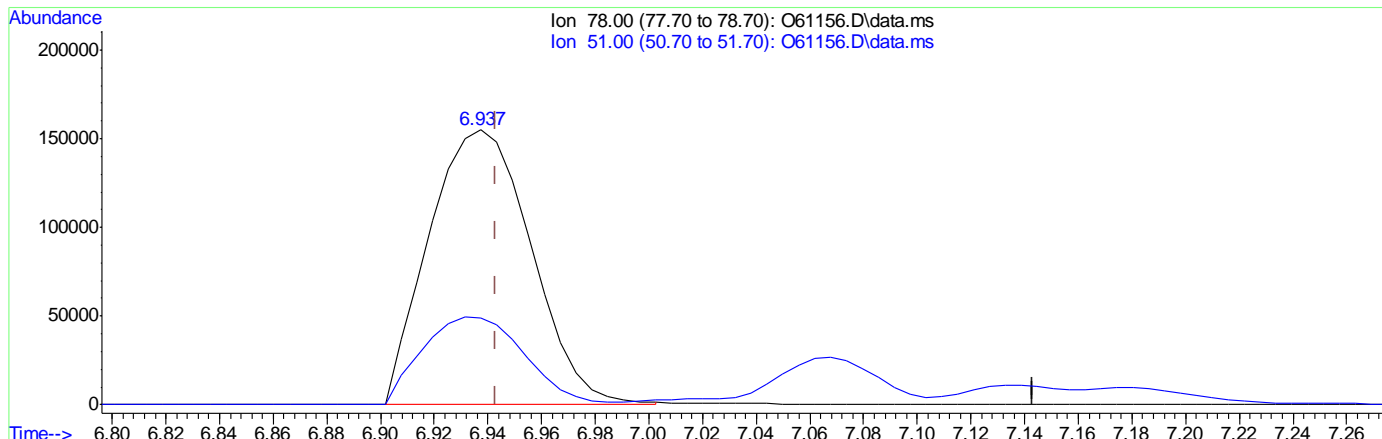
Ion	Exp%	Act%
78.00	100	100
51.00	26.20	31.74
0.00	0.00	0.00
0.00	0.00	0.00

7.3.1.1
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\091020\
 Data File : O61156.D
 Acq On : 10 Sep 2020 8:38 am
 Operator : melissam
 Sample : bs Inst : MSVOA12
 Misc : MS47137,VO2354,,,,,
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 10 09:00:20 2020
 Quant Method : C:\msdchem\2\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration



(12) Benzene ()
 6.937min (-0.006) 5.72ug/L m
 response 409845

Ion	Exp%	Act%
78.00	100	100
51.00	26.20	31.74
0.00	0.00	0.00
0.00	0.00	0.00

7.3.12
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-14-2020\ vz2417\
 Data File : Z62290.d
 Acq On : 13 Sep 2020 11:55 am
 Operator : stutip
 Sample : BS
 Misc : MS47199,VZ2417,,,,,
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 14 07:07:12 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Sun Sep 13 13:38:26 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)	

Internal Standards							
1) Fluorobenzene	7.401	96	1886079	5.00	ppb	0.00	
18) Chlorobenzene-d5	10.511	117	1527862	5.00	ppb	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.123	65	621318	5.33	ppb	0.00	
Spiked Amount	5.000	Range	79 - 125	Recovery	=	106.60%	
19) Toluene-d8	8.957	98	1846312	4.98	ppb	0.00	
Spiked Amount	5.000	Range	70 - 130	Recovery	=	99.60%	
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.835	62	930473	5.93	ppb		100
3) Chloromethane	2.729	50	786511	5.99	ppb		99
4) 1,1-Dichloroethene	4.083	96	648218	5.67	ppb		90
5) Methylene Chloride	4.713	84	862648	4.86	ppb		89
6) trans-1,2-Dichloroethene	4.886	96	795278	5.71	ppb		90
7) 1,1-Dichloroethane	5.542	63	1375256	5.82	ppb	#	100
8) cis-1,2-Dichloroethene	6.104	96	828644	5.36	ppb		95
9) Chloroform	6.371	83	1545657	5.45	ppb		99
10) Carbon Tetrachloride	6.543	117	1047257	5.44	ppb		98
11) 1,1,1-Trichloroethane	6.614	97	1390441	5.60	ppb		99
12) Benzene	6.994	78	3029341	5.77	ppb		94
14) 1,2-Dichloroethane	7.191	62	1086284	5.49	ppb		99
15) Trichloroethene	7.564	95	918060	5.70	ppb		92
16) 1,2-Dichloropropane	8.101	63	731673	5.48	ppb		97
17) cis-1,3-Dichloropropene	8.773	75	718197	4.92	ppb		98
20) trans-1,3-Dichloropropene	9.411	75	589285	4.59	ppb		99
21) Tetrachloroethene	9.399	166	912918	5.27	ppb		99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

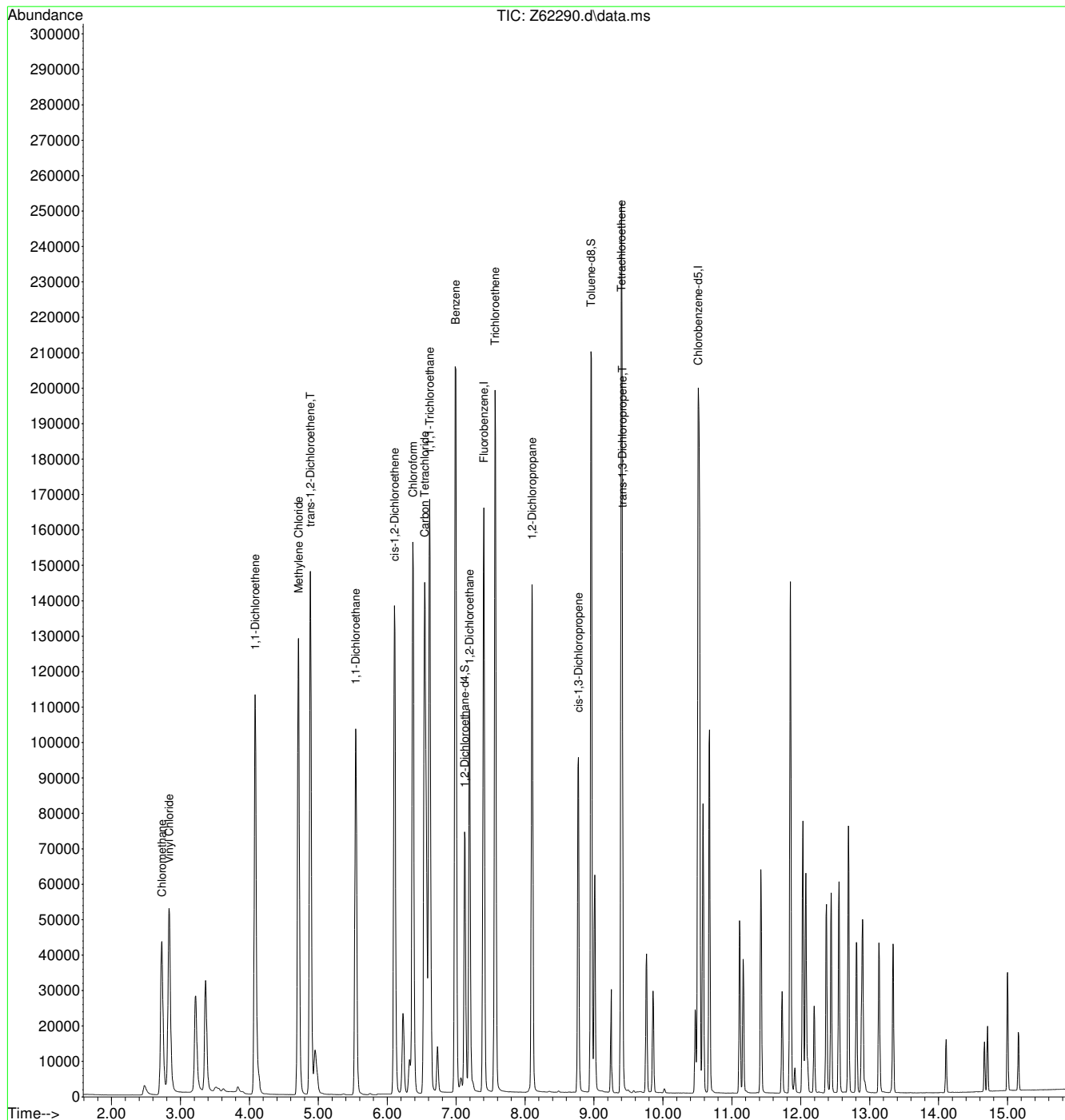
7.32
7



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-14-2020\ vz2417\
 Data File : Z62290.d
 Acq On : 13 Sep 2020 11:55 am
 Operator : stutip
 Sample : BS
 Misc : MS47199,VZ2417,,,,,
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 14 07:07:12 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Sun Sep 13 13:38:26 2020
 Response via : Initial Calibration



7.3.2
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-14-2020\VO2360\
 Data File : O61326.d
 Acq On : 13 Sep 2020 12:06 pm
 Operator : stutip
 Sample : bs
 Misc : MS47193,VO2360,,,,,
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 14 08:32:16 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Sun Sep 13 19:20:40 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	

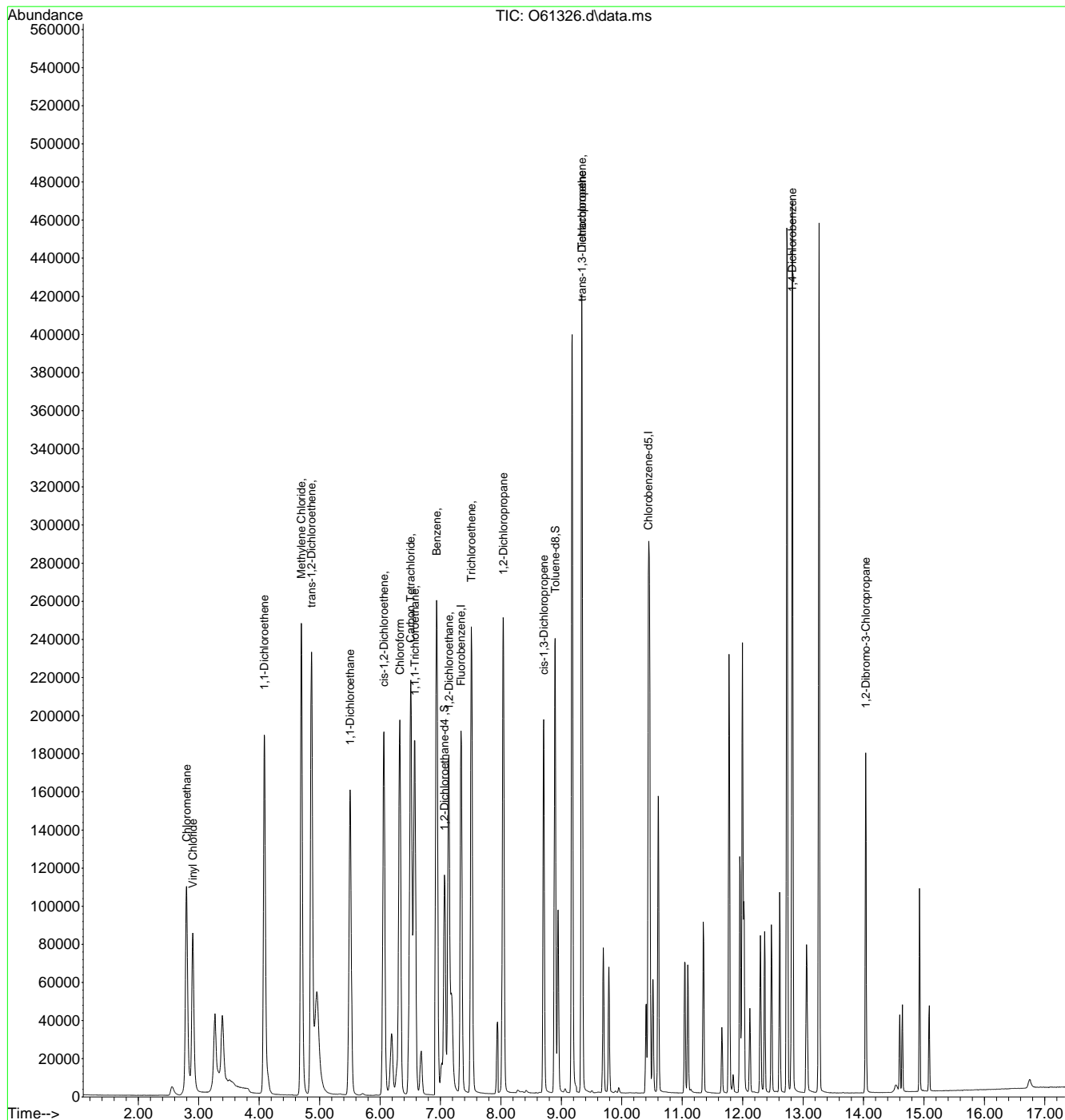
Internal Standards							
1) Fluorobenzene	7.340	96	283212	5.00	ug/L	0.00	
18) Chlorobenzene-d5	10.441	117	224536	5.00	ug/L	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.068	65	111453	4.87	ug/L	0.00	
Spiked Amount	5.000	Range 74 - 125	Recovery	=	97.40%		
19) Toluene-d8	8.896	98	232872	4.60	ug/L	0.00	
Spiked Amount	5.000	Range 88 - 111	Recovery	=	92.00%		
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.901	62	158277	4.99	ug/L		98
3) Chloromethane	2.799	50	216910	4.63	ug/L		94
4) 1,1-Dichloroethene	4.085	61	232185	5.93	ug/L		91
5) Methylene Chloride	4.696	49	326524	5.32	ug/L		95
6) trans-1,2-Dichloroethene	4.865	61	252580	5.59	ug/L		86
7) 1,1-Dichloroethane	5.506	63	286435	5.46	ug/L		100
8) cis-1,2-Dichloroethene	6.066	96	132538	5.11	ug/L		84
9) Chloroform	6.327	83	232001	5.14	ug/L		95
10) Carbon Tetrachloride	6.505	117	165675	5.38	ug/L		88
11) 1,1,1-Trichloroethane	6.576	97	180403	5.18	ug/L		92
12) Benzene	6.937	78	472163m	5.40	ug/L		
14) 1,2-Dichloroethane	7.139	62	216124	5.06	ug/L		93
15) Trichloroethene	7.512	95	140453	5.27	ug/L		86
16) 1,2-Dichloropropane	8.040	63	155545	5.33	ug/L		94
17) cis-1,3-Dichloropropene	8.707	75	147095	4.86	ug/L		98
20) trans-1,3-Dichloropropene	9.343	75	143008	4.85	ug/L		98
21) Tetrachloroethene	9.337	166	132501	5.39	ug/L		96
22) 1,4-Dichlorobenzene	12.821	146	268960	5.17	ug/L		98
23) 1,2-Dibromo-3-Chloropr...	14.037	75	42314	4.58	ug/L		86

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-14-2020\VO2360\
 Data File : O61326.d
 Acq On : 13 Sep 2020 12:06 pm
 Operator : stutip
 Sample : bs
 Misc : MS47193,VO2360,,,,,
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 14 08:32:16 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Sun Sep 13 19:20:40 2020
 Response via : Initial Calibration



7.3.3
7

Manual Integration Approval Summary

Sample Number: VO2360-BS **Method:** SW846 8260B BY SIM
Lab FileID: O61326.D **Analyst approved:** 09/14/20 08:47 Jennifer Ferreira
Injection Time: 09/13/20 12:06 **Supervisor approved:** 09/14/20 13:35 Melissa Mangual

Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzene	71-43-2		6.94	Poor instrument integration

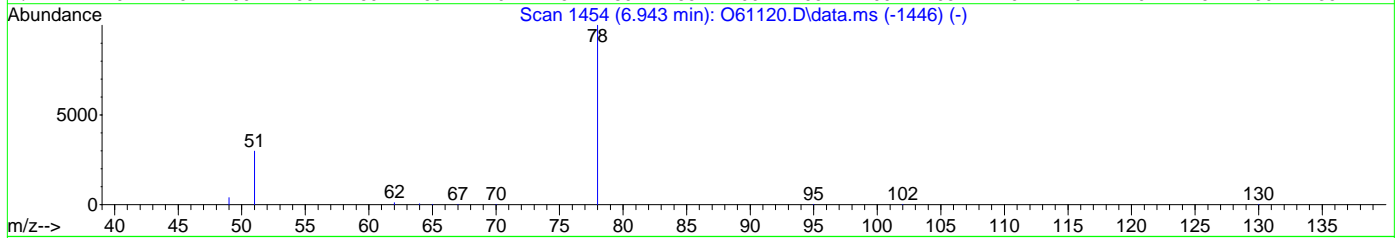
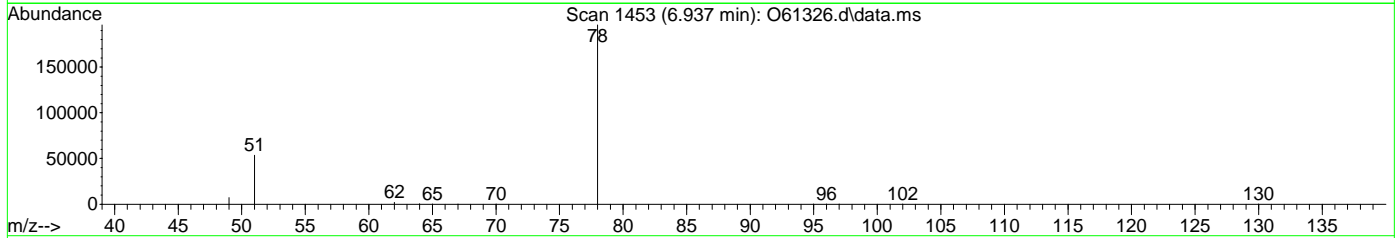
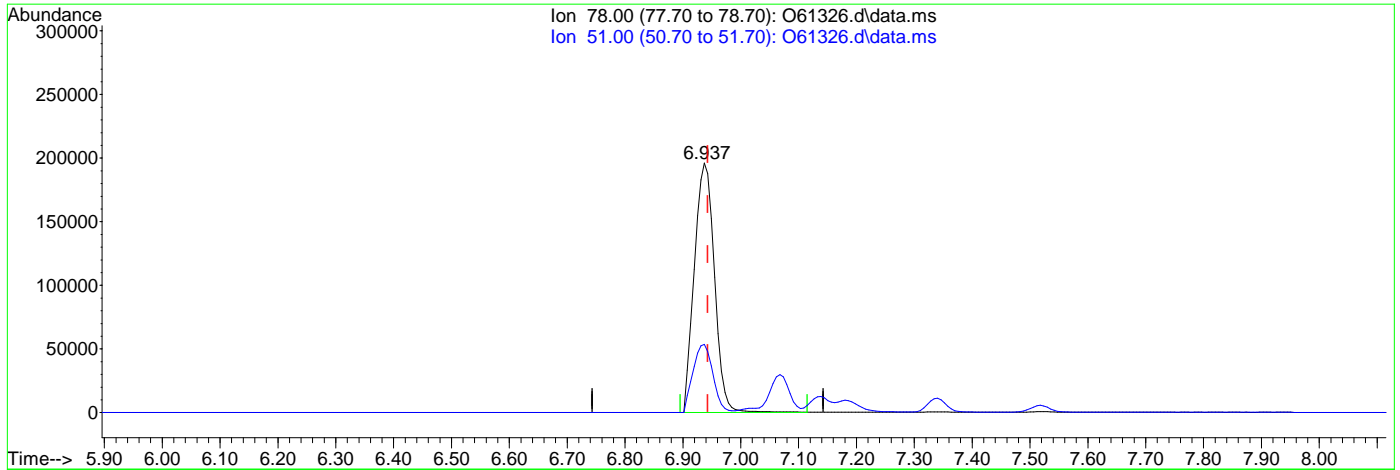
7.3.3.1

7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-14-2020\VO2360\
 Data File : O61326.d
 Acq On : 13 Sep 2020 12:06 pm
 Operator : stutip
 Sample : bs
 Misc : MS47193,VO2360,,,,,
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 14 07:52:41 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Sun Sep 13 19:20:40 2020
 Response via : Initial Calibration



(12) Benzene ()

6.937min (-0.006) 5.44ug/L

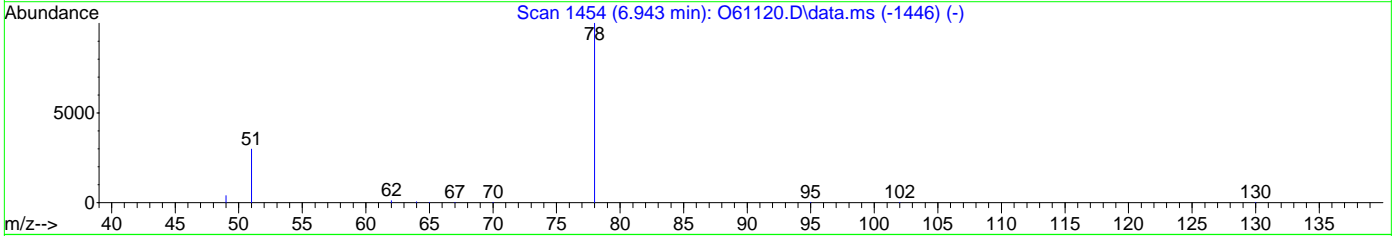
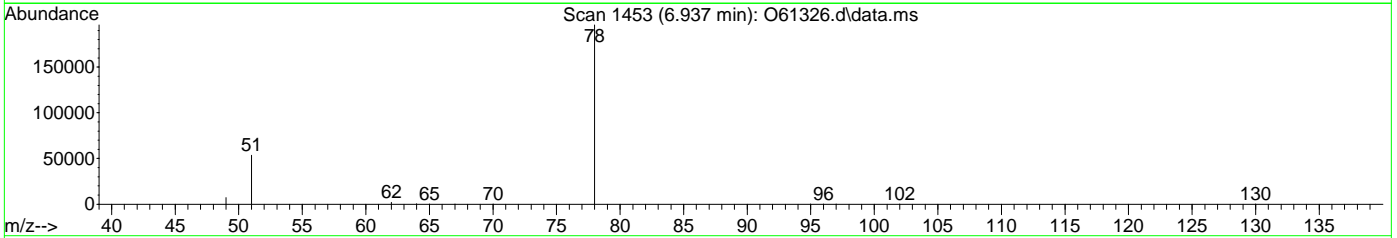
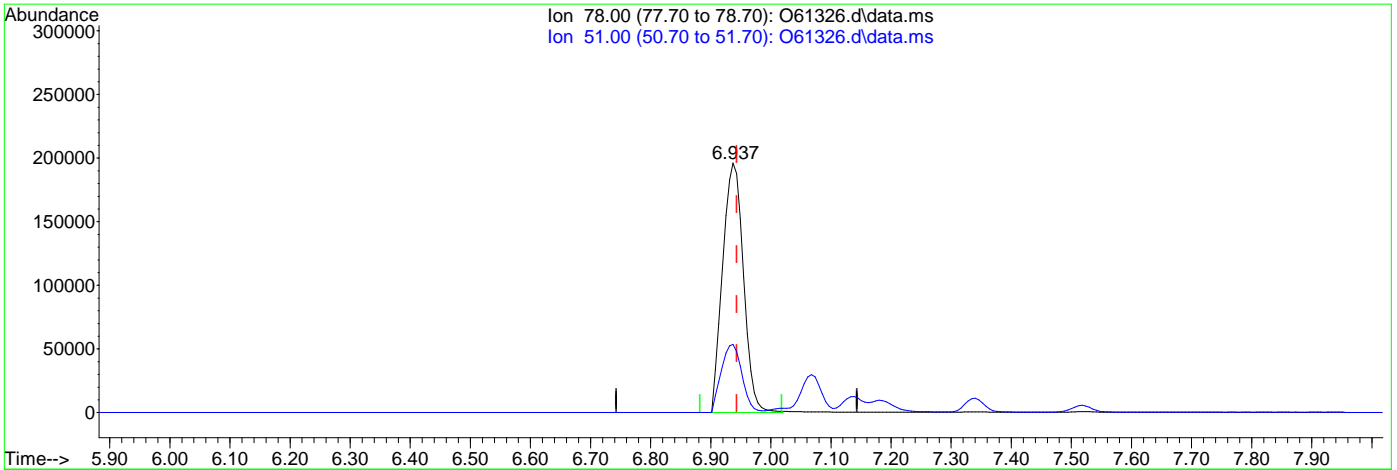
response 475520

Ion	Exp%	Act%
78.00	100	100
51.00	26.20	27.28
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-14-2020\VO2360\
 Data File : O61326.d
 Acq On : 13 Sep 2020 12:06 pm
 Operator : stutip
 Sample : bs
 Misc : MS47193,VO2360,,,,,
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 14 07:52:41 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Sun Sep 13 19:20:40 2020
 Response via : Initial Calibration



(12) Benzene ()

6.937min (-0.006) 5.40ug/L m

response 472163

Ion	Exp%	Act%
78.00	100	100
51.00	26.20	27.28
0.00	0.00	0.00
0.00	0.00	0.00

7.3.3.3
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\091420\
 Data File : Z62323.D
 Acq On : 14 Sep 2020 1:18 pm
 Operator : JuanG
 Sample : BS
 Misc : MS47199,VZ2418,,,,,
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 15 18:50:20 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Sun Sep 13 13:38:26 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	

Internal Standards							
1) Fluorobenzene	7.401	96	1802196	5.00	ppb	0.00	
18) Chlorobenzene-d5	10.511	117	1471249	5.00	ppb	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.123	65	612575	5.49	ppb	0.00	
Spiked Amount	5.000	Range 79 - 125	Recovery	=	109.80%		
19) Toluene-d8	8.958	98	1750191	4.90	ppb	0.00	
Spiked Amount	5.000	Range 70 - 130	Recovery	=	98.00%		
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.843	62	935650	6.24	ppb		99
3) Chloromethane	2.737	50	848544	6.70	ppb		100
4) 1,1-Dichloroethene	4.083	96	633900	5.80	ppb	#	89
5) Methylene Chloride	4.709	84	874936	5.18	ppb		91
6) trans-1,2-Dichloroethene	4.883	96	786014	5.91	ppb		93
7) 1,1-Dichloroethane	5.543	63	1365965	6.05	ppb	#	100
8) cis-1,2-Dichloroethene	6.104	96	807368	5.46	ppb		95
9) Chloroform	6.371	83	1541467	5.69	ppb		100
10) Carbon Tetrachloride	6.543	117	1052012	5.72	ppb		98
11) 1,1,1-Trichloroethane	6.614	97	1359082	5.73	ppb		99
12) Benzene	6.987	78	2983015	5.95	ppb		99
14) 1,2-Dichloroethane	7.191	62	1083005	5.73	ppb		100
15) Trichloroethene	7.564	95	881940	5.73	ppb		90
16) 1,2-Dichloropropane	8.101	63	719723	5.64	ppb		97
17) cis-1,3-Dichloropropene	8.773	75	831618	5.87	ppb		99
20) trans-1,3-Dichloropropene	9.407	75	696612	5.61	ppb		100
21) Tetrachloroethene	9.399	166	888303	5.33	ppb		98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

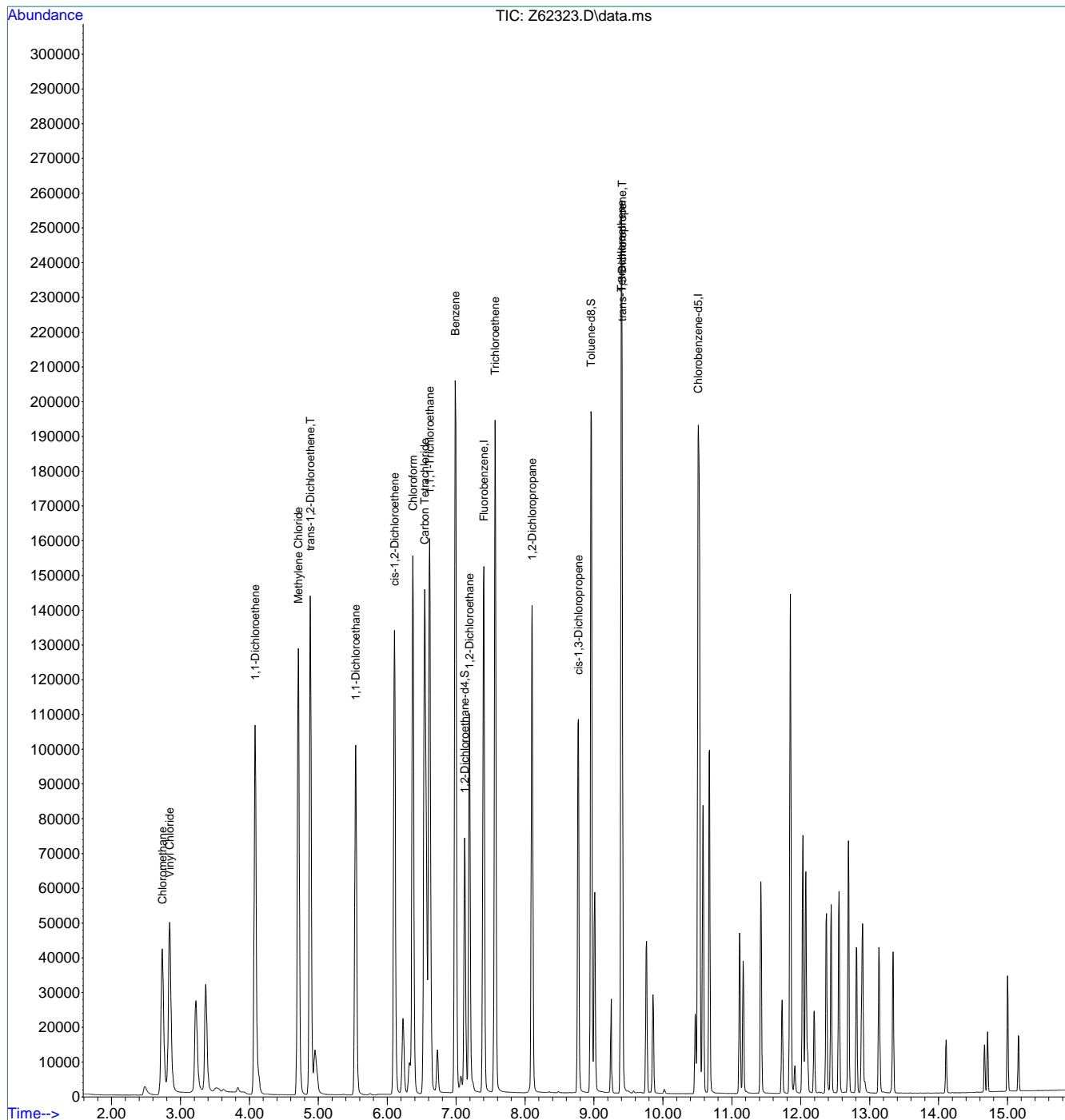
7.3.4
7



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\091420\
 Data File : Z62323.D
 Acq On : 14 Sep 2020 1:18 pm
 Operator : JuanG
 Sample : BS
 Misc : MS47199,VZ2418,,,,,
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 15 18:50:20 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Sun Sep 13 13:38:26 2020
 Response via : Initial Calibration



7.3.4
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-11-2020\vo2354\
 Data File : O61163.d
 Acq On : 10 Sep 2020 11:17 am
 Operator : melissam
 Sample : FA78549-2MS
 Misc : MS47173,VO2354,,,,,20
 ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 11 05:39:25 2020
 Quant Method : C:\msdchem\1\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)	

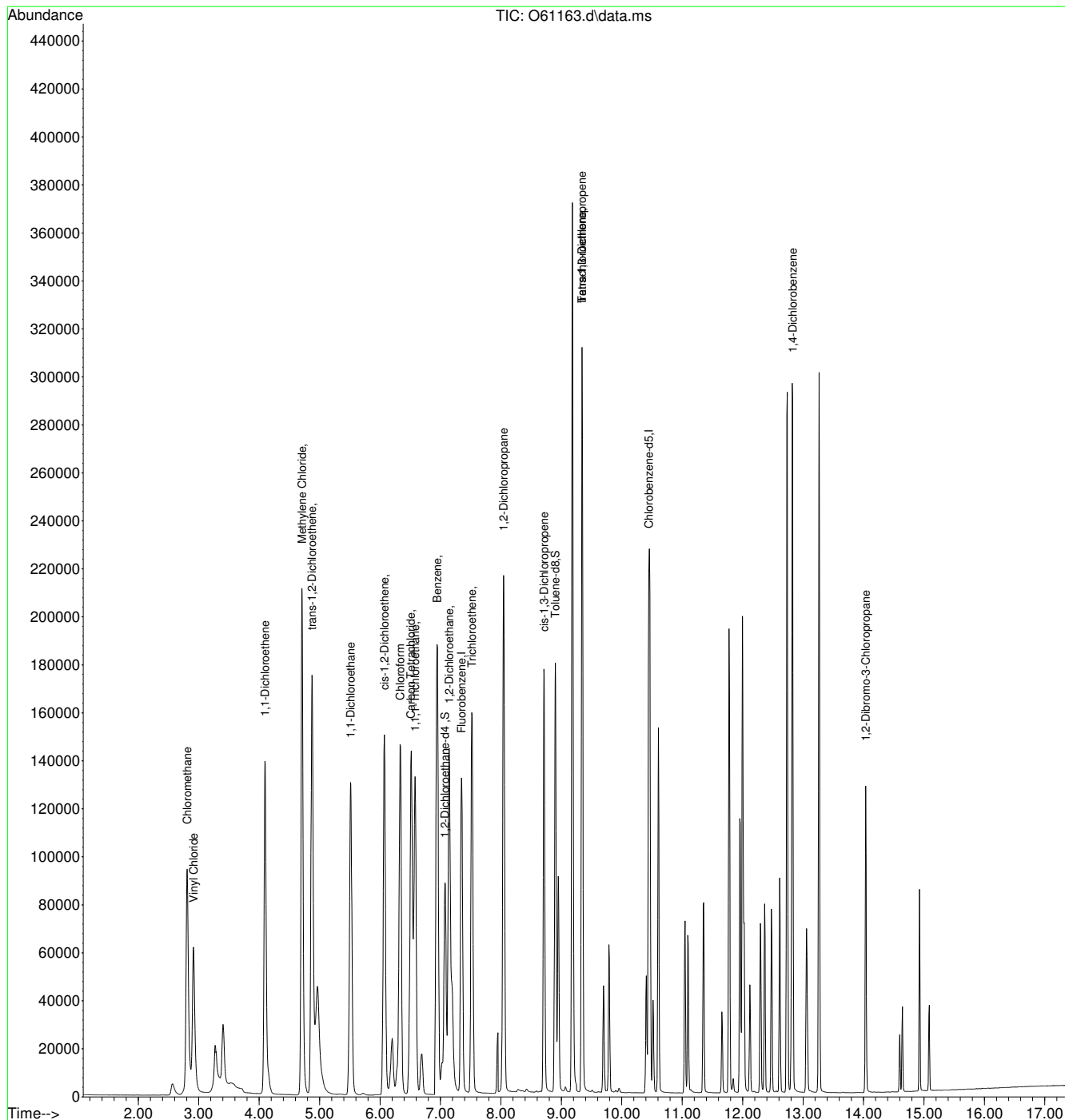
Internal Standards							
1) Fluorobenzene	7.346	96	203785	5.00	ug/L	0.00	
18) Chlorobenzene-d5	10.447	117	145992	5.00	ug/L	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.073	65	107267	5.99	ug/L	0.00	
Spiked Amount	5.000	Range	74 - 125	Recovery	=	119.80%	
19) Toluene-d8	8.900	98	176595	4.95	ug/L	0.00	
Spiked Amount	5.000	Range	88 - 111	Recovery	=	99.00%	
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.912	62	127175	6.65	ug/L		96
3) Chloromethane	2.810	50	194435	6.96	ug/L		94
4) 1,1-Dichloroethene	4.096	61	197178	7.15	ug/L		76
5) Methylene Chloride	4.707	49	299297	6.34	ug/L		88
6) trans-1,2-Dichloroethene	4.873	61	219328	6.63	ug/L		70
7) 1,1-Dichloroethane	5.514	63	244263	6.38	ug/L		96
8) cis-1,2-Dichloroethene	6.072	96	92905	5.45	ug/L #		53
9) Chloroform	6.333	83	175558	5.66	ug/L		91
10) Carbon Tetrachloride	6.510	117	104832	5.42	ug/L		86
11) 1,1,1-Trichloroethane	6.582	97	123315	5.51	ug/L		80
12) Benzene	6.949	78	370627	6.13	ug/L		88
14) 1,2-Dichloroethane	7.145	62	196652	5.88	ug/L		91
15) Trichloroethene	7.518	95	101139	5.70	ug/L		97
16) 1,2-Dichloropropane	8.043	63	137737	6.24	ug/L		97
17) cis-1,3-Dichloropropene	8.715	75	128692	5.19	ug/L		92
20) trans-1,3-Dichloropropene	9.343	75	123109	5.53	ug/L		89
21) Tetrachloroethene	9.343	166	76895	5.44	ug/L		95
22) 1,4-Dichlorobenzene	12.827	146	158267	5.15	ug/L		97
23) 1,2-Dibromo-3-Chloropr...	14.037	75	32995	4.08	ug/L #		76

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-11-2020\vo2354\
 Data File : O61163.d
 Acq On : 10 Sep 2020 11:17 am
 Operator : melissam
 Sample : FA78549-2MS
 Misc : MS47173,VO2354,,,,,20
 ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 11 05:39:25 2020
 Quant Method : C:\msdchem\1\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration

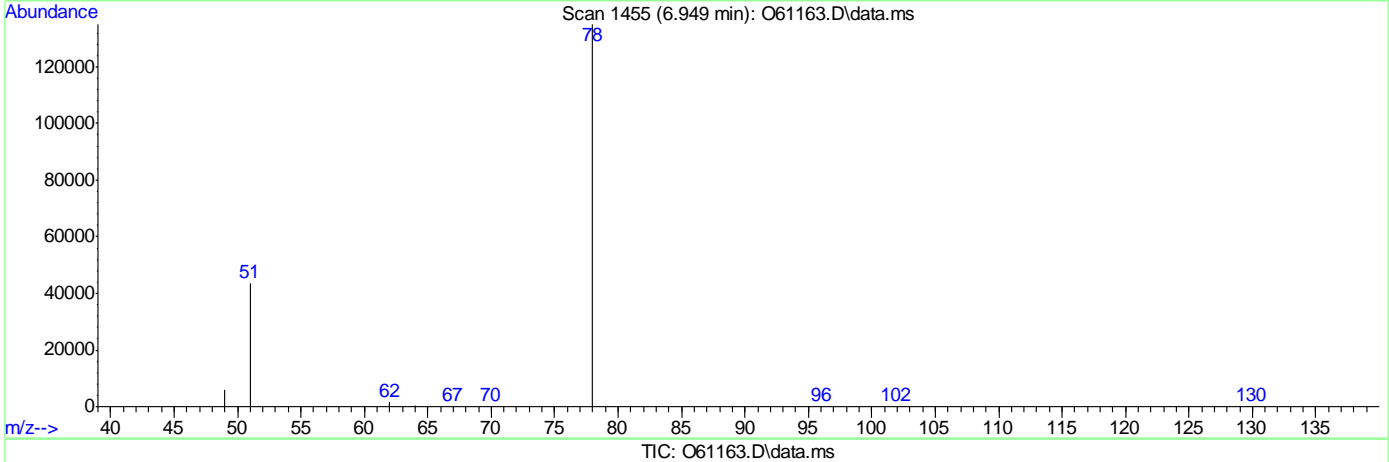
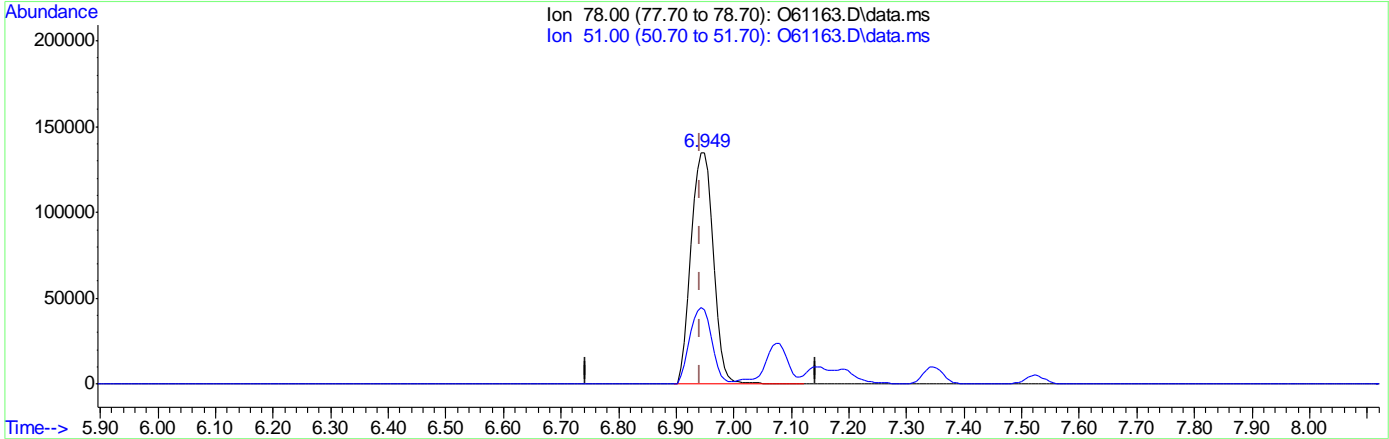


7.4.1
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\091020\
 Data File : O61163.D
 Acq On : 10 Sep 2020 11:17 am
 Operator : melissam
 Sample : FA78549-2MS Inst : MSVOA12
 Misc : MS47173,VO2354,,,,,20
 ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 10 11:41:03 2020
 Quant Method : C:\msdchem\2\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration



(12) Benzene ()
 6.949min (+0.006) 6.13ug/L
 response 370627

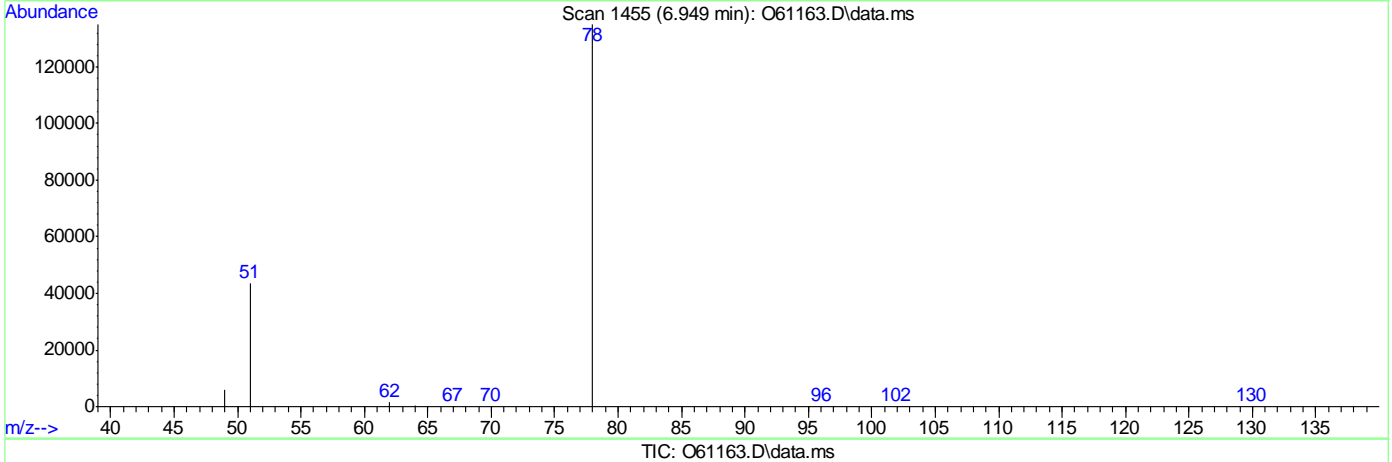
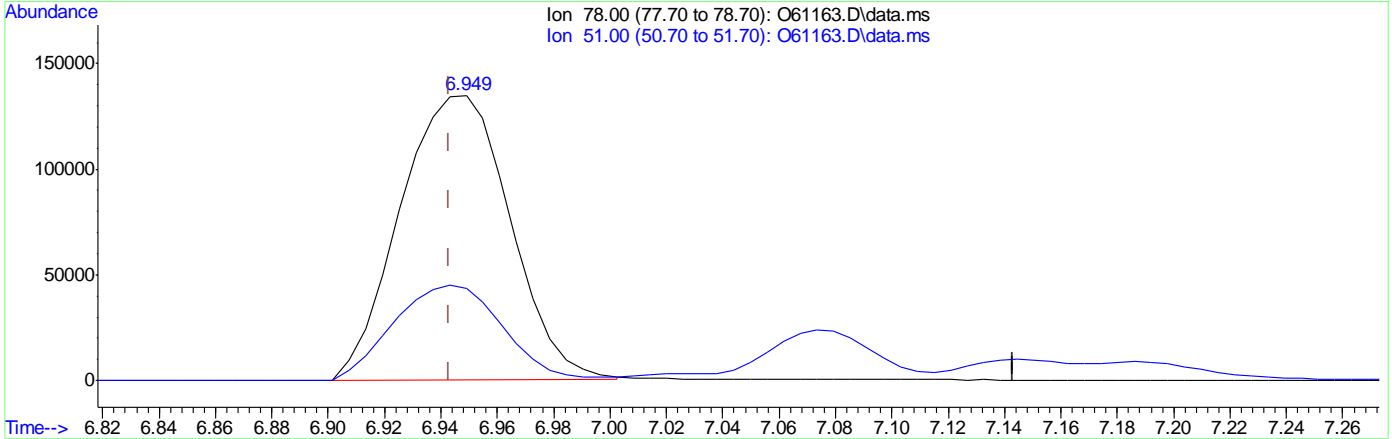
Ion	Exp%	Act%
78.00	100	100
51.00	26.20	32.32
0.00	0.00	0.00
0.00	0.00	0.00

7.4.1.1
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\091020\
 Data File : O61163.D
 Acq On : 10 Sep 2020 11:17 am
 Operator : melissam
 Sample : FA78549-2MS Inst : MSVOA12
 Misc : MS47173,VO2354,,,,,20
 ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 10 11:41:03 2020
 Quant Method : C:\msdchem\2\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration



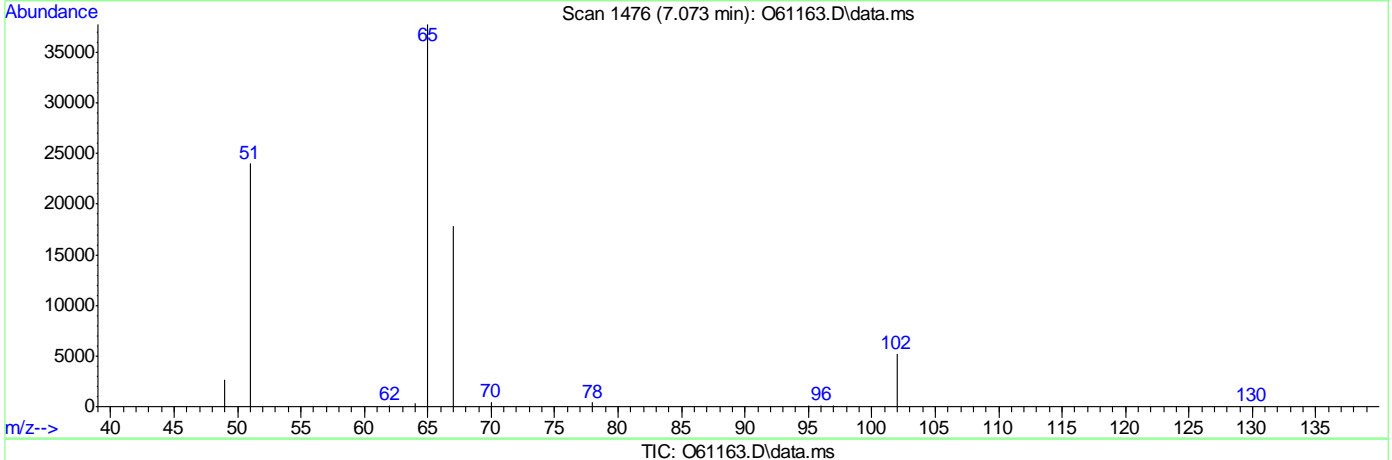
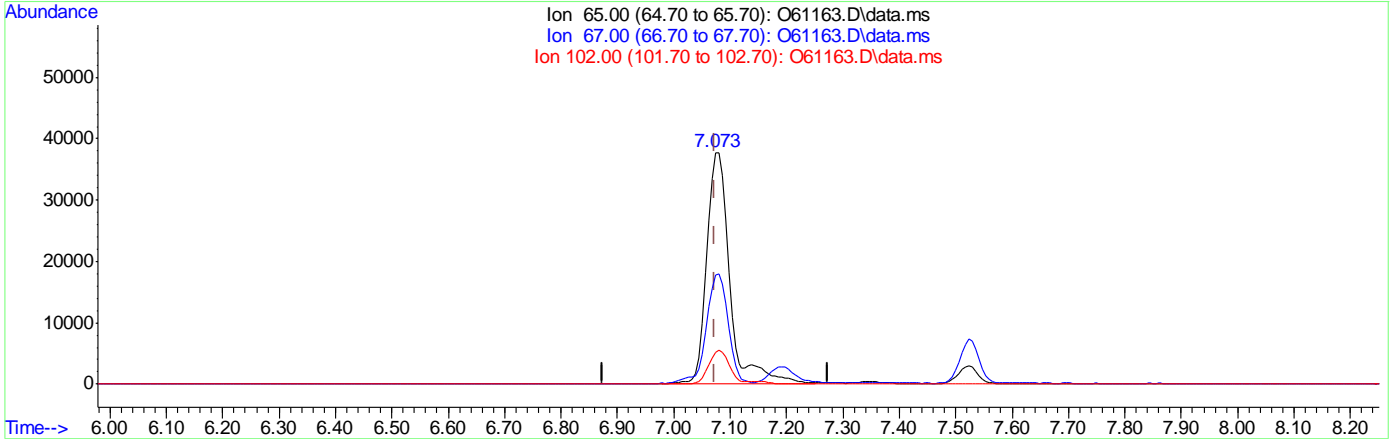
(12) Benzene ()
 6.949min (+0.006) 6.05ug/L m
 response 365407

Ion	Exp%	Act%
78.00	100	100
51.00	26.20	32.32
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\091020\
 Data File : O61163.D
 Acq On : 10 Sep 2020 11:17 am
 Operator : melissam
 Sample : FA78549-2MS Inst : MSVOA12
 Misc : MS47173,VO2354,,,,,20
 ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 10 12:05:50 2020
 Quant Method : C:\msdchem\2\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration



(13) 1,2-Dichloroethane-d4 (S)

7.073min (-0.000) 5.99ug/L

response 107267

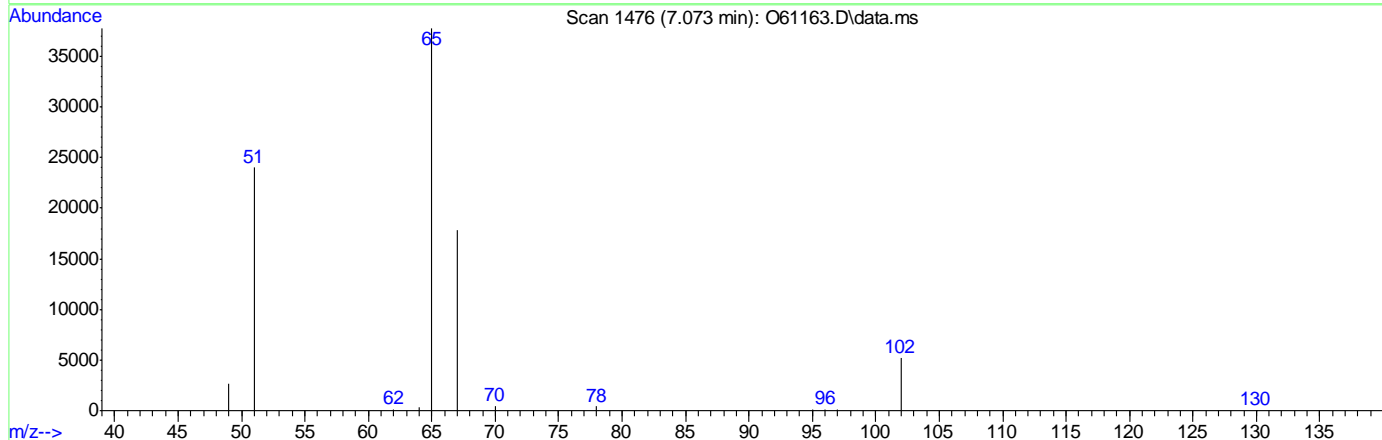
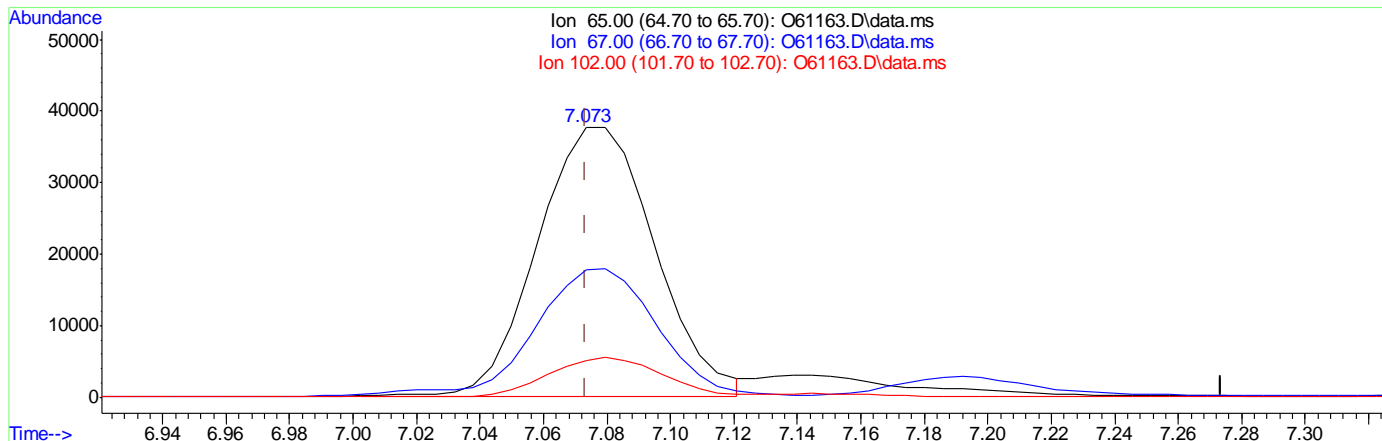
Ion	Exp%	Act%
65.00	100	100
67.00	53.50	46.88
102.00	16.10	13.59
0.00	0.00	0.00

7.4.1.3
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\091020\
 Data File : O61163.D
 Acq On : 10 Sep 2020 11:17 am
 Operator : melissam
 Sample : FA78549-2MS Inst : MSVOA12
 Misc : MS47173,VO2354,,,,,20
 ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 10 12:05:50 2020
 Quant Method : C:\msdchem\2\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration



TIC: O61163.D\data.ms

(13) 1,2-Dichloroethane-d4 (S)

7.073min (-0.000) 5.39ug/L m

response 96409

Ion	Exp%	Act%
65.00	100	100
67.00	53.50	47.21
102.00	16.10	13.70
0.00	0.00	0.00

7.4.1.4
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-11-2020\vo2354\
 Data File : O61164.d
 Acq On : 10 Sep 2020 11:38 am
 Operator : melissam
 Sample : FA78549-2MSD
 Misc : MS47173,VO2354,,,,,20
 ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 11 05:39:28 2020
 Quant Method : C:\msdchem\1\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)	

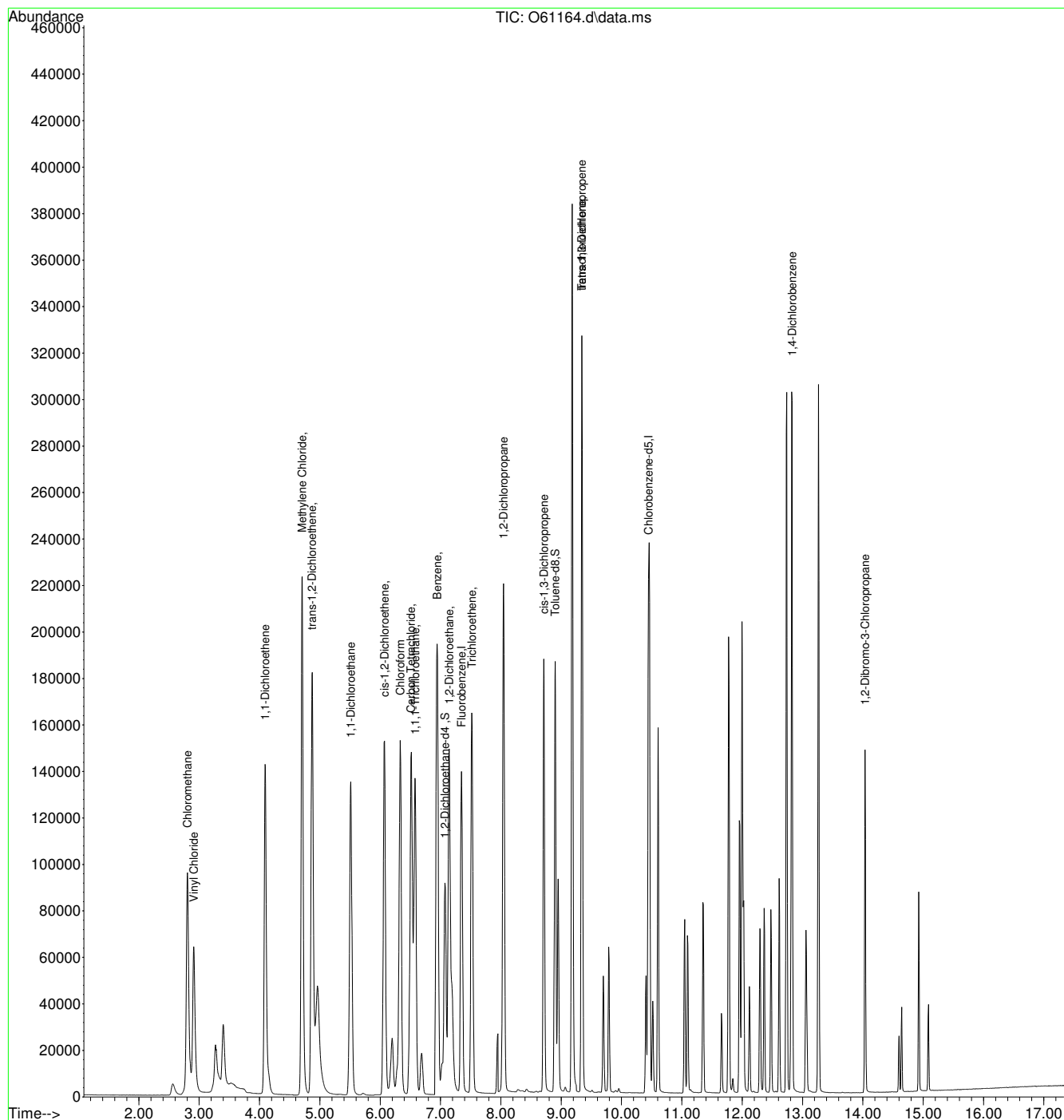
Internal Standards							
1) Fluorobenzene	7.346	96	209142	5.00	ug/L	0.00	
18) Chlorobenzene-d5	10.447	117	149715	5.00	ug/L	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.073	65	109026	5.94	ug/L	0.00	
Spiked Amount	5.000	Range 74 - 125	Recovery	=	118.80%		
19) Toluene-d8	8.900	98	181758	4.97	ug/L	0.00	
Spiked Amount	5.000	Range 88 - 111	Recovery	=	99.40%		
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.908	62	130985	6.68	ug/L		96
3) Chloromethane	2.806	50	195200	6.80	ug/L		95
4) 1,1-Dichloroethene	4.092	61	199993	7.06	ug/L		76
5) Methylene Chloride	4.703	49	315070	6.52	ug/L		88
6) trans-1,2-Dichloroethene	4.869	61	226141	6.66	ug/L		70
7) 1,1-Dichloroethane	5.514	63	251276	6.39	ug/L		97
8) cis-1,2-Dichloroethene	6.072	96	95727	5.47	ug/L #		55
9) Chloroform	6.333	83	180876	5.68	ug/L		90
10) Carbon Tetrachloride	6.510	117	109179	5.50	ug/L		87
11) 1,1,1-Trichloroethane	6.582	97	127956	5.57	ug/L		81
12) Benzene	6.943	78	382400	6.17	ug/L		87
14) 1,2-Dichloroethane	7.145	62	201731	5.87	ug/L		91
15) Trichloroethene	7.518	95	104435	5.74	ug/L		97
16) 1,2-Dichloropropane	8.043	63	141695	6.25	ug/L		97
17) cis-1,3-Dichloropropene	8.711	75	136217	5.36	ug/L		89
20) trans-1,3-Dichloropropene	9.343	75	129244	5.66	ug/L		89
21) Tetrachloroethene	9.343	166	79309	5.47	ug/L		95
22) 1,4-Dichlorobenzene	12.827	146	162427	5.15	ug/L		97
23) 1,2-Dibromo-3-Chloropr...	14.037	75	37816	4.56	ug/L #		75

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-11-2020\vo2354\
 Data File : O61164.d
 Acq On : 10 Sep 2020 11:38 am
 Operator : melissam
 Sample : FA78549-2MSD
 Misc : MS47173,VO2354,,,,,20
 ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 11 05:39:28 2020
 Quant Method : C:\msdchem\1\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration

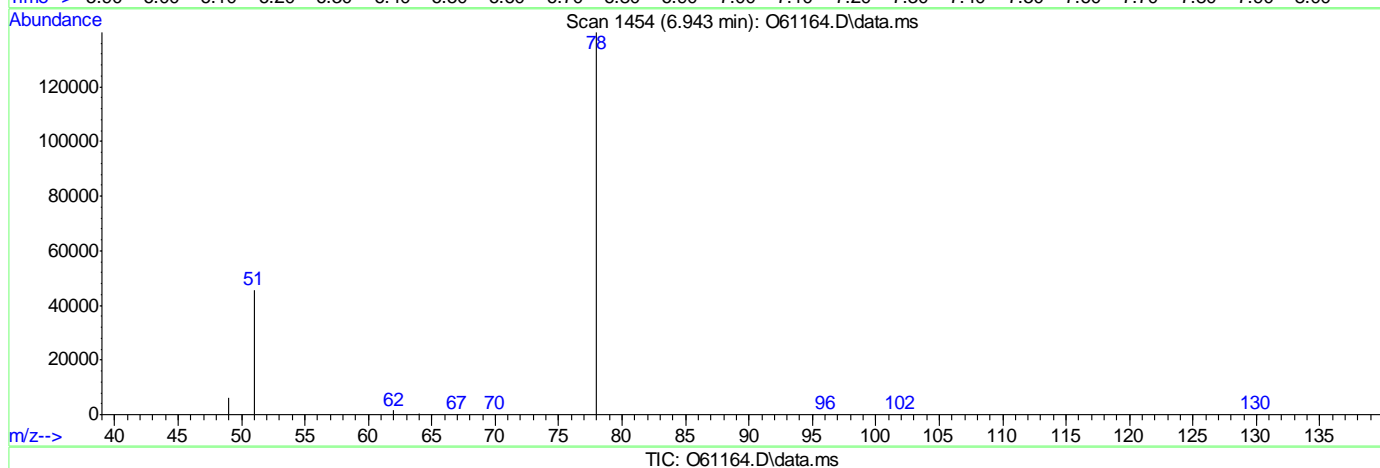
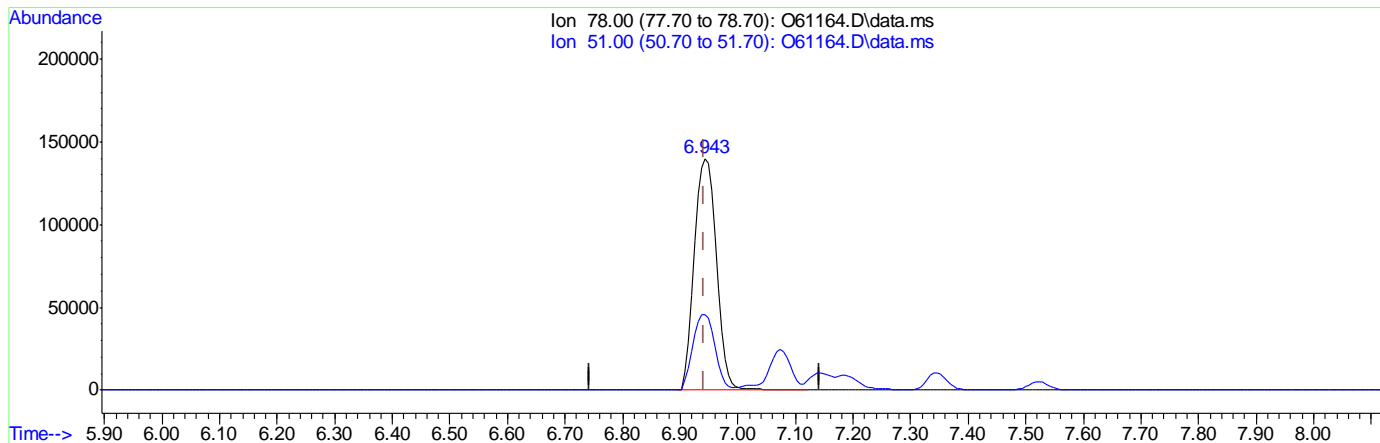


Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\091020\
 Data File : O61164.D
 Acq On : 10 Sep 2020 11:38 am
 Operator : melissam
 Sample : FA78549-2MSD
 Misc : MS47173,VO2354,,,,,20
 ALS Vial : 12 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 10 12:06:42 2020
 Quant Method : C:\msdchem\2\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration



(12) Benzene ()

6.943min (-0.000) 6.17ug/L

response 382400

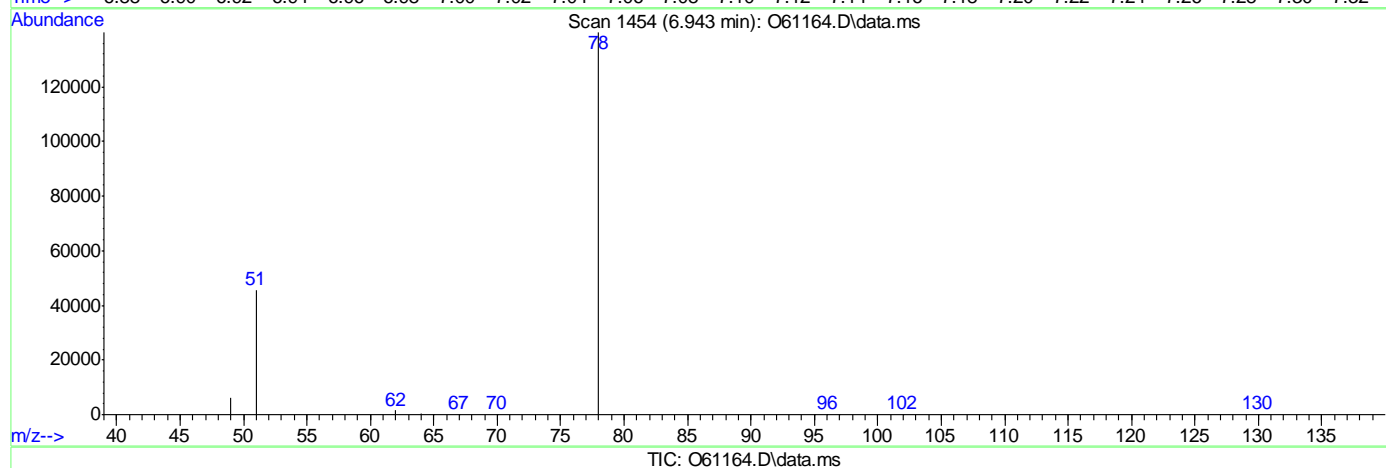
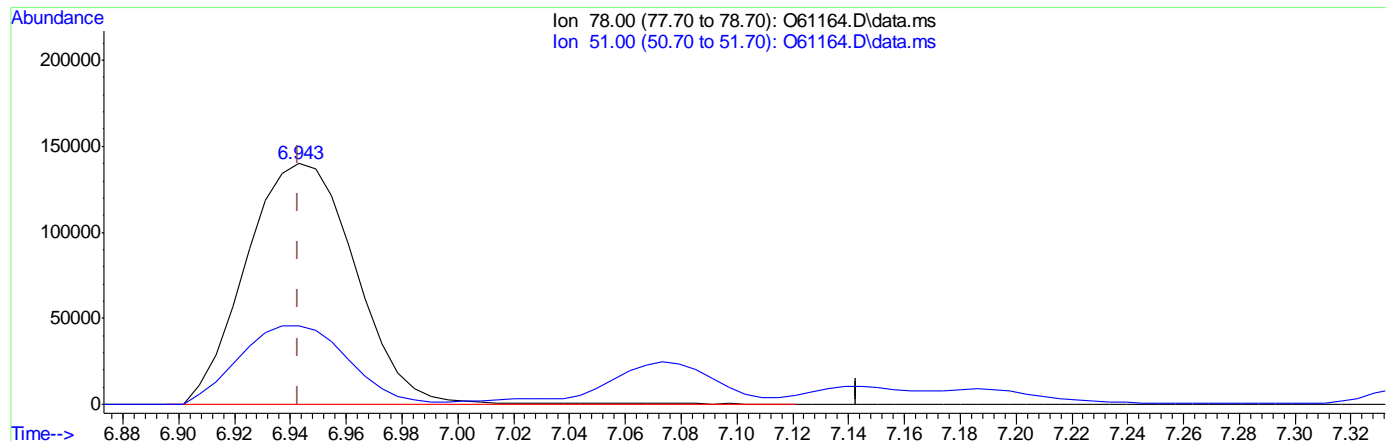
Ion	Exp%	Act%
78.00	100	100
51.00	26.20	32.61
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\091020\
 Data File : O61164.D
 Acq On : 10 Sep 2020 11:38 am
 Operator : melissam
 Sample : FA78549-2MSD
 Misc : MS47173,VO2354,,,,,20
 ALS Vial : 12 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 10 12:06:42 2020
 Quant Method : C:\msdchem\2\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration



(12) Benzene ()

6.943min (-0.000) 6.17ug/L

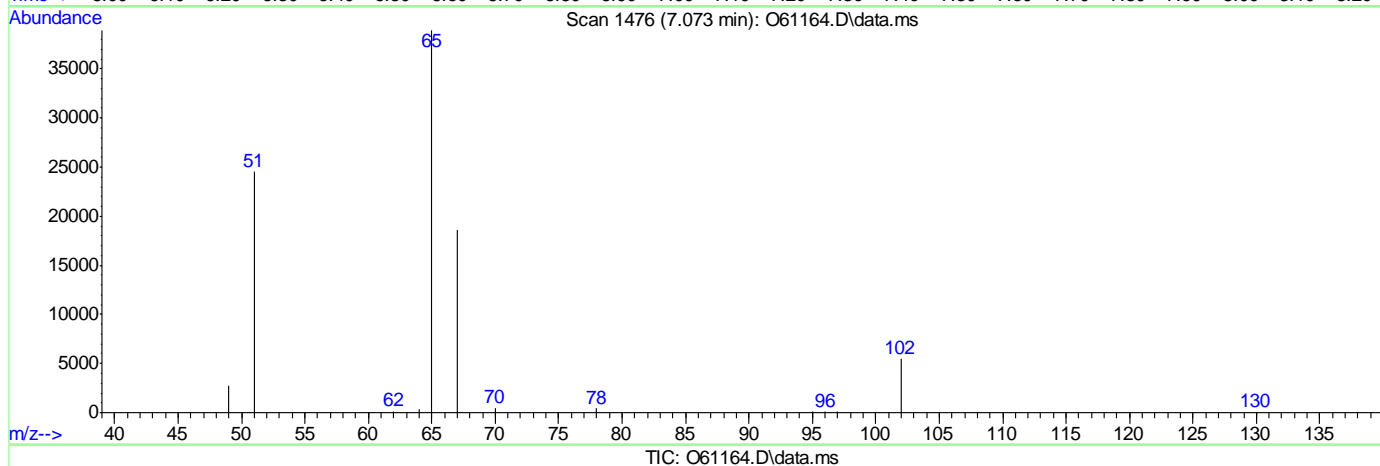
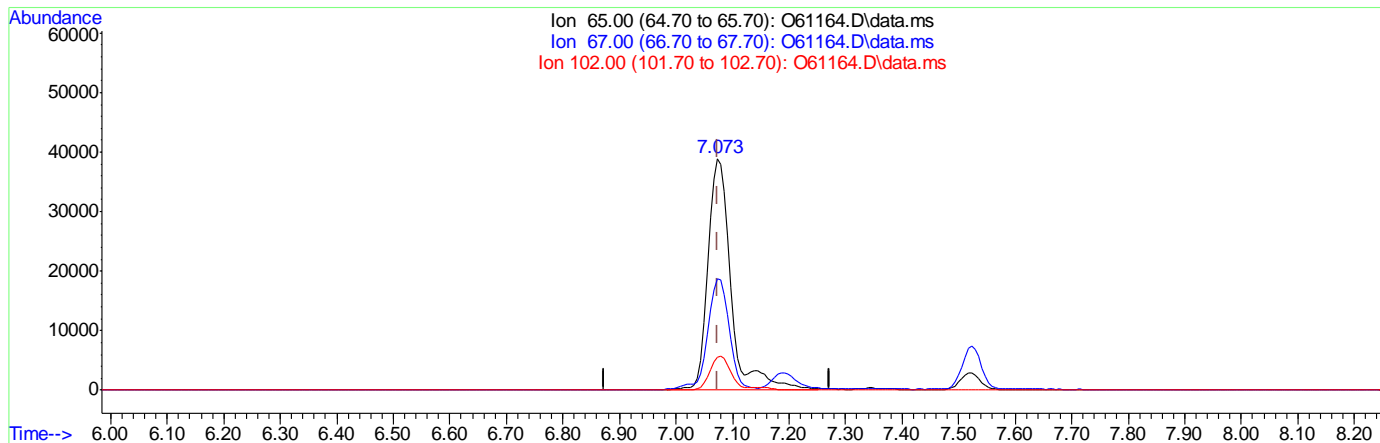
response 382400

Ion	Exp%	Act%
78.00	100	100
51.00	26.20	32.61
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\091020\
 Data File : O61164.D
 Acq On : 10 Sep 2020 11:38 am
 Operator : melissam
 Sample : FA78549-2MSD Inst : MSVOA12
 Misc : MS47173,VO2354,,,,,20
 ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 10 12:06:42 2020
 Quant Method : C:\msdchem\2\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration



(13) 1,2-Dichloroethane-d4 (S)

7.073min (-0.000) 5.94ug/L

response 109026

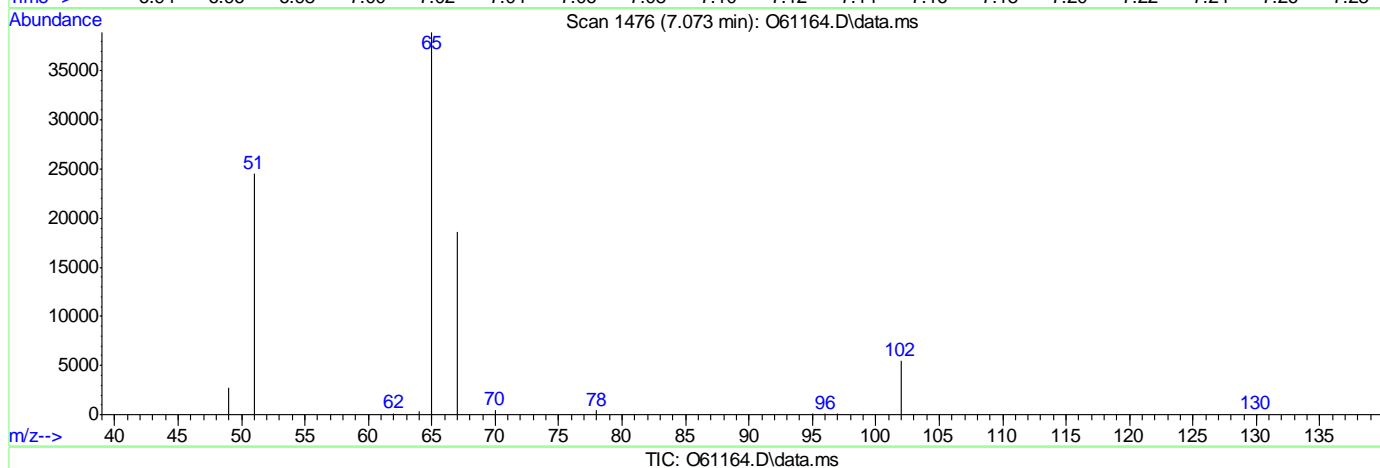
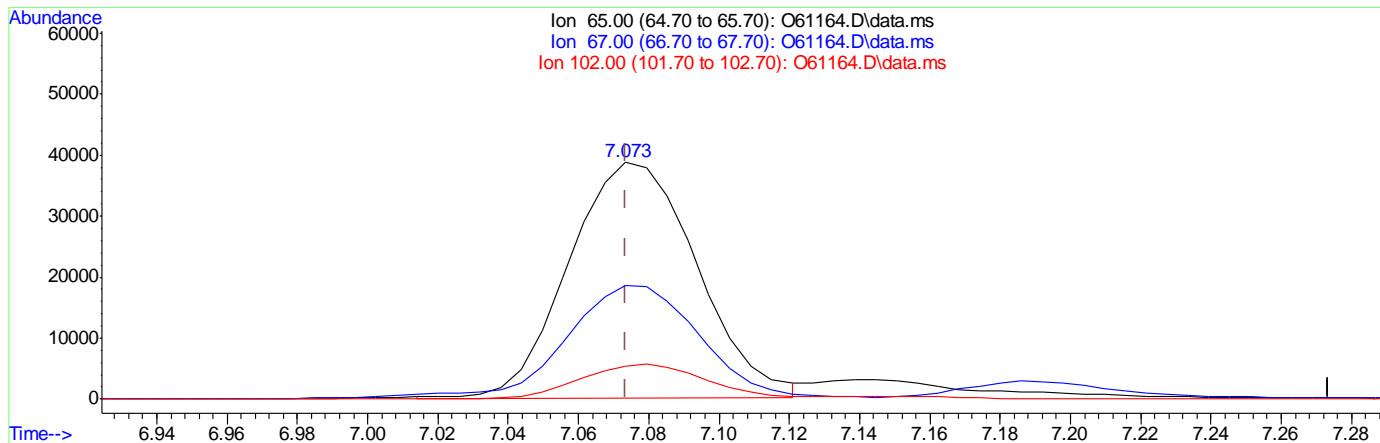
Ion	Exp%	Act%
65.00	100	100
67.00	53.50	47.64
102.00	16.10	13.91
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\091020\
 Data File : O61164.D
 Acq On : 10 Sep 2020 11:38 am
 Operator : melissam
 Sample : FA78549-2MSD
 Misc : MS47173,VO2354,,,,,20
 ALS Vial : 12 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 10 12:06:42 2020
 Quant Method : C:\msdchem\2\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration



(13) 1,2-Dichloroethane-d4 (S)

7.073min (-0.000) 5.34ug/L m

response 98147

Ion	Exp%	Act%
65.00	100	100
67.00	53.50	47.94
102.00	16.10	14.03
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-14-2020\vz2417\
 Data File : Z62314.d
 Acq On : 13 Sep 2020 7:38 pm
 Operator : stutip
 Sample : fa78549-16ms
 Misc : MS47203,VZ2417,,,,,
 ALS Vial : 25 Sample Multiplier: 1

Quant Time: Sep 14 07:08:09 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Sun Sep 13 13:38:26 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)	

Internal Standards							
1) Fluorobenzene	7.401	96	1487167	5.00	ppb	0.00	
18) Chlorobenzene-d5	10.511	117	1256295	5.00	ppb	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.130	65	521407	5.67	ppb	0.00	
Spiked Amount	5.000	Range	79 - 125	Recovery	=	113.40%	
19) Toluene-d8	8.961	98	1435131	4.70	ppb	0.00	
Spiked Amount	5.000	Range	70 - 130	Recovery	=	94.00%	
Target Compounds							
2) Vinyl Chloride	2.835	62	786738	6.36	ppb	99	Qvalue
3) Chloromethane	2.726	50	619071	5.98	ppb	99	
4) 1,1-Dichloroethene	4.087	96	525160	5.83	ppb	#	88
5) Methylene Chloride	4.713	84	682512	4.88	ppb		91
6) trans-1,2-Dichloroethene	4.886	96	612176	5.58	ppb		93
7) 1,1-Dichloroethane	5.546	63	1386559	7.45	ppb	#	100
8) cis-1,2-Dichloroethene	6.110	96	693088	5.68	ppb		93
9) Chloroform	6.377	83	1445318	6.47	ppb		100
10) Carbon Tetrachloride	6.543	117	783410	5.16	ppb		98
11) 1,1,1-Trichloroethane	6.614	97	1097539	5.60	ppb		99
12) Benzene	6.994	78	2397915	5.79	ppb		96
14) 1,2-Dichloroethane	7.198	62	894960	5.74	ppb		100
15) Trichloroethene	7.571	95	1992621	15.69	ppb	#	85
16) 1,2-Dichloropropane	8.105	63	587168	5.57	ppb		98
17) cis-1,3-Dichloropropene	8.773	75	419547	3.71	ppb		99
20) trans-1,3-Dichloropropene	9.412	75	329436	3.14	ppb		99
21) Tetrachloroethene	9.399	166	1531031	11.52	ppb		99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

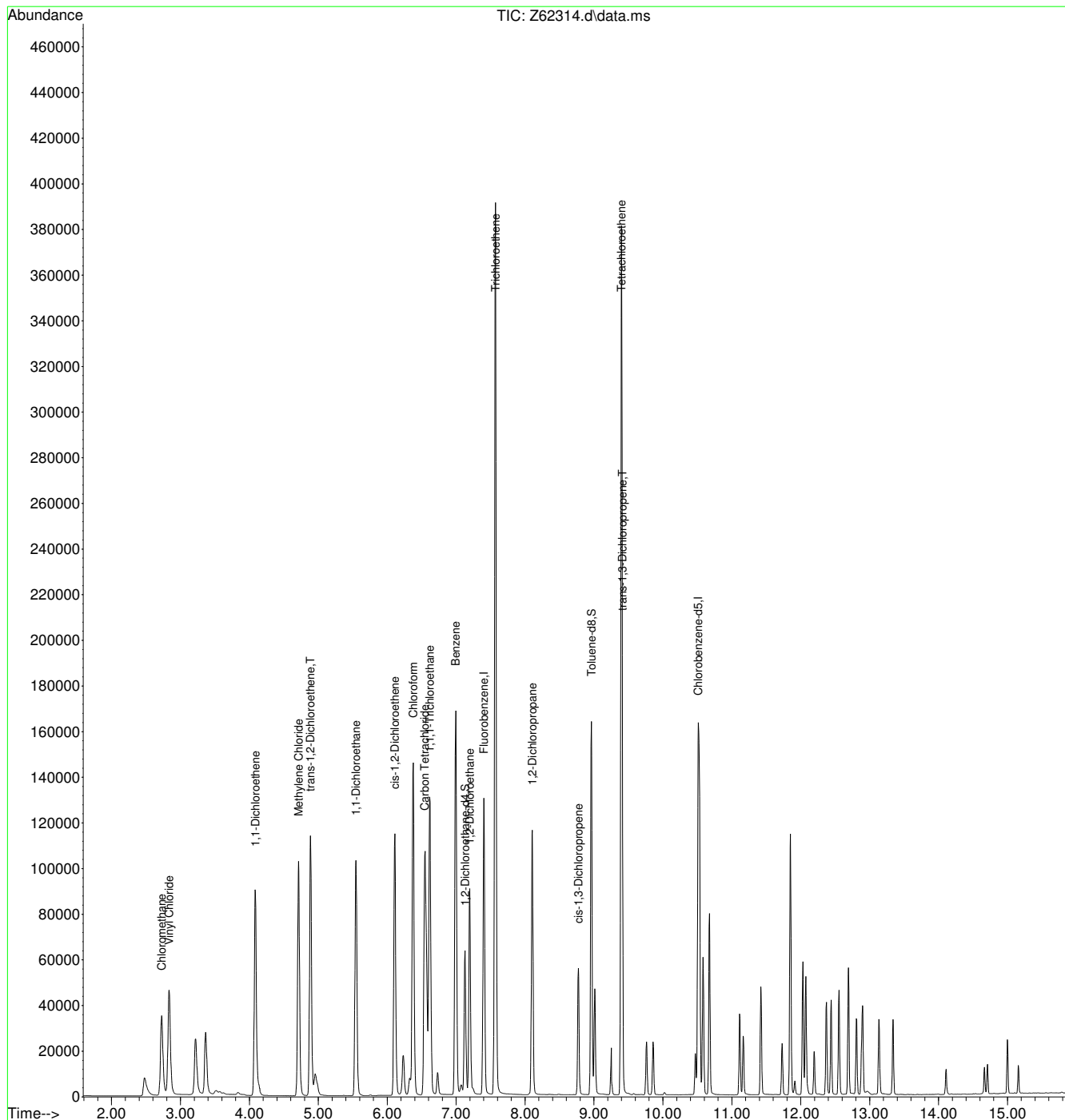
7.4.3
7



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-14-2020\ vz2417\
 Data File : Z62314.d
 Acq On : 13 Sep 2020 7:38 pm
 Operator : stutip
 Sample : fa78549-16ms
 Misc : MS47203,VZ2417,,,,,
 ALS Vial : 25 Sample Multiplier: 1

Quant Time: Sep 14 07:08:09 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Sun Sep 13 13:38:26 2020
 Response via : Initial Calibration



7.4.3
7



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\091320\
 Data File : O61349.D
 Acq On : 13 Sep 2020 7:52 pm
 Operator : stutip
 Sample : fa78564-1ms,10 Inst : MSVOA12
 Misc : MS47201,VO2360,,,,,10
 ALS Vial : 24 Sample Multiplier: 1

Quant Time: Sep 14 13:50:27 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Sun Sep 13 19:20:40 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
Internal Standards							
1) Fluorobenzene	7.340	96	215252	5.00	ug/L	0.00	
18) Chlorobenzene-d5	10.441	117	177426	5.00	ug/L	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.068	65	87985	5.06	ug/L	0.00	
Spiked Amount	5.000	Range 74 - 125	Recovery	=	101.20%		
19) Toluene-d8	8.896	98	169720	4.24	ug/L	0.00	
Spiked Amount	5.000	Range 88 - 111	Recovery	=	84.80%#		
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.897	62	137221	5.74	ug/L		99
3) Chloromethane	2.795	50	197845	5.64	ug/L		94
4) 1,1-Dichloroethene	4.085	61	162214	5.45	ug/L		92
5) Methylene Chloride	4.699	49	241689	5.19	ug/L		95
6) trans-1,2-Dichloroethene	4.865	61	170603	4.97	ug/L		86
7) 1,1-Dichloroethane	5.510	63	200782	5.03	ug/L		99
8) cis-1,2-Dichloroethene	6.066	96	86621	4.39	ug/L		84
9) Chloroform	6.327	83	165916	4.83	ug/L		94
10) Carbon Tetrachloride	6.505	117	116287	4.97	ug/L		87
11) 1,1,1-Trichloroethane	6.576	97	127312	4.81	ug/L		91
12) Benzene	6.937	78	324310m	4.88	ug/L		
14) 1,2-Dichloroethane	7.139	62	153619	4.73	ug/L		94
15) Trichloroethene	7.512	95	97749	4.83	ug/L		83
16) 1,2-Dichloropropane	8.040	63	108668	4.89	ug/L		95
17) cis-1,3-Dichloropropene	8.707	75	87909	3.82	ug/L		99
20) trans-1,3-Dichloropropene	9.343	75	87936	3.77	ug/L		100
21) Tetrachloroethene	9.337	166	97943	5.04	ug/L		94
22) 1,4-Dichlorobenzene	12.821	146	197478	4.81	ug/L		97
23) 1,2-Dibromo-3-Chloropr...	14.037	75	22696	3.13	ug/L #		81

(#) = qualifier out of range (m) = manual integration (+) = signals summed

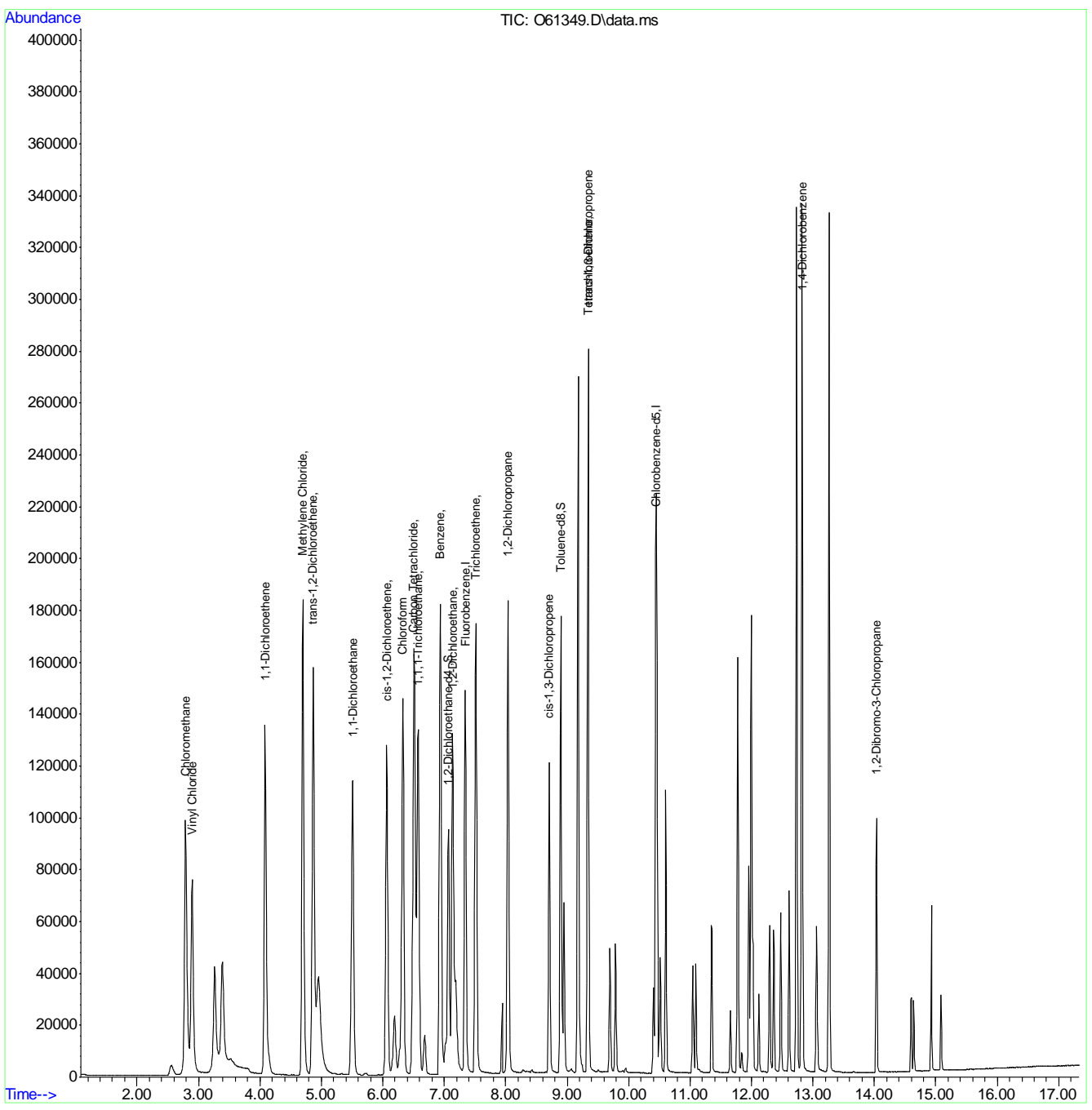
7.4.4
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\091320\
Data File : O61349.D
Acq On : 13 Sep 2020 7:52 pm
Operator : stutip
Sample : fa78564-1ms,10
Misc : MS47201,VO2360,,,,,10
ALS Vial : 24 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 14 13:50:27 2020
Quant Method : C:\msdchem\2\methods\SIMCL091120.M
Quant Title : Standard Methods 6200B
QLast Update : Sun Sep 13 19:20:40 2020
Response via : Initial Calibration



7.4.4
7

Manual Integration Approval Summary

Sample Number: FA78564-1MS **Method:** SW846 8260B BY SIM
Lab FileID: O61349.D **Analyst approved:** 09/14/20 13:52 Akari Giraldo
Injection Time: 09/13/20 19:52 **Supervisor approved:** 09/14/20 14:22 Melissa Mangual

Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzene	71-43-2		6.94	Poor instrument integration

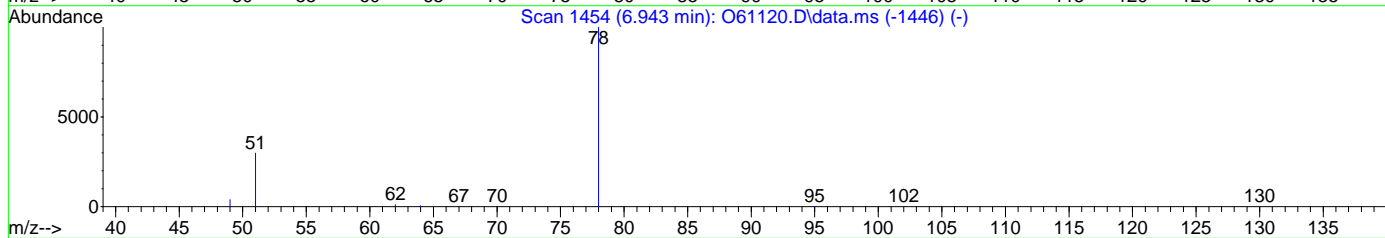
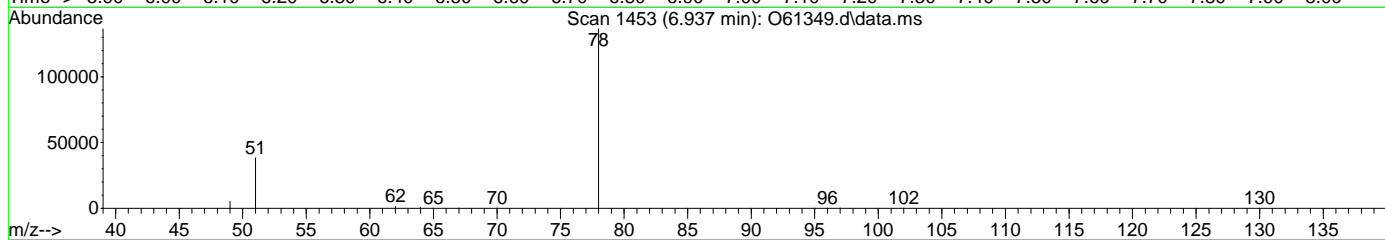
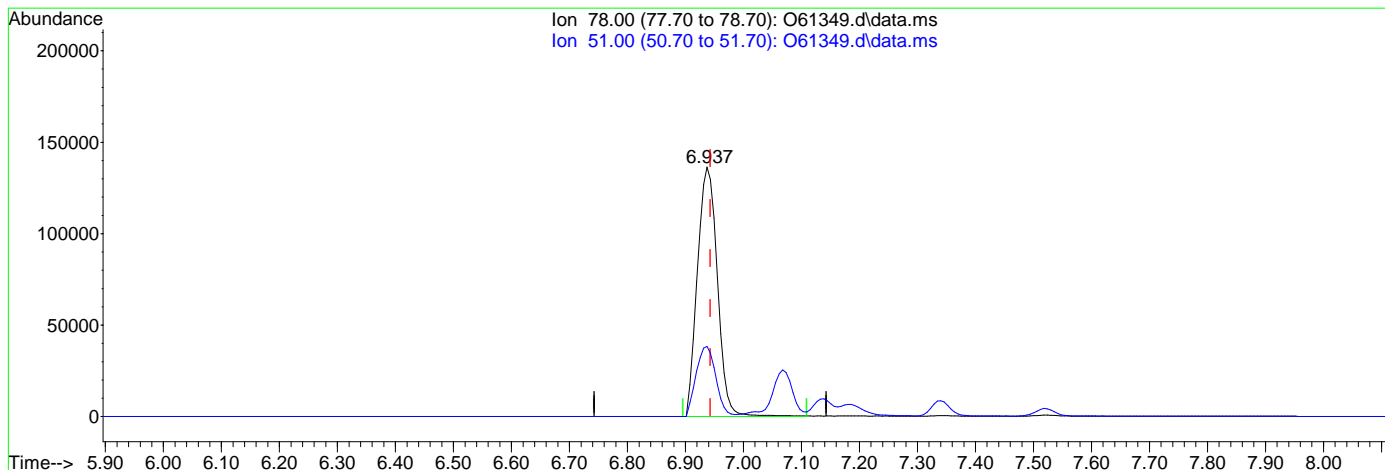
7.4.4.1

7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-14-2020\VO2360\
 Data File : O61349.d
 Acq On : 13 Sep 2020 7:52 pm
 Operator : stutip
 Sample : fa78564-1ms,10
 Misc : MS47201,VO2360,,,,,10
 ALS Vial : 24 Sample Multiplier: 1

Quant Time: Sep 14 07:53:27 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Sun Sep 13 19:20:40 2020
 Response via : Initial Calibration



(12) Benzene ()

6.937min (-0.006) 4.93ug/L

response 327395

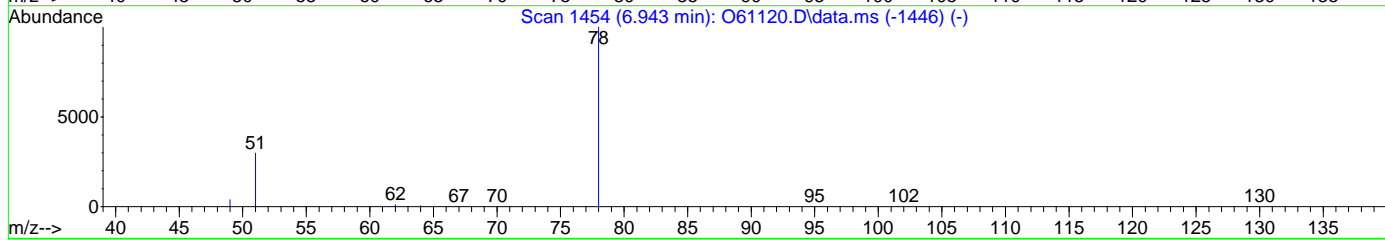
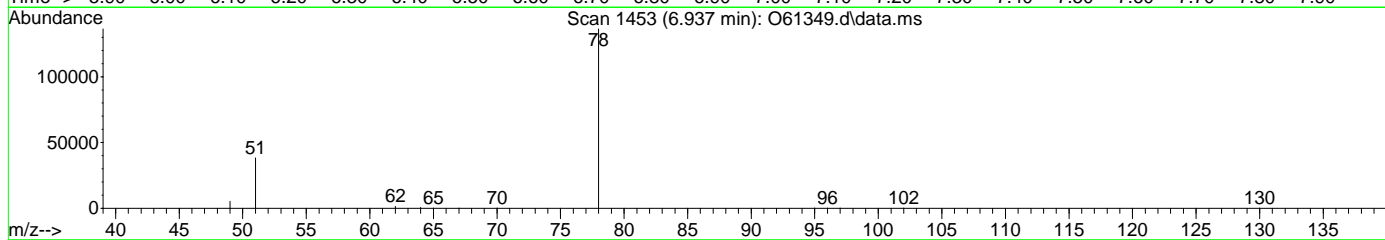
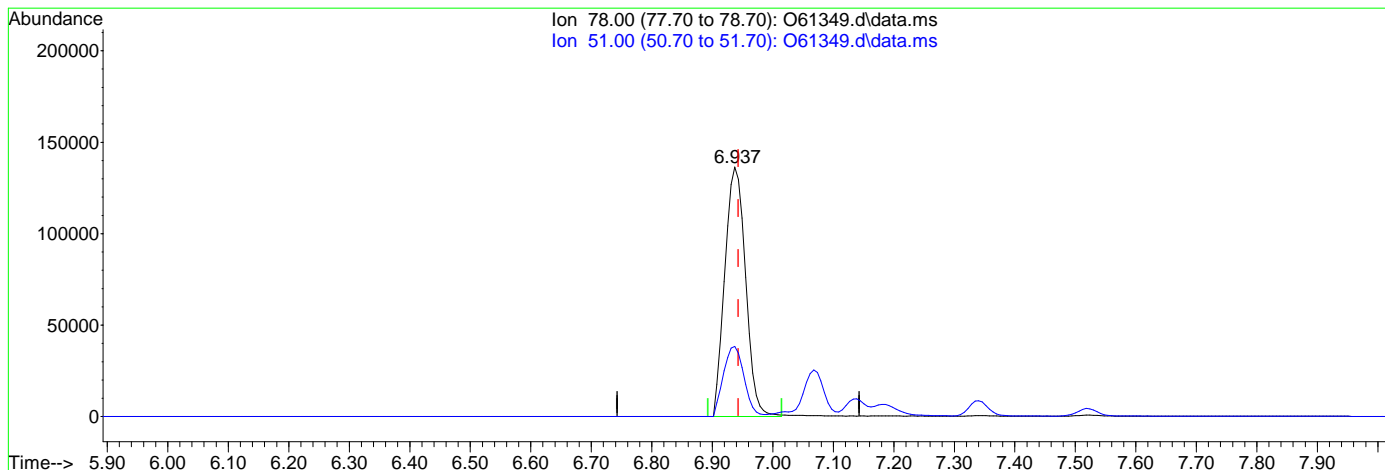
Ion	Exp%	Act%
78.00	100	100
51.00	26.20	28.09
0.00	0.00	0.00
0.00	0.00	0.00

7.4.4.2
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-14-2020\VO2360\
 Data File : O61349.d
 Acq On : 13 Sep 2020 7:52 pm
 Operator : stutip
 Sample : fa78564-1ms,10
 Misc : MS47201,VO2360,,,,,10
 ALS Vial : 24 Sample Multiplier: 1

Quant Time: Sep 14 07:53:27 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Sun Sep 13 19:20:40 2020
 Response via : Initial Calibration



(12) Benzene ()

6.937min (-0.006) 4.88ug/L m

response 324310

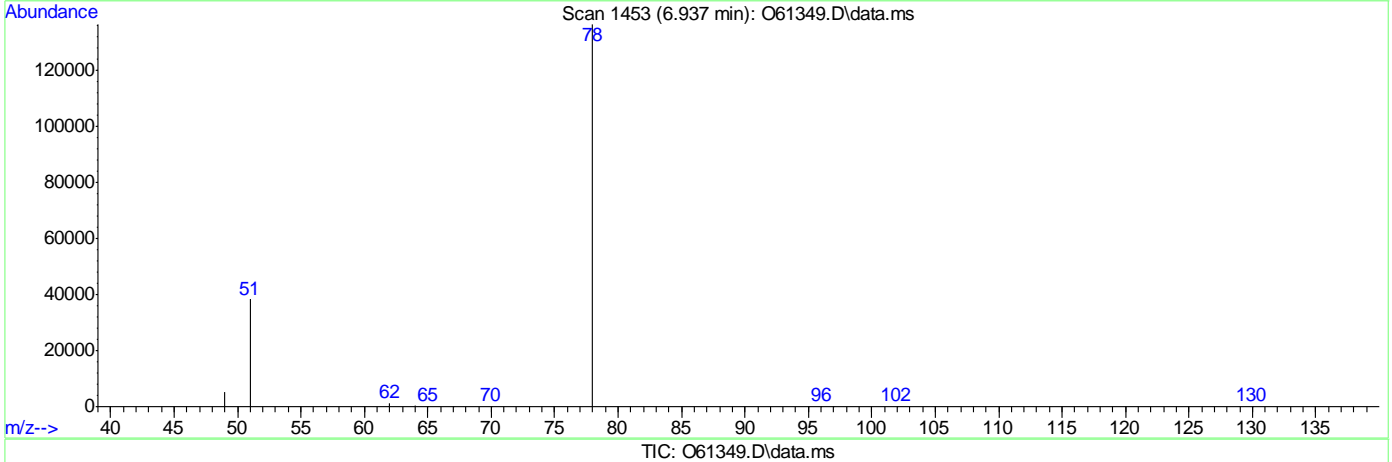
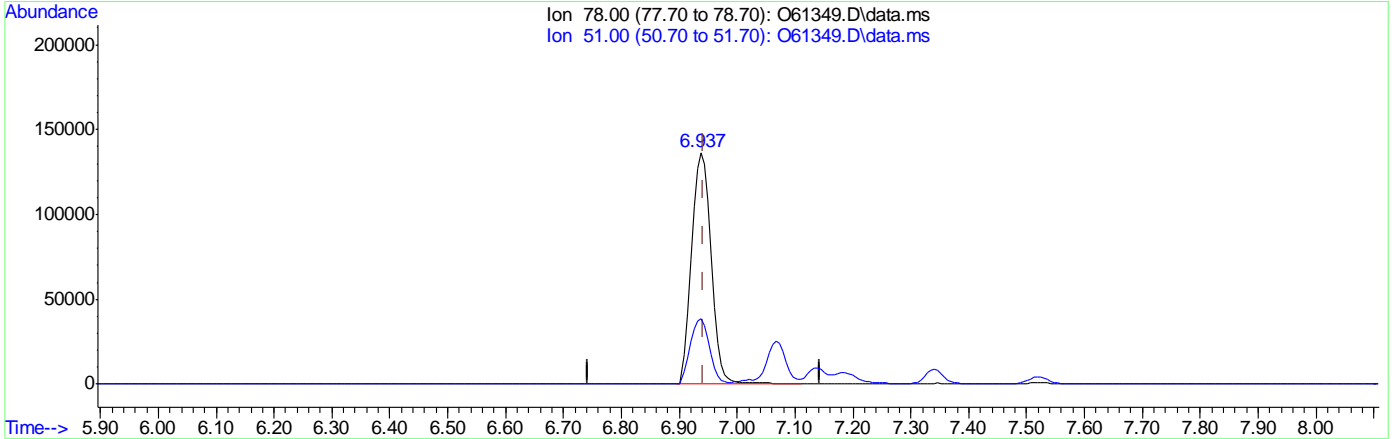
Ion	Exp%	Act%
78.00	100	100
51.00	26.20	28.09
0.00	0.00	0.00
0.00	0.00	0.00

7.4.4.3
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\091320\
 Data File : O61349.D
 Acq On : 13 Sep 2020 7:52 pm
 Operator : stutip
 Sample : fa78564-1ms,10 Inst : MSVOA12
 Misc : MS47201,VO2360,,,,,10
 ALS Vial : 24 Sample Multiplier: 1

Quant Time: Sep 14 13:48:58 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Sun Sep 13 19:20:40 2020
 Response via : Initial Calibration



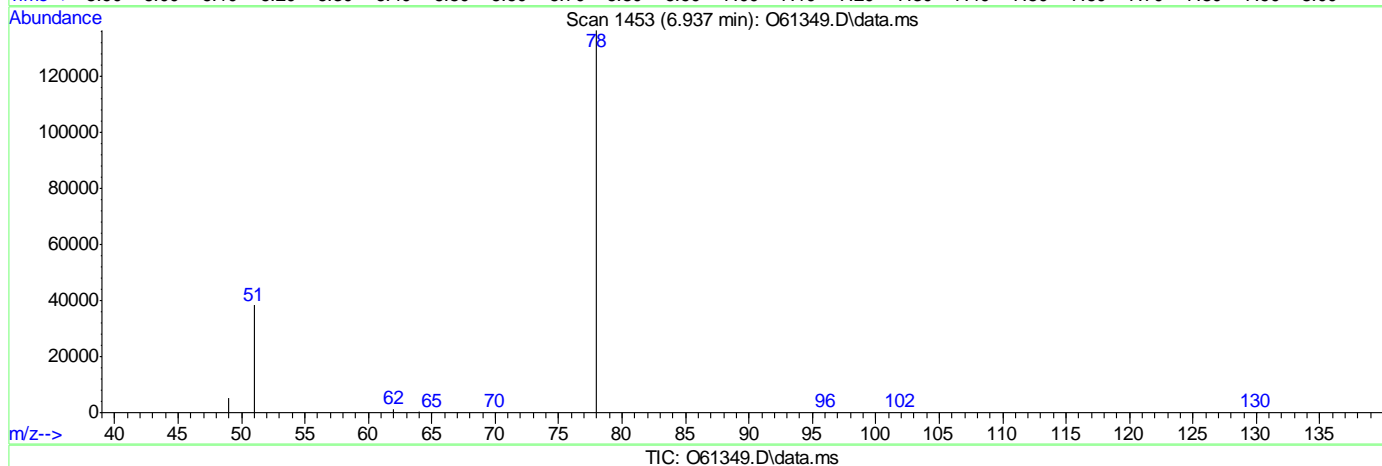
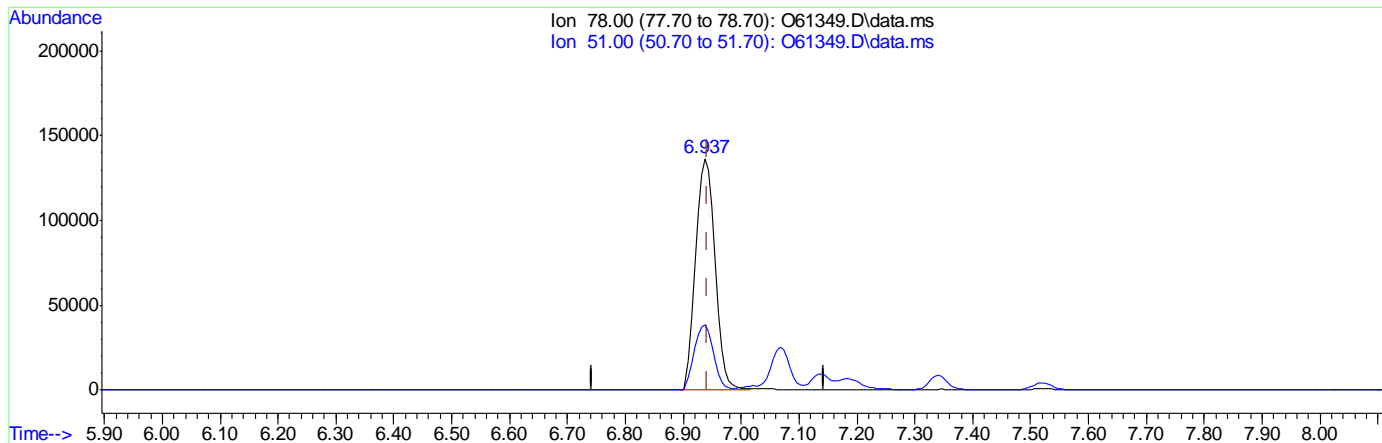
(12) Benzene ()
 6.937min (-0.006) 4.93ug/L
 response 327395

Ion	Exp%	Act%
78.00	100	100
51.00	26.20	28.09
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\091320\
 Data File : O61349.D
 Acq On : 13 Sep 2020 7:52 pm
 Operator : stutip
 Sample : fa78564-1ms,10 Inst : MSVOA12
 Misc : MS47201,VO2360,,,,,10
 ALS Vial : 24 Sample Multiplier: 1

Quant Time: Sep 14 13:48:58 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Sun Sep 13 19:20:40 2020
 Response via : Initial Calibration



(12) Benzene ()
 6.937min (-0.006) 4.88ug/L m
 response 324310

Ion	Exp%	Act%
78.00	100	100
51.00	26.20	28.09
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-14-2020\vz2417\
 Data File : Z62315.d
 Acq On : 13 Sep 2020 7:57 pm
 Operator : stutip
 Sample : fa78549-16msd
 Misc : MS47203,VZ2417,,,,,
 ALS Vial : 26 Sample Multiplier: 1

Quant Time: Sep 14 07:08:12 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Sun Sep 13 13:38:26 2020
 Response via : Initial Calibration

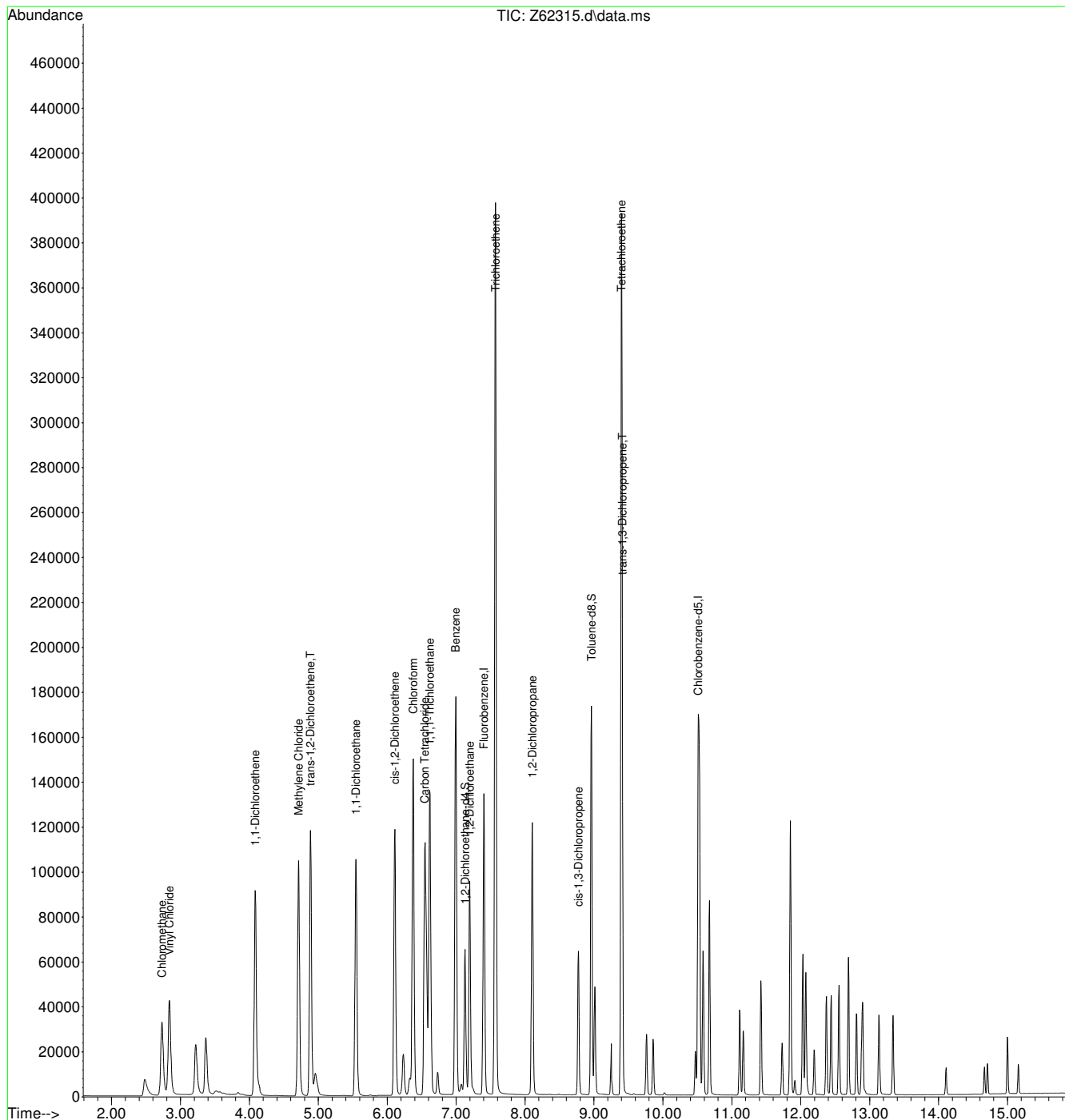
Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)	
Internal Standards							
1) Fluorobenzene	7.401	96	1548045	5.00	ppb	0.00	
18) Chlorobenzene-d5	10.511	117	1296762	5.00	ppb	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.130	65	535909	5.60	ppb	0.00	
Spiked Amount	5.000	Range	79 - 125	Recovery	=	112.00%	
19) Toluene-d8	8.961	98	1493042	4.74	ppb	0.00	
Spiked Amount	5.000	Range	70 - 130	Recovery	=	94.80%	
Target Compounds							
2) Vinyl Chloride	2.839	62	757567	5.88	ppb	100	Qvalue
3) Chloromethane	2.730	50	617804	5.75	ppb	100	
4) 1,1-Dichloroethene	4.083	96	550935	5.87	ppb	90	
5) Methylene Chloride	4.713	84	718558	4.94	ppb	91	
6) trans-1,2-Dichloroethene	4.886	96	649324	5.68	ppb	94	
7) 1,1-Dichloroethane	5.546	63	1436531	7.41	ppb	# 99	
8) cis-1,2-Dichloroethene	6.110	96	729083	5.74	ppb	93	
9) Chloroform	6.377	83	1508267	6.48	ppb	100	
10) Carbon Tetrachloride	6.543	117	829839	5.26	ppb	98	
11) 1,1,1-Trichloroethane	6.614	97	1157788	5.68	ppb	99	
12) Benzene	6.994	78	2533546	5.88	ppb	97	
14) 1,2-Dichloroethane	7.198	62	941224	5.79	ppb	100	
15) Trichloroethene	7.571	95	2010535	15.21	ppb	# 85	
16) 1,2-Dichloropropane	8.105	63	620280	5.66	ppb	98	
17) cis-1,3-Dichloropropene	8.773	75	483995	4.09	ppb	98	
20) trans-1,3-Dichloropropene	9.412	75	397797	3.66	ppb	99	
21) Tetrachloroethene	9.399	166	1569291	11.43	ppb	99	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-14-2020\ vz2417\
Data File : Z62315.d
Acq On : 13 Sep 2020 7:57 pm
Operator : stutip
Sample : fa78549-16msd
Misc : MS47203,VZ2417,,,,,
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Sep 14 07:08:12 2020
Quant Method : C:\msdchem\1\methods\SIMCL091120.M
Quant Title : WATER-EPA 8260B
QLast Update : Sun Sep 13 13:38:26 2020
Response via : Initial Calibration



7.4.5
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\091320\
 Data File : O61350.D
 Acq On : 13 Sep 2020 8:12 pm
 Operator : stutip
 Sample : fa78564-1msd,10 Inst : MSVOA12
 Misc : MS47201,VO2360,,,,,10
 ALS Vial : 25 Sample Multiplier: 1

Quant Time: Sep 14 13:50:50 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Sun Sep 13 19:20:40 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
Internal Standards							
1) Fluorobenzene	7.340	96	233995	5.00	ug/L	0.00	
18) Chlorobenzene-d5	10.441	117	190479	5.00	ug/L	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.068	65	93890	4.97	ug/L	0.00	
Spiked Amount	5.000	Range 74 - 125	Recovery	=	99.40%		
19) Toluene-d8	8.896	98	187373	4.36	ug/L	0.00	
Spiked Amount	5.000	Range 88 - 111	Recovery	=	87.20%#		
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.897	62	140892	5.40	ug/L		97
3) Chloromethane	2.795	50	197709	5.15	ug/L		94
4) 1,1-Dichloroethene	4.085	61	182933	5.66	ug/L		91
5) Methylene Chloride	4.700	49	270684	5.34	ug/L		94
6) trans-1,2-Dichloroethene	4.865	61	195834	5.25	ug/L		85
7) 1,1-Dichloroethane	5.510	63	228880	5.28	ug/L		99
8) cis-1,2-Dichloroethene	6.066	96	100960	4.71	ug/L		83
9) Chloroform	6.333	83	187129	5.01	ug/L		95
10) Carbon Tetrachloride	6.511	117	133372	5.24	ug/L		87
11) 1,1,1-Trichloroethane	6.576	97	144075	5.01	ug/L		91
12) Benzene	6.937	78	372379m	5.16	ug/L		
14) 1,2-Dichloroethane	7.139	62	174541	4.94	ug/L		93
15) Trichloroethene	7.512	95	113365	5.15	ug/L		84
16) 1,2-Dichloropropane	8.040	63	124954	5.18	ug/L		95
17) cis-1,3-Dichloropropene	8.707	75	110587	4.42	ug/L		99
20) trans-1,3-Dichloropropene	9.343	75	111001	4.43	ug/L		99
21) Tetrachloroethene	9.338	166	111276	5.34	ug/L		95
22) 1,4-Dichlorobenzene	12.827	146	222405	5.04	ug/L		96
23) 1,2-Dibromo-3-Chloropr...	14.038	75	33648	4.30	ug/L #		76

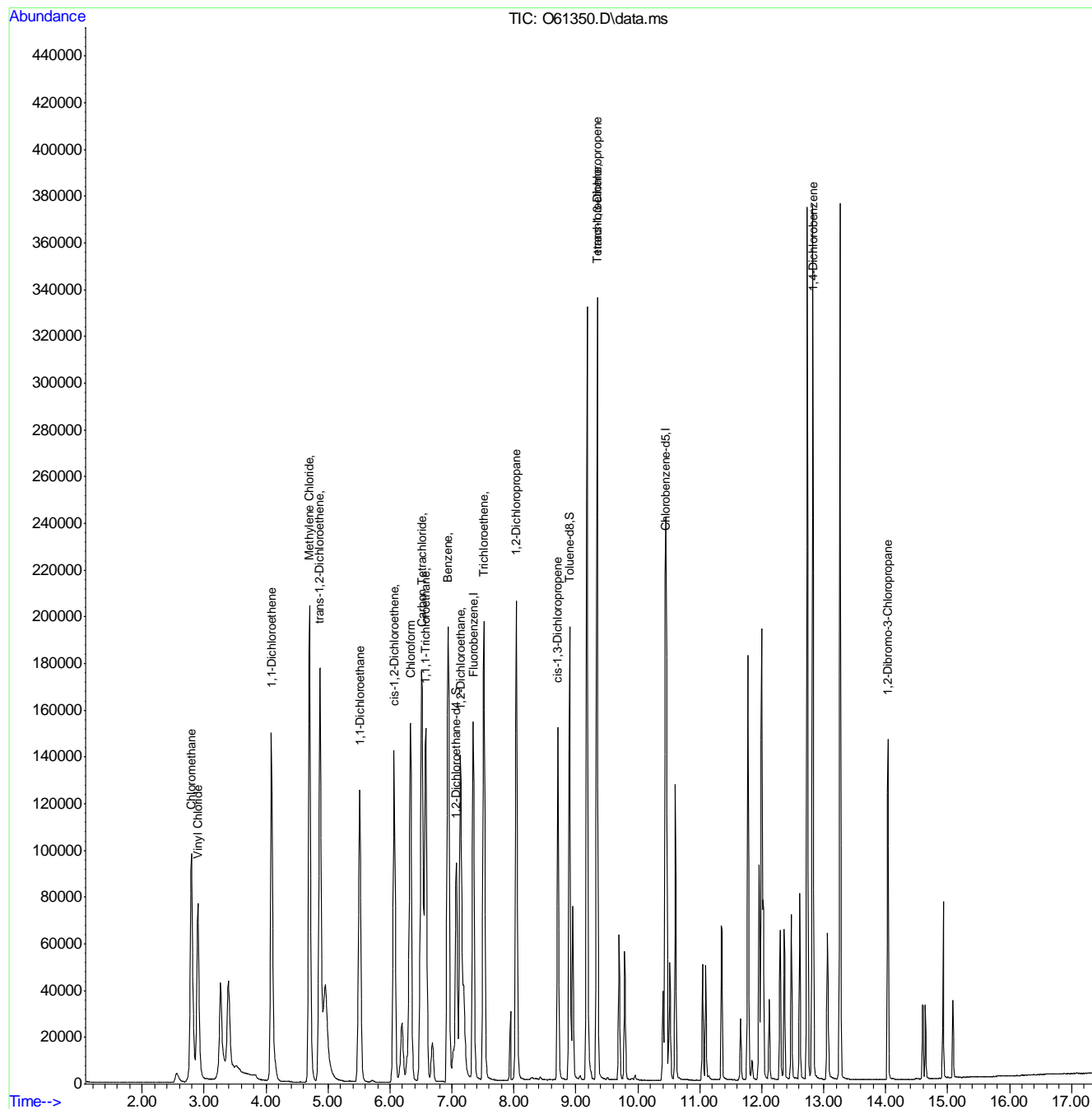
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\091320\
 Data File : O61350.D
 Acq On : 13 Sep 2020 8:12 pm
 Operator : stutip
 Sample : fa78564-1msd,10
 Misc : MS47201,VO2360,,,,,10
 ALS Vial : 25 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 14 13:50:50 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Sun Sep 13 19:20:40 2020
 Response via : Initial Calibration



Manual Integration Approval Summary

Sample Number: FA78564-1MSD **Method:** SW846 8260B BY SIM
Lab FileID: O61350.D **Analyst approved:** 09/14/20 13:52 Akari Giraldo
Injection Time: 09/13/20 20:12 **Supervisor approved:** 09/14/20 14:22 Melissa Mangual

Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzene	71-43-2		6.94	Poor instrument integration

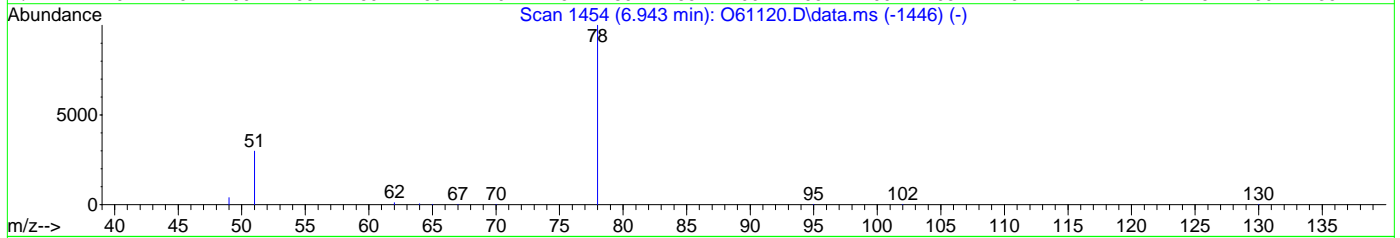
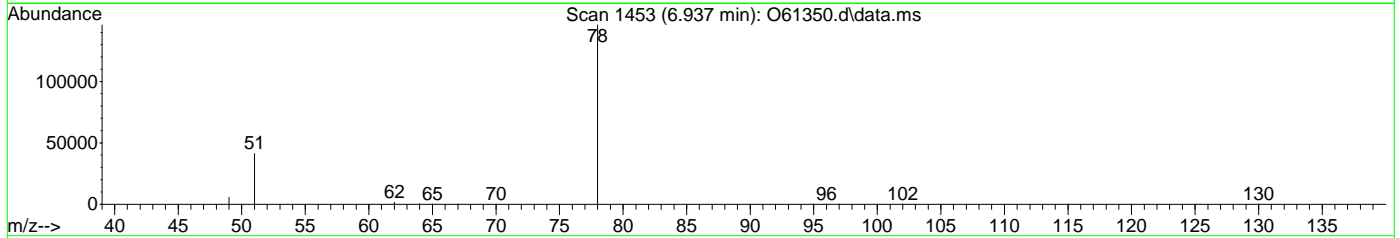
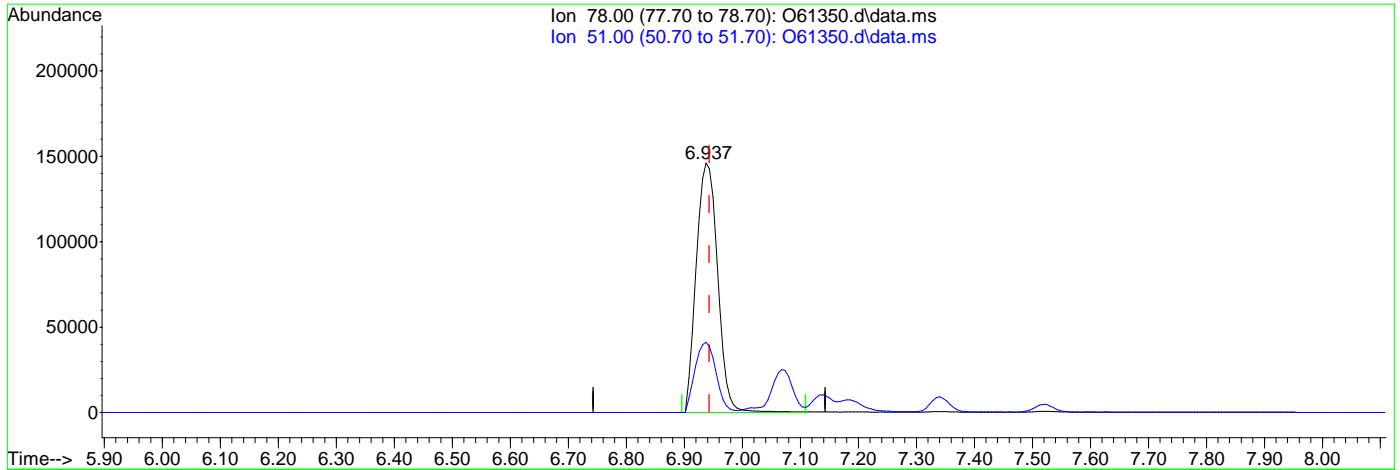
7.4.6.1

7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-14-2020\VO2360\
 Data File : O61350.d
 Acq On : 13 Sep 2020 8:12 pm
 Operator : stutip
 Sample : fa78564-1msd,10
 Misc : MS47201,VO2360,,,,,10
 ALS Vial : 25 Sample Multiplier: 1

Quant Time: Sep 14 07:53:29 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Sun Sep 13 19:20:40 2020
 Response via : Initial Calibration



(12) Benzene ()

6.937min (-0.006) 5.20ug/L

response 375819

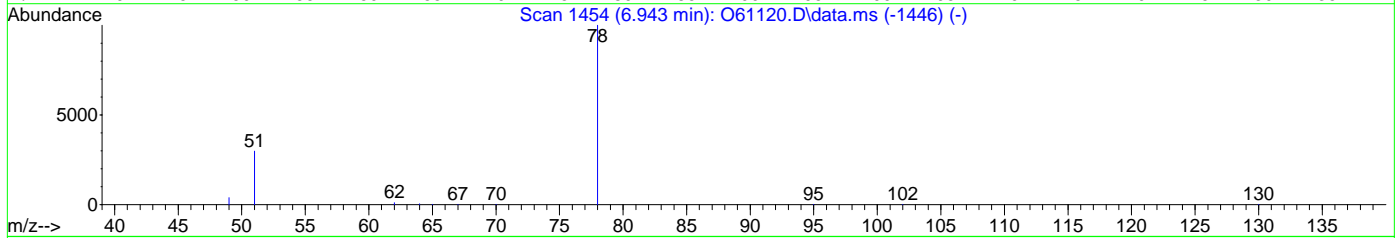
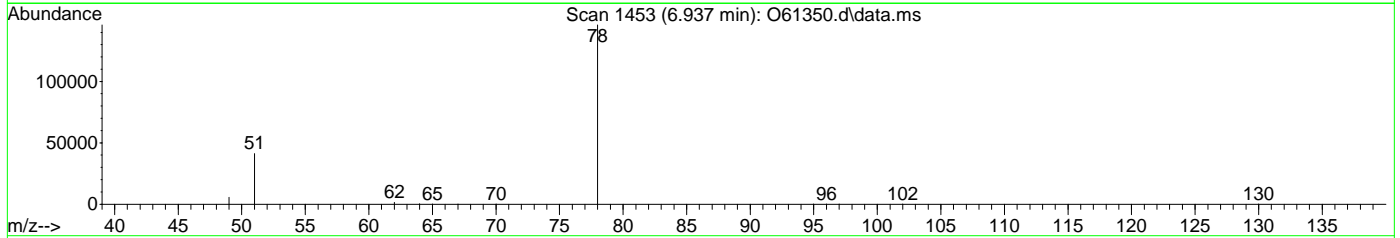
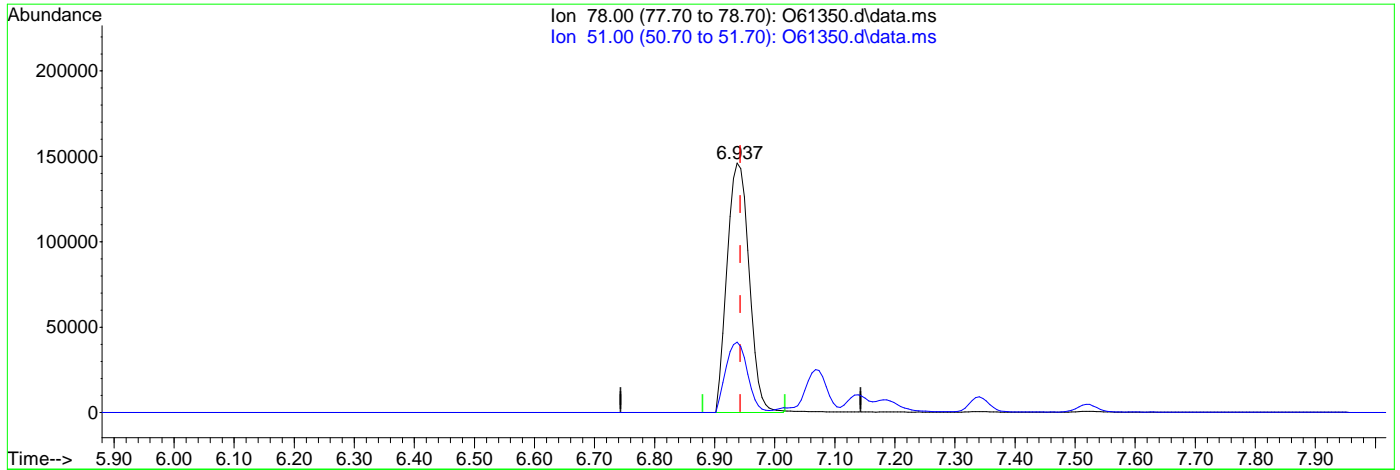
Ion	Exp%	Act%
78.00	100	100
51.00	26.20	28.17
0.00	0.00	0.00
0.00	0.00	0.00

7.4.6.2
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-14-2020\VO2360\
 Data File : O61350.d
 Acq On : 13 Sep 2020 8:12 pm
 Operator : stutip
 Sample : fa78564-1msd,10
 Misc : MS47201,VO2360,,,,,10
 ALS Vial : 25 Sample Multiplier: 1

Quant Time: Sep 14 07:53:29 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Sun Sep 13 19:20:40 2020
 Response via : Initial Calibration



(12) Benzene ()

6.937min (-0.006) 5.16ug/L m

response 372418

Ion	Exp%	Act%
78.00	100	100
51.00	26.20	28.17
0.00	0.00	0.00
0.00	0.00	0.00

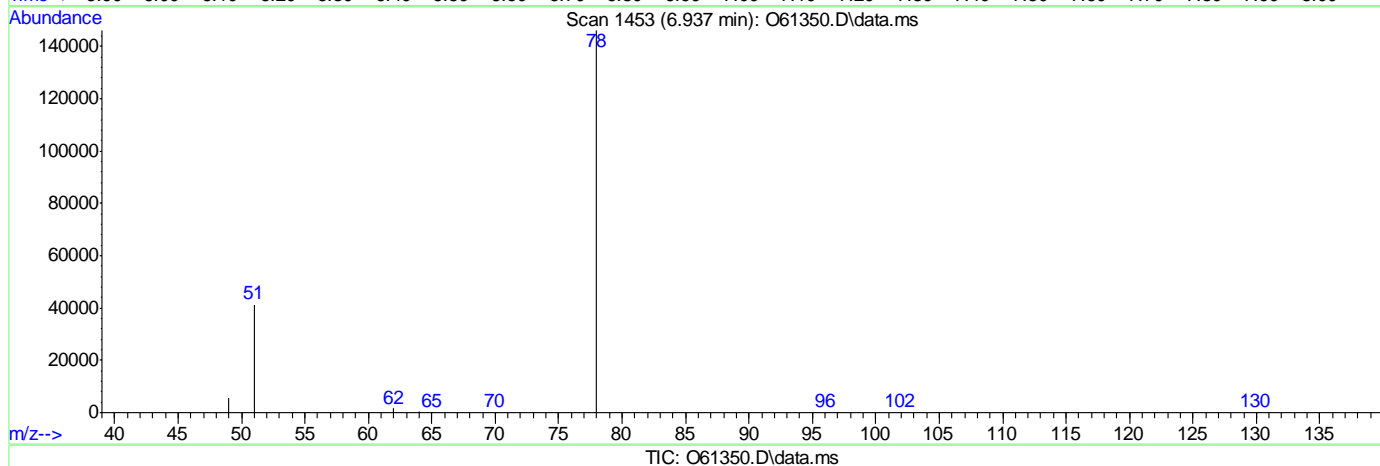
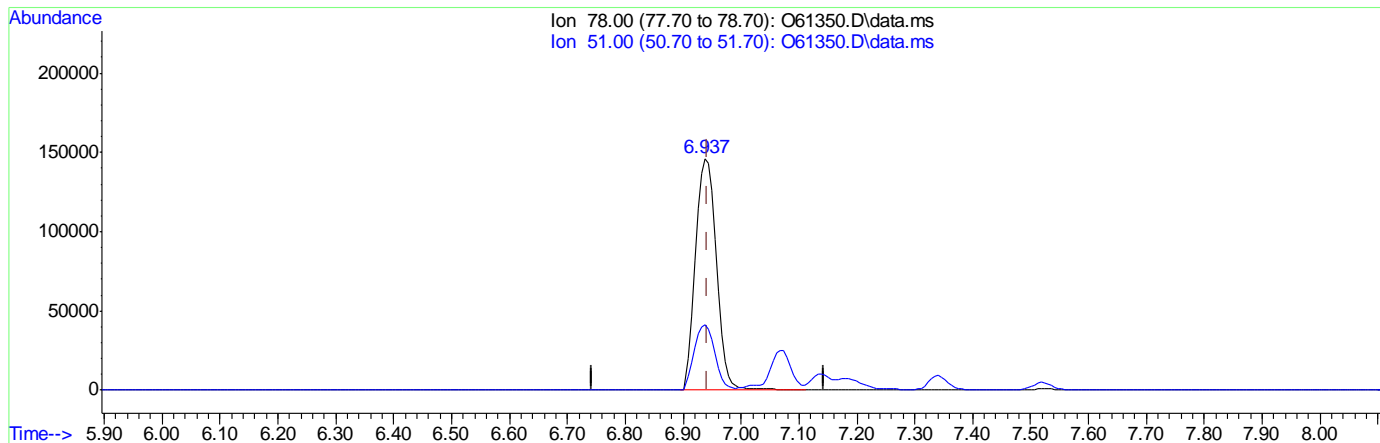
7.4.6.3
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\091320\
 Data File : O61350.D
 Acq On : 13 Sep 2020 8:12 pm
 Operator : stutip
 Sample : fa78564-1msd,10
 Misc : MS47201,VO2360,,,,,10
 ALS Vial : 25 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 14 13:49:00 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Sun Sep 13 19:20:40 2020
 Response via : Initial Calibration



(12) Benzene ()

6.937min (-0.006) 5.20ug/L

response 375819

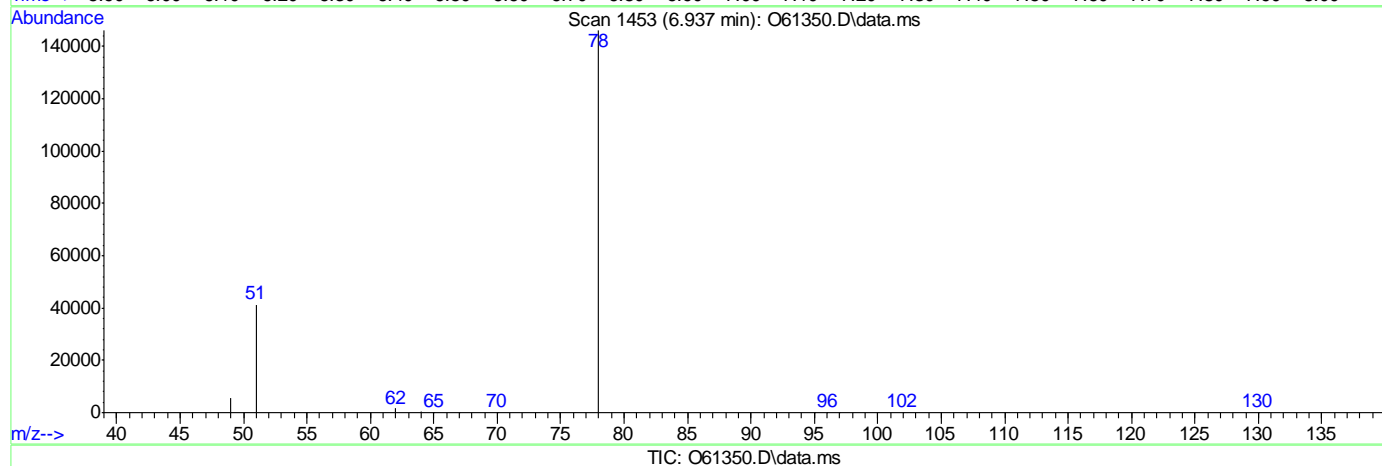
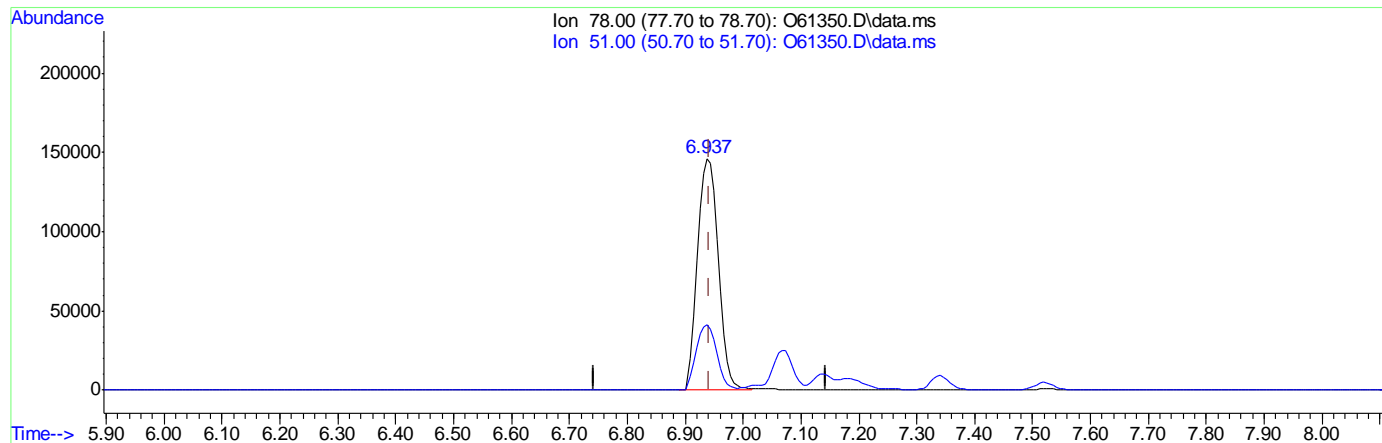
Ion	Exp%	Act%
78.00	100	100
51.00	26.20	28.17
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\091320\
 Data File : O61350.D
 Acq On : 13 Sep 2020 8:12 pm
 Operator : stutip
 Sample : fa78564-1msd,10
 Misc : MS47201,VO2360,,,,,10
 ALS Vial : 25 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 14 13:49:00 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Sun Sep 13 19:20:40 2020
 Response via : Initial Calibration



(12) Benzene ()

6.937min (-0.006) 5.16ug/L m

response 372379

Ion	Exp%	Act%
78.00	100	100
51.00	26.20	28.17
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\091420\
 Data File : Z62335.D
 Acq On : 14 Sep 2020 5:57 pm
 Operator : JuanG
 Sample : FA78551-15MS,10X
 Misc : MS47193,VZ2418,,,,,10
 ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 15 18:50:44 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Sun Sep 13 13:38:26 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	

Internal Standards							
1) Fluorobenzene	7.401	96	1535956	5.00	ppb	0.00	
18) Chlorobenzene-d5	10.511	117	1308662	5.00	ppb	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.130	65	540890	5.69	ppb	0.00	
Spiked Amount	5.000	Range 79 - 125	Recovery	=	113.80%		
19) Toluene-d8	8.961	98	1477825	4.65	ppb	0.00	
Spiked Amount	5.000	Range 70 - 130	Recovery	=	93.00%		
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.839	62	827363	6.47	ppb		100
3) Chloromethane	2.729	50	656815	6.13	ppb		100
4) 1,1-Dichloroethene	4.087	96	555274	5.97	ppb	#	88
5) Methylene Chloride	4.713	84	755384	5.25	ppb		91
6) trans-1,2-Dichloroethene	4.890	96	640859	5.65	ppb		89
7) 1,1-Dichloroethane	5.546	63	1514538	7.87	ppb	#	100
8) cis-1,2-Dichloroethene	6.110	96	715668	5.68	ppb		93
9) Chloroform	6.377	83	1357020	5.88	ppb		100
10) Carbon Tetrachloride	6.543	117	799644	5.10	ppb		98
11) 1,1,1-Trichloroethane	6.620	97	1120501	5.54	ppb		99
12) Benzene	6.994	78	2480344	5.80	ppb		96
14) 1,2-Dichloroethane	7.198	62	928890	5.76	ppb		100
15) Trichloroethene	7.571	95	839093	6.40	ppb		85
16) 1,2-Dichloropropane	8.105	63	608966	5.60	ppb		98
17) cis-1,3-Dichloropropene	8.773	75	419212	3.59	ppb		99
20) trans-1,3-Dichloropropene	9.411	75	341621	3.13	ppb		100
21) Tetrachloroethene	9.399	166	815385	5.51	ppb		100

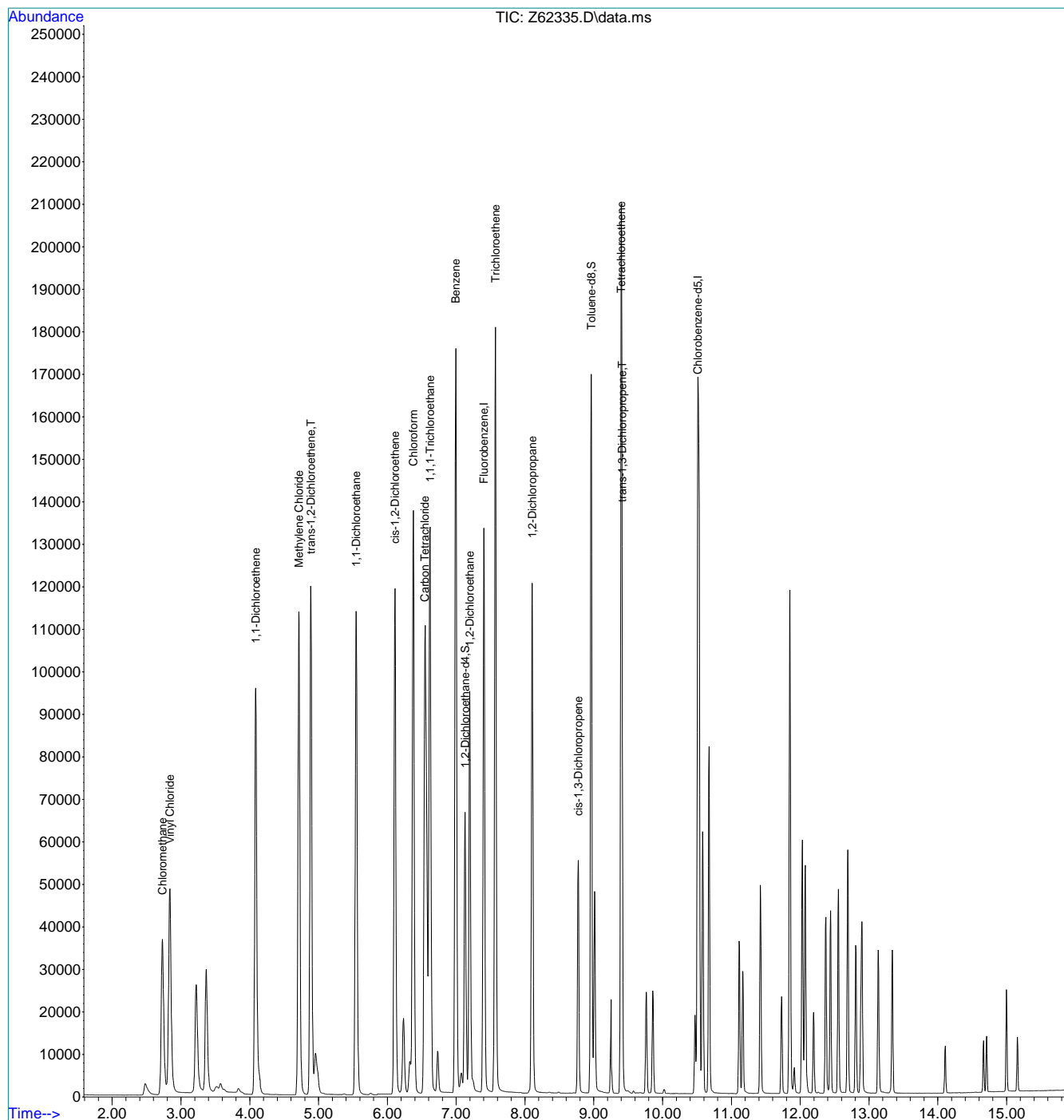
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.4.7
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\091420\
 Data File : Z62335.D
 Acq On : 14 Sep 2020 5:57 pm
 Operator : JuanG
 Sample : FA78551-15MS,10X
 Misc : MS47193,VZ2418,,,,,10
 ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 15 18:50:44 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Sun Sep 13 13:38:26 2020
 Response via : Initial Calibration



7.4.7
7



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\091420\
 Data File : Z62336.D
 Acq On : 14 Sep 2020 6:16 pm
 Operator : JuanG
 Sample : FA78551-15MSD,10X
 Misc : MS47193,VZ2418,,,,,10
 ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 15 18:50:46 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Sun Sep 13 13:38:26 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	

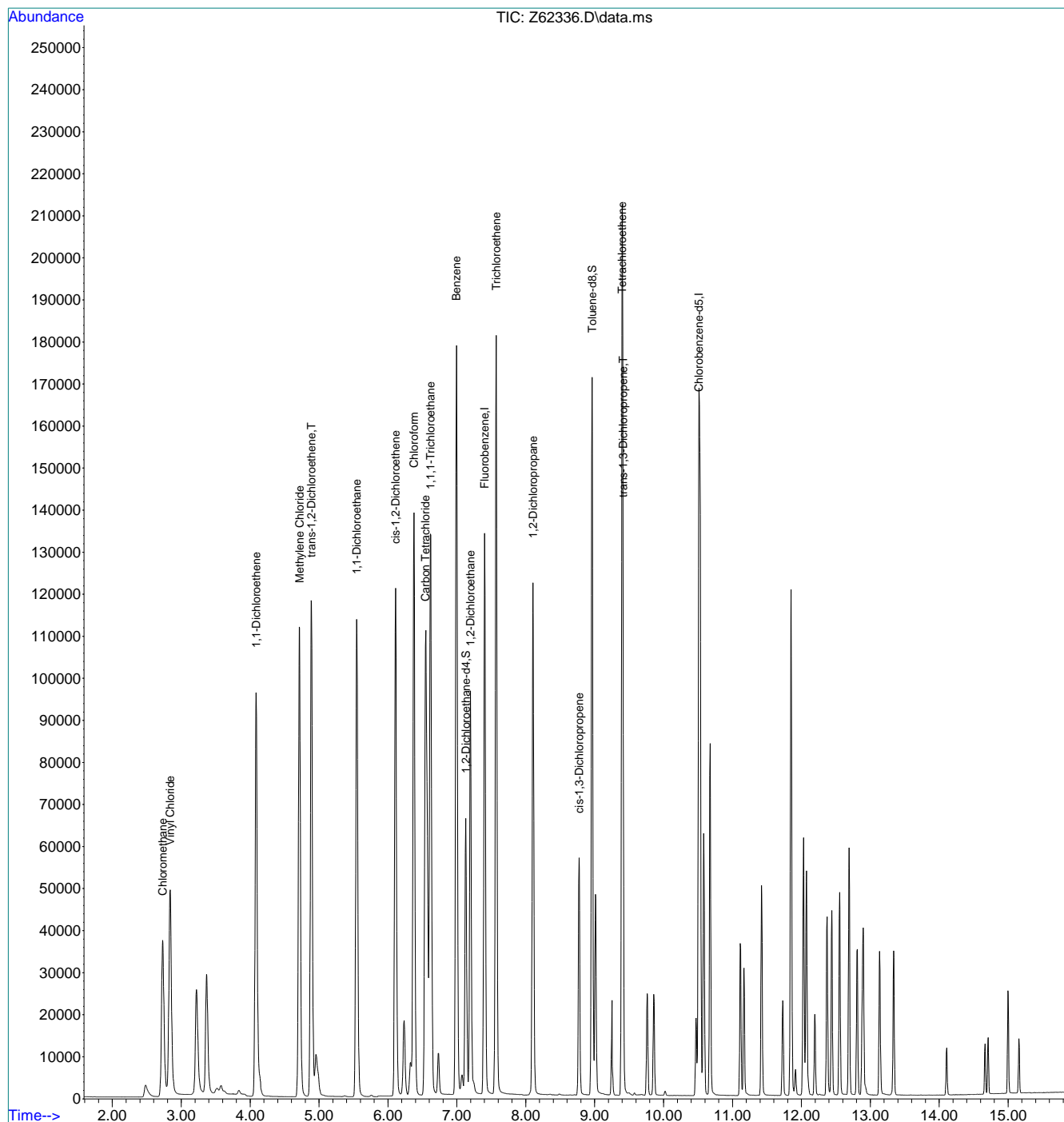
Internal Standards							
1) Fluorobenzene	7.401	96	1533862	5.00	ppb	0.00	
18) Chlorobenzene-d5	10.511	117	1295594	5.00	ppb	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.130	65	534924	5.64	ppb	0.00	
Spiked Amount	5.000	Range	79 - 125	Recovery	=	112.80%	
19) Toluene-d8	8.961	98	1472511	4.68	ppb	0.00	
Spiked Amount	5.000	Range	70 - 130	Recovery	=	93.60%	
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.839	62	843325	6.61	ppb		99
3) Chloromethane	2.729	50	672023	6.27	ppb		100
4) 1,1-Dichloroethene	4.087	96	560127	6.03	ppb	#	89
5) Methylene Chloride	4.717	84	755426	5.26	ppb	#	88
6) trans-1,2-Dichloroethene	4.890	96	642850	5.68	ppb		90
7) 1,1-Dichloroethane	5.546	63	1516870	7.90	ppb	#	99
8) cis-1,2-Dichloroethene	6.110	96	723747	5.75	ppb		93
9) Chloroform	6.377	83	1363274	5.91	ppb		100
10) Carbon Tetrachloride	6.543	117	803786	5.14	ppb		98
11) 1,1,1-Trichloroethane	6.614	97	1130968	5.60	ppb		99
12) Benzene	6.994	78	2500290	5.86	ppb		96
14) 1,2-Dichloroethane	7.197	62	932587	5.79	ppb		99
15) Trichloroethene	7.571	95	835348	6.38	ppb		85
16) 1,2-Dichloropropane	8.105	63	611948	5.63	ppb		98
17) cis-1,3-Dichloropropene	8.773	75	428263	3.67	ppb		98
20) trans-1,3-Dichloropropene	9.411	75	355484	3.28	ppb		99
21) Tetrachloroethene	9.399	166	817380	5.59	ppb		99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

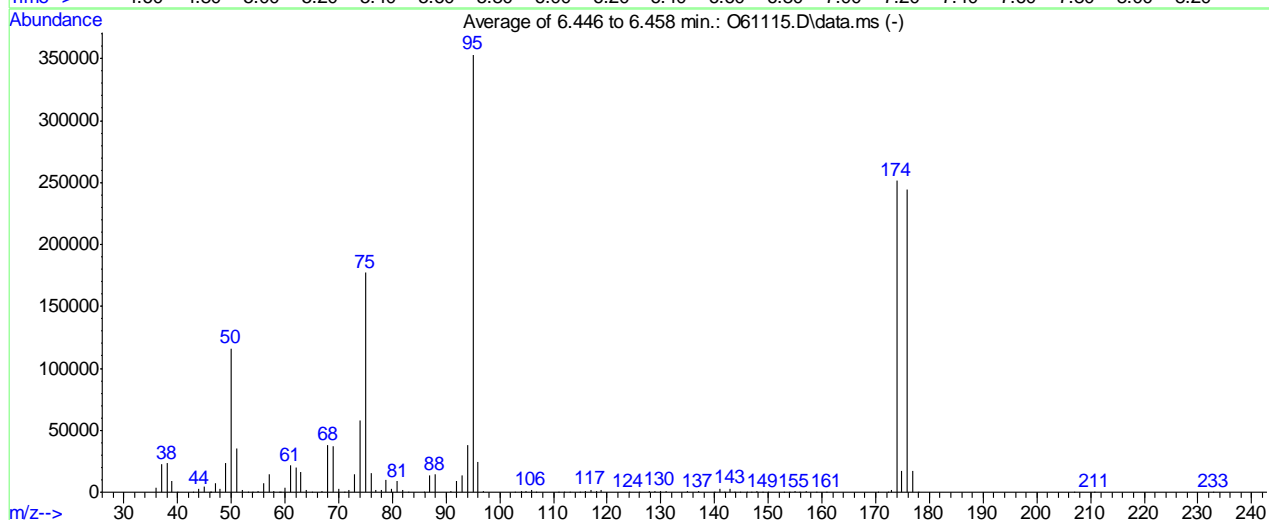
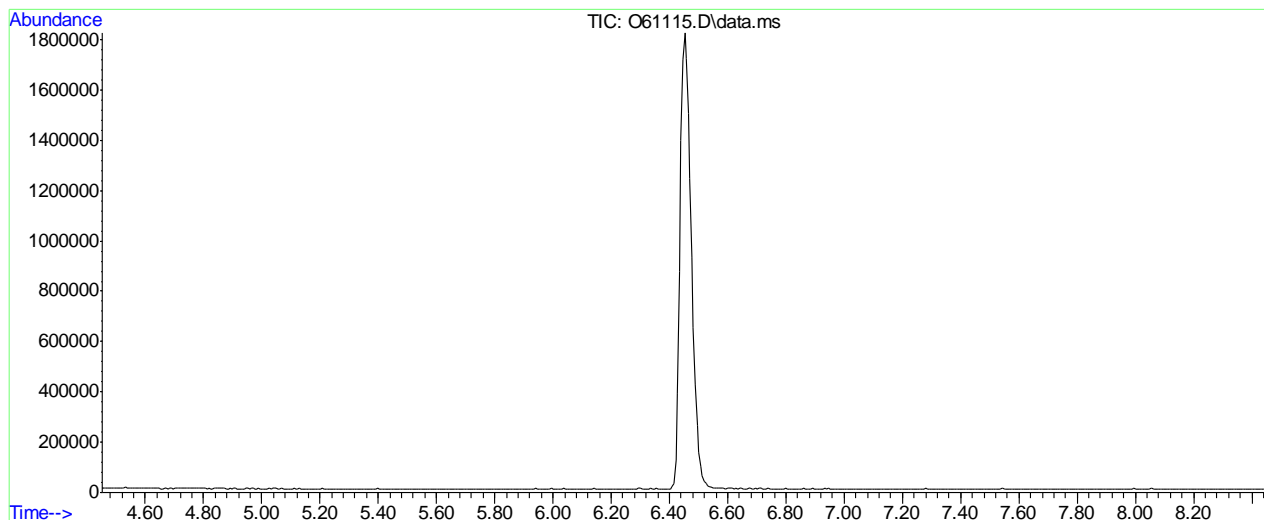
Data Path : C:\msdchem\1\data\091420\
 Data File : Z62336.D
 Acq On : 14 Sep 2020 6:16 pm
 Operator : JuanG
 Sample : FA78551-15MSD,10X
 Misc : MS47193,VZ2418,,,,,10
 ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 15 18:50:46 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Sun Sep 13 13:38:26 2020
 Response via : Initial Calibration



Methods: SW-846 8260B
 Data File : C:\msdchem\2\data\090820\O61115.D Vial: 100
 Acq On : 8 Sep 2020 11:44 am Operator: melissam
 Sample : BFB Inst : MSVOA12
 Misc : MS47137,VO2352,,,,, Multiplr: 1.00
 MS Integration Params: rteint.p

Method : C:\msdchem\2\methods\SIMCL090820.M (RTE Integrator)
 Title : Standard Methods 6200B



AutoFind: Scans 469, 470, 471; Background Corrected with Scan 460

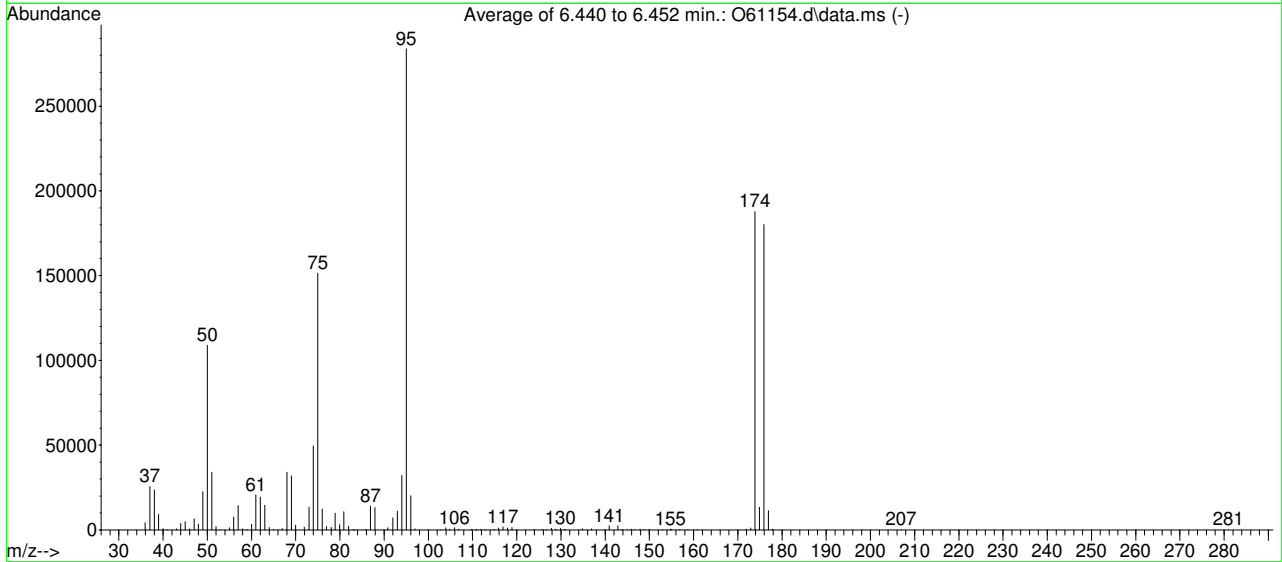
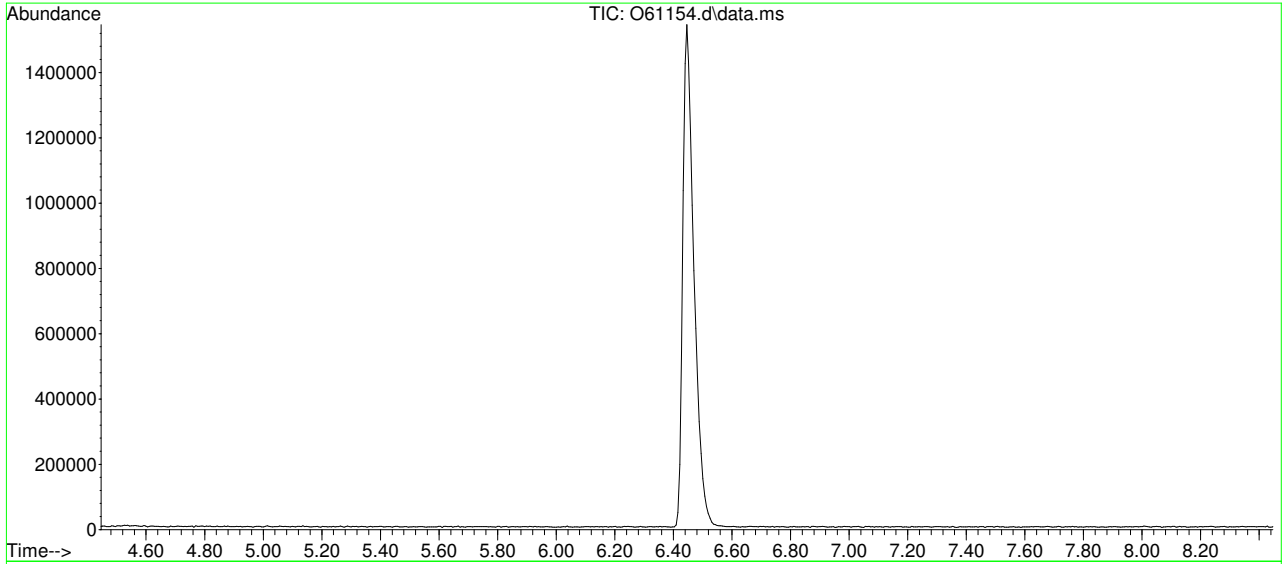
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	32.9	116296	PASS
75	95	30	60	50.1	177003	PASS
95	95	100	100	100.0	353365	PASS
96	95	5	9	6.9	24240	PASS
173	174	0.00	2	0.6	1519	PASS
174	95	50	100	71.2	251541	PASS
175	174	5	9	6.9	17467	PASS
176	174	95	101	97.1	244224	PASS
177	176	5	9	7.1	17221	PASS

O61115.D SIMCL090820.M Wed Sep 09 12:13:11 2020

Methods: SW-846 8260B

Data File : C:\msdchem\1\data\jo...-2020\vo2354\O61154.d Vial: 100
 Acq On : 10 Sep 2020 7:42 am Operator: melissam
 Sample : BFB Inst : MSVOA12
 Misc : MS47137,VO2354,,,,, Multiplr: 1.00
 MS Integration Params: rteint.p

Method : C:\msdchem\1\methods\SIMCL090820.M (RTE Integrator)
 Title : Standard Methods 6200B



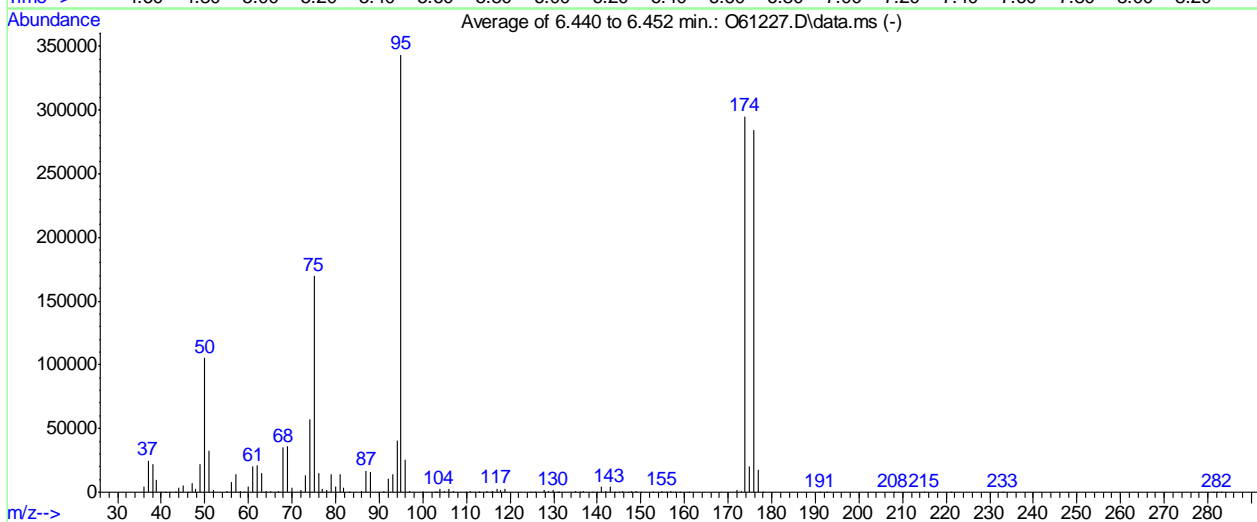
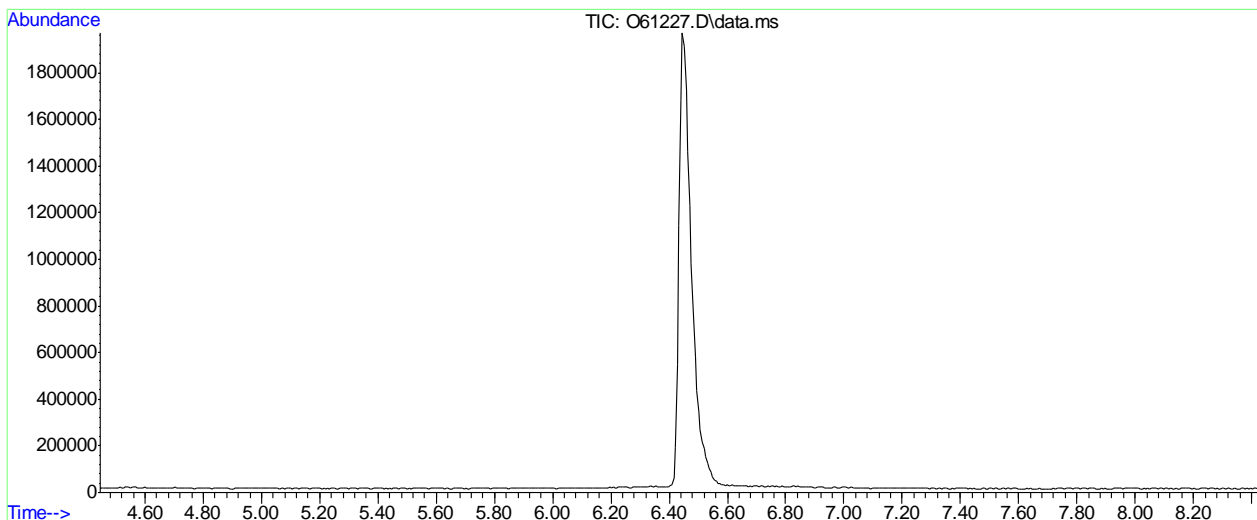
AutoFind: Scans 468, 469, 470; Background Corrected with Scan 460

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	38.4	108933	PASS
75	95	30	60	53.3	151403	PASS
95	95	100	100	100.0	283819	PASS
96	95	5	9	7.1	20171	PASS
173	174	0.00	2	0.6	1142	PASS
174	95	50	100	66.2	187819	PASS
175	174	5	9	7.1	13333	PASS
176	174	95	101	95.9	180139	PASS
177	176	5	9	6.3	11373	PASS

O61154.d SIMCL090820.M Fri Sep 11 05:40:58 2020

Methods: SW-846 8260B
 Data File : C:\msdchem\2\data\091120\O61227.D Vial: 100
 Acq On : 11 Sep 2020 2:01 pm Operator: stutip
 Sample : BFB Inst : MSVOA12
 Misc : MS47183,VO2356,,,,, Multiplr: 1.00
 MS Integration Params: rteint.p

Method : C:\msdchem\2\methods\SIMCL091120.M (RTE Integrator)
 Title : Standard Methods 6200B



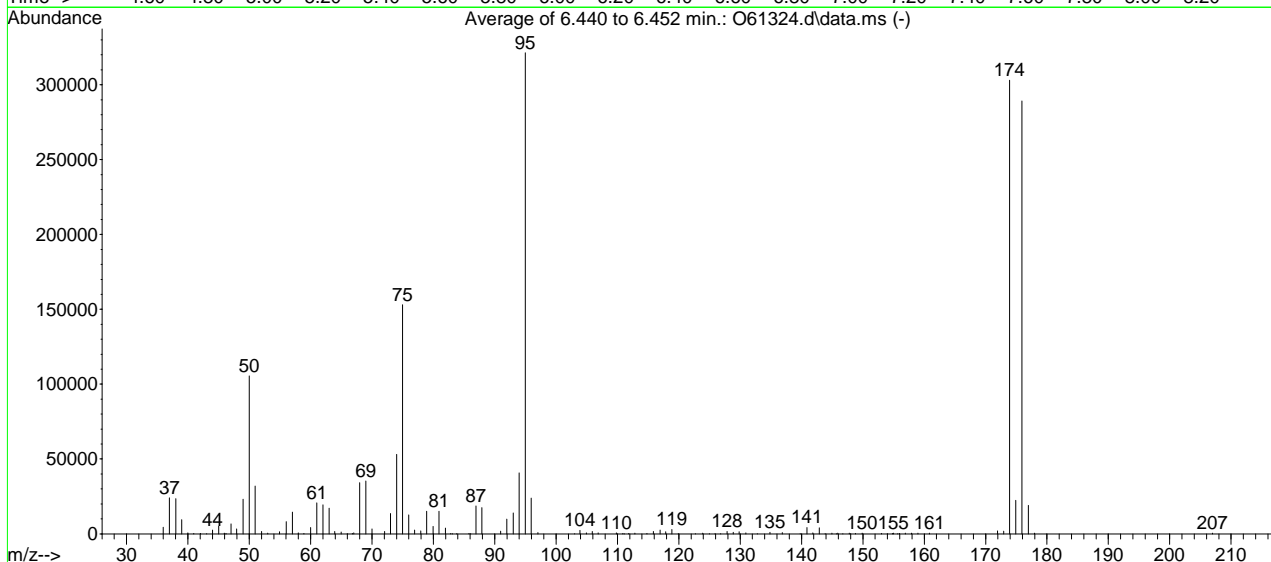
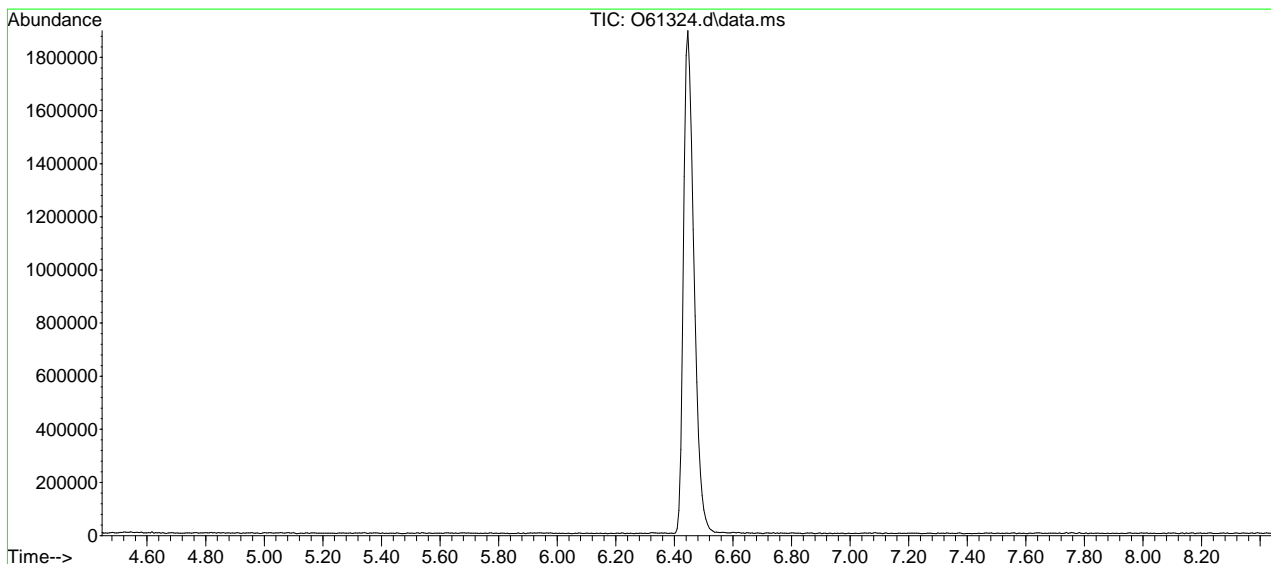
AutoFind: Scans 468, 469, 470; Background Corrected with Scan 460

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	30.7	105346	PASS
75	95	30	60	49.4	169774	PASS
95	95	100	100	100.0	343616	PASS
96	95	5	9	7.4	25531	PASS
173	174	0.00	2	0.5	1340	PASS
174	95	50	100	85.8	294848	PASS
175	174	5	9	7.0	20565	PASS
176	174	95	101	96.4	284096	PASS
177	176	5	9	6.2	17677	PASS

Methods: SW-846 8260B

Data File : C:\msdchem\1\data\je...-2020\VO2360\O61324.d Vial: 3
 Acq On : 13 Sep 2020 11:21 am Operator: stutip
 Sample : bfb Inst : MSVOA12
 Misc : MS47193,VO2360,,,,, Multiplr: 1.00
 MS Integration Params: rteint.p

Method : C:\msdchem\1\methods\SIMCL091120.M (RTE Integrator)
 Title : Standard Methods 6200B



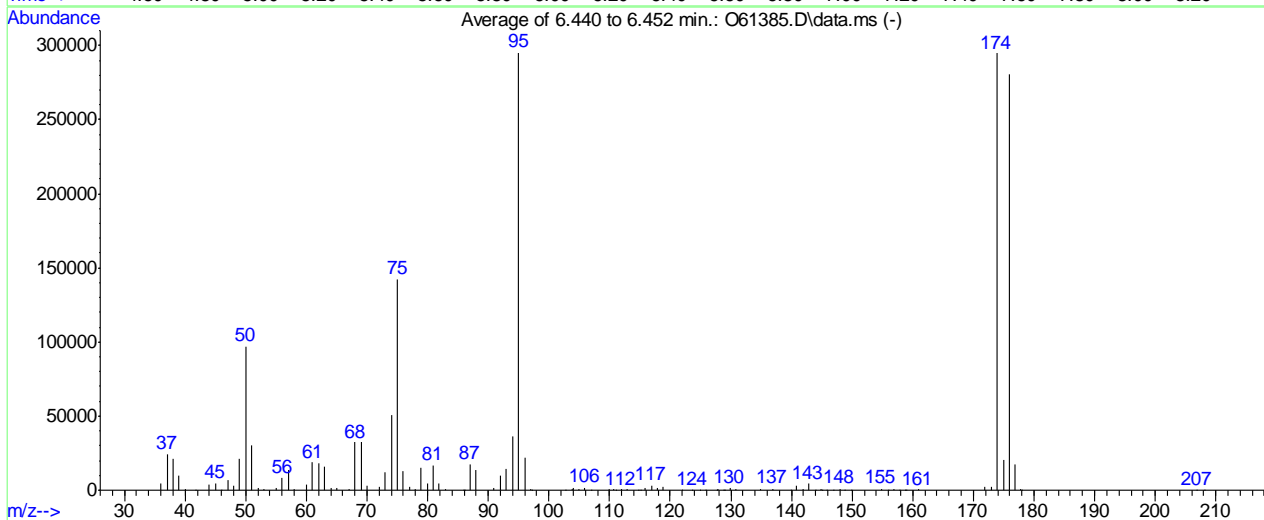
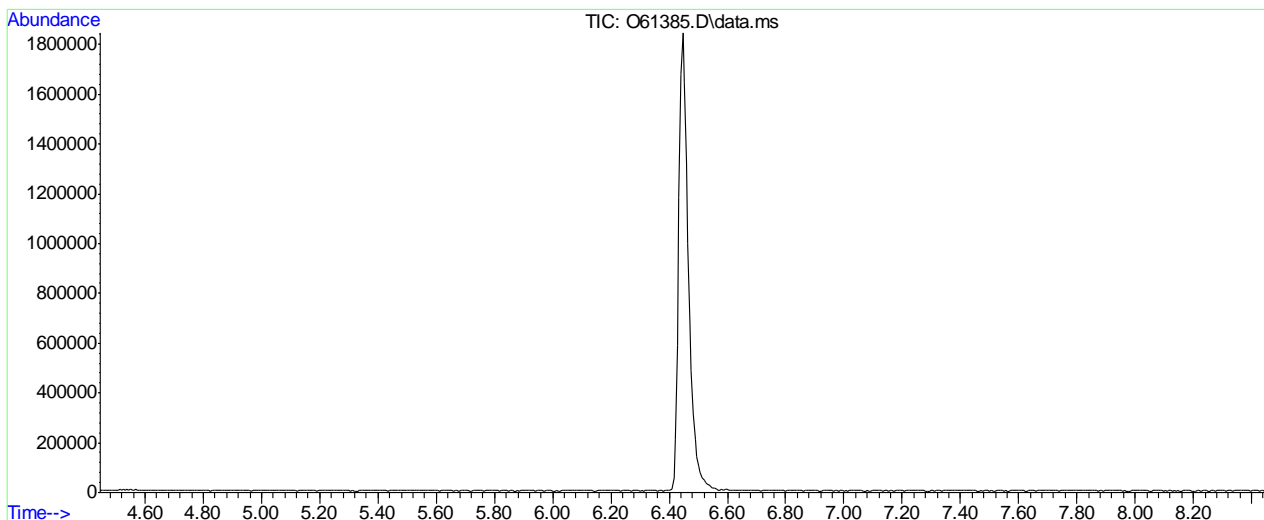
AutoFind: Scans 468, 469, 470; Background Corrected with Scan 459

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	32.9	105581	PASS
75	95	30	60	47.6	153003	PASS
95	95	100	100	100.0	321323	PASS
96	95	5	9	7.4	23851	PASS
173	174	0.00	2	0.6	1727	PASS
174	95	50	100	94.3	302997	PASS
175	174	5	9	7.4	22299	PASS
176	174	95	101	95.5	289216	PASS
177	176	5	9	6.5	18941	PASS

7.5.4
7

Methods: SW-846 8260B
 Data File : C:\msdchem\2\data\091520\O61385.D Vial: 4
 Acq On : 15 Sep 2020 2:52 pm Operator: manager
 Sample : bfb Inst : MSVOA12
 Misc : MS47193,VO2362,,,,, Multiplr: 1.00
 MS Integration Params: rteint.p

Method : C:\msdchem\2\methods\SIMCL091520.M (RTE Integrator)
 Title : Standard Methods 6200B

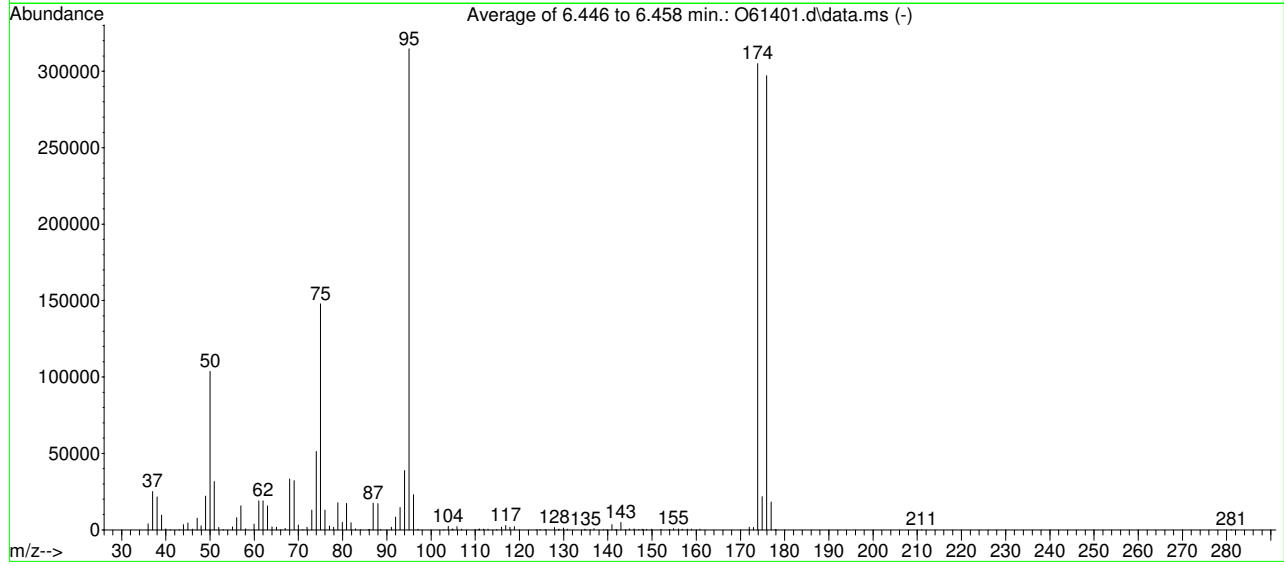
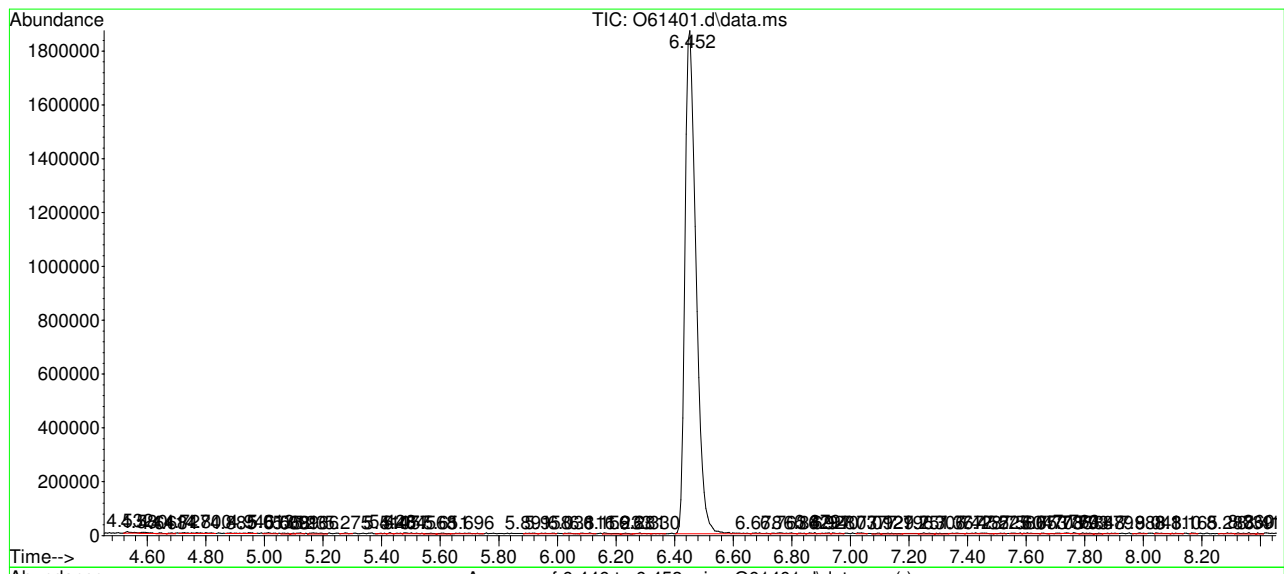


AutoFind: Scans 468, 469, 470; Background Corrected with Scan 459

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	32.8	96941	PASS
75	95	30	60	48.2	142400	PASS
95	95	100	100	100.0	295275	PASS
96	95	5	9	7.6	22317	PASS
173	174	0.00	2	0.7	1976	PASS
174	95	50	100	99.9	294869	PASS
175	174	5	9	7.0	20685	PASS
176	174	95	101	95.2	280789	PASS
177	176	5	9	6.2	17438	PASS

Methods: SW-846 8260B
 Data File : C:\msdchem\1\data\jo...-2020\vo2363\O61401.d Vial: 100
 Acq On : 16 Sep 2020 11:07 am Operator: akarig
 Sample : bfb Inst : MSVOA12
 Misc : MS47193,VO2363,,,,, Multiplr: 1.00
 MS Integration Params: rteint.p

Method : C:\msdchem\1\methods\SIMCL091520.M (RTE Integrator)
 Title : Standard Methods 6200B



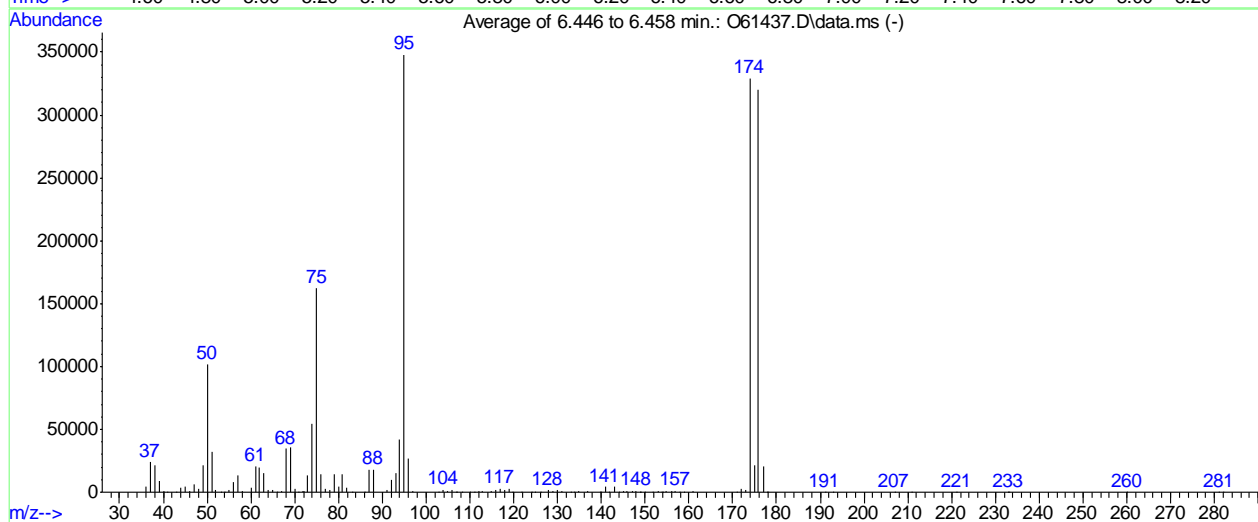
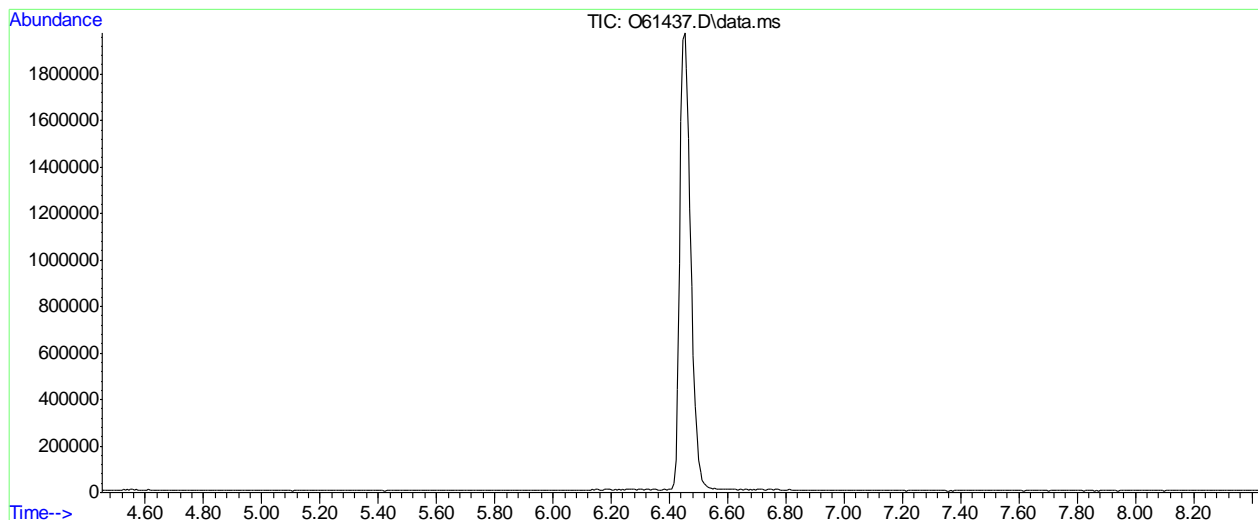
AutoFind: Scans 469, 470, 471; Background Corrected with Scan 460

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	33.0	103707	PASS
75	95	30	60	47.0	147861	PASS
95	95	100	100	100.0	314688	PASS
96	95	5	9	7.3	23037	PASS
173	174	0.00	2	0.5	1559	PASS
174	95	50	100	96.9	305045	PASS
175	174	5	9	7.2	21837	PASS
176	174	95	101	97.4	297067	PASS
177	176	5	9	6.1	18176	PASS

7.5.6
7

Methods: SW-846 8260B
 Data File : C:\msdchem\2\data\091820\O61437.D Vial: 100
 Acq On : 18 Sep 2020 8:17 am Operator: melissam
 Sample : bfb Inst : MSVOA12
 Misc : MS47193,VO2365,,,,, Multiplr: 1.00
 MS Integration Params: rteint.p

Method : C:\msdchem\2\methods\SIMCL091820.M (RTE Integrator)
 Title : Standard Methods 6200B



AutoFind: Scans 469, 470, 471; Background Corrected with Scan 460

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	29.3	101965	PASS
75	95	30	60	46.7	162539	PASS
95	95	100	100	100.0	348139	PASS
96	95	5	9	7.8	27092	PASS
173	174	0.00	2	0.6	1951	PASS
174	95	50	100	94.5	329003	PASS
175	174	5	9	6.6	21733	PASS
176	174	95	101	97.2	319701	PASS
177	176	5	9	6.5	20736	PASS

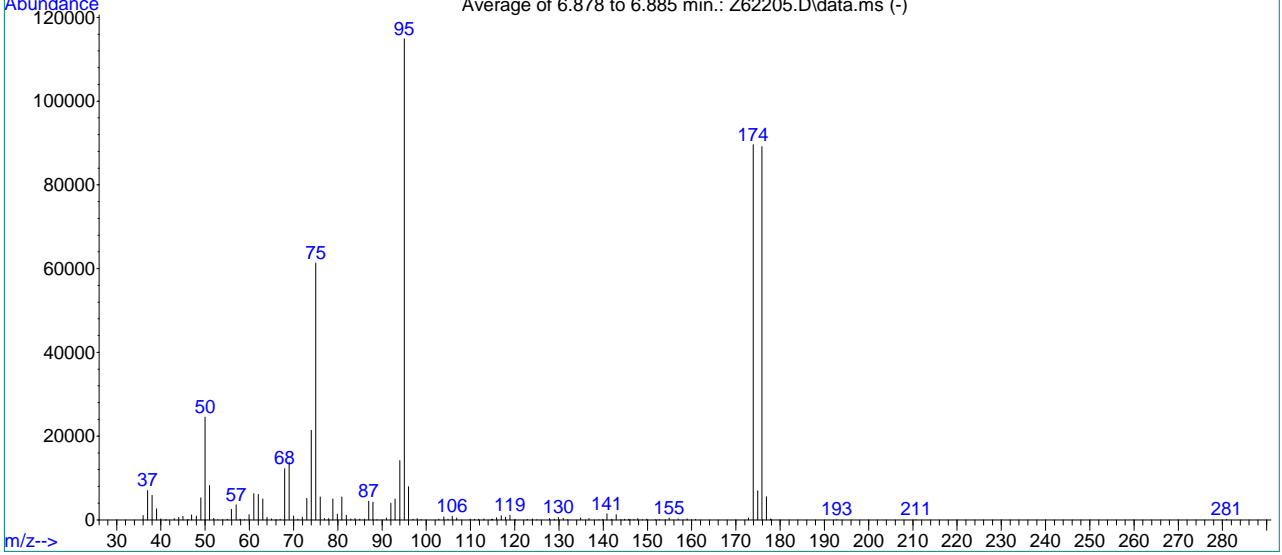
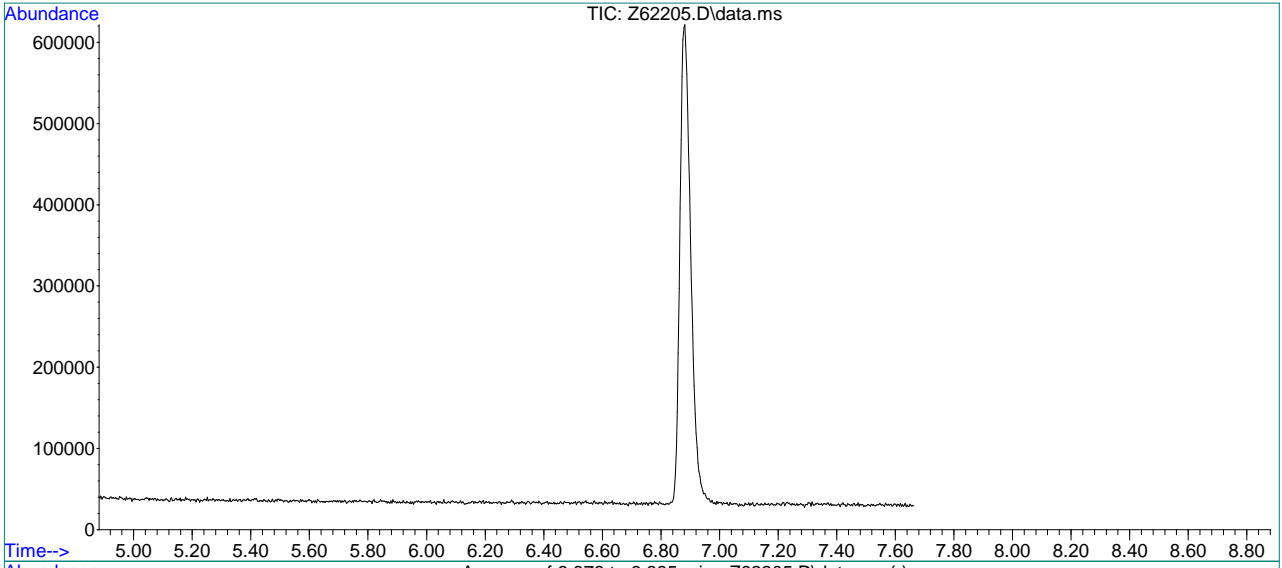
O61437.D SIMCL091820.M Mon Sep 21 11:26:30 2020

BFB

Data File : C:\msdchem\1\data\091120\Z62205.D
 Acq On : 11 Sep 2020 5:20 pm
 Sample : BFB
 Misc : MS47171,VZ2414,,,,,
 MS Integration Params: RTEINT.P

Vial: 100
 Operator: SHANICAO
 Inst : MSVOA15
 Multiplr: 1.00

Method : C:\msdchem\1\methods\SIMCL091120.M (RTE Integrator)
 Title : WATER-EPA 8260B



AutoFind: Scans 2112, 2113, 2114; Background Corrected with Scan 2095

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	21.4	24546	PASS
75	95	30	60	53.4	61341	PASS
95	95	100	100	100.0	114880	PASS
96	95	5	9	6.9	7912	PASS
173	174	0.00	2	0.5	429	PASS
174	95	50	100	78.0	89573	PASS
175	174	5	9	7.7	6903	PASS
176	174	95	101	99.5	89128	PASS
177	176	5	9	6.2	5541	PASS



7.5.8
7

Average of 6.878 to 6.885 min.: Z62205.D\data.ms

BFB

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.00	1011	48.00	892	58.90	60	70.00	922
37.00	6971	49.00	5241	59.95	1253	70.95	177
38.00	5869	49.95	24546	61.00	6279	71.95	655
39.00	2653	51.00	8188	62.00	6060	72.95	5098
39.95	227	51.95	363	63.00	4973	74.00	21419
41.00	0	52.90	63	64.00	544	75.00	61341
43.00	313	53.95	60	65.00	240	76.00	5430
44.00	548	55.00	143	66.10	58	76.95	281
44.95	816	55.95	2492	66.95	149	77.90	294
46.10	125	57.00	3597	68.00	12248	78.90	5021
46.95	1167	57.90	154	69.00	13760	79.90	1372

Average of 6.878 to 6.885 min.: Z62205.D\data.ms

BFB

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
80.90	5453	92.95	4978	106.85	414	120.10	70
81.90	1129	94.00	14133	109.90	170	122.85	126
82.95	219	95.00	114880	110.90	179	123.95	220
83.90	276	96.00	7912	111.80	175	125.00	58
84.95	162	97.00	153	113.00	244	127.85	303
86.05	163	97.95	274	114.70	110	128.90	142
86.95	4427	98.85	130	115.00	187	129.90	541
87.95	4242	102.85	150	115.85	519	130.95	388
88.80	60	103.95	710	116.95	998	131.90	56
90.95	419	104.90	190	117.90	667	134.90	414
92.00	4019	105.85	848	118.90	1119	136.80	272

Average of 6.878 to 6.885 min.: Z62205.D\data.ms

BFB

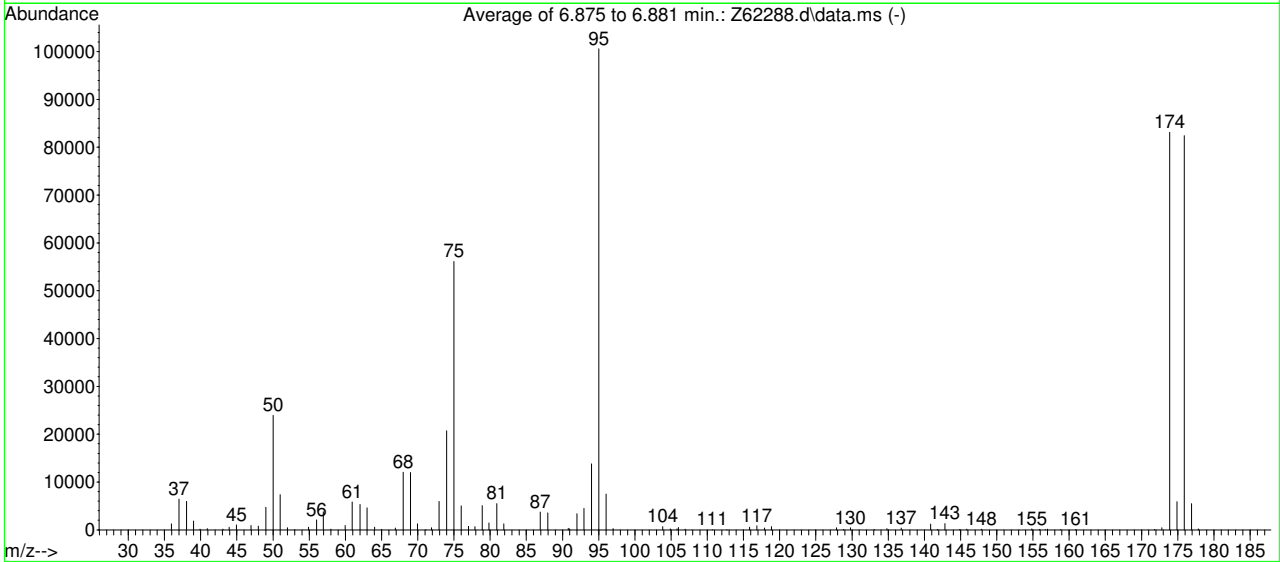
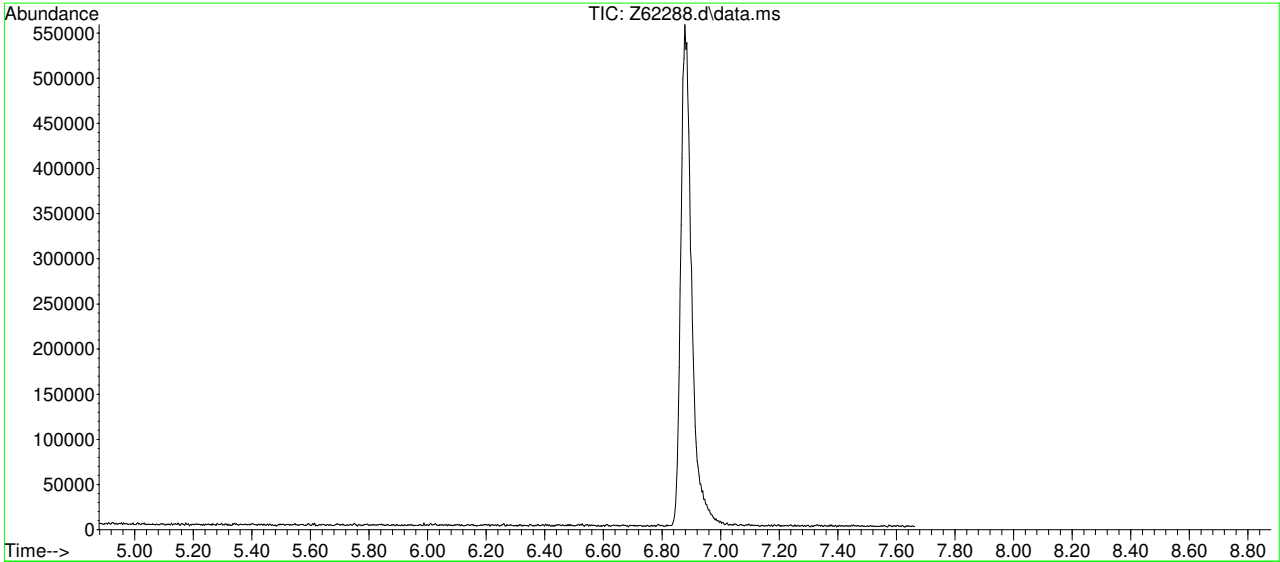
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
139.00	58	148.80	62	174.90	6903		
139.90	79	149.85	154	175.90	89128		
140.85	1457	151.80	52	176.90	5541		
141.90	160	152.70	111	177.85	205		
142.90	1269	154.10	53	178.10	53		
144.00	56	154.90	432	192.80	68		
144.85	153	156.90	235	210.70	66		
145.70	72	158.95	210	280.90	72		
146.00	182	160.85	116				
146.90	77	172.85	429				
147.80	337	173.90	89573				

BFB

Data File : C:\msdchem\1\data\jo...-2020\vz2417\Z62288.d Vial: 3
 Acq On : 13 Sep 2020 11:05 am Operator: stutip
 Sample : BFB Inst : MSVOA15
 Misc : MS47199,VZ2417,,,,, Multiplr: 1.00
 MS Integration Params: RTEINT.P

Method : C:\msdchem\1\methods\SIMCL091120.M (RTE Integrator)
 Title : WATER-EPA 8260B



AutoFind: Scans 2111, 2112, 2113; Background Corrected with Scan 2095

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	23.8	23957	PASS
75	95	30	60	55.8	56141	PASS
95	95	100	100	100.0	100576	PASS
96	95	5	9	7.4	7461	PASS
173	174	0.00	2	0.5	438	PASS
174	95	50	100	82.7	83139	PASS
175	174	5	9	7.1	5898	PASS
176	174	95	101	99.2	82453	PASS
177	176	5	9	6.7	5508	PASS

Average of 6.875 to 6.881 min.: Z62288.d\data.ms

BFB

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
35.95	1273	49.00	4731	62.00	5299	74.00	20715
37.00	6401	50.00	23957	63.00	4582	75.00	56141
38.05	5941	51.00	7379	64.05	562	76.00	5036
39.00	1872	52.00	424	65.00	78	77.00	748
39.90	125	53.00	52	66.90	398	77.90	672
40.90	284	54.90	560	68.00	12026	78.90	5078
43.10	127	56.00	2095	69.00	12009	79.85	1413
43.95	558	56.95	3784	69.95	1254	80.90	5488
44.95	1009	58.00	176	71.10	62	81.90	1264
46.95	936	59.95	939	71.90	461	86.90	3738
47.95	772	60.95	5849	72.95	5969	87.95	3576

Average of 6.875 to 6.881 min.: Z62288.d\data.ms

BFB

Modified:subtracted

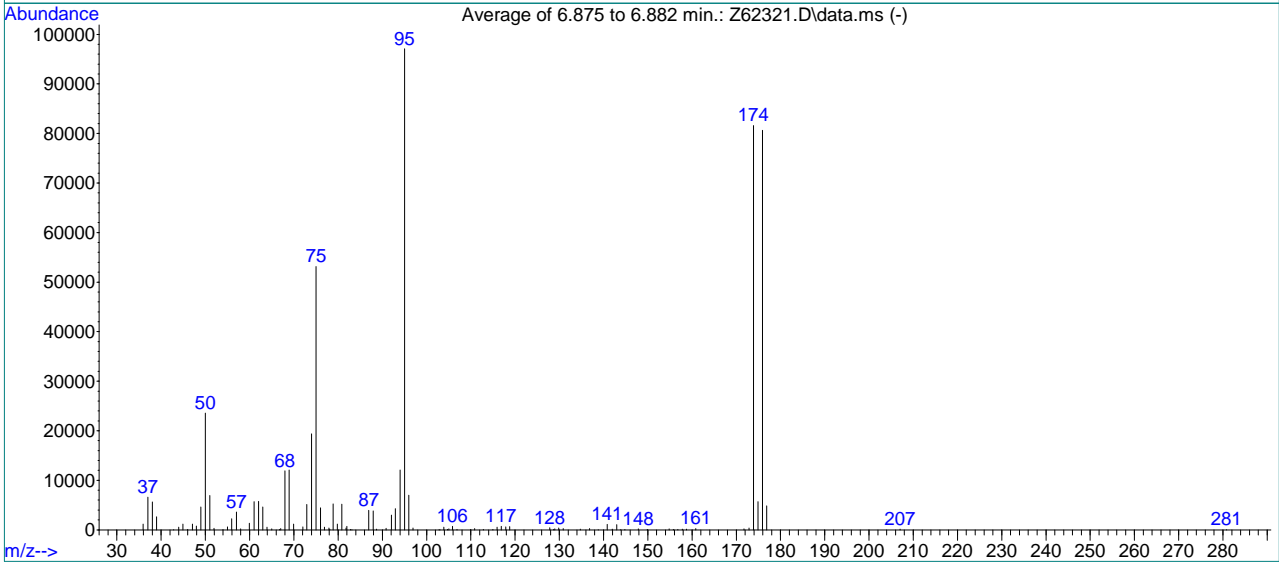
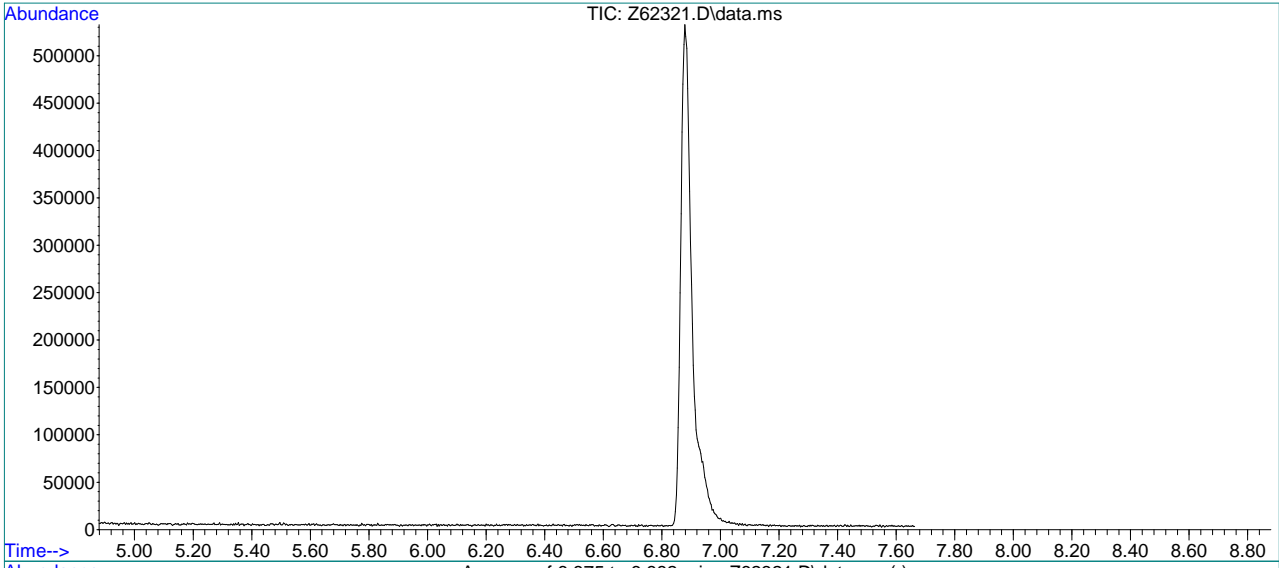
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
90.80	344	106.00	526	133.10	63	156.70	57
91.00	219	106.95	138	134.80	253	157.00	146
92.00	3400	110.70	60	136.80	384	158.80	51
92.95	4459	112.70	57	140.85	1214	160.90	87
94.00	13832	115.85	546	141.80	65	171.80	79
95.00	100576	116.85	860	142.85	1306	172.80	438
96.00	7461	117.90	404	144.90	65	173.90	83139
97.00	256	118.85	686	145.85	172	174.90	5898
103.85	689	127.85	437	147.85	166	175.90	82453
104.90	189	128.80	69	154.85	205	176.90	5508
105.80	184	129.80	447	155.90	113	177.85	202

BFB

Data File : C:\msdchem\1\data\091420\Z62321.D
 Acq On : 14 Sep 2020 11:56 am
 Sample : BFB
 Misc : MS47199,VZ2418,,,,,
 MS Integration Params: RTEINT.P

Vial: 3
 Operator: JuanG
 Inst : MSVOA15
 Multiplr: 1.00

Method : C:\msdchem\1\methods\SIMCL091120.M (RTE Integrator)
 Title : WATER-EPA 8260B



AutoFind: Scans 2111, 2112, 2113; Background Corrected with Scan 2097

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	24.3	23573	PASS
75	95	30	60	54.7	53144	PASS
95	95	100	100	100.0	97075	PASS
96	95	5	9	7.2	6990	PASS
173	174	0.00	2	0.5	393	PASS
174	95	50	100	84.0	81579	PASS
175	174	5	9	7.0	5714	PASS
176	174	95	101	98.8	80621	PASS
177	176	5	9	6.0	4844	PASS



7.5.10
7

Average of 6.875 to 6.882 min.: Z62321.D\data.ms

BFB

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
35.95	1146	50.00	23573	63.00	4618	75.00	53144
37.00	6608	51.00	6937	63.95	564	76.00	4457
38.00	5658	51.95	317	65.00	187	76.90	519
38.95	2607	54.00	53	66.80	109	77.90	372
42.85	35	55.00	621	67.05	254	78.10	155
44.00	565	55.95	2215	68.00	11935	78.85	5246
44.95	1149	57.00	3568	68.95	12098	79.85	1160
46.00	84	57.95	211	69.95	1183	80.85	5188
47.05	1171	59.95	1344	72.05	579	81.80	368
47.95	776	61.00	5664	72.95	5121	81.95	685
49.00	4634	62.00	5771	74.00	19389	82.80	67

Average of 6.875 to 6.882 min.: Z62321.D\data.ms

BFB

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
83.10	57	102.80	58	115.90	512	138.80	54
86.95	3934	103.00	57	116.85	730	140.85	1121
87.95	3836	103.90	558	117.90	594	141.95	168
88.70	131	104.70	70	118.80	673	142.95	1077
90.85	296	105.05	185	127.85	419	143.80	51
92.05	2951	105.85	706	128.70	63	144.80	99
92.95	4285	106.90	111	128.95	195	147.85	219
94.00	12087	110.00	80	129.85	373	149.90	110
95.00	97075	110.85	258	130.90	277	154.80	184
96.00	6990	112.80	80	134.75	148	155.80	79
96.95	389	114.95	103	136.85	235	156.80	107

Average of 6.875 to 6.882 min.: Z62321.D\data.ms

BFB

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
157.80	146						
158.75	169						
160.85	254						
171.75	189						
172.85	393						
173.90	81579						
174.90	5714						
175.90	80621						
176.90	4844						
207.05	155						
280.80	54						

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\090820\
 Data File : O61116.D
 Acq On : 8 Sep 2020 12:14 pm
 Operator : melissam
 Sample : ic2352-1 Inst : MSVOA12
 Misc : MS47137,VO2352,,,,,
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 09 12:04:02 2020
 Quant Method : C:\msdchem\2\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Fri Sep 04 07:54:30 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
Internal Standards							
1) Fluorobenzene	7.346	96	289638	5.00	ug/L	0.00	
18) Chlorobenzene-d5	10.441	117	217308	5.00	ug/L	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.068	65	127316	5.57	ug/L	0.00	
Spiked Amount	5.000	Range 74 - 125	Recovery	=	111.40%		
19) Toluene-d8	8.896	98	263980	5.53	ug/L	0.00	
Spiked Amount	5.000	Range 88 - 111	Recovery	=	110.60%		
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.912	62	2682	0.08	ug/L		96
3) Chloromethane	2.806	50	5083m	0.08	ug/L		
4) 1,1-Dichloroethene	4.096	61	3555	0.11	ug/L		81
5) Methylene Chloride	4.703	49	32662	0.39	ug/L		94
6) trans-1,2-Dichloroethene	4.869	61	4744	0.12	ug/L		76
7) 1,1-Dichloroethane	5.510	63	5315	0.11	ug/L		99
8) cis-1,2-Dichloroethene	6.066	96	2455	0.09	ug/L #		68
9) Chloroform	6.327	83	4748	0.10	ug/L #		76
10) Carbon Tetrachloride	6.511	117	2357	0.08	ug/L		91
11) 1,1,1-Trichloroethane	6.582	97	2879	0.08	ug/L		91
12) Benzene	6.943	78	9822m	0.12	ug/L		
14) 1,2-Dichloroethane	7.139	62	4904	0.13	ug/L		88
15) Trichloroethene	7.512	95	2469	0.08	ug/L		97
16) 1,2-Dichloropropane	8.040	63	3239m	0.12	ug/L		
17) cis-1,3-Dichloropropene	8.711	75	3367	0.12	ug/L		100
20) trans-1,3-Dichloropropene	9.343	75	2991	0.10	ug/L		97
21) Tetrachloroethene	9.343	166	1962m	0.07	ug/L		
22) 1,4-Dichlorobenzene	12.827	146	4642	0.09	ug/L		97
23) 1,2-Dibromo-3-Chloropr...	14.038	75	1368m	0.13	ug/L		

(#) = qualifier out of range (m) = manual integration (+) = signals summed

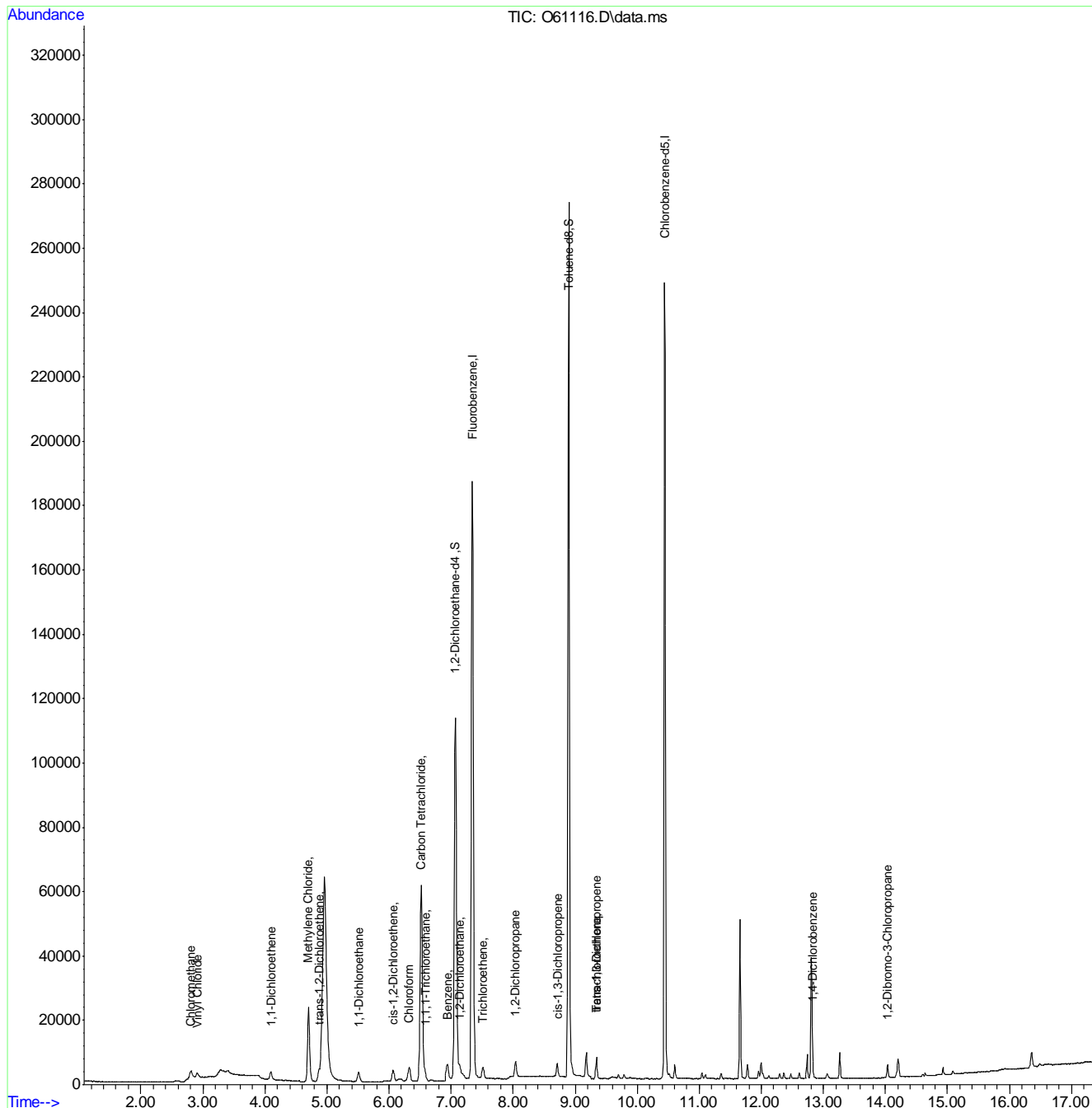
7.6.1
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\090820\
 Data File : O61116.D
 Acq On : 8 Sep 2020 12:14 pm
 Operator : melissam
 Sample : ic2352-1
 Misc : MS47137,VO2352,,,,,
 ALS Vial : 1 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 09 12:04:02 2020
 Quant Method : C:\msdchem\2\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Fri Sep 04 07:54:30 2020
 Response via : Initial Calibration



1.9.7

Manual Integration Approval Summary

Sample Number: VO2352-IC2352 **Method:** SW846 8260B BY SIM
Lab FileID: O61116.D **Analyst approved:** 09/10/20 08:40 Akari Giraldo
Injection Time: 09/08/20 12:14 **Supervisor approved:** 09/10/20 08:47 Melissa Mangual

Parameter	CAS	Sig#	R.T. (min.)	Reason
Methyl Chloride	74-87-3		2.81	Poor instrument integration
Benzene	71-43-2		6.94	Poor instrument integration
1,2-Dichloropropane	78-87-5		8.04	Poor instrument integration
Tetrachloroethylene	127-18-4		9.34	Poor instrument integration
1,2-Dibromo-3-chloropropane	96-12-8		14.04	Missed peak

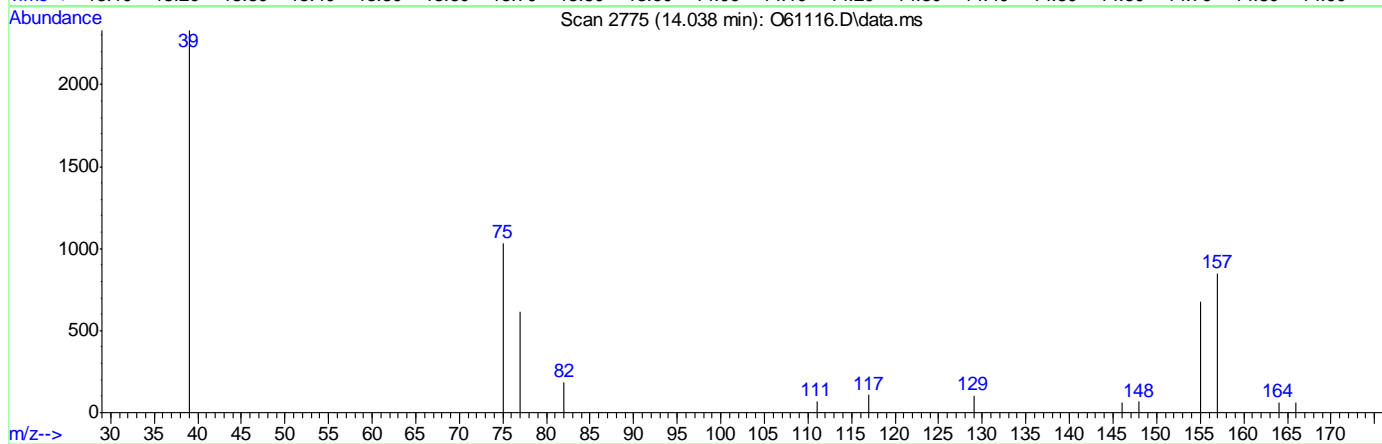
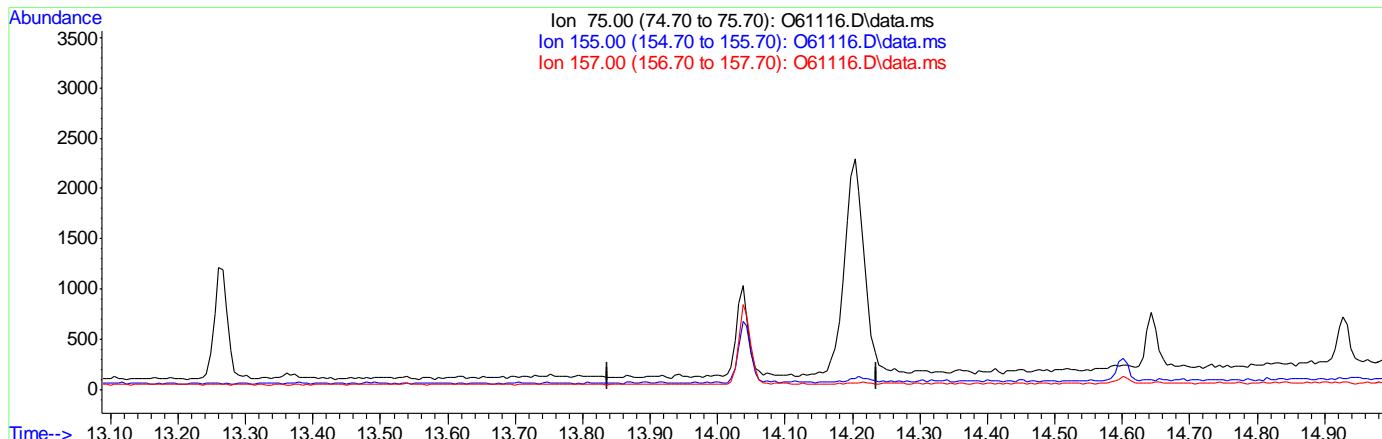
7.6.1.1
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\090820\
 Data File : O61116.D
 Acq On : 8 Sep 2020 12:14 pm
 Operator : melissam
 Sample : ic2352-1
 Misc : MS47137,VO2352,,,,,
 ALS Vial : 1 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 08 14:42:21 2020
 Quant Method : C:\msdchem\2\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Fri Sep 04 07:54:30 2020
 Response via : Initial Calibration



(23) 1,2-Dibromo-3-Chloropropane

14.037min (-14.037) 0.00ug/L

response 0

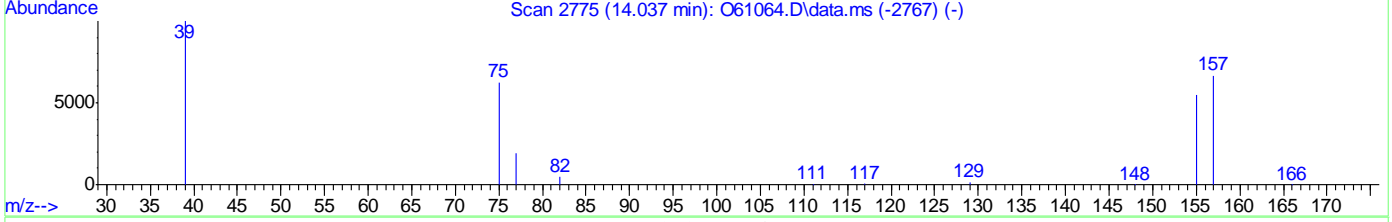
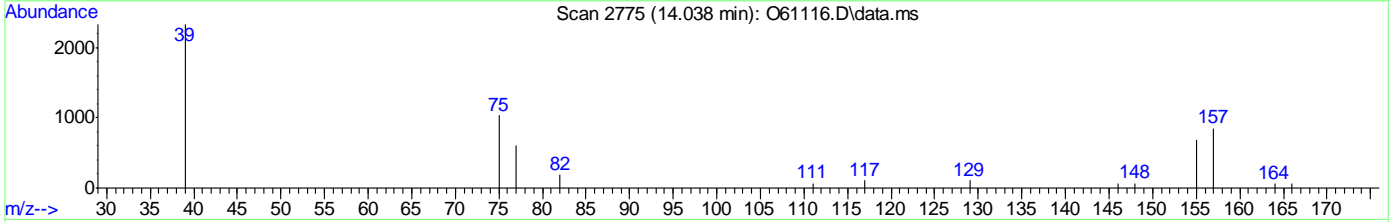
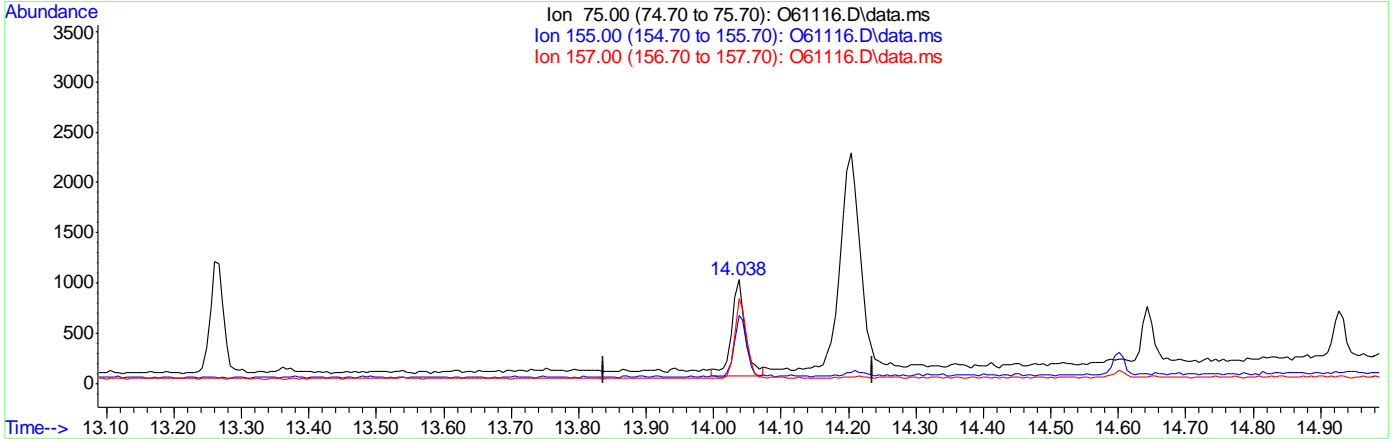
Ion	Exp%	Act%
75.00	100	0.00
155.00	88.00	0.00#
157.00	106.80	0.00#
0.00	0.00	0.00

7.6.1.2
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\090820\
 Data File : O61116.D
 Acq On : 8 Sep 2020 12:14 pm
 Operator : melissam
 Sample : ic2352-1 Inst : MSVOA12
 Misc : MS47137,VO2352,,,,,
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 08 14:42:21 2020
 Quant Method : C:\msdchem\2\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Fri Sep 04 07:54:30 2020
 Response via : Initial Calibration



TIC: O61116.D\data.ms

(23) 1,2-Dibromo-3-Chloropropane
 14.038min (+0.000) 0.13ug/L m
 response 1368

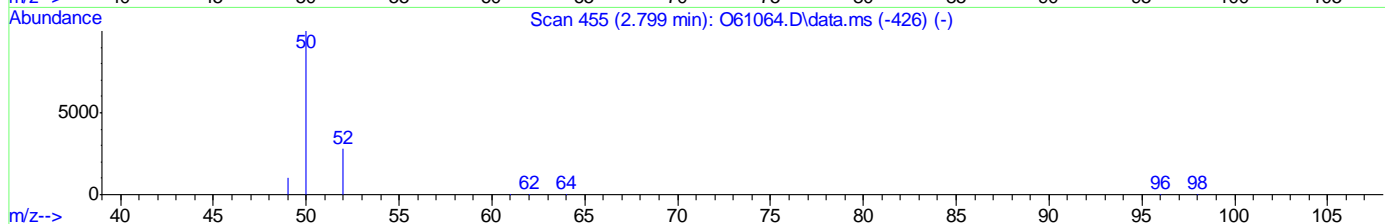
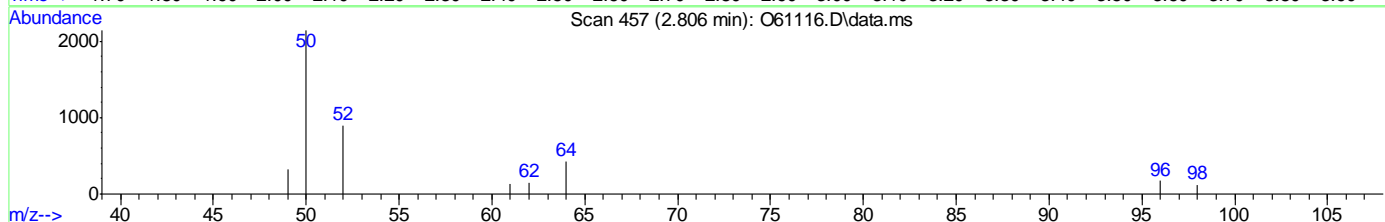
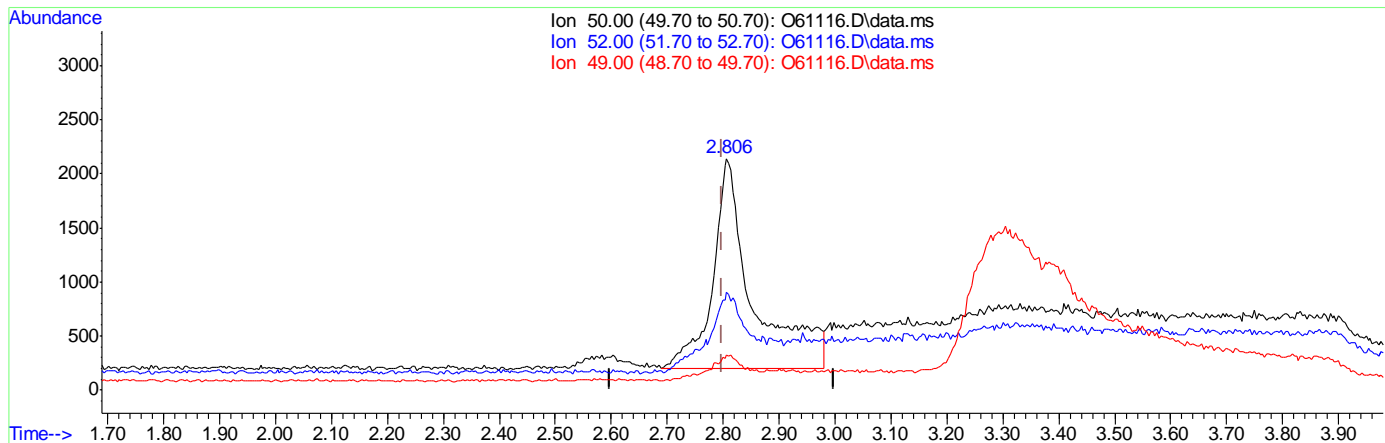
Ion	Exp%	Act%
75.00	100	100
155.00	88.00	65.70#
157.00	106.80	82.03#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\090820\
 Data File : O61116.D
 Acq On : 8 Sep 2020 12:14 pm
 Operator : melissam
 Sample : ic2352-1
 Misc : MS47137,VO2352,,,,,
 ALS Vial : 1 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 08 14:42:21 2020
 Quant Method : C:\msdchem\2\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Fri Sep 04 07:54:30 2020
 Response via : Initial Calibration



TIC: O61116.D\data.ms

(3) Chloromethane
 2.806min (+0.007) 0.16ug/L
 response 9635

Ion	Exp%	Act%
50.00	100	100
52.00	27.80	37.41
49.00	10.50	12.38
0.00	0.00	0.00

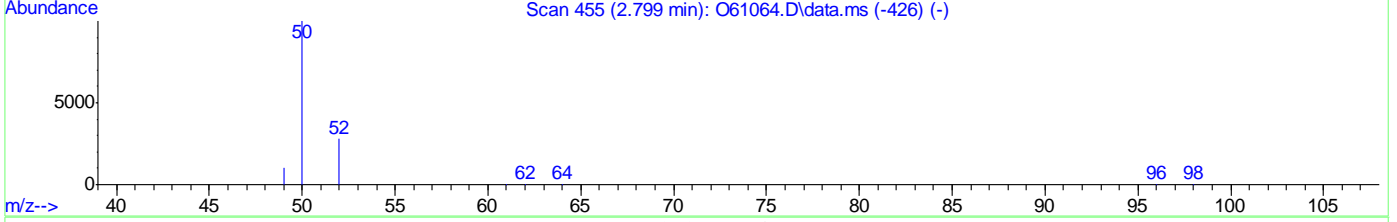
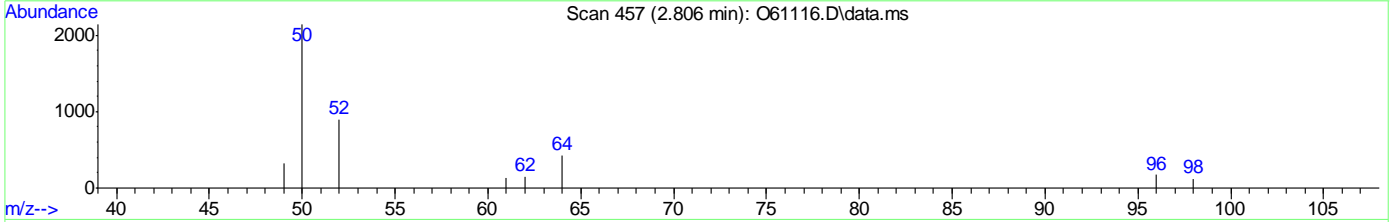
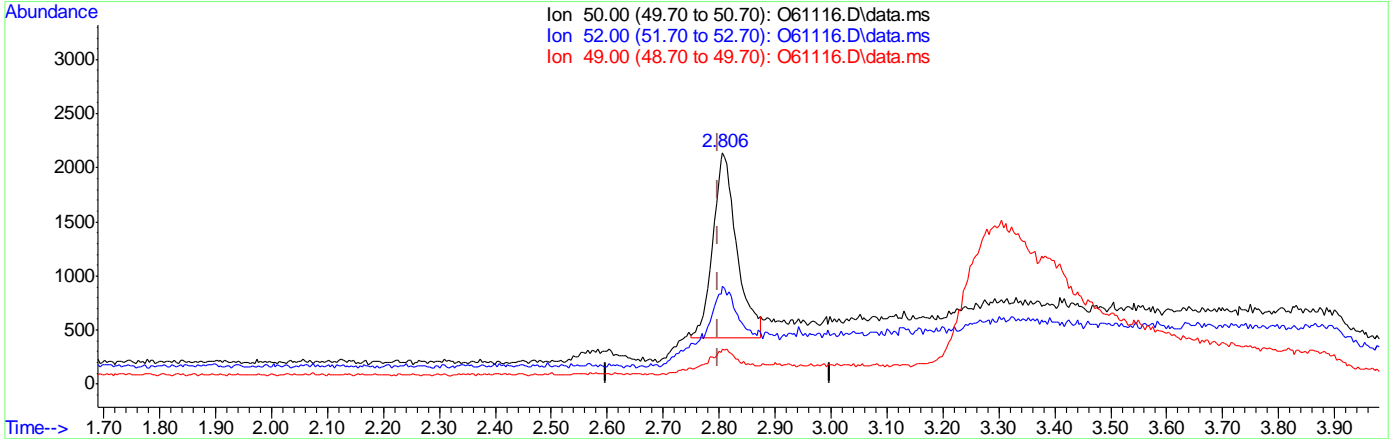
7.6.1.4
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\090820\
 Data File : O61116.D
 Acq On : 8 Sep 2020 12:14 pm
 Operator : melissam
 Sample : ic2352-1
 Misc : MS47137,VO2352,,,,,
 ALS Vial : 1 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 08 14:42:21 2020
 Quant Method : C:\msdchem\2\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Fri Sep 04 07:54:30 2020
 Response via : Initial Calibration



TIC: O61116.D\data.ms

(3) Chloromethane
 2.806min (+0.007) 0.08ug/L m
 response 5083

Ion	Exp%	Act%
50.00	100	100
52.00	27.80	42.08
49.00	10.50	15.27
0.00	0.00	0.00

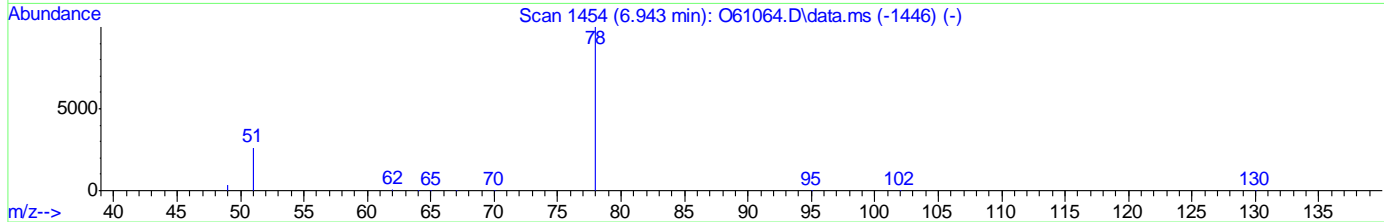
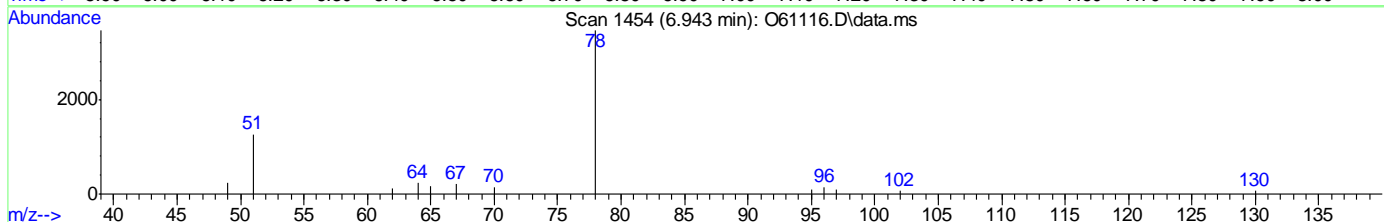
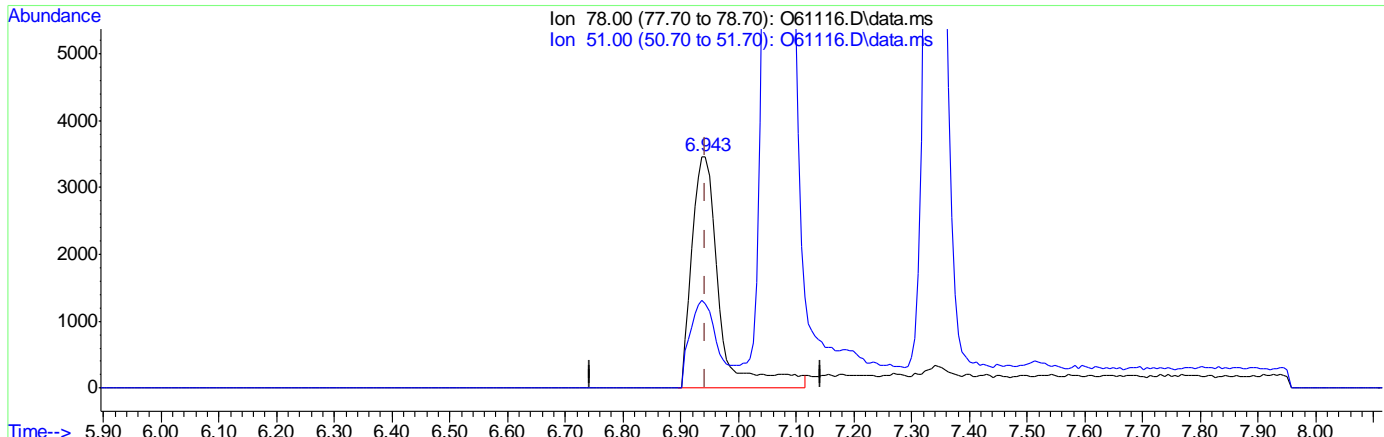
7.6.1.5
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\090820\
 Data File : O61116.D
 Acq On : 8 Sep 2020 12:14 pm
 Operator : melissam
 Sample : ic2352-1
 Misc : MS47137,VO2352,,,,,
 ALS Vial : 1 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 08 14:42:21 2020
 Quant Method : C:\msdchem\2\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Fri Sep 04 07:54:30 2020
 Response via : Initial Calibration



TIC: O61116.D\data.ms

(12) Benzene ()

6.943min (+0.000) 0.14ug/L

response 11274

Ion	Exp%	Act%
78.00	100	100
51.00	26.20	36.42
0.00	0.00	0.00
0.00	0.00	0.00

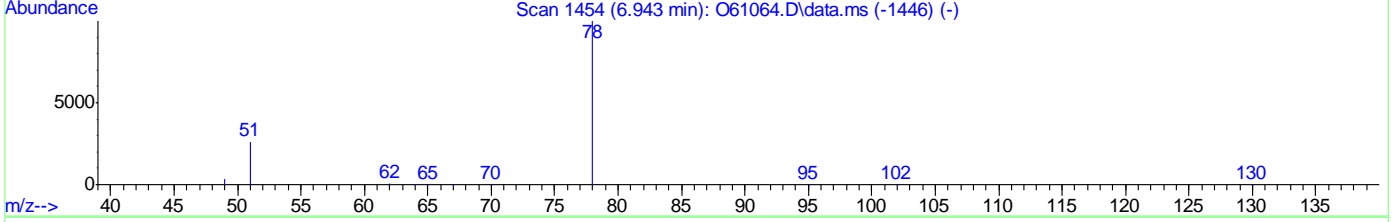
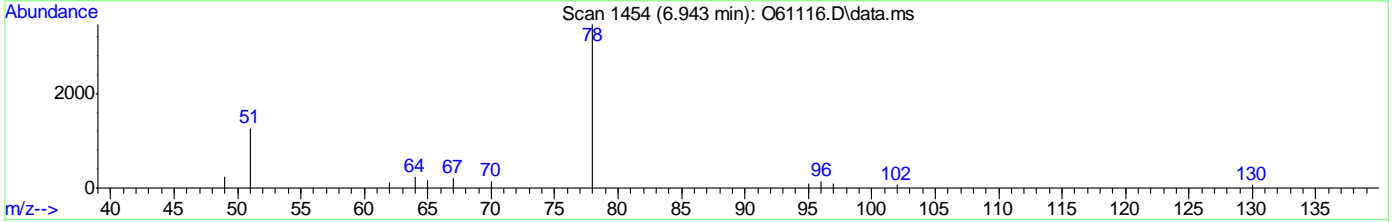
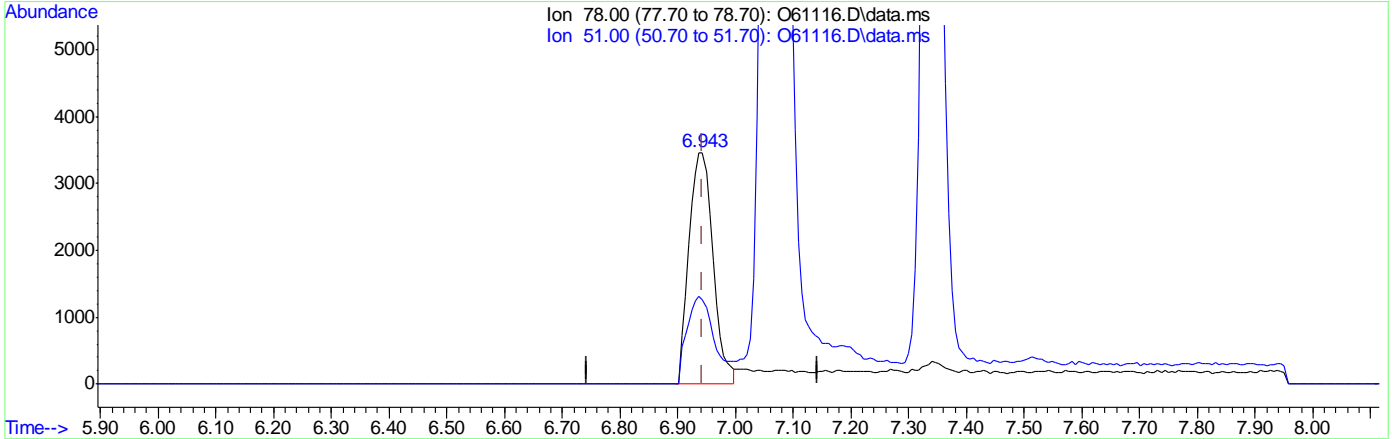
7.6.1.6
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\090820\
 Data File : O61116.D
 Acq On : 8 Sep 2020 12:14 pm
 Operator : melissam
 Sample : ic2352-1
 Misc : MS47137,VO2352,,,,,
 ALS Vial : 1 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 08 14:42:21 2020
 Quant Method : C:\msdchem\2\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Fri Sep 04 07:54:30 2020
 Response via : Initial Calibration



TIC: O61116.D\data.ms

(12) Benzene ()

6.943min (+0.000) 0.12ug/L m

response 9822

Ion	Exp%	Act%
78.00	100	100
51.00	26.20	36.42
0.00	0.00	0.00
0.00	0.00	0.00

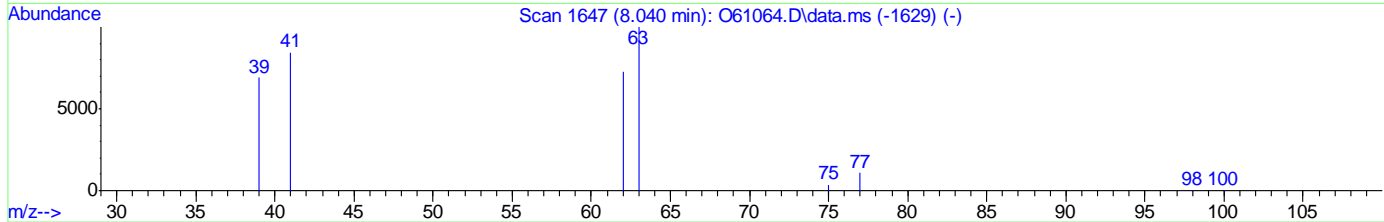
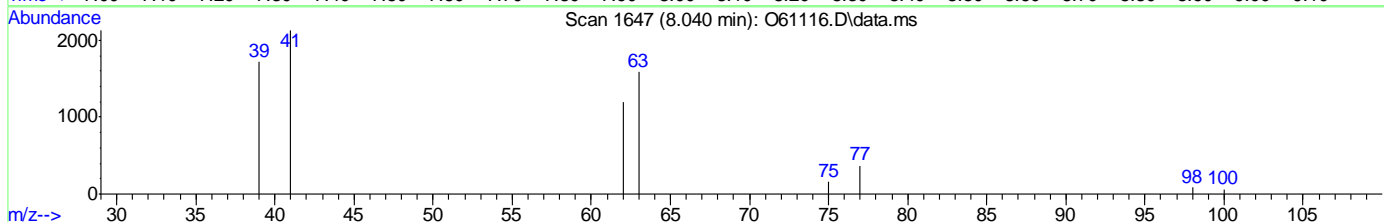
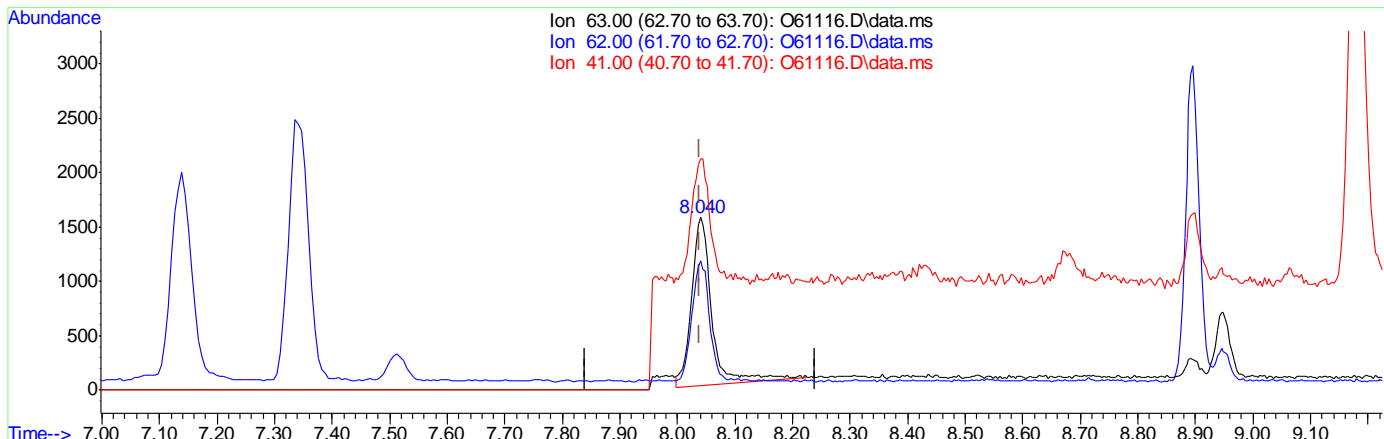
7.6.1.7
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\090820\
 Data File : O61116.D
 Acq On : 8 Sep 2020 12:14 pm
 Operator : melissam
 Sample : ic2352-1
 Misc : MS47137,VO2352,,,,,
 ALS Vial : 1 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 08 14:42:21 2020
 Quant Method : C:\msdchem\2\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Fri Sep 04 07:54:30 2020
 Response via : Initial Calibration



TIC: O61116.D\data.ms

(16) 1,2-Dichloropropane
 8.040min (-0.000) 0.14ug/L
 response 3809

Ion	Exp%	Act%
63.00	100	100
62.00	72.70	75.22
41.00	84.50	77.26
0.00	0.00	0.00

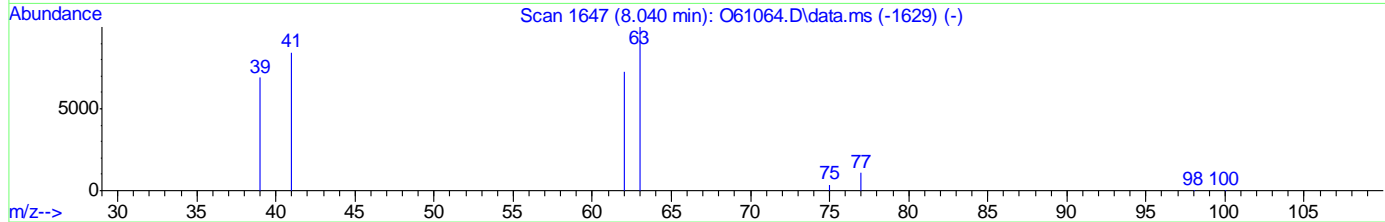
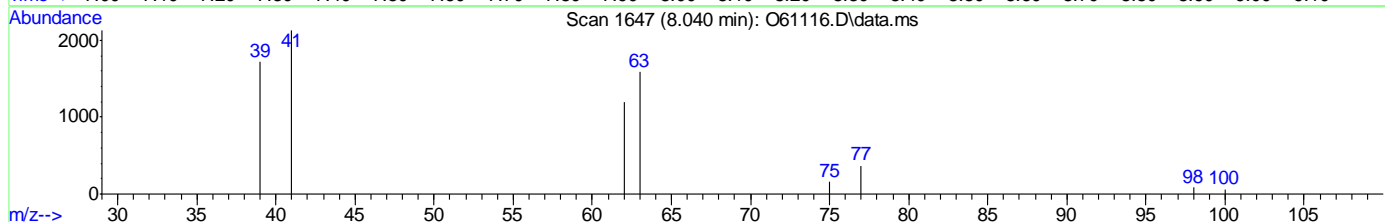
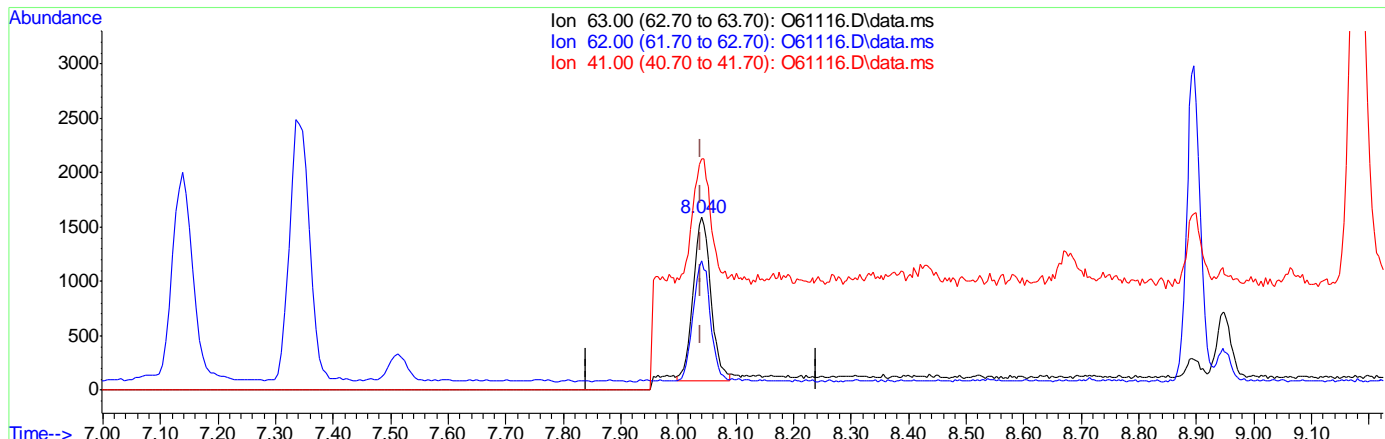
7.6.1.8
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\090820\
 Data File : O61116.D
 Acq On : 8 Sep 2020 12:14 pm
 Operator : melissam
 Sample : ic2352-1
 Misc : MS47137,VO2352,,,,,
 ALS Vial : 1 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 08 14:42:21 2020
 Quant Method : C:\msdchem\2\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Fri Sep 04 07:54:30 2020
 Response via : Initial Calibration



(16) 1,2-Dichloropropane
 8.040min (-0.000) 0.12ug/L m
 response 3239

Ion	Exp%	Act%
63.00	100	100
62.00	72.70	74.83
41.00	84.50	133.98#
0.00	0.00	0.00

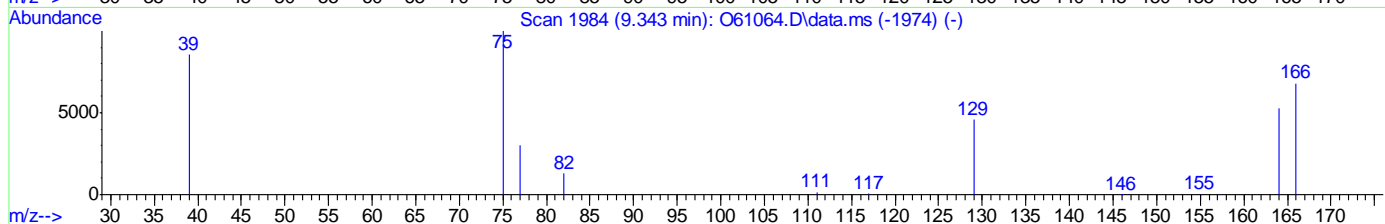
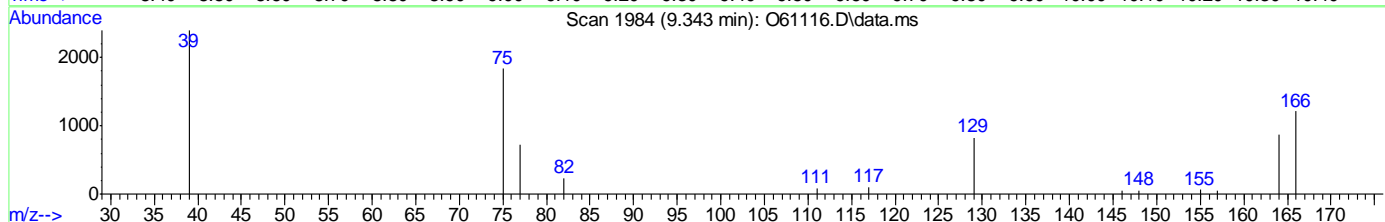
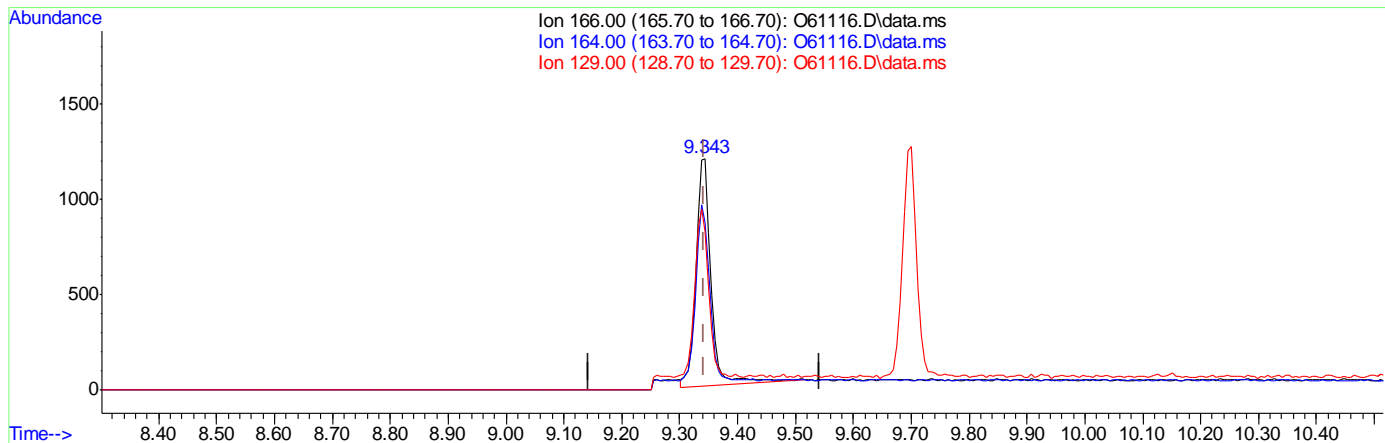
7.6.1.9
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\090820\
 Data File : O61116.D
 Acq On : 8 Sep 2020 12:14 pm
 Operator : melissam
 Sample : ic2352-1
 Misc : MS47137,VO2352,,,,,
 ALS Vial : 1 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 08 14:42:21 2020
 Quant Method : C:\msdchem\2\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Fri Sep 04 07:54:30 2020
 Response via : Initial Calibration



(21) Tetrachloroethene ()
 9.343min (+0.000) 0.08ug/L
 response 2203

Ion	Exp%	Act%
166.00	100	100
164.00	77.30	71.27
129.00	67.50	65.14
0.00	0.00	0.00

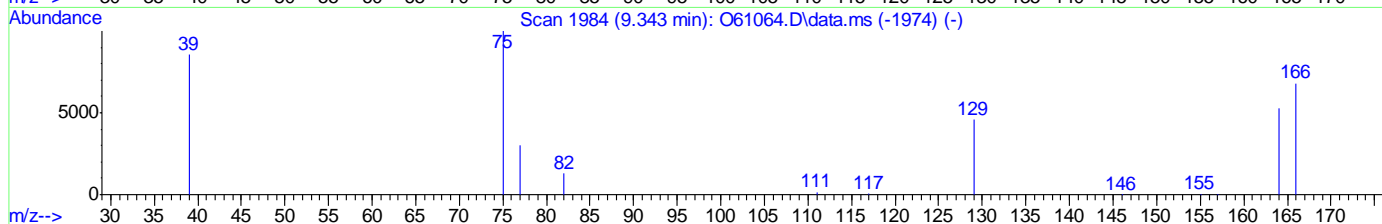
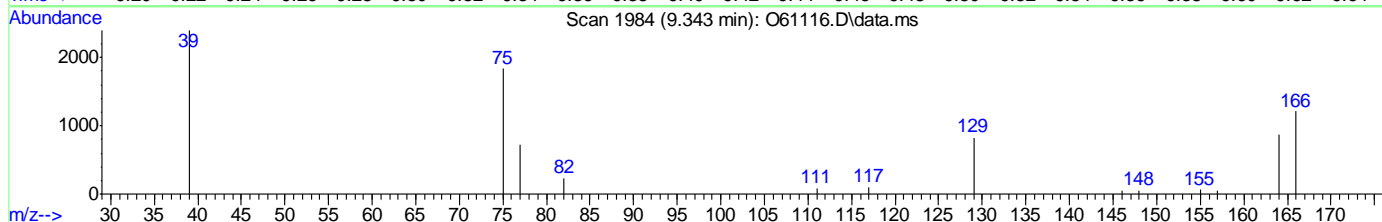
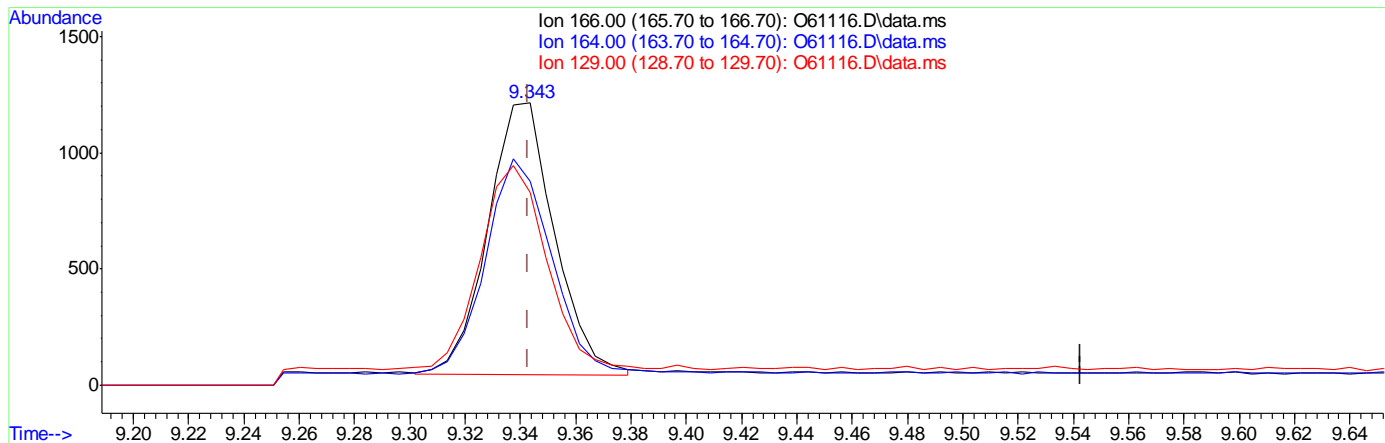
7.6.1.10
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\090820\
 Data File : O61116.D
 Acq On : 8 Sep 2020 12:14 pm
 Operator : melissam
 Sample : ic2352-1
 Misc : MS47137,VO2352,,,,,
 ALS Vial : 1 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 08 14:42:21 2020
 Quant Method : C:\msdchem\2\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Fri Sep 04 07:54:30 2020
 Response via : Initial Calibration



(21) Tetrachloroethene ()
 9.343min (+0.000) 0.07ug/L m
 response 1962

Ion	Exp%	Act%
166.00	100	100
164.00	77.30	72.38
129.00	67.50	68.34
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\090820\
 Data File : O61117.D
 Acq On : 8 Sep 2020 12:34 pm
 Operator : manager
 Sample : ic2352-2 Inst : MSVOA12
 Misc : MS47137,VO2352,,,,,
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 09 12:05:32 2020
 Quant Method : C:\msdchem\2\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Fri Sep 04 07:54:30 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
Internal Standards							
1) Fluorobenzene	7.346	96	274031	5.00	ug/L	0.00	
18) Chlorobenzene-d5	10.447	117	201797	5.00	ug/L	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.073	65	121365	5.62	ug/L	0.00	
Spiked Amount	5.000	Range 74 - 125	Recovery	=	112.40%		
19) Toluene-d8	8.896	98	248944	5.62	ug/L	0.00	
Spiked Amount	5.000	Range 88 - 111	Recovery	=	112.40%#		
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.901	62	14511	0.48	ug/L		100
3) Chloromethane	2.803	50	24752m	0.43	ug/L		
4) 1,1-Dichloroethene	4.088	61	20392	0.66	ug/L		81
5) Methylene Chloride	4.699	49	53019	0.68	ug/L		92
6) trans-1,2-Dichloroethene	4.869	61	26348	0.72	ug/L		75
7) 1,1-Dichloroethane	5.510	63	27492	0.60	ug/L		98
8) cis-1,2-Dichloroethene	6.066	96	12379	0.47	ug/L #		65
9) Chloroform	6.333	83	22437	0.47	ug/L		93
10) Carbon Tetrachloride	6.510	117	14112	0.51	ug/L		88
11) 1,1,1-Trichloroethane	6.576	97	16052	0.47	ug/L		85
12) Benzene	6.943	78	45806m	0.60	ug/L		
14) 1,2-Dichloroethane	7.139	62	24432	0.68	ug/L		89
15) Trichloroethene	7.512	95	12757	0.46	ug/L		99
16) 1,2-Dichloropropane	8.040	63	16884	0.67	ug/L		94
17) cis-1,3-Dichloropropene	8.711	75	17116	0.65	ug/L		98
20) trans-1,3-Dichloropropene	9.343	75	15467	0.53	ug/L		97
21) Tetrachloroethene	9.343	166	11099	0.45	ug/L		94
22) 1,4-Dichlorobenzene	12.827	146	23554	0.49	ug/L		97
23) 1,2-Dibromo-3-Chloropr...	14.037	75	5606	0.58	ug/L		82

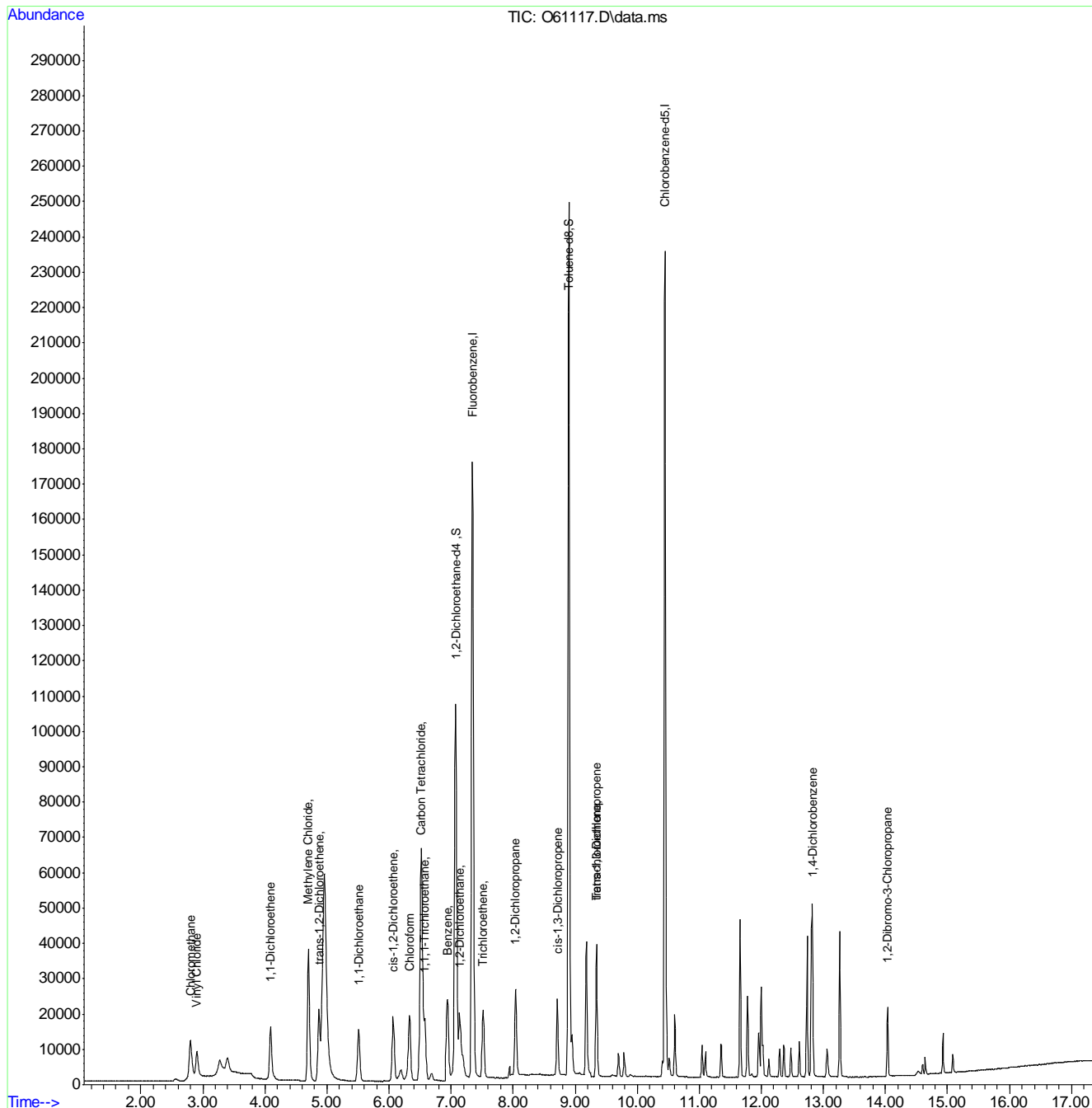
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\090820\
 Data File : O61117.D
 Acq On : 8 Sep 2020 12:34 pm
 Operator : manager
 Sample : ic2352-2
 Misc : MS47137,VO2352,,,,,
 ALS Vial : 2 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 09 12:05:32 2020
 Quant Method : C:\msdchem\2\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Fri Sep 04 07:54:30 2020
 Response via : Initial Calibration



7.6.2
7

Manual Integration Approval Summary

Sample Number: VO2352-IC2352 **Method:** SW846 8260B BY SIM
Lab FileID: O61117.D **Analyst approved:** 09/10/20 08:40 Akari Giraldo
Injection Time: 09/08/20 12:34 **Supervisor approved:** 09/10/20 08:47 Melissa Mangual

Parameter	CAS	Sig#	R.T. (min.)	Reason
Methyl Chloride	74-87-3		2.80	Poor instrument integration
Benzene	71-43-2		6.94	Poor instrument integration

7.6.2.1

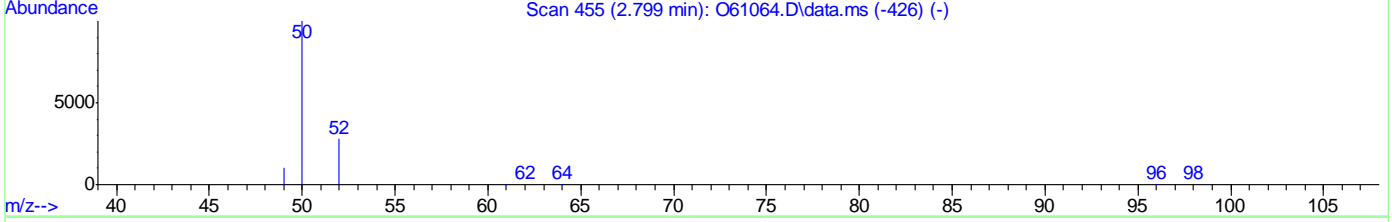
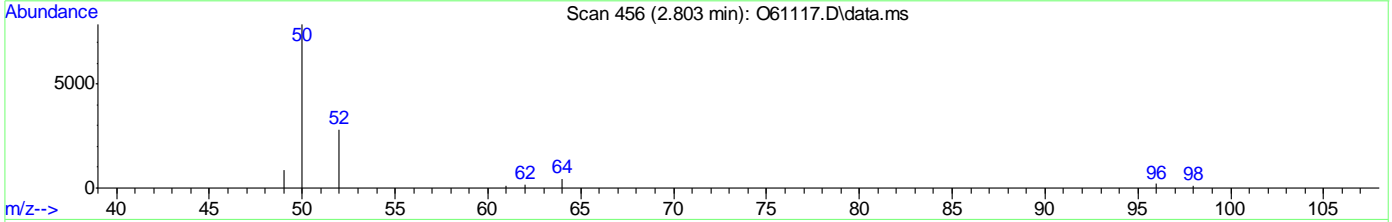
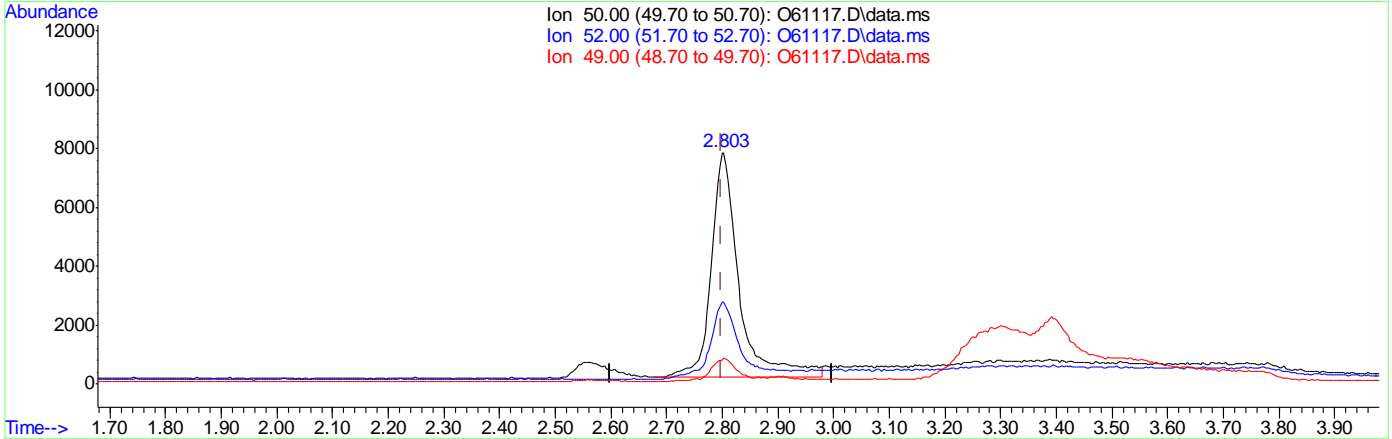
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\090820\
 Data File : O61117.D
 Acq On : 8 Sep 2020 12:34 pm
 Operator : manager
 Sample : ic2352-2
 Misc : MS47137,VO2352,,,,,
 ALS Vial : 2 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 08 14:42:23 2020
 Quant Method : C:\msdchem\2\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Fri Sep 04 07:54:30 2020
 Response via : Initial Calibration



TIC: O61117.D\data.ms

(3) Chloromethane
 2.803min (+0.004) 0.46ug/L
 response 26768

Ion	Exp%	Act%
50.00	100	100
52.00	27.80	34.53
49.00	10.50	10.16
0.00	0.00	0.00

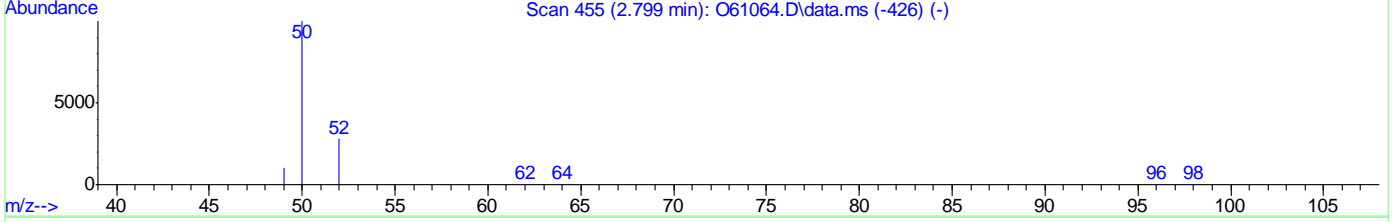
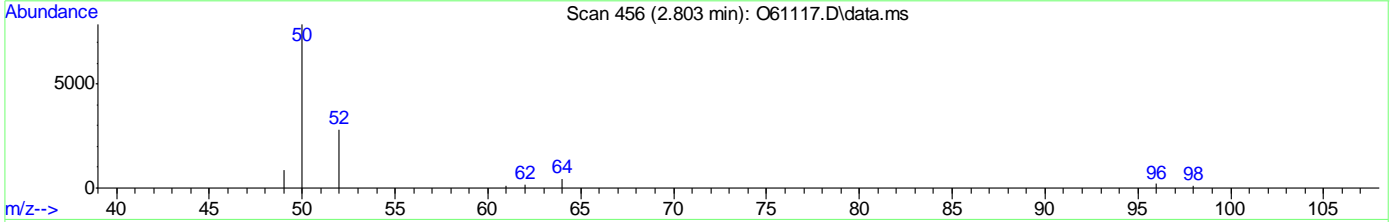
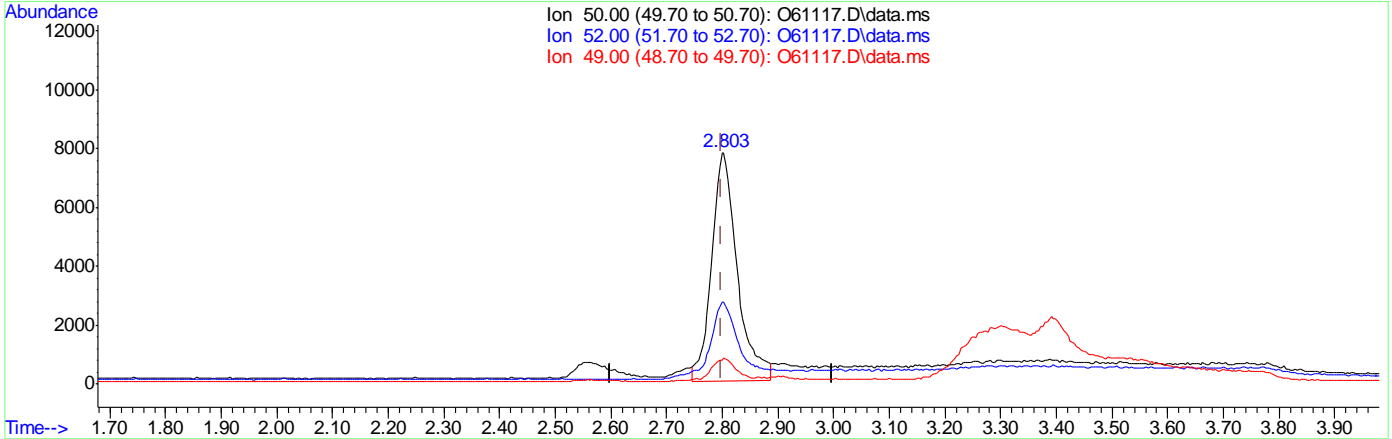
7.6.2.2
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\090820\
 Data File : O61117.D
 Acq On : 8 Sep 2020 12:34 pm
 Operator : manager
 Sample : ic2352-2
 Misc : MS47137,VO2352,,,,,
 ALS Vial : 2 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 08 14:42:23 2020
 Quant Method : C:\msdchem\2\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Fri Sep 04 07:54:30 2020
 Response via : Initial Calibration



TIC: O61117.D\data.ms

(3) Chloromethane
 2.803min (+0.004) 0.43ug/L m
 response 24752

Ion	Exp%	Act%
50.00	100	100
52.00	27.80	35.70
49.00	10.50	11.10
0.00	0.00	0.00

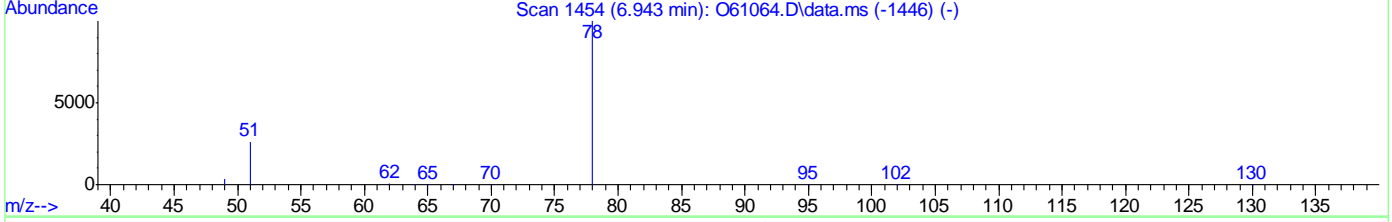
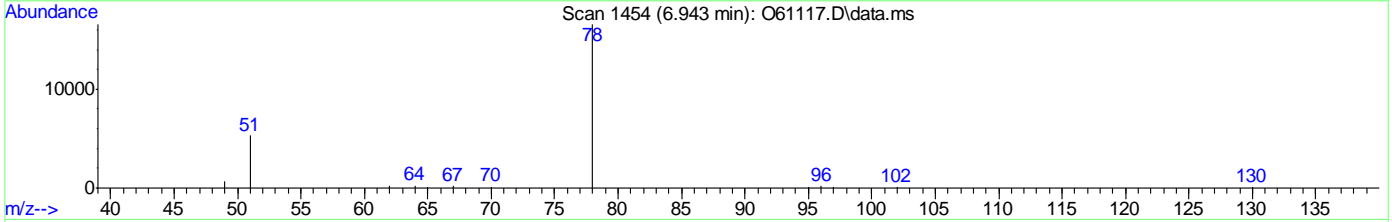
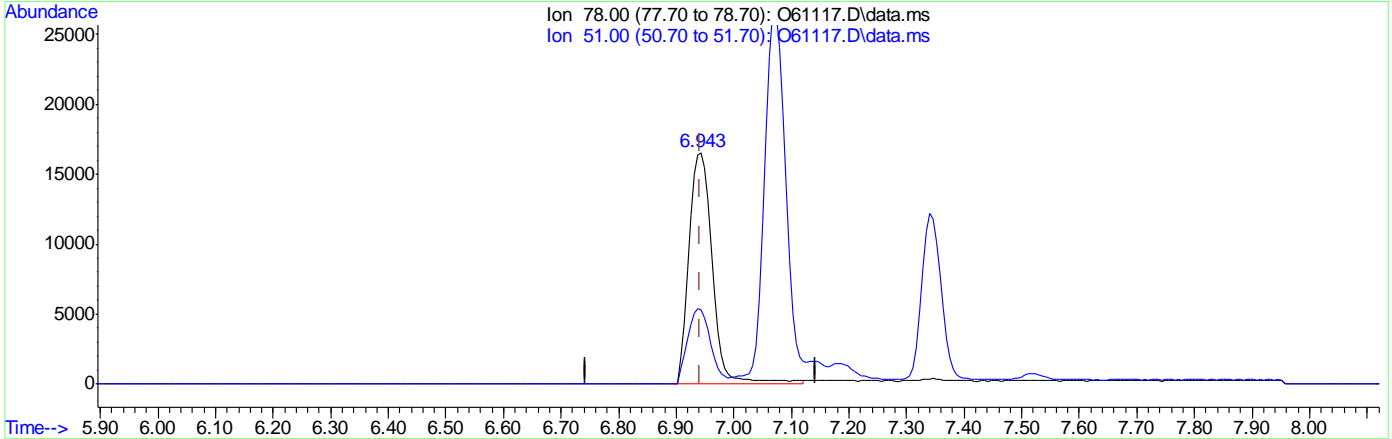
7.6.2.3
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\090820\
 Data File : O61117.D
 Acq On : 8 Sep 2020 12:34 pm
 Operator : manager
 Sample : ic2352-2
 Misc : MS47137,VO2352,,,,,
 ALS Vial : 2 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 08 14:42:23 2020
 Quant Method : C:\msdchem\2\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Fri Sep 04 07:54:30 2020
 Response via : Initial Calibration



TIC: O61117.D\data.ms

(12) Benzene ()		
6.943min (+0.000)	0.63ug/L	
response	47679	
Ion	Exp%	Act%
78.00	100	100
51.00	26.20	31.98
0.00	0.00	0.00
0.00	0.00	0.00

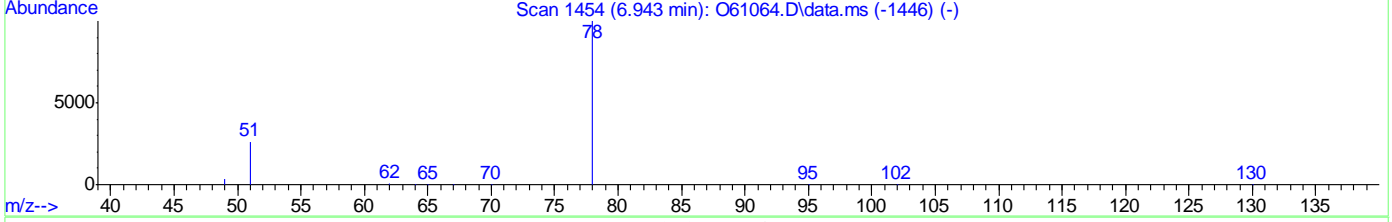
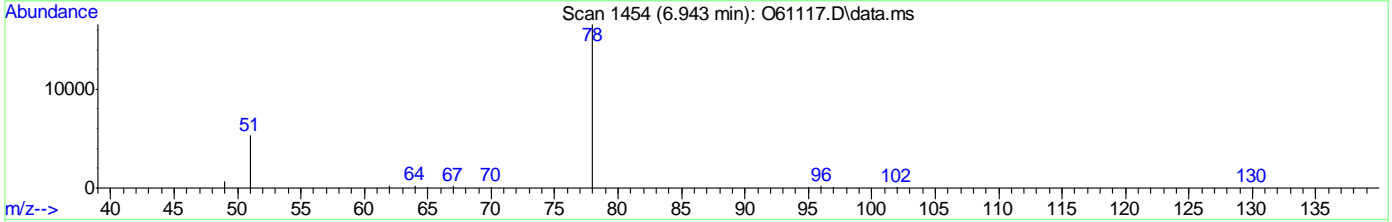
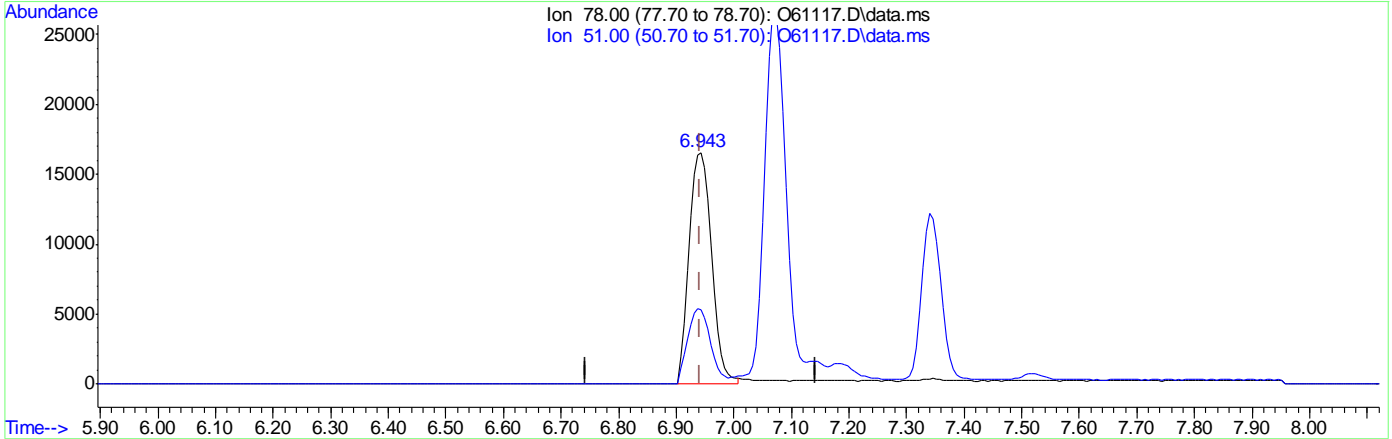
7.6.2.4
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\090820\
 Data File : O61117.D
 Acq On : 8 Sep 2020 12:34 pm
 Operator : manager
 Sample : ic2352-2
 Misc : MS47137,VO2352,,,,,
 ALS Vial : 2 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 08 14:42:23 2020
 Quant Method : C:\msdchem\2\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Fri Sep 04 07:54:30 2020
 Response via : Initial Calibration



TIC: O61117.D\data.ms

(12) Benzene ()		
6.943min (+0.000)	0.60ug/L m	
response	45806	
Ion	Exp%	Act%
78.00	100	100
51.00	26.20	31.98
0.00	0.00	0.00
0.00	0.00	0.00

7.6.2.5
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\090820\
 Data File : O61118.D
 Acq On : 8 Sep 2020 12:55 pm
 Operator : manager
 Sample : ic2352-3 Inst : MSVOA12
 Misc : MS47137,VO2352,,,,,
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 09 12:06:27 2020
 Quant Method : C:\msdchem\2\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Fri Sep 04 07:54:30 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
Internal Standards							
1) Fluorobenzene	7.346	96	267443	5.00	ug/L	0.00	
18) Chlorobenzene-d5	10.447	117	198930	5.00	ug/L	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.073	65	120244	5.70	ug/L	0.00	
Spiked Amount	5.000	Range 74 - 125	Recovery	=	114.00%		
19) Toluene-d8	8.900	98	243439	5.58	ug/L	0.00	
Spiked Amount	5.000	Range 88 - 111	Recovery	=	111.60%#		
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.904	62	50835	1.73	ug/L		97
3) Chloromethane	2.803	50	78059	1.40	ug/L		93
4) 1,1-Dichloroethene	4.088	61	74881	2.46	ug/L		80
5) Methylene Chloride	4.699	49	132871	1.78	ug/L		91
6) trans-1,2-Dichloroethene	4.869	61	90167	2.53	ug/L		75
7) 1,1-Dichloroethane	5.510	63	100332	2.25	ug/L		97
8) cis-1,2-Dichloroethene	6.066	96	43762	1.72	ug/L #		62
9) Chloroform	6.333	83	80028	1.73	ug/L		94
10) Carbon Tetrachloride	6.510	117	51338	1.88	ug/L		87
11) 1,1,1-Trichloroethane	6.576	97	58003	1.75	ug/L		87
12) Benzene	6.943	78	161333m	2.18	ug/L		
14) 1,2-Dichloroethane	7.139	62	86717	2.47	ug/L		89
15) Trichloroethene	7.512	95	45861	1.69	ug/L		99
16) 1,2-Dichloropropane	8.043	63	59021	2.39	ug/L		95
17) cis-1,3-Dichloropropene	8.711	75	62339	2.36	ug/L		97
20) trans-1,3-Dichloropropene	9.343	75	57704	1.99	ug/L		96
21) Tetrachloroethene	9.343	166	39169	1.62	ug/L		97
22) 1,4-Dichlorobenzene	12.827	146	82271	1.73	ug/L		96
23) 1,2-Dibromo-3-Chloropr...	14.037	75	19681	2.06	ug/L		82

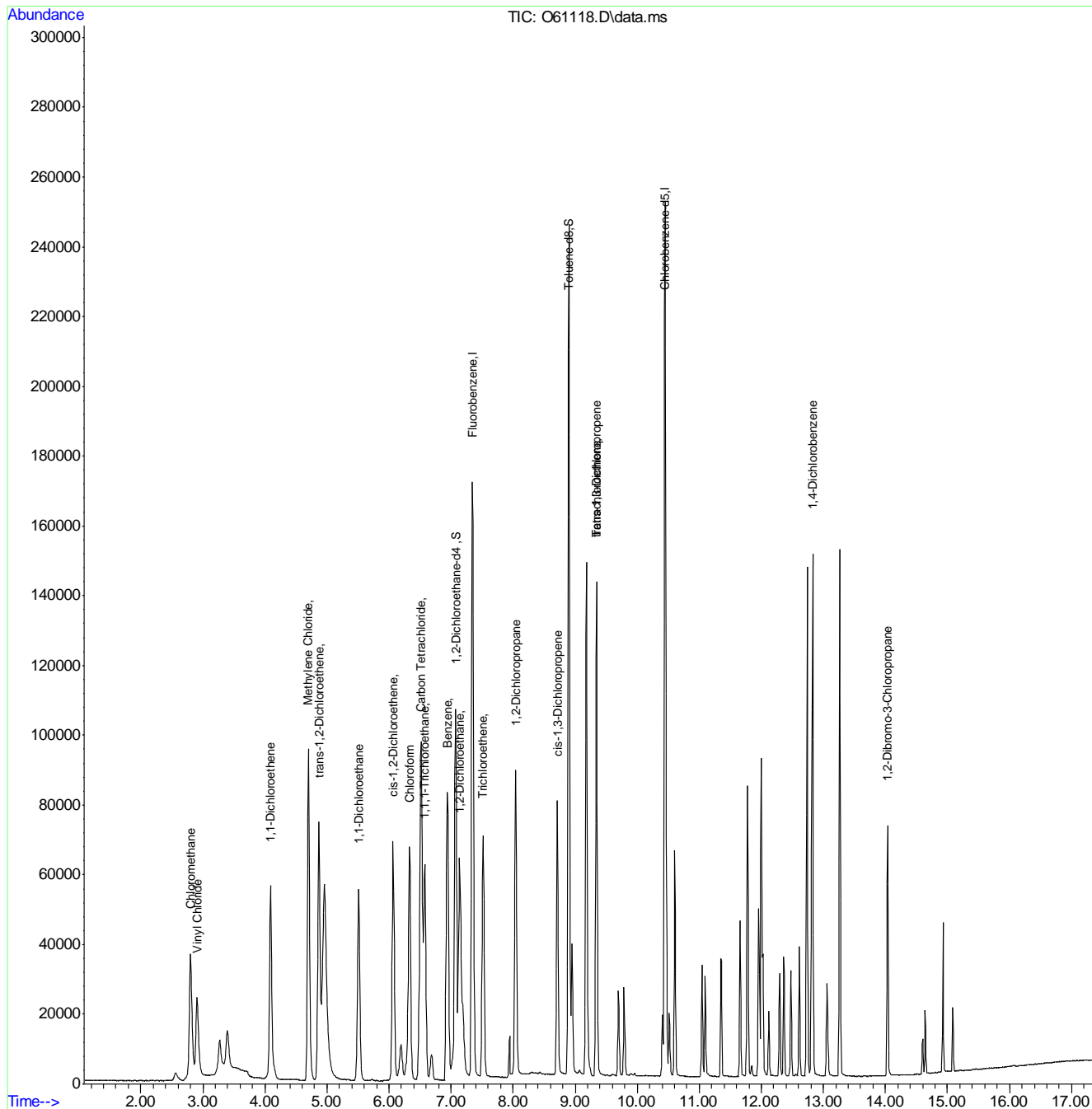
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\090820\
 Data File : O61118.D
 Acq On : 8 Sep 2020 12:55 pm
 Operator : manager
 Sample : ic2352-3
 Misc : MS47137,VO2352,,,,,
 ALS Vial : 3 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 09 12:06:27 2020
 Quant Method : C:\msdchem\2\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Fri Sep 04 07:54:30 2020
 Response via : Initial Calibration



Manual Integration Approval Summary

Sample Number: VO2352-IC2352 **Method:** SW846 8260B BY SIM
Lab FileID: O61118.D **Analyst approved:** 09/10/20 08:40 Akari Giraldo
Injection Time: 09/08/20 12:55 **Supervisor approved:** 09/10/20 08:47 Melissa Mangual

Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzene	71-43-2		6.94	Poor instrument integration

7.6.3.1

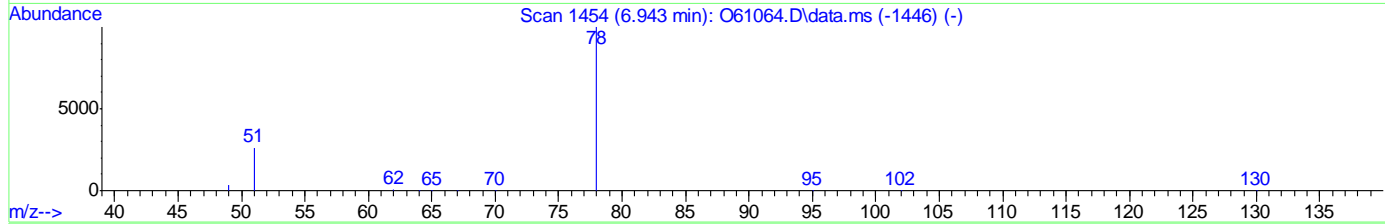
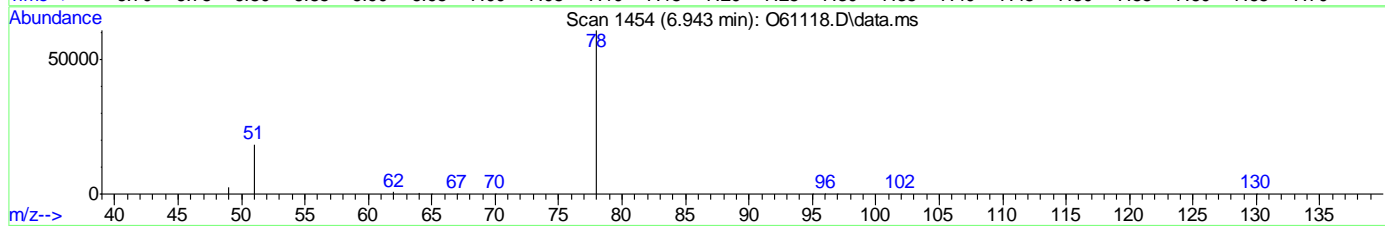
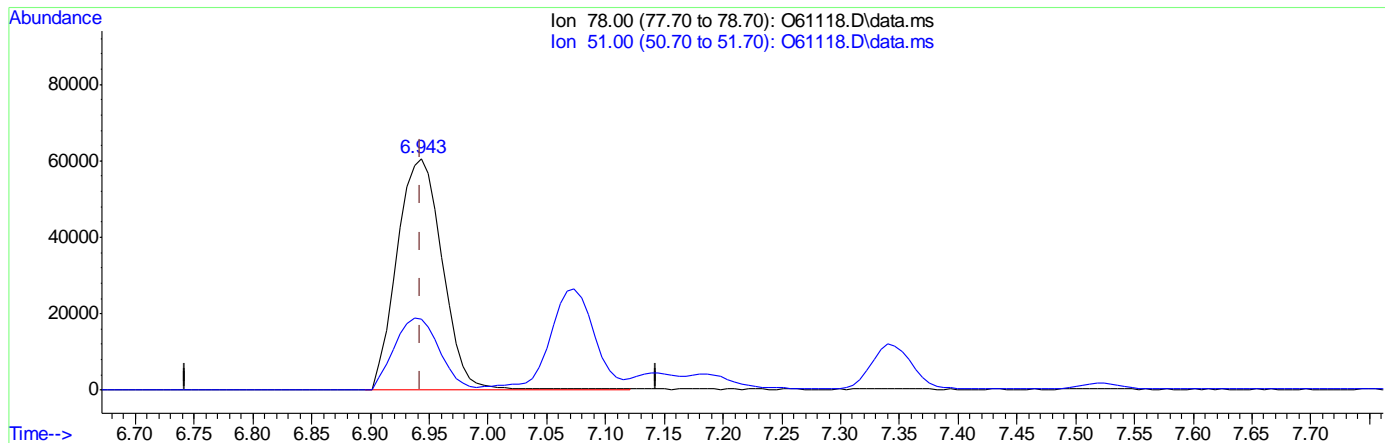
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\090820\
 Data File : O61118.D
 Acq On : 8 Sep 2020 12:55 pm
 Operator : manager
 Sample : ic2352-3
 Misc : MS47137,VO2352,,,,,
 ALS Vial : 3 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 08 14:42:25 2020
 Quant Method : C:\msdchem\2\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Fri Sep 04 07:54:30 2020
 Response via : Initial Calibration



TIC: O61118.D\data.ms

(12) Benzene ()
 6.943min (+0.000) 2.21ug/L
 response 163663

Ion	Exp%	Act%
78.00	100	100
51.00	26.20	30.47
0.00	0.00	0.00
0.00	0.00	0.00

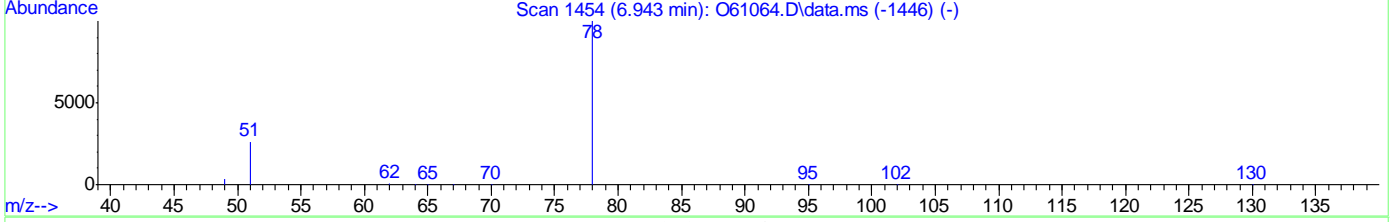
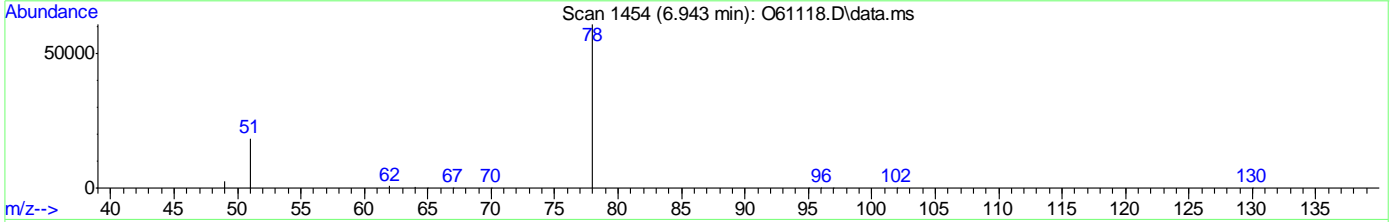
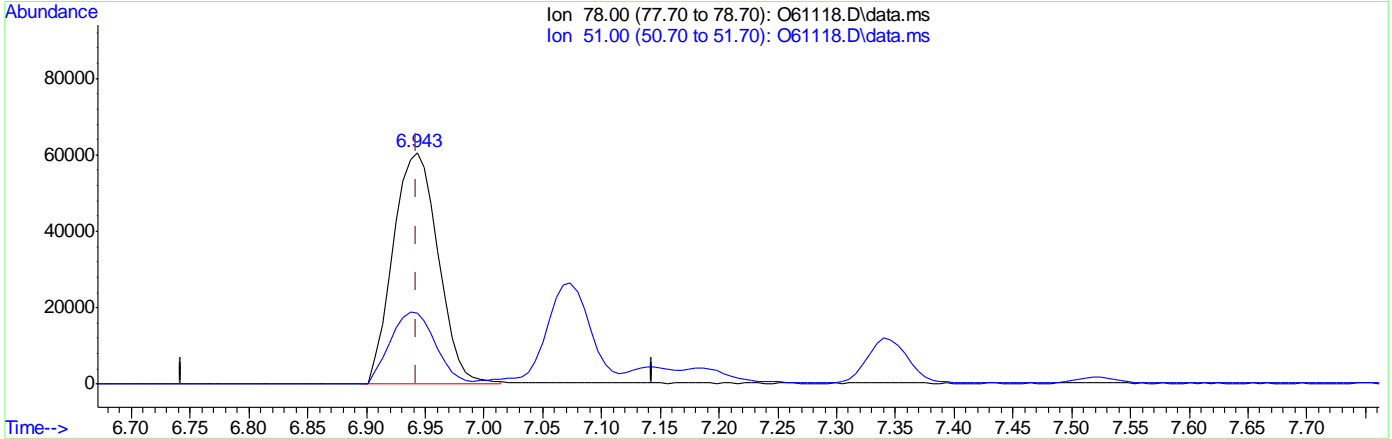
7.6.3.2
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\090820\
 Data File : O61118.D
 Acq On : 8 Sep 2020 12:55 pm
 Operator : manager
 Sample : ic2352-3
 Misc : MS47137,VO2352,,,,,
 ALS Vial : 3 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 08 14:42:25 2020
 Quant Method : C:\msdchem\2\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Fri Sep 04 07:54:30 2020
 Response via : Initial Calibration



TIC: O61118.D\data.ms

(12) Benzene ()
 6.943min (+0.000) 2.18ug/L m
 response 161333

Ion	Exp%	Act%
78.00	100	100
51.00	26.20	30.47
0.00	0.00	0.00
0.00	0.00	0.00

7.63.3
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\090820\
 Data File : O61119.D
 Acq On : 8 Sep 2020 1:15 pm
 Operator : manager
 Sample : ic2352-4 Inst : MSVOA12
 Misc : MS47137,VO2352,,,,,
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 09 12:09:55 2020
 Quant Method : C:\msdchem\2\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Fri Sep 04 07:54:30 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
Internal Standards							
1) Fluorobenzene	7.346	96	267496	5.00	ug/L	0.00	
18) Chlorobenzene-d5	10.447	117	199178	5.00	ug/L	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.073	65	118113m	5.60	ug/L	0.00	
Spiked Amount	5.000	Range 74 - 125	Recovery	=	112.00%		
19) Toluene-d8	8.900	98	242710	5.55	ug/L	0.00	
Spiked Amount	5.000	Range 88 - 111	Recovery	=	111.00%		
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.908	62	128059	4.36	ug/L		97
3) Chloromethane	2.806	50	185780	3.44	ug/L		93
4) 1,1-Dichloroethene	4.092	61	196176	6.46	ug/L		81
5) Methylene Chloride	4.703	49	296658	4.13	ug/L		92
6) trans-1,2-Dichloroethene	4.869	61	230442	6.48	ug/L		74
7) 1,1-Dichloroethane	5.514	63	258912	5.81	ug/L		96
8) cis-1,2-Dichloroethene	6.072	96	113621	4.47	ug/L #		64
9) Chloroform	6.333	83	205725	4.46	ug/L		94
10) Carbon Tetrachloride	6.510	117	136009	4.92	ug/L		87
11) 1,1,1-Trichloroethane	6.582	97	156364	4.70	ug/L		88
12) Benzene	6.943	78	412524m	5.57	ug/L		
14) 1,2-Dichloroethane	7.145	62	222462	6.34	ug/L		88
15) Trichloroethene	7.518	95	121299	4.42	ug/L		98
16) 1,2-Dichloropropane	8.043	63	149842	6.06	ug/L		94
17) cis-1,3-Dichloropropene	8.711	75	164334	6.00	ug/L		98
20) trans-1,3-Dichloropropene	9.343	75	154275	5.12	ug/L		99
21) Tetrachloroethene	9.343	166	103525	4.26	ug/L		97
22) 1,4-Dichlorobenzene	12.827	146	209514	4.34	ug/L		97
23) 1,2-Dibromo-3-Chloropr...	14.037	75	52470	5.49	ug/L		81

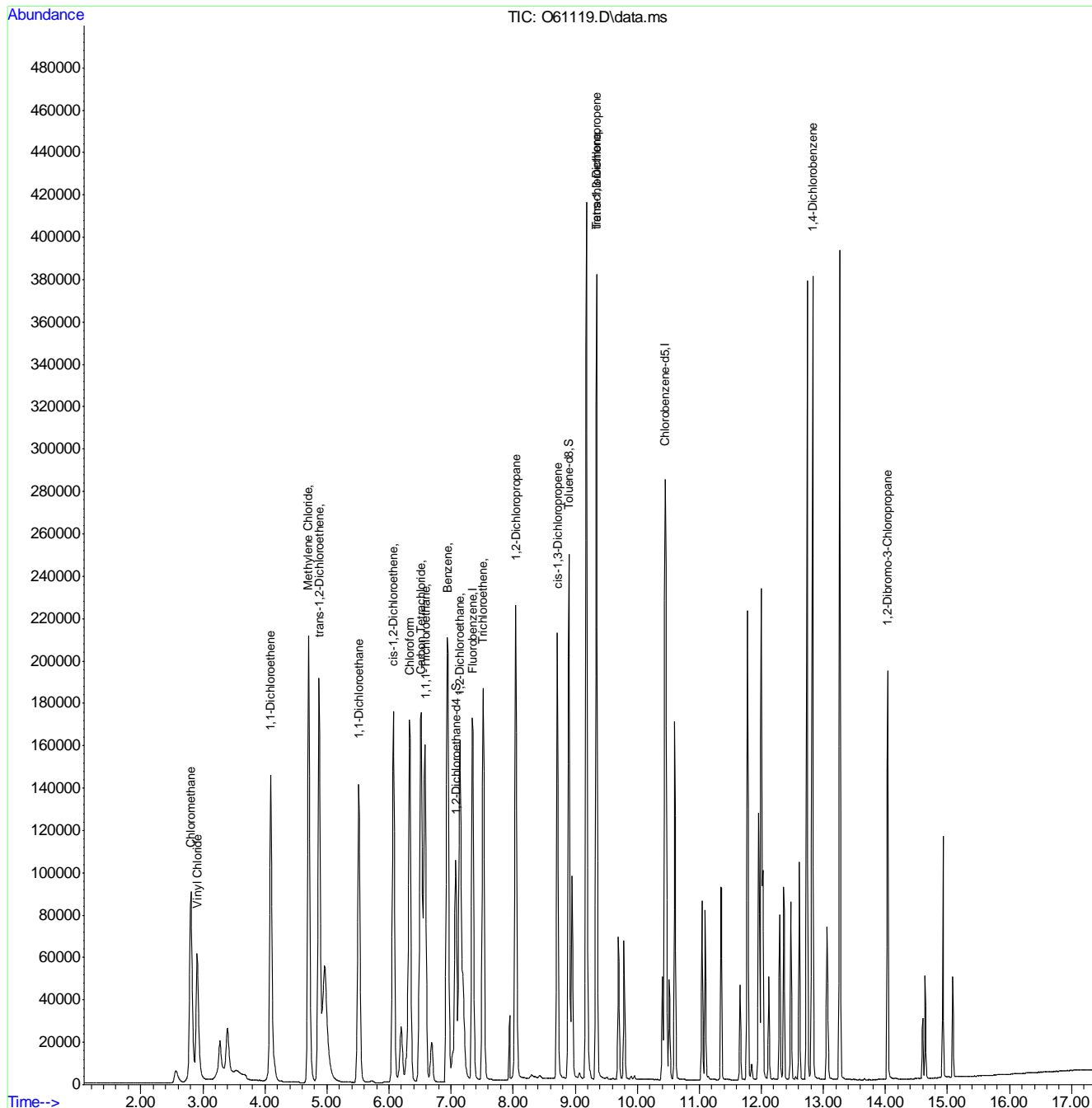
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\090820\
 Data File : O61119.D
 Acq On : 8 Sep 2020 1:15 pm
 Operator : manager
 Sample : ic2352-4
 Misc : MS47137,VO2352,,,,,
 ALS Vial : 4 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 09 12:09:55 2020
 Quant Method : C:\msdchem\2\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Fri Sep 04 07:54:30 2020
 Response via : Initial Calibration



7.6.4
7

Manual Integration Approval Summary

Sample Number: VO2352-IC2352 **Method:** SW846 8260B BY SIM
Lab FileID: O61119.D **Analyst approved:** 09/10/20 08:40 Akari Giraldo
Injection Time: 09/08/20 13:15 **Supervisor approved:** 09/10/20 08:47 Melissa Mangual

Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzene	71-43-2		6.94	Poor instrument integration
1,2-Dichloroethane-D4	17060-07-0		7.07	Overlapping peak

7.6.4.1

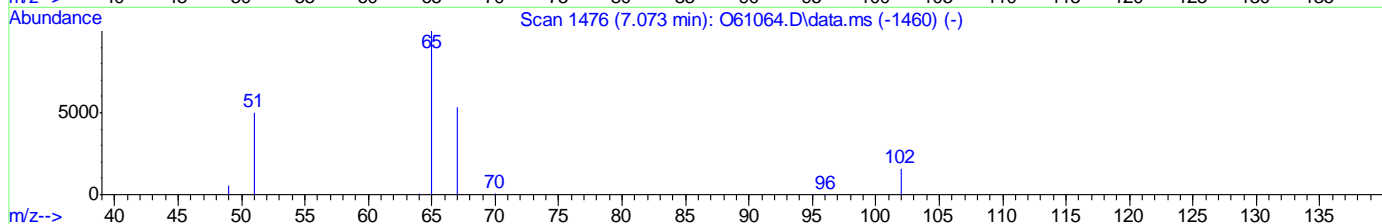
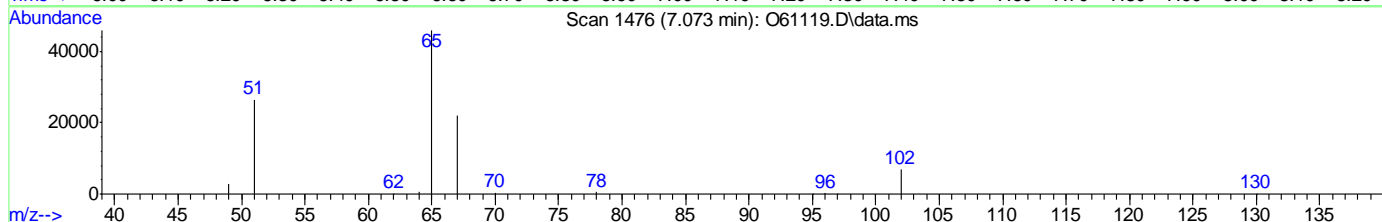
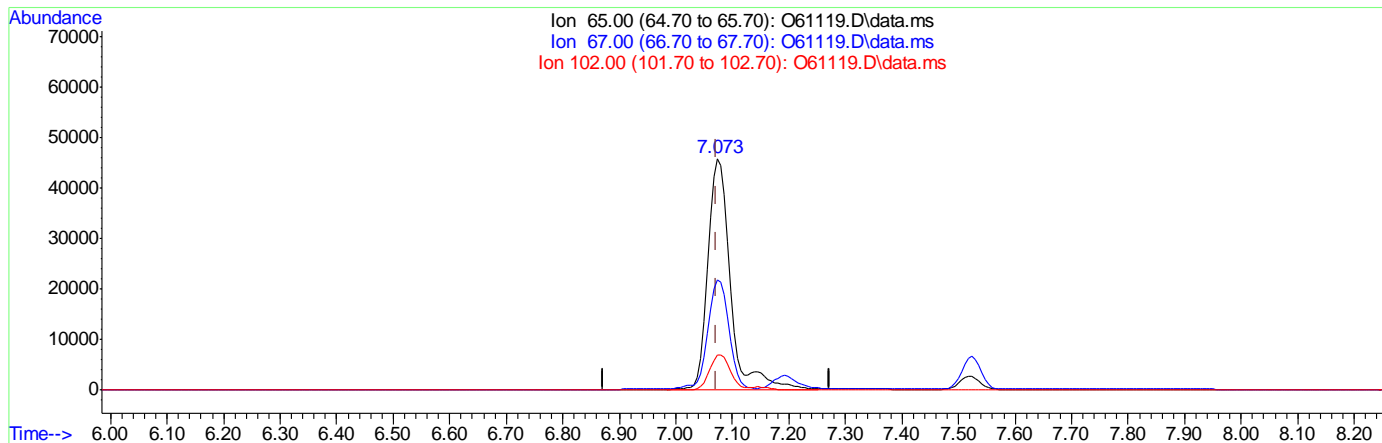
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\090820\
 Data File : O61119.D
 Acq On : 8 Sep 2020 1:15 pm
 Operator : manager
 Sample : ic2352-4
 Misc : MS47137,VO2352,,,,,
 ALS Vial : 4 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 08 14:42:27 2020
 Quant Method : C:\msdchem\2\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Fri Sep 04 07:54:30 2020
 Response via : Initial Calibration



TIC: O61119.D\data.ms

(13) 1,2-Dichloroethane-d4 (S)

7.073min (+0.000) 6.01ug/L

response 126863

Ion	Exp%	Act%
65.00	100	100
67.00	53.50	47.49
102.00	16.10	14.99
0.00	0.00	0.00

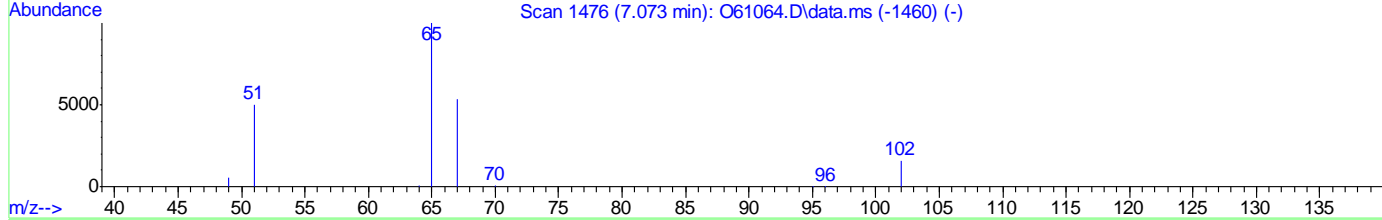
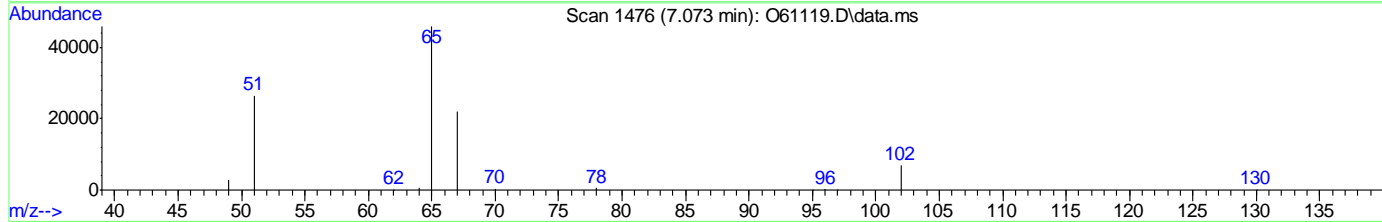
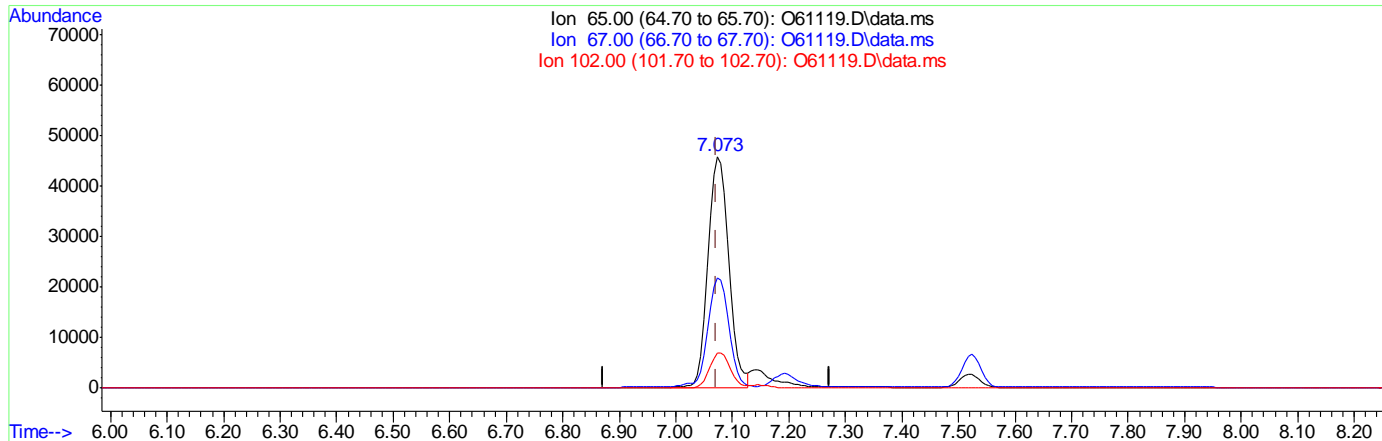
7.6.4.2
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\090820\
 Data File : O61119.D
 Acq On : 8 Sep 2020 1:15 pm
 Operator : manager
 Sample : ic2352-4
 Misc : MS47137,VO2352,,,,,
 ALS Vial : 4 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 08 14:42:27 2020
 Quant Method : C:\msdchem\2\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Fri Sep 04 07:54:30 2020
 Response via : Initial Calibration



TIC: O61119.D\data.ms

(13) 1,2-Dichloroethane-d4 (S)

7.073min (+0.000) 5.60ug/L m

response 118113

Ion	Exp%	Act%
65.00	100	100
67.00	53.50	47.82
102.00	16.10	15.07
0.00	0.00	0.00

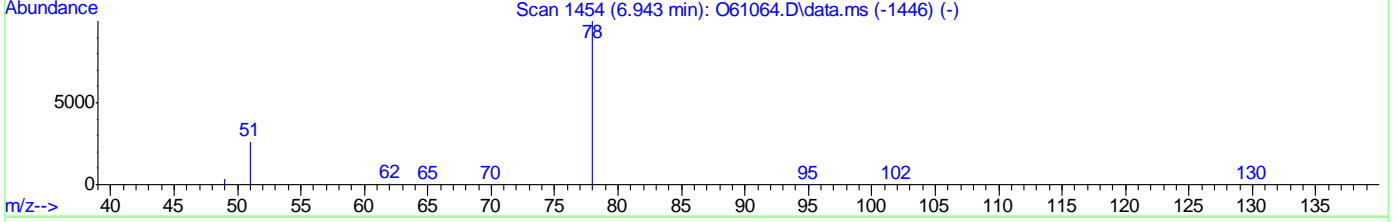
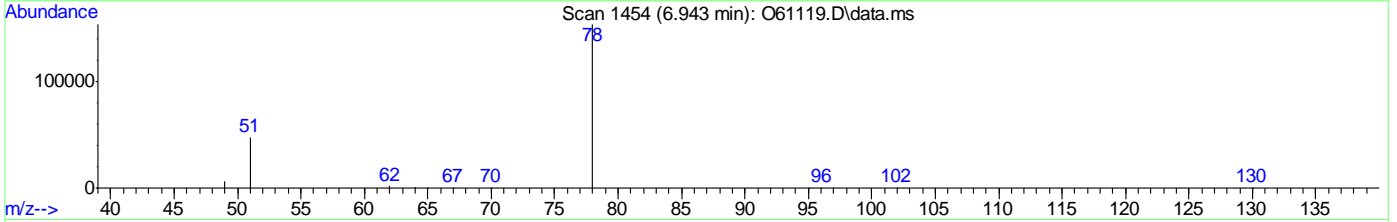
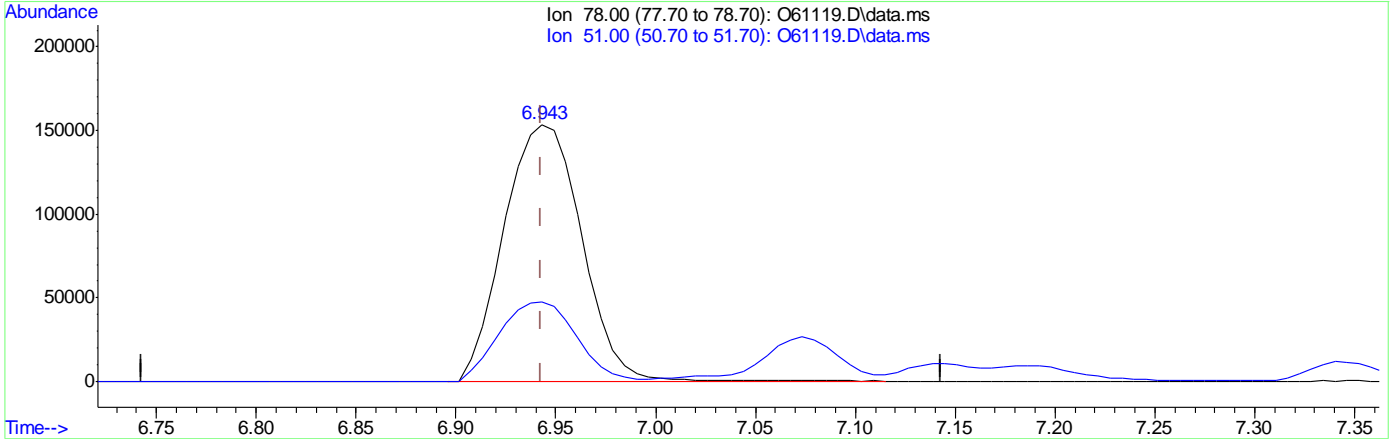
7.6.4.3
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\090820\
 Data File : O61119.D
 Acq On : 8 Sep 2020 1:15 pm
 Operator : manager
 Sample : ic2352-4
 Misc : MS47137,VO2352,,,,,
 ALS Vial : 4 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 09 12:07:18 2020
 Quant Method : C:\msdchem\2\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Fri Sep 04 07:54:30 2020
 Response via : Initial Calibration



TIC: O61119.D\data.ms

(12) Benzene ()

6.943min (+0.000) 5.62ug/L

response 416284

Ion	Exp%	Act%
78.00	100	100
51.00	26.20	31.18
0.00	0.00	0.00
0.00	0.00	0.00

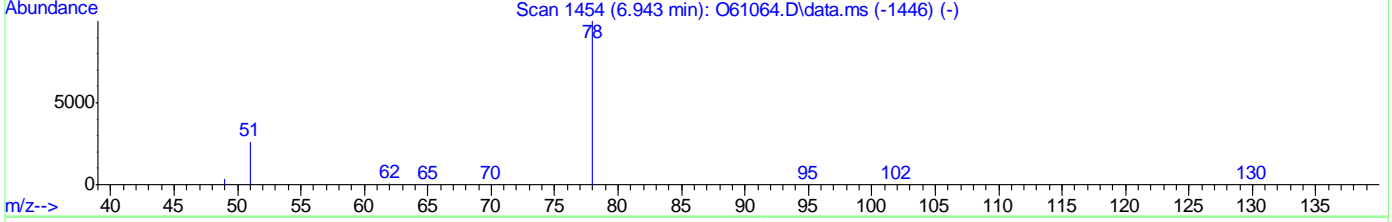
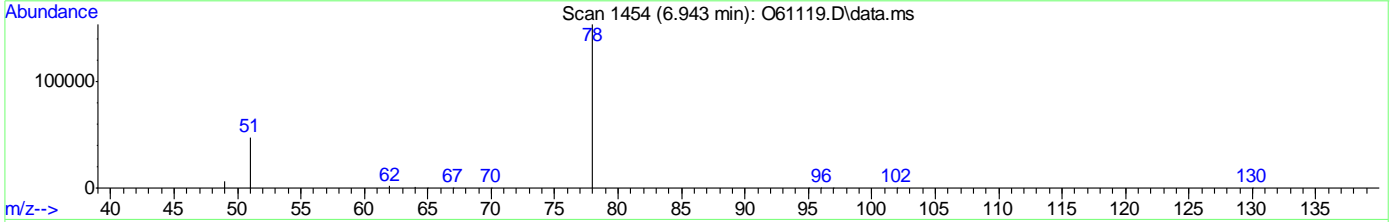
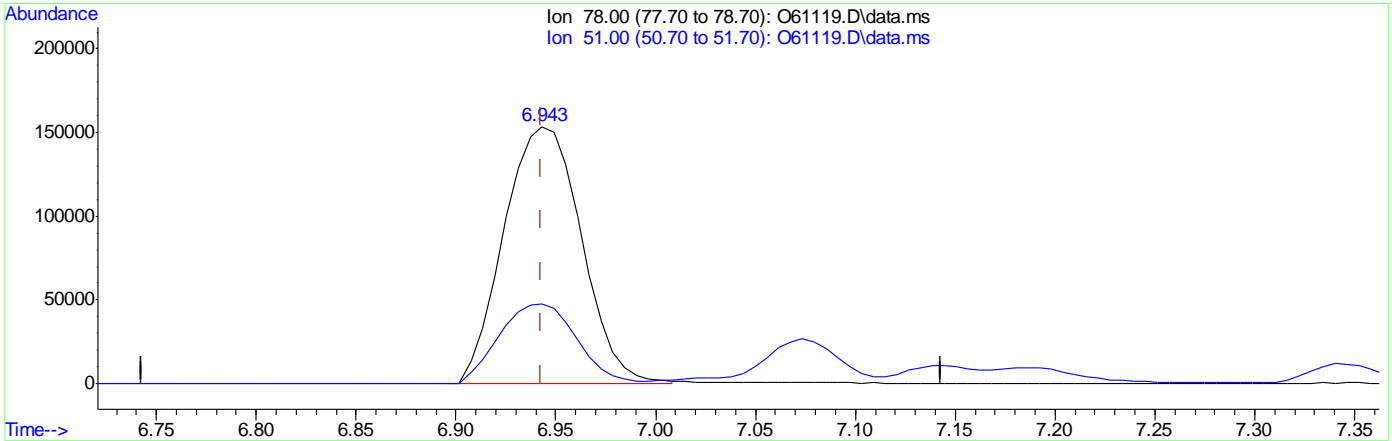
7.6.4.4
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\090820\
 Data File : O61119.D
 Acq On : 8 Sep 2020 1:15 pm
 Operator : manager
 Sample : ic2352-4
 Misc : MS47137,VO2352,,,,,
 ALS Vial : 4 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 09 12:07:18 2020
 Quant Method : C:\msdchem\2\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Fri Sep 04 07:54:30 2020
 Response via : Initial Calibration



(12) Benzene ()
 6.943min (+0.000) 5.57ug/L m
 response 412524

Ion	Exp%	Act%
78.00	100	100
51.00	26.20	31.18
0.00	0.00	0.00
0.00	0.00	0.00

7.6.4.5
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\090820\
 Data File : O61120.D
 Acq On : 8 Sep 2020 1:55 pm
 Operator : melissam
 Sample : icc2352-5 Inst : MSVOA12
 Misc : MS47137,VO2352,,,,,
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 09 12:07:51 2020
 Quant Method : C:\msdchem\2\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Fri Sep 04 07:54:30 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
Internal Standards							
1) Fluorobenzene	7.346	96	275666	5.00	ug/L	0.00	
18) Chlorobenzene-d5	10.441	117	205542	5.00	ug/L	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.073	65	120563	5.55	ug/L	0.00	
Spiked Amount	5.000	Range 74 - 125	Recovery	=	111.00%		
19) Toluene-d8	8.896	98	248588	5.51	ug/L	0.00	
Spiked Amount	5.000	Range 88 - 111	Recovery	=	110.20%		
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.912	62	246013	8.14	ug/L		97
3) Chloromethane	2.806	50	356376	6.77	ug/L		93
4) 1,1-Dichloroethene	4.088	61	358360	11.44	ug/L		82
5) Methylene Chloride	4.699	49	560380	8.16	ug/L		92
6) trans-1,2-Dichloroethene	4.865	61	434103	11.84	ug/L		75
7) 1,1-Dichloroethane	5.510	63	502830	10.94	ug/L		97
8) cis-1,2-Dichloroethene	6.066	96	221835	8.51	ug/L #		65
9) Chloroform	6.333	83	397951	8.37	ug/L		95
10) Carbon Tetrachloride	6.505	117	257228	8.88	ug/L		87
11) 1,1,1-Trichloroethane	6.576	97	295502	8.54	ug/L		88
12) Benzene	6.943	78	799075m	10.46	ug/L		
14) 1,2-Dichloroethane	7.139	62	435601	12.04	ug/L		89
15) Trichloroethene	7.512	95	232343	8.14	ug/L		99
16) 1,2-Dichloropropane	8.040	63	292776	11.49	ug/L		93
17) cis-1,3-Dichloropropene	8.707	75	333567	11.22	ug/L		98
20) trans-1,3-Dichloropropene	9.343	75	316745	9.71	ug/L		98
21) Tetrachloroethene	9.337	166	192508	7.65	ug/L		93
22) 1,4-Dichlorobenzene	12.821	146	414460	8.16	ug/L		94
23) 1,2-Dibromo-3-Chloropr...	14.037	75	111042	11.26	ug/L		86

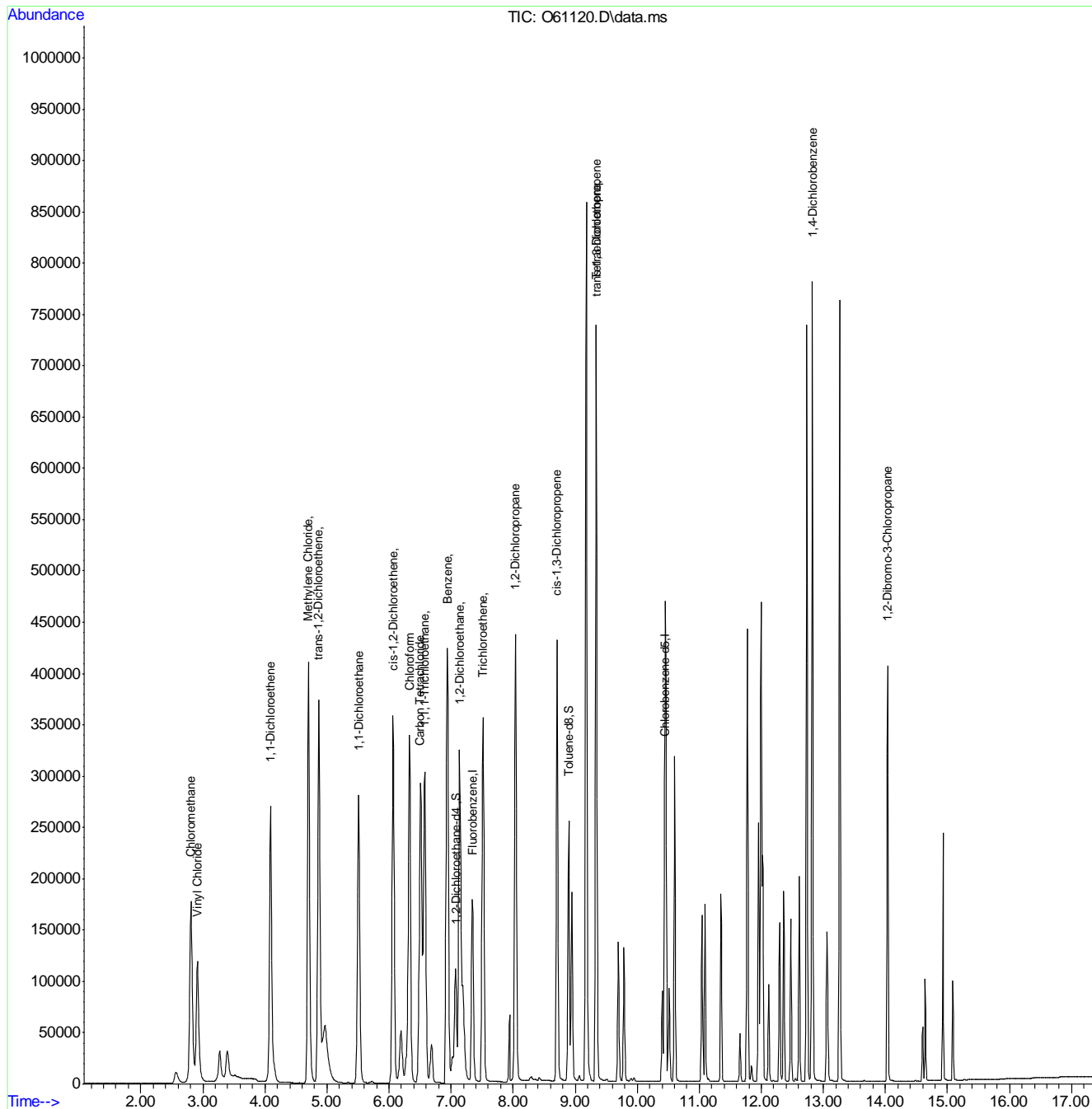
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\090820\
 Data File : O61120.D
 Acq On : 8 Sep 2020 1:55 pm
 Operator : melissam
 Sample : icc2352-5
 Misc : MS47137,VO2352,,,,,
 ALS Vial : 5 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 09 12:07:51 2020
 Quant Method : C:\msdchem\2\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Fri Sep 04 07:54:30 2020
 Response via : Initial Calibration



Manual Integration Approval Summary

Sample Number: VO2352-ICC2352 **Method:** SW846 8260B BY SIM
Lab FileID: O61120.D **Analyst approved:** 09/10/20 08:40 Akari Giraldo
Injection Time: 09/08/20 13:55 **Supervisor approved:** 09/10/20 08:47 Melissa Mangual

Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzene	71-43-2		6.94	Poor instrument integration

7.6.5.1

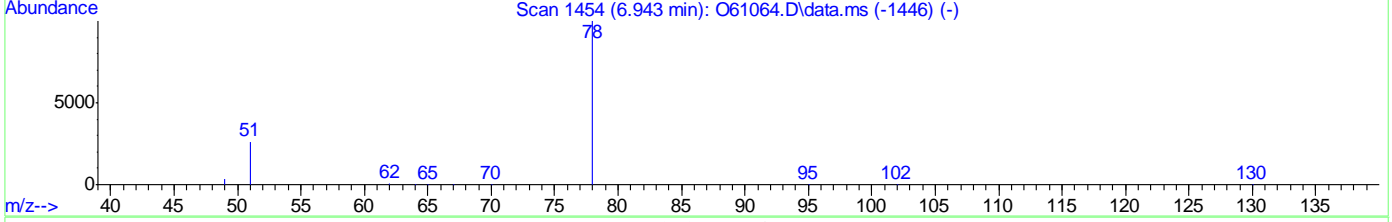
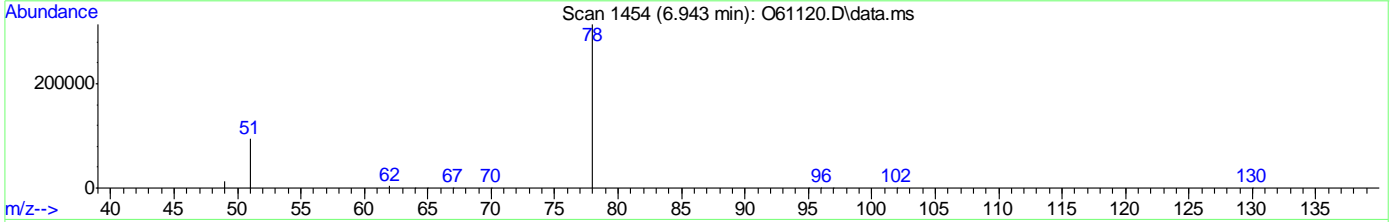
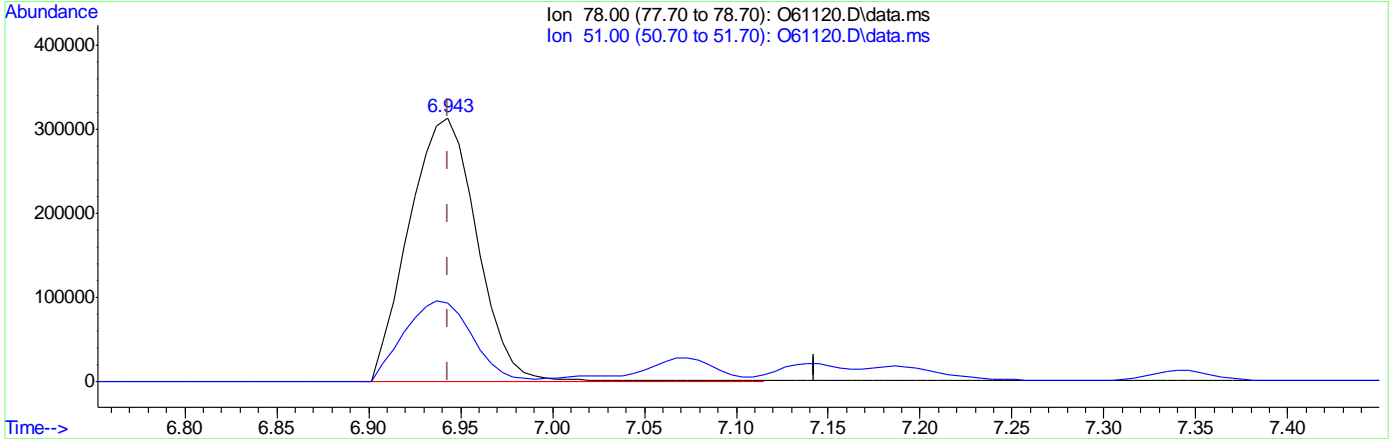
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\090820\
 Data File : O61120.D
 Acq On : 8 Sep 2020 1:55 pm
 Operator : melissam
 Sample : icc2352-5
 Misc : MS47137,VO2352,,,,,
 ALS Vial : 5 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 08 14:42:29 2020
 Quant Method : C:\msdchem\2\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Fri Sep 04 07:54:30 2020
 Response via : Initial Calibration



TIC: O61120.D\data.ms

(12) Benzene ()
 6.943min (+0.000) 10.53ug/L
 response 804139

Ion	Exp%	Act%
78.00	100	100
51.00	26.20	29.83
0.00	0.00	0.00
0.00	0.00	0.00

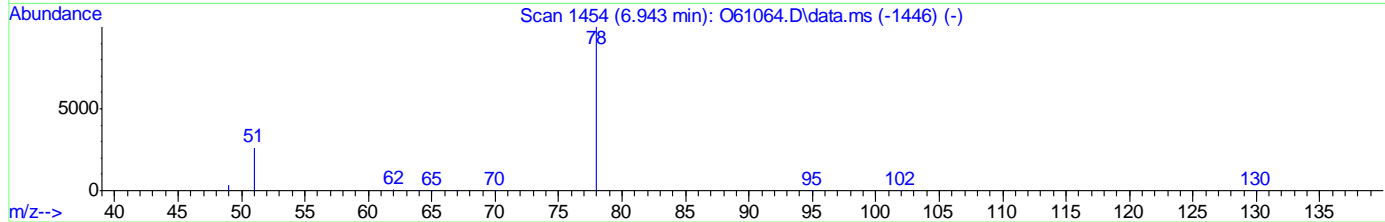
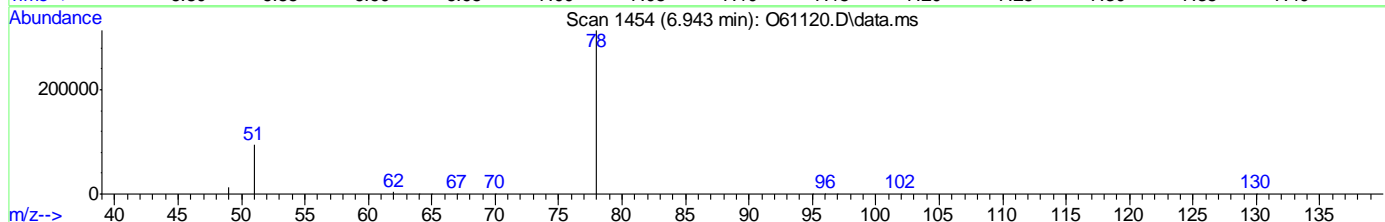
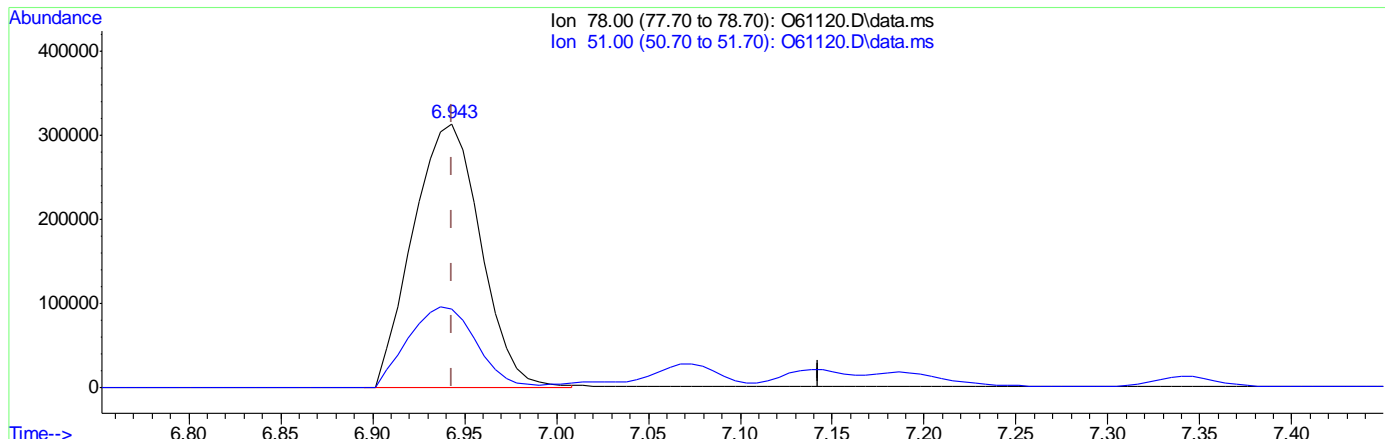
7.6.5.2
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\090820\
 Data File : O61120.D
 Acq On : 8 Sep 2020 1:55 pm
 Operator : melissam
 Sample : icc2352-5
 Misc : MS47137,VO2352,,,,,
 ALS Vial : 5 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 08 14:42:29 2020
 Quant Method : C:\msdchem\2\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Fri Sep 04 07:54:30 2020
 Response via : Initial Calibration



(12) Benzene ()
 6.943min (+0.000) 10.46ug/L m
 response 799075

Ion	Exp%	Act%
78.00	100	100
51.00	26.20	29.83
0.00	0.00	0.00
0.00	0.00	0.00

7.6.5.3
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\090820\
 Data File : O61121.D
 Acq On : 8 Sep 2020 2:15 pm
 Operator : manager
 Sample : ic2352-6 Inst : MSVOA12
 Misc : MS47137,VO2352,,,,,
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 09 12:09:36 2020
 Quant Method : C:\msdchem\2\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Fri Sep 04 07:54:30 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
Internal Standards							
1) Fluorobenzene	7.352	96	283380	5.00	ug/L	0.00	
18) Chlorobenzene-d5	10.447	117	209327	5.00	ug/L	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.079	65	123126	5.51	ug/L	0.00	
Spiked Amount	5.000	Range 74 - 125	Recovery	=	110.20%		
19) Toluene-d8	8.900	98	255819	5.57	ug/L	0.00	
Spiked Amount	5.000	Range 88 - 111	Recovery	=	111.40%#		
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.916	62	379724	12.22	ug/L		97
3) Chloromethane	2.810	50	536919	10.59	ug/L		94
4) 1,1-Dichloroethene	4.092	61	555757	17.27	ug/L		83
5) Methylene Chloride	4.707	49	841969	13.20	ug/L		94
6) trans-1,2-Dichloroethene	4.869	61	671373	17.81	ug/L		74
7) 1,1-Dichloroethane	5.514	63	781589	16.55	ug/L		97
8) cis-1,2-Dichloroethene	6.072	96	346056	12.99	ug/L #		66
9) Chloroform	6.333	83	617988	12.64	ug/L		95
10) Carbon Tetrachloride	6.511	117	404173	13.35	ug/L		87
11) 1,1,1-Trichloroethane	6.576	97	467816	13.03	ug/L		88
12) Benzene	6.943	78	1257981m	16.02	ug/L		
14) 1,2-Dichloroethane	7.145	62	671818	18.07	ug/L		89
15) Trichloroethene	7.518	95	362748	12.23	ug/L		98
16) 1,2-Dichloropropane	8.043	63	459058	17.53	ug/L		93
17) cis-1,3-Dichloropropene	8.715	75	528281	16.45	ug/L		97
20) trans-1,3-Dichloropropene	9.343	75	502755	14.42	ug/L		99
21) Tetrachloroethene	9.343	166	302083	11.72	ug/L		96
22) 1,4-Dichlorobenzene	12.827	146	640186	12.13	ug/L		97
23) 1,2-Dibromo-3-Chloropr...	14.038	75	174616	17.39	ug/L		84

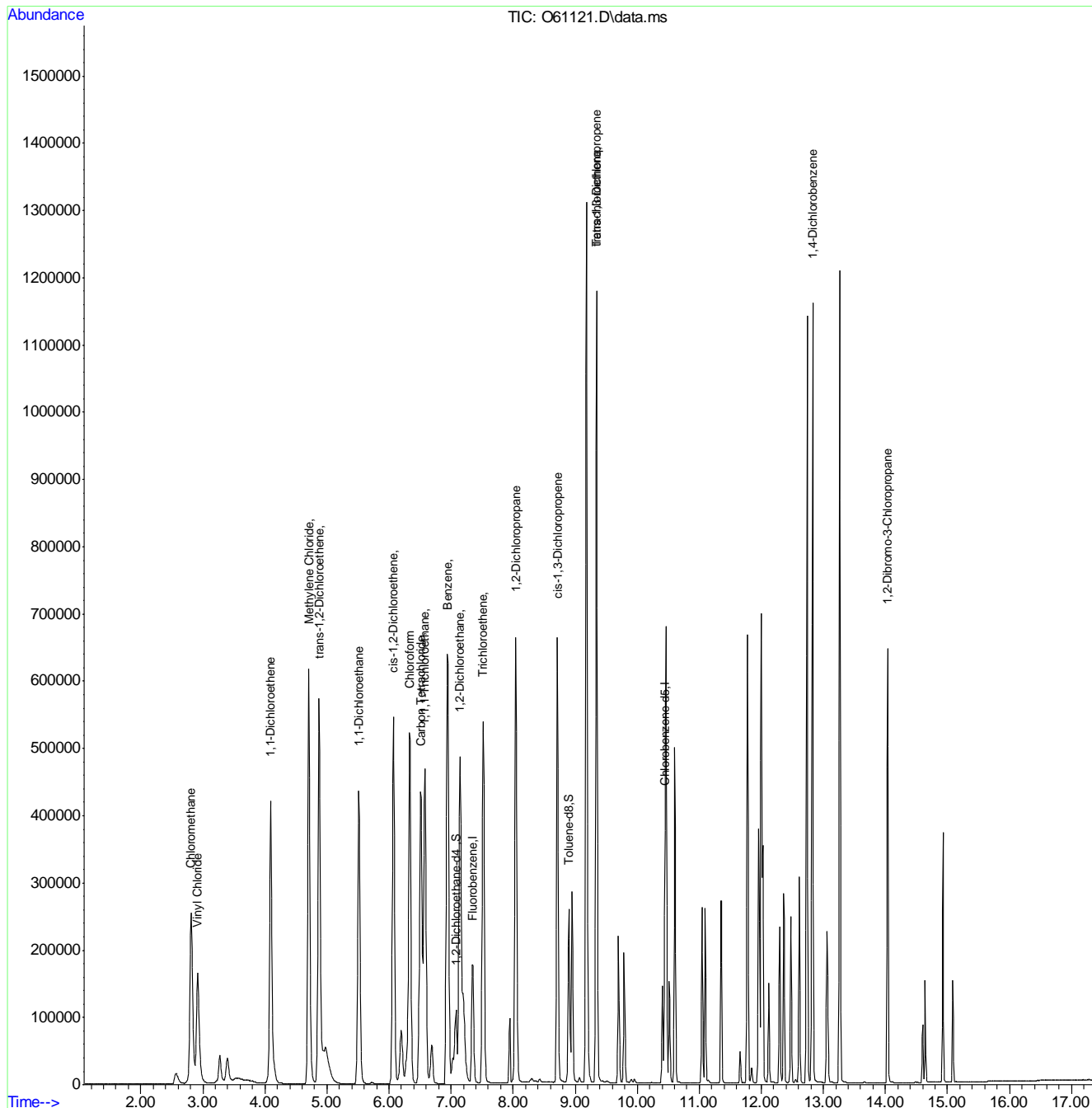
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\090820\
 Data File : O61121.D
 Acq On : 8 Sep 2020 2:15 pm
 Operator : manager
 Sample : ic2352-6
 Misc : MS47137,VO2352,,,,,
 ALS Vial : 6 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 09 12:09:36 2020
 Quant Method : C:\msdchem\2\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Fri Sep 04 07:54:30 2020
 Response via : Initial Calibration



Manual Integration Approval Summary

Sample Number: VO2352-IC2352 **Method:** SW846 8260B BY SIM
Lab FileID: O61121.D **Analyst approved:** 09/10/20 08:40 Akari Giraldo
Injection Time: 09/08/20 14:15 **Supervisor approved:** 09/10/20 08:47 Melissa Mangual

Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzene	71-43-2		6.94	Poor instrument integration

7.6.6.1

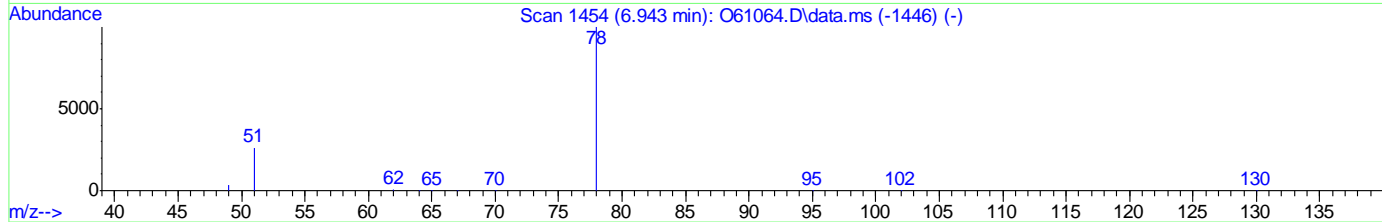
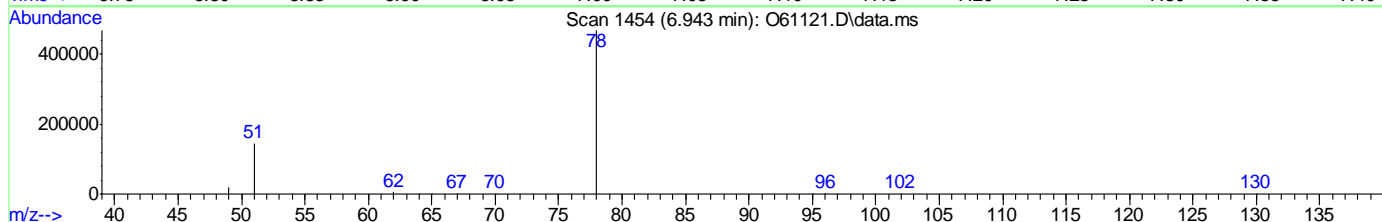
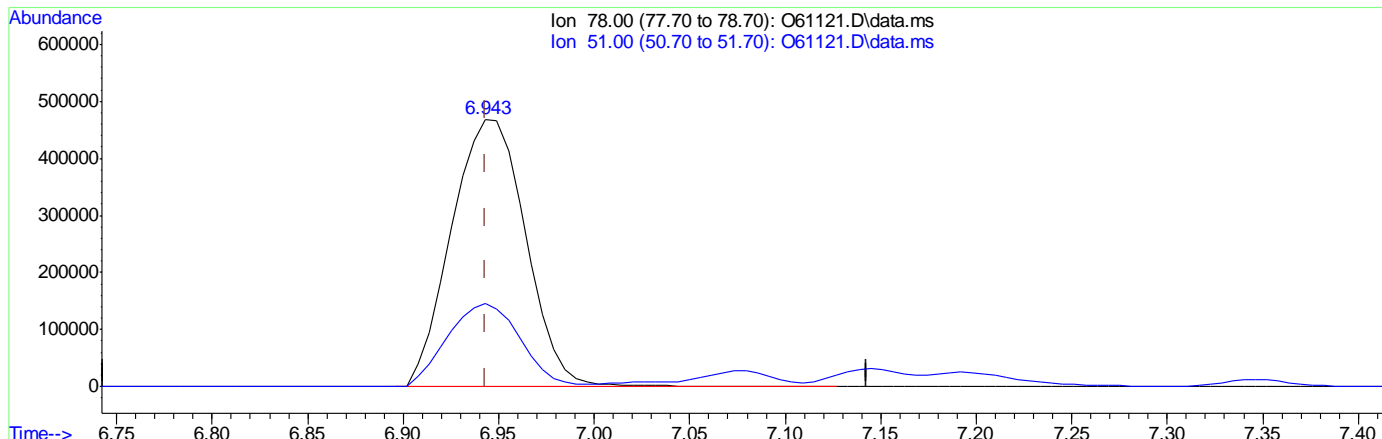
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Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\090820\
 Data File : O61121.D
 Acq On : 8 Sep 2020 2:15 pm
 Operator : manager
 Sample : ic2352-6
 Misc : MS47137,VO2352,,,,,
 ALS Vial : 6 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 08 14:42:31 2020
 Quant Method : C:\msdchem\2\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Fri Sep 04 07:54:30 2020
 Response via : Initial Calibration



TIC: O61121.D\data.ms

(12) Benzene ()
 6.943min (+0.000) 16.10ug/L
 response 1264549

Ion	Exp%	Act%
78.00	100	100
51.00	26.20	31.02
0.00	0.00	0.00
0.00	0.00	0.00

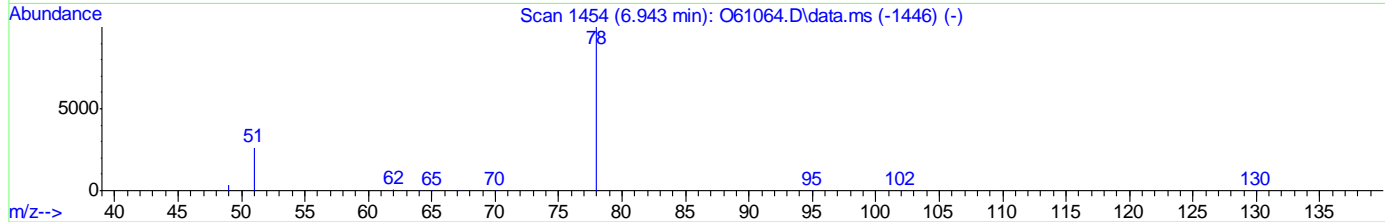
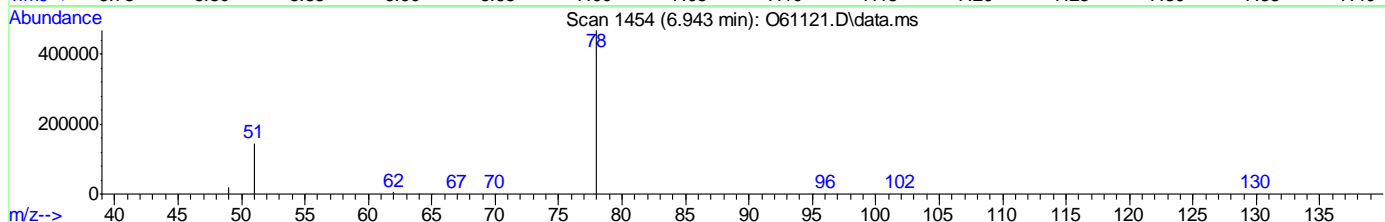
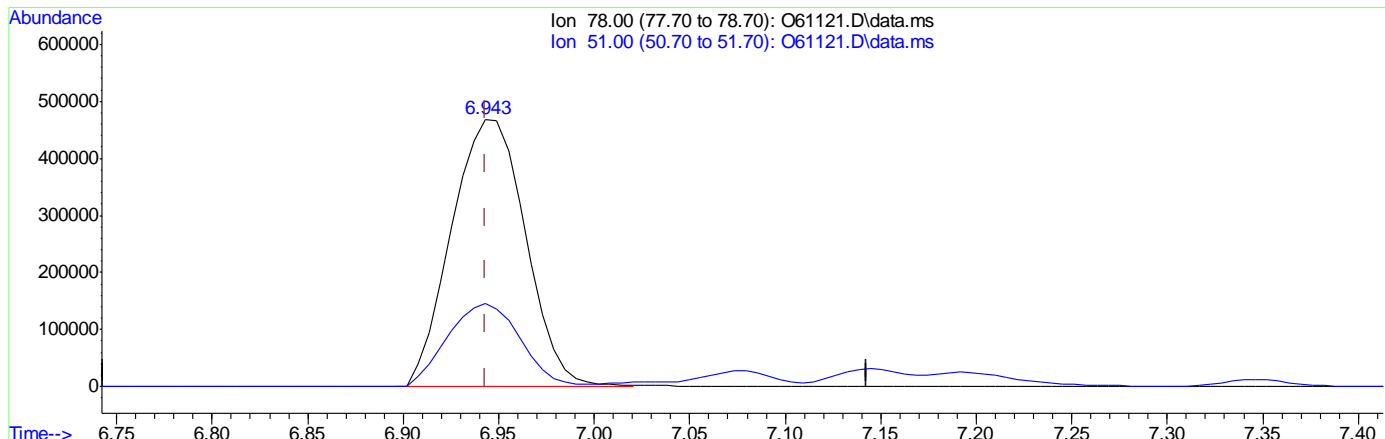
7.6.6.2
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\090820\
 Data File : O61121.D
 Acq On : 8 Sep 2020 2:15 pm
 Operator : manager
 Sample : ic2352-6
 Misc : MS47137,VO2352,,,,,
 ALS Vial : 6 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 08 14:42:31 2020
 Quant Method : C:\msdchem\2\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Fri Sep 04 07:54:30 2020
 Response via : Initial Calibration



TIC: O61121.D\data.ms

(12) Benzene ()
 6.943min (+0.000) 16.02ug/L m
 response 1257981

Ion	Exp%	Act%
78.00	100	100
51.00	26.20	31.02
0.00	0.00	0.00
0.00	0.00	0.00

7.6.6.3
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\090820\
 Data File : O61122.D
 Acq On : 8 Sep 2020 2:36 pm
 Operator : manager
 Sample : ic2352-7 Inst : MSVOA12
 Misc : MS47137,VO2352,,,,,
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 09 12:09:10 2020
 Quant Method : C:\msdchem\2\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Fri Sep 04 07:54:30 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
Internal Standards							
1) Fluorobenzene	7.352	96	288238	5.00	ug/L	0.00	
18) Chlorobenzene-d5	10.447	117	211205	5.00	ug/L	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.080	65	123556	5.44	ug/L	0.00	
Spiked Amount	5.000	Range 74 - 125	Recovery	=	108.80%		
19) Toluene-d8	8.900	98	260318	5.62	ug/L	0.00	
Spiked Amount	5.000	Range 88 - 111	Recovery	=	112.40%#		
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.908	62	473041	14.96	ug/L		97
3) Chloromethane	2.807	50	703261	14.73	ug/L		93
4) 1,1-Dichloroethene	4.089	61	743005	22.69	ug/L		83
5) Methylene Chloride	4.703	49	1128317	20.68	ug/L		93
6) trans-1,2-Dichloroethene	4.869	61	902631	23.55	ug/L		76
7) 1,1-Dichloroethane	5.514	63	1058794	22.04	ug/L		97
8) cis-1,2-Dichloroethene	6.072	96	471054	17.48	ug/L #		68
9) Chloroform	6.333	83	835571	16.80	ug/L		95
10) Carbon Tetrachloride	6.511	117	543755	17.38	ug/L		88
11) 1,1,1-Trichloroethane	6.576	97	631682	17.16	ug/L		89
12) Benzene	6.943	78	1696873m	21.25	ug/L		
14) 1,2-Dichloroethane	7.145	62	906149	23.96	ug/L		89
15) Trichloroethene	7.518	95	489099	16.05	ug/L		97
16) 1,2-Dichloropropane	8.044	63	619396	23.25	ug/L		92
17) cis-1,3-Dichloropropene	8.711	75	721104	21.15	ug/L		100
20) trans-1,3-Dichloropropene	9.343	75	685086	18.68	ug/L		98
21) Tetrachloroethene	9.343	166	405790	15.54	ug/L		97
22) 1,4-Dichlorobenzene	12.827	146	862973	15.91	ug/L		96
23) 1,2-Dibromo-3-Chloropr...	14.038	75	240869	23.78	ug/L		87

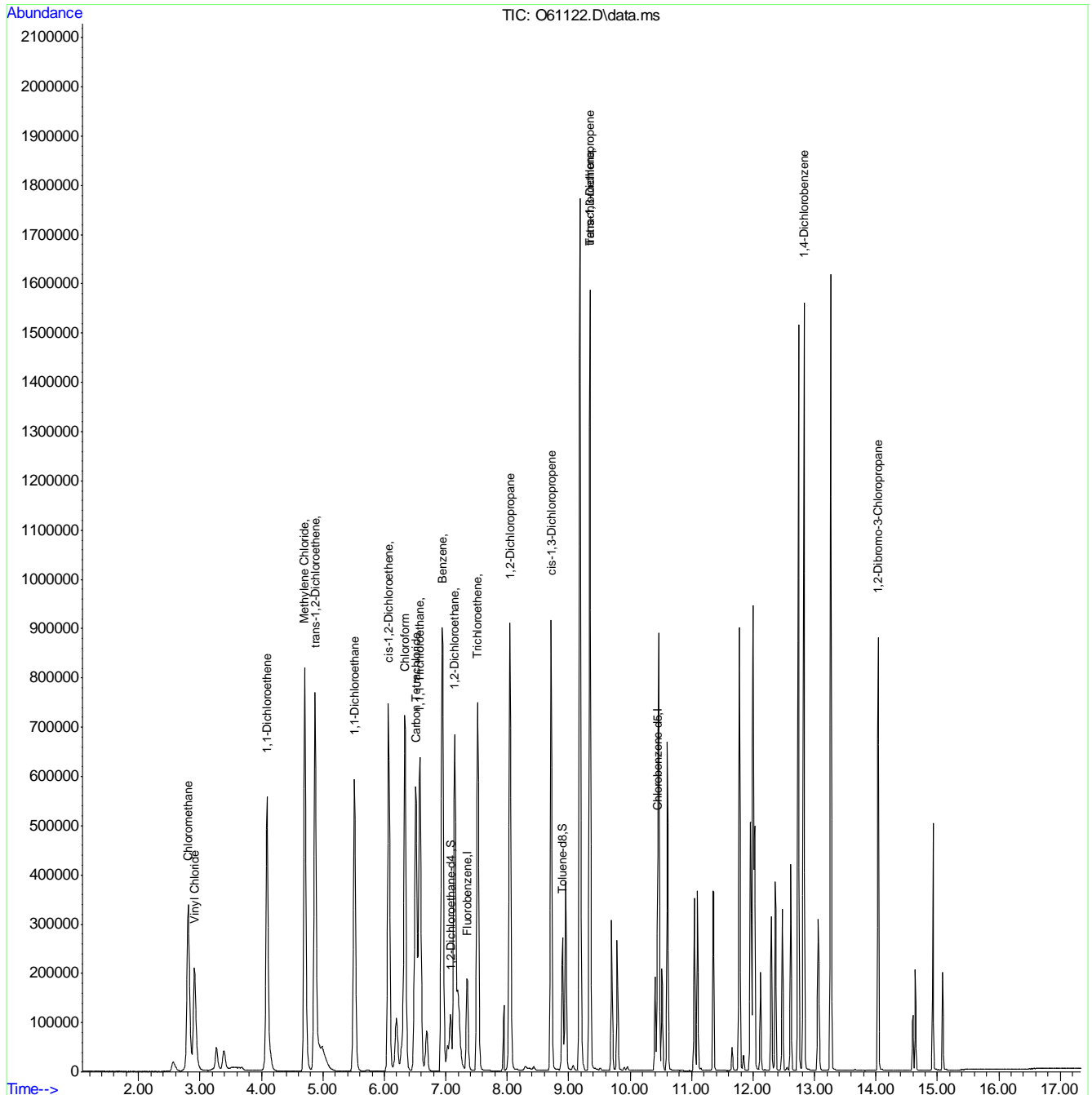
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\090820\
 Data File : O61122.D
 Acq On : 8 Sep 2020 2:36 pm
 Operator : manager
 Sample : ic2352-7
 Misc : MS47137,VO2352,,,,,
 ALS Vial : 7 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 09 12:09:10 2020
 Quant Method : C:\msdchem\2\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Fri Sep 04 07:54:30 2020
 Response via : Initial Calibration



7.6.7
7

Manual Integration Approval Summary

Sample Number: VO2352-IC2352 **Method:** SW846 8260B BY SIM
Lab FileID: O61122.D **Analyst approved:** 09/10/20 08:40 Akari Giraldo
Injection Time: 09/08/20 14:36 **Supervisor approved:** 09/10/20 08:47 Melissa Mangual

Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzene	71-43-2		6.94	Poor instrument integration

7.6.7.1

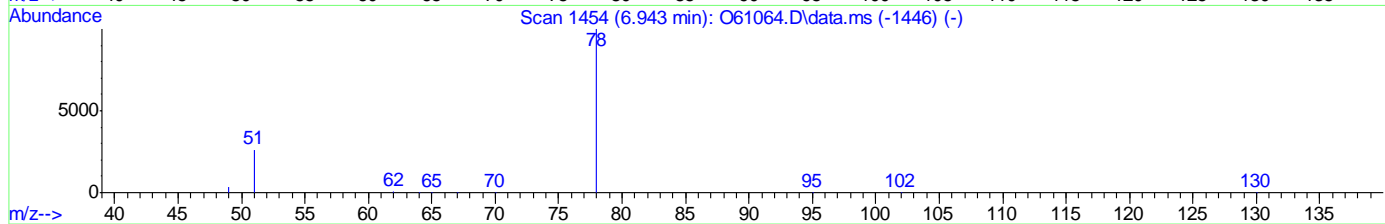
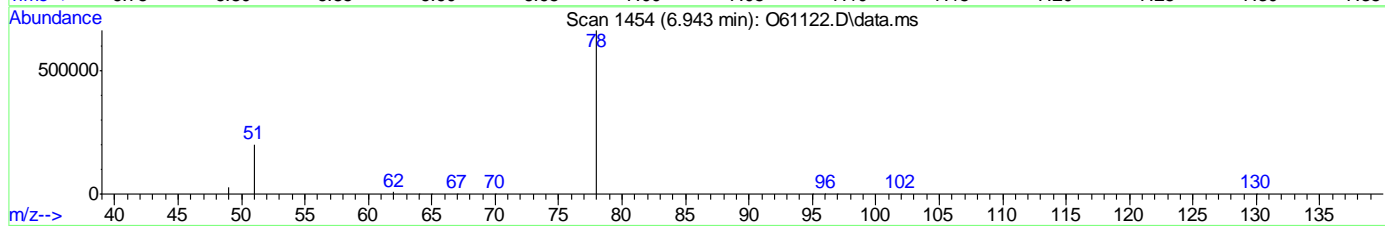
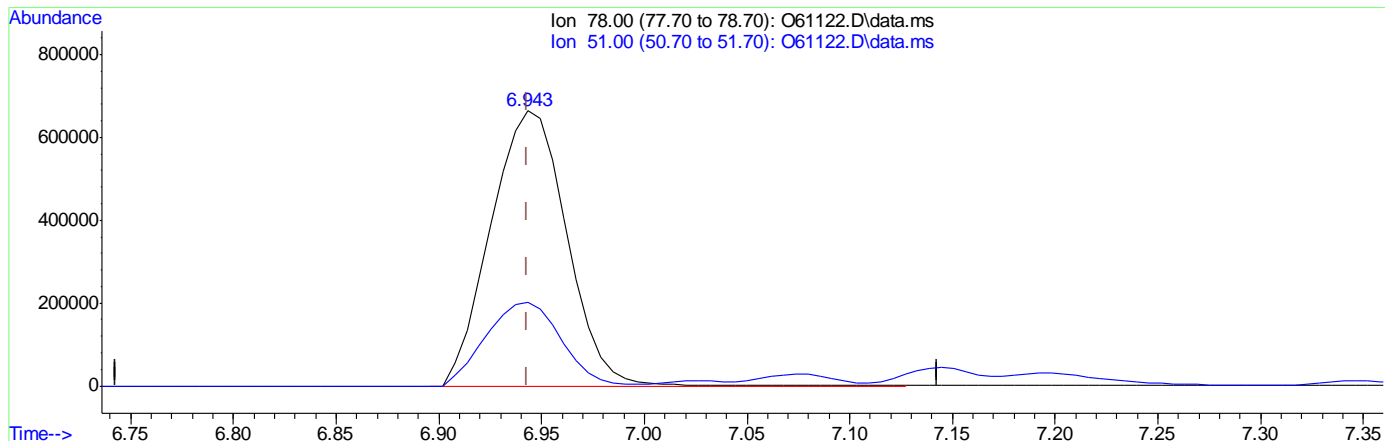
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\090820\
 Data File : O61122.D
 Acq On : 8 Sep 2020 2:36 pm
 Operator : manager
 Sample : ic2352-7
 Misc : MS47137,VO2352,,,,,
 ALS Vial : 7 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 08 14:54:58 2020
 Quant Method : C:\msdchem\2\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Fri Sep 04 07:54:30 2020
 Response via : Initial Calibration



TIC: O61122.D\data.ms

(12) Benzene ()
 6.943min (+0.000) 21.37ug/L
 response 1706822

Ion	Exp%	Act%
78.00	100	100
51.00	26.20	30.47
0.00	0.00	0.00
0.00	0.00	0.00

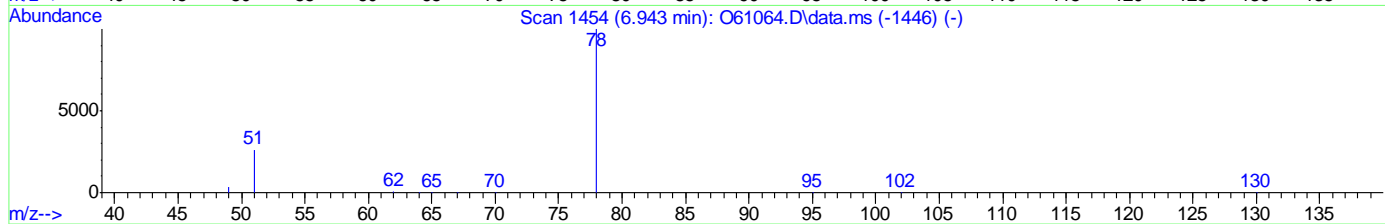
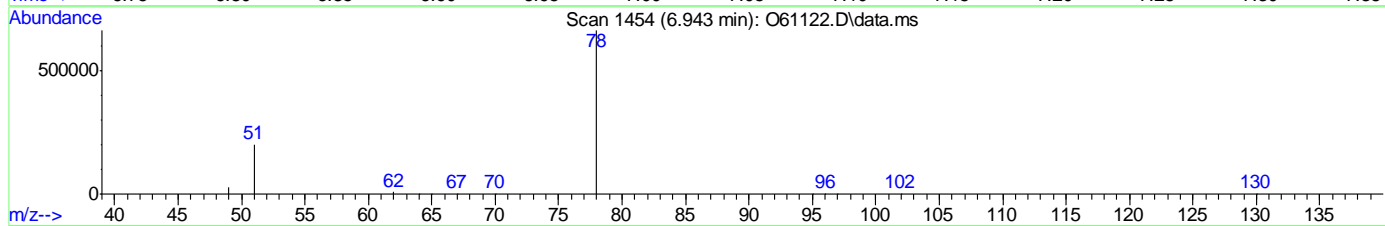
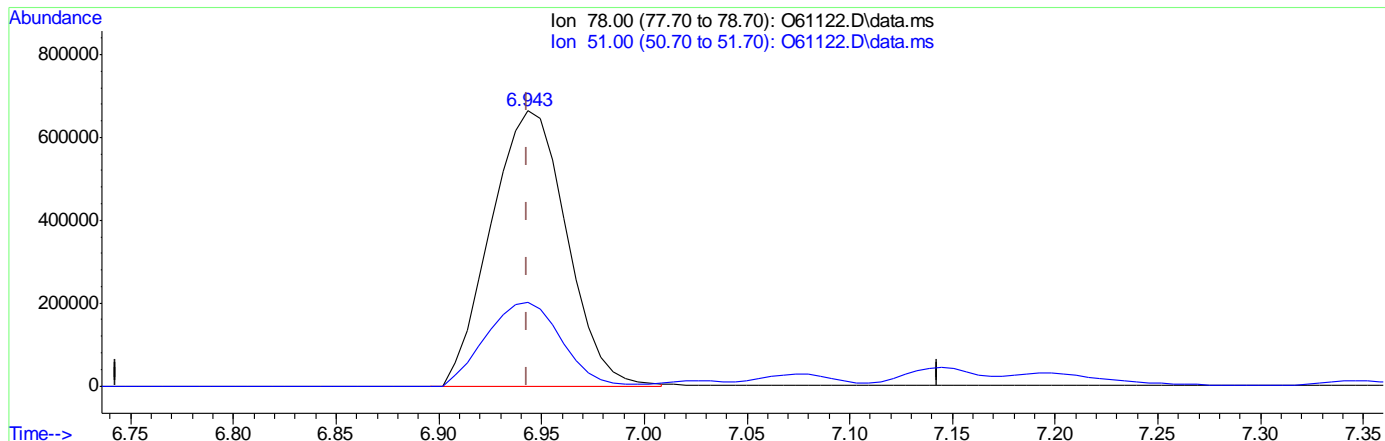
7.6.7.2
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\090820\
 Data File : O61122.D
 Acq On : 8 Sep 2020 2:36 pm
 Operator : manager
 Sample : ic2352-7
 Misc : MS47137,VO2352,,,,,
 ALS Vial : 7 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 08 14:54:58 2020
 Quant Method : C:\msdchem\2\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Fri Sep 04 07:54:30 2020
 Response via : Initial Calibration



TIC: O61122.D\data.ms

(12) Benzene ()
 6.943min (+0.000) 21.25ug/L m
 response 1696873

Ion	Exp%	Act%
78.00	100	100
51.00	26.20	30.47
0.00	0.00	0.00
0.00	0.00	0.00

7.6.7.3
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\090820\
 Data File : O61124.D
 Acq On : 8 Sep 2020 3:16 pm
 Operator : manager
 Sample : icv2352-5 Inst : MSVOA12
 Misc : MS47137,VO2352,,,,,
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 09 12:11:11 2020
 Quant Method : C:\msdchem\2\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
Internal Standards							
1) Fluorobenzene	7.346	96	269781	5.00	ug/L	0.00	
18) Chlorobenzene-d5	10.447	117	199638	5.00	ug/L	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.073	65	118119	4.98	ug/L	0.00	
Spiked Amount	5.000	Range 74 - 125	Recovery	=	99.60%		
19) Toluene-d8	8.900	98	244362	5.01	ug/L	0.00	
Spiked Amount	5.000	Range 88 - 111	Recovery	=	100.20%		
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.901	62	235919	9.56	ug/L		97
3) Chloromethane	2.799	50	341325	9.44	ug/L		94
4) 1,1-Dichloroethene	4.088	61	377200	10.33	ug/L		82
5) Methylene Chloride	4.699	49	604104	10.21	ug/L		92
6) trans-1,2-Dichloroethene	4.865	61	451495	10.42	ug/L		74
7) 1,1-Dichloroethane	5.510	63	526268	10.38	ug/L		97
8) cis-1,2-Dichloroethene	6.066	96	229693	10.18	ug/L #		63
9) Chloroform	6.333	83	409605	9.97	ug/L		94
10) Carbon Tetrachloride	6.510	117	265582	10.37	ug/L		89
11) 1,1,1-Trichloroethane	6.576	97	304075	10.26	ug/L		88
12) Benzene	6.943	78	862650m	10.81	ug/L		
14) 1,2-Dichloroethane	7.145	62	461873	10.43	ug/L		89
15) Trichloroethene	7.518	95	249696	10.63	ug/L		97
16) 1,2-Dichloropropane	8.043	63	316184	10.85	ug/L		94
17) cis-1,3-Dichloropropene	8.711	75	359076	10.95	ug/L		98
20) trans-1,3-Dichloropropene	9.343	75	344476	11.32	ug/L		98
21) Tetrachloroethene	9.343	166	198970	10.33	ug/L		96
22) 1,4-Dichlorobenzene	12.827	146	429249	10.21	ug/L		97
23) 1,2-Dibromo-3-Chloropr...	14.037	75	115169	10.43	ug/L		81

(#) = qualifier out of range (m) = manual integration (+) = signals summed

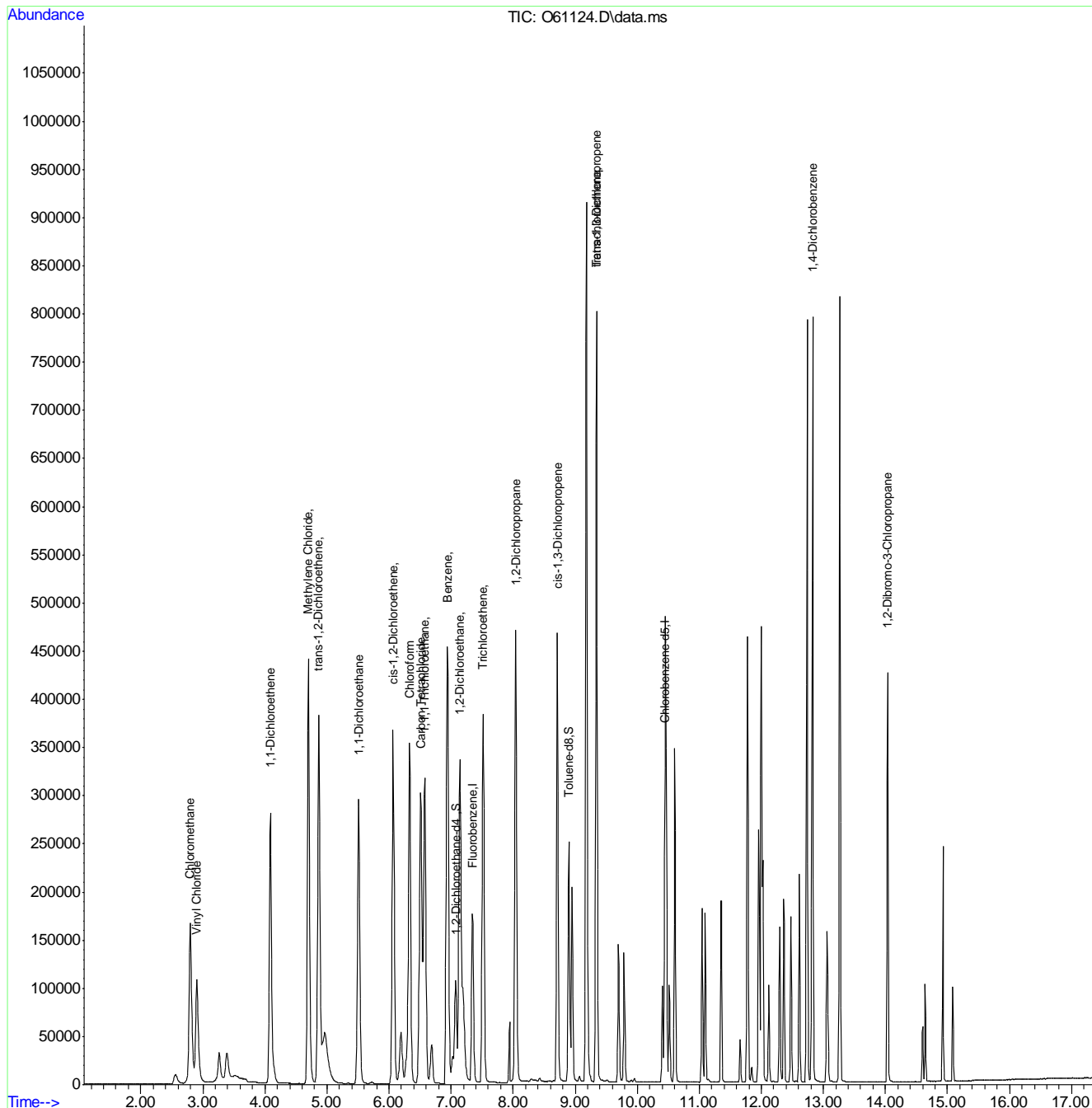
7.6.8
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\090820\
 Data File : O61124.D
 Acq On : 8 Sep 2020 3:16 pm
 Operator : manager
 Sample : icv2352-5
 Misc : MS47137,VO2352,,,,,
 ALS Vial : 9 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 09 12:11:11 2020
 Quant Method : C:\msdchem\2\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration



8'9'7

Manual Integration Approval Summary

Sample Number: VO2352-ICV2352 **Method:** SW846 8260B BY SIM
Lab FileID: O61124.D **Analyst approved:** 09/10/20 08:40 Akari Giraldo
Injection Time: 09/08/20 15:16 **Supervisor approved:** 09/10/20 08:47 Melissa Mangual

Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzene	71-43-2		6.94	Poor instrument integration

7.6.8.1

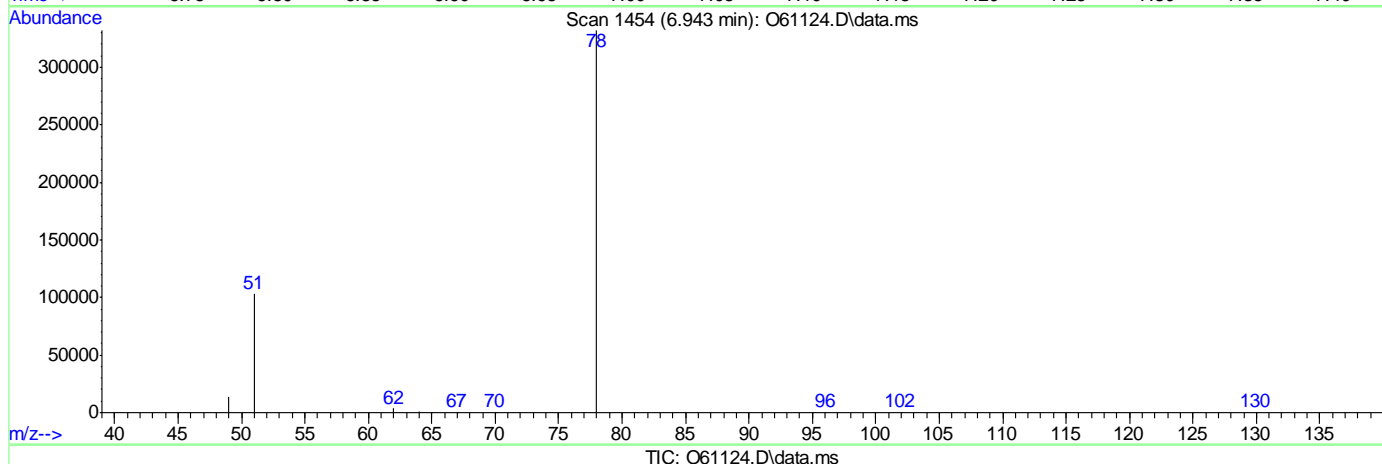
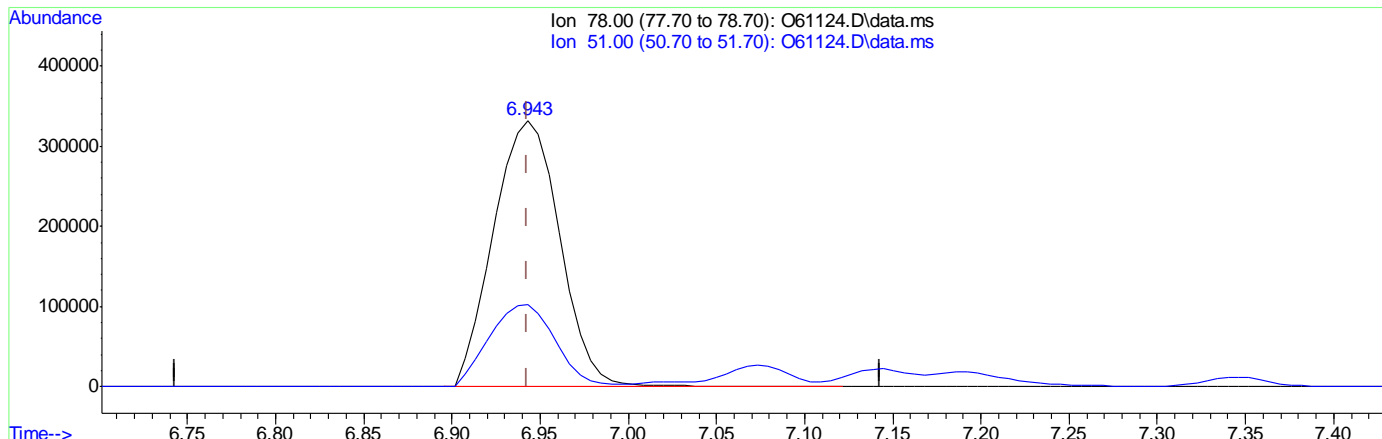
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\090820\
 Data File : O61124.D
 Acq On : 8 Sep 2020 3:16 pm
 Operator : manager
 Sample : icv2352-5
 Misc : MS47137,VO2352,,,,,
 ALS Vial : 9 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 09 12:10:53 2020
 Quant Method : C:\msdchem\2\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration



(12) Benzene ()
 6.943min (-0.000) 10.89ug/L
 response 868530

Ion	Exp%	Act%
78.00	100	100
51.00	26.20	31.04
0.00	0.00	0.00
0.00	0.00	0.00

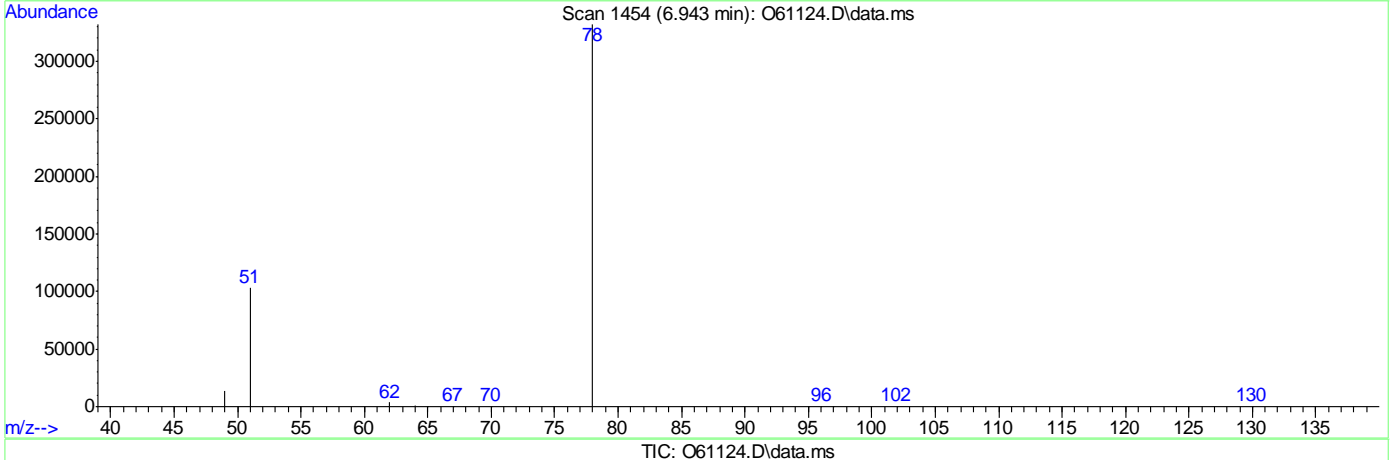
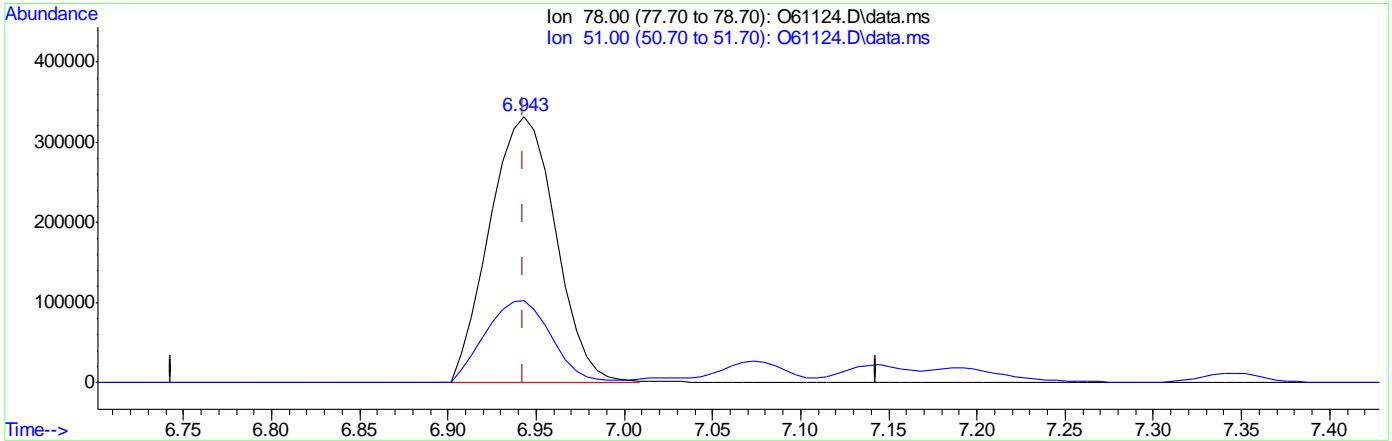
7.682
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\090820\
 Data File : O61124.D
 Acq On : 8 Sep 2020 3:16 pm
 Operator : manager
 Sample : icv2352-5
 Misc : MS47137,VO2352,,,,,
 ALS Vial : 9 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 09 12:10:53 2020
 Quant Method : C:\msdchem\2\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration



(12) Benzene ()
 6.943min (-0.000) 10.81ug/L m
 response 862650

Ion	Exp%	Act%
78.00	100	100
51.00	26.20	31.04
0.00	0.00	0.00
0.00	0.00	0.00

7.68.3
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-11-2020\vo2354\
 Data File : O61155.d
 Acq On : 10 Sep 2020 8:05 am
 Operator : melissam
 Sample : cc2352-5
 Misc : MS47137,VO2354,,,,,
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 11 05:39:02 2020
 Quant Method : C:\msdchem\1\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)	

Internal Standards							
1) Fluorobenzene	7.346	96	250240	5.00	ug/L	0.00	
18) Chlorobenzene-d5	10.441	117	180864	5.00	ug/L	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.074	65	117264	5.34	ug/L	0.00	
Spiked Amount	5.000	Range 74 - 125	Recovery	=	106.80%		
19) Toluene-d8	8.896	98	219227	4.96	ug/L	0.00	
Spiked Amount	5.000	Range 88 - 111	Recovery	=	99.20%		
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.908	62	265289	11.83	ug/L		96
3) Chloromethane	2.806	50	397329	12.16	ug/L		95
4) 1,1-Dichloroethene	4.089	61	371845	10.97	ug/L		79
5) Methylene Chloride	4.699	49	580906	10.66	ug/L		91
6) trans-1,2-Dichloroethene	4.865	61	441009	10.99	ug/L		71
7) 1,1-Dichloroethane	5.510	63	501035	10.66	ug/L		97
8) cis-1,2-Dichloroethene	6.066	96	202233	9.66	ug/L #		56
9) Chloroform	6.327	83	378608	9.94	ug/L		92
10) Carbon Tetrachloride	6.511	117	215935	9.09	ug/L		88
11) 1,1,1-Trichloroethane	6.576	97	258609	9.41	ug/L		82
12) Benzene	6.937	78	750714	10.14	ug/L		88
14) 1,2-Dichloroethane	7.139	62	432491	10.53	ug/L		90
15) Trichloroethene	7.512	95	211669	9.72	ug/L		97
16) 1,2-Dichloropropane	8.040	63	289346	10.70	ug/L		96
17) cis-1,3-Dichloropropene	8.707	75	302444	9.94	ug/L		91
20) trans-1,3-Dichloropropene	9.343	75	292856	10.62	ug/L		92
21) Tetrachloroethene	9.337	166	159473	9.13	ug/L		91
22) 1,4-Dichlorobenzene	12.821	146	344775	9.05	ug/L		94
23) 1,2-Dibromo-3-Chloropr...	14.038	75	92331	9.23	ug/L		82

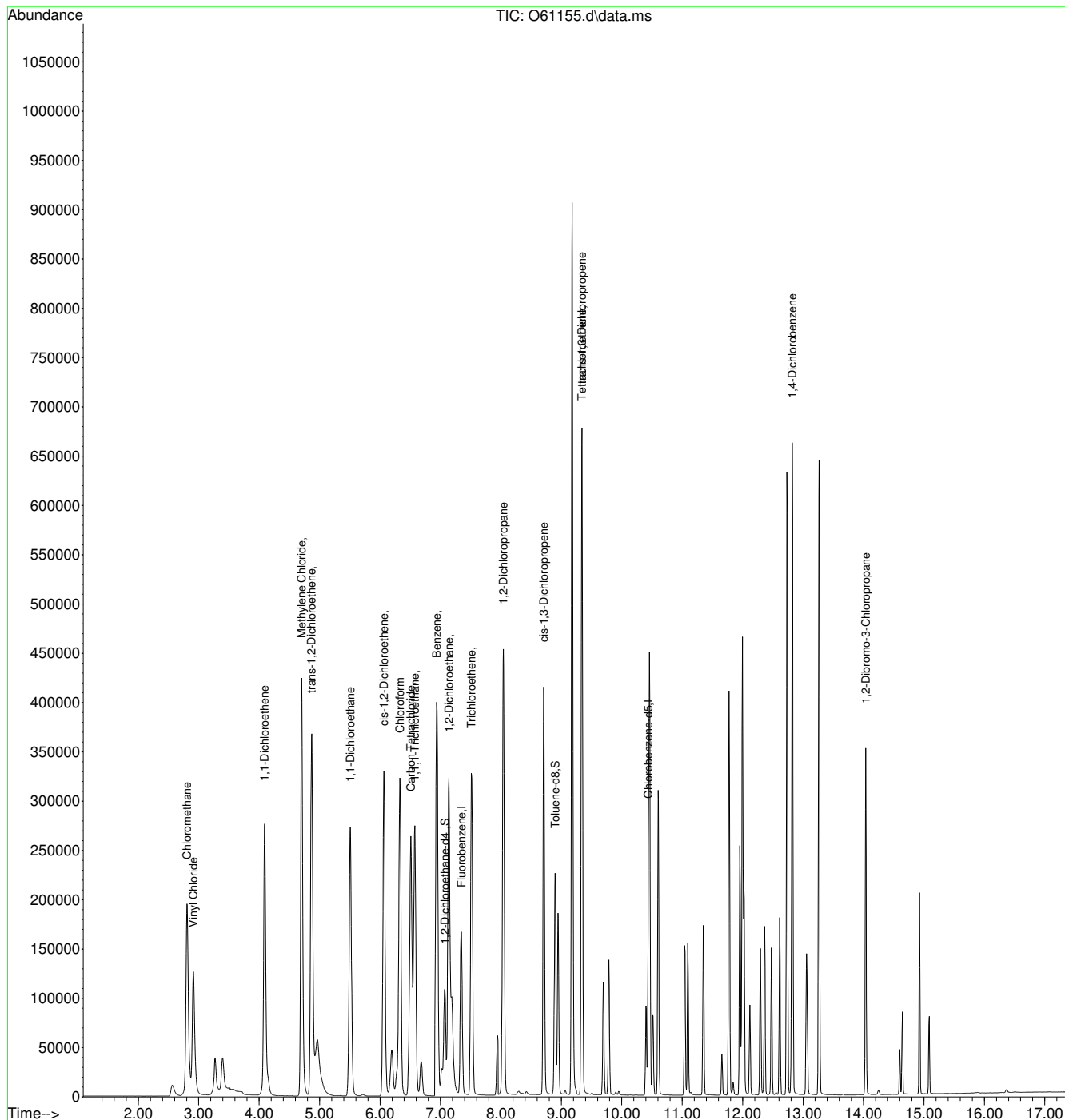
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.6.9
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-11-2020\vo2354\
 Data File : O61155.d
 Acq On : 10 Sep 2020 8:05 am
 Operator : melissam
 Sample : cc2352-5
 Misc : MS47137,VO2354,,,,,
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 11 05:39:02 2020
 Quant Method : C:\msdchem\1\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration



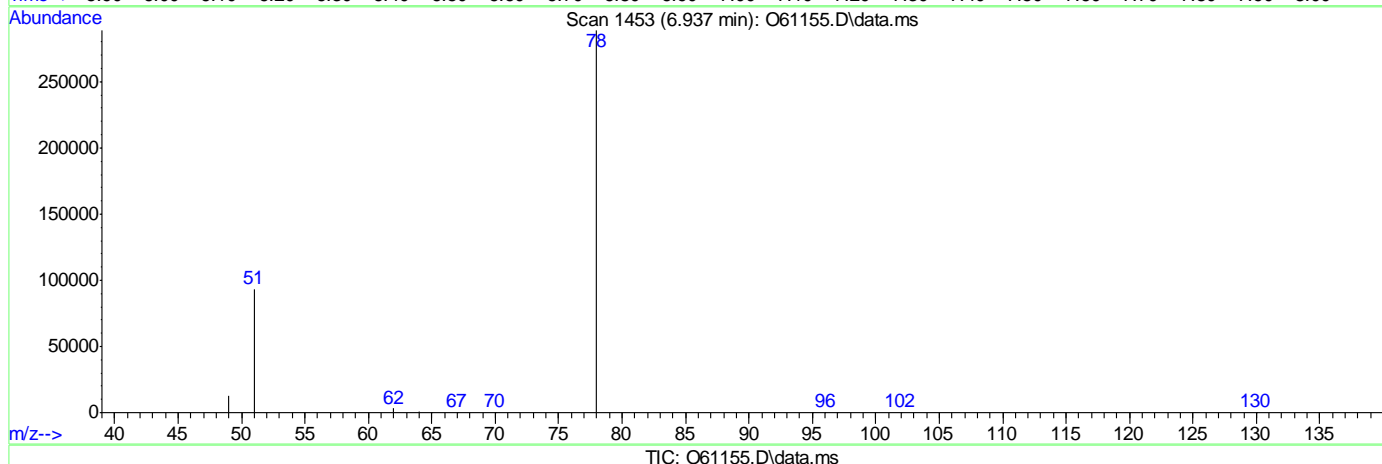
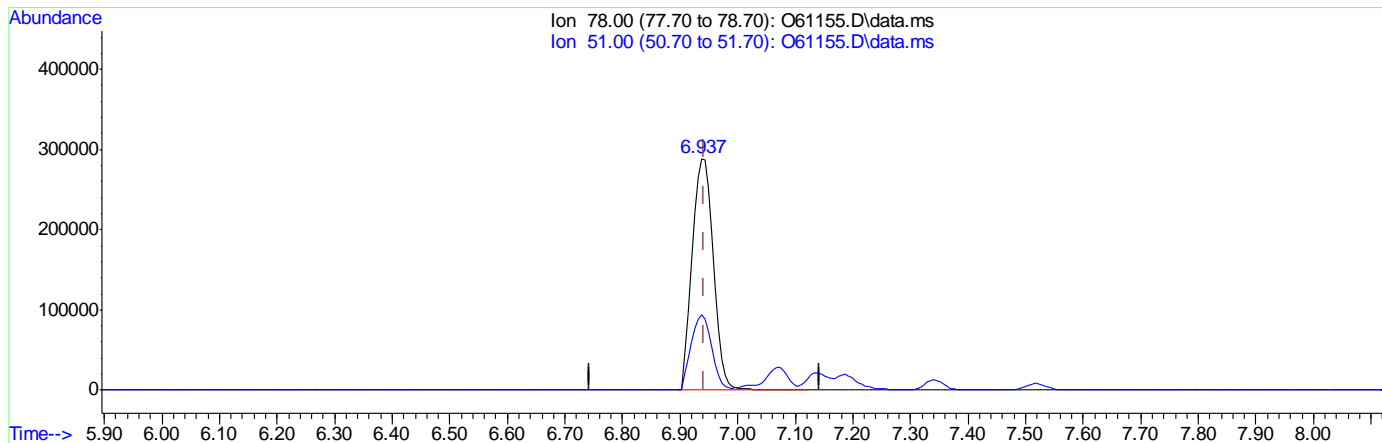
6.9.7

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\091020\
 Data File : O61155.D
 Acq On : 10 Sep 2020 8:05 am
 Operator : melissam
 Sample : cc2352-5
 Misc : MS47137,VO2354,,,,,
 ALS Vial : 3 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 10 08:24:43 2020
 Quant Method : C:\msdchem\2\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration



(12) Benzene ()

6.937min (-0.006) 10.14ug/L

response 750714

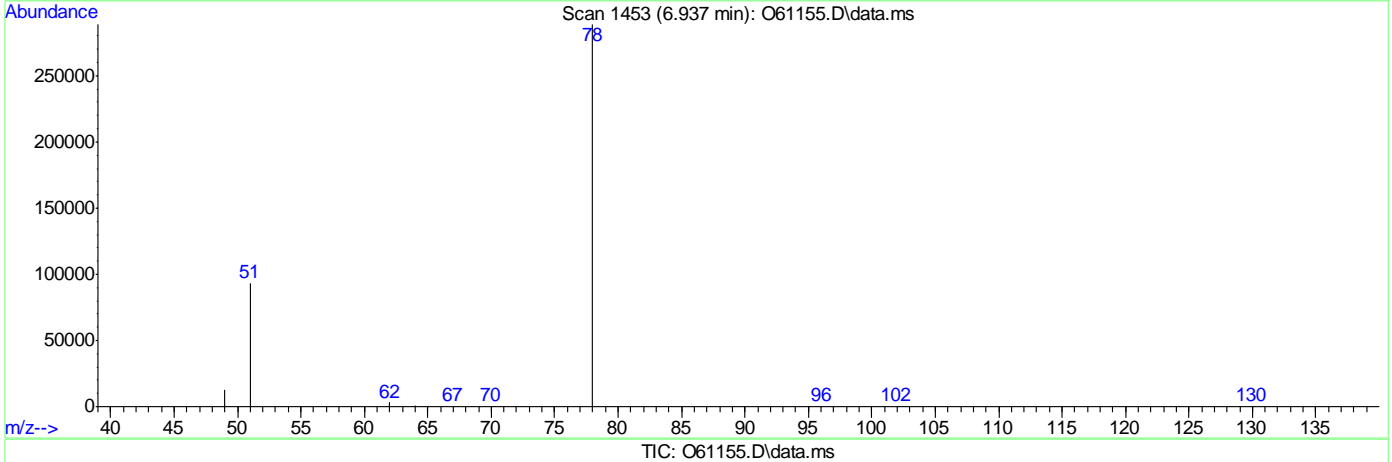
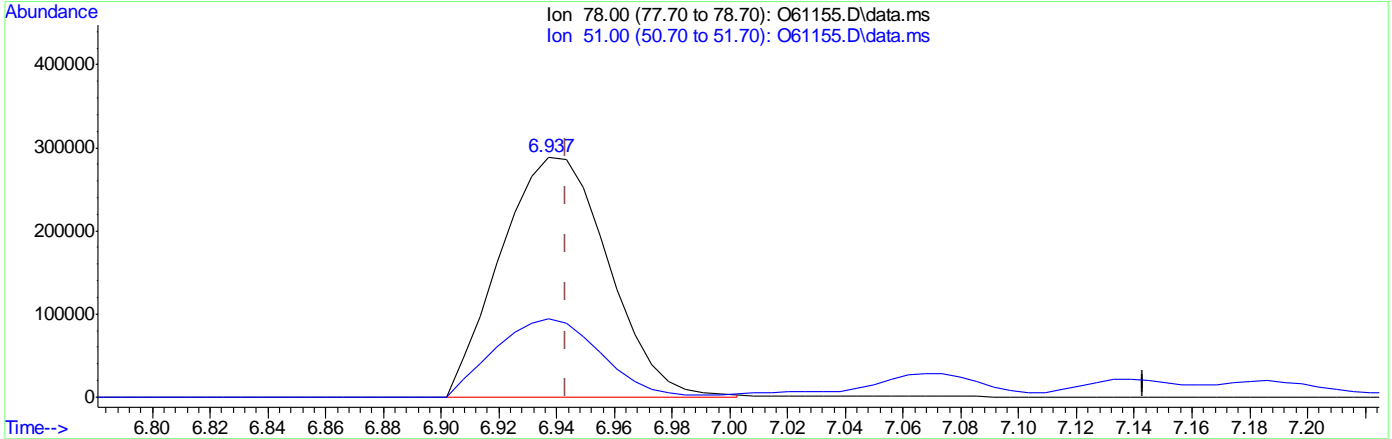
Ion	Exp%	Act%
78.00	100	100
51.00	26.20	32.41
0.00	0.00	0.00
0.00	0.00	0.00

7.69.1
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\091020\
 Data File : O61155.D
 Acq On : 10 Sep 2020 8:05 am
 Operator : melissam
 Sample : cc2352-5 Inst : MSVOA12
 Misc : MS47137,VO2354,,,,,
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 10 08:24:43 2020
 Quant Method : C:\msdchem\2\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration



(12) Benzene ()
 6.937min (-0.006) 10.05ug/L m
 response 743971

Ion	Exp%	Act%
78.00	100	100
51.00	26.20	32.41
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-11-2020\vo2354\
 Data File : O61178.d
 Acq On : 10 Sep 2020 4:26 pm
 Operator : melissam
 Sample : ecc2352-5
 Misc : MS47173,VO2354,,,,,
 ALS Vial : 26 Sample Multiplier: 1

Quant Time: Sep 11 05:40:07 2020
 Quant Method : C:\msdchem\1\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)	

Internal Standards							
1) Fluorobenzene	7.346	96	183873	5.00	ug/L	0.00	
18) Chlorobenzene-d5	10.441	117	132738	5.00	ug/L	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.073	65	86562	5.36	ug/L	0.00	
Spiked Amount	5.000	Range 74 - 125	Recovery	=	107.20%		
19) Toluene-d8	8.896	98	157509	4.85	ug/L	0.00	
Spiked Amount	5.000	Range 88 - 111	Recovery	=	97.00%		
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.904	62	228727	14.19	ug/L		97
3) Chloromethane	2.803	50	353152	15.15	ug/L		94
4) 1,1-Dichloroethene	4.088	61	310437	12.47	ug/L		77
5) Methylene Chloride	4.699	49	475102	12.13	ug/L		88
6) trans-1,2-Dichloroethene	4.865	61	365142	12.44	ug/L		70
7) 1,1-Dichloroethane	5.510	63	414384	11.99	ug/L		97
8) cis-1,2-Dichloroethene	6.066	96	160035	10.41	ug/L #		53
9) Chloroform	6.333	83	306353	10.94	ug/L		90
10) Carbon Tetrachloride	6.505	117	172363	9.87	ug/L		86
11) 1,1,1-Trichloroethane	6.576	97	208161	10.31	ug/L		80
12) Benzene	6.943	78	619168	11.39	ug/L		89
14) 1,2-Dichloroethane	7.139	62	343974	11.39	ug/L		92
15) Trichloroethene	7.512	95	178204	11.14	ug/L		96
16) 1,2-Dichloropropane	8.040	63	243008	12.25	ug/L		97
17) cis-1,3-Dichloropropene	8.711	75	233114	10.43	ug/L		92
20) trans-1,3-Dichloropropene	9.343	75	227310	11.23	ug/L		89
21) Tetrachloroethene	9.337	166	132494	10.34	ug/L		90
22) 1,4-Dichlorobenzene	12.827	146	285007	10.20	ug/L		97
23) 1,2-Dibromo-3-Chloropr...	14.037	75	72766	9.91	ug/L #		79

(#) = qualifier out of range (m) = manual integration (+) = signals summed

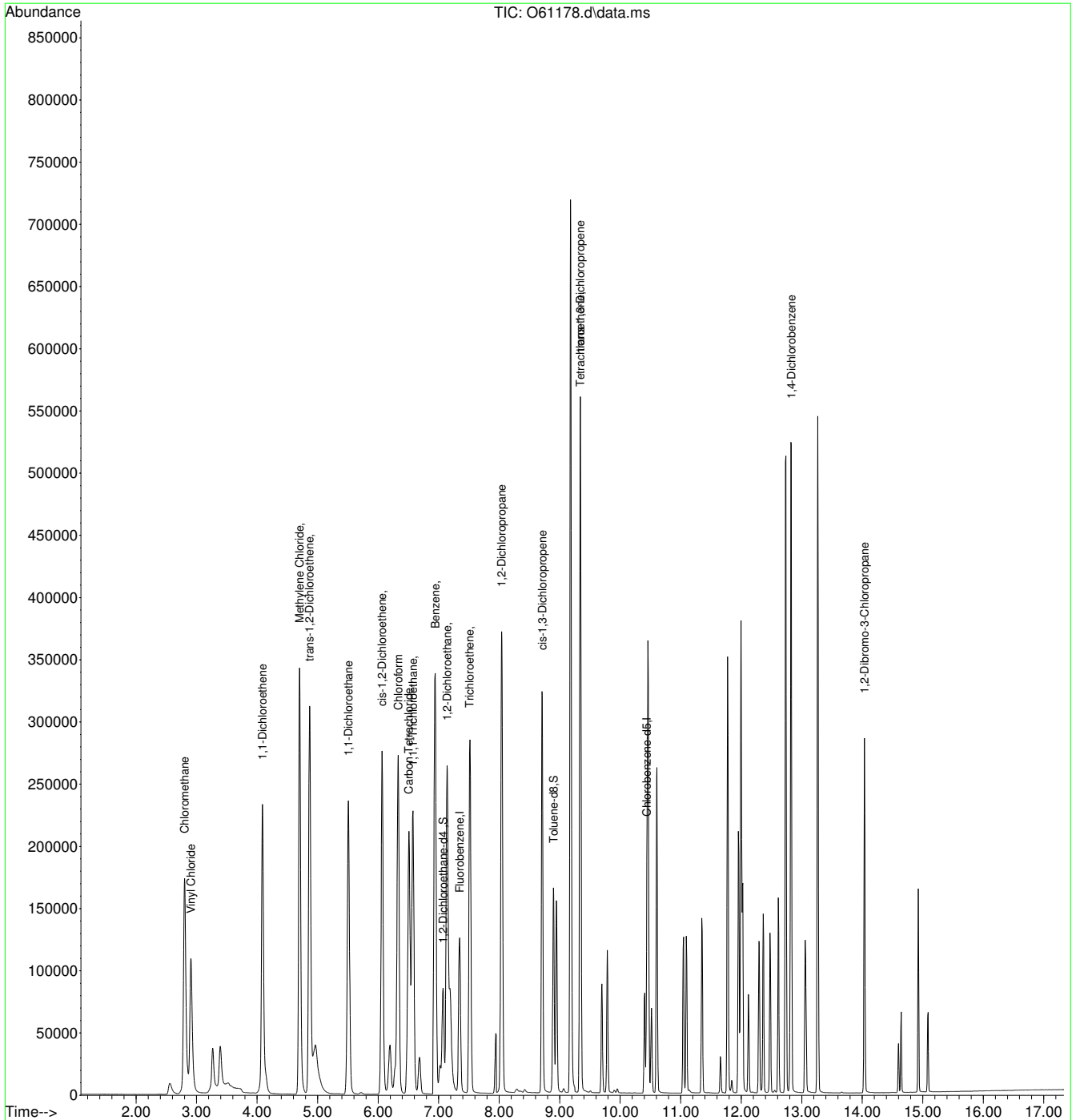
7.6.10
7



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-11-2020\vo2354\
 Data File : O61178.d
 Acq On : 10 Sep 2020 4:26 pm
 Operator : melissam
 Sample : ecc2352-5
 Misc : MS47173,VO2354,,,,,
 ALS Vial : 26 Sample Multiplier: 1

Quant Time: Sep 11 05:40:07 2020
 Quant Method : C:\msdchem\1\methods\SIMCL090820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration



7.6.10
7



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\091120\
 Data File : O61230.D
 Acq On : 11 Sep 2020 3:34 pm
 Operator : stutip
 Sample : IC2356-1 Inst : MSVOA12
 Misc : MS47201,VO2356,,,,,
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 11 18:00:06 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
Internal Standards							
1) Fluorobenzene	7.346	96	316238	5.00	ug/L	0.00	
18) Chlorobenzene-d5	10.441	117	240066	5.00	ug/L	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.074	65	128832	4.64	ug/L	0.00	
Spiked Amount	5.000	Range 74 - 125	Recovery	=	92.80%		
19) Toluene-d8	8.896	98	278677	4.75	ug/L	0.00	
Spiked Amount	5.000	Range 88 - 111	Recovery	=	95.00%		
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.905	62	3529	0.11	ug/L		100
3) Chloromethane	2.799	50	8825m	0.19	ug/L		
4) 1,1-Dichloroethene	4.089	61	4096	0.10	ug/L		83
5) Methylene Chloride	4.700	49	136057	1.74	ug/L		97
6) trans-1,2-Dichloroethene	4.869	61	5203	0.10	ug/L		83
7) 1,1-Dichloroethane	5.514	63	5816	0.10	ug/L		97
8) cis-1,2-Dichloroethene	6.072	96	2981	0.11	ug/L		88
9) Chloroform	6.333	83	5313	0.11	ug/L		81
10) Carbon Tetrachloride	6.505	117	3177	0.11	ug/L		80
11) 1,1,1-Trichloroethane	6.576	97	3749	0.11	ug/L		92
12) Benzene	6.943	78	10630m	0.11	ug/L		
14) 1,2-Dichloroethane	7.139	62	4857	0.09	ug/L		92
15) Trichloroethene	7.512	95	2945	0.11	ug/L		89
16) 1,2-Dichloropropane	8.040	63	3248m	0.09	ug/L		
17) cis-1,3-Dichloropropene	8.711	75	3070	0.08	ug/L		97
20) trans-1,3-Dichloropropene	9.343	75	2765	0.08	ug/L		91
21) Tetrachloroethene	9.343	166	2702m	0.12	ug/L		
22) 1,4-Dichlorobenzene	12.827	146	5272	0.10	ug/L		99
23) 1,2-Dibromo-3-Chloropr...	14.038	75	1605m	0.12	ug/L		

(#) = qualifier out of range (m) = manual integration (+) = signals summed

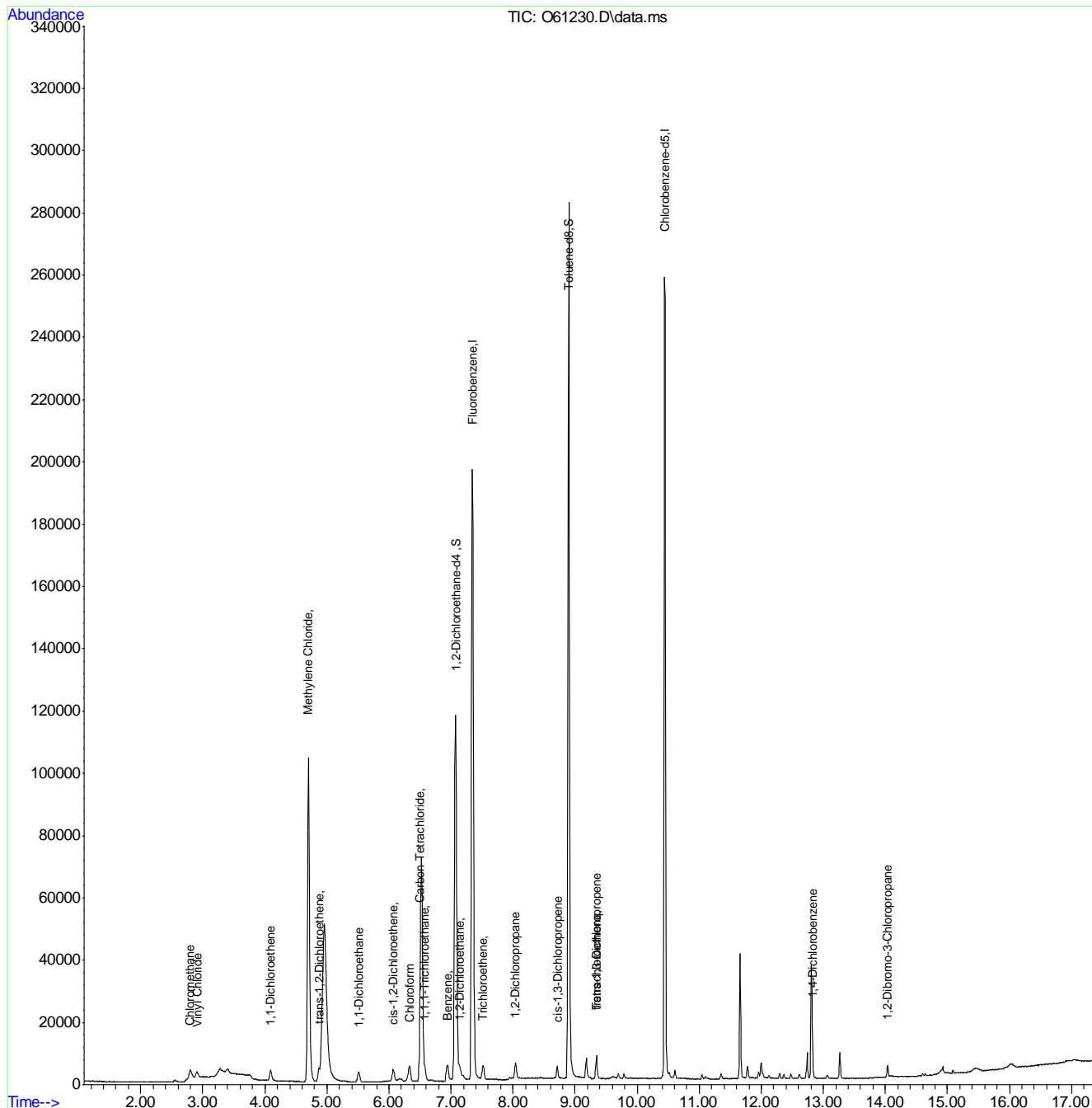
7.6.11
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\091120\
 Data File : O61230.D
 Acq On : 11 Sep 2020 3:34 pm
 Operator : stutip
 Sample : IC2356-1
 Misc : MS47201,VO2356,,,,,
 ALS Vial : 2 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 11 18:00:06 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration



7.6.11
7

Manual Integration Approval Summary

Sample Number: VO2356-IC2356 **Method:** SW846 8260B BY SIM
Lab FileID: O61230.D **Analyst approved:** 09/13/20 19:45 Stuti Patel
Injection Time: 09/11/20 15:34 **Supervisor approved:** 09/14/20 08:34 Melissa Mangual

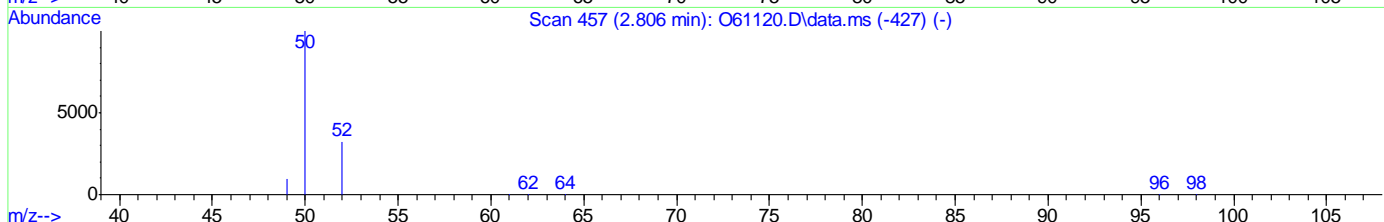
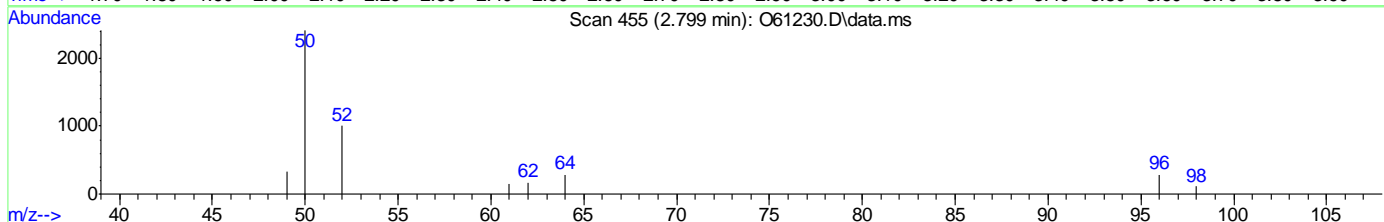
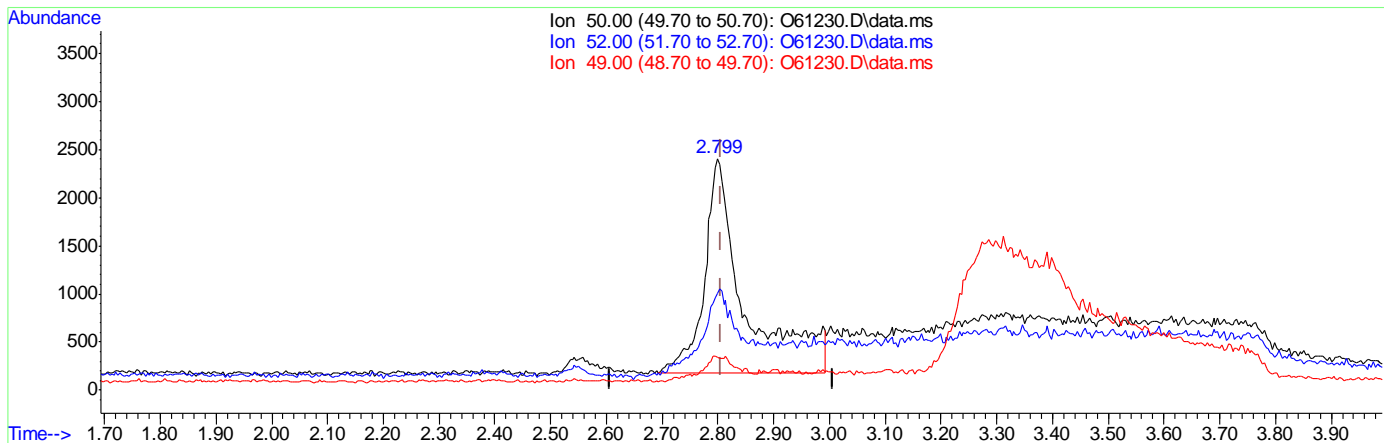
Parameter	CAS	Sig#	R.T. (min.)	Reason
Methyl Chloride	74-87-3		2.80	Poor instrument integration
Benzene	71-43-2		6.94	Poor instrument integration
1,2-Dichloropropane	78-87-5		8.04	Poor instrument integration
Tetrachloroethylene	127-18-4		9.34	Poor instrument integration
1,2-Dibromo-3-chloropropane	96-12-8		14.04	Poor instrument integration

7.6.11.1
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\091120\
 Data File : O61230.D
 Acq On : 11 Sep 2020 3:34 pm
 Operator : MANAGER
 Sample : IC2356-1 Inst : MSVOA12
 Misc : MS47184,VO2356,,,,,
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 11 17:52:22 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration



TIC: O61230.D\data.ms

(3) Chloromethane
 2.799min (-0.007) 0.24ug/L
 response 11047

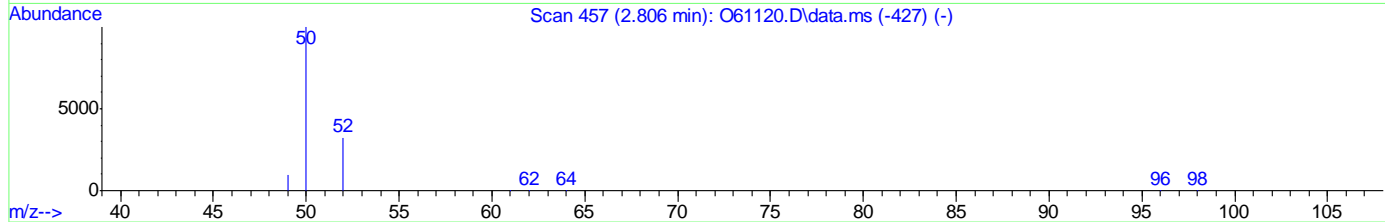
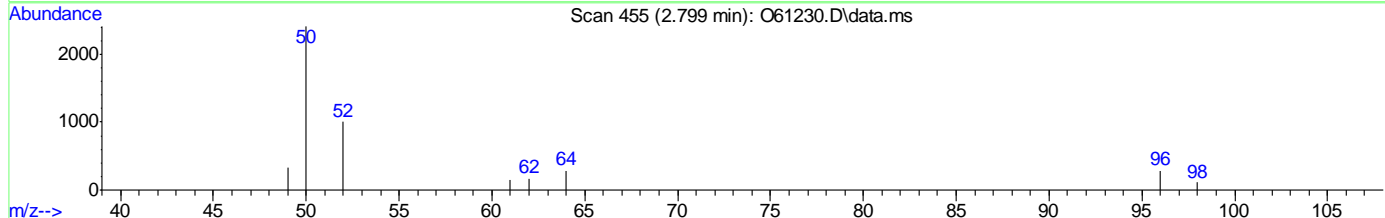
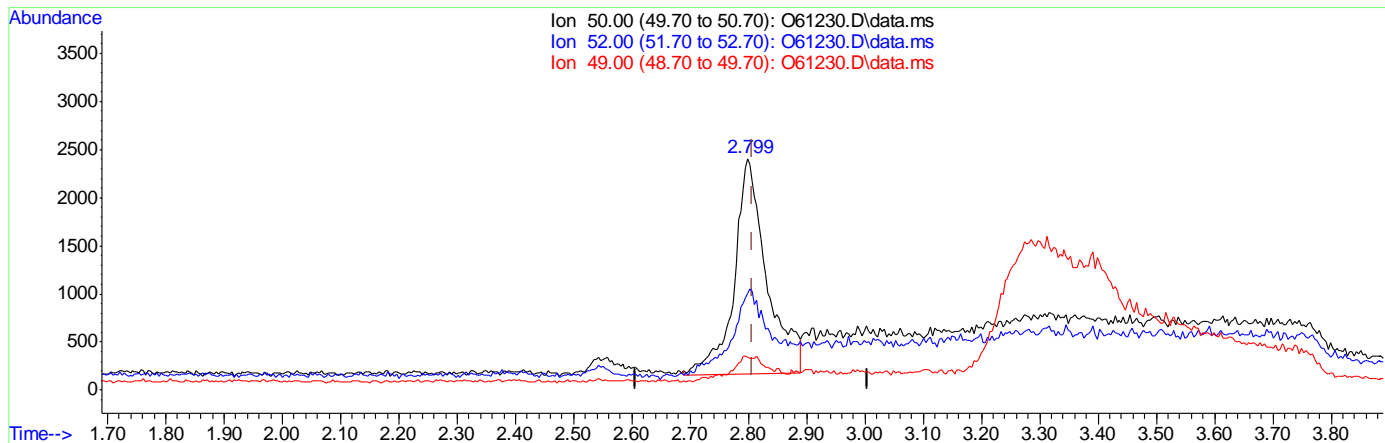
Ion	Exp%	Act%
50.00	100	100
52.00	27.80	37.05
49.00	10.50	11.15
0.00	0.00	0.00

7.6.11.2
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\091120\
 Data File : O61230.D
 Acq On : 11 Sep 2020 3:34 pm
 Operator : MANAGER
 Sample : IC2356-1 Inst : MSVOA12
 Misc : MS47184,VO2356,,,,,
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 11 17:52:22 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration



(3) Chloromethane
 2.799min (-0.007) 0.19ug/L m
 response 8787

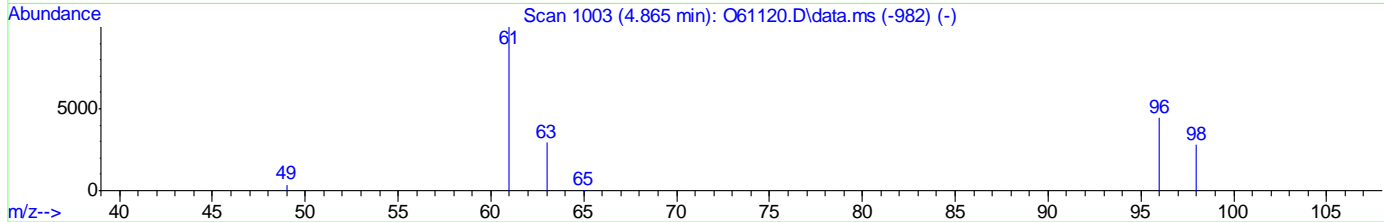
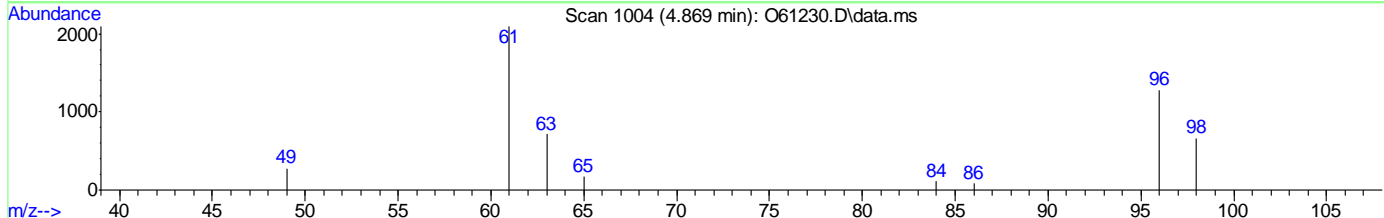
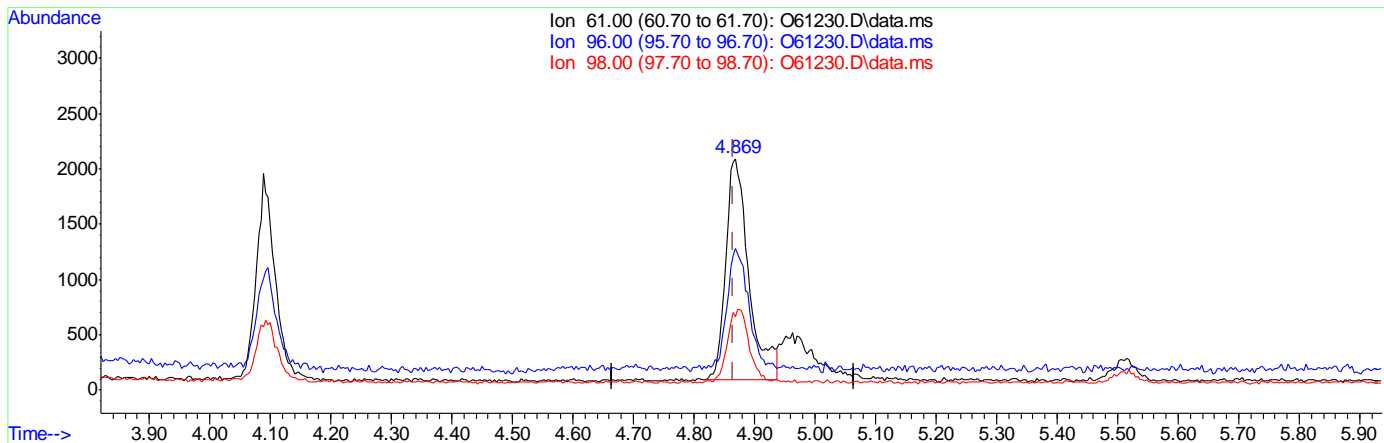
Ion	Exp%	Act%
50.00	100	100
52.00	27.80	41.69
49.00	10.50	14.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\091120\
 Data File : O61230.D
 Acq On : 11 Sep 2020 3:34 pm
 Operator : MANAGER
 Sample : IC2356-1
 Misc : MS47184,VO2356,,,,,
 ALS Vial : 2 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 11 17:52:22 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration



TIC: O61230.D\data.ms

(6) trans-1,2-Dichloroethene ()

4.869min (+0.004) 0.10ug/L

response 5203

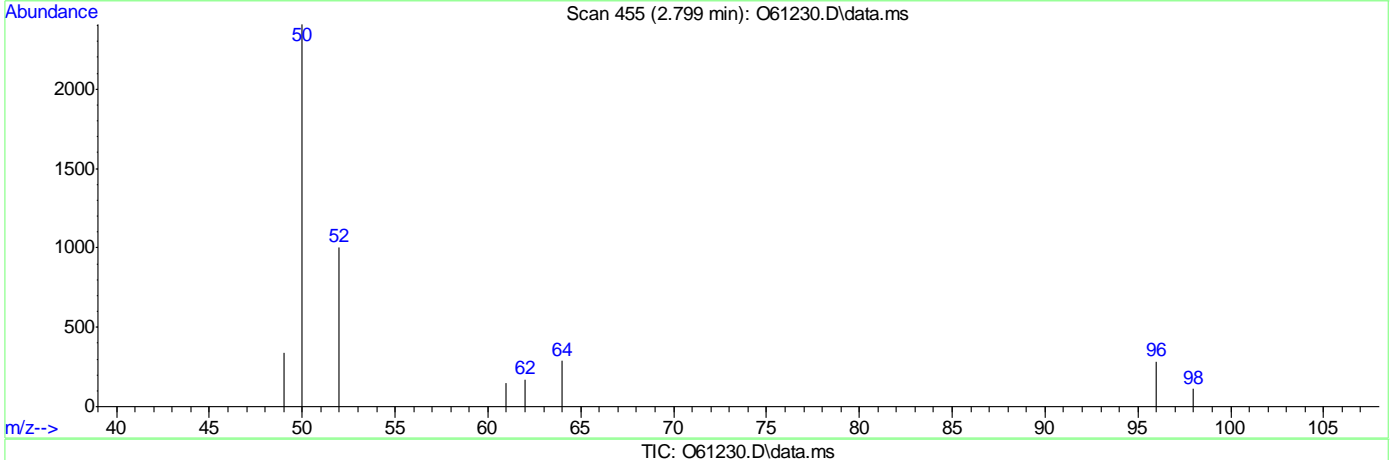
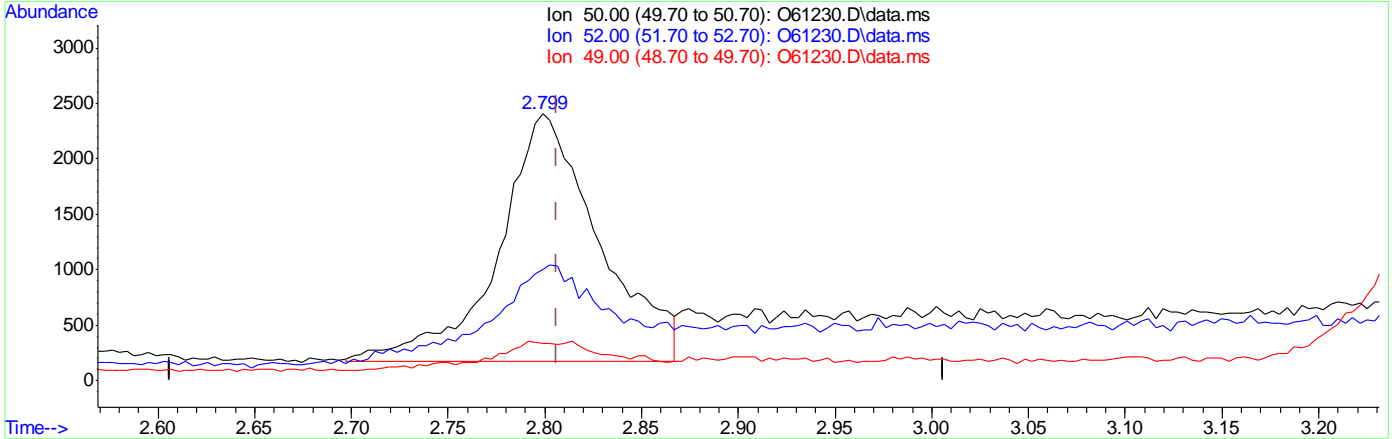
Ion	Exp%	Act%
61.00	100	100
96.00	66.90	54.30
98.00	41.10	28.92
0.00	0.00	0.00

7.6.11.4
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\091120\
 Data File : O61230.D
 Acq On : 11 Sep 2020 3:34 pm
 Operator : MANAGER
 Sample : IC2356-1 Inst : MSVOA12
 Misc : MS47184,VO2356,,,,,
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 11 17:52:22 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration



(3) Chloromethane

2.799min (-0.007) 0.17ug/L m

response 8061

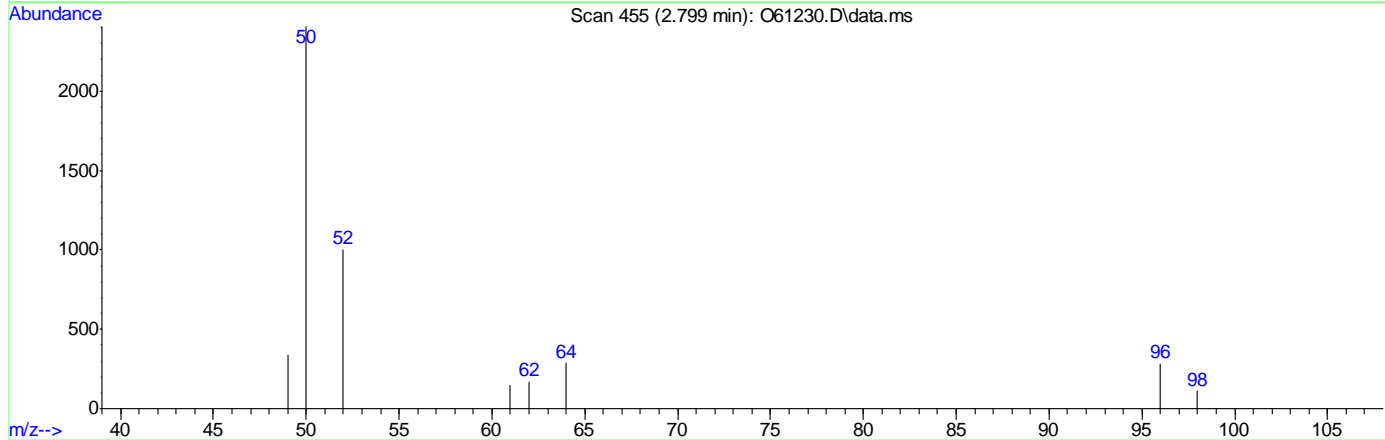
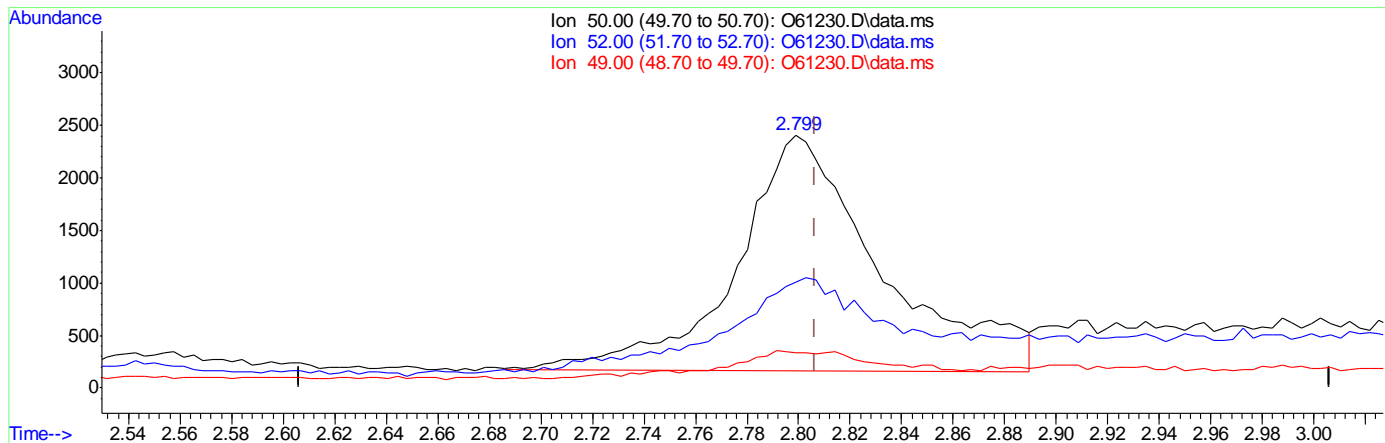
Ion	Exp%	Act%
50.00	100	100
52.00	27.80	41.69
49.00	10.50	14.00
0.00	0.00	0.00

7.6.11.5
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\091120\
 Data File : O61230.D
 Acq On : 11 Sep 2020 3:34 pm
 Operator : MANAGER
 Sample : IC2356-1 Inst : MSVOA12
 Misc : MS47184,VO2356,,,,,
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 11 17:52:22 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration



(3) Chloromethane

2.799min (-0.007) 0.19ug/L m

response 8825

Ion	Exp%	Act%
50.00	100	100
52.00	27.80	41.69
49.00	10.50	14.00
0.00	0.00	0.00

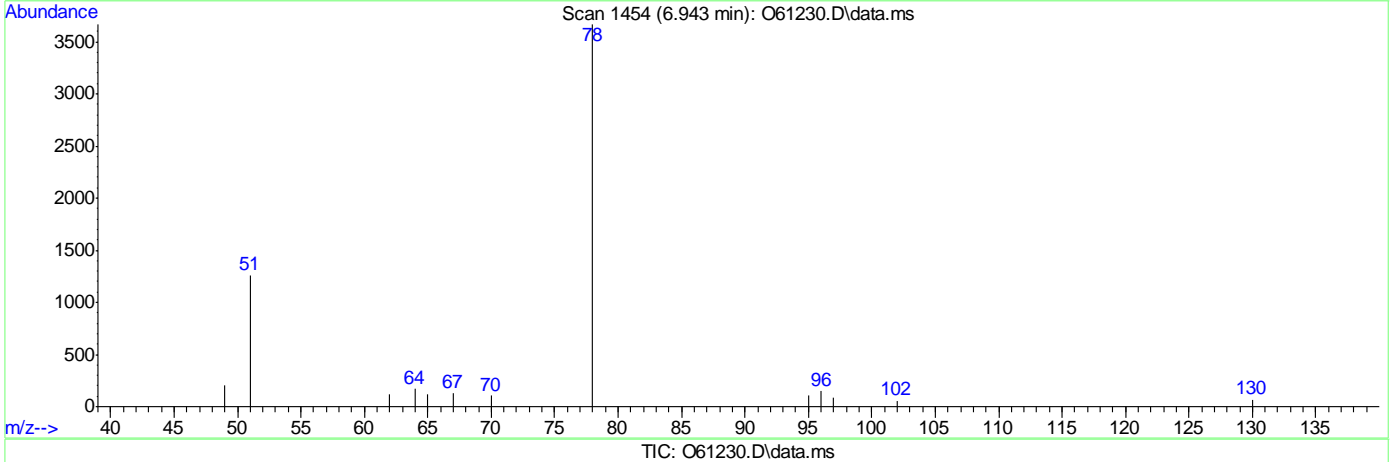
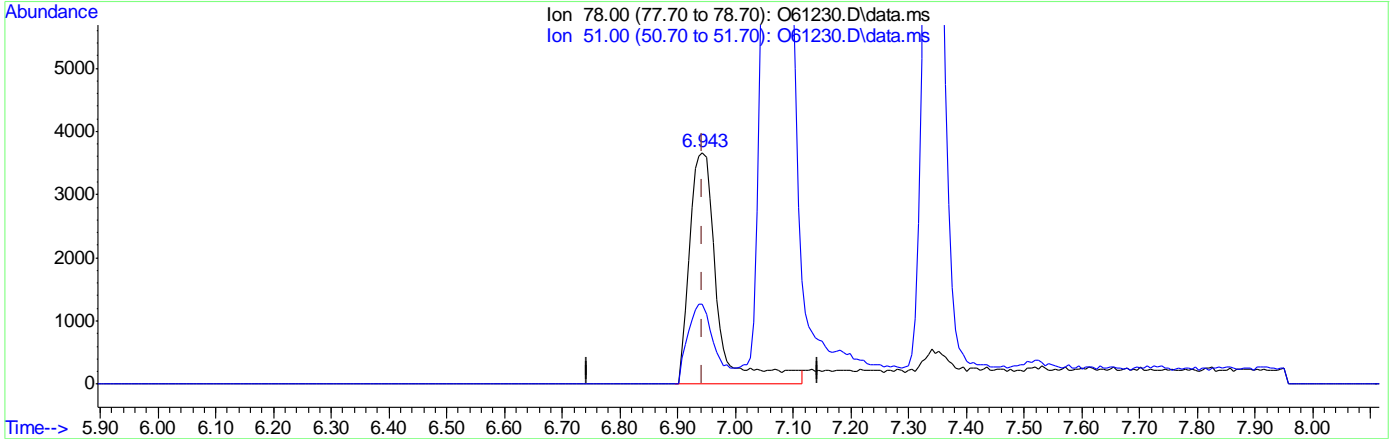
7.6.11.6

7

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\091120\
 Data File : O61230.D
 Acq On : 11 Sep 2020 3:34 pm
 Operator : MANAGER
 Sample : IC2356-1 Inst : MSVOA12
 Misc : MS47184,VO2356,,,,,
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 11 17:52:22 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration



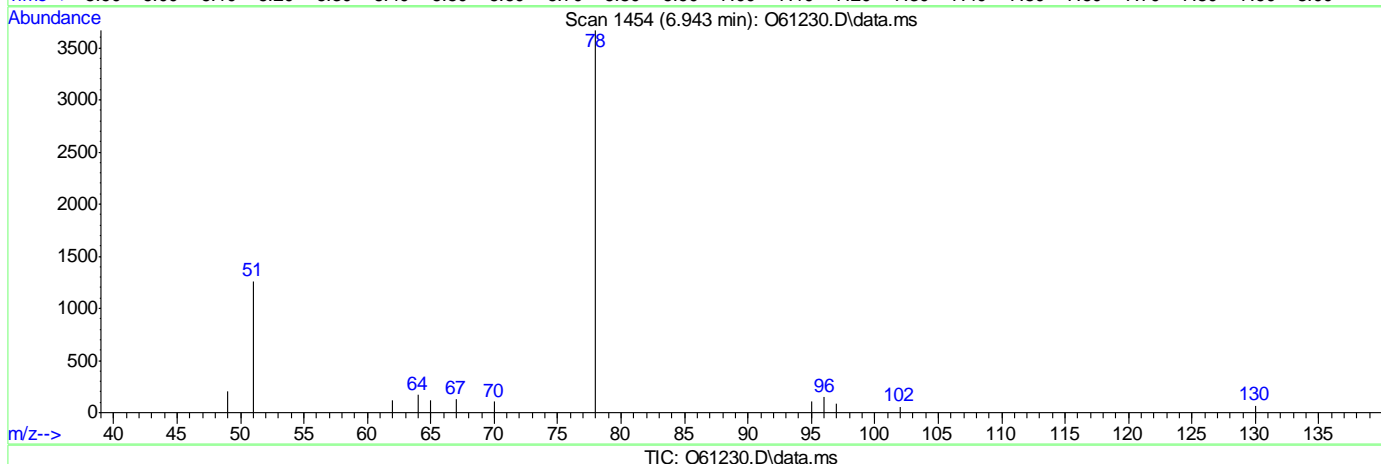
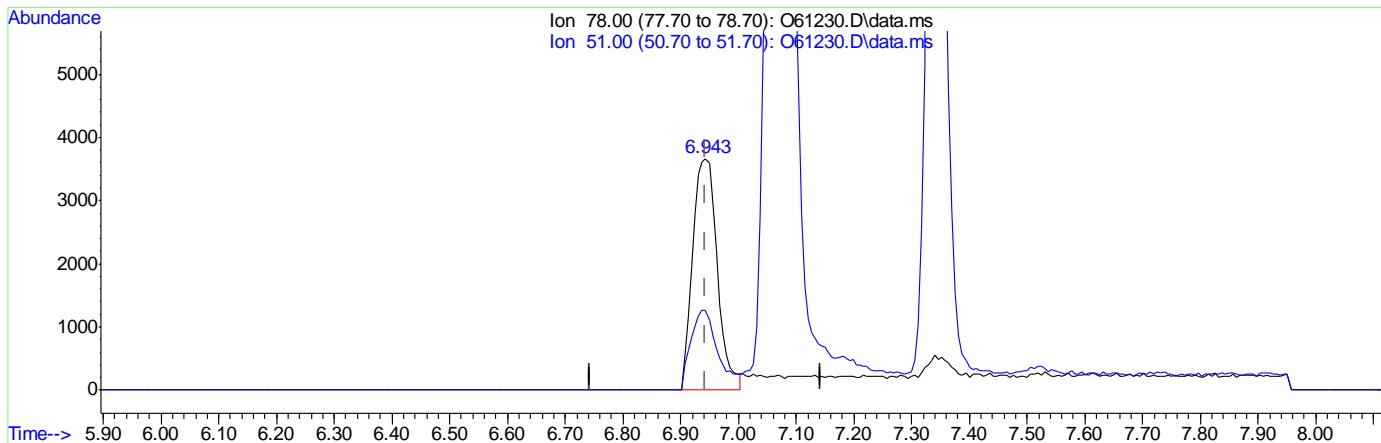
(12) Benzene ()
 6.943min (+0.000) 0.13ug/L
 response 12135

Ion	Exp%	Act%
78.00	100	100
51.00	26.20	34.36
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\091120\
 Data File : O61230.D
 Acq On : 11 Sep 2020 3:34 pm
 Operator : MANAGER
 Sample : IC2356-1 Inst : MSVOA12
 Misc : MS47184,VO2356,,,,,
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 11 17:52:22 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration



(12) Benzene ()
 6.943min (+0.000) 0.11ug/L m
 response 10630

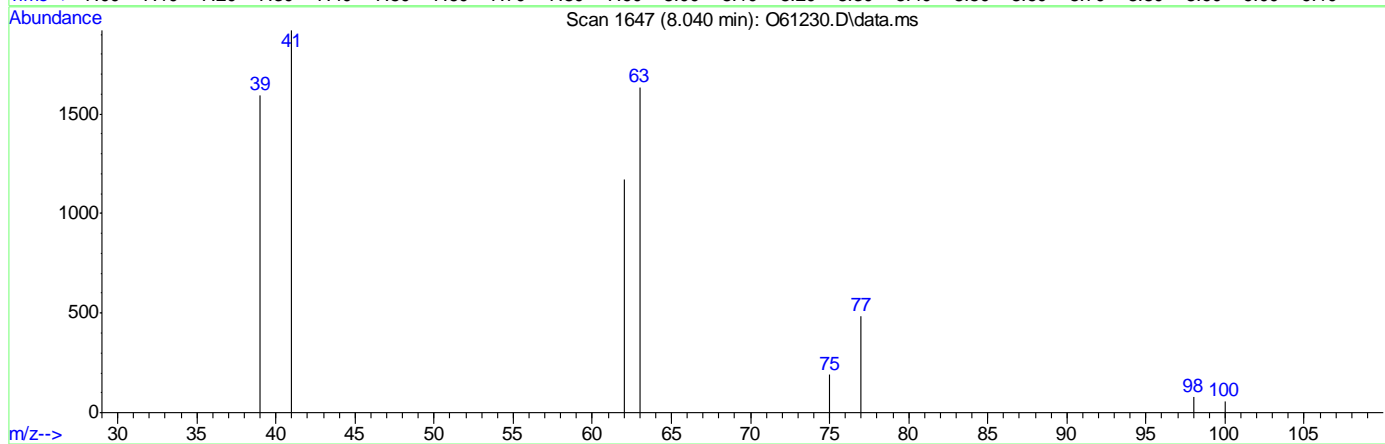
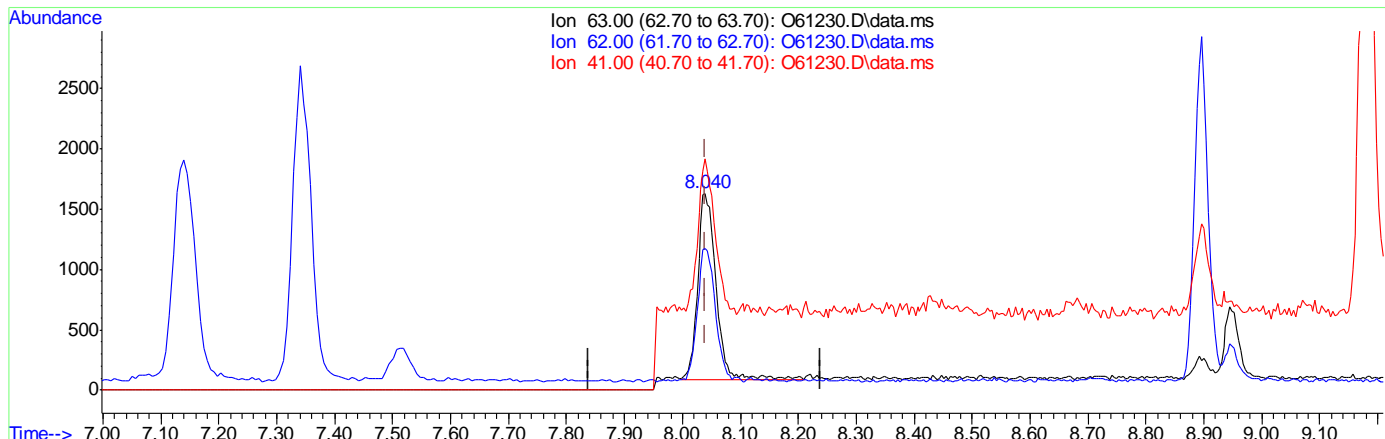
Ion	Exp%	Act%
78.00	100	100
51.00	26.20	34.36
0.00	0.00	0.00
0.00	0.00	0.00

7.6.11.8
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\091120\
 Data File : O61230.D
 Acq On : 11 Sep 2020 3:34 pm
 Operator : MANAGER
 Sample : IC2356-1 Inst : MSVOA12
 Misc : MS47184,VO2356,,,,,
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 11 17:52:22 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration



(16) 1,2-Dichloropropane
 8.040min (+0.000) 0.10ug/L
 response 3437

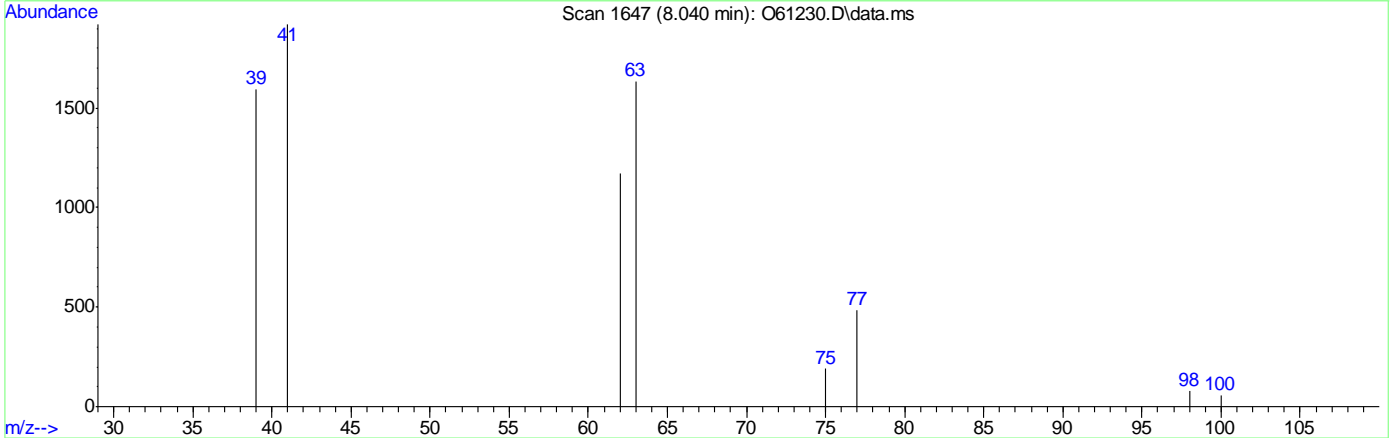
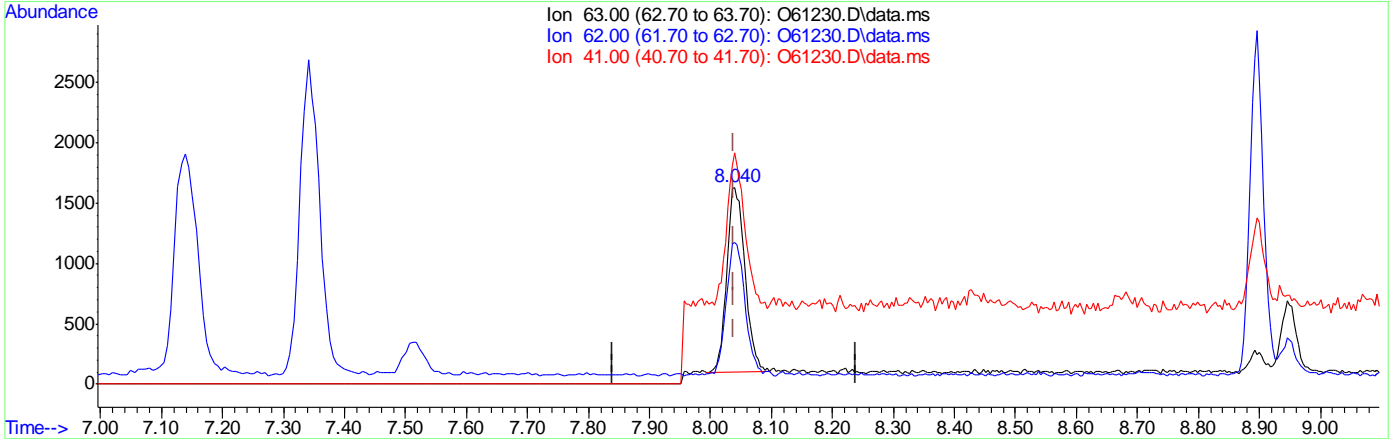
Ion	Exp%	Act%
63.00	100	100
62.00	72.70	70.53
41.00	84.50	81.61
0.00	0.00	0.00

7.6.11.9
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\091120\
 Data File : O61230.D
 Acq On : 11 Sep 2020 3:34 pm
 Operator : MANAGER
 Sample : IC2356-1 Inst : MSVOA12
 Misc : MS47184,VO2356,,,,,
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 11 17:52:22 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration



(16) 1,2-Dichloropropane
 8.040min (+0.000) 0.09ug/L m
 response 3248

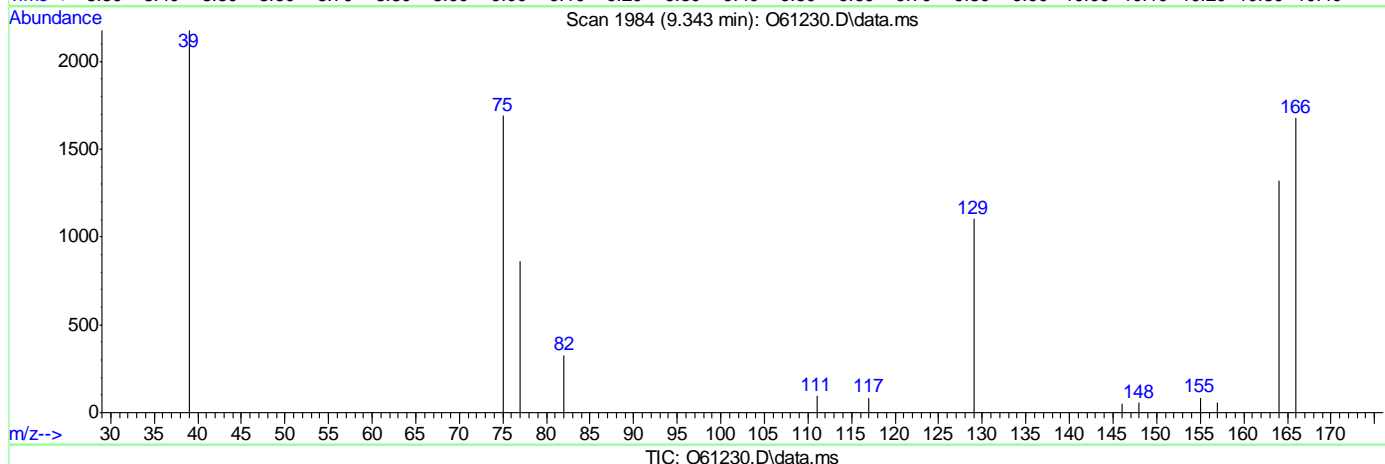
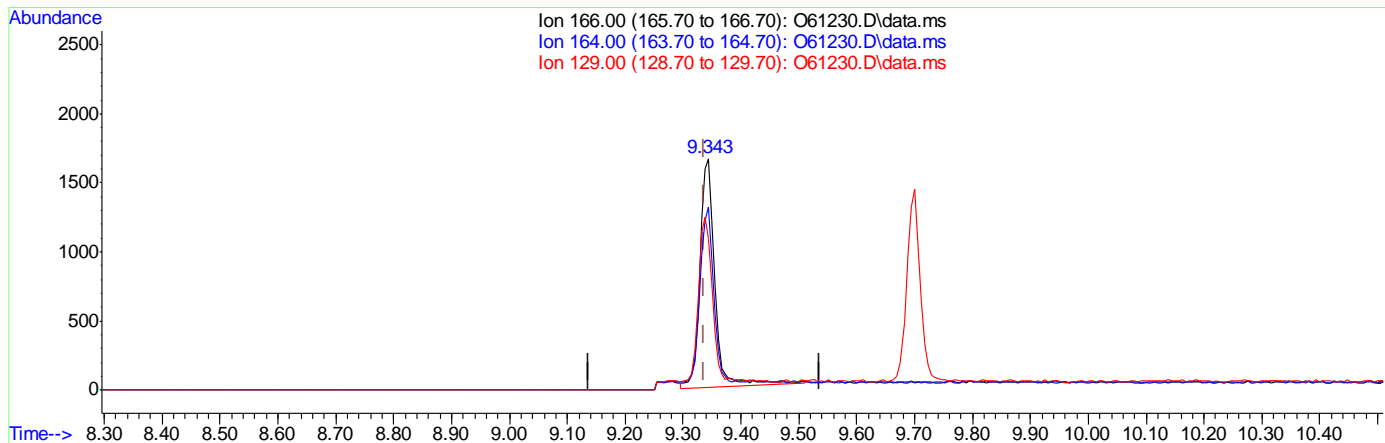
Ion	Exp%	Act%
63.00	100	100
62.00	72.70	71.77
41.00	84.50	117.58#
0.00	0.00	0.00

7.6.11.10 7

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\091120\
 Data File : O61230.D
 Acq On : 11 Sep 2020 3:34 pm
 Operator : MANAGER
 Sample : IC2356-1 Inst : MSVOA12
 Misc : MS47184,VO2356,,,,,
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 11 17:52:22 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration



(21) Tetrachloroethene ()

9.343min (+0.006) 0.13ug/L

response 2993

Ion	Exp%	Act%
166.00	100	100
164.00	77.30	77.82
129.00	67.50	64.20
0.00	0.00	0.00

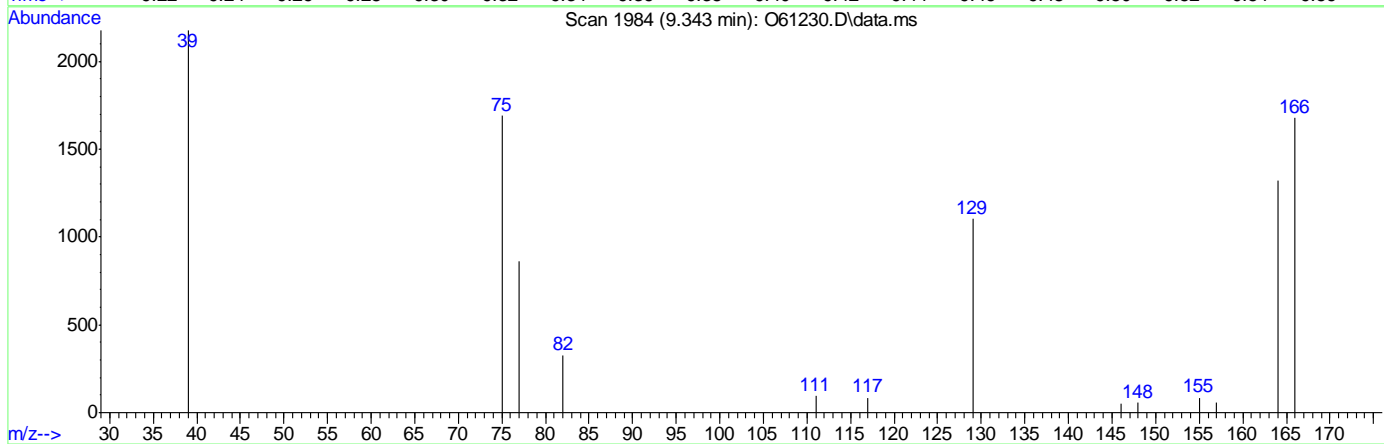
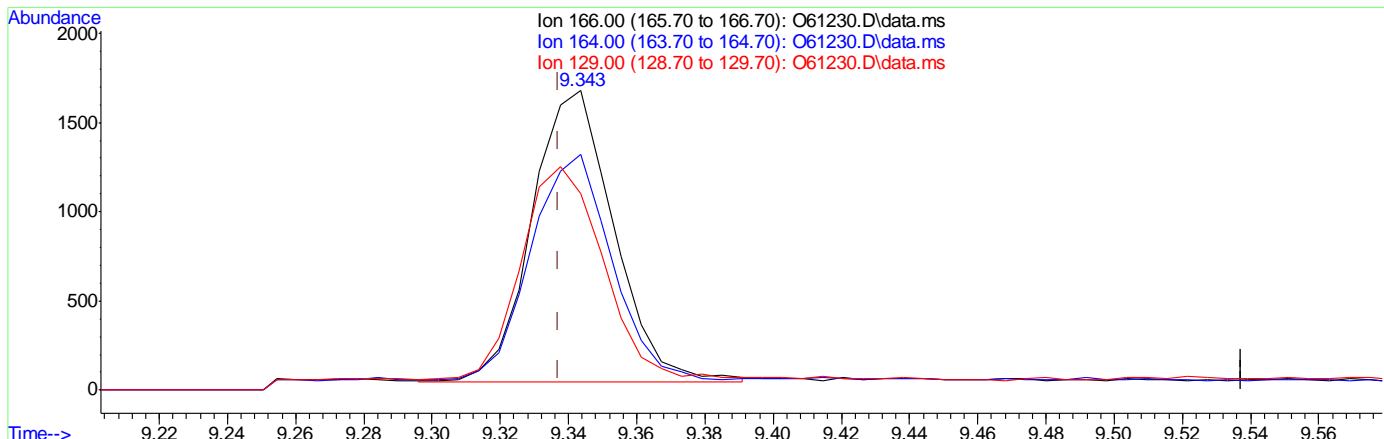
7.6.11.11

7

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\091120\
 Data File : O61230.D
 Acq On : 11 Sep 2020 3:34 pm
 Operator : MANAGER
 Sample : IC2356-1 Inst : MSVOA12
 Misc : MS47184,VO2356,,,,,
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 11 17:52:22 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration



(21) Tetrachloroethene ()

9.343min (+0.006) 0.12ug/L m

response 2702

Ion	Exp%	Act%
166.00	100	100
164.00	77.30	78.83
129.00	67.50	65.71
0.00	0.00	0.00

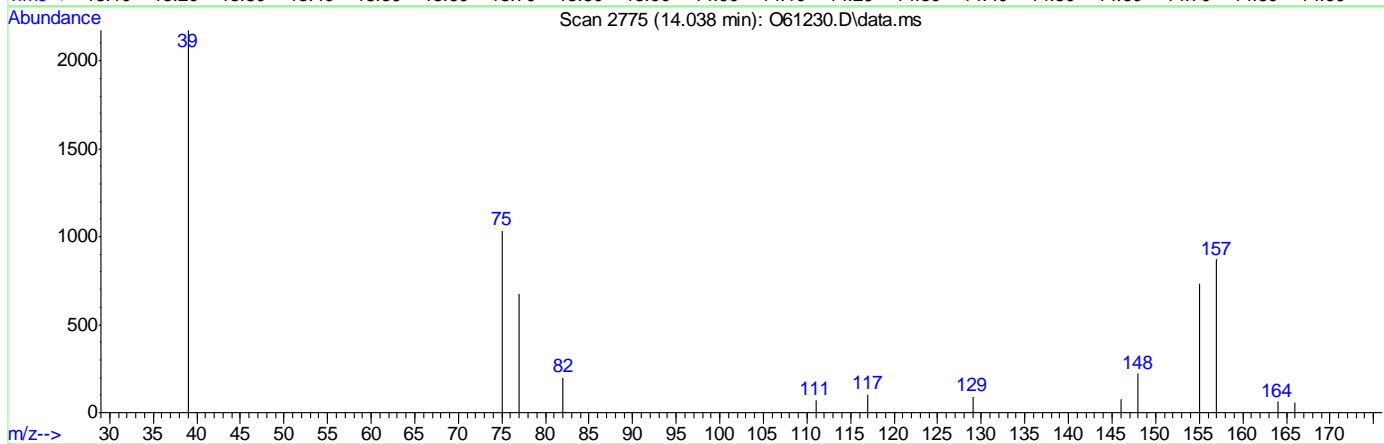
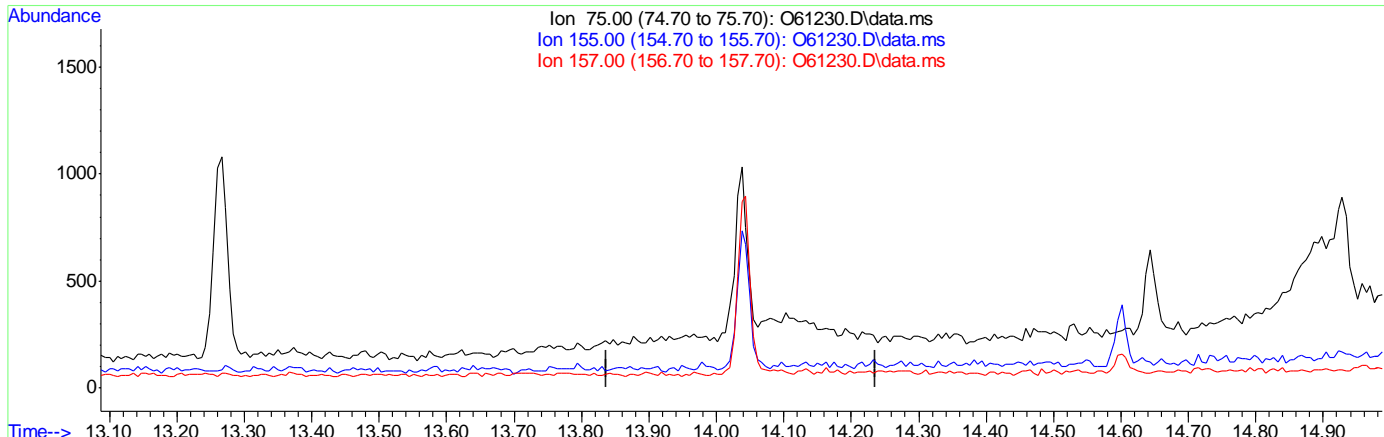
7.6.11.12
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\091120\
 Data File : O61230.D
 Acq On : 11 Sep 2020 3:34 pm
 Operator : MANAGER
 Sample : IC2356-1
 Misc : MS47184,VO2356,,,,,
 ALS Vial : 2 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 11 17:52:22 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration



(23) 1,2-Dibromo-3-Chloropropane

14.037min (-14.037) 0.00ug/L

response 0

Ion	Exp%	Act%
75.00	100	0.00
155.00	88.00	0.00#
157.00	106.80	0.00#
0.00	0.00	0.00

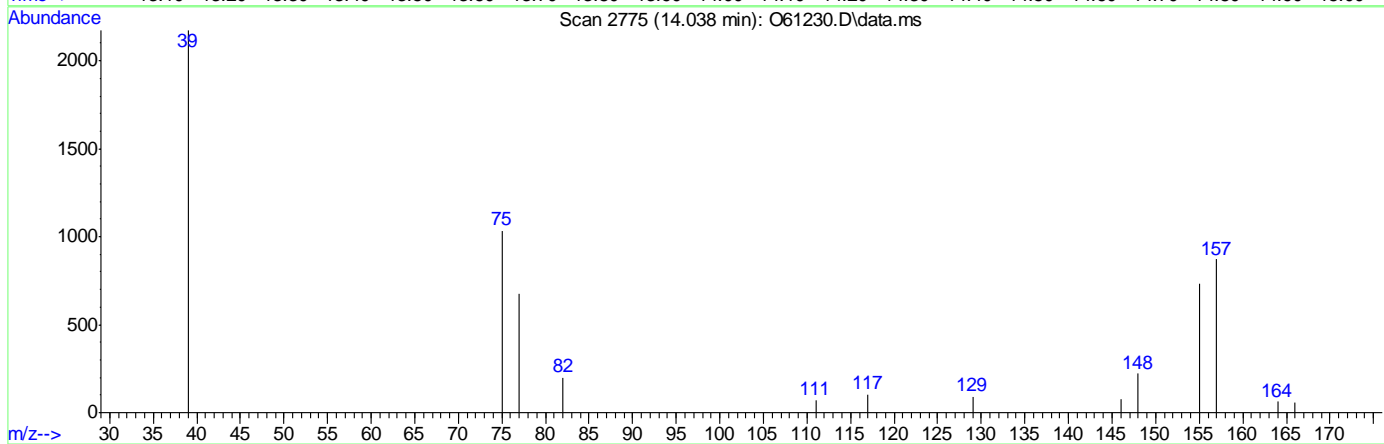
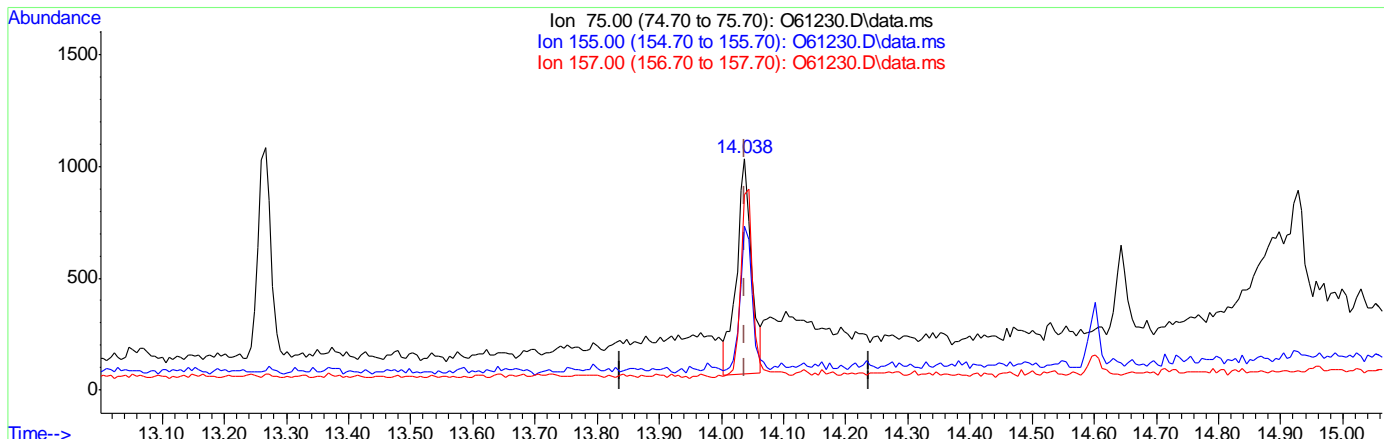
7.6.11.13
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\091120\
 Data File : O61230.D
 Acq On : 11 Sep 2020 3:34 pm
 Operator : MANAGER
 Sample : IC2356-1
 Misc : MS47184,VO2356,,,,,
 ALS Vial : 2 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 11 17:52:22 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration



(23) 1,2-Dibromo-3-Chloropropane

14.038min (+0.000) 0.12ug/L m

response 1605

Ion	Exp%	Act%
75.00	100	100
155.00	88.00	70.99
157.00	106.80	84.43#
0.00	0.00	0.00

7.6.11.14
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\091120\
 Data File : 061231.D
 Acq On : 11 Sep 2020 3:54 pm
 Operator : stutip
 Sample : IC2356-2 Inst : MSVOA12
 Misc : MS47201,VO2356,,,,,
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 11 18:02:23 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	Qvalue
Internal Standards							
1) Fluorobenzene	7.346	96	308238	5.00	ug/L	0.00	
18) Chlorobenzene-d5	10.447	117	234700	5.00	ug/L	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.074	65	125580	4.64	ug/L	0.00	
Spiked Amount	5.000	Range 74 - 125	Recovery	=	92.80%		
19) Toluene-d8	8.896	98	269907	4.71	ug/L	0.00	
Spiked Amount	5.000	Range 88 - 111	Recovery	=	94.20%		
Target Compounds							
2) Vinyl Chloride	2.908	62	19507	0.64	ug/L	96	
3) Chloromethane	2.799	50	33695	0.75	ug/L	90	
4) 1,1-Dichloroethene	4.092	61	22337	0.54	ug/L	92	
5) Methylene Chloride	4.703	49	128834	1.69	ug/L	98	
6) trans-1,2-Dichloroethene	4.869	61	28030	0.55	ug/L	84	
7) 1,1-Dichloroethane	5.514	63	30310	0.52	ug/L	99	
8) cis-1,2-Dichloroethene	6.066	96	14558	0.56	ug/L #	80	
9) Chloroform	6.333	83	26026	0.55	ug/L	94	
10) Carbon Tetrachloride	6.510	117	17328	0.59	ug/L	87	
11) 1,1,1-Trichloroethane	6.576	97	19399	0.57	ug/L	89	
12) Benzene	6.943	78	51252m	0.56	ug/L		
14) 1,2-Dichloroethane	7.139	62	24323	0.48	ug/L	91	
15) Trichloroethene	7.512	95	15009	0.56	ug/L	93	
16) 1,2-Dichloropropane	8.040	63	17486	0.52	ug/L	93	
17) cis-1,3-Dichloropropene	8.711	75	15877	0.42	ug/L	96	
20) trans-1,3-Dichloropropene	9.343	75	14216	0.40	ug/L	98	
21) Tetrachloroethene	9.337	166	14813	0.65	ug/L	90	
22) 1,4-Dichlorobenzene	12.827	146	27579	0.56	ug/L	98	
23) 1,2-Dibromo-3-Chloropr...	14.037	75	6106	0.47	ug/L	98	

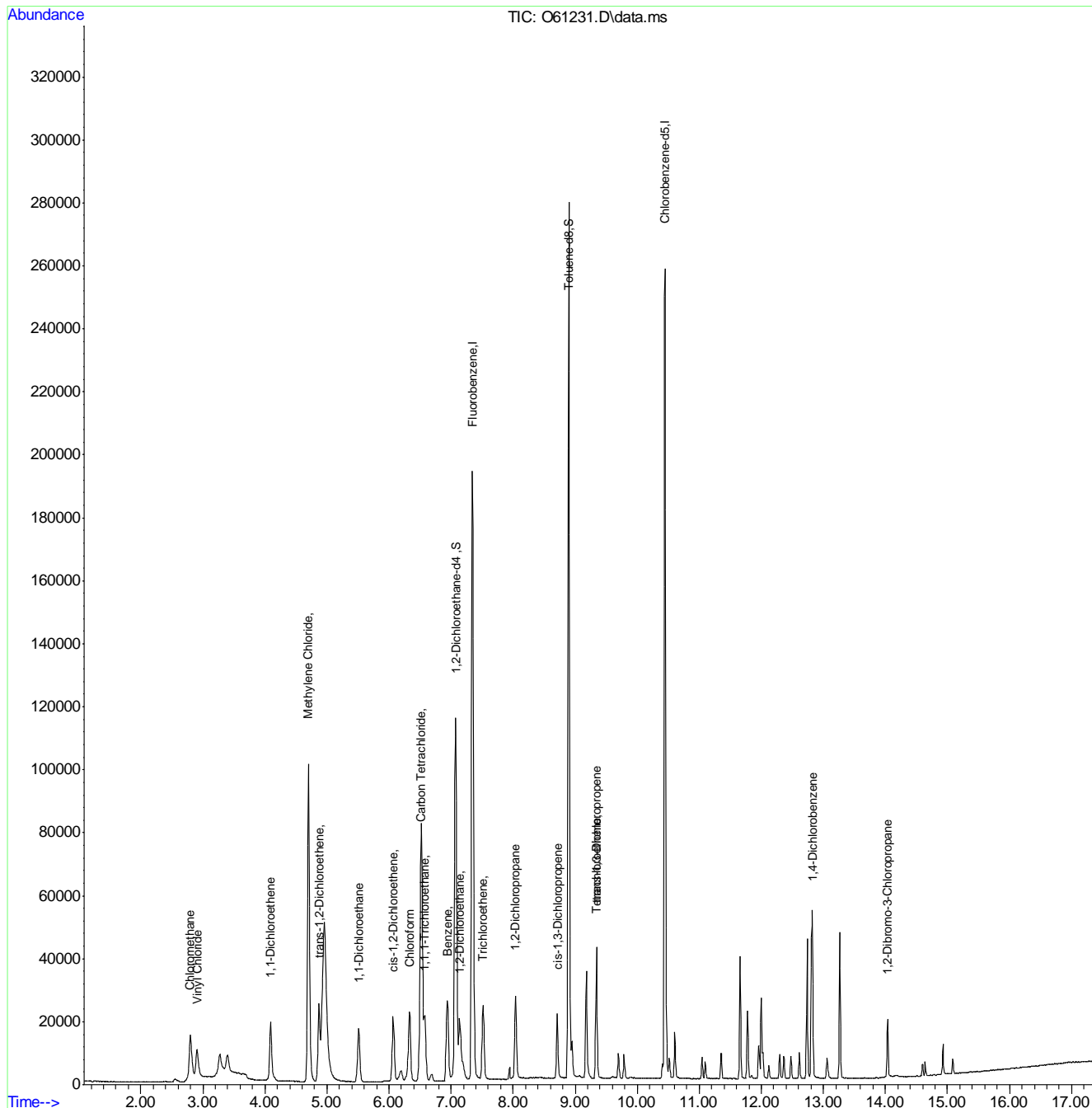
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\091120\
 Data File : 061231.D
 Acq On : 11 Sep 2020 3:54 pm
 Operator : stutip
 Sample : IC2356-2
 Misc : MS47201,VO2356,,,,,
 ALS Vial : 3 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 11 18:02:23 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration



7.6.12
7

Manual Integration Approval Summary

Sample Number: VO2356-IC2356 **Method:** SW846 8260B BY SIM
Lab FileID: O61231.D **Analyst approved:** 09/13/20 19:45 Stuti Patel
Injection Time: 09/11/20 15:54 **Supervisor approved:** 09/14/20 08:34 Melissa Mangual

Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzene	71-43-2		6.94	Poor instrument integration

7.6.12.1

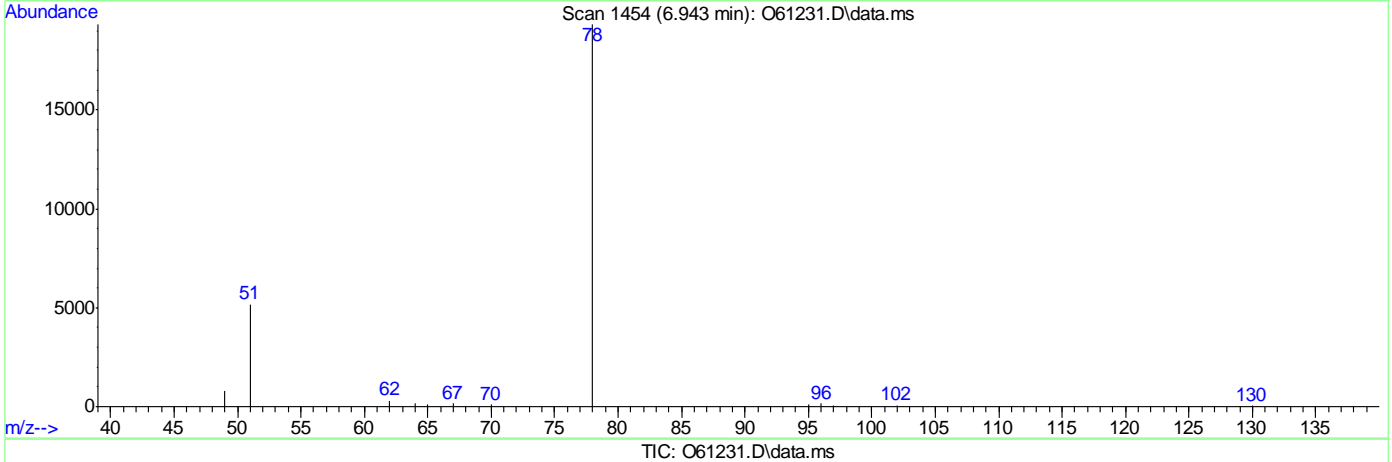
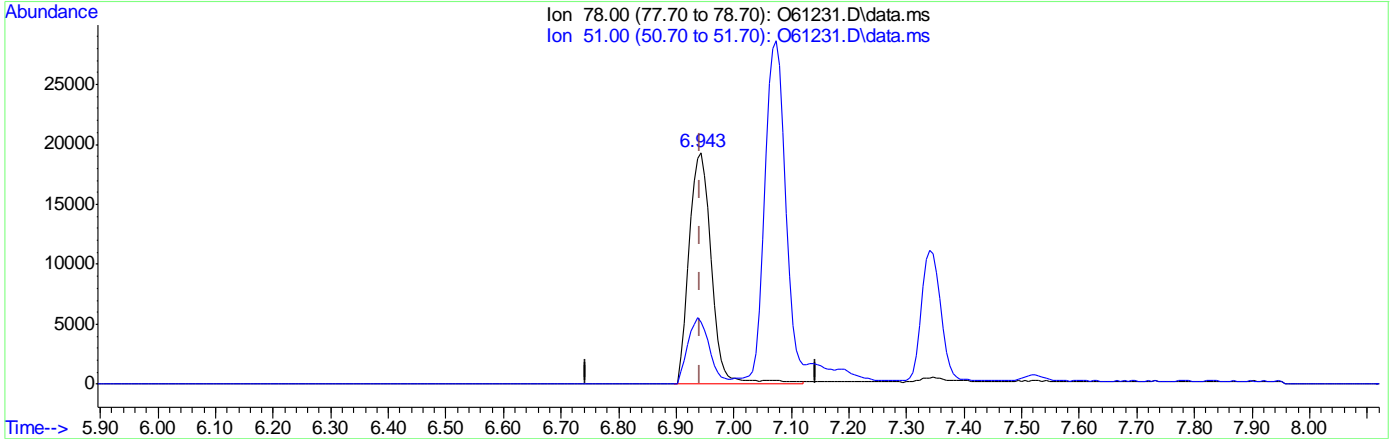
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\091120\
 Data File : O61231.D
 Acq On : 11 Sep 2020 3:54 pm
 Operator : MANAGER
 Sample : IC2356-2
 Misc : MS47184,VO2356,,,,,
 ALS Vial : 3 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 11 17:52:24 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration



(12) Benzene ()

6.943min (+0.000) 0.58ug/L

response 53149

Ion	Exp%	Act%
78.00	100	100
51.00	26.20	26.78
0.00	0.00	0.00
0.00	0.00	0.00

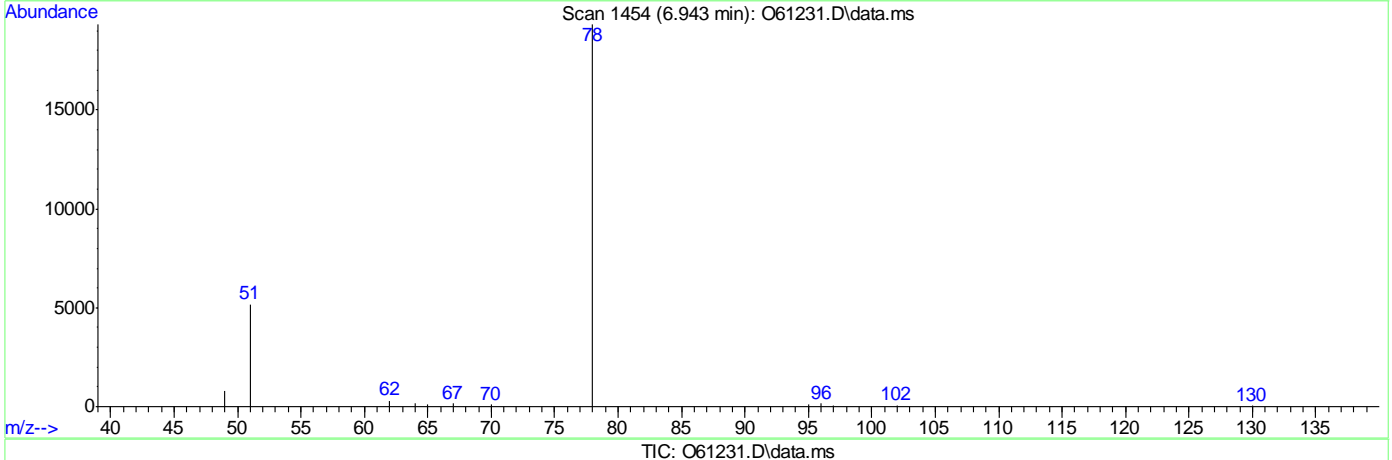
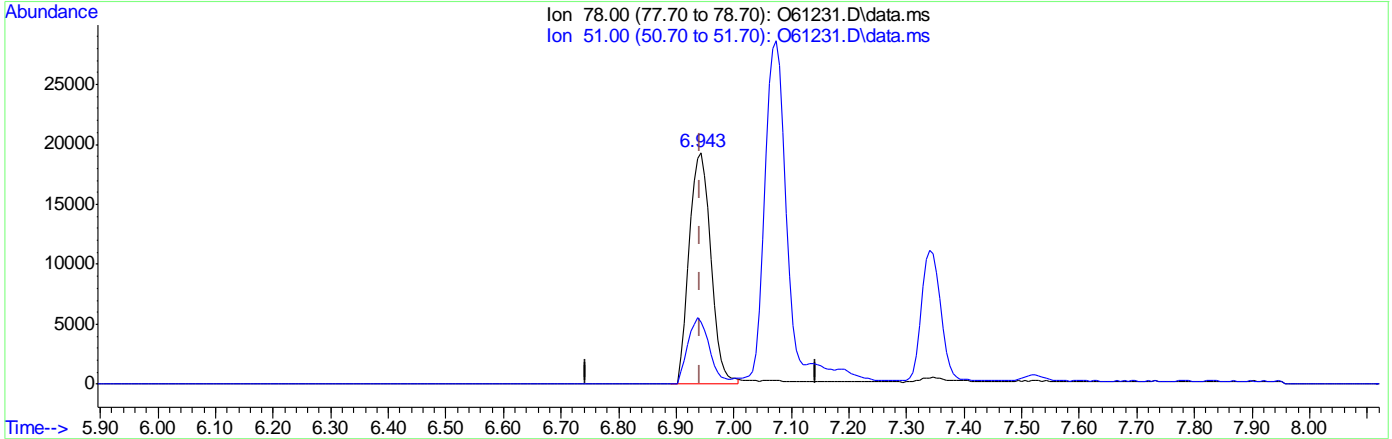
7.6.12.2
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\091120\
 Data File : O61231.D
 Acq On : 11 Sep 2020 3:54 pm
 Operator : MANAGER
 Sample : IC2356-2
 Misc : MS47184,VO2356,,,,,
 ALS Vial : 3 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 11 17:52:24 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration



(12) Benzene ()
 6.943min (+0.000) 0.56ug/L m
 response 51252

Ion	Exp%	Act%
78.00	100	100
51.00	26.20	26.78
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\091120\
 Data File : O61232.D
 Acq On : 11 Sep 2020 4:14 pm
 Operator : stutip
 Sample : IC2356-3 Inst : MSVOA12
 Misc : MS47201,VO2356,,,,,
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 11 18:03:15 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
Internal Standards							
1) Fluorobenzene	7.346	96	317169	5.00	ug/L	0.00	
18) Chlorobenzene-d5	10.447	117	244669	5.00	ug/L	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.079	65	131106	4.71	ug/L	0.00	
Spiked Amount	5.000	Range 74 - 125	Recovery	=	94.20%		
19) Toluene-d8	8.900	98	274860	4.60	ug/L	0.00	
Spiked Amount	5.000	Range 88 - 111	Recovery	=	92.00%		
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.912	62	72414	2.35	ug/L		97
3) Chloromethane	2.810	50	108758	2.40	ug/L		94
4) 1,1-Dichloroethene	4.100	61	84017	1.96	ug/L		92
5) Methylene Chloride	4.707	49	235781	3.07	ug/L		98
6) trans-1,2-Dichloroethene	4.873	61	98273	1.88	ug/L		82
7) 1,1-Dichloroethane	5.518	63	114595	1.92	ug/L		99
8) cis-1,2-Dichloroethene	6.072	96	55181	2.08	ug/L #		81
9) Chloroform	6.339	83	96882	2.01	ug/L		96
10) Carbon Tetrachloride	6.510	117	64256	2.13	ug/L		87
11) 1,1,1-Trichloroethane	6.582	97	73085	2.10	ug/L		93
12) Benzene	6.943	78	190849m	2.02	ug/L		
14) 1,2-Dichloroethane	7.145	62	94612	1.82	ug/L		91
15) Trichloroethene	7.518	95	56329	2.04	ug/L		86
16) 1,2-Dichloropropane	8.043	63	65843	1.91	ug/L		94
17) cis-1,3-Dichloropropene	8.711	75	63086	1.64	ug/L		98
20) trans-1,3-Dichloropropene	9.343	75	59845	1.60	ug/L		98
21) Tetrachloroethene	9.343	166	52774	2.22	ug/L		99
22) 1,4-Dichlorobenzene	12.827	146	108631	2.11	ug/L		98
23) 1,2-Dibromo-3-Chloropr...	14.037	75	18565	1.37	ug/L		96

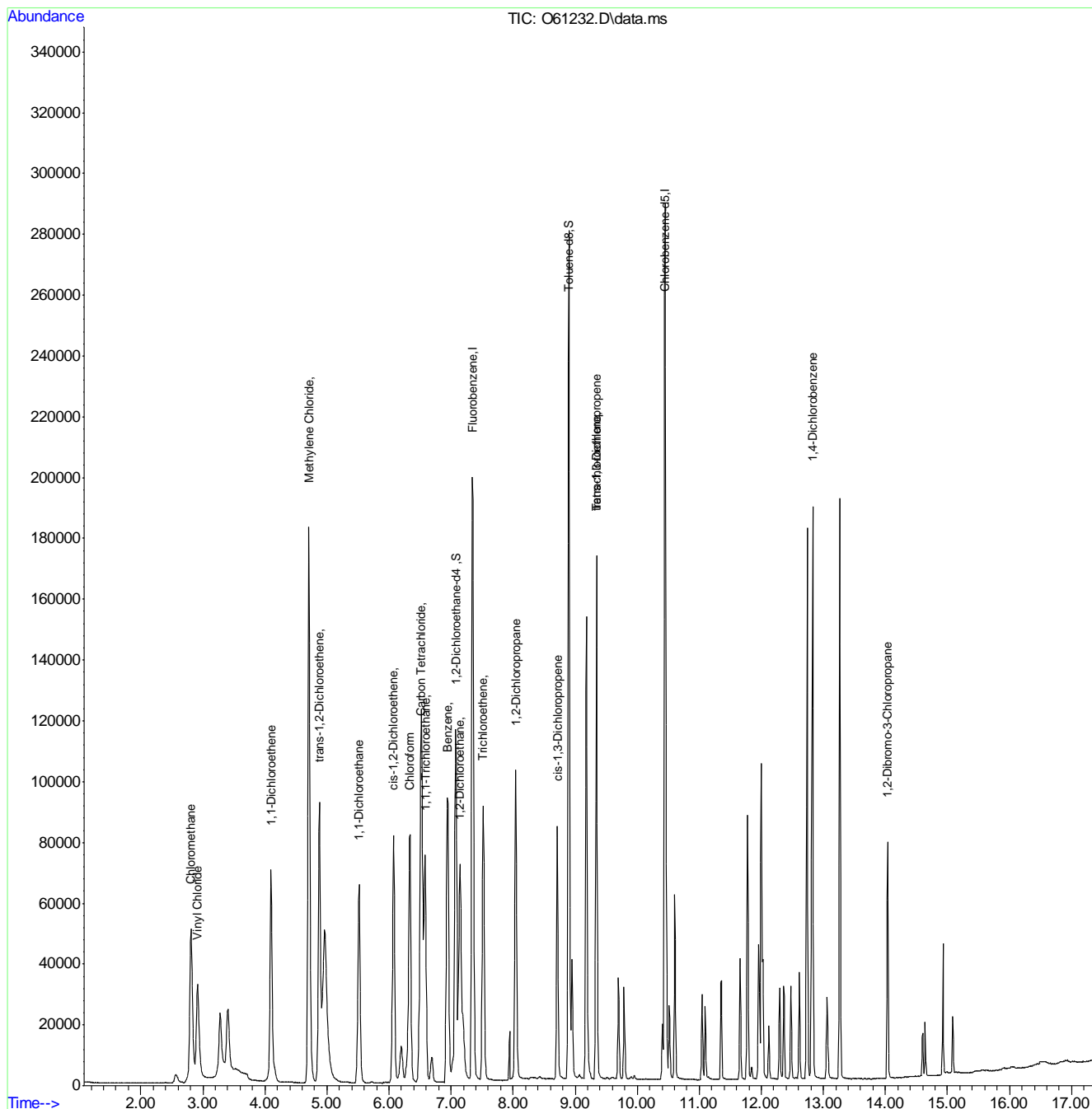
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\091120\
Data File : O61232.D
Acq On : 11 Sep 2020 4:14 pm
Operator : stutip
Sample : IC2356-3
Misc : MS47201,VO2356,,,,,
ALS Vial : 4 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 11 18:03:15 2020
Quant Method : C:\msdchem\2\methods\SIMCL091120.M
Quant Title : Standard Methods 6200B
QLast Update : Wed Sep 09 12:10:38 2020
Response via : Initial Calibration



Manual Integration Approval Summary

Sample Number: VO2356-IC2356 **Method:** SW846 8260B BY SIM
Lab FileID: O61232.D **Analyst approved:** 09/13/20 19:45 Stuti Patel
Injection Time: 09/11/20 16:14 **Supervisor approved:** 09/14/20 08:34 Melissa Mangual

Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzene	71-43-2		6.94	Poor instrument integration

7.6.13.1

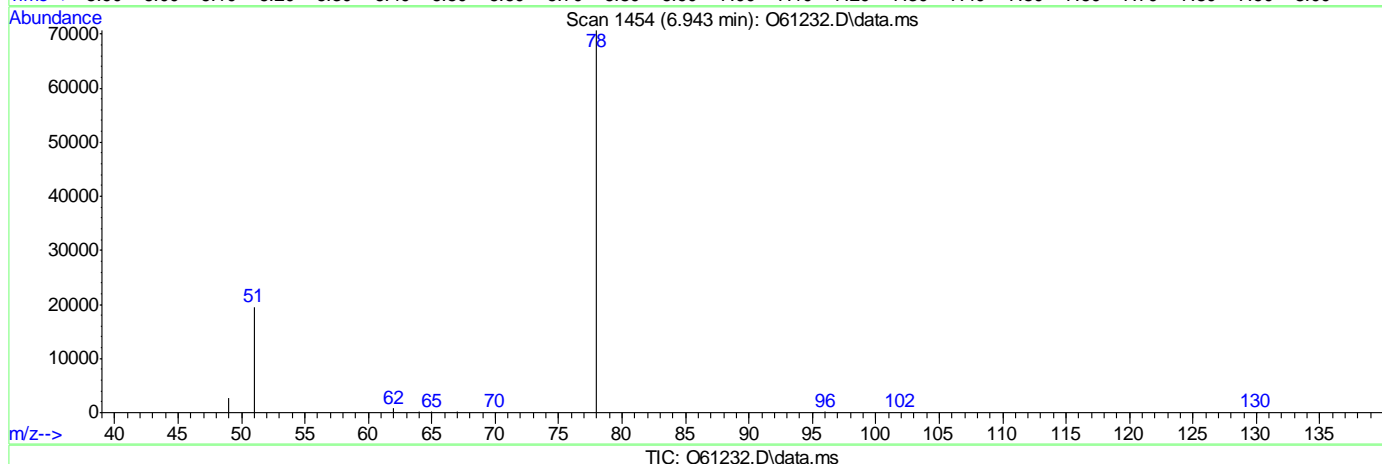
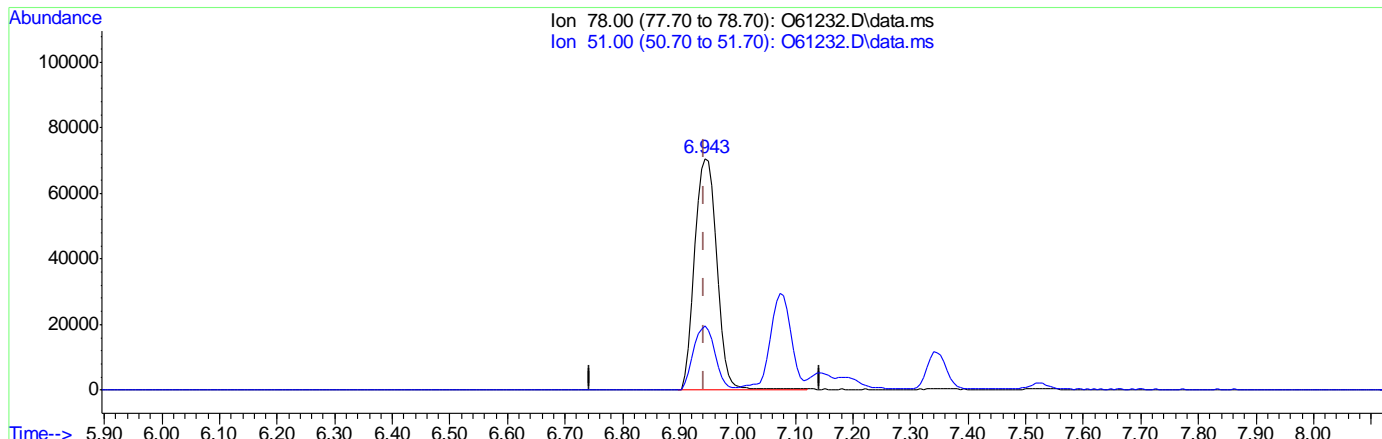
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\091120\
 Data File : O61232.D
 Acq On : 11 Sep 2020 4:14 pm
 Operator : MANAGER
 Sample : IC2356-3
 Misc : MS47184,VO2356,,,,,
 ALS Vial : 4 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 11 17:52:26 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration



(12) Benzene ()

6.943min (+0.000) 2.05ug/L

response 193530

Ion	Exp%	Act%
78.00	100	100
51.00	26.20	27.64
0.00	0.00	0.00
0.00	0.00	0.00

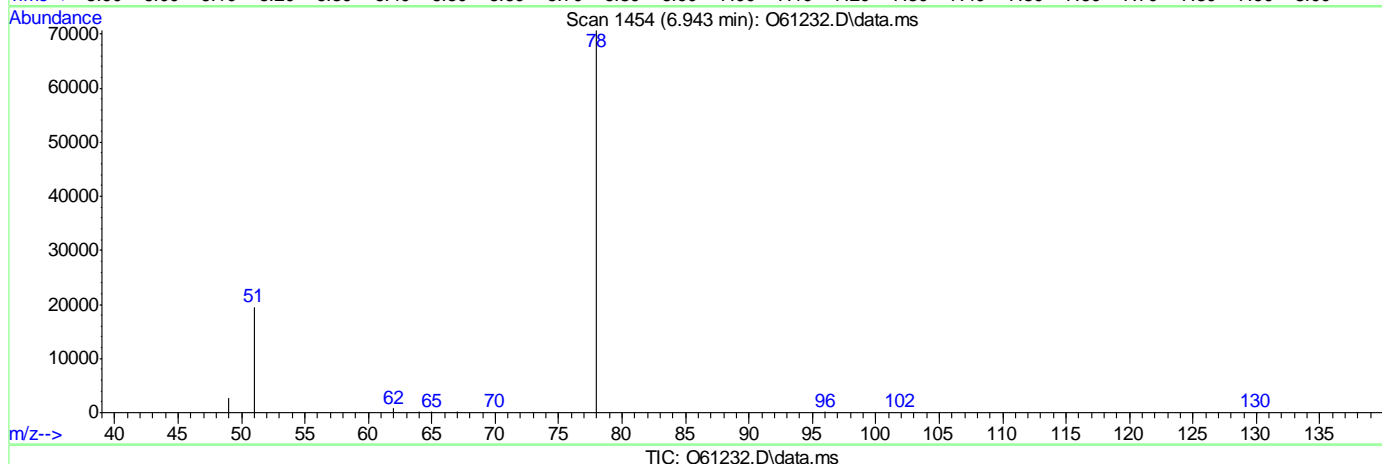
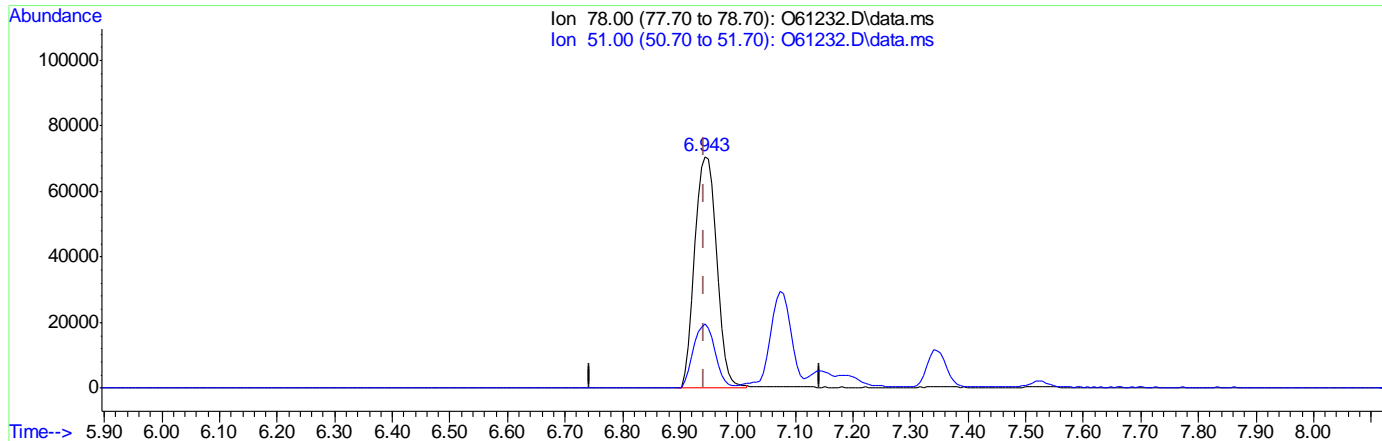
7.6.13.2
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\091120\
 Data File : O61232.D
 Acq On : 11 Sep 2020 4:14 pm
 Operator : MANAGER
 Sample : IC2356-3
 Misc : MS47184,VO2356,,,,,
 ALS Vial : 4 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 11 17:52:26 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration



(12) Benzene ()

6.943min (+0.000) 2.02ug/L m

response 190849

Ion	Exp%	Act%
78.00	100	100
51.00	26.20	27.64
0.00	0.00	0.00
0.00	0.00	0.00

7.6.13.3
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\091120\
 Data File : O61233.D
 Acq On : 11 Sep 2020 4:35 pm
 Operator : stutip
 Sample : IC2356-4 Inst : MSVOA12
 Misc : MS47201,VO2356,,,,,
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 11 18:03:03 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.346	96	331492	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.447	117	258539	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.074	65	143850	4.94	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	98.80%	
19) Toluene-d8	8.900	98	286563	4.53	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	90.60%	
Target Compounds						
						Qvalue
2) Vinyl Chloride	2.916	62	189960	6.08	ug/L	98
3) Chloromethane	2.810	50	274617	5.99	ug/L	94
4) 1,1-Dichloroethene	4.100	61	243476	5.42	ug/L	92
5) Methylene Chloride	4.707	49	387657	4.95	ug/L	99
6) trans-1,2-Dichloroethene	4.873	61	280716	5.19	ug/L	83
7) 1,1-Dichloroethane	5.518	63	322308	5.17	ug/L	100
8) cis-1,2-Dichloroethene	6.072	96	156323	5.64	ug/L #	81
9) Chloroform	6.339	83	274074	5.43	ug/L	96
10) Carbon Tetrachloride	6.517	117	189329	6.01	ug/L	88
11) 1,1,1-Trichloroethane	6.582	97	213837	5.87	ug/L	93
12) Benzene	6.943	78	539806m	5.49	ug/L	
14) 1,2-Dichloroethane	7.145	62	258506	4.75	ug/L	90
15) Trichloroethene	7.518	95	161314	5.59	ug/L	88
16) 1,2-Dichloropropane	8.044	63	181717	5.06	ug/L	93
17) cis-1,3-Dichloropropene	8.711	75	182931	4.54	ug/L	99
20) trans-1,3-Dichloropropene	9.343	75	176190	4.47	ug/L	99
21) Tetrachloroethene	9.343	166	150705	6.02	ug/L	98
22) 1,4-Dichlorobenzene	12.827	146	311628	5.72	ug/L	98
23) 1,2-Dibromo-3-Chloropr...	14.038	75	52936	3.70	ug/L	90

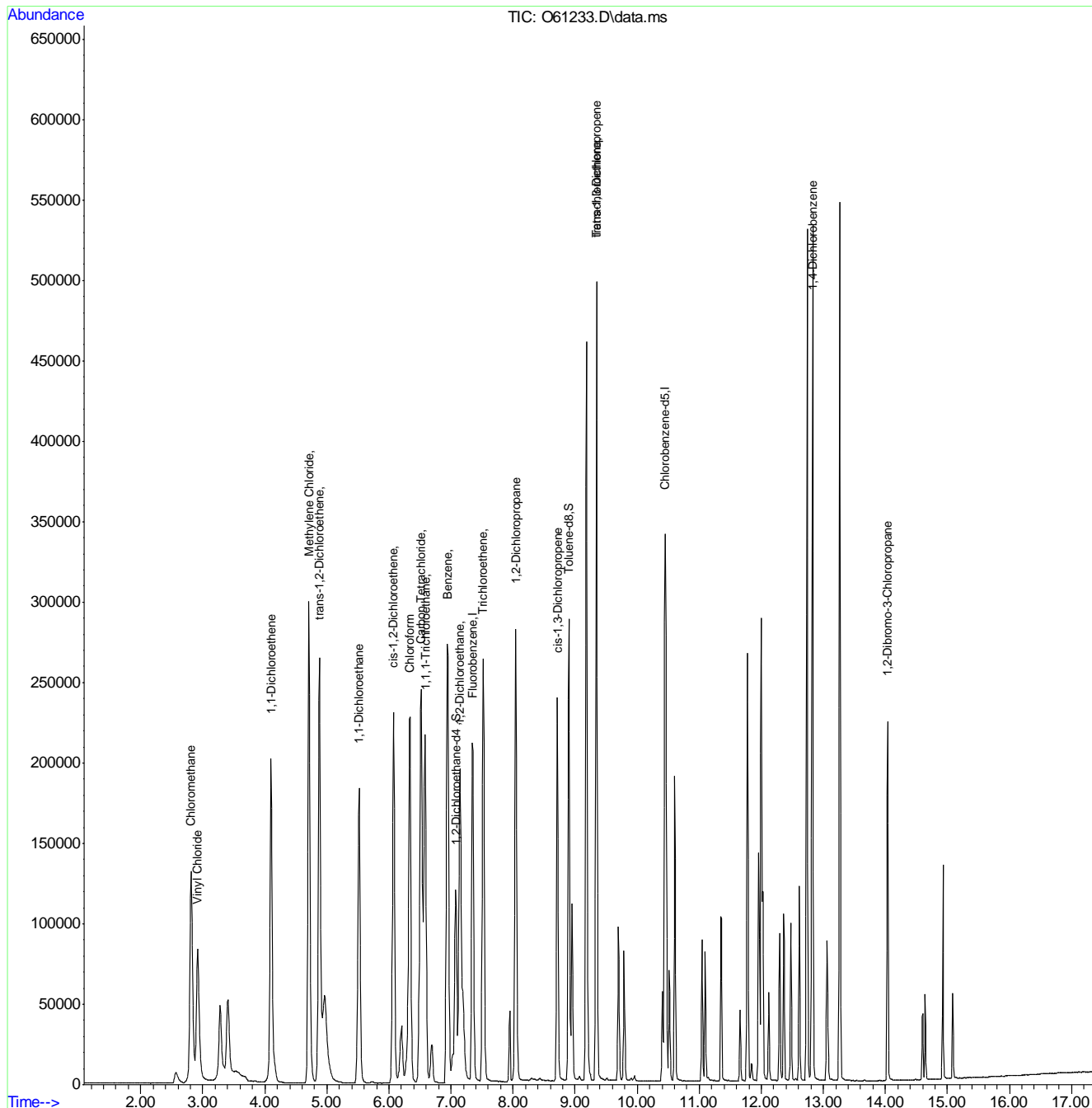
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\091120\
 Data File : O61233.D
 Acq On : 11 Sep 2020 4:35 pm
 Operator : stutip
 Sample : IC2356-4
 Misc : MS47201,VO2356,,,,,
 ALS Vial : 5 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 11 18:03:03 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration



7.6.14
7

Manual Integration Approval Summary

Sample Number: VO2356-IC2356 **Method:** SW846 8260B BY SIM
Lab FileID: O61233.D **Analyst approved:** 09/13/20 19:45 Stuti Patel
Injection Time: 09/11/20 16:35 **Supervisor approved:** 09/14/20 08:34 Melissa Mangual

Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzene	71-43-2		6.94	Poor instrument integration

7.6.14.1

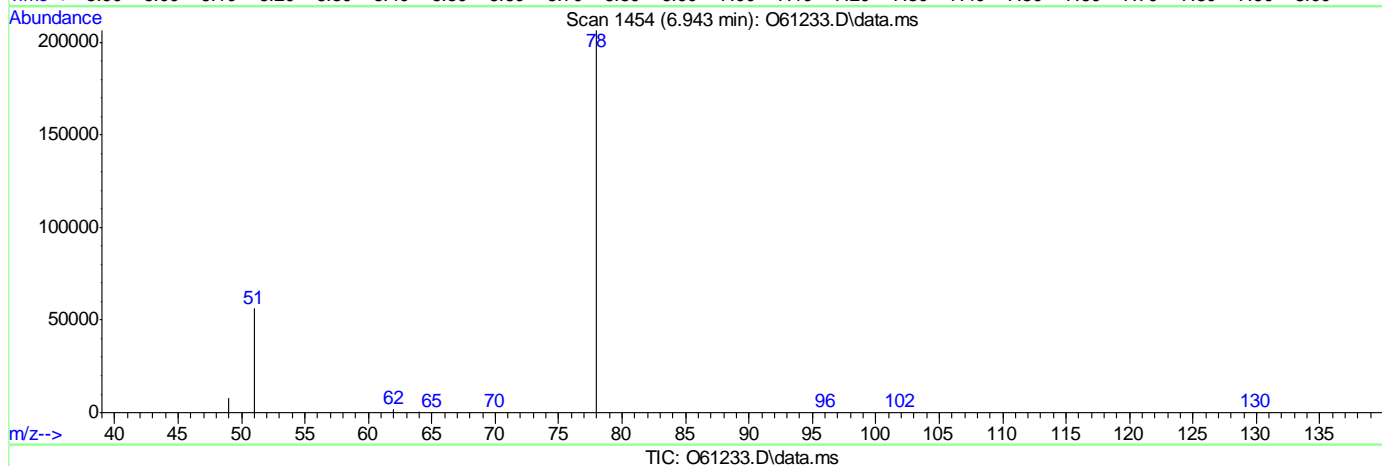
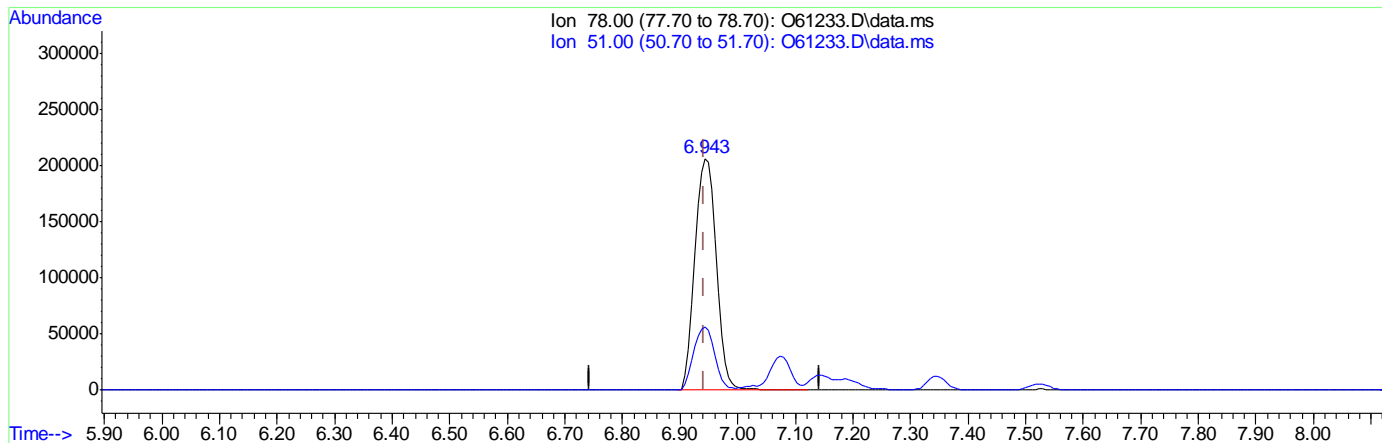
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\091120\
 Data File : O61233.D
 Acq On : 11 Sep 2020 4:35 pm
 Operator : MANAGER
 Sample : IC2356-4
 Misc : MS47184,VO2356,,,,,
 ALS Vial : 5 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 11 17:52:28 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration



(12) Benzene ()

6.943min (+0.000) 5.54ug/L

response 544298

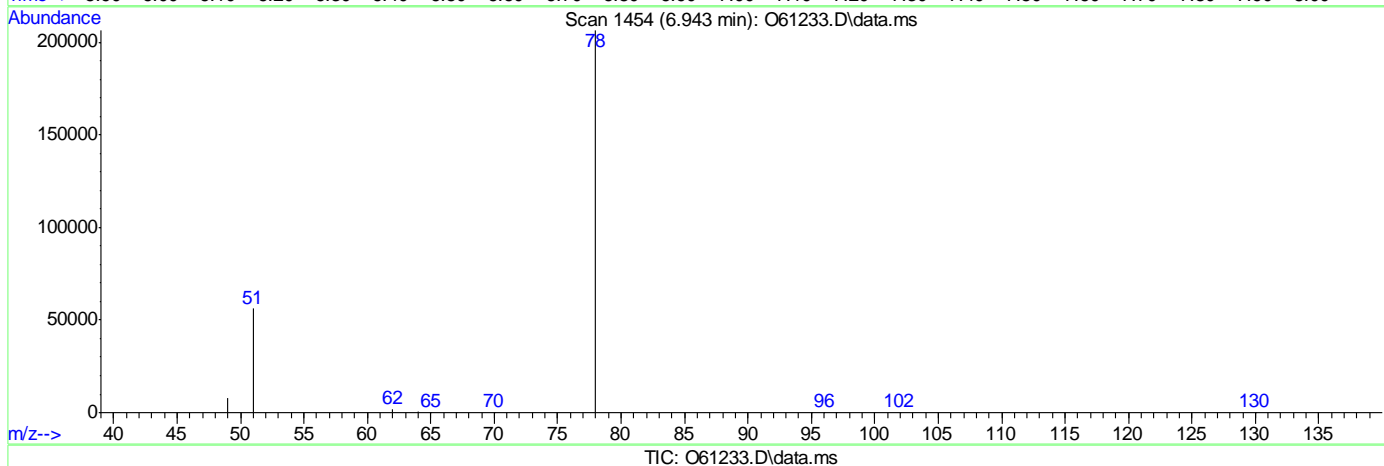
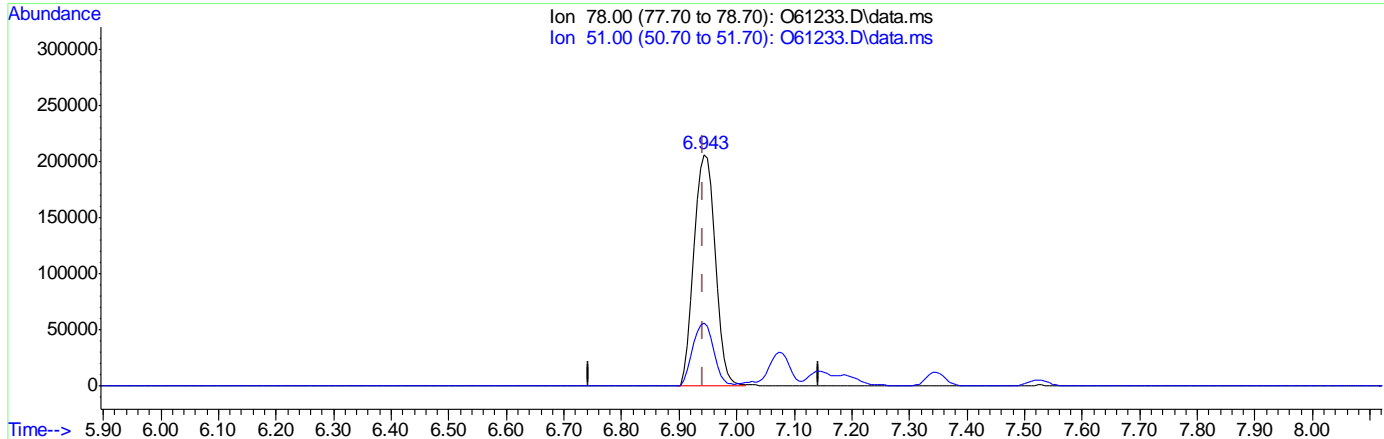
Ion	Exp%	Act%
78.00	100	100
51.00	26.20	27.17
0.00	0.00	0.00
0.00	0.00	0.00

7.6.14.2
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\091120\
 Data File : O61233.D
 Acq On : 11 Sep 2020 4:35 pm
 Operator : MANAGER
 Sample : IC2356-4 Inst : MSVOA12
 Misc : MS47184,VO2356,,,,,
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 11 17:52:28 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration



(12) Benzene ()
 6.943min (+0.000) 5.49ug/L m
 response 539806

Ion	Exp%	Act%
78.00	100	100
51.00	26.20	27.17
0.00	0.00	0.00
0.00	0.00	0.00

7.6.14.3
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\091120\
 Data File : O61234.D
 Acq On : 11 Sep 2020 4:55 pm
 Operator : stutip
 Sample : ICC2356-5 Inst : MSVOA12
 Misc : MS47201,VO2356,,,,,
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 11 18:03:36 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.346	96	367891	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.447	117	288681	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.074	65	143276	4.43	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	88.60%	
19) Toluene-d8	8.900	98	317520	4.50	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	90.00%	
Target Compounds						
						Qvalue
2) Vinyl Chloride	2.908	62	385419	11.68	ug/L	97
3) Chloromethane	2.807	50	542034	11.18	ug/L	93
4) 1,1-Dichloroethene	4.096	61	516893	10.38	ug/L	93
5) Methylene Chloride	4.703	49	746865	9.11	ug/L	99
6) trans-1,2-Dichloroethene	4.873	61	592225	10.01	ug/L	86
7) 1,1-Dichloroethane	5.514	63	676382	9.78	ug/L	100
8) cis-1,2-Dichloroethene	6.072	96	333880	10.85	ug/L	84
9) Chloroform	6.333	83	573497	10.24	ug/L	97
10) Carbon Tetrachloride	6.511	117	409043	11.71	ug/L	87
11) 1,1,1-Trichloroethane	6.582	97	456875	11.31	ug/L	94
12) Benzene	6.943	78	1143203m	10.51	ug/L	
14) 1,2-Dichloroethane	7.145	62	542073	8.97	ug/L	90
15) Trichloroethene	7.518	95	346969	10.84	ug/L	88
16) 1,2-Dichloropropane	8.043	63	380072	9.56	ug/L	92
17) cis-1,3-Dichloropropene	8.711	75	405529	9.07	ug/L	96
20) trans-1,3-Dichloropropene	9.343	75	393915	8.95	ug/L	97
21) Tetrachloroethene	9.343	166	320442	11.51	ug/L	98
22) 1,4-Dichlorobenzene	12.827	146	679269	11.17	ug/L	97
23) 1,2-Dibromo-3-Chloropr...	14.038	75	120855	7.57	ug/L	87

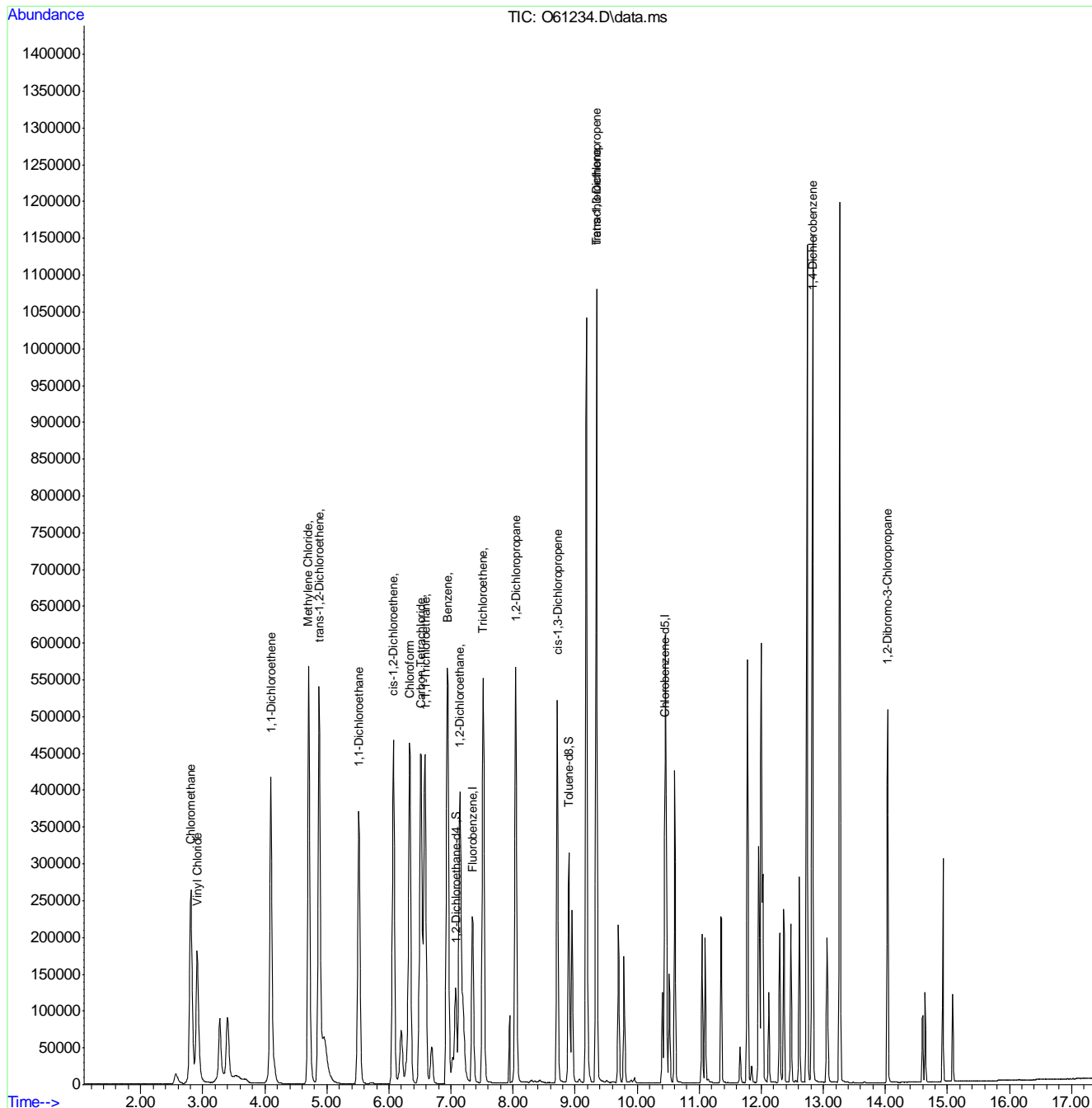
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\091120\
 Data File : O61234.D
 Acq On : 11 Sep 2020 4:55 pm
 Operator : stutip
 Sample : ICc2356-5
 Misc : MS47201,VO2356,,,,,
 ALS Vial : 6 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 11 18:03:36 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration



7.6.15
7

Manual Integration Approval Summary

Sample Number: VO2356-ICC2356 **Method:** SW846 8260B BY SIM
Lab FileID: O61234.D **Analyst approved:** 09/13/20 19:45 Stuti Patel
Injection Time: 09/11/20 16:55 **Supervisor approved:** 09/14/20 08:34 Melissa Mangual

Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzene	71-43-2		6.94	Poor instrument integration

7.6.15.1

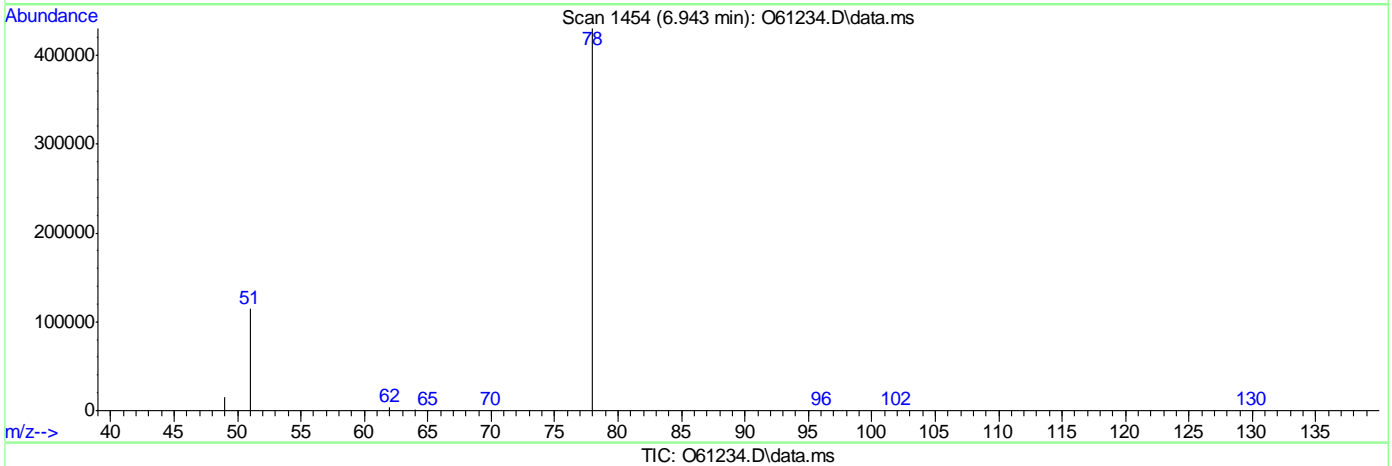
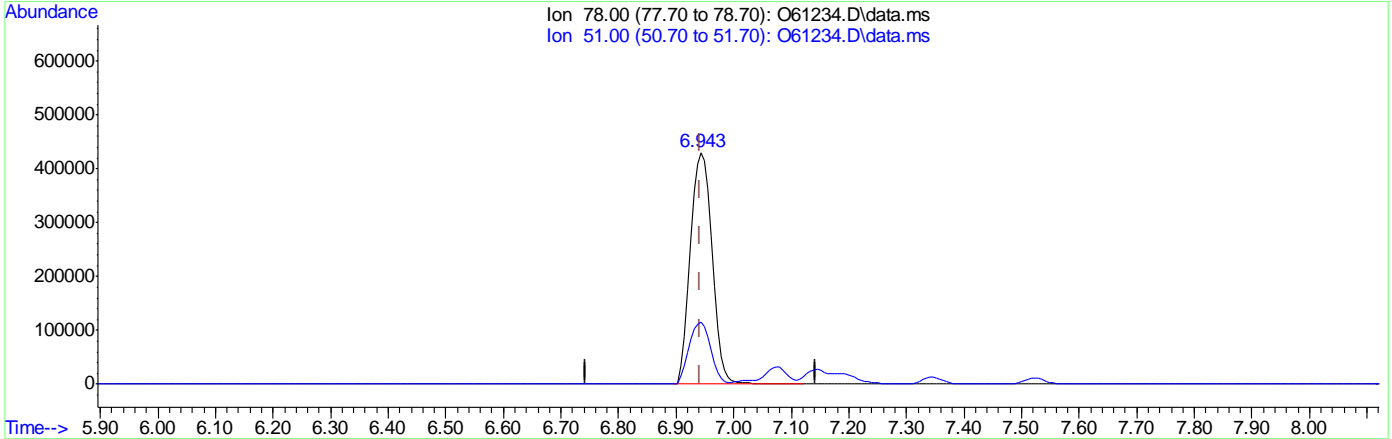
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\091120\
 Data File : O61234.D
 Acq On : 11 Sep 2020 4:55 pm
 Operator : MANAGER
 Sample : IC2356-5
 Misc : MS47184,VO2356,,,,,
 ALS Vial : 6 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 11 17:52:30 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration



(12) Benzene ()
 6.943min (+0.000) 10.57ug/L
 response 1149895

Ion	Exp%	Act%
78.00	100	100
51.00	26.20	26.68
0.00	0.00	0.00
0.00	0.00	0.00

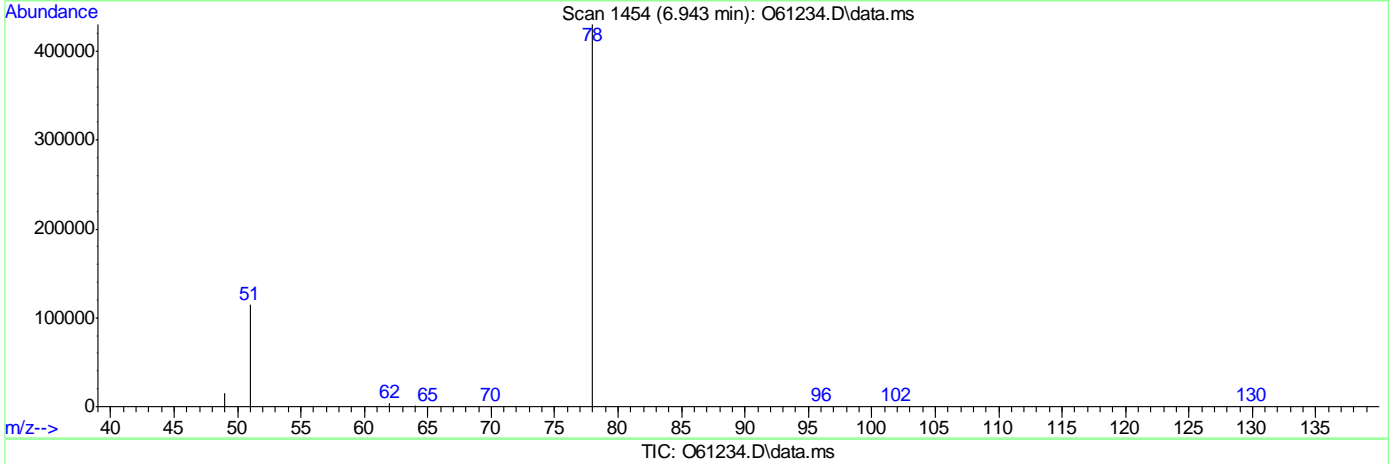
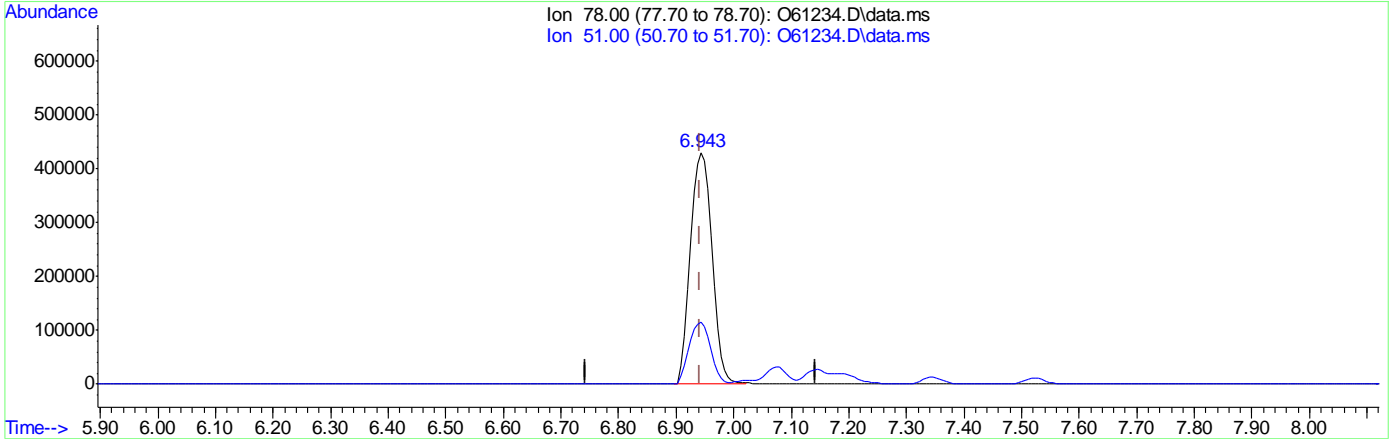
7.6.15.2
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\091120\
 Data File : O61234.D
 Acq On : 11 Sep 2020 4:55 pm
 Operator : MANAGER
 Sample : IC2356-5
 Misc : MS47184,VO2356,,,,,
 ALS Vial : 6 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 11 17:52:30 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration



(12) Benzene ()
 6.943min (+0.000) 10.51ug/L m
 response 1143203

Ion	Exp%	Act%
78.00	100	100
51.00	26.20	26.68
0.00	0.00	0.00
0.00	0.00	0.00

7.6.15.3
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\091120\
 Data File : O61235.D
 Acq On : 11 Sep 2020 5:15 pm
 Operator : stutip
 Sample : IC2356-6 Inst : MSVOA12
 Misc : MS47201,VO2356,,,,,
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 11 18:03:51 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
Internal Standards							
1) Fluorobenzene	7.346	96	393958	5.00	ug/L	0.00	
18) Chlorobenzene-d5	10.447	117	307376	5.00	ug/L	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.073	65	153155	4.43	ug/L	0.00	
Spiked Amount	5.000	Range 74 - 125	Recovery	=	88.60%		
19) Toluene-d8	8.896	98	343376	4.57	ug/L	0.00	
Spiked Amount	5.000	Range 88 - 111	Recovery	=	91.40%		
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.897	62	581790	17.36	ug/L		98
3) Chloromethane	2.791	50	805942	16.33	ug/L		94
4) 1,1-Dichloroethene	4.085	61	794045	14.88	ug/L		93
5) Methylene Chloride	4.696	49	1121963	13.69	ug/L		100
6) trans-1,2-Dichloroethene	4.861	61	919410	14.72	ug/L		84
7) 1,1-Dichloroethane	5.506	63	1045292	14.12	ug/L		100
8) cis-1,2-Dichloroethene	6.066	96	524339	15.91	ug/L		84
9) Chloroform	6.333	83	891365	14.86	ug/L		97
10) Carbon Tetrachloride	6.505	117	634944	16.97	ug/L		88
11) 1,1,1-Trichloroethane	6.576	97	713480	16.49	ug/L		94
12) Benzene	6.943	78	1776329m	15.29	ug/L		
14) 1,2-Dichloroethane	7.139	62	860563	13.30	ug/L		90
15) Trichloroethene	7.512	95	544590	15.88	ug/L		90
16) 1,2-Dichloropropane	8.040	63	594236	13.99	ug/L		92
17) cis-1,3-Dichloropropene	8.711	75	663239	13.85	ug/L		93
20) trans-1,3-Dichloropropene	9.343	75	651125	13.89	ug/L		95
21) Tetrachloroethene	9.337	166	499062	16.90	ug/L		92
22) 1,4-Dichlorobenzene	12.827	146	1064594	16.45	ug/L		98
23) 1,2-Dibromo-3-Chloropr...	14.037	75	202684	11.92	ug/L		90

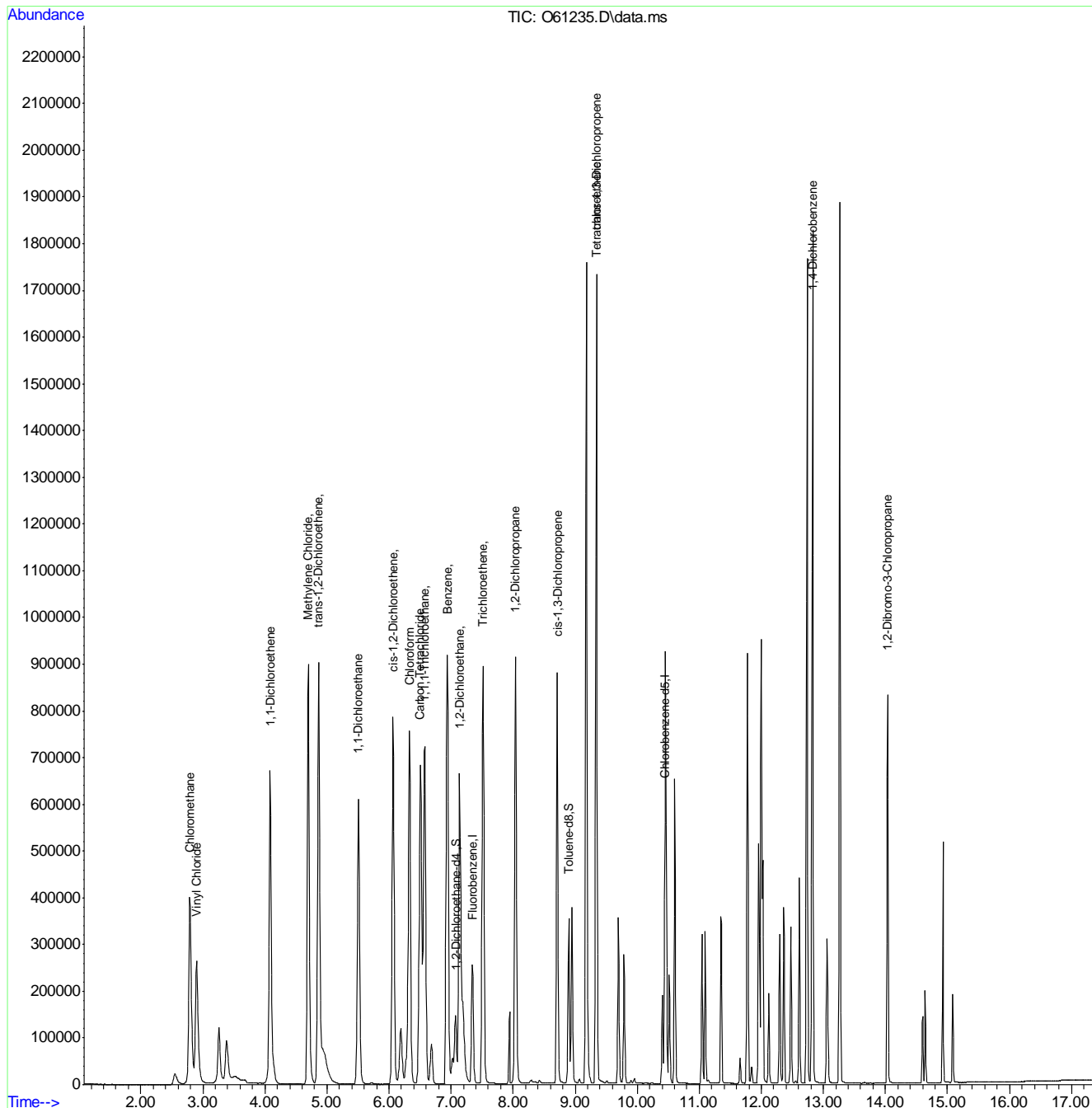
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\091120\
 Data File : O61235.D
 Acq On : 11 Sep 2020 5:15 pm
 Operator : stutip
 Sample : IC2356-6
 Misc : MS47201,VO2356,,,,,
 ALS Vial : 7 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 11 18:03:51 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration



7.6.16
7

Manual Integration Approval Summary

Sample Number: VO2356-IC2356 **Method:** SW846 8260B BY SIM
Lab FileID: O61235.D **Analyst approved:** 09/13/20 19:45 Stuti Patel
Injection Time: 09/11/20 17:15 **Supervisor approved:** 09/14/20 08:34 Melissa Mangual

Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzene	71-43-2		6.94	Poor instrument integration

7.6.16.1

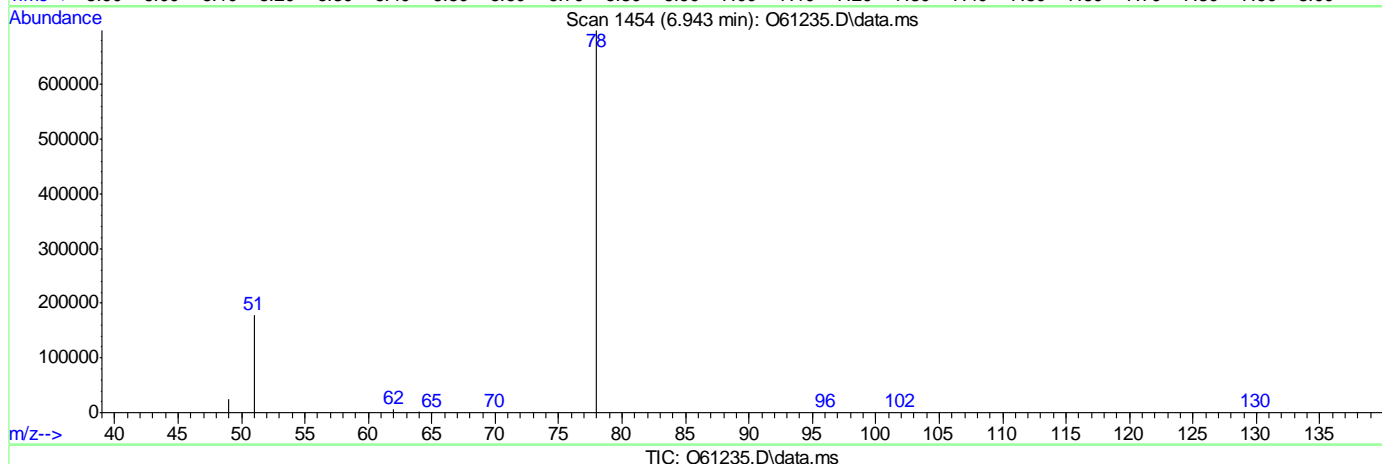
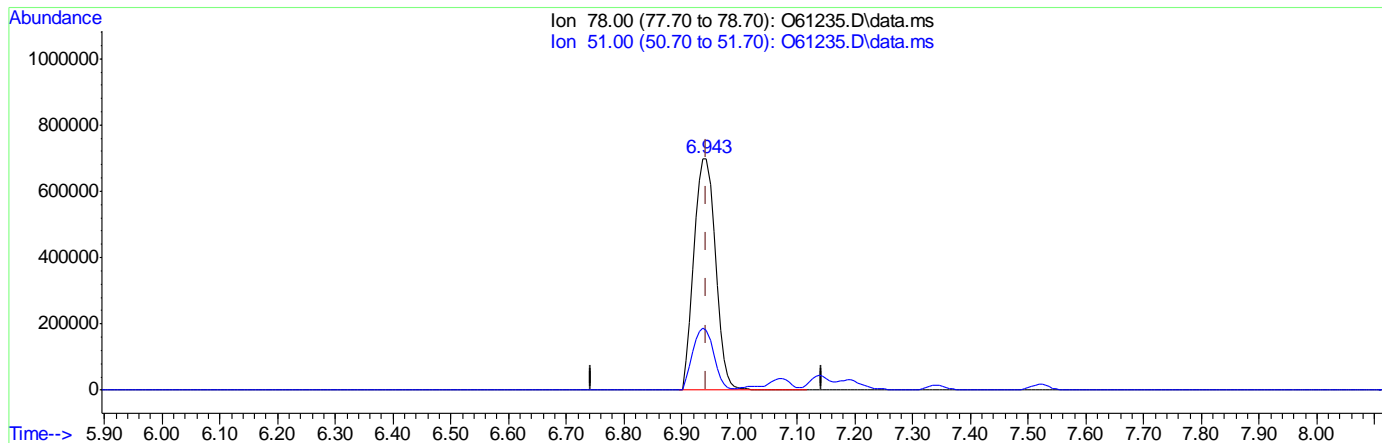
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\091120\
 Data File : O61235.D
 Acq On : 11 Sep 2020 5:15 pm
 Operator : MANAGER
 Sample : IC2356-6
 Misc : MS47184,VO2356,,,,,
 ALS Vial : 7 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 11 17:52:32 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration



(12) Benzene ()

6.943min (+0.000) 15.36ug/L

response 1784608

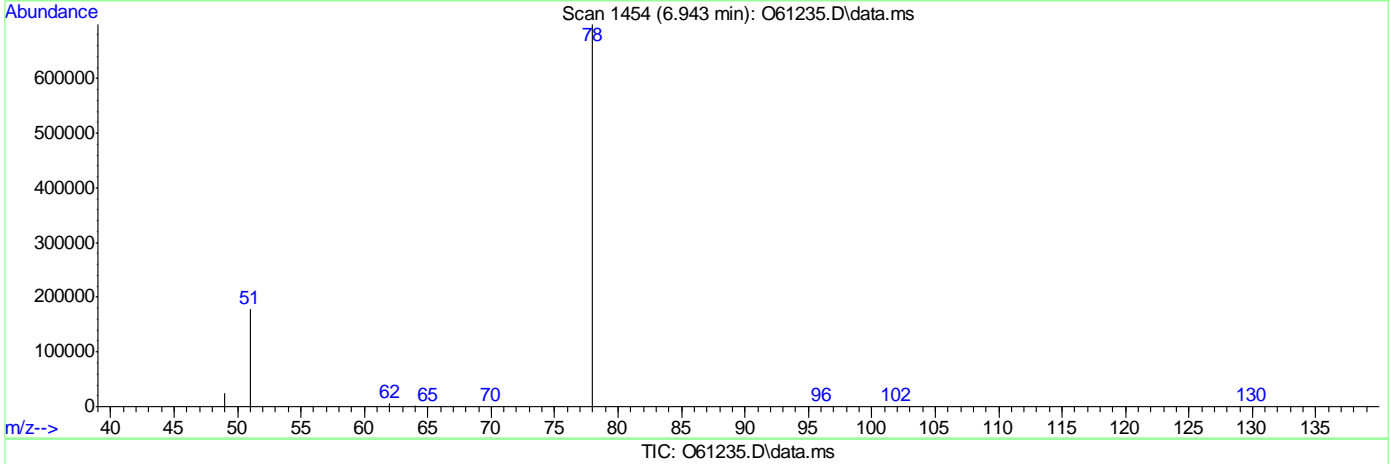
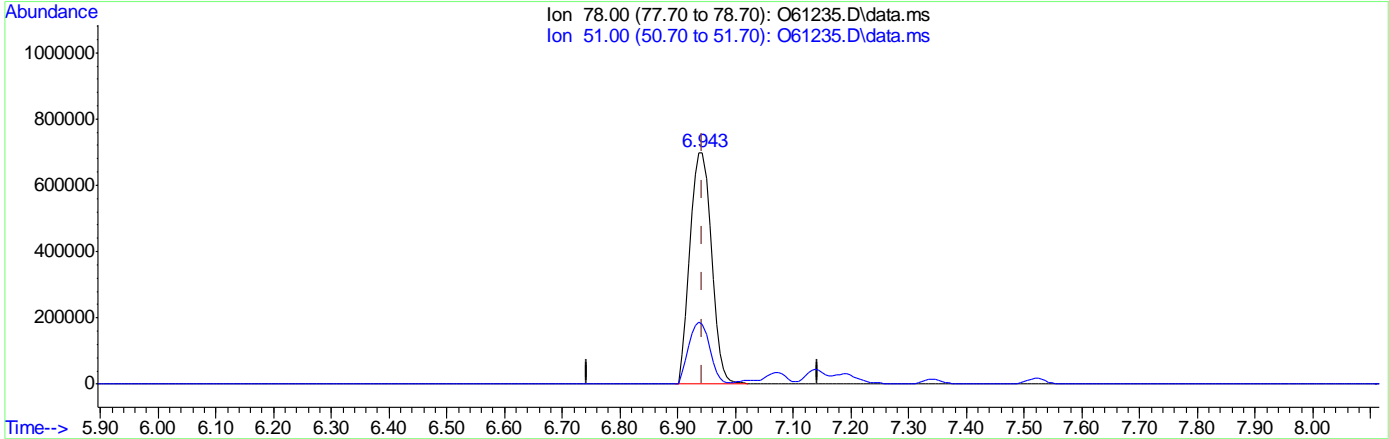
Ion	Exp%	Act%
78.00	100	100
51.00	26.20	25.61
0.00	0.00	0.00
0.00	0.00	0.00

7.6.16.2
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\091120\
 Data File : O61235.D
 Acq On : 11 Sep 2020 5:15 pm
 Operator : MANAGER
 Sample : IC2356-6 Inst : MSVOA12
 Misc : MS47184,VO2356,,,,,
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 11 17:52:32 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration



(12) Benzene ()
 6.943min (+0.000) 15.29ug/L m
 response 1776329

Ion	Exp%	Act%
78.00	100	100
51.00	26.20	25.61
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\091120\
 Data File : 061236.D
 Acq On : 11 Sep 2020 5:36 pm
 Operator : stutip
 Sample : IC2356-7 Inst : MSVOA12
 Misc : MS47201,VO2356,,,,,
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 11 18:04:12 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
Internal Standards							
1) Fluorobenzene	7.352	96	430313	5.00	ug/L	0.00	
18) Chlorobenzene-d5	10.447	117	330631	5.00	ug/L	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.079	65	166372	4.40	ug/L	0.00	
Spiked Amount	5.000	Range 74 - 125	Recovery	=	88.00%		
19) Toluene-d8	8.900	98	374232	4.63	ug/L	0.00	
Spiked Amount	5.000	Range 88 - 111	Recovery	=	92.60%		
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.908	62	814030	23.66	ug/L		98
3) Chloromethane	2.803	50	1116385	21.95	ug/L		94
4) 1,1-Dichloroethene	4.092	61	1194148	20.49	ug/L		94
5) Methylene Chloride	4.703	49	1613536	19.98	ug/L		98
6) trans-1,2-Dichloroethene	4.869	61	1391011	20.75	ug/L		85
7) 1,1-Dichloroethane	5.514	63	1560149	19.30	ug/L		100
8) cis-1,2-Dichloroethene	6.072	96	791148	21.98	ug/L		85
9) Chloroform	6.333	83	1332932	20.34	ug/L		97
10) Carbon Tetrachloride	6.510	117	982791	24.05	ug/L		88
11) 1,1,1-Trichloroethane	6.576	97	1094990	23.17	ug/L		95
12) Benzene	6.943	78	2670290m	21.11	ug/L		
14) 1,2-Dichloroethane	7.145	62	1260966	17.85	ug/L		89
15) Trichloroethene	7.518	95	818610	21.86	ug/L		88
16) 1,2-Dichloropropane	8.043	63	893916	19.34	ug/L		91
17) cis-1,3-Dichloropropene	8.711	75	1001044	19.14	ug/L		95
20) trans-1,3-Dichloropropene	9.343	75	975862	19.36	ug/L		94
21) Tetrachloroethene	9.343	166	748457	23.68	ug/L		97
22) 1,4-Dichlorobenzene	12.827	146	1570512	22.56	ug/L		98
23) 1,2-Dibromo-3-Chloropr...	14.037	75	297989	16.29	ug/L		91

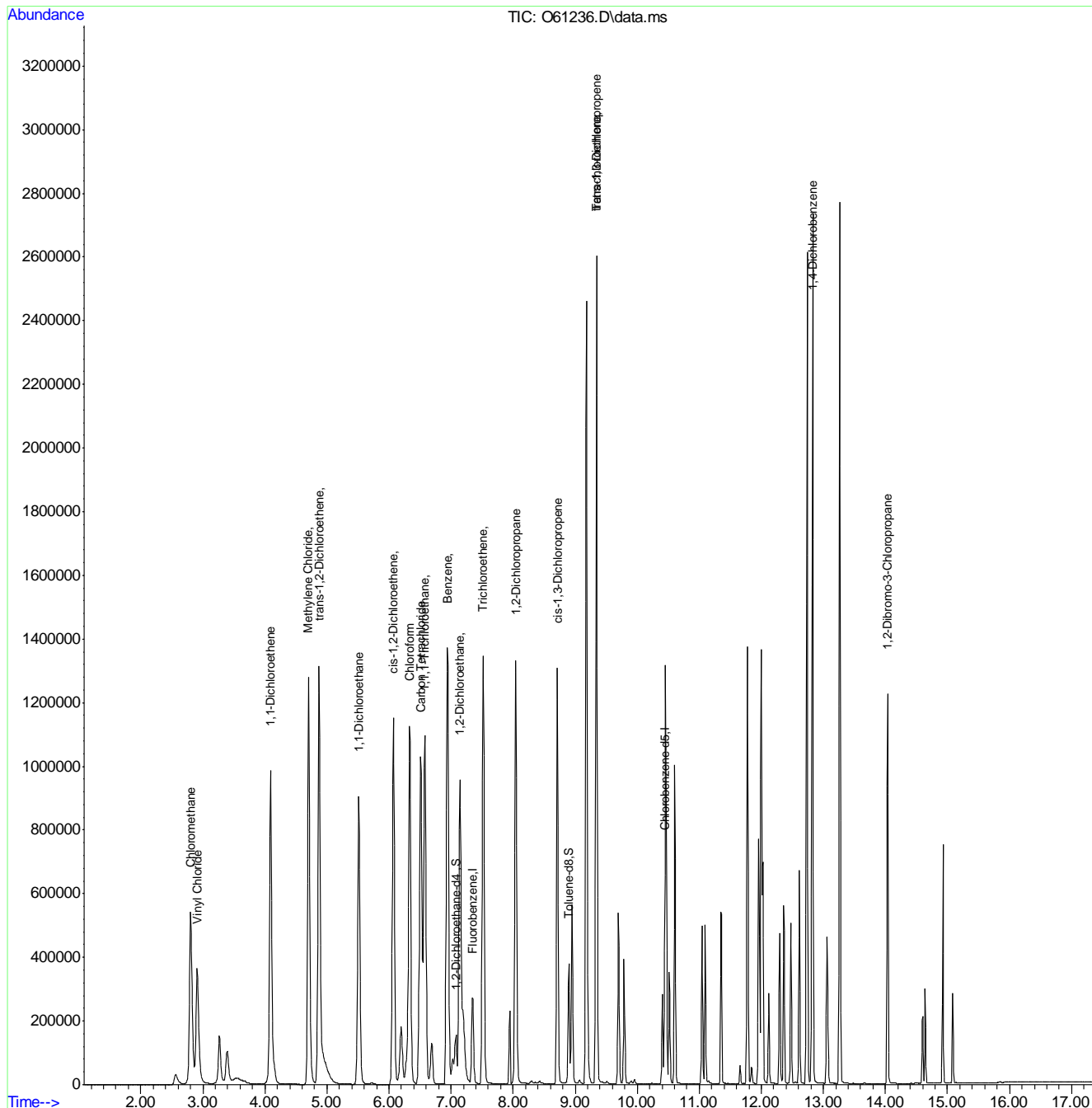
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\091120\
 Data File : O61236.D
 Acq On : 11 Sep 2020 5:36 pm
 Operator : stutip
 Sample : IC2356-7
 Misc : MS47201,VO2356,,,,,
 ALS Vial : 8 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 11 18:04:12 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration



7.6.17
7

Manual Integration Approval Summary

Sample Number: VO2356-IC2356 **Method:** SW846 8260B BY SIM
Lab FileID: O61236.D **Analyst approved:** 09/13/20 19:45 Stuti Patel
Injection Time: 09/11/20 17:36 **Supervisor approved:** 09/14/20 08:34 Melissa Mangual

Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzene	71-43-2		6.94	Poor instrument integration

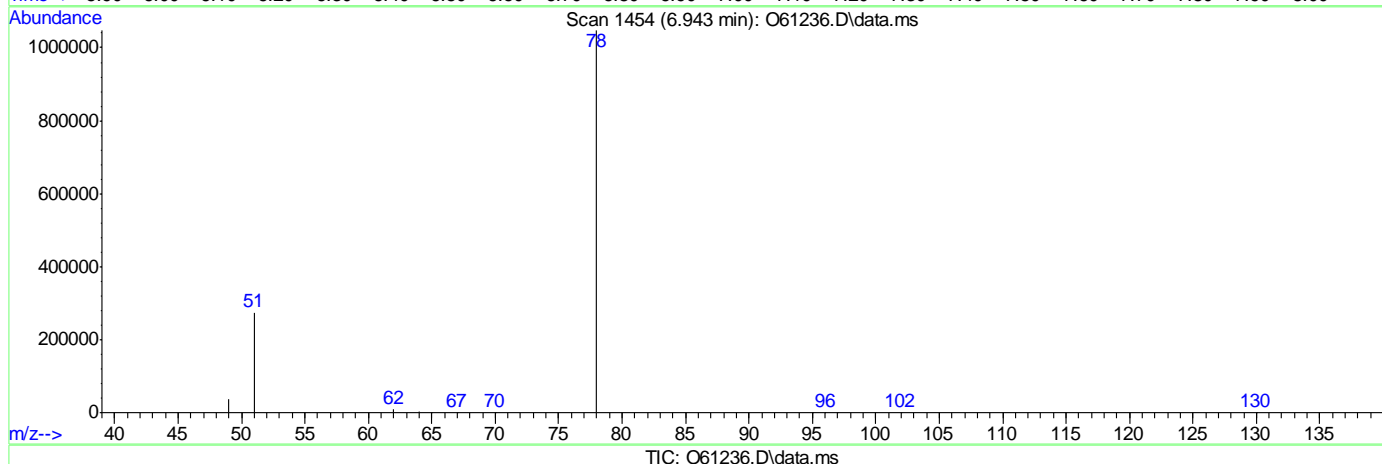
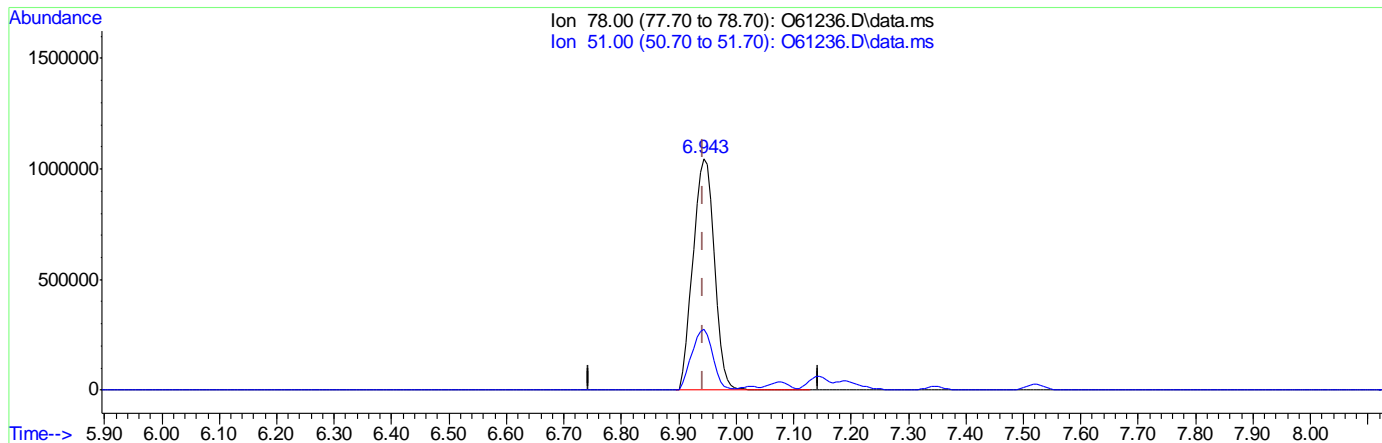
7.6.17.1

7

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\091120\
 Data File : O61236.D
 Acq On : 11 Sep 2020 5:36 pm
 Operator : MANAGER
 Sample : IC2356-7 Inst : MSVOA12
 Misc : MS47184,VO2356,,,,,
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 11 18:04:05 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration



(12) Benzene ()

6.943min (-0.000) 21.23ug/L

response 2686132

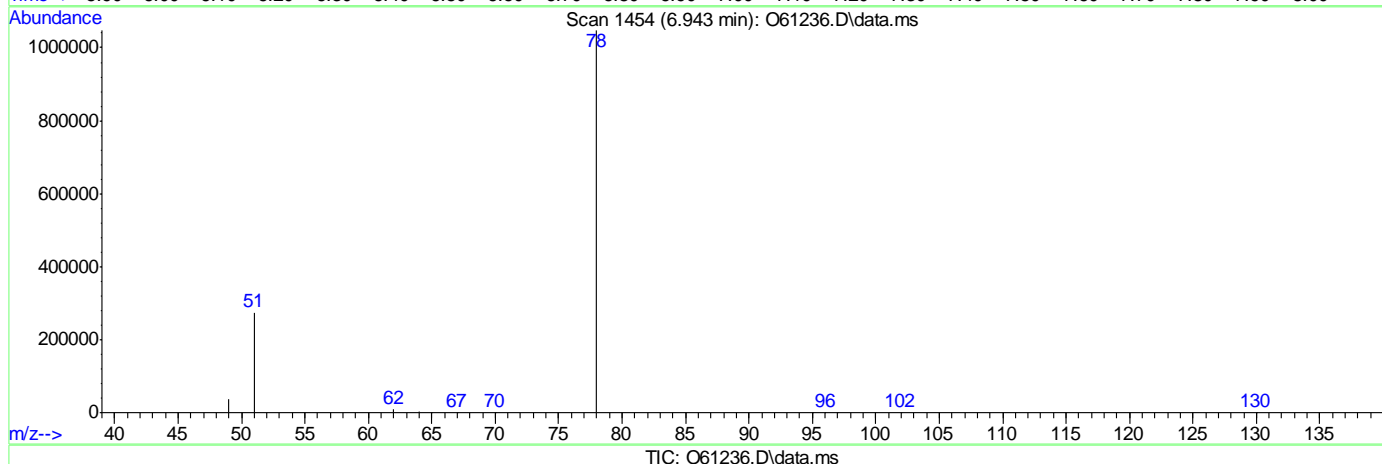
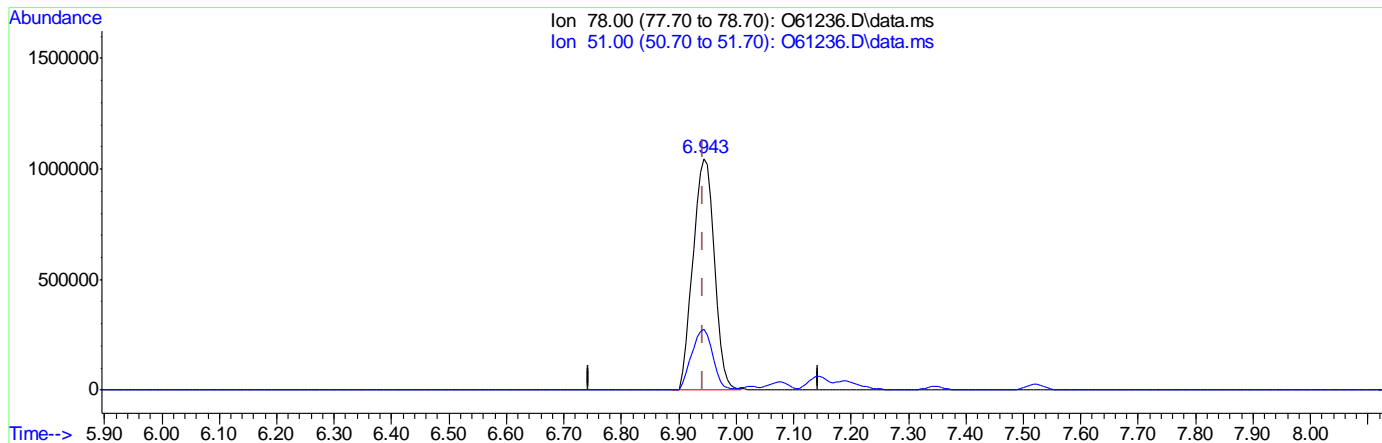
Ion	Exp%	Act%
78.00	100	100
51.00	26.20	26.17
0.00	0.00	0.00
0.00	0.00	0.00

7.6.17.2
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\091120\
 Data File : O61236.D
 Acq On : 11 Sep 2020 5:36 pm
 Operator : MANAGER
 Sample : IC2356-7 Inst : MSVOA12
 Misc : MS47184,VO2356,,,,,
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 11 18:04:05 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration



(12) Benzene ()
 6.943min (-0.000) 21.11ug/L m
 response 2670290

Ion	Exp%	Act%
78.00	100	100
51.00	26.20	26.17
0.00	0.00	0.00
0.00	0.00	0.00

7.6.17.3
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\091120\
 Data File : O61238.D
 Acq On : 11 Sep 2020 6:16 pm
 Operator : stutip
 Sample : icv2356-5 Inst : MSVOA12
 Misc : MS47201,VO2356,,,,,
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 13 19:20:48 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Sun Sep 13 19:20:40 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
Internal Standards							
1) Fluorobenzene	7.346	96	392529	5.00	ug/L	0.00	
18) Chlorobenzene-d5	10.447	117	305591	5.00	ug/L	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.074	65	151418	4.78	ug/L	0.00	
Spiked Amount	5.000	Range 74 - 125	Recovery	=	95.60%		
19) Toluene-d8	8.896	98	341369	4.95	ug/L	0.00	
Spiked Amount	5.000	Range 88 - 111	Recovery	=	99.00%		
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.905	62	359054	8.49	ug/L		98
3) Chloromethane	2.803	50	507353	8.27	ug/L		94
4) 1,1-Dichloroethene	4.092	61	507491	9.35	ug/L		91
5) Methylene Chloride	4.703	49	755284	8.89	ug/L		99
6) trans-1,2-Dichloroethene	4.869	61	597300	9.53	ug/L		84
7) 1,1-Dichloroethane	5.514	63	694519	9.54	ug/L		100
8) cis-1,2-Dichloroethene	6.072	96	347499	9.66	ug/L		85
9) Chloroform	6.333	83	585017	9.34	ug/L		97
10) Carbon Tetrachloride	6.511	117	409874	9.60	ug/L		88
11) 1,1,1-Trichloroethane	6.576	97	455396	9.43	ug/L		94
12) Benzene	6.943	78	1221796	10.10	ug/L		100
14) 1,2-Dichloroethane	7.139	62	581587	9.82	ug/L		90
15) Trichloroethene	7.518	95	365705	9.91	ug/L		88
16) 1,2-Dichloropropane	8.043	63	408716	10.10	ug/L		92
17) cis-1,3-Dichloropropene	8.711	75	449848	10.71	ug/L		94
20) trans-1,3-Dichloropropene	9.343	75	443597	11.04	ug/L		95
21) Tetrachloroethene	9.343	166	323529	9.60	ug/L		99
22) 1,4-Dichlorobenzene	12.827	146	714911	10.10	ug/L		98
23) 1,2-Dibromo-3-Chloropr...	14.038	75	131759	10.13	ug/L		93

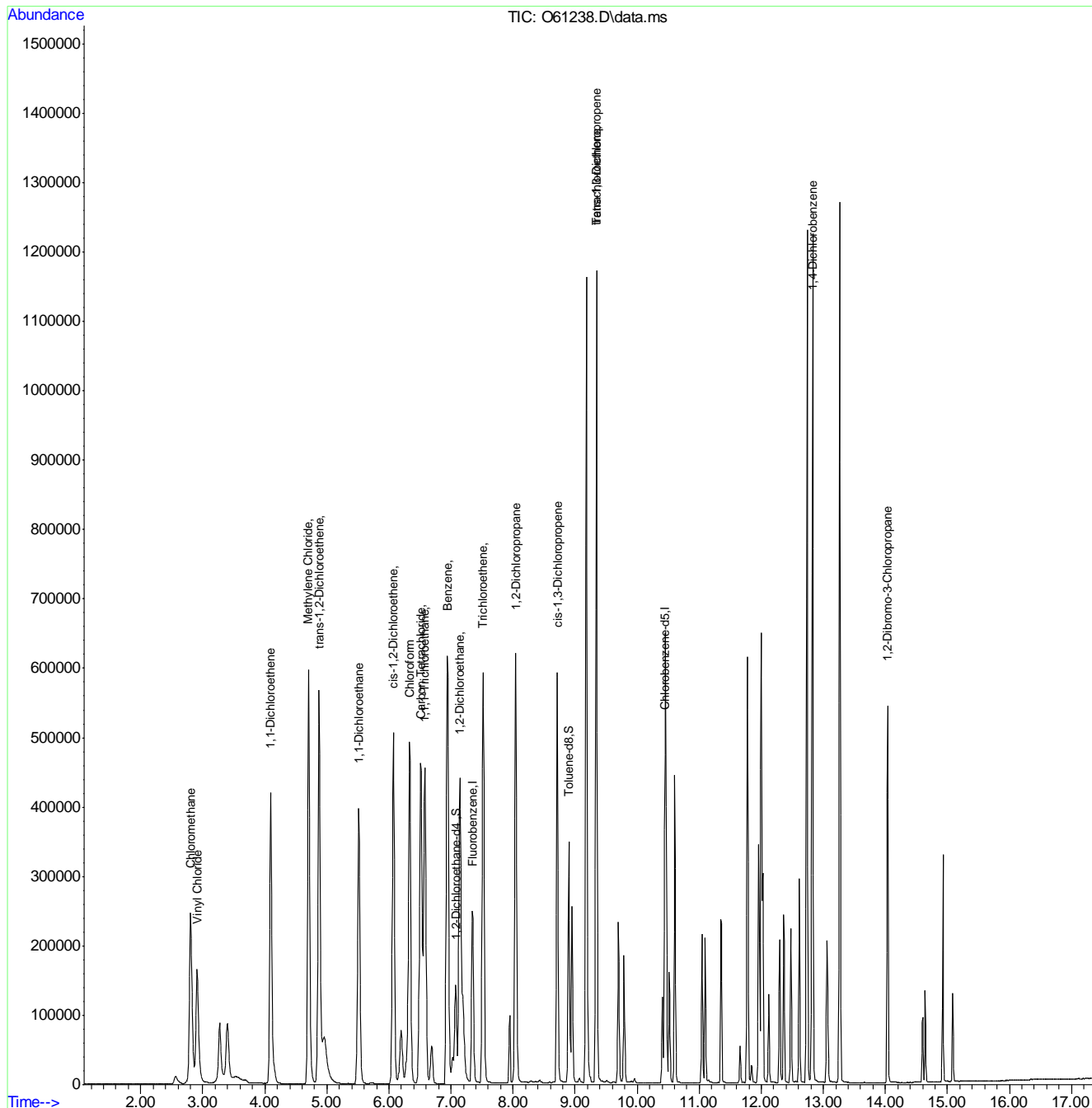
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\091120\
 Data File : O61238.D
 Acq On : 11 Sep 2020 6:16 pm
 Operator : stutip
 Sample : icv2356-5
 Misc : MS47201,VO2356,,,,,
 ALS Vial : 10 Sample Multiplier: 1

Inst : MSVOA12

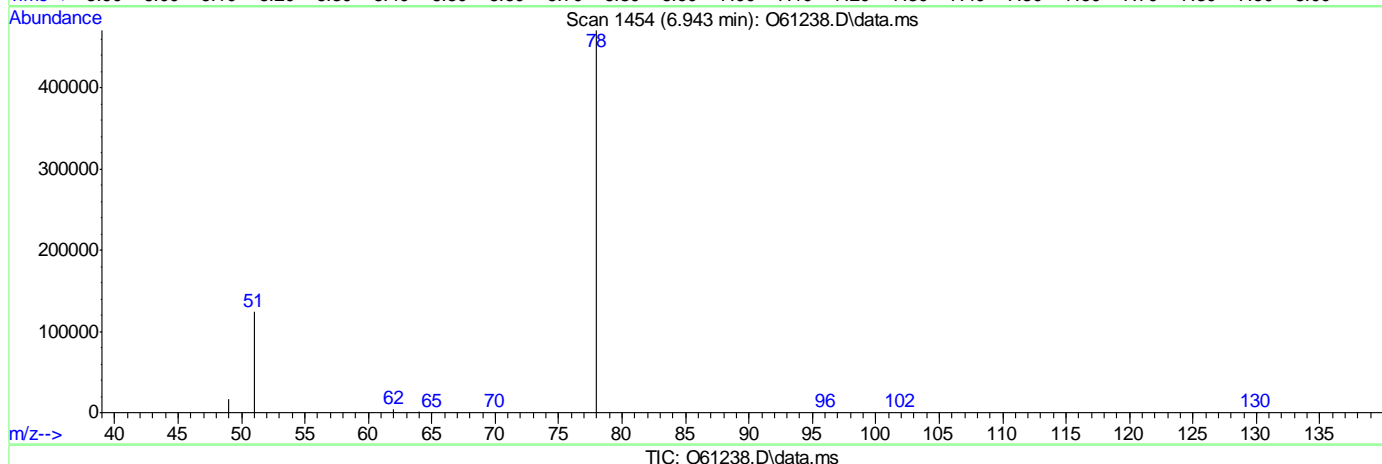
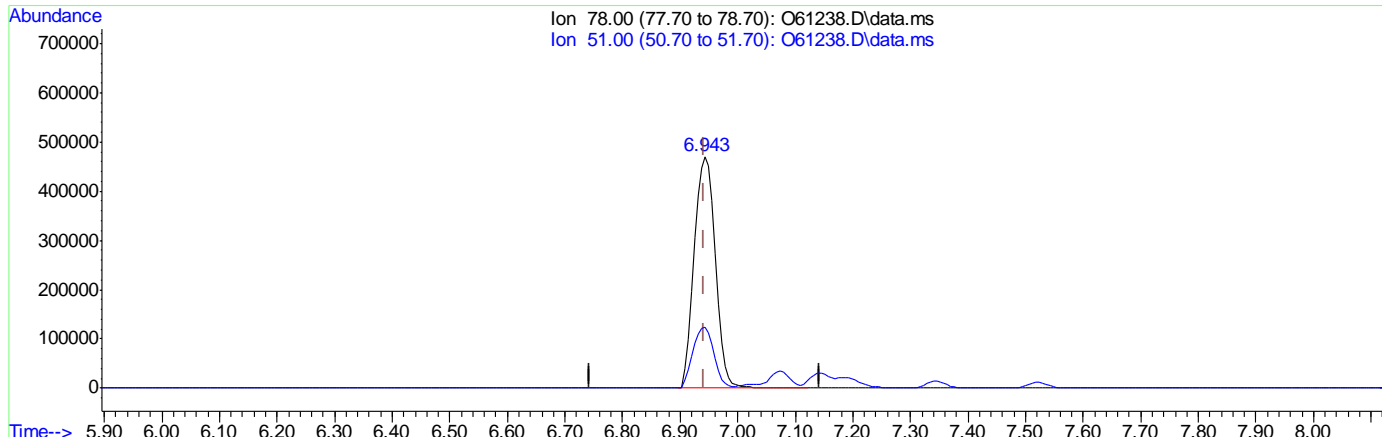
Quant Time: Sep 13 19:20:48 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Sun Sep 13 19:20:40 2020
 Response via : Initial Calibration



Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\091120\
 Data File : O61238.D
 Acq On : 11 Sep 2020 6:16 pm
 Operator : MANAGER
 Sample : icv2356-5 Inst : MSVOA12
 Misc : MS47184,VO2356,,,,,
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 13 19:14:07 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Sat Sep 12 09:29:43 2020
 Response via : Initial Calibration



(12) Benzene ()

6.943min (+0.000) 10.10ug/L

response 1221796

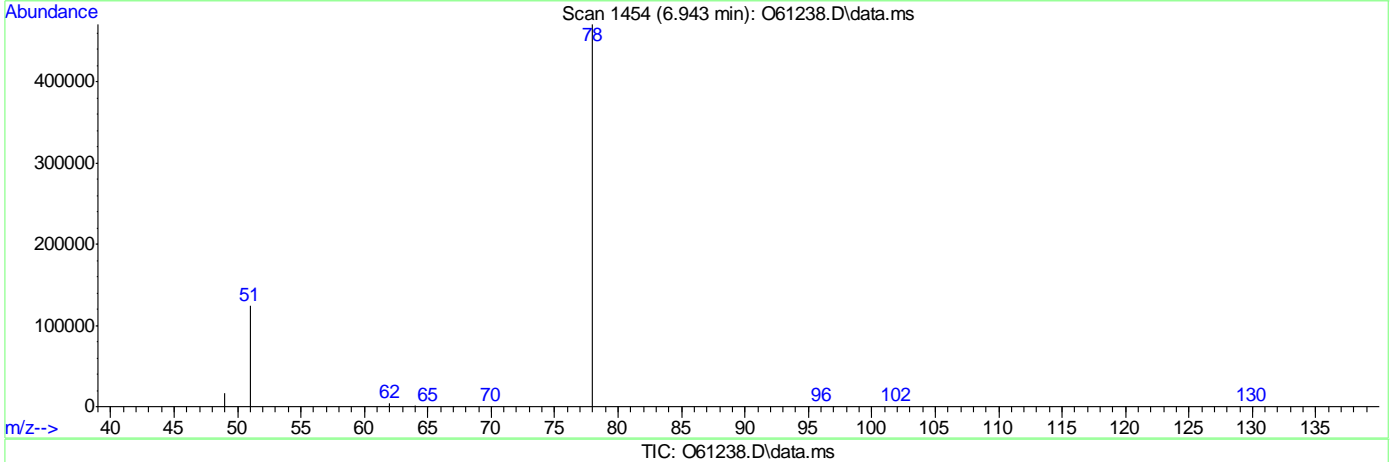
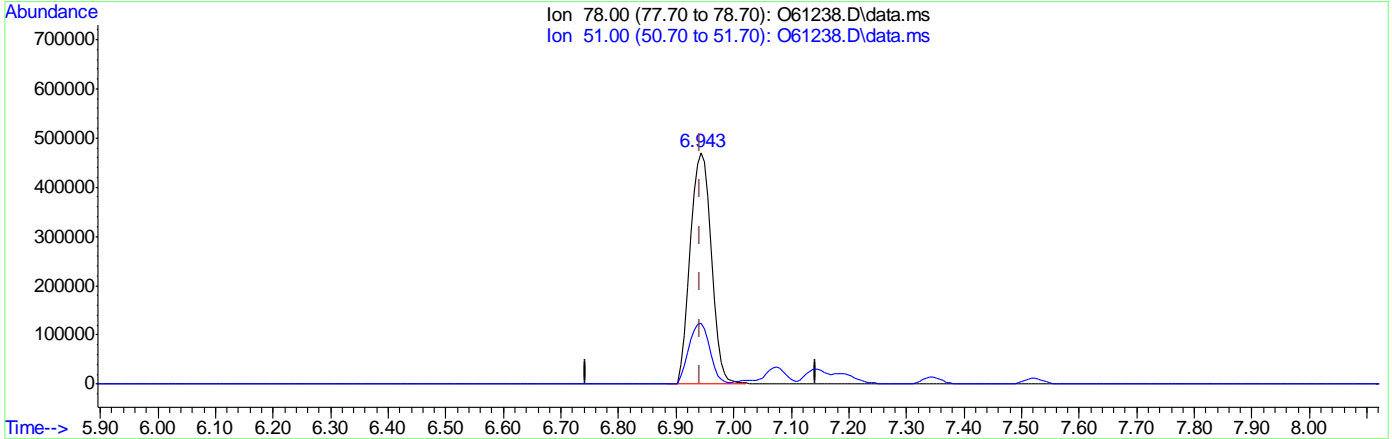
Ion	Exp%	Act%
78.00	100	100
51.00	26.20	26.31
0.00	0.00	0.00
0.00	0.00	0.00

7.6.18.1
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\091120\
 Data File : O61238.D
 Acq On : 11 Sep 2020 6:16 pm
 Operator : MANAGER
 Sample : icv2356-5 Inst : MSVOA12
 Misc : MS47184,VO2356,,,,,
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 13 19:14:07 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Sat Sep 12 09:29:43 2020
 Response via : Initial Calibration



(12) Benzene ()
 6.943min (+0.000) 10.04ug/L m
 response 1214827

Ion	Exp%	Act%
78.00	100	100
51.00	26.20	26.31
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-14-2020\VO2360\
 Data File : O61325.d
 Acq On : 13 Sep 2020 11:41 am
 Operator : stutip
 Sample : cc2356-5
 Misc : MS47193,VO2360,,,,,
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 14 08:28:45 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Sun Sep 13 19:20:40 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	

Internal Standards							
1) Fluorobenzene	7.340	96	286719	5.00	ug/L	0.00	
18) Chlorobenzene-d5	10.441	117	233530	5.00	ug/L	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.068	65	113439	4.90	ug/L	0.00	
Spiked Amount	5.000	Range 74 - 125	Recovery	=	98.00%		
19) Toluene-d8	8.896	98	240593	4.57	ug/L	0.00	
Spiked Amount	5.000	Range 88 - 111	Recovery	=	91.40%		
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.901	62	307619	10.15	ug/L		98
3) Chloromethane	2.799	50	454425	10.52	ug/L		94
4) 1,1-Dichloroethene	4.085	61	444036	11.21	ug/L		93
5) Methylene Chloride	4.699	49	662302	10.67	ug/L		98
6) trans-1,2-Dichloroethene	4.865	61	488323	10.67	ug/L		85
7) 1,1-Dichloroethane	5.506	63	573092	10.78	ug/L		99
8) cis-1,2-Dichloroethene	6.066	96	268107	10.20	ug/L		84
9) Chloroform	6.327	83	469898	10.27	ug/L		95
10) Carbon Tetrachloride	6.505	117	312524	10.02	ug/L		87
11) 1,1,1-Trichloroethane	6.576	97	351649	9.97	ug/L		92
12) Benzene	6.937	78	938711m	10.62	ug/L		
14) 1,2-Dichloroethane	7.139	62	453680	10.49	ug/L		92
15) Trichloroethene	7.512	95	275193	10.21	ug/L		87
16) 1,2-Dichloropropane	8.040	63	318194	10.77	ug/L		93
17) cis-1,3-Dichloropropene	8.707	75	318531	10.39	ug/L		96
20) trans-1,3-Dichloropropene	9.343	75	316783	10.32	ug/L		97
21) Tetrachloroethene	9.337	166	255132	9.90	ug/L		97
22) 1,4-Dichlorobenzene	12.821	146	564157	10.43	ug/L		98
23) 1,2-Dibromo-3-Chloropr...	14.037	75	98829	9.96	ug/L		84

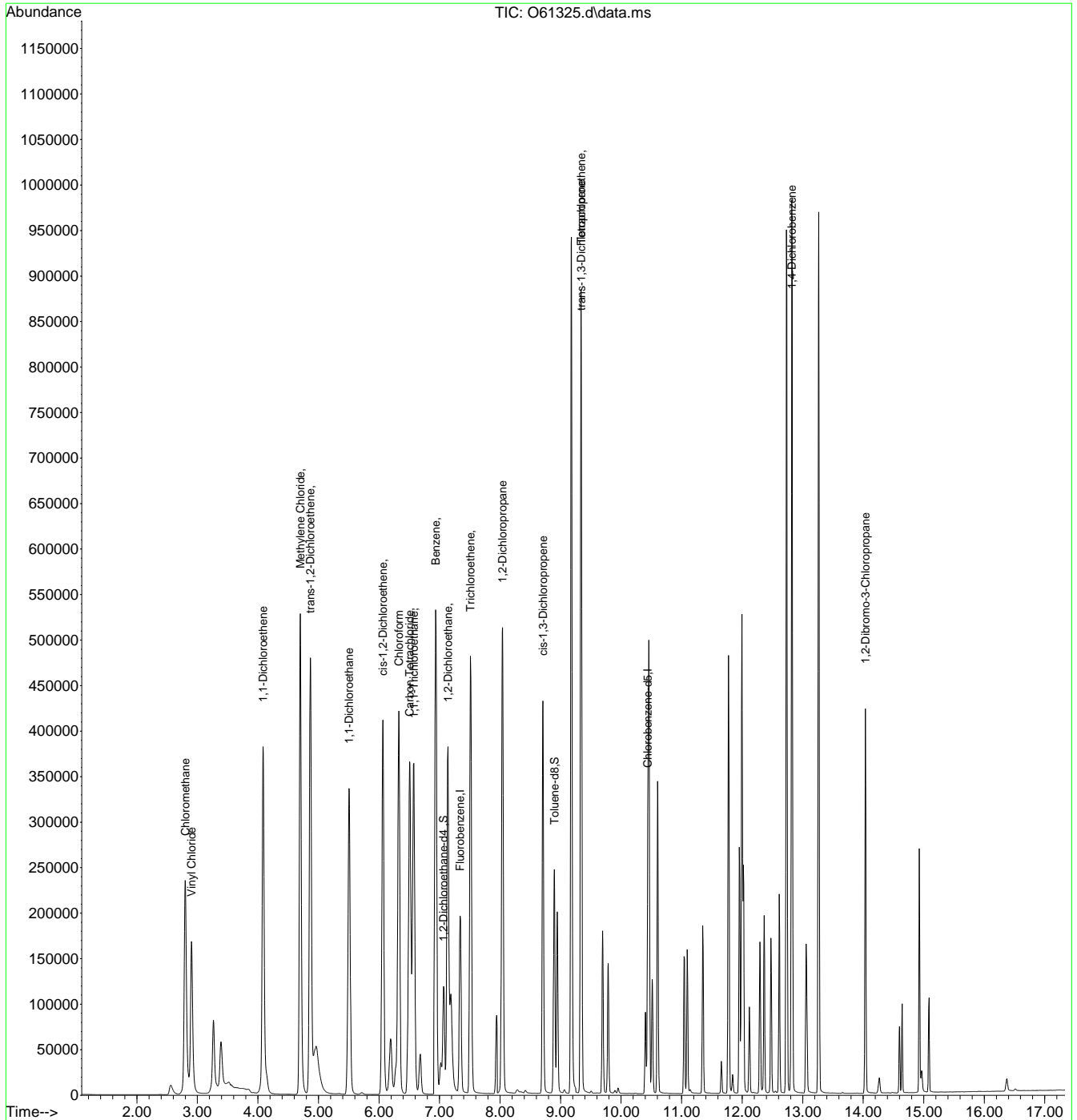
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.6.19
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-14-2020\VO2360\
 Data File : O61325.d
 Acq On : 13 Sep 2020 11:41 am
 Operator : stutip
 Sample : cc2356-5
 Misc : MS47193,VO2360,,,,,
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 14 08:28:45 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Sun Sep 13 19:20:40 2020
 Response via : Initial Calibration



Manual Integration Approval Summary

Sample Number: VO2360-CC2356 **Method:** SW846 8260B BY SIM
Lab FileID: O61325.D **Analyst approved:** 09/14/20 08:47 Jennifer Ferreira
Injection Time: 09/13/20 11:41 **Supervisor approved:** 09/14/20 13:35 Melissa Mangual

Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzene	71-43-2		6.94	Poor instrument integration

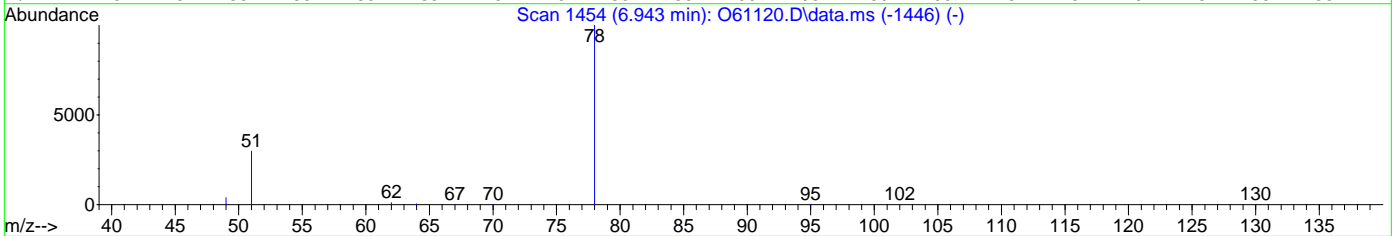
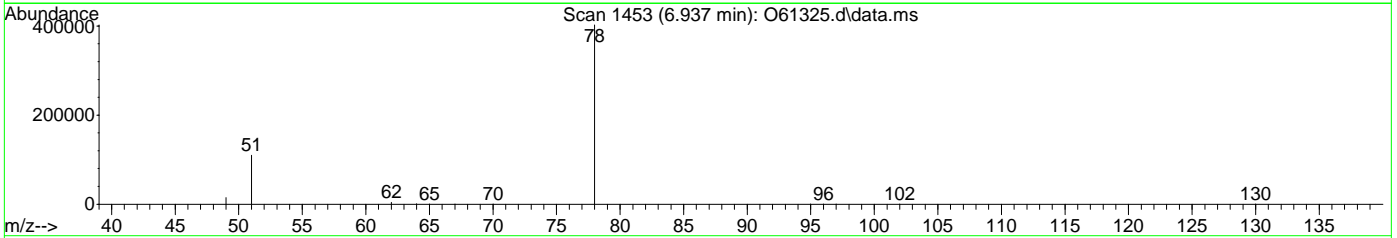
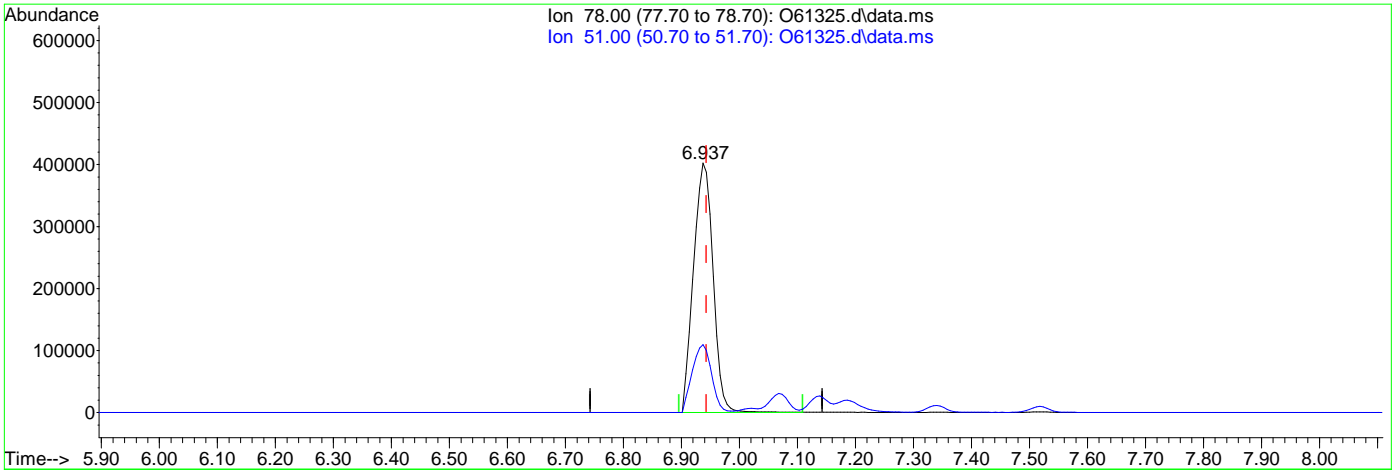
7.6.19.1

7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-14-2020\VO2360\
 Data File : O61325.d
 Acq On : 13 Sep 2020 11:41 am
 Operator : stutip
 Sample : cc2356-5
 Misc : MS47193,VO2360,,,,,
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 14 07:52:39 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Sun Sep 13 19:20:40 2020
 Response via : Initial Calibration



(12) Benzene ()

6.937min (-0.006) 10.70ug/L

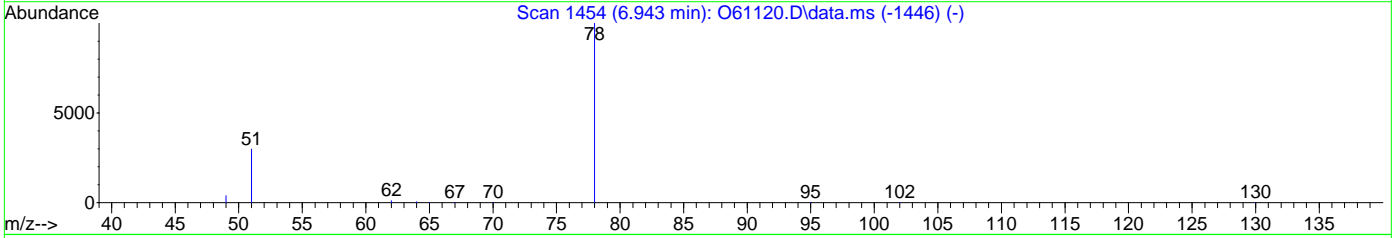
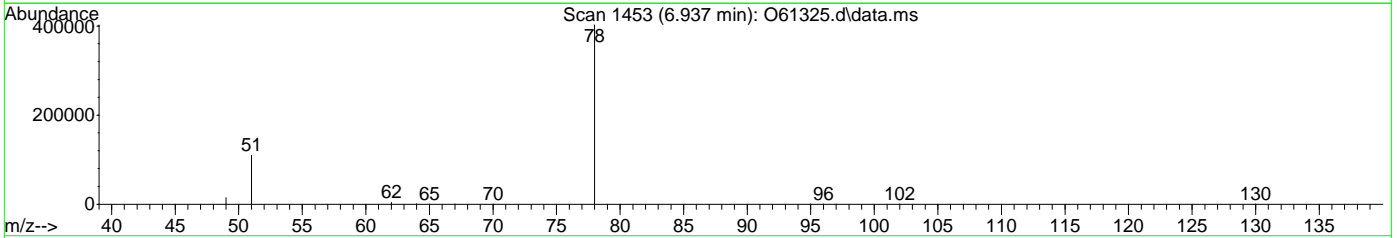
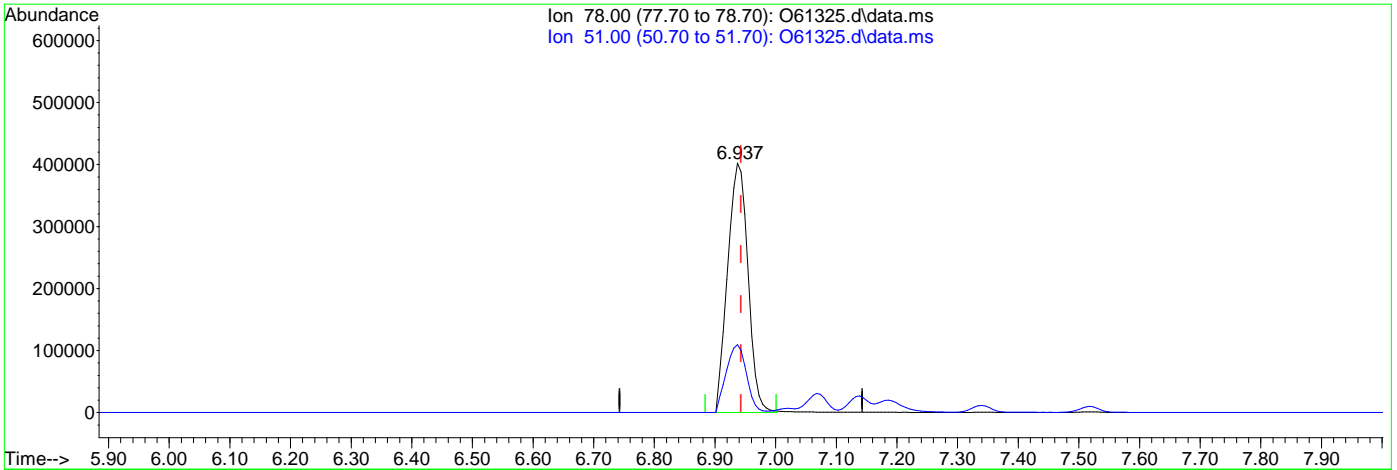
response 945468

Ion	Exp%	Act%
78.00	100	100
51.00	26.20	27.25
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-14-2020\VO2360\
 Data File : O61325.d
 Acq On : 13 Sep 2020 11:41 am
 Operator : stutip
 Sample : cc2356-5
 Misc : MS47193,VO2360,,,,,
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 14 07:52:39 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Sun Sep 13 19:20:40 2020
 Response via : Initial Calibration



(12) Benzene ()

6.937min (-0.006) 10.62ug/L m

response 938711

Ion	Exp%	Act%
78.00	100	100
51.00	26.20	27.25
0.00	0.00	0.00
0.00	0.00	0.00

7.6.19.3

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-14-2020\VO2360\
 Data File : O61351.d
 Acq On : 13 Sep 2020 8:32 pm
 Operator : stutip
 Sample : ecc2356-5
 Misc : MS47201,VO2360,,,,,
 ALS Vial : 26 Sample Multiplier: 1

Quant Time: Sep 14 08:40:54 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Sun Sep 13 19:20:40 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	

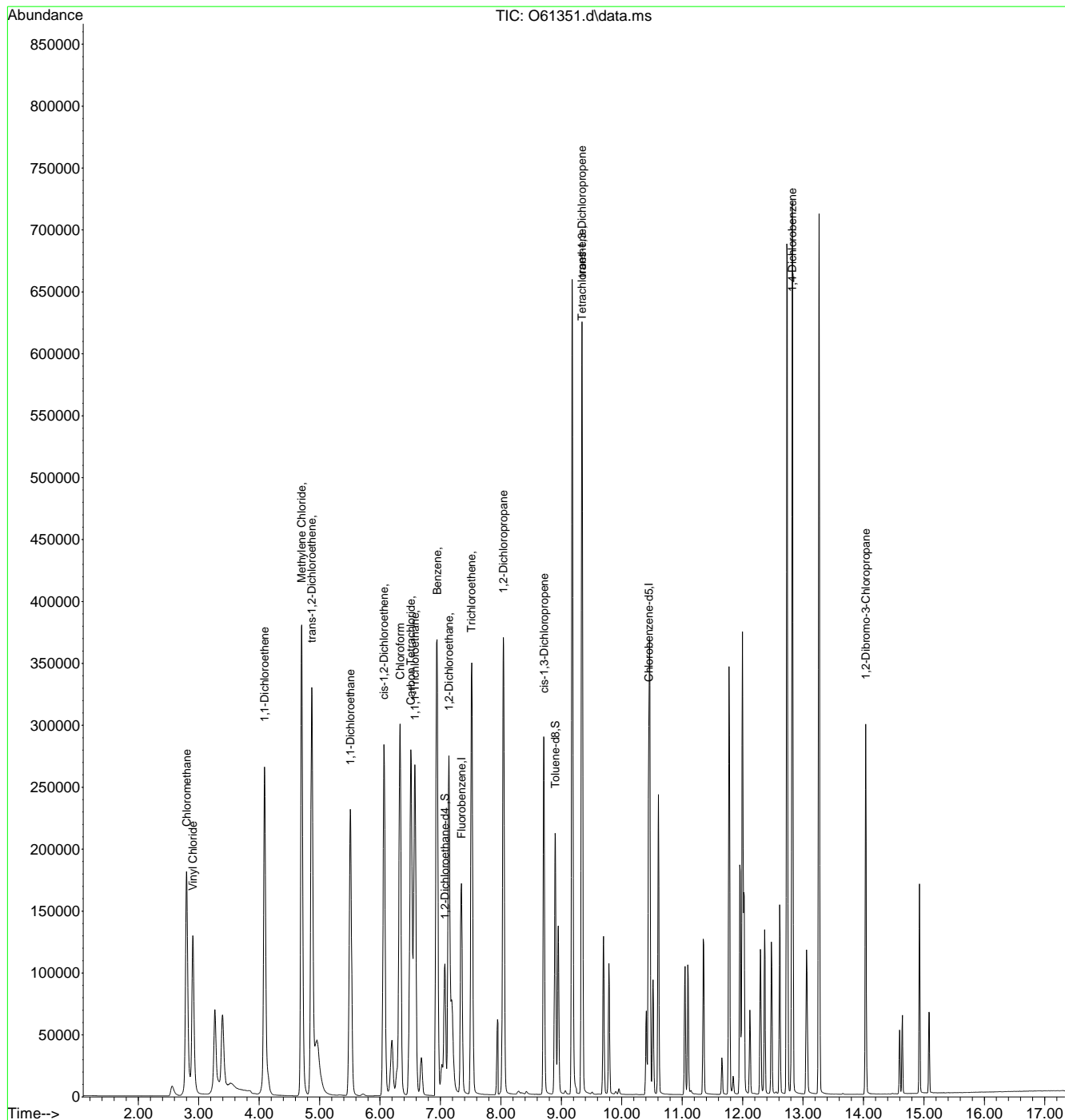
Internal Standards							
1) Fluorobenzene	7.346	96	254568	5.00	ug/L	0.00	
18) Chlorobenzene-d5	10.447	117	207589	5.00	ug/L	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.074	65	100968	4.91	ug/L	0.00	
Spiked Amount	5.000	Range 74 - 125	Recovery	=	98.20%		
19) Toluene-d8	8.896	98	205296	4.39	ug/L	0.00	
Spiked Amount	5.000	Range 88 - 111	Recovery	=	87.80%#		
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.901	62	242387	8.88	ug/L		97
3) Chloromethane	2.799	50	353873	9.00	ug/L		94
4) 1,1-Dichloroethene	4.089	61	323640	9.20	ug/L		92
5) Methylene Chloride	4.700	49	508398	9.22	ug/L		94
6) trans-1,2-Dichloroethene	4.869	61	362417	8.92	ug/L		85
7) 1,1-Dichloroethane	5.510	63	419399	8.89	ug/L		99
8) cis-1,2-Dichloroethene	6.066	96	194215	8.33	ug/L #		82
9) Chloroform	6.333	83	348668	8.59	ug/L		95
10) Carbon Tetrachloride	6.511	117	235689	8.51	ug/L		87
11) 1,1,1-Trichloroethane	6.576	97	261973	8.37	ug/L		91
12) Benzene	6.943	78	673294m	8.58	ug/L		
14) 1,2-Dichloroethane	7.139	62	327497	8.53	ug/L		94
15) Trichloroethene	7.512	95	200555	8.38	ug/L		88
16) 1,2-Dichloropropane	8.040	63	228374	8.70	ug/L		94
17) cis-1,3-Dichloropropene	8.711	75	215989	7.93	ug/L		96
20) trans-1,3-Dichloropropene	9.343	75	216249	7.92	ug/L		99
21) Tetrachloroethene	9.337	166	192902	8.44	ug/L		93
22) 1,4-Dichlorobenzene	12.821	146	414851	8.63	ug/L		99
23) 1,2-Dibromo-3-Chloropr...	14.038	75	69494	7.97	ug/L #		77

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-14-2020\VO2360\
 Data File : O61351.d
 Acq On : 13 Sep 2020 8:32 pm
 Operator : stutip
 Sample : ecc2356-5
 Misc : MS47201,VO2360,,,,,
 ALS Vial : 26 Sample Multiplier: 1

Quant Time: Sep 14 08:40:54 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Sun Sep 13 19:20:40 2020
 Response via : Initial Calibration



7.6.20
7

Manual Integration Approval Summary

Sample Number: VO2360-ECC2356 **Method:** SW846 8260B BY SIM
Lab FileID: O61351.D **Analyst approved:** 09/14/20 08:47 Jennifer Ferreira
Injection Time: 09/13/20 20:32 **Supervisor approved:** 09/14/20 13:36 Melissa Mangual

Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzene	71-43-2		6.94	Poor instrument integration

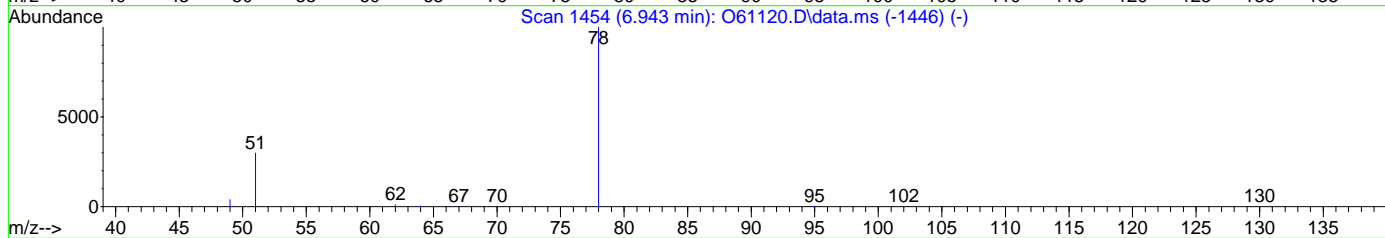
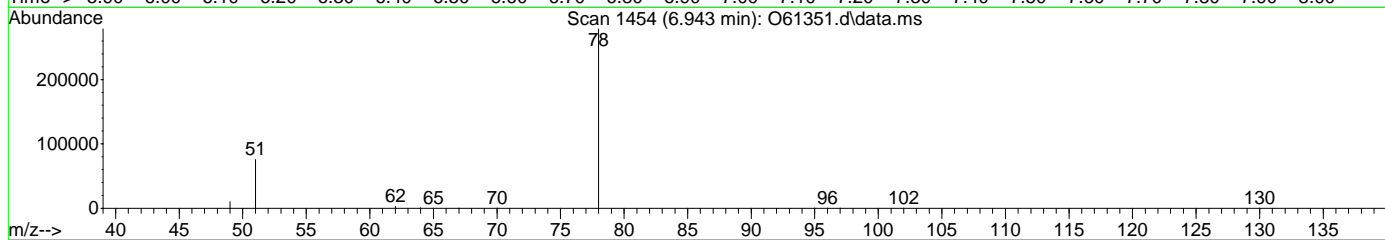
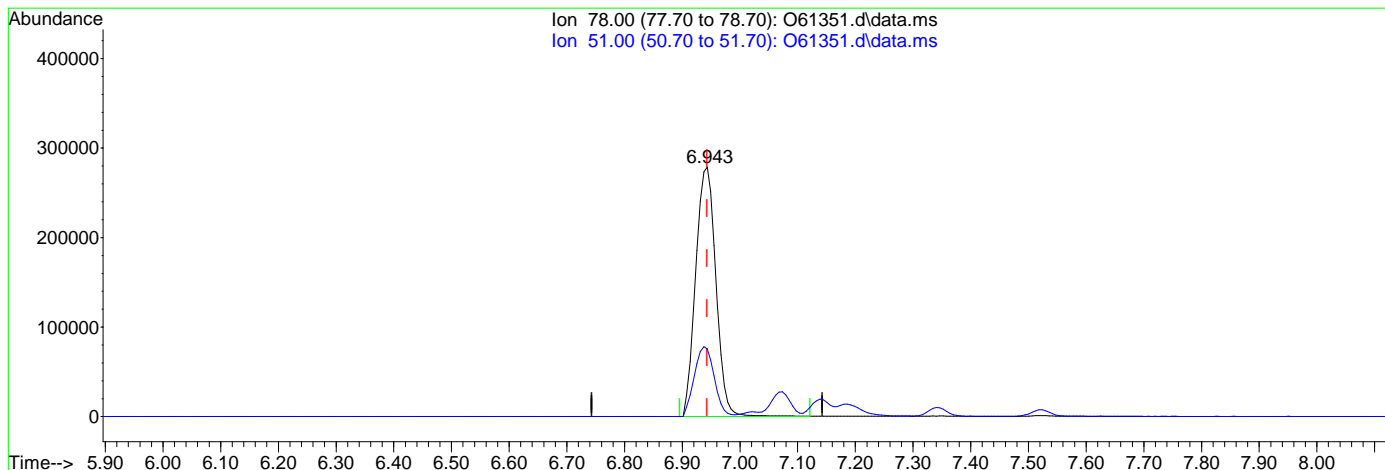
7.6.20.1

7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-14-2020\VO2360\
 Data File : O61351.d
 Acq On : 13 Sep 2020 8:32 pm
 Operator : stutip
 Sample : ecc2356-5
 Misc : MS47201,VO2360,,,,,
 ALS Vial : 26 Sample Multiplier: 1

Quant Time: Sep 14 07:53:31 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Sun Sep 13 19:20:40 2020
 Response via : Initial Calibration



(12) Benzene ()

6.943min (+0.000) 8.64ug/L

response 678435

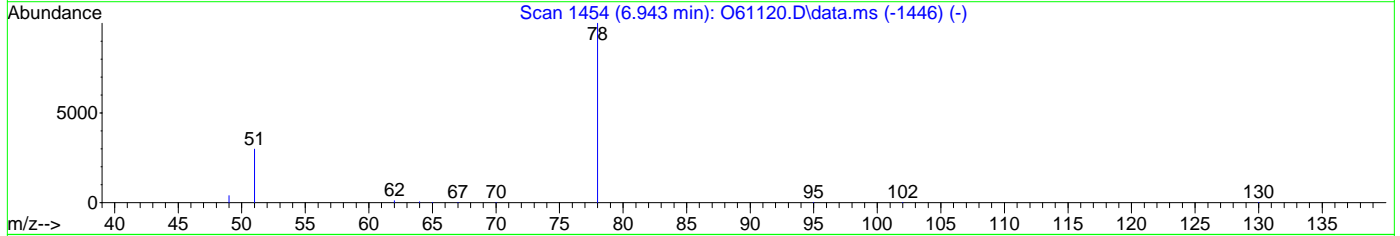
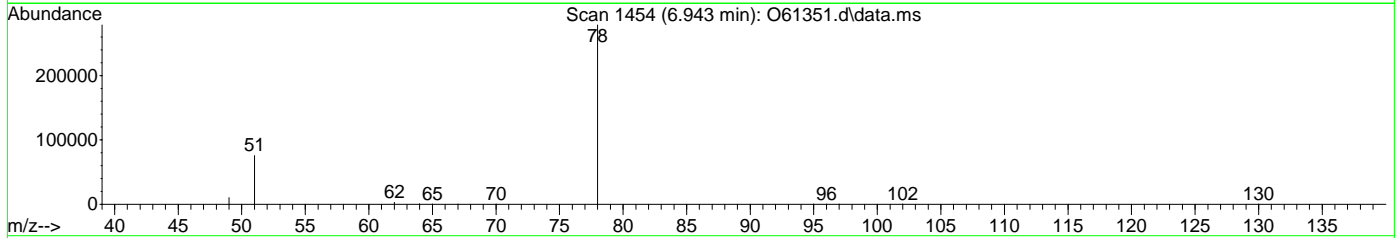
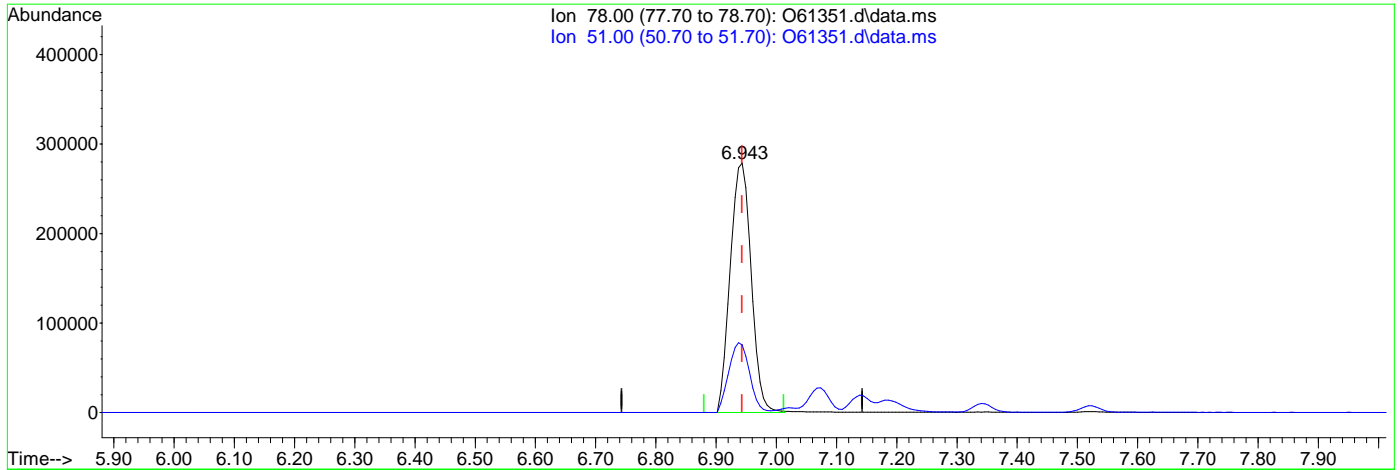
Ion	Exp%	Act%
78.00	100	100
51.00	26.20	27.15
0.00	0.00	0.00
0.00	0.00	0.00

7.6.20.2
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-14-2020\VO2360\
 Data File : O61351.d
 Acq On : 13 Sep 2020 8:32 pm
 Operator : stutip
 Sample : ecc2356-5
 Misc : MS47201,VO2360,,,,,
 ALS Vial : 26 Sample Multiplier: 1

Quant Time: Sep 14 07:53:31 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Sun Sep 13 19:20:40 2020
 Response via : Initial Calibration



(12) Benzene ()
 6.943min (+0.000) 8.58ug/L m
 response 673294

Ion	Exp%	Act%
78.00	100	100
51.00	26.20	27.15
0.00	0.00	0.00
0.00	0.00	0.00

7.6.20.3
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\091520\
 Data File : O61386.D
 Acq On : 15 Sep 2020 3:46 pm
 Operator : AKARIG
 Sample : IC2362-1 Inst : MSVOA12
 Misc : MS47193,VO2362,,,,,
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 16 08:53:35 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091520.M
 Quant Title : Standard Methods 6200B
 QLast Update : Tue Sep 15 18:43:50 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.337	96	229016	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.444	117	173372	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.069	65	107070	5.52	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	110.40%	
19) Toluene-d8	8.892	98	187671	5.30	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	106.00%	
Target Compounds						
						Qvalue
2) Vinyl Chloride	2.908	62	3497	0.12	ug/L	86
3) Chloromethane	2.806	50	10347	0.23	ug/L	81
4) 1,1-Dichloroethene	4.089	61	3760	0.11	ug/L	89
5) Methylene Chloride	4.703	49	23924	0.48	ug/L	93
6) trans-1,2-Dichloroethene	4.869	61	4368	0.11	ug/L	85
7) 1,1-Dichloroethane	5.506	63	4952	0.11	ug/L	83
8) cis-1,2-Dichloroethene	6.065	96	2174	0.11	ug/L	85
9) Chloroform	6.326	83	4561	0.12	ug/L #	80
10) Carbon Tetrachloride	6.504	117	2997	0.12	ug/L	78
11) 1,1,1-Trichloroethane	6.573	97	2970	0.10	ug/L	91
12) Benzene	6.939	78	7546	0.10	ug/L	98
14) 1,2-Dichloroethane	7.130	62	3849	0.11	ug/L	91
15) Trichloroethene	7.513	95	2272	0.11	ug/L	79
16) 1,2-Dichloropropane	8.039	63	2508	0.10	ug/L	90
17) cis-1,3-Dichloropropene	8.707	75	2020	0.09	ug/L	92
20) trans-1,3-Dichloropropene	9.341	75	1765	0.09	ug/L	97
21) Tetrachloroethene	9.341	166	2221	0.12	ug/L	97
22) 1,4-Dichlorobenzene	12.824	146	3401	0.09	ug/L	98
23) 1,2-Dibromo-3-Chloropr...	14.035	75	694	0.11	ug/L	91

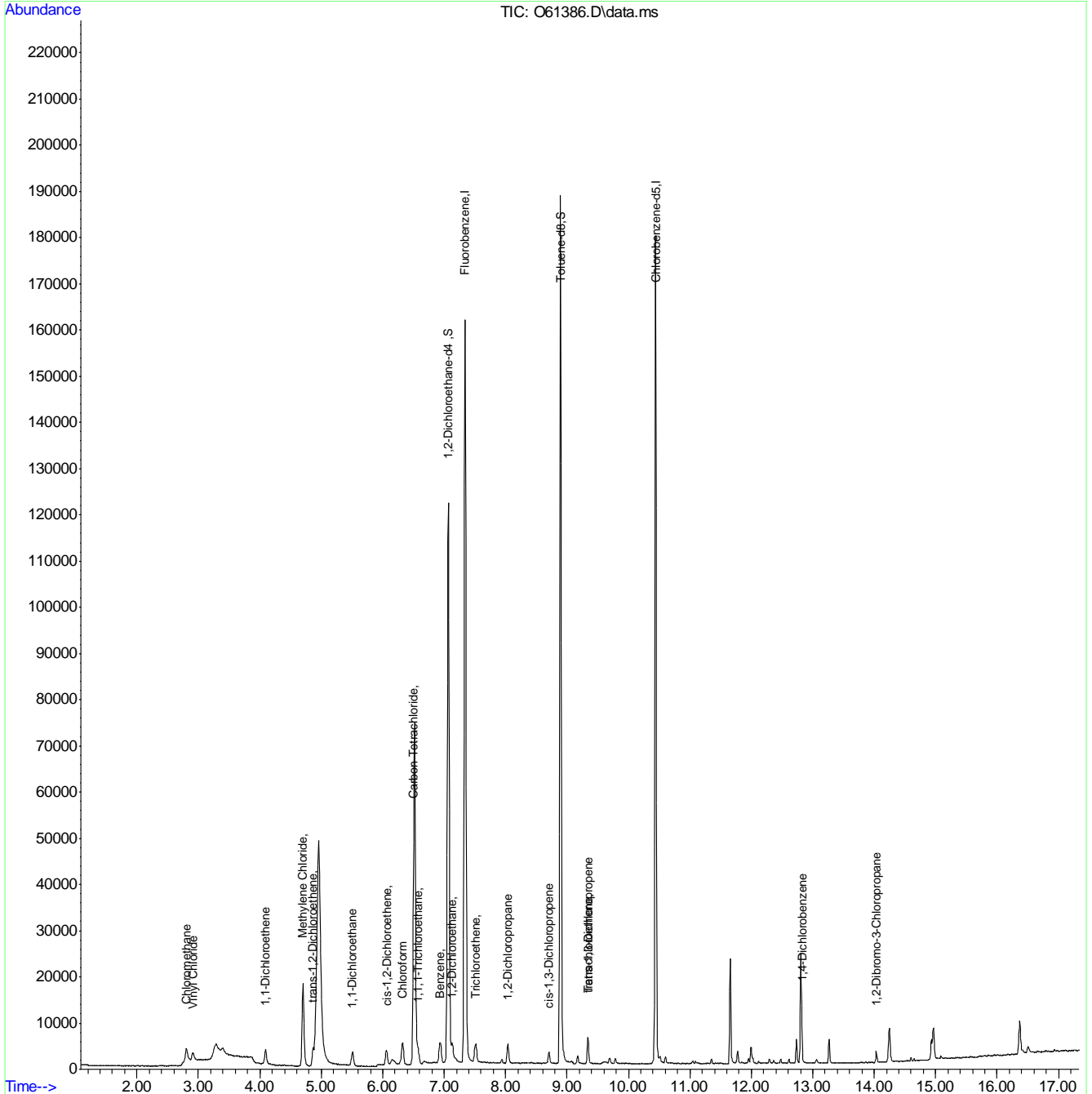
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\091520\
 Data File : O61386.D
 Acq On : 15 Sep 2020 3:46 pm
 Operator : AKARIG
 Sample : IC2362-1
 Misc : MS47193,VO2362,,,,,
 ALS Vial : 7 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 16 08:53:35 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091520.M
 Quant Title : Standard Methods 6200B
 QLast Update : Tue Sep 15 18:43:50 2020
 Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\091520\
 Data File : O61387.D
 Acq On : 15 Sep 2020 4:06 pm
 Operator : AKARIG
 Sample : IC2362-2 Inst : MSVOA12
 Misc : MS47193,VO2362,,,,,
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 16 08:53:38 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091520.M
 Quant Title : Standard Methods 6200B
 QLast Update : Tue Sep 15 18:43:50 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.345	96	226011	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.444	117	176974	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.069	65	103896	5.42	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	108.40%	
19) Toluene-d8	8.896	98	184137	5.10	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	102.00%	
Target Compounds						
						Qvalue
2) Vinyl Chloride	2.905	62	17348	0.59	ug/L	95
3) Chloromethane	2.803	50	29260	0.66	ug/L	90
4) 1,1-Dichloroethene	4.089	61	18331	0.54	ug/L	94
5) Methylene Chloride	4.700	49	45451	0.92	ug/L	92
6) trans-1,2-Dichloroethene	4.869	61	21650	0.57	ug/L	86
7) 1,1-Dichloroethane	5.510	63	23843	0.54	ug/L	97
8) cis-1,2-Dichloroethene	6.065	96	10308	0.52	ug/L	85
9) Chloroform	6.332	83	20374	0.55	ug/L	91
10) Carbon Tetrachloride	6.510	117	13730	0.53	ug/L	86
11) 1,1,1-Trichloroethane	6.580	97	15577	0.54	ug/L	91
12) Benzene	6.939	78	35661	0.50	ug/L	97
14) 1,2-Dichloroethane	7.138	62	18394	0.54	ug/L	95
15) Trichloroethene	7.513	95	10698	0.51	ug/L	84
16) 1,2-Dichloropropane	8.039	63	12209	0.52	ug/L	97
17) cis-1,3-Dichloropropene	8.707	75	9816	0.47	ug/L	97
20) trans-1,3-Dichloropropene	9.347	75	9088	0.45	ug/L	94
21) Tetrachloroethene	9.341	166	11087	0.57	ug/L	99
22) 1,4-Dichlorobenzene	12.824	146	17956	0.46	ug/L	98
23) 1,2-Dibromo-3-Chloropr...	14.035	75	3183	0.51	ug/L	97

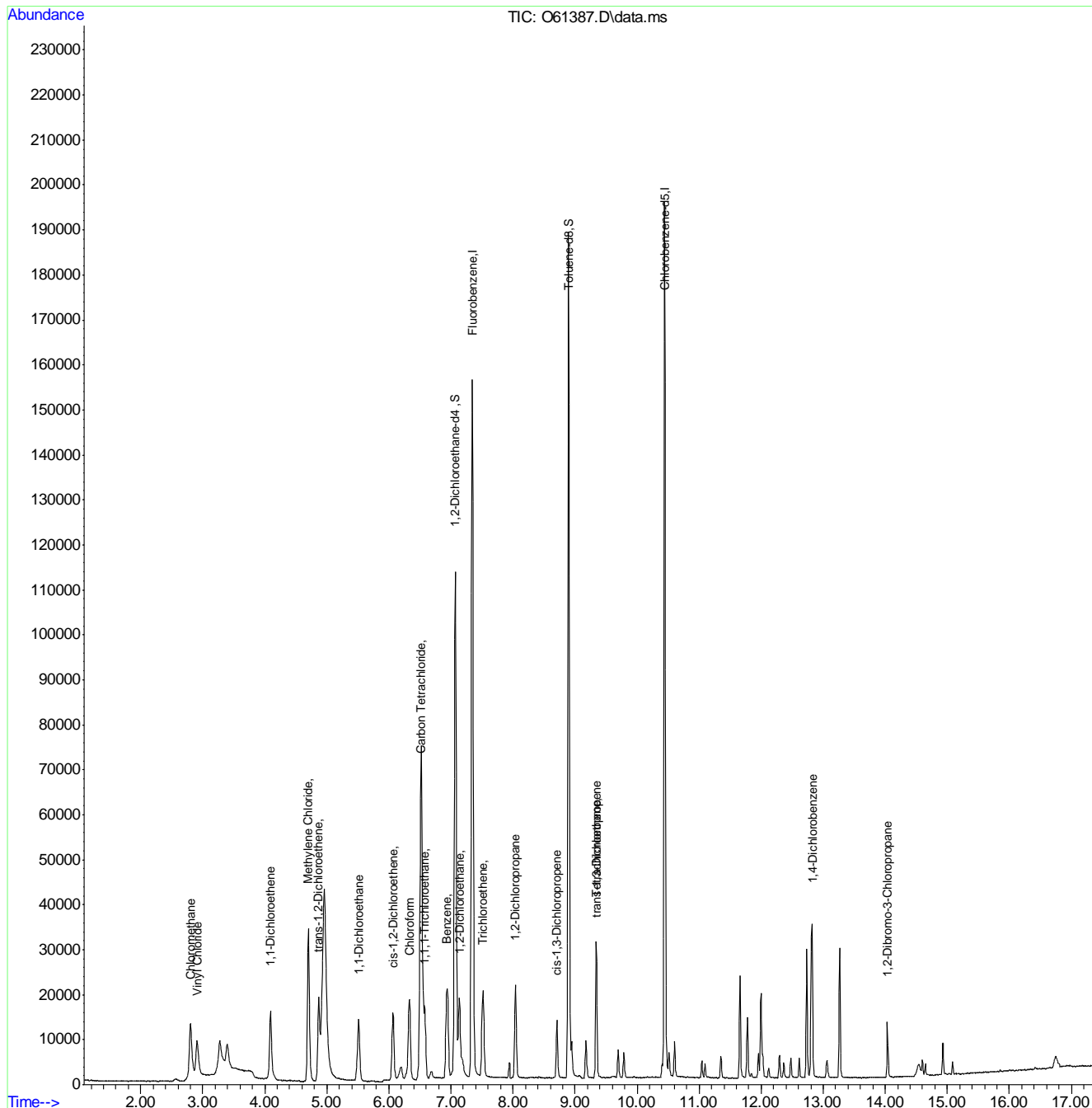
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\091520\
 Data File : O61387.D
 Acq On : 15 Sep 2020 4:06 pm
 Operator : AKARIG
 Sample : IC2362-2
 Misc : MS47193,VO2362,,,,,
 ALS Vial : 8 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 16 08:53:38 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091520.M
 Quant Title : Standard Methods 6200B
 QLast Update : Tue Sep 15 18:43:50 2020
 Response via : Initial Calibration



7.6.22
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\091520\
 Data File : O61388.D
 Acq On : 15 Sep 2020 4:26 pm
 Operator : AKARIG
 Sample : IC2362-3 Inst : MSVOA12
 Misc : MS47193,VO2362,,,,,
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 16 08:55:51 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091520.M
 Quant Title : Standard Methods 6200B
 QLast Update : Tue Sep 15 18:43:50 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.344	96	245280	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.444	117	188641	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.077	65	105125m	5.06	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	101.20%	
19) Toluene-d8	8.899	98	191462	4.97	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	99.40%	
Target Compounds						
						Qvalue
2) Vinyl Chloride	2.916	62	66611	2.13	ug/L	96
3) Chloromethane	2.810	50	99140	2.10	ug/L	94
4) 1,1-Dichloroethene	4.096	61	72659	1.98	ug/L	92
5) Methylene Chloride	4.707	49	137024	2.56	ug/L	91
6) trans-1,2-Dichloroethene	4.877	61	81338	1.98	ug/L	85
7) 1,1-Dichloroethane	5.518	63	96687	2.02	ug/L	98
8) cis-1,2-Dichloroethene	6.071	96	41351	1.92	ug/L	84
9) Chloroform	6.332	83	80171	1.98	ug/L	93
10) Carbon Tetrachloride	6.510	117	54794	1.96	ug/L	87
11) 1,1,1-Trichloroethane	6.580	97	63074	2.00	ug/L	91
12) Benzene	6.947	78	147883	1.93	ug/L	99
14) 1,2-Dichloroethane	7.138	62	75583	2.03	ug/L	94
15) Trichloroethene	7.513	95	43463	1.92	ug/L	89
16) 1,2-Dichloropropane	8.043	63	50197	1.97	ug/L	97
17) cis-1,3-Dichloropropene	8.711	75	41268	1.80	ug/L	98
20) trans-1,3-Dichloropropene	9.346	75	40215	1.87	ug/L	98
21) Tetrachloroethene	9.341	166	43932	2.13	ug/L	97
22) 1,4-Dichlorobenzene	12.824	146	84276	2.05	ug/L	98
23) 1,2-Dibromo-3-Chloropr...	14.035	75	13753	2.03	ug/L	97

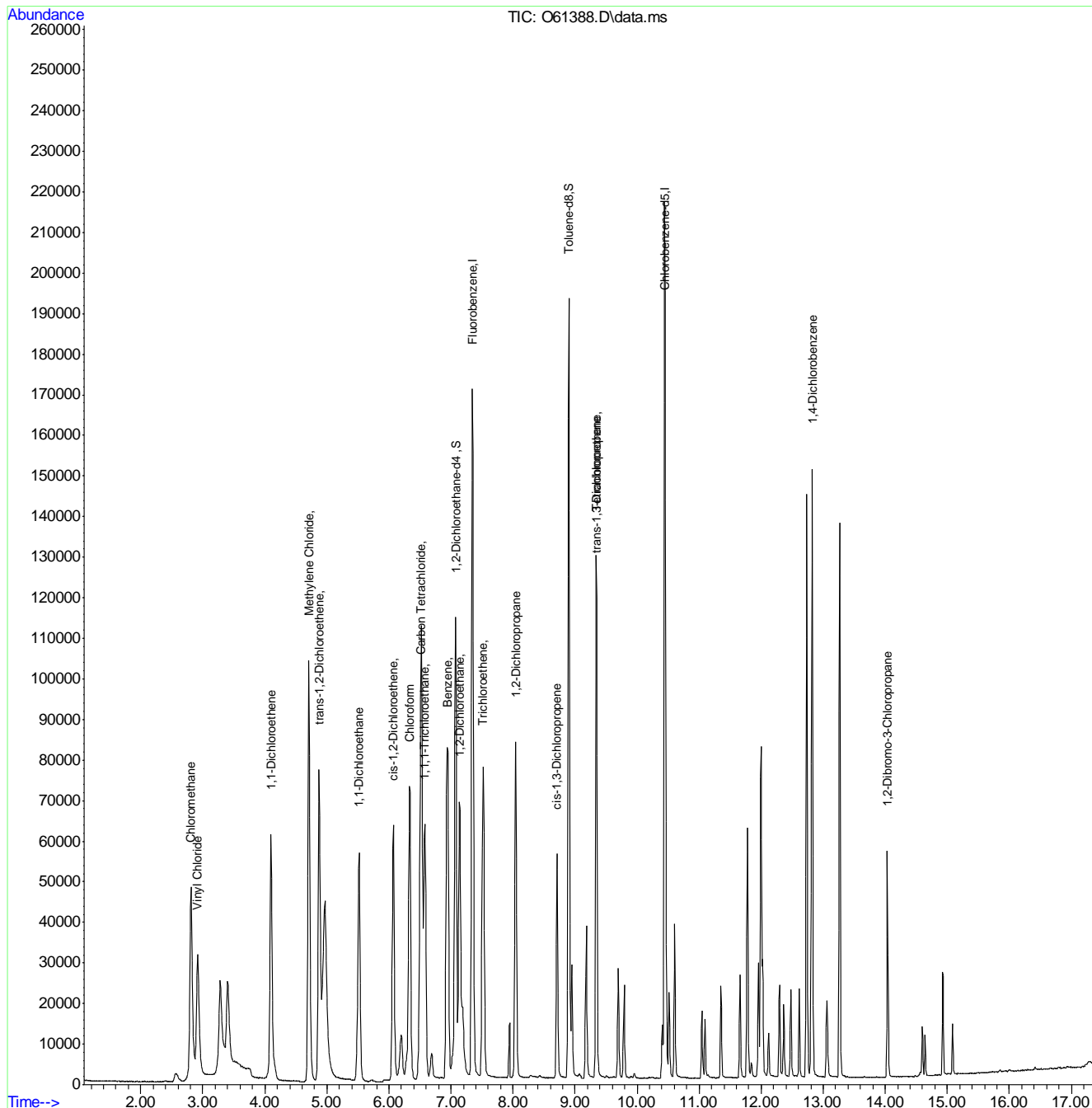
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\091520\
 Data File : O61388.D
 Acq On : 15 Sep 2020 4:26 pm
 Operator : AKARIG
 Sample : IC2362-3
 Misc : MS47193,VO2362,,,,,
 ALS Vial : 9 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 16 08:55:51 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091520.M
 Quant Title : Standard Methods 6200B
 QLast Update : Tue Sep 15 18:43:50 2020
 Response via : Initial Calibration



7.6.23
7

Manual Integration Approval Summary

Sample Number: VO2362-IC2362 **Method:** SW846 8260B BY SIM
Lab FileID: O61388.D **Analyst approved:** 09/16/20 09:09 Melissa Mangual
Injection Time: 09/15/20 16:26 **Supervisor approved:** 09/16/20 16:03 Juan Garcia

Parameter	CAS	Sig#	R.T. (min.)	Reason
1,2-Dichloroethane-D4	17060-07-0		7.08	Overlapping peak

7.6.23.1

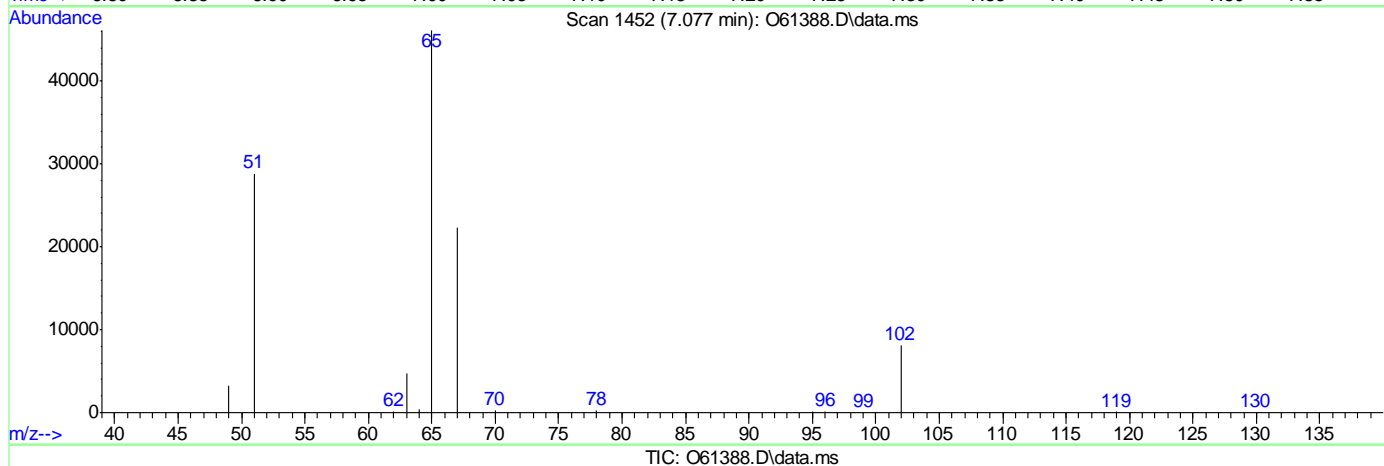
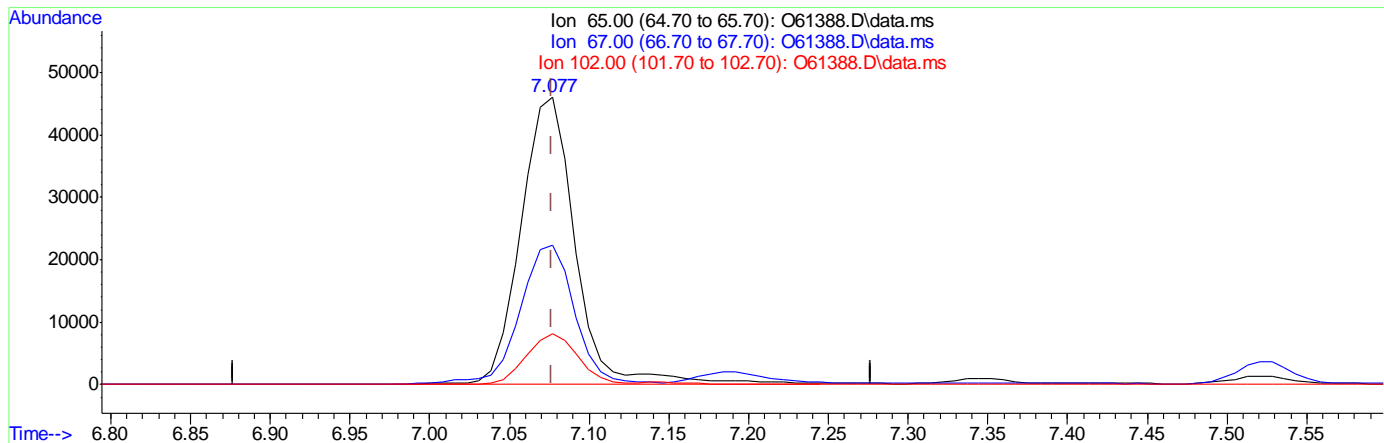
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\091520\
 Data File : O61388.D
 Acq On : 15 Sep 2020 4:26 pm
 Operator : AKARIG
 Sample : IC2362-3
 Misc : MS47193,VO2362,,,,,
 ALS Vial : 9 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 16 08:53:40 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091520.M
 Quant Title : Standard Methods 6200B
 QLast Update : Tue Sep 15 18:43:50 2020
 Response via : Initial Calibration



(13) 1,2-Dichloroethane-d4 (S)

7.077min (-0.000) 5.26ug/L

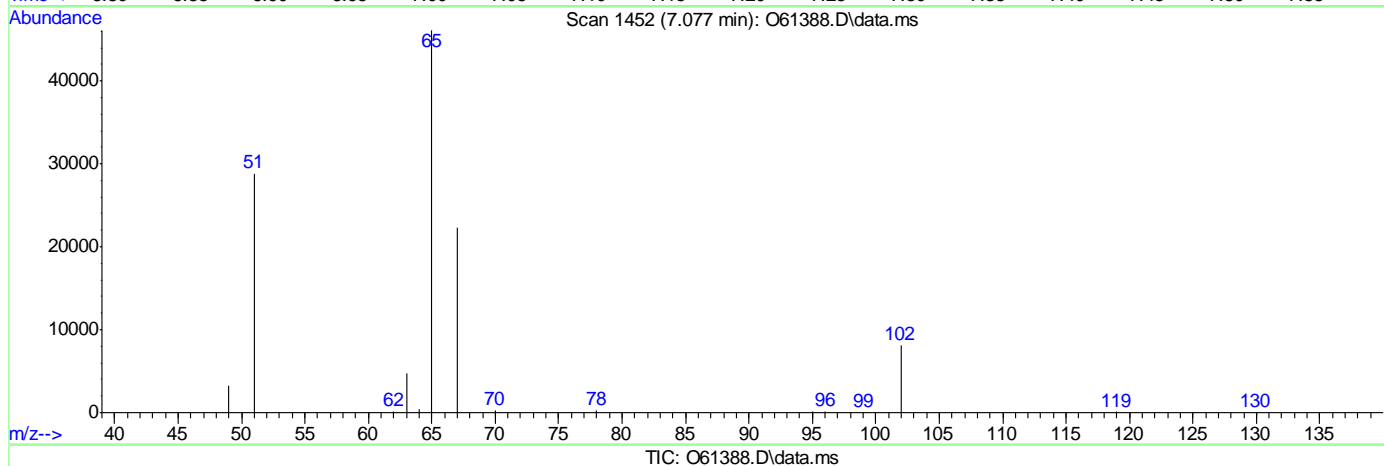
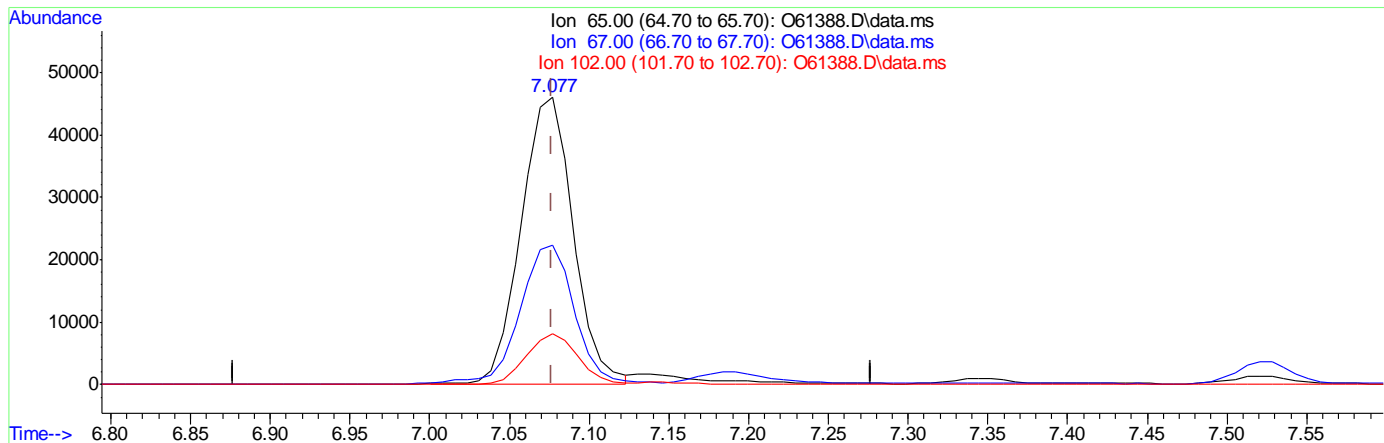
response 109386

Ion	Exp%	Act%
65.00	100	100
67.00	53.50	48.32
102.00	16.10	17.60
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\091520\
 Data File : O61388.D
 Acq On : 15 Sep 2020 4:26 pm
 Operator : AKARIG
 Sample : IC2362-3 Inst : MSVOA12
 Misc : MS47193,VO2362,,,,,
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 16 08:53:40 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091520.M
 Quant Title : Standard Methods 6200B
 QLast Update : Tue Sep 15 18:43:50 2020
 Response via : Initial Calibration



(13) 1,2-Dichloroethane-d4 (S)

7.077min (-0.000) 5.06ug/L m

response 105125

Ion	Exp%	Act%
65.00	100	100
67.00	53.50	48.47
102.00	16.10	17.69
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\091520\
 Data File : O61389.D
 Acq On : 15 Sep 2020 4:47 pm
 Operator : AKARIG
 Sample : IC2362-4 Inst : MSVOA12
 Misc : MS47193,VO2362,,,,,
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 16 08:53:42 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091520.M
 Quant Title : Standard Methods 6200B
 QLast Update : Tue Sep 15 18:43:50 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.344	96	272056	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.442	117	219792	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.077	65	112029	4.86	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	97.20%	
19) Toluene-d8	8.896	98	215371	4.80	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	96.00%	
Target Compounds						
						Qvalue
2) Vinyl Chloride	2.912	62	155626	4.63	ug/L	98
3) Chloromethane	2.806	50	227154	4.53	ug/L	94
4) 1,1-Dichloroethene	4.092	61	198148	4.86	ug/L	92
5) Methylene Chloride	4.703	49	328922	5.55	ug/L	92
6) trans-1,2-Dichloroethene	4.873	61	219652	4.85	ug/L	85
7) 1,1-Dichloroethane	5.514	63	257348	4.85	ug/L	99
8) cis-1,2-Dichloroethene	6.071	96	114203	4.77	ug/L	84
9) Chloroform	6.332	83	214196	4.76	ug/L	94
10) Carbon Tetrachloride	6.510	117	145432	4.70	ug/L	87
11) 1,1,1-Trichloroethane	6.580	97	170526	4.87	ug/L	92
12) Benzene	6.939	78	412770	4.88	ug/L	96
14) 1,2-Dichloroethane	7.138	62	201620	4.88	ug/L	95
15) Trichloroethene	7.513	95	121414	4.84	ug/L	91
16) 1,2-Dichloropropane	8.043	63	137312	4.89	ug/L	95
17) cis-1,3-Dichloropropene	8.711	75	121847	4.80	ug/L	99
20) trans-1,3-Dichloropropene	9.344	75	121859	4.87	ug/L	98
21) Tetrachloroethene	9.338	166	121414	5.07	ug/L	96
22) 1,4-Dichlorobenzene	12.822	146	243863	5.08	ug/L	98
23) 1,2-Dibromo-3-Chloropr...	14.038	75	39546	4.92	ug/L #	77

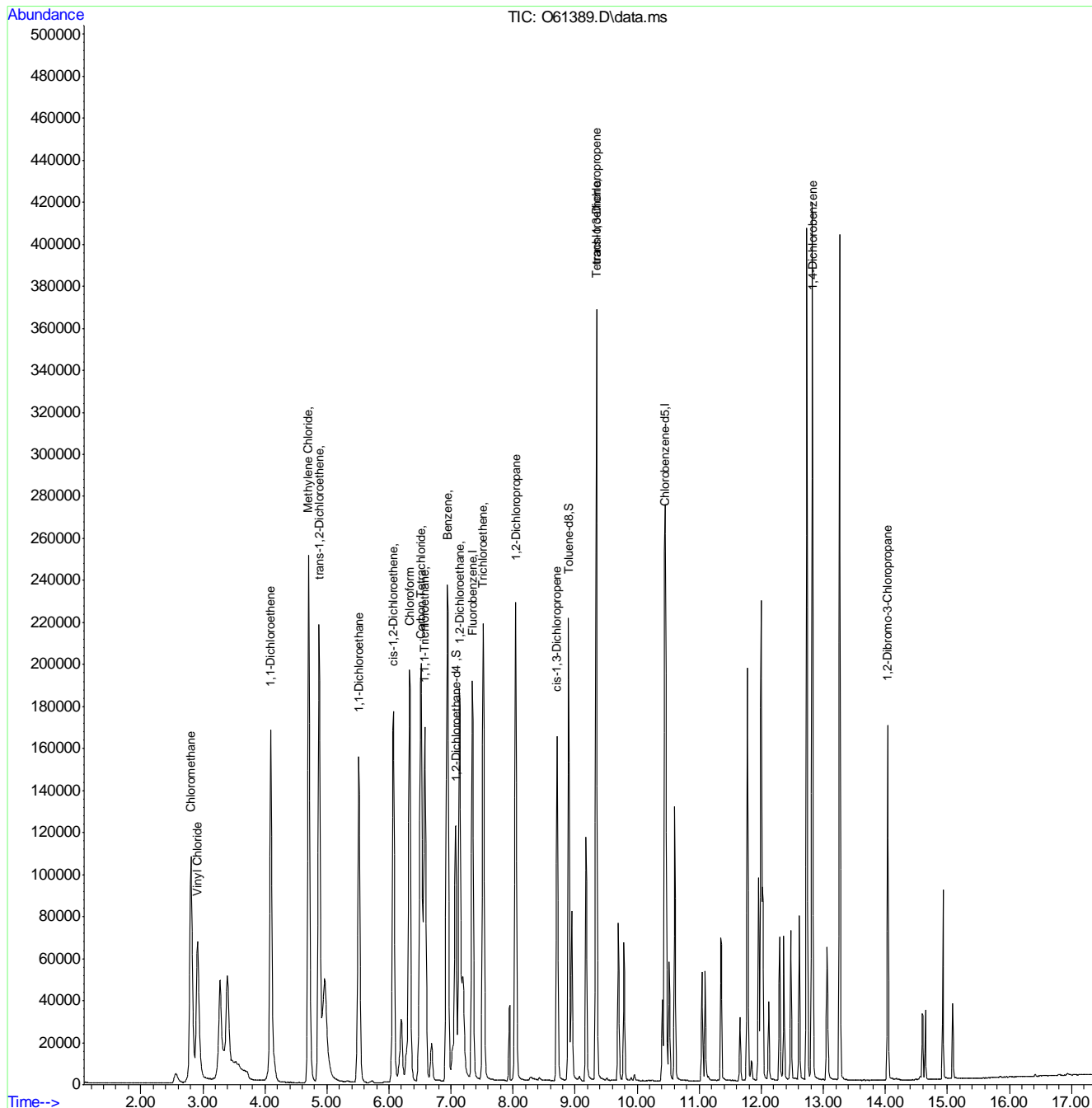
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\091520\
 Data File : O61389.D
 Acq On : 15 Sep 2020 4:47 pm
 Operator : AKARIG
 Sample : IC2362-4
 Misc : MS47193,VO2362,,,,,
 ALS Vial : 10 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 16 08:53:42 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091520.M
 Quant Title : Standard Methods 6200B
 QLast Update : Tue Sep 15 18:43:50 2020
 Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\091520\
 Data File : O61390.D
 Acq On : 15 Sep 2020 5:07 pm
 Operator : AKARIG
 Sample : ICC2362-5 Inst : MSVOA12
 Misc : MS47193,VO2362,,,,,
 ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 16 08:53:44 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091520.M
 Quant Title : Standard Methods 6200B
 QLast Update : Tue Sep 15 18:43:50 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.345	96	305864	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.444	117	250755	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.077	65	122900	4.74	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	94.80%	
19) Toluene-d8	8.899	98	247079	4.83	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	96.60%	
Target Compounds						
						Qvalue
2) Vinyl Chloride	2.912	62	348299	9.89	ug/L	98
3) Chloromethane	2.810	50	493935	9.66	ug/L	94
4) 1,1-Dichloroethene	4.096	61	453746	9.90	ug/L	92
5) Methylene Chloride	4.707	49	695268	10.43	ug/L	94
6) trans-1,2-Dichloroethene	4.873	61	509355	10.15	ug/L	84
7) 1,1-Dichloroethane	5.514	63	581508	9.75	ug/L	99
8) cis-1,2-Dichloroethene	6.071	96	268026	9.96	ug/L	83
9) Chloroform	6.332	83	480741	9.51	ug/L	95
10) Carbon Tetrachloride	6.510	117	338356	9.72	ug/L	87
11) 1,1,1-Trichloroethane	6.580	97	394231	10.02	ug/L	92
12) Benzene	6.947	78	948911	10.11	ug/L	100
14) 1,2-Dichloroethane	7.138	62	452639	9.74	ug/L	94
15) Trichloroethene	7.513	95	281405	9.99	ug/L	90
16) 1,2-Dichloropropane	8.043	63	311763	10.06	ug/L	94
17) cis-1,3-Dichloropropene	8.711	75	299309	10.49	ug/L	99
20) trans-1,3-Dichloropropene	9.346	75	299356	10.49	ug/L	99
21) Tetrachloroethene	9.341	166	273381	10.09	ug/L	96
22) 1,4-Dichlorobenzene	12.824	146	568582	10.38	ug/L	98
23) 1,2-Dibromo-3-Chloropr...	14.035	75	94565	9.95	ug/L	94

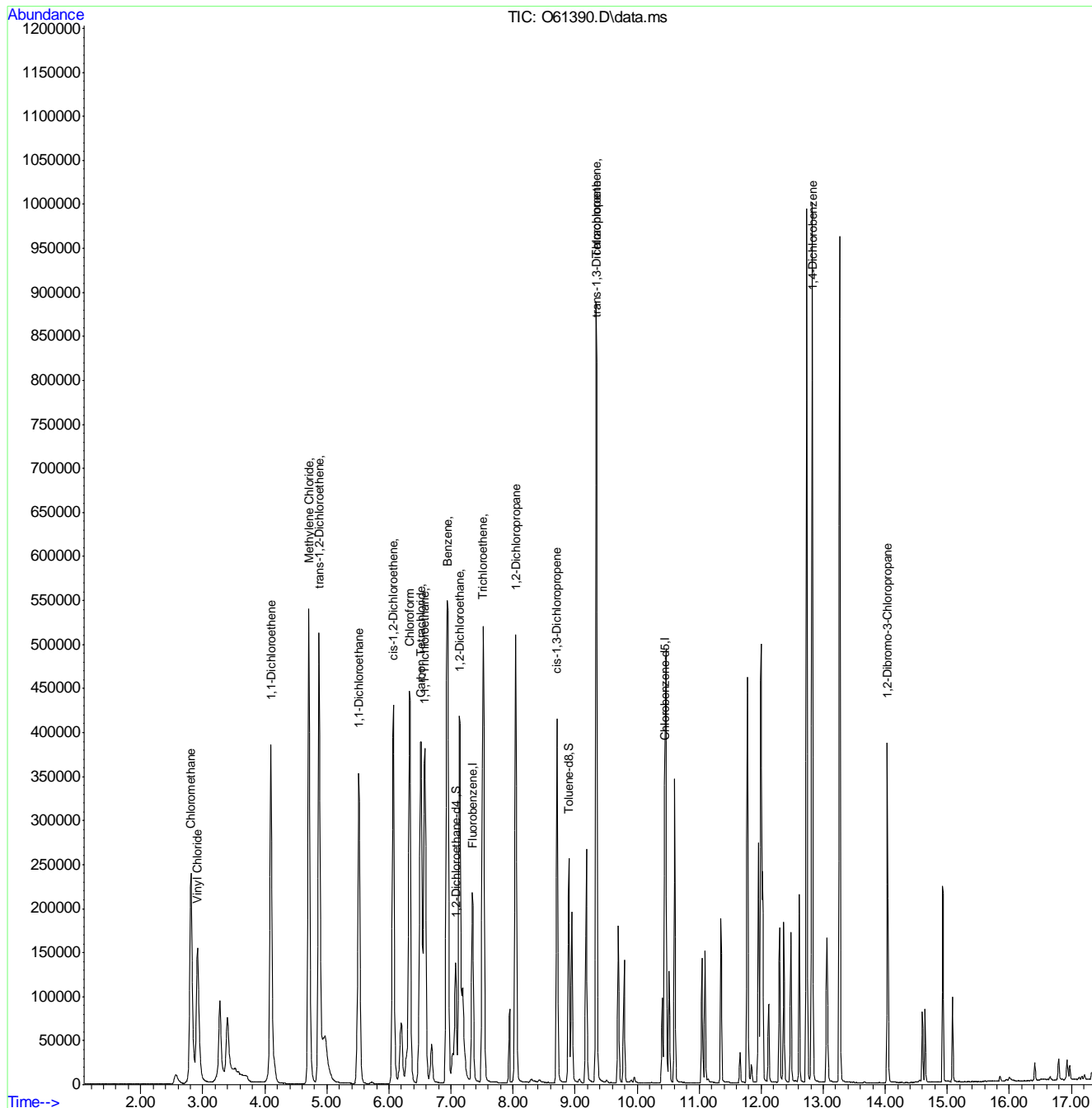
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\091520\
 Data File : O61390.D
 Acq On : 15 Sep 2020 5:07 pm
 Operator : AKARIG
 Sample : ICC2362-5
 Misc : MS47193,VO2362,,,,,
 ALS Vial : 11 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 16 08:53:44 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091520.M
 Quant Title : Standard Methods 6200B
 QLast Update : Tue Sep 15 18:43:50 2020
 Response via : Initial Calibration



7.6.25
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\091520\
 Data File : O61391.D
 Acq On : 15 Sep 2020 5:28 pm
 Operator : AKARIG
 Sample : IC2362-6 Inst : MSVOA12
 Misc : MS47193,VO2362,,,,,
 ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 16 08:53:46 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091520.M
 Quant Title : Standard Methods 6200B
 QLast Update : Tue Sep 15 18:43:50 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.344	96	339428	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.442	117	277837	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.077	65	133857	4.65	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	93.00%	
19) Toluene-d8	8.896	98	274683	4.84	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	96.80%	
Target Compounds						
						Qvalue
2) Vinyl Chloride	2.916	62	559724	15.58	ug/L	98
3) Chloromethane	2.806	50	774953	15.43	ug/L	94
4) 1,1-Dichloroethene	4.092	61	714734	14.06	ug/L	92
5) Methylene Chloride	4.703	49	1072294	14.50	ug/L	95
6) trans-1,2-Dichloroethene	4.873	61	821569	14.95	ug/L	86
7) 1,1-Dichloroethane	5.514	63	930777	14.07	ug/L	99
8) cis-1,2-Dichloroethene	6.071	96	442982	14.83	ug/L	84
9) Chloroform	6.332	83	773258	13.78	ug/L	95
10) Carbon Tetrachloride	6.510	117	548399	14.20	ug/L	87
11) 1,1,1-Trichloroethane	6.580	97	638534	14.62	ug/L	92
12) Benzene	6.939	78	1544743	15.02	ug/L	95
14) 1,2-Dichloroethane	7.138	62	730206	14.16	ug/L	94
15) Trichloroethene	7.513	95	464178	14.84	ug/L	91
16) 1,2-Dichloropropane	8.043	63	508572	15.05	ug/L	92
17) cis-1,3-Dichloropropene	8.711	75	517869	16.35	ug/L	97
20) trans-1,3-Dichloropropene	9.344	75	515811	16.32	ug/L	97
21) Tetrachloroethene	9.338	166	438978	14.74	ug/L	94
22) 1,4-Dichlorobenzene	12.822	146	967634	15.94	ug/L	99
23) 1,2-Dibromo-3-Chloropr...	14.032	75	165116	15.15	ug/L	85

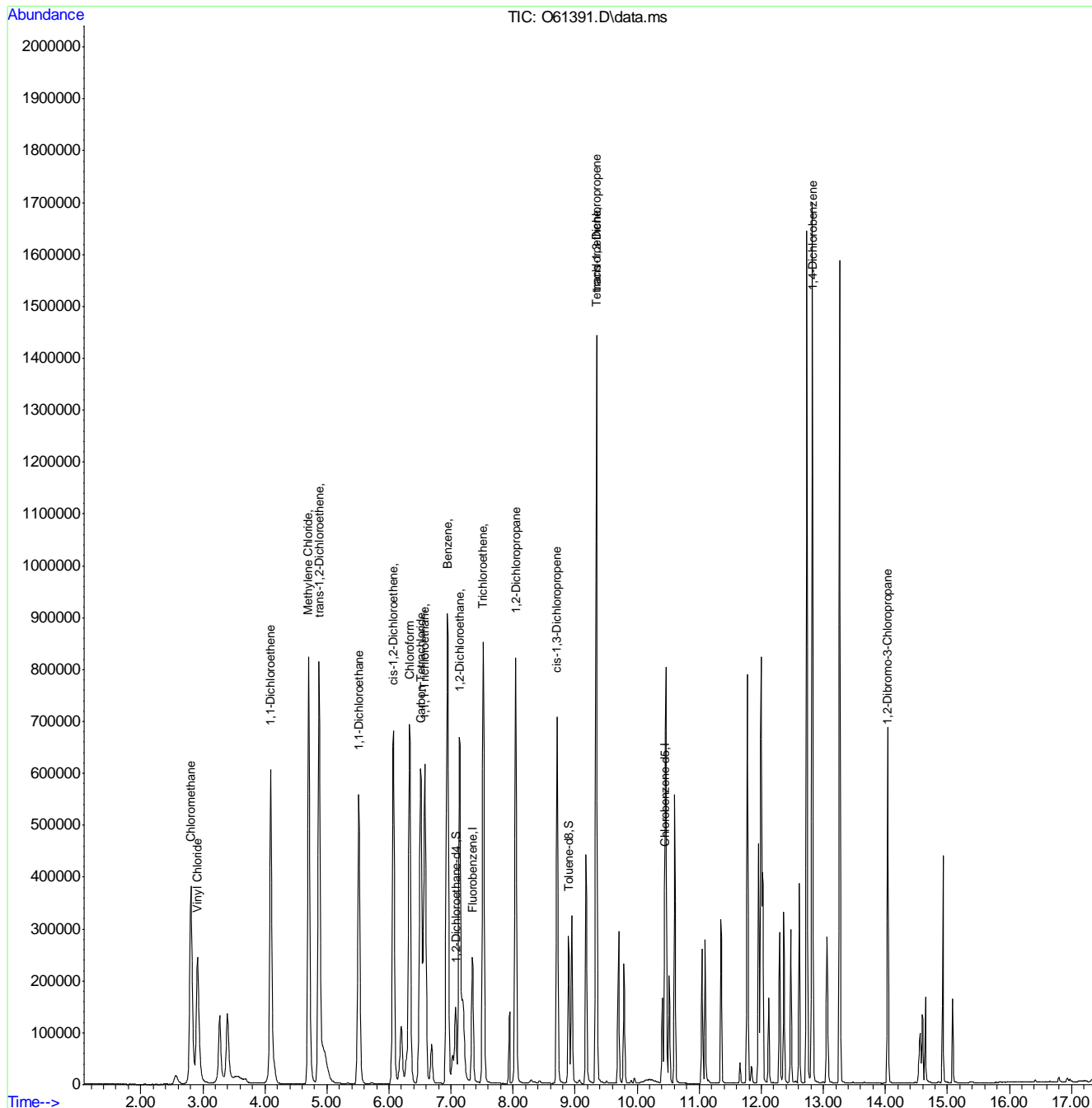
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\091520\
 Data File : O61391.D
 Acq On : 15 Sep 2020 5:28 pm
 Operator : AKARIG
 Sample : IC2362-6
 Misc : MS47193,VO2362,,,,,
 ALS Vial : 12 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 16 08:53:46 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091520.M
 Quant Title : Standard Methods 6200B
 QLast Update : Tue Sep 15 18:43:50 2020
 Response via : Initial Calibration



7.6.26
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\091520\
 Data File : O61392.D
 Acq On : 15 Sep 2020 5:48 pm
 Operator : AKARIG
 Sample : IC2362-7 Inst : MSVOA12
 Misc : MS47193,VO2362,,,,,
 ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 16 08:53:48 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091520.M
 Quant Title : Standard Methods 6200B
 QLast Update : Tue Sep 15 18:43:50 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
Internal Standards							
1) Fluorobenzene	7.344	96	392640	5.00	ug/L	0.00	
18) Chlorobenzene-d5	10.444	117	306840	5.00	ug/L	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.069	65	151155	4.54	ug/L	0.00	
Spiked Amount	5.000	Range 74 - 125	Recovery	=	90.80%		
19) Toluene-d8	8.899	98	322677	5.15	ug/L	0.00	
Spiked Amount	5.000	Range 88 - 111	Recovery	=	103.00%		
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.904	62	767009	19.70	ug/L		98
3) Chloromethane	2.803	50	1045788	20.12	ug/L		93
4) 1,1-Dichloroethene	4.085	61	1097413	18.66	ug/L		92
5) Methylene Chloride	4.703	49	1553383	18.16	ug/L		97
6) trans-1,2-Dichloroethene	4.869	61	1253396	20.00	ug/L		85
7) 1,1-Dichloroethane	5.510	63	1396794	18.25	ug/L		99
8) cis-1,2-Dichloroethene	6.065	96	682667	19.76	ug/L #		80
9) Chloroform	6.332	83	1161212	17.89	ug/L		96
10) Carbon Tetrachloride	6.510	117	841059	18.83	ug/L		88
11) 1,1,1-Trichloroethane	6.573	97	980373	19.40	ug/L		93
12) Benzene	6.939	78	2346508	19.97	ug/L		98
14) 1,2-Dichloroethane	7.138	62	1091602	18.30	ug/L		92
15) Trichloroethene	7.513	95	705476	19.50	ug/L		90
16) 1,2-Dichloropropane	8.043	63	767297	19.97	ug/L		91
17) cis-1,3-Dichloropropene	8.711	75	824147	22.49	ug/L		95
20) trans-1,3-Dichloropropene	9.346	75	806009	23.09	ug/L		94
21) Tetrachloroethene	9.341	166	655729	20.12	ug/L		96
22) 1,4-Dichlorobenzene	12.824	146	1385286	20.67	ug/L		98
23) 1,2-Dibromo-3-Chloropr...	14.035	75	247490	19.93	ug/L		97

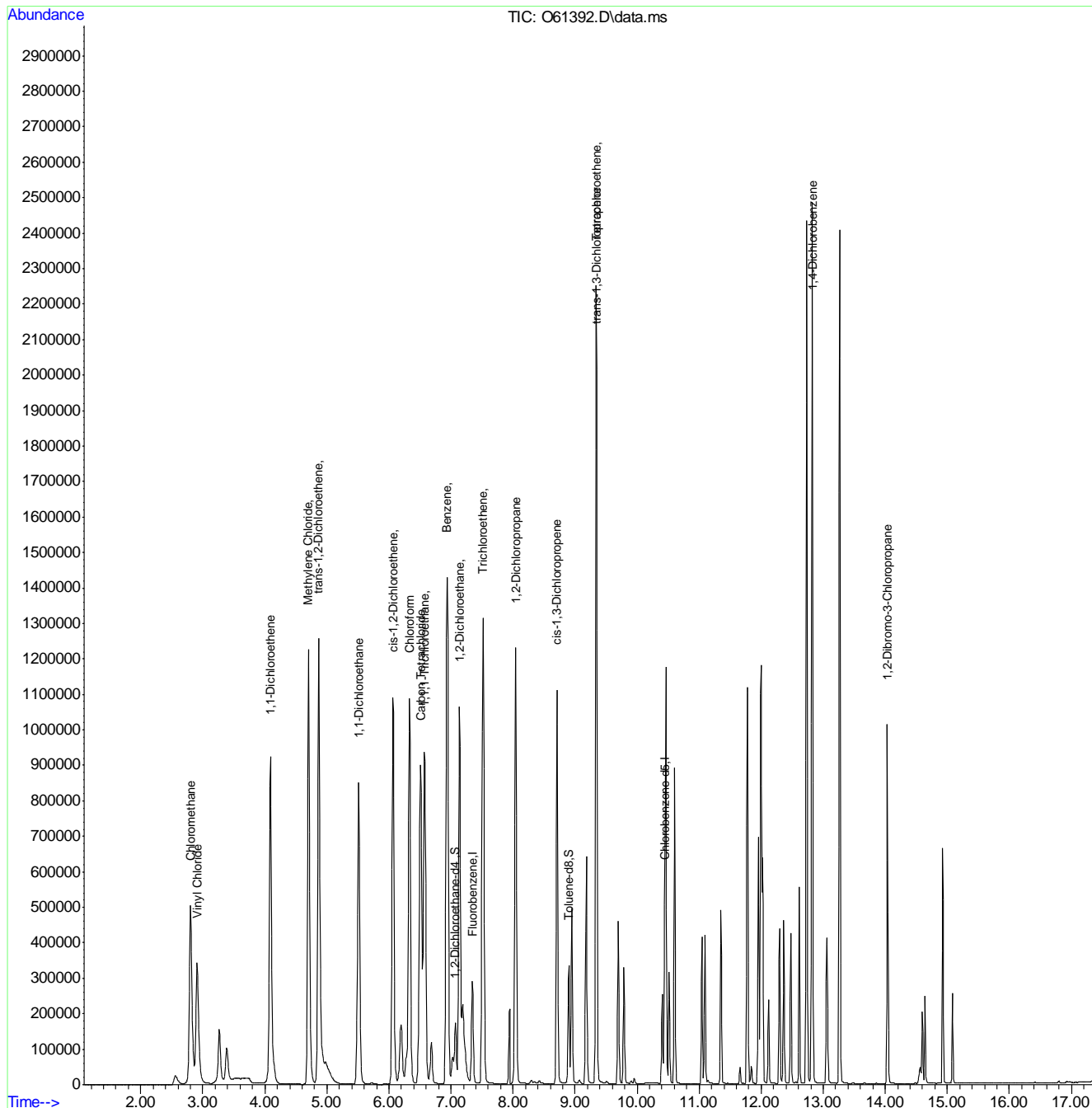
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\091520\
 Data File : 061392.D
 Acq On : 15 Sep 2020 5:48 pm
 Operator : AKARIG
 Sample : IC2362-7
 Misc : MS47193,VO2362,,,,,
 ALS Vial : 13 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 16 08:53:48 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091520.M
 Quant Title : Standard Methods 6200B
 QLast Update : Tue Sep 15 18:43:50 2020
 Response via : Initial Calibration



7.6.27
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\091520\
 Data File : O61394.D
 Acq On : 15 Sep 2020 6:29 pm
 Operator : AKARIG
 Sample : ICV2362-5 Inst : MSVOA12
 Misc : MS47193,VO2362,,,,,
 ALS Vial : 15 Sample Multiplier: 1

Quant Time: Sep 16 09:05:28 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091520.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 16 09:02:25 2020
 Response via : Initial Calibration

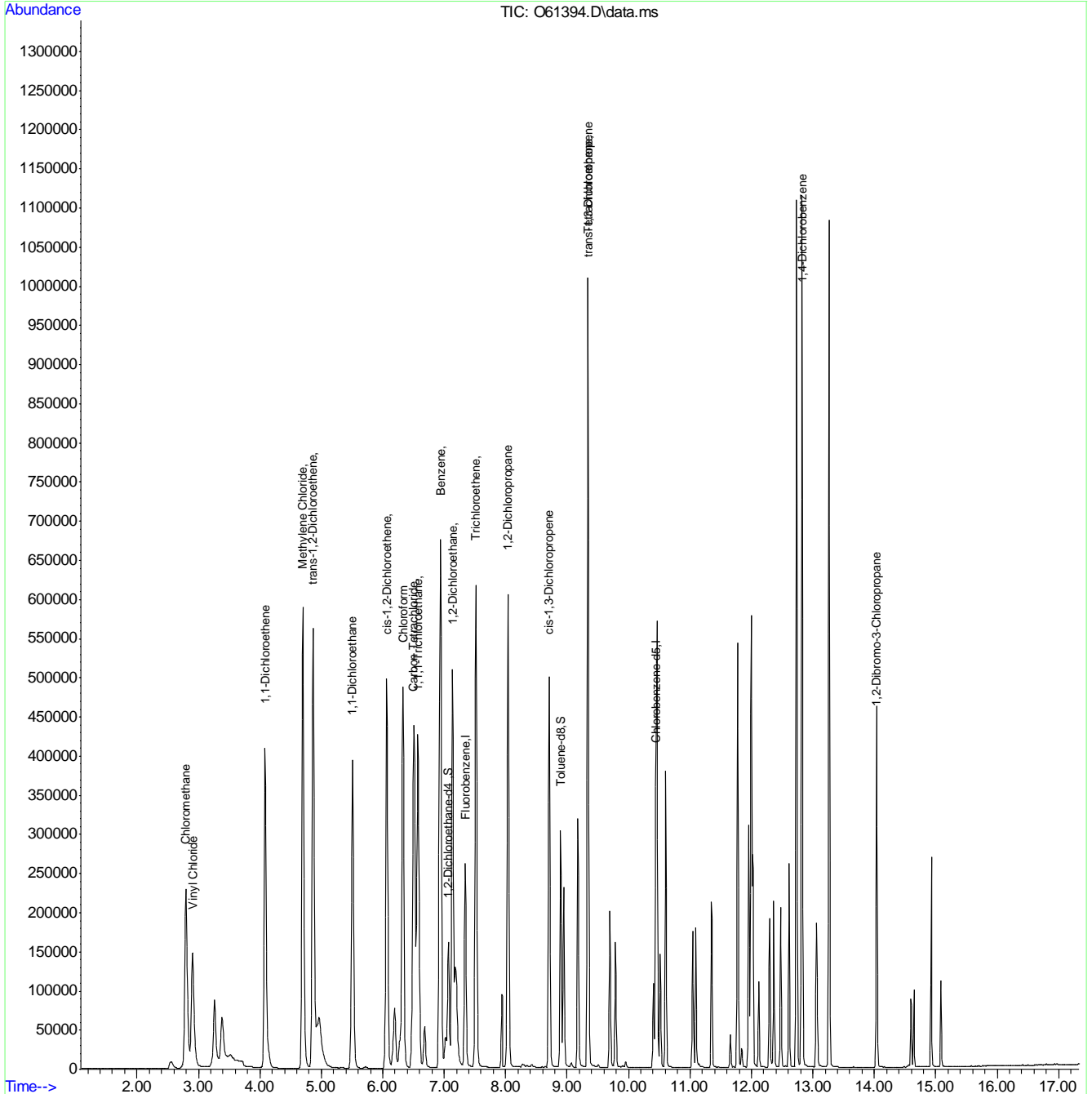
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
Internal Standards							
1) Fluorobenzene	7.344	96	351400	5.00	ug/L	0.00	
18) Chlorobenzene-d5	10.442	117	277635	5.00	ug/L	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.069	65	138509	4.68	ug/L	0.00	
Spiked Amount	5.000	Range 74 - 125	Recovery	=	93.60%		
19) Toluene-d8	8.896	98	288567	5.09	ug/L	0.00	
Spiked Amount	5.000	Range 88 - 111	Recovery	=	101.80%		
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.904	62	336755	8.11	ug/L		100
3) Chloromethane	2.799	50	470043	7.70	ug/L		99
4) 1,1-Dichloroethene	4.085	61	485590	9.22	ug/L		100
5) Methylene Chloride	4.696	49	752004	8.78	ug/L		99
6) trans-1,2-Dichloroethene	4.865	61	563657	9.38	ug/L		99
7) 1,1-Dichloroethane	5.506	63	649866	9.49	ug/L		99
8) cis-1,2-Dichloroethene	6.065	96	309114	10.00	ug/L		99
9) Chloroform	6.332	83	532103	9.16	ug/L		98
10) Carbon Tetrachloride	6.503	117	372360	9.31	ug/L		99
11) 1,1,1-Trichloroethane	6.573	97	432252	9.56	ug/L		99
12) Benzene	6.939	78	1111283	10.24	ug/L		99
14) 1,2-Dichloroethane	7.138	62	519762	9.74	ug/L		97
15) Trichloroethene	7.513	95	324950	10.04	ug/L		98
16) 1,2-Dichloropropane	8.039	63	365668	10.11	ug/L		98
17) cis-1,3-Dichloropropene	8.711	75	369498	11.27	ug/L		96
20) trans-1,3-Dichloropropene	9.344	75	369218	11.69	ug/L		97
21) Tetrachloroethene	9.338	166	296478	9.33	ug/L		99
22) 1,4-Dichlorobenzene	12.822	146	635008	10.47	ug/L		97
23) 1,2-Dibromo-3-Chloropr...	14.032	75	111064	10.52	ug/L		89

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\091520\
 Data File : O61394.D
 Acq On : 15 Sep 2020 6:29 pm
 Operator : AKARIG
 Sample : ICV2362-5 Inst : MSVOA12
 Misc : MS47193,VO2362,,,,,
 ALS Vial : 15 Sample Multiplier: 1

Quant Time: Sep 16 09:05:28 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091520.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 16 09:02:25 2020
 Response via : Initial Calibration



7.6.28
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-17-2020\vo2363\
 Data File : O61402.d
 Acq On : 16 Sep 2020 11:32 am
 Operator : akarig
 Sample : cc2632-5
 Misc : MS47193,VO2363,,,,,
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 17 04:42:15 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091520.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 16 09:02:25 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)	

Internal Standards							
1) Fluorobenzene	7.340	96	325847	5.00	ug/L	0.00	
18) Chlorobenzene-d5	10.441	117	270075	5.00	ug/L	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.068	65	128979	4.70	ug/L	0.00	
Spiked Amount	5.000	Range 74 - 125	Recovery	=	94.00%		
19) Toluene-d8	8.896	98	270320	4.90	ug/L	0.00	
Spiked Amount	5.000	Range 88 - 111	Recovery	=	98.00%		
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.904	62	333326	8.74	ug/L		100
3) Chloromethane	2.803	50	470037	8.42	ug/L		100
4) 1,1-Dichloroethene	4.085	61	440506	9.02	ug/L		99
5) Methylene Chloride	4.699	49	662782	8.27	ug/L		98
6) trans-1,2-Dichloroethene	4.865	61	488055	8.76	ug/L		99
7) 1,1-Dichloroethane	5.506	63	558208	8.79	ug/L		100
8) cis-1,2-Dichloroethene	6.060	96	262000	9.14	ug/L		98
9) Chloroform	6.327	83	461945	8.58	ug/L		99
10) Carbon Tetrachloride	6.505	117	323952	8.74	ug/L		100
11) 1,1,1-Trichloroethane	6.576	97	357632	8.53	ug/L		99
12) Benzene	6.937	78	909169	9.03	ug/L		97
14) 1,2-Dichloroethane	7.139	62	433728	8.76	ug/L		98
15) Trichloroethene	7.512	95	266819	8.89	ug/L		96
16) 1,2-Dichloropropane	8.040	63	305758	9.12	ug/L		99
17) cis-1,3-Dichloropropene	8.707	75	299518	9.85	ug/L		99
20) trans-1,3-Dichloropropene	9.337	75	294504	9.58	ug/L		98
21) Tetrachloroethene	9.337	166	257791	8.34	ug/L		100
22) 1,4-Dichlorobenzene	12.821	146	542705	9.20	ug/L		99
23) 1,2-Dibromo-3-Chloropr...	14.037	75	92403	9.00	ug/L #		73

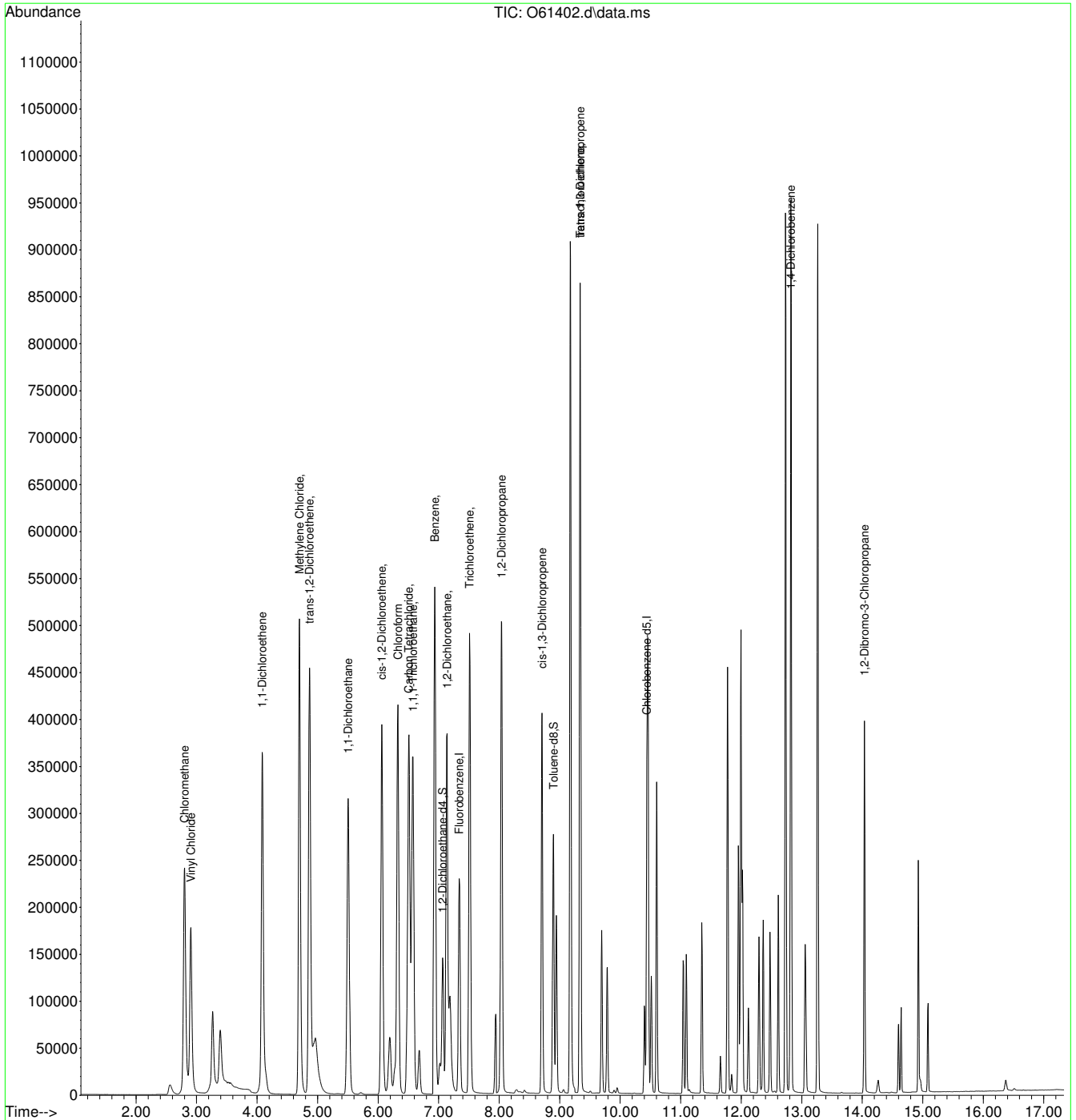
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.6.29
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-17-2020\vo2363\
 Data File : O61402.d
 Acq On : 16 Sep 2020 11:32 am
 Operator : akarig
 Sample : cc2632-5
 Misc : MS47193,VO2363,,,,,
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 17 04:42:15 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091520.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 16 09:02:25 2020
 Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\091620\
 Data File : O61422.D
 Acq On : 17 Sep 2020 8:05 am
 Operator : JuanG
 Sample : ecc2362-5 Inst : MSVOA12
 Misc : MS47193,VO2363,,,,,
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 17 15:41:58 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091520.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 16 09:02:25 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.340	96	264356	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.441	117	231809	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.068	65	112713	5.06	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	101.20%	
19) Toluene-d8	8.892	98	206233	4.36	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	87.20%#	
Target Compounds						
						Qvalue
2) Vinyl Chloride	2.901	62	291792	9.53	ug/L	100
3) Chloromethane	2.799	50	424538	9.59	ug/L	99
4) 1,1-Dichloroethene	4.081	61	439279	11.09	ug/L	98
5) Methylene Chloride	4.692	49	623492	9.89	ug/L	97
6) trans-1,2-Dichloroethene	4.858	61	437454	9.68	ug/L	99
7) 1,1-Dichloroethane	5.503	63	500022	9.70	ug/L	99
8) cis-1,2-Dichloroethene	6.060	96	219297	9.43	ug/L	98
9) Chloroform	6.321	83	419765	9.60	ug/L	99
10) Carbon Tetrachloride	6.499	117	295475	9.82	ug/L	100
11) 1,1,1-Trichloroethane	6.570	97	321489	9.45	ug/L	99
12) Benzene	6.931	78	776935	9.51	ug/L	93
14) 1,2-Dichloroethane	7.133	62	392115	9.76	ug/L	99
15) Trichloroethene	7.506	95	237878	9.77	ug/L	97
16) 1,2-Dichloropropane	8.036	63	265838	9.77	ug/L	98
17) cis-1,3-Dichloropropene	8.703	75	235080	9.53	ug/L	97
20) trans-1,3-Dichloropropene	9.337	75	243253	9.22	ug/L	97
21) Tetrachloroethene	9.337	166	240399	9.06	ug/L	95
22) 1,4-Dichlorobenzene	12.821	146	506530	10.00	ug/L	100
23) 1,2-Dibromo-3-Chloropr...	14.037	75	84784	9.62	ug/L #	71

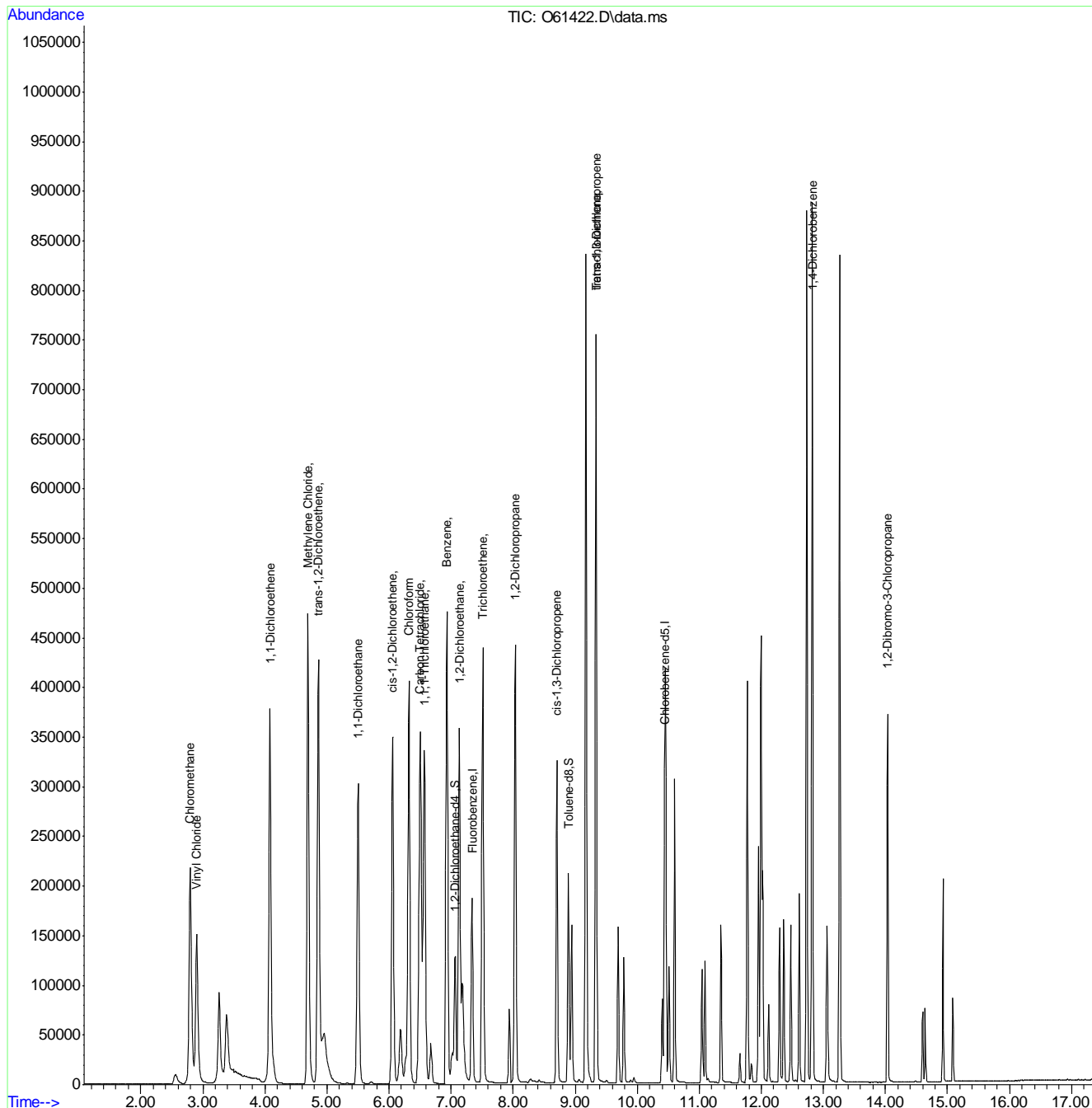
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\091620\
 Data File : O61422.D
 Acq On : 17 Sep 2020 8:05 am
 Operator : JuanG
 Sample : ecc2362-5
 Misc : MS47193,VO2363,,,,,
 ALS Vial : 2 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 17 15:41:58 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091520.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 16 09:02:25 2020
 Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\091820\
 Data File : O61438.D
 Acq On : 18 Sep 2020 8:59 am
 Operator : manager
 Sample : ic2365-1 Inst : MSVOA12
 Misc : MS47193,VO2365,,,,,
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 21 10:58:45 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Fri Sep 18 12:33:03 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.337	96	261236	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.444	117	202163	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.069	65	116570	5.44	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	108.80%	
19) Toluene-d8	8.892	98	218200	5.20	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	104.00%	
Target Compounds						
						Qvalue
2) Vinyl Chloride	2.901	62	2083	0.10	ug/L	93
3) Chloromethane	2.799	50	7435	0.21	ug/L	90
4) 1,1-Dichloroethene	4.092	61	2731	0.09	ug/L	98
5) Methylene Chloride	4.699	49	20345	0.36	ug/L	98
6) trans-1,2-Dichloroethene	4.865	61	3398	0.09	ug/L	99
7) 1,1-Dichloroethane	5.506	63	4113	0.10	ug/L	92
8) cis-1,2-Dichloroethene	6.065	96	1999	0.10	ug/L	96
9) Chloroform	6.326	83	4005	0.11	ug/L	86
10) Carbon Tetrachloride	6.504	117	2341	0.09	ug/L	98
11) 1,1,1-Trichloroethane	6.574	97	2520	0.08	ug/L	97
12) Benzene	6.931	78	6565	0.09	ug/L	99
14) 1,2-Dichloroethane	7.130	62	3299	0.10	ug/L	96
15) Trichloroethene	7.513	95	2001	0.09	ug/L	93
16) 1,2-Dichloropropane	8.036	63	2172	0.09	ug/L	96
17) cis-1,3-Dichloropropene	8.707	75	1804	0.09	ug/L	99
20) trans-1,3-Dichloropropene	9.341	75	1693	0.07	ug/L	100
21) Tetrachloroethene	9.341	166	1788	0.09	ug/L	86
22) 1,4-Dichlorobenzene	12.824	146	3287	0.08	ug/L	99
23) 1,2-Dibromo-3-Chloropr...	14.035	75	966	0.12	ug/L #	74

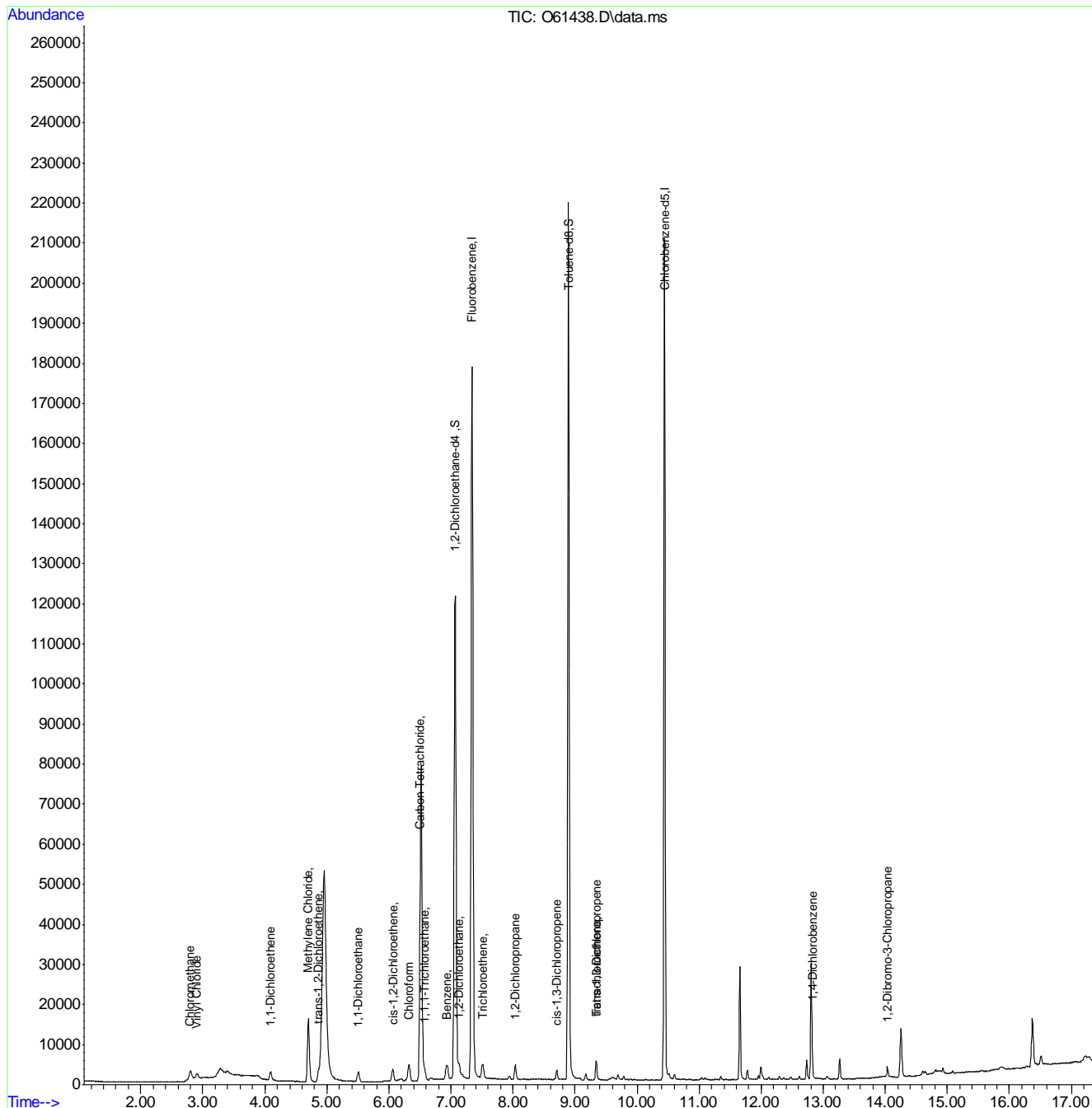
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\091820\
 Data File : O61438.D
 Acq On : 18 Sep 2020 8:59 am
 Operator : manager
 Sample : ic2365-1
 Misc : MS47193,VO2365,,,,,
 ALS Vial : 1 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 21 10:58:45 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Fri Sep 18 12:33:03 2020
 Response via : Initial Calibration



7.6.31
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\091820\
 Data File : O61439.D
 Acq On : 18 Sep 2020 9:19 am
 Operator : manager
 Sample : ic2365-2 Inst : MSVOA12
 Misc : MS47193,VO2365,,,,,
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 18 11:15:13 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 16 09:02:25 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.344	96	252171	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.444	117	194840	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.069	65	113152	5.33	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	106.60%	
19) Toluene-d8	8.896	98	210430	5.29	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	105.80%	
Target Compounds						
						Qvalue
2) Vinyl Chloride	2.908	62	11644	0.35	ug/L	100
3) Chloromethane	2.810	50	20323	0.41	ug/L	97
4) 1,1-Dichloroethene	4.096	61	15033	0.40	ug/L	96
5) Methylene Chloride	4.707	49	36456	0.51	ug/L	95
6) trans-1,2-Dichloroethene	4.873	61	18800	0.44	ug/L	98
7) 1,1-Dichloroethane	5.514	63	20598	0.42	ug/L	99
8) cis-1,2-Dichloroethene	6.071	96	9414	0.42	ug/L	95
9) Chloroform	6.332	83	18583	0.45	ug/L	100
10) Carbon Tetrachloride	6.510	117	12911	0.45	ug/L	99
11) 1,1,1-Trichloroethane	6.580	97	13989	0.43	ug/L	99
12) Benzene	6.939	78	32370	0.42	ug/L	99
14) 1,2-Dichloroethane	7.138	62	16414	0.43	ug/L	97
15) Trichloroethene	7.513	95	9833	0.42	ug/L	97
16) 1,2-Dichloropropane	8.043	63	10856	0.42	ug/L	96
17) cis-1,3-Dichloropropene	8.711	75	9449	0.40	ug/L	94
20) trans-1,3-Dichloropropene	9.346	75	8839	0.40	ug/L	95
21) Tetrachloroethene	9.341	166	9884	0.44	ug/L	95
22) 1,4-Dichlorobenzene	12.824	146	16845	0.40	ug/L	99
23) 1,2-Dibromo-3-Chloropr...	14.035	75	3203	0.43	ug/L	97

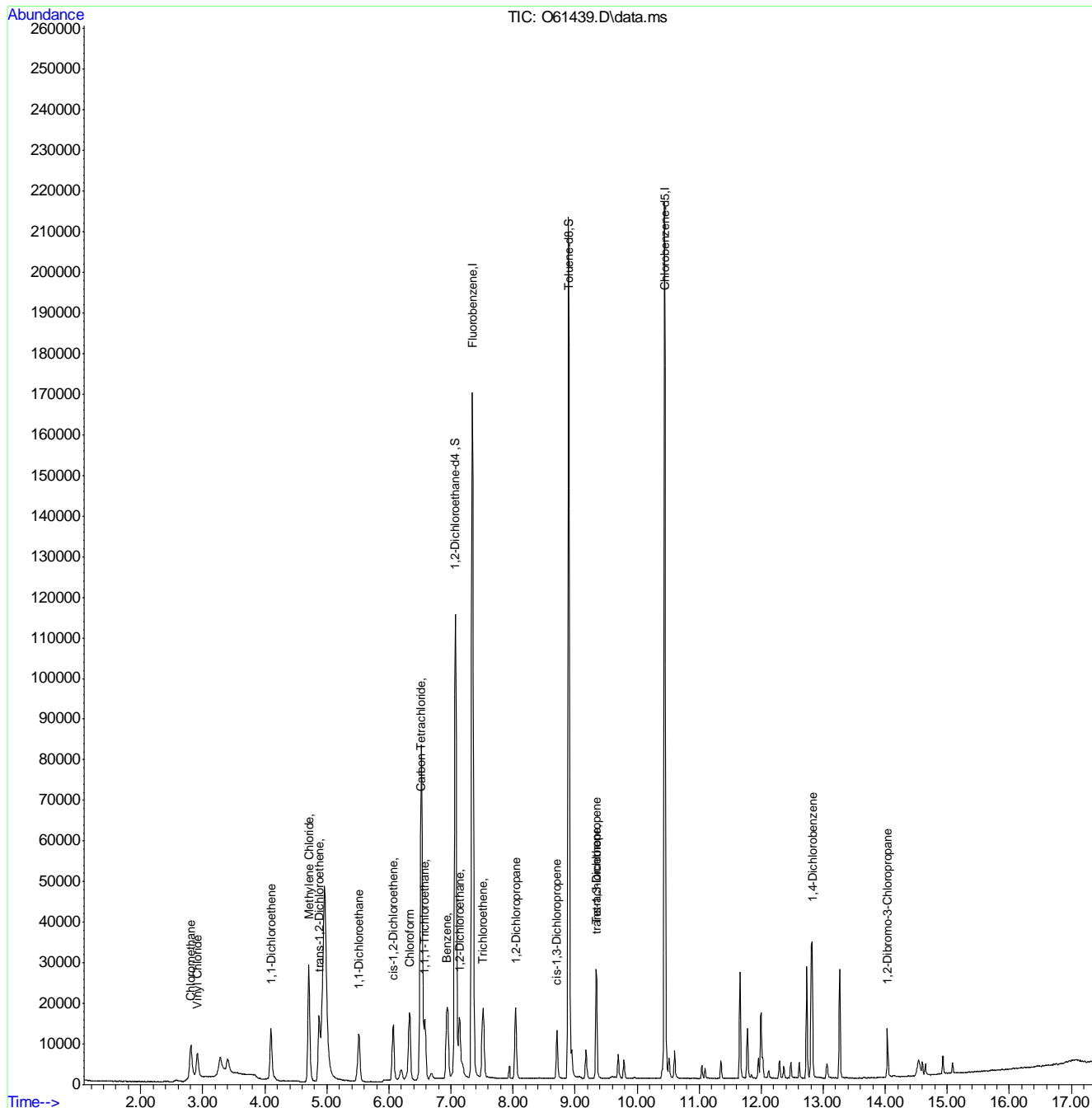
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\091820\
 Data File : 061439.D
 Acq On : 18 Sep 2020 9:19 am
 Operator : manager
 Sample : ic2365-2
 Misc : MS47193,VO2365,,,,,
 ALS Vial : 2 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 18 11:15:13 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 16 09:02:25 2020
 Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\091820\
 Data File : O61440.D
 Acq On : 18 Sep 2020 9:39 am
 Operator : manager
 Sample : ic2365-3 Inst : MSVOA12
 Misc : MS47193,VO2365,,,,,
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 18 11:15:15 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 16 09:02:25 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.345	96	268141	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.444	117	209010	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.069	65	115751	5.12	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	102.40%	
19) Toluene-d8	8.896	98	216803	5.08	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	101.60%	
Target Compounds						
						Qvalue
2) Vinyl Chloride	2.905	62	49935	1.44	ug/L	98
3) Chloromethane	2.799	50	72140	1.38	ug/L	99
4) 1,1-Dichloroethene	4.092	61	66773	1.66	ug/L	97
5) Methylene Chloride	4.700	49	117124	1.58	ug/L	96
6) trans-1,2-Dichloroethene	4.869	61	75666	1.65	ug/L	95
7) 1,1-Dichloroethane	5.510	63	89006	1.70	ug/L	99
8) cis-1,2-Dichloroethene	6.065	96	41201	1.75	ug/L	98
9) Chloroform	6.332	83	78619	1.77	ug/L	97
10) Carbon Tetrachloride	6.510	117	56528	1.85	ug/L	99
11) 1,1,1-Trichloroethane	6.580	97	64352	1.87	ug/L	97
12) Benzene	6.939	78	144210	1.74	ug/L	99
14) 1,2-Dichloroethane	7.138	62	71965	1.77	ug/L	95
15) Trichloroethene	7.513	95	42878	1.74	ug/L	96
16) 1,2-Dichloropropane	8.039	63	47054	1.71	ug/L	99
17) cis-1,3-Dichloropropene	8.707	75	42794	1.71	ug/L	95
20) trans-1,3-Dichloropropene	9.341	75	42016	1.77	ug/L	95
21) Tetrachloroethene	9.341	166	44410	1.86	ug/L	97
22) 1,4-Dichlorobenzene	12.824	146	83651	1.83	ug/L	99
23) 1,2-Dibromo-3-Chloropr...	14.035	75	14699	1.85	ug/L	99

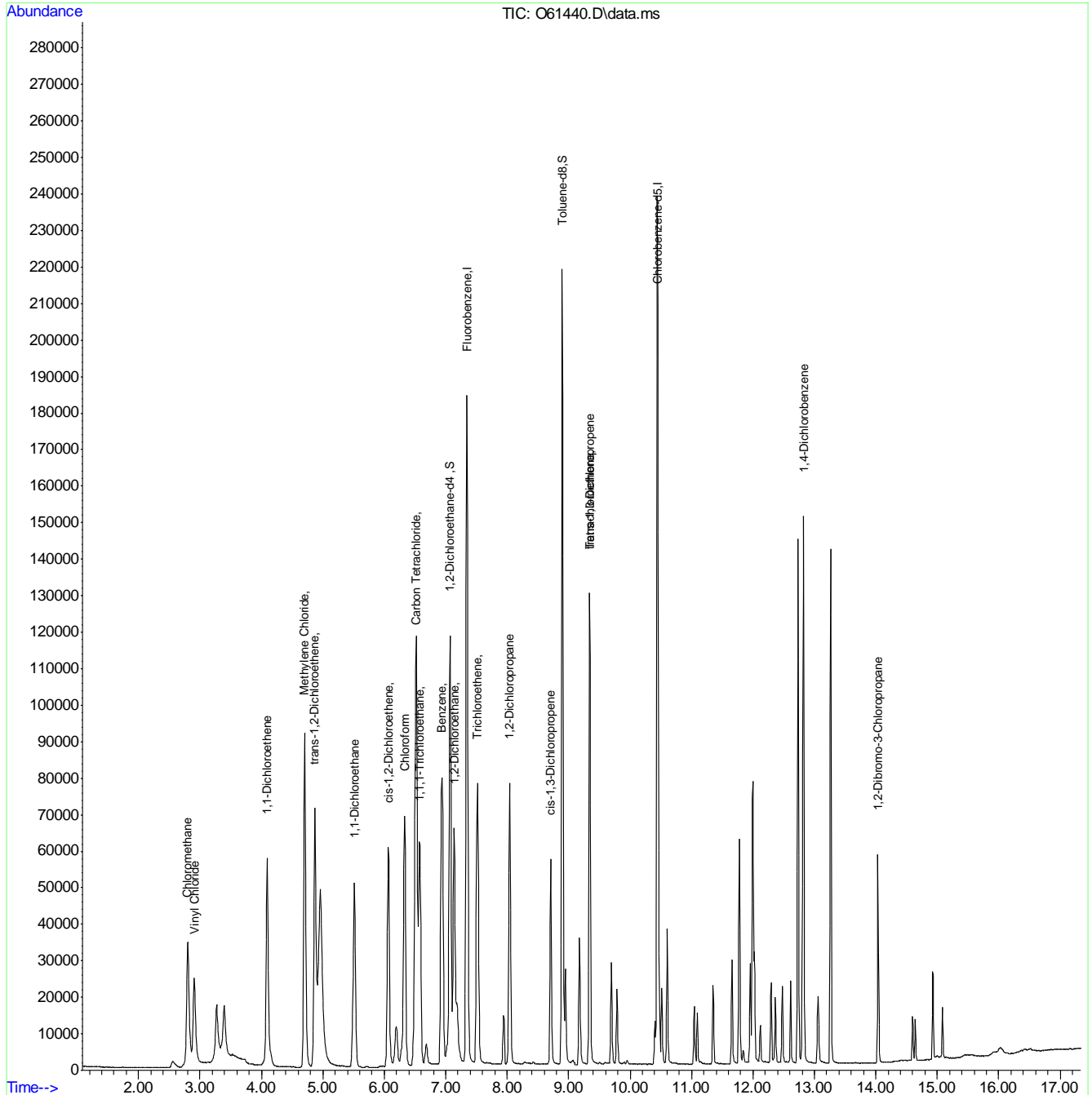
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\091820\
 Data File : O61440.D
 Acq On : 18 Sep 2020 9:39 am
 Operator : manager
 Sample : ic2365-3
 Misc : MS47193,VO2365,,,,,
 ALS Vial : 3 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 18 11:15:15 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 16 09:02:25 2020
 Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\091820\
 Data File : O61441.D
 Acq On : 18 Sep 2020 9:59 am
 Operator : manager
 Sample : ic2365-4 Inst : MSVOA12
 Misc : MS47193,VO2365,,,,,
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 18 11:15:17 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 16 09:02:25 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.344	96	294808	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.442	117	237988	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.069	65	116529	4.69	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	93.80%	
19) Toluene-d8	8.896	98	239015	4.92	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	98.40%	
Target Compounds						
						Qvalue
2) Vinyl Chloride	2.901	62	120675	3.25	ug/L	98
3) Chloromethane	2.795	50	176395	3.17	ug/L	100
4) 1,1-Dichloroethene	4.085	61	171754	3.89	ug/L	97
5) Methylene Chloride	4.699	49	275783	3.49	ug/L	94
6) trans-1,2-Dichloroethene	4.865	61	194812	3.86	ug/L	97
7) 1,1-Dichloroethane	5.510	63	230378	4.01	ug/L	99
8) cis-1,2-Dichloroethene	6.065	96	109559	4.22	ug/L	96
9) Chloroform	6.325	83	203003	4.17	ug/L	98
10) Carbon Tetrachloride	6.503	117	145473	4.34	ug/L	99
11) 1,1,1-Trichloroethane	6.573	97	157017	4.14	ug/L	98
12) Benzene	6.939	78	384822	4.23	ug/L	99
14) 1,2-Dichloroethane	7.138	62	188429	4.21	ug/L	96
15) Trichloroethene	7.513	95	115676	4.26	ug/L	96
16) 1,2-Dichloropropane	8.039	63	125456	4.14	ug/L	100
17) cis-1,3-Dichloropropene	8.707	75	121235	4.41	ug/L	96
20) trans-1,3-Dichloropropene	9.344	75	121382	4.48	ug/L	94
21) Tetrachloroethene	9.338	166	115720	4.25	ug/L	99
22) 1,4-Dichlorobenzene	12.822	146	233075	4.48	ug/L	98
23) 1,2-Dibromo-3-Chloropr...	14.032	75	41267	4.56	ug/L	90

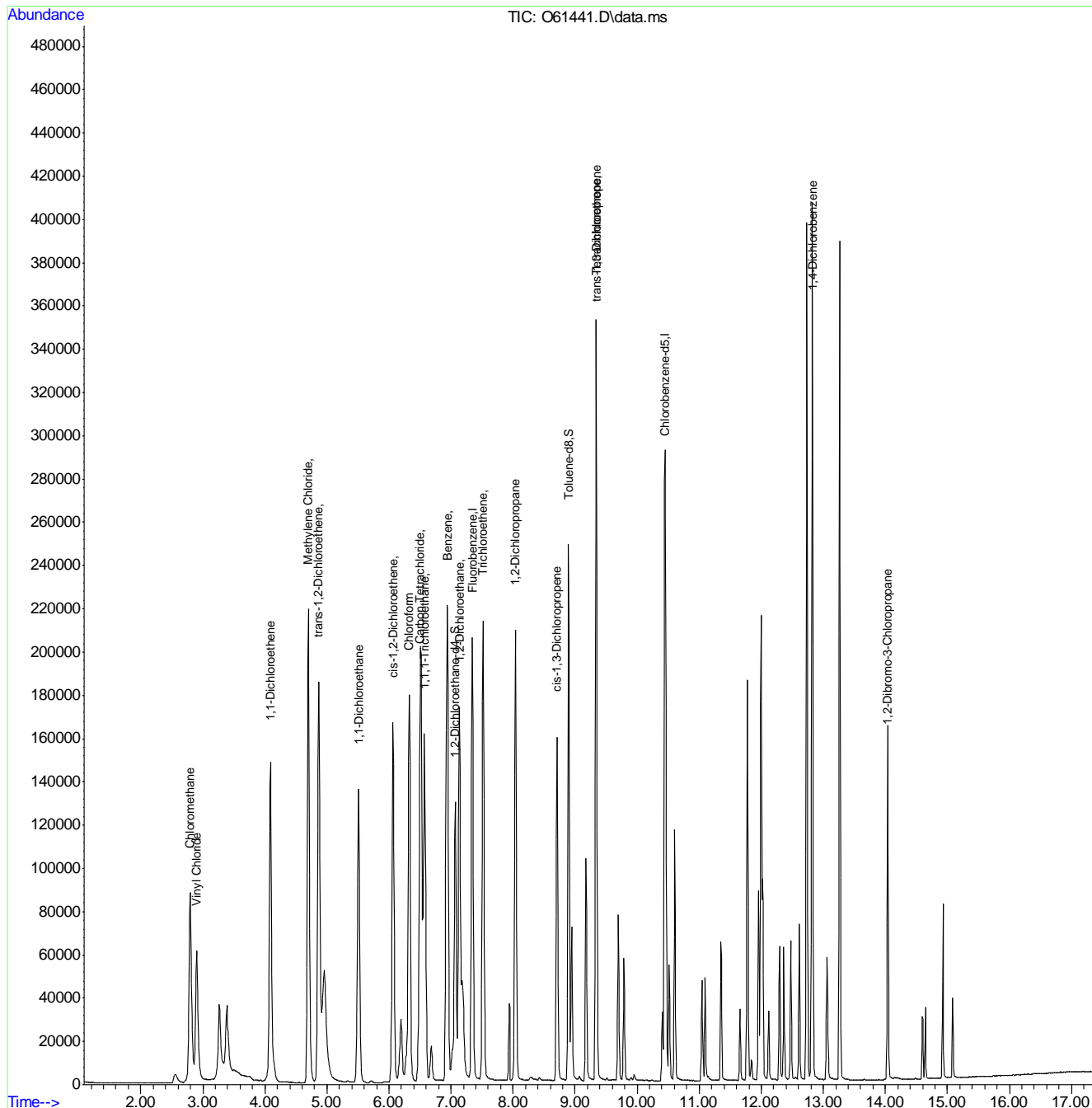
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\091820\
 Data File : O61441.D
 Acq On : 18 Sep 2020 9:59 am
 Operator : manager
 Sample : ic2365-4
 Misc : MS47193,VO2365,,,,,
 ALS Vial : 4 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 18 11:15:17 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 16 09:02:25 2020
 Response via : Initial Calibration



7.6.34
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\091820\
 Data File : O61442.D
 Acq On : 18 Sep 2020 10:20 am
 Operator : manager
 Sample : icc2365-5 Inst : MSVOA12
 Misc : MS47193,VO2365,,,,,
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 18 13:28:13 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Fri Sep 18 12:33:03 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.344	96	317479	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.444	117	262197	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.069	65	124374	4.78	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	95.60%	
19) Toluene-d8	8.896	98	261566	4.81	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	96.20%	
Target Compounds						
						Qvalue
2) Vinyl Chloride	2.904	62	258010	9.83	ug/L	100
3) Chloromethane	2.799	50	368949	9.84	ug/L	100
4) 1,1-Dichloroethene	4.089	61	403552	10.70	ug/L	100
5) Methylene Chloride	4.699	49	594962	9.66	ug/L	100
6) trans-1,2-Dichloroethene	4.865	61	465324	10.43	ug/L	100
7) 1,1-Dichloroethane	5.506	63	538909	10.44	ug/L	100
8) cis-1,2-Dichloroethene	6.065	96	267602	10.63	ug/L	100
9) Chloroform	6.326	83	473177	10.23	ug/L	100
10) Carbon Tetrachloride	6.504	117	349387	10.76	ug/L	100
11) 1,1,1-Trichloroethane	6.573	97	396800	10.91	ug/L	100
12) Benzene	6.939	78	927336	10.31	ug/L	100
14) 1,2-Dichloroethane	7.138	62	433891	10.38	ug/L	100
15) Trichloroethene	7.513	95	279983	10.77	ug/L	100
16) 1,2-Dichloropropane	8.039	63	295419	10.58	ug/L	100
17) cis-1,3-Dichloropropene	8.711	75	305456	10.40	ug/L	100
20) trans-1,3-Dichloropropene	9.341	75	303355	9.80	ug/L	100
21) Tetrachloroethene	9.341	166	276313	10.48	ug/L	100
22) 1,4-Dichlorobenzene	12.824	146	571165	10.33	ug/L	100
23) 1,2-Dibromo-3-Chloropr...	14.035	75	100354	9.98	ug/L	100

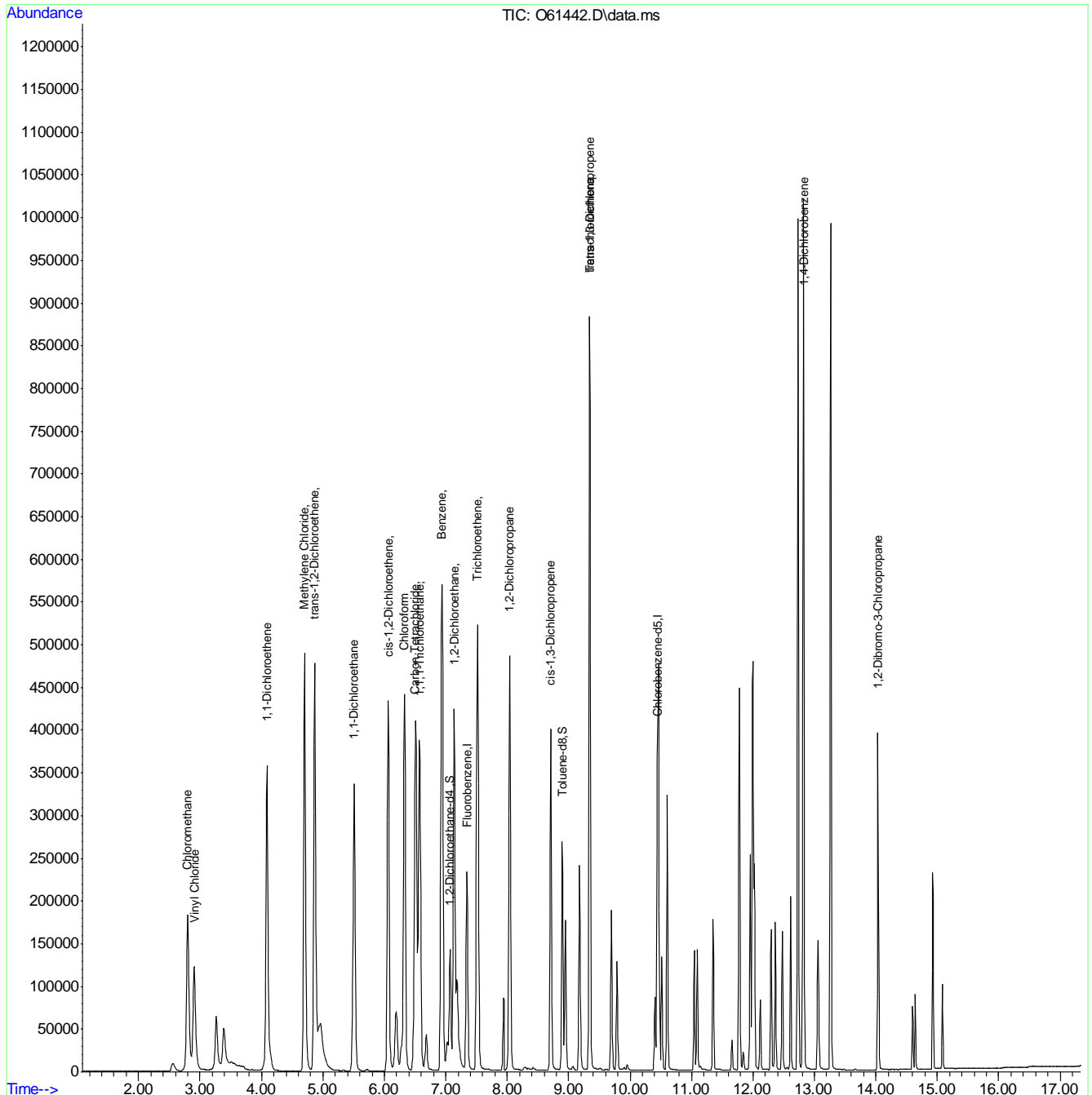
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\091820\
 Data File : O61442.D
 Acq On : 18 Sep 2020 10:20 am
 Operator : manager
 Sample : icc2365-5
 Misc : MS47193,VO2365,,,,,
 ALS Vial : 5 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 18 13:28:13 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Fri Sep 18 12:33:03 2020
 Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\091820\
 Data File : O61443.D
 Acq On : 18 Sep 2020 10:40 am
 Operator : manager
 Sample : ic2365-6 Inst : MSVOA12
 Misc : MS47193,VO2365,,,,,
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 18 11:15:21 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 16 09:02:25 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
Internal Standards							
1) Fluorobenzene	7.344	96	349600	5.00	ug/L	0.00	
18) Chlorobenzene-d5	10.444	117	284296	5.00	ug/L	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.069	65	133006	4.52	ug/L	0.00	
Spiked Amount	5.000	Range 74 - 125	Recovery	=	90.40%		
19) Toluene-d8	8.896	98	289639	4.99	ug/L	0.00	
Spiked Amount	5.000	Range 88 - 111	Recovery	=	99.80%		
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.901	62	408210	10.18	ug/L		99
3) Chloromethane	2.799	50	573827	9.85	ug/L		100
4) 1,1-Dichloroethene	4.085	61	628074	11.99	ug/L		96
5) Methylene Chloride	4.696	49	942585	11.72	ug/L		95
6) trans-1,2-Dichloroethene	4.865	61	748951	12.53	ug/L		95
7) 1,1-Dichloroethane	5.506	63	860860	12.63	ug/L		99
8) cis-1,2-Dichloroethene	6.065	96	440975	14.33	ug/L		96
9) Chloroform	6.332	83	755124	13.07	ug/L		95
10) Carbon Tetrachloride	6.504	117	546583	13.74	ug/L		100
11) 1,1,1-Trichloroethane	6.573	97	633035	14.07	ug/L		96
12) Benzene	6.939	78	1489877	13.80	ug/L		99
14) 1,2-Dichloroethane	7.138	62	706014	13.29	ug/L		95
15) Trichloroethene	7.513	95	448714	13.94	ug/L		96
16) 1,2-Dichloropropane	8.039	63	476629	13.25	ug/L		96
17) cis-1,3-Dichloropropene	8.711	75	519158	15.91	ug/L		90
20) trans-1,3-Dichloropropene	9.341	75	514875	15.92	ug/L		93
21) Tetrachloroethene	9.341	166	430942	13.24	ug/L		98
22) 1,4-Dichlorobenzene	12.824	146	935228	15.06	ug/L		99
23) 1,2-Dibromo-3-Chloropr...	14.035	75	172288	15.94	ug/L		91

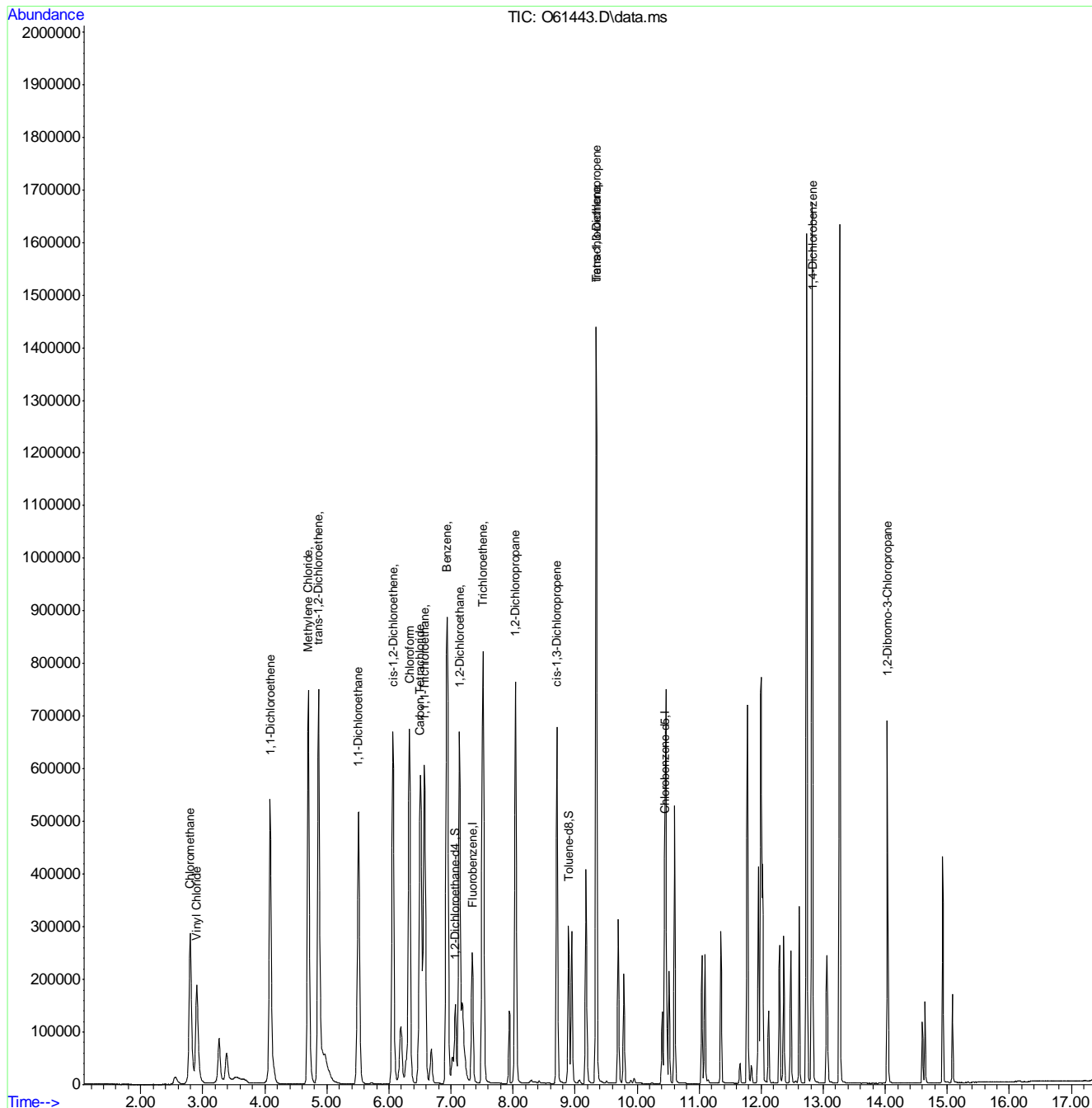
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\091820\
 Data File : O61443.D
 Acq On : 18 Sep 2020 10:40 am
 Operator : manager
 Sample : ic2365-6
 Misc : MS47193,VO2365,,,,,
 ALS Vial : 6 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 18 11:15:21 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 16 09:02:25 2020
 Response via : Initial Calibration



7.6.36
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\091820\
 Data File : O61444.D
 Acq On : 18 Sep 2020 11:00 am
 Operator : manager
 Sample : ic2365-7 Inst : MSVOA12
 Misc : MS47193,VO2365,,,,,
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 18 11:18:15 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 16 09:02:25 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.345	96	378436	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.444	117	303929	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.069	65	142322	4.46	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	89.20%	
19) Toluene-d8	8.896	98	316353	5.10	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	102.00%	
Target Compounds						
						Qvalue
2) Vinyl Chloride	2.905	62	549351	13.23	ug/L	99
3) Chloromethane	2.803	50	759194	12.80	ug/L	99
4) 1,1-Dichloroethene	4.089	61	906550	15.99	ug/L	96
5) Methylene Chloride	4.703	49	1296523	16.47	ug/L	91
6) trans-1,2-Dichloroethene	4.869	61	1075792	16.62	ug/L	95
7) 1,1-Dichloroethane	5.510	63	1223744	16.59	ug/L	99
8) cis-1,2-Dichloroethene	6.065	96	636570	19.12	ug/L	97
9) Chloroform	6.332	83	1072728	17.15	ug/L	95
10) Carbon Tetrachloride	6.510	117	798020	18.53	ug/L	99
11) 1,1,1-Trichloroethane	6.574	97	922417	18.95	ug/L	96
12) Benzene	6.939	78	2138246	18.29	ug/L	100
14) 1,2-Dichloroethane	7.138	62	996784	17.34	ug/L	95
15) Trichloroethene	7.513	95	652438	18.72	ug/L	99
16) 1,2-Dichloropropane	8.043	63	678346	17.42	ug/L	95
17) cis-1,3-Dichloropropene	8.711	75	768754	21.77	ug/L	91
20) trans-1,3-Dichloropropene	9.341	75	752317	21.75	ug/L	92
21) Tetrachloroethene	9.341	166	630648	18.12	ug/L	99
22) 1,4-Dichlorobenzene	12.824	146	1345441	20.27	ug/L	99
23) 1,2-Dibromo-3-Chloropr...	14.035	75	238266	20.62	ug/L	92

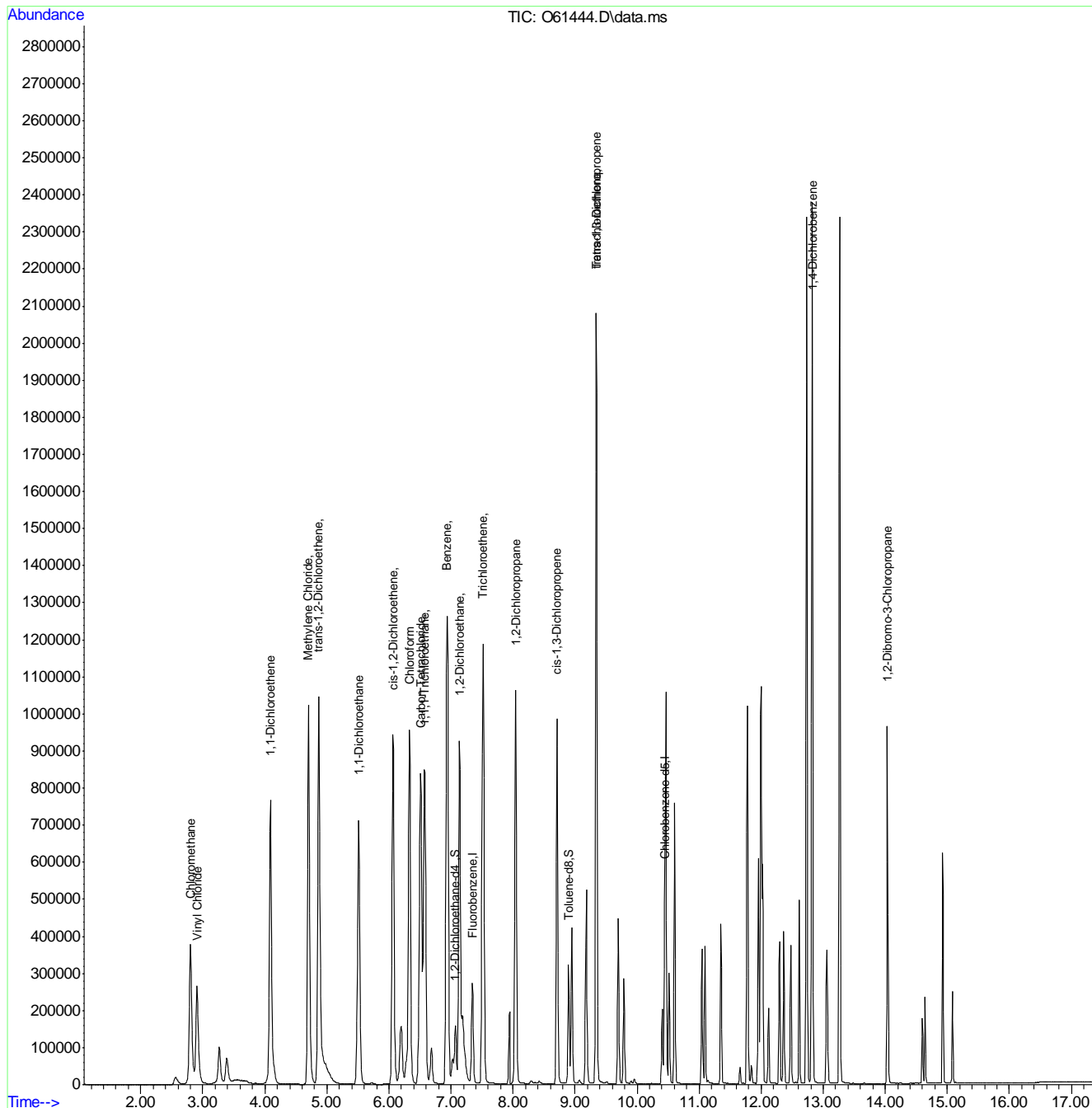
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\091820\
 Data File : O61444.D
 Acq On : 18 Sep 2020 11:00 am
 Operator : manager
 Sample : ic2365-7
 Misc : MS47193,VO2365,,,,,
 ALS Vial : 7 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 18 11:18:15 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 16 09:02:25 2020
 Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\091820\
 Data File : O61449.D
 Acq On : 18 Sep 2020 1:45 pm
 Operator : manager
 Sample : icv2365-5 Inst : MSVOA12
 Misc : MS47193,VO2365,,,,,
 ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 21 11:02:09 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Mon Sep 21 11:01:30 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
Internal Standards							
1) Fluorobenzene	7.345	96	345404	5.00	ug/L	0.00	
18) Chlorobenzene-d5	10.444	117	280094	5.00	ug/L	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.069	65	132346	4.67	ug/L	0.00	
Spiked Amount	5.000	Range 74 - 125	Recovery	=	93.40%		
19) Toluene-d8	8.896	98	287603	4.95	ug/L	0.00	
Spiked Amount	5.000	Range 88 - 111	Recovery	=	99.00%		
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.916	62	278141	9.74	ug/L		100
3) Chloromethane	2.814	50	385205	9.38	ug/L		100
4) 1,1-Dichloroethene	4.092	61	453054	11.04	ug/L		98
5) Methylene Chloride	4.707	49	649105	9.69	ug/L		99
6) trans-1,2-Dichloroethene	4.873	61	515172	10.61	ug/L		99
7) 1,1-Dichloroethane	5.514	63	601290	10.70	ug/L		100
8) cis-1,2-Dichloroethene	6.071	96	302659	11.06	ug/L		99
9) Chloroform	6.332	83	518250	10.30	ug/L		99
10) Carbon Tetrachloride	6.510	117	388731	11.01	ug/L		99
11) 1,1,1-Trichloroethane	6.580	97	437431	11.06	ug/L		99
12) Benzene	6.939	78	1068476	10.92	ug/L		98
14) 1,2-Dichloroethane	7.138	62	491591	10.81	ug/L		99
15) Trichloroethene	7.513	95	320798	11.35	ug/L		100
16) 1,2-Dichloropropane	8.039	63	339084	11.16	ug/L		99
17) cis-1,3-Dichloropropene	8.707	75	364460	11.29	ug/L		99
20) trans-1,3-Dichloropropene	9.341	75	365164	11.05	ug/L		98
21) Tetrachloroethene	9.341	166	304680	10.82	ug/L		99
22) 1,4-Dichlorobenzene	12.824	146	650957	10.97	ug/L		100
23) 1,2-Dibromo-3-Chloropr...	14.035	75	117662	10.96	ug/L		95

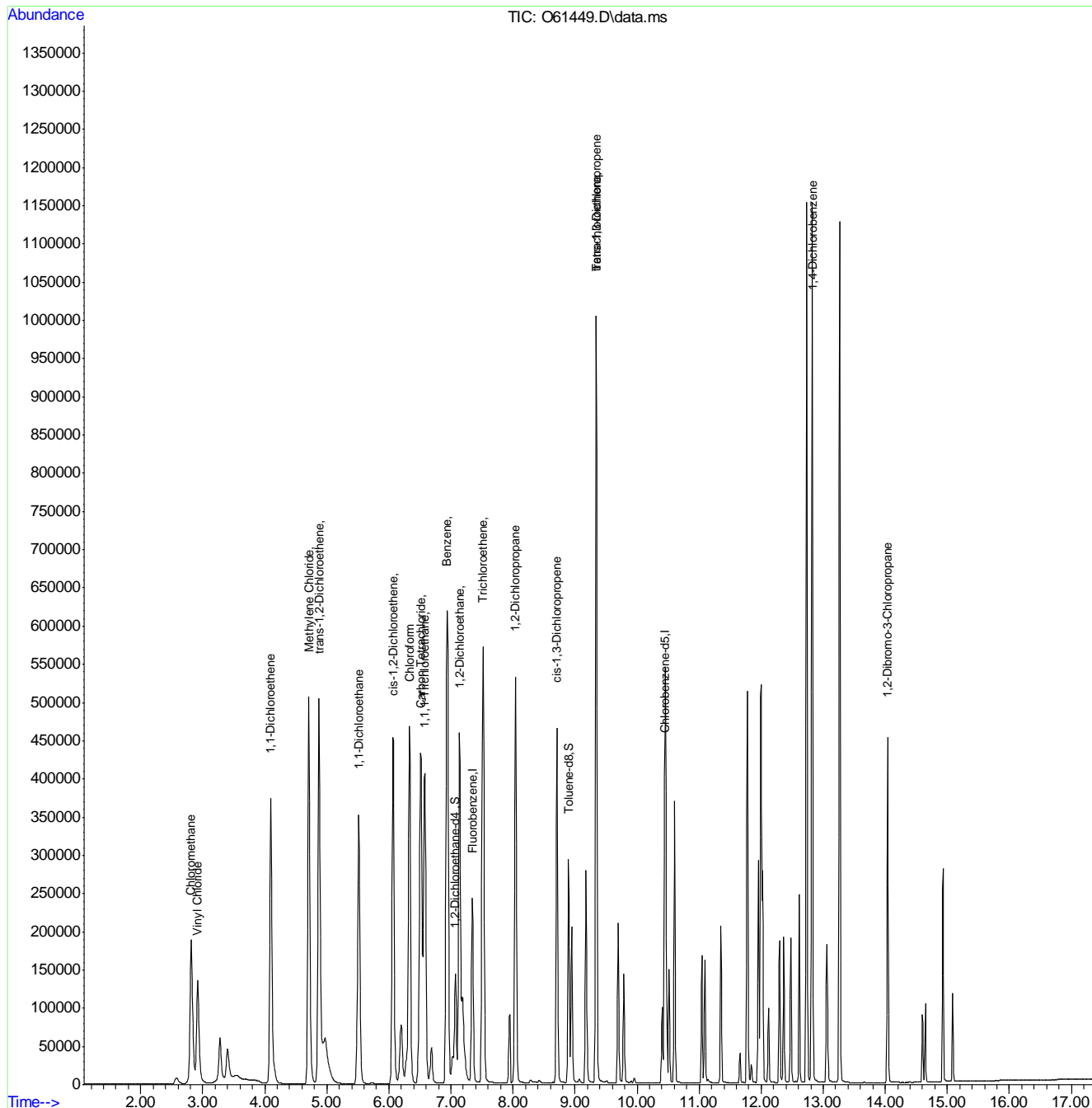
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\091820\
 Data File : O61449.D
 Acq On : 18 Sep 2020 1:45 pm
 Operator : manager
 Sample : icv2365-5
 Misc : MS47193,VO2365,,,,,
 ALS Vial : 12 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 21 11:02:09 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Mon Sep 21 11:01:30 2020
 Response via : Initial Calibration



7.6.38

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\091820\
 Data File : O61458.D
 Acq On : 18 Sep 2020 5:07 pm
 Operator : manager
 Sample : ECC2365-5 Inst : MSVOA12
 Misc : MS47173,VO2365,,,,,
 ALS Vial : 21 Sample Multiplier: 1

Quant Time: Sep 21 11:02:27 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Mon Sep 21 11:01:30 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.344	96	295751	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.444	117	243771	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.077	65	114436	4.72	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	94.40%	
19) Toluene-d8	8.899	98	244174	4.83	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	96.60%	
Target Compounds						
						Qvalue
2) Vinyl Chloride	2.916	62	262178	10.72	ug/L	100
3) Chloromethane	2.810	50	375712	10.94	ug/L	100
4) 1,1-Dichloroethene	4.096	61	398414	11.34	ug/L	100
5) Methylene Chloride	4.707	49	584859	10.28	ug/L	99
6) trans-1,2-Dichloroethene	4.873	61	458700	11.03	ug/L	99
7) 1,1-Dichloroethane	5.514	63	533378	11.09	ug/L	100
8) cis-1,2-Dichloroethene	6.071	96	264274	11.27	ug/L	99
9) Chloroform	6.332	83	466493	10.83	ug/L	100
10) Carbon Tetrachloride	6.510	117	346651	11.46	ug/L	99
11) 1,1,1-Trichloroethane	6.580	97	395544	11.68	ug/L	99
12) Benzene	6.947	78	918284	10.96	ug/L	98
14) 1,2-Dichloroethane	7.138	62	427930	10.99	ug/L	98
15) Trichloroethene	7.513	95	278746	11.51	ug/L	98
16) 1,2-Dichloropropane	8.043	63	291898	11.22	ug/L	99
17) cis-1,3-Dichloropropene	8.711	75	297995	10.84	ug/L	99
20) trans-1,3-Dichloropropene	9.346	75	296146	10.29	ug/L	97
21) Tetrachloroethene	9.340	166	273400	11.16	ug/L	99
22) 1,4-Dichlorobenzene	12.824	146	561431	10.88	ug/L	99
23) 1,2-Dibromo-3-Chloropr...	14.035	75	94014	10.06	ug/L	94

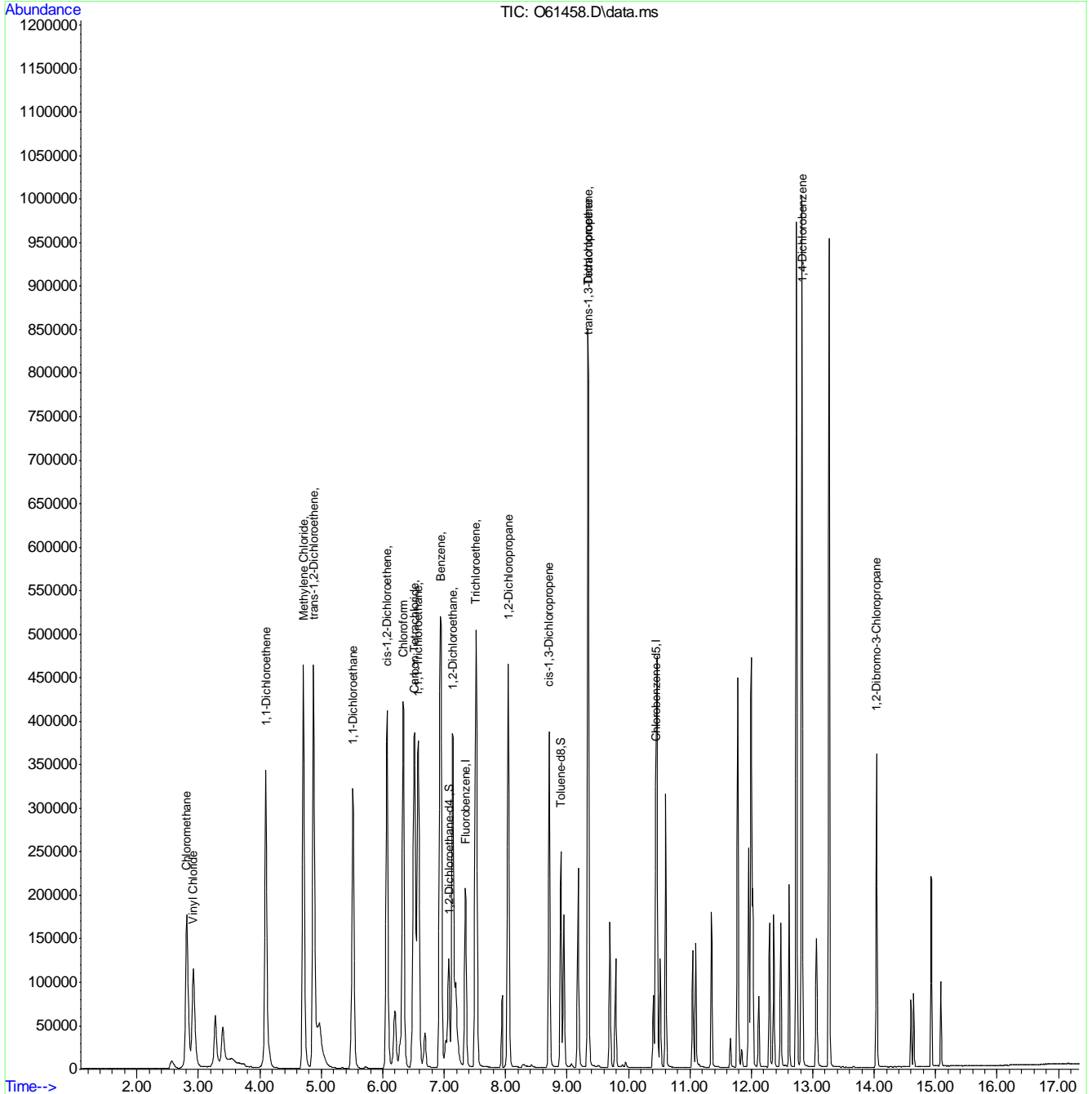
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\091820\
 Data File : O61458.D
 Acq On : 18 Sep 2020 5:07 pm
 Operator : manager
 Sample : ECC2365-5
 Misc : MS47173,VO2365,,,,,
 ALS Vial : 21 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 21 11:02:27 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Mon Sep 21 11:01:30 2020
 Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\091120\
 Data File : Z62207.D
 Acq On : 11 Sep 2020 6:15 pm
 Operator : SHANICAO
 Sample : IC2414-1
 Misc : MS47171,VZ2414,,,,,
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 11 20:45:22 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Tue Sep 08 14:39:51 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	

Internal Standards							
1) Fluorobenzene	7.401	96	1911916	5.00	ppb	0.00	
18) Chlorobenzene-d5	10.511	117	1500837	5.00	ppb	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.123	65	582041	4.07	ppb	0.00	
Spiked Amount	5.000	Range 79 - 125	Recovery	=	81.40%		
19) Toluene-d8	8.961	98	1882184	5.19	ppb	0.00	
Spiked Amount	5.000	Range 70 - 130	Recovery	=	103.80%		
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.846	62	28495	0.14	ppb		64
3) Chloromethane	2.741	50	25350	0.11	ppb		98
4) 1,1-Dichloroethene	4.083	96	11716	0.09	ppb	#	82
5) Methylene Chloride	4.713	84	104791	0.50	ppb	#	85
6) trans-1,2-Dichloroethene	4.886	96	13680	0.09	ppb	#	86
7) 1,1-Dichloroethane	5.542	63	21987	0.07	ppb	#	93
8) cis-1,2-Dichloroethene	6.104	96	16012	0.10	ppb		90
9) Chloroform	6.371	83	29706	0.09	ppb		94
10) Carbon Tetrachloride	6.543	117	19024	0.09	ppb		96
11) 1,1,1-Trichloroethane	6.614	97	24317	0.09	ppb		56
12) Benzene	6.994	78	51294	0.09	ppb		91
14) 1,2-Dichloroethane	7.198	62	19143	0.08	ppb		99
15) Trichloroethene	7.564	95	15849	0.09	ppb		96
16) 1,2-Dichloropropane	8.101	63	13157	0.09	ppb		97
17) cis-1,3-Dichloropropene	8.773	75	13481	0.09	ppb		96
20) trans-1,3-Dichloropropene	9.411	75	10019	0.09	ppb		96
21) Tetrachloroethene	9.399	166	15170	0.09	ppb		97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

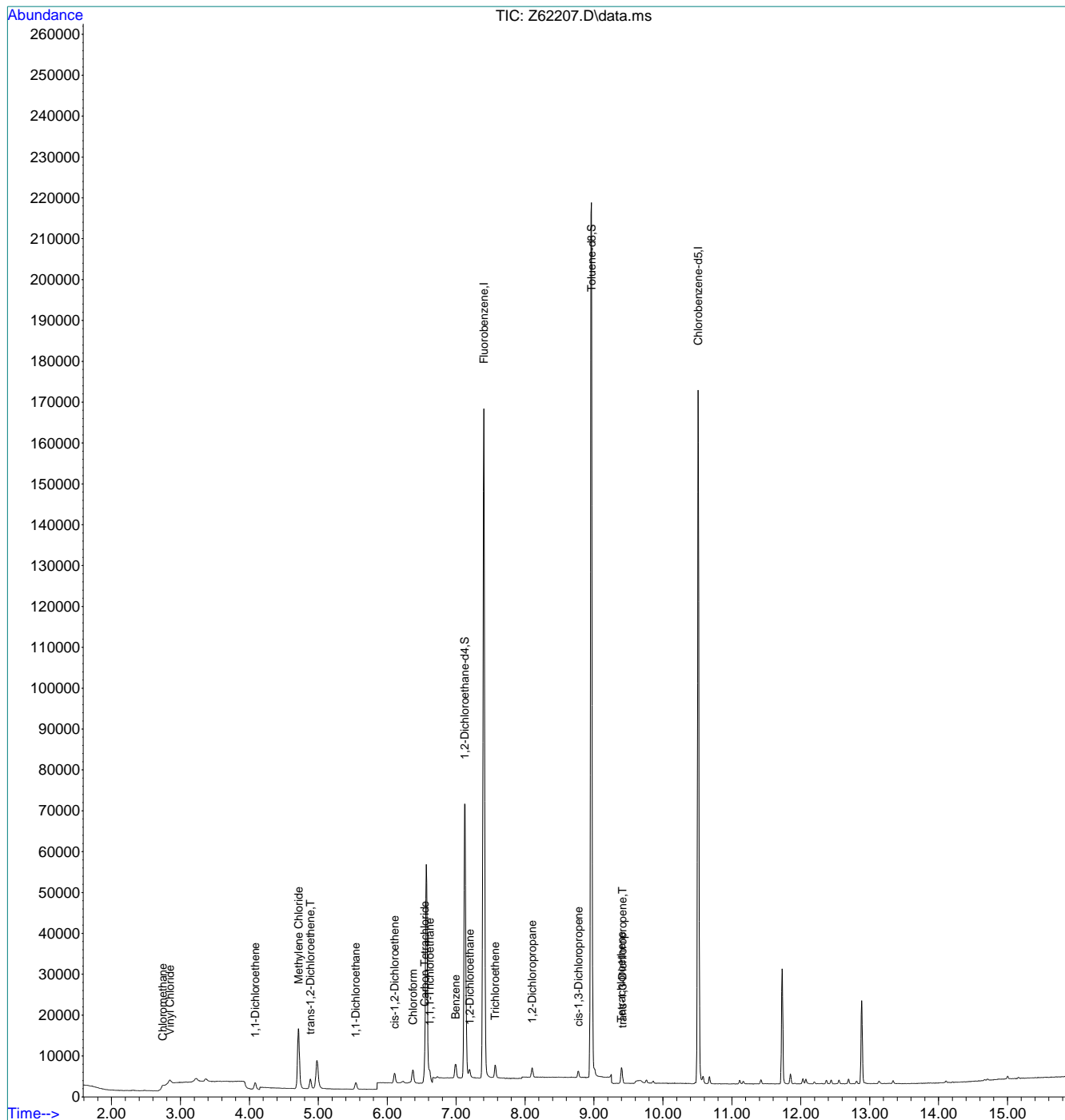
7.6.40
7



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\091120\
 Data File : Z62207.D
 Acq On : 11 Sep 2020 6:15 pm
 Operator : SHANICAO
 Sample : IC2414-1
 Misc : MS47171,VZ2414,,,,,
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 11 20:45:22 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Tue Sep 08 14:39:51 2020
 Response via : Initial Calibration



7.6.40
7



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\091120\
 Data File : Z62208.D
 Acq On : 11 Sep 2020 6:34 pm
 Operator : SHANICAO
 Sample : IC2414-2
 Misc : MS47171,VZ2414,,,,,
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 11 20:45:24 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Tue Sep 08 14:39:51 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	

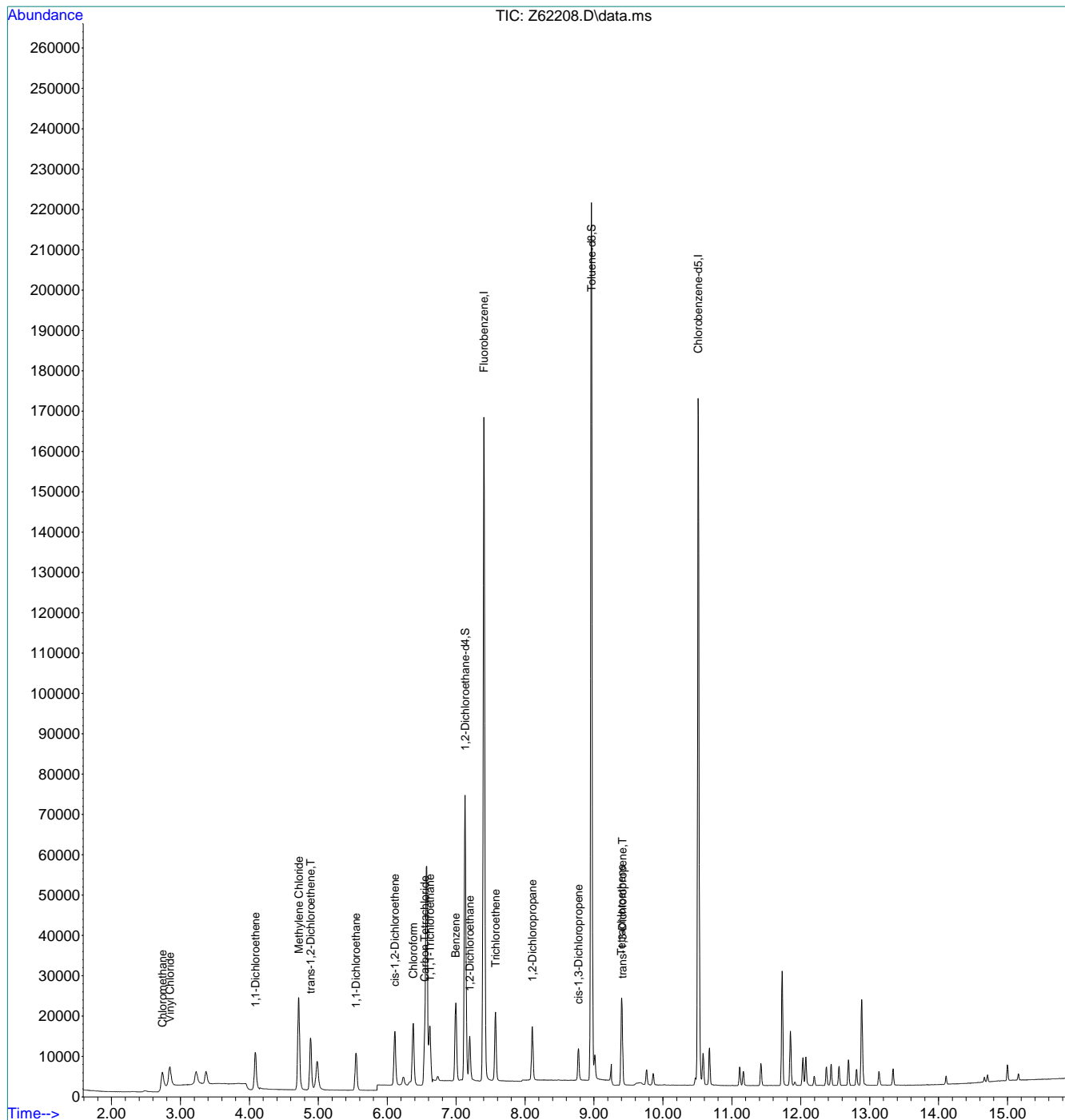
Internal Standards							
1) Fluorobenzene	7.401	96	1904308	5.00	ppb	0.00	
18) Chlorobenzene-d5	10.511	117	1505590	5.00	ppb	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.130	65	590498	4.14	ppb	0.00	
Spiked Amount	5.000	Range	79 - 125	Recovery	=	82.80%	
19) Toluene-d8	8.961	98	1879356	5.17	ppb	0.00	
Spiked Amount	5.000	Range	70 - 130	Recovery	=	103.40%	
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.846	62	100902	0.49	ppb		94
3) Chloromethane	2.737	50	94917	0.43	ppb		99
4) 1,1-Dichloroethene	4.087	96	56778	0.46	ppb	#	85
5) Methylene Chloride	4.717	84	159658	0.77	ppb	#	84
6) trans-1,2-Dichloroethene	4.890	96	72093	0.47	ppb	#	87
7) 1,1-Dichloroethane	5.546	63	125841	0.43	ppb	#	100
8) cis-1,2-Dichloroethene	6.110	96	81784	0.50	ppb		91
9) Chloroform	6.377	83	149761	0.46	ppb		99
10) Carbon Tetrachloride	6.543	117	93184	0.46	ppb		100
11) 1,1,1-Trichloroethane	6.620	97	125772	0.46	ppb		93
12) Benzene	6.994	78	278106	0.49	ppb		95
14) 1,2-Dichloroethane	7.198	62	107084	0.46	ppb		99
15) Trichloroethene	7.571	95	81536	0.46	ppb	#	84
16) 1,2-Dichloropropane	8.105	63	71854	0.47	ppb		96
17) cis-1,3-Dichloropropene	8.773	75	62431	0.42	ppb		97
20) trans-1,3-Dichloropropene	9.411	75	51134	0.43	ppb		97
21) Tetrachloroethene	9.399	166	81006	0.45	ppb		99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\091120\
 Data File : Z62208.D
 Acq On : 11 Sep 2020 6:34 pm
 Operator : SHANICAO
 Sample : IC2414-2
 Misc : MS47171,VZ2414,,,,,
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 11 20:45:24 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Tue Sep 08 14:39:51 2020
 Response via : Initial Calibration



7.6.41
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\091120\
 Data File : Z62209.D
 Acq On : 11 Sep 2020 6:53 pm
 Operator : SHANICAO
 Sample : IC2414-3
 Misc : MS47171,VZ2414,,,,,
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 11 20:45:26 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Tue Sep 08 14:39:51 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	

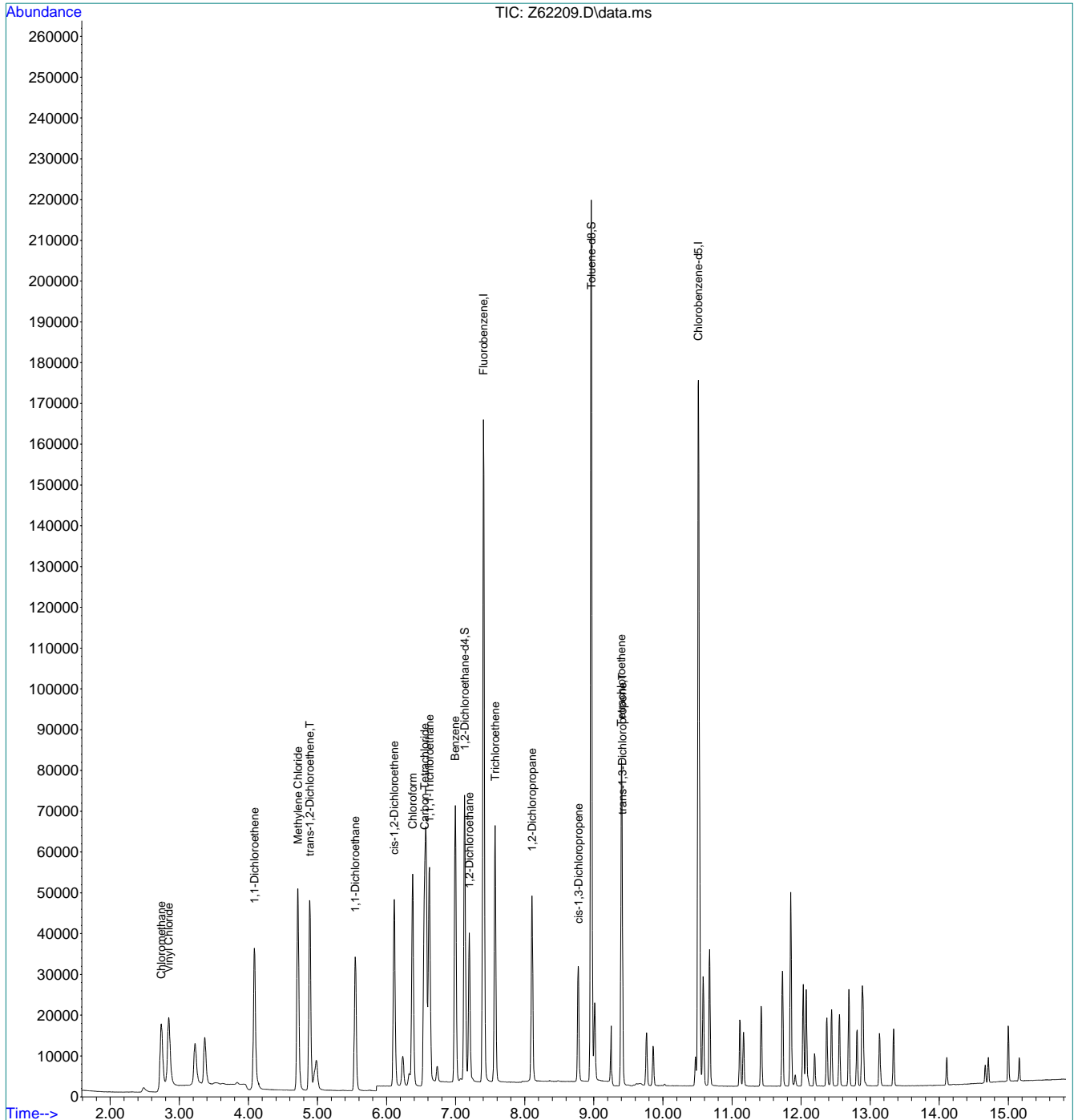
Internal Standards							
1) Fluorobenzene	7.401	96	1880383	5.00	ppb	0.00	
18) Chlorobenzene-d5	10.511	117	1501976	5.00	ppb	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.130	65	577590	4.10	ppb	0.00	
Spiked Amount	5.000	Range 79 - 125	Recovery	=	82.00%		
19) Toluene-d8	8.961	98	1874357	5.17	ppb	0.00	
Spiked Amount	5.000	Range 70 - 130	Recovery	=	103.40%		
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.846	62	355035	1.73	ppb		99
3) Chloromethane	2.737	50	361423	1.66	ppb		99
4) 1,1-Dichloroethene	4.087	96	211318	1.74	ppb	#	86
5) Methylene Chloride	4.717	84	343631	1.70	ppb	#	85
6) trans-1,2-Dichloroethene	4.890	96	256460	1.69	ppb	#	88
7) 1,1-Dichloroethane	5.546	63	437656	1.50	ppb	#	99
8) cis-1,2-Dichloroethene	6.110	96	282000	1.74	ppb		93
9) Chloroform	6.377	83	511484	1.59	ppb		99
10) Carbon Tetrachloride	6.549	117	347244	1.75	ppb		98
11) 1,1,1-Trichloroethane	6.620	97	460357	1.71	ppb		97
12) Benzene	6.994	78	967414	1.72	ppb		96
14) 1,2-Dichloroethane	7.198	62	357979	1.54	ppb		100
15) Trichloroethene	7.571	95	292723	1.66	ppb		86
16) 1,2-Dichloropropane	8.105	63	240964	1.60	ppb		94
17) cis-1,3-Dichloropropene	8.777	75	222972	1.51	ppb		97
20) trans-1,3-Dichloropropene	9.411	75	182860	1.51	ppb		99
21) Tetrachloroethene	9.399	166	294888	1.65	ppb		99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\091120\
 Data File : Z62209.D
 Acq On : 11 Sep 2020 6:53 pm
 Operator : SHANICAO
 Sample : IC2414-3
 Misc : MS47171,VZ2414,,,,,
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 11 20:45:26 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Tue Sep 08 14:39:51 2020
 Response via : Initial Calibration



7.6.42

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\091120\
 Data File : Z62210.D
 Acq On : 11 Sep 2020 7:13 pm
 Operator : SHANICAO
 Sample : IC2414-4
 Misc : MS47171,VZ2414,,,,,
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 11 20:45:28 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Tue Sep 08 14:39:51 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	

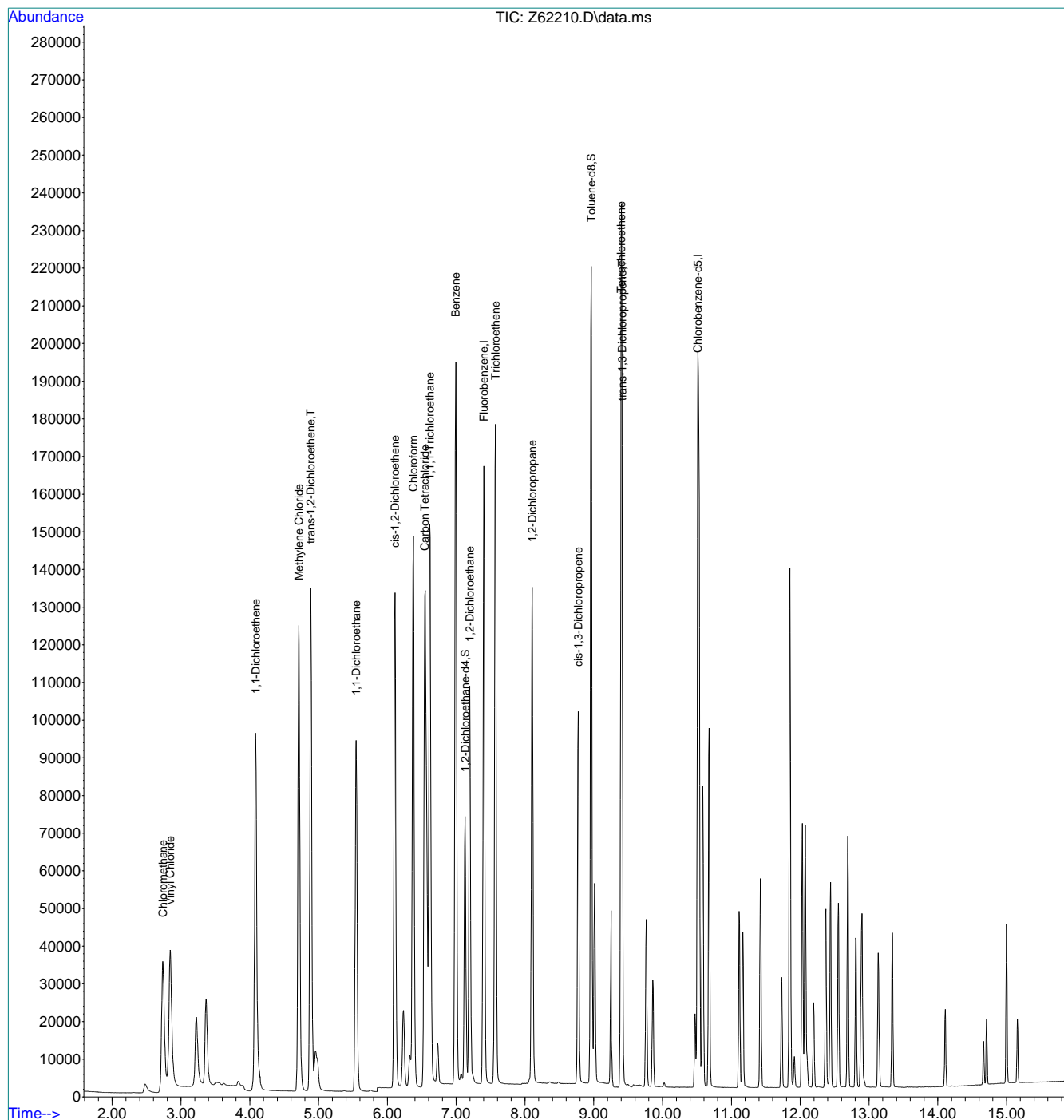
Internal Standards							
1) Fluorobenzene	7.401	96	1874569	5.00	ppb	0.00	
18) Chlorobenzene-d5	10.511	117	1501119	5.00	ppb	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.130	65	580143	4.14	ppb	0.00	
Spiked Amount	5.000	Range	79 - 125	Recovery	=	82.80%	
19) Toluene-d8	8.961	98	1856134	5.12	ppb	0.00	
Spiked Amount	5.000	Range	70 - 130	Recovery	=	102.40%	
Target Compounds							
2) Vinyl Chloride	2.843	62	746636	3.65	ppb	100	Qvalue
3) Chloromethane	2.737	50	689642	3.18	ppb	100	
4) 1,1-Dichloroethene	4.087	96	578860	4.78	ppb	#	84
5) Methylene Chloride	4.713	84	844960	4.28	ppb	#	87
6) trans-1,2-Dichloroethene	4.887	96	721782	4.77	ppb		90
7) 1,1-Dichloroethane	5.546	63	1240697	4.27	ppb	#	99
8) cis-1,2-Dichloroethene	6.110	96	799673	4.96	ppb		91
9) Chloroform	6.377	83	1469750	4.59	ppb		100
10) Carbon Tetrachloride	6.543	117	991099	5.00	ppb		98
11) 1,1,1-Trichloroethane	6.614	97	1287900	4.80	ppb		99
12) Benzene	6.994	78	2731897	4.86	ppb		94
14) 1,2-Dichloroethane	7.198	62	1039442	4.49	ppb		100
15) Trichloroethene	7.571	95	828558	4.70	ppb	#	84
16) 1,2-Dichloropropane	8.105	63	697663	4.66	ppb		93
17) cis-1,3-Dichloropropene	8.773	75	770426	4.98	ppb		99
20) trans-1,3-Dichloropropene	9.412	75	644715	4.96	ppb		99
21) Tetrachloroethene	9.399	166	826179	4.63	ppb		100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\091120\
 Data File : Z62210.D
 Acq On : 11 Sep 2020 7:13 pm
 Operator : SHANICAO
 Sample : IC2414-4
 Misc : MS47171,VZ2414,,,,,
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 11 20:45:28 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Tue Sep 08 14:39:51 2020
 Response via : Initial Calibration



7.6.43

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\091120\
 Data File : Z62211.D
 Acq On : 11 Sep 2020 7:32 pm
 Operator : SHANICAO
 Sample : ICC2414-5
 Misc : MS47171,VZ2414,,,,,
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 11 20:45:30 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Tue Sep 08 14:39:51 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	

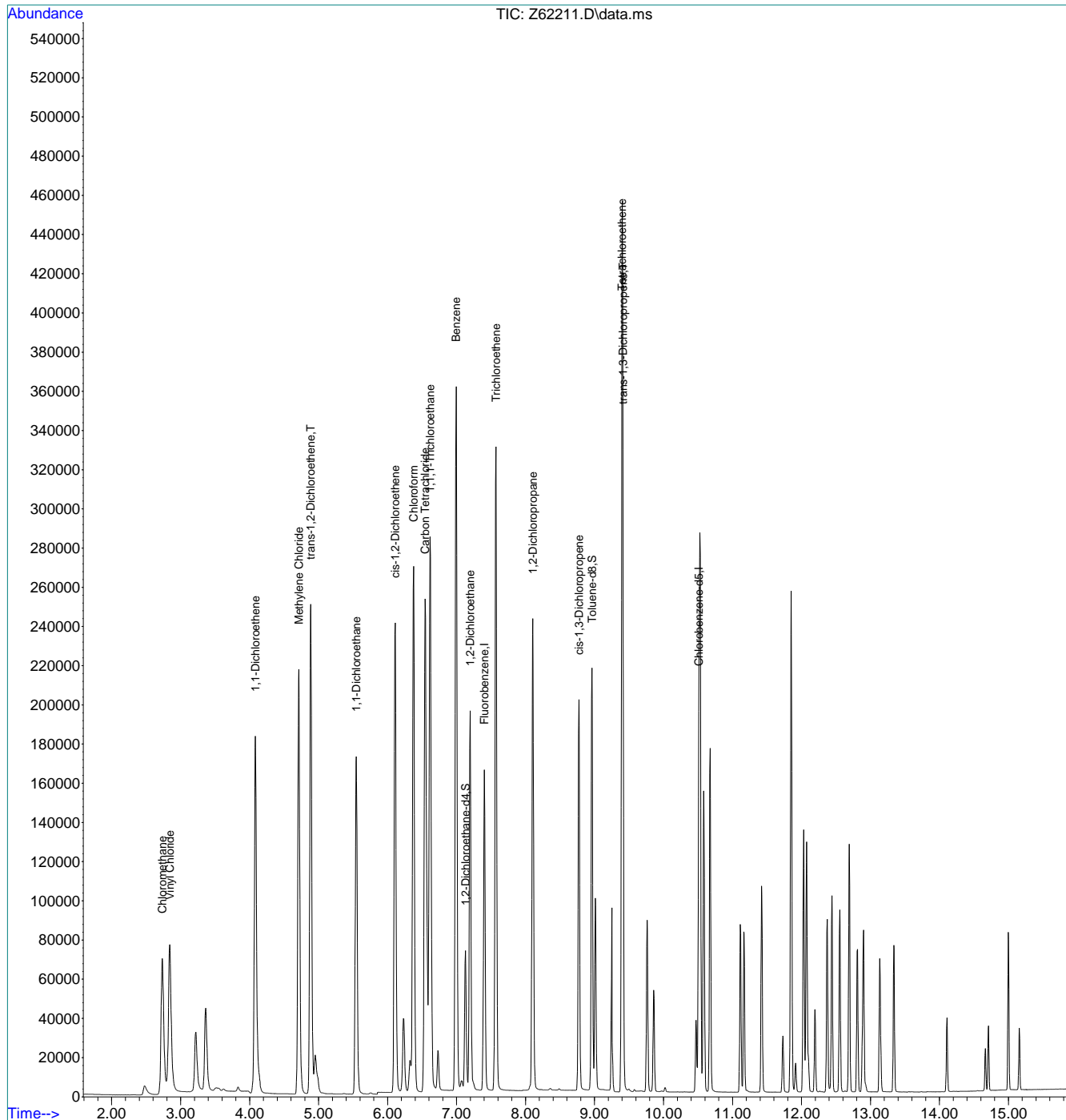
Internal Standards							
1) Fluorobenzene	7.401	96	1875869	5.00	ppb	0.00	
18) Chlorobenzene-d5	10.511	117	1507669	5.00	ppb	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.130	65	588321	4.19	ppb	0.00	
Spiked Amount	5.000	Range	79 - 125	Recovery	=	83.80%	
19) Toluene-d8	8.961	98	1858099	5.10	ppb	0.00	
Spiked Amount	5.000	Range	70 - 130	Recovery	=	102.00%	
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.843	62	1492558	7.29	ppb		99
3) Chloromethane	2.733	50	1346933	6.21	ppb		100
4) 1,1-Dichloroethene	4.083	96	1096324	9.05	ppb	#	86
5) Methylene Chloride	4.713	84	1470542	7.68	ppb	#	86
6) trans-1,2-Dichloroethene	4.886	96	1349910	8.92	ppb		89
7) 1,1-Dichloroethane	5.546	63	2297659	7.91	ppb	#	99
8) cis-1,2-Dichloroethene	6.110	96	1467363	9.09	ppb		90
9) Chloroform	6.377	83	2692203	8.40	ppb		99
10) Carbon Tetrachloride	6.543	117	1927309	9.72	ppb		98
11) 1,1,1-Trichloroethane	6.614	97	2452792	9.14	ppb		99
12) Benzene	6.994	78	5069961	9.02	ppb		94
14) 1,2-Dichloroethane	7.198	62	1897782	8.19	ppb		100
15) Trichloroethene	7.571	95	1558656	8.84	ppb	#	82
16) 1,2-Dichloropropane	8.105	63	1281972	8.55	ppb		93
17) cis-1,3-Dichloropropene	8.773	75	1534300	9.33	ppb		98
20) trans-1,3-Dichloropropene	9.411	75	1291984	9.12	ppb		98
21) Tetrachloroethene	9.399	166	1556787	8.70	ppb		99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\091120\
 Data File : Z62211.D
 Acq On : 11 Sep 2020 7:32 pm
 Operator : SHANICAO
 Sample : ICC2414-5
 Misc : MS47171,VZ2414,,,,,
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 11 20:45:30 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Tue Sep 08 14:39:51 2020
 Response via : Initial Calibration



7.6.44
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\091120\
 Data File : Z62212.D
 Acq On : 11 Sep 2020 7:51 pm
 Operator : SHANICAO
 Sample : IC2414-6
 Misc : MS47171,VZ2414,,,,,
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 13 13:35:41 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Tue Sep 08 14:39:51 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	

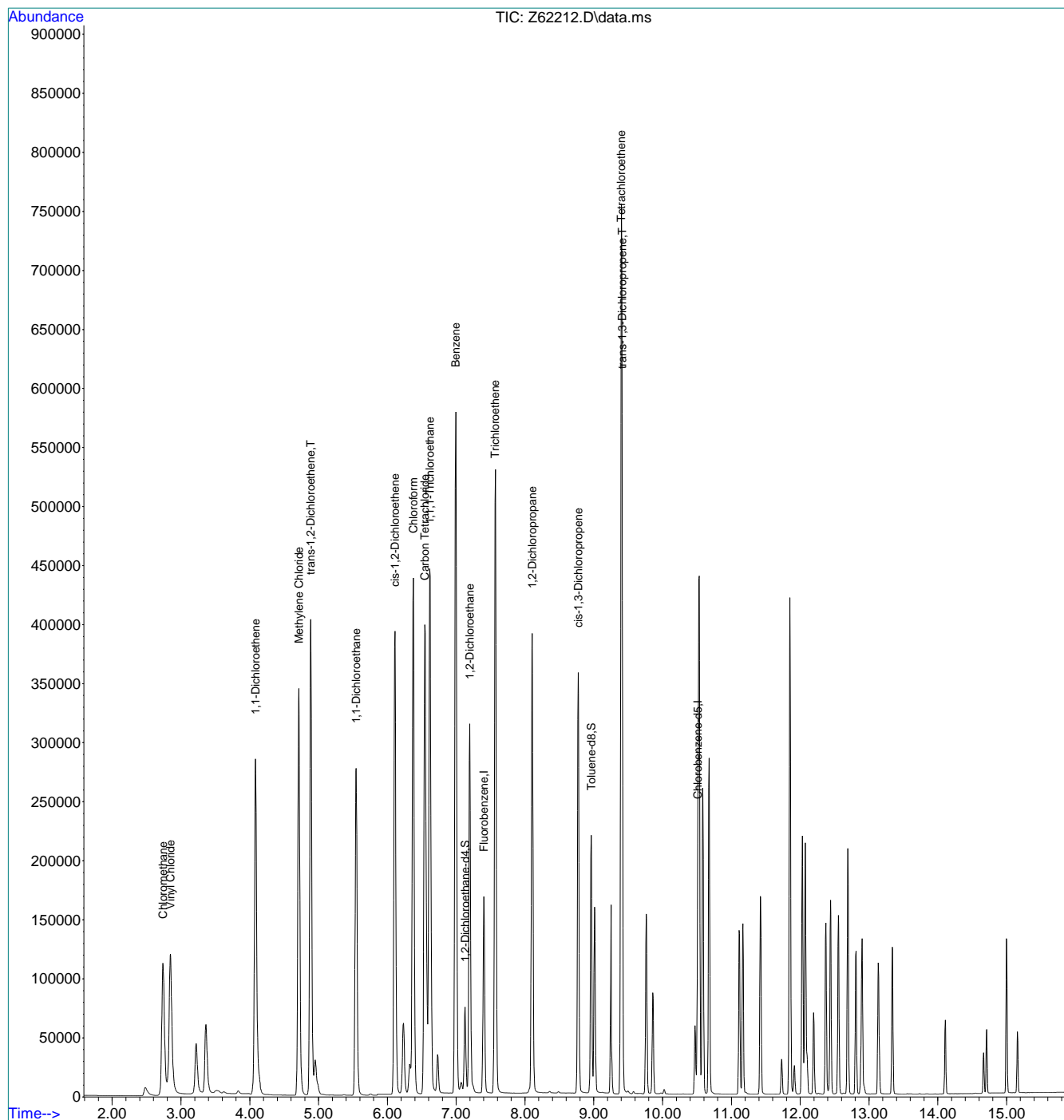
Internal Standards							
1) Fluorobenzene	7.401	96	1928565	5.00	ppb	0.00	
18) Chlorobenzene-d5	10.511	117	1554348	5.00	ppb	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.130	65	598324	4.15	ppb	0.00	
Spiked Amount	5.000	Range 79 - 125	Recovery	=	83.00%		
19) Toluene-d8	8.961	98	1902886	5.07	ppb	0.00	
Spiked Amount	5.000	Range 70 - 130	Recovery	=	101.40%		
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.846	62	2372157	11.27	ppb		99
3) Chloromethane	2.737	50	2193747m	9.84	ppb		
4) 1,1-Dichloroethene	4.083	96	1744774	14.01	ppb	#	85
5) Methylene Chloride	4.713	84	2365093	12.57	ppb	#	86
6) trans-1,2-Dichloroethene	4.886	96	2193890	14.11	ppb		89
7) 1,1-Dichloroethane	5.546	63	3742058	12.53	ppb	#	99
8) cis-1,2-Dichloroethene	6.110	96	2407966	14.50	ppb		90
9) Chloroform	6.377	83	4396659	13.34	ppb		99
10) Carbon Tetrachloride	6.543	117	3121791	15.31	ppb		98
11) 1,1,1-Trichloroethane	6.614	97	3949841	14.31	ppb		100
12) Benzene	6.994	78	8243521	14.26	ppb		94
14) 1,2-Dichloroethane	7.198	62	3118382	13.08	ppb		100
15) Trichloroethene	7.564	95	2545311	14.04	ppb		96
16) 1,2-Dichloropropane	8.105	63	2098124	13.62	ppb		94
17) cis-1,3-Dichloropropene	8.773	75	2732029	15.02	ppb		98
20) trans-1,3-Dichloropropene	9.411	75	2318445	14.41	ppb		99
21) Tetrachloroethene	9.399	166	2516093	13.63	ppb		100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\091120\
 Data File : Z62212.D
 Acq On : 11 Sep 2020 7:51 pm
 Operator : SHANICAO
 Sample : IC2414-6
 Misc : MS47171,VZ2414,,,,,
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 13 13:35:41 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Tue Sep 08 14:39:51 2020
 Response via : Initial Calibration



7.6.45
7



Manual Integration Approval Summary

Sample Number: VZ2414-IC2414 **Method:** SW846 8260B BY SIM
Lab FileID: Z62212.D **Analyst approved:** 09/13/20 13:47 Stuti Patel
Injection Time: 09/11/20 19:51 **Supervisor approved:** 09/14/20 11:09 Juan Garcia

Parameter	CAS	Sig#	R.T. (min.)	Reason
Methyl Chloride	74-87-3		2.74	Overlapping peak

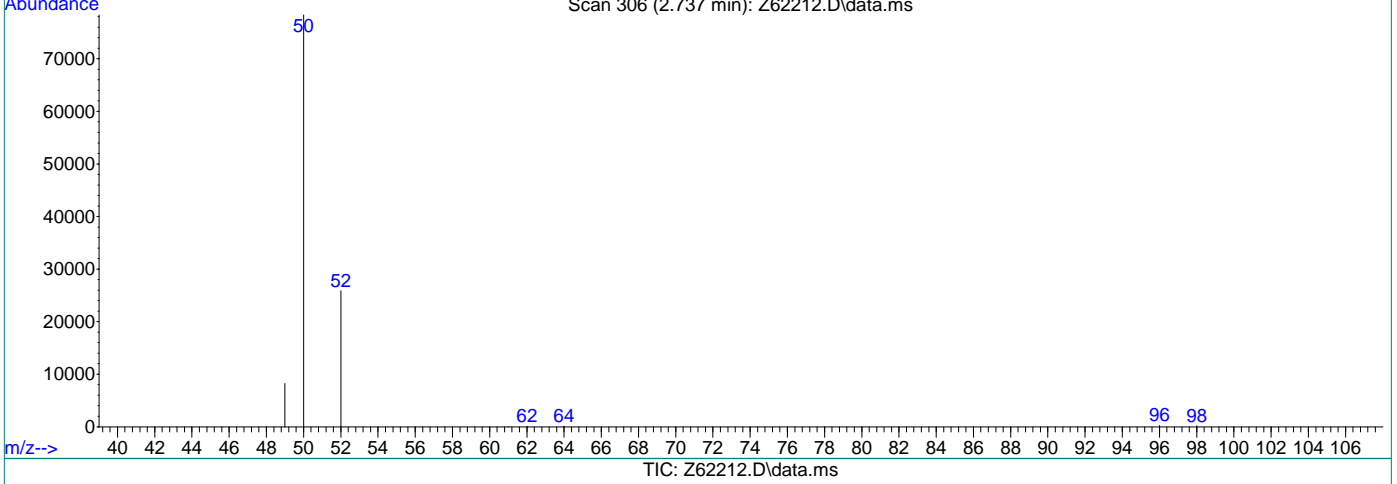
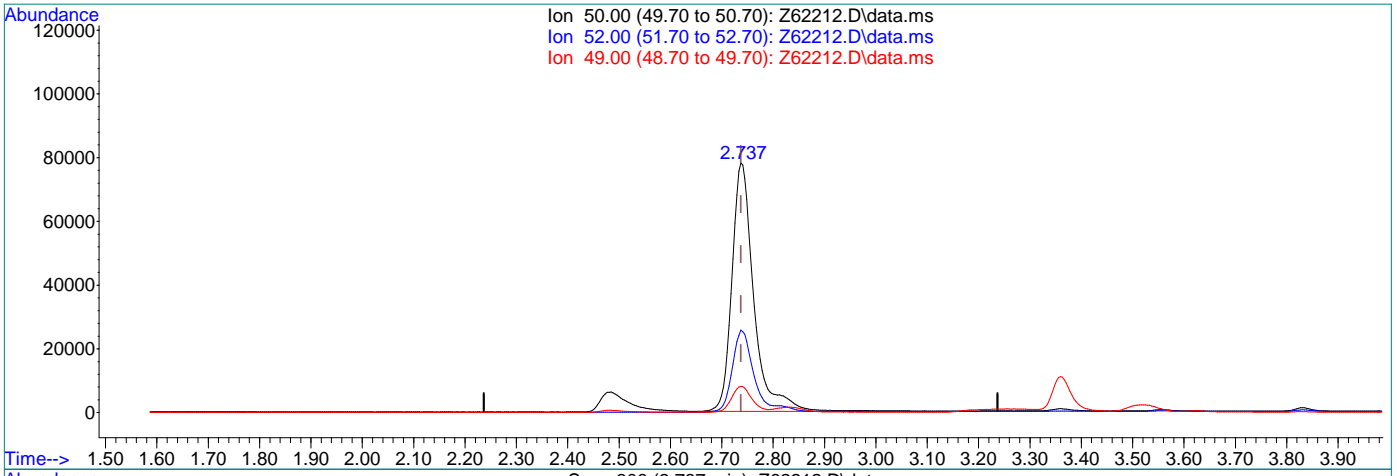
7.6.45.1

7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\091120\
 Data File : Z62212.D
 Acq On : 11 Sep 2020 7:51 pm
 Operator : SHANICAO
 Sample : IC2414-6
 Misc : MS47171,VZ2414,,,,,
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 11 20:45:32 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Tue Sep 08 14:39:51 2020
 Response via : Initial Calibration



(3) Chloromethane

2.737min (-0.000) 10.40ppb

response 2319513

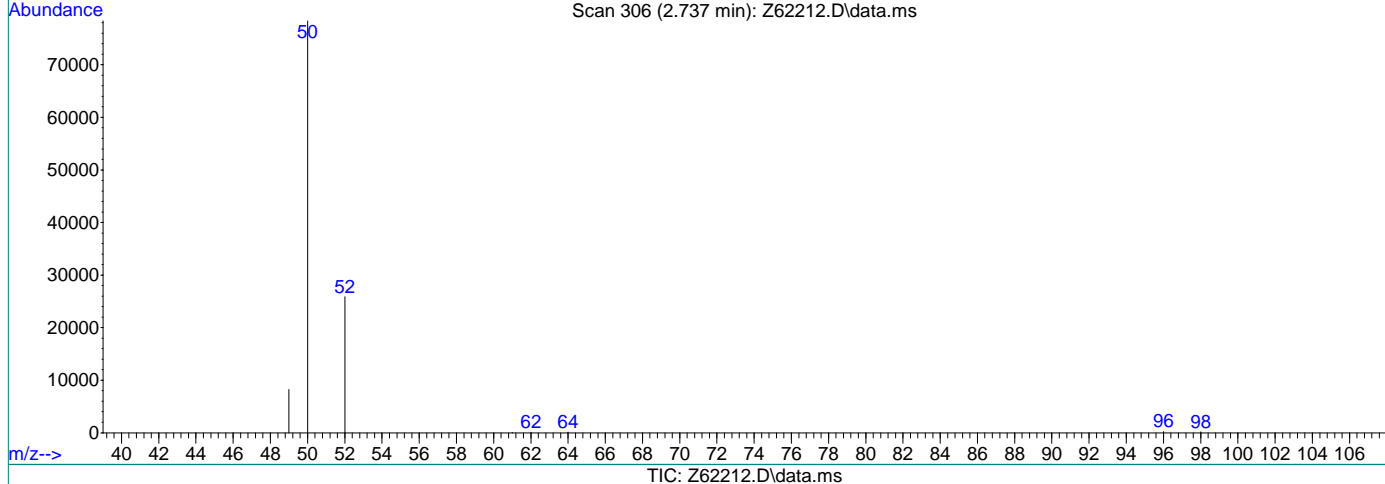
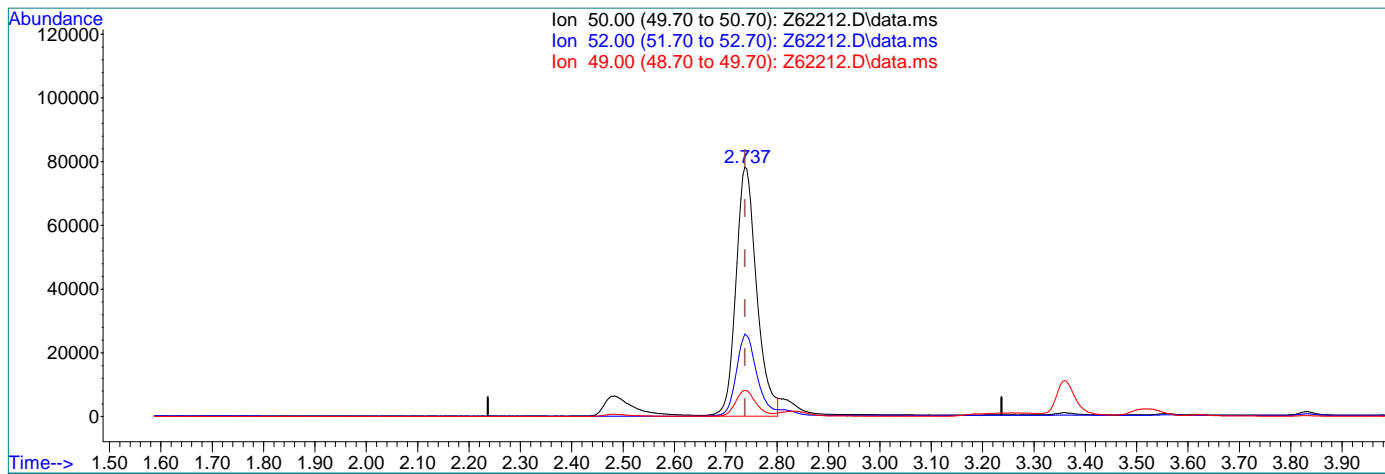
Ion	Exp%	Act%
50.00	100	100
52.00	32.60	33.01
49.00	10.80	10.46
0.00	0.00	0.00

7.6.45.2
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\091120\
 Data File : Z62212.D
 Acq On : 11 Sep 2020 7:51 pm
 Operator : SHANICAO
 Sample : IC2414-6
 Misc : MS47171,VZ2414,,,,,
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 11 20:45:32 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Tue Sep 08 14:39:51 2020
 Response via : Initial Calibration



(3) Chloromethane
 2.737min (-0.000) 9.84ppb m
 response 2193747

Ion	Exp%	Act%
50.00	100	100
52.00	32.60	33.03
49.00	10.80	10.53
0.00	0.00	0.00

7.6.45.3
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\091120\
 Data File : Z62213.D
 Acq On : 11 Sep 2020 8:13 pm
 Operator : SHANICAO
 Sample : IC2414-7
 Misc : MS47171,VZ2414,,,,,
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 13 13:36:00 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Tue Sep 08 14:39:51 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	

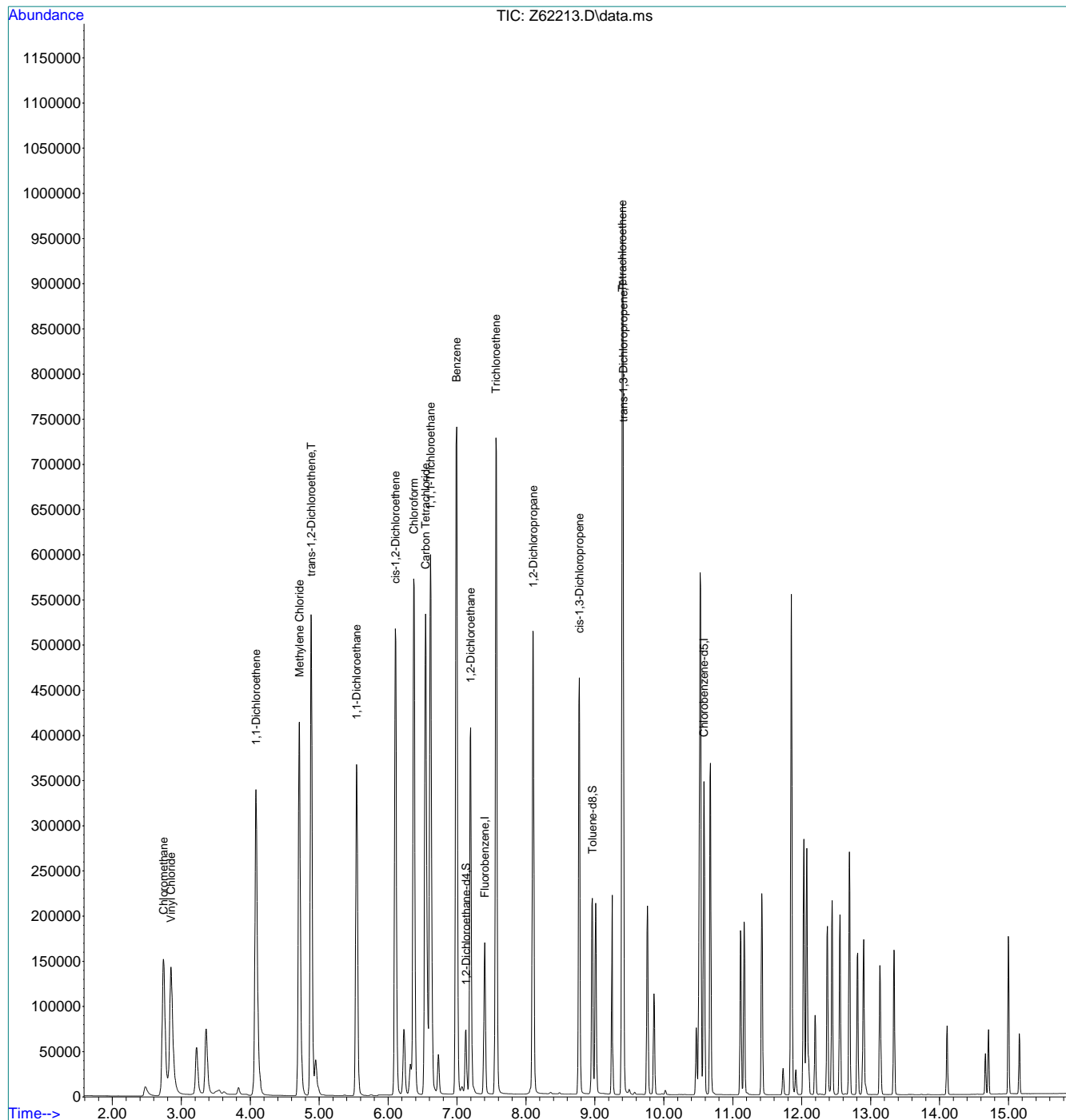
Internal Standards							
1) Fluorobenzene	7.401	96	1917621	5.00	ppb	0.00	
18) Chlorobenzene-d5	10.583	117	1788256	5.00	ppb	# 0.07	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.130	65	594422	4.14	ppb	0.00	
Spiked Amount	5.000	Range 79 - 125	Recovery	=	82.80%		
19) Toluene-d8	8.961	98	1887402	4.37	ppb	0.00	
Spiked Amount	5.000	Range 70 - 130	Recovery	=	87.40%		
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.850	62	3290825	15.73	ppb		100
3) Chloromethane	2.741	50	3221181m	14.53	ppb		
4) 1,1-Dichloroethene	4.083	96	2349554	18.97	ppb	#	85
5) Methylene Chloride	4.713	84	3082122	17.24	ppb	#	85
6) trans-1,2-Dichloroethene	4.886	96	2926695	18.93	ppb	#	87
7) 1,1-Dichloroethane	5.542	63	4937816	16.63	ppb	#	99
8) cis-1,2-Dichloroethene	6.104	96	3175295	19.23	ppb		94
9) Chloroform	6.371	83	5799532	17.70	ppb		99
10) Carbon Tetrachloride	6.543	117	4140429	20.43	ppb		98
11) 1,1,1-Trichloroethane	6.614	97	5188910	18.91	ppb		100
12) Benzene	6.994	78	10899346	18.97	ppb		93
14) 1,2-Dichloroethane	7.198	62	4096394	17.29	ppb		100
15) Trichloroethene	7.564	95	3527962	19.57	ppb		93
16) 1,2-Dichloropropane	8.105	63	2768908	18.07	ppb		93
17) cis-1,3-Dichloropropene	8.773	75	3527102	18.66	ppb		98
20) trans-1,3-Dichloropropene	9.411	75	2974601m	15.72	ppb		
21) Tetrachloroethene	9.399	166	3343761	15.75	ppb		99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\091120\
 Data File : Z62213.D
 Acq On : 11 Sep 2020 8:13 pm
 Operator : SHANICAO
 Sample : IC2414-7
 Misc : MS47171,VZ2414,,,,,
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 13 13:36:00 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Tue Sep 08 14:39:51 2020
 Response via : Initial Calibration



7.6.46
7

Manual Integration Approval Summary

Sample Number: VZ2414-IC2414 **Method:** SW846 8260B BY SIM
Lab FileID: Z62213.D **Analyst approved:** 09/13/20 13:47 Stuti Patel
Injection Time: 09/11/20 20:13 **Supervisor approved:** 09/14/20 11:09 Juan Garcia

Parameter	CAS	Sig#	R.T. (min.)	Reason
Methyl Chloride	74-87-3		2.74	Overlapping peak
trans-1,3-Dichloropropene	10061-02-6		9.41	Missed peak

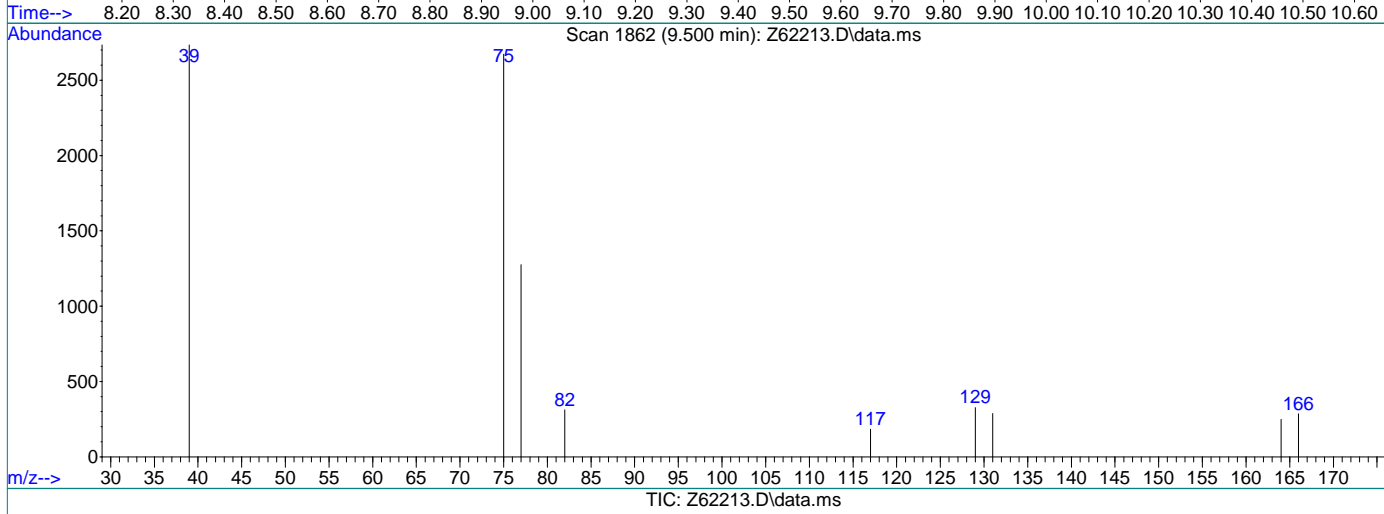
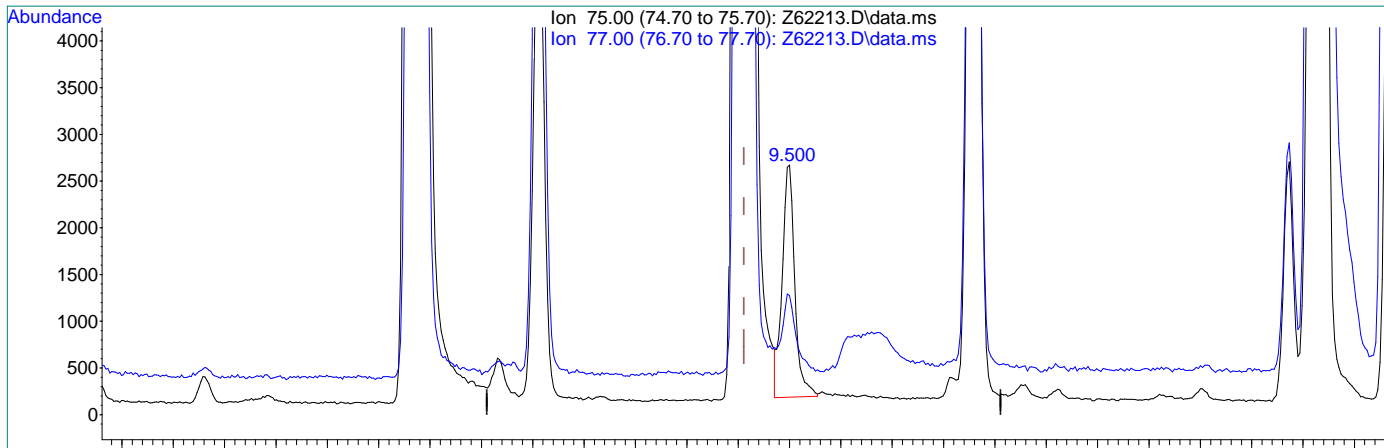
7.6.46.1

7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\091120\
 Data File : Z62213.D
 Acq On : 11 Sep 2020 8:13 pm
 Operator : SHANICAO
 Sample : IC2414-7
 Misc : MS47171,VZ2414,,,,,
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 11 20:45:34 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Tue Sep 08 14:39:51 2020
 Response via : Initial Calibration



(20) trans-1,3-Dichloropropene (T)

9.500min (+0.089) 0.30ppb

response 42280

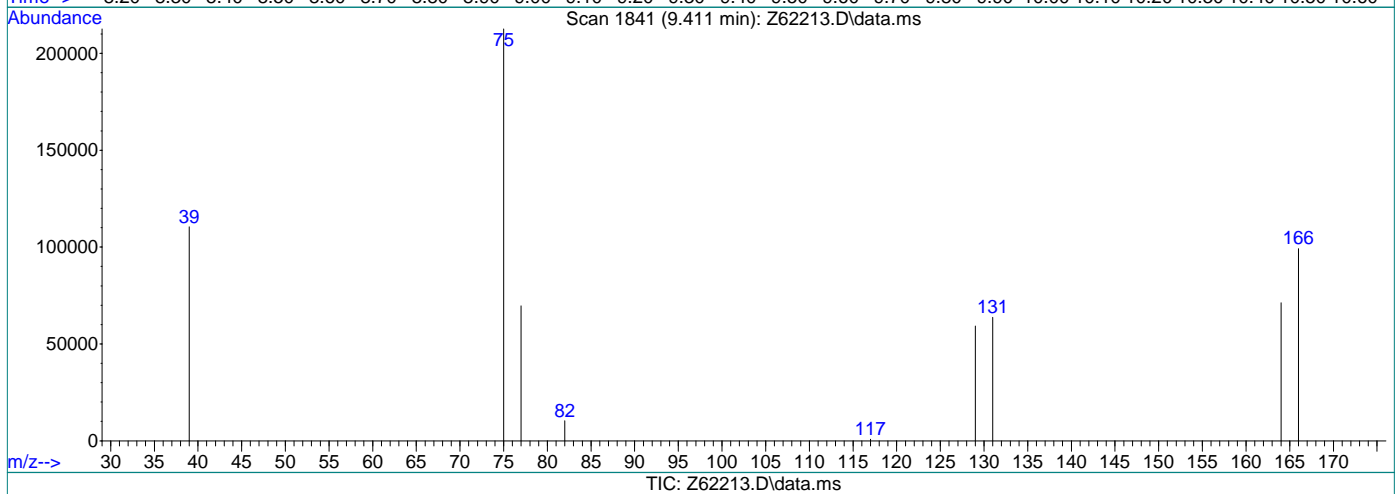
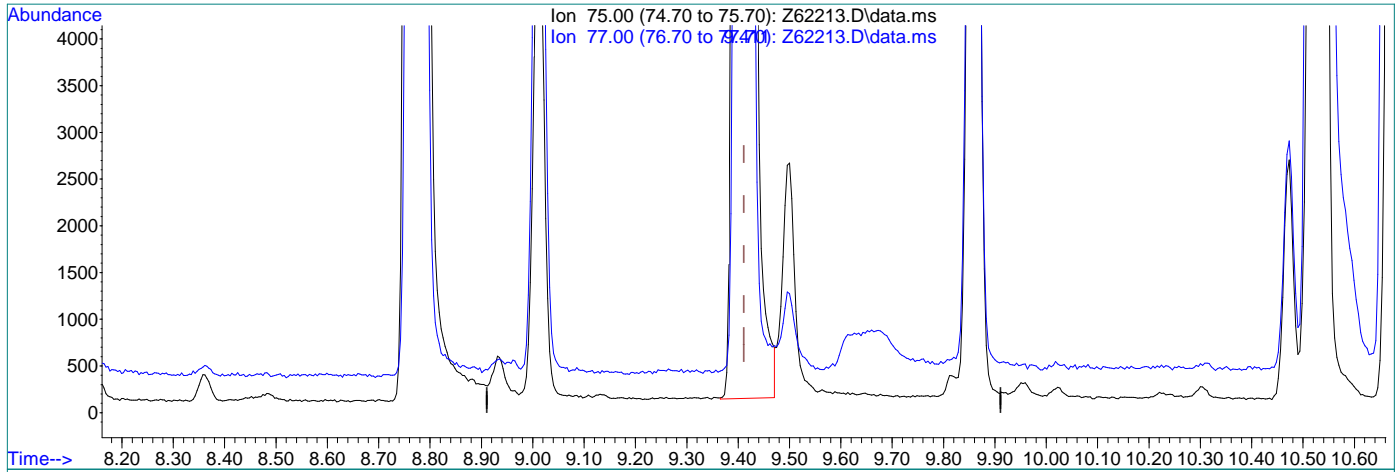
Ion	Exp%	Act%
75.00	100	100
77.00	31.50	32.52
0.00	0.00	0.00
0.00	0.00	0.00

7.6.46.2
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\091120\
 Data File : Z62213.D
 Acq On : 11 Sep 2020 8:13 pm
 Operator : SHANICAO
 Sample : IC2414-7
 Misc : MS47171,VZ2414,,,,,
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 11 20:45:34 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Tue Sep 08 14:39:51 2020
 Response via : Initial Calibration



(20) trans-1,3-Dichloropropene (T)

9.411min (+0.000) 15.72ppb m

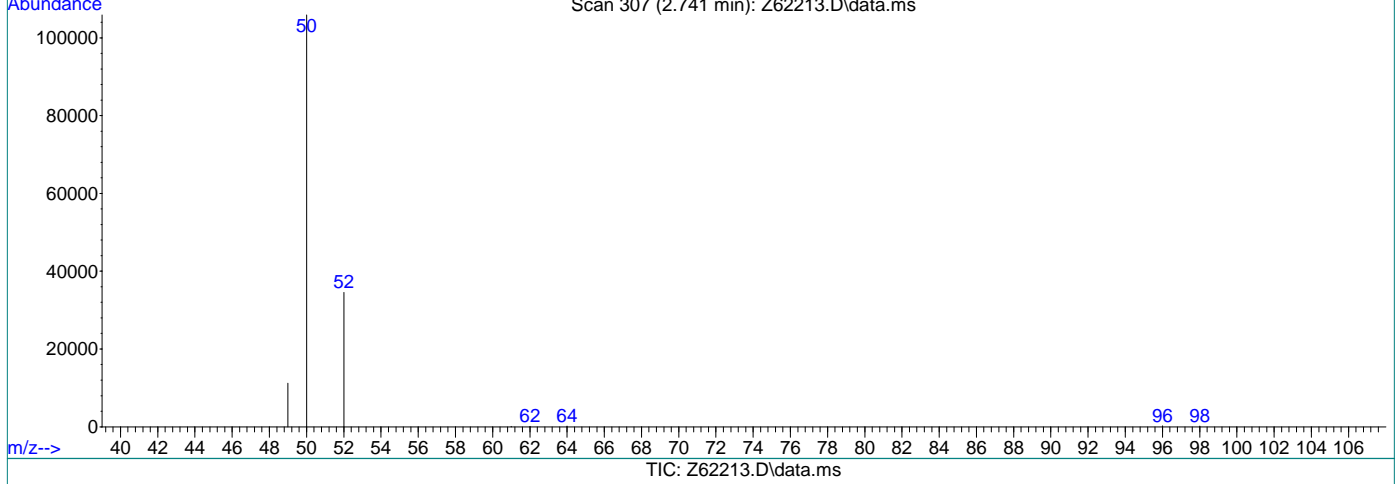
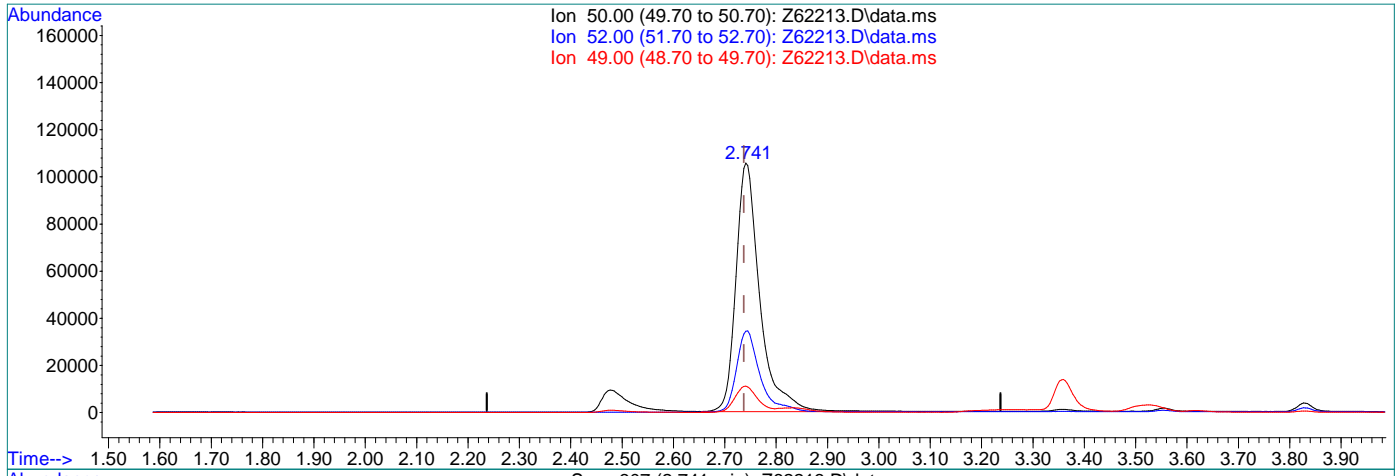
response 2974601

Ion	Exp%	Act%
75.00	100	100
77.00	31.50	32.77
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\091120\
 Data File : Z62213.D
 Acq On : 11 Sep 2020 8:13 pm
 Operator : SHANICAO
 Sample : IC2414-7
 Misc : MS47171,VZ2414,,,,,
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 11 20:49:58 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Tue Sep 08 14:39:51 2020
 Response via : Initial Calibration



(3) Chloromethane

2.741min (+0.004) 15.35ppb

response 3403148

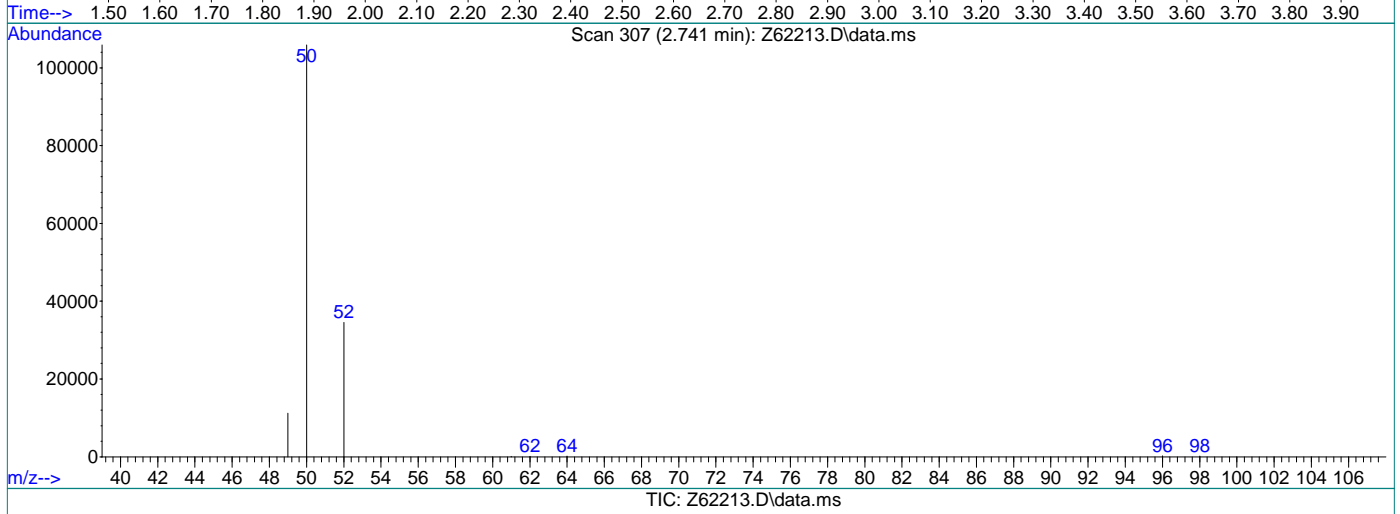
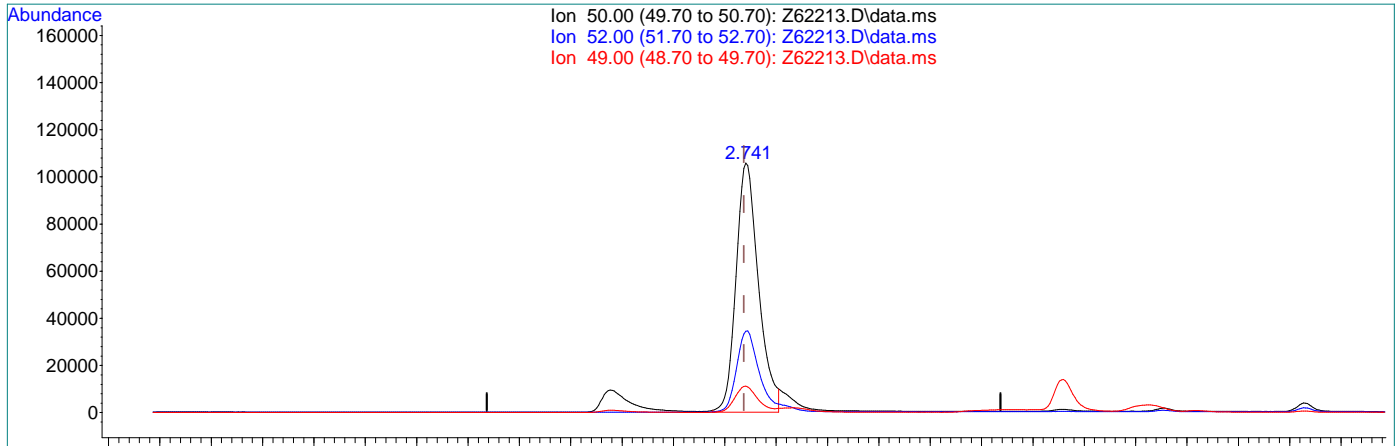
Ion	Exp%	Act%
50.00	100	100
52.00	32.60	32.61
49.00	10.80	10.56
0.00	0.00	0.00

7.6.46.4
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\091120\
 Data File : Z62213.D
 Acq On : 11 Sep 2020 8:13 pm
 Operator : SHANICAO
 Sample : IC2414-7
 Misc : MS47171,VZ2414,,,,,
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 11 20:49:58 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Tue Sep 08 14:39:51 2020
 Response via : Initial Calibration



(3) Chloromethane

2.741min (+0.004) 14.53ppb m

response 3221181

Ion	Exp%	Act%
50.00	100	100
52.00	32.60	32.60
49.00	10.80	10.61
0.00	0.00	0.00

7.6.46.5

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\091120\
 Data File : Z62215.D
 Acq On : 11 Sep 2020 8:51 pm
 Operator : SHANICAO
 Sample : ICV2414-5
 Misc : MS47171,VZ2414,,,,,
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 13 13:41:02 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Sun Sep 13 13:38:26 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	

Internal Standards							
1) Fluorobenzene	7.402	96	1913422	5.00	ppb	0.00	
18) Chlorobenzene-d5	10.512	117	1533777	5.00	ppb	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.131	65	601973	5.09	ppb	0.00	
Spiked Amount	5.000	Range	79 - 125	Recovery	=	101.80%	
19) Toluene-d8	8.962	98	1888455	5.07	ppb	0.00	
Spiked Amount	5.000	Range	70 - 130	Recovery	=	101.40%	
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.843	62	1616654	10.13	ppb		99
3) Chloromethane	2.733	50	1398748	9.96	ppb		100
4) 1,1-Dichloroethene	4.083	96	1273981	10.99	ppb	#	85
5) Methylene Chloride	4.713	84	1568776	9.19	ppb	#	87
6) trans-1,2-Dichloroethene	4.886	96	1451630	10.28	ppb		91
7) 1,1-Dichloroethane	5.546	63	2482127	10.36	ppb	#	99
8) cis-1,2-Dichloroethene	6.110	96	1578267	10.06	ppb		91
9) Chloroform	6.377	83	2861428	9.95	ppb		99
10) Carbon Tetrachloride	6.543	117	2066805	10.59	ppb		98
11) 1,1,1-Trichloroethane	6.614	97	2614500	10.38	ppb		100
12) Benzene	6.995	78	5609186	10.53	ppb		94
14) 1,2-Dichloroethane	7.199	62	2071875	10.32	ppb		100
15) Trichloroethene	7.565	95	1708163	10.45	ppb		95
16) 1,2-Dichloropropane	8.106	63	1410167	10.40	ppb		94
17) cis-1,3-Dichloropropene	8.774	75	1756808	10.89	ppb		98
20) trans-1,3-Dichloropropene	9.412	75	1511145	11.39	ppb		98
21) Tetrachloroethene	9.400	166	1702489	10.36	ppb		99

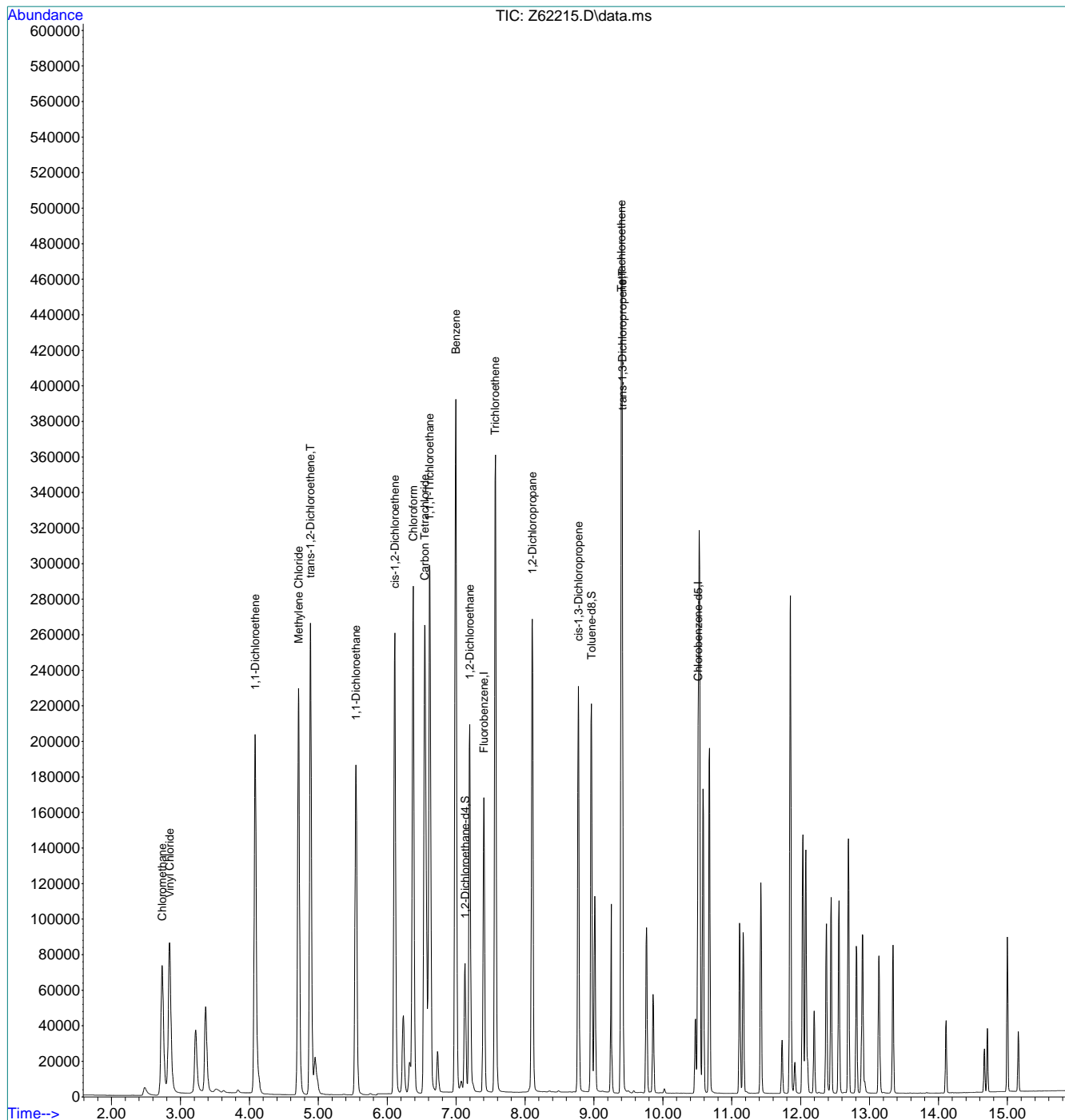
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.6.47
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\091120\
 Data File : Z62215.D
 Acq On : 11 Sep 2020 8:51 pm
 Operator : SHANICAO
 Sample : ICV2414-5
 Misc : MS47171,VZ2414,,,,,
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 13 13:41:02 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Sun Sep 13 13:38:26 2020
 Response via : Initial Calibration



7.6.47
7



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-14-2020\vz2417\
 Data File : Z62289.d
 Acq On : 13 Sep 2020 11:28 am
 Operator : stutip
 Sample : CC2414-5
 Misc : MS47199,VZ2417,,,,,
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 14 07:07:10 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Sun Sep 13 13:38:26 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	

Internal Standards							
1) Fluorobenzene	7.401	96	1988867	5.00	ppb	0.00	
18) Chlorobenzene-d5	10.511	117	1615294	5.00	ppb	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.123	65	646369	5.25	ppb	0.00	
Spiked Amount	5.000	Range	79 - 125	Recovery	=	105.00%	
19) Toluene-d8	8.958	98	1946356	4.96	ppb	0.00	
Spiked Amount	5.000	Range	70 - 130	Recovery	=	99.20%	
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.835	62	1833648	11.05	ppb		99
3) Chloromethane	2.726	50	1688699	11.37	ppb		99
4) 1,1-Dichloroethene	4.083	96	1115829	9.26	ppb	#	88
5) Methylene Chloride	4.709	84	1616963	9.10	ppb		90
6) trans-1,2-Dichloroethene	4.883	96	1421373	9.68	ppb		93
7) 1,1-Dichloroethane	5.543	63	2522667	10.13	ppb	#	99
8) cis-1,2-Dichloroethene	6.104	96	1521455	9.33	ppb		94
9) Chloroform	6.371	83	2850140	9.53	ppb		99
10) Carbon Tetrachloride	6.543	117	1843488	9.09	ppb		98
11) 1,1,1-Trichloroethane	6.614	97	2453906	9.37	ppb		99
12) Benzene	6.987	78	5448290	9.84	ppb		98
14) 1,2-Dichloroethane	7.191	62	2016614	9.66	ppb		100
15) Trichloroethene	7.564	95	1592938	9.38	ppb		90
16) 1,2-Dichloropropane	8.101	63	1320826	9.38	ppb		97
17) cis-1,3-Dichloropropene	8.773	75	1541672	9.39	ppb		99
20) trans-1,3-Dichloropropene	9.407	75	1301782	9.40	ppb		100
21) Tetrachloroethene	9.399	166	1573527	8.95	ppb		98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

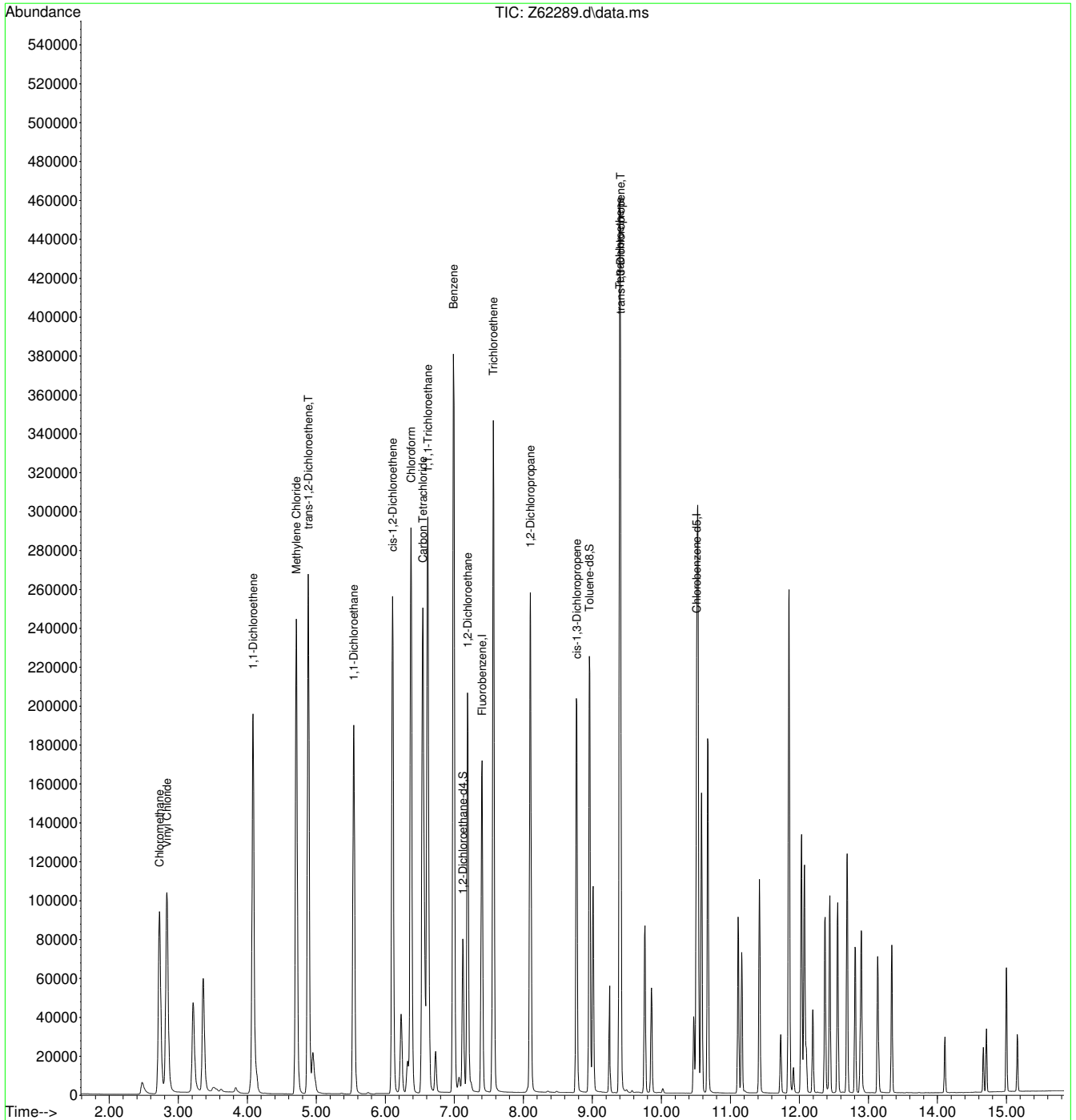
7.6.48
7



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-14-2020\ vz2417\
 Data File : Z62289.d
 Acq On : 13 Sep 2020 11:28 am
 Operator : stutip
 Sample : CC2414-5
 Misc : MS47199,VZ2417,,,,,
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 14 07:07:10 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Sun Sep 13 13:38:26 2020
 Response via : Initial Calibration



7.6.48
7



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-14-2020\vvz2417\
 Data File : Z62318.d
 Acq On : 13 Sep 2020 8:54 pm
 Operator : stutip
 Sample : ecc2414-5
 Misc : MS47203,VZ2417,,,,,
 ALS Vial : 29 Sample Multiplier: 1

Quant Time: Sep 14 07:08:19 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Sun Sep 13 13:38:26 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)	

Internal Standards							
1) Fluorobenzene	7.401	96	1638791	5.00	ppb	0.00	
18) Chlorobenzene-d5	10.511	117	1378925	5.00	ppb	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.130	65	552303	5.45	ppb	0.00	
Spiked Amount	5.000	Range	79 - 125	Recovery	=	109.00%	
19) Toluene-d8	8.961	98	1587084	4.74	ppb	0.00	
Spiked Amount	5.000	Range	70 - 130	Recovery	=	94.80%	
Target Compounds							
2) Vinyl Chloride	2.839	62	1750150	12.79	ppb	100	Qvalue
3) Chloromethane	2.733	50	1537005	12.39	ppb	100	
4) 1,1-Dichloroethene	4.087	96	1053952	10.61	ppb	#	89
5) Methylene Chloride	4.713	84	1539709	10.74	ppb		91
6) trans-1,2-Dichloroethene	4.890	96	1346848	11.14	ppb		89
7) 1,1-Dichloroethane	5.546	63	2397909	11.69	ppb	#	100
8) cis-1,2-Dichloroethene	6.110	96	1454134	10.82	ppb		93
9) Chloroform	6.377	83	2814392	11.43	ppb		100
10) Carbon Tetrachloride	6.549	117	1670176	9.99	ppb		98
11) 1,1,1-Trichloroethane	6.620	97	2351468	10.90	ppb		99
12) Benzene	6.994	78	5180769	11.36	ppb		96
14) 1,2-Dichloroethane	7.198	62	2004191	11.66	ppb		100
15) Trichloroethene	7.571	95	1554815	11.11	ppb		86
16) 1,2-Dichloropropane	8.105	63	1303945	11.23	ppb		97
17) cis-1,3-Dichloropropene	8.773	75	1201103	8.93	ppb		98
20) trans-1,3-Dichloropropene	9.411	75	1025985	8.70	ppb		99
21) Tetrachloroethene	9.399	166	1525746	10.32	ppb		100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

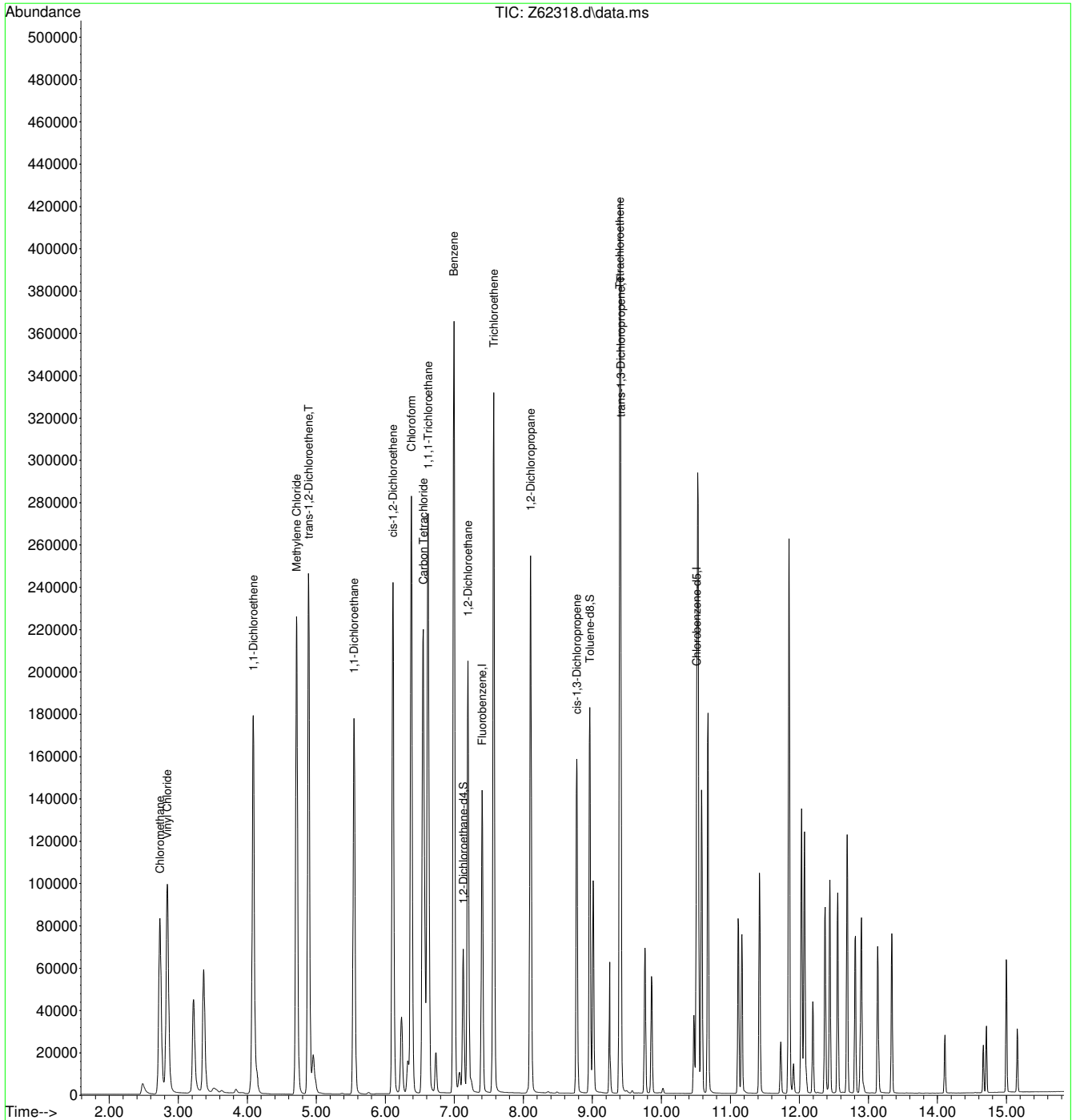
7.6.49
7



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-14-2020\ vz2417\
 Data File : Z62318.d
 Acq On : 13 Sep 2020 8:54 pm
 Operator : stutip
 Sample : ecc2414-5
 Misc : MS47203,VZ2417,,,,,
 ALS Vial : 29 Sample Multiplier: 1

Quant Time: Sep 14 07:08:19 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Sun Sep 13 13:38:26 2020
 Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\091420\
 Data File : Z62322.D
 Acq On : 14 Sep 2020 12:22 pm
 Operator : JuanG
 Sample : CC2414-5
 Misc : MS47199,VZ2418,,,,,
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 15 18:50:18 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Sun Sep 13 13:38:26 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	

Internal Standards							
1) Fluorobenzene	7.402	96	1993481	5.00	ppb	0.00	
18) Chlorobenzene-d5	10.512	117	1656572	5.00	ppb	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.124	65	669922	5.43	ppb	0.00	
Spiked Amount	5.000	Range 79 - 125	Recovery	=	108.60%		
19) Toluene-d8	8.959	98	1947818	4.84	ppb	0.00	
Spiked Amount	5.000	Range 70 - 130	Recovery	=	96.80%		
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.839	62	2105885	12.65	ppb		100
3) Chloromethane	2.733	50	1974560	12.99	ppb		100
4) 1,1-Dichloroethene	4.083	96	1273632	10.54	ppb	#	87
5) Methylene Chloride	4.709	84	1825191	10.42	ppb		90
6) trans-1,2-Dichloroethene	4.883	96	1616036	10.99	ppb		93
7) 1,1-Dichloroethane	5.543	63	2809593	11.26	ppb	#	100
8) cis-1,2-Dichloroethene	6.104	96	1689110	10.33	ppb		94
9) Chloroform	6.371	83	3228525	10.77	ppb		99
10) Carbon Tetrachloride	6.543	117	2107524	10.36	ppb		98
11) 1,1,1-Trichloroethane	6.614	97	2824560	10.76	ppb		100
12) Benzene	6.988	78	6008784	10.83	ppb		97
14) 1,2-Dichloroethane	7.192	62	2242244	10.72	ppb		100
15) Trichloroethene	7.565	95	1752087	10.29	ppb		88
16) 1,2-Dichloropropane	8.102	63	1460518	10.34	ppb		97
17) cis-1,3-Dichloropropene	8.770	75	1799497	10.73	ppb		99
20) trans-1,3-Dichloropropene	9.409	75	1559226	10.91	ppb		99
21) Tetrachloroethene	9.396	166	1769776	9.92	ppb		99

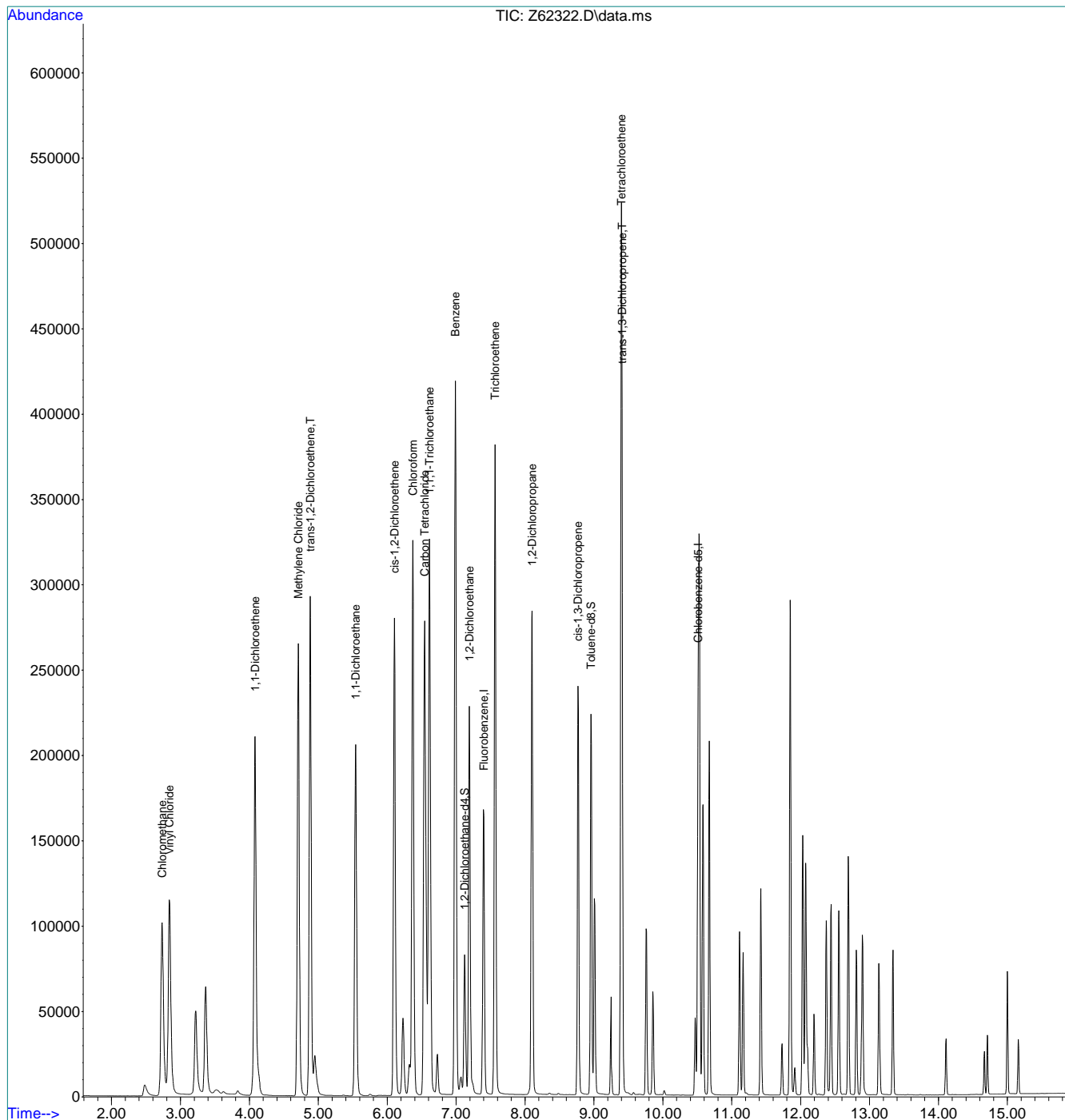
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.6.50
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\091420\
 Data File : Z62322.D
 Acq On : 14 Sep 2020 12:22 pm
 Operator : JuanG
 Sample : CC2414-5
 Misc : MS47199,VZ2418,,,,,
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 15 18:50:18 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Sun Sep 13 13:38:26 2020
 Response via : Initial Calibration



7.6-50
7



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\091420\
 Data File : Z62350.D
 Acq On : 14 Sep 2020 10:45 pm
 Operator : JuanG
 Sample : ECC2414-5
 Misc : MS47199,VZ2418,,,,,
 ALS Vial : 28 Sample Multiplier: 1

Quant Time: Sep 15 18:51:14 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Sun Sep 13 13:38:26 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	

Internal Standards							
1) Fluorobenzene	7.401	96	1446126	5.00	ppb	0.00	
18) Chlorobenzene-d5	10.511	117	1266288	5.00	ppb	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.130	65	507971	5.68	ppb	0.00	
Spiked Amount	5.000	Range 79 - 125	Recovery	=	113.60%		
19) Toluene-d8	8.961	98	1382085	4.49	ppb	0.00	
Spiked Amount	5.000	Range 70 - 130	Recovery	=	89.80%		
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.835	62	1591291	13.17	ppb		100
3) Chloromethane	2.726	50	1313920	12.06	ppb		100
4) 1,1-Dichloroethene	4.083	96	962000	10.98	ppb		89
5) Methylene Chloride	4.713	84	1395244	11.07	ppb		90
6) trans-1,2-Dichloroethene	4.886	96	1169228	10.96	ppb		92
7) 1,1-Dichloroethane	5.546	63	2112643	11.67	ppb	#	100
8) cis-1,2-Dichloroethene	6.110	96	1227954	10.35	ppb		93
9) Chloroform	6.377	83	2469996	11.36	ppb		100
10) Carbon Tetrachloride	6.543	117	1467048	9.94	ppb		98
11) 1,1,1-Trichloroethane	6.614	97	2071952	10.88	ppb		99
12) Benzene	6.994	78	4526705	11.25	ppb		96
14) 1,2-Dichloroethane	7.198	62	1694881	11.17	ppb		100
15) Trichloroethene	7.571	95	1381533	11.19	ppb	#	83
16) 1,2-Dichloropropane	8.105	63	1115314	10.89	ppb		97
17) cis-1,3-Dichloropropene	8.773	75	848630	7.32	ppb		98
20) trans-1,3-Dichloropropene	9.411	75	737530	6.86	ppb		99
21) Tetrachloroethene	9.399	166	1335838	9.78	ppb		99

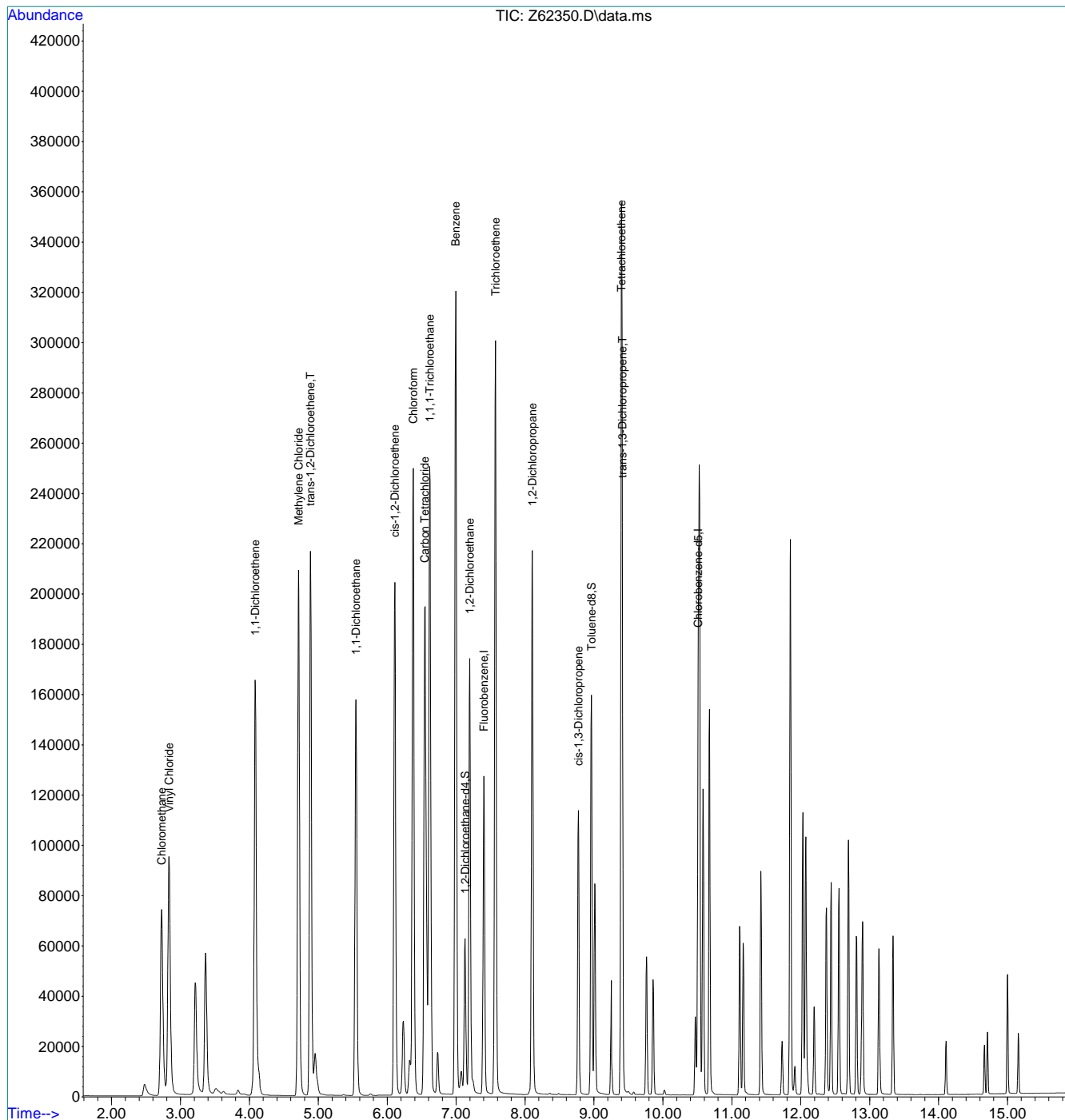
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.6.51
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\091420\
 Data File : Z62350.D
 Acq On : 14 Sep 2020 10:45 pm
 Operator : JuanG
 Sample : ECC2414-5
 Misc : MS47199,VZ2418,,,,,
 ALS Vial : 28 Sample Multiplier: 1

Quant Time: Sep 15 18:51:14 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Sun Sep 13 13:38:26 2020
 Response via : Initial Calibration



7.6.51
7

SGS -ORLANDO

MSV0A12-O-ANALYSIS LOG

Date:	9/8/2020
COLUMN TYPE:	RTX VMS
DETECTOR:	5975 MSD
INSTRUMENT:	MSV0A12-O
PURGE PRESSURE:	8.4PSI
PURGE VOLUME:	5 mL
ANALYST:	mellissam

METHODS:*	SIMCLM
METHOD FILE:	SIMCL090820.M
CALIB. DATE:	9/8/2020
EM VOLTAGE:	1588V
BFB RESPONSE	4883116
RUN ID:	VO2352

BFB:	V25942b
ICAL/CC:	V25934 VS0792
ISTD/SUR:	VS0799
ICV/QC:	VS0793 VS0802

PH LOT1-12 :230814
ph lot 0.0-3.0 : 220416a
K1 PAPER LOT:030317
SAMPLE ID VERIFIED BY:
NA
DATE VERIFIED: 09/09/20

Data File	Sample ID	DIL.	VIAL #	MATRIX	ALS POS.	SAMPLE METHOD	MANUALLY INTEGRATED PEAK RATIONAL, PEAK #	PH	CL ?	RR	COMMENTS
O61108	BLK	NA	NA	w	1	ACQ_SIMCL		NA	NA		
O61109	BLK	NA	NA	w	2	ACQ_SIMCL		NA	NA		
O61110	BFB	NA	NA	w	100	BFB		NA	NA		176/174 low
O61111	BFB	NA	NA	w	100	BFB		NA	NA		176/174 low
O61112	BFB	NA	NA	w	100	BFB	increased voltage 219	NA	NA		Pass on autofind 2ul
O61113	CC2349-5	NA	NA	w	1	ACQ_SIMCL		NA	NA		50ul -> 50ml , failed
O61114	BLANK	NA	NA	w	2	ACQ_SIMCL		NA	NA		
O61115	BFB	NA	NA	w	100	BFB		NA	NA		Passed autofind 2ul
O61116	IC2352-1	NA	NA	w	1	ACQ_SIMCL	23mp, (3.12, 16.21)Pll	NA	NA		1ul -> 100ml
O61117	IC2352-2	NA	NA	w	2	ACQ_SIMCL	3.12Pll	NA	NA		5ul -> 100ml
O61118	IC2352-3	NA	NA	w	3	ACQ_SIMCL	12Pll	NA	NA		10ul -> 50ml
O61119	IC2352-4	NA	NA	w	4	ACQ_SIMCL	13OP, 12Pll	NA	NA		25ul -> 50ml
O61120	IC2352-5	NA	NA	w	5	ACQ_SIMCL	12Pll	NA	NA		50ul -> 50ml
O61121	IC2352-6	NA	NA	w	6	ACQ_SIMCL	12Pll	NA	NA		75ul -> 50ml
O61122	IC2352-7	NA	NA	w	7	ACQ_SIMCL	12Pll	NA	NA		100ul -> 50ml
O61123	BLANK	NA	NA	w	8	ACQ_SIMCL		NA	NA		
O61124	ICV2352-5	NA	NA	w	9	ACQ_SIMCL	12Pll	NA	NA		50ul -> 50ml
O61125	BLANK	NA	NA	w	1	ACQ_SIMCL		NA	NA		
O61126	BLANK	NA	NA	w	2	ACQ_SIMCL		NA	NA		

* For NELAC purposes, Method 8260 includes analytes by SOP MS005 Matrix: Designate "W" for Water "S" for soil "O" for Oil, "Liq" for Non-aqueous Liquid, and "TCLP" or "SPLP" for Leachate.
 Manual Integration Rational SOP QA029: MP Missed Peak, OP Overlapping Peak, SP Split Peak, PDB Poorly Defined Baseline, BR Baseline Ripple, Pl Poor Instrument

VO2352.MS 040918

Analyst's Signature:




Date:	9/10/2020
COLUMN TYPE:	RTX VMS
DETECTOR:	5975 MSD
INSTRUMENT:	MSV0A12-O
PURGE PRESSURE:	8.4PSI
PURGE VOLUME:	5 mL
ANALYST:	akang

METHODS:*	SIMCLM
METHOD FILE:	SIMCL090820.M
CALIB. DATE:	9/8/2020
EM VOLTAGE:	1365V
BFB RESPONSE	411345
RUN ID:	VO2354

BFB:	V25942b
ICAL/CC:	V25934 VS0792
ISTD/SUR:	VS0799
ICV/QC:	VS0793 VS0802

PH LOT1-12 :230814
ph lot 0.0-3.0 : 220416a
KI PAPER LOT:030317
SAMPLE ID VERIFIED BY:
akang
DATE VERIFIED: 09/10/2020

Data File	Sample ID	DIL.	VIAL #	MATRIX	ALS POS.	SAMPLE METHOD	MANUALLY INTEGRATED PEAK RATIONAL, PEAK #	PH	CL	RR	COMMENTS
061152	BLANK	-	-	w	1	ACQ_SIMCL		-	-		
061153	BLANK	-	-	w	2	ACQ_SIMCL		-	-		
061154	BFB	-	-	w	100	BFB		-	-		Passed autofind 2ul
061155	CC2352-5	-	-	w	3	ACQ_SIMCL		-	-		50ul -> 50ml passed
061156	BS	-	-	w	4	ACQ_SIMCL		-	-		20ul -> vial passed
061157	MB	-	-	w	5	ACQ_SIMCL		-	-		XNot used
061158	MB	-	-	w	6	ACQ_SIMCL		-	-		NDV
061159	FA78549-1	1X	1	w	7	ACQ_SIMCL		1	N		✓
061160	FA78549-2	1X	1	w	8	ACQ_SIMCL		1	N		✓
061161	FA78549-3	1X	1	w	9	ACQ_SIMCL		1	N		✓
061162	FA78549-4	1X	1	w	10	ACQ_SIMCL		1	N		✓
061163	FA78549-2MS	20X	1	w	11	ACQ_SIMCL		1	N		20ul -> vial ✓
061164	FA78549-2MSD	20X	1	w	12	ACQ_SIMCL		1	N		20ul -> vial ✓
061165	FA78549-5	1X	1	w	13	ACQ_SIMCL		1	N		✓
061166	FA78549-6	1X	1	w	14	ACQ_SIMCL		1	N		✓
061167	FA78549-7	1X	1	w	15	ACQ_SIMCL		1	N		✓
061168	FA78549-8	1X	1	w	16	ACQ_SIMCL	HS, HS in remaining vials	1	N		✓
061169	FA78549-9	1X	1	w	17	ACQ_SIMCL		1	N		✓
061170	FA78549-10	1X	1	w	18	ACQ_SIMCL		1	N		✓
061171	FA78549-11	1X	1	w	19	ACQ_SIMCL		1	N		✓
061172	FA78549-12	1X	1	w	20	ACQ_SIMCL		1	N		✓
061173	FA78549-13	1X	1	w	21	ACQ_SIMCL		1	N		✓
061174	FA78549-14	1X	1	w	22	ACQ_SIMCL		1	N		✓
061175	FA78549-15	1X	1	w	23	ACQ_SIMCL		1	N		✓
061176	ECC2352-4	-	-	w	24	ACQ_SIMCL		-	-		20ul -> 50ml ✓
061177	blank	-	-	w	25	ACQ_SIMCL		-	-		
061178	ECC2352-5	-	-	w	26	ACQ_SIMCL		-	-		50ul -> 50ml ✓

* For NIELAC purposes, Method 8260 includes analytes by SOP MS005 Matrix. Designate "w" for Water, "s" for soil, "O" for Oil, "Liq" for Non-aqueous Liquid, and "TCLP" or "SPLP" for Leachate.
 Manual Integration Rational SOP QA029: MP Missed Peak, OP Overlapping Peak, SP Split Peak, PDB Poorly Defined Baseline, BR Baseline Ripple, PI Poor Instrument

Date: 9/11/2020
 COLUMN TYPE: RTX VMS
 DETECTOR: 5975 MSD
 INSTRUMENT: MSVOA12-O
 PURGE PRESSURE: 8.4PSI
 PURGE VOLUME: 5 mL
 ANALYST: AKARI(G)stutip

METHODS*: SIMCLm
 METHOD FILE: SIMCL091120.M
 CALIB. DATE: 9/11/2020
 EM VOLTAGE: 1424V
 BFB RESPONSE: 6052279
 RUN ID: VO2356

BFB: V25942b
 ICAL/JC: V25806, VS0804
 ISTD/SUR: VS0799
 ICV/QC: VS0805 VS0802
 data reviewed by: stutip

PH LOT1-12 :230814
 ph lot 0.0-3.0 : 220416a
 KI PAPER LOT:030317
 SAMPLE ID VERIFIED BY:
 stutip
 DATE VERIFIED: 09/14/2020

Data File	Sample ID	DIL.	VIAL #	MATRIX	ALS POS.	SAMPLE METHOD	MANUALLY INTEGRATED PEAK RATIONAL, PEAK #	PH	CL	RR	COMMENTS
O61211	BLANK	-	-	w	1	ACQ_SIMCL		-	?		
O61212	BLANK	-	-	w	2	ACQ_SIMCL		-	-		
O61213	BLANK	-	-	w	2	ACQ_SIMCL		-	-		
O61214	BLANK	-	-	w	2	ACQ_SIMCL		-	-		
O61215	BFB	-	-	w	100	BFB		-	-		autofind 2ul failed, increased voltage
O61216	COND. STD.	-	-	w	2	ACQ_SIMCL		-	-		
O61217	BFB	-	-	w	100	BFB		-	-		autofind 2ul failed, increased voltage
O61218	BFB	-	-	w	100	BFB		-	-		autofind 2ul failed, increased voltage
O61219	BFB	-	-	w	100	BFB		-	-		autofind 2ul failed, returned
O61220	BFB	-	-	w	100	BFB		-	-		autofind 2ul failed, decreased voltage
O61221	BFB	-	-	w	100	BFB		-	-		autofind 2ul failed, decreased voltage
O61222	BFB	-	-	w	100	BFB		-	-		autofind 2ul failed, increased voltage
O61223	BFB	-	-	w	100	BFB		-	-		autofind 2ul failed, decreased voltage
O61224	BFB	-	-	w	100	BFB		-	-		autofind 2ul passed
O61225	CC2352-5	-	-	w	2	ACQ_SIMCL		-	-		50ul -> 50ml passed
O61226	BS	-	-	w	3	ACQ_SIMCL		-	-		20ul -> vial passed
O61227	BFB	-	-	w	100	BFB		-	-		pass autofind 2ul
O61228	BLANK	-	-	w	1	ACQ_SIMCL		-	-		
O61229	BLANK	-	-	w	1	ACQ_SIMCL		-	-		
O61230	IC2356-1	-	-	w	2	ACQ_SIMCL	pii-3,12,16,21,30	-	-		1ul -> 100ml
O61231	IC2356-2	-	-	w	3	ACQ_SIMCL	pii-12	-	-		5ul -> 100ml
O61232	IC2356-3	-	-	w	4	ACQ_SIMCL	pii-12	-	-		10ul -> 50ml
O61233	IC2356-4	-	-	w	5	ACQ_SIMCL	pii-12	-	-		25ul -> 50ml
O61234	ICe2356-5	-	-	w	6	ACQ_SIMCL	pii-12	-	-		50ul -> 50ml
O61235	IC2356-6	-	-	w	7	ACQ_SIMCL	pii-12	-	-		75ul -> 50ml
O61236	IC2356-7	-	-	w	8	ACQ_SIMCL	pii-12	-	-		100ul -> 50ml
O61237	BLANK	-	-	w	9	ACQ_SIMCL		-	-		
O61238	iev2356-5	-	-	w	10	ACQ_SIMCL	pii-12	-	-		50ul-50ml

* For NELAC purposes, Method 8280 includes analytes by SOP MS005 Matrix: Designate "W" for Water "S" for soil, "O" for Oil, "Liq" for Non-aqueous Liquid, and "TCLP" or "SPLP" for Leachate.
 Manual Integration Rational SOP QA029: MP Missed Peak, OP Overlapping Peak, SP Split Peak, PDB Poorly Defined Baseline, BR Baseline Ripple, PII Poor Instrument

Date:	9/13/2020
COLUMN TYPE:	RTX VMS
DETECTOR:	5975 MSD
INSTRUMENT:	MSV0A12-O
PURGE PRESSURE:	8.4PSI
PURGE VOLUME:	5 mL
ANALYST:	stutip

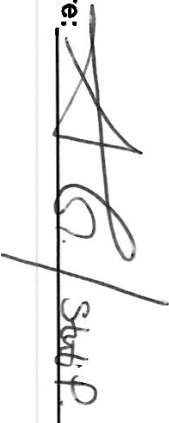
METHODS:*	SIMCLm
METHOD FILE:	SIMCL091120.M
CALIB. DATE:	9/11/2020
EM VOLTAGE:	1424v
BFB RESPONSE	679465
RUN ID:	VO2360

BFB:	V25942b
ICALCC:	V25806, VS0804
ISTD/SUR:	VS0799
ICV/QC:	VS0805 VS0802
data reviewed by: JenniferF	

PH LOT:1-12 :230814
ph lot 0.0-3.0 : 220416a
KI PAPER LOT:030317
SAMPLE ID VERIFIED BY:
stutip
DATE VERIFIED: 09/14/2020

Data File	Sample ID	DIL.	VIAL #	MATRIX	ALS POS.	SAMPLE METHOD	MANUALLY INTEGRATED PEAK RATIONAL, PEAK #	PH	CL	RR	COMMENTS
061321	blk	-	-	w	1	ACQ_SIMCL		-	-		
061322	blk	-	-	w	2	ACQ_SIMCL		-	-		
061323	bfb	-	-	w	3	bfb		-	-		
061324	bfb	-	-	w	4	bfb		-	-		autofnd 2ul passed ✓
061325	cc2356-5	-	-	w	5	ACQ_SIMCL	#12(P11)	-	-		50ul-50ml ✓
061326	bs	-	-	w	6	ACQ_SIMCL		-	-		20ul-40ml ✓
061327	mb	-	-	w	7	ACQ_SIMCL		-	-		ND ✓
061328	mb	-	-	w	8	ACQ_SIMCL		1	n		ND ✓
061329	fa78565-25	-	-	w	9	ACQ_SIMCL		1	n		1x
061330	fa78565-26	-	-	w	10	ACQ_SIMCL		1	n		1x
061331	fa78565-27	-	-	w	11	ACQ_SIMCL		1	n		SS Fail
061332	fa78549-30	-	-	w	12	ACQ_SIMCL		1	n		1x
061333	fa78549-31	-	-	w	13	ACQ_SIMCL		1	n		1x
061334	fa78549-32	-	-	w	14	ACQ_SIMCL		1	n		1x
061335	fa78549-33	-	-	w	15	ACQ_SIMCL		1	n		1x
061336	fa78549-34	-	-	w	16	ACQ_SIMCL		1	n		1x
061337	fa78549-35	-	-	w	17	ACQ_SIMCL		1	n		1x
061338	fa78549-36	-	-	w	18	ACQ_SIMCL		1	n		1x
061339	fa78549-37	-	-	w	19	ACQ_SIMCL		1	n		1x
061340	fa78549-38	-	-	w	20	ACQ_SIMCL		1	n		1x
061341	fa78549-39	-	-	w	21	ACQ_SIMCL		1	n		1x
061342	fa78549-40	-	-	w	22	ACQ_SIMCL		1	n		1x
061343	fa78549-41	-	-	w	23	ACQ_SIMCL		1	n		SS Fail
061344	fa78549-42	-	-	w	24	ACQ_SIMCL		1	n		1x
061345	fa78564-1	-	-	w	25	ACQ_SIMCL		1	n		✓
061346	fa78564-2	-	-	w	26	ACQ_SIMCL		1	n		✓
061347	fa78564-3	-	-	w	27	ACQ_SIMCL		1	n		✓
061348	fa78564-4	-	-	w	28	ACQ_SIMCL		1	n		✓
061349	fa78564-1ms,10	-	-	w	29	ACQ_SIMCL	5mL-50mL #12(P11)	1	n		20ul-40ml ✓
061350	fa78564-1msd,10	-	-	w	30	ACQ_SIMCL	5mL-50mL #12(P11)	1	n		20ul-40ml ✓
061351	ecc2356-5	-	-	w	30	ACQ_SIMCL	#12(P11)	1	n		50ul-50ml ✓

* For NELAC purposes, Method 8260 includes analytes by SOP MS005 Matrix: Designate "W" for Water "S" for soil, "O" for Oil, "Liq" for Non-aqueous Liquid, and "TCLP" or "SPLP" for Leachate.
 Manual Integration Rational SOP QA029: MP Missed Peak, OP Overlapping Peak, SP Split Peak, PDB Poorly Defined Baseline, BR Baseline Ripple, P11 Poor Instrument



SGS -ORLANDO

MSV0A12-O-ANALYSIS LOG

Date:	9/16/2020
COLUMN TYPE:	RTX VMS
DETECTOR:	5975 MSD
INSTRUMENT:	MSV0A12-O
PURGE PRESSURE:	8.4PSI
PURGE VOLUME:	5 mL
ANALYST:	akarig

METHODS:*	SIMCLm
METHOD FILE:	SIMCL091520.M
CALIB. DATE:	9/15/2020
EM VOLTAGE:	1447V
BFB RESPONSE	4915783
RUN ID:	VO2363

BFB:	V25942b
ICAL/CC:	V25806 VS0804
ISTD/SUR:	VS0799
ICV/QC:	VS0805 VS0802
data reviewed by: johnm	

PH LOT1-12 :230814
ph lot 0.0-3.0 : 220416a
KI PAPER LOT:030317
SAMPLE ID VERIFIED BY:
akarig
DATE VERIFIED: 09/16/2020

Data File	Sample ID	DIL.	VIAL #	MATRIX	ALS POS.	SAMPLE METHOD	MANUALLY INTEGRATED PEAK RATIONAL, PEAK #	PH	CL	RR	COMMENTS
061398	BLK	-	-	w	1	ACQ_SIMCL		-	?		
061399	BLK	-	-	w	2	ACQ_SIMCL		-	-		
061400	bfb	-	-	w	100	bfb		-	-		autofind 2ul failed low
061401	bfb	-	-	w	100	bfb		-	-		autofind 2ul passed
061402	CC2362-5	-	-	w	3	ACQ_SIMCL		-	-		50ul -> 50ml passed
061403	BS	-	-	w	4	ACQ_SIMCL		-	-		20ul-40ml passed
061404	MB	-	-	w	5	ACQ_SIMCL		-	-		
061405	MB	-	-	w	6	ACQ_SIMCL		-	-		
061406	FAT8551-18	1X	2	w	7	ACQ_SIMCL	#16(PII)	1	n	1X	✓
061407	FAT8551-23	1X	3	w	8	ACQ_SIMCL	#12,16(PII)	1	n	1X	✓
061408	FAT8551-24	1X	2	w	9	ACQ_SIMCL	#12(PII)	1	n	1X	✓
061409	FAT8551-25	1X	2	w	10	ACQ_SIMCL	#21(PII)	1	n	1X	ND✓
061410	FAT8551-26	1X	1	w	11	ACQ_SIMCL	#12(PII)	1	n	1X	Surr Failed
061411	FAT8551-27	1X	2	w	12	ACQ_SIMCL	#12(PII)	1	n	1X	✓
061412	FAT8559-9	1X	2	w	13	ACQ_SIMCL	#12(PII)	1	n	1X	Surr Failed
061413	FAT8562-1	1X	1	w	14	ACQ_SIMCL	#12(PII)	1	n	1X	ND✓
061414	FAT8549-2	1X	2	w	15	ACQ_SIMCL	#12,16(PII)	1	n	1X	✓
061415	FAT8549-6	1X	2	w	16	ACQ_SIMCL	#12,16(PII)	1	n	1X	✓
061416	FAT8549-7	1X	2	w	17	ACQ_SIMCL	#12(PII)	1	n	1X	ISTD Failed
061417	FAT8549-8	1X	2	w	18	ACQ_SIMCL		1	n	1X	ISTD Failed
061418	FAT8549-11	1X	2	w	19	ACQ_SIMCL		1	n	1X	ISTD Failed
061419	FAT8549-12	1X	2	w	20	ACQ_SIMCL	#12(PII)	1	n	1X	ISTD Failed
061420	FAT8549-13	1X	2	w	21	ACQ_SIMCL	#16(PII)	1	n	1X	✓
061421	FAT8549-14	1X	2	w	22	ACQ_SIMCL	power failure	1	n	1X	ISTD Failed
061422	FAT8549-15	1X	2	w	23	ACQ_SIMCL					
061423	FAT8551-18MS	10X	2	w	24	ACQ_SIMCL					20ul-40ml
061424	FAT8551-18MSD	10X	2	w	25	ACQ_SIMCL					20ul-40ml
061425	ECC2362-5		2	w	26	ACQ_SIMCL					50ul -> 50ml

* For NELAC purposes, Method 8260 includes analytes by SOP MS005 Matrix: Designate "W" for Water, "S" for soil, "O" for Oil, "Liq" for Non-aqueous Liquid, and "TCLP" or "SPLP" for Leachate.
 Manual Integration Rational SOP QA029: MP Missed Peak, OP Overlapping Peak, SP Split Peak, PDB Poorly Defined Baseline, BR Baseline Ripple, Pl Poor Instrument

Analyst's Signature:



MSVOA17-1A-ANALYSIS LOG

SGS -ORLANDO

DATE: 09/11/20		METHOD FILE(s): simcl0911120.m		BFB: V25942A		PH LOT: 1 to 12 pH lot #: 200814				
COLUMN TYPE: RTX-VMS		CALIB. DATE: 09/11/20		ICAL/CC: VS0806, VS0804		0 to 3 pH lot#: 220416				
DETECTOR: 5975C MSD		EM VOLTAGE: 1718V		ISTD/SURR: VS0791		KI PAPER LOT: 060117				
INSTRUMENT: MSVOA15-z		BFB Response: 15262853		ICV/QC: VS0802, VS0805		Processed BY: SO/SPIES				
PURGE PRESSURE: 9.7psi		RUN ID: VZ2414		AFA: VS0418A		SAMPLE ID VERIFIED BY: stutip				
PURGE VOLUME: 5 mL						DATE VERIFIED: 09/14/20				
ANALYST: STUTIP						COMMENTS				
Data File	Sample ID	DIL.	VIAL #	MATRIX	ALS POS.	SAMPLE METHOD	MANUALLY INTEGRATED PEAKS RATIONAL, PEAK #	PH	CL ?	RR
Z62205	BFB	-	-	w	1	bfb		-	-	-
Z62206	MB	-	-	w	2	acq_simcl0214		-	-	-
Z62207	IC2414-1	-	-	w	3	acq_simcl0214		-	-	-
Z62208	IC2414-2	-	-	w	4	acq_simcl0214		-	-	-
Z62209	IC2414-3	-	-	w	5	acq_simcl0214		-	-	-
Z62210	IC2414-4	-	-	w	6	acq_simcl0214		-	-	-
Z62211	IC2414-5	-	-	w	7	acq_simcl0214		-	-	-
Z62212	IC2414-6	-	-	w	8	acq_simcl0214	op-3	-	-	-
Z62213	IC2414-7	-	-	w	9	acq_simcl0214	mp-20,op-3	-	-	-
Z62214	MB	-	-	w	10	acq_simcl0214		-	-	-
Z62215	ICV2414-5	-	-	w	11	acq_simcl0214		-	-	-
Z62216	BS	-	-	w	12	acq_simcl0214		-	-	-
Z62217	MB	-	-	w	13	acq_simcl0214		-	-	-
Z62218	MB	-	-	w	14	acq_simcl0214		-	-	-
Z62219	FA78573-1	-	2	w	15	acq_simcl0214		1	NO	-
Z62220	FA78573-2	-	2	w	16	acq_simcl0214		1	NO	-
Z62221	FA78573-3	-	2	w	17	acq_simcl0214		1	NO	-
Z62222	FA78573-4	-	2	w	18	acq_simcl0214		1	NO	-
Z62223	FA78573-5	-	2	w	19	acq_simcl0214		1	NO	-
Z62224	FA78573-6	-	2	w	20	acq_simcl0214		1	NO	-
Z62225	FA78573-7	-	2	w	21	acq_simcl0214		1	NO	-
Z62226	FA78573-8	-	2	w	22	acq_simcl0214		1	NO	-
Z62227	FA78573-9	-	2	w	23	acq_simcl0214		1	NO	-
Z62228	FA78573-10	-	2	w	24	acq_simcl0214		1	NO	-
Z62229	FA78573-11	-	2	w	25	acq_simcl0214		1	NO	-
Z62230	FA78573-12	-	2	w	26	acq_simcl0214		1	NO	-
Z62231	FA78573-13	-	2	w	27	acq_simcl0214		1	NO	-
Z62232	FA78573-14	-	2	w	28	acq_simcl0214		1	NO	-
Z62233	FA78573-1MS,10	-	2	w	29	acq_simcl0214	5ml-50ml	1	NO	-
Z62234	FA78573-1MSD,10	-	2	w	30	acq_simcl0214	5ml-50ml	1	NO	-
Z62235	ECC2414-5	-	-	w	31	acq_simcl0214		-	-	-

Analyst's Signature: 

MSVOA17-1A-ANALYSIS LOG

SGS -ORLANDO

DATE: 09/13/20		METHOD(s): SimCI		BFB: V25942A		PH LOT: 1 to 12 pH lot #: 200814					
COLUMN TYPE: RTX-VMS		METHOD FILE(s): simcl091120.m		ICAL/CC: VS0806, VS0804		0 to 3 pH lot#: 220416					
DETECTOR: 5975C.MSD		CALIB. DATE: 09/11/20		ISTD/SURR: VS0791		KI PAPER LOT: 060117					
INSTRUMENT: MSVOA15-z		EM VOLTAGE: 1776V		ICV/QC: VS0802, VS0805		Processed BY: johnm					
PURGE PRESSURE: 9.7psi		BFB Response: 14257835		AFA: VS0418A		SAMPLE ID VERIFIED BY:					
PURGE VOLUME: 5 mL		RUN ID: VZ2417		DATE VERIFIED: 09/14/20		JuanG					
ANALYST: STUTJP											
Data File	Sample ID	DIL.	VIAL #	MATRIX	ALS POS.	SAMPLE METHOD	MANUALLY INTEGRATED PEAKS RATIONAL, PEAK #	PH	CL	RR	COMMENTS
Z62286	blk	-	-	w	1	acq_simcl0214		-	-	-	✓
Z62287	blk	-	-	w	2	acq_simcl0214		-	-	-	
Z62288	bfb	-	-	w	3	bfb		-	-	-	Passed Autofind✓
Z62289	cc2414-5	-	-	w	4	acq_simcl0214		-	-	-	50µL→50mL ✓
Z62290	bs	-	-	w	1	acq_simcl0214		-	-	-	20µL→40mL ✓
Z62291	MB	-	-	w	2	acq_simcl0214		-	-	-	ND✓
Z62292	MB	-	-	w	3	acq_simcl0214		-	-	-	ND✓
Z62293	fa78549-16	1x	1	w	4	acq_simcl0214		1	n	-	✓
Z62294	fa78549-17	1x	2	w	5	acq_simcl0214		1	n	-	✓
Z62295	fa78549-18	1x	1	w	6	acq_simcl0214	#9, OP	1	n	-	✓
Z62296	fa78549-19	1x	1	w	7	acq_simcl0214		1	n	-	✓
Z62297	fa78549-20	1x	2	w	8	acq_simcl0214		1	n	-	✓
Z62298	fa78549-21	1x	1	w	9	acq_simcl0214		1	n	-	✓
Z62299	fa78549-22	1x	2	w	10	acq_simcl0214		1	n	-	✓
Z62300	fa78549-23	1x	2	w	11	acq_simcl0214		1	n	-	✓
Z62301	fa78549-24	1x	2	w	12	acq_simcl0214		1	n	-	✓
Z62302	fa78549-25	1x	2	w	13	acq_simcl0214		1	n	-	✓
Z62303	fa78549-26	1x	2	w	14	acq_simcl0214	#9, OP	1	n	-	✓
Z62304	fa78549-27	1x	1	w	15	acq_simcl0214	#9, OP	1	n	-	✓
Z62305	fa78549-28	1x	1	w	16	acq_simcl0214	#9, OP	1	n	-	✓
Z62306	fa78549-29	1x	1	w	17	acq_simcl0214	#9, OP	1	n	-	✓
Z62307	fa78564-5	1x	1	w	18	acq_simcl0214		1	n	-	ND✓
Z62308	fa78564-6	1x	1	w	19	acq_simcl0214	#9, OP	1	n	-	ND✓
Z62309	fa78576-1	1x	1	w	20	acq_simcl0214		1	n	-	✓
Z62310	fa78576-2	1x	1	w	21	acq_simcl0214		1	n	-	✓
Z62311	fa78576-3	1x	1	w	22	acq_simcl0214		1	n	-	✓
Z62312	fa78576-4	1x	1	w	23	acq_simcl0214		1	n	-	✓
Z62313	fa78576-5	1x	1	w	24	acq_simcl0214		1	n	-	✓
Z62314	fa78549-16ms	1x	5	w	25	acq_simcl0214		1	n	-	20µL→40mL ✓
Z62315	fa78549-16msd	1x	6	w	26	acq_simcl0214		1	n	-	20µL→40mL ✓
Z62316	fa78576-2ms	1x	2	w	27	acq_simcl0214		1	n	-	20µL→40mL ✓
Z62317	fa78576-2msd	1x	2	w	28	acq_simcl0214		1	n	-	20µL→40mL ✓
Z62318	ecc2414-5	-	-	w	29	acq_simcl0214		-	-	-	50µL→50mL ✓

Analyst's Signature:

MSVOA17-1A ANALYSIS LOG

SG ORLANDO

DATE: 09/14/20		METHOD FILE(s): simc1091120.m		BFB: VZ5942A		PH LOT: 1 to 12 pH lot #: 200814					
COLUMN TYPE: RTX-VMS		CALIB. DATE: 09/11/20		ICAL/CC: VS0806, VS0804		0 to 3 pH lot#: 220416					
DETECTOR: 5975C.MSD		EM VOLTAGE: 1776V		ISTD/SURR: VS0791		KI PAPER LOT: 060117					
INSTRUMENT: MSVOA15-z		BFB Response: 14432522		ICV/QC: VS0802, VS0805		Processed BY:					
PURGE PRESSURE: 9.7psi		RUN ID: VZ2418		AFA: VS0418A		SAMPLE ID VERIFIED BY:					
PURGE VOLUME: 5 mL						JuanG					
ANALYST: JuanG						DATE VERIFIED: 09/15/20					
Data File	Sample ID	DIL.	VIAL #	MATRIX	ALS POS.	SAMPLE METHOD	MANUALLY INTEGRATED PEAKS RATIONAL, PEAK #	PH	CL	RR	COMMENTS
Z62319	mb	-	-	w	1	acq_simc10214		-	-	-	✓
Z62320	mb	-	-	w	2	bfb		-	-	-	✓
Z62321	bfb	-	-	w	-	acq_simc10214		-	-	-	Passed Autofind ✓
Z62322	cc2414-5	-	-	w	1	acq_simc10214		-	-	-	50µL → 50mL ✓
Z62323	bs	-	-	w	2	acq_simc10214		-	-	-	20µL → 40mL ✓
Z62324	mb	-	-	w	3	acq_simc10214		-	-	-	✓
Z62325	mb	-	-	w	4	acq_simc10214		1	n	-	✓
Z62326	FA78549-30	1X	2	w	5	acq_simc10214		1	n	-	✓
Z62327	FA78549-31	1X	2	w	6	acq_simc10214		1	n	-	✓
Z62328	FA78549-32	1X	2	w	7	acq_simc10214		1	n	-	✓
Z62329	FA78549-33	1X	2	w	8	acq_simc10214		1	n	-	✓
Z62330	FA78549-34	1X	2	w	9	acq_simc10214		1	n	-	✓
Z62331	FA78549-35	1X	2	w	10	acq_simc10214		1	n	-	✓
Z62332	FA78549-36	1X	2	w	11	acq_simc10214		1	n	-	✓
Z62333	FA78549-37	1X	2	w	12	acq_simc10214		1	n	-	✓
Z62334	FA78551-15,2X	2X	2	w	13	acq_simc10214	25ml to 50ml	1	n	-	✓
Z62335	FA78551-15MS,10X	10X	2	w	14	acq_simc10214	10ml to 100ml	1	n	-	20µL → 40mL ✓
Z62336	FA78551-15MSD,10X	10X	2	w	15	acq_simc10214	10ml to 100ml	1	n	-	20µL → 40mL ✓
Z62337	FA78549-38	1X	2	w	16	acq_simc10214		1	n	-	✓
Z62338	FA78549-39	1X	2	w	17	acq_simc10214		1	n	-	✓
Z62339	FA78549-40	1X	2	w	18	acq_simc10214		1	n	-	✓
Z62340	FA78549-41	1X	2	w	19	acq_simc10214		1	n	-	✓
Z62341	FA78549-42	1X	2	w	20	acq_simc10214		1	n	-	✓
Z62342	FA78551-16,2X	2X	2	w	21	acq_simc10214	25ml to 50ml	1	n	-	✓
Z62343	FA78551-16MS,10X	10X	2	w	22	acq_simc10214	10ml to 100ml	1	n	-	20µL → 40mL ✓
Z62344	FA78551-16MSD,10X	10X	2	w	23	acq_simc10214	10ml to 100ml	1	n	-	20µL → 40mL ✓
Z62345	FA78565-21	1X	2	w	24	acq_simc10214		1	n	-	✓
Z62346	FA78565-22	1X	2	w	25	acq_simc10214		1	n	-	✓
Z62347	FA78565-23	1X	2	w	26	acq_simc10214		1	n	-	✓
Z62348	FA78565-24	1X	2	w	27	acq_simc10214		1	n	-	✓
Z62349	FA78565-25	1X	2	w	28	acq_simc10214		1	n	-	✓
Z62350	ECC2414-5	-	-	w	29	acq_simc10214		-	-	-	50µL → 50mL ✓

Analyst's Signature: 

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

e-Hardcopy 2.0
Automated Report

Technical Report for

Ahtna Global, LLC

Fort Ord Groundwater Monitoring

21065.000.01.0000(Former Fort Ord GWMP - OU2 Aquifer)

SGS Job Number: FA78551

Sampling Dates: 09/03/20 - 09/04/20

Report to:

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Total number of pages in report: **669**



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

Norm Farmer
Technical Director

Client Service contact: Elvin Kumar 407-425-6700

Certifications: FL(E83510), LA(03051), KS(E-10327), IL(200063), NC(573), NJ(FL002), NY(12022), SC(96038001)
DoD ELAP(ANAB L2229), AZ(AZ0806), CA(2937), TX(T104704404), PA(68-03573), VA(460177),
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Test results relate only to samples analyzed.

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Sample Summary

Ahtna Global, LLC

Job No: FA78551

Fort Ord Groundwater Monitoring

Project No: 21065.000.01.0000(Former Fort Ord GWMP - OU2 Aquifer)

Sample Number	Collected		Matrix Code	Received	Type	Client Sample ID
	Date	Time By				
FA78551-1	09/03/20	07:12 TSLB	AQ	09/09/20	Trip Blank Water	2036YOU2423A
FA78551-2	09/03/20	07:53 TSLB	AQ	09/09/20	Ground Water	2036YOU2425F
FA78551-3	09/03/20	08:03 TSLB	AQ	09/09/20	Ground Water	2036YOU2426F
FA78551-4	09/03/20	08:23 TSLB	AQ	09/09/20	Ground Water	2036YOU2427F
FA78551-5	09/03/20	08:55 TSLB	AQ	09/09/20	Ground Water	2036YOU2428F
FA78551-6	09/03/20	09:12 TSLB	AQ	09/09/20	Ground Water	2036YOU2429F
FA78551-7	09/03/20	09:24 TSLB	AQ	09/09/20	Ground Water	2036YOU2430F
FA78551-8	09/03/20	09:47 TSLB	AQ	09/09/20	Ground Water	2036YOU2431F
FA78551-9	09/03/20	09:56 TSLB	AQ	09/09/20	Ground Water	2036YOU2432F
FA78551-10	09/03/20	10:00 TSLB	AQ	09/09/20	Ground Water	2036YOU2433D
FA78551-11	09/03/20	10:20 TSLB	AQ	09/09/20	Ground Water	2036YOU2434F
FA78551-12	09/03/20	10:33 TSLB	AQ	09/09/20	Ground Water	2036YOU2435F
FA78551-13	09/03/20	10:40 TSLB	AQ	09/09/20	Ground Water	2036YOU2436F



Sample Summary

(continued)

Ahtna Global, LLC

Job No: FA78551

Fort Ord Groundwater Monitoring

Project No: 21065.000.01.0000(Former Fort Ord GWMP - OU2 Aquifer)

Sample Number	Collected		Matrix Received	Code	Type	Client Sample ID
	Date	Time By				
FA78551-14	09/03/20	10:55 TSLB	09/09/20	AQ	Ground Water	2036YOU2437F
FA78551-15	09/03/20	11:09 TSLB	09/09/20	AQ	Ground Water	2036YOU2438F
FA78551-16	09/03/20	11:14 TSLB	09/09/20	AQ	Ground Water	2036YOU2439D
FA78551-17	09/03/20	11:25 TSLB	09/09/20	AQ	Ground Water	2036YOU2440F
FA78551-18	09/03/20	11:34 TSLB	09/09/20	AQ	Ground Water	2036YOU2441F
FA78551-19	09/03/20	11:39 TSLB	09/09/20	AQ	Ground Water	2036YOU2442D
FA78551-20	09/03/20	14:18 TSLB	09/09/20	AQ	Ground Water	2036YOU2443F
FA78551-21	09/03/20	14:30 TSLB	09/09/20	AQ	Ground Water	2036YOU2444F
FA78551-22	09/03/20	14:45 TSLB	09/09/20	AQ	Ground Water	2036YOU2445F
FA78551-23	09/03/20	14:57 TSLB	09/09/20	AQ	Ground Water	2036YOU2446F
FA78551-24	09/03/20	08:12 RMCG	09/09/20	AQ	Ground Water	2036X0BW232F
FA78551-25	09/03/20	08:00 RMCG	09/09/20	AQ	Trip Blank Water	2036X0BW233A
FA78551-26	09/03/20	08:20 RMCG	09/09/20	AQ	Ground Water	2036X0BW234C



Sample Summary

(continued)

Ahtna Global, LLC

Job No: FA78551

Fort Ord Groundwater Monitoring

Project No: 21065.000.01.0000(Former Fort Ord GWMP - OU2 Aquifer)

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
FA78551-27	09/03/20	14:13	RMCG09/09/20	AQ	Ground Water	2036X0BW246F
FA78551-28F	09/04/20	07:55	TSLB 09/09/20	AQ	Groundwater Filtered	2036YOU2450F
FA78551-29F	09/04/20	08:15	TSLB 09/09/20	AQ	Groundwater Filtered	2036YOU2451F
FA78551-30F	09/04/20	08:30	TSLB 09/09/20	AQ	Groundwater Filtered	2036YOU2452F
FA78551-31F	09/04/20	08:46	TSLB 09/09/20	AQ	Groundwater Filtered	2036YOU2453F

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: Ahtna Global, LLC

Job No: FA78551

Site: Fort Ord Groundwater Monitoring

Report Date 9/23/2020 2:39:07

29 Sample(s), 2 Trip Blank(s) and 0 Field Blank(s) were collected on between 09/03/2020 and 09/04/2020 and were received at SGS North America Inc - Orlando on 09/09/2020 properly preserved, at 3.2 Deg. C and intact. These Samples received an SGS Orlando job number of FA78551. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section. Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

MS Volatiles By Method SW846 8260B BY SIM

Matrix: AQ

Batch ID: VO2358

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA78551-1MS, FA78551-1MSD were used as the QC samples indicated.

Matrix: AQ

Batch ID: VO2359

All samples were analyzed within the recommended method holding time.

Sample(s) FA78551-12MS, FA78551-12MSD were used as the QC samples indicated.

All method blanks for this batch meet method specific criteria.

Sample(s) FA78551-26 have surrogates outside control limits.

FA78551-26 for Toluene-D8: Outside DOD QSM control limits.

Matrix: AQ

Batch ID: VO2363

Sample(s) FA78551-26 have surrogates outside control limits.

FA78551-18: Confirmation run.

FA78551-23: Confirmation run.

FA78551-24: Confirmation run.

FA78551-25: Confirmation run.

FA78551-26 for Toluene-D8: Outside DOD QSM control limits.

FA78551-26: Confirmation run.

FA78551-27: Confirmation run.

Matrix: AQ

Batch ID: VZ2418

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA78551-15MS, FA78551-15MSD, FA78551-16MS, FA78551-16MSD were used as the QC samples

Matrix Spike Recovery(s) for 1,1-Dichloroethane are outside control limits. Probable cause is due to matrix interference.

Matrix: AQ

Batch ID: VZ2419

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA78551-7MS, FA78551-7MSD were used as the QC samples indicated.

Sample(s) FA78551-12, FA78551-13, FA78551-14, FA78551-17, FA78551-19, FA78551-20, FA78551-21,

FA78551-1 for 1,2-Dichloroethane-D4: Outside DOD QSM control limits.

FA78551-2 for 1,2-Dichloroethane-D4: Outside DOD QSM control limits.

FA78551-3 for 1,2-Dichloroethane-D4: Outside DOD QSM control limits.

FA78551-4 for 1,2-Dichloroethane-D4: Outside DOD QSM control limits.

FA78551-5 for 1,2-Dichloroethane-D4: Outside DOD QSM control limits.

FA78551-6 for 1,2-Dichloroethane-D4: Outside DOD QSM control limits.

FA78551-7 for 1,2-Dichloroethane-D4: Outside DOD QSM control limits.

FA78551-8 for 1,2-Dichloroethane-D4: Outside DOD QSM control limits.

FA78551-9 for 1,2-Dichloroethane-D4: Outside DOD QSM control limits.

FA78551-10 for 1,2-Dichloroethane-D4: Outside DOD QSM control limits.

FA78551-11 for 1,2-Dichloroethane-D4: Outside DOD QSM control limits.

FA78551-12 for 1,2-Dichloroethane-D4: Outside DOD QSM control limits.

FA78551-13 for 1,2-Dichloroethane-D4: Outside DOD QSM control limits.

Summary of Hits

Job Number: FA78551
Account: Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring
Collected: 09/03/20 thru 09/04/20



Lab Sample ID	Client Sample ID	Result/ Qual	LOQ	LOD	Units	Method
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FA78551-1 2036YOU2423A

No hits reported in this sample.

FA78551-2 2036YOU2425F

Chloroform	0.28 J	0.50	0.25	ug/l	SW846 8260B BY SIM
Trichloroethylene	1.4	0.50	0.25	ug/l	SW846 8260B BY SIM

FA78551-3 2036YOU2426F

Chloroform	0.27 J	0.50	0.25	ug/l	SW846 8260B BY SIM
Trichloroethylene	1.5	0.50	0.25	ug/l	SW846 8260B BY SIM

FA78551-4 2036YOU2427F

Trichloroethylene	1.1	0.50	0.25	ug/l	SW846 8260B BY SIM
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FA78551-5 2036YOU2428F

1,1-Dichloroethane	0.54	0.50	0.25	ug/l	SW846 8260B BY SIM
1,2-Dichloroethane	0.57	0.50	0.25	ug/l	SW846 8260B BY SIM
cis-1,2-Dichloroethylene	3.8	0.50	0.25	ug/l	SW846 8260B BY SIM
1,2-Dichloropropane	0.21 J	0.50	0.25	ug/l	SW846 8260B BY SIM
Tetrachloroethylene	0.43 J	0.50	0.25	ug/l	SW846 8260B BY SIM
Trichloroethylene	1.0	0.50	0.25	ug/l	SW846 8260B BY SIM

FA78551-6 2036YOU2429F

Carbon Tetrachloride	0.20 J	0.50	0.25	ug/l	SW846 8260B BY SIM
Chloroform	0.53	0.50	0.25	ug/l	SW846 8260B BY SIM
1,1-Dichloroethane	0.33 J	0.50	0.25	ug/l	SW846 8260B BY SIM
cis-1,2-Dichloroethylene	0.68	0.50	0.25	ug/l	SW846 8260B BY SIM
Tetrachloroethylene	2.0	0.50	0.25	ug/l	SW846 8260B BY SIM
Trichloroethylene	4.6	0.50	0.25	ug/l	SW846 8260B BY SIM

FA78551-7 2036YOU2430F

Chloroform	0.49 J	0.50	0.25	ug/l	SW846 8260B BY SIM
1,1-Dichloroethane	0.43 J	0.50	0.25	ug/l	SW846 8260B BY SIM
cis-1,2-Dichloroethylene	0.32 J	0.50	0.25	ug/l	SW846 8260B BY SIM
Tetrachloroethylene	0.30 J	0.50	0.25	ug/l	SW846 8260B BY SIM
Trichloroethylene	1.1	0.50	0.25	ug/l	SW846 8260B BY SIM

Summary of Hits

Job Number: FA78551
Account: Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring
Collected: 09/03/20 thru 09/04/20



Lab Sample ID Analyte	Client Sample ID	Result/ Qual	LOQ	LOD	Units	Method
FA78551-8		2036YOU2431F				
Chloroform		0.55	0.50	0.25	ug/l	SW846 8260B BY SIM
1,1-Dichloroethane		5.5	0.50	0.25	ug/l	SW846 8260B BY SIM
1,2-Dichloroethane		1.3	0.50	0.25	ug/l	SW846 8260B BY SIM
cis-1,2-Dichloroethylene		2.7	0.50	0.25	ug/l	SW846 8260B BY SIM
Tetrachloroethylene		1.5	0.50	0.25	ug/l	SW846 8260B BY SIM
Trichloroethylene		1.2	0.50	0.25	ug/l	SW846 8260B BY SIM
Vinyl Chloride		0.22	0.10	0.050	ug/l	SW846 8260B BY SIM
FA78551-9		2036YOU2432F				
Chloroform		0.75	0.50	0.25	ug/l	SW846 8260B BY SIM
cis-1,2-Dichloroethylene		2.6	0.50	0.25	ug/l	SW846 8260B BY SIM
Tetrachloroethylene		0.37 J	0.50	0.25	ug/l	SW846 8260B BY SIM
Trichloroethylene		13.3	0.50	0.25	ug/l	SW846 8260B BY SIM
FA78551-10		2036YOU2433D				
Chloroform		0.72	0.50	0.25	ug/l	SW846 8260B BY SIM
cis-1,2-Dichloroethylene		2.5	0.50	0.25	ug/l	SW846 8260B BY SIM
Tetrachloroethylene		0.38 J	0.50	0.25	ug/l	SW846 8260B BY SIM
Trichloroethylene		13.1	0.50	0.25	ug/l	SW846 8260B BY SIM
FA78551-11		2036YOU2434F				
Trichloroethylene		0.47 J	0.50	0.25	ug/l	SW846 8260B BY SIM
FA78551-12		2036YOU2435F				
Chloroform		5.2	0.50	0.25	ug/l	SW846 8260B BY SIM
1,1-Dichloroethane		10.0	0.50	0.25	ug/l	SW846 8260B BY SIM
cis-1,2-Dichloroethylene		0.35 J	0.50	0.25	ug/l	SW846 8260B BY SIM
1,2-Dichloropropane		0.82	0.50	0.25	ug/l	SW846 8260B BY SIM
Tetrachloroethylene		7.4	0.50	0.25	ug/l	SW846 8260B BY SIM
Trichloroethylene		5.5	0.50	0.25	ug/l	SW846 8260B BY SIM
FA78551-13		2036YOU2436F				
Trichloroethylene		1.5	0.50	0.25	ug/l	SW846 8260B BY SIM
FA78551-14		2036YOU2437F				
Chloroform		0.55	0.50	0.25	ug/l	SW846 8260B BY SIM
1,1-Dichloroethane		5.5	0.50	0.25	ug/l	SW846 8260B BY SIM

Summary of Hits

Job Number: FA78551
Account: Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring
Collected: 09/03/20 thru 09/04/20



Lab Sample ID	Client Sample ID	Result/ Analyte	LOQ	LOD	Units	Method
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1,2-Dichloroethane		0.21 J	0.50	0.25	ug/l	SW846 8260B BY SIM
cis-1,2-Dichloroethylene		1.5	0.50	0.25	ug/l	SW846 8260B BY SIM
Tetrachloroethylene		1.3	0.50	0.25	ug/l	SW846 8260B BY SIM
Trichloroethylene		1.2	0.50	0.25	ug/l	SW846 8260B BY SIM

FA78551-15 2036YOU2438F

Chloroform		3.1	0.50	0.25	ug/l	SW846 8260B BY SIM
1,1-Dichloroethane		21.6	1.0	0.50	ug/l	SW846 8260B BY SIM
1,2-Dichloroethane		1.4	0.50	0.25	ug/l	SW846 8260B BY SIM
cis-1,2-Dichloroethylene		5.7	0.50	0.25	ug/l	SW846 8260B BY SIM
1,2-Dichloropropane		0.65	0.50	0.25	ug/l	SW846 8260B BY SIM
Methylene Chloride		1.0 J	2.0	0.50	ug/l	SW846 8260B BY SIM
Tetrachloroethylene		6.6	0.50	0.25	ug/l	SW846 8260B BY SIM
Trichloroethylene		6.4	0.50	0.25	ug/l	SW846 8260B BY SIM
Vinyl Chloride		0.31	0.10	0.050	ug/l	SW846 8260B BY SIM

FA78551-16 2036YOU2439D

Chloroform		3.1	0.50	0.25	ug/l	SW846 8260B BY SIM
1,1-Dichloroethane		20.7	1.0	0.50	ug/l	SW846 8260B BY SIM
1,2-Dichloroethane		1.5	0.50	0.25	ug/l	SW846 8260B BY SIM
cis-1,2-Dichloroethylene		5.7	0.50	0.25	ug/l	SW846 8260B BY SIM
1,2-Dichloropropane		0.66	0.50	0.25	ug/l	SW846 8260B BY SIM
Methylene Chloride		1.0 J	2.0	0.50	ug/l	SW846 8260B BY SIM
Tetrachloroethylene		7.1	0.50	0.25	ug/l	SW846 8260B BY SIM
Trichloroethylene		6.5	0.50	0.25	ug/l	SW846 8260B BY SIM
Vinyl Chloride		0.31	0.10	0.050	ug/l	SW846 8260B BY SIM

FA78551-17 2036YOU2440F

Chloroform		1.1	0.50	0.25	ug/l	SW846 8260B BY SIM
1,1-Dichloroethane		2.1	0.50	0.25	ug/l	SW846 8260B BY SIM
1,2-Dichloroethane		0.47 J	0.50	0.25	ug/l	SW846 8260B BY SIM
cis-1,2-Dichloroethylene		0.62	0.50	0.25	ug/l	SW846 8260B BY SIM
Tetrachloroethylene		9.7	0.50	0.25	ug/l	SW846 8260B BY SIM
Trichloroethylene		12.1	0.50	0.25	ug/l	SW846 8260B BY SIM

FA78551-18 2036YOU2441F

Chloroform		0.20 J	0.50	0.25	ug/l	SW846 8260B BY SIM
Trichloroethylene		3.7	0.50	0.25	ug/l	SW846 8260B BY SIM

Summary of Hits

Job Number: FA78551
Account: Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring
Collected: 09/03/20 thru 09/04/20



Lab Sample ID	Client Sample ID	Result/ Qual	LOQ	LOD	Units	Method
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FA78551-19 2036YOU2442D

Chloroform	0.20 J	0.50	0.25	ug/l	SW846 8260B BY SIM
Trichloroethylene	3.6	0.50	0.25	ug/l	SW846 8260B BY SIM

FA78551-20 2036YOU2443F

No hits reported in this sample.

FA78551-21 2036YOU2444F

Tetrachloroethylene	0.28 J	0.50	0.25	ug/l	SW846 8260B BY SIM
Trichloroethylene	0.56	0.50	0.25	ug/l	SW846 8260B BY SIM

FA78551-22 2036YOU2445F

cis-1,2-Dichloroethylene	0.63	0.50	0.25	ug/l	SW846 8260B BY SIM
Tetrachloroethylene	1.0	0.50	0.25	ug/l	SW846 8260B BY SIM
Trichloroethylene	8.7	0.50	0.25	ug/l	SW846 8260B BY SIM

FA78551-23 2036YOU2446F

cis-1,2-Dichloroethylene	1.0	0.50	0.25	ug/l	SW846 8260B BY SIM
Tetrachloroethylene	1.1	0.50	0.25	ug/l	SW846 8260B BY SIM
Trichloroethylene	12.2	0.50	0.25	ug/l	SW846 8260B BY SIM

FA78551-24 2036X0BW232F

No hits reported in this sample.

FA78551-25 2036X0BW233A

No hits reported in this sample.

FA78551-26 2036X0BW234C

No hits reported in this sample.

FA78551-27 2036X0BW246F

Chloroform	1.4	0.50	0.25	ug/l	SW846 8260B BY SIM
1,1-Dichloroethane	1.9	0.50	0.25	ug/l	SW846 8260B BY SIM
Tetrachloroethylene	2.9	0.50	0.25	ug/l	SW846 8260B BY SIM
Trichloroethylene	1.1	0.50	0.25	ug/l	SW846 8260B BY SIM

Summary of Hits

Job Number: FA78551
Account: Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring
Collected: 09/03/20 thru 09/04/20



Lab Sample ID	Client Sample ID	Result/ Qual	LOQ	LOD	Units	Method
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FA78551-28F 2036YOU2450F

No hits reported in this sample.

FA78551-29F 2036YOU2451F

No hits reported in this sample.

FA78551-30F 2036YOU2452F

No hits reported in this sample.

FA78551-31F 2036YOU2453F

No hits reported in this sample.

Sample Results

Report of Analysis

SGS North America Inc.

Report of Analysis

Page 1 of 1

Client Sample ID: 2036YOU2423A	
Lab Sample ID: FA78551-1	Date Sampled: 09/03/20
Matrix: AQ - Trip Blank Water	Date Received: 09/09/20
Method: SW846 8260B BY SIM	Percent Solids: n/a
Project: Fort Ord Groundwater Monitoring	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	O61277.D	1	09/12/20 12:15	SP	n/a	n/a	VO2358
Run #2	Z62361.D	1	09/15/20 16:18	JG	n/a	n/a	VZ2419

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
71-43-2	Benzene	0.25 U	0.50	0.25	0.10	ug/l	
56-23-5	Carbon Tetrachloride	0.25 U	0.50	0.25	0.10	ug/l	
67-66-3	Chloroform	0.25 U	0.50	0.25	0.10	ug/l	
75-34-3	1,1-Dichloroethane	0.25 U	0.50	0.25	0.10	ug/l	
107-06-2	1,2-Dichloroethane	0.25 U	0.50	0.25	0.10	ug/l	
156-59-2	cis-1,2-Dichloroethylene	0.25 U	0.50	0.25	0.10	ug/l	
78-87-5	1,2-Dichloropropane	0.25 U	0.50	0.25	0.10	ug/l	
75-09-2	Methylene Chloride	0.50 U ^a	2.0	0.50	0.50	ug/l	
127-18-4	Tetrachloroethylene	0.25 U	0.50	0.25	0.10	ug/l	
79-01-6	Trichloroethylene	0.25 U	0.50	0.25	0.10	ug/l	
75-01-4	Vinyl Chloride	0.050 U	0.10	0.050	0.050	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	105%	120% ^b	74-125%
2037-26-5	Toluene-D8	100%	97%	88-111%

(a) Result is from Run# 2

(b) Outside DOD QSM control limits.

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
 LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

4.1
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SGS North America Inc.

Report of Analysis

Page 1 of 1

Client Sample ID: 2036YOU2425F	
Lab Sample ID: FA78551-2	Date Sampled: 09/03/20
Matrix: AQ - Ground Water	Date Received: 09/09/20
Method: SW846 8260B BY SIM	Percent Solids: n/a
Project: Fort Ord Groundwater Monitoring	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	O61278.D	1	09/12/20 12:36	SP	n/a	n/a	VO2358
Run #2	Z62362.D	1	09/15/20 16:37	JG	n/a	n/a	VZ2419

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
71-43-2	Benzene	0.25 U	0.50	0.25	0.10	ug/l	
56-23-5	Carbon Tetrachloride	0.25 U	0.50	0.25	0.10	ug/l	
67-66-3	Chloroform	0.28	0.50	0.25	0.10	ug/l	J
75-34-3	1,1-Dichloroethane	0.25 U	0.50	0.25	0.10	ug/l	
107-06-2	1,2-Dichloroethane	0.25 U	0.50	0.25	0.10	ug/l	
156-59-2	cis-1,2-Dichloroethylene	0.25 U	0.50	0.25	0.10	ug/l	
78-87-5	1,2-Dichloropropane	0.25 U	0.50	0.25	0.10	ug/l	
75-09-2	Methylene Chloride	0.50 U ^a	2.0	0.50	0.50	ug/l	
127-18-4	Tetrachloroethylene	0.25 U	0.50	0.25	0.10	ug/l	
79-01-6	Trichloroethylene	1.4	0.50	0.25	0.10	ug/l	
75-01-4	Vinyl Chloride	0.050 U	0.10	0.050	0.050	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	106%	120% ^b	74-125%
2037-26-5	Toluene-D8	100%	97%	88-111%

(a) Result is from Run# 2

(b) Outside DOD QSM control limits.

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
 LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

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Client Sample ID:	2036YOU2426F	Date Sampled:	09/03/20
Lab Sample ID:	FA78551-3	Date Received:	09/09/20
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B BY SIM		
Project:	Fort Ord Groundwater Monitoring		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	O61279.D	1	09/12/20 12:56	SP	n/a	n/a	VO2358
Run #2	Z62363.D	1	09/15/20 16:56	JG	n/a	n/a	VZ2419

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
71-43-2	Benzene	0.25 U	0.50	0.25	0.10	ug/l	
56-23-5	Carbon Tetrachloride	0.25 U	0.50	0.25	0.10	ug/l	
67-66-3	Chloroform	0.27	0.50	0.25	0.10	ug/l	J
75-34-3	1,1-Dichloroethane	0.25 U	0.50	0.25	0.10	ug/l	
107-06-2	1,2-Dichloroethane	0.25 U	0.50	0.25	0.10	ug/l	
156-59-2	cis-1,2-Dichloroethylene	0.25 U	0.50	0.25	0.10	ug/l	
78-87-5	1,2-Dichloropropane	0.25 U	0.50	0.25	0.10	ug/l	
75-09-2	Methylene Chloride	0.50 U ^a	2.0	0.50	0.50	ug/l	
127-18-4	Tetrachloroethylene	0.25 U	0.50	0.25	0.10	ug/l	
79-01-6	Trichloroethylene	1.5	0.50	0.25	0.10	ug/l	
75-01-4	Vinyl Chloride	0.050 U	0.10	0.050	0.050	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	107%	121% ^b	74-125%
2037-26-5	Toluene-D8	97%	96%	88-111%

(a) Result is from Run# 2

(b) Outside DOD QSM control limits.

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
 LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

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Client Sample ID:	2036YOU2427F	
Lab Sample ID:	FA78551-4	Date Sampled: 09/03/20
Matrix:	AQ - Ground Water	Date Received: 09/09/20
Method:	SW846 8260B BY SIM	Percent Solids: n/a
Project:	Fort Ord Groundwater Monitoring	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	O61280.D	1	09/12/20 13:16	SP	n/a	n/a	VO2358
Run #2	Z62364.D	1	09/15/20 17:16	JG	n/a	n/a	VZ2419

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
71-43-2	Benzene	0.25 U	0.50	0.25	0.10	ug/l	
56-23-5	Carbon Tetrachloride	0.25 U	0.50	0.25	0.10	ug/l	
67-66-3	Chloroform	0.25 U	0.50	0.25	0.10	ug/l	
75-34-3	1,1-Dichloroethane	0.25 U	0.50	0.25	0.10	ug/l	
107-06-2	1,2-Dichloroethane	0.25 U	0.50	0.25	0.10	ug/l	
156-59-2	cis-1,2-Dichloroethylene	0.25 U	0.50	0.25	0.10	ug/l	
78-87-5	1,2-Dichloropropane	0.25 U	0.50	0.25	0.10	ug/l	
75-09-2	Methylene Chloride	0.50 U ^a	2.0	0.50	0.50	ug/l	
127-18-4	Tetrachloroethylene	0.25 U	0.50	0.25	0.10	ug/l	
79-01-6	Trichloroethylene	1.1	0.50	0.25	0.10	ug/l	
75-01-4	Vinyl Chloride	0.050 U	0.10	0.050	0.050	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	107%	122% ^b	74-125%
2037-26-5	Toluene-D8	95%	97%	88-111%

(a) Result is from Run# 2

(b) Outside DOD QSM control limits.

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
 LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

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Client Sample ID:	2036YOU2428F	Date Sampled:	09/03/20
Lab Sample ID:	FA78551-5	Date Received:	09/09/20
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B BY SIM		
Project:	Fort Ord Groundwater Monitoring		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	O61281.D	1	09/12/20 13:36	SP	n/a	n/a	VO2358
Run #2	Z62365.D	1	09/15/20 17:35	JG	n/a	n/a	VZ2419

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
71-43-2	Benzene	0.25 U	0.50	0.25	0.10	ug/l	
56-23-5	Carbon Tetrachloride	0.25 U	0.50	0.25	0.10	ug/l	
67-66-3	Chloroform	0.25 U	0.50	0.25	0.10	ug/l	
75-34-3	1,1-Dichloroethane	0.54	0.50	0.25	0.10	ug/l	
107-06-2	1,2-Dichloroethane	0.57	0.50	0.25	0.10	ug/l	
156-59-2	cis-1,2-Dichloroethylene	3.8	0.50	0.25	0.10	ug/l	
78-87-5	1,2-Dichloropropane	0.21	0.50	0.25	0.10	ug/l	J
75-09-2	Methylene Chloride	0.50 U ^a	2.0	0.50	0.50	ug/l	
127-18-4	Tetrachloroethylene	0.43	0.50	0.25	0.10	ug/l	J
79-01-6	Trichloroethylene	1.0	0.50	0.25	0.10	ug/l	
75-01-4	Vinyl Chloride	0.050 U	0.10	0.050	0.050	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	106%	121% ^b	74-125%
2037-26-5	Toluene-D8	94%	96%	88-111%

(a) Result is from Run# 2

(b) Outside DOD QSM control limits.

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
 LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

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Client Sample ID:	2036YOU2429F	
Lab Sample ID:	FA78551-6	Date Sampled: 09/03/20
Matrix:	AQ - Ground Water	Date Received: 09/09/20
Method:	SW846 8260B BY SIM	Percent Solids: n/a
Project:	Fort Ord Groundwater Monitoring	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	O61282.D	1	09/12/20 13:57	SP	n/a	n/a	VO2358
Run #2	Z62366.D	1	09/15/20 17:55	JG	n/a	n/a	VZ2419

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
71-43-2	Benzene	0.25 U	0.50	0.25	0.10	ug/l	
56-23-5	Carbon Tetrachloride	0.20	0.50	0.25	0.10	ug/l	J
67-66-3	Chloroform	0.53	0.50	0.25	0.10	ug/l	
75-34-3	1,1-Dichloroethane	0.33	0.50	0.25	0.10	ug/l	J
107-06-2	1,2-Dichloroethane	0.25 U	0.50	0.25	0.10	ug/l	
156-59-2	cis-1,2-Dichloroethylene	0.68	0.50	0.25	0.10	ug/l	
78-87-5	1,2-Dichloropropane	0.25 U	0.50	0.25	0.10	ug/l	
75-09-2	Methylene Chloride	0.50 U ^a	2.0	0.50	0.50	ug/l	
127-18-4	Tetrachloroethylene	2.0	0.50	0.25	0.10	ug/l	
79-01-6	Trichloroethylene	4.6	0.50	0.25	0.10	ug/l	
75-01-4	Vinyl Chloride	0.050 U	0.10	0.050	0.050	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	107%	124% ^b	74-125%
2037-26-5	Toluene-D8	94%	96%	88-111%

(a) Result is from Run# 2

(b) Outside DOD QSM control limits.

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
 LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

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Client Sample ID:	2036YOU2430F	Date Sampled:	09/03/20
Lab Sample ID:	FA78551-7	Date Received:	09/09/20
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B BY SIM		
Project:	Fort Ord Groundwater Monitoring		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	O61283.D	1	09/12/20 14:17	SP	n/a	n/a	VO2358
Run #2	Z62367.D	1	09/15/20 18:14	JG	n/a	n/a	VZ2419

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
71-43-2	Benzene	0.25 U	0.50	0.25	0.10	ug/l	
56-23-5	Carbon Tetrachloride	0.25 U	0.50	0.25	0.10	ug/l	
67-66-3	Chloroform	0.49	0.50	0.25	0.10	ug/l	J
75-34-3	1,1-Dichloroethane	0.43	0.50	0.25	0.10	ug/l	J
107-06-2	1,2-Dichloroethane	0.25 U	0.50	0.25	0.10	ug/l	
156-59-2	cis-1,2-Dichloroethylene	0.32	0.50	0.25	0.10	ug/l	J
78-87-5	1,2-Dichloropropane	0.25 U	0.50	0.25	0.10	ug/l	
75-09-2	Methylene Chloride	0.50 U ^a	2.0	0.50	0.50	ug/l	
127-18-4	Tetrachloroethylene	0.30	0.50	0.25	0.10	ug/l	J
79-01-6	Trichloroethylene	1.1	0.50	0.25	0.10	ug/l	
75-01-4	Vinyl Chloride	0.050 U	0.10	0.050	0.050	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	107%	125% ^b	74-125%
2037-26-5	Toluene-D8	95%	95%	88-111%

(a) Result is from Run# 2

(b) Outside DOD QSM control limits.

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
 LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

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Client Sample ID:	2036YOU2431F	Date Sampled:	09/03/20
Lab Sample ID:	FA78551-8	Date Received:	09/09/20
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B BY SIM		
Project:	Fort Ord Groundwater Monitoring		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	O61284.D	1	09/12/20 14:37	SP	n/a	n/a	VO2358
Run #2	Z62368.D	1	09/15/20 18:33	JG	n/a	n/a	VZ2419

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
71-43-2	Benzene	0.25 U	0.50	0.25	0.10	ug/l	
56-23-5	Carbon Tetrachloride	0.25 U	0.50	0.25	0.10	ug/l	
67-66-3	Chloroform	0.55	0.50	0.25	0.10	ug/l	
75-34-3	1,1-Dichloroethane	5.5	0.50	0.25	0.10	ug/l	
107-06-2	1,2-Dichloroethane	1.3	0.50	0.25	0.10	ug/l	
156-59-2	cis-1,2-Dichloroethylene	2.7	0.50	0.25	0.10	ug/l	
78-87-5	1,2-Dichloropropane	0.25 U	0.50	0.25	0.10	ug/l	
75-09-2	Methylene Chloride	0.50 U ^a	2.0	0.50	0.50	ug/l	
127-18-4	Tetrachloroethylene	1.5	0.50	0.25	0.10	ug/l	
79-01-6	Trichloroethylene	1.2	0.50	0.25	0.10	ug/l	
75-01-4	Vinyl Chloride	0.22	0.10	0.050	0.050	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	110%	124% ^b	74-125%
2037-26-5	Toluene-D8	95%	96%	88-111%

(a) Result is from Run# 2

(b) Outside DOD QSM control limits.

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
 LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

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Client Sample ID:	2036YOU2432F	Date Sampled:	09/03/20
Lab Sample ID:	FA78551-9	Date Received:	09/09/20
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B BY SIM		
Project:	Fort Ord Groundwater Monitoring		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	O61285.D	1	09/12/20 14:57	SP	n/a	n/a	VO2358
Run #2	Z62372.D	1	09/15/20 19:31	JG	n/a	n/a	VZ2419

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
71-43-2	Benzene	0.25 U	0.50	0.25	0.10	ug/l	
56-23-5	Carbon Tetrachloride	0.25 U	0.50	0.25	0.10	ug/l	
67-66-3	Chloroform	0.75	0.50	0.25	0.10	ug/l	
75-34-3	1,1-Dichloroethane	0.25 U	0.50	0.25	0.10	ug/l	
107-06-2	1,2-Dichloroethane	0.25 U	0.50	0.25	0.10	ug/l	
156-59-2	cis-1,2-Dichloroethylene	2.6	0.50	0.25	0.10	ug/l	
78-87-5	1,2-Dichloropropane	0.25 U	0.50	0.25	0.10	ug/l	
75-09-2	Methylene Chloride	0.50 U ^a	2.0	0.50	0.50	ug/l	
127-18-4	Tetrachloroethylene	0.37	0.50	0.25	0.10	ug/l	J
79-01-6	Trichloroethylene	13.3	0.50	0.25	0.10	ug/l	
75-01-4	Vinyl Chloride	0.050 U	0.10	0.050	0.050	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	110%	123% ^b	74-125%
2037-26-5	Toluene-D8	93%	97%	88-111%

(a) Result is from Run# 2

(b) Outside DOD QSM control limits.

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
 LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

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Client Sample ID:	2036YOU2433D	Date Sampled:	09/03/20
Lab Sample ID:	FA78551-10	Date Received:	09/09/20
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B BY SIM		
Project:	Fort Ord Groundwater Monitoring		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	O61286.D	1	09/12/20 15:18	SP	n/a	n/a	VO2358
Run #2	Z62373.D	1	09/15/20 19:51	JG	n/a	n/a	VZ2419

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
71-43-2	Benzene	0.25 U	0.50	0.25	0.10	ug/l	
56-23-5	Carbon Tetrachloride	0.25 U	0.50	0.25	0.10	ug/l	
67-66-3	Chloroform	0.72	0.50	0.25	0.10	ug/l	
75-34-3	1,1-Dichloroethane	0.25 U	0.50	0.25	0.10	ug/l	
107-06-2	1,2-Dichloroethane	0.25 U	0.50	0.25	0.10	ug/l	
156-59-2	cis-1,2-Dichloroethylene	2.5	0.50	0.25	0.10	ug/l	
78-87-5	1,2-Dichloropropane	0.25 U	0.50	0.25	0.10	ug/l	
75-09-2	Methylene Chloride	0.50 U ^a	2.0	0.50	0.50	ug/l	
127-18-4	Tetrachloroethylene	0.38	0.50	0.25	0.10	ug/l	J
79-01-6	Trichloroethylene	13.1	0.50	0.25	0.10	ug/l	
75-01-4	Vinyl Chloride	0.050 U	0.10	0.050	0.050	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	109%	124% ^b	74-125%
2037-26-5	Toluene-D8	93%	97%	88-111%

(a) Result is from Run# 2

(b) Outside DOD QSM control limits.

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
 LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

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Client Sample ID:	2036YOU2434F	Date Sampled:	09/03/20
Lab Sample ID:	FA78551-11	Date Received:	09/09/20
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B BY SIM		
Project:	Fort Ord Groundwater Monitoring		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	O61287.D	1	09/12/20 15:38	SP	n/a	n/a	VO2358
Run #2	Z62374.D	1	09/15/20 20:10	JG	n/a	n/a	VZ2419

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
71-43-2	Benzene	0.25 U	0.50	0.25	0.10	ug/l	
56-23-5	Carbon Tetrachloride	0.25 U	0.50	0.25	0.10	ug/l	
67-66-3	Chloroform	0.25 U	0.50	0.25	0.10	ug/l	
75-34-3	1,1-Dichloroethane	0.25 U	0.50	0.25	0.10	ug/l	
107-06-2	1,2-Dichloroethane	0.25 U	0.50	0.25	0.10	ug/l	
156-59-2	cis-1,2-Dichloroethylene	0.25 U	0.50	0.25	0.10	ug/l	
78-87-5	1,2-Dichloropropane	0.25 U	0.50	0.25	0.10	ug/l	
75-09-2	Methylene Chloride	0.50 U ^a	2.0	0.50	0.50	ug/l	
127-18-4	Tetrachloroethylene	0.25 U	0.50	0.25	0.10	ug/l	
79-01-6	Trichloroethylene	0.47	0.50	0.25	0.10	ug/l	J
75-01-4	Vinyl Chloride	0.050 U	0.10	0.050	0.050	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	109%	125% ^b	74-125%
2037-26-5	Toluene-D8	93%	96%	88-111%

(a) Result is from Run# 2

(b) Outside DOD QSM control limits.

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
 LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	2036YOU2435F	Date Sampled:	09/03/20
Lab Sample ID:	FA78551-12	Date Received:	09/09/20
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B BY SIM		
Project:	Fort Ord Groundwater Monitoring		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	O61298.D	1	09/12/20 19:43	SP	n/a	n/a	VO2359
Run #2	Z62375.D	1	09/15/20 20:29	JG	n/a	n/a	VZ2419

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
71-43-2	Benzene	0.25 U	0.50	0.25	0.10	ug/l	
56-23-5	Carbon Tetrachloride	0.25 U	0.50	0.25	0.10	ug/l	
67-66-3	Chloroform	5.2	0.50	0.25	0.10	ug/l	
75-34-3	1,1-Dichloroethane	10.0	0.50	0.25	0.10	ug/l	
107-06-2	1,2-Dichloroethane	0.25 U	0.50	0.25	0.10	ug/l	
156-59-2	cis-1,2-Dichloroethylene	0.35	0.50	0.25	0.10	ug/l	J
78-87-5	1,2-Dichloropropane	0.82	0.50	0.25	0.10	ug/l	
75-09-2	Methylene Chloride	0.50 U ^a	2.0	0.50	0.50	ug/l	
127-18-4	Tetrachloroethylene	7.4	0.50	0.25	0.10	ug/l	
79-01-6	Trichloroethylene	5.5	0.50	0.25	0.10	ug/l	
75-01-4	Vinyl Chloride	0.050 U	0.10	0.050	0.050	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	105%	126% ^b	74-125%
2037-26-5	Toluene-D8	96%	95%	88-111%

(a) Result is from Run# 2

(b) Outside DOD QSM control limits.

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
 LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

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Client Sample ID:	2036YOU2436F	Date Sampled:	09/03/20
Lab Sample ID:	FA78551-13	Date Received:	09/09/20
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B BY SIM		
Project:	Fort Ord Groundwater Monitoring		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	O61299.D	1	09/12/20 20:04	SP	n/a	n/a	VO2359
Run #2	Z62376.D	1	09/15/20 20:49	JG	n/a	n/a	VZ2419

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
71-43-2	Benzene	0.25 U	0.50	0.25	0.10	ug/l	
56-23-5	Carbon Tetrachloride	0.25 U	0.50	0.25	0.10	ug/l	
67-66-3	Chloroform	0.25 U	0.50	0.25	0.10	ug/l	
75-34-3	1,1-Dichloroethane	0.25 U	0.50	0.25	0.10	ug/l	
107-06-2	1,2-Dichloroethane	0.25 U	0.50	0.25	0.10	ug/l	
156-59-2	cis-1,2-Dichloroethylene	0.25 U	0.50	0.25	0.10	ug/l	
78-87-5	1,2-Dichloropropane	0.25 U	0.50	0.25	0.10	ug/l	
75-09-2	Methylene Chloride	0.50 U ^a	2.0	0.50	0.50	ug/l	
127-18-4	Tetrachloroethylene	0.25 U	0.50	0.25	0.10	ug/l	
79-01-6	Trichloroethylene	1.5	0.50	0.25	0.10	ug/l	
75-01-4	Vinyl Chloride	0.050 U	0.10	0.050	0.050	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	106%	126% ^b	74-125%
2037-26-5	Toluene-D8	96%	95%	88-111%

(a) Result is from Run# 2

(b) Outside DOD QSM control limits.

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
 LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

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Client Sample ID:	2036YOU2437F	Date Sampled:	09/03/20
Lab Sample ID:	FA78551-14	Date Received:	09/09/20
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B BY SIM		
Project:	Fort Ord Groundwater Monitoring		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	O61300.D	1	09/12/20 20:24	SP	n/a	n/a	VO2359
Run #2	Z62377.D	1	09/15/20 21:08	JG	n/a	n/a	VZ2419

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
71-43-2	Benzene	0.25 U	0.50	0.25	0.10	ug/l	
56-23-5	Carbon Tetrachloride	0.25 U	0.50	0.25	0.10	ug/l	
67-66-3	Chloroform	0.55	0.50	0.25	0.10	ug/l	
75-34-3	1,1-Dichloroethane	5.5	0.50	0.25	0.10	ug/l	
107-06-2	1,2-Dichloroethane	0.21	0.50	0.25	0.10	ug/l	J
156-59-2	cis-1,2-Dichloroethylene	1.5	0.50	0.25	0.10	ug/l	
78-87-5	1,2-Dichloropropane	0.25 U	0.50	0.25	0.10	ug/l	
75-09-2	Methylene Chloride	0.50 U ^a	2.0	0.50	0.50	ug/l	
127-18-4	Tetrachloroethylene	1.3	0.50	0.25	0.10	ug/l	
79-01-6	Trichloroethylene	1.2	0.50	0.25	0.10	ug/l	
75-01-4	Vinyl Chloride	0.050 U	0.10	0.050	0.050	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	106%	127% ^b	74-125%
2037-26-5	Toluene-D8	94%	95%	88-111%

(a) Result is from Run# 2

(b) Outside DOD QSM control limits.

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
 LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

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Client Sample ID: 2036YOU2438F	
Lab Sample ID: FA78551-15	Date Sampled: 09/03/20
Matrix: AQ - Ground Water	Date Received: 09/09/20
Method: SW846 8260B BY SIM	Percent Solids: n/a
Project: Fort Ord Groundwater Monitoring	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	O61301.D	1	09/12/20 20:44	SP	n/a	n/a	VO2359
Run #2	Z62334.D	2	09/14/20 17:38	JG	n/a	n/a	VZ2418

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
71-43-2	Benzene	0.25 U	0.50	0.25	0.10	ug/l	
56-23-5	Carbon Tetrachloride	0.25 U	0.50	0.25	0.10	ug/l	
67-66-3	Chloroform	3.1	0.50	0.25	0.10	ug/l	
75-34-3	1,1-Dichloroethane	21.6 ^a	1.0	0.50	0.20	ug/l	
107-06-2	1,2-Dichloroethane	1.4	0.50	0.25	0.10	ug/l	
156-59-2	cis-1,2-Dichloroethylene	5.7	0.50	0.25	0.10	ug/l	
78-87-5	1,2-Dichloropropane	0.65	0.50	0.25	0.10	ug/l	
75-09-2	Methylene Chloride	1.0	2.0	0.50	0.50	ug/l	J
127-18-4	Tetrachloroethylene	6.6	0.50	0.25	0.10	ug/l	
79-01-6	Trichloroethylene	6.4	0.50	0.25	0.10	ug/l	
75-01-4	Vinyl Chloride	0.31	0.10	0.050	0.050	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	108%	116%	74-125%
2037-26-5	Toluene-D8	94%	98%	88-111%

(a) Result is from Run# 2

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
 LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

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Client Sample ID:	2036YOU2439D	Date Sampled:	09/03/20
Lab Sample ID:	FA78551-16	Date Received:	09/09/20
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B BY SIM		
Project:	Fort Ord Groundwater Monitoring		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	O61302.D	1	09/12/20 21:04	SP	n/a	n/a	VO2359
Run #2	Z62342.D	2	09/14/20 20:12	JG	n/a	n/a	VZ2418

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
71-43-2	Benzene	0.25 U	0.50	0.25	0.10	ug/l	
56-23-5	Carbon Tetrachloride	0.25 U	0.50	0.25	0.10	ug/l	
67-66-3	Chloroform	3.1	0.50	0.25	0.10	ug/l	
75-34-3	1,1-Dichloroethane	20.7 ^a	1.0	0.50	0.20	ug/l	
107-06-2	1,2-Dichloroethane	1.5	0.50	0.25	0.10	ug/l	
156-59-2	cis-1,2-Dichloroethylene	5.7	0.50	0.25	0.10	ug/l	
78-87-5	1,2-Dichloropropane	0.66	0.50	0.25	0.10	ug/l	
75-09-2	Methylene Chloride	1.0	2.0	0.50	0.50	ug/l	J
127-18-4	Tetrachloroethylene	7.1	0.50	0.25	0.10	ug/l	
79-01-6	Trichloroethylene	6.5	0.50	0.25	0.10	ug/l	
75-01-4	Vinyl Chloride	0.31	0.10	0.050	0.050	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	109%	118%	74-125%
2037-26-5	Toluene-D8	94%	98%	88-111%

(a) Result is from Run# 2

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
 LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

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Client Sample ID:	2036YOU2440F	Date Sampled:	09/03/20
Lab Sample ID:	FA78551-17	Date Received:	09/09/20
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B BY SIM		
Project:	Fort Ord Groundwater Monitoring		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	O61303.D	1	09/12/20 21:25	SP	n/a	n/a	VO2359
Run #2	Z62379.D	1	09/15/20 21:47	JG	n/a	n/a	VZ2419

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
71-43-2	Benzene	0.25 U	0.50	0.25	0.10	ug/l	
56-23-5	Carbon Tetrachloride	0.25 U	0.50	0.25	0.10	ug/l	
67-66-3	Chloroform	1.1	0.50	0.25	0.10	ug/l	
75-34-3	1,1-Dichloroethane	2.1	0.50	0.25	0.10	ug/l	
107-06-2	1,2-Dichloroethane	0.47	0.50	0.25	0.10	ug/l	J
156-59-2	cis-1,2-Dichloroethylene	0.62	0.50	0.25	0.10	ug/l	
78-87-5	1,2-Dichloropropane	0.25 U	0.50	0.25	0.10	ug/l	
75-09-2	Methylene Chloride	0.50 U ^a	2.0	0.50	0.50	ug/l	
127-18-4	Tetrachloroethylene	9.7	0.50	0.25	0.10	ug/l	
79-01-6	Trichloroethylene	12.1	0.50	0.25	0.10	ug/l	
75-01-4	Vinyl Chloride	0.050 U	0.10	0.050	0.050	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	109%	128% ^b	74-125%
2037-26-5	Toluene-D8	93%	95%	88-111%

(a) Result is from Run# 2

(b) Outside DOD QSM control limits.

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
 LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

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Client Sample ID:	2036YOU2441F	Date Sampled:	09/03/20
Lab Sample ID:	FA78551-18	Date Received:	09/09/20
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B BY SIM		
Project:	Fort Ord Groundwater Monitoring		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	O61304.D	1	09/12/20 21:45	SP	n/a	n/a	VO2359
Run #2 ^a	O61406.D	1	09/16/20 13:29	AG	n/a	n/a	VO2363

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
71-43-2	Benzene	0.25 U	0.50	0.25	0.10	ug/l	
56-23-5	Carbon Tetrachloride	0.25 U	0.50	0.25	0.10	ug/l	
67-66-3	Chloroform	0.20	0.50	0.25	0.10	ug/l	J
75-34-3	1,1-Dichloroethane	0.25 U	0.50	0.25	0.10	ug/l	
107-06-2	1,2-Dichloroethane	0.25 U	0.50	0.25	0.10	ug/l	
156-59-2	cis-1,2-Dichloroethylene	0.25 U	0.50	0.25	0.10	ug/l	
78-87-5	1,2-Dichloropropane	0.25 U	0.50	0.25	0.10	ug/l	
75-09-2	Methylene Chloride	0.50 U	2.0	0.50	0.50	ug/l	
127-18-4	Tetrachloroethylene	0.25 U	0.50	0.25	0.10	ug/l	
79-01-6	Trichloroethylene	3.7	0.50	0.25	0.10	ug/l	
75-01-4	Vinyl Chloride	0.050 U	0.10	0.050	0.050	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	108%	109%	74-125%
2037-26-5	Toluene-D8	94%	101%	88-111%

(a) Confirmation run.

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
 LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

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Client Sample ID:	2036YOU2442D	Date Sampled:	09/03/20
Lab Sample ID:	FA78551-19	Date Received:	09/09/20
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B BY SIM		
Project:	Fort Ord Groundwater Monitoring		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	O61305.D	1	09/12/20 22:05	SP	n/a	n/a	VO2359
Run #2	Z62380.D	1	09/15/20 22:06	JG	n/a	n/a	VZ2419

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
71-43-2	Benzene	0.25 U	0.50	0.25	0.10	ug/l	
56-23-5	Carbon Tetrachloride	0.25 U	0.50	0.25	0.10	ug/l	
67-66-3	Chloroform	0.20	0.50	0.25	0.10	ug/l	J
75-34-3	1,1-Dichloroethane	0.25 U	0.50	0.25	0.10	ug/l	
107-06-2	1,2-Dichloroethane	0.25 U	0.50	0.25	0.10	ug/l	
156-59-2	cis-1,2-Dichloroethylene	0.25 U	0.50	0.25	0.10	ug/l	
78-87-5	1,2-Dichloropropane	0.25 U	0.50	0.25	0.10	ug/l	
75-09-2	Methylene Chloride	0.50 U ^a	2.0	0.50	0.50	ug/l	
127-18-4	Tetrachloroethylene	0.25 U	0.50	0.25	0.10	ug/l	
79-01-6	Trichloroethylene	3.6	0.50	0.25	0.10	ug/l	
75-01-4	Vinyl Chloride	0.050 U	0.10	0.050	0.050	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	109%	128% ^b	74-125%
2037-26-5	Toluene-D8	94%	95%	88-111%

(a) Result is from Run# 2

(b) Outside DOD QSM control limits.

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
 LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

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Client Sample ID:	2036YOU2443F	Date Sampled:	09/03/20
Lab Sample ID:	FA78551-20	Date Received:	09/09/20
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B BY SIM		
Project:	Fort Ord Groundwater Monitoring		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	O61306.D	1	09/12/20 22:25	SP	n/a	n/a	VO2359
Run #2	Z62381.D	1	09/15/20 22:25	JG	n/a	n/a	VZ2419

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
71-43-2	Benzene	0.25 U	0.50	0.25	0.10	ug/l	
56-23-5	Carbon Tetrachloride	0.25 U	0.50	0.25	0.10	ug/l	
67-66-3	Chloroform	0.25 U	0.50	0.25	0.10	ug/l	
75-34-3	1,1-Dichloroethane	0.25 U	0.50	0.25	0.10	ug/l	
107-06-2	1,2-Dichloroethane	0.25 U	0.50	0.25	0.10	ug/l	
156-59-2	cis-1,2-Dichloroethylene	0.25 U	0.50	0.25	0.10	ug/l	
78-87-5	1,2-Dichloropropane	0.25 U	0.50	0.25	0.10	ug/l	
75-09-2	Methylene Chloride	0.50 U ^a	2.0	0.50	0.50	ug/l	
127-18-4	Tetrachloroethylene	0.25 U	0.50	0.25	0.10	ug/l	
79-01-6	Trichloroethylene	0.25 U	0.50	0.25	0.10	ug/l	
75-01-4	Vinyl Chloride	0.050 U	0.10	0.050	0.050	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	109%	128% ^b	74-125%
2037-26-5	Toluene-D8	97%	94%	88-111%

(a) Result is from Run# 2

(b) Outside DOD QSM control limits.

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
 LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

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Client Sample ID:	2036YOU2444F	Date Sampled:	09/03/20
Lab Sample ID:	FA78551-21	Date Received:	09/09/20
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B BY SIM		
Project:	Fort Ord Groundwater Monitoring		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	O61307.D	1	09/12/20 22:46	SP	n/a	n/a	VO2359
Run #2	Z62382.D	1	09/15/20 22:45	JG	n/a	n/a	VZ2419

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
71-43-2	Benzene	0.25 U	0.50	0.25	0.10	ug/l	
56-23-5	Carbon Tetrachloride	0.25 U	0.50	0.25	0.10	ug/l	
67-66-3	Chloroform	0.25 U	0.50	0.25	0.10	ug/l	
75-34-3	1,1-Dichloroethane	0.25 U	0.50	0.25	0.10	ug/l	
107-06-2	1,2-Dichloroethane	0.25 U	0.50	0.25	0.10	ug/l	
156-59-2	cis-1,2-Dichloroethylene	0.25 U	0.50	0.25	0.10	ug/l	
78-87-5	1,2-Dichloropropane	0.25 U	0.50	0.25	0.10	ug/l	
75-09-2	Methylene Chloride	0.50 U ^a	2.0	0.50	0.50	ug/l	
127-18-4	Tetrachloroethylene	0.28	0.50	0.25	0.10	ug/l	J
79-01-6	Trichloroethylene	0.56	0.50	0.25	0.10	ug/l	
75-01-4	Vinyl Chloride	0.050 U	0.10	0.050	0.050	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	110%	127% ^b	74-125%
2037-26-5	Toluene-D8	93%	94%	88-111%

(a) Result is from Run# 2

(b) Outside DOD QSM control limits.

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
 LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Page 1 of 1

Client Sample ID:	2036YOU2445F	Date Sampled:	09/03/20
Lab Sample ID:	FA78551-22	Date Received:	09/09/20
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B BY SIM		
Project:	Fort Ord Groundwater Monitoring		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	O61308.D	1	09/12/20 23:06	SP	n/a	n/a	VO2359
Run #2	Z62383.D	1	09/15/20 23:04	JG	n/a	n/a	VZ2419

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
71-43-2	Benzene	0.25 U	0.50	0.25	0.10	ug/l	
56-23-5	Carbon Tetrachloride	0.25 U	0.50	0.25	0.10	ug/l	
67-66-3	Chloroform	0.25 U	0.50	0.25	0.10	ug/l	
75-34-3	1,1-Dichloroethane	0.25 U	0.50	0.25	0.10	ug/l	
107-06-2	1,2-Dichloroethane	0.25 U	0.50	0.25	0.10	ug/l	
156-59-2	cis-1,2-Dichloroethylene	0.63	0.50	0.25	0.10	ug/l	
78-87-5	1,2-Dichloropropane	0.25 U	0.50	0.25	0.10	ug/l	
75-09-2	Methylene Chloride	0.50 U ^a	2.0	0.50	0.50	ug/l	
127-18-4	Tetrachloroethylene	1.0	0.50	0.25	0.10	ug/l	
79-01-6	Trichloroethylene	8.7	0.50	0.25	0.10	ug/l	
75-01-4	Vinyl Chloride	0.050 U	0.10	0.050	0.050	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	111%	128% ^b	74-125%
2037-26-5	Toluene-D8	94%	95%	88-111%

(a) Result is from Run# 2

(b) Outside DOD QSM control limits.

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
 LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Page 1 of 1

Client Sample ID:	2036YOU2446F	Date Sampled:	09/03/20
Lab Sample ID:	FA78551-23	Date Received:	09/09/20
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B BY SIM		
Project:	Fort Ord Groundwater Monitoring		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	O61309.D	1	09/12/20 23:26	SP	n/a	n/a	VO2359
Run #2 ^a	O61407.D	1	09/16/20 13:50	AG	n/a	n/a	VO2363

Purge Volume	
Run #1	5.0 ml
Run #2	5.0 ml

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
71-43-2	Benzene	0.25 U	0.50	0.25	0.10	ug/l	
56-23-5	Carbon Tetrachloride	0.25 U	0.50	0.25	0.10	ug/l	
67-66-3	Chloroform	0.25 U	0.50	0.25	0.10	ug/l	
75-34-3	1,1-Dichloroethane	0.25 U	0.50	0.25	0.10	ug/l	
107-06-2	1,2-Dichloroethane	0.25 U	0.50	0.25	0.10	ug/l	
156-59-2	cis-1,2-Dichloroethylene	1.0	0.50	0.25	0.10	ug/l	
78-87-5	1,2-Dichloropropane	0.25 U	0.50	0.25	0.10	ug/l	
75-09-2	Methylene Chloride	0.50 U	2.0	0.50	0.50	ug/l	
127-18-4	Tetrachloroethylene	1.1	0.50	0.25	0.10	ug/l	
79-01-6	Trichloroethylene	12.2	0.50	0.25	0.10	ug/l	
75-01-4	Vinyl Chloride	0.050 U	0.10	0.050	0.050	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	111%	110%	74-125%
2037-26-5	Toluene-D8	92%	100%	88-111%

(a) Confirmation run.

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
 LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Page 1 of 1

Client Sample ID: 2036X0BW232F	Date Sampled: 09/03/20
Lab Sample ID: FA78551-24	Date Received: 09/09/20
Matrix: AQ - Ground Water	Percent Solids: n/a
Method: SW846 8260B BY SIM	
Project: Fort Ord Groundwater Monitoring	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	O61310.D	1	09/12/20 23:46	SP	n/a	n/a	VO2359
Run #2 ^a	O61408.D	1	09/16/20 14:10	AG	n/a	n/a	VO2363

Purge Volume	
Run #1	5.0 ml
Run #2	5.0 ml

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
71-43-2	Benzene	0.25 U	0.50	0.25	0.10	ug/l	
56-23-5	Carbon Tetrachloride	0.25 U	0.50	0.25	0.10	ug/l	
67-66-3	Chloroform	0.25 U	0.50	0.25	0.10	ug/l	
75-34-3	1,1-Dichloroethane	0.25 U	0.50	0.25	0.10	ug/l	
107-06-2	1,2-Dichloroethane	0.25 U	0.50	0.25	0.10	ug/l	
156-59-2	cis-1,2-Dichloroethylene	0.25 U	0.50	0.25	0.10	ug/l	
78-87-5	1,2-Dichloropropane	0.25 U	0.50	0.25	0.10	ug/l	
75-09-2	Methylene Chloride	0.50 U	2.0	0.50	0.50	ug/l	
127-18-4	Tetrachloroethylene	0.25 U	0.50	0.25	0.10	ug/l	
79-01-6	Trichloroethylene	0.25 U	0.50	0.25	0.10	ug/l	
75-01-4	Vinyl Chloride	0.050 U	0.10	0.050	0.050	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	111%	111%	74-125%
2037-26-5	Toluene-D8	96%	104%	88-111%

(a) Confirmation run.

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
 LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Page 1 of 1

Client Sample ID:	2036X0BW233A	Date Sampled:	09/03/20
Lab Sample ID:	FA78551-25	Date Received:	09/09/20
Matrix:	AQ - Trip Blank Water	Percent Solids:	n/a
Method:	SW846 8260B BY SIM		
Project:	Fort Ord Groundwater Monitoring		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	O61311.D	1	09/13/20 00:11	SP	n/a	n/a	VO2359
Run #2 ^a	O61409.D	1	09/16/20 14:30	AG	n/a	n/a	VO2363

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
71-43-2	Benzene	0.25 U	0.50	0.25	0.10	ug/l	
56-23-5	Carbon Tetrachloride	0.25 U	0.50	0.25	0.10	ug/l	
67-66-3	Chloroform	0.25 U	0.50	0.25	0.10	ug/l	
75-34-3	1,1-Dichloroethane	0.25 U	0.50	0.25	0.10	ug/l	
107-06-2	1,2-Dichloroethane	0.25 U	0.50	0.25	0.10	ug/l	
156-59-2	cis-1,2-Dichloroethylene	0.25 U	0.50	0.25	0.10	ug/l	
78-87-5	1,2-Dichloropropane	0.25 U	0.50	0.25	0.10	ug/l	
75-09-2	Methylene Chloride	0.50 U	2.0	0.50	0.50	ug/l	
127-18-4	Tetrachloroethylene	0.25 U	0.50	0.25	0.10	ug/l	
79-01-6	Trichloroethylene	0.25 U	0.50	0.25	0.10	ug/l	
75-01-4	Vinyl Chloride	0.050 U	0.10	0.050	0.050	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	111%	113%	74-125%
2037-26-5	Toluene-D8	97%	104%	88-111%

(a) Confirmation run.

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
 LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Page 1 of 1

Client Sample ID: 2036X0BW234C	Date Sampled: 09/03/20
Lab Sample ID: FA78551-26	Date Received: 09/09/20
Matrix: AQ - Ground Water	Percent Solids: n/a
Method: SW846 8260B BY SIM	
Project: Fort Ord Groundwater Monitoring	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	O61312.D	1	09/13/20 00:31	SP	n/a	n/a	VO2359
Run #2 ^a	O61410.D	1	09/16/20 14:51	AG	n/a	n/a	VO2363

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
71-43-2	Benzene	0.25 U	0.50	0.25	0.10	ug/l	
56-23-5	Carbon Tetrachloride	0.25 U	0.50	0.25	0.10	ug/l	
67-66-3	Chloroform	0.25 U	0.50	0.25	0.10	ug/l	
75-34-3	1,1-Dichloroethane	0.25 U	0.50	0.25	0.10	ug/l	
107-06-2	1,2-Dichloroethane	0.25 U	0.50	0.25	0.10	ug/l	
156-59-2	cis-1,2-Dichloroethylene	0.25 U	0.50	0.25	0.10	ug/l	
78-87-5	1,2-Dichloropropane	0.25 U	0.50	0.25	0.10	ug/l	
75-09-2	Methylene Chloride	0.50 U	2.0	0.50	0.50	ug/l	
127-18-4	Tetrachloroethylene	0.25 U	0.50	0.25	0.10	ug/l	
79-01-6	Trichloroethylene	0.25 U	0.50	0.25	0.10	ug/l	
75-01-4	Vinyl Chloride	0.050 U	0.10	0.050	0.050	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	113%	113%	74-125%
2037-26-5	Toluene-D8	79% ^b	81% ^b	88-111%

(a) Confirmation run.

(b) Outside DOD QSM control limits.

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
 LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Page 1 of 1

Client Sample ID: 2036X0BW246F	Date Sampled: 09/03/20
Lab Sample ID: FA78551-27	Date Received: 09/09/20
Matrix: AQ - Ground Water	Percent Solids: n/a
Method: SW846 8260B BY SIM	
Project: Fort Ord Groundwater Monitoring	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	O61313.D	1	09/13/20 00:51	SP	n/a	n/a	VO2359
Run #2 ^a	O61411.D	1	09/16/20 15:11	AG	n/a	n/a	VO2363

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
71-43-2	Benzene	0.25 U	0.50	0.25	0.10	ug/l	
56-23-5	Carbon Tetrachloride	0.25 U	0.50	0.25	0.10	ug/l	
67-66-3	Chloroform	1.4	0.50	0.25	0.10	ug/l	
75-34-3	1,1-Dichloroethane	1.9	0.50	0.25	0.10	ug/l	
107-06-2	1,2-Dichloroethane	0.25 U	0.50	0.25	0.10	ug/l	
156-59-2	cis-1,2-Dichloroethylene	0.25 U	0.50	0.25	0.10	ug/l	
78-87-5	1,2-Dichloropropane	0.25 U	0.50	0.25	0.10	ug/l	
75-09-2	Methylene Chloride	0.50 U	2.0	0.50	0.50	ug/l	
127-18-4	Tetrachloroethylene	2.9	0.50	0.25	0.10	ug/l	
79-01-6	Trichloroethylene	1.1	0.50	0.25	0.10	ug/l	
75-01-4	Vinyl Chloride	0.050 U	0.10	0.050	0.050	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	113%	115%	74-125%
2037-26-5	Toluene-D8	94%	100%	88-111%

(a) Confirmation run.

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
 LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

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Report of Analysis

Client Sample ID: 2036YOU2450F	Date Sampled: 09/04/20
Lab Sample ID: FA78551-28F	Date Received: 09/09/20
Matrix: AQ - Groundwater Filtered	Percent Solids: n/a
Project: Fort Ord Groundwater Monitoring	

Dissolved Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed By	Method	Prep Method
Antimony	5.0 U	6.0	5.0	1.0	ug/l	1	09/15/20	09/15/20 LM	SW846 6010D ¹	SW846 3010A ²
Copper	2.0 U	25	2.0	1.0	ug/l	1	09/15/20	09/15/20 LM	SW846 6010D ¹	SW846 3010A ²
Lead	2.0 U	5.0	2.0	1.1	ug/l	1	09/15/20	09/15/20 LM	SW846 6010D ¹	SW846 3010A ²

(1) Instrument QC Batch: MA17052

(2) Prep QC Batch: MP37810

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

Report of Analysis

Client Sample ID: 2036YOU2451F	Date Sampled: 09/04/20
Lab Sample ID: FA78551-29F	Date Received: 09/09/20
Matrix: AQ - Groundwater Filtered	Percent Solids: n/a
Project: Fort Ord Groundwater Monitoring	

Dissolved Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed By	Method	Prep Method
Antimony	5.0 U	6.0	5.0	1.0	ug/l	1	09/15/20	09/15/20 LM	SW846 6010D ¹	SW846 3010A ²
Copper	2.0 U	25	2.0	1.0	ug/l	1	09/15/20	09/15/20 LM	SW846 6010D ¹	SW846 3010A ²
Lead	2.0 U	5.0	2.0	1.1	ug/l	1	09/15/20	09/15/20 LM	SW846 6010D ¹	SW846 3010A ²

(1) Instrument QC Batch: MA17052

(2) Prep QC Batch: MP37810

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

Report of Analysis

Client Sample ID: 2036YOU2452F	Date Sampled: 09/04/20
Lab Sample ID: FA78551-30F	Date Received: 09/09/20
Matrix: AQ - Groundwater Filtered	Percent Solids: n/a
Project: Fort Ord Groundwater Monitoring	

Dissolved Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed By	Method	Prep Method
Antimony	5.0 U	6.0	5.0	1.0	ug/l	1	09/15/20	09/15/20 LM	SW846 6010D ¹	SW846 3010A ²
Copper	2.0 U	25	2.0	1.0	ug/l	1	09/15/20	09/15/20 LM	SW846 6010D ¹	SW846 3010A ²
Lead	2.0 U	5.0	2.0	1.1	ug/l	1	09/15/20	09/15/20 LM	SW846 6010D ¹	SW846 3010A ²

(1) Instrument QC Batch: MA17052

(2) Prep QC Batch: MP37810

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

Report of Analysis

Client Sample ID: 2036YOU2453F	Date Sampled: 09/04/20
Lab Sample ID: FA78551-31F	Date Received: 09/09/20
Matrix: AQ - Groundwater Filtered	Percent Solids: n/a
Project: Fort Ord Groundwater Monitoring	

Dissolved Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed By	Method	Prep Method
Antimony	5.0 U	6.0	5.0	1.0	ug/l	1	09/15/20	09/15/20 LM	SW846 6010D ¹	SW846 3010A ²
Copper	2.0 U	25	2.0	1.0	ug/l	1	09/15/20	09/15/20 LM	SW846 6010D ¹	SW846 3010A ²
Lead	2.0 U	5.0	2.0	1.1	ug/l	1	09/15/20	09/15/20 LM	SW846 6010D ¹	SW846 3010A ²

(1) Instrument QC Batch: MA17052

(2) Prep QC Batch: MP37810

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

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody
- QC Evaluation: DOD QSM5.x Limits

CADS2037
Ahtna

CHAIN OF CUSTODY

WATER / SOIL

FA78551

Chain of Custody #: 0147

2024

Carbon Copies: White - Laboratory Yellow - Ahtna

Project Information:		Analysis Requested		Lab Sample Receipt	
Project Location: Former Fort Ord, CA	Sampler/s: F. Stuart L. Boryer				Laboratory Sample Delivery
Project Name: Boxwide GWMP	Report To: Derek Lieberman				Group #: _____
Project Number: 21065.000.01.0000	E-Mail: dlieberman@ahтна.net				Custody Seal: _____
Sampling Event/Site: FFO GWMP 302020	Laboratory: SGS				Temp (°C): _____

Lab Number	Sample Number/Description	Sample Collection		Matrix			Number of Preserved Bottles											VOCs 8260 - SIM	Metals 6010 C	Chloride 9056A	Notes				
		Date	Time	Water	Soil	Other	Total # of Bottles	HCl	HNO ₃	H ₂ SO ₄	NaOH	MeOH	NaHSO ₄	None	Other										
16	2036YOU2439 D	9/3/20	1114	X			3	X										X							
17	2036YOU2440 F	9/3/20	1125	X			3	X										X							710
18	2036YOU2441 F	9/3/20	1134	X			3	X										X							710
19	2036YOU2442 D	9/3/20	1139	X			2	X										X							
20	2036YOU2443 F	9/3/20	1418	X			3	X										X							
21	2036YOU2444 F	9/3/20	1430	X			3	X										X							
22	2036YOU2445 F	9/3/20	1445	X			3	X										X							710
23	2036YOU2446 F	9/3/20	1457	X			3	X										X							710

Turnaround Time: _____ : Standard _____ : 3-5 Day Rush _____ : 48 Hour Rush _____ : 24 Hour Rush _____

Comments: _____

OUL2 AQUIFER

Chain of Custody Tracking:			
Relinquished By: <i>[Signature]</i>	Date/Time: 9/3/20 1160	Received By: <i>[Signature]</i>	Date/Time: 9/3/20 1605
Relinquished By: <i>[Signature]</i>	Date/Time: 9/4/20 1155	Received By: <i>[Signature]</i>	Date/Time: 9/4/20 1155
Relinquished By: Lee Banta	Date/Time: 9/8/20 1500	Received By Laboratory: FEDEX	Date/Time: 9/8/20 1500

[Signature] 09/09/20



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CADS2037
Ahtna

CHAIN OF CUSTODY

WATER / SOIL

FA78551

3024

Chain of Custody #: 0137

Carbon Copies: White - Laboratory Yellow - Ahtna

Project Information:										Analysis Requested			Lab Sample Receipt				
Project Location: <u>Former Fort Ord, CA</u>					Sampler/s: <u>R. Miskovitch, C. Capria</u>					VOCs 8260 - SIM	Metals 6010 C	Chloride 9056A	Laboratory Sample Delivery				
Project Name: <u>FFO Basewide GWM</u>					Report To: <u>Derek Lieberman</u>								Group #: _____				
Project Number: <u>21065.000.01.0000</u>					E-Mail: <u>dlieberman@ahna.net</u>								Custody Seal: _____				
Sampling Event/Site: <u>302020</u>					Laboratory: <u>SGS</u>								Temp (°C): _____				
Lab Number	Sample Collection		Matrix			Number of Preserved Bottles								Notes			
	Date	Time	Water	Soil	Other	Total # of Bottles	HCl	HNO ₃	H ₂ SO ₄	NaOH	MeOH	NanHSO ⁺	None		Other		
24	2036X08W232F	9-3-20	0812	X	M-3	3	3								X		
25	2036X08W233A	9-3-20	0800	X	M-2	2	2								X		
26	2036X08W234C	9-3-20	0820	X	M-3	3	3								X		
27	2036X08W246F	9-3-20	1413	X		3	3								X		

Turnaround Time: Standard 3-5 Day Rush 48 Hour Rush 24 Hour Rush

Comments: _____

OU 2

Chain of Custody Tracking:

Relinquished By Sampler: <u>R. Miskovitch</u>	Date/Time: <u>9-3-20 11:45</u>	Received By: <u>[Signature]</u>	Date/Time: <u>9/3/20 11:50</u>
Relinquished By: <u>[Signature]</u>	Date/Time: <u>9/4/20 11:55</u>	Received By: <u>Lee Bantz</u>	Date/Time: <u>9/4/20 11:55</u>
Relinquished By: <u>Lee Bantz</u>	Date/Time: <u>9/8/20 15:00</u>	Received By Laboratory: <u>ADDER</u>	Date/Time: <u>9/8/20 15:00</u>

[Signature] 09/09/20 10:15

FA78551: Chain of Custody

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5.1
5



CADS 2037
Ahtna

FA78551

4024

CHAIN OF CUSTODY

WATER / SOIL

Chain of Custody #: 0150

Carbon Copies: White - Laboratory Yellow - Ahtna

Project Information:		Analysis Requested				Lab Sample Receipt	
Project Location: Former Fort Ord, CA		Sampler/s: Thomas Stuart, Lindsay Barger				Laboratory Sample Delivery	
Project Name: Basewide GWM Program		Report To: Derek Lieberman				Group #: _____	
Project Number: 21065.000.01.0000		E-Mail: dlieberman@ahna.net				Custody Seal: _____	
Sampling Event/Site: FFO GWM 3Q2020		Laboratory: SGS				Temp (°C): _____	

Lab Number	Sample Number/Description	Sample Collection		Matrix			Number of Preserved Bottles											VOCs 8260 - SIM	Metals 6010 C	Chloride 9056A	Notes	
		Date	Time	Water	Soil	Other	Total # of Bottles	HCl	HNO ₃	H ₂ SO ₄	NaOH	MeOH	NaHSO ₄	None	Other							
28	20364OU2450F	9/4/20	0755	X			1		X										X			
29	20364OU2451F	9/4/20	0815	X			1		X										X			
30	20364OU2452F	9/4/20	0830	X			1		X										X			
31	20364OU2453F	9/4/20	0840	X			1		X										X			

Turnaround Time: _____ : Standard _____ : 3-5 Day Rush _____ : 48 Hour Rush _____ : 24 Hour Rush _____

Comments: _____

OU2 Aquifer

Chain of Custody Tracking:

Relinquished By Sampler:	Date/Time: 9/4/2020 0925	Received By:	Date/Time: 9/4/20 0925
Relinquished By: [Signature]	Date/Time: 9/4/20 1155	Received By: Lee Baur	Date/Time: 9/4/20 1155
Relinquished By: Lee Baur	Date/Time: 9/8/20 1500	Received By Laboratory: FEDEX	Date/Time: 9/8/20 1500

09/09/20 10:15

FA78551: Chain of Custody

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SGS Sample Receipt Summary

Job Number: FA78551

Client: AHTNA

Project: Former Fort Ord, CA - OU2 Aquifer

Date / Time Received: 9/9/2020 10:15:00 AM

Delivery Method: FedEx

Airbill #: 771472457105

Therm ID: IR 1;	Therm CF: -0.2;	# of Coolers: 1
Cooler Temps (Raw Measured) °C: Cooler 1: (3.4);		
Cooler Temps (Corrected) °C: Cooler 1: (3.2);		

<u>Cooler Information</u>	<u>Y</u>	<u>or</u>	<u>N</u>
1. Custody Seals Present	<input checked="" type="checkbox"/>		<input type="checkbox"/>
2. Custody Seals Intact	<input checked="" type="checkbox"/>		<input type="checkbox"/>
3. Temp criteria achieved	<input checked="" type="checkbox"/>		<input type="checkbox"/>
4. Cooler temp verification	IR Gun		
5. Cooler media	Ice (Bag)		

<u>Trip Blank Information</u>	<u>Y</u>	<u>or</u>	<u>N</u>	<u>N/A</u>
1. Trip Blank present / cooler	<input checked="" type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
2. Trip Blank listed on COC	<input checked="" type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>

<u>W</u>	<u>or</u>	<u>S</u>	<u>N/A</u>
3. Type Of TB Received	<input checked="" type="checkbox"/>		<input type="checkbox"/>

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

<u>Misc. Information</u>			
Number of Encores: 25-Gram _____	5-Gram _____	Number of 5035 Field Kits: _____	Number of Lab Filtered Metals: _____
Test Strip Lot #: pH 0-3 _____	230315 _____	pH 10-12 _____	219813A _____
Residual Chlorine Test Strip Lot #: _____			

Comments

SM001 Rev. Date 05/24/17 Technician: JENNAK Date: 9/9/2020 10:15:00 AM Reviewer: PH Date: 9/10/2020

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Job Change Order: FA78551

Requested Date:	9/10/2020	Received Date:	9/9/2020
Account Name:	Ahtna Global, LLC	Due Date:	9/23/2020
Project Description:	Fort Ord Groundwater Monitoring	Deliverable:	FULT1
CSR:	EK	TAT (Days):	14

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FA78551: Chain of Custody

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Above Changes Per: Holly Dillon

Date/Time: 9/10/2020 1:01:23 PM

To Client: This Change Order is confirmation of the revisions, previously discussed with the Client Service Representative.

Page 2 of 2

QC Evaluation: DOD QSM5.x Limits

Job Number: FA78551
Account: Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring
Collected: 09/03/20 thru 09/04/20

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
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VO2358 SW846 8260B BY SIM

VO2358-BS	71-43-2	Benzene	BSP	REC	104	%	79-120
VO2358-BS	56-23-5	Carbon Tetrachloride	BSP	REC	104	%	72-136
VO2358-BS	67-66-3	Chloroform	BSP	REC	98	%	79-124
VO2358-BS	75-34-3	1,1-Dichloroethane	BSP	REC	104	%	77-125
VO2358-BS	107-06-2	1,2-Dichloroethane	BSP	REC	98	%	73-128
VO2358-BS	156-59-2	cis-1,2-Dichloroethylene	BSP	REC	98	%	78-123
VO2358-BS	78-87-5	1,2-Dichloropropane	BSP	REC	104	%	78-122
VO2358-BS	127-18-4	Tetrachloroethylene	BSP	REC	106	%	74-129
VO2358-BS	79-01-6	Trichloroethylene	BSP	REC	102	%	79-123
VO2358-BS	75-01-4	Vinyl Chloride	BSP	REC	100	%	58-137
VO2358-BS	17060-07-0	1,2-Dichloroethane-D4	BSP	SURR	98	%	81-118
VO2358-BS	2037-26-5	Toluene-D8	BSP	SURR	97	%	89-112
FA78551-IMS	71-43-2	Benzene	MS	REC	101	%	79-120
FA78551-IMS	56-23-5	Carbon Tetrachloride	MS	REC	98	%	72-136
FA78551-IMS	67-66-3	Chloroform	MS	REC	96	%	79-124
FA78551-IMS	75-34-3	1,1-Dichloroethane	MS	REC	102	%	77-125
FA78551-IMS	107-06-2	1,2-Dichloroethane	MS	REC	95	%	73-128
FA78551-IMS	156-59-2	cis-1,2-Dichloroethylene	MS	REC	93	%	78-123
FA78551-IMS	78-87-5	1,2-Dichloropropane	MS	REC	100	%	78-122
FA78551-IMS	127-18-4	Tetrachloroethylene	MS	REC	102	%	74-129
FA78551-IMS	79-01-6	Trichloroethylene	MS	REC	93	%	79-123
FA78551-IMS	75-01-4	Vinyl Chloride	MS	REC	110	%	58-137
FA78551-IMS	17060-07-0	1,2-Dichloroethane-D4	MS	SURR	99	%	81-118
FA78551-IMS	2037-26-5	Toluene-D8	MS	SURR	91	%	89-112
FA78551-IMSD	71-43-2	Benzene	MSD	REC	107	%	79-120
FA78551-IMSD	71-43-2	Benzene	MSD	RPD	6	%	20
FA78551-IMSD	56-23-5	Carbon Tetrachloride	MSD	REC	105	%	72-136
FA78551-IMSD	56-23-5	Carbon Tetrachloride	MSD	RPD	7	%	20
FA78551-IMSD	67-66-3	Chloroform	MSD	REC	102	%	79-124
FA78551-IMSD	67-66-3	Chloroform	MSD	RPD	5	%	20
FA78551-IMSD	75-34-3	1,1-Dichloroethane	MSD	REC	107	%	77-125
FA78551-IMSD	75-34-3	1,1-Dichloroethane	MSD	RPD	6	%	20
FA78551-IMSD	107-06-2	1,2-Dichloroethane	MSD	REC	101	%	73-128
FA78551-IMSD	107-06-2	1,2-Dichloroethane	MSD	RPD	6	%	20
FA78551-IMSD	156-59-2	cis-1,2-Dichloroethylene	MSD	REC	100	%	78-123
FA78551-IMSD	156-59-2	cis-1,2-Dichloroethylene	MSD	RPD	7	%	20
FA78551-IMSD	78-87-5	1,2-Dichloropropane	MSD	REC	106	%	78-122
FA78551-IMSD	78-87-5	1,2-Dichloropropane	MSD	RPD	6	%	20
FA78551-IMSD	127-18-4	Tetrachloroethylene	MSD	REC	108	%	74-129
FA78551-IMSD	127-18-4	Tetrachloroethylene	MSD	RPD	6	%	20
FA78551-IMSD	79-01-6	Trichloroethylene	MSD	REC	98	%	79-123
FA78551-IMSD	79-01-6	Trichloroethylene	MSD	RPD	5	%	20

* Sample used for QC is not from job FA78551

QC Evaluation: DOD QSM5.x Limits

Job Number: FA78551
Account: Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring
Collected: 09/03/20 thru 09/04/20

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
FA78551-1MSD	75-01-4	Vinyl Chloride	MSD	REC	109	%	58-137
FA78551-1MSD	75-01-4	Vinyl Chloride	MSD	RPD	1	%	20
FA78551-1MSD	17060-07-0	1,2-Dichloroethane-D4	MSD	SURR	98	%	81-118
FA78551-1MSD	2037-26-5	Toluene-D8	MSD	SURR	93	%	89-112
VO2358-MB	17060-07-0	1,2-Dichloroethane-D4	MB	SURR	104	%	81-118
VO2358-MB	2037-26-5	Toluene-D8	MB	SURR	100	%	89-112
FA78551-1	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	105	%	81-118
FA78551-1	2037-26-5	Toluene-D8	SAMP	SURR	100	%	89-112
FA78551-2	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	106	%	81-118
FA78551-2	2037-26-5	Toluene-D8	SAMP	SURR	100	%	89-112
FA78551-3	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	107	%	81-118
FA78551-3	2037-26-5	Toluene-D8	SAMP	SURR	97	%	89-112
FA78551-4	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	107	%	81-118
FA78551-4	2037-26-5	Toluene-D8	SAMP	SURR	95	%	89-112
FA78551-5	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	106	%	81-118
FA78551-5	2037-26-5	Toluene-D8	SAMP	SURR	94	%	89-112
FA78551-6	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	107	%	81-118
FA78551-6	2037-26-5	Toluene-D8	SAMP	SURR	94	%	89-112
FA78551-7	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	107	%	81-118
FA78551-7	2037-26-5	Toluene-D8	SAMP	SURR	95	%	89-112
FA78551-8	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	110	%	81-118
FA78551-8	2037-26-5	Toluene-D8	SAMP	SURR	95	%	89-112
FA78551-9	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	110	%	81-118
FA78551-9	2037-26-5	Toluene-D8	SAMP	SURR	93	%	89-112
FA78551-10	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	109	%	81-118
FA78551-10	2037-26-5	Toluene-D8	SAMP	SURR	93	%	89-112
FA78551-11	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	109	%	81-118
FA78551-11	2037-26-5	Toluene-D8	SAMP	SURR	93	%	89-112
VO2359	SW846 8260B BY SIM						
VO2359-BS	71-43-2	Benzene	BSP	REC	100	%	79-120
VO2359-BS	56-23-5	Carbon Tetrachloride	BSP	REC	100	%	72-136
VO2359-BS	67-66-3	Chloroform	BSP	REC	96	%	79-124
VO2359-BS	75-34-3	1,1-Dichloroethane	BSP	REC	102	%	77-125
VO2359-BS	107-06-2	1,2-Dichloroethane	BSP	REC	96	%	73-128
VO2359-BS	156-59-2	cis-1,2-Dichloroethylene	BSP	REC	96	%	78-123
VO2359-BS	78-87-5	1,2-Dichloropropane	BSP	REC	100	%	78-122
VO2359-BS	75-09-2	Methylene Chloride	BSP	REC	98	%	74-124
VO2359-BS	127-18-4	Tetrachloroethylene	BSP	REC	102	%	74-129
VO2359-BS	79-01-6	Trichloroethylene	BSP	REC	98	%	79-123
VO2359-BS	75-01-4	Vinyl Chloride	BSP	REC	102	%	58-137
VO2359-BS	17060-07-0	1,2-Dichloroethane-D4	BSP	SURR	97	%	81-118
VO2359-BS	2037-26-5	Toluene-D8	BSP	SURR	95	%	89-112
FA78551-12MS	71-43-2	Benzene	MS	REC	107	%	79-120

* Sample used for QC is not from job FA78551

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QC Evaluation: DOD QSM5.x Limits

Job Number: FA78551
Account: Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring
Collected: 09/03/20 thru 09/04/20

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
FA78551-12MS	56-23-5	Carbon Tetrachloride	MS	REC	105	%	72-136
FA78551-12MS	67-66-3	Chloroform	MS	REC	102	%	79-124
FA78551-12MS	75-34-3	1,1-Dichloroethane	MS	REC	106	%	77-125
FA78551-12MS	107-06-2	1,2-Dichloroethane	MS	REC	102	%	73-128
FA78551-12MS	156-59-2	cis-1,2-Dichloroethylene	MS	REC	96	%	78-123
FA78551-12MS	78-87-5	1,2-Dichloropropane	MS	REC	107	%	78-122
FA78551-12MS	75-09-2	Methylene Chloride	MS	REC	113	%	74-124
FA78551-12MS	127-18-4	Tetrachloroethylene	MS	REC	104	%	74-129
FA78551-12MS	79-01-6	Trichloroethylene	MS	REC	97	%	79-123
FA78551-12MS	75-01-4	Vinyl Chloride	MS	REC	108	%	58-137
FA78551-12MS	17060-07-0	1,2-Dichloroethane-D4	MS	SURR	100	%	81-118
FA78551-12MS	2037-26-5	Toluene-D8	MS	SURR	87 ^a	%	89-112
FA78551-12MSD	71-43-2	Benzene	MSD	REC	110	%	79-120
FA78551-12MSD	71-43-2	Benzene	MSD	RPD	4	%	20
FA78551-12MSD	56-23-5	Carbon Tetrachloride	MSD	REC	109	%	72-136
FA78551-12MSD	56-23-5	Carbon Tetrachloride	MSD	RPD	3	%	20
FA78551-12MSD	67-66-3	Chloroform	MSD	REC	104	%	79-124
FA78551-12MSD	67-66-3	Chloroform	MSD	RPD	1	%	20
FA78551-12MSD	75-34-3	1,1-Dichloroethane	MSD	REC	108	%	77-125
FA78551-12MSD	75-34-3	1,1-Dichloroethane	MSD	RPD	2	%	20
FA78551-12MSD	107-06-2	1,2-Dichloroethane	MSD	REC	105	%	73-128
FA78551-12MSD	107-06-2	1,2-Dichloroethane	MSD	RPD	3	%	20
FA78551-12MSD	156-59-2	cis-1,2-Dichloroethylene	MSD	REC	102	%	78-123
FA78551-12MSD	156-59-2	cis-1,2-Dichloroethylene	MSD	RPD	5	%	20
FA78551-12MSD	78-87-5	1,2-Dichloropropane	MSD	REC	111	%	78-122
FA78551-12MSD	78-87-5	1,2-Dichloropropane	MSD	RPD	3	%	20
FA78551-12MSD	75-09-2	Methylene Chloride	MSD	REC	116	%	74-124
FA78551-12MSD	75-09-2	Methylene Chloride	MSD	RPD	3	%	20
FA78551-12MSD	127-18-4	Tetrachloroethylene	MSD	REC	107	%	74-129
FA78551-12MSD	127-18-4	Tetrachloroethylene	MSD	RPD	2	%	20
FA78551-12MSD	79-01-6	Trichloroethylene	MSD	REC	100	%	79-123
FA78551-12MSD	79-01-6	Trichloroethylene	MSD	RPD	3	%	20
FA78551-12MSD	75-01-4	Vinyl Chloride	MSD	REC	102	%	58-137
FA78551-12MSD	75-01-4	Vinyl Chloride	MSD	RPD	6	%	20
FA78551-12MSD	17060-07-0	1,2-Dichloroethane-D4	MSD	SURR	99	%	81-118
FA78551-12MSD	2037-26-5	Toluene-D8	MSD	SURR	89	%	89-112
VO2359-MB	17060-07-0	1,2-Dichloroethane-D4	MB	SURR	103	%	81-118
VO2359-MB	2037-26-5	Toluene-D8	MB	SURR	101	%	89-112
FA78551-12	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	105	%	81-118
FA78551-12	2037-26-5	Toluene-D8	SAMP	SURR	96	%	89-112
FA78551-13	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	106	%	81-118
FA78551-13	2037-26-5	Toluene-D8	SAMP	SURR	96	%	89-112
FA78551-14	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	106	%	81-118
FA78551-14	2037-26-5	Toluene-D8	SAMP	SURR	94	%	89-112
FA78551-15	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	108	%	81-118

* Sample used for QC is not from job FA78551

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QC Evaluation: DOD QSM5.x Limits

Job Number: FA78551
Account: Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring
Collected: 09/03/20 thru 09/04/20

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
FA78551-15	2037-26-5	Toluene-D8	SAMP	SURR	94	%	89-112
FA78551-16	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	109	%	81-118
FA78551-16	2037-26-5	Toluene-D8	SAMP	SURR	94	%	89-112
FA78551-17	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	109	%	81-118
FA78551-17	2037-26-5	Toluene-D8	SAMP	SURR	93	%	89-112
FA78551-18	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	108	%	81-118
FA78551-18	2037-26-5	Toluene-D8	SAMP	SURR	94	%	89-112
FA78551-19	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	109	%	81-118
FA78551-19	2037-26-5	Toluene-D8	SAMP	SURR	94	%	89-112
FA78551-20	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	109	%	81-118
FA78551-20	2037-26-5	Toluene-D8	SAMP	SURR	97	%	89-112
FA78551-21	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	110	%	81-118
FA78551-21	2037-26-5	Toluene-D8	SAMP	SURR	93	%	89-112
FA78551-22	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	111	%	81-118
FA78551-22	2037-26-5	Toluene-D8	SAMP	SURR	94	%	89-112
FA78551-23	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	111	%	81-118
FA78551-23	2037-26-5	Toluene-D8	SAMP	SURR	92	%	89-112
FA78551-24	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	111	%	81-118
FA78551-24	2037-26-5	Toluene-D8	SAMP	SURR	96	%	89-112
FA78551-25	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	111	%	81-118
FA78551-25	2037-26-5	Toluene-D8	SAMP	SURR	97	%	89-112
FA78551-26	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	113	%	81-118
FA78551-26	2037-26-5	Toluene-D8	SAMP	SURR	79 ^a	%	89-112
FA78551-27	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	113	%	81-118
FA78551-27	2037-26-5	Toluene-D8	SAMP	SURR	94	%	89-112
VZ2418 SW846 8260B BY SIM							
VZ2418-BS	75-34-3	1,1-Dichloroethane	BSP	REC	122	%	77-125
VZ2418-BS	17060-07-0	1,2-Dichloroethane-D4	BSP	SURR	110	%	81-118
VZ2418-BS	2037-26-5	Toluene-D8	BSP	SURR	98	%	89-112
FA78551-15MS	75-34-3	1,1-Dichloroethane	MS	REC	114	%	77-125
FA78551-15MS	17060-07-0	1,2-Dichloroethane-D4	MS	SURR	114	%	81-118
FA78551-15MS	2037-26-5	Toluene-D8	MS	SURR	93	%	89-112
FA78551-16MS	75-34-3	1,1-Dichloroethane	MS	REC	127	%	77-125
FA78551-16MS	17060-07-0	1,2-Dichloroethane-D4	MS	SURR	115	%	81-118
FA78551-16MS	2037-26-5	Toluene-D8	MS	SURR	92	%	89-112
FA78551-15MSD	75-34-3	1,1-Dichloroethane	MSD	REC	115	%	77-125
FA78551-15MSD	75-34-3	1,1-Dichloroethane	MSD	RPD	0	%	20
FA78551-15MSD	17060-07-0	1,2-Dichloroethane-D4	MSD	SURR	113	%	81-118
FA78551-15MSD	2037-26-5	Toluene-D8	MSD	SURR	94	%	89-112
FA78551-16MSD	75-34-3	1,1-Dichloroethane	MSD	REC	115	%	77-125
FA78551-16MSD	75-34-3	1,1-Dichloroethane	MSD	RPD	7	%	20
FA78551-16MSD	17060-07-0	1,2-Dichloroethane-D4	MSD	SURR	114	%	81-118
FA78551-16MSD	2037-26-5	Toluene-D8	MSD	SURR	93	%	89-112

* Sample used for QC is not from job FA78551

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QC Evaluation: DOD QSM5.x Limits

Job Number: FA78551
Account: Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring
Collected: 09/03/20 thru 09/04/20

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
VZ2418-MB	17060-07-0	1,2-Dichloroethane-D4	MB	SURR	112	%	81-118
VZ2418-MB	2037-26-5	Toluene-D8	MB	SURR	100	%	89-112
FA78551-15	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	116	%	81-118
FA78551-15	2037-26-5	Toluene-D8	SAMP	SURR	98	%	89-112
FA78551-16	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	118	%	81-118
FA78551-16	2037-26-5	Toluene-D8	SAMP	SURR	98	%	89-112
VZ2419	SW846 8260B BY SIM						
VZ2419-BS	75-09-2	Methylene Chloride	BSP	REC	102	%	74-124
VZ2419-BS	17060-07-0	1,2-Dichloroethane-D4	BSP	SURR	112	%	81-118
VZ2419-BS	2037-26-5	Toluene-D8	BSP	SURR	95	%	89-112
FA78551-7MS	75-09-2	Methylene Chloride	MS	REC	115	%	74-124
FA78551-7MS	17060-07-0	1,2-Dichloroethane-D4	MS	SURR	119 ^a	%	81-118
FA78551-7MS	2037-26-5	Toluene-D8	MS	SURR	89	%	89-112
FA78551-7MSD	75-09-2	Methylene Chloride	MSD	REC	114	%	74-124
FA78551-7MSD	75-09-2	Methylene Chloride	MSD	RPD	1	%	20
FA78551-7MSD	17060-07-0	1,2-Dichloroethane-D4	MSD	SURR	118	%	81-118
FA78551-7MSD	2037-26-5	Toluene-D8	MSD	SURR	90	%	89-112
VZ2419-MB	17060-07-0	1,2-Dichloroethane-D4	MB	SURR	116	%	81-118
VZ2419-MB	2037-26-5	Toluene-D8	MB	SURR	99	%	89-112
FA78551-1	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	120 ^a	%	81-118
FA78551-1	2037-26-5	Toluene-D8	SAMP	SURR	97	%	89-112
FA78551-2	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	120 ^a	%	81-118
FA78551-2	2037-26-5	Toluene-D8	SAMP	SURR	97	%	89-112
FA78551-3	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	121 ^a	%	81-118
FA78551-3	2037-26-5	Toluene-D8	SAMP	SURR	96	%	89-112
FA78551-4	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	122 ^a	%	81-118
FA78551-4	2037-26-5	Toluene-D8	SAMP	SURR	97	%	89-112
FA78551-5	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	121 ^a	%	81-118
FA78551-5	2037-26-5	Toluene-D8	SAMP	SURR	96	%	89-112
FA78551-6	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	124 ^a	%	81-118
FA78551-6	2037-26-5	Toluene-D8	SAMP	SURR	96	%	89-112
FA78551-7	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	125 ^a	%	81-118
FA78551-7	2037-26-5	Toluene-D8	SAMP	SURR	95	%	89-112
FA78551-8	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	124 ^a	%	81-118
FA78551-8	2037-26-5	Toluene-D8	SAMP	SURR	96	%	89-112
FA78551-9	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	123 ^a	%	81-118
FA78551-9	2037-26-5	Toluene-D8	SAMP	SURR	97	%	89-112
FA78551-10	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	124 ^a	%	81-118
FA78551-10	2037-26-5	Toluene-D8	SAMP	SURR	97	%	89-112
FA78551-11	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	125 ^a	%	81-118
FA78551-11	2037-26-5	Toluene-D8	SAMP	SURR	96	%	89-112
FA78551-12	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	126 ^a	%	81-118
FA78551-12	2037-26-5	Toluene-D8	SAMP	SURR	95	%	89-112

* Sample used for QC is not from job FA78551

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QC Evaluation: DOD QSM5.x Limits

Job Number: FA78551
Account: Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring
Collected: 09/03/20 thru 09/04/20

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
FA78551-13	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	126 ^a	%	81-118
FA78551-13	2037-26-5	Toluene-D8	SAMP	SURR	95	%	89-112
FA78551-14	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	127 ^a	%	81-118
FA78551-14	2037-26-5	Toluene-D8	SAMP	SURR	95	%	89-112
FA78551-17	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	128 ^a	%	81-118
FA78551-17	2037-26-5	Toluene-D8	SAMP	SURR	95	%	89-112
FA78551-19	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	128 ^a	%	81-118
FA78551-19	2037-26-5	Toluene-D8	SAMP	SURR	95	%	89-112
FA78551-20	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	128 ^a	%	81-118
FA78551-20	2037-26-5	Toluene-D8	SAMP	SURR	94	%	89-112
FA78551-21	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	127 ^a	%	81-118
FA78551-21	2037-26-5	Toluene-D8	SAMP	SURR	94	%	89-112
FA78551-22	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	128 ^a	%	81-118
FA78551-22	2037-26-5	Toluene-D8	SAMP	SURR	95	%	89-112

MP37810 SW846 6010D

MP37810-B1	7440-36-0	Antimony	BSP	REC	103.8	%	88-113
MP37810-B1	7440-50-8	Copper	BSP	REC	102	%	86-114
MP37810-B1	7439-92-1	Lead	BSP	REC	96	%	86-113
MP37810-S1*	7440-36-0	Antimony	MS	REC	103.4	%	88-113
MP37810-S1*	7440-50-8	Copper	MS	REC	100.4	%	86-114
MP37810-S1*	7439-92-1	Lead	MS	REC	95.4	%	86-113
MP37810-S2*	7440-36-0	Antimony	MSD	REC	104.8	%	88-113
MP37810-S2*	7440-36-0	Antimony	MSD	RPD	1.3	%	20
MP37810-S2*	7440-50-8	Copper	MSD	REC	102	%	86-114
MP37810-S2*	7440-50-8	Copper	MSD	RPD	1.6	%	20
MP37810-S2*	7439-92-1	Lead	MSD	REC	97.4	%	86-113
MP37810-S2*	7439-92-1	Lead	MSD	RPD	2.1	%	20
MP37810-D1*	7440-36-0	Antimony	DUP	RPD	0	%	20
MP37810-D1*	7440-50-8	Copper	DUP	RPD	0	%	20
MP37810-D1*	7439-92-1	Lead	DUP	RPD	0	%	20

(a) Outside DOD QSM control limits.

* Sample used for QC is not from job FA78551

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QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Instrument Performance Checks (BFB)
- Internal Standard Area Summaries
- Surrogate Recovery Summaries
- Initial and Continuing Calibration Summaries
- Run Sequence Reports

Method Blank Summary

Job Number: FA78551
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VO2358-MB	O61276.D	1	09/12/20	SP	n/a	n/a	VO2358

The QC reported here applies to the following samples:

Method: SW846 8260B BY SIM

FA78551-1, FA78551-2, FA78551-3, FA78551-4, FA78551-5, FA78551-6, FA78551-7, FA78551-8, FA78551-9, FA78551-10, FA78551-11

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	0.50	0.10	ug/l	
56-23-5	Carbon Tetrachloride	ND	0.50	0.10	ug/l	
67-66-3	Chloroform	ND	0.50	0.10	ug/l	
75-34-3	1,1-Dichloroethane	ND	0.50	0.10	ug/l	
107-06-2	1,2-Dichloroethane	ND	0.50	0.10	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	0.50	0.10	ug/l	
78-87-5	1,2-Dichloropropane	ND	0.50	0.10	ug/l	
127-18-4	Tetrachloroethylene	ND	0.50	0.10	ug/l	
79-01-6	Trichloroethylene	ND	0.50	0.10	ug/l	
75-01-4	Vinyl Chloride	ND	0.10	0.050	ug/l	

CAS No.	Surrogate Recoveries	Limits	
17060-07-0	1,2-Dichloroethane-D4	104%	74-125%
2037-26-5	Toluene-D8	100%	88-111%

Method Blank Summary

Job Number: FA78551
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VO2359-MB	O61296.D	1	09/12/20	SP	n/a	n/a	VO2359

The QC reported here applies to the following samples:

Method: SW846 8260B BY SIM

FA78551-12, FA78551-13, FA78551-14, FA78551-15, FA78551-16, FA78551-17, FA78551-18, FA78551-19, FA78551-20, FA78551-21, FA78551-22, FA78551-23, FA78551-24, FA78551-25, FA78551-26, FA78551-27

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	0.50	0.10	ug/l	
56-23-5	Carbon Tetrachloride	ND	0.50	0.10	ug/l	
67-66-3	Chloroform	ND	0.50	0.10	ug/l	
75-34-3	1,1-Dichloroethane	ND	0.50	0.10	ug/l	
107-06-2	1,2-Dichloroethane	ND	0.50	0.10	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	0.50	0.10	ug/l	
78-87-5	1,2-Dichloropropane	ND	0.50	0.10	ug/l	
75-09-2	Methylene Chloride	ND	2.0	0.50	ug/l	
127-18-4	Tetrachloroethylene	ND	0.50	0.10	ug/l	
79-01-6	Trichloroethylene	ND	0.50	0.10	ug/l	
75-01-4	Vinyl Chloride	ND	0.10	0.050	ug/l	

CAS No.	Surrogate Recoveries	Limits	
17060-07-0	1,2-Dichloroethane-D4	103%	74-125%
2037-26-5	Toluene-D8	101%	88-111%

Method Blank Summary

Job Number: FA78551
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VZ2418-MB	Z62325.D	1	09/14/20	JG	n/a	n/a	VZ2418

The QC reported here applies to the following samples:

Method: SW846 8260B BY SIM

FA78551-15, FA78551-16

CAS No.	Compound	Result	RL	MDL	Units	Q
75-34-3	1,1-Dichloroethane	ND	0.50	0.10	ug/l	

CAS No.	Surrogate Recoveries	Limits	
17060-07-0	1,2-Dichloroethane-D4	112%	74-125%
2037-26-5	Toluene-D8	100%	88-111%

Method Blank Summary

Job Number: FA78551
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VZ2419-MB	Z62357.D	1	09/15/20	JG	n/a	n/a	VZ2419

The QC reported here applies to the following samples:

Method: SW846 8260B BY SIM

FA78551-1, FA78551-2, FA78551-3, FA78551-4, FA78551-5, FA78551-6, FA78551-7, FA78551-8, FA78551-9, FA78551-10, FA78551-11, FA78551-12, FA78551-13, FA78551-14, FA78551-17, FA78551-19, FA78551-20, FA78551-21, FA78551-22

CAS No.	Compound	Result	RL	MDL	Units	Q
75-09-2	Methylene Chloride	1.1	2.0	0.50	ug/l	J

CAS No.	Surrogate Recoveries	Limits	
17060-07-0	1,2-Dichloroethane-D4	116%	74-125%
2037-26-5	Toluene-D8	99%	88-111%

Blank Spike Summary

Job Number: FA78551
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VO2358-BS	O61274.D	1	09/12/20	SP	n/a	n/a	VO2358

The QC reported here applies to the following samples:

Method: SW846 8260B BY SIM

FA78551-1, FA78551-2, FA78551-3, FA78551-4, FA78551-5, FA78551-6, FA78551-7, FA78551-8, FA78551-9, FA78551-10, FA78551-11

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
71-43-2	Benzene	5	5.2	104	81-122
56-23-5	Carbon Tetrachloride	5	5.2	104	76-136
67-66-3	Chloroform	5	4.9	98	80-124
75-34-3	1,1-Dichloroethane	5	5.2	104	81-122
107-06-2	1,2-Dichloroethane	5	4.9	98	75-125
156-59-2	cis-1,2-Dichloroethylene	5	4.9	98	78-120
78-87-5	1,2-Dichloropropane	5	5.2	104	76-124
127-18-4	Tetrachloroethylene	5	5.3	106	76-135
79-01-6	Trichloroethylene	5	5.1	102	81-126
75-01-4	Vinyl Chloride	5	5.0	100	69-159

CAS No.	Surrogate Recoveries	BSP	Limits
17060-07-0	1,2-Dichloroethane-D4	98%	74-125%
2037-26-5	Toluene-D8	97%	88-111%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA78551
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VO2359-BS	O61295.D	1	09/12/20	SP	n/a	n/a	VO2359

The QC reported here applies to the following samples:

Method: SW846 8260B BY SIM

FA78551-12, FA78551-13, FA78551-14, FA78551-15, FA78551-16, FA78551-17, FA78551-18, FA78551-19, FA78551-20, FA78551-21, FA78551-22, FA78551-23, FA78551-24, FA78551-25, FA78551-26, FA78551-27

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
71-43-2	Benzene	5	5.0	100	81-122
56-23-5	Carbon Tetrachloride	5	5.0	100	76-136
67-66-3	Chloroform	5	4.8	96	80-124
75-34-3	1,1-Dichloroethane	5	5.1	102	81-122
107-06-2	1,2-Dichloroethane	5	4.8	96	75-125
156-59-2	cis-1,2-Dichloroethylene	5	4.8	96	78-120
78-87-5	1,2-Dichloropropane	5	5.0	100	76-124
75-09-2	Methylene Chloride	5	4.9	98	69-135
127-18-4	Tetrachloroethylene	5	5.1	102	76-135
79-01-6	Trichloroethylene	5	4.9	98	81-126
75-01-4	Vinyl Chloride	5	5.1	102	69-159

CAS No.	Surrogate Recoveries	BSP	Limits
17060-07-0	1,2-Dichloroethane-D4	97%	74-125%
2037-26-5	Toluene-D8	95%	88-111%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA78551
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VZ2418-BS	Z62323.D	1	09/14/20	JG	n/a	n/a	VZ2418

The QC reported here applies to the following samples:

Method: SW846 8260B BY SIM

FA78551-15, FA78551-16

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
75-34-3	1,1-Dichloroethane	5	6.1	122	81-122

CAS No.	Surrogate Recoveries	BSP	Limits
17060-07-0	1,2-Dichloroethane-D4	110%	74-125%
2037-26-5	Toluene-D8	98%	88-111%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA78551
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VZ2419-BS	Z62355.D	1	09/15/20	JG	n/a	n/a	VZ2419

The QC reported here applies to the following samples:

Method: SW846 8260B BY SIM

FA78551-1, FA78551-2, FA78551-3, FA78551-4, FA78551-5, FA78551-6, FA78551-7, FA78551-8, FA78551-9, FA78551-10, FA78551-11, FA78551-12, FA78551-13, FA78551-14, FA78551-17, FA78551-19, FA78551-20, FA78551-21, FA78551-22

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
75-09-2	Methylene Chloride	5	5.1	102	69-135

CAS No.	Surrogate Recoveries	BSP	Limits
17060-07-0	1,2-Dichloroethane-D4	112%	74-125%
2037-26-5	Toluene-D8	95%	88-111%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA78551
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA78551-1MS	O61288.D	10	09/12/20	SP	n/a	n/a	VO2358
FA78551-1MSD	O61289.D	10	09/12/20	SP	n/a	n/a	VO2358
FA78551-1	O61277.D	1	09/12/20	SP	n/a	n/a	VO2358

The QC reported here applies to the following samples:

Method: SW846 8260B BY SIM

FA78551-1, FA78551-2, FA78551-3, FA78551-4, FA78551-5, FA78551-6, FA78551-7, FA78551-8, FA78551-9, FA78551-10, FA78551-11

CAS No.	Compound	FA78551-1 ug/l	Spike Q ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	0.50 U	50	50.7	101	50	53.7	107	6	81-122/14
56-23-5	Carbon Tetrachloride	0.50 U	50	48.9	98	50	52.5	105	7	76-136/23
67-66-3	Chloroform	0.50 U	50	48.2	96	50	50.8	102	5	80-124/15
75-34-3	1,1-Dichloroethane	0.50 U	50	50.8	102	50	53.7	107	6	81-122/15
107-06-2	1,2-Dichloroethane	0.50 U	50	47.7	95	50	50.6	101	6	75-125/14
156-59-2	cis-1,2-Dichloroethylene	0.50 U	50	46.3	93	50	49.8	100	7	78-120/15
78-87-5	1,2-Dichloropropane	0.50 U	50	50.1	100	50	53.2	106	6	76-124/14
127-18-4	Tetrachloroethylene	0.50 U	50	50.8	102	50	53.8	108	6	76-135/16
79-01-6	Trichloroethylene	0.50 U	50	46.5	93	50	49.0	98	5	81-126/15
75-01-4	Vinyl Chloride	0.10 U	50	55.0	110	50	54.5	109	1	69-159/18

CAS No.	Surrogate Recoveries	MS	MSD	FA78551-1	Limits
17060-07-0	1,2-Dichloroethane-D4	99%	98%	105%	74-125%
2037-26-5	Toluene-D8	91%	93%	100%	88-111%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA78551
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA78551-12MS	O61318.D	10	09/13/20	SP	n/a	n/a	VO2359
FA78551-12MSD	O61319.D	10	09/13/20	SP	n/a	n/a	VO2359
FA78551-12	O61298.D	1	09/12/20	SP	n/a	n/a	VO2359

The QC reported here applies to the following samples:

Method: SW846 8260B BY SIM

FA78551-12, FA78551-13, FA78551-14, FA78551-15, FA78551-16, FA78551-17, FA78551-18, FA78551-19, FA78551-20, FA78551-21, FA78551-22, FA78551-23, FA78551-24, FA78551-25, FA78551-26, FA78551-27

CAS No.	Compound	FA78551-12 Spike		MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
		ug/l	Q							
71-43-2	Benzene	0.50 U	50	53.3	107	50	55.2	110	4	81-122/14
56-23-5	Carbon Tetrachloride	0.50 U	50	52.6	105	50	54.4	109	3	76-136/23
67-66-3	Chloroform	5.2	50	56.2	102	50	57.0	104	1	80-124/15
75-34-3	1,1-Dichloroethane	10.0	50	62.9	106	50	63.9	108	2	81-122/15
107-06-2	1,2-Dichloroethane	0.50 U	50	51.0	102	50	52.6	105	3	75-125/14
156-59-2	cis-1,2-Dichloroethylene	0.35 J	50	48.5	96	50	51.1	102	5	78-120/15
78-87-5	1,2-Dichloropropane	0.82	50	54.2	107	50	56.1	111	3	76-124/14
75-09-2	Methylene Chloride	0.57 J	50	56.9	113	50	58.5	116	3	69-135/16
127-18-4	Tetrachloroethylene	7.4	50	59.5	104	50	61.0	107	2	76-135/16
79-01-6	Trichloroethylene	5.5	50	54.2	97	50	55.6	100	3	81-126/15
75-01-4	Vinyl Chloride	0.10 U	50	53.8	108	50	50.9	102	6	69-159/18

CAS No.	Surrogate Recoveries	MS	MSD	FA78551-12 Limits	
17060-07-0	1,2-Dichloroethane-D4	100%	99%	105%	74-125%
2037-26-5	Toluene-D8	87% * a	89%	96%	88-111%

(a) Outside DOD QSM control limits.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA78551
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA78551-15MS	Z62335.D	10	09/14/20	JG	n/a	n/a	VZ2418
FA78551-15MSD	Z62336.D	10	09/14/20	JG	n/a	n/a	VZ2418
FA78551-15	Z62334.D	2	09/14/20	JG	n/a	n/a	VZ2418

The QC reported here applies to the following samples:

Method: SW846 8260B BY SIM

FA78551-15

CAS No.	Compound	FA78551-15 ug/l	Spike Q ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
75-34-3	1,1-Dichloroethane	21.6	50	78.7	114	50	79.0	115	0	81-122/15

CAS No.	Surrogate Recoveries	MS	MSD	FA78551-15	Limits
17060-07-0	1,2-Dichloroethane-D4	114%	113%	116%	74-125%
2037-26-5	Toluene-D8	93%	94%	98%	88-111%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA78551
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA78551-16MS	Z62343.D	10	09/14/20	JG	n/a	n/a	VZ2418
FA78551-16MSD	Z62344.D	10	09/14/20	JG	n/a	n/a	VZ2418
FA78551-16	Z62342.D	2	09/14/20	JG	n/a	n/a	VZ2418

The QC reported here applies to the following samples:

Method: SW846 8260B BY SIM

FA78551-16

CAS No.	Compound	FA78551-16 ug/l	Spike Q ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
75-34-3	1,1-Dichloroethane	20.7	50	84.0	127*	50	78.2	115	7	81-122/15

CAS No.	Surrogate Recoveries	MS	MSD	FA78551-16	Limits
17060-07-0	1,2-Dichloroethane-D4	115%	114%	118%	74-125%
2037-26-5	Toluene-D8	92%	93%	98%	88-111%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA78551
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA78551-7MS	Z62370.D	5	09/15/20	JG	n/a	n/a	VZ2419
FA78551-7MSD	Z62371.D	5	09/15/20	JG	n/a	n/a	VZ2419
FA78551-7	Z62367.D	1	09/15/20	JG	n/a	n/a	VZ2419

The QC reported here applies to the following samples:

Method: SW846 8260B BY SIM

FA78551-1, FA78551-2, FA78551-3, FA78551-4, FA78551-5, FA78551-6, FA78551-7, FA78551-8, FA78551-9, FA78551-10, FA78551-11, FA78551-12, FA78551-13, FA78551-14, FA78551-17, FA78551-19, FA78551-20, FA78551-21, FA78551-22

CAS No.	Compound	FA78551-7 ug/l	Spike Q ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
75-09-2	Methylene Chloride	2.0 U	25	28.8	115	25	28.4	114	1	69-135/16

CAS No.	Surrogate Recoveries	MS	MSD	FA78551-7	Limits
17060-07-0	1,2-Dichloroethane-D4	119% ^a	118%	125% ^a	74-125%
2037-26-5	Toluene-D8	89%	90%	95%	88-111%

(a) Outside DOD QSM control limits.

* = Outside of Control Limits.

Instrument Performance Check (BFB)

Job Number: FA78551
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Sample: VO2356-BFB	Injection Date: 09/11/20
Lab File ID: O61227.D	Injection Time: 14:01
Instrument ID: GCMSO	

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	105346	30.7	Pass
75	30.0 - 60.0% of mass 95	169774	49.4	Pass
95	Base peak, 100% relative abundance	343616	100.0	Pass
96	5.0 - 9.0% of mass 95	25531	7.43	Pass
173	Less than 2.0% of mass 174	1340	0.39 (0.45) ^a	Pass
174	50.0 - 100.0% of mass 95	294848	85.8	Pass
175	5.0 - 9.0% of mass 174	20565	5.98 (6.97) ^a	Pass
176	95.0 - 101.0% of mass 174	284096	82.7 (96.4) ^a	Pass
177	5.0 - 9.0% of mass 176	17677	5.14 (6.22) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VO2356-IC2356	O61230.D	09/11/20	15:34	01:33	Initial cal 1
VO2356-IC2356	O61231.D	09/11/20	15:54	01:53	Initial cal 2
VO2356-IC2356	O61232.D	09/11/20	16:14	02:13	Initial cal 3
VO2356-IC2356	O61233.D	09/11/20	16:35	02:34	Initial cal 4
VO2356-ICC2356	O61234.D	09/11/20	16:55	02:54	Initial cal 5
VO2356-IC2356	O61235.D	09/11/20	17:15	03:14	Initial cal 6
VO2356-IC2356	O61236.D	09/11/20	17:36	03:35	Initial cal 7
VO2356-ICV2356	O61238.D	09/11/20	18:16	04:15	Initial cal verification 5

Instrument Performance Check (BFB)

Job Number: FA78551
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Sample: VO2358-BFB	Injection Date: 09/12/20
Lab File ID: O61272.D	Injection Time: 10:34
Instrument ID: GCMSO	

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	124139	31.9	Pass
75	30.0 - 60.0% of mass 95	187861	48.2	Pass
95	Base peak, 100% relative abundance	389419	100.0	Pass
96	5.0 - 9.0% of mass 95	29717	7.63	Pass
173	Less than 2.0% of mass 174	1621	0.42 (0.46) ^a	Pass
174	50.0 - 100.0% of mass 95	354688	91.1	Pass
175	5.0 - 9.0% of mass 174	25424	6.53 (7.17) ^a	Pass
176	95.0 - 101.0% of mass 174	342379	87.9 (96.5) ^a	Pass
177	5.0 - 9.0% of mass 176	21387	5.49 (6.25) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VO2358-CC2356	O61273.D	09/12/20	10:52	00:18	Continuing cal 5
VO2358-BS	O61274.D	09/12/20	11:14	00:40	Blank Spike
VO2358-MB	O61276.D	09/12/20	11:55	01:21	Method Blank
FA78551-1	O61277.D	09/12/20	12:15	01:41	2036YOU2423A
FA78551-2	O61278.D	09/12/20	12:36	02:02	2036YOU2425F
FA78551-3	O61279.D	09/12/20	12:56	02:22	2036YOU2426F
FA78551-4	O61280.D	09/12/20	13:16	02:42	2036YOU2427F
FA78551-5	O61281.D	09/12/20	13:36	03:02	2036YOU2428F
FA78551-6	O61282.D	09/12/20	13:57	03:23	2036YOU2429F
FA78551-7	O61283.D	09/12/20	14:17	03:43	2036YOU2430F
FA78551-8	O61284.D	09/12/20	14:37	04:03	2036YOU2431F
FA78551-9	O61285.D	09/12/20	14:57	04:23	2036YOU2432F
FA78551-10	O61286.D	09/12/20	15:18	04:44	2036YOU2433D
FA78551-11	O61287.D	09/12/20	15:38	05:04	2036YOU2434F
FA78551-1MS	O61288.D	09/12/20	15:58	05:24	Matrix Spike
FA78551-1MSD	O61289.D	09/12/20	16:18	05:44	Matrix Spike Duplicate
VO2358-ECC2356	O61290.D	09/12/20	16:39	06:05	Ending cal 5

Instrument Performance Check (BFB)

Job Number: FA78551
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Sample: VO2359-BFB	Injection Date: 09/12/20
Lab File ID: O61293.D	Injection Time: 17:31
Instrument ID: GCMSO	

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	117360	31.7	Pass
75	30.0 - 60.0% of mass 95	174059	47.0	Pass
95	Base peak, 100% relative abundance	370240	100.0	Pass
96	5.0 - 9.0% of mass 95	28037	7.57	Pass
173	Less than 2.0% of mass 174	1589	0.43 (0.47) ^a	Pass
174	50.0 - 100.0% of mass 95	338069	91.3	Pass
175	5.0 - 9.0% of mass 174	24341	6.57 (7.20) ^a	Pass
176	95.0 - 101.0% of mass 174	323925	87.5 (95.8) ^a	Pass
177	5.0 - 9.0% of mass 176	20637	5.57 (6.37) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VO2359-CC2356	O61294.D	09/12/20	17:54	00:23	Continuing cal 5
VO2359-BS	O61295.D	09/12/20	18:43	01:12	Blank Spike
VO2359-MB	O61296.D	09/12/20	19:03	01:32	Method Blank
FA78551-12	O61298.D	09/12/20	19:43	02:12	2036YOU2435F
FA78551-13	O61299.D	09/12/20	20:04	02:33	2036YOU2436F
FA78551-14	O61300.D	09/12/20	20:24	02:53	2036YOU2437F
FA78551-15	O61301.D	09/12/20	20:44	03:13	2036YOU2438F
FA78551-16	O61302.D	09/12/20	21:04	03:33	2036YOU2439D
FA78551-17	O61303.D	09/12/20	21:25	03:54	2036YOU2440F
FA78551-18	O61304.D	09/12/20	21:45	04:14	2036YOU2441F
FA78551-19	O61305.D	09/12/20	22:05	04:34	2036YOU2442D
FA78551-20	O61306.D	09/12/20	22:25	04:54	2036YOU2443F
FA78551-21	O61307.D	09/12/20	22:46	05:15	2036YOU2444F
FA78551-22	O61308.D	09/12/20	23:06	05:35	2036YOU2445F
FA78551-23	O61309.D	09/12/20	23:26	05:55	2036YOU2446F
FA78551-24	O61310.D	09/12/20	23:46	06:15	2036X0BW232F
FA78551-25	O61311.D	09/13/20	00:11	06:40	2036X0BW233A
FA78551-26	O61312.D	09/13/20	00:31	07:00	2036X0BW234C
FA78551-27	O61313.D	09/13/20	00:51	07:20	2036X0BW246F
ZZZZZZ	O61314.D	09/13/20	01:11	07:40	(unrelated sample)
ZZZZZZ	O61315.D	09/13/20	01:32	08:01	(unrelated sample)
ZZZZZZ	O61316.D	09/13/20	01:52	08:21	(unrelated sample)
ZZZZZZ	O61317.D	09/13/20	02:12	08:41	(unrelated sample)
FA78551-12MS	O61318.D	09/13/20	02:33	09:02	Matrix Spike

Instrument Performance Check (BFB)

Job Number: FA78551
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Sample: VO2359-BFB	Injection Date: 09/12/20
Lab File ID: O61293.D	Injection Time: 17:31
Instrument ID: GCMSO	

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
FA78551-12MSD	O61319.D	09/13/20	02:53	09:22	Matrix Spike Duplicate
VO2359-ECC2356	O61320.D	09/13/20	03:13	09:42	Ending cal 5

Instrument Performance Check (BFB)

Job Number: FA78551
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Sample: VO2362-BFB	Injection Date: 09/15/20
Lab File ID: O61385.D	Injection Time: 14:52
Instrument ID: GCMSO	

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	96941	32.8	Pass
75	30.0 - 60.0% of mass 95	142400	48.2	Pass
95	Base peak, 100% relative abundance	295275	100.0	Pass
96	5.0 - 9.0% of mass 95	22317	7.56	Pass
173	Less than 2.0% of mass 174	1976	0.67 (0.67) ^a	Pass
174	50.0 - 100.0% of mass 95	294869	99.9	Pass
175	5.0 - 9.0% of mass 174	20685	7.01 (7.01) ^a	Pass
176	95.0 - 101.0% of mass 174	280789	95.1 (95.2) ^a	Pass
177	5.0 - 9.0% of mass 176	17438	5.91 (6.21) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VO2362-IC2362	O61386.D	09/15/20	15:46	00:54	Initial cal 1
VO2362-IC2362	O61387.D	09/15/20	16:06	01:14	Initial cal 2
VO2362-IC2362	O61388.D	09/15/20	16:26	01:34	Initial cal 3
VO2362-IC2362	O61389.D	09/15/20	16:47	01:55	Initial cal 4
VO2362-ICC2362	O61390.D	09/15/20	17:07	02:15	Initial cal 5
VO2362-IC2362	O61391.D	09/15/20	17:28	02:36	Initial cal 6
VO2362-IC2362	O61392.D	09/15/20	17:48	02:56	Initial cal 7
VO2362-ICV2362	O61394.D	09/15/20	18:29	03:37	Initial cal verification 5

Instrument Performance Check (BFB)

Job Number: FA78551
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Sample: VO2363-BFB	Injection Date: 09/16/20
Lab File ID: O61401.D	Injection Time: 11:07
Instrument ID: GCMSO	

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	103707	33.0	Pass
75	30.0 - 60.0% of mass 95	147861	47.0	Pass
95	Base peak, 100% relative abundance	314688	100.0	Pass
96	5.0 - 9.0% of mass 95	23037	7.32	Pass
173	Less than 2.0% of mass 174	1559	0.50 (0.51) ^a	Pass
174	50.0 - 100.0% of mass 95	305045	96.9	Pass
175	5.0 - 9.0% of mass 174	21837	6.94 (7.16) ^a	Pass
176	95.0 - 101.0% of mass 174	297067	94.4 (97.4) ^a	Pass
177	5.0 - 9.0% of mass 176	18176	5.78 (6.12) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VO2363-CC2362	O61402.D	09/16/20	11:32	00:25	Continuing cal 5
VO2363-BS	O61403.D	09/16/20	12:11	01:04	Blank Spike
VO2363-MB	O61405.D	09/16/20	13:09	02:02	Method Blank
FA78551-18	O61406.D	09/16/20	13:29	02:22	2036YOU2441F
FA78551-23	O61407.D	09/16/20	13:50	02:43	2036YOU2446F
FA78551-24	O61408.D	09/16/20	14:10	03:03	2036X0BW232F
FA78551-25	O61409.D	09/16/20	14:30	03:23	2036X0BW233A
FA78551-26	O61410.D	09/16/20	14:51	03:44	2036X0BW234C
FA78551-27	O61411.D	09/16/20	15:11	04:04	2036X0BW246F
ZZZZZZ	O61412.D	09/16/20	15:32	04:25	(unrelated sample)
ZZZZZZ	O61414.D	09/16/20	16:13	05:06	(unrelated sample)
ZZZZZZ	O61415.D	09/16/20	16:33	05:26	(unrelated sample)
ZZZZZZ	O61416.D	09/16/20	16:53	05:46	(unrelated sample)
ZZZZZZ	O61417.D	09/16/20	17:14	06:07	(unrelated sample)
ZZZZZZ	O61418.D	09/16/20	17:34	06:27	(unrelated sample)
ZZZZZZ	O61419.D	09/16/20	17:55	06:48	(unrelated sample)
ZZZZZZ	O61420.D	09/16/20	18:15	07:08	(unrelated sample)
VO2363-ECC2362	O61422.D	09/17/20	08:05	20:58	Ending cal 5

Instrument Performance Check (BFB)

Job Number: FA78551
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Sample: VZ2414-BFB	Injection Date: 09/11/20
Lab File ID: Z62205.D	Injection Time: 17:20
Instrument ID: GCMSZ	

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	24546	21.4	Pass
75	30.0 - 60.0% of mass 95	61341	53.4	Pass
95	Base peak, 100% relative abundance	114880	100.0	Pass
96	5.0 - 9.0% of mass 95	7912	6.89	Pass
173	Less than 2.0% of mass 174	429	0.37 (0.48) ^a	Pass
174	50.0 - 100.0% of mass 95	89573	78.0	Pass
175	5.0 - 9.0% of mass 174	6903	6.01 (7.71) ^a	Pass
176	95.0 - 101.0% of mass 174	89128	77.6 (99.5) ^a	Pass
177	5.0 - 9.0% of mass 176	5541	4.82 (6.22) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VZ2414-IC2414	Z62207.D	09/11/20	18:15	00:55	Initial cal 1
VZ2414-IC2414	Z62208.D	09/11/20	18:34	01:14	Initial cal 2
VZ2414-IC2414	Z62209.D	09/11/20	18:53	01:33	Initial cal 3
VZ2414-IC2414	Z62210.D	09/11/20	19:13	01:53	Initial cal 4
VZ2414-ICC2414	Z62211.D	09/11/20	19:32	02:12	Initial cal 5
VZ2414-IC2414	Z62212.D	09/11/20	19:51	02:31	Initial cal 6
VZ2414-IC2414	Z62213.D	09/11/20	20:13	02:53	Initial cal 7
VZ2414-ICV2414	Z62215.D	09/11/20	20:51	03:31	Initial cal verification 5
VZ2414-BS	Z62216.D	09/11/20	21:10	03:50	Blank Spike
VZ2414-MB	Z62218.D	09/11/20	21:49	04:29	Method Blank
FA78573-1	Z62219.D	09/11/20	22:08	04:48	(used for QC only; not part of job FA78551)
ZZZZZZ	Z62220.D	09/11/20	22:27	05:07	(unrelated sample)
ZZZZZZ	Z62221.D	09/11/20	22:47	05:27	(unrelated sample)
ZZZZZZ	Z62222.D	09/11/20	23:06	05:46	(unrelated sample)
ZZZZZZ	Z62223.D	09/11/20	23:26	06:06	(unrelated sample)
ZZZZZZ	Z62224.D	09/11/20	23:45	06:25	(unrelated sample)
ZZZZZZ	Z62225.D	09/12/20	00:04	06:44	(unrelated sample)
ZZZZZZ	Z62226.D	09/12/20	00:23	07:03	(unrelated sample)
ZZZZZZ	Z62227.D	09/12/20	00:42	07:22	(unrelated sample)
ZZZZZZ	Z62228.D	09/12/20	01:02	07:42	(unrelated sample)
ZZZZZZ	Z62229.D	09/12/20	01:21	08:01	(unrelated sample)
ZZZZZZ	Z62230.D	09/12/20	01:40	08:20	(unrelated sample)
ZZZZZZ	Z62231.D	09/12/20	02:00	08:40	(unrelated sample)
ZZZZZZ	Z62232.D	09/12/20	02:19	08:59	(unrelated sample)

Instrument Performance Check (BFB)

Job Number: FA78551
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Sample: VZ2414-BFB	Injection Date: 09/11/20
Lab File ID: Z62205.D	Injection Time: 17:20
Instrument ID: GCMSZ	

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
FA78573-1MS	Z62233.D	09/12/20	02:38	09:18	Matrix Spike
FA78573-1MSD	Z62234.D	09/12/20	02:57	09:37	Matrix Spike Duplicate
VZ2414-ECC2414	Z62235.D	09/12/20	03:16	09:56	Ending cal 5

6.4.6

6

Instrument Performance Check (BFB)

Job Number: FA78551
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Sample: VZ2418-BFB	Injection Date: 09/14/20
Lab File ID: Z62321.D	Injection Time: 11:56
Instrument ID: GCMSZ	

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	23573	24.3	Pass
75	30.0 - 60.0% of mass 95	53144	54.7	Pass
95	Base peak, 100% relative abundance	97075	100.0	Pass
96	5.0 - 9.0% of mass 95	6990	7.20	Pass
173	Less than 2.0% of mass 174	393	0.40 (0.48) ^a	Pass
174	50.0 - 100.0% of mass 95	81579	84.0	Pass
175	5.0 - 9.0% of mass 174	5714	5.89 (7.00) ^a	Pass
176	95.0 - 101.0% of mass 174	80621	83.1 (98.8) ^a	Pass
177	5.0 - 9.0% of mass 176	4844	4.99 (6.01) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VZ2418-CC2414	Z62322.D	09/14/20	12:22	00:26	Continuing cal 5
VZ2418-BS	Z62323.D	09/14/20	13:18	01:22	Blank Spike
VZ2418-MB	Z62325.D	09/14/20	13:57	02:01	Method Blank
ZZZZZZ	Z62326.D	09/14/20	15:04	03:08	(unrelated sample)
ZZZZZZ	Z62327.D	09/14/20	15:23	03:27	(unrelated sample)
ZZZZZZ	Z62328.D	09/14/20	15:42	03:46	(unrelated sample)
ZZZZZZ	Z62329.D	09/14/20	16:02	04:06	(unrelated sample)
ZZZZZZ	Z62330.D	09/14/20	16:21	04:25	(unrelated sample)
ZZZZZZ	Z62331.D	09/14/20	16:41	04:45	(unrelated sample)
ZZZZZZ	Z62332.D	09/14/20	17:00	05:04	(unrelated sample)
ZZZZZZ	Z62333.D	09/14/20	17:19	05:23	(unrelated sample)
FA78551-15	Z62334.D	09/14/20	17:38	05:42	2036YOU2438F
FA78551-15MS	Z62335.D	09/14/20	17:57	06:01	Matrix Spike
FA78551-15MSD	Z62336.D	09/14/20	18:16	06:20	Matrix Spike Duplicate
ZZZZZZ	Z62337.D	09/14/20	18:36	06:40	(unrelated sample)
ZZZZZZ	Z62338.D	09/14/20	18:55	06:59	(unrelated sample)
ZZZZZZ	Z62339.D	09/14/20	19:14	07:18	(unrelated sample)
ZZZZZZ	Z62340.D	09/14/20	19:33	07:37	(unrelated sample)
ZZZZZZ	Z62341.D	09/14/20	19:52	07:56	(unrelated sample)
FA78551-16	Z62342.D	09/14/20	20:12	08:16	2036YOU2439D
FA78551-16MS	Z62343.D	09/14/20	20:31	08:35	Matrix Spike
FA78551-16MSD	Z62344.D	09/14/20	20:50	08:54	Matrix Spike Duplicate
ZZZZZZ	Z62345.D	09/14/20	21:09	09:13	(unrelated sample)
ZZZZZZ	Z62346.D	09/14/20	21:28	09:32	(unrelated sample)

Instrument Performance Check (BFB)

Job Number: FA78551
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Sample: VZ2418-BFB	Injection Date: 09/14/20
Lab File ID: Z62321.D	Injection Time: 11:56
Instrument ID: GCMSZ	

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ZZZZZZ	Z62347.D	09/14/20	21:48	09:52	(unrelated sample)
ZZZZZZ	Z62348.D	09/14/20	22:07	10:11	(unrelated sample)
ZZZZZZ	Z62349.D	09/14/20	22:26	10:30	(unrelated sample)
VZ2418-ECC2414	Z62350.D	09/14/20	22:45	10:49	Ending cal 5

Instrument Performance Check (BFB)

Job Number: FA78551
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Sample: VZ2419-BFB	Injection Date: 09/15/20
Lab File ID: Z62353.D	Injection Time: 13:19
Instrument ID: GCMSZ	

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	25171	24.4	Pass
75	30.0 - 60.0% of mass 95	57957	56.3	Pass
95	Base peak, 100% relative abundance	103013	100.0	Pass
96	5.0 - 9.0% of mass 95	8476	8.23	Pass
173	Less than 2.0% of mass 174	575	0.56 (0.65) ^a	Pass
174	50.0 - 100.0% of mass 95	88536	85.9	Pass
175	5.0 - 9.0% of mass 174	6388	6.20 (7.22) ^a	Pass
176	95.0 - 101.0% of mass 174	87899	85.3 (99.3) ^a	Pass
177	5.0 - 9.0% of mass 176	5269	5.11 (5.99) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VZ2419-CC2414	Z62354.D	09/15/20	13:58	00:39	Continuing cal 5
VZ2419-BS	Z62355.D	09/15/20	14:17	00:58	Blank Spike
VZ2419-MB	Z62357.D	09/15/20	14:55	01:36	Method Blank
ZZZZZZ	Z62359.D	09/15/20	15:39	02:20	(unrelated sample)
ZZZZZZ	Z62360.D	09/15/20	15:58	02:39	(unrelated sample)
FA78551-1	Z62361.D	09/15/20	16:18	02:59	2036YOU2423A
FA78551-2	Z62362.D	09/15/20	16:37	03:18	2036YOU2425F
FA78551-3	Z62363.D	09/15/20	16:56	03:37	2036YOU2426F
FA78551-4	Z62364.D	09/15/20	17:16	03:57	2036YOU2427F
FA78551-5	Z62365.D	09/15/20	17:35	04:16	2036YOU2428F
FA78551-6	Z62366.D	09/15/20	17:55	04:36	2036YOU2429F
FA78551-7	Z62367.D	09/15/20	18:14	04:55	2036YOU2430F
FA78551-8	Z62368.D	09/15/20	18:33	05:14	2036YOU2431F
FA78551-7MS	Z62370.D	09/15/20	18:53	05:34	Matrix Spike
FA78551-7MSD	Z62371.D	09/15/20	19:12	05:53	Matrix Spike Duplicate
FA78551-9	Z62372.D	09/15/20	19:31	06:12	2036YOU2432F
FA78551-10	Z62373.D	09/15/20	19:51	06:32	2036YOU2433D
FA78551-11	Z62374.D	09/15/20	20:10	06:51	2036YOU2434F
FA78551-12	Z62375.D	09/15/20	20:29	07:10	2036YOU2435F
FA78551-13	Z62376.D	09/15/20	20:49	07:30	2036YOU2436F
FA78551-14	Z62377.D	09/15/20	21:08	07:49	2036YOU2437F
FA78551-17	Z62379.D	09/15/20	21:47	08:28	2036YOU2440F
FA78551-19	Z62380.D	09/15/20	22:06	08:47	2036YOU2442D
FA78551-20	Z62381.D	09/15/20	22:25	09:06	2036YOU2443F

Instrument Performance Check (BFB)

Job Number: FA78551
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Sample: VZ2419-BFB	Injection Date: 09/15/20
Lab File ID: Z62353.D	Injection Time: 13:19
Instrument ID: GCMSZ	

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
FA78551-21	Z62382.D	09/15/20	22:45	09:26	2036YOU2444F
FA78551-22	Z62383.D	09/15/20	23:04	09:45	2036YOU2445F
VZ2419-ECC2414	Z62384.D	09/15/20	23:23	10:04	Ending cal 5

6.4.8

6

Internal Standard Area Summary

Job Number: FA78551
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Check Std: VO2358-CC2356	Injection Date: 09/12/20
Lab File ID: O61273.D	Injection Time: 10:52
Instrument ID: GCMSO	Method: SW846 8260B BY SIM

	IS 1 AREA	RT	IS 2 AREA	RT
Initial Cal ^a	367891	7.35	288681	10.45
Check Std ^b	312802	7.34	250188	10.44
Upper Limit ^c	625604	7.51	500376	10.61
Lower Limit ^d	156401	7.17	125094	10.27

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT
VO2358-BS	316235	7.34	246436	10.44
VO2358-MB	252883	7.35	194316	10.45
FA78551-1	244209	7.35	189092	10.45
FA78551-2	237065	7.35	183423	10.45
FA78551-3	232343	7.35	184296	10.45
FA78551-4	229839	7.35	185710	10.45
FA78551-5	233960	7.35	188942	10.45
FA78551-6	226468	7.35	185206	10.45
FA78551-7	226141	7.35	182649	10.45
FA78551-8	217764	7.35	177148	10.45
FA78551-9	215187	7.35	176308	10.45
FA78551-10	208551	7.35	173218	10.45
FA78551-11	208100	7.35	169973	10.45
FA78551-1MS	248512	7.35	199484	10.45
FA78551-1MSD	264695	7.35	209153	10.45
VO2358-ECC2356294586	7.35	233904	10.45	

IS 1 = Fluorobenzene
IS 2 = Chlorobenzene-D5

- (a) Initial Cal is: VO2356-ICC2356 O61234.D 09/11/20 16:55
- (b) Check Std Limit = -50 to + 100% of initial cal area.
- (c) Upper Limit = + 100% of check standard area; Retention time + 0.167 minutes.
- (d) Lower Limit = -50% of check standard area; Retention time -0.167 minutes.

Internal Standard Area Summary

Job Number: FA78551
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Check Std: VO2359-CC2356	Injection Date: 09/12/20
Lab File ID: O61294.D	Injection Time: 17:54
Instrument ID: GCMSO	Method: SW846 8260B BY SIM

	IS 1 AREA	RT	IS 2 AREA	RT
Initial Cal ^a	367891	7.35	288681	10.45
Check Std ^b	309205	7.34	244582	10.44
Upper Limit ^c	618410	7.51	489164	10.61
Lower Limit ^d	154603	7.17	122291	10.27

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT
VO2359-BS	312701	7.34	245098	10.44
VO2359-MB	277430	7.35	211417	10.44
FA78551-12	231482	7.35	184213	10.45
FA78551-13	234740	7.35	187654	10.45
FA78551-14	227299	7.35	183118	10.45
FA78551-15	226995	7.35	184311	10.45
FA78551-16	224261	7.35	183224	10.45
FA78551-17	217976	7.35	180623	10.45
FA78551-18	210971	7.35	171670	10.45
FA78551-19	212593	7.35	173815	10.45
FA78551-20	207333	7.35	162383	10.45
FA78551-21	203050	7.35	164109	10.45
FA78551-22	196239	7.35	159788	10.45
FA78551-23	194241	7.35	160896	10.45
FA78551-24	192803	7.35	152706	10.45
FA78551-25	194118	7.34	150807	10.44
FA78551-26	185209	7.34	176438	10.45
FA78551-27	184950	7.35	150061	10.45
ZZZZZZ	183028	7.35	148402	10.45
ZZZZZZ	180985	7.35	149504	10.45
ZZZZZZ	176073	7.34	140821	10.45
ZZZZZZ	180953	7.35	141150	10.45
FA78551-12MS	224584	7.35	184530	10.45
FA78551-12MSD	240247	7.34	194673	10.44
VO2359-ECC2356267420		7.35	216936	10.45

IS 1 = Fluorobenzene
IS 2 = Chlorobenzene-D5

- (a) Initial Cal is: VO2356-ICC2356 O61234.D 09/11/20 16:55
- (b) Check Std Limit = -50 to + 100% of initial cal area.
- (c) Upper Limit = + 100% of check standard area; Retention time + 0.167 minutes.
- (d) Lower Limit = -50% of check standard area; Retention time -0.167 minutes.

Internal Standard Area Summary

Job Number: FA78551
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Check Std: VO2363-CC2362	Injection Date: 09/16/20
Lab File ID: O61402.D	Injection Time: 11:32
Instrument ID: GCMSO	Method: SW846 8260B BY SIM

	IS 1	RT	IS 2	RT
	AREA		AREA	
Initial Cal ^a	305864	7.34	250755	10.44
Check Std ^b	325847	7.34	270075	10.44
Upper Limit ^c	651694	7.51	540150	10.61
Lower Limit ^d	162924	7.17	135038	10.27

Lab	IS 1	RT	IS 2	RT
Sample ID	AREA		AREA	
VO2363-BS ^e	320586	7.34	256344	10.44
VO2363-MB	238146	7.35	183919	10.45
FA78551-18 ^f	224280	7.35	182597	10.45
FA78551-23 ^f	216471	7.35	178619	10.45
FA78551-24 ^f	206526	7.35	162387	10.45
FA78551-25 ^f	197208	7.35	154209	10.45
FA78551-26 ^f	194058	7.35	193477	10.45
FA78551-27 ^f	188143	7.35	152706	10.45
ZZZZZZ	187324	7.35	187821	10.45
ZZZZZZ	174772	7.35	135780	10.45
ZZZZZZ	172443	7.35	135200	10.45
ZZZZZZ	172782	7.35	134116*	10.45
ZZZZZZ	165610	7.35	131594*	10.45
ZZZZZZ	167325	7.35	130941*	10.45
ZZZZZZ	217133	7.35	142690	10.45
ZZZZZZ	164510	7.35	131208*	10.45
VO2363-ECC2362264356	320586	7.34	231809	10.44

IS 1 = Fluorobenzene
IS 2 = Chlorobenzene-D5

- (a) Initial Cal is: VO2362-ICC2362 O61390.D 09/15/20 17:07
- (b) Check Std Limit = -50 to + 100% of initial cal area.
- (c) Upper Limit = + 100% of check standard area; Retention time + 0.167 minutes.
- (d) Lower Limit = -50% of check standard area; Retention time -0.167 minutes.
- (e) No MS/MSD available for this run.
- (f) Confirmation run.

6.5.3
6

Internal Standard Area Summary

Job Number: FA78551
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Check Std: VZ2418-CC2414	Injection Date: 09/14/20
Lab File ID: Z62322.D	Injection Time: 12:22
Instrument ID: GCMSZ	Method: SW846 8260B BY SIM

	IS 1	RT	IS 2	RT
	AREA		AREA	
Initial Cal ^a	1875869	7.40	1507669	10.51
Check Std ^b	1993481	7.40	1656572	10.51
Upper Limit ^c	3986962	7.57	3313144	10.68
Lower Limit ^d	996741	7.23	828286	10.34

Lab	IS 1	RT	IS 2	RT
Sample ID	AREA		AREA	
VZ2418-BS	1802196	7.40	1471249	10.51
VZ2418-MB	1691138	7.40	1358393	10.51
ZZZZZZ	1602030	7.40	1286055	10.51
ZZZZZZ	1576340	7.40	1275081	10.51
ZZZZZZ	1512698	7.40	1225189	10.51
ZZZZZZ	1527900	7.40	1238043	10.51
ZZZZZZ	1485802	7.40	1206669	10.51
ZZZZZZ	1473867	7.40	1201502	10.51
ZZZZZZ	1444465	7.40	1171684	10.51
ZZZZZZ	1402630	7.40	1138118	10.51
FA78551-15	1402089	7.40	1140633	10.51
FA78551-15MS	1535956	7.40	1308662	10.51
FA78551-15MSD	1533862	7.40	1295594	10.51
ZZZZZZ	1474091	7.40	1187051	10.51
ZZZZZZ	1361609	7.40	1097547	10.51
ZZZZZZ	1391996	7.40	1135236	10.51
ZZZZZZ	1380259	7.40	1140028	10.51
ZZZZZZ	1368340	7.40	1112637	10.51
FA78551-16	1340569	7.40	1092265	10.51
FA78551-16MS	1386954	7.40	1188096	10.51
FA78551-16MSD	1509625	7.40	1278994	10.51
ZZZZZZ	1414299	7.40	1136056	10.51
ZZZZZZ	1371655	7.40	1116479	10.51
ZZZZZZ	1364805	7.40	1111660	10.51
ZZZZZZ	1271893	7.40	1030410	10.51
ZZZZZZ	1273604	7.40	1045493	10.51
VZ2418-ECC2414	1446126	7.40	1266288	10.51

IS 1 = Fluorobenzene
IS 2 = Chlorobenzene-D5

(a) Initial Cal is: VZ2414-ICC2414 Z62211.D 09/11/20 19:32
 (b) Check Std Limit = -50 to + 100% of initial cal area.

Internal Standard Area Summary

Job Number: FA78551
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Check Std: VZ2418-CC2414	Injection Date: 09/14/20
Lab File ID: Z62322.D	Injection Time: 12:22
Instrument ID: GCMSZ	Method: SW846 8260B BY SIM

Lab	IS 1	IS 2		
Sample ID	AREA	RT	AREA	RT

- (c) Upper Limit = + 100% of check standard area; Retention time + 0.167 minutes.
- (d) Lower Limit = -50% of check standard area; Retention time -0.167 minutes.

6.5.4
6

Internal Standard Area Summary

Job Number: FA78551
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Check Std: VZ2419-CC2414	Injection Date: 09/15/20
Lab File ID: Z62354.D	Injection Time: 13:58
Instrument ID: GCMSZ	Method: SW846 8260B BY SIM

	IS 1 AREA	RT	IS 2 AREA	RT
Initial Cal ^a	1875869	7.40	1507669	10.51
Check Std ^b	2207739	7.40	1887969	10.51
Upper Limit ^c	4415478	7.57	3775938	10.68
Lower Limit ^d	1103870	7.23	943985	10.34

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT
VZ2419-BS	2106664	7.40	1769955	10.51
VZ2419-MB	1858608	7.40	1502088	10.51
ZZZZZZ	1745743	7.40	1426071	10.51
ZZZZZZ	1702720	7.40	1418169	10.51
FA78551-1	1642515	7.40	1342090	10.51
FA78551-2	1613020	7.40	1322254	10.51
FA78551-3	1523802	7.40	1250445	10.51
FA78551-4	1598786	7.40	1309618	10.51
FA78551-5	1579131	7.40	1301000	10.51
FA78551-6	1510569	7.40	1246801	10.52
FA78551-7	1495843	7.40	1236200	10.52
FA78551-8	1528417	7.40	1257129	10.52
FA78551-7MS	1645715	7.40	1440453	10.51
FA78551-7MSD	1649663	7.40	1429931	10.51
FA78551-9	1602425	7.40	1314913	10.51
FA78551-10	1548226	7.40	1277318	10.51
FA78551-11	1519534	7.40	1253366	10.51
FA78551-12	1484029	7.40	1236600	10.51
FA78551-13	1461395	7.40	1217797	10.51
FA78551-14	1465795	7.40	1219249	10.51
FA78551-17	1462983	7.40	1232583	10.51
FA78551-19	1430433	7.40	1189416	10.51
FA78551-20	1442469	7.40	1201458	10.51
FA78551-21	1425076	7.40	1193005	10.51
FA78551-22	1443164	7.40	1210945	10.51
VZ2419-ECC2414	1683040	7.40	1525848	10.51

IS 1 = Fluorobenzene
IS 2 = Chlorobenzene-D5

(a) Initial Cal is: VZ2414-ICC2414 Z62211.D 09/11/20 19:32
 (b) Check Std Limit = -50 to + 100% of initial cal area.
 (c) Upper Limit = + 100% of check standard area; Retention time + 0.167 minutes.

6.5.5
6

Internal Standard Area Summary

Job Number: FA78551
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Check Std: VZ2419-CC2414	Injection Date: 09/15/20
Lab File ID: Z62354.D	Injection Time: 13:58
Instrument ID: GCMSZ	Method: SW846 8260B BY SIM

Lab	IS 1	IS 2		
Sample ID	AREA	RT	AREA	RT

(d) Lower Limit = -50% of check standard area; Retention time -0.167 minutes.

6.5.5

6

Surrogate Recovery Summary

Job Number: FA78551
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Method: SW846 8260B BY SIM	Matrix: AQ
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Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2
FA78551-21	Z62382.D	127* a	94
FA78551-21	O61307.D	110	93
FA78551-22	Z62383.D	128* a	95
FA78551-22	O61308.D	111	94
FA78551-23	O61407.D	110	100
FA78551-23	O61309.D	111	92
FA78551-24	O61408.D	111	104
FA78551-24	O61310.D	111	96
FA78551-25	O61409.D	113	104
FA78551-25	O61311.D	111	97
FA78551-26	O61410.D	113	81* a
FA78551-26	O61312.D	113	79* a
FA78551-27	O61411.D	115	100
FA78551-27	O61313.D	113	94
FA78551-12MS	O61318.D	100	87* a
FA78551-12MSD	O61319.D	99	89
FA78551-15MS	Z62335.D	114	93
FA78551-15MSD	Z62336.D	113	94
FA78551-16MS	Z62343.D	115	92
FA78551-16MSD	Z62344.D	114	93
FA78551-1MS	O61288.D	99	91
FA78551-1MSD	O61289.D	98	93
FA78551-7MS	Z62370.D	119 a	89
FA78551-7MSD	Z62371.D	118	90
VO2358-BS	O61274.D	98	97
VO2358-MB	O61276.D	104	100
VO2359-BS	O61295.D	97	95
VO2359-MB	O61296.D	103	101
VZ2418-BS	Z62323.D	110	98
VZ2418-MB	Z62325.D	112	100
VZ2419-BS	Z62355.D	112	95
VZ2419-MB	Z62357.D	116	99

Surrogate Compounds	Recovery Limits
S1 = 1,2-Dichloroethane-D4	74-125%
S2 = Toluene-D8	88-111%

(a) Outside DOD QSM control limits.

Initial Calibration Summary

Job Number: FA78551
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Sample: VO2356-ICC2356
Lab FileID: O61234.D

Response Factor Report MSVOA12

Method : C:\msdchem\2\methods\SIMCL091120.M (RTE Integrator)
 Title : Standard Methods 6200B
 Last Update : Sun Sep 13 19:20:40 2020
 Response via : Initial Calibration

Calibration Files

1 =O61230.D 2 =O61231.D 3 =O61232.D 4 =O61233.D
 5 =O61234.D 6 =O61235.D 7 =O61236.D

Compound	1	2	3	4	5	6	7	Avg	%RSD
1) I Fluorobenzene	-----ISTD-----								
2) Vinyl Chloride	0.558	0.633	0.571	0.573	0.524	0.492	0.473	0.546	9.96
	---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9997								
	Response Ratio = 0.00000 + 0.59060 *A + -0.03053 *A^2								
3) Chloromethane	1.395	1.093	0.857	0.828	0.737	0.682	0.649	0.892	29.90
	---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9992								
	Response Ratio = 0.00000 + 0.88497 *A + -0.06257 *A^2								
4) 1,1-Dichloroethen	0.648	0.725	0.662	0.734	0.703	0.672	0.694	0.691	4.67
5) Methylene Chlorid	2.151	0.418	0.186	0.117	0.102	0.095	0.094	0.452	E1 167.87
	---- Linear regr., Force(0,0) ---- Coefficient = 0.9916								
	Response Ratio = 0.00000 + 1.08258 *A								
6) trans-1,2-Dichlor	0.823	0.909	0.775	0.847	0.805	0.778	0.808	0.821	5.65
	---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9992								
	Response Ratio = 0.00000 + 0.79595 *A + 0.00117 *A^2								
7) 1,1-Dichloroethan	0.920	0.983	0.903	0.972	0.919	0.884	0.906	0.927	3.97
8) cis-1,2-Dichloroe	0.471	0.472	0.435	0.472	0.454	0.444	0.460	0.458	3.24
9) Chloroform	0.840	0.844	0.764	0.827	0.779	0.754	0.774	0.798	4.79
10) Carbon Tetrachlor	0.502	0.562	0.506	0.571	0.556	0.537	0.571	0.544	5.38
11) 1,1,1-Trichloroet	0.593	0.629	0.576	0.645	0.621	0.604	0.636	0.615	4.06
12) Benzene	1.681	1.663	1.504	1.628	1.554	1.503	1.551	1.583	4.64
	---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9993								
	Response Ratio = 0.00000 + 1.54480 *A + -0.00157 *A^2								
13)S 1,2-Dichloroethan	0.407	0.407	0.413	0.434	0.389	0.389	0.387	0.404	4.23
14) 1,2-Dichloroethan	0.768	0.789	0.746	0.780	0.737	0.728	0.733	0.754	3.24
15) Trichloroethene	0.466	0.487	0.444	0.487	0.472	0.461	0.476	0.470	3.22
16) 1,2-Dichloropropa	0.514	0.567	0.519	0.548	0.517	0.503	0.519	0.527	4.30
	---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9993								
	Response Ratio = 0.00000 + 0.51595 *A + -0.00029 *A^2								
17) cis-1,3-Dichlorop	0.485	0.515	0.497	0.552	0.551	0.561	0.582	0.535	6.69
18) I Chlorobenzene-d5	-----ISTD-----								
19)S Toluene-d8	1.161	1.150	1.123	1.108	1.100	1.117	1.132	1.127	1.95
20) trans-1,3-Dichlor	0.576	0.606	0.611	0.681	0.682	0.706	0.738	0.657	9.10
21) Tetrachloroethene	0.563	0.631	0.539	0.583	0.555	0.541	0.566	0.568	5.54
	---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9992								
	Response Ratio = 0.00000 + 0.54272 *A + 0.00447 *A^2								
22) 1,4-Dichlorobenze	1.098	1.175	1.110	1.205	1.177	1.154	1.188	1.158	3.46
23) 1,2-Dibromo-3-Chl	0.334	0.260	0.190	0.205	0.209	0.220	0.225	0.235	20.90
	---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9994								

6.7.1
6



Initial Calibration Summary

Job Number: FA78551
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Sample: VO2356-ICC2356
Lab FileID: O61234.D

$$\text{Response Ratio} = 0.00000 + 0.20028 *A + 0.00615 *A^2$$

(#) = Out of Range

SIMCL091120.M

Sun Sep 13 19:41:25 2020

Initial Calibration Verification

Job Number: FA78551
 Account: AHTNACAS Ahtna Global, LLC
 Project: Fort Ord Groundwater Monitoring

Sample: VO2356-ICV2356
 Lab FileID: O61238.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\2\data\091120\O61238.D Vial: 10
 Acq On : 11 Sep 2020 6:16 pm Operator: stutip
 Sample : icv2356-5 Inst : MSVOA12
 Misc : MS47201,VO2356,,,,, Multiplr: 1.00
 MS Integration Params: rteint.p

Method : C:\msdchem\2\methods\SIMCL091120.M (RTE Integrator)
 Title : Standard Methods 6200B
 Last Update : Sun Sep 13 19:20:40 2020
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	Fluorobenzene	1.000	1.000	0.0	107	0.00	7.35
	----- Amount	Calc.	%Drift	-----			
2	Vinyl Chloride	10.000	8.489	15.1	93	0.00	2.90
3	Chloromethane	10.000	8.270	17.3	94	0.00	2.80
	----- AvgRF	CCRF	%Dev	-----			
4	1,1-Dichloroethene	0.691	0.646	6.5	98	0.00	4.09
	----- Amount	Calc.	%Drift	-----			
5	Methylene Chloride	10.000	8.887	11.1	101	0.00	4.70
6	trans-1,2-Dichloroethene	10.000	9.532	4.7	101	0.00	4.87
	----- AvgRF	CCRF	%Dev	-----			
7	1,1-Dichloroethane	0.927	0.885	4.5	103	0.00	5.51
8	cis-1,2-Dichloroethene	0.458	0.443	3.3	104	0.00	6.07
9	Chloroform	0.798	0.745	6.6	102	0.00	6.33
10	Carbon Tetrachloride	0.544	0.522	4.0	100	0.00	6.51
11	1,1,1-Trichloroethane	0.615	0.580	5.7	100	0.00	6.58
	----- Amount	Calc.	%Drift	-----			
12	Benzene	10.000	10.095	-1.0	107	0.00	6.94
	----- AvgRF	CCRF	%Dev	-----			
13 S	1,2-Dichloroethane-d4	0.404	0.386	4.5	106	0.00	7.07
14	1,2-Dichloroethane	0.754	0.741	1.7	107	0.00	7.14
15	Trichloroethene	0.470	0.466	0.9	105	0.00	7.52
	----- Amount	Calc.	%Drift	-----			
16	1,2-Dichloropropane	10.000	10.102	-1.0	108	0.00	8.04
	----- AvgRF	CCRF	%Dev	-----			
17	cis-1,3-Dichloropropene	0.535	0.573	-7.1	111	0.00	8.71
18 I	Chlorobenzene-d5	1.000	1.000	0.0	106	0.00	10.45
19 S	Toluene-d8	1.127	1.117	0.9	108	0.00	8.90
20	trans-1,3-Dichloropropene	0.657	0.726	-10.5	113	0.00	9.34
	----- Amount	Calc.	%Drift	-----			
21	Tetrachloroethene	10.000	9.602	4.0	101	0.00	9.34
	----- AvgRF	CCRF	%Dev	-----			

Initial Calibration Verification

Job Number: FA78551
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Sample: VO2356-ICV2356
Lab FileID: O61238.D

22	1,4-Dichlorobenzene	1.158	1.170	-1.0	105	0.00	12.83
		-----	Amount	Calc.	%Drift	-----	
23	1,2-Dibromo-3-Chloropropa	10.000	10.133	-1.3	109	0.00	14.04
		-----				-----	

(#) = Out of Range SPCC's out = 0 CCC's out = 0
 061234.D SIMCL091120.M Sun Sep 13 19:41:09 2020

6.7.2
 6

Continuing Calibration Summary

Job Number: FA78551
 Account: AHTNACAS Ahtna Global, LLC
 Project: Fort Ord Groundwater Monitoring

Sample: VO2358-CC2356
 Lab FileID: O61273.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\je...-2020\VO2358\O61273.d Vial: 1
 Acq On : 12 Sep 2020 10:52 am Operator: stutip
 Sample : cc2356-5 Inst : MSVOA12
 Misc : MS47191,VO2358,,,,, Multiplr: 1.00
 MS Integration Params: rteint.p

Method : C:\msdchem\1\methods\SIMCL091120.M (RTE Integrator)
 Title : Standard Methods 6200B
 Last Update : Sun Sep 13 19:20:40 2020
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	Fluorobenzene	1.000	1.000	0.0	85	0.00	7.34
	----- True	Calc.	% Drift	-----			
2	Vinyl Chloride	10.000	8.543	14.6	75	-0.01	2.90
3	Chloromethane	10.000	8.654	13.5	78	-0.02	2.79
	----- AvgRF	CCRF	% Dev	-----			
4	1,1-Dichloroethene	0.691	0.651	5.8	79	-0.01	4.08
	----- True	Calc.	% Drift	-----			
5	Methylene Chloride	10.000	9.205	7.9	83	-0.01	4.69
6	trans-1,2-Dichloroethene	10.000	9.282	7.2	78	-0.02	4.86
	----- AvgRF	CCRF	% Dev	-----			
7	1,1-Dichloroethane	0.927	0.854	7.9	79	-0.01	5.50
8	cis-1,2-Dichloroethene	0.458	0.407	11.1	76	-0.01	6.06
9	Chloroform	0.798	0.708	11.3	77	0.00	6.33
10	Carbon Tetrachloride	0.544	0.481	11.6	74	0.00	6.50
11	1,1,1-Trichloroethane	0.615	0.540	12.2	74	-0.01	6.57
	----- True	Calc.	% Drift	-----			
12	Benzene	10.000	9.025	9.7	76	0.00	6.94
	----- AvgRF	CCRF	% Dev	-----			
13 S	1,2-Dichloroethane-d4	0.404	0.397	1.7	87	0.00	7.07
14	1,2-Dichloroethane	0.754	0.677	10.2	78	0.00	7.14
15	Trichloroethene	0.470	0.415	11.7	75	0.00	7.51
	----- True	Calc.	% Drift	-----			
16	1,2-Dichloropropane	10.000	9.244	7.6	78	0.00	8.04
	----- AvgRF	CCRF	% Dev	-----			
17	cis-1,3-Dichloropropene	0.535	0.484	9.5	75	0.00	8.71
18 I	Chlorobenzene-d5	1.000	1.000	0.0	87	0.00	10.44
19 S	Toluene-d8	1.127	1.072	4.9	84	0.00	8.90
20	trans-1,3-Dichloropropene	0.657	0.592	9.9	75	0.00	9.34
	----- True	Calc.	% Drift	-----			
21	Tetrachloroethene	10.000	8.787	12.1	76	0.00	9.34
	----- AvgRF	CCRF	% Dev	-----			

Continuing Calibration Summary

Job Number: FA78551
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Sample: VO2358-CC2356
Lab FileID: O61273.D

22	1,4-Dichlorobenzene	1.158	1.042	10.0	77	0.00	12.82
		----- True	Calc.	% Drift	-----		
23	1,2-Dibromo-3-Chloropropa	10.000	8.544	14.6	75	0.00	14.04

(#) = Out of Range SPCC's out = 0 CCC's out = 0
 061234.D SIMCL091120.M Mon Sep 14 07:26:16 2020

6.7.3

6

Continuing Calibration Summary

Job Number: FA78551
 Account: AHTNACAS Ahtna Global, LLC
 Project: Fort Ord Groundwater Monitoring

Sample: VO2358-ECC2356
 Lab FileID: O61290.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\je...-2020\VO2358\O61290.d Vial: 17
 Acq On : 12 Sep 2020 4:39 pm Operator: stutip
 Sample : ecc2356-5 Inst : MSVOA12
 Misc : MS47192,VO2358,,,,, Multiplr: 1.00
 MS Integration Params: rteint.p

Method : C:\msdchem\1\methods\SIMCL091120.M (RTE Integrator)
 Title : Standard Methods 6200B
 Last Update : Sun Sep 13 19:20:40 2020
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 50% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	Fluorobenzene	1.000	1.000	0.0	80	0.00	7.35
	----- True	Calc.	% Drift	-----			
2	Vinyl Chloride	10.000	10.409	-4.1	84	0.00	2.90
3	Chloromethane	10.000	10.256	-2.6	84	-0.01	2.80
	----- AvgRF	CCRF	% Dev	-----			
4	1,1-Dichloroethene	0.691	0.743	-7.5	85	-0.01	4.08
	----- True	Calc.	% Drift	-----			
5	Methylene Chloride	10.000	9.958	0.4	85	0.00	4.70
6	trans-1,2-Dichloroethene	10.000	10.492	-4.9	83	0.00	4.87
	----- AvgRF	CCRF	% Dev	-----			
7	1,1-Dichloroethane	0.927	0.951	-2.6	83	0.00	5.51
8	cis-1,2-Dichloroethene	0.458	0.451	1.5	80	0.00	6.07
9	Chloroform	0.798	0.790	1.0	81	0.00	6.33
10	Carbon Tetrachloride	0.544	0.553	-1.7	80	0.00	6.51
11	1,1,1-Trichloroethane	0.615	0.620	-0.8	80	0.00	6.58
	----- True	Calc.	% Drift	-----			
12	Benzene	10.000	10.162	-1.6	81	0.00	6.94
	----- AvgRF	CCRF	% Dev	-----			
13 S	1,2-Dichloroethane-d4	0.404	0.391	3.2	80	0.00	7.07
14	1,2-Dichloroethane	0.754	0.749	0.7	81	0.00	7.14
15	Trichloroethene	0.470	0.474	-0.9	80	0.00	7.51
	----- True	Calc.	% Drift	-----			
16	1,2-Dichloropropane	10.000	10.166	-1.7	81	0.00	8.04
	----- AvgRF	CCRF	% Dev	-----			
17	cis-1,3-Dichloropropene	0.535	0.524	2.1	76	0.00	8.71
18 I	Chlorobenzene-d5	1.000	1.000	0.0	81	0.00	10.45
19 S	Toluene-d8	1.127	1.054	6.5	78	0.00	8.90
20	trans-1,3-Dichloropropene	0.657	0.648	1.4	77	0.00	9.34
	----- True	Calc.	% Drift	-----			
21	Tetrachloroethene	10.000	10.034	-0.3	81	0.00	9.34
	----- AvgRF	CCRF	% Dev	-----			

Continuing Calibration Summary

Job Number: FA78551
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Sample: VO2358-ECC2356
Lab FileID: O61290.D

22	1,4-Dichlorobenzene	1.158	1.176	-1.6	81	0.00	12.83
		----- True	Calc.	% Drift	-----		
23	1,2-Dibromo-3-Chloropropa	10.000	9.152	8.5	75	0.00	14.04

(#) = Out of Range SPCC's out = 0 CCC's out = 0
 061234.D SIMCL091120.M Mon Sep 14 07:37:59 2020

6.7.4
6

Continuing Calibration Summary

Job Number: FA78551
 Account: AHTNACAS Ahtna Global, LLC
 Project: Fort Ord Groundwater Monitoring

Sample: VO2359-CC2356
 Lab FileID: O61294.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\je...-2020\VO2359\O61294.d Vial: 20
 Acq On : 12 Sep 2020 5:54 pm Operator: stutip
 Sample : cc2356-5 Inst : MSVOA12
 Misc : MS47192,VO2359,,,,, Multiplr: 1.00
 MS Integration Params: rteint.p

Method : C:\msdchem\1\methods\SIMCL091120.M (RTE Integrator)
 Title : Standard Methods 6200B
 Last Update : Sun Sep 13 19:20:40 2020
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	Fluorobenzene	1.000	1.000	0.0	84	0.00	7.34
	----- True	Calc.	% Drift	-----			
2	Vinyl Chloride	10.000	10.115	-1.2	86	0.00	2.90
3	Chloromethane	10.000	9.846	1.5	86	0.00	2.80
	----- AvgRF	CCRF	% Dev	-----			
4	1,1-Dichloroethene	0.691	0.720	-4.2	86	-0.01	4.08
	----- True	Calc.	% Drift	-----			
5	Methylene Chloride	10.000	9.418	5.8	84	0.00	4.70
6	trans-1,2-Dichloroethene	10.000	10.020	-0.2	84	-0.01	4.86
	----- AvgRF	CCRF	% Dev	-----			
7	1,1-Dichloroethane	0.927	0.907	2.2	83	0.00	5.51
8	cis-1,2-Dichloroethene	0.458	0.434	5.2	80	-0.01	6.06
9	Chloroform	0.798	0.755	5.4	81	0.00	6.33
10	Carbon Tetrachloride	0.544	0.534	1.8	81	0.00	6.50
11	1,1,1-Trichloroethane	0.615	0.595	3.3	81	-0.01	6.57
	----- True	Calc.	% Drift	-----			
12	Benzene	10.000	9.676	3.2	81	0.00	6.94
	----- AvgRF	CCRF	% Dev	-----			
13 S	1,2-Dichloroethane-d4	0.404	0.390	3.5	84	0.00	7.07
14	1,2-Dichloroethane	0.754	0.713	5.4	81	-0.01	7.13
15	Trichloroethene	0.470	0.450	4.3	80	0.00	7.51
	----- True	Calc.	% Drift	-----			
16	1,2-Dichloropropane	10.000	9.738	2.6	82	0.00	8.04
	----- AvgRF	CCRF	% Dev	-----			
17	cis-1,3-Dichloropropene	0.535	0.510	4.7	78	0.00	8.71
18 I	Chlorobenzene-d5	1.000	1.000	0.0	85	0.00	10.44
19 S	Toluene-d8	1.127	1.065	5.5	82	0.00	8.90
20	trans-1,3-Dichloropropene	0.657	0.630	4.1	78	0.00	9.34
	----- True	Calc.	% Drift	-----			
21	Tetrachloroethene	10.000	9.850	1.5	83	0.00	9.34
	----- AvgRF	CCRF	% Dev	-----			

Continuing Calibration Summary

Job Number: FA78551
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Sample: VO2359-CC2356
Lab FileID: O61294.D

22	1,4-Dichlorobenzene	1.158	1.145	1.1	82	0.00	12.82
		----- True	Calc.	% Drift	-----		
23	1,2-Dibromo-3-Chloropropa	10.000	9.146	8.5	78	0.00	14.04

(#) = Out of Range

061234.D SIMCL091120.M

SPCC's out = 0 CCC's out = 0

Mon Sep 14 07:54:42 2020

Continuing Calibration Summary

Job Number: FA78551
 Account: AHTNACAS Ahtna Global, LLC
 Project: Fort Ord Groundwater Monitoring

Sample: VO2359-ECC2356
 Lab FileID: O61320.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\je...-2020\VO2359\O61320.d Vial: 26
 Acq On : 13 Sep 2020 3:13 am Operator: stutip
 Sample : ecc2356-5 Inst : MSVOA12
 Misc : MS47193,VO2359,,,,, Multiplr: 1.00
 MS Integration Params: rteint.p

Method : C:\msdchem\1\methods\SIMCL091120.M (RTE Integrator)
 Title : Standard Methods 6200B
 Last Update : Sun Sep 13 19:20:40 2020
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 50% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	Fluorobenzene	1.000	1.000	0.0	73	0.00	7.35
	----- True	Calc.	% Drift	-----			
2	Vinyl Chloride	10.000	10.892	-8.9	79	0.00	2.91
3	Chloromethane	10.000	10.743	-7.4	80	0.00	2.81
	----- AvgRF	CCRF	% Dev	-----			
4	1,1-Dichloroethene	0.691	0.751	-8.7	78	0.00	4.09
	----- True	Calc.	% Drift	-----			
5	Methylene Chloride	10.000	10.148	-1.5	79	0.00	4.70
6	trans-1,2-Dichloroethene	10.000	10.513	-5.1	76	0.00	4.87
	----- AvgRF	CCRF	% Dev	-----			
7	1,1-Dichloroethane	0.927	0.957	-3.2	76	0.00	5.51
8	cis-1,2-Dichloroethene	0.458	0.447	2.4	72	0.00	6.07
9	Chloroform	0.798	0.792	0.8	74	0.00	6.33
10	Carbon Tetrachloride	0.544	0.559	-2.8	73	0.00	6.51
11	1,1,1-Trichloroethane	0.615	0.622	-1.1	73	0.00	6.58
	----- True	Calc.	% Drift	-----			
12	Benzene	10.000	10.189	-1.9	73	0.00	6.94
	----- AvgRF	CCRF	% Dev	-----			
13 S	1,2-Dichloroethane-d4	0.404	0.393	2.7	73	0.00	7.07
14	1,2-Dichloroethane	0.754	0.743	1.5	73	0.00	7.14
15	Trichloroethene	0.470	0.471	-0.2	73	0.00	7.52
	----- True	Calc.	% Drift	-----			
16	1,2-Dichloropropane	10.000	10.154	-1.5	74	0.00	8.04
	----- AvgRF	CCRF	% Dev	-----			
17	cis-1,3-Dichloropropene	0.535	0.490	8.4	65	0.00	8.71
18 I	Chlorobenzene-d5	1.000	1.000	0.0	75	0.00	10.45
19 S	Toluene-d8	1.127	1.018	9.7	70	0.00	8.90
20	trans-1,3-Dichloropropene	0.657	0.598	9.0	66	0.00	9.34
	----- True	Calc.	% Drift	-----			
21	Tetrachloroethene	10.000	10.002	-0.0	75	0.00	9.34
	----- AvgRF	CCRF	% Dev	-----			

Continuing Calibration Summary

Job Number: FA78551
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Sample: VO2359-ECC2356
Lab FileID: O61320.D

22	1,4-Dichlorobenzene	1.158	1.142	1.4	73	0.00	12.83
		----- True	Calc.	% Drift	-----		
23	1,2-Dibromo-3-Chloropropa	10.000	8.877	11.2	67	0.00	14.04

(#) = Out of Range SPCC's out = 0 CCC's out = 0
 061234.D SIMCL091120.M Mon Sep 14 08:09:19 2020

6.7.6

6

Initial Calibration Summary

Job Number: FA78551
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Sample: VO2362-ICC2362
Lab FileID: O61390.D

Response Factor Report MSVOA12

Method : C:\msdchem\2\methods\SIMCL091520.M (RTE Integrator)
 Title : Standard Methods 6200B
 Last Update : Wed Sep 16 09:02:25 2020
 Response via : Initial Calibration

Calibration Files

1 =O61386.D 2 =O61387.D 3 =O61388.D 4 =O61389.D
 5 =O61390.D 6 =O61391.D 7 =O61392.D

Compound	1	2	3	4	5	6	7	Avg	%RSD

1) I Fluorobenzene	-----ISTD-----								
2) Vinyl Chloride	0.763	0.768	0.679	0.572	0.569	0.550	0.488	0.627	17.55
	---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9985								
	Response Ratio = 0.00000 + 0.65691 *A + -0.04089 *A^2								
3) Chloromethane	2.259	1.295	1.010	0.835	0.807	0.761	0.666	1.090	50.89
	---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9981								
	Response Ratio = 0.00000 + 0.99722 *A + -0.08338 *A^2								
4) 1,1-Dichloroethen	0.821	0.811	0.741	0.728	0.742	0.702	0.699	0.749	6.52
5) Methylene Chlorid	5.223	2.011	1.397	1.209	1.137	1.053	0.989	1.860	81.86
	---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9969								
	Response Ratio = 0.00000 + 1.42164 *A + -0.11581 *A^2								
6) trans-1,2-Dichlor	0.954	0.958	0.829	0.807	0.833	0.807	0.798	0.855	8.18
7) 1,1-Dichloroethan	1.081	1.055	0.985	0.946	0.951	0.914	0.889	0.975	7.29
8) cis-1,2-Dichloroe	0.475	0.456	0.421	0.420	0.438	0.435	0.435	0.440	4.42
9) Chloroform	0.996	0.901	0.817	0.787	0.786	0.759	0.739	0.827	11.00
10) Carbon Tetrachlor	0.654	0.607	0.558	0.535	0.553	0.539	0.536	0.569	7.98
11) 1,1,1-Trichloroet	0.648	0.689	0.643	0.627	0.644	0.627	0.624	0.643	3.50
12) Benzene	1.647	1.578	1.507	1.517	1.551	1.517	1.494	1.545	3.47
13)S 1,2-Dichloroethan	0.468	0.460	0.429	0.412	0.402	0.394	0.385	0.421	7.62
14) 1,2-Dichloroethan	0.840	0.814	0.770	0.741	0.740	0.717	0.695	0.760	6.86
15) Trichloroethene	0.496	0.473	0.443	0.446	0.460	0.456	0.449	0.461	4.05
16) 1,2-Dichloropropa	0.548	0.540	0.512	0.505	0.510	0.499	0.489	0.515	4.18
17) cis-1,3-Dichlorop	0.441	0.434	0.421	0.448	0.489	0.509	0.525	0.467	8.67

18) I Chlorobenzene-d5	-----ISTD-----								
19)S Toluene-d8	1.082	1.040	1.015	0.980	0.985	0.989	1.052	1.020	3.82
20) trans-1,3-Dichlor	0.509	0.514	0.533	0.554	0.597	0.619	0.657	0.569	9.93
21) Tetrachloroethene	0.641	0.626	0.582	0.552	0.545	0.527	0.534	0.573	7.93
22) 1,4-Dichlorobenze	0.981	1.015	1.117	1.110	1.134	1.161	1.129	1.092	6.15
23) 1,2-Dibromo-3-Chl	0.200	0.180	0.182	0.180	0.189	0.198	0.202	0.190	5.13

(#) = Out of Range

SIMCL091520.M Wed Sep 16 09:06:27 2020

6.7.7
6

Initial Calibration Verification

Job Number: FA78551
 Account: AHTNACAS Ahtna Global, LLC
 Project: Fort Ord Groundwater Monitoring

Sample: VO2362-ICV2362
 Lab FileID: O61394.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\2\data\091520\O61394.D Vial: 15
 Acq On : 15 Sep 2020 6:29 pm Operator: AKARIG
 Sample : ICV2362-5 Inst : MSVOA12
 Misc : MS47193,VO2362,,,,, Multiplr: 1.00
 MS Integration Params: rteint.p

Method : C:\msdchem\2\methods\SIMCL091520.M (RTE Integrator)
 Title : Standard Methods 6200B
 Last Update : Wed Sep 16 09:02:25 2020
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	Fluorobenzene	1.000	1.000	0.0	115	0.00	7.34
	----- Amount	Calc.	%Drift	-----			
2	Vinyl Chloride	10.000	8.114	18.9	97	0.00	2.90
3	Chloromethane	10.000	7.698	23.0#	95	-0.01	2.80
	----- AvgRF	CCRF	%Dev	-----			
4	1,1-Dichloroethene	0.749	0.691	7.7	107	-0.01	4.08
	----- Amount	Calc.	%Drift	-----			
5	Methylene Chloride	10.000	8.784	12.2	108	-0.01	4.70
	----- AvgRF	CCRF	%Dev	-----			
6	trans-1,2-Dichloroethene	0.855	0.802	6.2	111	0.00	4.87
7	1,1-Dichloroethane	0.975	0.925	5.1	112	0.00	5.51
8	cis-1,2-Dichloroethene	0.440	0.440	0.0	115	0.00	6.06
9	Chloroform	0.827	0.757	8.5	111	0.00	6.33
10	Carbon Tetrachloride	0.569	0.530	6.9	110	0.00	6.50
11	1,1,1-Trichloroethane	0.643	0.615	4.4	110	0.00	6.57
12	Benzene	1.545	1.581	-2.3	117	0.00	6.94
13 S	1,2-Dichloroethane-d4	0.421	0.394	6.4	113	0.00	7.07
14	1,2-Dichloroethane	0.760	0.740	2.6	115	0.00	7.14
15	Trichloroethene	0.461	0.462	-0.2	115	0.00	7.51
16	1,2-Dichloropropane	0.515	0.520	-1.0	117	0.00	8.04
17	cis-1,3-Dichloropropene	0.467	0.526	-12.6	123	0.00	8.71
18 I	Chlorobenzene-d5	1.000	1.000	0.0	111	0.00	10.44
19 S	Toluene-d8	1.020	1.039	-1.9	117	0.00	8.90
20	trans-1,3-Dichloropropene	0.569	0.665	-16.9	123	0.00	9.34
21	Tetrachloroethene	0.573	0.534	6.8	108	0.00	9.34
22	1,4-Dichlorobenzene	1.092	1.144	-4.8	112	0.00	12.82
23	1,2-Dibromo-3-Chloropropa	0.190	0.200	-5.3	117	0.00	14.03

(#) = Out of Range SPCC's out = 0 CCC's out = 0
 O61390.D SIMCL091520.M Wed Sep 16 09:06:17 2020

Continuing Calibration Summary

Job Number: FA78551
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Sample: VO2363-CC2362
Lab FileID: O61402.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\jo...-2020\vo2363\O61402.d Vial: 3
 Acq On : 16 Sep 2020 11:32 am Operator: akarig
 Sample : cc2362-5 Inst : MSVOA12
 Misc : MS47193,VO2363,,,,, Multiplr: 1.00
 MS Integration Params: rteint.p

Method : C:\msdchem\1\methods\SIMCL091520.M (RTE Integrator)
 Title : Standard Methods 6200B
 Last Update : Wed Sep 16 09:02:25 2020
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	Fluorobenzene	1.000	1.000	0.0	107	0.00	7.34
	----- True	Calc.	% Drift	-----			
2	Vinyl Chloride	10.000	8.736	12.6	96	0.00	2.90
3	Chloromethane	10.000	8.417	15.8	95	0.00	2.80
	----- AvgRF	CCRF	% Dev	-----			
4	1,1-Dichloroethene	0.749	0.676	9.7	97	-0.01	4.08
	----- True	Calc.	% Drift	-----			
5	Methylene Chloride	10.000	8.267	17.3	95	0.00	4.70
	----- AvgRF	CCRF	% Dev	-----			
6	trans-1,2-Dichloroethene	0.855	0.749	12.4	96	0.00	4.87
7	1,1-Dichloroethane	0.975	0.857	12.1	96	0.00	5.51
8	cis-1,2-Dichloroethene	0.440	0.402	8.6	98	-0.01	6.06
9	Chloroform	0.827	0.709	14.3	96	0.00	6.33
10	Carbon Tetrachloride	0.569	0.497	12.7	96	0.00	6.50
11	1,1,1-Trichloroethane	0.643	0.549	14.6	91	0.00	6.58
12	Benzene	1.545	1.395	9.7	96	0.00	6.94
13 S	1,2-Dichloroethane-d4	0.421	0.396	5.9	105	0.00	7.07
14	1,2-Dichloroethane	0.760	0.666	12.4	96	0.00	7.14
15	Trichloroethene	0.461	0.409	11.3	95	0.00	7.51
16	1,2-Dichloropropane	0.515	0.469	8.9	98	0.00	8.04
17	cis-1,3-Dichloropropene	0.467	0.460	1.5	100	0.00	8.71
18 I	Chlorobenzene-d5	1.000	1.000	0.0	108	0.00	10.44
19 S	Toluene-d8	1.020	1.001	1.9	109	0.00	8.90
20	trans-1,3-Dichloropropene	0.569	0.545	4.2	98	0.00	9.34
21	Tetrachloroethene	0.573	0.477	16.8	94	0.00	9.34
22	1,4-Dichlorobenzene	1.092	1.005	8.0	95	0.00	12.82
23	1,2-Dibromo-3-Chloropropa	0.190	0.171	10.0	98	0.00	14.04

(#) = Out of Range SPCC's out = 0 CCC's out = 0
 O61390.D SIMCL091520.M Thu Sep 17 04:58:34 2020

6.7.9
6

Continuing Calibration Summary

Job Number: FA78551
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Sample: VO2363-ECC2362
Lab FileID: O61422.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\2\data\091620\O61422.D Vial: 2
 Acq On : 17 Sep 2020 8:05 am Operator: JuanG
 Sample : ecc2362-5 Inst : MSVOA12
 Misc : MS47193,VO2363,,,,, Multiplr: 1.00
 MS Integration Params: rteint.p

Method : C:\msdchem\2\methods\SIMCL091520.M (RTE Integrator)
 Title : Standard Methods 6200B
 Last Update : Wed Sep 16 09:02:25 2020
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 50% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	Fluorobenzene	1.000	1.000	0.0	86	0.00	7.34
	----- Amount	Calc.	%Drift	-----			
2	Vinyl Chloride	10.000	9.533	4.7	84	-0.01	2.90
3	Chloromethane	10.000	9.590	4.1	86	-0.01	2.80
	----- AvgRF	CCRF	%Dev	-----			
4	1,1-Dichloroethene	0.749	0.831	-10.9	97	-0.02	4.08
	----- Amount	Calc.	%Drift	-----			
5	Methylene Chloride	10.000	9.888	1.1	90	-0.02	4.69
	----- AvgRF	CCRF	%Dev	-----			
6	trans-1,2-Dichloroethene	0.855	0.827	3.3	86	-0.02	4.86
7	1,1-Dichloroethane	0.975	0.946	3.0	86	-0.01	5.50
8	cis-1,2-Dichloroethene	0.440	0.415	5.7	82	-0.01	6.06
9	Chloroform	0.827	0.794	4.0	87	-0.01	6.32
10	Carbon Tetrachloride	0.569	0.559	1.8	87	-0.01	6.50
11	1,1,1-Trichloroethane	0.643	0.608	5.4	82	-0.01	6.57
12	Benzene	1.545	1.469	4.9	82	-0.02	6.93
13 S	1,2-Dichloroethane-d4	0.421	0.426	-1.2	92	0.00	7.07
14	1,2-Dichloroethane	0.760	0.742	2.4	87	0.00	7.13
15	Trichloroethene	0.461	0.450	2.4	85	0.00	7.51
16	1,2-Dichloropropane	0.515	0.503	2.3	85	0.00	8.04
17	cis-1,3-Dichloropropene	0.467	0.445	4.7	79	0.00	8.70
18 I	Chlorobenzene-d5	1.000	1.000	0.0	92	0.00	10.44
19 S	Toluene-d8	1.020	0.890	12.7	83	0.00	8.89
20	trans-1,3-Dichloropropene	0.569	0.525	7.7	81	0.00	9.34
21	Tetrachloroethene	0.573	0.519	9.4	88	0.00	9.34
22	1,4-Dichlorobenzene	1.092	1.093	-0.1	89	0.00	12.82
23	1,2-Dibromo-3-Chloropropa	0.190	0.183	3.7	90	0.00	14.04

(#) = Out of Range
 O61390.D SIMCL091520.M

SPCC's out = 0 CCC's out = 0
 Thu Sep 17 15:56:42 2020

Initial Calibration Summary

Job Number: FA78551
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Sample: VZ2414-ICC2414
Lab FileID: Z62211.D

Response Factor Report MSVOA15

Method : C:\msdchem\1\methods\SIMCL091120.M (RTE Integrator)
 Title : WATER-EPA 8260B
 Last Update : Sun Sep 13 13:38:26 2020
 Response via : Initial Calibration

Calibration Files

1 =Z62207.D 2 =Z62208.D 3 =Z62209.D 4 =Z62210.D
 5 =Z62211.D 6 =Z62212.D 7 =Z62213.D

Compound	1	2	3	4	5	6	7	Avg	%RSD
1) I Fluorobenzene	-----ISTD-----								
2) Vinyl Chloride	0.745	0.530	0.472	0.398	0.398	0.410	0.429	0.483	25.87
	---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9983								
	Response Ratio = 0.00000 + 0.41463 *A + 0.00115 *A^2								
3) Chloromethane	0.663	0.498	0.481	0.368	0.359	0.379	0.420	0.453	23.78
	---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9980								
	Response Ratio = 0.00000 + 0.31946 *A + 0.02378 *A^2								
4) 1,1-Dichloroethen	0.306	0.298	0.281	0.309	0.292	0.302	0.306	0.299	3.29
	---- Linear regr., Force(0,0) ---- Coefficient = 0.9995								
	Response Ratio = 0.00000 + 0.30297 *A								
5) Methylene Chlorid	2.740	0.838	0.457	0.451	0.392	0.409	0.402	0.813	106.36
	---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9908								
	Response Ratio = 0.00000 + 0.49775 *A + -0.02806 *A^2								
6)T trans-1,2-Dichlor	0.358	0.379	0.341	0.385	0.360	0.379	0.382	0.369	4.44
7) 1,1-Dichloroethan	0.575	0.661	0.582	0.662	0.612	0.647	0.644	0.626	5.82
8) cis-1,2-Dichloroe	0.419	0.429	0.375	0.427	0.391	0.416	0.414	0.410	4.85
9) Chloroform	0.777	0.786	0.680	0.784	0.718	0.760	0.756	0.752	5.23
10) Carbon Tetrachlor	0.498	0.489	0.462	0.529	0.514	0.540	0.540	0.510	5.69
11) 1,1,1-Trichloroet	0.636	0.660	0.612	0.687	0.654	0.683	0.676	0.658	4.12
12) Benzene	1.341	1.460	1.286	1.457	1.351	1.425	1.421	1.392	4.75
13)S 1,2-Dichloroethan	0.304	0.310	0.307	0.309	0.314	0.310	0.310	0.309	0.92
14) 1,2-Dichloroethan	0.501	0.562	0.476	0.554	0.506	0.539	0.534	0.525	5.98
15) Trichloroethene	0.414	0.428	0.389	0.442	0.415	0.440	0.460	0.427	5.41
16) 1,2-Dichloropropa	0.344	0.377	0.320	0.372	0.342	0.363	0.361	0.354	5.62
17) cis-1,3-Dichlorop	0.353	0.328	0.296	0.411	0.409	0.472	0.460	0.390	17.03
	---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9970								
	Response Ratio = 0.00000 + 0.35911 *A + 0.02868 *A^2								
18) I Chlorobenzene-d5	-----ISTD-----								
19)S Toluene-d8	1.254	1.248	1.248	1.237	1.232	1.224	1.055	1.214	5.83
20)T trans-1,3-Dichlor	0.334	0.340	0.304	0.429	0.428	0.497	0.416	0.393	17.45
	---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9900								
	Response Ratio = 0.00000 + 0.41206 *A + 0.00891 *A^2								
21) Tetrachloroethene	0.505	0.538	0.491	0.550	0.516	0.540	0.467	0.515	5.78
	---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9961								
	Response Ratio = 0.00000 + 0.59840 *A + -0.03017 *A^2								

(#) = Out of Range

6.7.11

6

Initial Calibration Summary

Job Number: FA78551
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Sample: VZ2414-ICC2414
Lab FileID: Z62211.D

SIMCL091120.M

Sun Sep 13 14:24:15 2020

Initial Calibration Verification

Job Number: FA78551
 Account: AHTNACAS Ahtna Global, LLC
 Project: Fort Ord Groundwater Monitoring

Sample: VZ2414-ICV2414
 Lab FileID: Z62215.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\091120\Z62215.D Vial: 10
 Acq On : 11 Sep 2020 8:51 pm Operator: SHANICAO
 Sample : ICV2414-5 Inst : MSVOA15
 Misc : MS47171,VZ2414,,,,, Multiplr: 1.00
 MS Integration Params: RTEINT.P

Method : C:\msdchem\1\methods\SIMCL091120.M (RTE Integrator)
 Title : WATER-EPA 8260B
 Last Update : Sun Sep 13 13:38:26 2020
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I Fluorobenzene	1.000	1.000	0.0	102	0.00	7.40
----- Amount Calc. %Drift -----						
2 Vinyl Chloride	10.000	10.131	-1.3	108	0.00	2.84
3 Chloromethane	10.000	9.964	0.4	104	0.00	2.73
4 1,1-Dichloroethene	10.000	10.988	-9.9	116	0.00	4.08
5 Methylene Chloride	10.000	9.188	8.1	107	0.00	4.71
----- AvgRF CCRF %Dev -----						
6 T trans-1,2-Dichloroethene	0.369	0.379	-2.7	108	0.00	4.89
7 1,1-Dichloroethane	0.626	0.649	-3.7	108	0.00	5.55
8 cis-1,2-Dichloroethene	0.410	0.412	-0.5	108	0.00	6.11
9 Chloroform	0.752	0.748	0.5	106	0.00	6.38
10 Carbon Tetrachloride	0.510	0.540	-5.9	107	0.00	6.54
11 1,1,1-Trichloroethane	0.658	0.683	-3.8	107	0.00	6.61
12 Benzene	1.392	1.466	-5.3	111	0.00	6.99
13 S 1,2-Dichloroethane-d4	0.309	0.315	-1.9	102	0.00	7.13
14 1,2-Dichloroethane	0.525	0.541	-3.0	109	0.00	7.20
15 Trichloroethene	0.427	0.446	-4.4	110	0.00	7.57
16 1,2-Dichloropropane	0.354	0.368	-4.0	110	0.00	8.11
----- Amount Calc. %Drift -----						
17 cis-1,3-Dichloropropene	10.000	10.889	-8.9	115	0.00	8.77
----- AvgRF CCRF %Dev -----						
18 I Chlorobenzene-d5	1.000	1.000	0.0	102	0.00	10.51
19 S Toluene-d8	1.214	1.231	-1.4	102	0.00	8.96
----- Amount Calc. %Drift -----						
20 T trans-1,3-Dichloropropene	10.000	11.393	-13.9	117	0.00	9.41
21 Tetrachloroethene	10.000	10.356	-3.6	109	0.00	9.40

(#) = Out of Range
 Z62211.D SIMCL091120.M

SPCC's out = 0 CCC's out = 0
 Sun Sep 13 14:23:50 2020

Continuing Calibration Summary

Job Number: FA78551
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Sample: VZ2418-CC2414
Lab FileID: Z62322.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\091420\Z62322.D
 Acq On : 14 Sep 2020 12:22 pm
 Sample : CC2414-5
 Misc : MS47199,VZ2418,,,,,
 MS Integration Params: RTEINT.P
 Vial: 1
 Operator: JuanG
 Inst : MSVOA15
 Multiplr: 1.00

Method : C:\msdchem\1\methods\SIMCL091120.M (RTE Integrator)
 Title : WATER-EPA 8260B
 Last Update : Sun Sep 13 13:38:26 2020
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I Fluorobenzene	1.000	1.000	0.0	106	0.00	7.40
----- Amount Calc. %Drift -----						
2 Vinyl Chloride	10.000	12.650	-26.5#	141	0.00	2.84
3 Chloromethane	10.000	12.991	-29.9#	147	0.00	2.73
4 1,1-Dichloroethene	10.000	10.544	-5.4	116	0.00	4.08
5 Methylene Chloride	10.000	10.422	-4.2	124	0.00	4.71
----- AvgRF CCRF %Dev -----						
6 T trans-1,2-Dichloroethene	0.369	0.405	-9.8	120	0.00	4.88
7 1,1-Dichloroethane	0.626	0.705	-12.6	122	0.00	5.54
8 cis-1,2-Dichloroethene	0.410	0.424	-3.4	115	0.00	6.10
9 Chloroform	0.752	0.810	-7.7	120	0.00	6.37
10 Carbon Tetrachloride	0.510	0.529	-3.7	109	0.00	6.54
11 1,1,1-Trichloroethane	0.658	0.708	-7.6	115	0.00	6.61
12 Benzene	1.392	1.507	-8.3	119	0.00	6.99
13 S 1,2-Dichloroethane-d4	0.309	0.336	-8.7	114	0.00	7.12
14 1,2-Dichloroethane	0.525	0.562	-7.0	118	0.00	7.19
15 Trichloroethene	0.427	0.439	-2.8	112	0.00	7.57
16 1,2-Dichloropropane	0.354	0.366	-3.4	114	0.00	8.10
----- Amount Calc. %Drift -----						
17 cis-1,3-Dichloropropene	10.000	10.729	-7.3	117	0.00	8.77
----- AvgRF CCRF %Dev -----						
18 I Chlorobenzene-d5	1.000	1.000	0.0	110	0.00	10.51
19 S Toluene-d8	1.214	1.176	3.1	105	0.00	8.96
----- Amount Calc. %Drift -----						
20 T trans-1,3-Dichloropropene	10.000	10.906	-9.1	121	0.00	9.41
21 Tetrachloroethene	10.000	9.919	0.8	114	0.00	9.40

(#) = Out of Range
 Z62211.D SIMCL091120.M
 SPCC's out = 0 CCC's out = 0
 Tue Sep 15 19:11:21 2020

6.7.13

6

Continuing Calibration Summary

Job Number: FA78551
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Sample: VZ2418-ECC2414
Lab FileID: Z62350.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\091420\Z62350.D Vial: 28
 Acq On : 14 Sep 2020 10:45 pm Operator: JuanG
 Sample : ECC2414-5 Inst : MSVOA15
 Misc : MS47199,VZ2418,,,,, Multiplr: 1.00
 MS Integration Params: RTEINT.P

Method : C:\msdchem\1\methods\SIMCL091120.M (RTE Integrator)
 Title : WATER-EPA 8260B
 Last Update : Sun Sep 13 13:38:26 2020
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 50% Max. Rel. Area : 200%

Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I Fluorobenzene	1.000	1.000	0.0	77	0.00	7.40
----- Amount Calc. %Drift -----						
2 Vinyl Chloride	10.000	13.173	-31.7	107	0.00	2.83
3 Chloromethane	10.000	12.057	-20.6	98	0.00	2.73
4 1,1-Dichloroethene	10.000	10.978	-9.8	88	0.00	4.08
5 Methylene Chloride	10.000	11.075	-10.7	95	0.00	4.71
----- AvgRF CCRF %Dev -----						
6 T trans-1,2-Dichloroethene	0.369	0.404	-9.5	87	0.00	4.89
7 1,1-Dichloroethane	0.626	0.730	-16.6	92	0.00	5.55
8 cis-1,2-Dichloroethene	0.410	0.425	-3.7	84	0.00	6.11
9 Chloroform	0.752	0.854	-13.6	92	0.00	6.38
10 Carbon Tetrachloride	0.510	0.507	0.6	76	0.00	6.54
11 1,1,1-Trichloroethane	0.658	0.716	-8.8	84	0.00	6.61
12 Benzene	1.392	1.565	-12.4	89	0.00	6.99
13 S 1,2-Dichloroethane-d4	0.309	0.351	-13.6	86	0.00	7.13
14 1,2-Dichloroethane	0.525	0.586	-11.6	89	0.00	7.20
15 Trichloroethene	0.427	0.478	-11.9	89	0.00	7.57
16 1,2-Dichloropropane	0.354	0.386	-9.0	87	0.00	8.10
----- Amount Calc. %Drift -----						
17 cis-1,3-Dichloropropene	10.000	7.316	26.8	55	0.00	8.77
----- AvgRF CCRF %Dev -----						
18 I Chlorobenzene-d5	1.000	1.000	0.0	84	0.00	10.51
19 S Toluene-d8	1.214	1.091	10.1	74	0.00	8.96
----- Amount Calc. %Drift -----						
20 T trans-1,3-Dichloropropene	10.000	6.864	31.4	57	0.00	9.41
21 Tetrachloroethene	10.000	9.779	2.2	86	0.00	9.40

(#) = Out of Range SPCC's out = 0 CCC's out = 0
 Z62211.D SIMCL091120.M Tue Sep 15 19:11:40 2020

6.7.14
6

Continuing Calibration Summary

Job Number: FA78551
 Account: AHTNACAS Ahtna Global, LLC
 Project: Fort Ord Groundwater Monitoring

Sample: VZ2419-CC2414
 Lab FileID: Z62354.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\091520\Z62354.D Vial: 1
 Acq On : 15 Sep 2020 1:58 pm Operator: JuanG
 Sample : CC2414-5 Inst : MSVOA15
 Misc : MS47199,VZ2419,,,,, Multiplr: 1.00
 MS Integration Params: RTEINT.P

Method : C:\msdchem\1\methods\SIMCL091120.M (RTE Integrator)
 Title : WATER-EPA 8260B
 Last Update : Sun Sep 13 13:38:26 2020
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	Fluorobenzene	1.000	1.000	0.0	118	0.00	7.40
	----- Amount	Calc.	%Drift	-----			
2	Vinyl Chloride	10.000	13.761	-37.6#	170	0.00	2.84
3	Chloromethane	10.000	12.947	-29.5#	162	0.00	2.73
4	1,1-Dichloroethene	10.000	11.417	-14.2	139	0.00	4.08
5	Methylene Chloride	10.000	11.135	-11.3	146	0.00	4.71
	----- AvgRF	CCRF	%Dev	-----			
6 T	trans-1,2-Dichloroethene	0.369	0.426	-15.4	139	0.00	4.88
7	1,1-Dichloroethane	0.626	0.745	-19.0	143	0.00	5.54
8	cis-1,2-Dichloroethene	0.410	0.438	-6.8	132	0.00	6.10
9	Chloroform	0.752	0.861	-14.5	141	0.00	6.37
10	Carbon Tetrachloride	0.510	0.567	-11.2	130	0.00	6.54
11	1,1,1-Trichloroethane	0.658	0.750	-14.0	135	0.00	6.61
12	Benzene	1.392	1.590	-14.2	138	0.00	6.99
13 S	1,2-Dichloroethane-d4	0.309	0.345	-11.7	129	0.00	7.12
14	1,2-Dichloroethane	0.525	0.589	-12.2	137	0.00	7.19
15	Trichloroethene	0.427	0.461	-8.0	131	0.00	7.56
16	1,2-Dichloropropane	0.354	0.386	-9.0	133	0.00	8.10
	----- Amount	Calc.	%Drift	-----			
17	cis-1,3-Dichloropropene	10.000	10.971	-9.7	133	0.00	8.77
	----- AvgRF	CCRF	%Dev	-----			
18 I	Chlorobenzene-d5	1.000	1.000	0.0	125	0.00	10.51
19 S	Toluene-d8	1.214	1.143	5.8	116	0.00	8.96
	----- Amount	Calc.	%Drift	-----			
20 T	trans-1,3-Dichloropropene	10.000	11.009	-10.1	139	0.00	9.41
21	Tetrachloroethene	10.000	10.217	-2.2	133	0.00	9.40

(#) = Out of Range
 Z62211.D SIMCL091120.M

SPCC's out = 0 CCC's out = 0
 Wed Sep 16 14:00:03 2020

Continuing Calibration Summary

Job Number: FA78551
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Sample: VZ2419-ECC2414
Lab FileID: Z62384.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\091520\Z62384.D Vial: 29
 Acq On : 15 Sep 2020 11:23 pm Operator: JuanG
 Sample : ecc2414-5 Inst : MSVOA15
 Misc : MS47193,VZ2419,,,,, Multiplr: 1.00
 MS Integration Params: RTEINT.P

Method : C:\msdchem\1\methods\SIMCL091120.M (RTE Integrator)
 Title : WATER-EPA 8260B
 Last Update : Sun Sep 13 13:38:26 2020
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 50% Max. Rel. Area : 200%

Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I Fluorobenzene	1.000	1.000	0.0	90	0.00	7.40
----- Amount Calc. %Drift -----						
2 Vinyl Chloride	10.000	13.797	-38.0	130	0.00	2.84
3 Chloromethane	10.000	12.578	-25.8	119	0.00	2.73
4 1,1-Dichloroethene	10.000	10.699	-7.0	100	0.00	4.08
5 Methylene Chloride	10.000	10.967	-9.7	110	0.00	4.71
----- AvgRF CCRF %Dev -----						
6 T trans-1,2-Dichloroethene	0.369	0.399	-8.1	99	0.00	4.89
7 1,1-Dichloroethane	0.626	0.730	-16.6	107	0.00	5.54
8 cis-1,2-Dichloroethene	0.410	0.415	-1.2	95	0.00	6.10
9 Chloroform	0.752	0.859	-14.2	107	0.00	6.37
10 Carbon Tetrachloride	0.510	0.495	2.9	87	0.00	6.54
11 1,1,1-Trichloroethane	0.658	0.703	-6.8	96	0.00	6.61
12 Benzene	1.392	1.553	-11.6	103	0.00	6.99
13 S 1,2-Dichloroethane-d4	0.309	0.364	-17.8	104	0.00	7.13
14 1,2-Dichloroethane	0.525	0.587	-11.8	104	0.00	7.20
15 Trichloroethene	0.427	0.481	-12.6	104	0.00	7.56
16 1,2-Dichloropropane	0.354	0.383	-8.2	101	0.00	8.10
----- Amount Calc. %Drift -----						
17 cis-1,3-Dichloropropene	10.000	6.855	31.4	60	0.00	8.77
----- AvgRF CCRF %Dev -----						
18 I Chlorobenzene-d5	1.000	1.000	0.0	101	0.00	10.51
19 S Toluene-d8	1.214	1.045	13.9	86	0.00	8.96
----- Amount Calc. %Drift -----						
20 T trans-1,3-Dichloropropene	10.000	5.898	41.0	59	0.00	9.41
21 Tetrachloroethene	10.000	9.063	9.4	97	0.00	9.40

(#) = Out of Range SPCC's out = 0 CCC's out = 0
 Z62211.D SIMCL091120.M Wed Sep 16 14:03:03 2020

6.7.16

6

Run Sequence Report

Job Number: FA78551
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Run ID: VO2356	Method: SW846 8260B BY SIM	Instrument ID: GCMSO
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Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
VO2356-BFB	O61227.D	09/11/20 14:01	n/a	BFB Tune
VO2356-IC2356	O61230.D	09/11/20 15:34	n/a	Initial cal 1
VO2356-IC2356	O61231.D	09/11/20 15:54	n/a	Initial cal 2
VO2356-IC2356	O61232.D	09/11/20 16:14	n/a	Initial cal 3
VO2356-IC2356	O61233.D	09/11/20 16:35	n/a	Initial cal 4
VO2356-ICC2356	O61234.D	09/11/20 16:55	n/a	Initial cal 5
VO2356-IC2356	O61235.D	09/11/20 17:15	n/a	Initial cal 6
VO2356-IC2356	O61236.D	09/11/20 17:36	n/a	Initial cal 7
VO2356-ICV2356	O61238.D	09/11/20 18:16	n/a	Initial cal verification 5

Run Sequence Report

Job Number: FA78551
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Run ID: VO2358	Method: SW846 8260B BY SIM	Instrument ID: GCMSO
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Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
VO2358-BFB	O61272.D	09/12/20 10:34	n/a	BFB Tune
VO2358-CC2356	O61273.D	09/12/20 10:52	n/a	Continuing cal 5
VO2358-BS	O61274.D	09/12/20 11:14	n/a	Blank Spike
VO2358-MB	O61276.D	09/12/20 11:55	n/a	Method Blank
FA78551-1	O61277.D	09/12/20 12:15	n/a	2036YOU2423A
FA78551-2	O61278.D	09/12/20 12:36	n/a	2036YOU2425F
FA78551-3	O61279.D	09/12/20 12:56	n/a	2036YOU2426F
FA78551-4	O61280.D	09/12/20 13:16	n/a	2036YOU2427F
FA78551-5	O61281.D	09/12/20 13:36	n/a	2036YOU2428F
FA78551-6	O61282.D	09/12/20 13:57	n/a	2036YOU2429F
FA78551-7	O61283.D	09/12/20 14:17	n/a	2036YOU2430F
FA78551-8	O61284.D	09/12/20 14:37	n/a	2036YOU2431F
FA78551-9	O61285.D	09/12/20 14:57	n/a	2036YOU2432F
FA78551-10	O61286.D	09/12/20 15:18	n/a	2036YOU2433D
FA78551-11	O61287.D	09/12/20 15:38	n/a	2036YOU2434F
FA78551-1MS	O61288.D	09/12/20 15:58	n/a	Matrix Spike
FA78551-1MSD	O61289.D	09/12/20 16:18	n/a	Matrix Spike Duplicate
VO2358-ECC2356	O61290.D	09/12/20 16:39	n/a	Ending cal 5

Run Sequence Report

Job Number: FA78551
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Run ID: VO2359	Method: SW846 8260B BY SIM	Instrument ID: GCMSO
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Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
VO2359-BFB	O61293.D	09/12/20 17:31	n/a	BFB Tune
VO2359-CC2356	O61294.D	09/12/20 17:54	n/a	Continuing cal 5
VO2359-BS	O61295.D	09/12/20 18:43	n/a	Blank Spike
VO2359-MB	O61296.D	09/12/20 19:03	n/a	Method Blank
FA78551-12	O61298.D	09/12/20 19:43	n/a	2036YOU2435F
FA78551-13	O61299.D	09/12/20 20:04	n/a	2036YOU2436F
FA78551-14	O61300.D	09/12/20 20:24	n/a	2036YOU2437F
FA78551-15	O61301.D	09/12/20 20:44	n/a	2036YOU2438F
FA78551-16	O61302.D	09/12/20 21:04	n/a	2036YOU2439D
FA78551-17	O61303.D	09/12/20 21:25	n/a	2036YOU2440F
FA78551-18	O61304.D	09/12/20 21:45	n/a	2036YOU2441F
FA78551-19	O61305.D	09/12/20 22:05	n/a	2036YOU2442D
FA78551-20	O61306.D	09/12/20 22:25	n/a	2036YOU2443F
FA78551-21	O61307.D	09/12/20 22:46	n/a	2036YOU2444F
FA78551-22	O61308.D	09/12/20 23:06	n/a	2036YOU2445F
FA78551-23	O61309.D	09/12/20 23:26	n/a	2036YOU2446F
FA78551-24	O61310.D	09/12/20 23:46	n/a	2036X0BW232F
FA78551-25	O61311.D	09/13/20 00:11	n/a	2036X0BW233A
FA78551-26	O61312.D	09/13/20 00:31	n/a	2036X0BW234C
FA78551-27	O61313.D	09/13/20 00:51	n/a	2036X0BW246F
ZZZZZZ	O61314.D	09/13/20 01:11	n/a	(unrelated sample)
ZZZZZZ	O61315.D	09/13/20 01:32	n/a	(unrelated sample)
ZZZZZZ	O61316.D	09/13/20 01:52	n/a	(unrelated sample)
ZZZZZZ	O61317.D	09/13/20 02:12	n/a	(unrelated sample)
FA78551-12MS	O61318.D	09/13/20 02:33	n/a	Matrix Spike
FA78551-12MSD	O61319.D	09/13/20 02:53	n/a	Matrix Spike Duplicate
VO2359-ECC2356	O61320.D	09/13/20 03:13	n/a	Ending cal 5

Run Sequence Report

Job Number: FA78551
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Run ID: VO2362	Method: SW846 8260B BY SIM	Instrument ID: GCMSO
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Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
VO2362-BFB	O61385.D	09/15/20 14:52	n/a	BFB Tune
VO2362-IC2362	O61386.D	09/15/20 15:46	n/a	Initial cal 1
VO2362-IC2362	O61387.D	09/15/20 16:06	n/a	Initial cal 2
VO2362-IC2362	O61388.D	09/15/20 16:26	n/a	Initial cal 3
VO2362-IC2362	O61389.D	09/15/20 16:47	n/a	Initial cal 4
VO2362-ICC2362	O61390.D	09/15/20 17:07	n/a	Initial cal 5
VO2362-IC2362	O61391.D	09/15/20 17:28	n/a	Initial cal 6
VO2362-IC2362	O61392.D	09/15/20 17:48	n/a	Initial cal 7
VO2362-ICV2362	O61394.D	09/15/20 18:29	n/a	Initial cal verification 5

Run Sequence Report

Job Number: FA78551
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Run ID: VO2363	Method: SW846 8260B BY SIM	Instrument ID: GCMSO
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Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
VO2363-BFB	O61401.D	09/16/20 11:07	n/a	BFB Tune
VO2363-CC2362	O61402.D	09/16/20 11:32	n/a	Continuing cal 5
VO2363-BS	O61403.D	09/16/20 12:11	n/a	Blank Spike
VO2363-MB	O61405.D	09/16/20 13:09	n/a	Method Blank
FA78551-18	O61406.D	09/16/20 13:29	n/a	2036YOU2441F
FA78551-23	O61407.D	09/16/20 13:50	n/a	2036YOU2446F
FA78551-24	O61408.D	09/16/20 14:10	n/a	2036X0BW232F
FA78551-25	O61409.D	09/16/20 14:30	n/a	2036X0BW233A
FA78551-26	O61410.D	09/16/20 14:51	n/a	2036X0BW234C
FA78551-27	O61411.D	09/16/20 15:11	n/a	2036X0BW246F
ZZZZZZ	O61412.D	09/16/20 15:32	n/a	(unrelated sample)
ZZZZZZ	O61414.D	09/16/20 16:13	n/a	(unrelated sample)
ZZZZZZ	O61415.D	09/16/20 16:33	n/a	(unrelated sample)
ZZZZZZ	O61416.D	09/16/20 16:53	n/a	(unrelated sample)
ZZZZZZ	O61417.D	09/16/20 17:14	n/a	(unrelated sample)
ZZZZZZ	O61418.D	09/16/20 17:34	n/a	(unrelated sample)
ZZZZZZ	O61419.D	09/16/20 17:55	n/a	(unrelated sample)
ZZZZZZ	O61420.D	09/16/20 18:15	n/a	(unrelated sample)
VO2363-ECC2362	O61422.D	09/17/20 08:05	n/a	Ending cal 5

Run Sequence Report

Job Number: FA78551
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Run ID: VZ2414 **Method:** SW846 8260B BY SIM **Instrument ID:** GCMSZ

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
VZ2414-BFB	Z62205.D	09/11/20 17:20	n/a	BFB Tune
VZ2414-IC2414	Z62207.D	09/11/20 18:15	n/a	Initial cal 1
VZ2414-IC2414	Z62208.D	09/11/20 18:34	n/a	Initial cal 2
VZ2414-IC2414	Z62209.D	09/11/20 18:53	n/a	Initial cal 3
VZ2414-IC2414	Z62210.D	09/11/20 19:13	n/a	Initial cal 4
VZ2414-ICC2414	Z62211.D	09/11/20 19:32	n/a	Initial cal 5
VZ2414-IC2414	Z62212.D	09/11/20 19:51	n/a	Initial cal 6
VZ2414-IC2414	Z62213.D	09/11/20 20:13	n/a	Initial cal 7
VZ2414-ICV2414	Z62215.D	09/11/20 20:51	n/a	Initial cal verification 5
VZ2414-BS	Z62216.D	09/11/20 21:10	n/a	Blank Spike
VZ2414-MB	Z62218.D	09/11/20 21:49	n/a	Method Blank
FA78573-1	Z62219.D	09/11/20 22:08	n/a	(used for QC only; not part of job FA78551)
ZZZZZZ	Z62220.D	09/11/20 22:27	n/a	(unrelated sample)
ZZZZZZ	Z62221.D	09/11/20 22:47	n/a	(unrelated sample)
ZZZZZZ	Z62222.D	09/11/20 23:06	n/a	(unrelated sample)
ZZZZZZ	Z62223.D	09/11/20 23:26	n/a	(unrelated sample)
ZZZZZZ	Z62224.D	09/11/20 23:45	n/a	(unrelated sample)
ZZZZZZ	Z62225.D	09/12/20 00:04	n/a	(unrelated sample)
ZZZZZZ	Z62226.D	09/12/20 00:23	n/a	(unrelated sample)
ZZZZZZ	Z62227.D	09/12/20 00:42	n/a	(unrelated sample)
ZZZZZZ	Z62228.D	09/12/20 01:02	n/a	(unrelated sample)
ZZZZZZ	Z62229.D	09/12/20 01:21	n/a	(unrelated sample)
ZZZZZZ	Z62230.D	09/12/20 01:40	n/a	(unrelated sample)
ZZZZZZ	Z62231.D	09/12/20 02:00	n/a	(unrelated sample)
ZZZZZZ	Z62232.D	09/12/20 02:19	n/a	(unrelated sample)
FA78573-1MS	Z62233.D	09/12/20 02:38	n/a	Matrix Spike
FA78573-1MSD	Z62234.D	09/12/20 02:57	n/a	Matrix Spike Duplicate
VZ2414-ECC2414	Z62235.D	09/12/20 03:16	n/a	Ending cal 5

Run Sequence Report

Job Number: FA78551
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Run ID: VZ2418 **Method:** SW846 8260B BY SIM **Instrument ID:** GCMSZ

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
VZ2418-BFB	Z62321.D	09/14/20 11:56	n/a	BFB Tune
VZ2418-CC2414	Z62322.D	09/14/20 12:22	n/a	Continuing cal 5
VZ2418-BS	Z62323.D	09/14/20 13:18	n/a	Blank Spike
VZ2418-MB	Z62325.D	09/14/20 13:57	n/a	Method Blank
ZZZZZZ	Z62326.D	09/14/20 15:04	n/a	(unrelated sample)
ZZZZZZ	Z62327.D	09/14/20 15:23	n/a	(unrelated sample)
ZZZZZZ	Z62328.D	09/14/20 15:42	n/a	(unrelated sample)
ZZZZZZ	Z62329.D	09/14/20 16:02	n/a	(unrelated sample)
ZZZZZZ	Z62330.D	09/14/20 16:21	n/a	(unrelated sample)
ZZZZZZ	Z62331.D	09/14/20 16:41	n/a	(unrelated sample)
ZZZZZZ	Z62332.D	09/14/20 17:00	n/a	(unrelated sample)
ZZZZZZ	Z62333.D	09/14/20 17:19	n/a	(unrelated sample)
FA78551-15	Z62334.D	09/14/20 17:38	n/a	2036YOU2438F
FA78551-15MS	Z62335.D	09/14/20 17:57	n/a	Matrix Spike
FA78551-15MSD	Z62336.D	09/14/20 18:16	n/a	Matrix Spike Duplicate
ZZZZZZ	Z62337.D	09/14/20 18:36	n/a	(unrelated sample)
ZZZZZZ	Z62338.D	09/14/20 18:55	n/a	(unrelated sample)
ZZZZZZ	Z62339.D	09/14/20 19:14	n/a	(unrelated sample)
ZZZZZZ	Z62340.D	09/14/20 19:33	n/a	(unrelated sample)
ZZZZZZ	Z62341.D	09/14/20 19:52	n/a	(unrelated sample)
FA78551-16	Z62342.D	09/14/20 20:12	n/a	2036YOU2439D
FA78551-16MS	Z62343.D	09/14/20 20:31	n/a	Matrix Spike
FA78551-16MSD	Z62344.D	09/14/20 20:50	n/a	Matrix Spike Duplicate
ZZZZZZ	Z62345.D	09/14/20 21:09	n/a	(unrelated sample)
ZZZZZZ	Z62346.D	09/14/20 21:28	n/a	(unrelated sample)
ZZZZZZ	Z62347.D	09/14/20 21:48	n/a	(unrelated sample)
ZZZZZZ	Z62348.D	09/14/20 22:07	n/a	(unrelated sample)
ZZZZZZ	Z62349.D	09/14/20 22:26	n/a	(unrelated sample)
VZ2418-ECC2414	Z62350.D	09/14/20 22:45	n/a	Ending cal 5

Run Sequence Report

Job Number: FA78551
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Run ID: VZ2419 **Method:** SW846 8260B BY SIM **Instrument ID:** GCMSZ

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
VZ2419-BFB	Z62353.D	09/15/20 13:19	n/a	BFB Tune
VZ2419-CC2414	Z62354.D	09/15/20 13:58	n/a	Continuing cal 5
VZ2419-BS	Z62355.D	09/15/20 14:17	n/a	Blank Spike
VZ2419-MB	Z62357.D	09/15/20 14:55	n/a	Method Blank
ZZZZZZ	Z62359.D	09/15/20 15:39	n/a	(unrelated sample)
ZZZZZZ	Z62360.D	09/15/20 15:58	n/a	(unrelated sample)
FA78551-1	Z62361.D	09/15/20 16:18	n/a	2036YOU2423A
FA78551-2	Z62362.D	09/15/20 16:37	n/a	2036YOU2425F
FA78551-3	Z62363.D	09/15/20 16:56	n/a	2036YOU2426F
FA78551-4	Z62364.D	09/15/20 17:16	n/a	2036YOU2427F
FA78551-5	Z62365.D	09/15/20 17:35	n/a	2036YOU2428F
FA78551-6	Z62366.D	09/15/20 17:55	n/a	2036YOU2429F
FA78551-7	Z62367.D	09/15/20 18:14	n/a	2036YOU2430F
FA78551-8	Z62368.D	09/15/20 18:33	n/a	2036YOU2431F
FA78551-7MS	Z62370.D	09/15/20 18:53	n/a	Matrix Spike
FA78551-7MSD	Z62371.D	09/15/20 19:12	n/a	Matrix Spike Duplicate
FA78551-9	Z62372.D	09/15/20 19:31	n/a	2036YOU2432F
FA78551-10	Z62373.D	09/15/20 19:51	n/a	2036YOU2433D
FA78551-11	Z62374.D	09/15/20 20:10	n/a	2036YOU2434F
FA78551-12	Z62375.D	09/15/20 20:29	n/a	2036YOU2435F
FA78551-13	Z62376.D	09/15/20 20:49	n/a	2036YOU2436F
FA78551-14	Z62377.D	09/15/20 21:08	n/a	2036YOU2437F
FA78551-17	Z62379.D	09/15/20 21:47	n/a	2036YOU2440F
FA78551-19	Z62380.D	09/15/20 22:06	n/a	2036YOU2442D
FA78551-20	Z62381.D	09/15/20 22:25	n/a	2036YOU2443F
FA78551-21	Z62382.D	09/15/20 22:45	n/a	2036YOU2444F
FA78551-22	Z62383.D	09/15/20 23:04	n/a	2036YOU2445F
VZ2419-ECC2414	Z62384.D	09/15/20 23:23	n/a	Ending cal 5

MS Volatiles

Raw Data

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-14-2020\VO2358\
Data File : O61277.d
Acq On : 12 Sep 2020 12:15 pm
Operator : stutip
Sample : fa78551-1
Misc : MS47193,VO2358,,,,,
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 14 07:29:26 2020
Quant Method : C:\msdchem\1\methods\SIMCL091120.M
Quant Title : Standard Methods 6200B
QLast Update : Sun Sep 13 19:20:40 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Fluorobenzene	7.346	96	244209	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.447	117	189092	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.068	65	103490	5.25	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	105.00%	
19) Toluene-d8	8.896	98	212118	4.98	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	99.60%	
Target Compounds						Qvalue

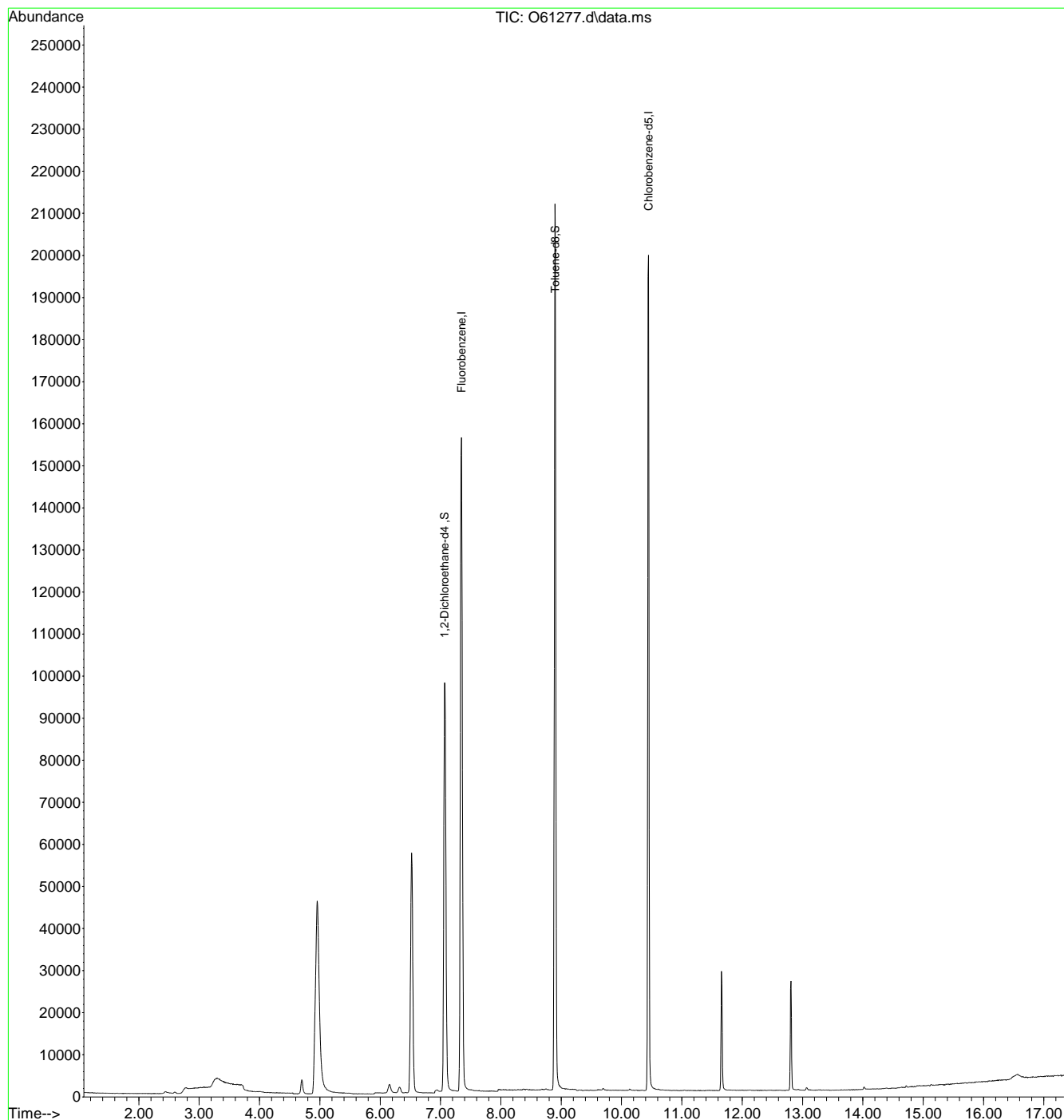
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.1.1
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-14-2020\VO2358\
Data File : O61277.d
Acq On : 12 Sep 2020 12:15 pm
Operator : stutip
Sample : fa78551-1
Misc : MS47193,VO2358,,,,,
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 14 07:29:26 2020
Quant Method : C:\msdchem\1\methods\SIMCL091120.M
Quant Title : Standard Methods 6200B
QLast Update : Sun Sep 13 19:20:40 2020
Response via : Initial Calibration



7.1.1
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\091520\
 Data File : Z62361.D
 Acq On : 15 Sep 2020 4:18 pm
 Operator : JuanG
 Sample : FA78551-1
 Misc : MS47193,VZ2419,,,,,
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 16 10:46:55 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Sun Sep 13 13:38:26 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

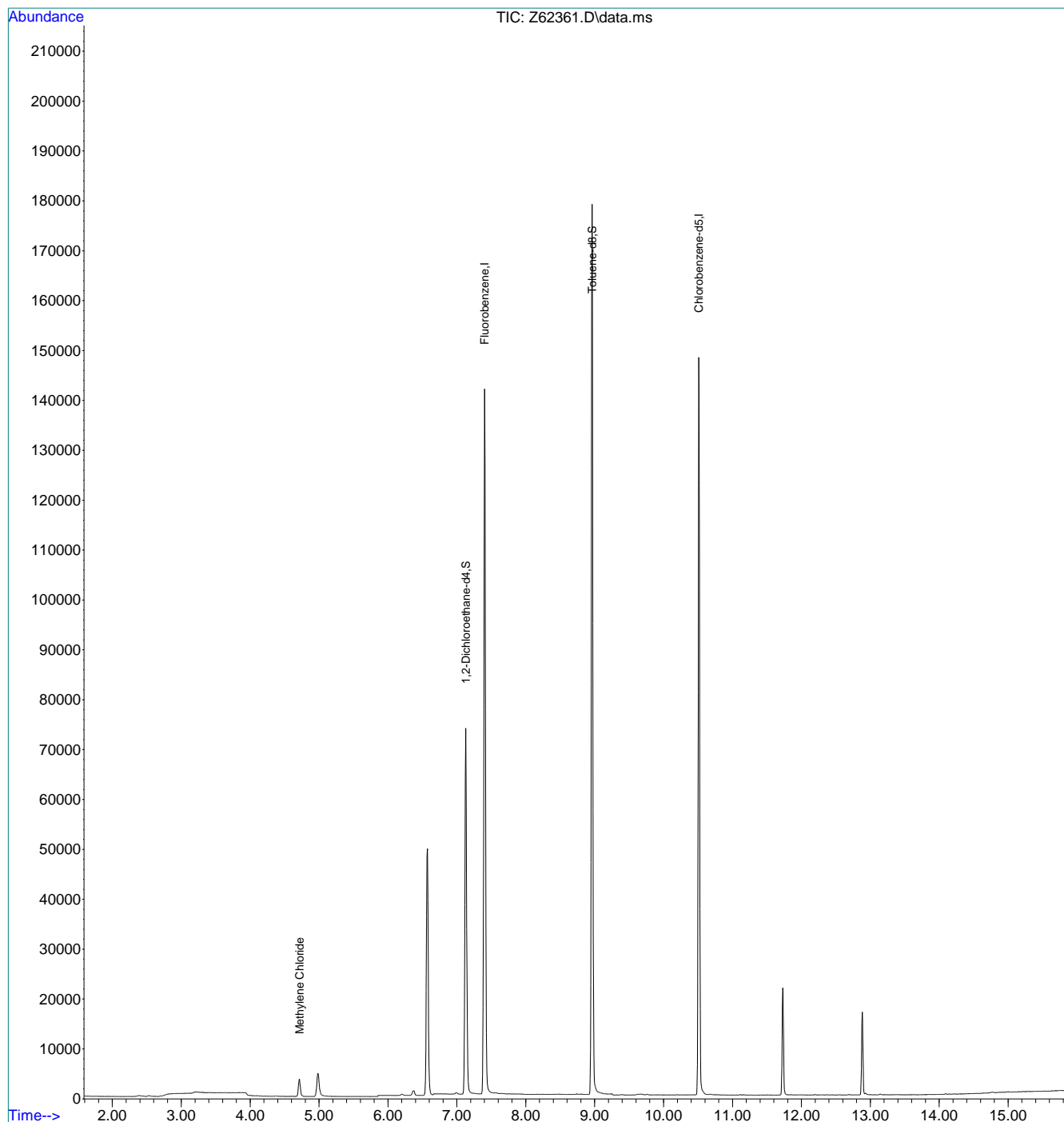
Internal Standards						
1) Fluorobenzene	7.401	96	1642515	5.00	ppb	0.00
18) Chlorobenzene-d5	10.511	117	1342090	5.00	ppb	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.130	65	607955	5.98	ppb	0.00
Spiked Amount	5.000	Range	79 - 125	Recovery	=	119.60%
19) Toluene-d8	8.961	98	1584237	4.86	ppb	0.00
Spiked Amount	5.000	Range	70 - 130	Recovery	=	97.20%
Target Compounds						
5) Methylene Chloride	4.717	84	24056	0.15	ppb	Qvalue # 86

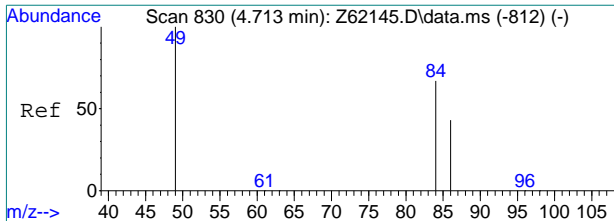
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\091520\
Data File : Z62361.D
Acq On : 15 Sep 2020 4:18 pm
Operator : JuanG
Sample : FA78551-1
Misc : MS47193,VZ2419,,,,,
ALS Vial : 8 Sample Multiplier: 1

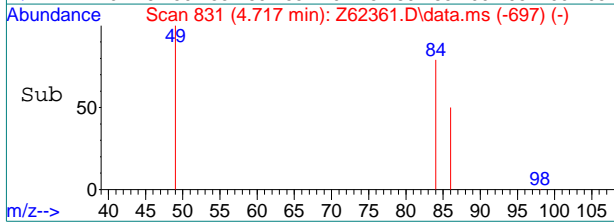
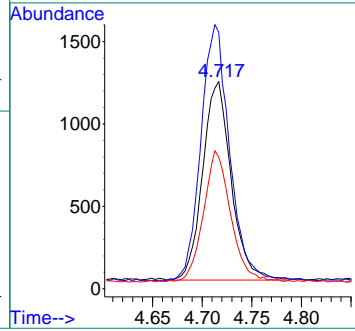
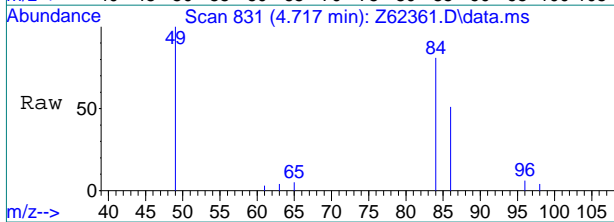
Quant Time: Sep 16 10:46:55 2020
Quant Method : C:\msdchem\1\methods\SIMCL091120.M
Quant Title : WATER-EPA 8260B
QLast Update : Sun Sep 13 13:38:26 2020
Response via : Initial Calibration





#5
 Methylene Chloride
 Concen: 0.15 ppb
 RT: 4.717 min Scan# 831
 Delta R.T. 0.004 min
 Lab File: Z62361.D
 Acq: 15 Sep 2020 4:18 pm

Tgt Ion	Ratio	Lower	Upper
84	100		
49	125.0	128.7	168.7#
86	62.5	43.9	83.9



7.12
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-14-2020\VO2358\
 Data File : O61278.d
 Acq On : 12 Sep 2020 12:36 pm
 Operator : stutip
 Sample : fa78551-2
 Misc : MS47193,VO2358,,,,,
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 14 07:29:39 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Sun Sep 13 19:20:40 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Fluorobenzene	7.346	96	237065	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.447	117	183423	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.074	65	101429	5.30	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	106.00%	
19) Toluene-d8	8.900	98	205944	4.98	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	99.60%	
Target Compounds						
9) Chloroform	6.333	83	10686	0.28	ug/L	91
15) Trichloroethene	7.518	95	31517	1.41	ug/L	87

(#) = qualifier out of range (m) = manual integration (+) = signals summed

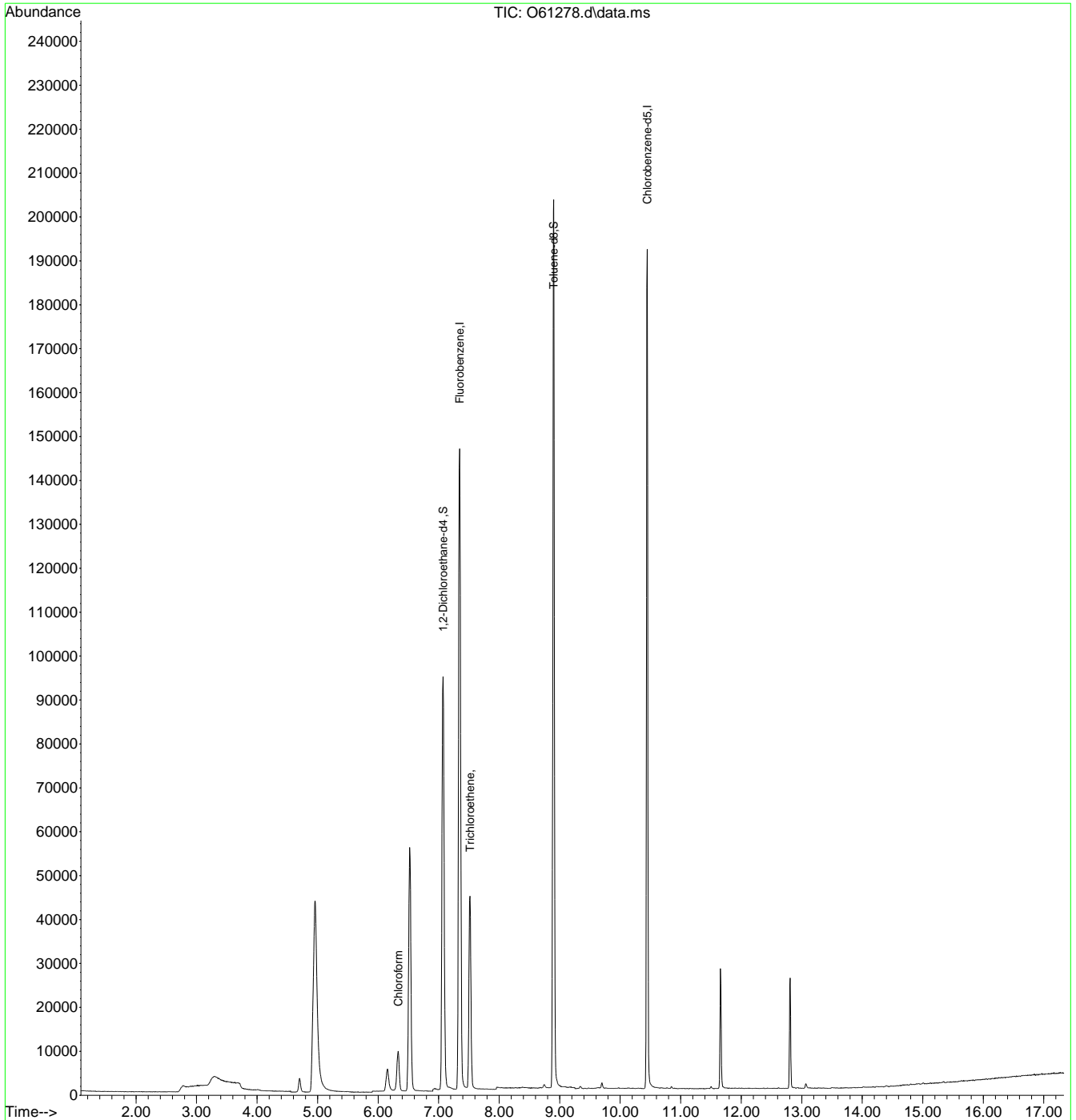
7.1.3
7



Quantitation Report (QT Reviewed)

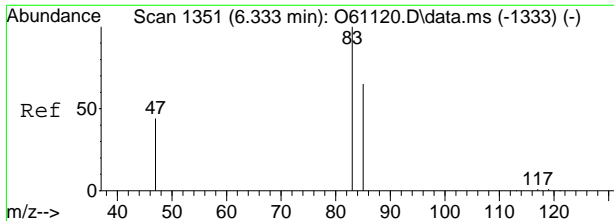
Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-14-2020\VO2358\
 Data File : O61278.d
 Acq On : 12 Sep 2020 12:36 pm
 Operator : stutip
 Sample : fa78551-2
 Misc : MS47193,VO2358,,,,,
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 14 07:29:39 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Sun Sep 13 19:20:40 2020
 Response via : Initial Calibration

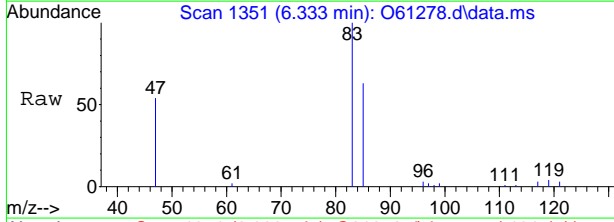


7.1.3
7



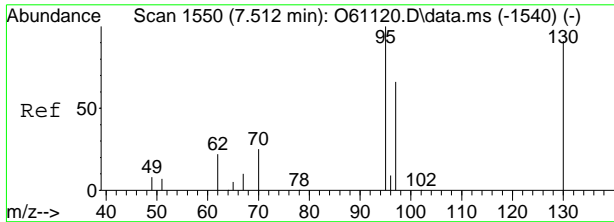
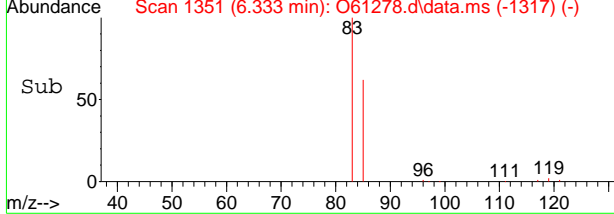
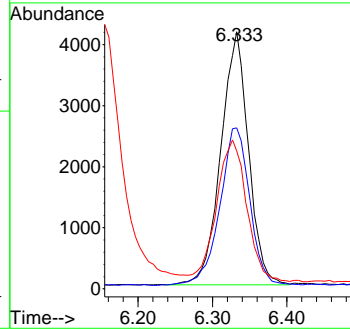


#9
 Chloroform
 Concen: 0.28 ug/L
 RT: 6.333 min Scan# 1351
 Delta R.T. -0.000 min
 Lab File: O61278.d
 Acq: 12 Sep 2020 12:36 pm

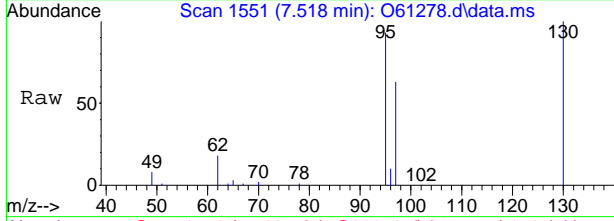


Tgt Ion: 83 Resp: 10686

Ion	Ratio	Lower	Upper
83	100		
85	62.0	33.0	93.0
47	51.6	8.1	68.1

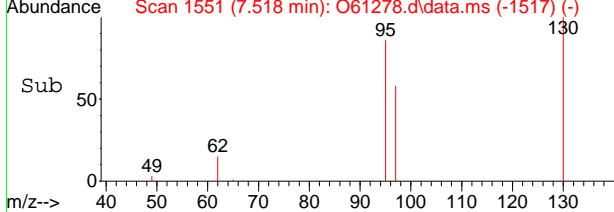
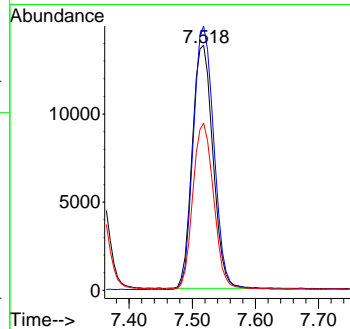


#15
 Trichloroethene
 Concen: 1.41 ug/L
 RT: 7.518 min Scan# 1551
 Delta R.T. 0.000 min
 Lab File: O61278.d
 Acq: 12 Sep 2020 12:36 pm



Tgt Ion: 95 Resp: 31517

Ion	Ratio	Lower	Upper
95	100		
130	108.2	60.4	120.4
97	68.1	34.6	94.6



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\091520\
 Data File : Z62362.D
 Acq On : 15 Sep 2020 4:37 pm
 Operator : JuanG
 Sample : FA78551-2
 Misc : MS47193,VZ2419,,,,,
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 16 10:46:57 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Sun Sep 13 13:38:26 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	Qvalue

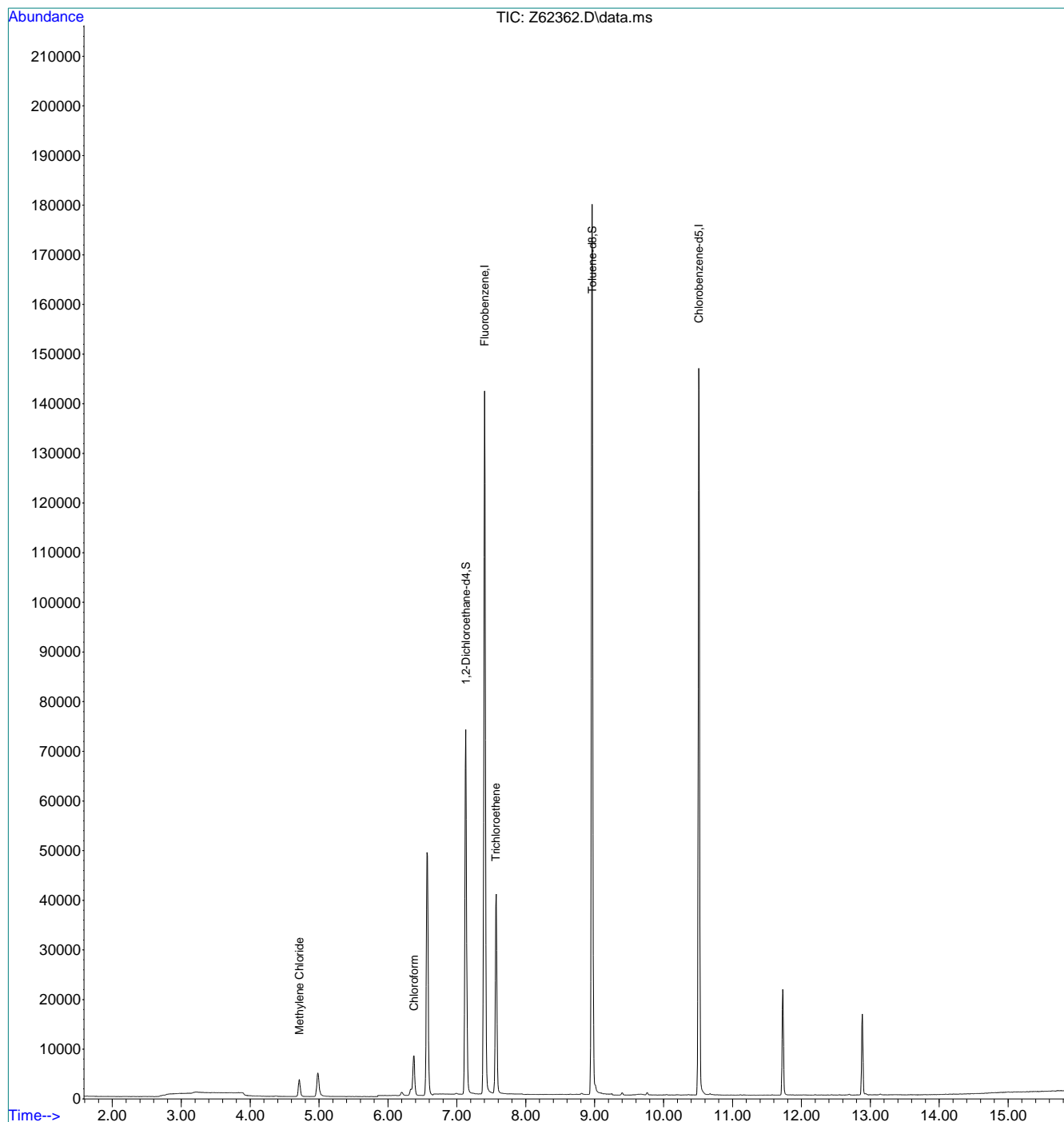
Internal Standards							
1) Fluorobenzene	7.401	96	1613020	5.00	ppb	0.00	
18) Chlorobenzene-d5	10.511	117	1322254	5.00	ppb	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.130	65	600111	6.01	ppb	0.00	
Spiked Amount	5.000	Range	79 - 125	Recovery	=	120.20%	
19) Toluene-d8	8.961	98	1557749	4.85	ppb	0.00	
Spiked Amount	5.000	Range	70 - 130	Recovery	=	97.00%	
Target Compounds							
5) Methylene Chloride	4.713	84	23185	0.14	ppb	91	
9) Chloroform	6.377	83	87161	0.36	ppb	87	
15) Trichloroethene	7.564	95	218187	1.58	ppb	96	

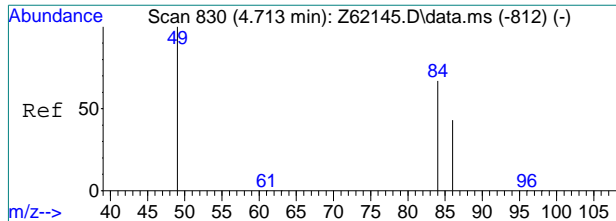
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\091520\
Data File : Z62362.D
Acq On : 15 Sep 2020 4:37 pm
Operator : JuanG
Sample : FA78551-2
Misc : MS47193,VZ2419,,,,,
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 16 10:46:57 2020
Quant Method : C:\msdchem\1\methods\SIMCL091120.M
Quant Title : WATER-EPA 8260B
QLast Update : Sun Sep 13 13:38:26 2020
Response via : Initial Calibration

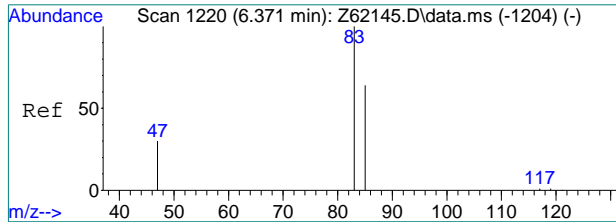
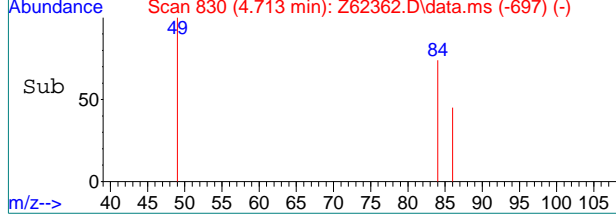
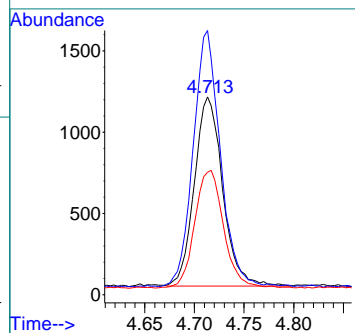
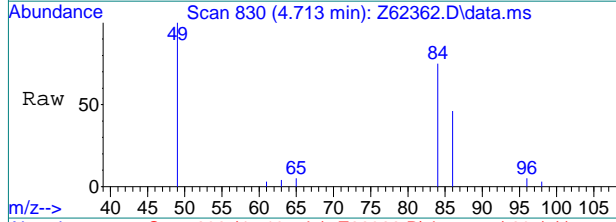




#5
 Methylene Chloride
 Concen: 0.14 ppb
 RT: 4.713 min Scan# 830
 Delta R.T. 0.000 min
 Lab File: Z62362.D
 Acq: 15 Sep 2020 4:37 pm

Tgt Ion: 84 Resp: 23185

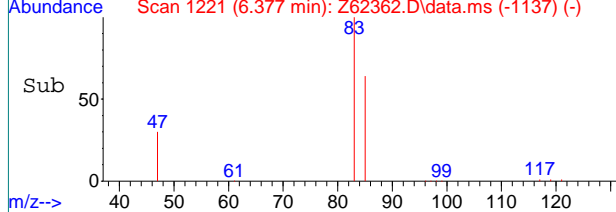
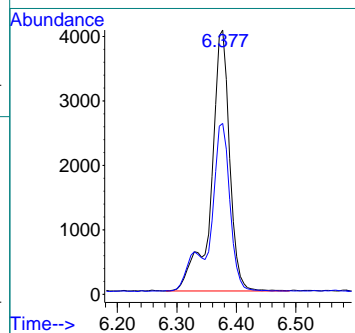
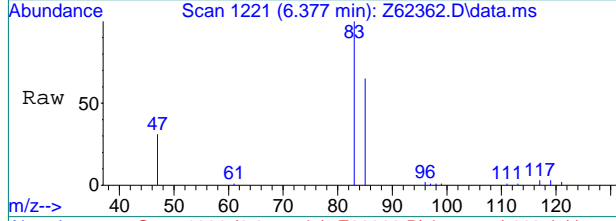
Ion	Ratio	Lower	Upper
84	100		
49	134.7	128.7	168.7
86	60.8	43.9	83.9

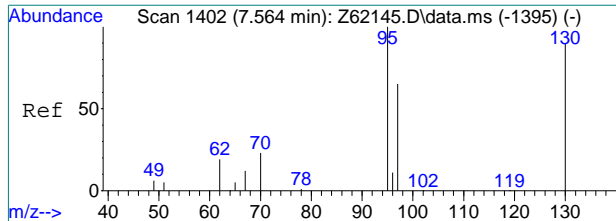


#9
 Chloroform
 Concen: 0.36 ppb
 RT: 6.377 min Scan# 1221
 Delta R.T. 0.000 min
 Lab File: Z62362.D
 Acq: 15 Sep 2020 4:37 pm

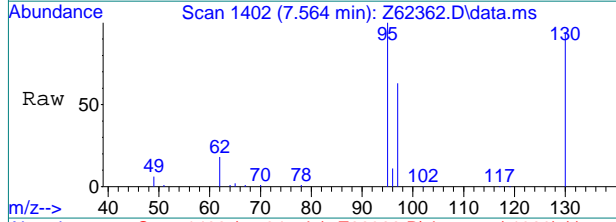
Tgt Ion: 83 Resp: 87161

Ion	Ratio	Lower	Upper
83	100		
85	56.1	46.1	86.1



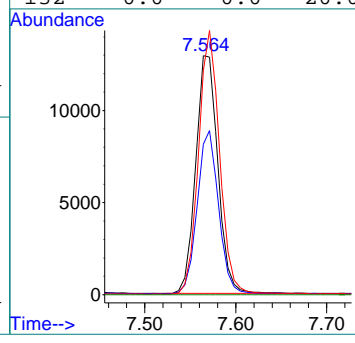
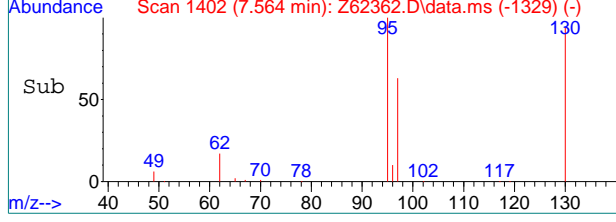


#15
 Trichloroethene
 Concen: 1.58 ppb
 RT: 7.564 min Scan# 1402
 Delta R.T. -0.007 min
 Lab File: Z62362.D
 Acq: 15 Sep 2020 4:37 pm



Tgt Ion: 95 Resp: 218187

Ion	Ratio	Lower	Upper
95	100		
97	62.8	44.5	84.5
130	93.9	69.7	109.7
132	0.0	0.0	20.0



7.14
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-14-2020\VO2358\
Data File : O61279.d
Acq On : 12 Sep 2020 12:56 pm
Operator : stutip
Sample : fa78551-3
Misc : MS47193,VO2358,,,,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 14 07:29:55 2020
Quant Method : C:\msdchem\1\methods\SIMCL091120.M
Quant Title : Standard Methods 6200B
QLast Update : Sun Sep 13 19:20:40 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Fluorobenzene	7.346	96	232343	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.447	117	184296	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.074	65	99956	5.33	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	106.60%	
19) Toluene-d8	8.900	98	200940	4.84	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	96.80%	
Target Compounds						
9) Chloroform	6.333	83	10044	0.27	ug/L	85
15) Trichloroethene	7.518	95	33433	1.53	ug/L	86

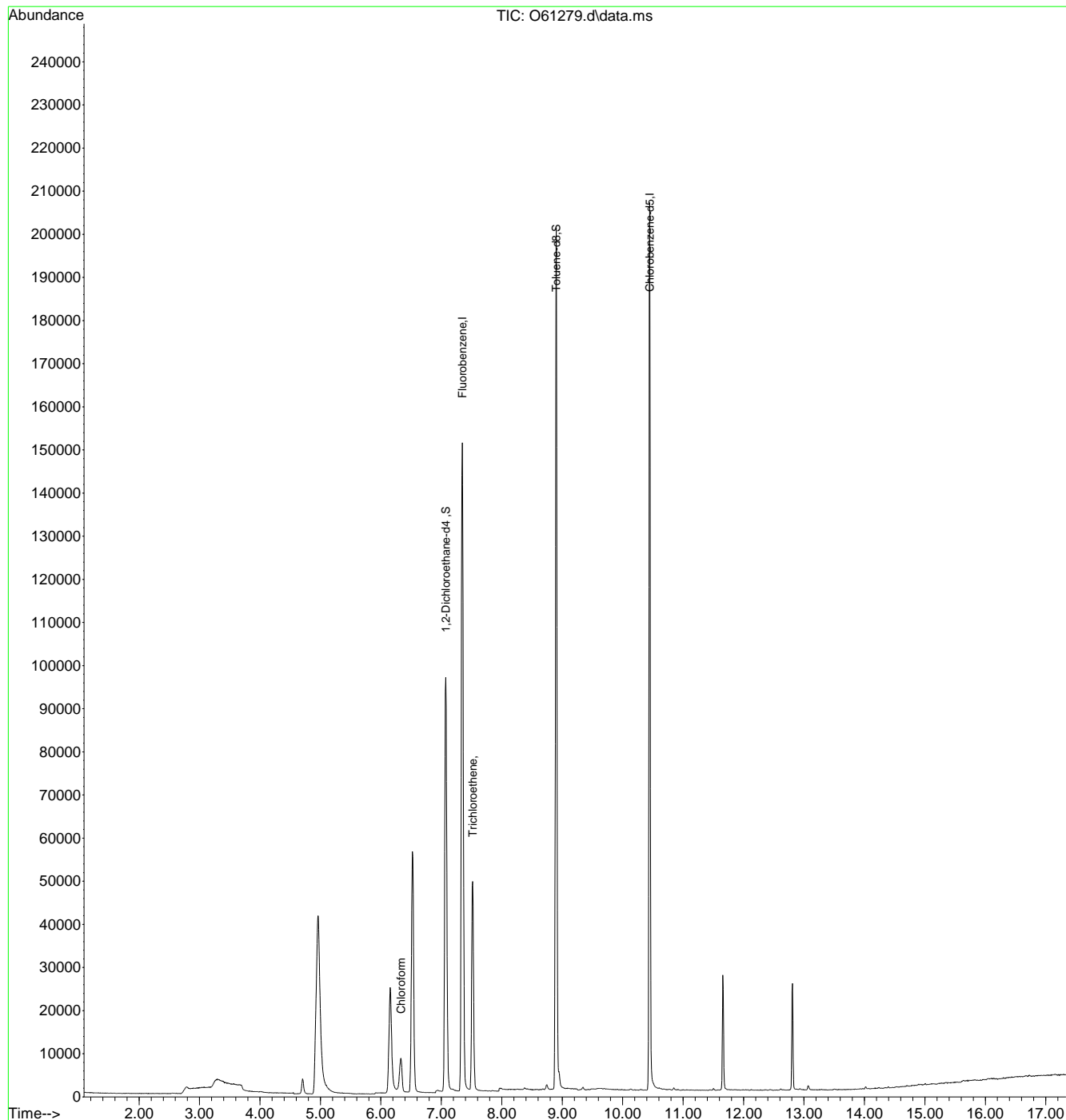
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.15
7

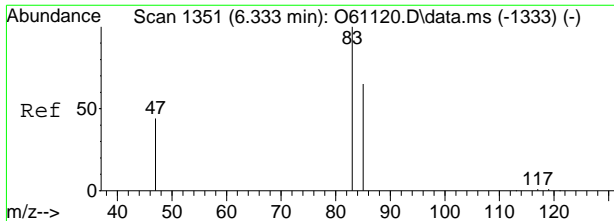
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-14-2020\VO2358\
 Data File : O61279.d
 Acq On : 12 Sep 2020 12:56 pm
 Operator : stutip
 Sample : fa78551-3
 Misc : MS47193,VO2358,,,,,
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 14 07:29:55 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Sun Sep 13 19:20:40 2020
 Response via : Initial Calibration

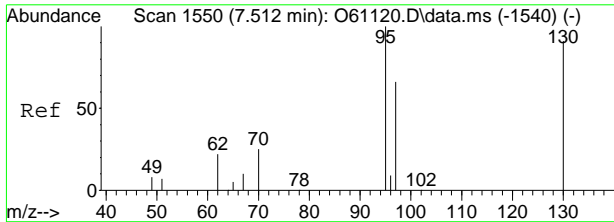
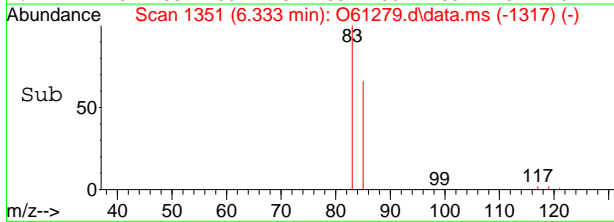
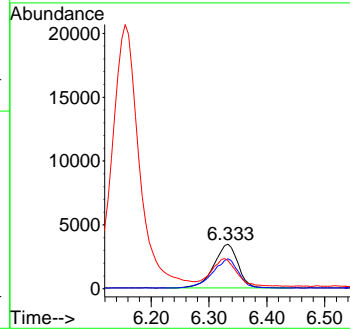
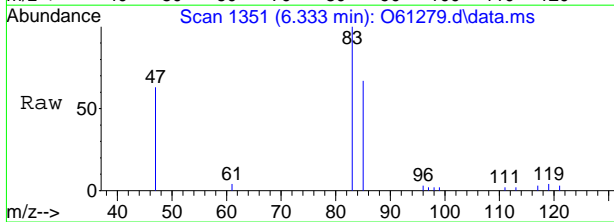


7.15
7



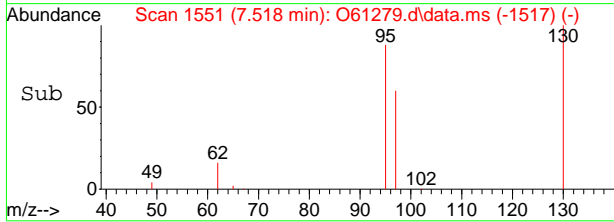
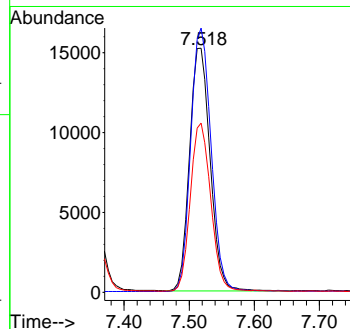
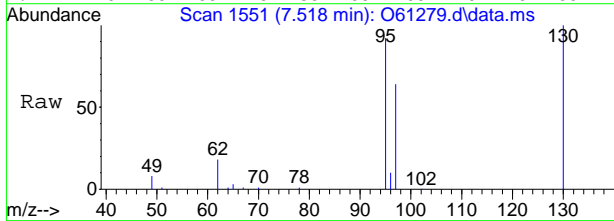
#9
 Chloroform
 Concen: 0.27 ug/L
 RT: 6.333 min Scan# 1351
 Delta R.T. -0.000 min
 Lab File: O61279.d
 Acq: 12 Sep 2020 12:56 pm

Tgt Ion	Resp	Lower	Upper
83	10044		
85	66.0	33.0	93.0
47	57.8	8.1	68.1



#15
 Trichloroethene
 Concen: 1.53 ug/L
 RT: 7.518 min Scan# 1551
 Delta R.T. 0.000 min
 Lab File: O61279.d
 Acq: 12 Sep 2020 12:56 pm

Tgt Ion	Resp	Lower	Upper
95	33433		
95	100		
130	108.6	60.4	120.4
97	69.2	34.6	94.6



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\091520\
 Data File : Z62363.D
 Acq On : 15 Sep 2020 4:56 pm
 Operator : JuanG
 Sample : FA78551-3
 Misc : MS47193,VZ2419,,,,,
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 16 10:46:59 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Sun Sep 13 13:38:26 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

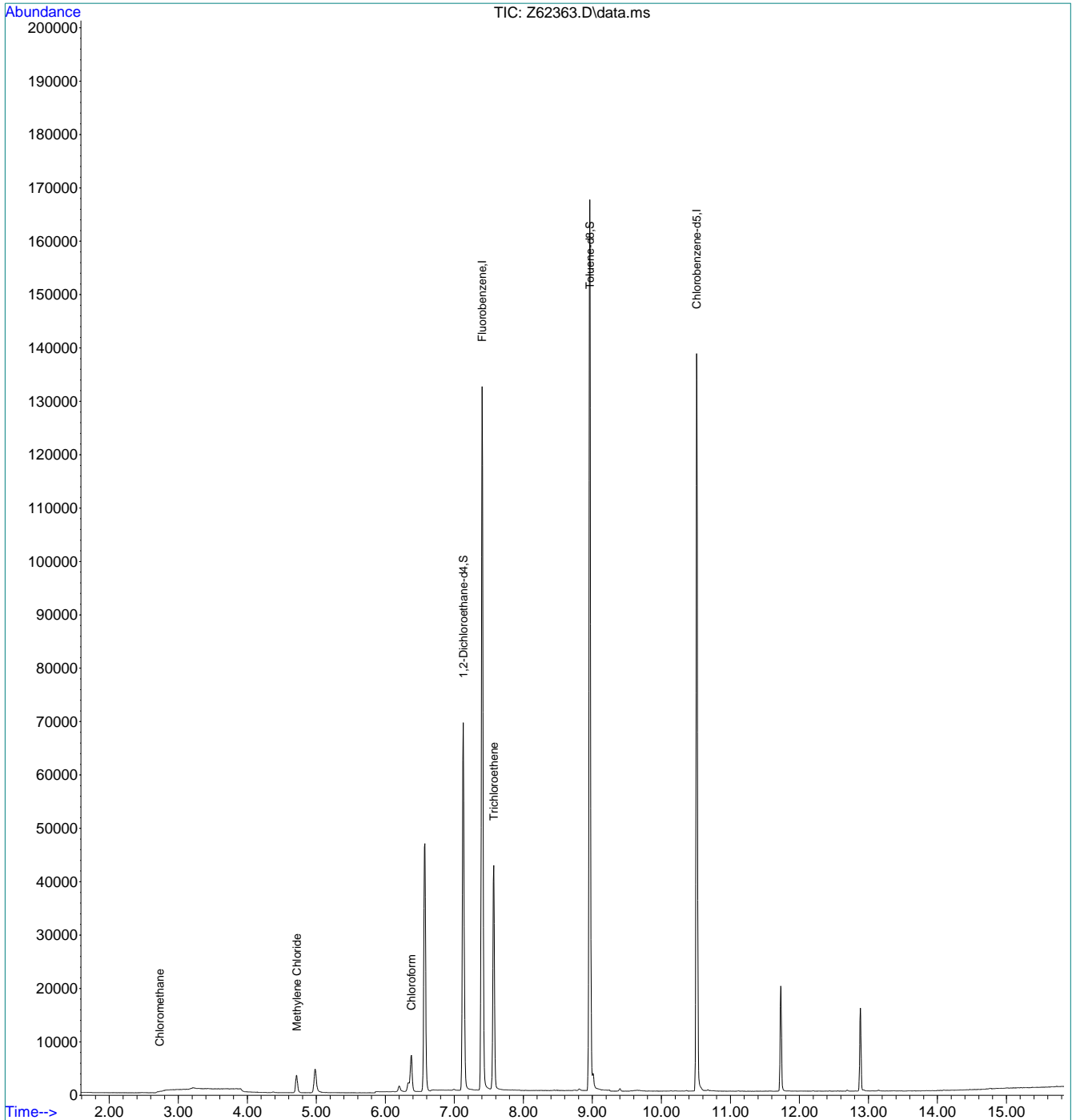
Internal Standards						
1) Fluorobenzene	7.401	96	1523802	5.00	ppb	0.00
18) Chlorobenzene-d5	10.511	117	1250445	5.00	ppb	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.130	65	572120	6.07	ppb	0.00
Spiked Amount	5.000	Range	79 - 125	Recovery	=	121.40%
19) Toluene-d8	8.961	98	1464452	4.82	ppb	0.00
Spiked Amount	5.000	Range	70 - 130	Recovery	=	96.40%
Target Compounds						
3) Chloromethane	2.729	50	4917	0.05	ppb	Qvalue 87
5) Methylene Chloride	4.717	84	22622	0.15	ppb	# 84
9) Chloroform	6.377	83	63896	0.28	ppb	99
15) Trichloroethene	7.571	95	228008	1.75	ppb	87

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

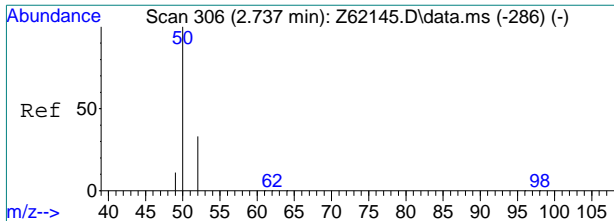
Data Path : C:\msdchem\1\data\091520\
 Data File : Z62363.D
 Acq On : 15 Sep 2020 4:56 pm
 Operator : JuanG
 Sample : FA78551-3
 Misc : MS47193,VZ2419,,,,,
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 16 10:46:59 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Sun Sep 13 13:38:26 2020
 Response via : Initial Calibration



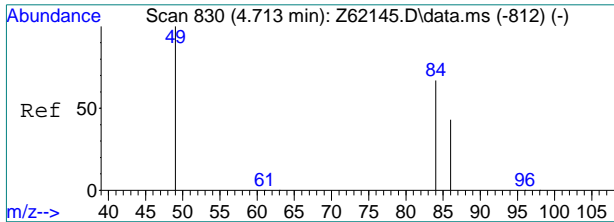
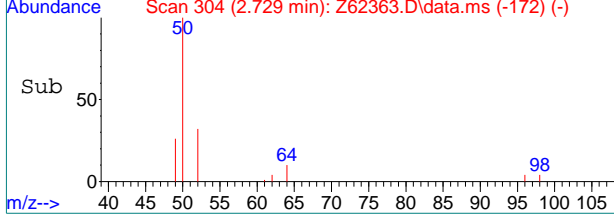
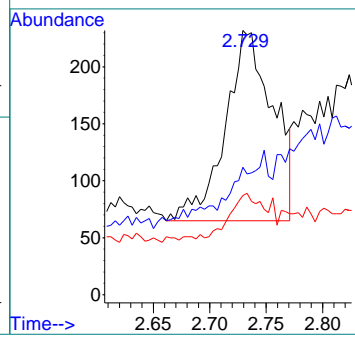
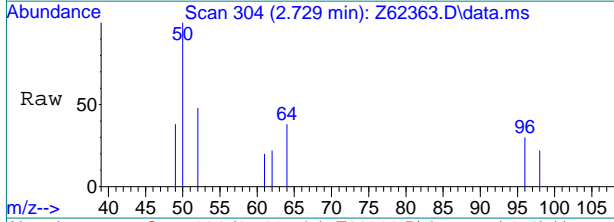
7.1.6
7





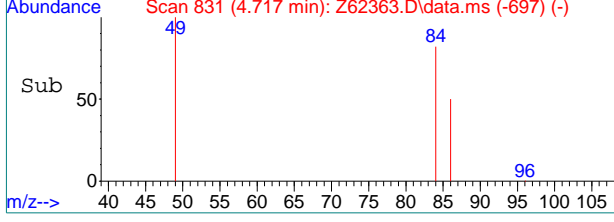
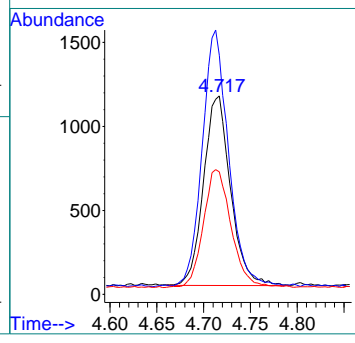
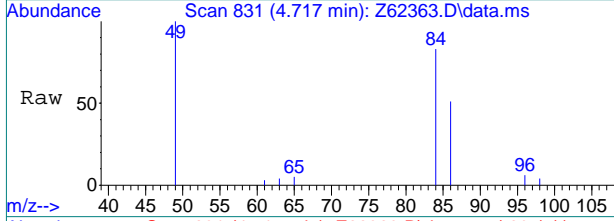
#3
 Chloromethane
 Concen: 0.05 ppb
 RT: 2.729 min Scan# 304
 Delta R.T. -0.004 min
 Lab File: Z62363.D
 Acq: 15 Sep 2020 4:56 pm

Tgt Ion	Ratio	Lower	Upper
50	100		
52	28.1	12.6	52.6
49	21.6	0.0	30.8



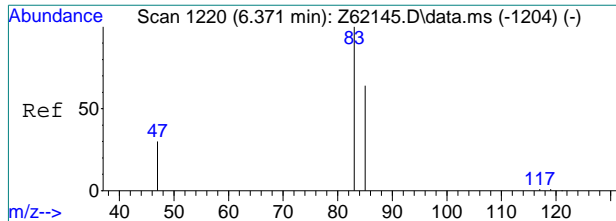
#5
 Methylene Chloride
 Concen: 0.15 ppb
 RT: 4.717 min Scan# 831
 Delta R.T. 0.004 min
 Lab File: Z62363.D
 Acq: 15 Sep 2020 4:56 pm

Tgt Ion	Ratio	Lower	Upper
84	100		
49	121.4	128.7	168.7#
86	61.0	43.9	83.9



7.1.6
7

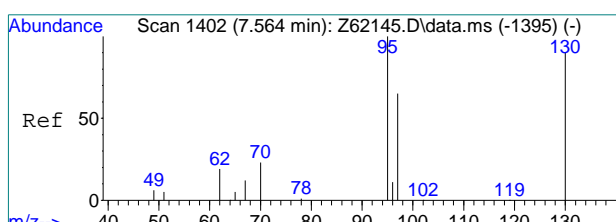
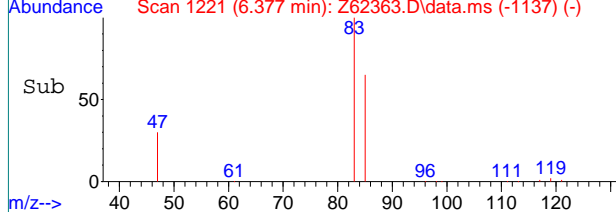
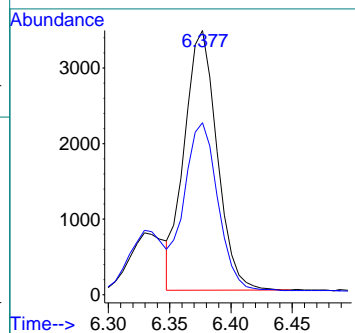
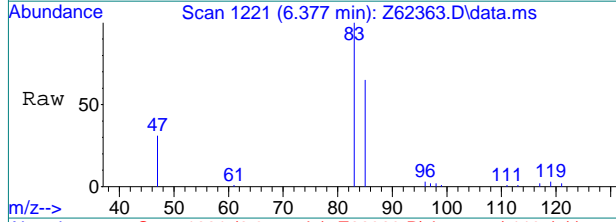




#9
 Chloroform
 Concen: 0.28 ppb
 RT: 6.377 min Scan# 1221
 Delta R.T. -0.000 min
 Lab File: Z62363.D
 Acq: 15 Sep 2020 4:56 pm

Tgt Ion: 83 Resp: 63896

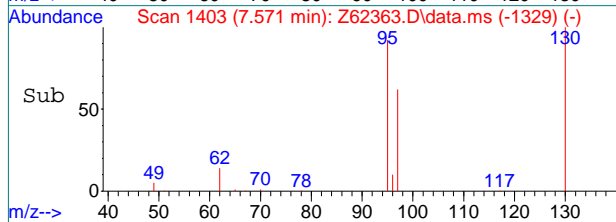
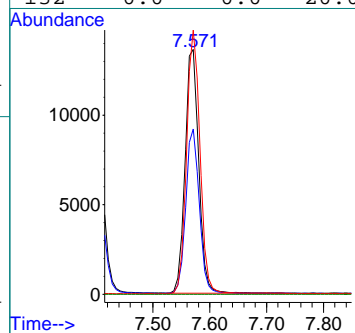
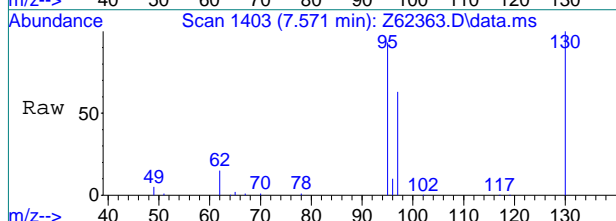
Ion	Ratio	Lower	Upper
83	100		
85	67.0	46.1	86.1



#15
 Trichloroethene
 Concen: 1.75 ppb
 RT: 7.571 min Scan# 1403
 Delta R.T. -0.000 min
 Lab File: Z62363.D
 Acq: 15 Sep 2020 4:56 pm

Tgt Ion: 95 Resp: 228008

Ion	Ratio	Lower	Upper
95	100		
97	67.5	44.5	84.5
130	108.2	69.7	109.7
132	0.0	0.0	20.0



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-14-2020\VO2358\
Data File : O61280.d
Acq On : 12 Sep 2020 1:16 pm
Operator : stutip
Sample : fa78551-4
Misc : MS47193,VO2358,,,,,
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 14 07:30:29 2020
Quant Method : C:\msdchem\1\methods\SIMCL091120.M
Quant Title : Standard Methods 6200B
QLast Update : Sun Sep 13 19:20:40 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Fluorobenzene	7.346	96	229839	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.447	117	185710	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.073	65	99188	5.34	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	106.80%	
19) Toluene-d8	8.896	98	199002	4.75	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	95.00%	
Target Compounds						
15) Trichloroethene	7.512	95	23768	1.10	ug/L	Qvalue 88

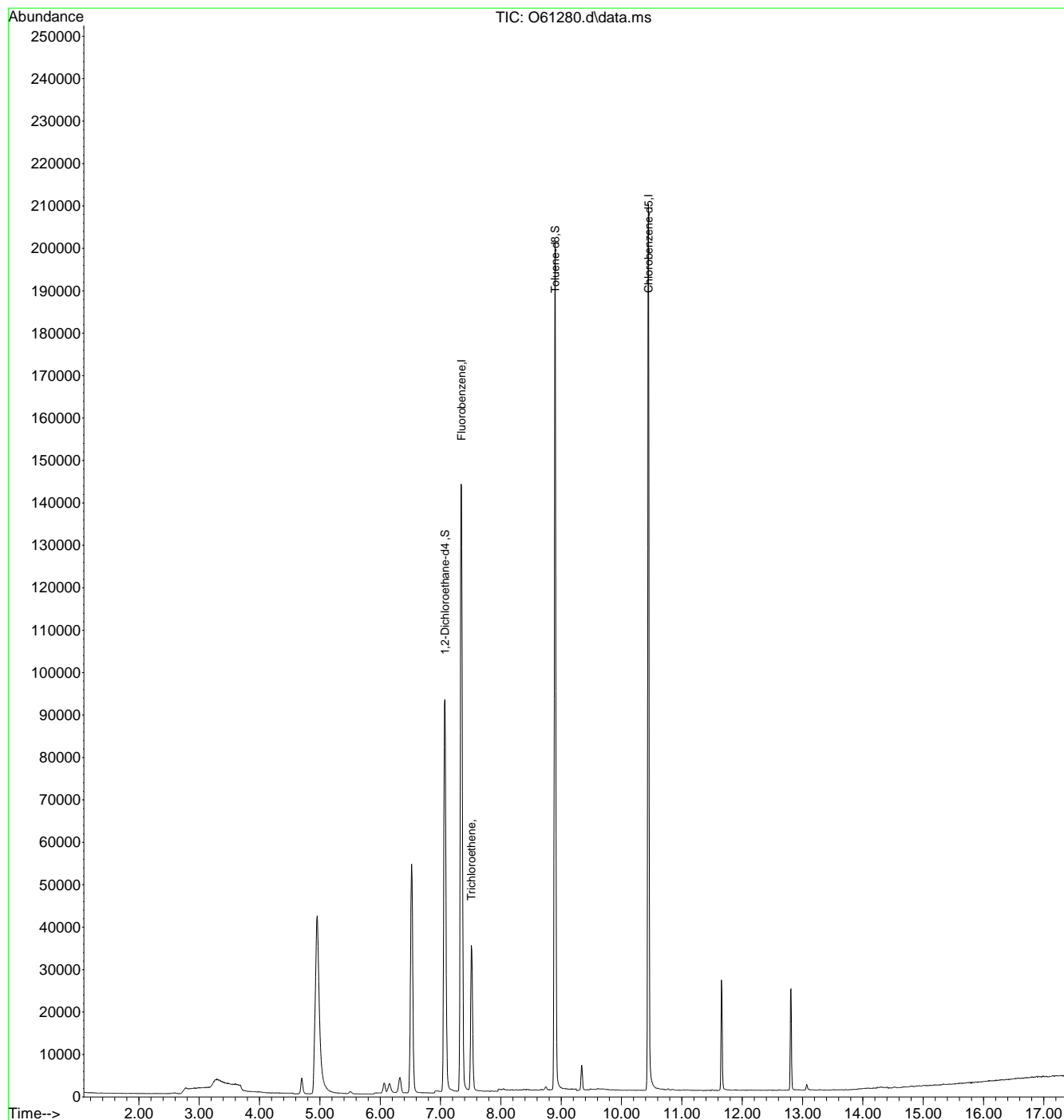
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.17
7

Quantitation Report (QT Reviewed)

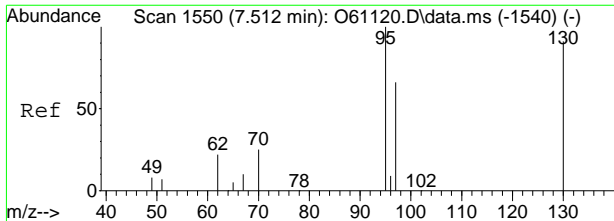
Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-14-2020\VO2358\
 Data File : O61280.d
 Acq On : 12 Sep 2020 1:16 pm
 Operator : stutip
 Sample : fa78551-4
 Misc : MS47193,VO2358,,,,,
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 14 07:30:29 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Sun Sep 13 19:20:40 2020
 Response via : Initial Calibration



7.17
7

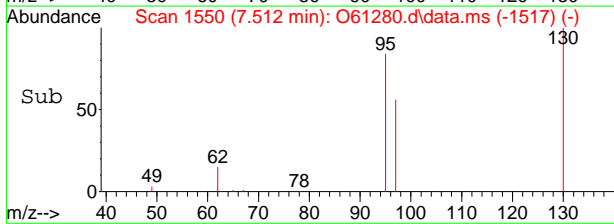
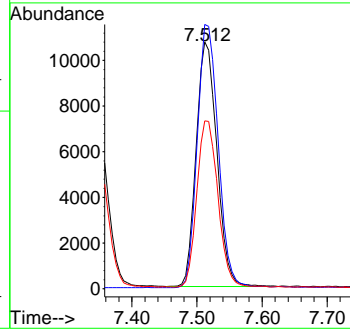
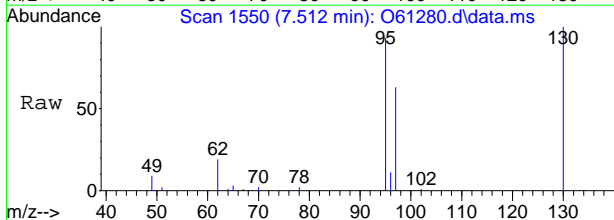




#15
 Trichloroethene
 Concen: 1.10 ug/L
 RT: 7.512 min Scan# 1550
 Delta R.T. -0.006 min
 Lab File: O61280.d
 Acq: 12 Sep 2020 1:16 pm

Tgt Ion: 95 Resp: 23768

Ion	Ratio	Lower	Upper
95	100		
130	107.6	60.4	120.4
97	67.8	34.6	94.6



7.17
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\091520\
 Data File : Z62364.D
 Acq On : 15 Sep 2020 5:16 pm
 Operator : JuanG
 Sample : FA78551-4
 Misc : MS47193,VZ2419,,,,,
 ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 16 10:47:01 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Sun Sep 13 13:38:26 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	

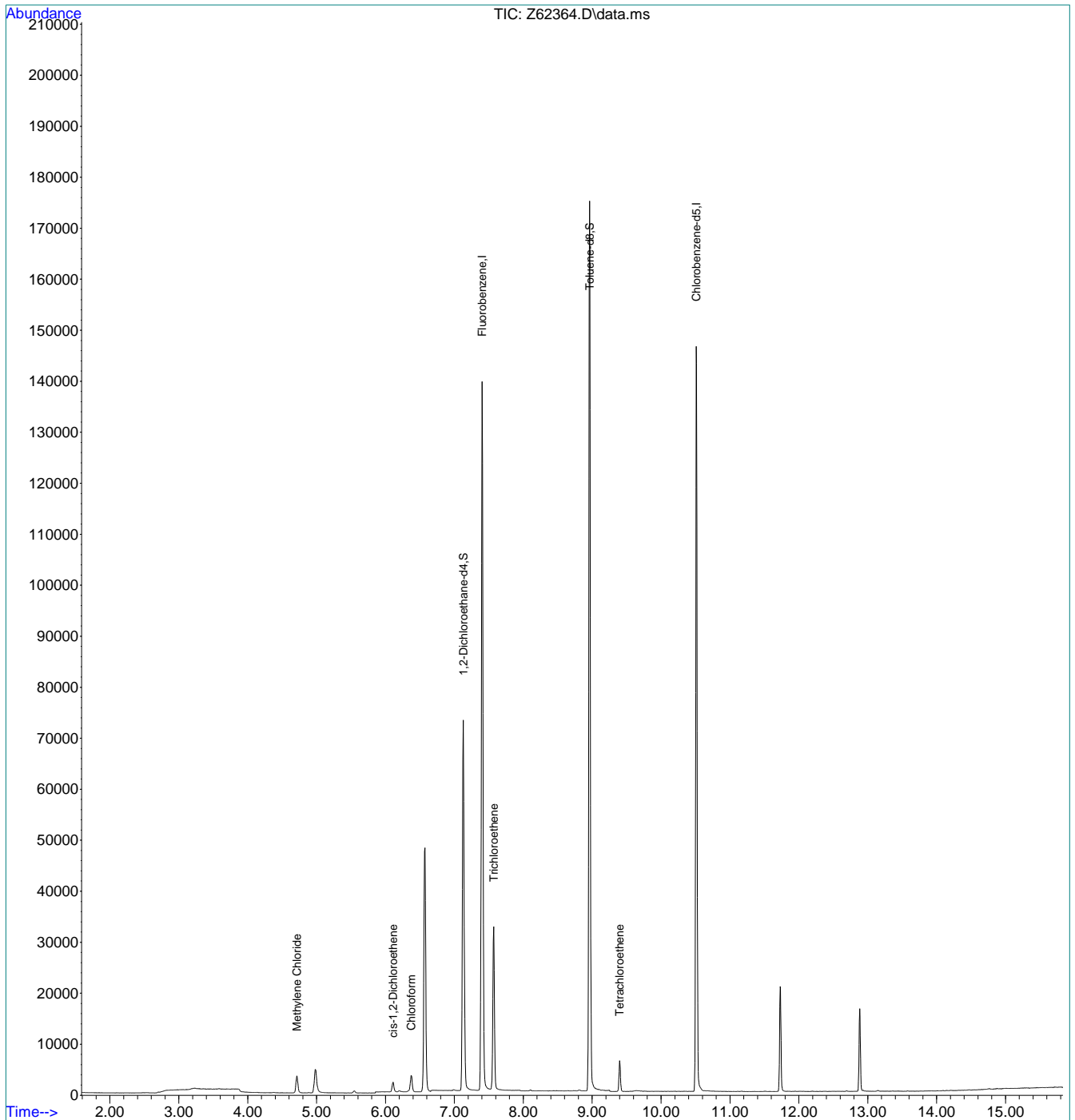
Internal Standards							
1) Fluorobenzene	7.401	96	1598786	5.00	ppb	0.00	
18) Chlorobenzene-d5	10.511	117	1309618	5.00	ppb	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.130	65	604553	6.11	ppb	0.00	
Spiked Amount	5.000	Range	79 - 125	Recovery	=	122.20%	
19) Toluene-d8	8.961	98	1535672	4.83	ppb	0.00	
Spiked Amount	5.000	Range	70 - 130	Recovery	=	96.60%	
Target Compounds							
							Qvalue
5) Methylene Chloride	4.713	84	23105	0.15	ppb		89
8) cis-1,2-Dichloroethene	6.110	96	12560	0.10	ppb		89
9) Chloroform	6.371	83	30725	0.13	ppb		95
15) Trichloroethene	7.571	95	174454	1.28	ppb		87
21) Tetrachloroethene	9.399	166	25861	0.17	ppb		98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

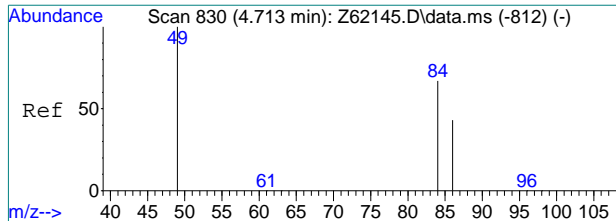
Data Path : C:\msdchem\1\data\091520\
 Data File : Z62364.D
 Acq On : 15 Sep 2020 5:16 pm
 Operator : JuanG
 Sample : FA78551-4
 Misc : MS47193,VZ2419,,,,,
 ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 16 10:47:01 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Sun Sep 13 13:38:26 2020
 Response via : Initial Calibration



7.1.8

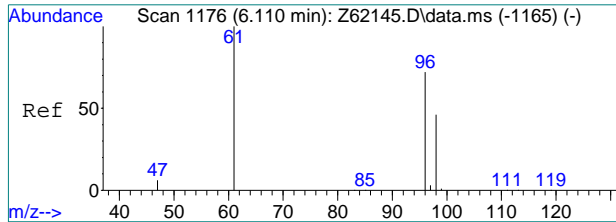
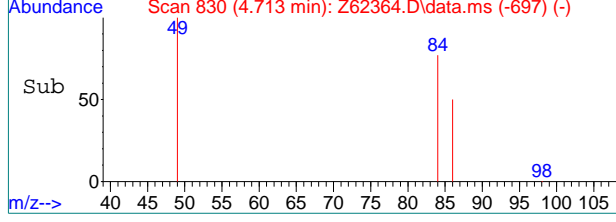
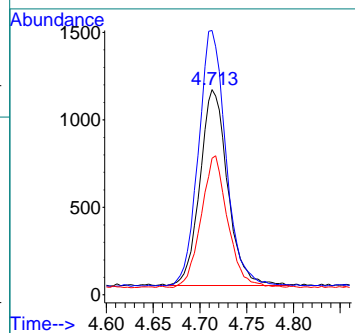
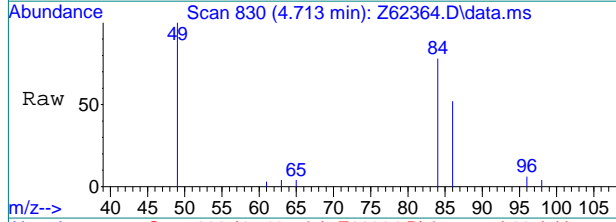




#5
 Methylene Chloride
 Concen: 0.15 ppb
 RT: 4.713 min Scan# 830
 Delta R.T. 0.000 min
 Lab File: Z62364.D
 Acq: 15 Sep 2020 5:16 pm

Tgt Ion: 84 Resp: 23105

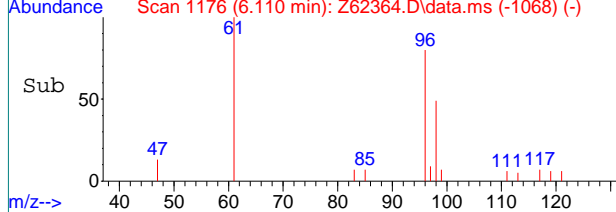
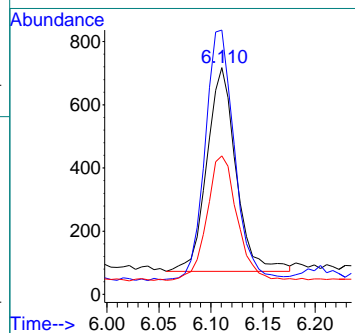
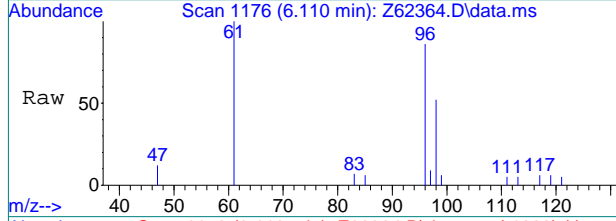
Ion	Ratio	Lower	Upper
84	100		
49	130.4	128.7	168.7
86	65.8	43.9	83.9

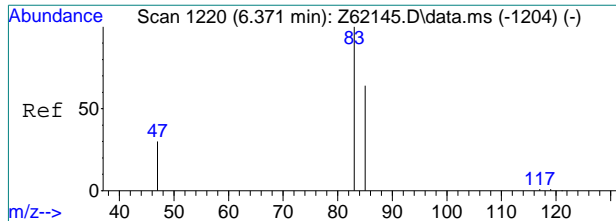


#8
 cis-1,2-Dichloroethene
 Concen: 0.10 ppb
 RT: 6.110 min Scan# 1176
 Delta R.T. 0.000 min
 Lab File: Z62364.D
 Acq: 15 Sep 2020 5:16 pm

Tgt Ion: 96 Resp: 12560

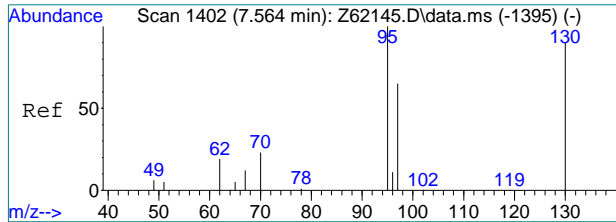
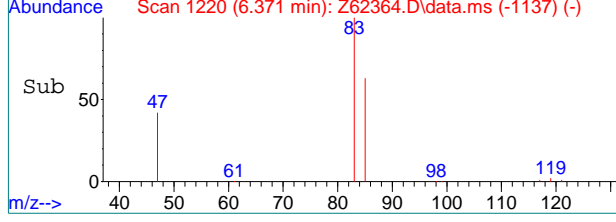
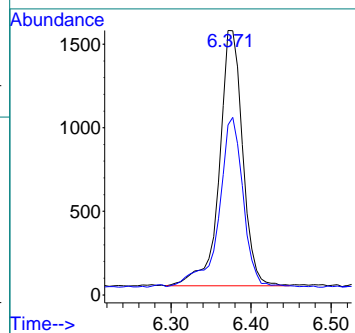
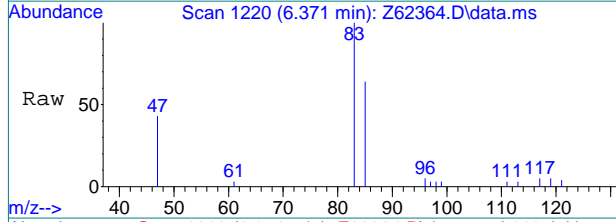
Ion	Ratio	Lower	Upper
96	100		
61	122.3	119.3	159.3
98	60.9	44.5	84.5





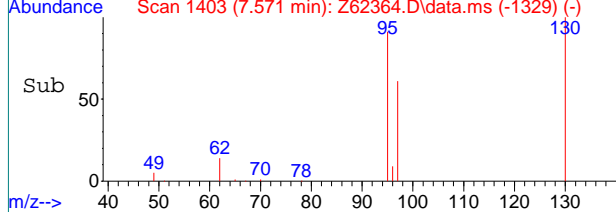
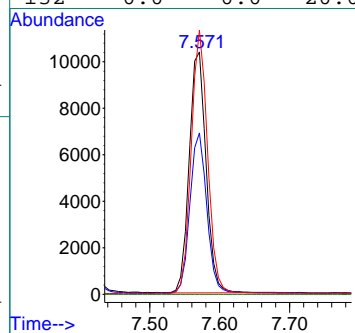
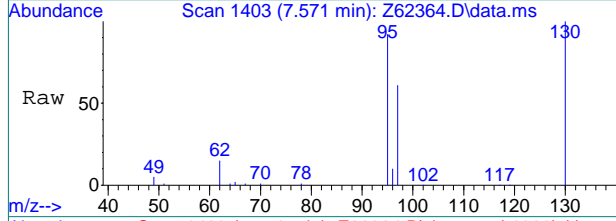
#9
 Chloroform
 Concen: 0.13 ppb
 RT: 6.371 min Scan# 1220
 Delta R.T. -0.006 min
 Lab File: Z62364.D
 Acq: 15 Sep 2020 5:16 pm

Tgt Ion	Resp	Lower	Upper
83	30725		
85	70.1	46.1	86.1

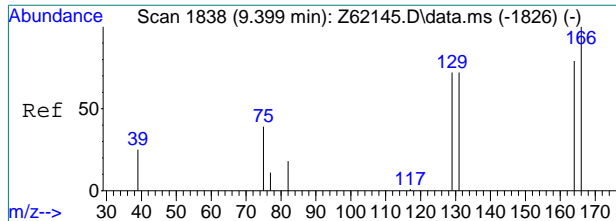


#15
 Trichloroethene
 Concen: 1.28 ppb
 RT: 7.571 min Scan# 1403
 Delta R.T. 0.000 min
 Lab File: Z62364.D
 Acq: 15 Sep 2020 5:16 pm

Tgt Ion	Resp	Lower	Upper
95	174454		
97	66.5	44.5	84.5
130	109.5	69.7	109.7
132	0.0	0.0	20.0

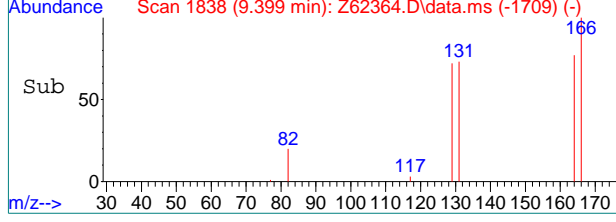
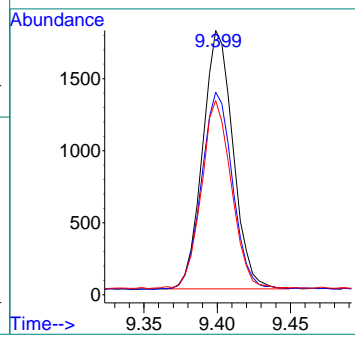
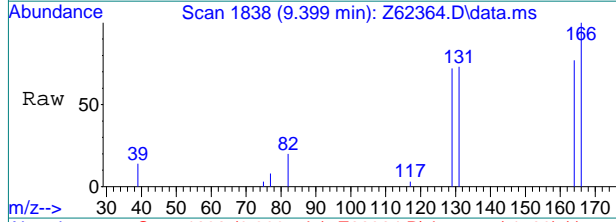


7.18
7



#21
 Tetrachloroethene
 Concen: 0.17 ppb
 RT: 9.399 min Scan# 1838
 Delta R.T. -0.000 min
 Lab File: Z62364.D
 Acq: 15 Sep 2020 5:16 pm

Tgt Ion	Resp
166	25861
166	100
164	76.0
131	72.4



7.1.8
7



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-14-2020\VO2358\
Data File : O61281.d
Acq On : 12 Sep 2020 1:36 pm
Operator : stutip
Sample : fa78551-5
Misc : MS47193,VO2358,,,,,
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 14 07:31:10 2020
Quant Method : C:\msdchem\1\methods\SIMCL091120.M
Quant Title : Standard Methods 6200B
QLast Update : Sun Sep 13 19:20:40 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Fluorobenzene	7.346	96	233960	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.447	117	188942	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.074	65	100507	5.32	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	106.40%	
19) Toluene-d8	8.900	98	201234	4.72	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	94.40%	
Target Compounds						
7) 1,1-Dichloroethane	5.514	63	23353	0.54	ug/L	99
8) cis-1,2-Dichloroethene	6.072	96	80690	3.76	ug/L #	83
14) 1,2-Dichloroethane	7.139	62	20229	0.57	ug/L	93
15) Trichloroethene	7.518	95	22328	1.01	ug/L	84
16) 1,2-Dichloropropane	8.043	63	5126	0.21	ug/L	98
21) Tetrachloroethene	9.343	166	8886	0.43	ug/L	99
22) 1,4-Dichlorobenzene	12.827	146	85138	1.95	ug/L	97

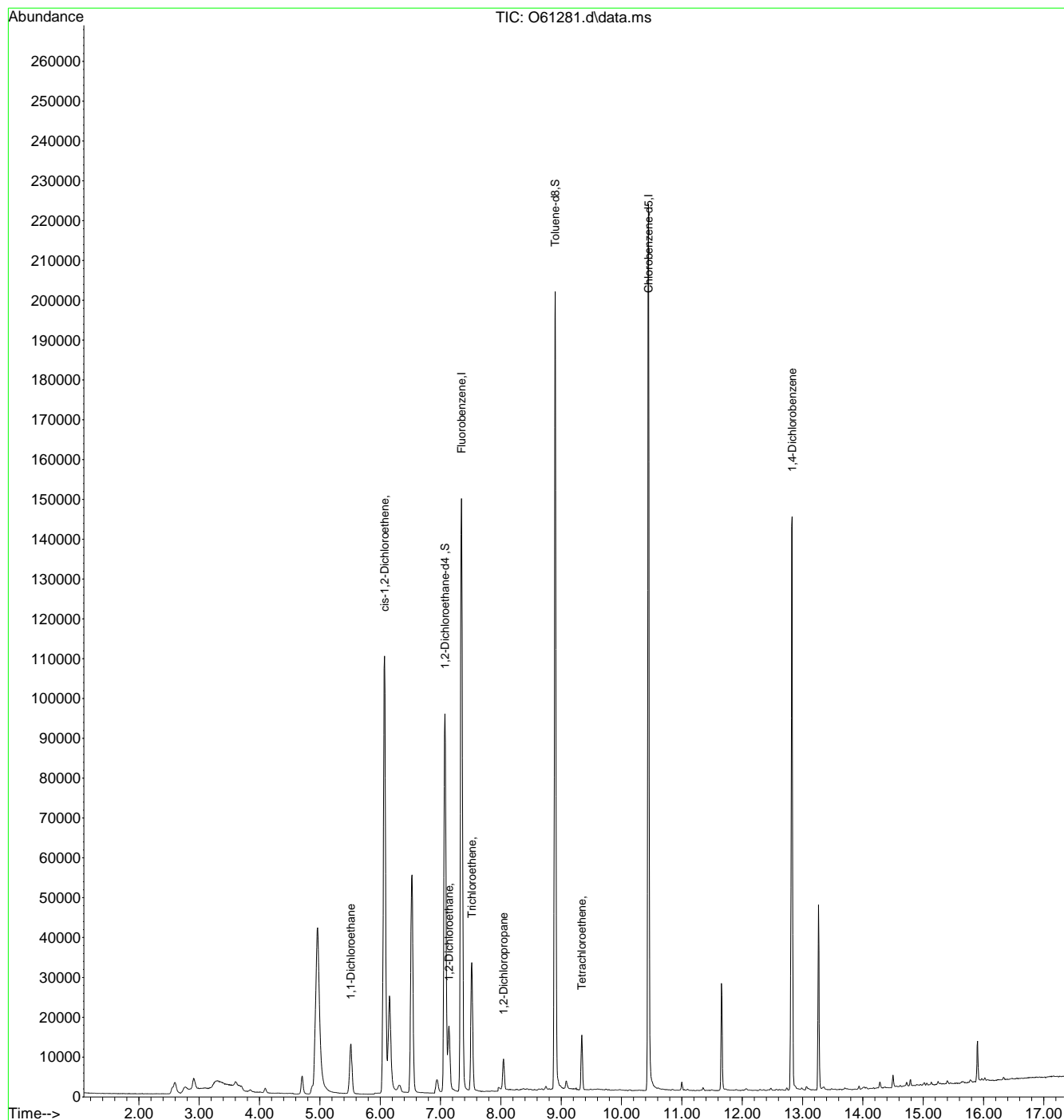
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.1.9
7

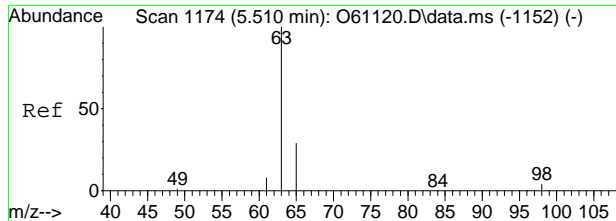
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-14-2020\VO2358\
 Data File : O61281.d
 Acq On : 12 Sep 2020 1:36 pm
 Operator : stutip
 Sample : fa78551-5
 Misc : MS47193,VO2358,,,,,
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 14 07:31:10 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Sun Sep 13 19:20:40 2020
 Response via : Initial Calibration

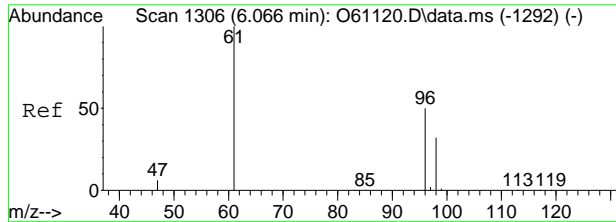
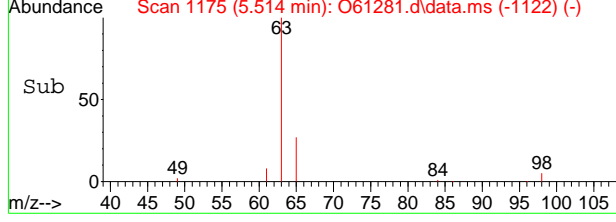
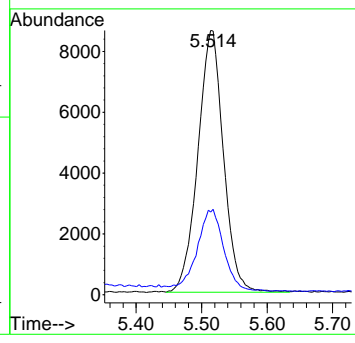
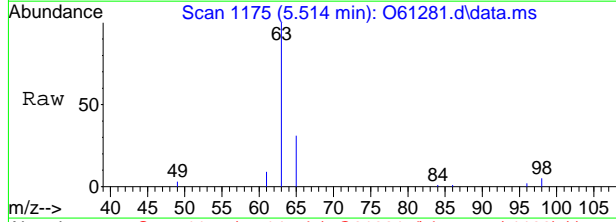


7
617



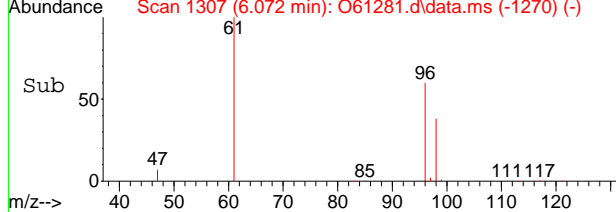
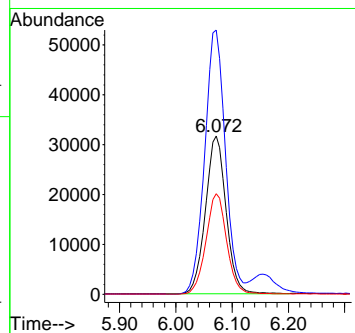
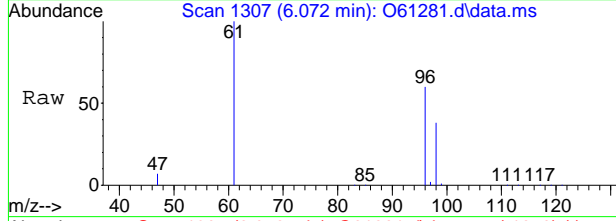
#7
 1,1-Dichloroethane
 Concen: 0.54 ug/L
 RT: 5.514 min Scan# 1175
 Delta R.T. -0.000 min
 Lab File: O61281.d
 Acq: 12 Sep 2020 1:36 pm

Tgt Ion	Resp	Lower	Upper
63	23353		
65	30.0	0.7	60.7



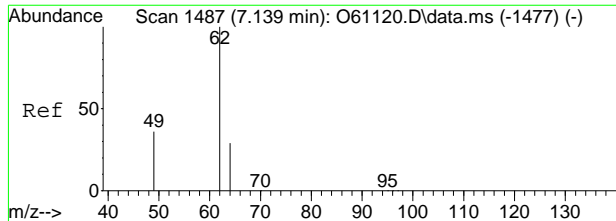
#8
 cis-1,2-Dichloroethene
 Concen: 3.76 ug/L
 RT: 6.072 min Scan# 1307
 Delta R.T. -0.000 min
 Lab File: O61281.d
 Acq: 12 Sep 2020 1:36 pm

Tgt Ion	Resp	Lower	Upper
96	80690		
61	167.4	107.0	167.0#
98	63.6	34.1	94.1



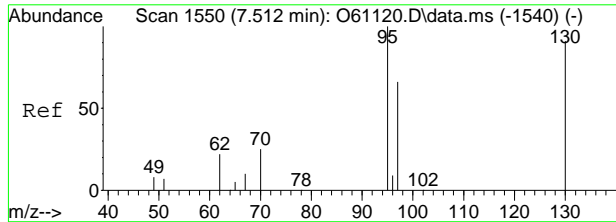
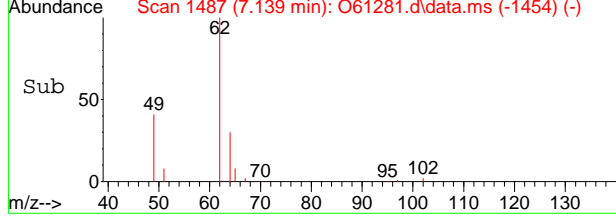
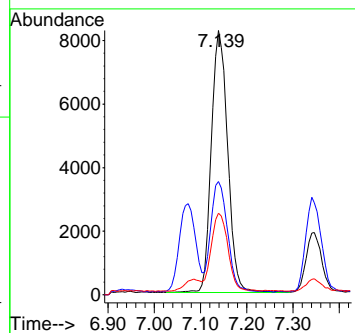
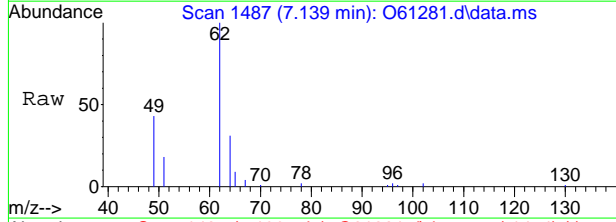
7.19
7





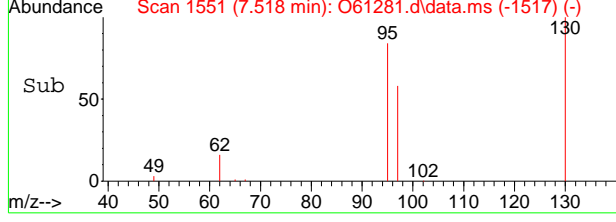
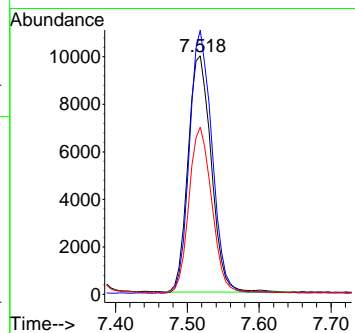
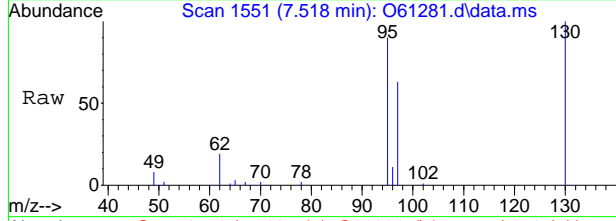
#14
 1,2-Dichloroethane
 Concen: 0.57 ug/L
 RT: 7.139 min Scan# 1487
 Delta R.T. -0.006 min
 Lab File: O61281.d
 Acq: 12 Sep 2020 1:36 pm

Tgt Ion	Ratio	Lower	Upper
62	100		
49	41.9	18.0	78.0
64	29.7	1.5	61.5



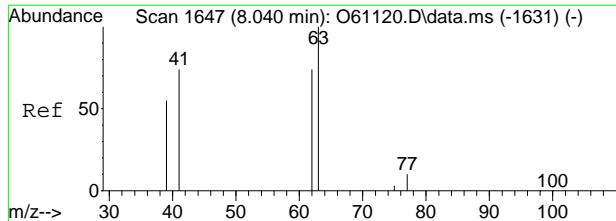
#15
 Trichloroethene
 Concen: 1.01 ug/L
 RT: 7.518 min Scan# 1551
 Delta R.T. 0.000 min
 Lab File: O61281.d
 Acq: 12 Sep 2020 1:36 pm

Tgt Ion	Ratio	Lower	Upper
95	100		
130	111.3	60.4	120.4
97	70.2	34.6	94.6



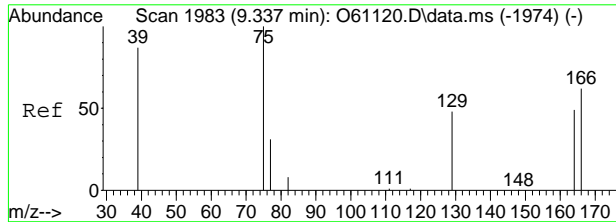
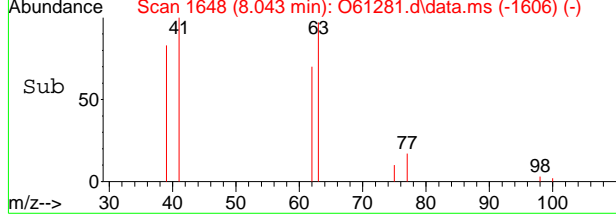
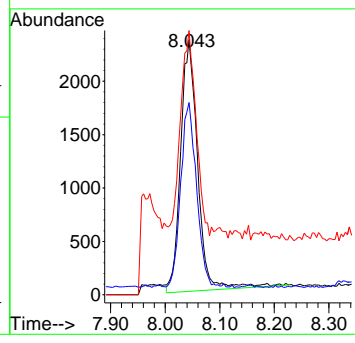
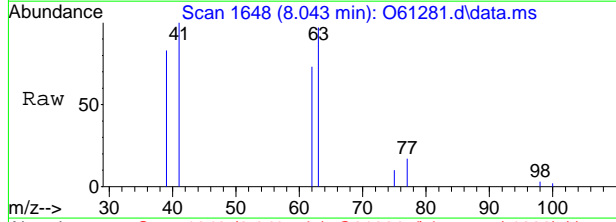
7.19
7





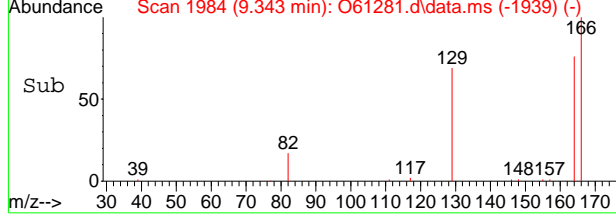
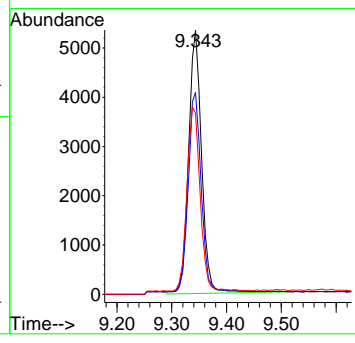
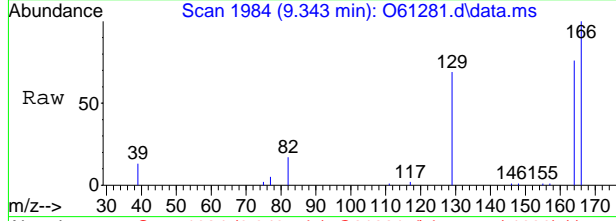
#16
 1,2-Dichloropropane
 Concen: 0.21 ug/L
 RT: 8.043 min Scan# 1648
 Delta R.T. 0.000 min
 Lab File: O61281.d
 Acq: 12 Sep 2020 1:36 pm

Tgt Ion	Resp	Lower	Upper
63	5126		
62	75.1	42.7	102.7
41	83.6	54.5	114.5



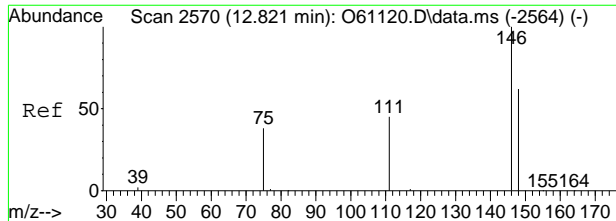
#21
 Tetrachloroethene
 Concen: 0.43 ug/L
 RT: 9.343 min Scan# 1984
 Delta R.T. 0.000 min
 Lab File: O61281.d
 Acq: 12 Sep 2020 1:36 pm

Tgt Ion	Resp	Lower	Upper
166	8886		
164	76.2	47.3	107.3
129	67.9	37.5	97.5



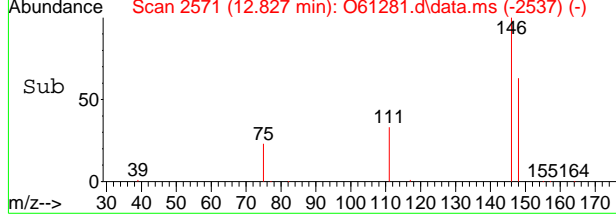
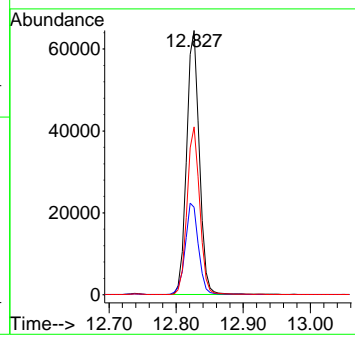
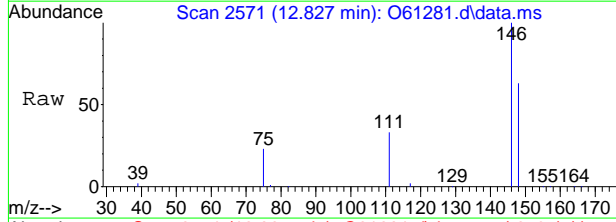
7.19
7





#22
 1,4-Dichlorobenzene
 Concen: 1.95 ug/L
 RT: 12.827 min Scan# 2571
 Delta R.T. -0.000 min
 Lab File: O61281.d
 Acq: 12 Sep 2020 1:36 pm

Tgt Ion	Ratio	Lower	Upper
146	100		
111	33.0	17.0	57.0
148	63.5	43.7	83.7



7.1.9
7



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\091520\
 Data File : Z62365.D
 Acq On : 15 Sep 2020 5:35 pm
 Operator : JuanG
 Sample : FA78551-5
 Misc : MS47193,VZ2419,,,,,
 ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 16 10:47:03 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Sun Sep 13 13:38:26 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	

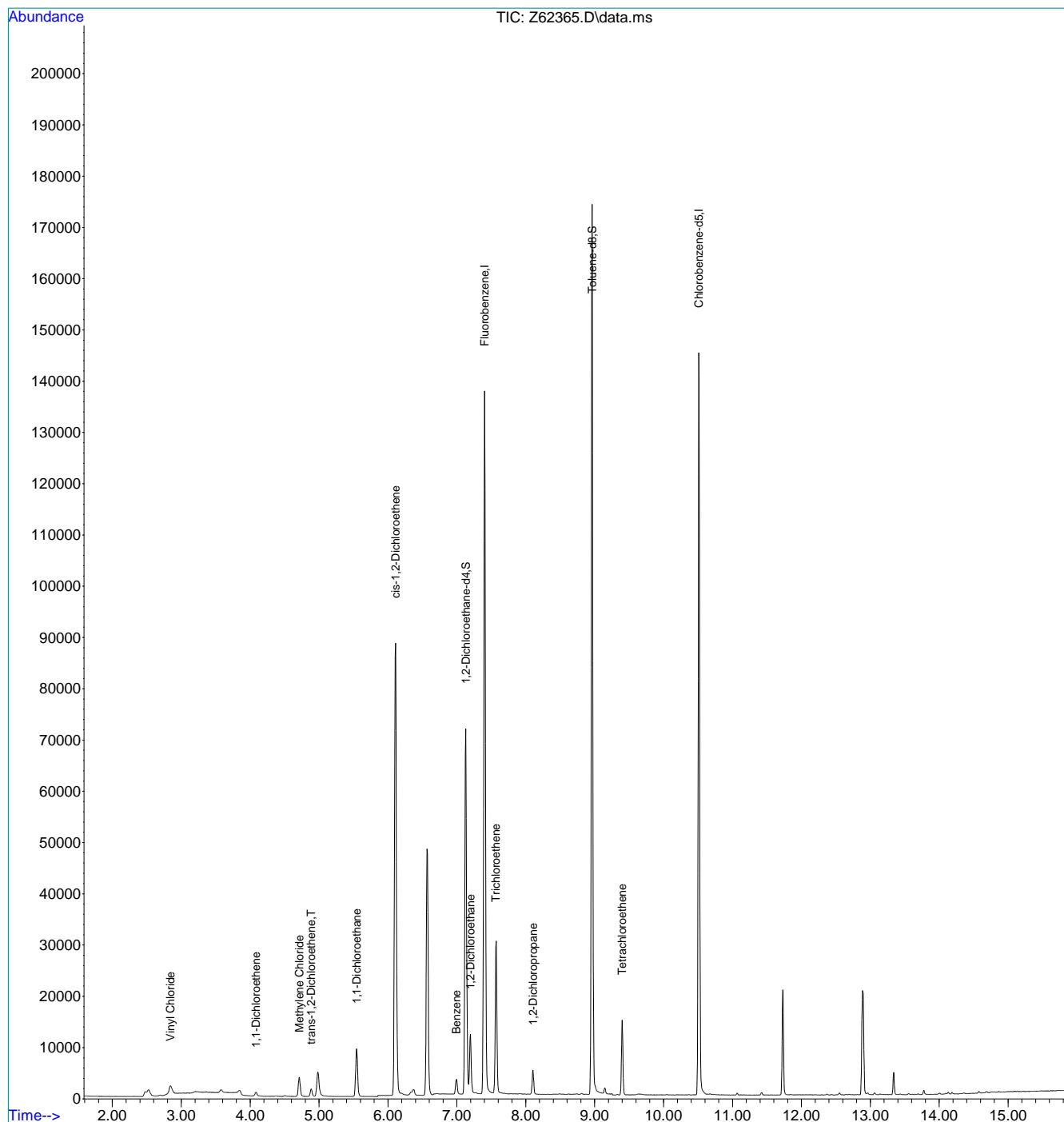
Internal Standards							
1) Fluorobenzene	7.401	96	1579131	5.00	ppb	0.00	
18) Chlorobenzene-d5	10.511	117	1301000	5.00	ppb	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.130	65	593110	6.07	ppb	0.00	
Spiked Amount	5.000	Range	79 - 125	Recovery	=	121.40%	
19) Toluene-d8	8.961	98	1514591	4.79	ppb	0.00	
Spiked Amount	5.000	Range	70 - 130	Recovery	=	95.80%	
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.843	62	27346	0.21	ppb		94
4) 1,1-Dichloroethene	4.083	96	4856	0.05	ppb	#	84
5) Methylene Chloride	4.713	84	25789	0.16	ppb		90
6) trans-1,2-Dichloroethene	4.886	96	8715	0.07	ppb		88
7) 1,1-Dichloroethane	5.546	63	125772	0.64	ppb	#	99
8) cis-1,2-Dichloroethene	6.110	96	541573	4.18	ppb		92
12) Benzene	6.994	78	42438	0.10	ppb		94
14) 1,2-Dichloroethane	7.198	62	114206	0.69	ppb		99
15) Trichloroethene	7.564	95	163848	1.21	ppb		96
16) 1,2-Dichloropropane	8.105	63	23781	0.21	ppb		97
21) Tetrachloroethene	9.399	166	61663	0.40	ppb		99

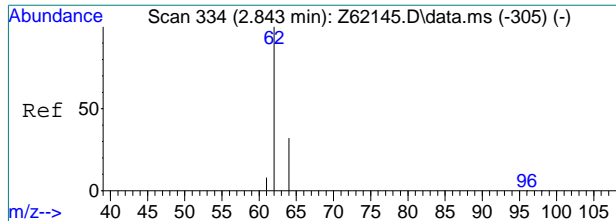
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\091520\
Data File : Z62365.D
Acq On : 15 Sep 2020 5:35 pm
Operator : JuanG
Sample : FA78551-5
Misc : MS47193,VZ2419,,,,,
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 16 10:47:03 2020
Quant Method : C:\msdchem\1\methods\SIMCL091120.M
Quant Title : WATER-EPA 8260B
QLast Update : Sun Sep 13 13:38:26 2020
Response via : Initial Calibration

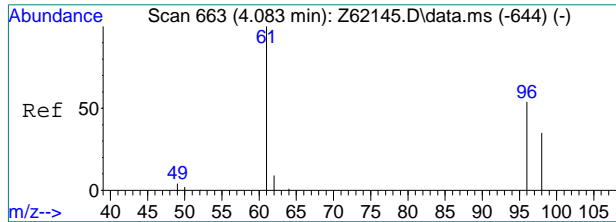
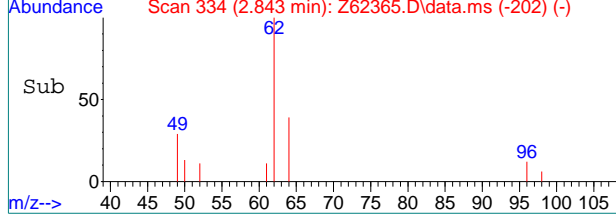
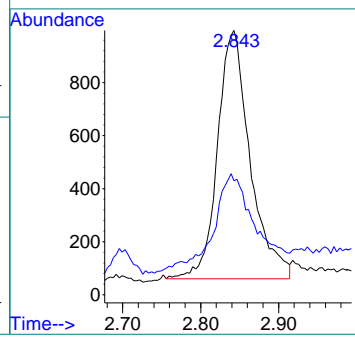
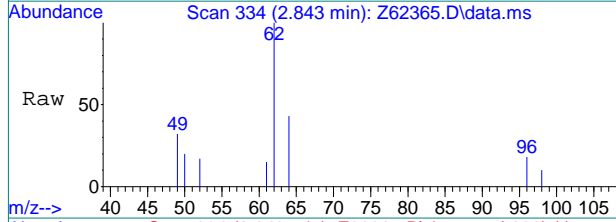




#2
 Vinyl Chloride
 Concen: 0.21 ppb
 RT: 2.843 min Scan# 334
 Delta R.T. -0.000 min
 Lab File: Z62365.D
 Acq: 15 Sep 2020 5:35 pm

Tgt Ion: 62 Resp: 27346

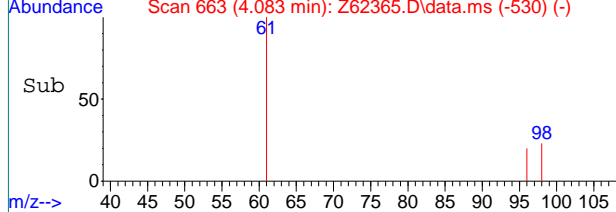
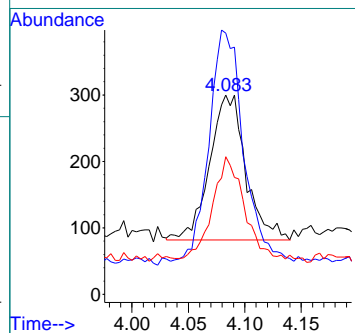
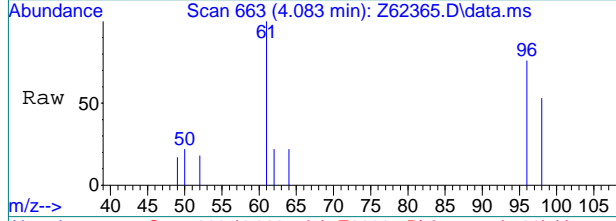
Ion	Ratio	Lower	Upper
62	100		
64	35.2	11.9	51.9



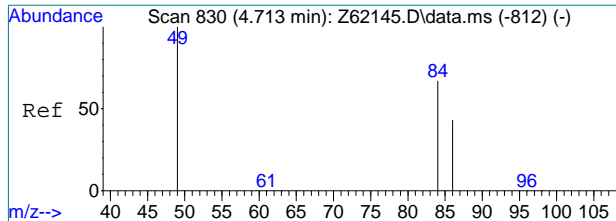
#4
 1,1-Dichloroethene
 Concen: 0.05 ppb
 RT: 4.083 min Scan# 663
 Delta R.T. 0.000 min
 Lab File: Z62365.D
 Acq: 15 Sep 2020 5:35 pm

Tgt Ion: 96 Resp: 4856

Ion	Ratio	Lower	Upper
96	100		
61	156.0	164.8	204.8#
98	68.8	45.1	85.1



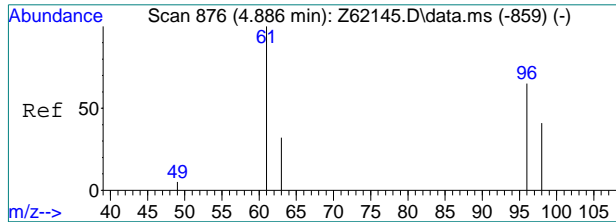
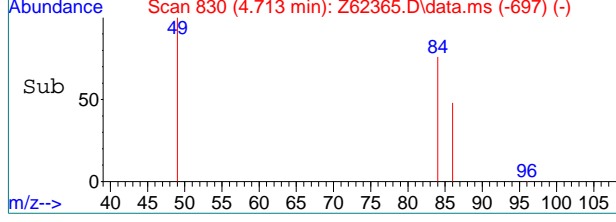
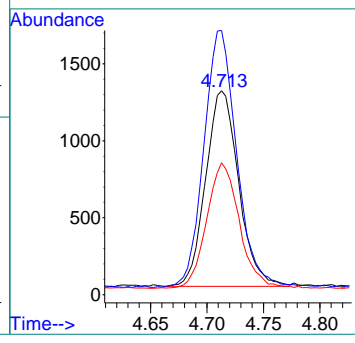
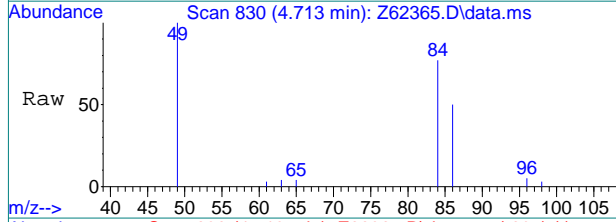
7.1.10
7



#5
 Methylene Chloride
 Concen: 0.16 ppb
 RT: 4.713 min Scan# 830
 Delta R.T. -0.000 min
 Lab File: Z62365.D
 Acq: 15 Sep 2020 5:35 pm

Tgt Ion: 84 Resp: 25789

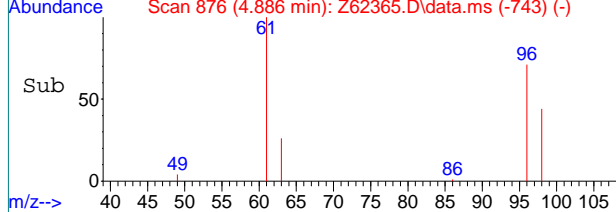
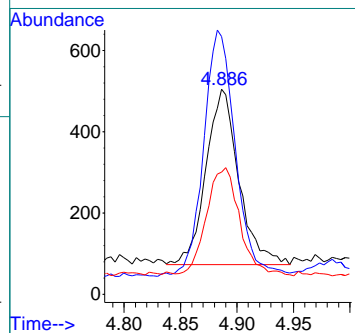
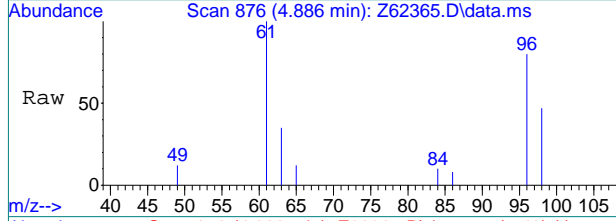
Ion	Ratio	Lower	Upper
84	100		
49	131.0	128.7	168.7
86	64.0	43.9	83.9



#6
 trans-1,2-Dichloroethene
 Concen: 0.07 ppb
 RT: 4.886 min Scan# 876
 Delta R.T. 0.000 min
 Lab File: Z62365.D
 Acq: 15 Sep 2020 5:35 pm

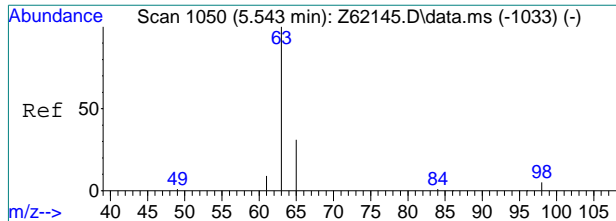
Tgt Ion: 96 Resp: 8715

Ion	Ratio	Lower	Upper
96	100		
61	135.0	134.2	174.2
98	58.6	43.4	83.4



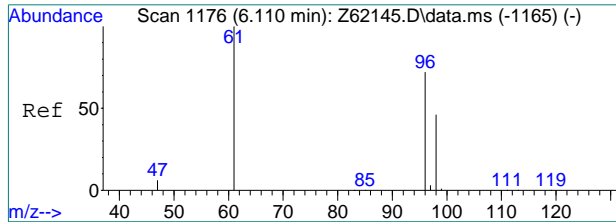
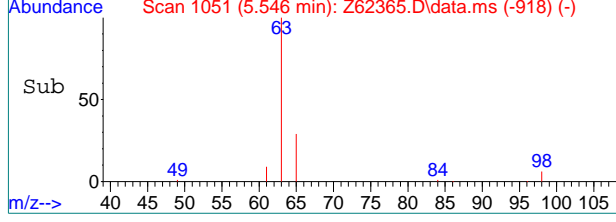
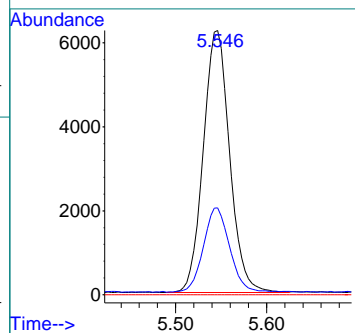
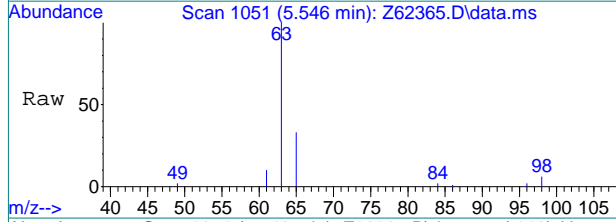
7.1.10
7





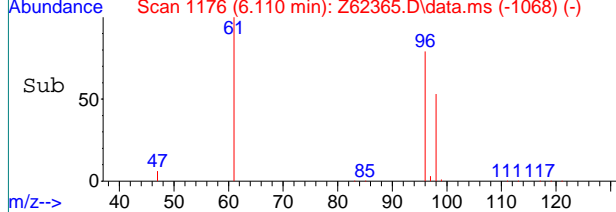
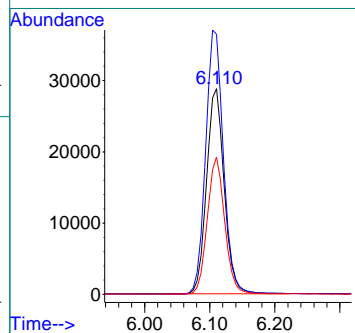
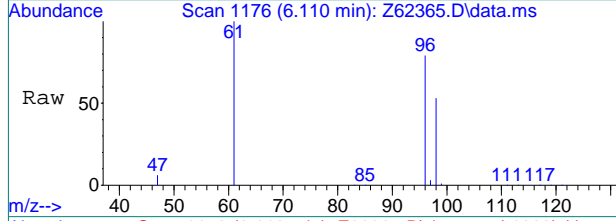
#7
 1,1-Dichloroethane
 Concen: 0.64 ppb
 RT: 5.546 min Scan# 1051
 Delta R.T. 0.000 min
 Lab File: Z62365.D
 Acq: 15 Sep 2020 5:35 pm

Tgt Ion	Resp	Lower	Upper
63	125772		
65	31.9	11.3	51.3
83	0.0	0.0	30.0



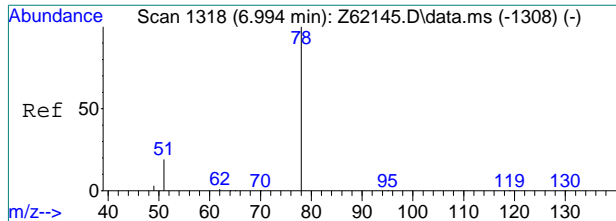
#8
 cis-1,2-Dichloroethene
 Concen: 4.18 ppb
 RT: 6.110 min Scan# 1176
 Delta R.T. 0.000 min
 Lab File: Z62365.D
 Acq: 15 Sep 2020 5:35 pm

Tgt Ion	Resp	Lower	Upper
96	541573		
61	126.7	119.3	159.3
98	66.8	44.5	84.5



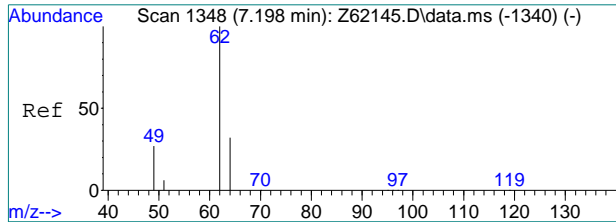
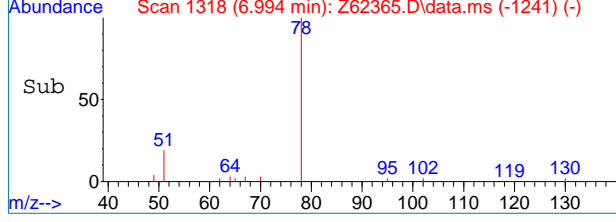
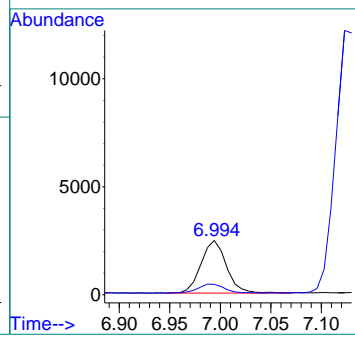
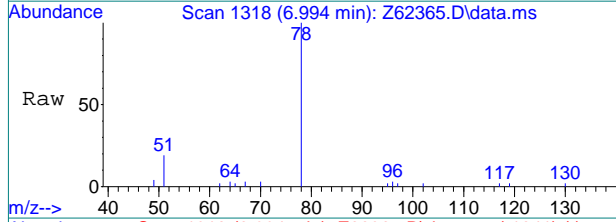
7.1.10
7





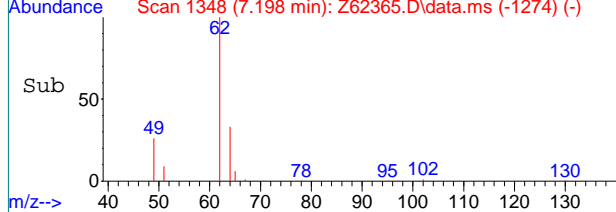
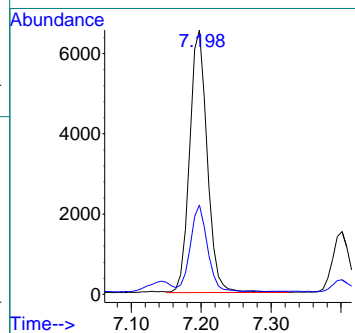
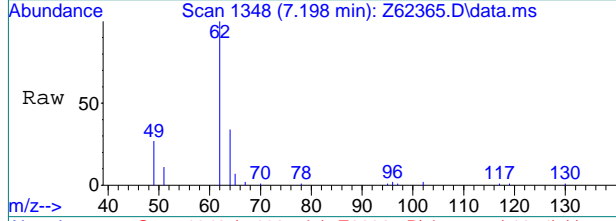
#12
Benzene
Concen: 0.10 ppb
RT: 6.994 min Scan# 1318
Delta R.T. 0.000 min
Lab File: Z62365.D
Acq: 15 Sep 2020 5:35 pm

Tgt Ion	Resp	Lower	Upper
78	42438	100	
51	16.4	0.0	38.9

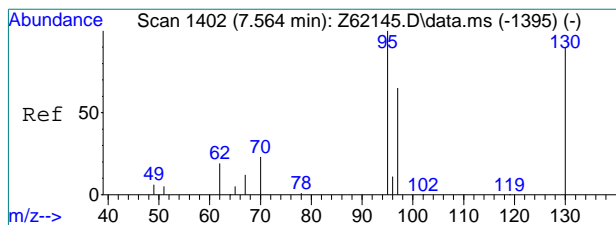


#14
1,2-Dichloroethane
Concen: 0.69 ppb
RT: 7.198 min Scan# 1348
Delta R.T. -0.000 min
Lab File: Z62365.D
Acq: 15 Sep 2020 5:35 pm

Tgt Ion	Resp	Lower	Upper
62	114206	100	
64	31.8	12.3	52.3

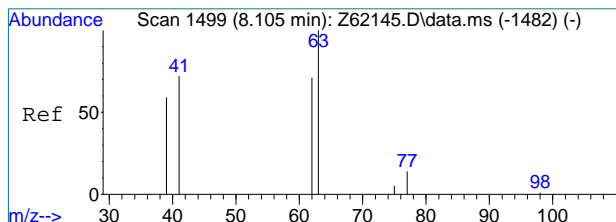
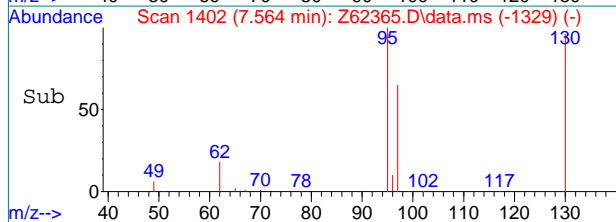
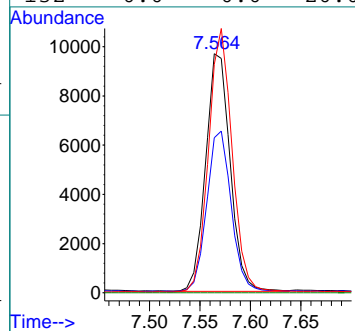
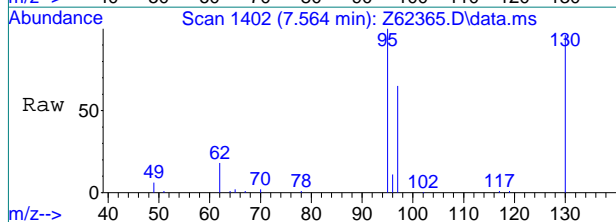


7.1.10
7



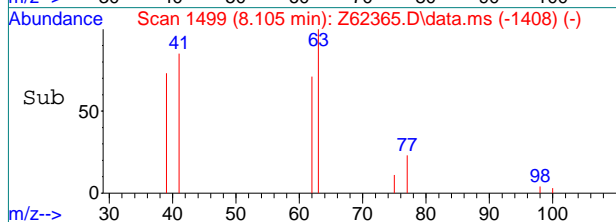
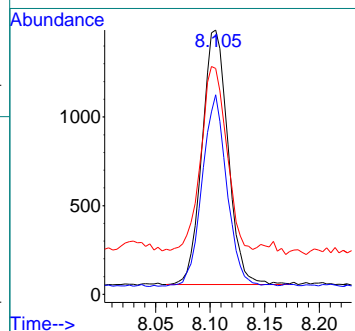
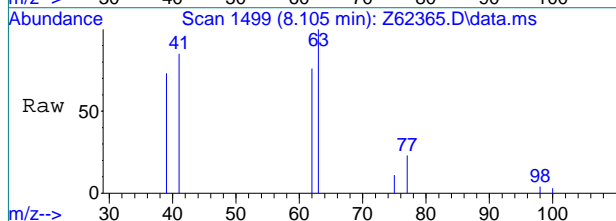
#15
 Trichloroethene
 Concen: 1.21 ppb
 RT: 7.564 min Scan# 1402
 Delta R.T. -0.007 min
 Lab File: Z62365.D
 Acq: 15 Sep 2020 5:35 pm

Tgt Ion	Resp	Lower	Upper
95	163848		
97	64.7	44.5	84.5
130	96.0	69.7	109.7
132	0.0	0.0	20.0

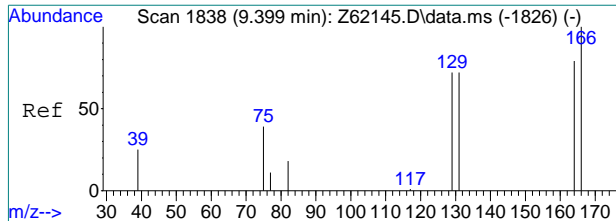


#16
 1,2-Dichloropropane
 Concen: 0.21 ppb
 RT: 8.105 min Scan# 1499
 Delta R.T. 0.000 min
 Lab File: Z62365.D
 Acq: 15 Sep 2020 5:35 pm

Tgt Ion	Resp	Lower	Upper
63	23781		
62	71.6	51.6	91.6
41	78.7	43.7	103.7

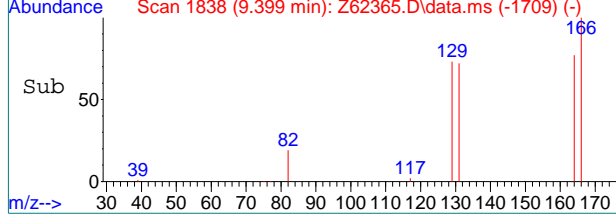
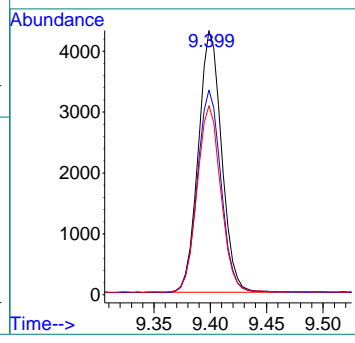
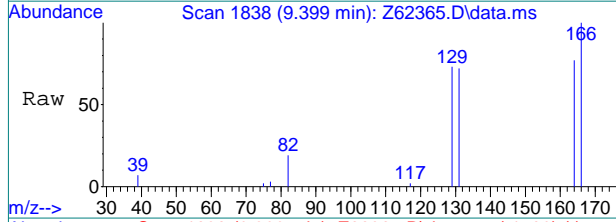


7.1.10
7



#21
 Tetrachloroethene
 Concen: 0.40 ppb
 RT: 9.399 min Scan# 1838
 Delta R.T. -0.000 min
 Lab File: Z62365.D
 Acq: 15 Sep 2020 5:35 pm

Tgt Ion	Ratio	Lower	Upper
166	100		
164	77.3	58.7	98.7
131	71.2	51.6	91.6



7.1.10
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-14-2020\VO2358\
Data File : O61282.d
Acq On : 12 Sep 2020 1:57 pm
Operator : stutip
Sample : fa78551-6
Misc : MS47193,VO2358,,,,,
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 14 07:32:20 2020
Quant Method : C:\msdchem\1\methods\SIMCL091120.M
Quant Title : Standard Methods 6200B
QLast Update : Sun Sep 13 19:20:40 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Fluorobenzene	7.346	96	226468	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.447	117	185206	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.067	65	97943	5.35	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	107.00%	
19) Toluene-d8	8.896	98	196154	4.70	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	94.00%	
Target Compounds						
7) 1,1-Dichloroethane	5.506	63	13920	0.33	ug/L	99
8) cis-1,2-Dichloroethene	6.066	96	14202	0.68	ug/L #	81
9) Chloroform	6.327	83	19181	0.53	ug/L	92
10) Carbon Tetrachloride	6.504	117	5044	0.20	ug/L	85
15) Trichloroethene	7.512	95	97455	4.58	ug/L	89
21) Tetrachloroethene	9.337	166	40855	2.03	ug/L	94

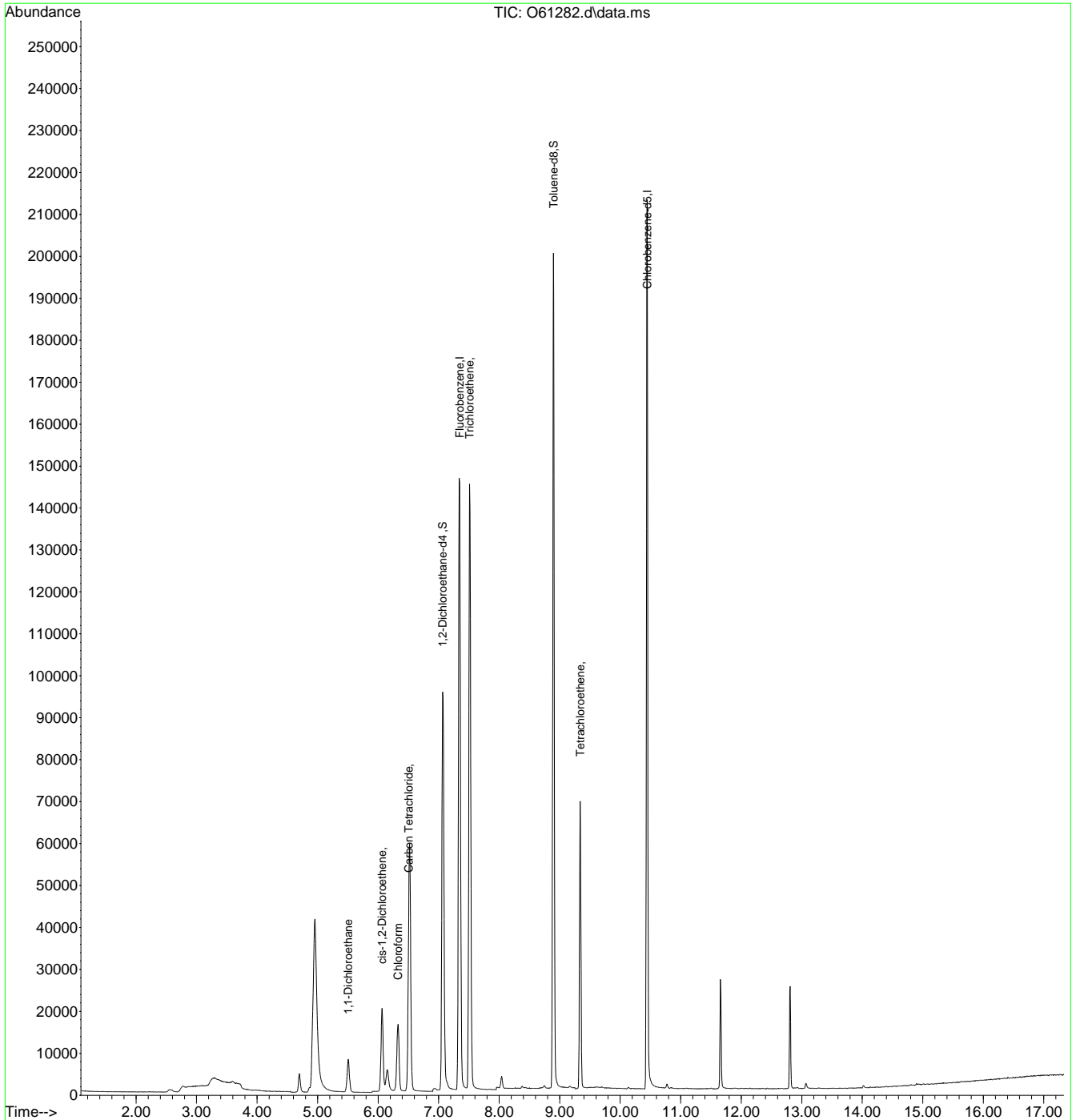
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.1.11
7

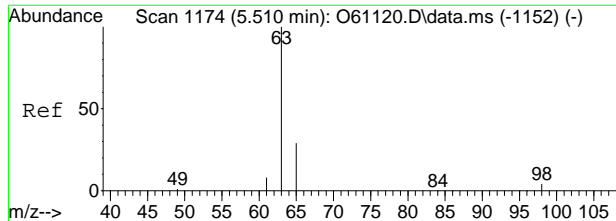
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-14-2020\VO2358\
 Data File : O61282.d
 Acq On : 12 Sep 2020 1:57 pm
 Operator : stutip
 Sample : fa78551-6
 Misc : MS47193,VO2358,,,,,
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 14 07:32:20 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Sun Sep 13 19:20:40 2020
 Response via : Initial Calibration

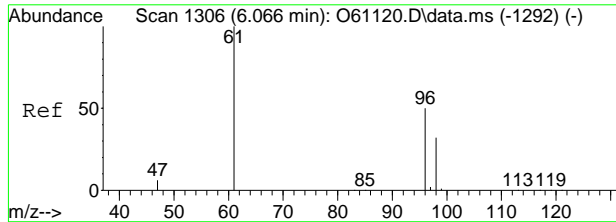
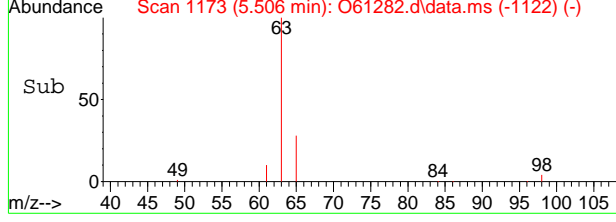
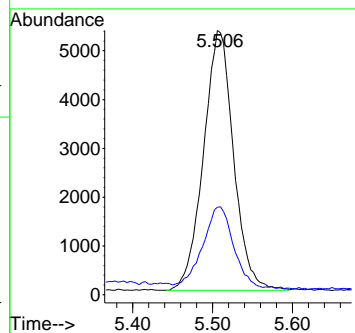
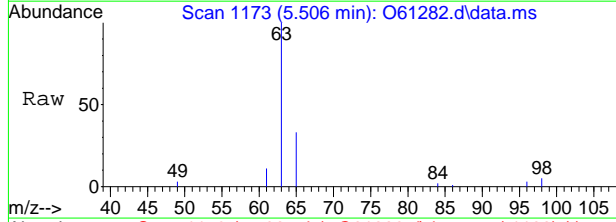


7.1.11
7



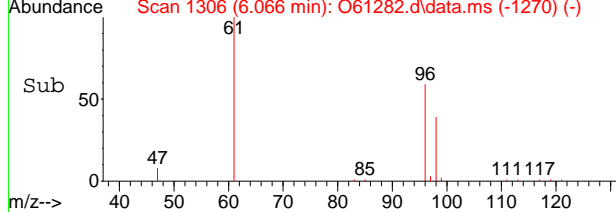
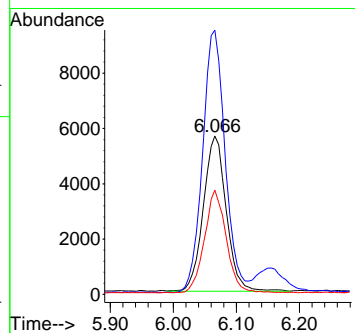
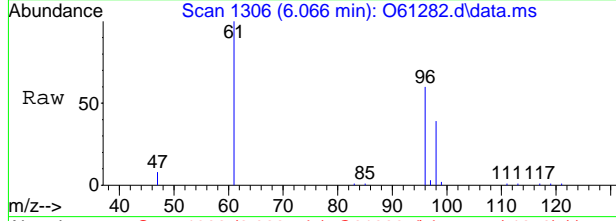
#7
 1,1-Dichloroethane
 Concen: 0.33 ug/L
 RT: 5.506 min Scan# 1173
 Delta R.T. -0.008 min
 Lab File: O61282.d
 Acq: 12 Sep 2020 1:57 pm

Tgt Ion	Ratio	Lower	Upper
63	100		
65	31.1	0.7	60.7



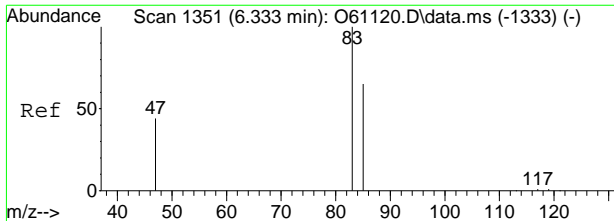
#8
 cis-1,2-Dichloroethene
 Concen: 0.68 ug/L
 RT: 6.066 min Scan# 1306
 Delta R.T. -0.006 min
 Lab File: O61282.d
 Acq: 12 Sep 2020 1:57 pm

Tgt Ion	Ratio	Lower	Upper
96	100		
61	168.8	107.0	167.0#
98	65.9	34.1	94.1

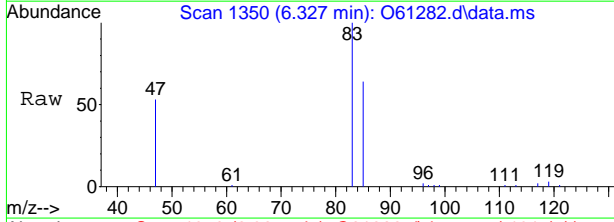


7.1.11
7



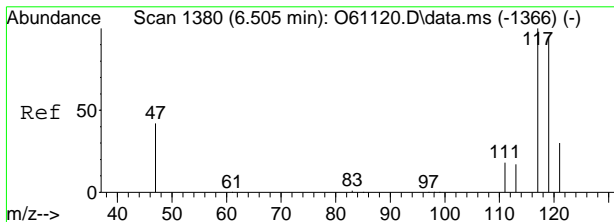
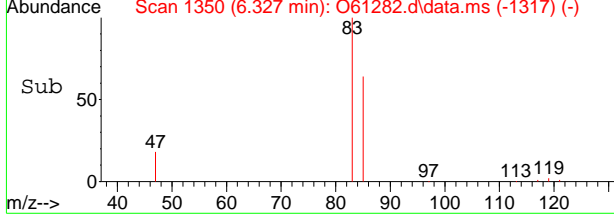
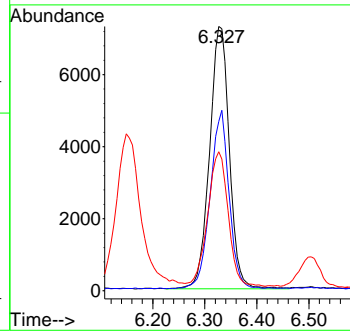


#9
 Chloroform
 Concen: 0.53 ug/L
 RT: 6.327 min Scan# 1350
 Delta R.T. -0.006 min
 Lab File: O61282.d
 Acq: 12 Sep 2020 1:57 pm

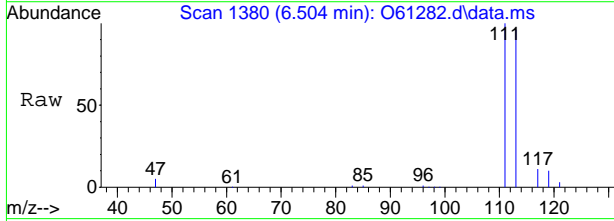


Tgt Ion: 83 Resp: 19181

Ion	Ratio	Lower	Upper
83	100		
85	63.7	33.0	93.0
47	50.0	8.1	68.1

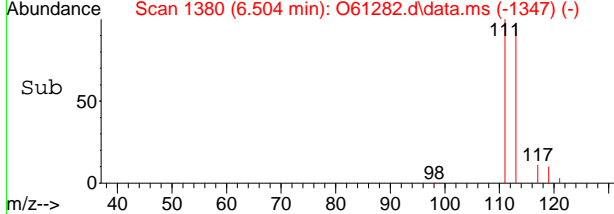
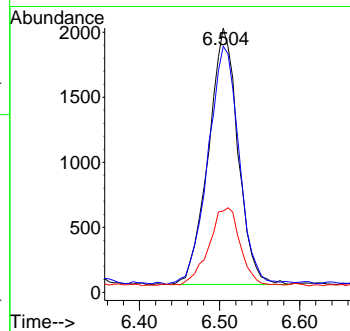


#10
 Carbon Tetrachloride
 Concen: 0.20 ug/L
 RT: 6.504 min Scan# 1380
 Delta R.T. -0.007 min
 Lab File: O61282.d
 Acq: 12 Sep 2020 1:57 pm

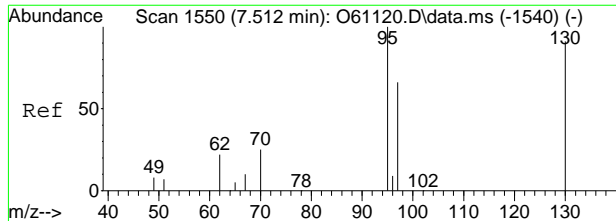


Tgt Ion: 117 Resp: 5044

Ion	Ratio	Lower	Upper
117	100		
119	92.8	80.9	140.9
121	28.6	4.1	64.1

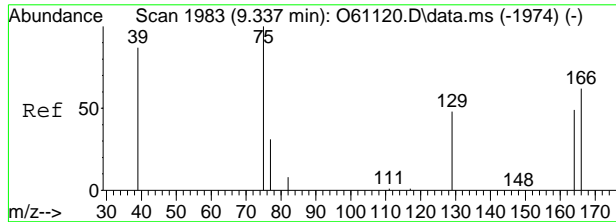
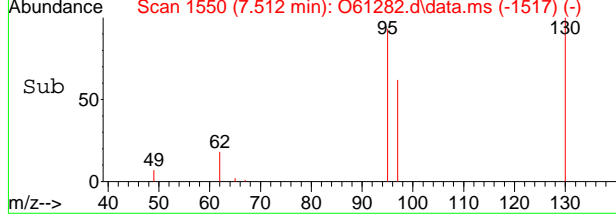
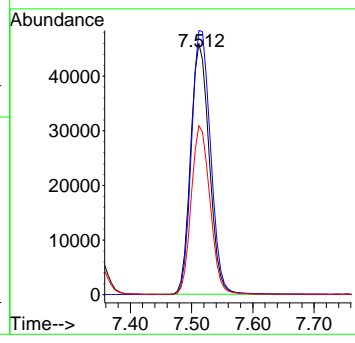
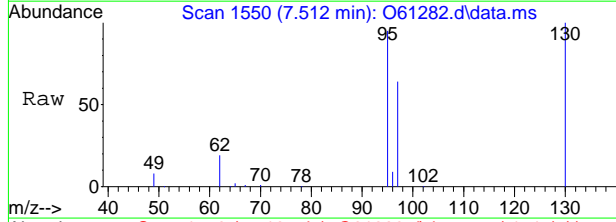


7.1.11
7



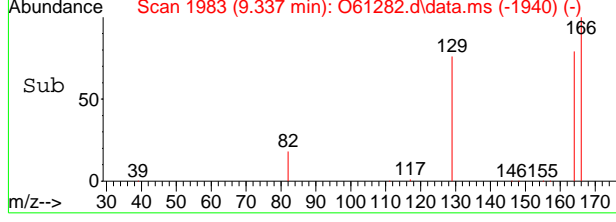
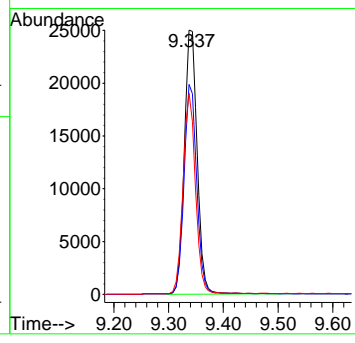
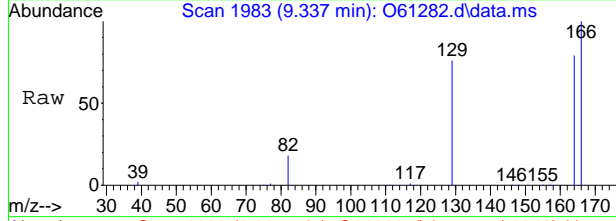
#15
 Trichloroethene
 Concen: 4.58 ug/L
 RT: 7.512 min Scan# 1550
 Delta R.T. -0.006 min
 Lab File: O61282.d
 Acq: 12 Sep 2020 1:57 pm

Tgt Ion	Resp	Lower	Upper
95	97455		
130	105.3	60.4	120.4
97	67.4	34.6	94.6



#21
 Tetrachloroethene
 Concen: 2.03 ug/L
 RT: 9.337 min Scan# 1983
 Delta R.T. -0.006 min
 Lab File: O61282.d
 Acq: 12 Sep 2020 1:57 pm

Tgt Ion	Resp	Lower	Upper
166	40855		
164	79.4	47.3	107.3
129	76.1	37.5	97.5



7.1.11
7



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\091520\
 Data File : Z62366.D
 Acq On : 15 Sep 2020 5:55 pm
 Operator : JuanG
 Sample : FA78551-6
 Misc : MS47193,VZ2419,,,,,
 ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 16 10:47:05 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Sun Sep 13 13:38:26 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	

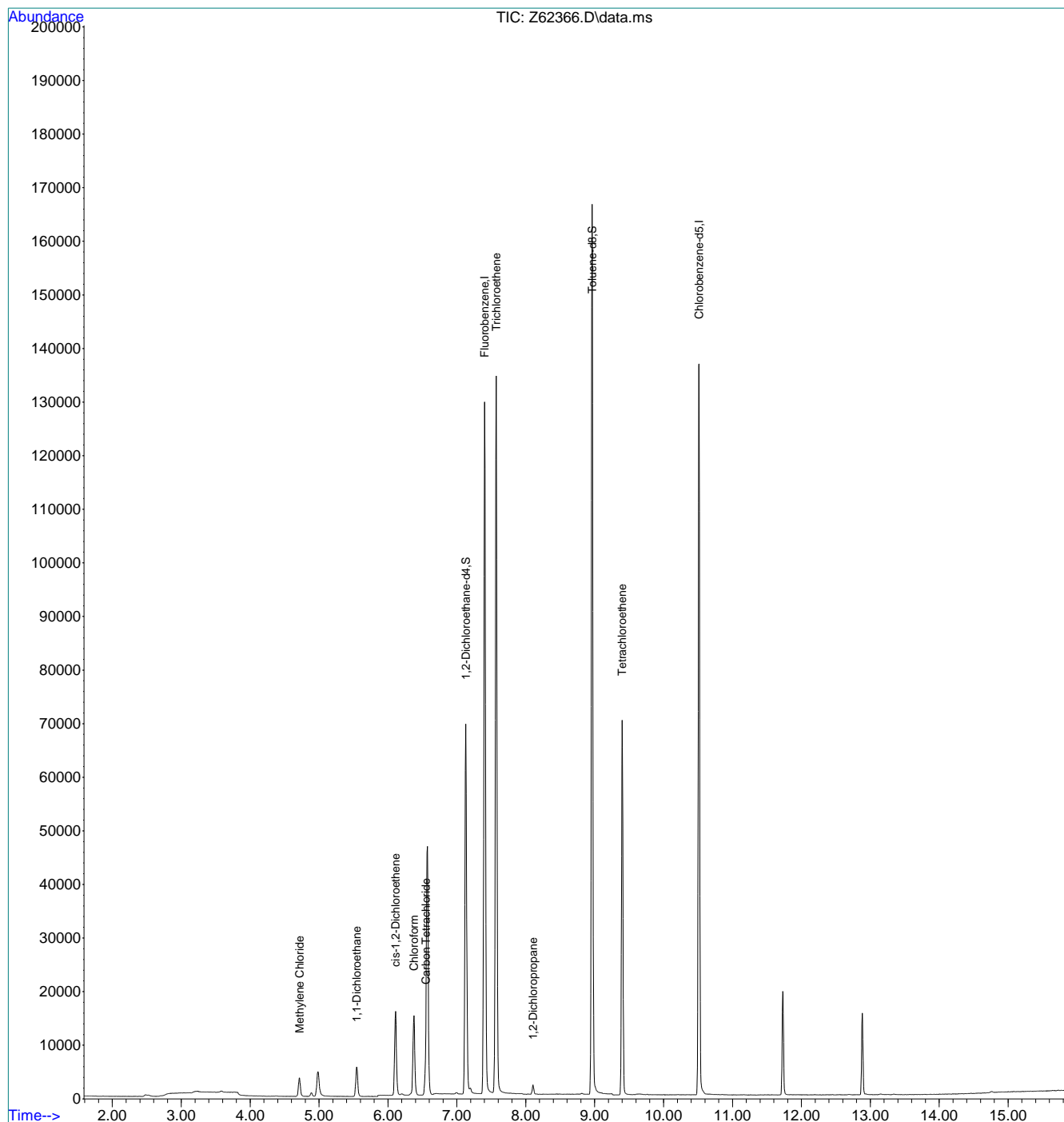
Internal Standards							
1) Fluorobenzene	7.401	96	1510569	5.00	ppb	0.00	
18) Chlorobenzene-d5	10.515	117	1246801	5.00	ppb	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.130	65	578268	6.19	ppb	0.00	
Spiked Amount	5.000	Range	79 - 125	Recovery	=	123.80%	
19) Toluene-d8	8.961	98	1455065	4.81	ppb	0.00	
Spiked Amount	5.000	Range	70 - 130	Recovery	=	96.20%	
Target Compounds							
5) Methylene Chloride	4.717	84	23714	0.16	ppb		Qvalue # 85
7) 1,1-Dichloroethane	5.546	63	74142	0.39	ppb		# 99
8) cis-1,2-Dichloroethene	6.110	96	95080	0.77	ppb		93
9) Chloroform	6.377	83	142111	0.63	ppb		99
10) Carbon Tetrachloride	6.549	117	30551	0.20	ppb		100
15) Trichloroethene	7.571	95	718642	5.57	ppb		86
16) 1,2-Dichloropropane	8.105	63	8821	0.08	ppb		100
21) Tetrachloroethene	9.399	166	299340	2.05	ppb		99

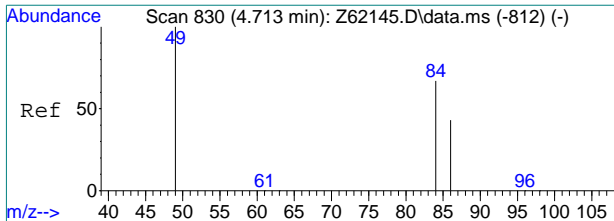
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\091520\
 Data File : Z62366.D
 Acq On : 15 Sep 2020 5:55 pm
 Operator : JuanG
 Sample : FA78551-6
 Misc : MS47193,VZ2419,,,,,
 ALS Vial : 13 Sample Multiplier: 1

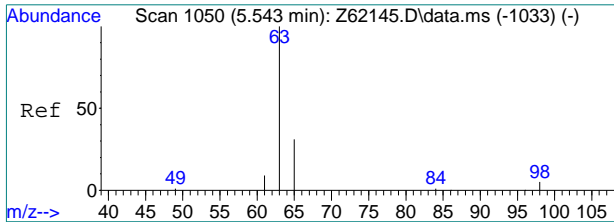
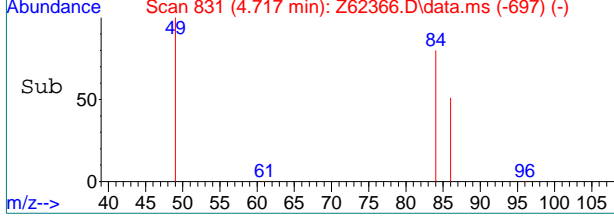
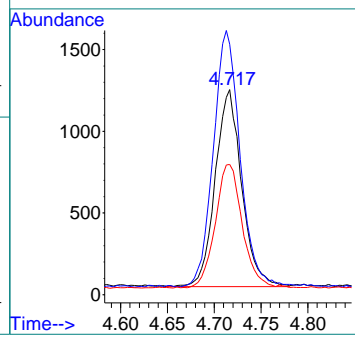
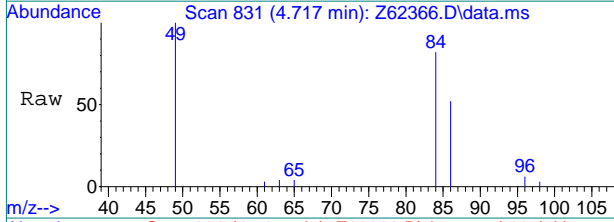
Quant Time: Sep 16 10:47:05 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Sun Sep 13 13:38:26 2020
 Response via : Initial Calibration





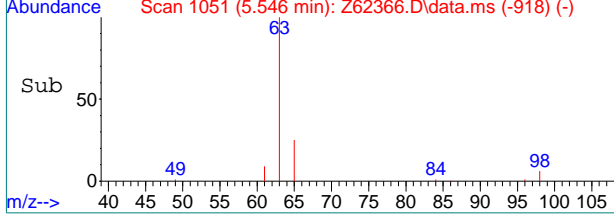
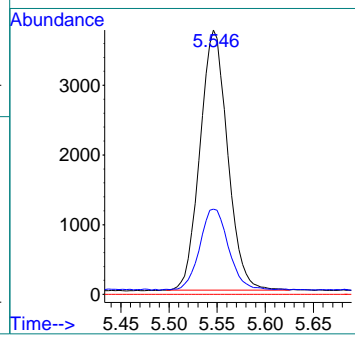
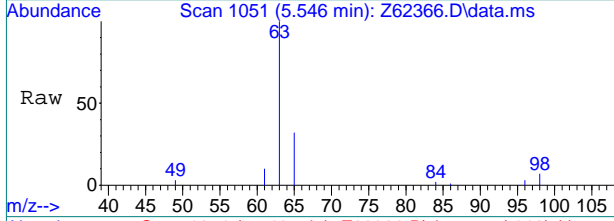
#5
 Methylene Chloride
 Concen: 0.16 ppb
 RT: 4.717 min Scan# 831
 Delta R.T. 0.004 min
 Lab File: Z62366.D
 Acq: 15 Sep 2020 5:55 pm

Tgt Ion	Ratio	Lower	Upper
84	100		
49	122.7	128.7	168.7#
86	62.4	43.9	83.9

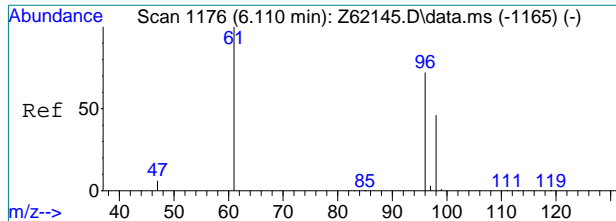


#7
 1,1-Dichloroethane
 Concen: 0.39 ppb
 RT: 5.546 min Scan# 1051
 Delta R.T. 0.000 min
 Lab File: Z62366.D
 Acq: 15 Sep 2020 5:55 pm

Tgt Ion	Ratio	Lower	Upper
63	100		
65	32.0	11.3	51.3
83	0.0	0.0	30.0

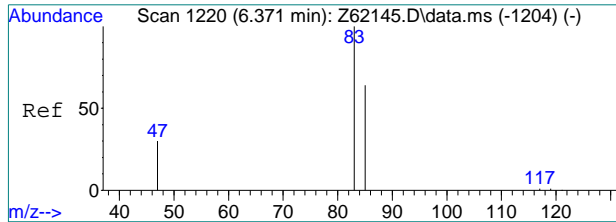
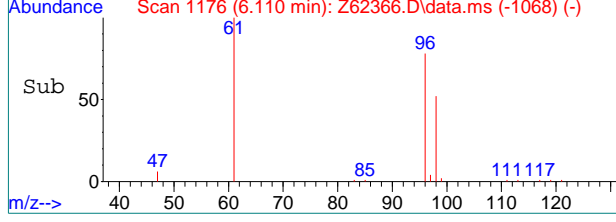
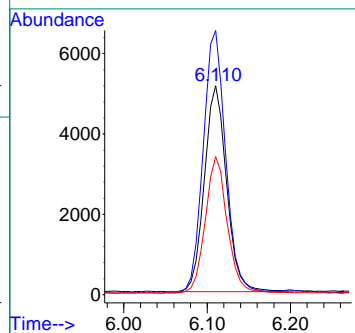
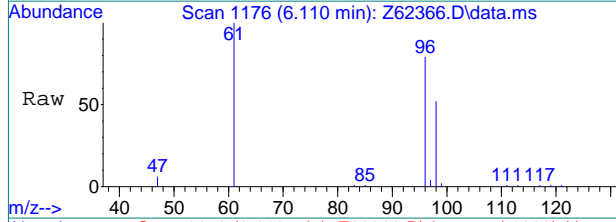


7.1.12
7



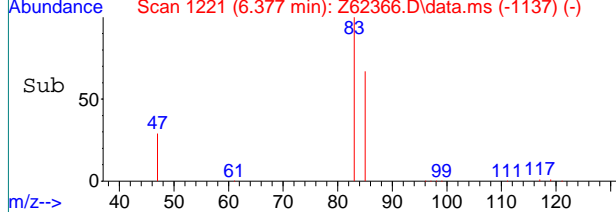
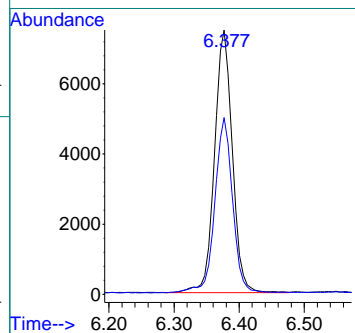
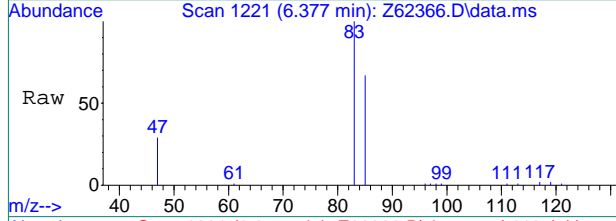
#8
 cis-1,2-Dichloroethene
 Concen: 0.77 ppb
 RT: 6.110 min Scan# 1176
 Delta R.T. 0.000 min
 Lab File: Z62366.D
 Acq: 15 Sep 2020 5:55 pm

Tgt Ion	Resp	Lower	Upper
96	95080		
61	127.4	119.3	159.3
98	66.2	44.5	84.5

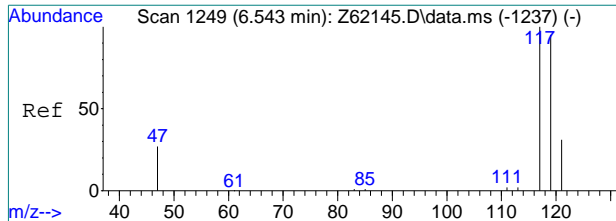


#9
 Chloroform
 Concen: 0.63 ppb
 RT: 6.377 min Scan# 1221
 Delta R.T. -0.000 min
 Lab File: Z62366.D
 Acq: 15 Sep 2020 5:55 pm

Tgt Ion	Resp	Lower	Upper
83	142111		
83	100		
85	66.7	46.1	86.1

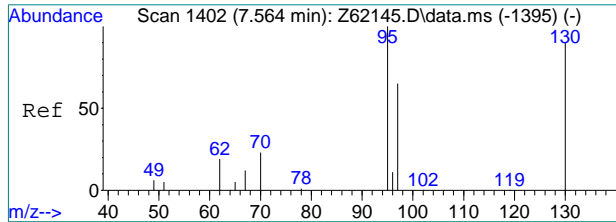
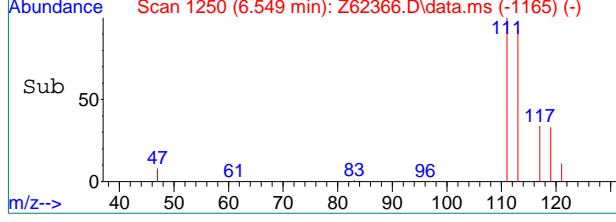
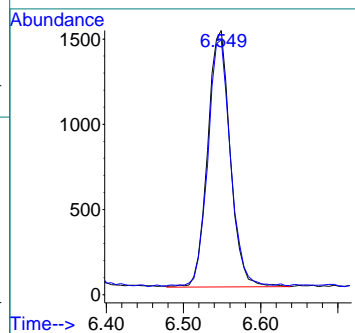
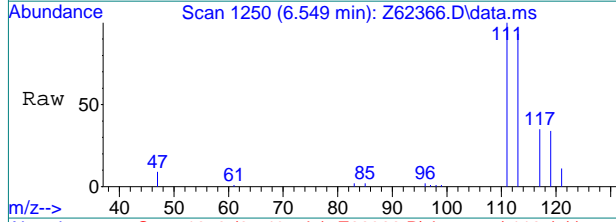


7.1.12
7



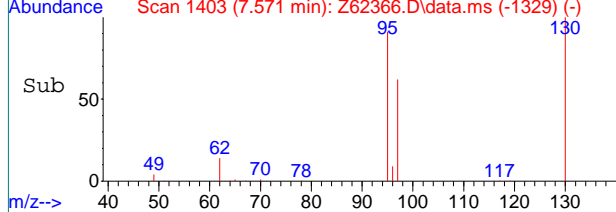
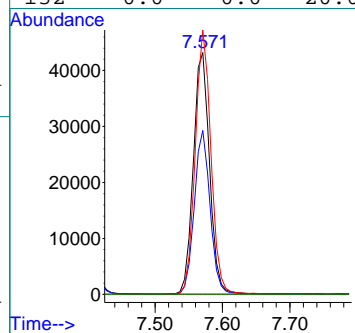
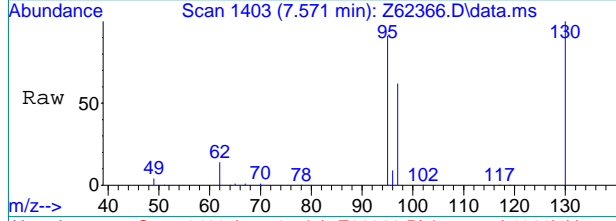
#10
 Carbon Tetrachloride
 Concen: 0.20 ppb
 RT: 6.549 min Scan# 1250
 Delta R.T. 0.006 min
 Lab File: Z62366.D
 Acq: 15 Sep 2020 5:55 pm

Tgt Ion	Ratio	Lower	Upper
117	100		
119	95.9	75.5	115.5



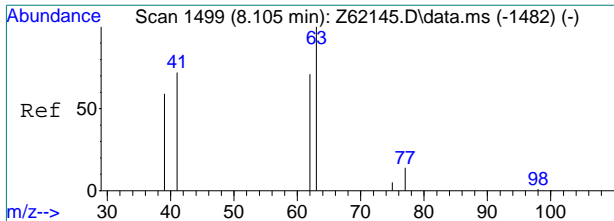
#15
 Trichloroethene
 Concen: 5.57 ppb
 RT: 7.571 min Scan# 1403
 Delta R.T. -0.000 min
 Lab File: Z62366.D
 Acq: 15 Sep 2020 5:55 pm

Tgt Ion	Ratio	Lower	Upper
95	100		
97	67.8	44.5	84.5
130	109.4	69.7	109.7
132	0.0	0.0	20.0



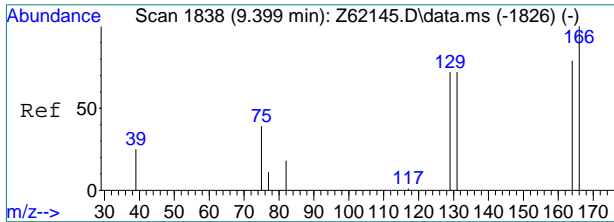
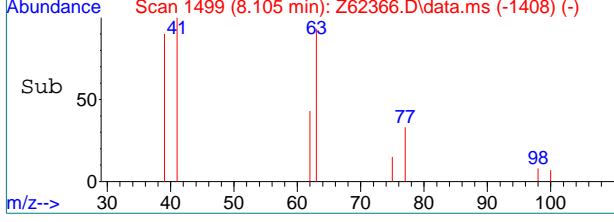
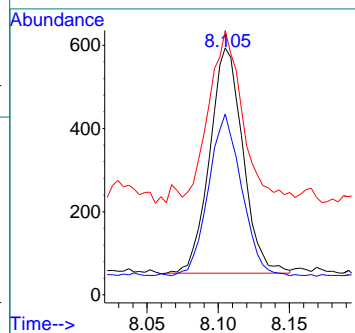
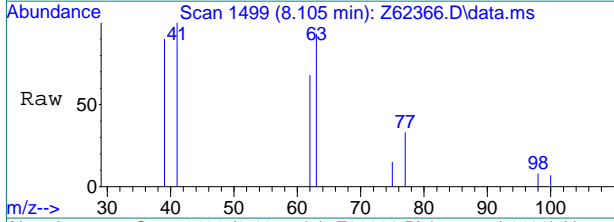
7.1.12
7





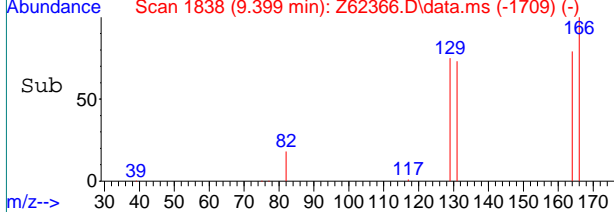
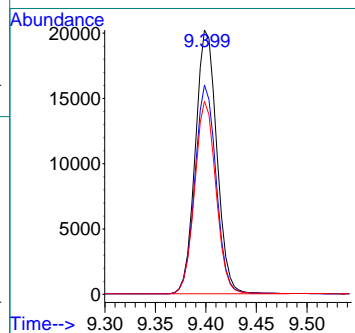
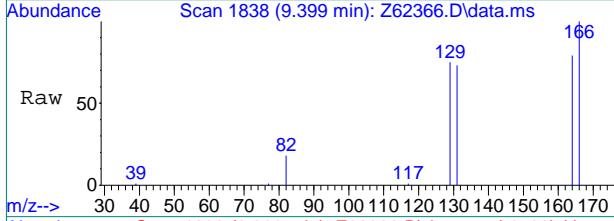
#16
 1,2-Dichloropropane
 Concen: 0.08 ppb
 RT: 8.105 min Scan# 1499
 Delta R.T. -0.000 min
 Lab File: Z62366.D
 Acq: 15 Sep 2020 5:55 pm

Tgt Ion	Ratio	Lower	Upper
63	100		
62	71.3	51.6	91.6
41	73.8	43.7	103.7



#21
 Tetrachloroethene
 Concen: 2.05 ppb
 RT: 9.399 min Scan# 1838
 Delta R.T. -0.000 min
 Lab File: Z62366.D
 Acq: 15 Sep 2020 5:55 pm

Tgt Ion	Ratio	Lower	Upper
166	100		
164	79.1	58.7	98.7
131	72.9	51.6	91.6



7.1.12
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-14-2020\VO2358\
Data File : O61283.d
Acq On : 12 Sep 2020 2:17 pm
Operator : stutip
Sample : fa78551-7
Misc : MS47193,VO2358,,,,,
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 14 07:32:53 2020
Quant Method : C:\msdchem\1\methods\SIMCL091120.M
Quant Title : Standard Methods 6200B
QLast Update : Sun Sep 13 19:20:40 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Fluorobenzene	7.346	96	226141	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.447	117	182649	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.068	65	97940	5.36	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	107.20%	
19) Toluene-d8	8.896	98	195071	4.74	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	94.80%	
Target Compounds						
7) 1,1-Dichloroethane	5.510	63	17962	0.43	ug/L	99
8) cis-1,2-Dichloroethene	6.066	96	6544	0.32	ug/L #	77
9) Chloroform	6.333	83	17679	0.49	ug/L	91
15) Trichloroethene	7.512	95	22879	1.08	ug/L	91
21) Tetrachloroethene	9.337	166	6002	0.30	ug/L	95

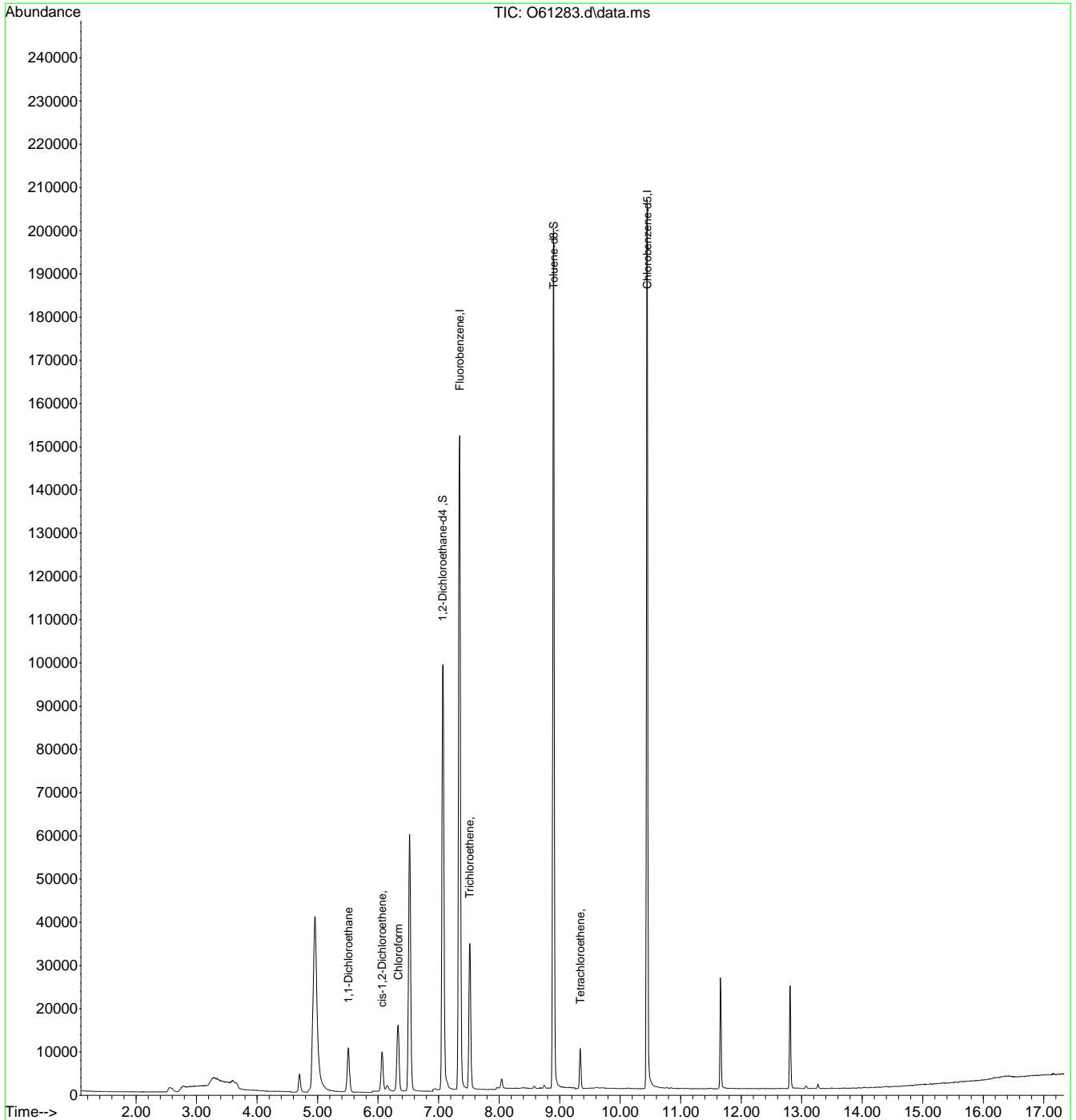
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.1.13
7

Quantitation Report (QT Reviewed)

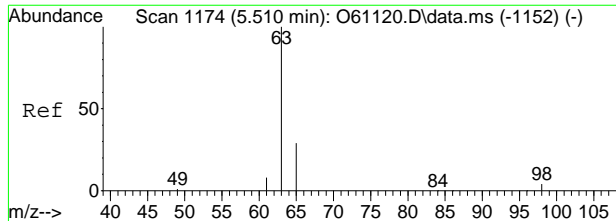
Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-14-2020\VO2358\
 Data File : O61283.d
 Acq On : 12 Sep 2020 2:17 pm
 Operator : stutip
 Sample : fa78551-7
 Misc : MS47193,VO2358,,,,,
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 14 07:32:53 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Sun Sep 13 19:20:40 2020
 Response via : Initial Calibration



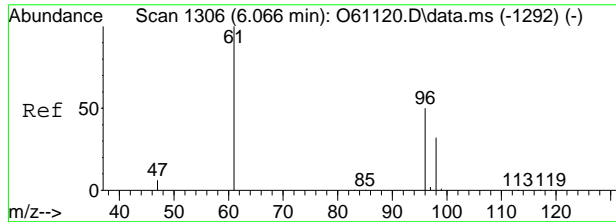
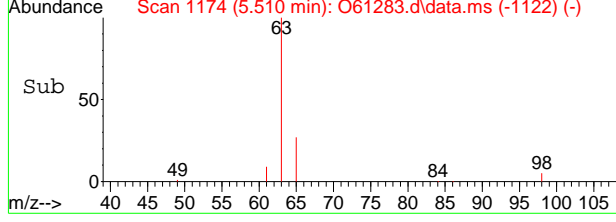
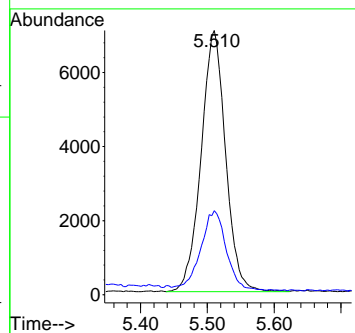
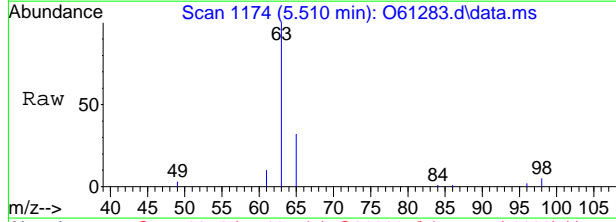
7.1.13
7





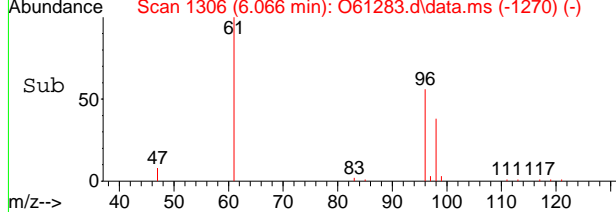
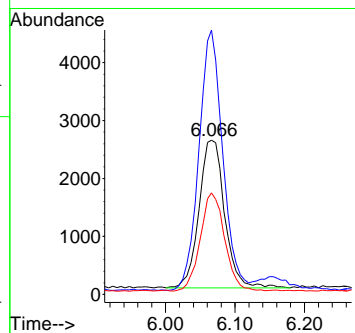
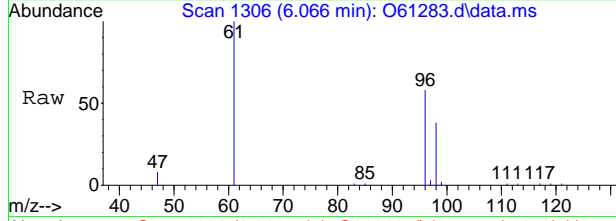
#7
 1,1-Dichloroethane
 Concen: 0.43 ug/L
 RT: 5.510 min Scan# 1174
 Delta R.T. -0.004 min
 Lab File: O61283.d
 Acq: 12 Sep 2020 2:17 pm

Tgt Ion	Resp	Lower	Upper
63	17962		
65	30.3	0.7	60.7



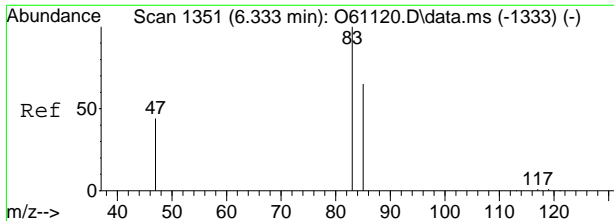
#8
 cis-1,2-Dichloroethene
 Concen: 0.32 ug/L
 RT: 6.066 min Scan# 1306
 Delta R.T. -0.006 min
 Lab File: O61283.d
 Acq: 12 Sep 2020 2:17 pm

Tgt Ion	Resp	Lower	Upper
96	6544		
61	176.2	107.0	167.0#
98	65.9	34.1	94.1



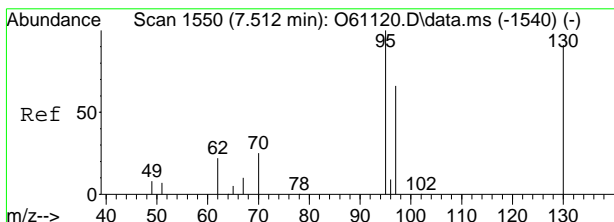
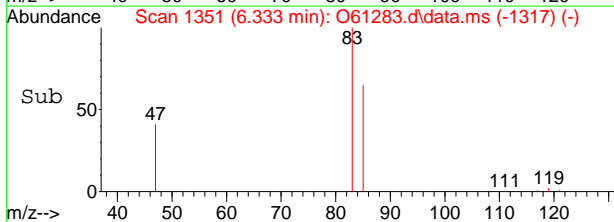
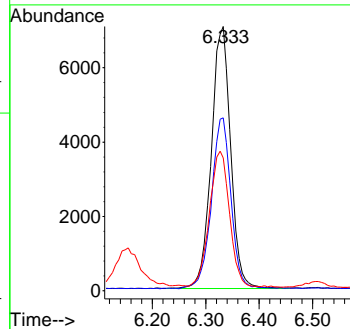
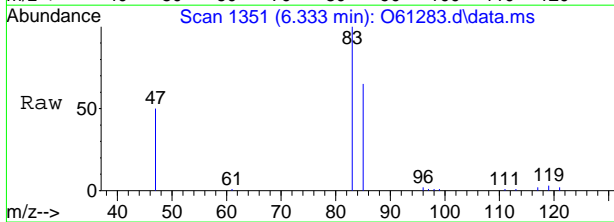
7.1.13
7





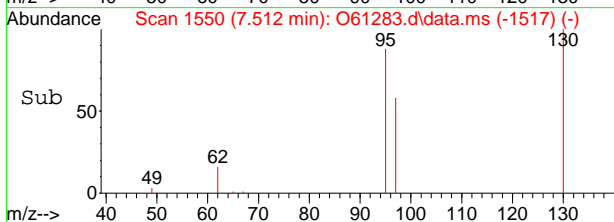
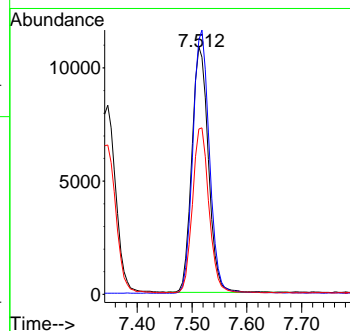
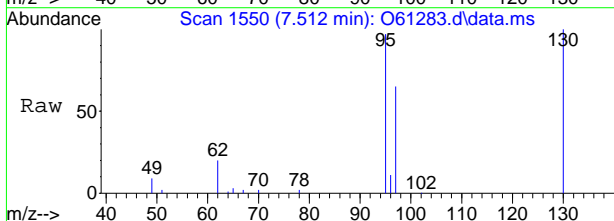
#9
 Chloroform
 Concen: 0.49 ug/L
 RT: 6.333 min Scan# 1351
 Delta R.T. -0.000 min
 Lab File: O61283.d
 Acq: 12 Sep 2020 2:17 pm

Tgt Ion	Resp	Lower	Upper
83	17679		
85	65.1	33.0	93.0
47	49.2	8.1	68.1



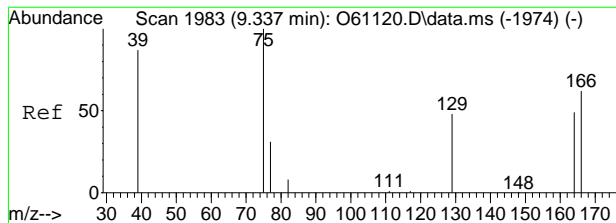
#15
 Trichloroethene
 Concen: 1.08 ug/L
 RT: 7.512 min Scan# 1550
 Delta R.T. -0.006 min
 Lab File: O61283.d
 Acq: 12 Sep 2020 2:17 pm

Tgt Ion	Resp	Lower	Upper
95	22879		
130	103.0	60.4	120.4
97	66.7	34.6	94.6



7.1.13
7

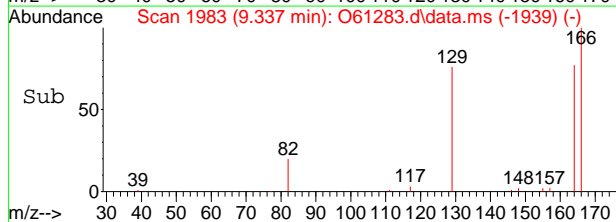
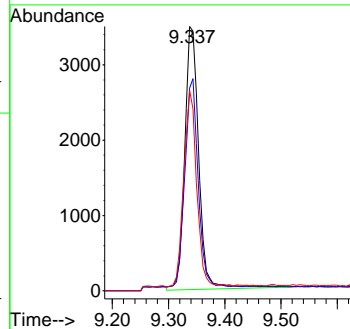
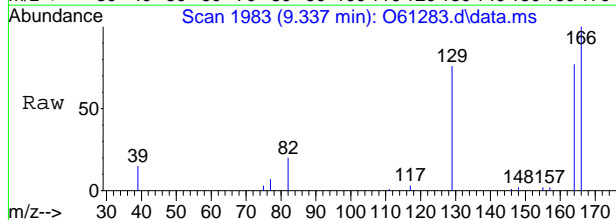




#21
 Tetrachloroethene
 Concen: 0.30 ug/L
 RT: 9.337 min Scan# 1983
 Delta R.T. -0.006 min
 Lab File: O61283.d
 Acq: 12 Sep 2020 2:17 pm

Tgt Ion:166 Resp: 6002

Ion	Ratio	Lower	Upper
166	100		
164	76.2	47.3	107.3
129	75.3	37.5	97.5



7.1.13
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\091520\
 Data File : Z62367.D
 Acq On : 15 Sep 2020 6:14 pm
 Operator : JuanG
 Sample : FA78551-7
 Misc : MS47193,VZ2419,,,,,
 ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 16 10:47:07 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Sun Sep 13 13:38:26 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	

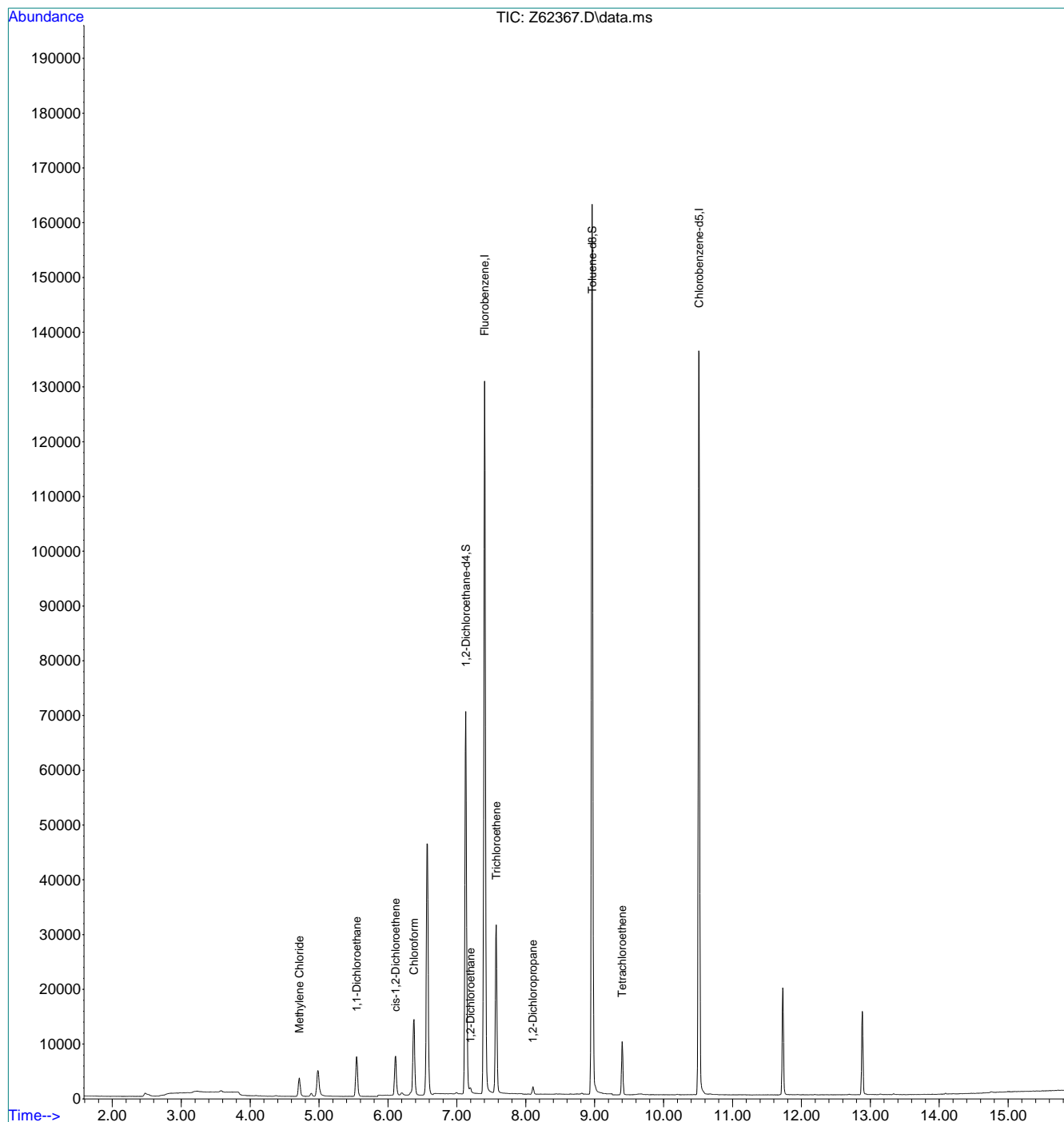
Internal Standards							
1) Fluorobenzene	7.401	96	1495843	5.00	ppb	0.00	
18) Chlorobenzene-d5	10.515	117	1236200	5.00	ppb	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.130	65	578041	6.25	ppb	0.00	
Spiked Amount	5.000	Range	79 - 125	Recovery	=	125.00%	
19) Toluene-d8	8.961	98	1433082	4.77	ppb	0.00	
Spiked Amount	5.000	Range	70 - 130	Recovery	=	95.40%	
Target Compounds							
5) Methylene Chloride	4.713	84	22115	0.15	ppb	91	Qvalue
7) 1,1-Dichloroethane	5.546	63	97221	0.52	ppb	99	#
8) cis-1,2-Dichloroethene	6.110	96	43725	0.36	ppb	93	
9) Chloroform	6.377	83	135868	0.60	ppb	100	
14) 1,2-Dichloroethane	7.198	62	8807	0.06	ppb	97	
15) Trichloroethene	7.571	95	169492	1.33	ppb	88	
16) 1,2-Dichloropropane	8.101	63	6781	0.06	ppb	97	
21) Tetrachloroethene	9.399	166	41283	0.28	ppb	98	

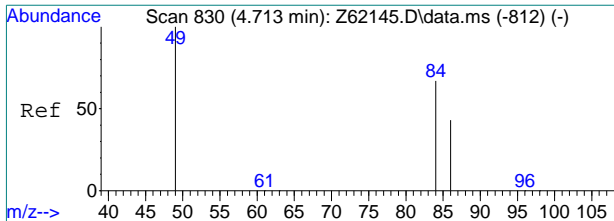
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\091520\
Data File : Z62367.D
Acq On : 15 Sep 2020 6:14 pm
Operator : JuanG
Sample : FA78551-7
Misc : MS47193,VZ2419,,,,,
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 16 10:47:07 2020
Quant Method : C:\msdchem\1\methods\SIMCL091120.M
Quant Title : WATER-EPA 8260B
QLast Update : Sun Sep 13 13:38:26 2020
Response via : Initial Calibration

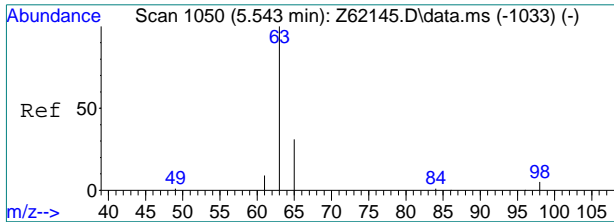
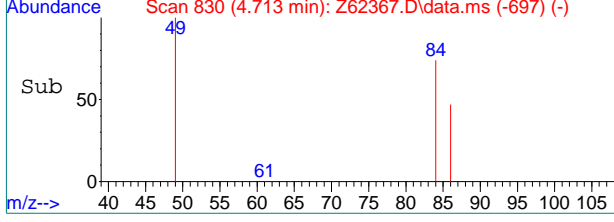
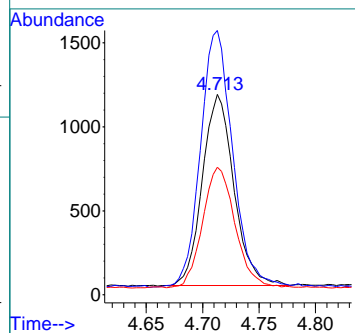
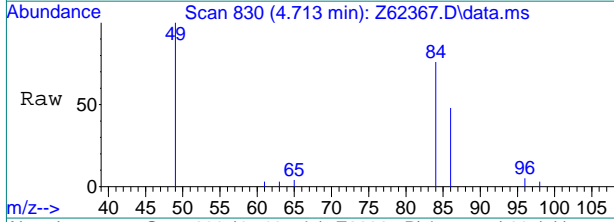




#5
 Methylene Chloride
 Concen: 0.15 ppb
 RT: 4.713 min Scan# 830
 Delta R.T. 0.000 min
 Lab File: Z62367.D
 Acq: 15 Sep 2020 6:14 pm

Tgt Ion: 84 Resp: 22115

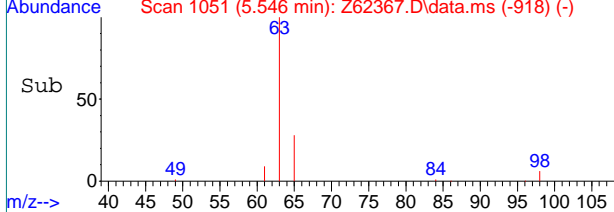
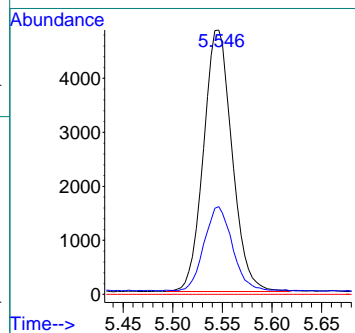
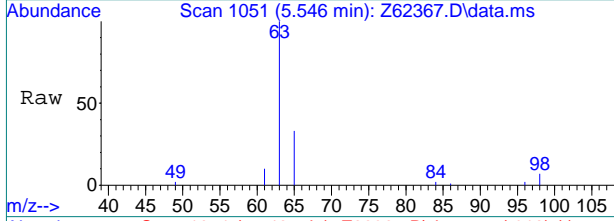
Ion	Ratio	Lower	Upper
84	100		
49	133.5	128.7	168.7
86	63.1	43.9	83.9



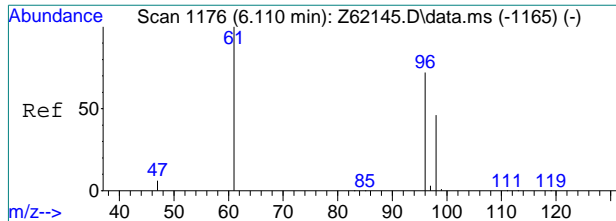
#7
 1,1-Dichloroethane
 Concen: 0.52 ppb
 RT: 5.546 min Scan# 1051
 Delta R.T. 0.000 min
 Lab File: Z62367.D
 Acq: 15 Sep 2020 6:14 pm

Tgt Ion: 63 Resp: 97221

Ion	Ratio	Lower	Upper
63	100		
65	31.9	11.3	51.3
83	0.0	0.0	30.0

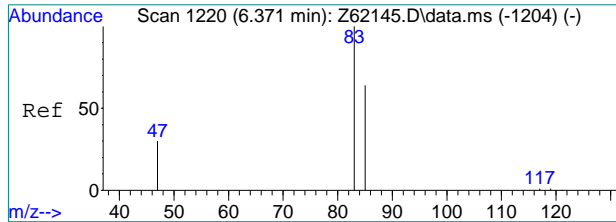
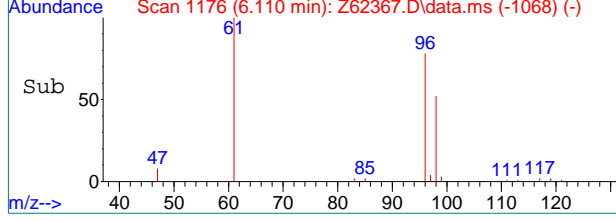
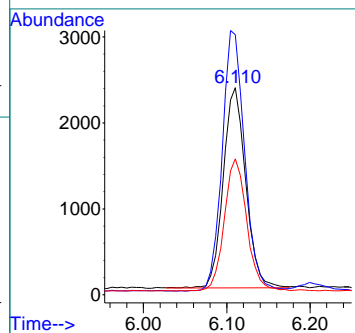
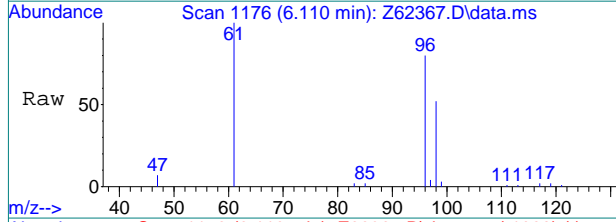


7.1.14
7



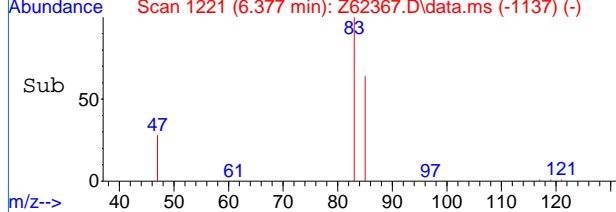
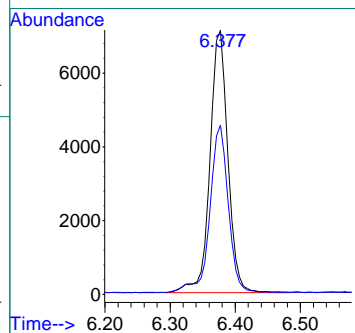
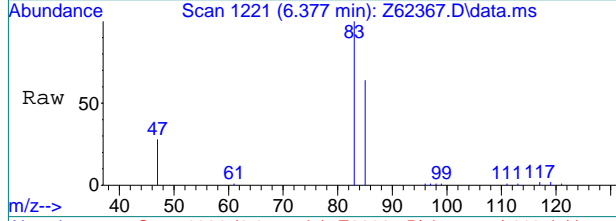
#8
 cis-1,2-Dichloroethene
 Concen: 0.36 ppb
 RT: 6.110 min Scan# 1176
 Delta R.T. 0.000 min
 Lab File: Z62367.D
 Acq: 15 Sep 2020 6:14 pm

Tgt Ion	Resp	Lower	Upper
96	43725		
61	128.0	119.3	159.3
98	65.8	44.5	84.5

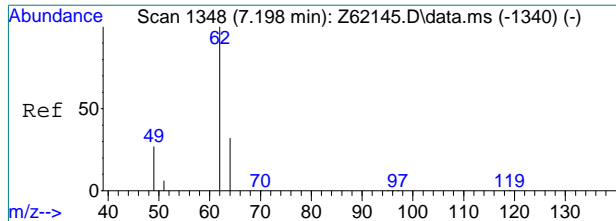


#9
 Chloroform
 Concen: 0.60 ppb
 RT: 6.377 min Scan# 1221
 Delta R.T. 0.000 min
 Lab File: Z62367.D
 Acq: 15 Sep 2020 6:14 pm

Tgt Ion	Resp	Lower	Upper
83	135868		
83	100		
85	66.0	46.1	86.1



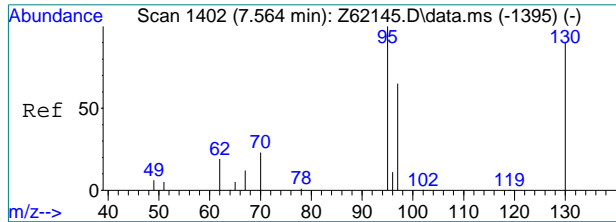
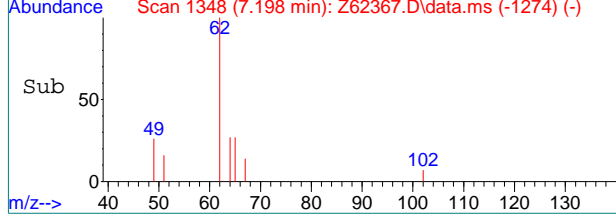
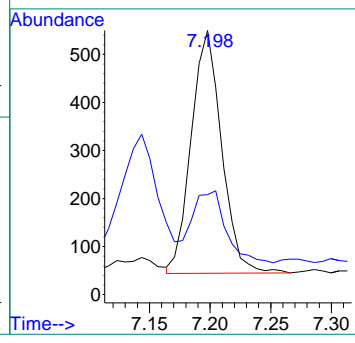
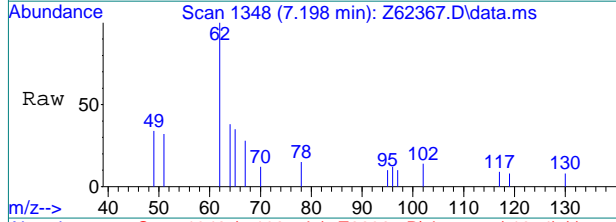
7.1.14
7



#14
 1,2-Dichloroethane
 Concen: 0.06 ppb
 RT: 7.198 min Scan# 1348
 Delta R.T. -0.000 min
 Lab File: Z62367.D
 Acq: 15 Sep 2020 6:14 pm

Tgt Ion: 62 Resp: 8807

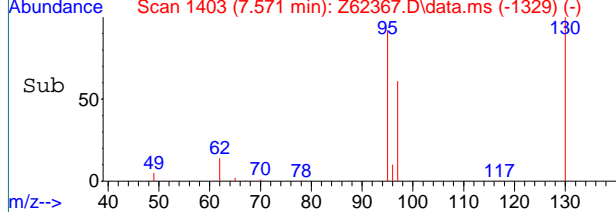
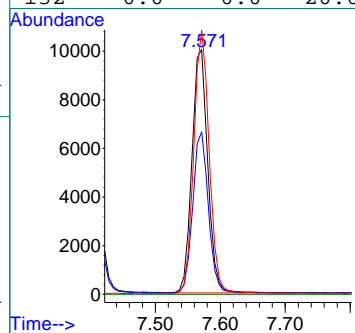
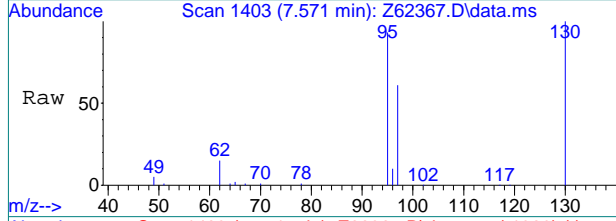
Ion	Ratio	Lower	Upper
62	100		
64	33.7	12.3	52.3



#15
 Trichloroethene
 Concen: 1.33 ppb
 RT: 7.571 min Scan# 1403
 Delta R.T. 0.000 min
 Lab File: Z62367.D
 Acq: 15 Sep 2020 6:14 pm

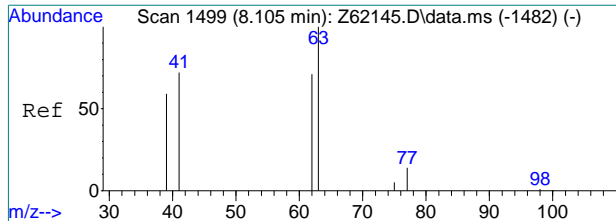
Tgt Ion: 95 Resp: 169492

Ion	Ratio	Lower	Upper
95	100		
97	66.2	44.5	84.5
130	108.2	69.7	109.7
132	0.0	0.0	20.0



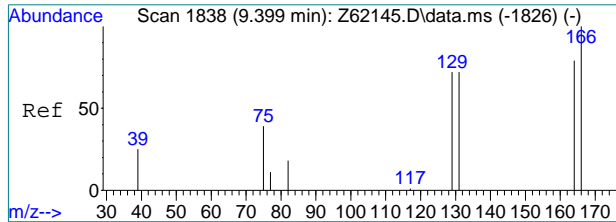
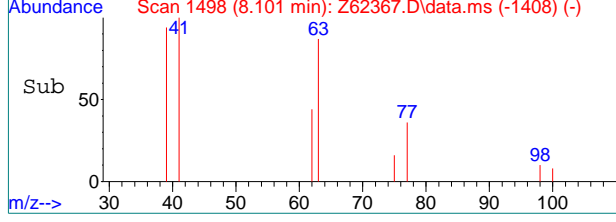
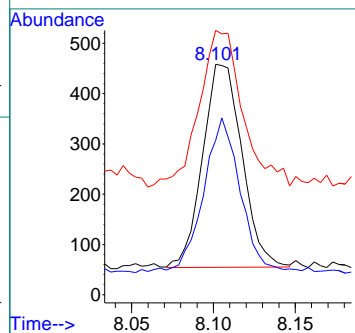
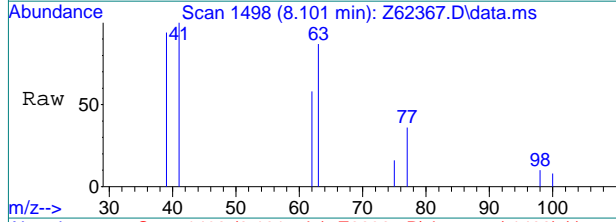
7.1.14
7





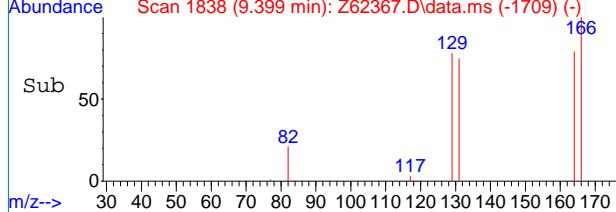
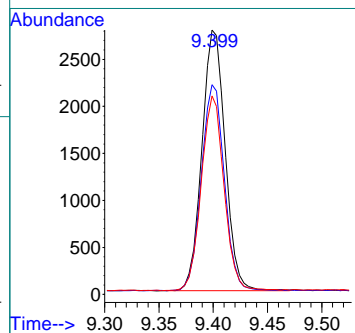
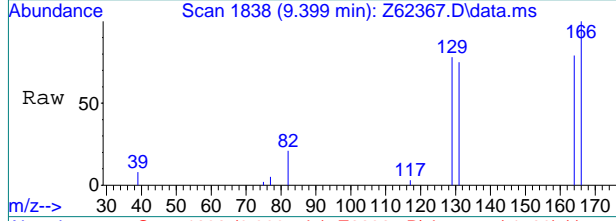
#16
 1,2-Dichloropropane
 Concen: 0.06 ppb
 RT: 8.101 min Scan# 1498
 Delta R.T. -0.004 min
 Lab File: Z62367.D
 Acq: 15 Sep 2020 6:14 pm

Tgt Ion	Ratio	Lower	Upper
63	100		
62	71.8	51.6	91.6
41	78.4	43.7	103.7



#21
 Tetrachloroethene
 Concen: 0.28 ppb
 RT: 9.399 min Scan# 1838
 Delta R.T. -0.000 min
 Lab File: Z62367.D
 Acq: 15 Sep 2020 6:14 pm

Tgt Ion	Ratio	Lower	Upper
166	100		
164	79.0	58.7	98.7
131	74.6	51.6	91.6



7.1.14
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-14-2020\VO2358\
Data File : O61284.d
Acq On : 12 Sep 2020 2:37 pm
Operator : stutip
Sample : fa78551-8
Misc : MS47193,VO2358,,,,,
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 14 07:33:32 2020
Quant Method : C:\msdchem\1\methods\SIMCL091120.M
Quant Title : Standard Methods 6200B
QLast Update : Sun Sep 13 19:20:40 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Fluorobenzene	7.346	96	217764	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.447	117	177148	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.074	65	96315	5.48	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	109.60%	
19) Toluene-d8	8.900	98	188860	4.73	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	94.60%	
Target Compounds						
2) Vinyl Chloride	2.908	62	5654	0.22	ug/L	87
5) Methylene Chloride	4.707	49	20206	0.43	ug/L	95
7) 1,1-Dichloroethane	5.514	63	222112	5.50	ug/L	99
8) cis-1,2-Dichloroethene	6.072	96	53034	2.66	ug/L	84
9) Chloroform	6.333	83	19081	0.55	ug/L	89
14) 1,2-Dichloroethane	7.139	62	43062	1.31	ug/L	92
15) Trichloroethene	7.518	95	25414	1.24	ug/L	86
21) Tetrachloroethene	9.343	166	29617	1.54	ug/L	99

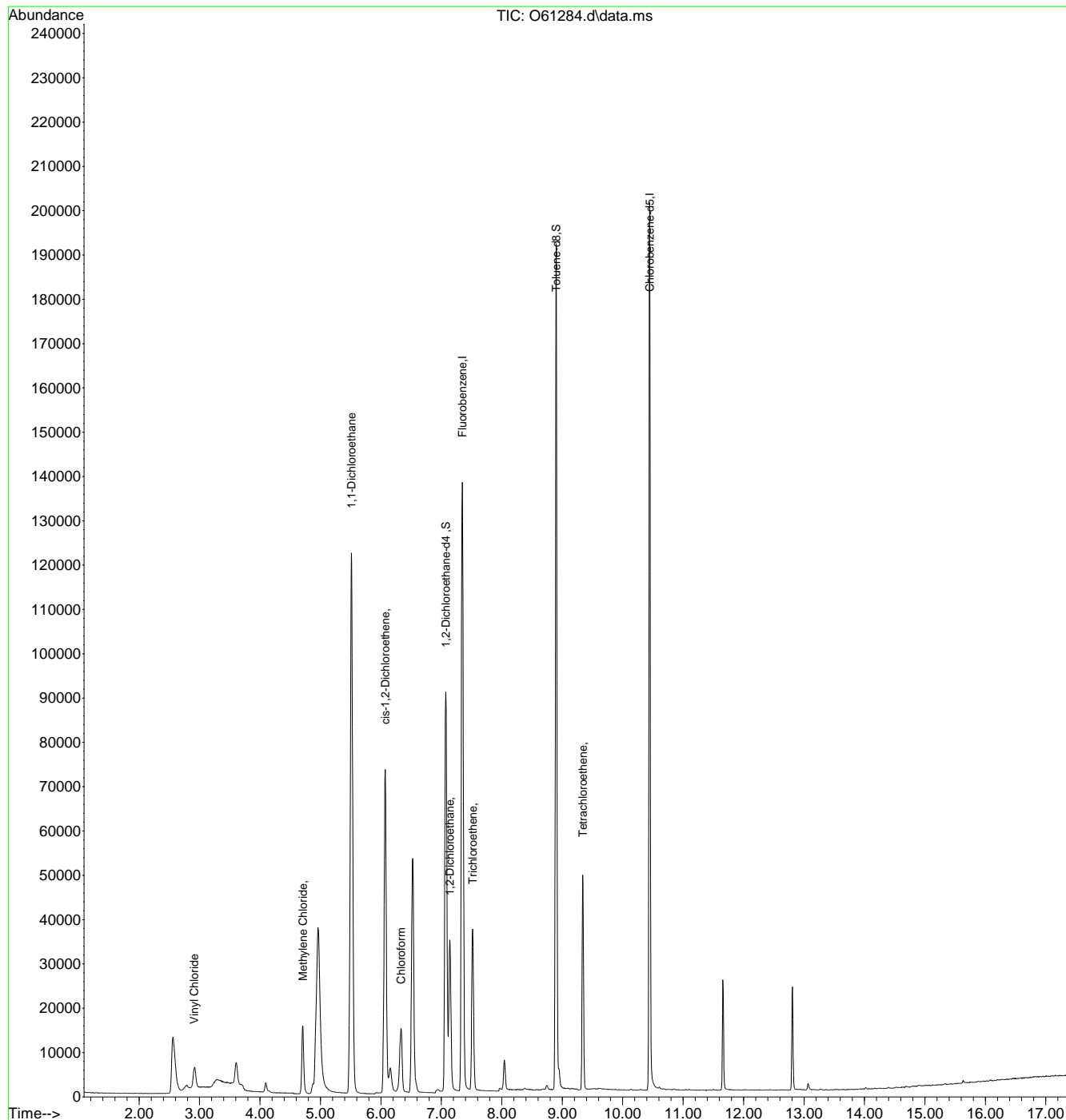
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.1.15
7

Quantitation Report (QT Reviewed)

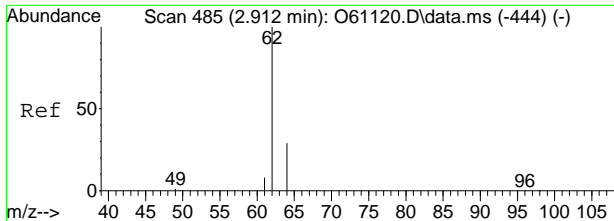
Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-14-2020\VO2358\
 Data File : O61284.d
 Acq On : 12 Sep 2020 2:37 pm
 Operator : stutip
 Sample : fa78551-8
 Misc : MS47193,VO2358,,,,,
 ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 14 07:33:32 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Sun Sep 13 19:20:40 2020
 Response via : Initial Calibration



7.1.15
7

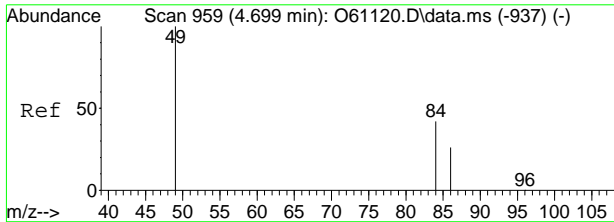
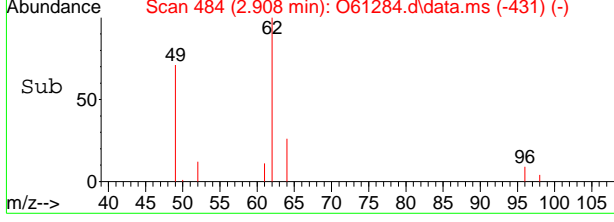
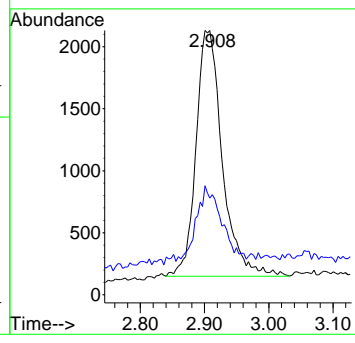
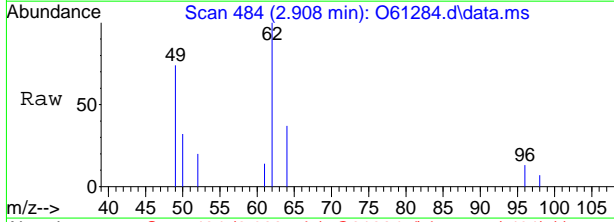




#2
 Vinyl Chloride
 Concen: 0.22 ug/L
 RT: 2.908 min Scan# 484
 Delta R.T. 0.000 min
 Lab File: O61284.d
 Acq: 12 Sep 2020 2:37 pm

Tgt Ion: 62 Resp: 5654

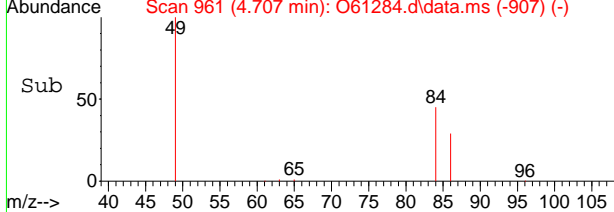
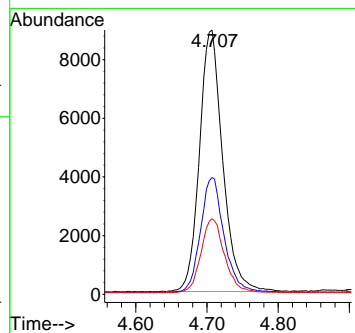
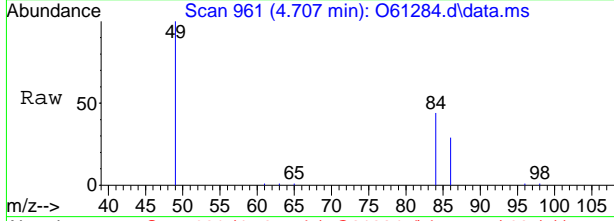
Ion	Ratio	Lower	Upper
62	100		
64	24.0	0.9	60.9



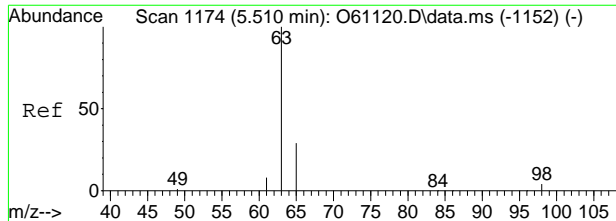
#5
 Methylene Chloride
 Concen: 0.43 ug/L
 RT: 4.707 min Scan# 961
 Delta R.T. 0.004 min
 Lab File: O61284.d
 Acq: 12 Sep 2020 2:37 pm

Tgt Ion: 49 Resp: 20206

Ion	Ratio	Lower	Upper
49	100		
84	43.8	17.9	77.9
86	28.2	0.0	59.8



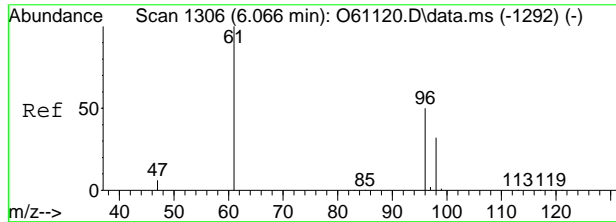
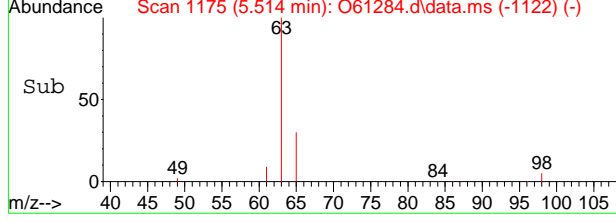
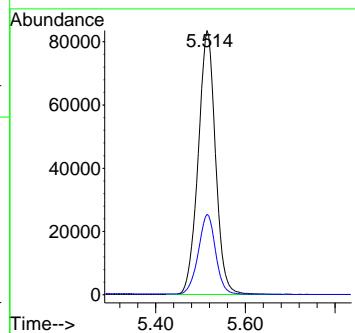
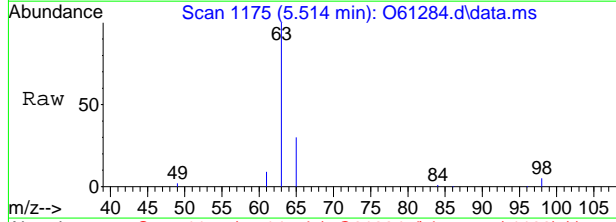
7.1.15
7



#7
 1,1-Dichloroethane
 Concen: 5.50 ug/L
 RT: 5.514 min Scan# 1175
 Delta R.T. -0.000 min
 Lab File: O61284.d
 Acq: 12 Sep 2020 2:37 pm

Tgt Ion: 63 Resp: 222112

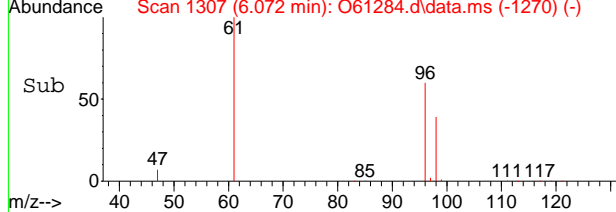
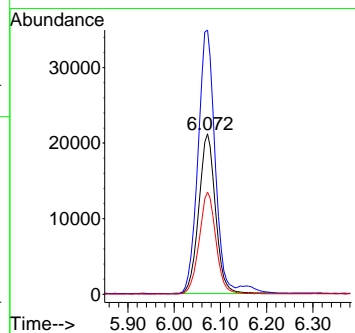
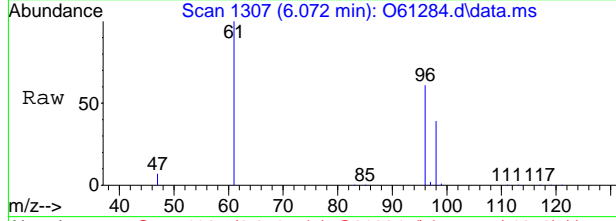
Ion	Ratio	Lower	Upper
63	100		
65	30.3	0.7	60.7



#8
 cis-1,2-Dichloroethene
 Concen: 2.66 ug/L
 RT: 6.072 min Scan# 1307
 Delta R.T. -0.000 min
 Lab File: O61284.d
 Acq: 12 Sep 2020 2:37 pm

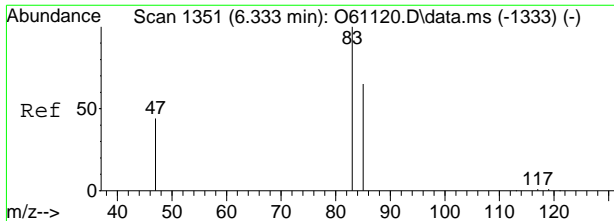
Tgt Ion: 96 Resp: 53034

Ion	Ratio	Lower	Upper
96	100		
61	165.2	107.0	167.0
98	63.9	34.1	94.1



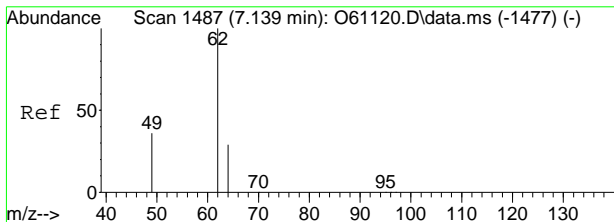
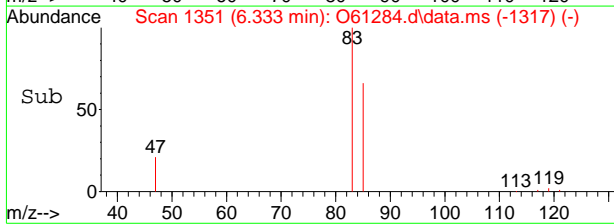
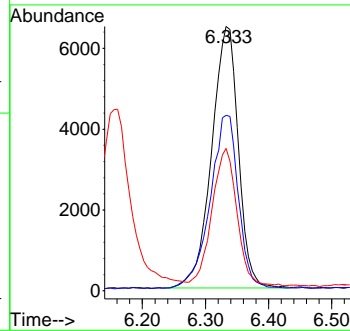
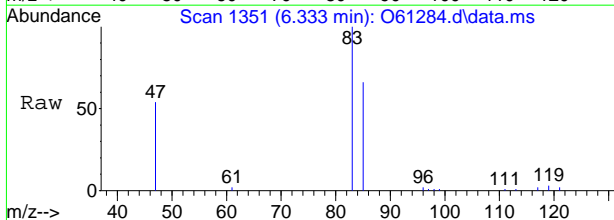
7.1.15
7





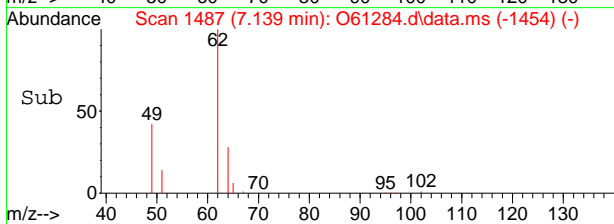
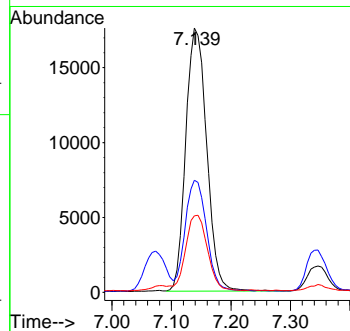
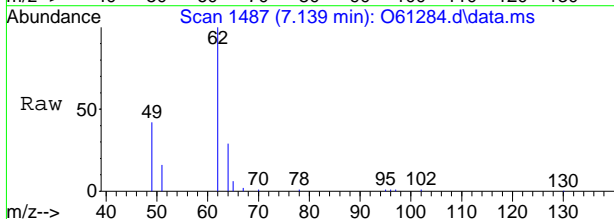
#9
 Chloroform
 Concen: 0.55 ug/L
 RT: 6.333 min Scan# 1351
 Delta R.T. -0.000 min
 Lab File: O61284.d
 Acq: 12 Sep 2020 2:37 pm

Tgt Ion	Resp	Lower	Upper
83	19081		
85	66.0	33.0	93.0
47	52.2	8.1	68.1

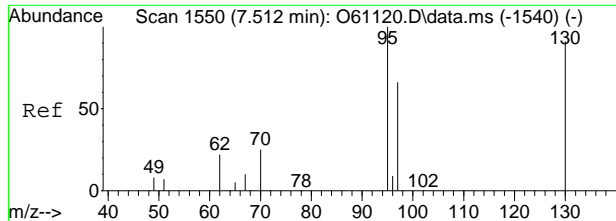


#14
 1,2-Dichloroethane
 Concen: 1.31 ug/L
 RT: 7.139 min Scan# 1487
 Delta R.T. -0.006 min
 Lab File: O61284.d
 Acq: 12 Sep 2020 2:37 pm

Tgt Ion	Resp	Lower	Upper
62	43062		
49	42.0	18.0	78.0
64	28.4	1.5	61.5

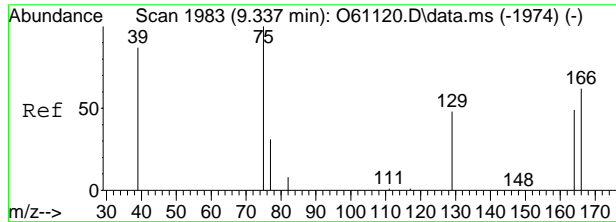
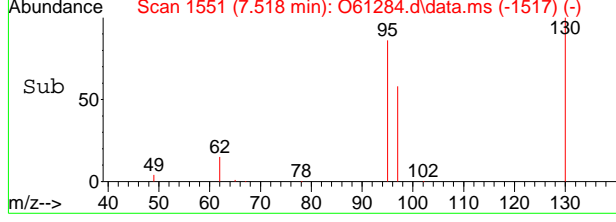
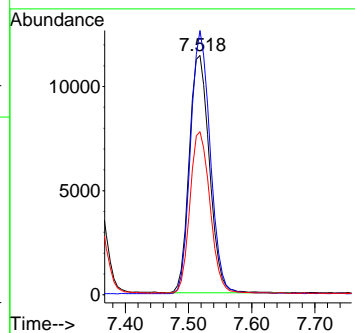
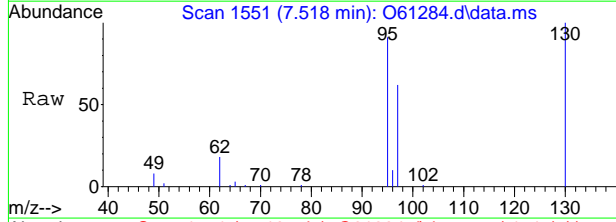


7.1.15
7



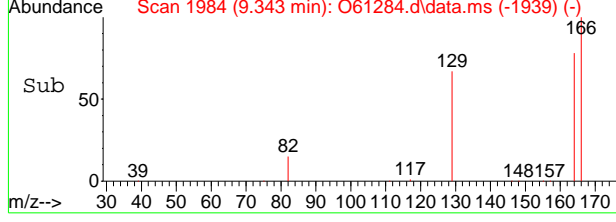
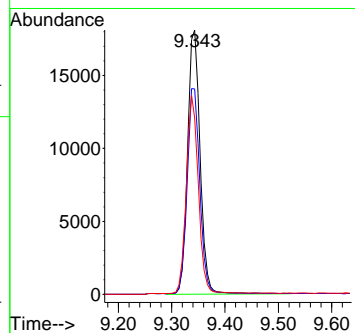
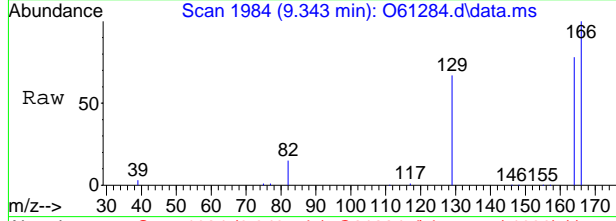
#15
 Trichloroethene
 Concen: 1.24 ug/L
 RT: 7.518 min Scan# 1551
 Delta R.T. 0.000 min
 Lab File: O61284.d
 Acq: 12 Sep 2020 2:37 pm

Tgt Ion	Resp	Lower	Upper
95	25414	100	
130	110.8	60.4	120.4
97	68.1	34.6	94.6



#21
 Tetrachloroethene
 Concen: 1.54 ug/L
 RT: 9.343 min Scan# 1984
 Delta R.T. 0.000 min
 Lab File: O61284.d
 Acq: 12 Sep 2020 2:37 pm

Tgt Ion	Resp	Lower	Upper
166	29617	100	
164	77.6	47.3	107.3
129	66.5	37.5	97.5



7.1.15
 7



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\091520\
 Data File : Z62368.D
 Acq On : 15 Sep 2020 6:33 pm
 Operator : JuanG
 Sample : FA78551-8
 Misc : MS47193,VZ2419,,,,,
 ALS Vial : 15 Sample Multiplier: 1

Quant Time: Sep 16 10:47:09 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Sun Sep 13 13:38:26 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	

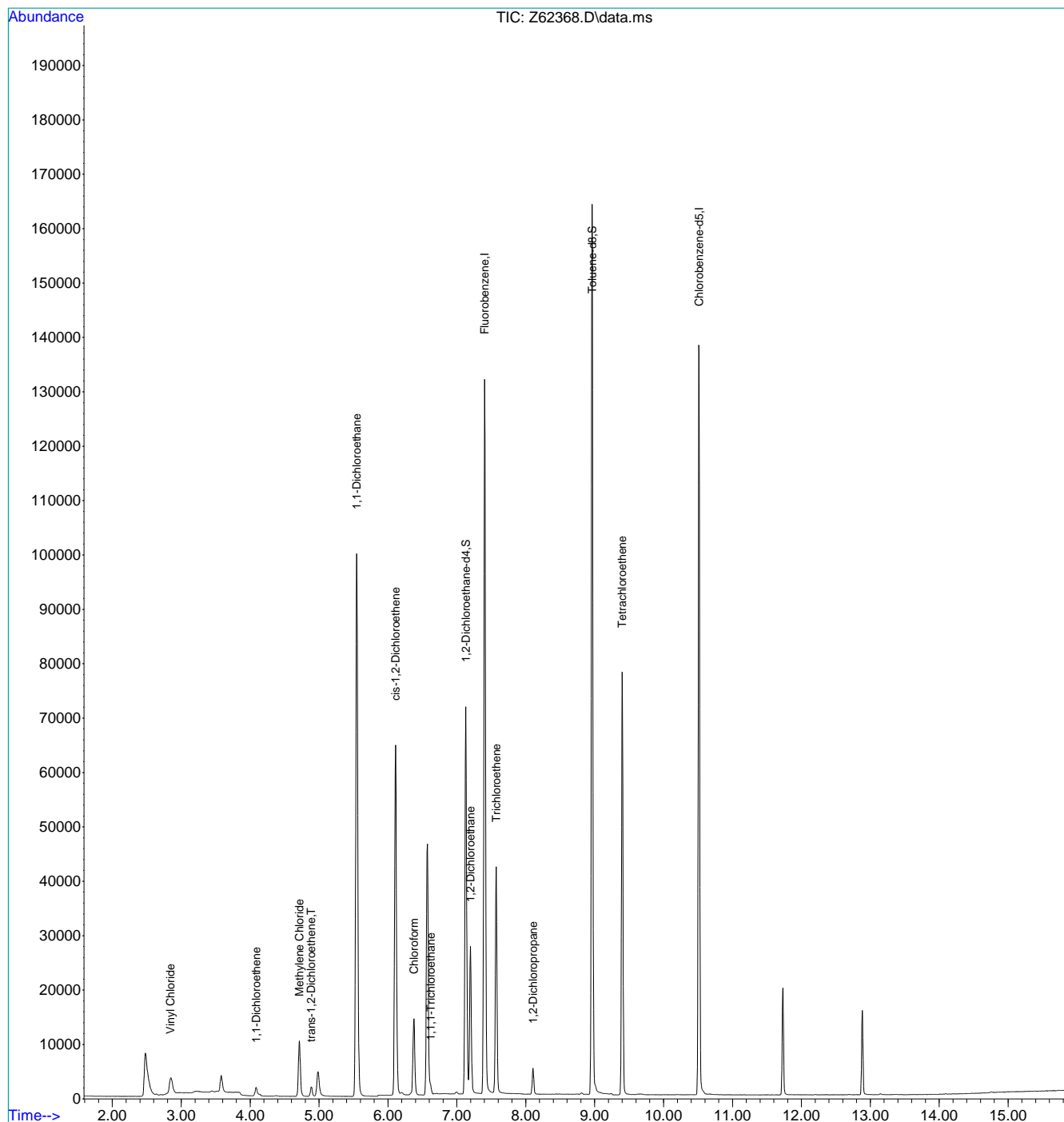
Internal Standards							
1) Fluorobenzene	7.401	96	1528417	5.00	ppb	0.00	
18) Chlorobenzene-d5	10.515	117	1257129	5.00	ppb	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.130	65	584233	6.18	ppb	0.00	
Spiked Amount	5.000	Range	79 - 125	Recovery	=	123.60%	
19) Toluene-d8	8.961	98	1460706	4.79	ppb	0.00	
Spiked Amount	5.000	Range	70 - 130	Recovery	=	95.80%	
Target Compounds							
2) Vinyl Chloride	2.843	62	44490	0.35	ppb		Qvalue 91
4) 1,1-Dichloroethene	4.087	96	9360	0.10	ppb	#	84
5) Methylene Chloride	4.713	84	68658	0.45	ppb		91
6) trans-1,2-Dichloroethene	4.886	96	9799	0.09	ppb		93
7) 1,1-Dichloroethane	5.546	63	1334061	6.97	ppb	#	99
8) cis-1,2-Dichloroethene	6.110	96	393468	3.14	ppb		93
9) Chloroform	6.377	83	136573	0.59	ppb		100
11) 1,1,1-Trichloroethane	6.620	97	12516	0.06	ppb		77
14) 1,2-Dichloroethane	7.198	62	267311	1.67	ppb		100
15) Trichloroethene	7.571	95	226299	1.73	ppb		86
16) 1,2-Dichloropropane	8.105	63	24204	0.22	ppb		98
21) Tetrachloroethene	9.399	166	335278	2.28	ppb		99

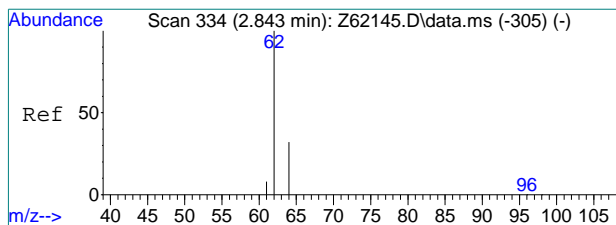
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\091520\
Data File : Z62368.D
Acq On : 15 Sep 2020 6:33 pm
Operator : JuanG
Sample : FA78551-8
Misc : MS47193,VZ2419,,,,,
ALS Vial : 15 Sample Multiplier: 1

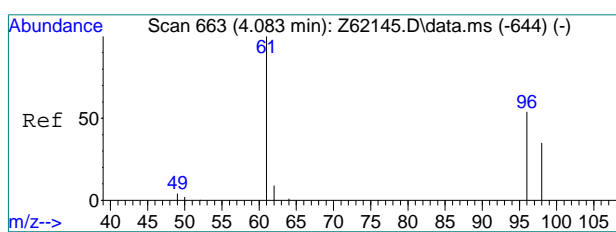
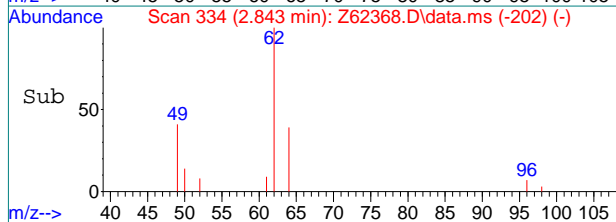
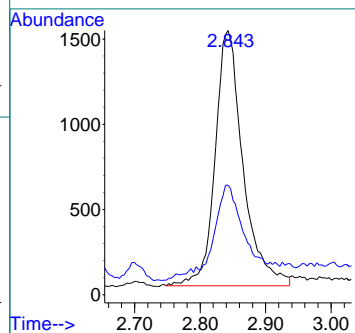
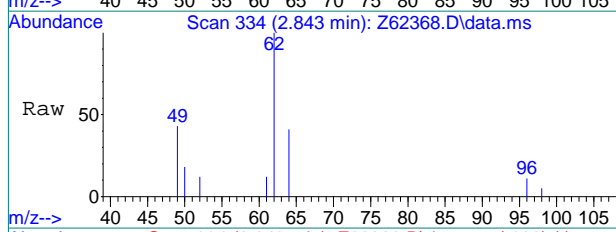
Quant Time: Sep 16 10:47:09 2020
Quant Method : C:\msdchem\1\methods\SIMCL091120.M
Quant Title : WATER-EPA 8260B
QLast Update : Sun Sep 13 13:38:26 2020
Response via : Initial Calibration





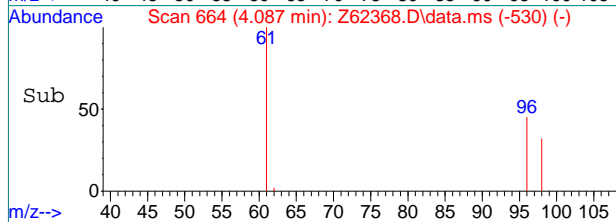
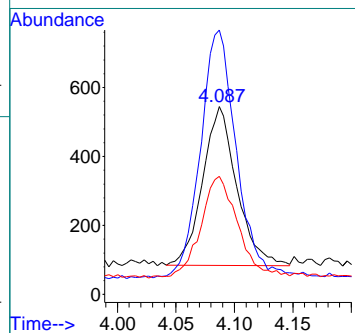
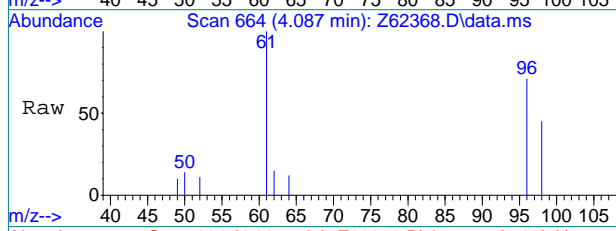
#2
 Vinyl Chloride
 Concen: 0.35 ppb
 RT: 2.843 min Scan# 334
 Delta R.T. -0.000 min
 Lab File: Z62368.D
 Acq: 15 Sep 2020 6:33 pm

Tgt Ion	Resp	Lower	Upper
62	44490		
64	37.1	11.9	51.9

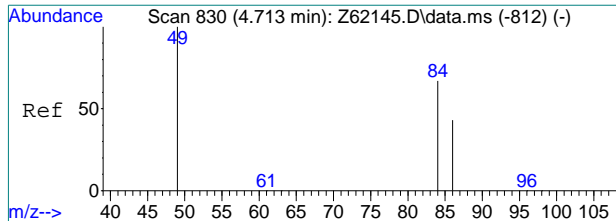


#4
 1,1-Dichloroethene
 Concen: 0.10 ppb
 RT: 4.087 min Scan# 664
 Delta R.T. 0.004 min
 Lab File: Z62368.D
 Acq: 15 Sep 2020 6:33 pm

Tgt Ion	Resp	Lower	Upper
96	9360		
61	155.0	164.8	204.8#
98	63.0	45.1	85.1

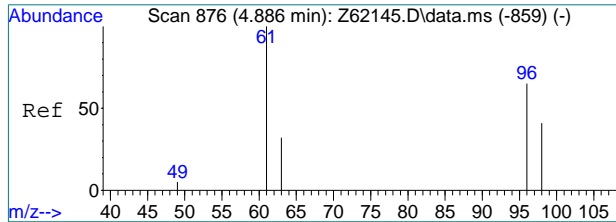
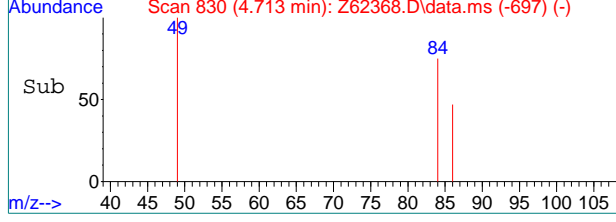
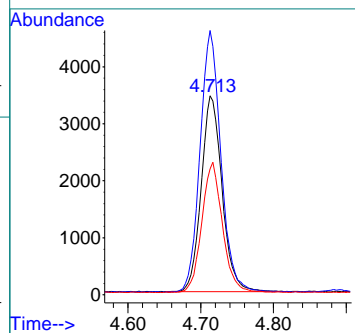
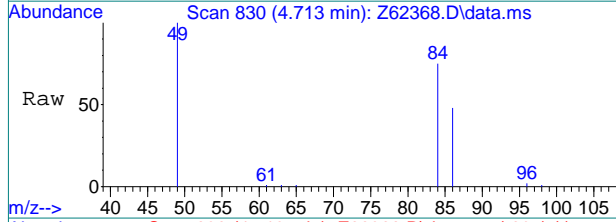


7.1.16
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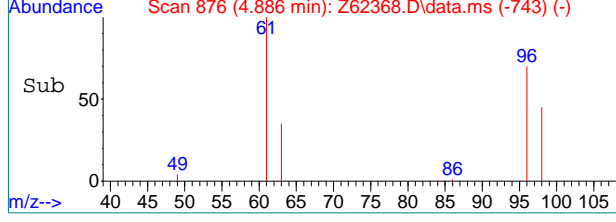
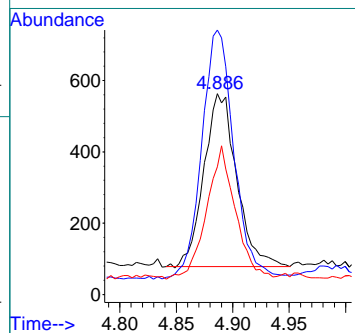
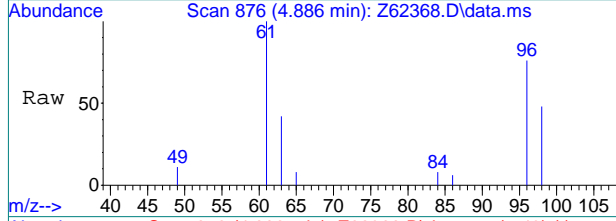
#5
 Methylene Chloride
 Concen: 0.45 ppb
 RT: 4.713 min Scan# 830
 Delta R.T. -0.000 min
 Lab File: Z62368.D
 Acq: 15 Sep 2020 6:33 pm

Tgt Ion	Resp	Lower	Upper
84	68658		
49	133.6	128.7	168.7
86	63.1	43.9	83.9



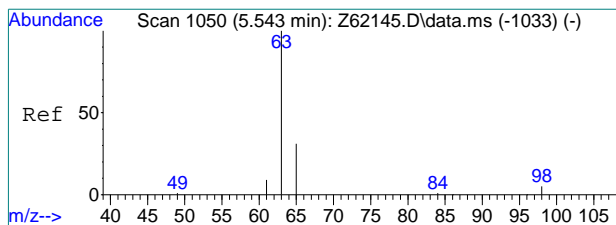
#6
 trans-1,2-Dichloroethene
 Concen: 0.09 ppb
 RT: 4.886 min Scan# 876
 Delta R.T. 0.000 min
 Lab File: Z62368.D
 Acq: 15 Sep 2020 6:33 pm

Tgt Ion	Resp	Lower	Upper
96	9799		
61	143.1	134.2	174.2
98	64.9	43.4	83.4



7.1.16
7

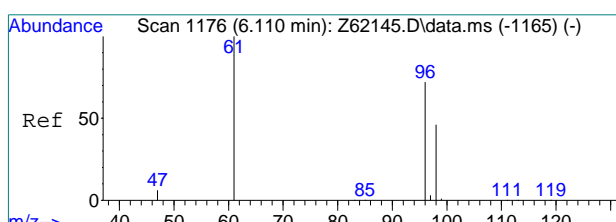
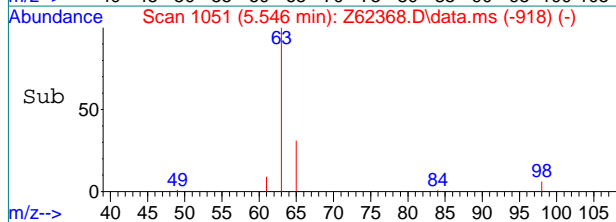
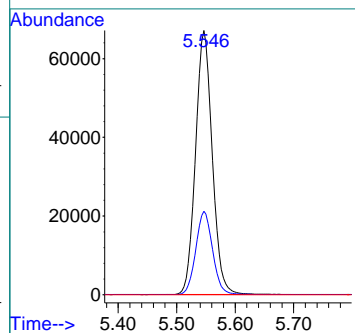
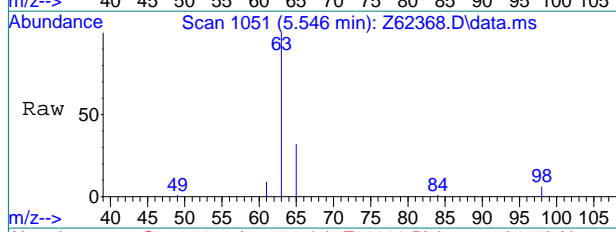




#7
 1,1-Dichloroethane
 Concen: 6.97 ppb
 RT: 5.546 min Scan# 1051
 Delta R.T. 0.000 min
 Lab File: Z62368.D
 Acq: 15 Sep 2020 6:33 pm

Tgt Ion: 63 Resp: 1334061

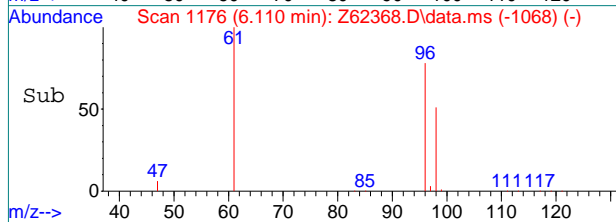
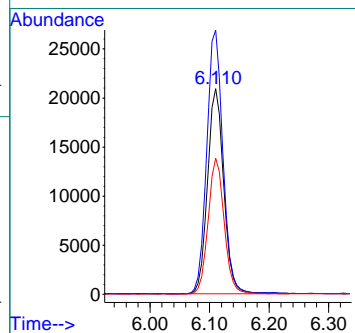
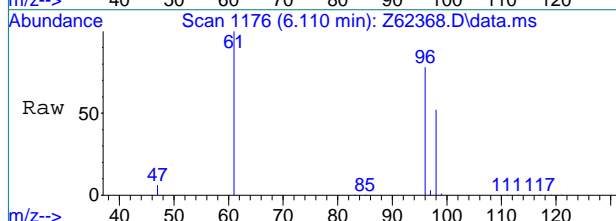
Ion	Ratio	Lower	Upper
63	100		
65	31.7	11.3	51.3
83	0.0	0.0	30.0



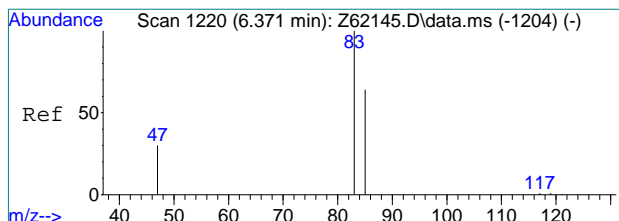
#8
 cis-1,2-Dichloroethene
 Concen: 3.14 ppb
 RT: 6.110 min Scan# 1176
 Delta R.T. 0.000 min
 Lab File: Z62368.D
 Acq: 15 Sep 2020 6:33 pm

Tgt Ion: 96 Resp: 393468

Ion	Ratio	Lower	Upper
96	100		
61	128.7	119.3	159.3
98	66.2	44.5	84.5

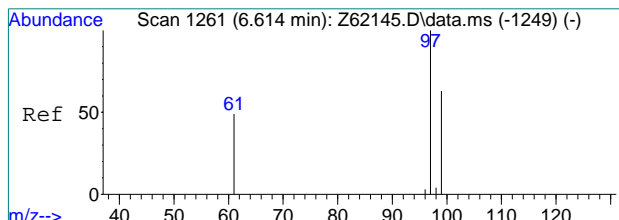
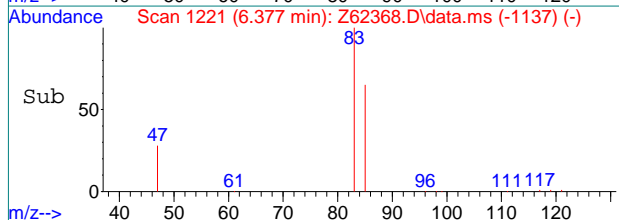
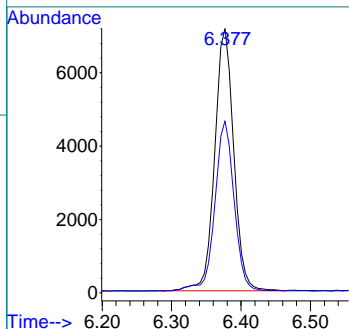
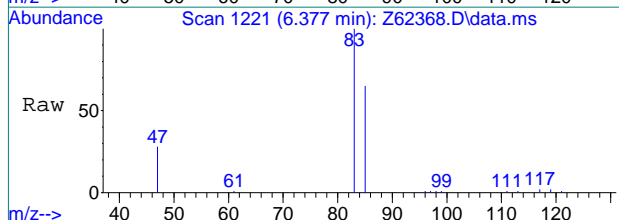


7.1.16
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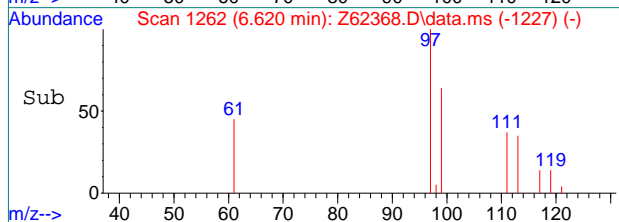
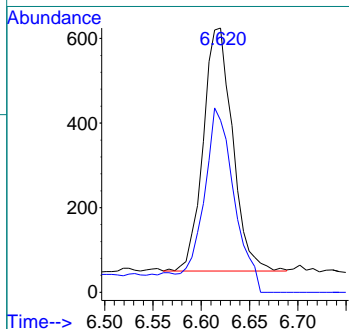
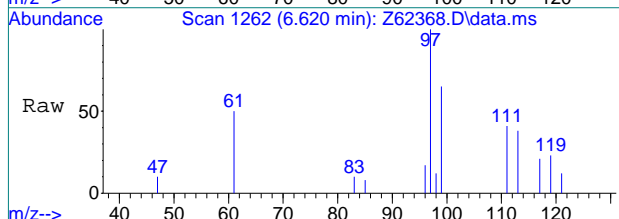
#9
 Chloroform
 Concen: 0.59 ppb
 RT: 6.377 min Scan# 1221
 Delta R.T. -0.000 min
 Lab File: Z62368.D
 Acq: 15 Sep 2020 6:33 pm

Tgt Ion: 83 Resp: 136573
 Ion Ratio Lower Upper
 83 100
 85 65.9 46.1 86.1

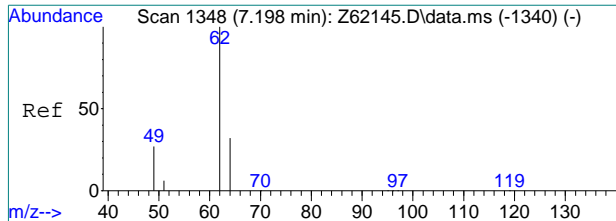


#11
 1,1,1-Trichloroethane
 Concen: 0.06 ppb
 RT: 6.620 min Scan# 1262
 Delta R.T. 0.006 min
 Lab File: Z62368.D
 Acq: 15 Sep 2020 6:33 pm

Tgt Ion: 97 Resp: 12516
 Ion Ratio Lower Upper
 97 100
 99 78.5 0.0 123.8



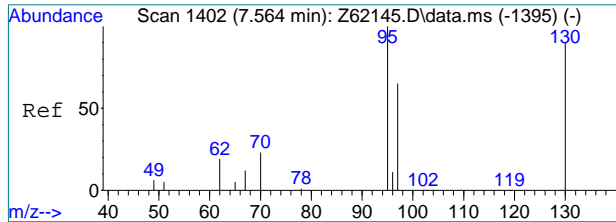
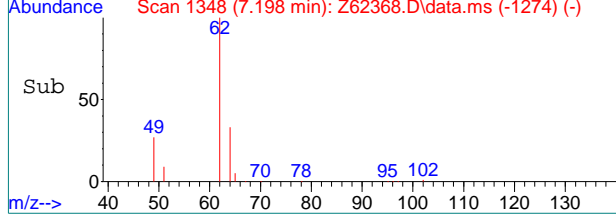
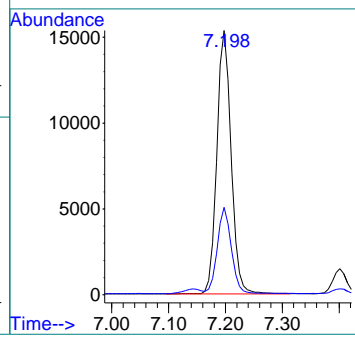
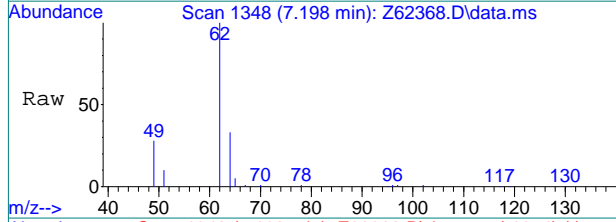
7.1.16
7



#14
 1,2-Dichloroethane
 Concen: 1.67 ppb
 RT: 7.198 min Scan# 1348
 Delta R.T. -0.000 min
 Lab File: Z62368.D
 Acq: 15 Sep 2020 6:33 pm

Tgt Ion: 62 Resp: 267311

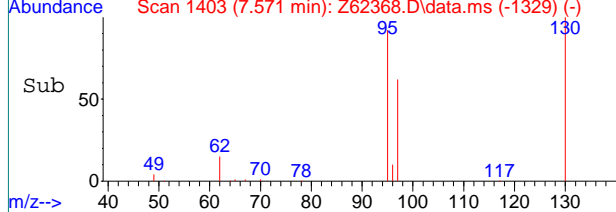
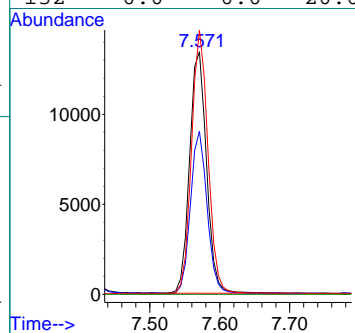
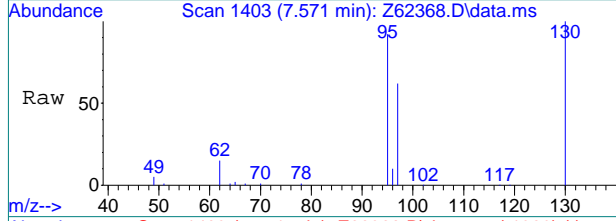
Ion	Ratio	Lower	Upper
62	100		
64	32.1	12.3	52.3



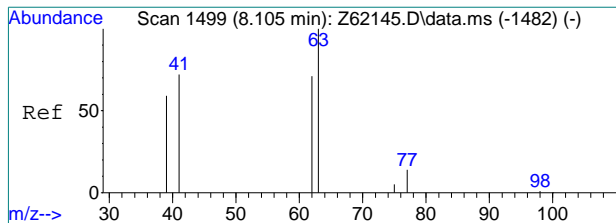
#15
 Trichloroethene
 Concen: 1.73 ppb
 RT: 7.571 min Scan# 1403
 Delta R.T. -0.000 min
 Lab File: Z62368.D
 Acq: 15 Sep 2020 6:33 pm

Tgt Ion: 95 Resp: 226299

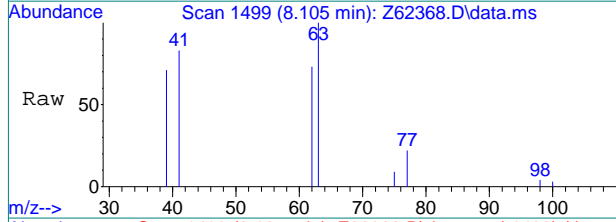
Ion	Ratio	Lower	Upper
95	100		
97	67.2	44.5	84.5
130	109.2	69.7	109.7
132	0.0	0.0	20.0



7.1.16
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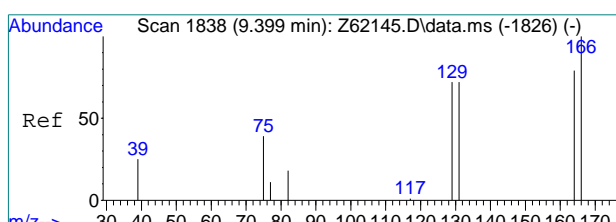
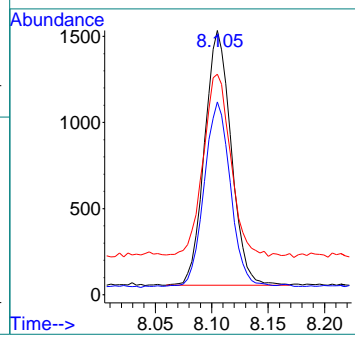
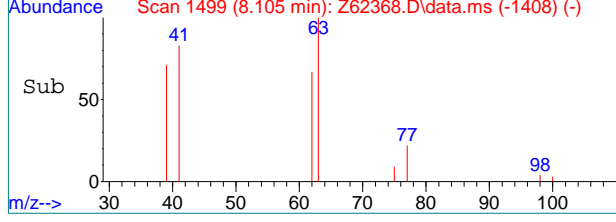


#16
 1,2-Dichloropropane
 Concen: 0.22 ppb
 RT: 8.105 min Scan# 1499
 Delta R.T. 0.000 min
 Lab File: Z62368.D
 Acq: 15 Sep 2020 6:33 pm

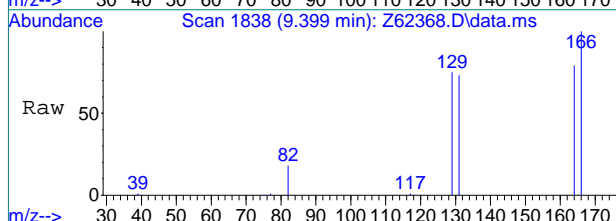


Tgt Ion: 63 Resp: 24204

Ion	Ratio	Lower	Upper
63	100		
62	71.7	51.6	91.6
41	76.2	43.7	103.7

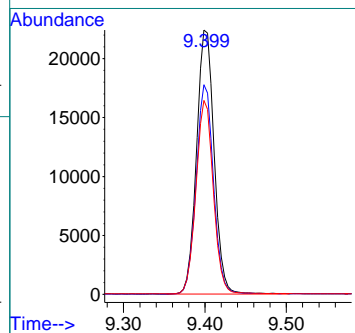
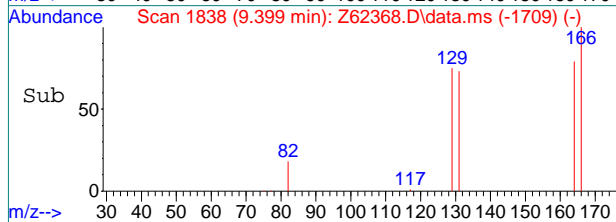


#21
 Tetrachloroethene
 Concen: 2.28 ppb
 RT: 9.399 min Scan# 1838
 Delta R.T. -0.000 min
 Lab File: Z62368.D
 Acq: 15 Sep 2020 6:33 pm



Tgt Ion: 166 Resp: 335278

Ion	Ratio	Lower	Upper
166	100		
164	79.2	58.7	98.7
131	73.3	51.6	91.6



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Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-14-2020\VO2358\
Data File : O61285.d
Acq On : 12 Sep 2020 2:57 pm
Operator : stutip
Sample : fa78551-9
Misc : MS47193,VO2358,,,,,
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 14 07:34:02 2020
Quant Method : C:\msdchem\1\methods\SIMCL091120.M
Quant Title : Standard Methods 6200B
QLast Update : Sun Sep 13 19:20:40 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Fluorobenzene	7.346	96	215187	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.447	117	176308	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.073	65	95183	5.48	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	109.60%	
19) Toluene-d8	8.900	98	185724	4.67	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	93.40%	
Target Compounds						
8) cis-1,2-Dichloroethene	6.072	96	50679	2.57	ug/L	84
9) Chloroform	6.333	83	25817	0.75	ug/L	91
15) Trichloroethene	7.518	95	269304	13.31	ug/L	87
21) Tetrachloroethene	9.343	166	7141	0.37	ug/L	98

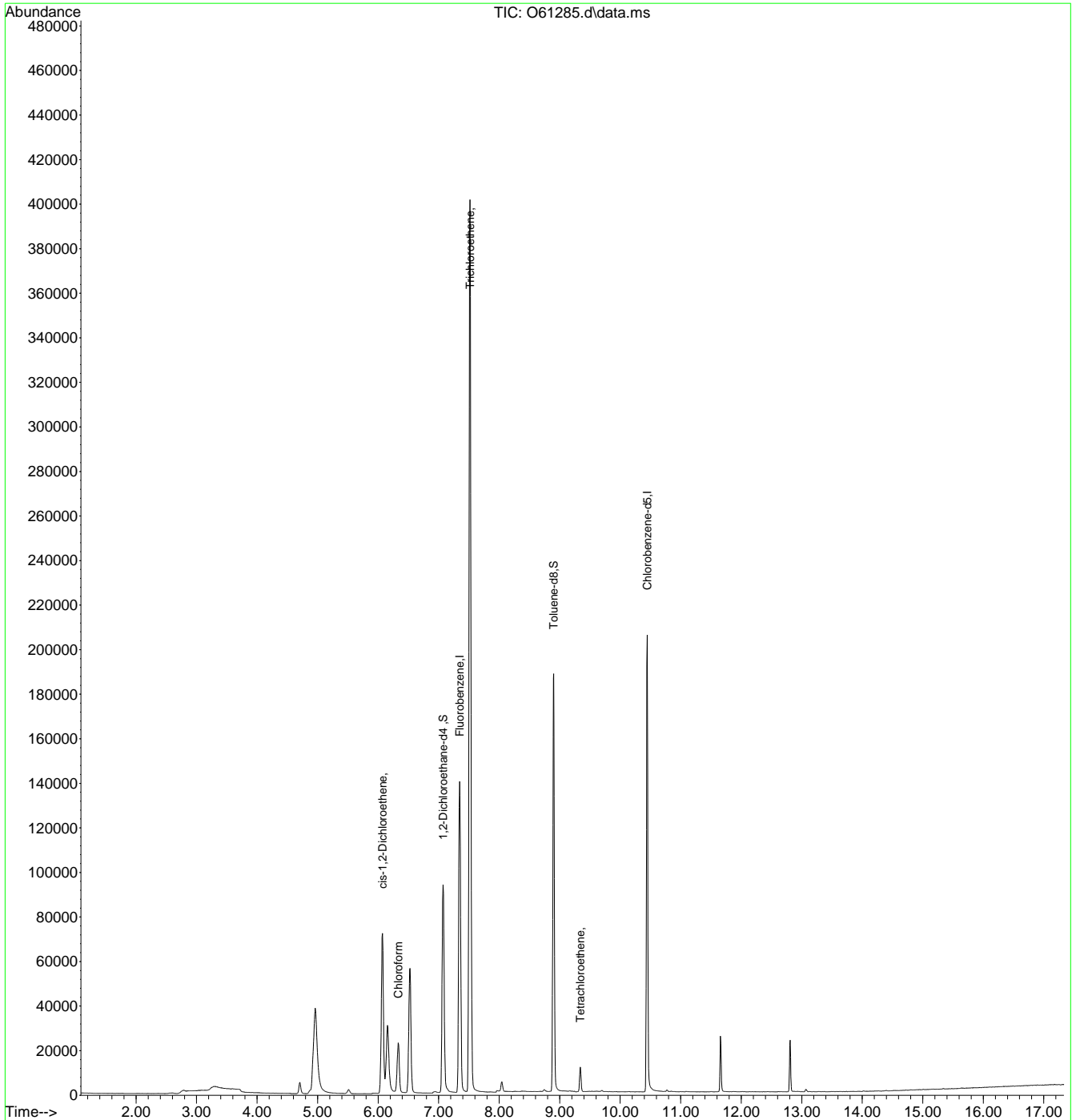
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.1.17
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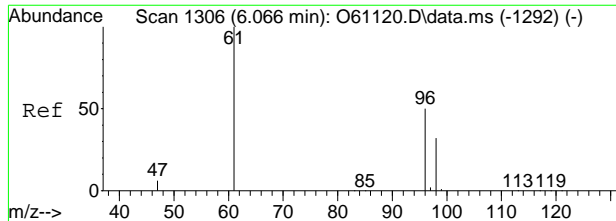
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-14-2020\VO2358\
 Data File : O61285.d
 Acq On : 12 Sep 2020 2:57 pm
 Operator : stutip
 Sample : fa78551-9
 Misc : MS47193,VO2358,,,,,
 ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 14 07:34:02 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Sun Sep 13 19:20:40 2020
 Response via : Initial Calibration

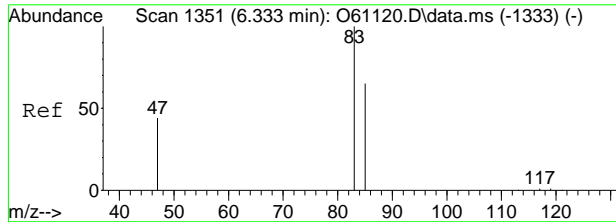
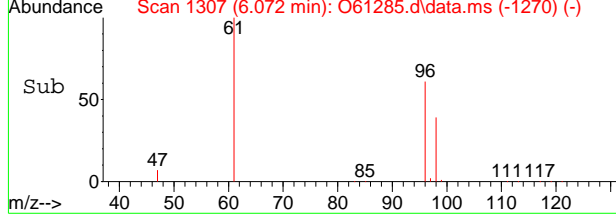
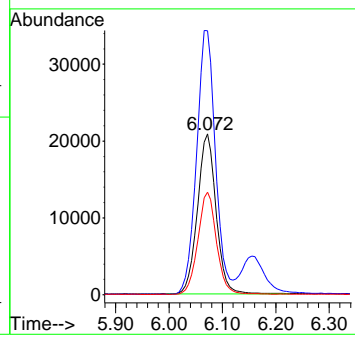
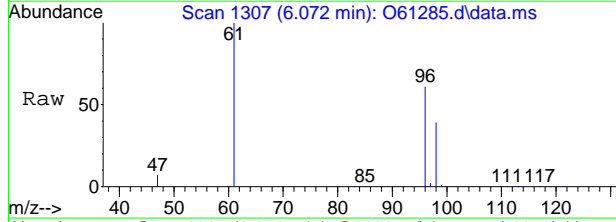


7.1.17
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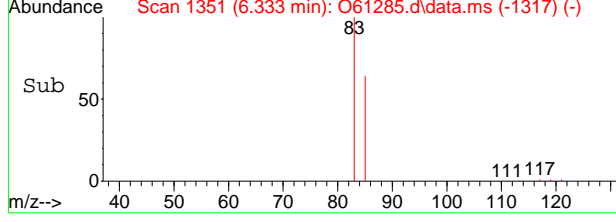
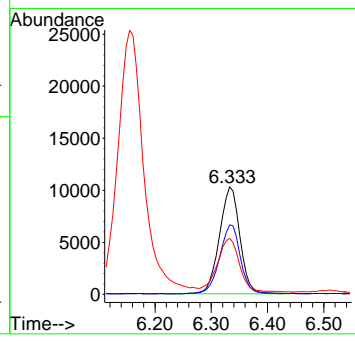
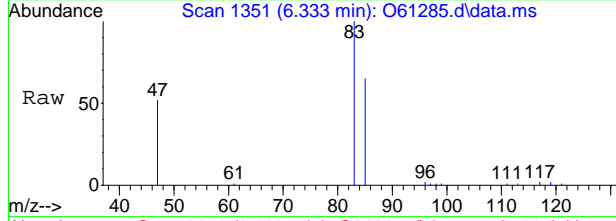
#8
 cis-1,2-Dichloroethene
 Concen: 2.57 ug/L
 RT: 6.072 min Scan# 1307
 Delta R.T. -0.000 min
 Lab File: O61285.d
 Acq: 12 Sep 2020 2:57 pm

Tgt Ion	Resp	Lower	Upper
96	50679		
61	164.4	107.0	167.0
98	63.8	34.1	94.1



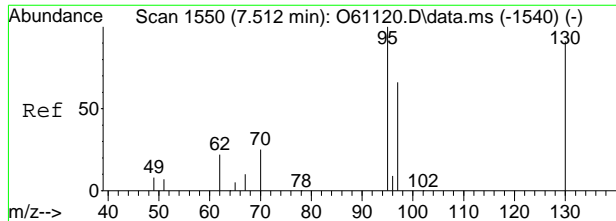
#9
 Chloroform
 Concen: 0.75 ug/L
 RT: 6.333 min Scan# 1351
 Delta R.T. -0.000 min
 Lab File: O61285.d
 Acq: 12 Sep 2020 2:57 pm

Tgt Ion	Resp	Lower	Upper
83	25817		
85	64.4	33.0	93.0
47	50.1	8.1	68.1



7.1.17

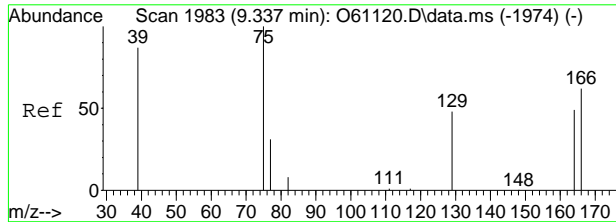
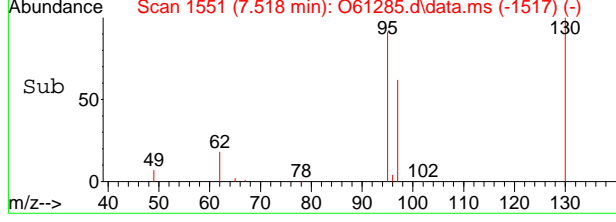
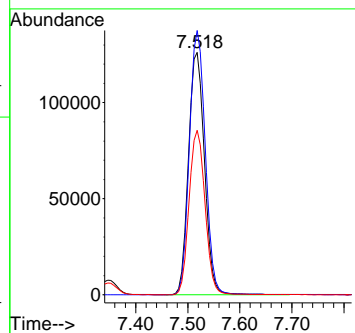
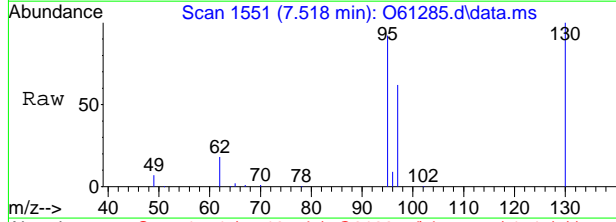




#15
 Trichloroethene
 Concen: 13.31 ug/L
 RT: 7.518 min Scan# 1551
 Delta R.T. -0.000 min
 Lab File: O61285.d
 Acq: 12 Sep 2020 2:57 pm

Tgt Ion: 95 Resp: 269304

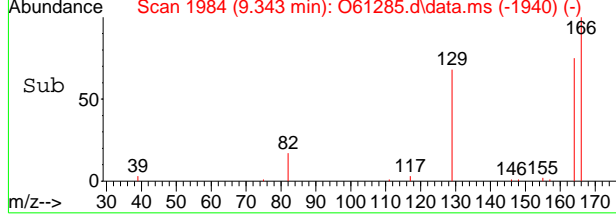
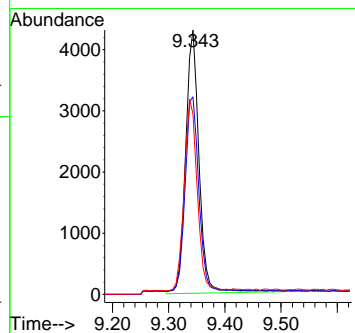
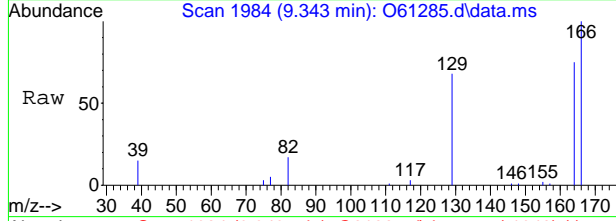
Ion	Ratio	Lower	Upper
95	100		
130	109.1	60.4	120.4
97	67.8	34.6	94.6



#21
 Tetrachloroethene
 Concen: 0.37 ug/L
 RT: 9.343 min Scan# 1984
 Delta R.T. 0.000 min
 Lab File: O61285.d
 Acq: 12 Sep 2020 2:57 pm

Tgt Ion: 166 Resp: 7141

Ion	Ratio	Lower	Upper
166	100		
164	74.3	47.3	107.3
129	67.5	37.5	97.5



7.1.17



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\091520\
 Data File : Z62372.D
 Acq On : 15 Sep 2020 7:31 pm
 Operator : JuanG
 Sample : FA78551-9
 Misc : MS47193,VZ2419,,,,,
 ALS Vial : 17 Sample Multiplier: 1

Quant Time: Sep 16 10:47:15 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Sun Sep 13 13:38:26 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	

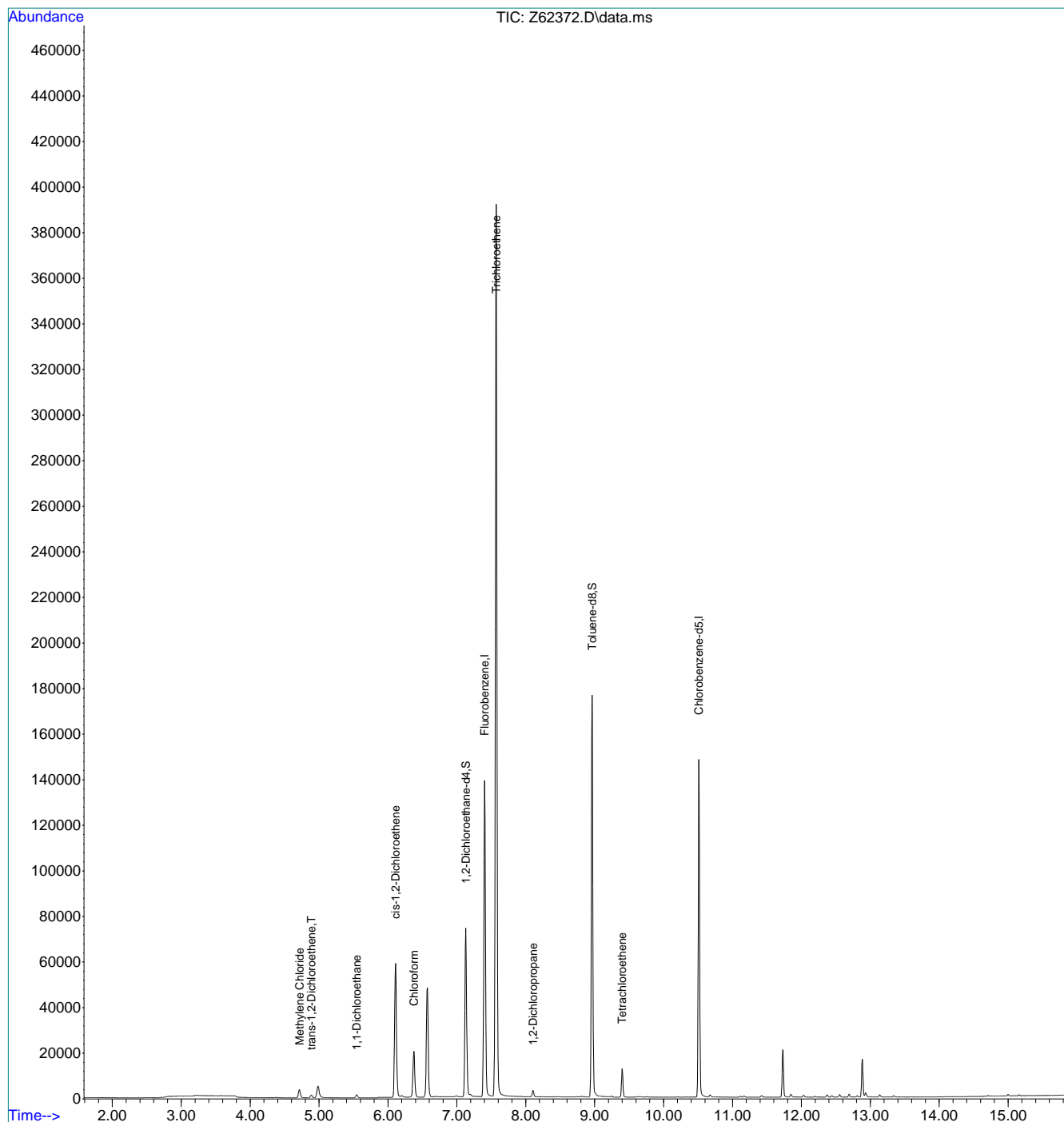
Internal Standards							
1) Fluorobenzene	7.401	96	1602425	5.00	ppb	0.00	
18) Chlorobenzene-d5	10.511	117	1314913	5.00	ppb	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.130	65	607183	6.13	ppb	0.00	
Spiked Amount	5.000	Range	79 - 125	Recovery	=	122.60%	
19) Toluene-d8	8.961	98	1547596	4.85	ppb	0.00	
Spiked Amount	5.000	Range	70 - 130	Recovery	=	97.00%	
Target Compounds							
5) Methylene Chloride	4.717	84	24366	0.15	ppb	#	87
6) trans-1,2-Dichloroethene	4.890	96	7061	0.06	ppb	#	82
7) 1,1-Dichloroethane	5.546	63	18086	0.09	ppb	#	99
8) cis-1,2-Dichloroethene	6.110	96	355405	2.70	ppb		93
9) Chloroform	6.377	83	191287	0.79	ppb		99
15) Trichloroethene	7.571	95	2098563	15.33	ppb		87
16) 1,2-Dichloropropane	8.105	63	14328	0.13	ppb		100
21) Tetrachloroethene	9.399	166	53309	0.34	ppb		99

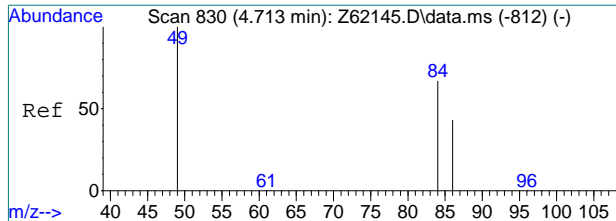
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\091520\
Data File : Z62372.D
Acq On : 15 Sep 2020 7:31 pm
Operator : JuanG
Sample : FA78551-9
Misc : MS47193,VZ2419,,,,,
ALS Vial : 17 Sample Multiplier: 1

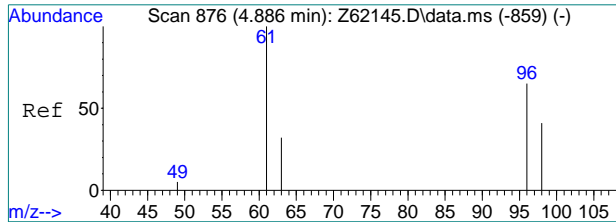
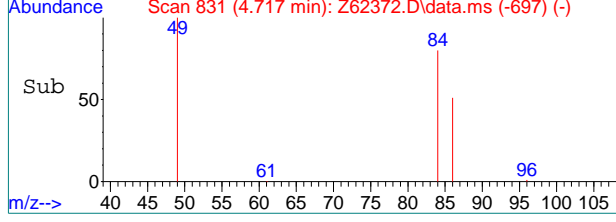
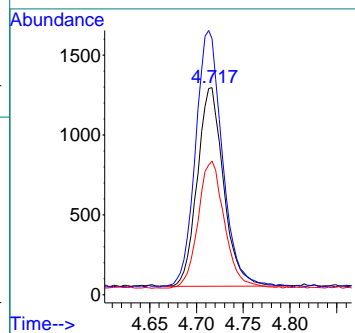
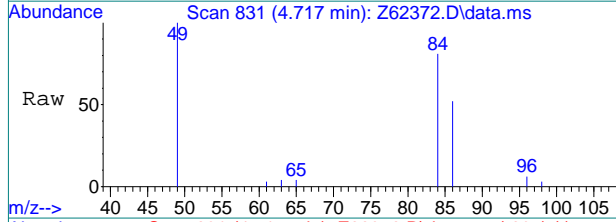
Quant Time: Sep 16 10:47:15 2020
Quant Method : C:\msdchem\1\methods\SIMCL091120.M
Quant Title : WATER-EPA 8260B
QLast Update : Sun Sep 13 13:38:26 2020
Response via : Initial Calibration





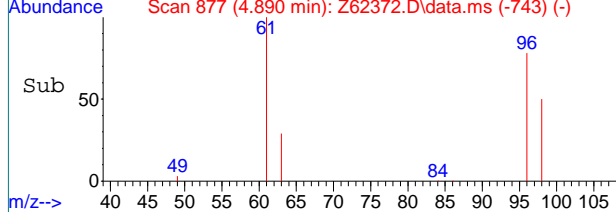
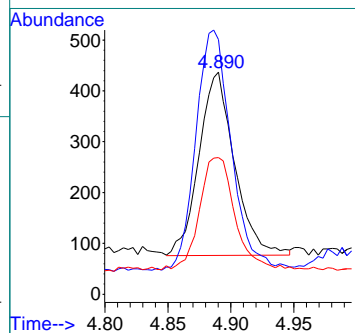
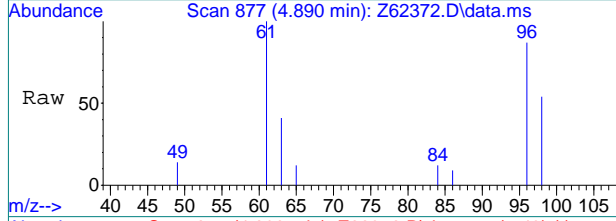
#5
 Methylene Chloride
 Concen: 0.15 ppb
 RT: 4.717 min Scan# 831
 Delta R.T. 0.004 min
 Lab File: Z62372.D
 Acq: 15 Sep 2020 7:31 pm

Tgt Ion	Resp	Lower	Upper
84	24366		
49	124.7	128.7	168.7#
86	64.0	43.9	83.9

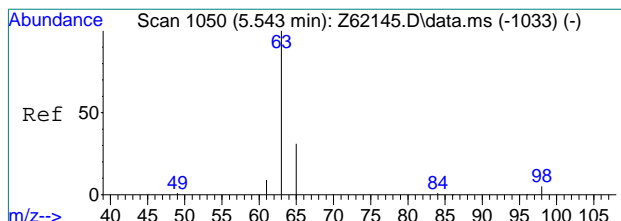


#6
 trans-1,2-Dichloroethene
 Concen: 0.06 ppb
 RT: 4.890 min Scan# 877
 Delta R.T. 0.004 min
 Lab File: Z62372.D
 Acq: 15 Sep 2020 7:31 pm

Tgt Ion	Resp	Lower	Upper
96	7061		
61	124.4	134.2	174.2#
98	59.7	43.4	83.4

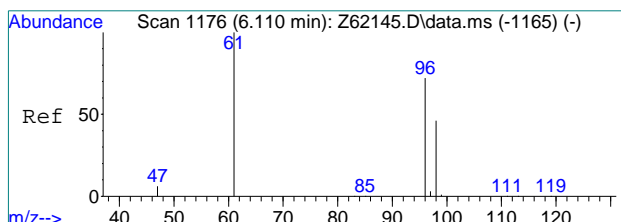
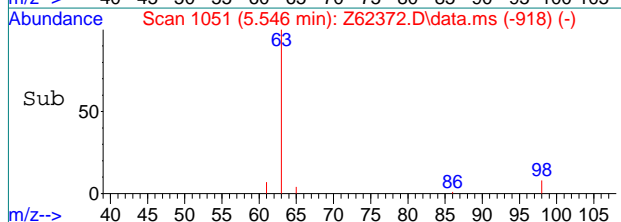
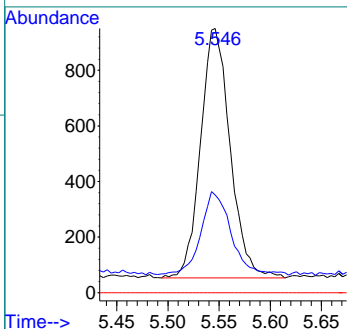
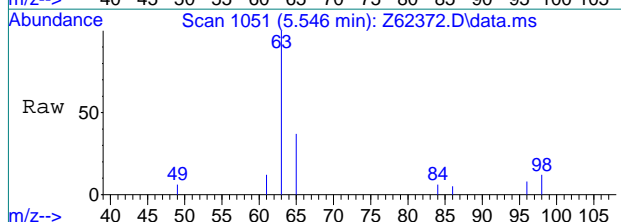


7.1.18
7



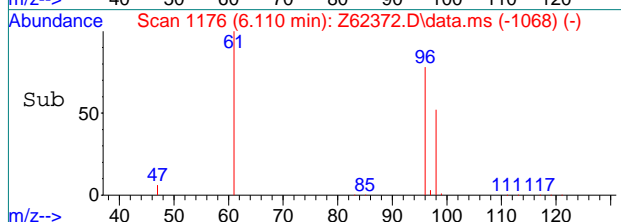
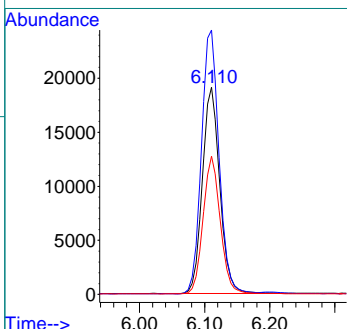
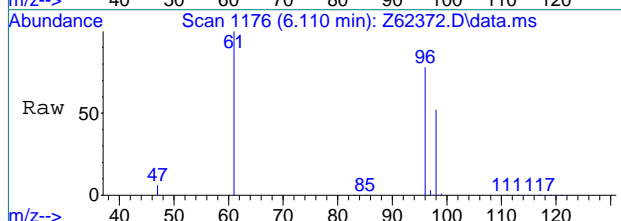
#7
 1,1-Dichloroethane
 Concen: 0.09 ppb
 RT: 5.546 min Scan# 1051
 Delta R.T. 0.000 min
 Lab File: Z62372.D
 Acq: 15 Sep 2020 7:31 pm

Tgt Ion	Resp	Lower	Upper
63	18086		
65	30.7	11.3	51.3
83	0.0	0.0	30.0

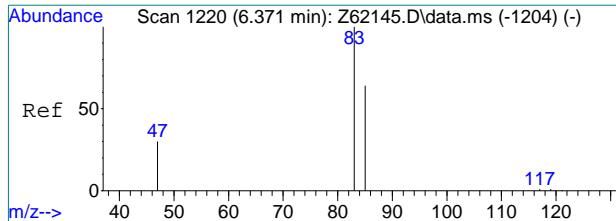


#8
 cis-1,2-Dichloroethene
 Concen: 2.70 ppb
 RT: 6.110 min Scan# 1176
 Delta R.T. 0.000 min
 Lab File: Z62372.D
 Acq: 15 Sep 2020 7:31 pm

Tgt Ion	Resp	Lower	Upper
96	355405		
61	127.9	119.3	159.3
98	66.7	44.5	84.5



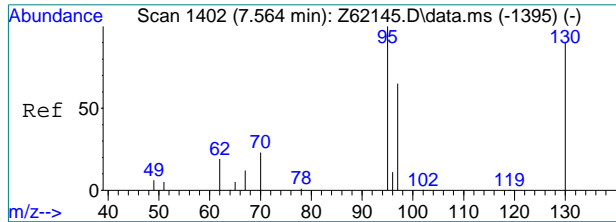
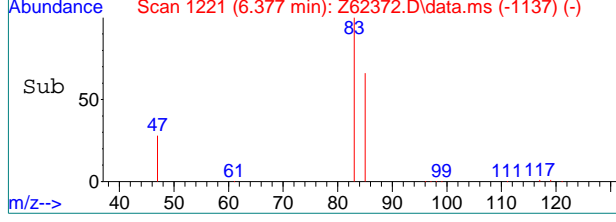
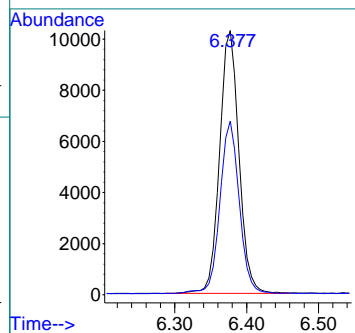
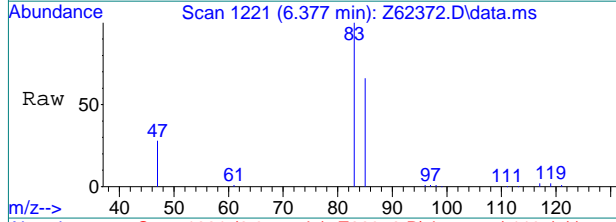
7.1.18
7



#9
 Chloroform
 Concen: 0.79 ppb
 RT: 6.377 min Scan# 1221
 Delta R.T. -0.000 min
 Lab File: Z62372.D
 Acq: 15 Sep 2020 7:31 pm

Tgt Ion: 83 Resp: 191287

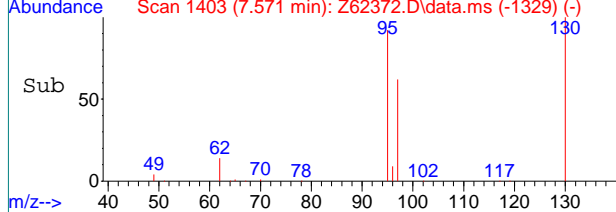
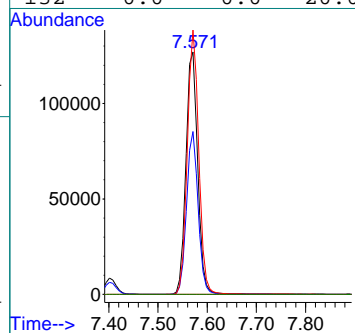
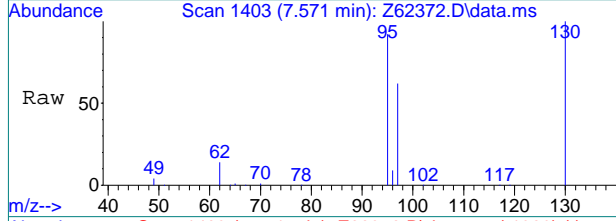
Ion	Ratio	Lower	Upper
83	100		
85	65.5	46.1	86.1



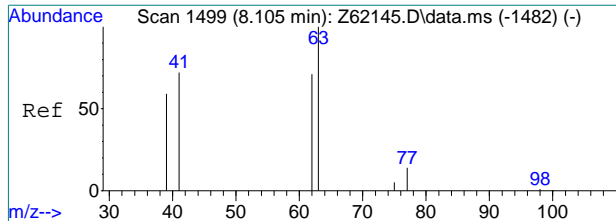
#15
 Trichloroethene
 Concen: 15.33 ppb
 RT: 7.571 min Scan# 1403
 Delta R.T. 0.000 min
 Lab File: Z62372.D
 Acq: 15 Sep 2020 7:31 pm

Tgt Ion: 95 Resp: 2098563

Ion	Ratio	Lower	Upper
95	100		
97	67.2	44.5	84.5
130	109.2	69.7	109.7
132	0.0	0.0	20.0

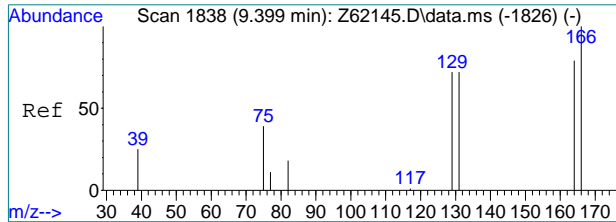
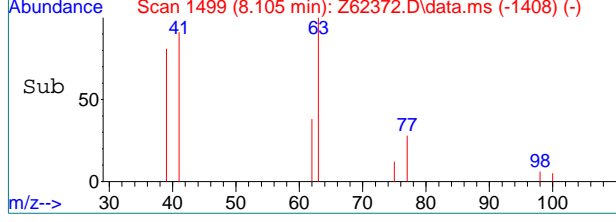
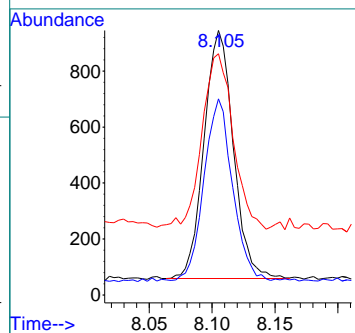
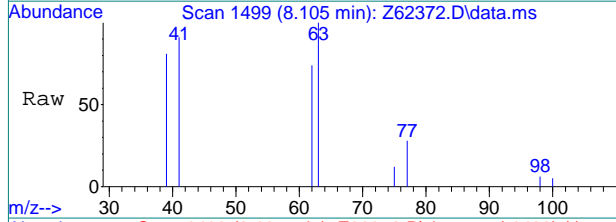


7.1.18
7



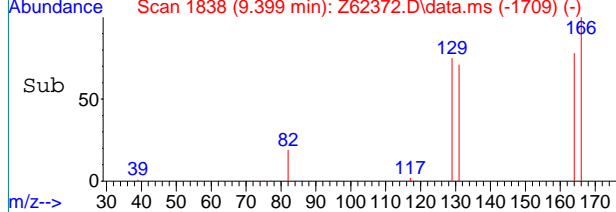
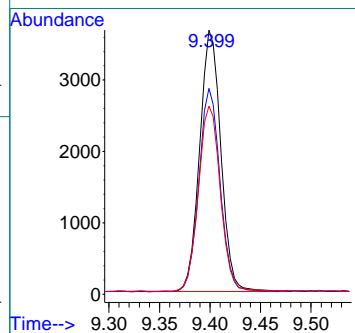
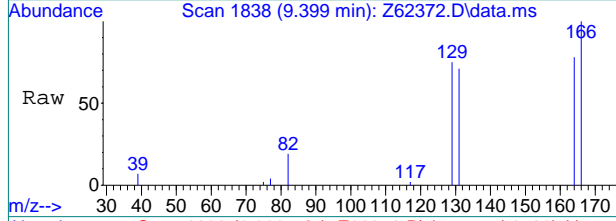
#16
 1,2-Dichloropropane
 Concen: 0.13 ppb
 RT: 8.105 min Scan# 1499
 Delta R.T. 0.000 min
 Lab File: Z62372.D
 Acq: 15 Sep 2020 7:31 pm

Tgt Ion	Resp	Lower	Upper
63	14328		
62	72.0	51.6	91.6
41	73.9	43.7	103.7



#21
 Tetrachloroethene
 Concen: 0.34 ppb
 RT: 9.399 min Scan# 1838
 Delta R.T. -0.000 min
 Lab File: Z62372.D
 Acq: 15 Sep 2020 7:31 pm

Tgt Ion	Resp	Lower	Upper
166	53309		
164	77.7	58.7	98.7
131	70.8	51.6	91.6



7.1.18
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-14-2020\VO2358\
Data File : O61286.d
Acq On : 12 Sep 2020 3:18 pm
Operator : stutip
Sample : fa78551-10
Misc : MS47193,VO2358,,,,,
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 14 07:34:28 2020
Quant Method : C:\msdchem\1\methods\SIMCL091120.M
Quant Title : Standard Methods 6200B
QLast Update : Sun Sep 13 19:20:40 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Fluorobenzene	7.346	96	208551	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.447	117	173218	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.073	65	92020	5.46	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	109.20%	
19) Toluene-d8	8.896	98	181220	4.64	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	92.80%	
Target Compounds						
8) cis-1,2-Dichloroethene	6.066	96	47666	2.49	ug/L	# 82
9) Chloroform	6.333	83	23947	0.72	ug/L	92
15) Trichloroethene	7.512	95	256486	13.08	ug/L	89
21) Tetrachloroethene	9.343	166	7182	0.38	ug/L	98

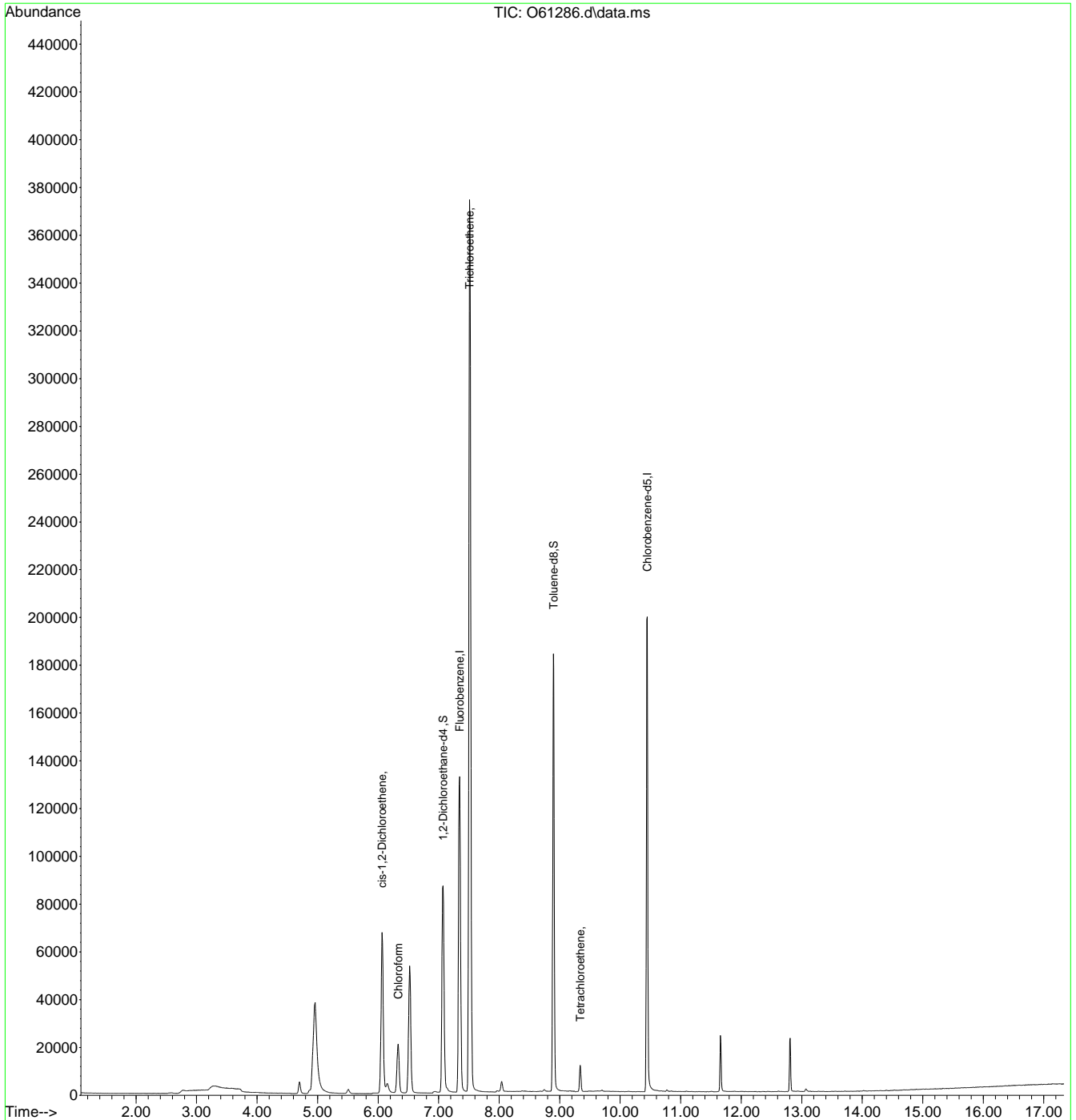
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.1.19
7

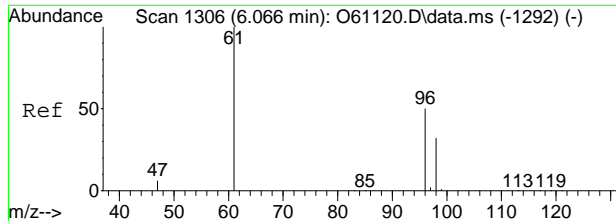
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-14-2020\VO2358\
 Data File : O61286.d
 Acq On : 12 Sep 2020 3:18 pm
 Operator : stutip
 Sample : fa78551-10
 Misc : MS47193,VO2358,,,,,
 ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 14 07:34:28 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Sun Sep 13 19:20:40 2020
 Response via : Initial Calibration



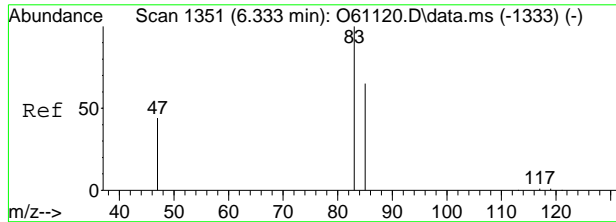
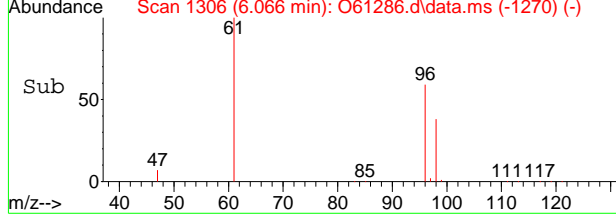
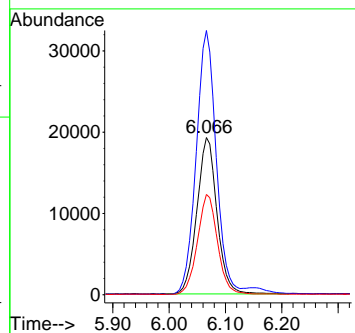
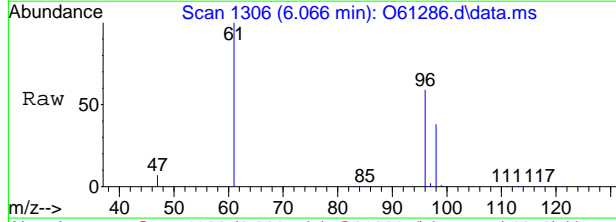
7.1.19
7



#8
 cis-1,2-Dichloroethene
 Concen: 2.49 ug/L
 RT: 6.066 min Scan# 1306
 Delta R.T. -0.006 min
 Lab File: O61286.d
 Acq: 12 Sep 2020 3:18 pm

Tgt Ion: 96 Resp: 47666

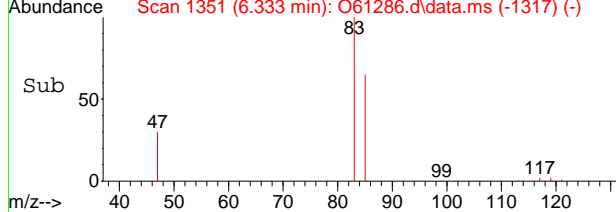
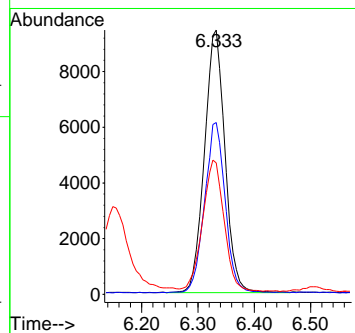
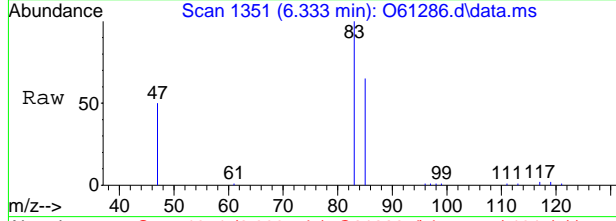
Ion	Ratio	Lower	Upper
96	100		
61	168.8	107.0	167.0#
98	63.8	34.1	94.1

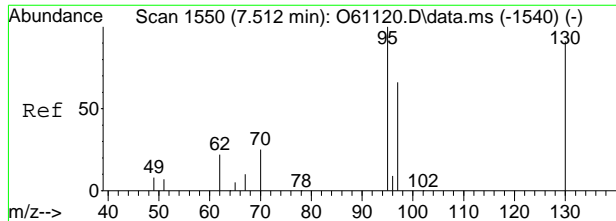


#9
 Chloroform
 Concen: 0.72 ug/L
 RT: 6.333 min Scan# 1351
 Delta R.T. -0.000 min
 Lab File: O61286.d
 Acq: 12 Sep 2020 3:18 pm

Tgt Ion: 83 Resp: 23947

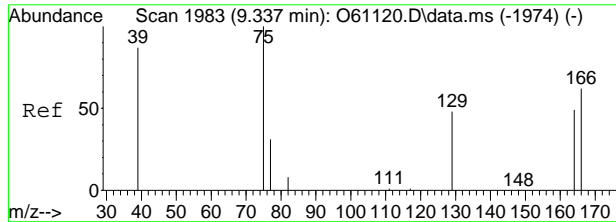
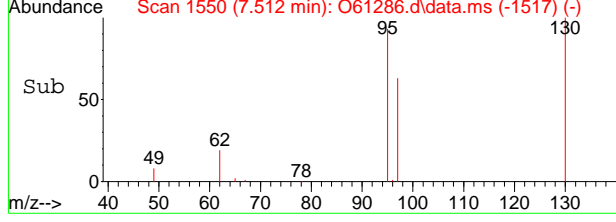
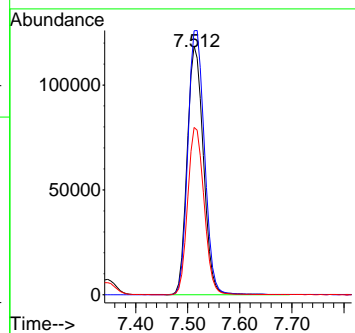
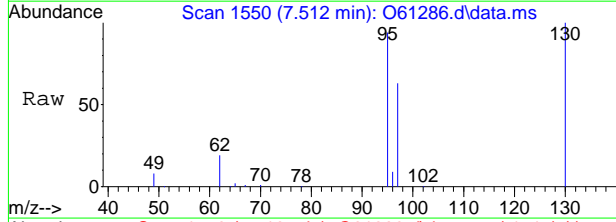
Ion	Ratio	Lower	Upper
83	100		
85	64.7	33.0	93.0
47	48.7	8.1	68.1





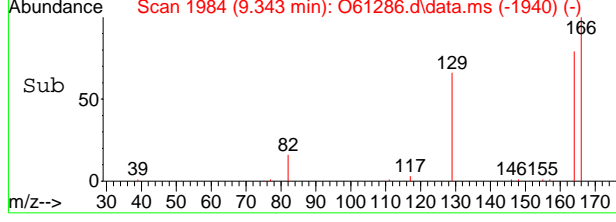
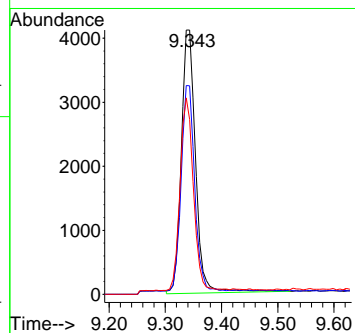
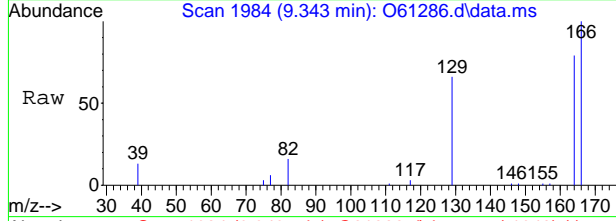
#15
 Trichloroethene
 Concen: 13.08 ug/L
 RT: 7.512 min Scan# 1550
 Delta R.T. -0.006 min
 Lab File: O61286.d
 Acq: 12 Sep 2020 3:18 pm

Tgt Ion	Resp	Lower	Upper
95	256486		
130	106.2	60.4	120.4
97	67.3	34.6	94.6



#21
 Tetrachloroethene
 Concen: 0.38 ug/L
 RT: 9.343 min Scan# 1984
 Delta R.T. 0.000 min
 Lab File: O61286.d
 Acq: 12 Sep 2020 3:18 pm

Tgt Ion	Resp	Lower	Upper
166	7182		
164	78.5	47.3	107.3
129	65.4	37.5	97.5



7.1.19
7



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\091520\
 Data File : Z62373.D
 Acq On : 15 Sep 2020 7:51 pm
 Operator : JuanG
 Sample : FA78551-10
 Misc : MS47193,VZ2419,,,,,
 ALS Vial : 18 Sample Multiplier: 1

Quant Time: Sep 16 10:47:17 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Sun Sep 13 13:38:26 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	

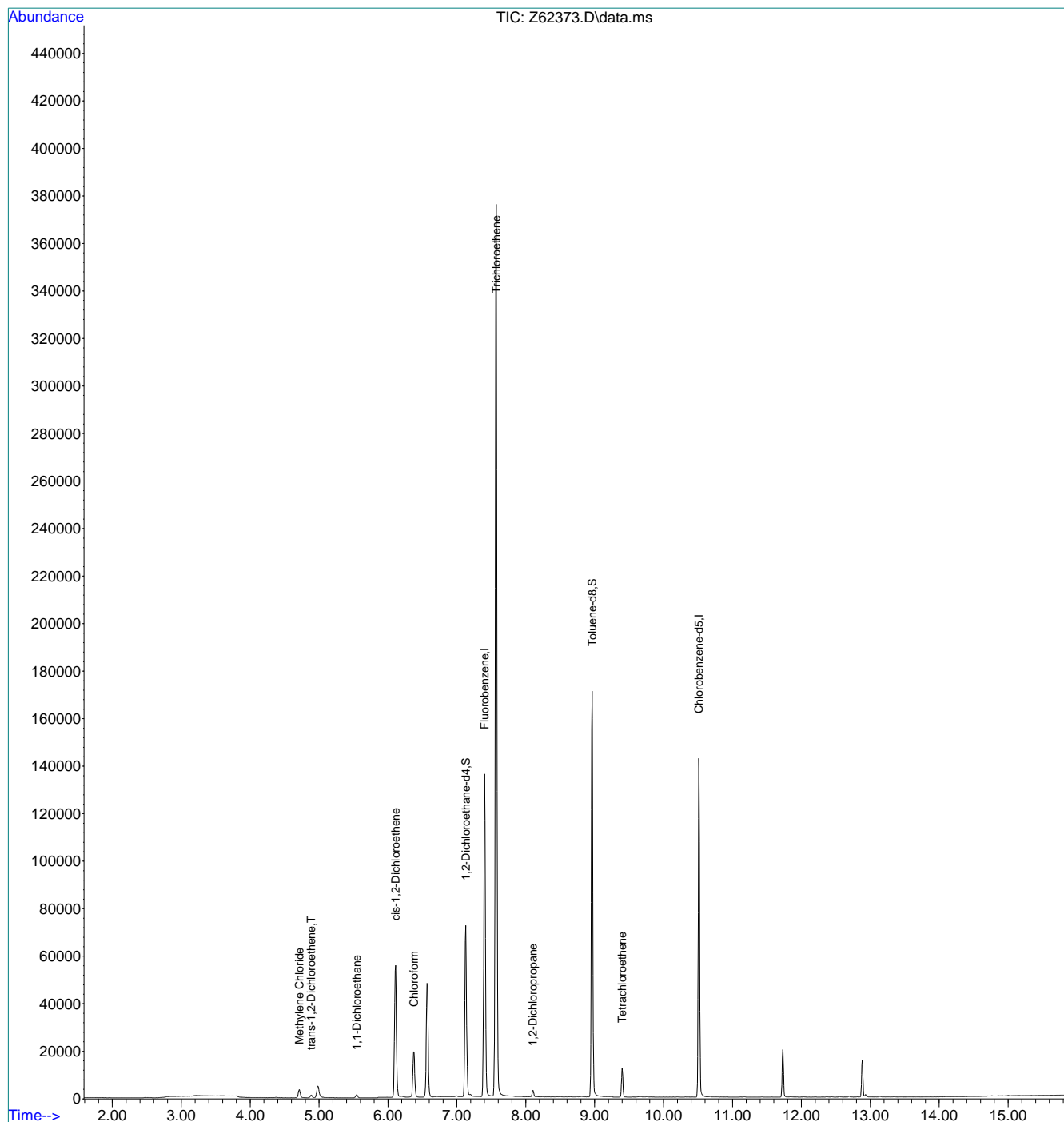
Internal Standards							
1) Fluorobenzene	7.401	96	1548226	5.00	ppb	0.00	
18) Chlorobenzene-d5	10.511	117	1277318	5.00	ppb	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.130	65	595187	6.21	ppb	0.00	
Spiked Amount	5.000	Range	79 - 125	Recovery	=	124.20%	
19) Toluene-d8	8.961	98	1497123	4.83	ppb	0.00	
Spiked Amount	5.000	Range	70 - 130	Recovery	=	96.60%	
Target Compounds							
5) Methylene Chloride	4.713	84	23961	0.16	ppb	#	87
6) trans-1,2-Dichloroethene	4.886	96	6381	0.06	ppb		88
7) 1,1-Dichloroethane	5.546	63	17046	0.09	ppb	#	96
8) cis-1,2-Dichloroethene	6.110	96	339954	2.68	ppb		92
9) Chloroform	6.377	83	186683	0.80	ppb		99
15) Trichloroethene	7.571	95	2031883	15.37	ppb	#	85
16) 1,2-Dichloropropane	8.101	63	14041	0.13	ppb		98
21) Tetrachloroethene	9.399	166	52546	0.34	ppb		99

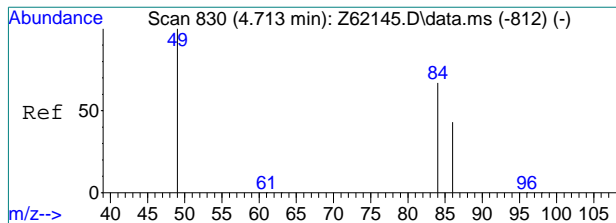
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\091520\
Data File : Z62373.D
Acq On : 15 Sep 2020 7:51 pm
Operator : JuanG
Sample : FA78551-10
Misc : MS47193,VZ2419,,,,,
ALS Vial : 18 Sample Multiplier: 1

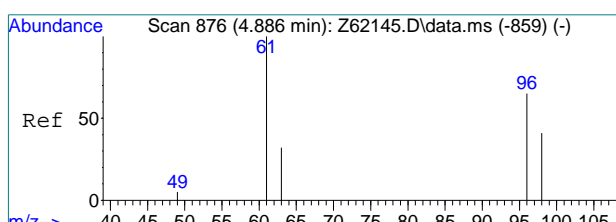
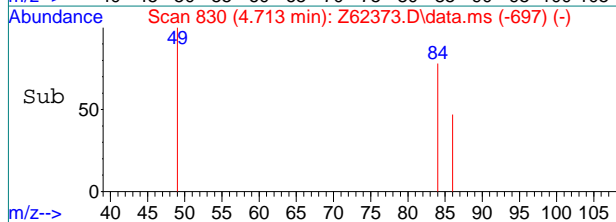
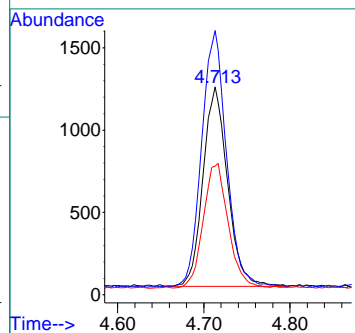
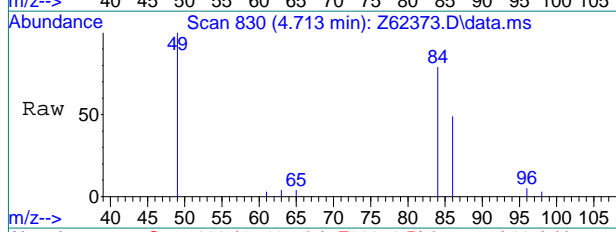
Quant Time: Sep 16 10:47:17 2020
Quant Method : C:\msdchem\1\methods\SIMCL091120.M
Quant Title : WATER-EPA 8260B
QLast Update : Sun Sep 13 13:38:26 2020
Response via : Initial Calibration





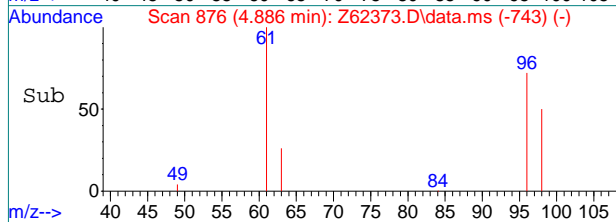
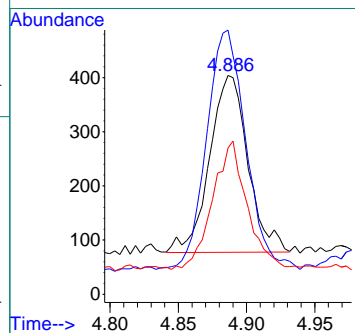
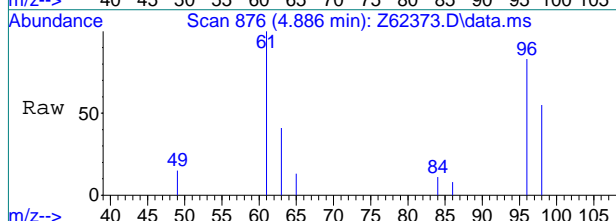
#5
 Methylene Chloride
 Concen: 0.16 ppb
 RT: 4.713 min Scan# 830
 Delta R.T. -0.000 min
 Lab File: Z62373.D
 Acq: 15 Sep 2020 7:51 pm

Tgt Ion	Resp	Lower	Upper
84	23961		
49	128.2	128.7	168.7#
86	60.7	43.9	83.9

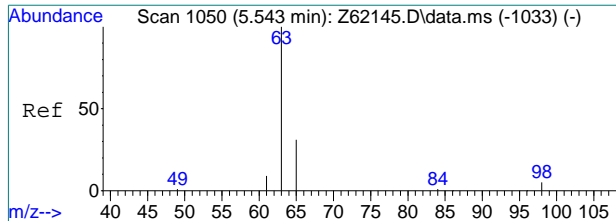


#6
 trans-1,2-Dichloroethene
 Concen: 0.06 ppb
 RT: 4.886 min Scan# 876
 Delta R.T. 0.000 min
 Lab File: Z62373.D
 Acq: 15 Sep 2020 7:51 pm

Tgt Ion	Resp	Lower	Upper
96	6381		
61	134.7	134.2	174.2
98	67.5	43.4	83.4

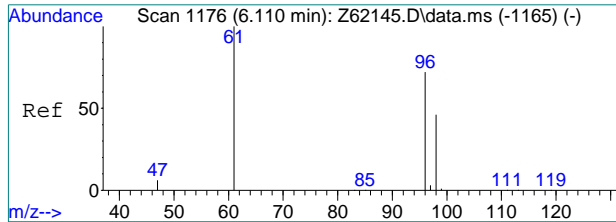
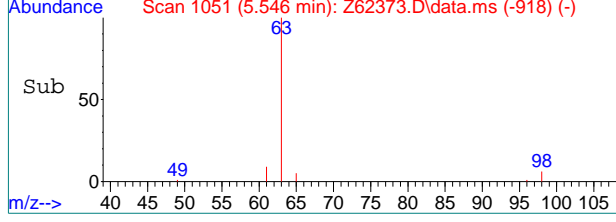
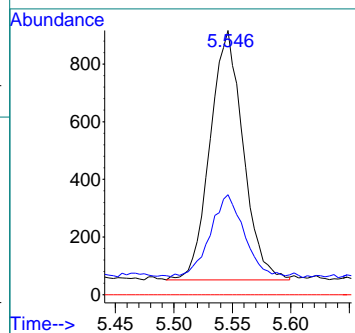
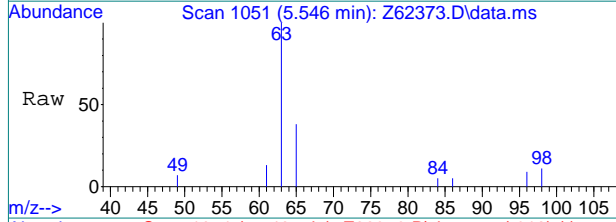


7.1.20
7



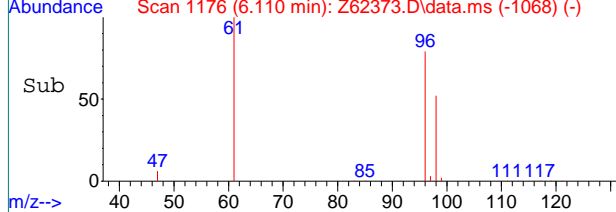
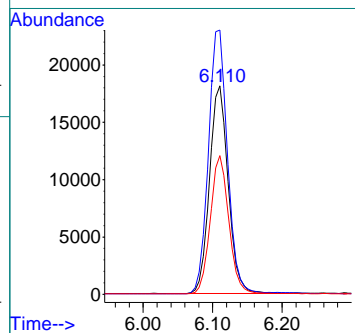
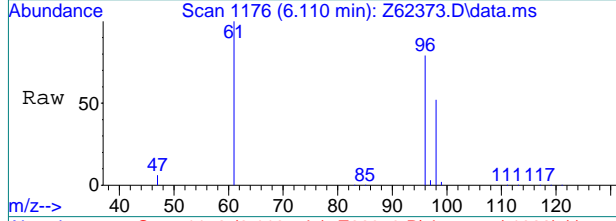
#7
 1,1-Dichloroethane
 Concen: 0.09 ppb
 RT: 5.546 min Scan# 1051
 Delta R.T. 0.000 min
 Lab File: Z62373.D
 Acq: 15 Sep 2020 7:51 pm

Tgt Ion	Resp	Lower	Upper
63	17046		
65	33.4	11.3	51.3
83	0.0	0.0	30.0

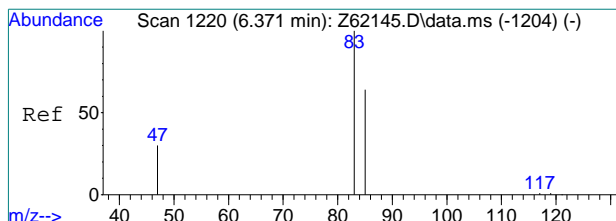


#8
 cis-1,2-Dichloroethene
 Concen: 2.68 ppb
 RT: 6.110 min Scan# 1176
 Delta R.T. 0.000 min
 Lab File: Z62373.D
 Acq: 15 Sep 2020 7:51 pm

Tgt Ion	Resp	Lower	Upper
96	339954		
61	127.0	119.3	159.3
98	66.5	44.5	84.5

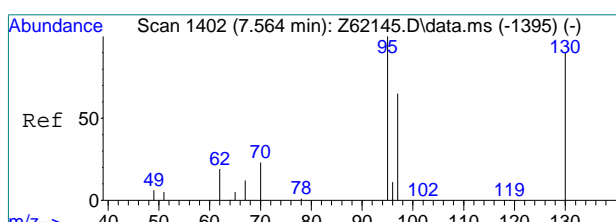
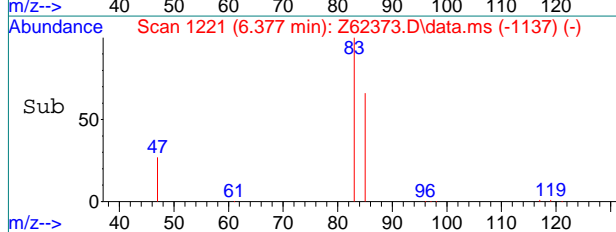
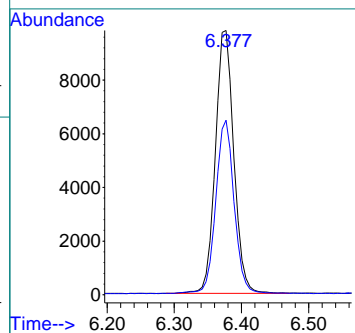
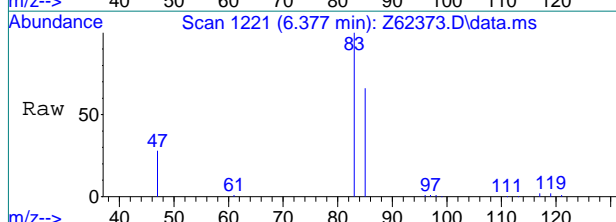


7.1.20
 7



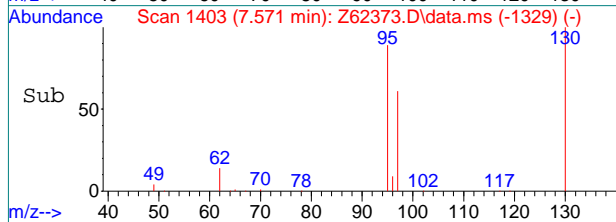
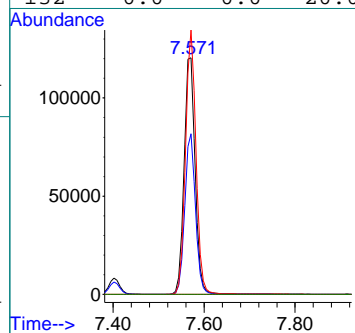
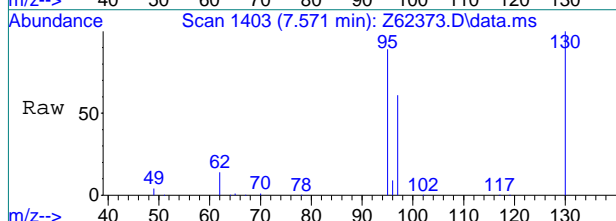
#9
 Chloroform
 Concen: 0.80 ppb
 RT: 6.377 min Scan# 1221
 Delta R.T. -0.000 min
 Lab File: Z62373.D
 Acq: 15 Sep 2020 7:51 pm

Tgt Ion	Resp	Lower	Upper
83	186683		
85	65.4	46.1	86.1

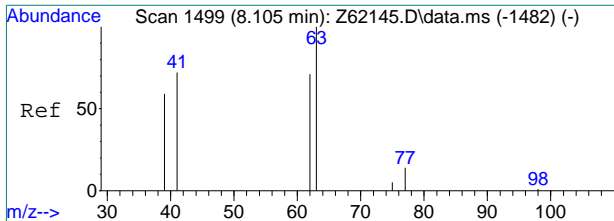


#15
 Trichloroethene
 Concen: 15.37 ppb
 RT: 7.571 min Scan# 1403
 Delta R.T. -0.000 min
 Lab File: Z62373.D
 Acq: 15 Sep 2020 7:51 pm

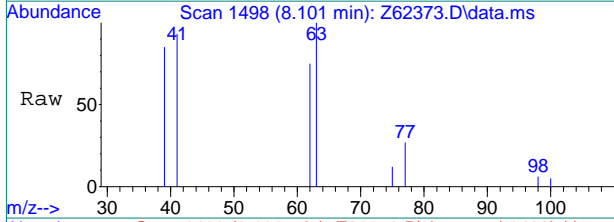
Tgt Ion	Resp	Lower	Upper
95	2031883		
97	67.8	44.5	84.5
130	111.8	69.7	109.7#
132	0.0	0.0	20.0



7.1.20
7

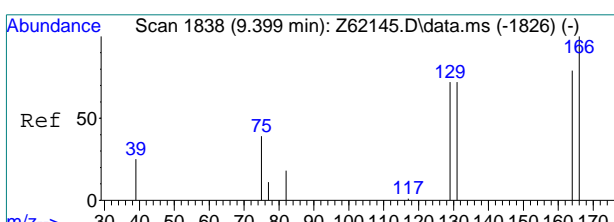
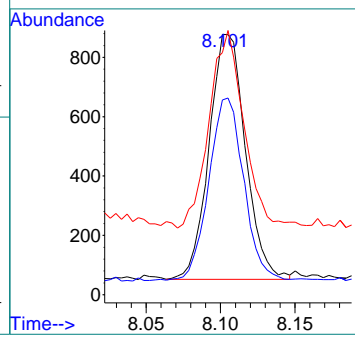
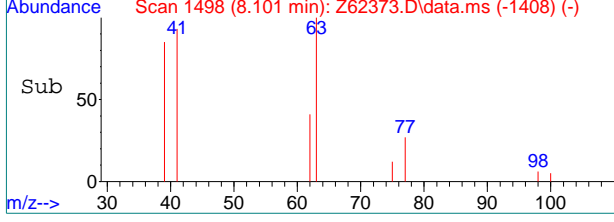


#16
 1,2-Dichloropropane
 Concen: 0.13 ppb
 RT: 8.101 min Scan# 1498
 Delta R.T. -0.004 min
 Lab File: Z62373.D
 Acq: 15 Sep 2020 7:51 pm

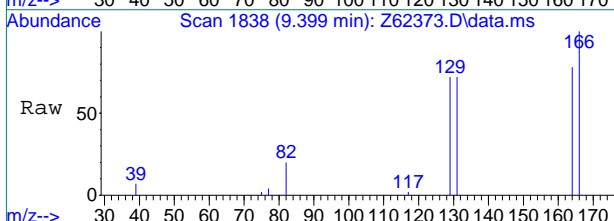


Tgt Ion: 63 Resp: 14041

Ion	Ratio	Lower	Upper
63	100		
62	72.1	51.6	91.6
41	77.2	43.7	103.7

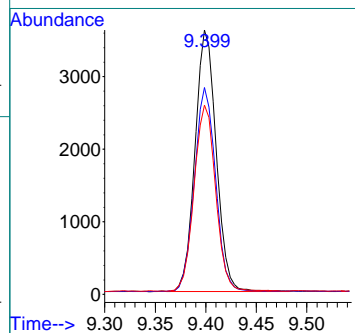
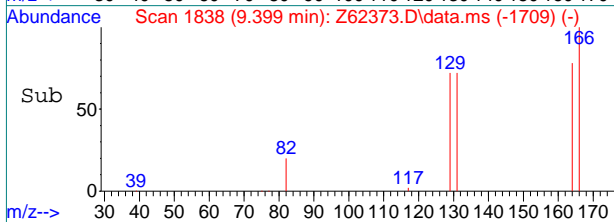


#21
 Tetrachloroethene
 Concen: 0.34 ppb
 RT: 9.399 min Scan# 1838
 Delta R.T. -0.000 min
 Lab File: Z62373.D
 Acq: 15 Sep 2020 7:51 pm



Tgt Ion: 166 Resp: 52546

Ion	Ratio	Lower	Upper
166	100		
164	77.9	58.7	98.7
131	71.1	51.6	91.6



7.1.20
 7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-14-2020\VO2358\
Data File : O61287.d
Acq On : 12 Sep 2020 3:38 pm
Operator : stutip
Sample : fa78551-11
Misc : MS47193,VO2358,,,,,
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 14 07:34:54 2020
Quant Method : C:\msdchem\1\methods\SIMCL091120.M
Quant Title : Standard Methods 6200B
QLast Update : Sun Sep 13 19:20:40 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Fluorobenzene	7.346	96	208100	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.447	117	169973	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.073	65	91527	5.45	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	109.00%	
19) Toluene-d8	8.896	98	177320	4.63	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	92.60%	
Target Compounds						
15) Trichloroethene	7.512	95	9112	0.47	ug/L	Qvalue 92

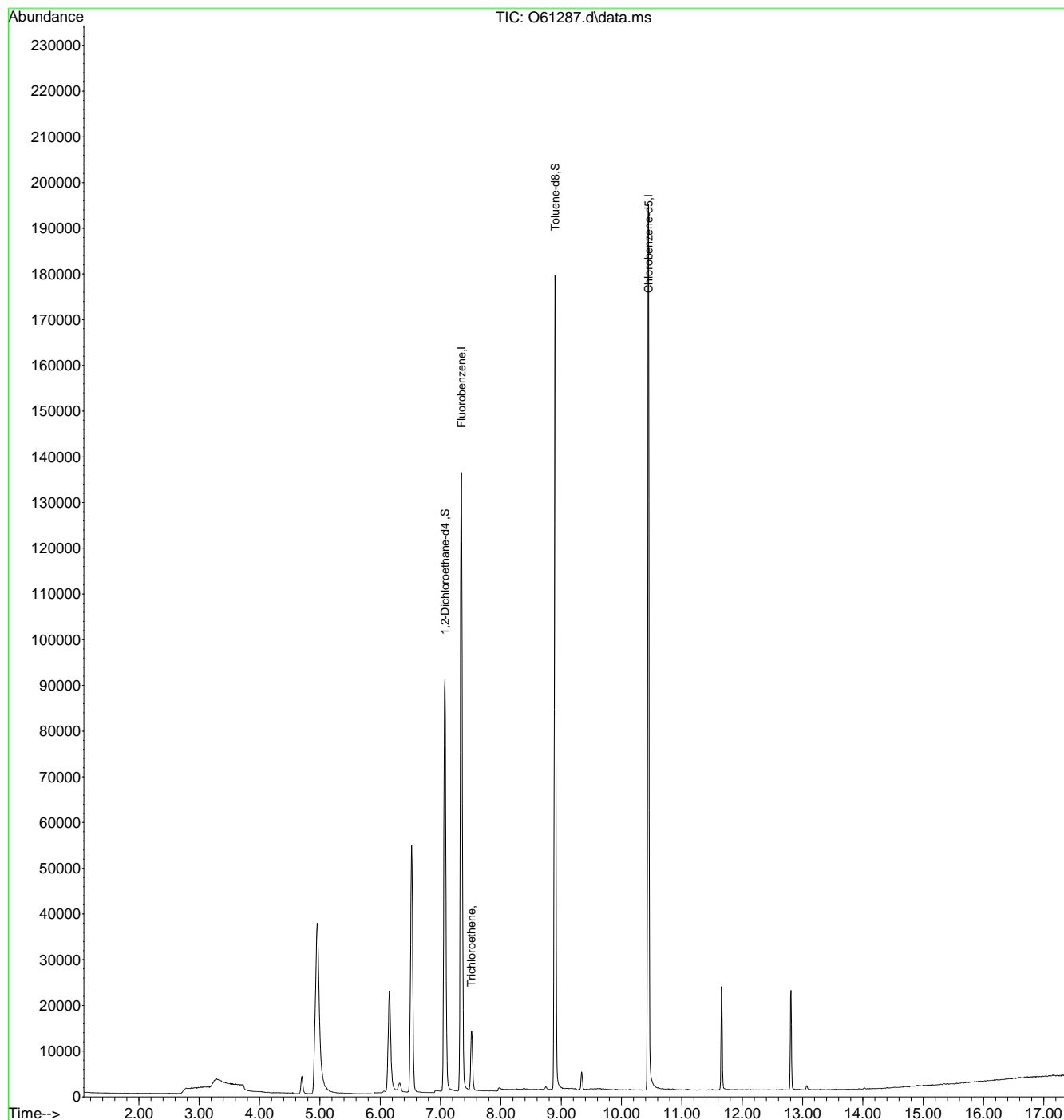
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.1.21
7

Quantitation Report (QT Reviewed)

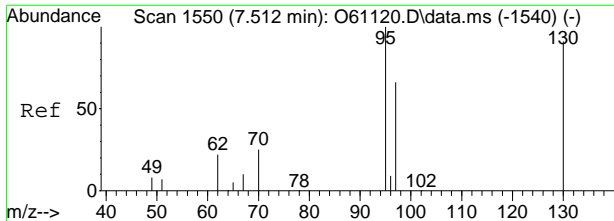
Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-14-2020\VO2358\
Data File : O61287.d
Acq On : 12 Sep 2020 3:38 pm
Operator : stutip
Sample : fa78551-11
Misc : MS47193,VO2358,,,,,
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 14 07:34:54 2020
Quant Method : C:\msdchem\1\methods\SIMCL091120.M
Quant Title : Standard Methods 6200B
QLast Update : Sun Sep 13 19:20:40 2020
Response via : Initial Calibration



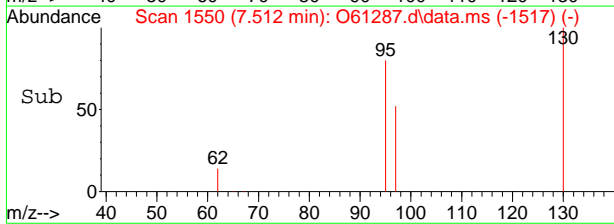
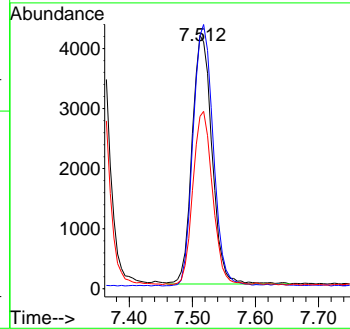
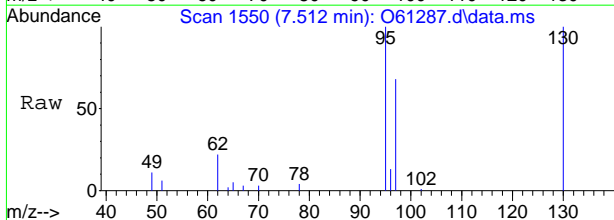
7.1.21
7





#15
 Trichloroethene
 Concen: 0.47 ug/L
 RT: 7.512 min Scan# 1550
 Delta R.T. -0.006 min
 Lab File: O61287.d
 Acq: 12 Sep 2020 3:38 pm

Tgt Ion	Ratio	Lower	Upper
95	100		
130	100.5	60.4	120.4
97	67.6	34.6	94.6



7.1.21
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\091520\
 Data File : Z62374.D
 Acq On : 15 Sep 2020 8:10 pm
 Operator : JuanG
 Sample : FA78551-11
 Misc : MS47193,VZ2419,,,,,
 ALS Vial : 19 Sample Multiplier: 1

Quant Time: Sep 16 10:47:19 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Sun Sep 13 13:38:26 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

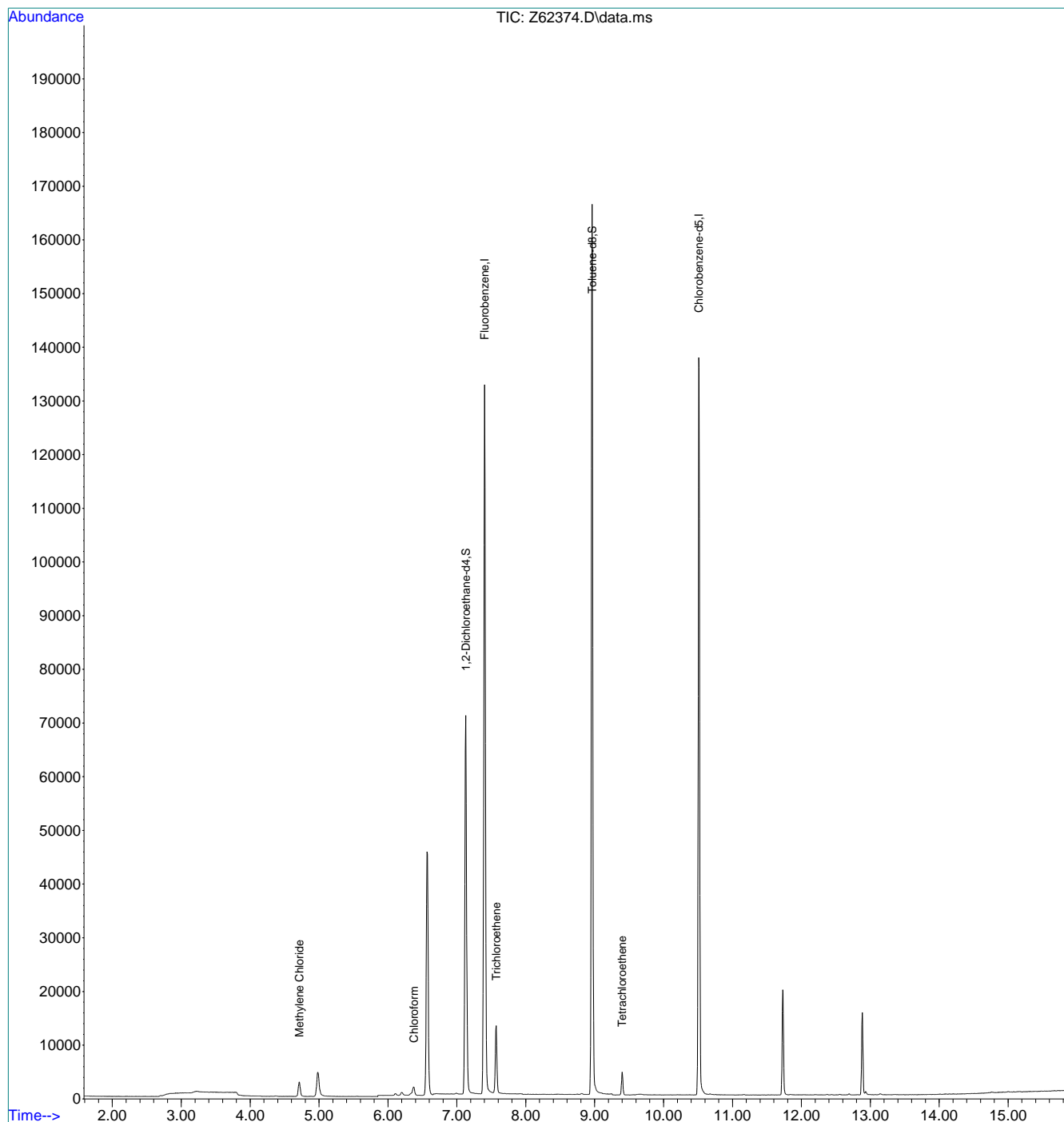
Internal Standards						
1) Fluorobenzene	7.401	96	1519534	5.00	ppb	0.00
18) Chlorobenzene-d5	10.511	117	1253366	5.00	ppb	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.130	65	588201	6.26	ppb	0.00
Spiked Amount	5.000	Range 79 - 125	Recovery	=	125.20%#	
19) Toluene-d8	8.961	98	1457994	4.79	ppb	0.00
Spiked Amount	5.000	Range 70 - 130	Recovery	=	95.80%	
Target Compounds						
5) Methylene Chloride	4.713	84	19235	0.13	ppb	# 83
9) Chloroform	6.377	83	14084	0.06	ppb	100
15) Trichloroethene	7.571	95	69256	0.53	ppb	# 85
21) Tetrachloroethene	9.399	166	17961	0.12	ppb	97

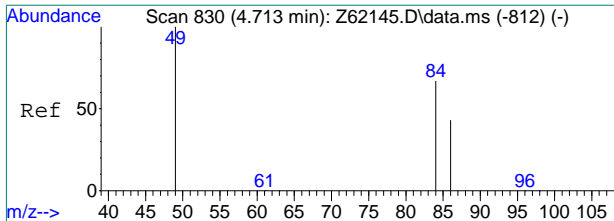
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\091520\
Data File : Z62374.D
Acq On : 15 Sep 2020 8:10 pm
Operator : JuanG
Sample : FA78551-11
Misc : MS47193,VZ2419,,,,,
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Sep 16 10:47:19 2020
Quant Method : C:\msdchem\1\methods\SIMCL091120.M
Quant Title : WATER-EPA 8260B
QLast Update : Sun Sep 13 13:38:26 2020
Response via : Initial Calibration

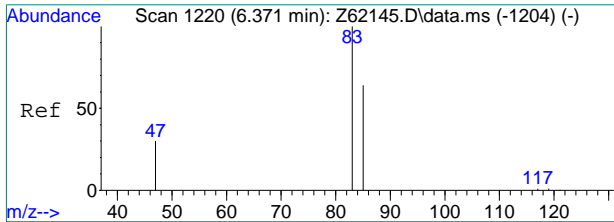
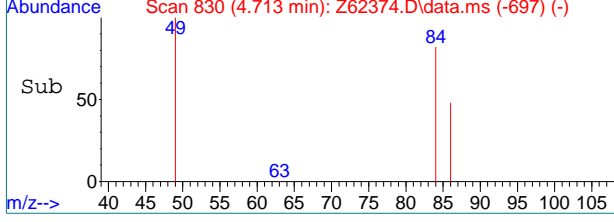
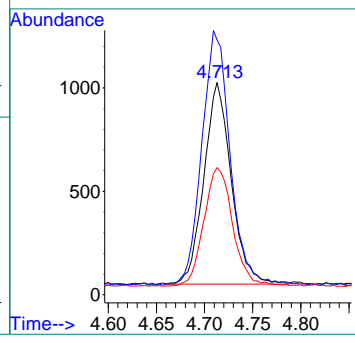
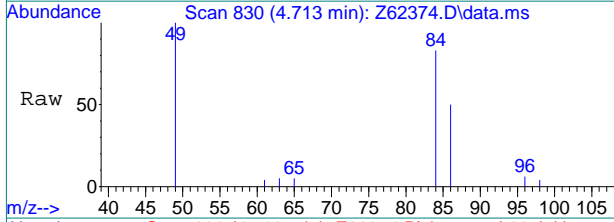




#5
 Methylene Chloride
 Concen: 0.13 ppb
 RT: 4.713 min Scan# 830
 Delta R.T. 0.000 min
 Lab File: Z62374.D
 Acq: 15 Sep 2020 8:10 pm

Tgt Ion: 84 Resp: 19235

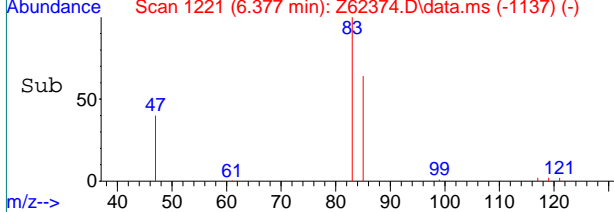
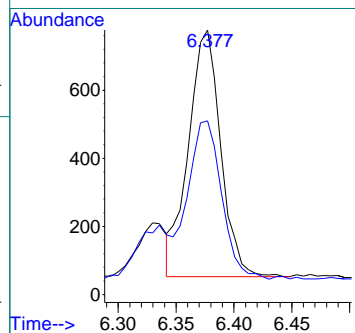
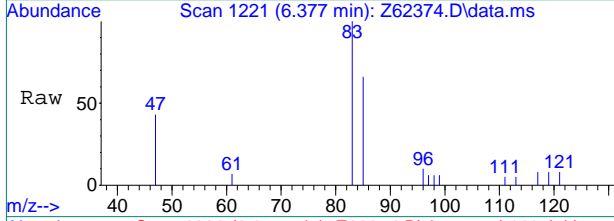
Ion	Ratio	Lower	Upper
84	100		
49	121.0	128.7	168.7#
86	58.8	43.9	83.9



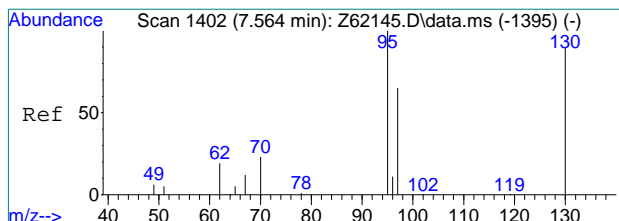
#9
 Chloroform
 Concen: 0.06 ppb
 RT: 6.377 min Scan# 1221
 Delta R.T. 0.000 min
 Lab File: Z62374.D
 Acq: 15 Sep 2020 8:10 pm

Tgt Ion: 83 Resp: 14084

Ion	Ratio	Lower	Upper
83	100		
85	65.7	46.1	86.1

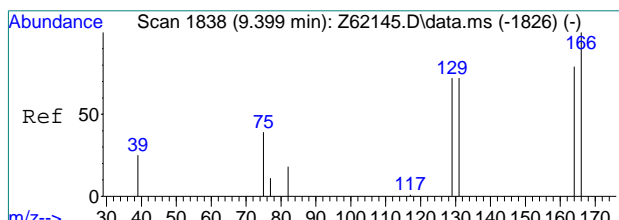
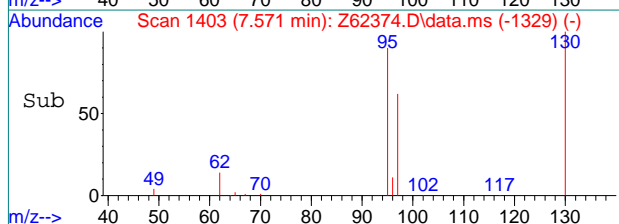
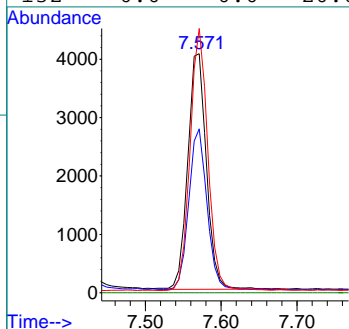
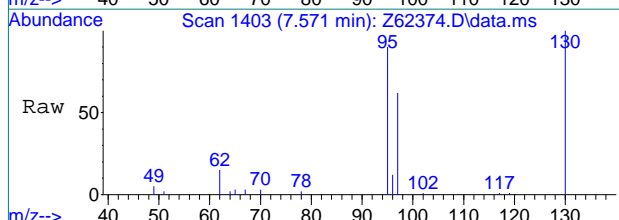


7.1.22
7



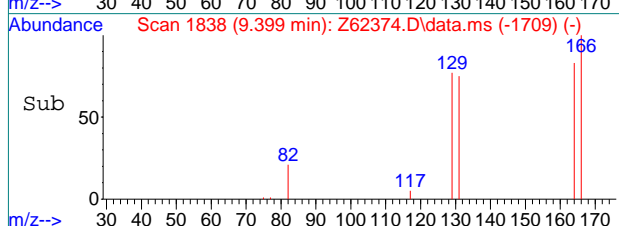
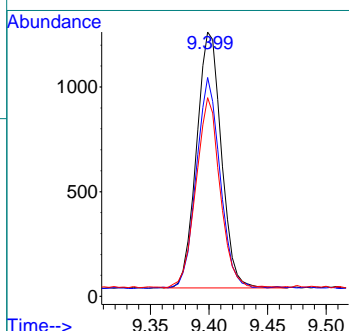
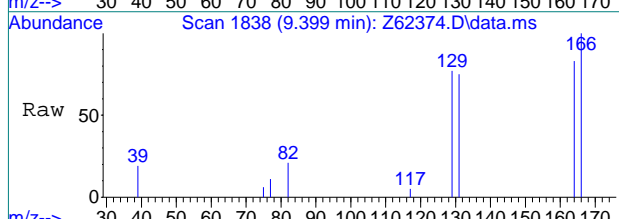
#15
 Trichloroethene
 Concen: 0.53 ppb
 RT: 7.571 min Scan# 1403
 Delta R.T. 0.000 min
 Lab File: Z62374.D
 Acq: 15 Sep 2020 8:10 pm

Tgt Ion	Resp	Lower	Upper
95	69256		
97	68.4	44.5	84.5
130	111.4	69.7	109.7#
132	0.0	0.0	20.0



#21
 Tetrachloroethene
 Concen: 0.12 ppb
 RT: 9.399 min Scan# 1838
 Delta R.T. -0.000 min
 Lab File: Z62374.D
 Acq: 15 Sep 2020 8:10 pm

Tgt Ion	Resp	Lower	Upper
166	17961		
164	82.1	58.7	98.7
131	74.1	51.6	91.6



7.1.22
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-14-2020\VO2359\
Data File : O61298.d
Acq On : 12 Sep 2020 7:43 pm
Operator : stutip
Sample : fa78551-12
Misc : MS47193,VO2359,,,,,
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 14 07:56:46 2020
Quant Method : C:\msdchem\1\methods\SIMCL091120.M
Quant Title : Standard Methods 6200B
QLast Update : Sun Sep 13 19:20:40 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Fluorobenzene	7.346	96	231482	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.447	117	184213	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.074	65	98115	5.25	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	105.00%	
19) Toluene-d8	8.896	98	199950	4.81	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	96.20%	
Target Compounds						
4) 1,1-Dichloroethene	4.092	61	24122	0.75	ug/L	91
5) Methylene Chloride	4.703	49	28402	0.57	ug/L	94
7) 1,1-Dichloroethane	5.514	63	430068	10.02	ug/L	100
8) cis-1,2-Dichloroethene	6.066	96	7483	0.35	ug/L	84
9) Chloroform	6.333	83	190363	5.16	ug/L	94
15) Trichloroethene	7.512	95	120196	5.52	ug/L	89
16) 1,2-Dichloropropane	8.043	63	19693	0.82	ug/L	94
21) Tetrachloroethene	9.343	166	149841	7.40	ug/L	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

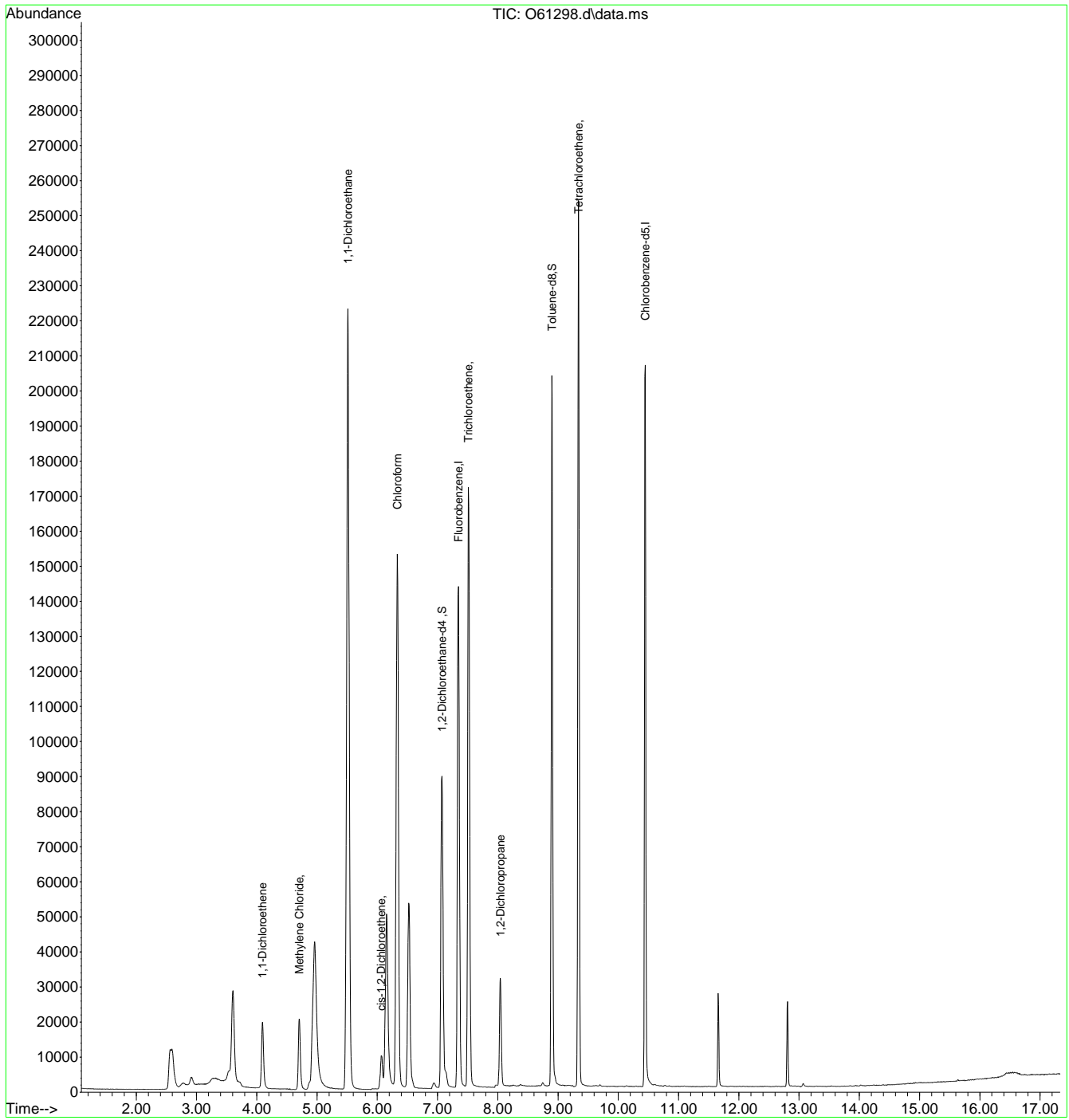
7.1.23
7



Quantitation Report (QT Reviewed)

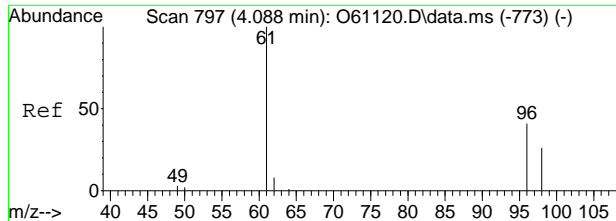
Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-14-2020\VO2359\
Data File : O61298.d
Acq On : 12 Sep 2020 7:43 pm
Operator : stutip
Sample : fa78551-12
Misc : MS47193,VO2359,,,,,
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 14 07:56:46 2020
Quant Method : C:\msdchem\1\methods\SIMCL091120.M
Quant Title : Standard Methods 6200B
QLast Update : Sun Sep 13 19:20:40 2020
Response via : Initial Calibration



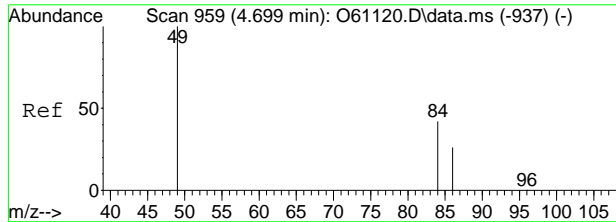
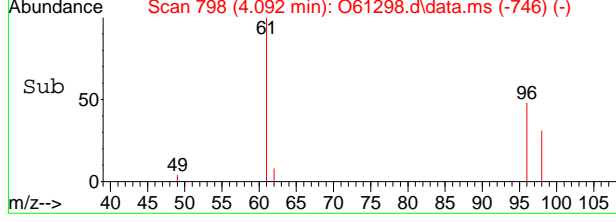
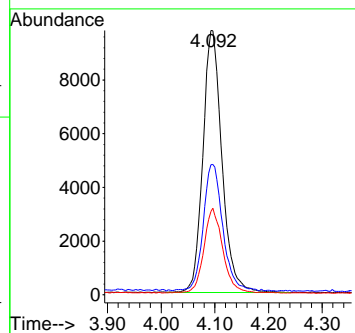
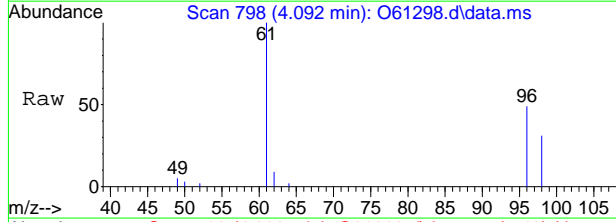
7.1.23
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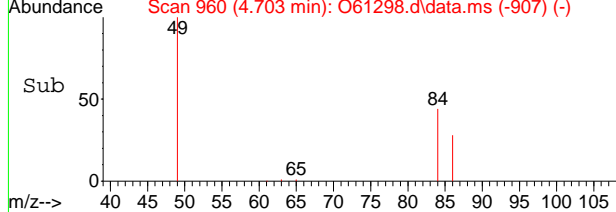
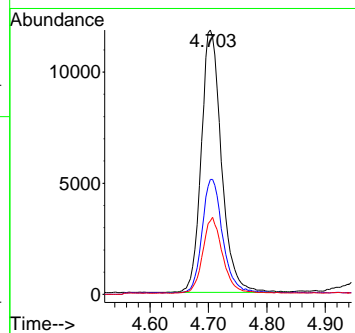
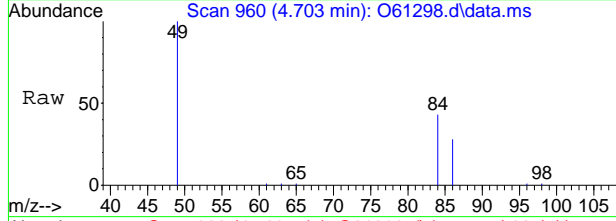
#4
 1,1-Dichloroethene
 Concen: 0.75 ug/L
 RT: 4.092 min Scan# 798
 Delta R.T. -0.004 min
 Lab File: O61298.d
 Acq: 12 Sep 2020 7:43 pm

Tgt Ion	Resp	Lower	Upper
61	24122		
96	48.1	25.4	85.4
98	31.1	5.9	65.9



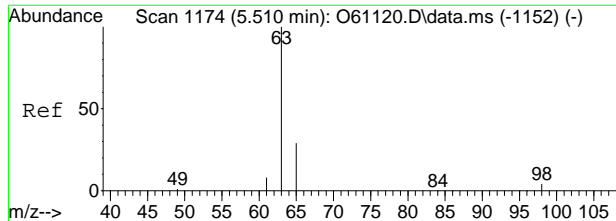
#5
 Methylene Chloride
 Concen: 0.57 ug/L
 RT: 4.703 min Scan# 960
 Delta R.T. 0.000 min
 Lab File: O61298.d
 Acq: 12 Sep 2020 7:43 pm

Tgt Ion	Resp	Lower	Upper
49	28402		
84	43.0	17.9	77.9
86	27.4	0.0	59.8



7.1.23
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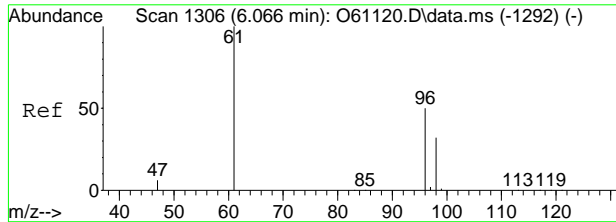
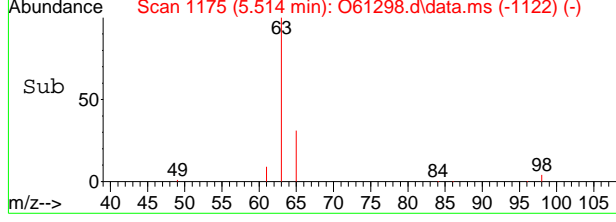
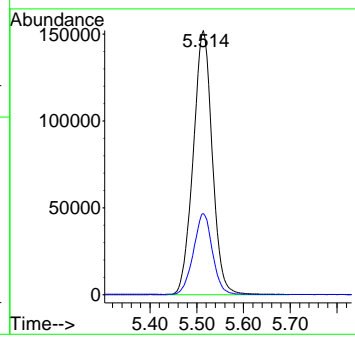
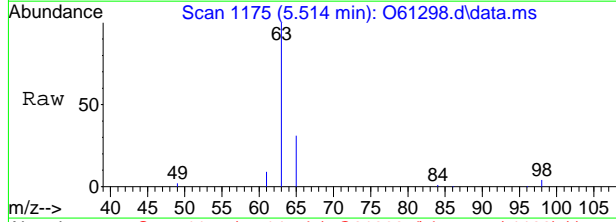




#7
 1,1-Dichloroethane
 Concen: 10.02 ug/L
 RT: 5.514 min Scan# 1175
 Delta R.T. -0.000 min
 Lab File: O61298.d
 Acq: 12 Sep 2020 7:43 pm

Tgt Ion: 63 Resp: 430068

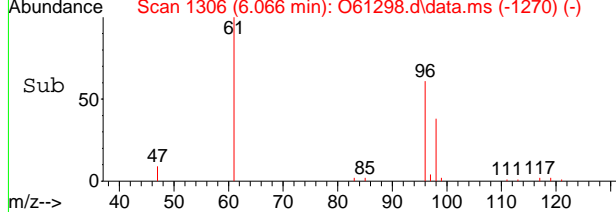
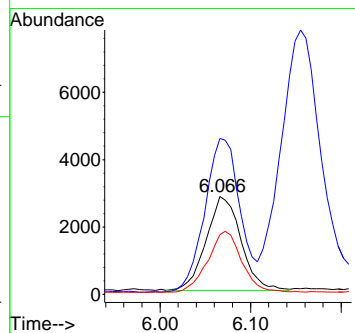
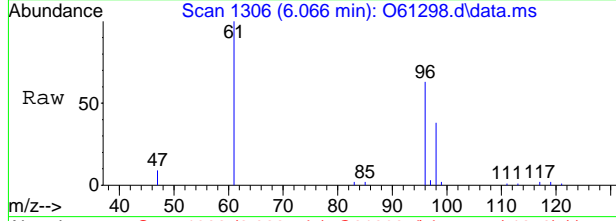
Ion	Ratio	Lower	Upper
63	100		
65	30.7	0.7	60.7



#8
 cis-1,2-Dichloroethene
 Concen: 0.35 ug/L
 RT: 6.066 min Scan# 1306
 Delta R.T. -0.006 min
 Lab File: O61298.d
 Acq: 12 Sep 2020 7:43 pm

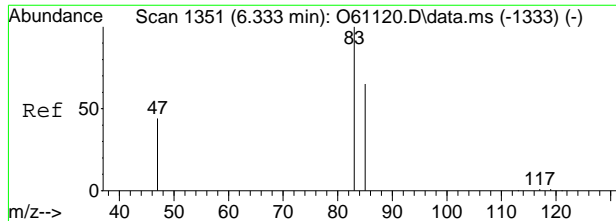
Tgt Ion: 96 Resp: 7483

Ion	Ratio	Lower	Upper
96	100		
61	162.7	107.0	167.0
98	61.3	34.1	94.1



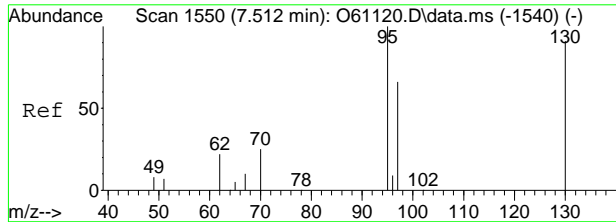
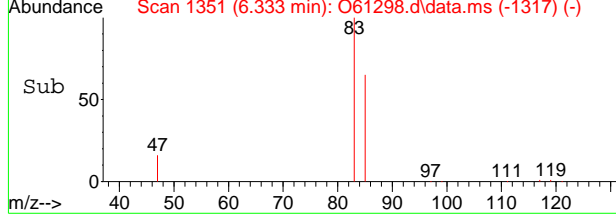
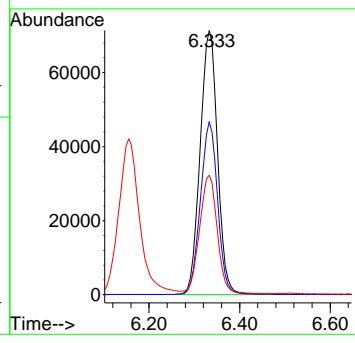
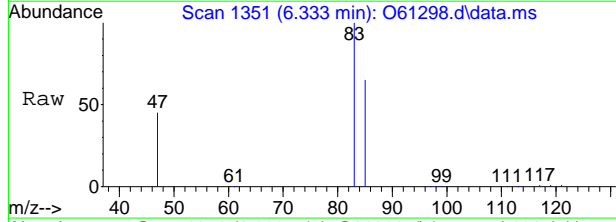
7.1.23
7





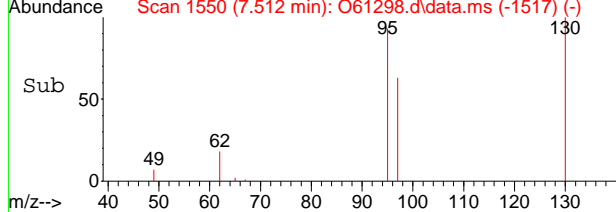
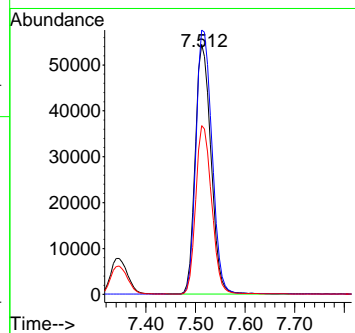
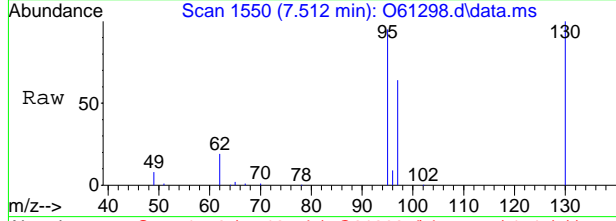
#9
 Chloroform
 Concen: 5.16 ug/L
 RT: 6.333 min Scan# 1351
 Delta R.T. -0.000 min
 Lab File: O61298.d
 Acq: 12 Sep 2020 7:43 pm

Tgt Ion	Ratio	Lower	Upper
83	100		
85	65.4	33.0	93.0
47	44.7	8.1	68.1



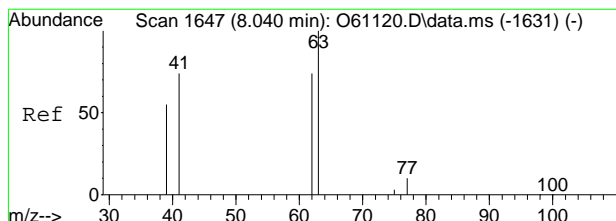
#15
 Trichloroethene
 Concen: 5.52 ug/L
 RT: 7.512 min Scan# 1550
 Delta R.T. -0.006 min
 Lab File: O61298.d
 Acq: 12 Sep 2020 7:43 pm

Tgt Ion	Ratio	Lower	Upper
95	100		
130	105.8	60.4	120.4
97	67.4	34.6	94.6

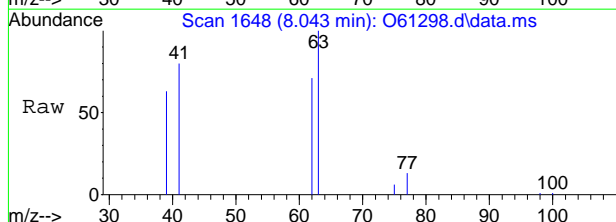


7.1.23
7



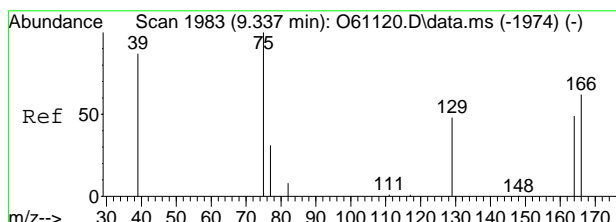
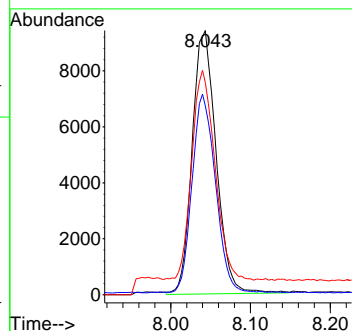
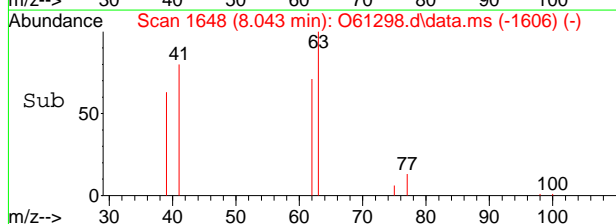


#16
 1,2-Dichloropropane
 Concen: 0.82 ug/L
 RT: 8.043 min Scan# 1648
 Delta R.T. 0.001 min
 Lab File: O61298.d
 Acq: 12 Sep 2020 7:43 pm

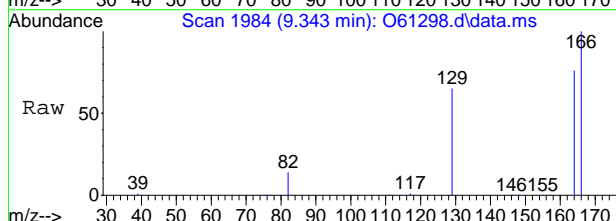


Tgt Ion: 63 Resp: 19693

Ion	Ratio	Lower	Upper
63	100		
62	71.2	42.7	102.7
41	75.2	54.5	114.5

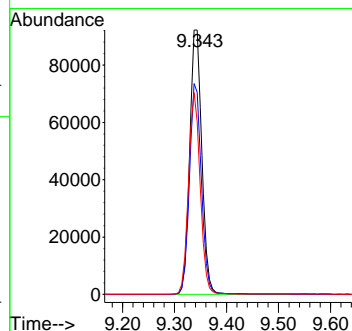
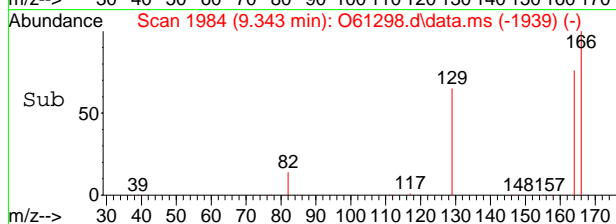


#21
 Tetrachloroethene
 Concen: 7.40 ug/L
 RT: 9.343 min Scan# 1984
 Delta R.T. 0.000 min
 Lab File: O61298.d
 Acq: 12 Sep 2020 7:43 pm



Tgt Ion: 166 Resp: 149841

Ion	Ratio	Lower	Upper
166	100		
164	76.4	47.3	107.3
129	65.3	37.5	97.5



7.1.23
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\091520\
 Data File : Z62375.D
 Acq On : 15 Sep 2020 8:29 pm
 Operator : JuanG
 Sample : FA78551-12
 Misc : MS47193,VZ2419,,,,,
 ALS Vial : 20 Sample Multiplier: 1

Quant Time: Sep 16 10:47:21 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Sun Sep 13 13:38:26 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	

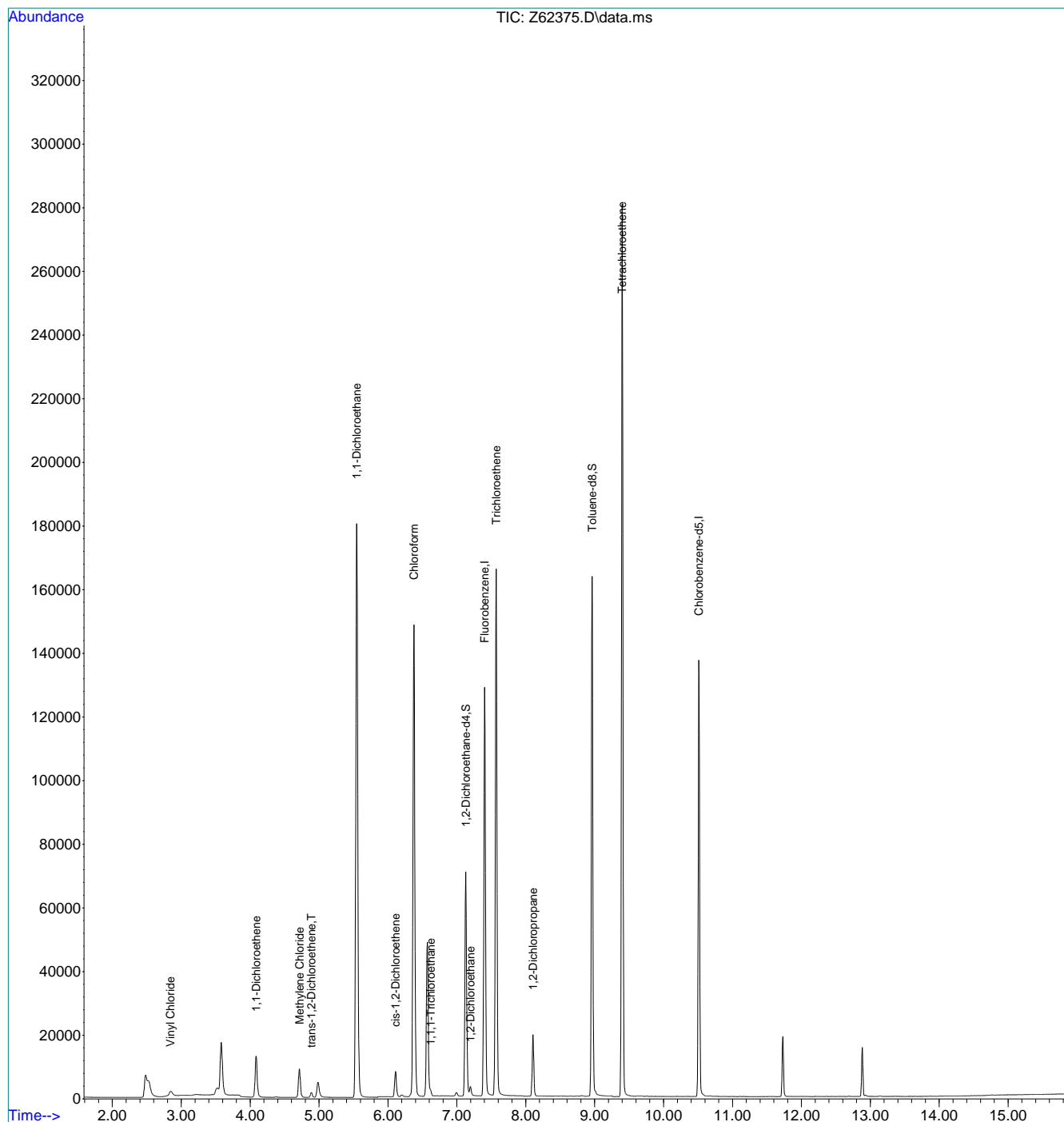
Internal Standards							
1) Fluorobenzene	7.401	96	1484029	5.00	ppb	0.00	
18) Chlorobenzene-d5	10.511	117	1236600	5.00	ppb	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.130	65	579039	6.31	ppb	0.00	
Spiked Amount	5.000	Range	79 - 125	Recovery	=	126.20%#	
19) Toluene-d8	8.961	98	1426717	4.75	ppb	0.00	
Spiked Amount	5.000	Range	70 - 130	Recovery	=	95.00%	
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.843	62	23438	0.19	ppb		85
4) 1,1-Dichloroethene	4.087	96	76249	0.85	ppb	#	88
5) Methylene Chloride	4.717	84	60817	0.41	ppb	#	88
6) trans-1,2-Dichloroethene	4.890	96	9111	0.08	ppb	#	85
7) 1,1-Dichloroethane	5.546	63	2408136	12.96	ppb	#	99
8) cis-1,2-Dichloroethene	6.110	96	48653	0.40	ppb		92
9) Chloroform	6.377	83	1406230	6.30	ppb		98
11) 1,1,1-Trichloroethane	6.620	97	13789	0.07	ppb		79
14) 1,2-Dichloroethane	7.198	62	26776	0.17	ppb		99
15) Trichloroethene	7.571	95	897225	7.08	ppb		87
16) 1,2-Dichloropropane	8.105	63	96389	0.92	ppb		100
21) Tetrachloroethene	9.399	166	1183779	8.78	ppb		99

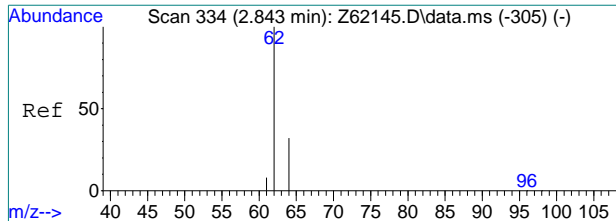
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\091520\
 Data File : Z62375.D
 Acq On : 15 Sep 2020 8:29 pm
 Operator : JuanG
 Sample : FA78551-12
 Misc : MS47193,VZ2419,,,,,
 ALS Vial : 20 Sample Multiplier: 1

Quant Time: Sep 16 10:47:21 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Sun Sep 13 13:38:26 2020
 Response via : Initial Calibration

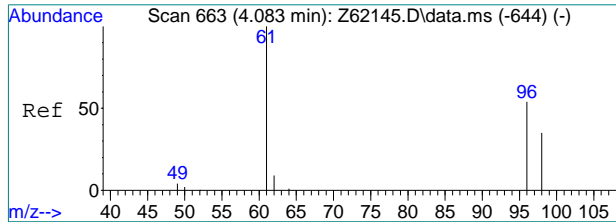
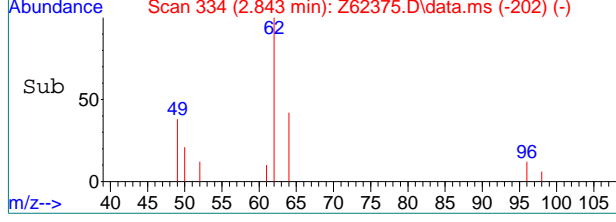
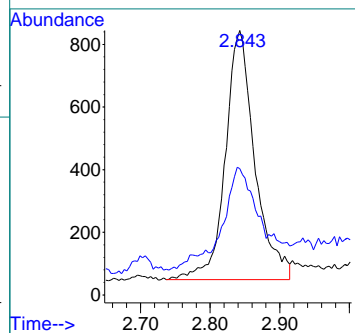
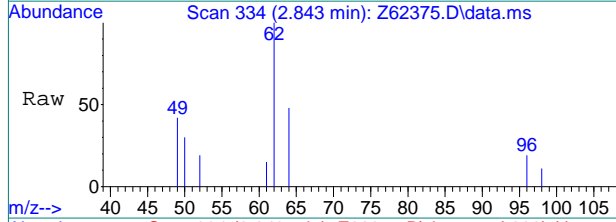




#2
 Vinyl Chloride
 Concen: 0.19 ppb
 RT: 2.843 min Scan# 334
 Delta R.T. -0.000 min
 Lab File: Z62375.D
 Acq: 15 Sep 2020 8:29 pm

Tgt Ion: 62 Resp: 23438

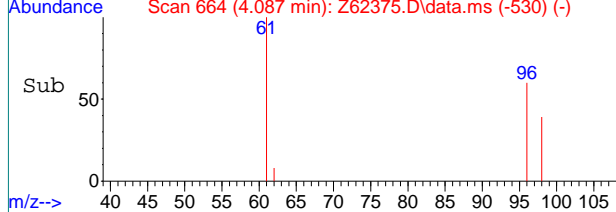
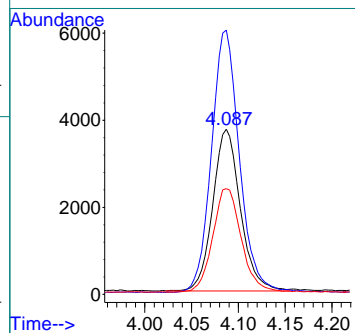
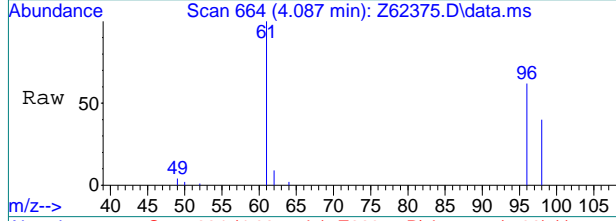
Ion	Ratio	Lower	Upper
62	100		
64	40.3	11.9	51.9



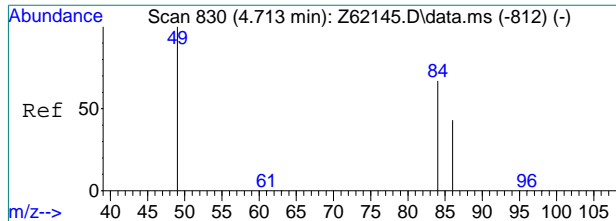
#4
 1,1-Dichloroethene
 Concen: 0.85 ppb
 RT: 4.087 min Scan# 664
 Delta R.T. 0.004 min
 Lab File: Z62375.D
 Acq: 15 Sep 2020 8:29 pm

Tgt Ion: 96 Resp: 76249

Ion	Ratio	Lower	Upper
96	100		
61	162.4	164.8	204.8#
98	64.1	45.1	85.1

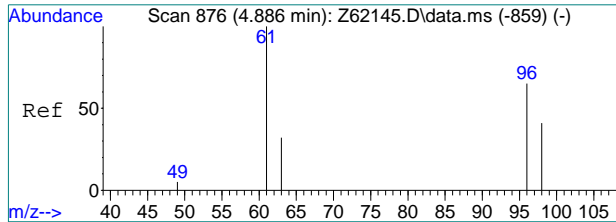
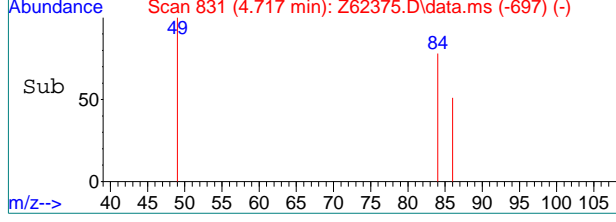
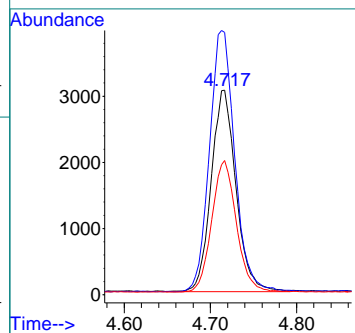
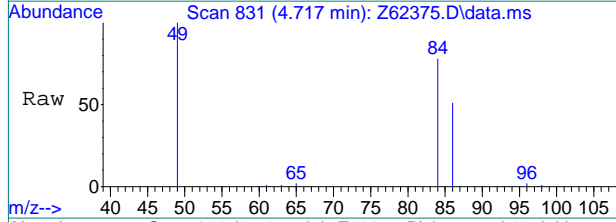


7.1.24
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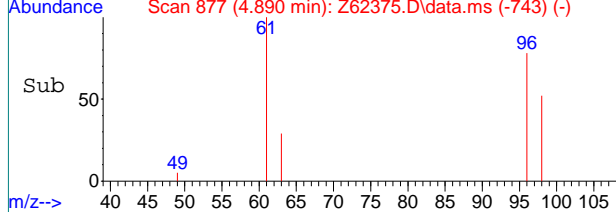
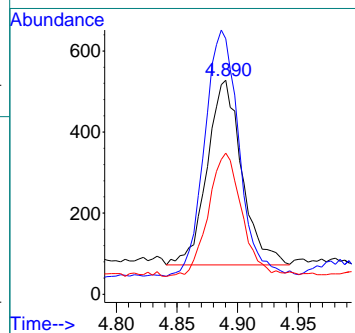
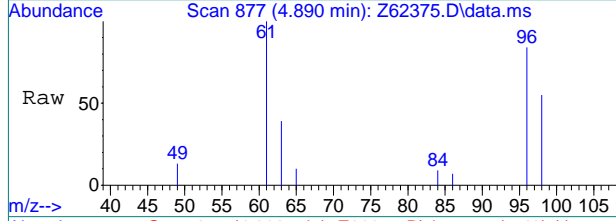
#5
 Methylene Chloride
 Concen: 0.41 ppb
 RT: 4.717 min Scan# 831
 Delta R.T. 0.004 min
 Lab File: Z62375.D
 Acq: 15 Sep 2020 8:29 pm

Tgt Ion	Ratio	Lower	Upper
84	100		
49	128.6	128.7	168.7#
86	65.2	43.9	83.9

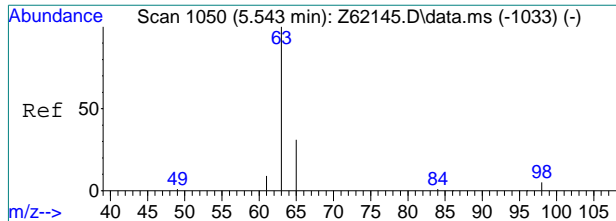


#6
 trans-1,2-Dichloroethene
 Concen: 0.08 ppb
 RT: 4.890 min Scan# 877
 Delta R.T. 0.004 min
 Lab File: Z62375.D
 Acq: 15 Sep 2020 8:29 pm

Tgt Ion	Ratio	Lower	Upper
96	100		
61	128.5	134.2	174.2#
98	66.7	43.4	83.4



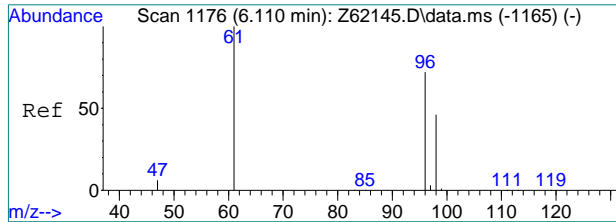
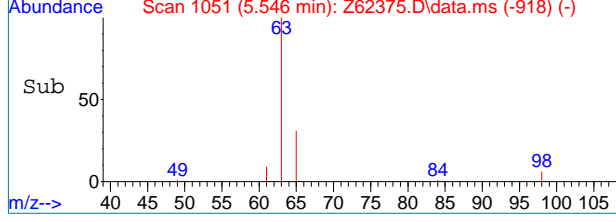
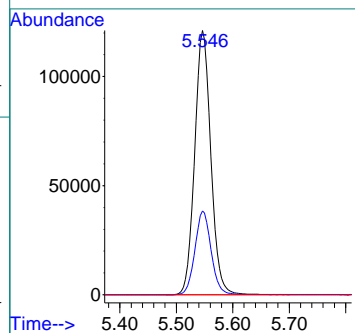
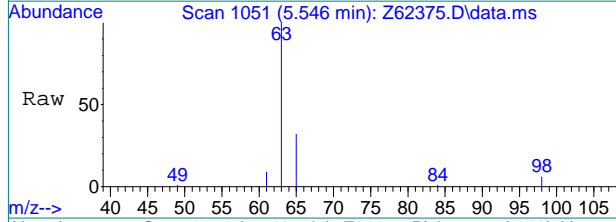
7.1.24
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#7
 1,1-Dichloroethane
 Concen: 12.96 ppb
 RT: 5.546 min Scan# 1051
 Delta R.T. 0.000 min
 Lab File: Z62375.D
 Acq: 15 Sep 2020 8:29 pm

Tgt Ion: 63 Resp: 2408136

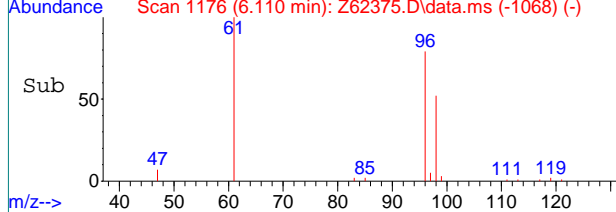
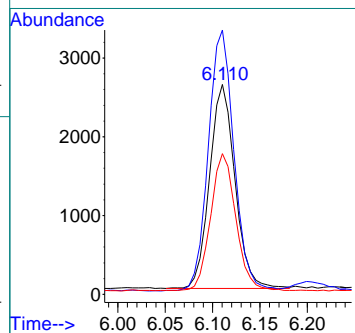
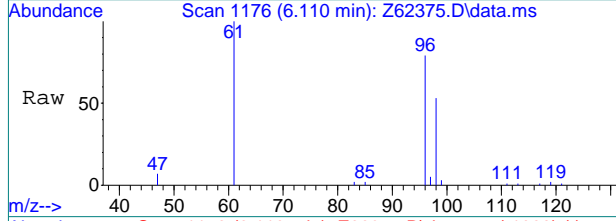
Ion	Ratio	Lower	Upper
63	100		
65	31.7	11.3	51.3
83	0.0	0.0	30.0



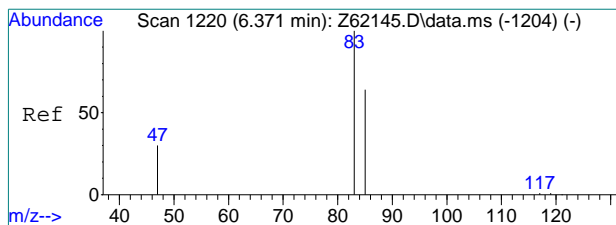
#8
 cis-1,2-Dichloroethene
 Concen: 0.40 ppb
 RT: 6.110 min Scan# 1176
 Delta R.T. 0.000 min
 Lab File: Z62375.D
 Acq: 15 Sep 2020 8:29 pm

Tgt Ion: 96 Resp: 48653

Ion	Ratio	Lower	Upper
96	100		
61	127.6	119.3	159.3
98	66.9	44.5	84.5



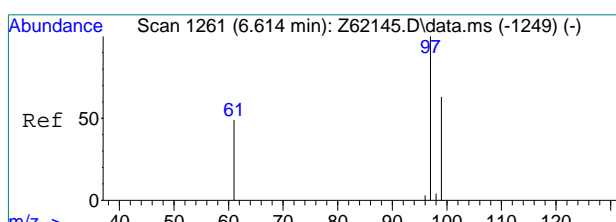
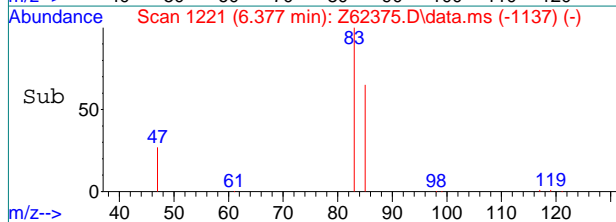
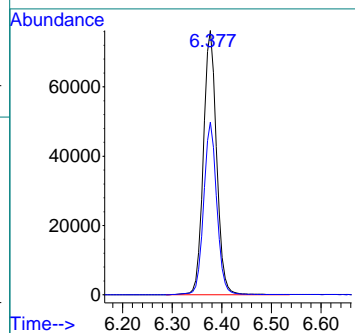
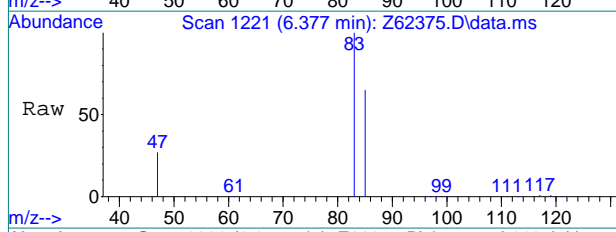
7.1.24
7



#9
 Chloroform
 Concen: 6.30 ppb
 RT: 6.377 min Scan# 1221
 Delta R.T. -0.000 min
 Lab File: Z62375.D
 Acq: 15 Sep 2020 8:29 pm

Tgt Ion: 83 Resp: 1406230

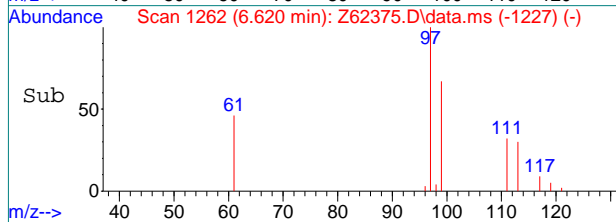
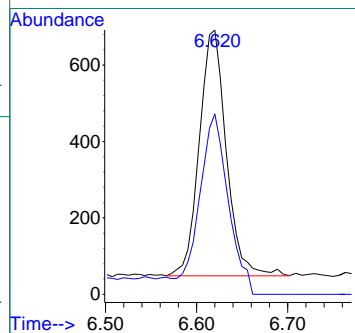
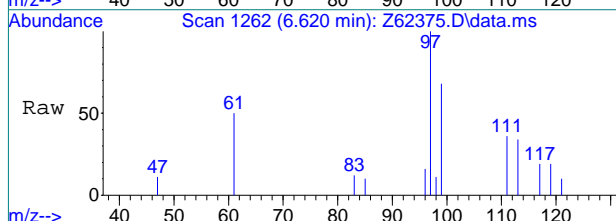
Ion	Ratio	Lower	Upper
83	100		
85	64.8	46.1	86.1



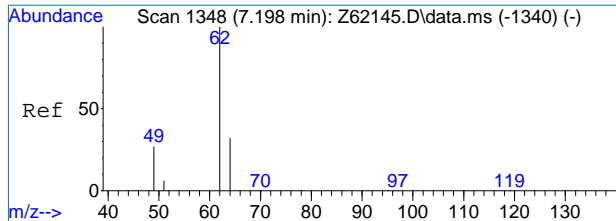
#11
 1,1,1-Trichloroethane
 Concen: 0.07 ppb
 RT: 6.620 min Scan# 1262
 Delta R.T. 0.006 min
 Lab File: Z62375.D
 Acq: 15 Sep 2020 8:29 pm

Tgt Ion: 97 Resp: 13789

Ion	Ratio	Lower	Upper
97	100		
99	76.7	0.0	123.8



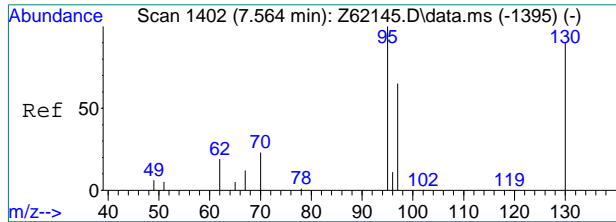
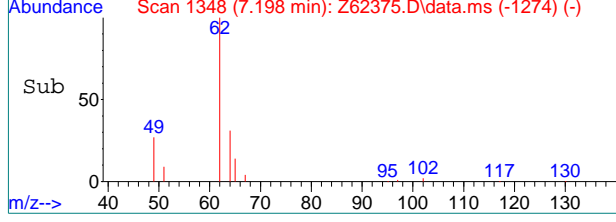
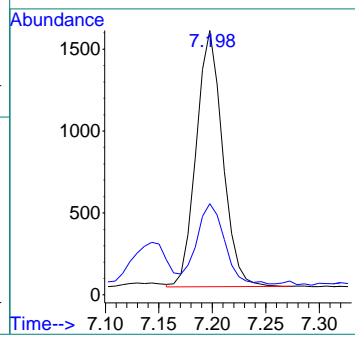
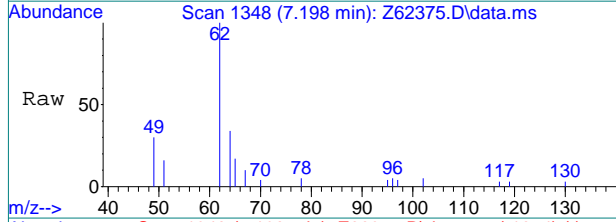
7.1.24
7



#14
 1,2-Dichloroethane
 Concen: 0.17 ppb
 RT: 7.198 min Scan# 1348
 Delta R.T. -0.000 min
 Lab File: Z62375.D
 Acq: 15 Sep 2020 8:29 pm

Tgt Ion: 62 Resp: 26776

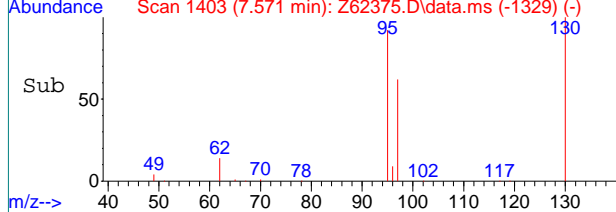
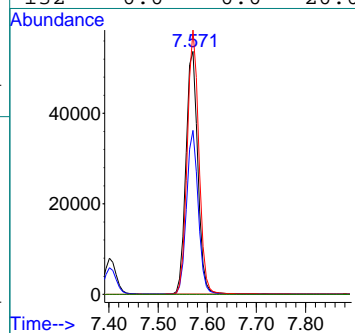
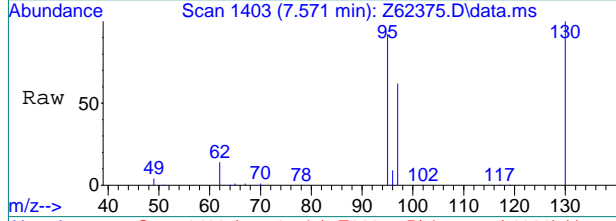
Ion	Ratio	Lower	Upper
62	100		
64	33.0	12.3	52.3



#15
 Trichloroethene
 Concen: 7.08 ppb
 RT: 7.571 min Scan# 1403
 Delta R.T. -0.000 min
 Lab File: Z62375.D
 Acq: 15 Sep 2020 8:29 pm

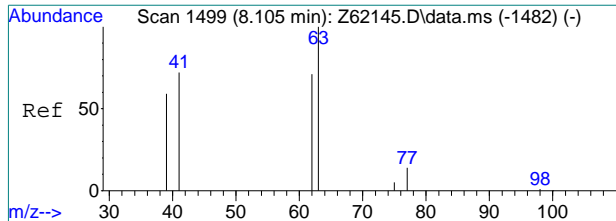
Tgt Ion: 95 Resp: 897225

Ion	Ratio	Lower	Upper
95	100		
97	67.4	44.5	84.5
130	108.9	69.7	109.7
132	0.0	0.0	20.0

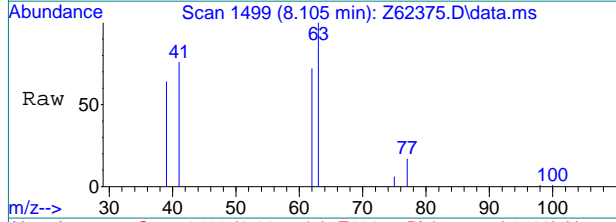


7.1.24
7



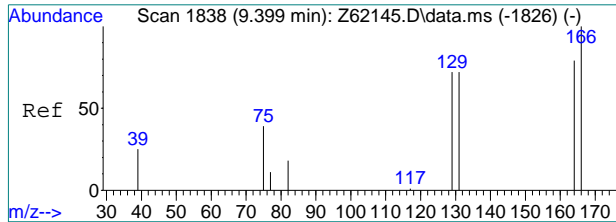
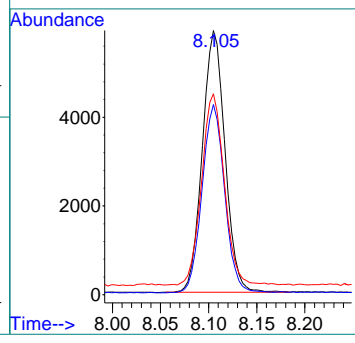
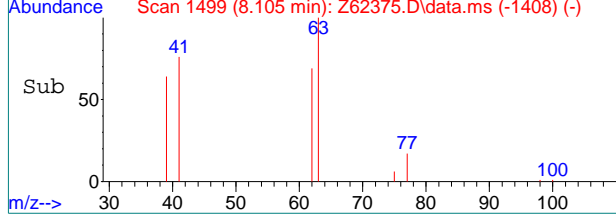


#16
 1,2-Dichloropropane
 Concen: 0.92 ppb
 RT: 8.105 min Scan# 1499
 Delta R.T. 0.000 min
 Lab File: Z62375.D
 Acq: 15 Sep 2020 8:29 pm

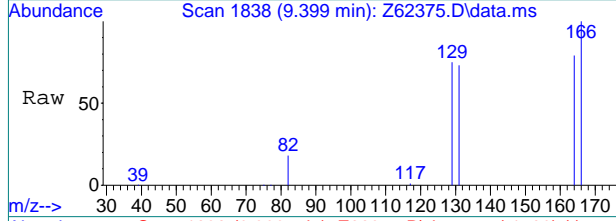


Tgt Ion: 63 Resp: 96389

Ion	Ratio	Lower	Upper
63	100		
62	71.5	51.6	91.6
41	73.2	43.7	103.7

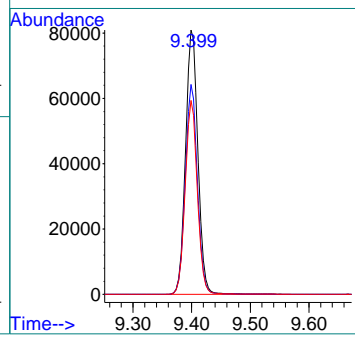
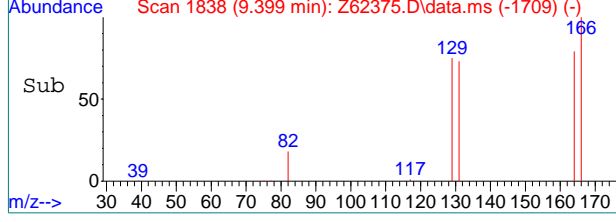


#21
 Tetrachloroethene
 Concen: 8.78 ppb
 RT: 9.399 min Scan# 1838
 Delta R.T. -0.000 min
 Lab File: Z62375.D
 Acq: 15 Sep 2020 8:29 pm



Tgt Ion: 166 Resp: 1183779

Ion	Ratio	Lower	Upper
166	100		
164	79.3	58.7	98.7
131	73.3	51.6	91.6



7.1.24
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-14-2020\VO2359\
Data File : O61299.d
Acq On : 12 Sep 2020 8:04 pm
Operator : stutip
Sample : fa78551-13
Misc : MS47193,VO2359,,,,,
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 14 07:57:07 2020
Quant Method : C:\msdchem\1\methods\SIMCL091120.M
Quant Title : Standard Methods 6200B
QLast Update : Sun Sep 13 19:20:40 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Fluorobenzene	7.346	96	234740	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.447	117	187654	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.074	65	100431	5.30	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	106.00%	
19) Toluene-d8	8.900	98	202509	4.79	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	95.80%	
Target Compounds						
15) Trichloroethene	7.518	95	33789	1.53	ug/L	Qvalue 87

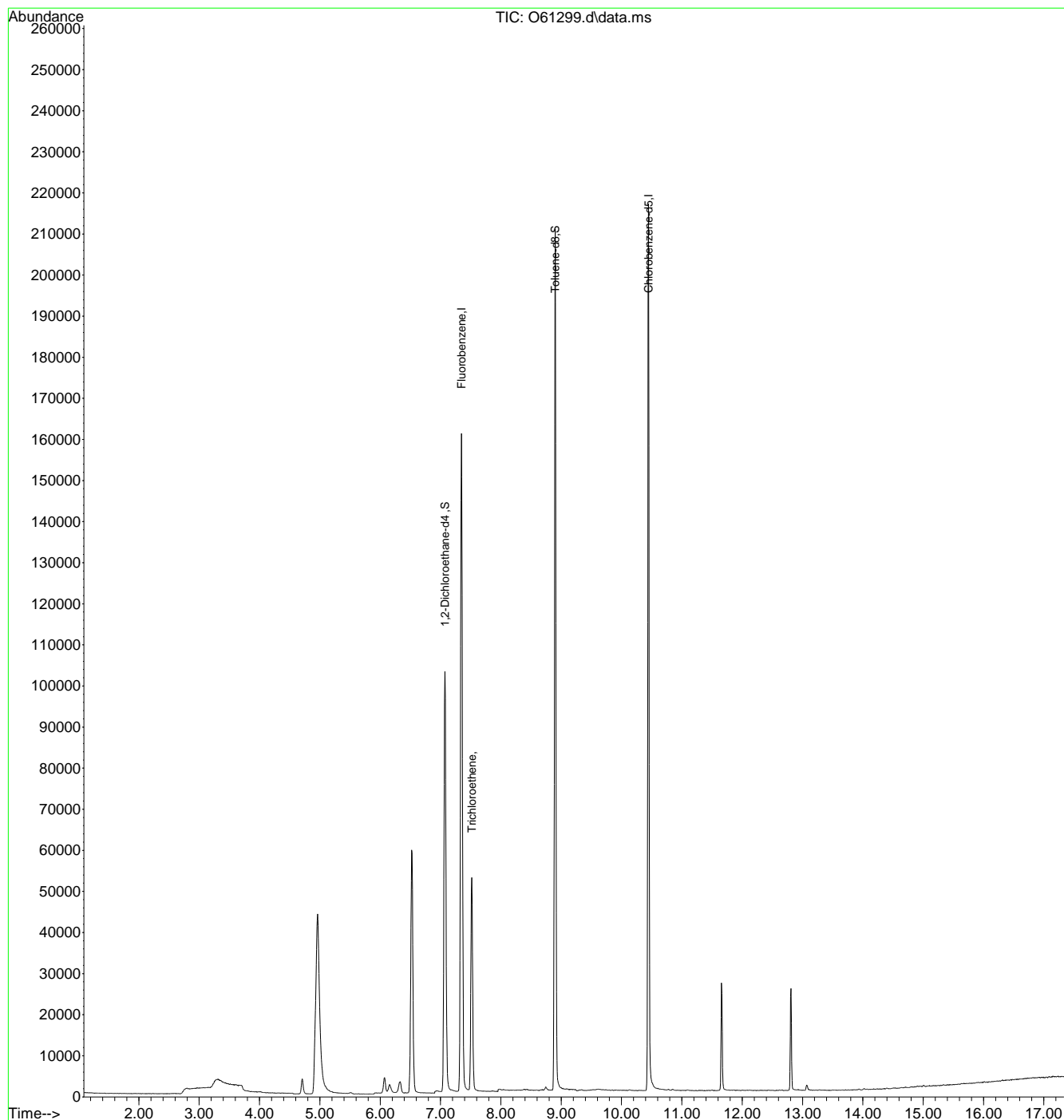
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.1.25
7

Quantitation Report (QT Reviewed)

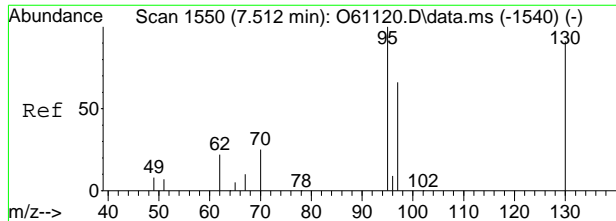
Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-14-2020\VO2359\
Data File : O61299.d
Acq On : 12 Sep 2020 8:04 pm
Operator : stutip
Sample : fa78551-13
Misc : MS47193,VO2359,,,,,
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 14 07:57:07 2020
Quant Method : C:\msdchem\1\methods\SIMCL091120.M
Quant Title : Standard Methods 6200B
QLast Update : Sun Sep 13 19:20:40 2020
Response via : Initial Calibration

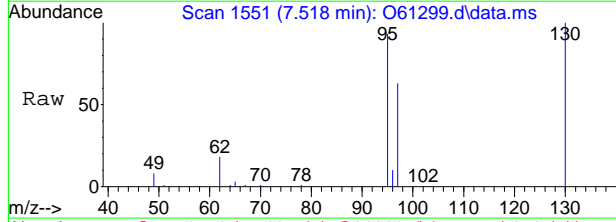


7.1.25
7



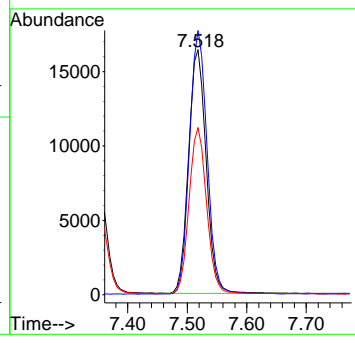
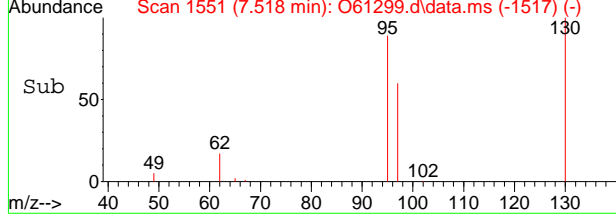


#15
 Trichloroethene
 Concen: 1.53 ug/L
 RT: 7.518 min Scan# 1551
 Delta R.T. 0.000 min
 Lab File: O61299.d
 Acq: 12 Sep 2020 8:04 pm



Tgt Ion: 95 Resp: 33789

Ion	Ratio	Lower	Upper
95	100		
130	108.1	60.4	120.4
97	68.1	34.6	94.6



7.1.25
7



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\091520\
 Data File : Z62376.D
 Acq On : 15 Sep 2020 8:49 pm
 Operator : JuanG
 Sample : FA78551-13
 Misc : MS47193,VZ2419,,,,,
 ALS Vial : 21 Sample Multiplier: 1

Quant Time: Sep 16 10:47:23 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Sun Sep 13 13:38:26 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

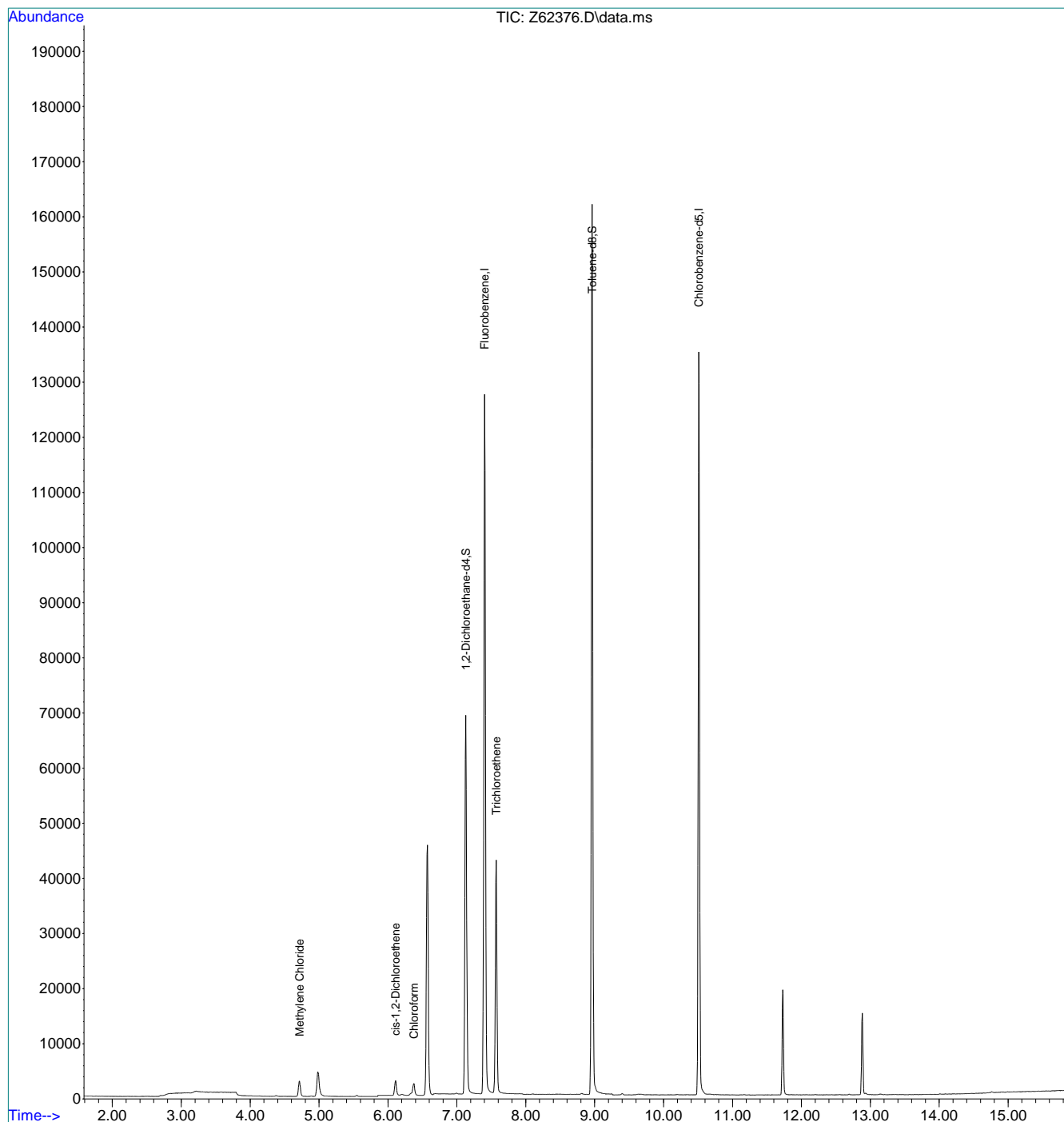
Internal Standards						
1) Fluorobenzene	7.401	96	1461395	5.00	ppb	0.00
18) Chlorobenzene-d5	10.511	117	1217797	5.00	ppb	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.130	65	571257	6.32	ppb	0.00
Spiked Amount	5.000	Range	79 - 125	Recovery	=	126.40%#
19) Toluene-d8	8.961	98	1410783	4.77	ppb	0.00
Spiked Amount	5.000	Range	70 - 130	Recovery	=	95.40%
Target Compounds						
5) Methylene Chloride	4.717	84	19303	0.13	ppb	# 88
8) cis-1,2-Dichloroethene	6.110	96	16318	0.14	ppb	92
9) Chloroform	6.377	83	19578	0.09	ppb	96
15) Trichloroethene	7.571	95	228240	1.83	ppb	# 86

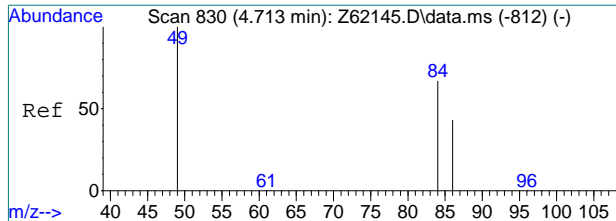
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\091520\
Data File : Z62376.D
Acq On : 15 Sep 2020 8:49 pm
Operator : JuanG
Sample : FA78551-13
Misc : MS47193,VZ2419,,,,,
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Sep 16 10:47:23 2020
Quant Method : C:\msdchem\1\methods\SIMCL091120.M
Quant Title : WATER-EPA 8260B
QLast Update : Sun Sep 13 13:38:26 2020
Response via : Initial Calibration

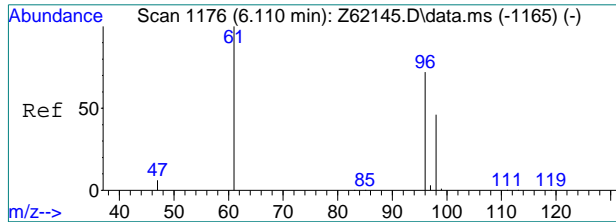
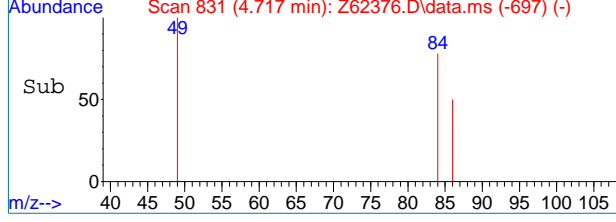
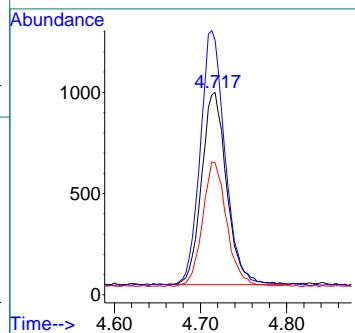
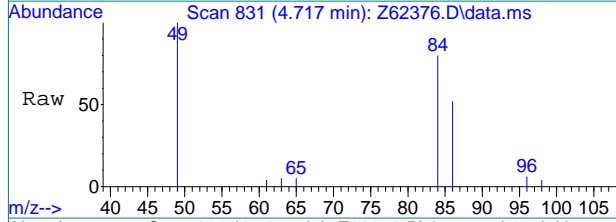




#5
 Methylene Chloride
 Concen: 0.13 ppb
 RT: 4.717 min Scan# 831
 Delta R.T. 0.004 min
 Lab File: Z62376.D
 Acq: 15 Sep 2020 8:49 pm

Tgt Ion: 84 Resp: 19303

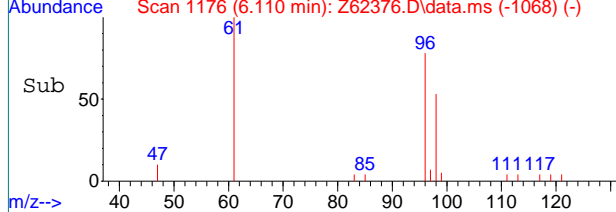
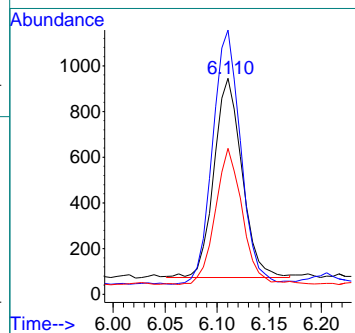
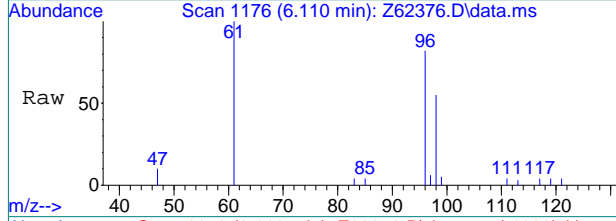
Ion	Ratio	Lower	Upper
84	100		
49	126.9	128.7	168.7#
86	64.1	43.9	83.9



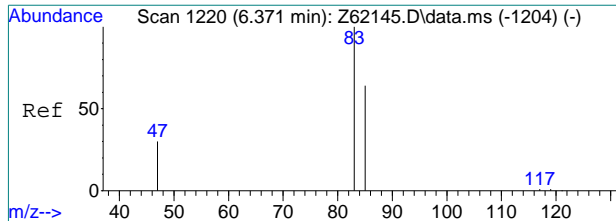
#8
 cis-1,2-Dichloroethene
 Concen: 0.14 ppb
 RT: 6.110 min Scan# 1176
 Delta R.T. 0.000 min
 Lab File: Z62376.D
 Acq: 15 Sep 2020 8:49 pm

Tgt Ion: 96 Resp: 16318

Ion	Ratio	Lower	Upper
96	100		
61	128.4	119.3	159.3
98	68.4	44.5	84.5



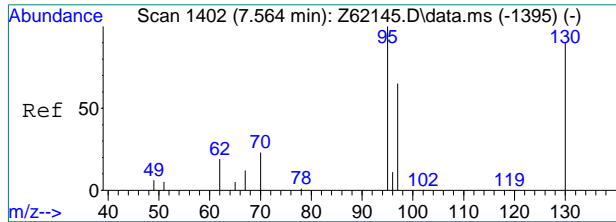
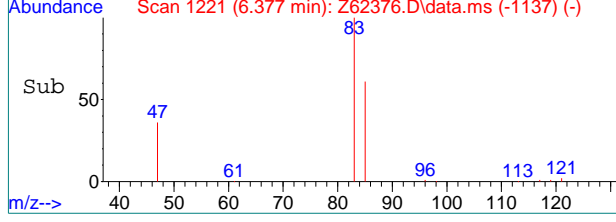
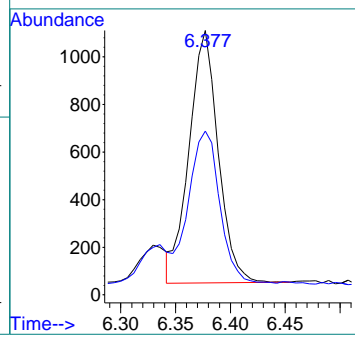
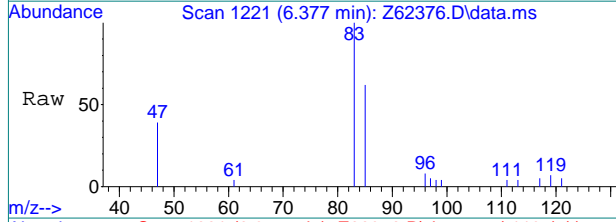
7.1.26
7



#9
 Chloroform
 Concen: 0.09 ppb
 RT: 6.377 min Scan# 1221
 Delta R.T. 0.000 min
 Lab File: Z62376.D
 Acq: 15 Sep 2020 8:49 pm

Tgt Ion: 83 Resp: 19578

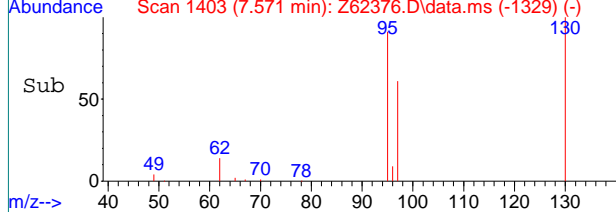
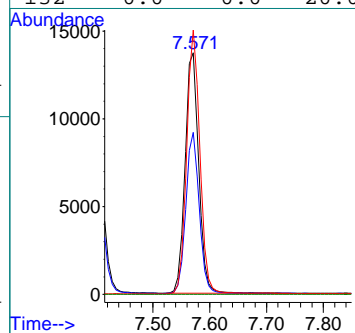
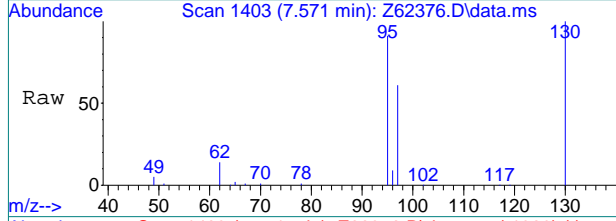
Ion	Ratio	Lower	Upper
83	100		
85	63.2	46.1	86.1



#15
 Trichloroethene
 Concen: 1.83 ppb
 RT: 7.571 min Scan# 1403
 Delta R.T. 0.000 min
 Lab File: Z62376.D
 Acq: 15 Sep 2020 8:49 pm

Tgt Ion: 95 Resp: 228240

Ion	Ratio	Lower	Upper
95	100		
97	67.0	44.5	84.5
130	109.7	69.7	109.7#
132	0.0	0.0	20.0



7.1.26
 7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-14-2020\VO2359\
 Data File : O61300.d
 Acq On : 12 Sep 2020 8:24 pm
 Operator : stutip
 Sample : fa78551-14
 Misc : MS47193,VO2359,,,,,
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 14 07:57:35 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Sun Sep 13 19:20:40 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Fluorobenzene	7.346	96	227299	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.447	117	183118	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.074	65	97654	5.32	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	106.40%	
19) Toluene-d8	8.896	98	193657	4.69	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	93.80%	
Target Compounds						
4) 1,1-Dichloroethene	4.092	61	23998	0.76	ug/L	92
5) Methylene Chloride	4.703	49	15511	0.32	ug/L	95
7) 1,1-Dichloroethane	5.510	63	233858	5.55	ug/L	99
8) cis-1,2-Dichloroethene	6.066	96	30815	1.48	ug/L #	82
9) Chloroform	6.327	83	20071	0.55	ug/L	89
14) 1,2-Dichloroethane	7.139	62	7173	0.21	ug/L	92
15) Trichloroethene	7.512	95	25015	1.17	ug/L	88
21) Tetrachloroethene	9.343	166	25542	1.28	ug/L	99

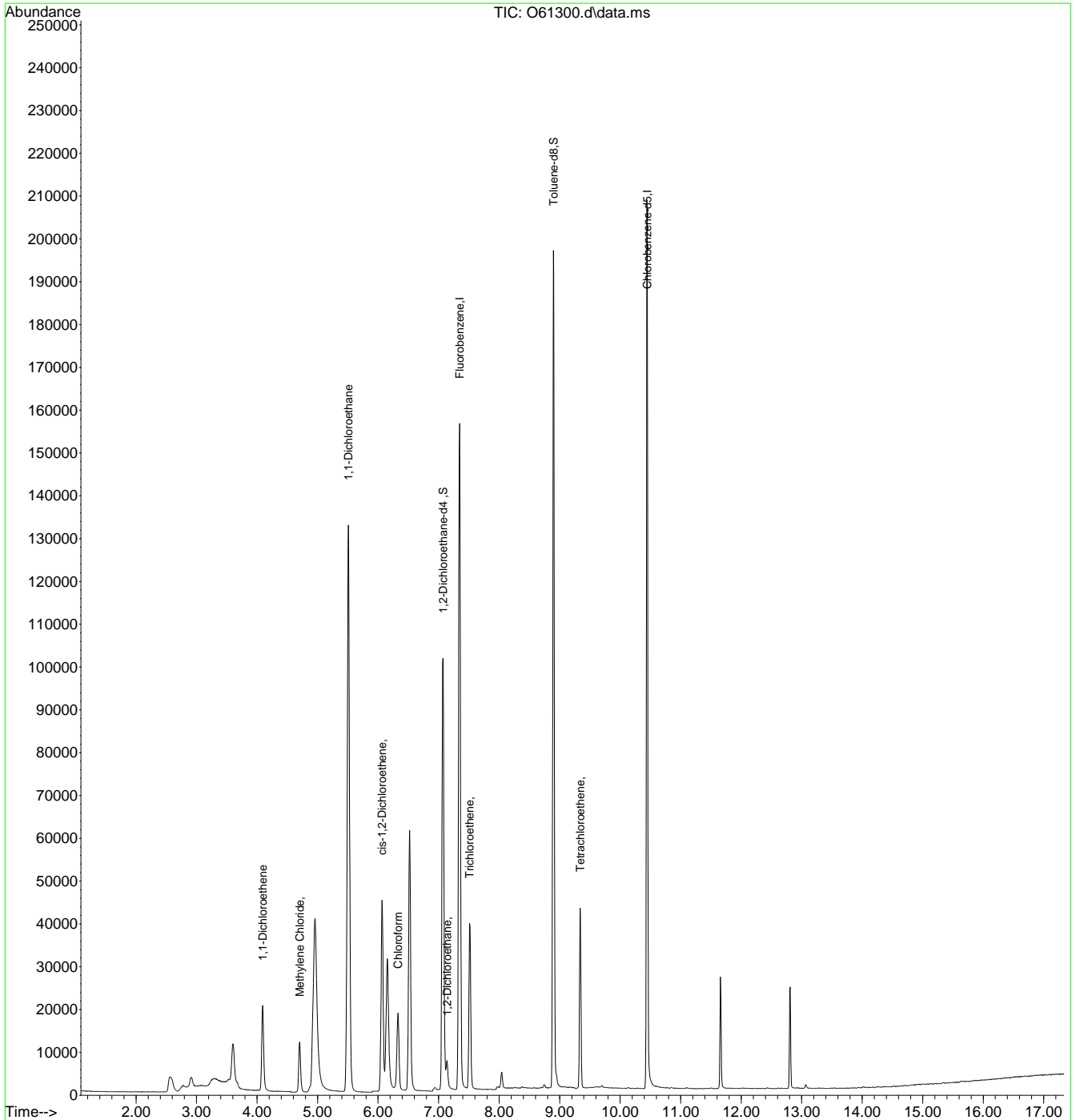
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.1.27
7

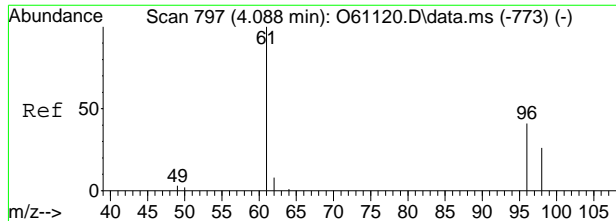
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-14-2020\VO2359\
 Data File : O61300.d
 Acq On : 12 Sep 2020 8:24 pm
 Operator : stutip
 Sample : fa78551-14
 Misc : MS47193,VO2359,,,,,
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 14 07:57:35 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Sun Sep 13 19:20:40 2020
 Response via : Initial Calibration

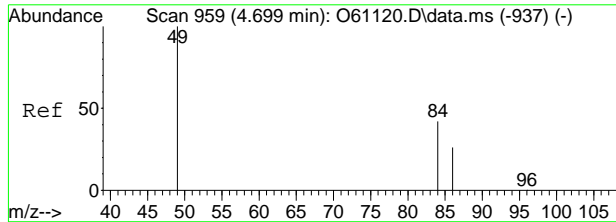
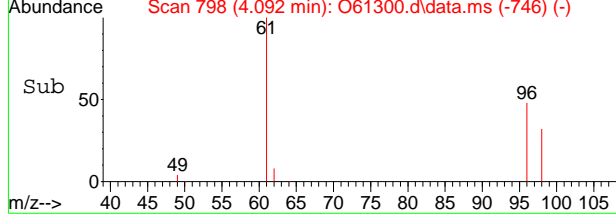
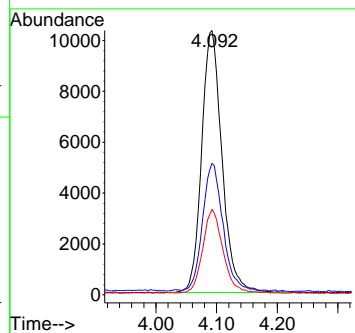
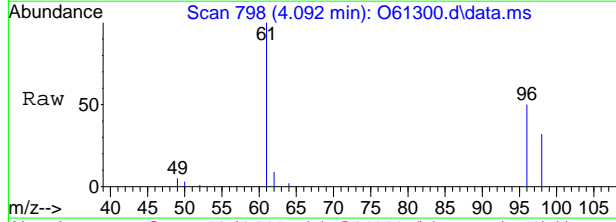


7.1.27
7



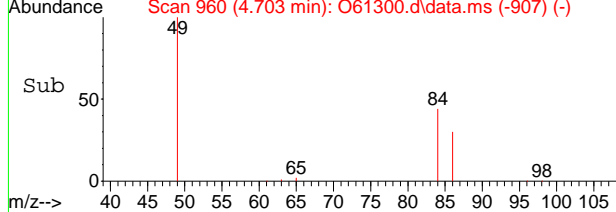
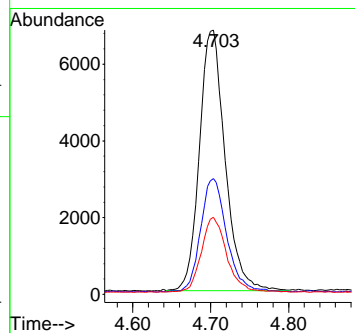
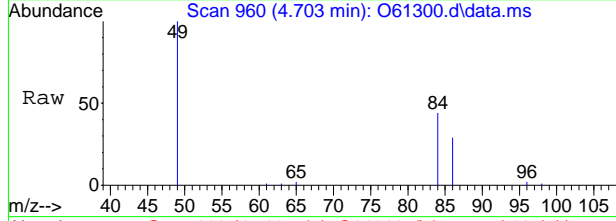
#4
 1,1-Dichloroethene
 Concen: 0.76 ug/L
 RT: 4.092 min Scan# 798
 Delta R.T. -0.004 min
 Lab File: O61300.d
 Acq: 12 Sep 2020 8:24 pm

Tgt Ion	Resp	Lower	Upper
61	23998		
96	49.0	25.4	85.4
98	32.0	5.9	65.9



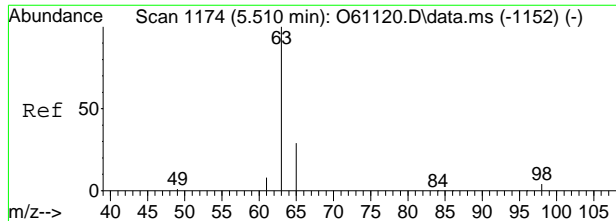
#5
 Methylene Chloride
 Concen: 0.32 ug/L
 RT: 4.703 min Scan# 960
 Delta R.T. 0.000 min
 Lab File: O61300.d
 Acq: 12 Sep 2020 8:24 pm

Tgt Ion	Resp	Lower	Upper
49	15511		
84	43.5	17.9	77.9
86	28.7	0.0	59.8



7.1.27
7

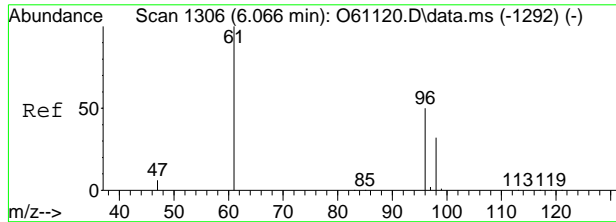
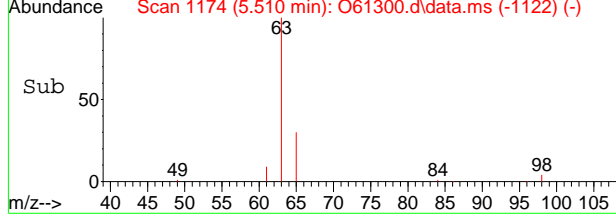
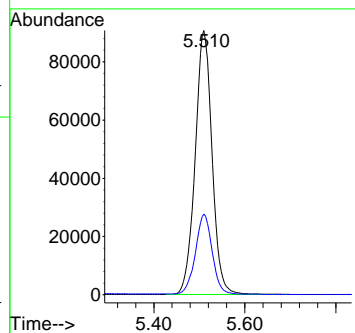
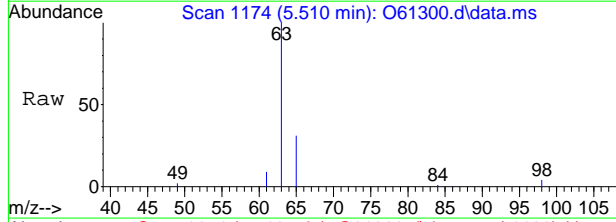




#7
 1,1-Dichloroethane
 Concen: 5.55 ug/L
 RT: 5.510 min Scan# 1174
 Delta R.T. -0.004 min
 Lab File: O61300.d
 Acq: 12 Sep 2020 8:24 pm

Tgt Ion: 63 Resp: 233858

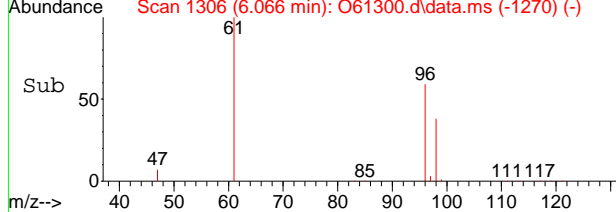
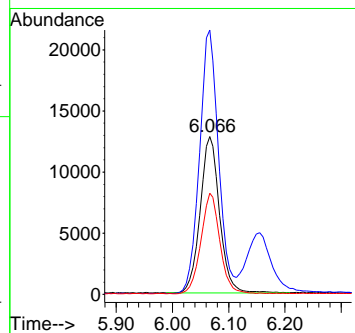
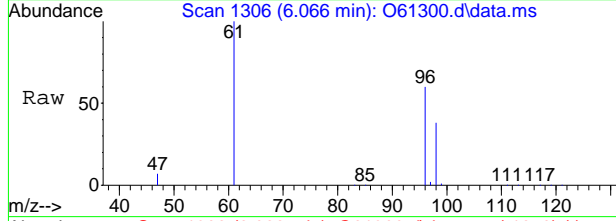
Ion	Ratio	Lower	Upper
63	100		
65	30.4	0.7	60.7



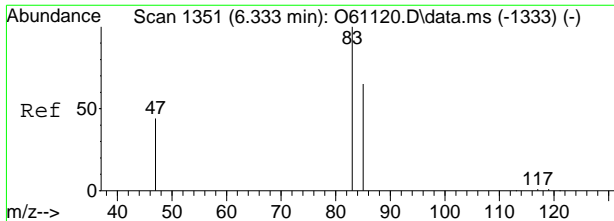
#8
 cis-1,2-Dichloroethene
 Concen: 1.48 ug/L
 RT: 6.066 min Scan# 1306
 Delta R.T. -0.006 min
 Lab File: O61300.d
 Acq: 12 Sep 2020 8:24 pm

Tgt Ion: 96 Resp: 30815

Ion	Ratio	Lower	Upper
96	100		
61	168.5	107.0	167.0#
98	64.3	34.1	94.1

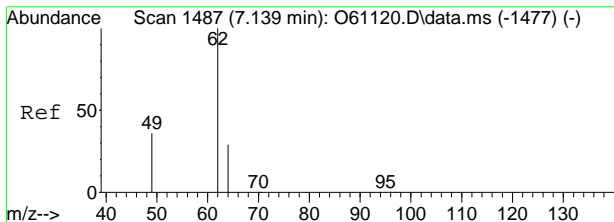
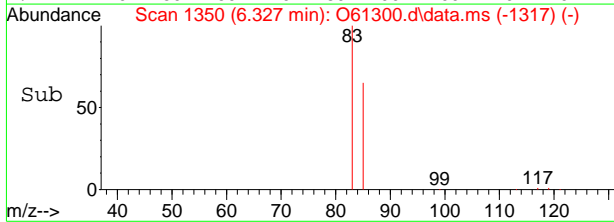
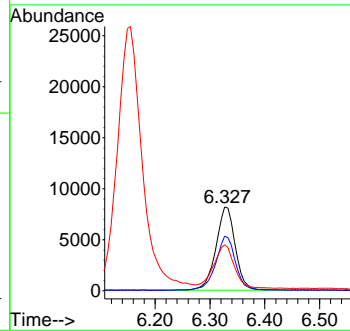
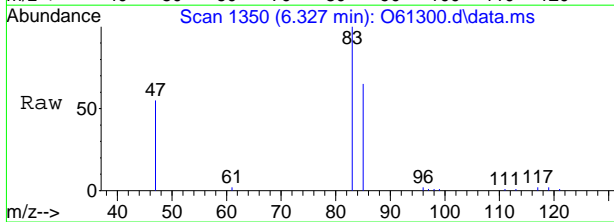


7.1.27
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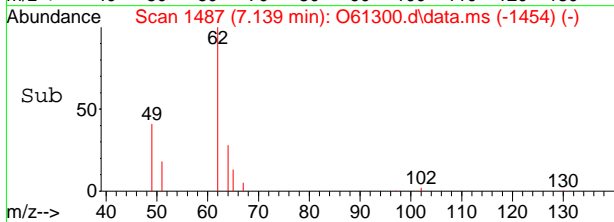
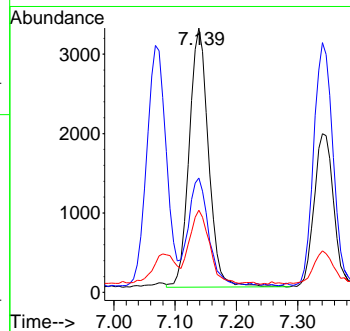
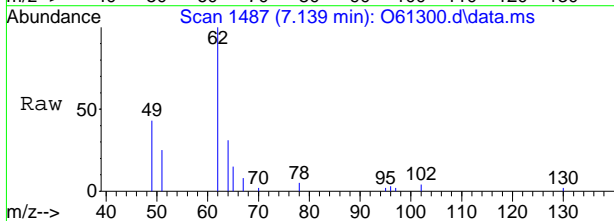
#9
 Chloroform
 Concen: 0.55 ug/L
 RT: 6.327 min Scan# 1350
 Delta R.T. -0.006 min
 Lab File: O61300.d
 Acq: 12 Sep 2020 8:24 pm

Tgt Ion	Ratio	Lower	Upper
83	100		
85	65.1	33.0	93.0
47	52.3	8.1	68.1

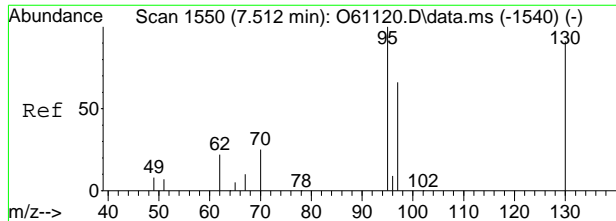


#14
 1,2-Dichloroethane
 Concen: 0.21 ug/L
 RT: 7.139 min Scan# 1487
 Delta R.T. -0.006 min
 Lab File: O61300.d
 Acq: 12 Sep 2020 8:24 pm

Tgt Ion	Ratio	Lower	Upper
62	100		
49	41.3	18.0	78.0
64	28.1	1.5	61.5

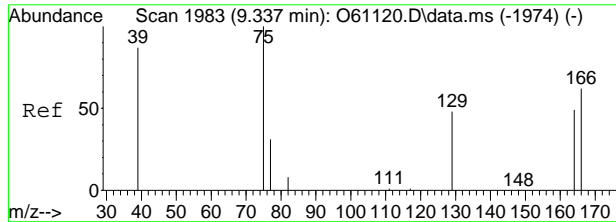
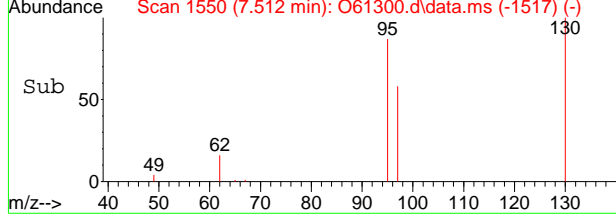
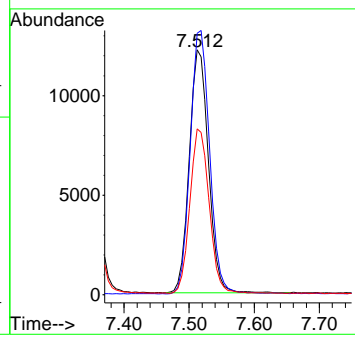
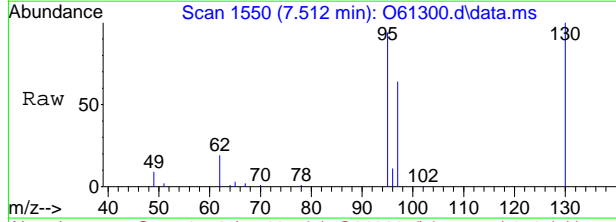


7.1.27
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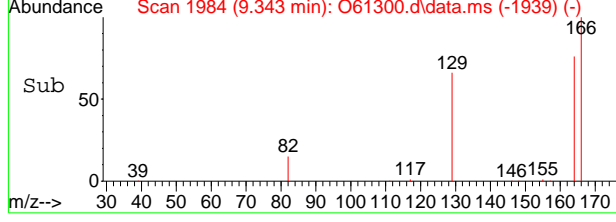
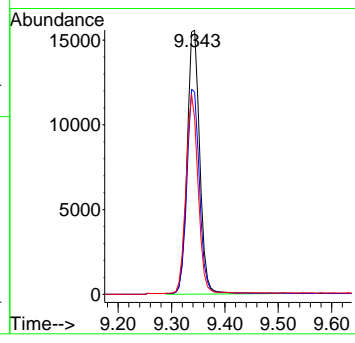
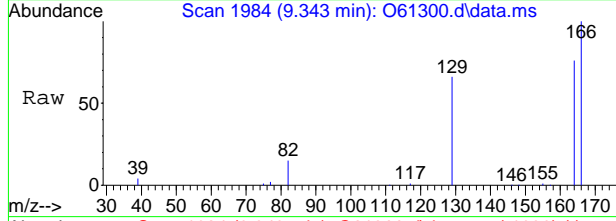
#15
 Trichloroethene
 Concen: 1.17 ug/L
 RT: 7.512 min Scan# 1550
 Delta R.T. -0.006 min
 Lab File: O61300.d
 Acq: 12 Sep 2020 8:24 pm

Tgt Ion	Resp	Lower	Upper
95	25015		
130	107.1	60.4	120.4
97	67.6	34.6	94.6



#21
 Tetrachloroethene
 Concen: 1.28 ug/L
 RT: 9.343 min Scan# 1984
 Delta R.T. 0.000 min
 Lab File: O61300.d
 Acq: 12 Sep 2020 8:24 pm

Tgt Ion	Resp	Lower	Upper
166	25542		
164	76.3	47.3	107.3
129	66.2	37.5	97.5



7.1.27
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Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\091520\
 Data File : Z62377.D
 Acq On : 15 Sep 2020 9:08 pm
 Operator : JuanG
 Sample : FA78551-14
 Misc : MS47193,VZ2419,,,,,
 ALS Vial : 22 Sample Multiplier: 1

Quant Time: Sep 16 10:47:25 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Sun Sep 13 13:38:26 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	

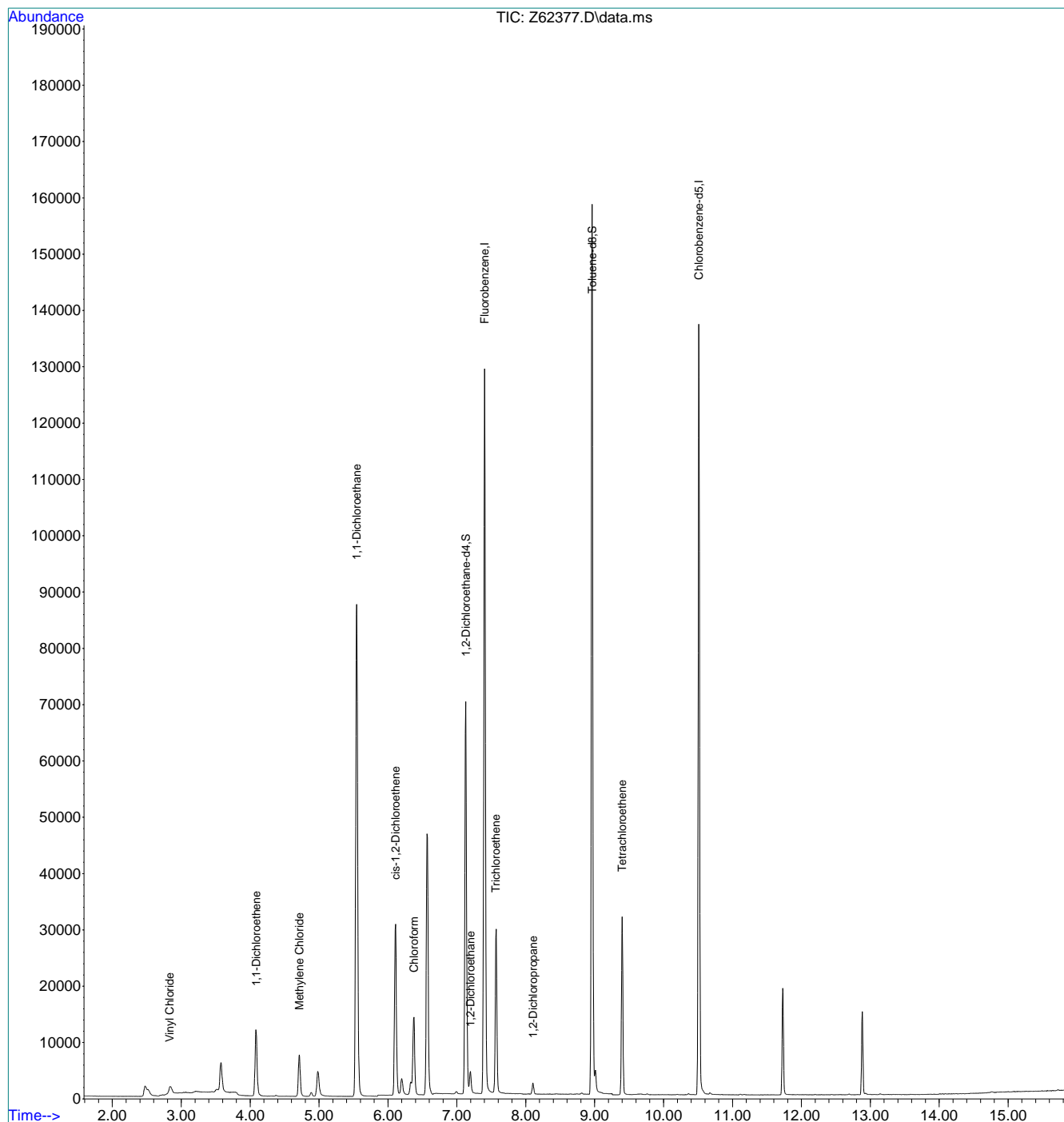
Internal Standards							
1) Fluorobenzene	7.401	96	1465795	5.00	ppb	0.00	
18) Chlorobenzene-d5	10.511	117	1219249	5.00	ppb	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.130	65	574755	6.34	ppb	0.00	
Spiked Amount	5.000	Range	79 - 125	Recovery	=	126.80%#	
19) Toluene-d8	8.961	98	1402385	4.74	ppb	0.00	
Spiked Amount	5.000	Range	70 - 130	Recovery	=	94.80%	
Target Compounds							
2) Vinyl Chloride	2.831	62	21731	0.18	ppb		Qvalue 91
4) 1,1-Dichloroethene	4.087	96	67585	0.76	ppb	#	87
5) Methylene Chloride	4.713	84	49255	0.34	ppb		90
7) 1,1-Dichloroethane	5.546	63	1172749	6.39	ppb	#	100
8) cis-1,2-Dichloroethene	6.110	96	185352	1.54	ppb		92
9) Chloroform	6.377	83	154302	0.70	ppb		91
14) 1,2-Dichloroethane	7.198	62	37026	0.24	ppb		98
15) Trichloroethene	7.564	95	159089	1.27	ppb		96
16) 1,2-Dichloropropane	8.105	63	10571	0.10	ppb		95
21) Tetrachloroethene	9.399	166	135127	0.93	ppb		99

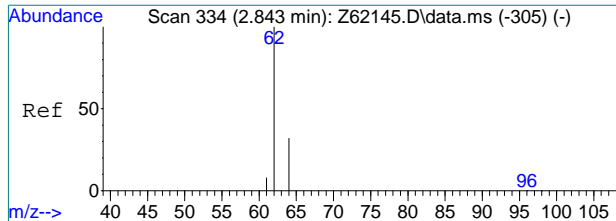
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\091520\
Data File : Z62377.D
Acq On : 15 Sep 2020 9:08 pm
Operator : JuanG
Sample : FA78551-14
Misc : MS47193,VZ2419,,,,,
ALS Vial : 22 Sample Multiplier: 1

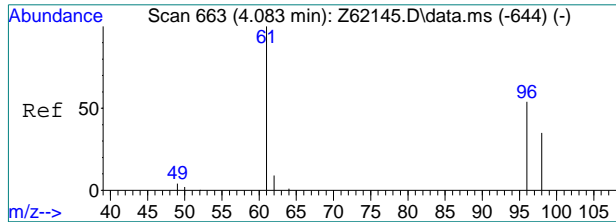
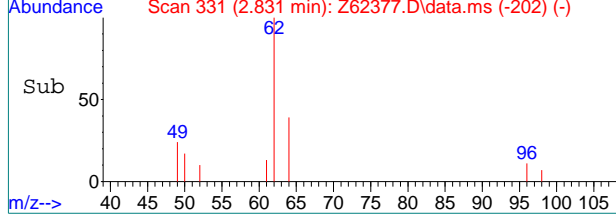
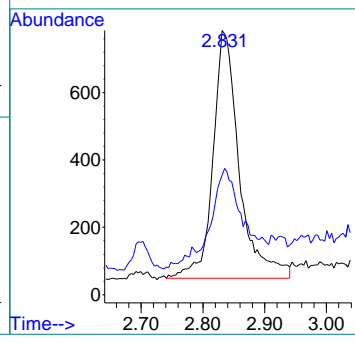
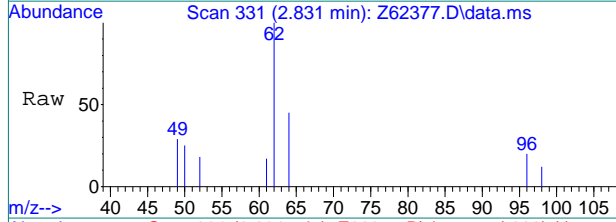
Quant Time: Sep 16 10:47:25 2020
Quant Method : C:\msdchem\1\methods\SIMCL091120.M
Quant Title : WATER-EPA 8260B
QLast Update : Sun Sep 13 13:38:26 2020
Response via : Initial Calibration





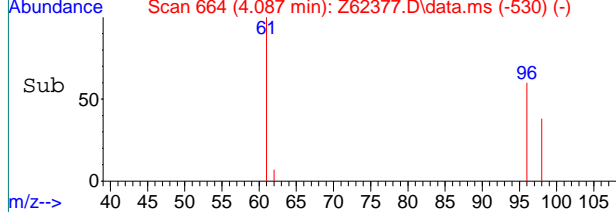
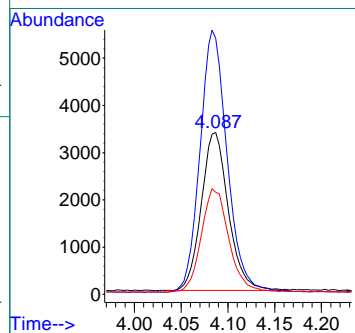
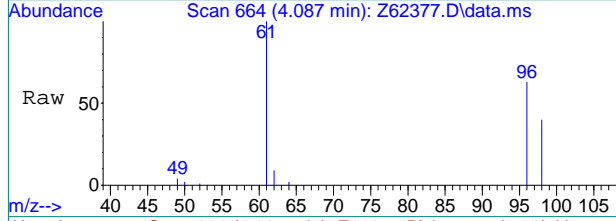
#2
 Vinyl Chloride
 Concen: 0.18 ppb
 RT: 2.831 min Scan# 331
 Delta R.T. -0.012 min
 Lab File: Z62377.D
 Acq: 15 Sep 2020 9:08 pm

Tgt Ion	Resp	Lower	Upper
62	21731		
64	37.1	11.9	51.9

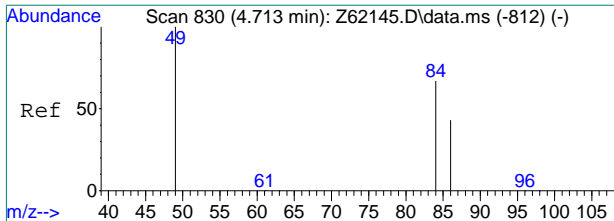


#4
 1,1-Dichloroethene
 Concen: 0.76 ppb
 RT: 4.087 min Scan# 664
 Delta R.T. 0.004 min
 Lab File: Z62377.D
 Acq: 15 Sep 2020 9:08 pm

Tgt Ion	Resp	Lower	Upper
96	67585		
61	160.4	164.8	204.8#
98	63.0	45.1	85.1



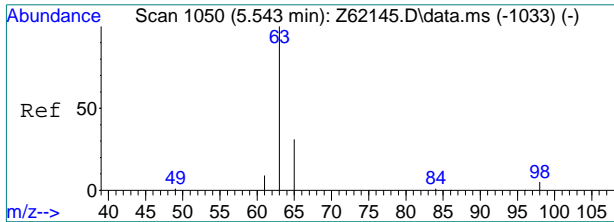
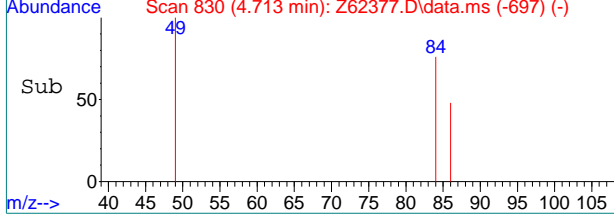
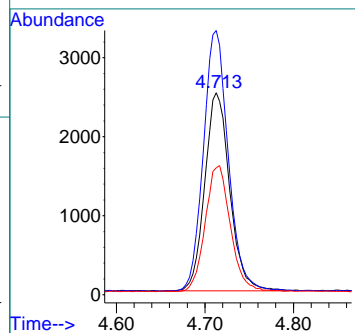
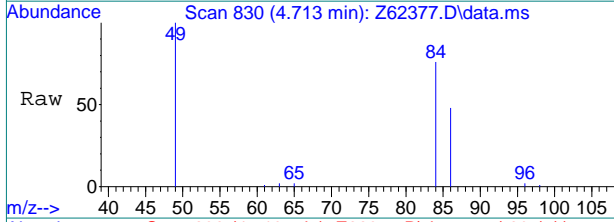
7.1.28
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#5
 Methylene Chloride
 Concen: 0.34 ppb
 RT: 4.713 min Scan# 830
 Delta R.T. -0.000 min
 Lab File: Z62377.D
 Acq: 15 Sep 2020 9:08 pm

Tgt Ion: 84 Resp: 49255

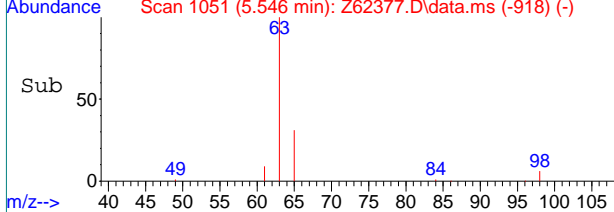
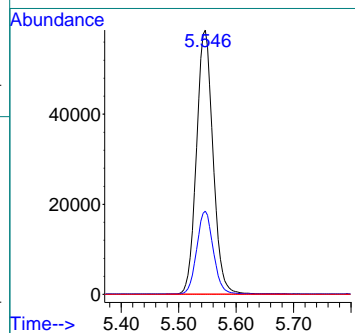
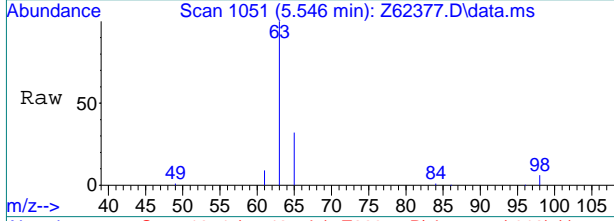
Ion	Ratio	Lower	Upper
84	100		
49	131.3	128.7	168.7
86	62.3	43.9	83.9



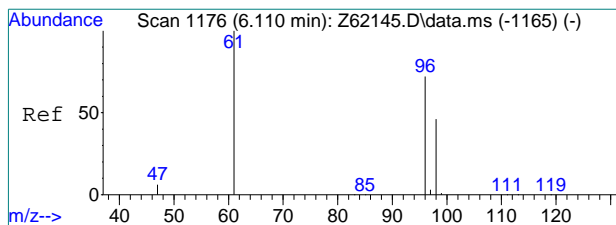
#7
 1,1-Dichloroethane
 Concen: 6.39 ppb
 RT: 5.546 min Scan# 1051
 Delta R.T. 0.000 min
 Lab File: Z62377.D
 Acq: 15 Sep 2020 9:08 pm

Tgt Ion: 63 Resp: 1172749

Ion	Ratio	Lower	Upper
63	100		
65	31.4	11.3	51.3
83	0.0	0.0	30.0

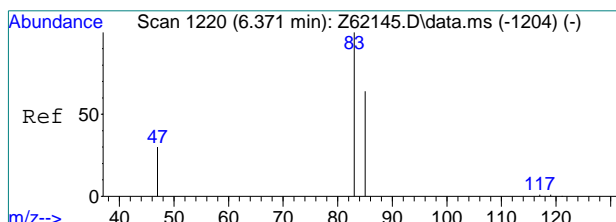
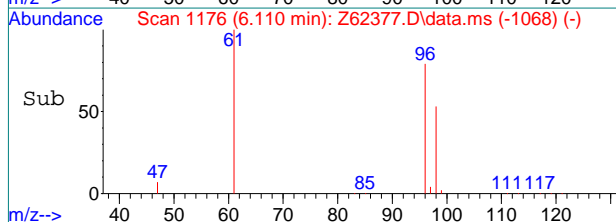
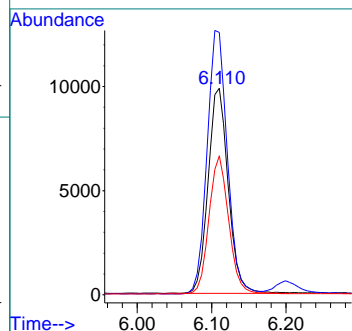
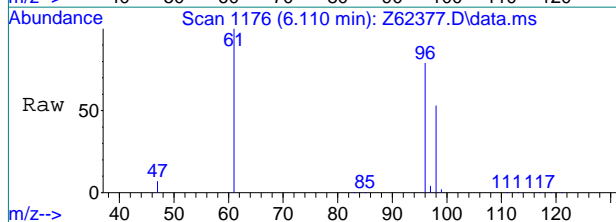


7.1.28
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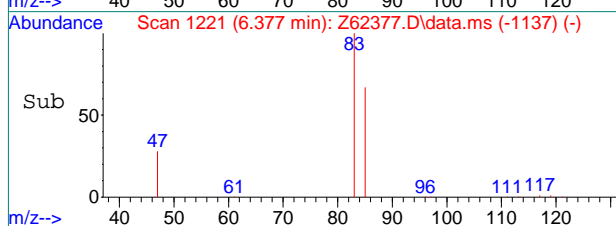
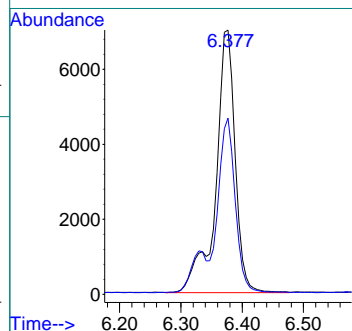
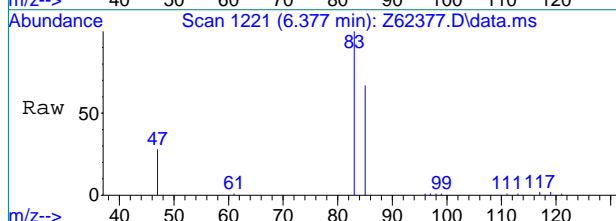
#8
 cis-1,2-Dichloroethene
 Concen: 1.54 ppb
 RT: 6.110 min Scan# 1176
 Delta R.T. 0.000 min
 Lab File: Z62377.D
 Acq: 15 Sep 2020 9:08 pm

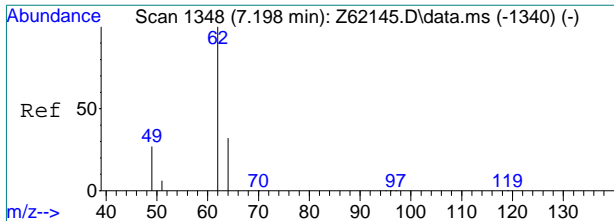
Tgt Ion	Resp	Lower	Upper
96	185352		
96	100		
61	127.4	119.3	159.3
98	67.3	44.5	84.5



#9
 Chloroform
 Concen: 0.70 ppb
 RT: 6.377 min Scan# 1221
 Delta R.T. -0.000 min
 Lab File: Z62377.D
 Acq: 15 Sep 2020 9:08 pm

Tgt Ion	Resp	Lower	Upper
83	154302		
83	100		
85	58.7	46.1	86.1

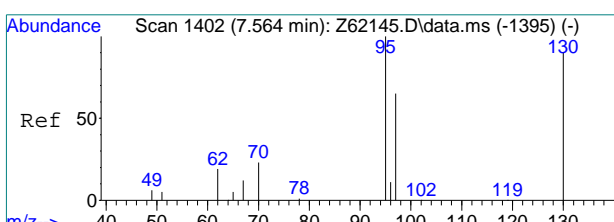
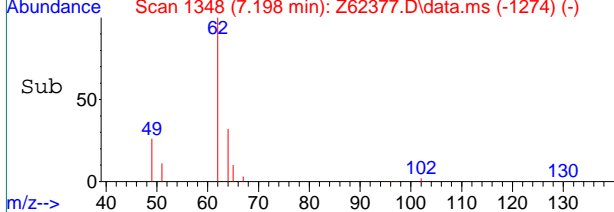
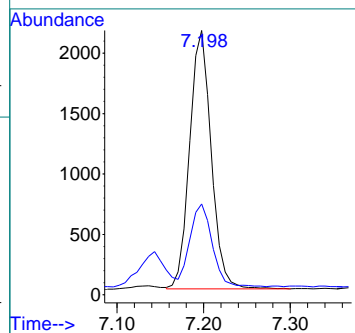
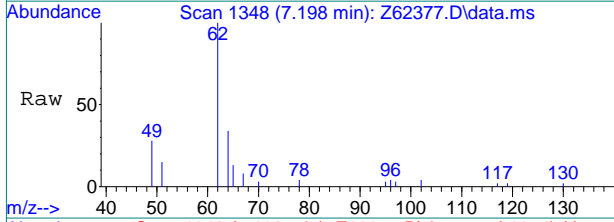




#14
 1,2-Dichloroethane
 Concen: 0.24 ppb
 RT: 7.198 min Scan# 1348
 Delta R.T. -0.000 min
 Lab File: Z62377.D
 Acq: 15 Sep 2020 9:08 pm

Tgt Ion: 62 Resp: 37026

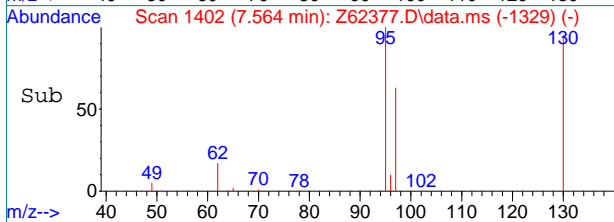
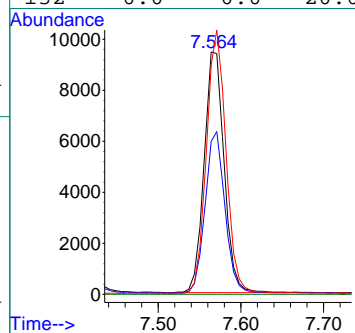
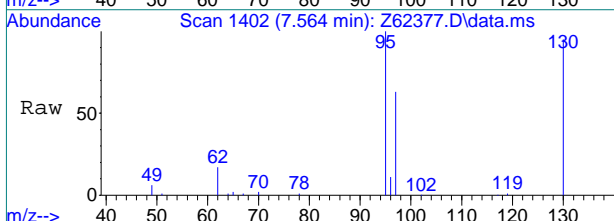
Ion	Ratio	Lower	Upper
62	100		
64	33.5	12.3	52.3



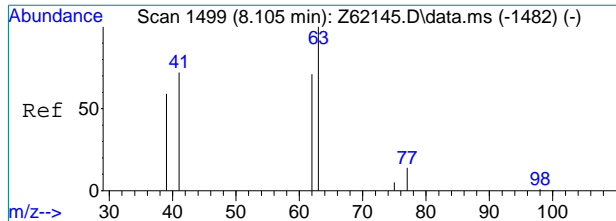
#15
 Trichloroethene
 Concen: 1.27 ppb
 RT: 7.564 min Scan# 1402
 Delta R.T. -0.007 min
 Lab File: Z62377.D
 Acq: 15 Sep 2020 9:08 pm

Tgt Ion: 95 Resp: 159089

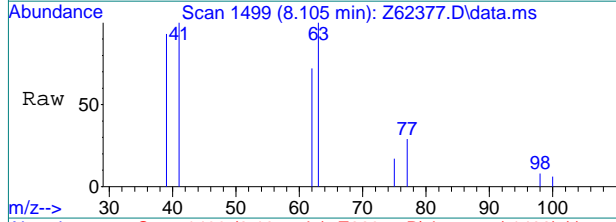
Ion	Ratio	Lower	Upper
95	100		
97	62.9	44.5	84.5
130	94.8	69.7	109.7
132	0.0	0.0	20.0



7.1.28
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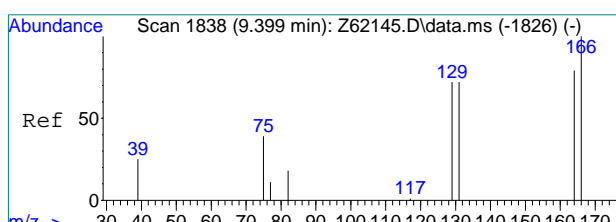
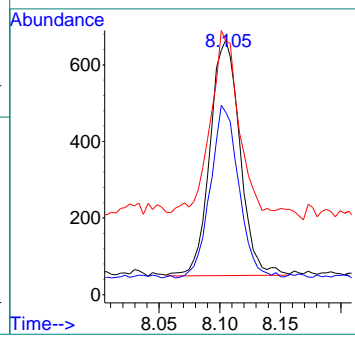
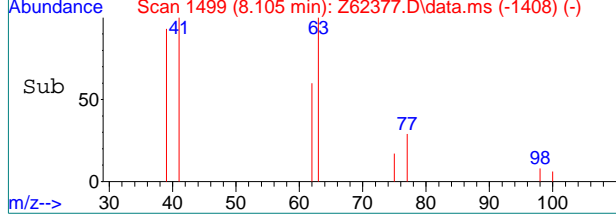


#16
 1,2-Dichloropropane
 Concen: 0.10 ppb
 RT: 8.105 min Scan# 1499
 Delta R.T. -0.000 min
 Lab File: Z62377.D
 Acq: 15 Sep 2020 9:08 pm

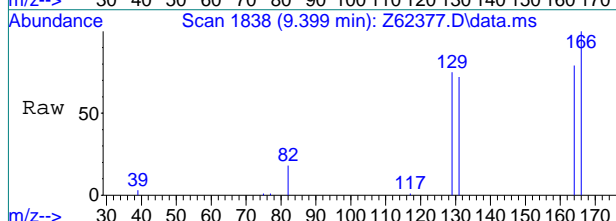


Tgt Ion: 63 Resp: 10571

Ion	Ratio	Lower	Upper
63	100		
62	69.5	51.6	91.6
41	67.5	43.7	103.7

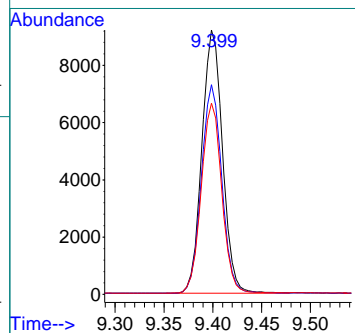
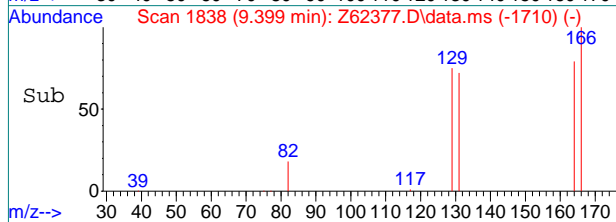


#21
 Tetrachloroethene
 Concen: 0.93 ppb
 RT: 9.399 min Scan# 1838
 Delta R.T. -0.000 min
 Lab File: Z62377.D
 Acq: 15 Sep 2020 9:08 pm



Tgt Ion: 166 Resp: 135127

Ion	Ratio	Lower	Upper
166	100		
164	79.2	58.7	98.7
131	72.1	51.6	91.6



7.1.28
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Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-14-2020\VO2359\
 Data File : O61301.d
 Acq On : 12 Sep 2020 8:44 pm
 Operator : stutip
 Sample : fa78551-15
 Misc : MS47193,VO2359,,,,,
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 14 07:58:12 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Sun Sep 13 19:20:40 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	

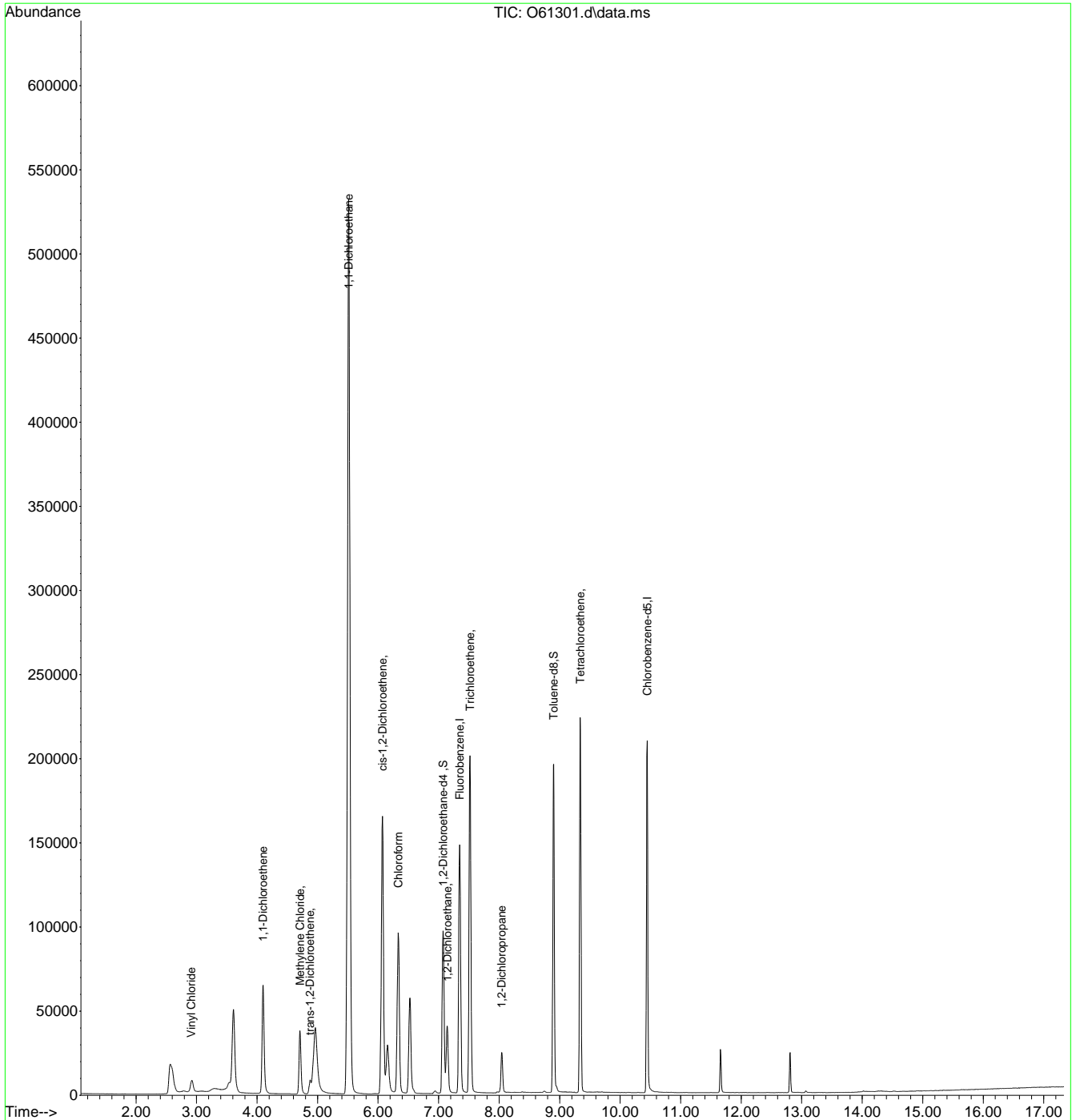
Internal Standards							
1) Fluorobenzene	7.346	96	226995	5.00	ug/L	0.00	
18) Chlorobenzene-d5	10.447	117	184311	5.00	ug/L	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.074	65	99278	5.41	ug/L	0.00	
Spiked Amount	5.000	Range 74 - 125	Recovery	=	108.20%		
19) Toluene-d8	8.900	98	195875	4.71	ug/L	0.00	
Spiked Amount	5.000	Range 88 - 111	Recovery	=	94.20%		
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.908	62	8346	0.31	ug/L		98
4) 1,1-Dichloroethene	4.096	61	79707	2.54	ug/L		91
5) Methylene Chloride	4.707	49	50432	1.03	ug/L		95
6) trans-1,2-Dichloroethene	4.873	61	9400m	0.26	ug/L		
7) 1,1-Dichloroethane	5.514	63	976567	23.21	ug/L		99
8) cis-1,2-Dichloroethene	6.072	96	118490	5.70	ug/L #		82
9) Chloroform	6.333	83	112483	3.11	ug/L		95
14) 1,2-Dichloroethane	7.145	62	49594	1.45	ug/L		92
15) Trichloroethene	7.518	95	136811	6.41	ug/L		87
16) 1,2-Dichloropropane	8.040	63	15266	0.65	ug/L		95
21) Tetrachloroethene	9.343	166	134296	6.64	ug/L		99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

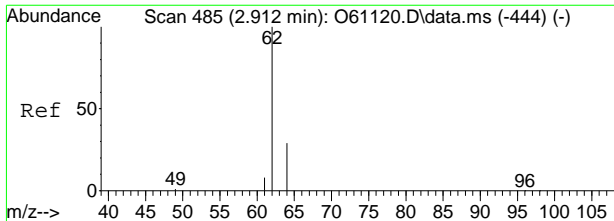
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-14-2020\VO2359\
 Data File : O61301.d
 Acq On : 12 Sep 2020 8:44 pm
 Operator : stutip
 Sample : fa78551-15
 Misc : MS47193,VO2359,,,,,
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 14 07:58:12 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Sun Sep 13 19:20:40 2020
 Response via : Initial Calibration



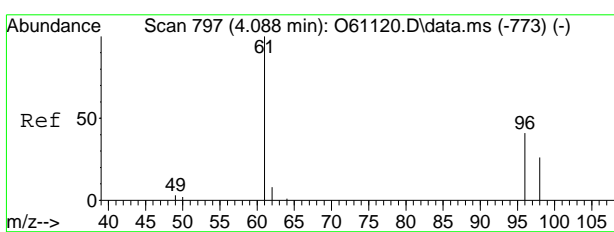
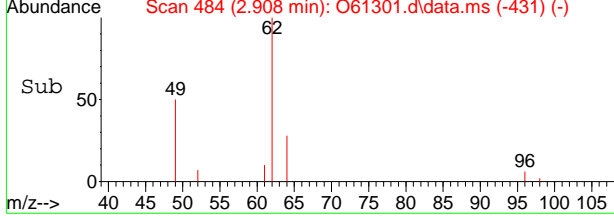
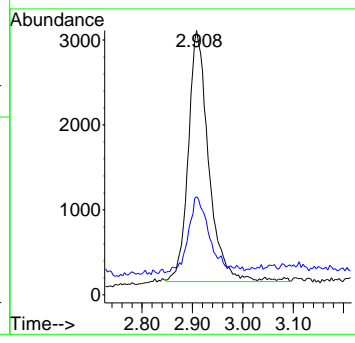
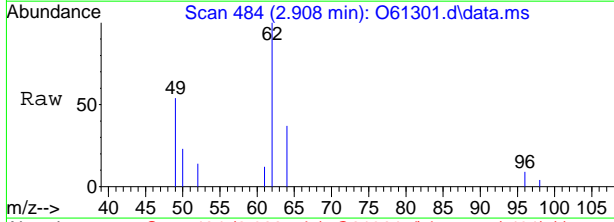
7.1.29
7



#2
 Vinyl Chloride
 Concen: 0.31 ug/L
 RT: 2.908 min Scan# 484
 Delta R.T. 0.000 min
 Lab File: O61301.d
 Acq: 12 Sep 2020 8:44 pm

Tgt Ion: 62 Resp: 8346

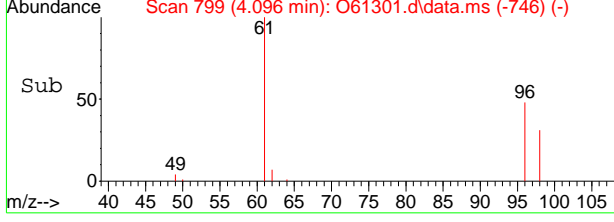
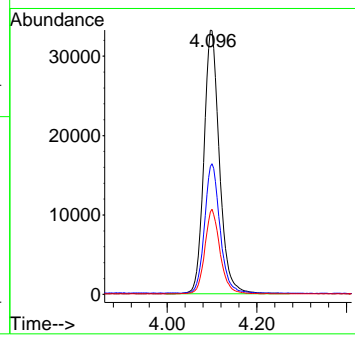
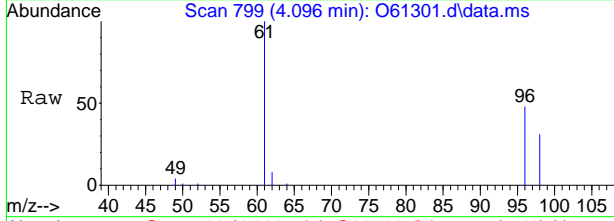
Ion	Ratio	Lower	Upper
62	100		
64	30.1	0.9	60.9



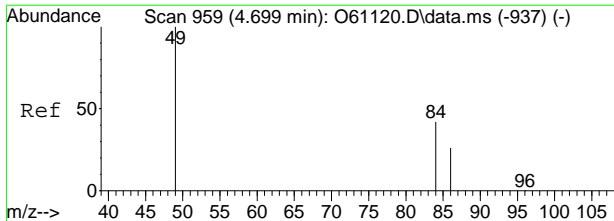
#4
 1,1-Dichloroethene
 Concen: 2.54 ug/L
 RT: 4.096 min Scan# 799
 Delta R.T. 0.000 min
 Lab File: O61301.d
 Acq: 12 Sep 2020 8:44 pm

Tgt Ion: 61 Resp: 79707

Ion	Ratio	Lower	Upper
61	100		
96	48.0	25.4	85.4
98	31.0	5.9	65.9

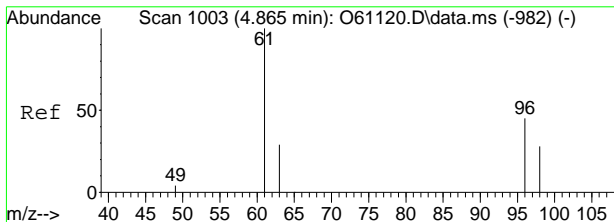
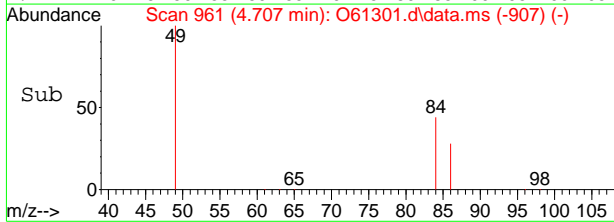
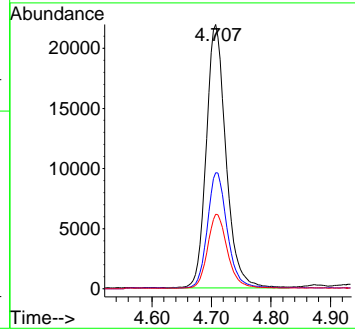
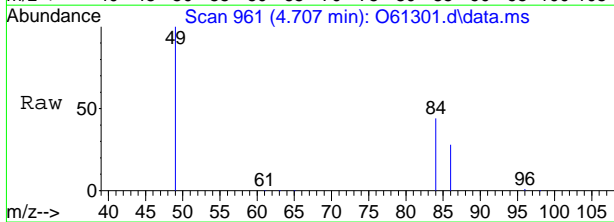


7.1.29
7



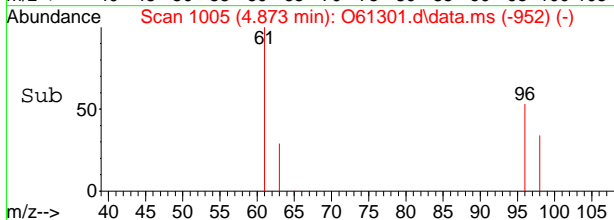
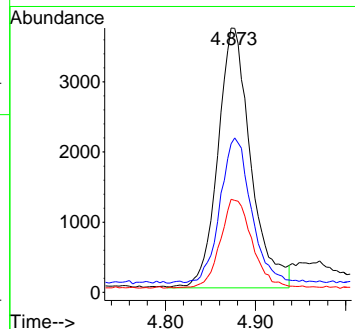
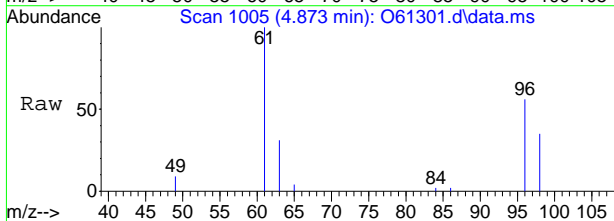
#5
 Methylene Chloride
 Concen: 1.03 ug/L
 RT: 4.707 min Scan# 961
 Delta R.T. 0.004 min
 Lab File: O61301.d
 Acq: 12 Sep 2020 8:44 pm

Tgt Ion	Ratio	Lower	Upper
49	100		
84	43.7	17.9	77.9
86	28.0	0.0	59.8

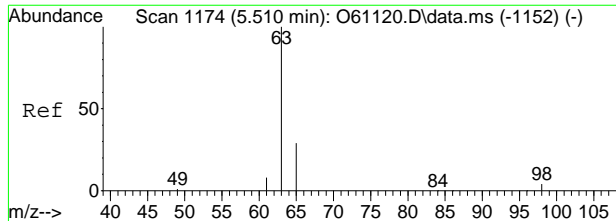


#6
 trans-1,2-Dichloroethene
 Concen: 0.26 ug/L m
 RT: 4.873 min Scan# 1005
 Delta R.T. -0.000 min
 Lab File: O61301.d
 Acq: 12 Sep 2020 8:44 pm

Tgt Ion	Ratio	Lower	Upper
61	100		
96	56.1	36.9	96.9
98	35.2	11.1	71.1



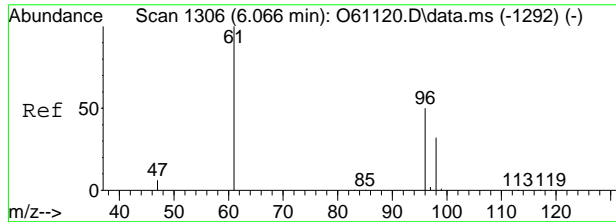
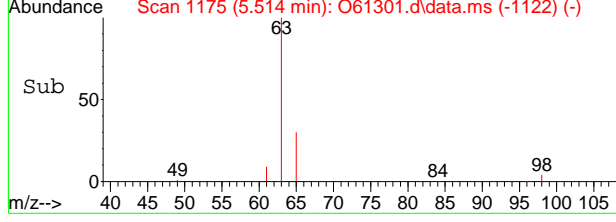
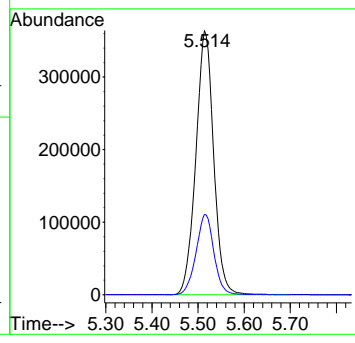
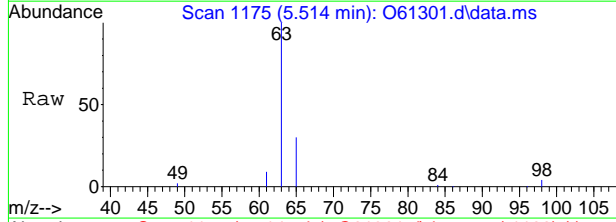
7.1.29
7



#7
 1,1-Dichloroethane
 Concen: 23.21 ug/L
 RT: 5.514 min Scan# 1175
 Delta R.T. 0.000 min
 Lab File: O61301.d
 Acq: 12 Sep 2020 8:44 pm

Tgt Ion: 63 Resp: 976567

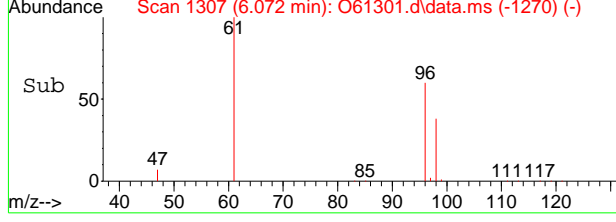
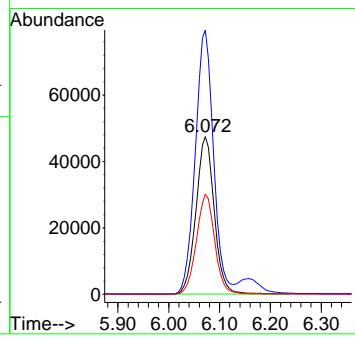
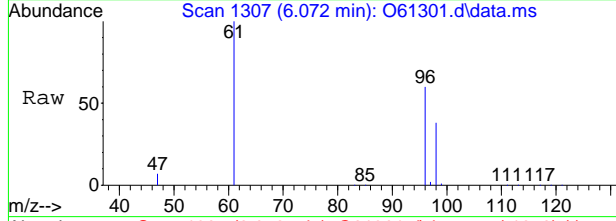
Ion	Ratio	Lower	Upper
63	100		
65	30.3	0.7	60.7



#8
 cis-1,2-Dichloroethene
 Concen: 5.70 ug/L
 RT: 6.072 min Scan# 1307
 Delta R.T. 0.000 min
 Lab File: O61301.d
 Acq: 12 Sep 2020 8:44 pm

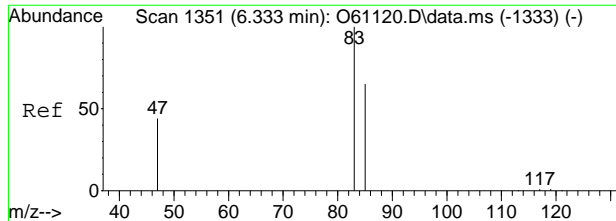
Tgt Ion: 96 Resp: 118490

Ion	Ratio	Lower	Upper
96	100		
61	167.9	107.0	167.0#
98	63.7	34.1	94.1



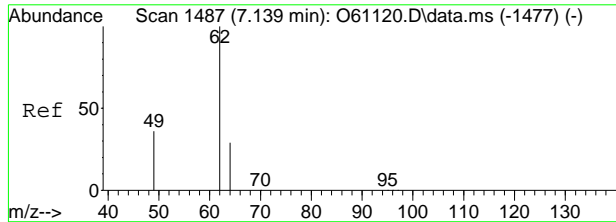
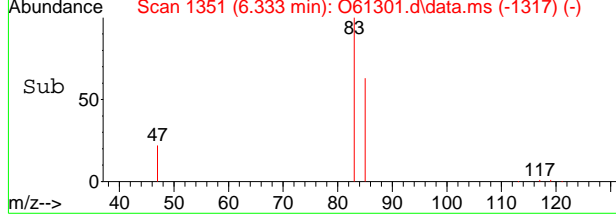
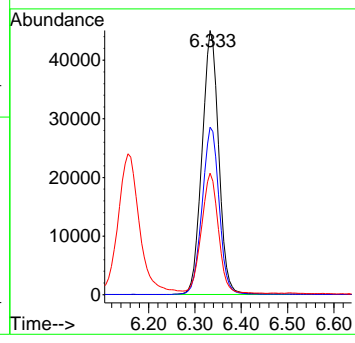
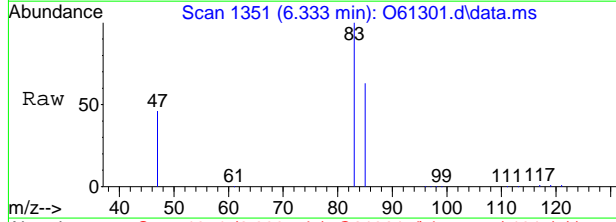
7.1.29
7





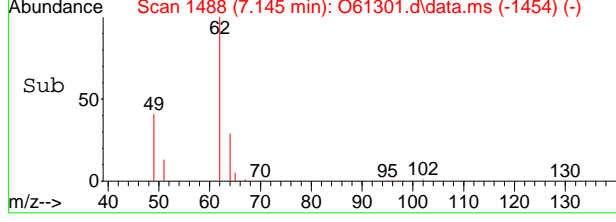
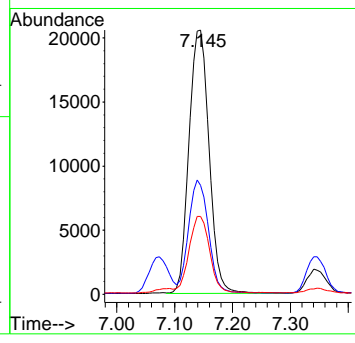
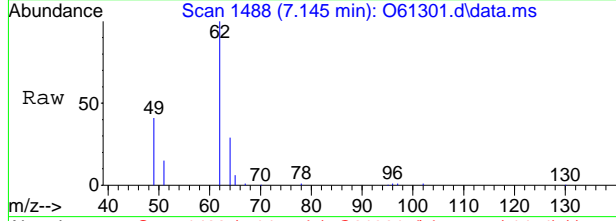
#9
 Chloroform
 Concen: 3.11 ug/L
 RT: 6.333 min Scan# 1351
 Delta R.T. -0.000 min
 Lab File: O61301.d
 Acq: 12 Sep 2020 8:44 pm

Tgt Ion	Ratio	Lower	Upper
83	100		
85	63.4	33.0	93.0
47	45.3	8.1	68.1

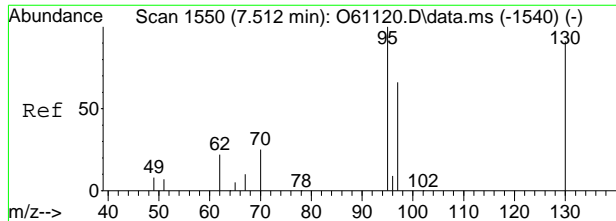


#14
 1,2-Dichloroethane
 Concen: 1.45 ug/L
 RT: 7.145 min Scan# 1488
 Delta R.T. -0.000 min
 Lab File: O61301.d
 Acq: 12 Sep 2020 8:44 pm

Tgt Ion	Ratio	Lower	Upper
62	100		
49	40.9	18.0	78.0
64	28.9	1.5	61.5



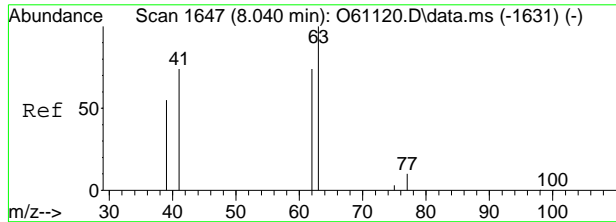
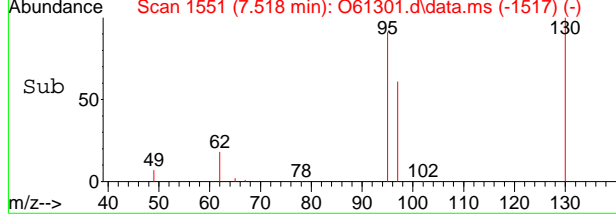
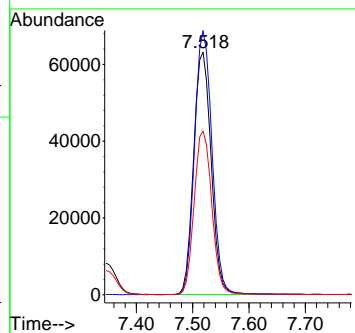
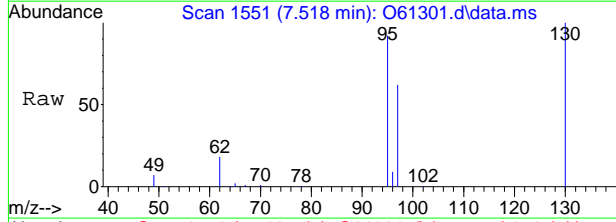
7.1.29 7



#15
 Trichloroethene
 Concen: 6.41 ug/L
 RT: 7.518 min Scan# 1551
 Delta R.T. 0.000 min
 Lab File: O61301.d
 Acq: 12 Sep 2020 8:44 pm

Tgt Ion: 95 Resp: 136811

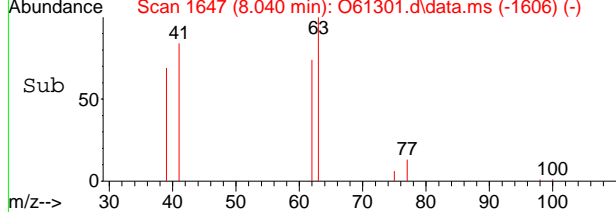
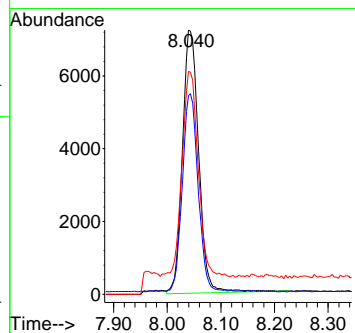
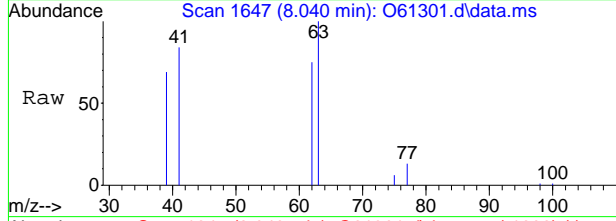
Ion	Ratio	Lower	Upper
95	100		
130	109.0	60.4	120.4
97	67.5	34.6	94.6



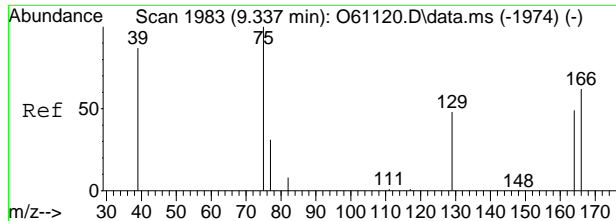
#16
 1,2-Dichloropropane
 Concen: 0.65 ug/L
 RT: 8.040 min Scan# 1647
 Delta R.T. -0.003 min
 Lab File: O61301.d
 Acq: 12 Sep 2020 8:44 pm

Tgt Ion: 63 Resp: 15266

Ion	Ratio	Lower	Upper
63	100		
62	75.0	42.7	102.7
41	78.5	54.5	114.5



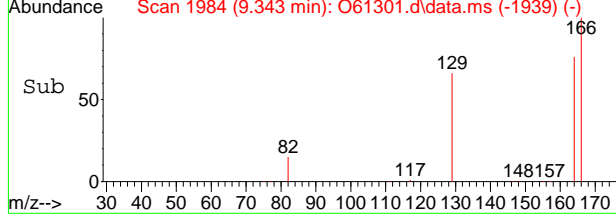
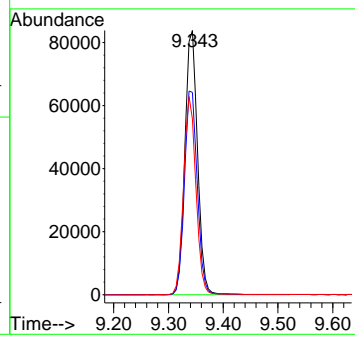
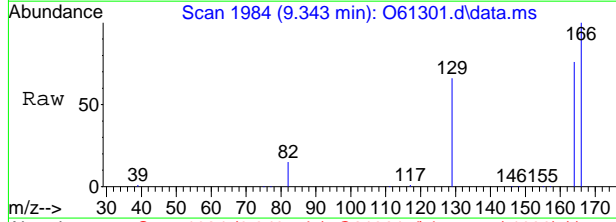
7.1.29
7



#21
 Tetrachloroethene
 Concen: 6.64 ug/L
 RT: 9.343 min Scan# 1984
 Delta R.T. 0.000 min
 Lab File: O61301.d
 Acq: 12 Sep 2020 8:44 pm

Tgt Ion:166 Resp: 134296

Ion	Ratio	Lower	Upper
166	100		
164	76.5	47.3	107.3
129	66.4	37.5	97.5



7.1.29
7



Manual Integration Approval Summary

Sample Number: FA78551-15 **Method:** SW846 8260B BY SIM
Lab FileID: O61301.D **Analyst approved:** 09/16/20 11:05 Juan Garcia
Injection Time: 09/12/20 20:44 **Supervisor approved:** 09/16/20 12:23 Melissa Mangual

Parameter	CAS	Sig#	R.T. (min.)	Reason
trans-1,2-Dichloroethylene	156-60-5		4.87	Overlapping peak

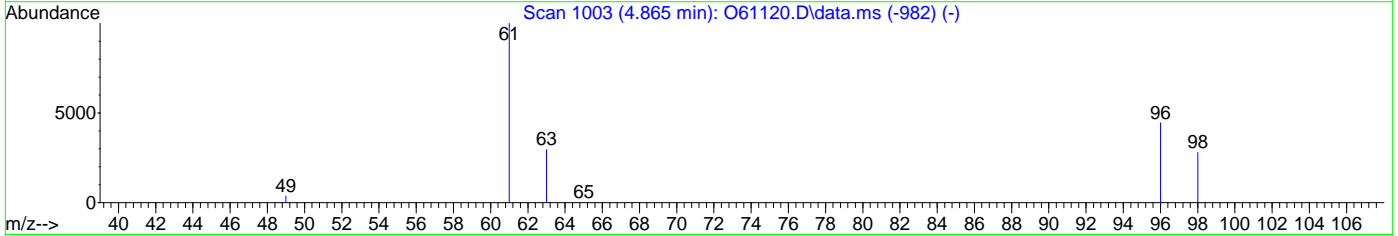
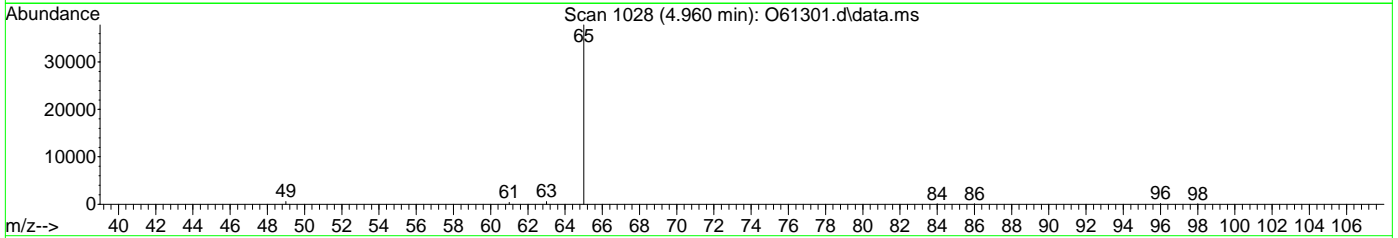
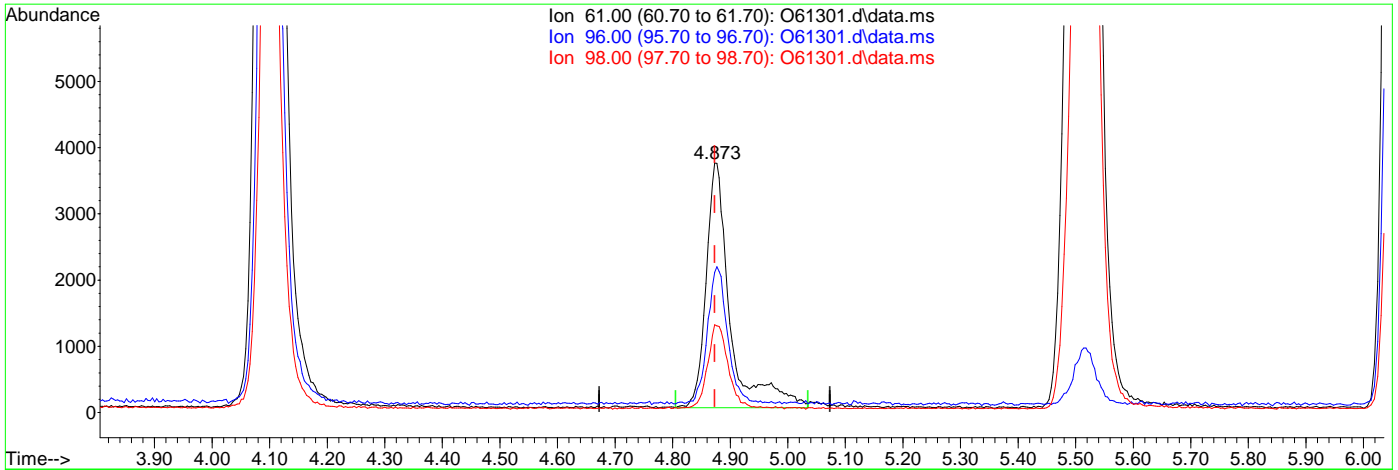
7.1.29.1

7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-14-2020\VO2359\
 Data File : O61301.d
 Acq On : 12 Sep 2020 8:44 pm
 Operator : stutip
 Sample : fa78551-15
 Misc : MS47193,VO2359,,,,,
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 14 07:19:58 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Sun Sep 13 19:20:40 2020
 Response via : Initial Calibration



(6) trans-1,2-Dichloroethene ()

4.873min (-0.000) 0.30ug/L

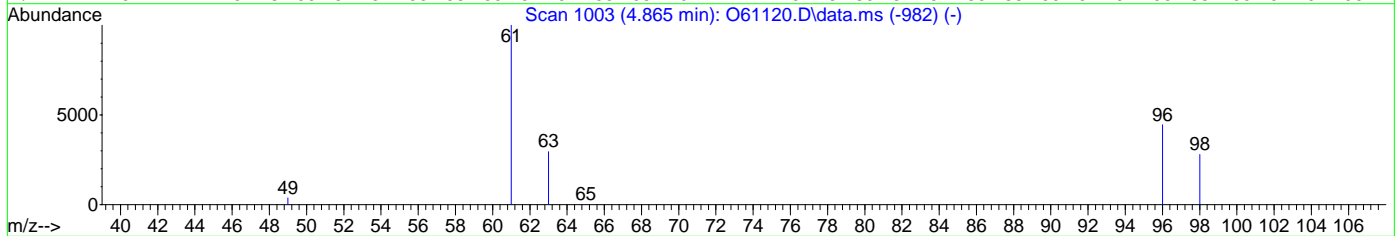
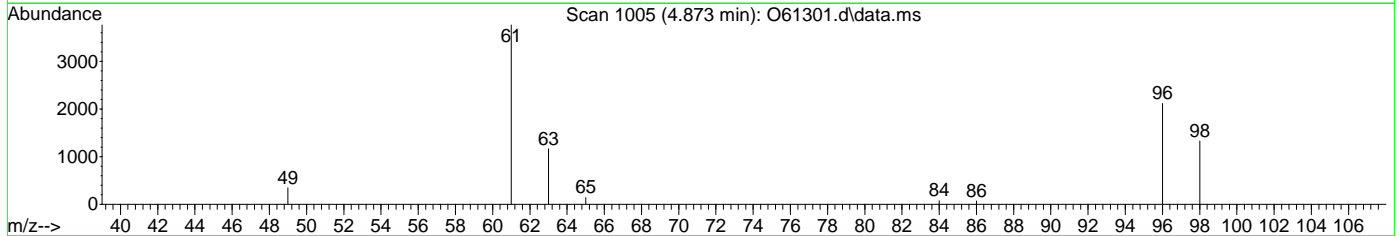
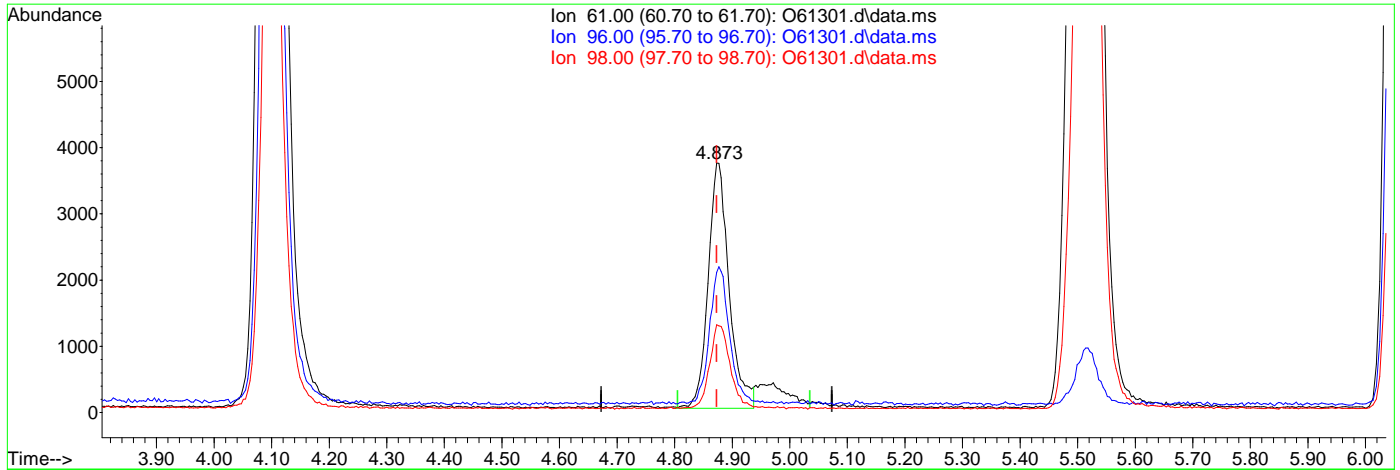
response 10694

Ion	Exp%	Act%
61.00	100	100
96.00	66.90	53.71
98.00	41.10	33.89
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-14-2020\VO2359\
 Data File : O61301.d
 Acq On : 12 Sep 2020 8:44 pm
 Operator : stutip
 Sample : fa78551-15
 Misc : MS47193,VO2359,,,,,
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 14 07:19:58 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Sun Sep 13 19:20:40 2020
 Response via : Initial Calibration



TIC: O61301.d\data.ms

(6) trans-1,2-Dichloroethene ()

4.873min (-0.000) 0.26ug/L m

response 9400

Ion	Exp%	Act%
61.00	100	100
96.00	66.90	56.14
98.00	41.10	35.18
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\091420\
 Data File : Z62334.D
 Acq On : 14 Sep 2020 5:38 pm
 Operator : JuanG
 Sample : FA78551-15,2X
 Misc : MS47193,VZ2418,,,,,2
 ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 15 18:50:42 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Sun Sep 13 13:38:26 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	

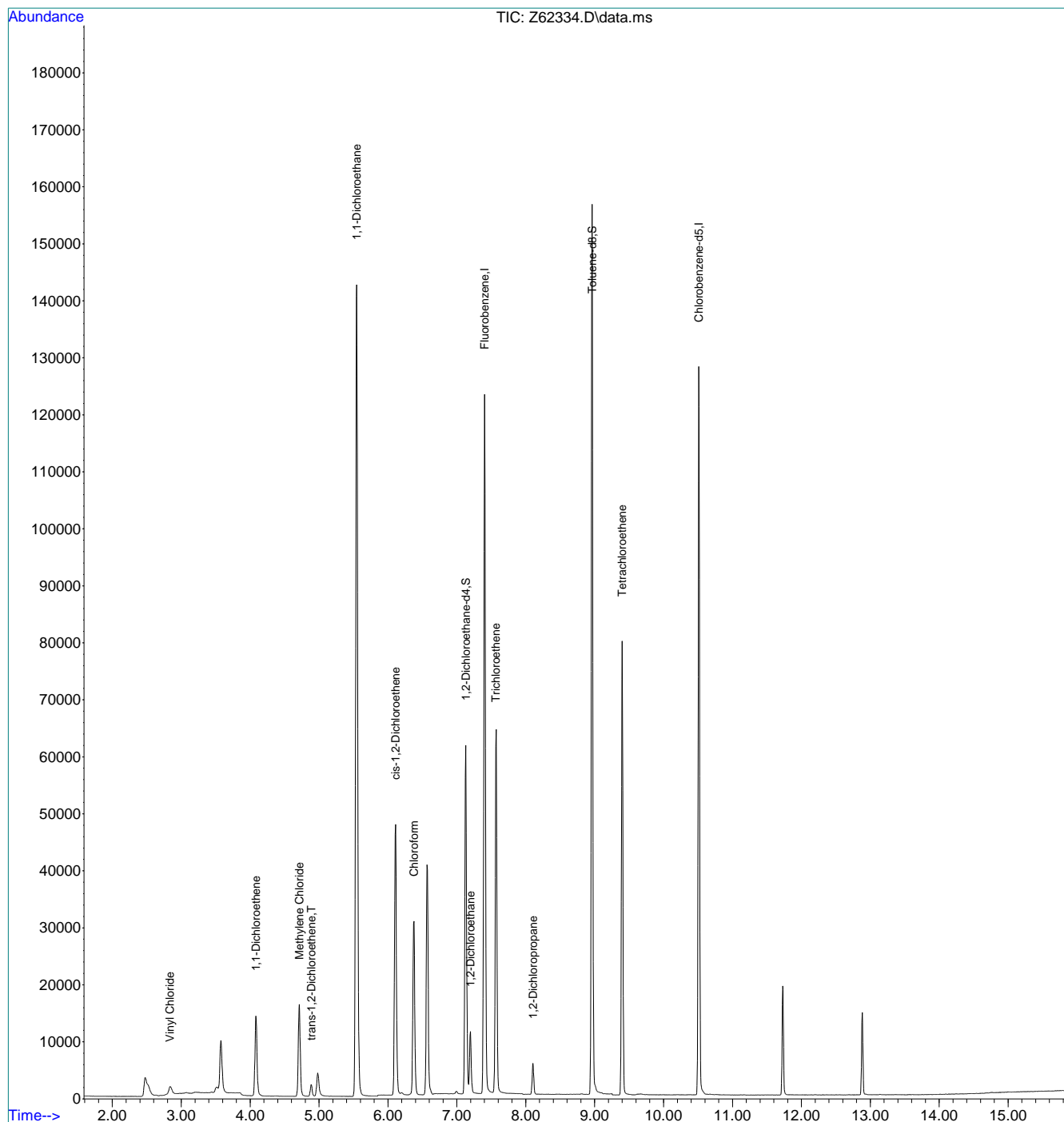
Internal Standards							
1) Fluorobenzene	7.401	96	1402089	5.00	ppb	0.00	
18) Chlorobenzene-d5	10.511	117	1140633	5.00	ppb	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.130	65	501866	5.79	ppb	0.00	
Spiked Amount	5.000	Range	79 - 125	Recovery	=	115.80%	
19) Toluene-d8	8.961	98	1354009	4.89	ppb	0.00	
Spiked Amount	5.000	Range	70 - 130	Recovery	=	97.80%	
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.835	62	18027	0.16	ppb		93
4) 1,1-Dichloroethene	4.083	96	81547	0.96	ppb		90
5) Methylene Chloride	4.713	84	107133	0.77	ppb		90
6) trans-1,2-Dichloroethene	4.890	96	11353	0.11	ppb	#	84
7) 1,1-Dichloroethane	5.546	63	1898474	10.81	ppb	#	99
8) cis-1,2-Dichloroethene	6.110	96	288248	2.51	ppb		93
9) Chloroform	6.377	83	295123	1.40	ppb		98
14) 1,2-Dichloroethane	7.198	62	106239	0.72	ppb		99
15) Trichloroethene	7.564	95	350504	2.93	ppb		96
16) 1,2-Dichloropropane	8.105	63	27711	0.28	ppb		99
21) Tetrachloroethene	9.399	166	340083	2.56	ppb		99

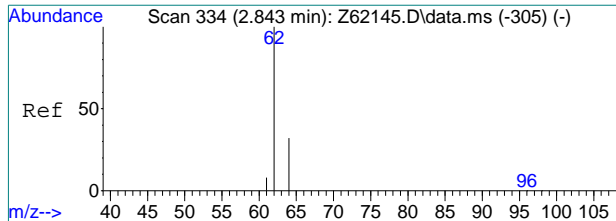
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\091420\
Data File : Z62334.D
Acq On : 14 Sep 2020 5:38 pm
Operator : JuanG
Sample : FA78551-15,2X
Misc : MS47193,VZ2418,,,,,2
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 15 18:50:42 2020
Quant Method : C:\msdchem\1\methods\SIMCL091120.M
Quant Title : WATER-EPA 8260B
QLast Update : Sun Sep 13 13:38:26 2020
Response via : Initial Calibration

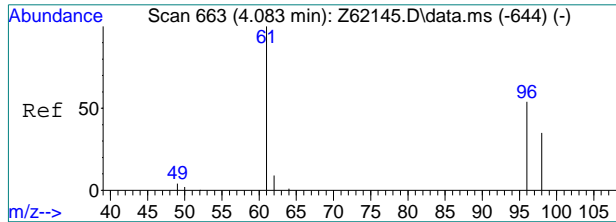
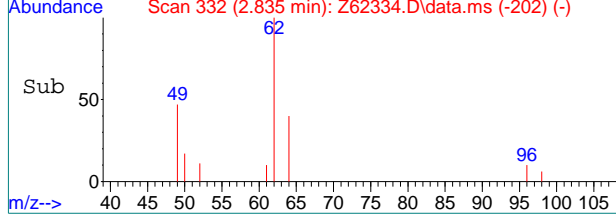
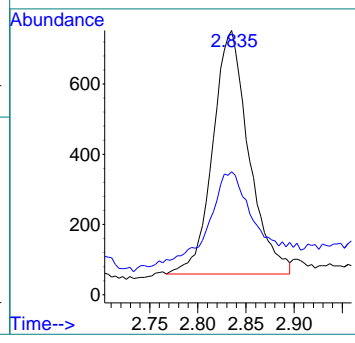
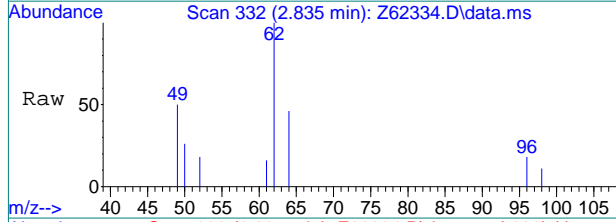




#2
 Vinyl Chloride
 Concen: 0.16 ppb
 RT: 2.835 min Scan# 332
 Delta R.T. -0.008 min
 Lab File: Z62334.D
 Acq: 14 Sep 2020 5:38 pm

Tgt Ion: 62 Resp: 18027

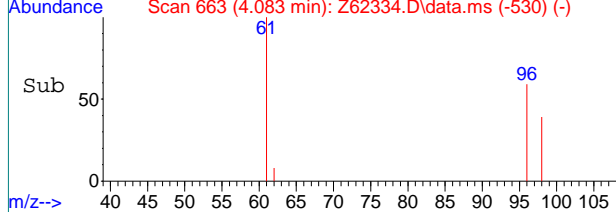
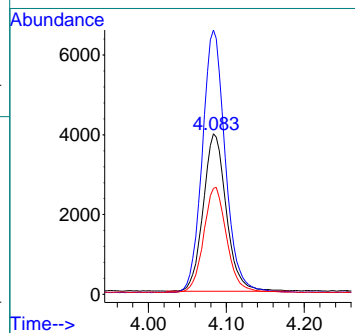
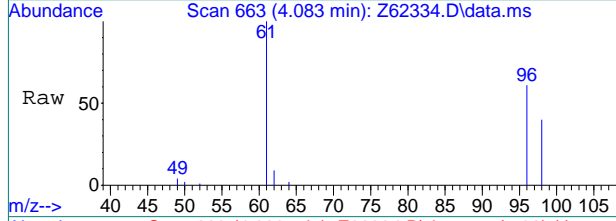
Ion	Ratio	Lower	Upper
62	100		
64	36.0	11.9	51.9



#4
 1,1-Dichloroethene
 Concen: 0.96 ppb
 RT: 4.083 min Scan# 663
 Delta R.T. 0.000 min
 Lab File: Z62334.D
 Acq: 14 Sep 2020 5:38 pm

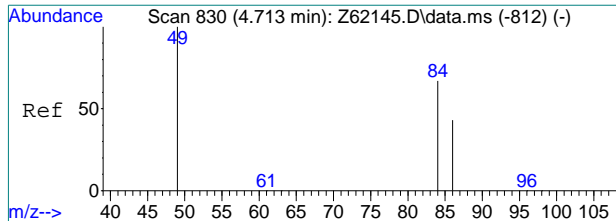
Tgt Ion: 96 Resp: 81547

Ion	Ratio	Lower	Upper
96	100		
61	166.5	164.8	204.8
98	66.0	45.1	85.1



7.1.30
7

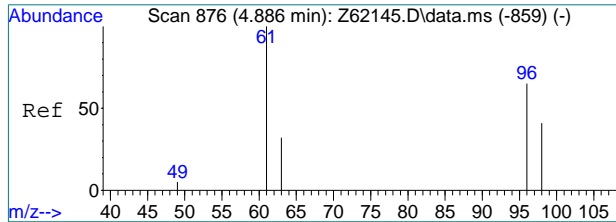
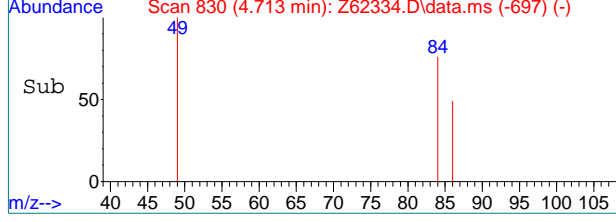
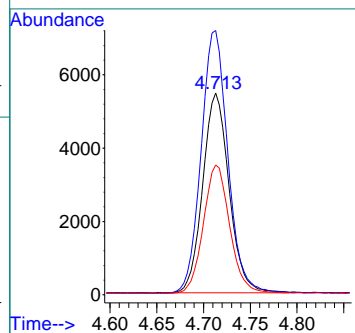
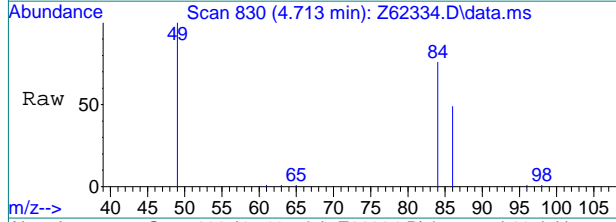




#5
Methylene Chloride
Concen: 0.77 ppb
RT: 4.713 min Scan# 830
Delta R.T. -0.000 min
Lab File: Z62334.D
Acq: 14 Sep 2020 5:38 pm

Tgt Ion: 84 Resp: 107133

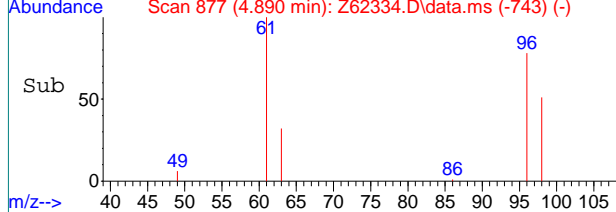
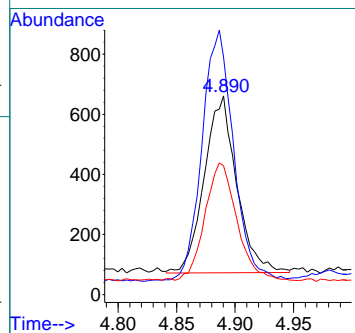
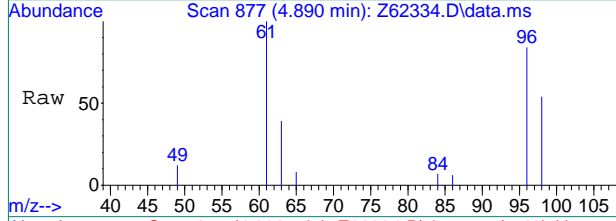
Ion	Ratio	Lower	Upper
84	100		
49	131.4	128.7	168.7
86	64.2	43.9	83.9



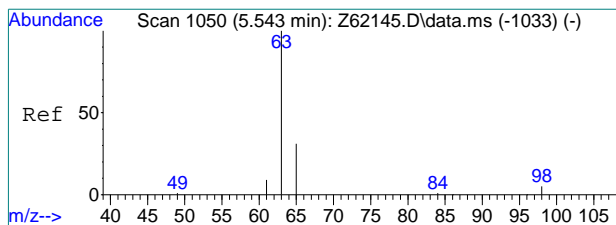
#6
trans-1,2-Dichloroethene
Concen: 0.11 ppb
RT: 4.890 min Scan# 877
Delta R.T. 0.004 min
Lab File: Z62334.D
Acq: 14 Sep 2020 5:38 pm

Tgt Ion: 96 Resp: 11353

Ion	Ratio	Lower	Upper
96	100		
61	127.1	134.2	174.2#
98	65.2	43.4	83.4



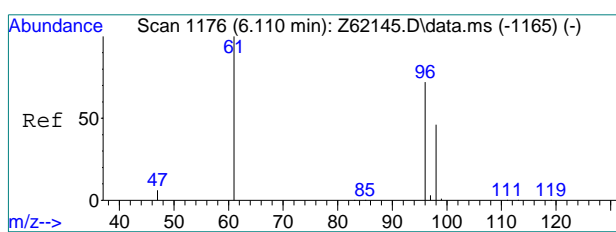
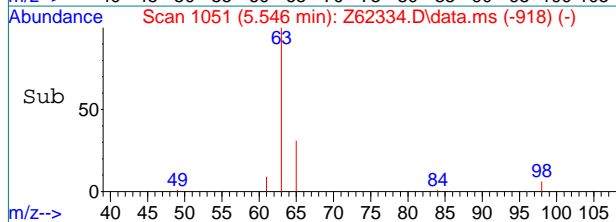
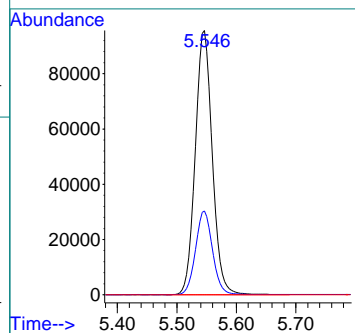
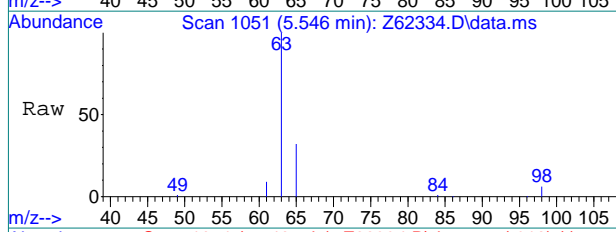
7.1.30
7



#7
 1,1-Dichloroethane
 Concen: 10.81 ppb
 RT: 5.546 min Scan# 1051
 Delta R.T. 0.000 min
 Lab File: Z62334.D
 Acq: 14 Sep 2020 5:38 pm

Tgt Ion: 63 Resp: 1898474

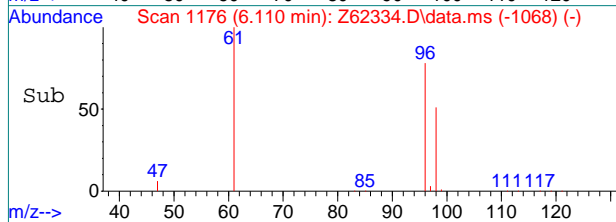
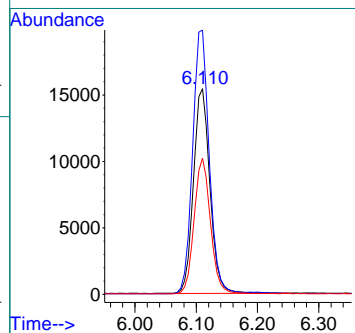
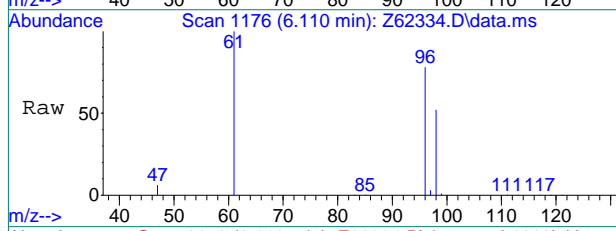
Ion	Ratio	Lower	Upper
63	100		
65	31.6	11.3	51.3
83	0.0	0.0	30.0



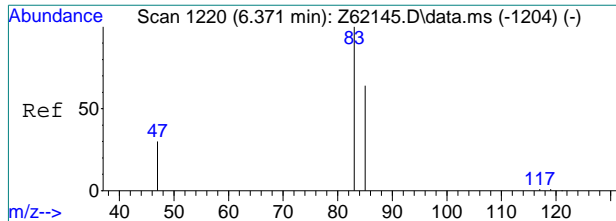
#8
 cis-1,2-Dichloroethene
 Concen: 2.51 ppb
 RT: 6.110 min Scan# 1176
 Delta R.T. 0.000 min
 Lab File: Z62334.D
 Acq: 14 Sep 2020 5:38 pm

Tgt Ion: 96 Resp: 288248

Ion	Ratio	Lower	Upper
96	100		
61	128.9	119.3	159.3
98	66.4	44.5	84.5



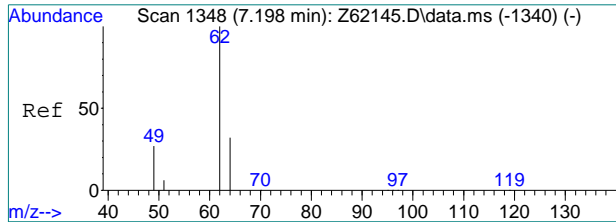
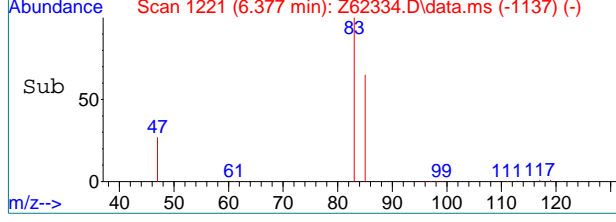
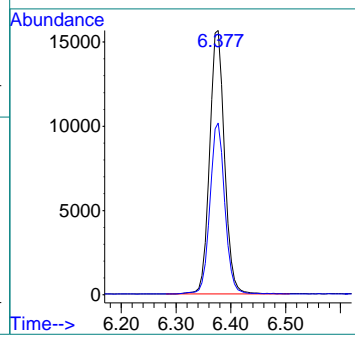
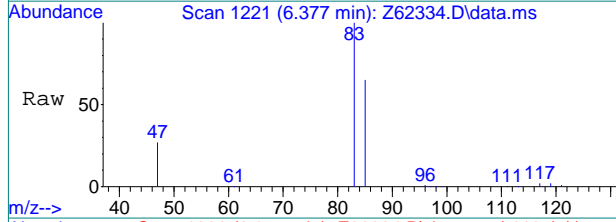
7.1.30
7



#9
 Chloroform
 Concen: 1.40 ppb
 RT: 6.377 min Scan# 1221
 Delta R.T. -0.000 min
 Lab File: Z62334.D
 Acq: 14 Sep 2020 5:38 pm

Tgt Ion: 83 Resp: 295123

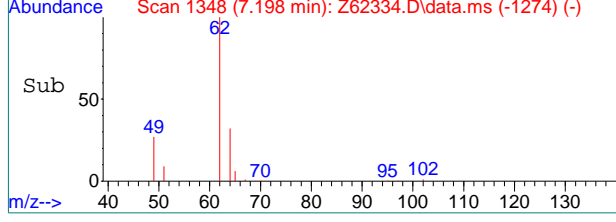
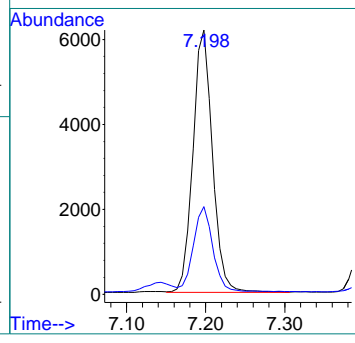
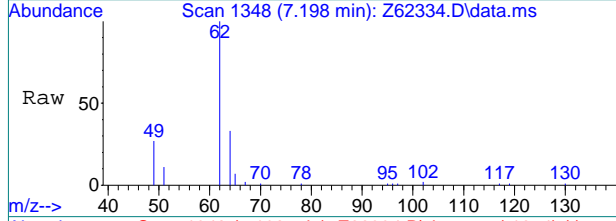
Ion	Ratio	Lower	Upper
83	100		
85	64.8	46.1	86.1



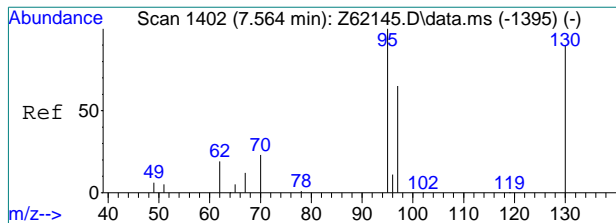
#14
 1,2-Dichloroethane
 Concen: 0.72 ppb
 RT: 7.198 min Scan# 1348
 Delta R.T. -0.000 min
 Lab File: Z62334.D
 Acq: 14 Sep 2020 5:38 pm

Tgt Ion: 62 Resp: 106239

Ion	Ratio	Lower	Upper
62	100		
64	31.8	12.3	52.3

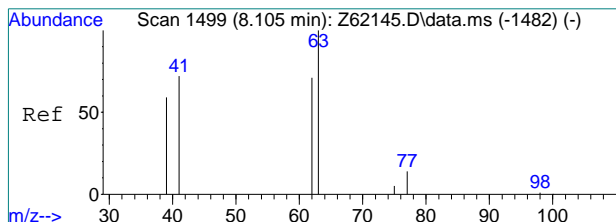
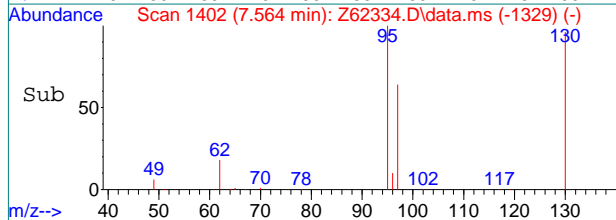
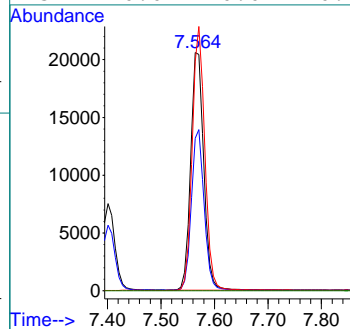
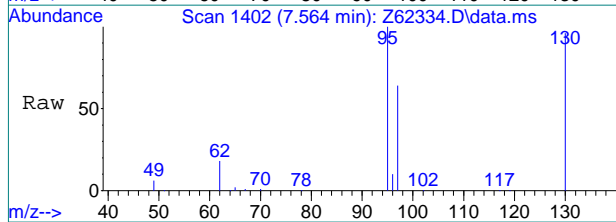


7.1.30
7



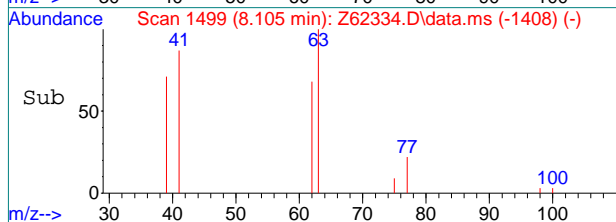
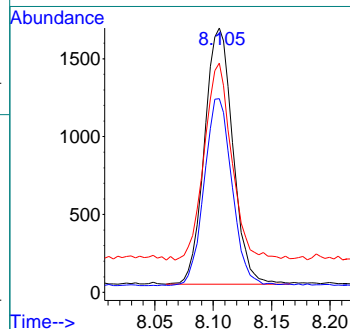
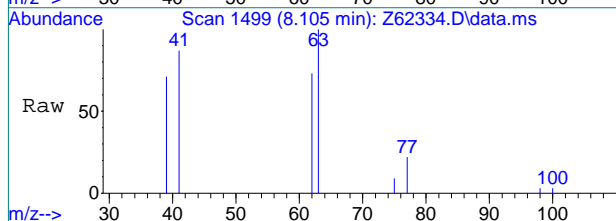
#15
 Trichloroethene
 Concen: 2.93 ppb
 RT: 7.564 min Scan# 1402
 Delta R.T. -0.007 min
 Lab File: Z62334.D
 Acq: 14 Sep 2020 5:38 pm

Tgt Ion	Resp	Lower	Upper
95	350504		
97	63.9	44.5	84.5
130	96.1	69.7	109.7
132	0.0	0.0	20.0

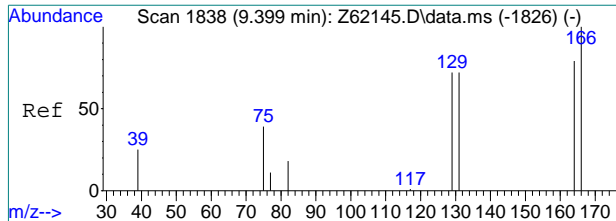


#16
 1,2-Dichloropropane
 Concen: 0.28 ppb
 RT: 8.105 min Scan# 1499
 Delta R.T. 0.000 min
 Lab File: Z62334.D
 Acq: 14 Sep 2020 5:38 pm

Tgt Ion	Resp	Lower	Upper
63	27711		
62	72.1	51.6	91.6
41	74.8	43.7	103.7



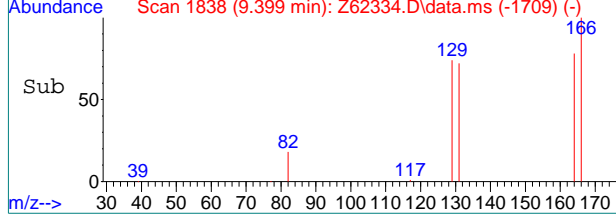
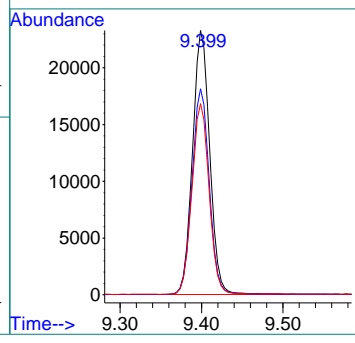
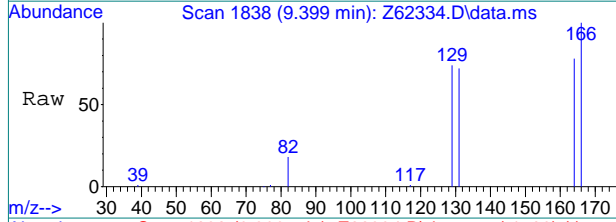
7.1.30
7



#21
 Tetrachloroethene
 Concen: 2.56 ppb
 RT: 9.399 min Scan# 1838
 Delta R.T. -0.000 min
 Lab File: Z62334.D
 Acq: 14 Sep 2020 5:38 pm

Tgt Ion: 166 Resp: 340083

Ion	Ratio	Lower	Upper
166	100		
164	77.9	58.7	98.7
131	72.2	51.6	91.6



7.1.30
7



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-14-2020\VO2359\
 Data File : O61302.d
 Acq On : 12 Sep 2020 9:04 pm
 Operator : stutip
 Sample : fa78551-16
 Misc : MS47193,VO2359,,,,,
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 14 07:59:19 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Sun Sep 13 19:20:40 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	

Internal Standards							
1) Fluorobenzene	7.346	96	224261	5.00	ug/L	0.00	
18) Chlorobenzene-d5	10.447	117	183224	5.00	ug/L	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.073	65	98841	5.46	ug/L	0.00	
Spiked Amount	5.000	Range 74 - 125	Recovery	=	109.20%		
19) Toluene-d8	8.896	98	193942	4.69	ug/L	0.00	
Spiked Amount	5.000	Range 88 - 111	Recovery	=	93.80%		
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.901	62	8113	0.31	ug/L		99
4) 1,1-Dichloroethene	4.092	61	79670	2.57	ug/L		91
5) Methylene Chloride	4.703	49	50123	1.03	ug/L		94
6) trans-1,2-Dichloroethene	4.873	61	9196m	0.26	ug/L		
7) 1,1-Dichloroethane	5.510	63	970575	23.35	ug/L		99
8) cis-1,2-Dichloroethene	6.072	96	118076	5.75	ug/L		85
9) Chloroform	6.333	83	110132	3.08	ug/L		93
14) 1,2-Dichloroethane	7.139	62	49444	1.46	ug/L		93
15) Trichloroethene	7.512	95	137629	6.53	ug/L		90
16) 1,2-Dichloropropane	8.043	63	15170	0.66	ug/L		95
21) Tetrachloroethene	9.343	166	141918	7.05	ug/L		99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

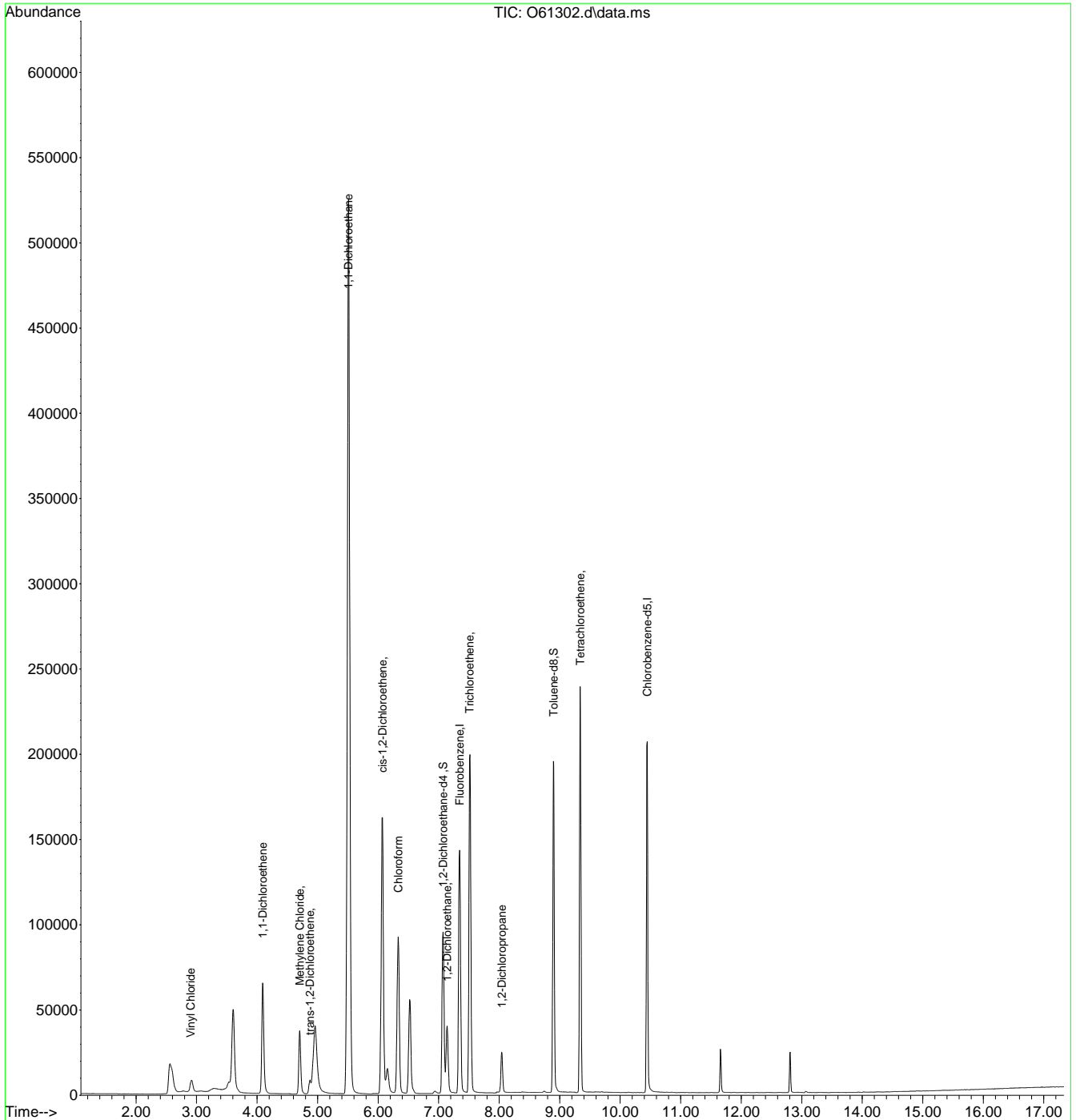
7.1.31
7



Quantitation Report (QT Reviewed)

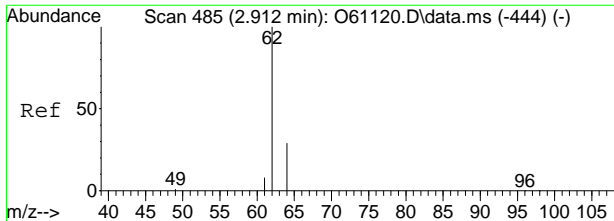
Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-14-2020\VO2359\
 Data File : O61302.d
 Acq On : 12 Sep 2020 9:04 pm
 Operator : stutip
 Sample : fa78551-16
 Misc : MS47193,VO2359,,,,,
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 14 07:59:19 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Sun Sep 13 19:20:40 2020
 Response via : Initial Calibration



7.1.31
7

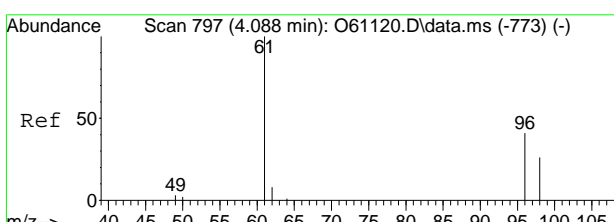
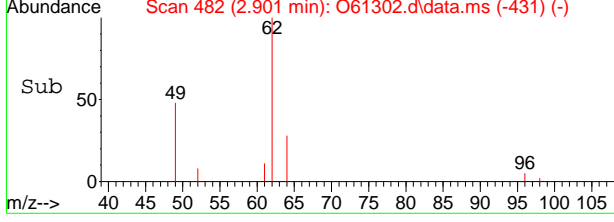
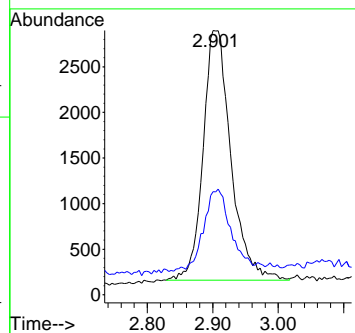
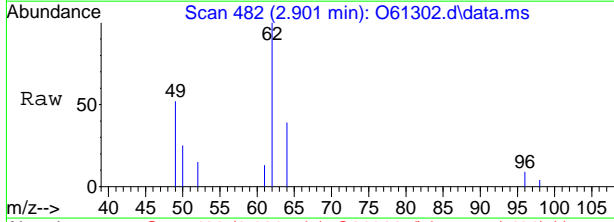




#2
 Vinyl Chloride
 Concen: 0.31 ug/L
 RT: 2.901 min Scan# 482
 Delta R.T. -0.007 min
 Lab File: O61302.d
 Acq: 12 Sep 2020 9:04 pm

Tgt Ion: 62 Resp: 8113

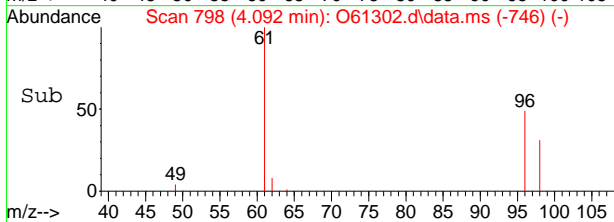
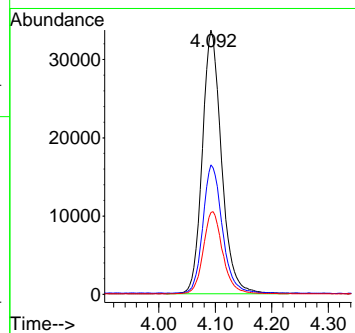
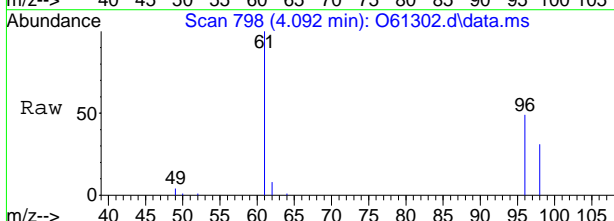
Ion	Ratio	Lower	Upper
62	100		
64	31.2	0.9	60.9



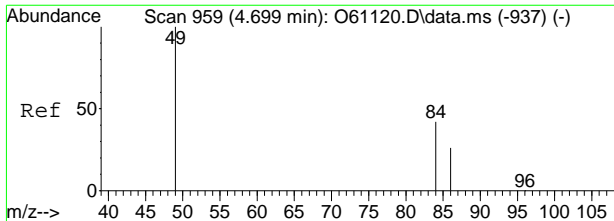
#4
 1,1-Dichloroethene
 Concen: 2.57 ug/L
 RT: 4.092 min Scan# 798
 Delta R.T. -0.004 min
 Lab File: O61302.d
 Acq: 12 Sep 2020 9:04 pm

Tgt Ion: 61 Resp: 79670

Ion	Ratio	Lower	Upper
61	100		
96	48.7	25.4	85.4
98	30.8	5.9	65.9

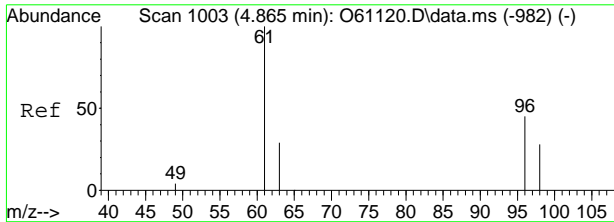
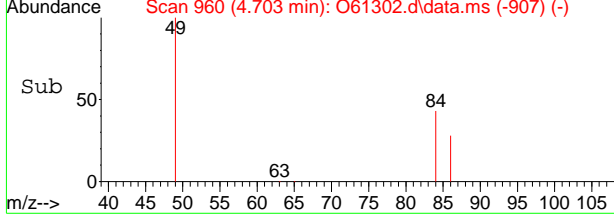
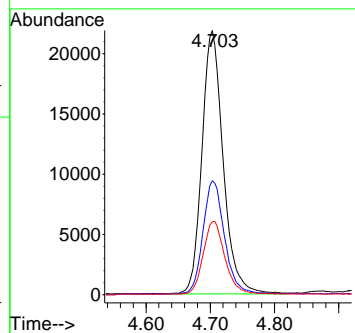
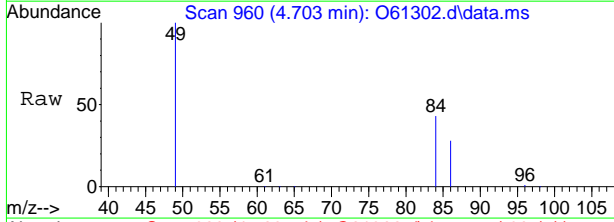


7.1.31
7



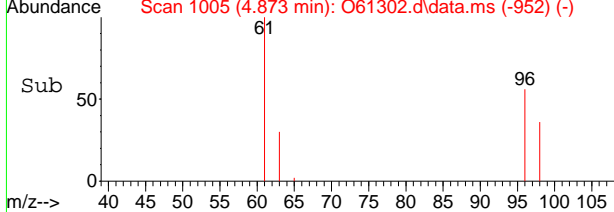
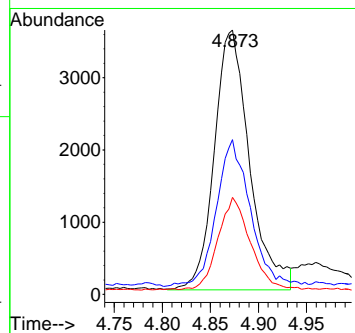
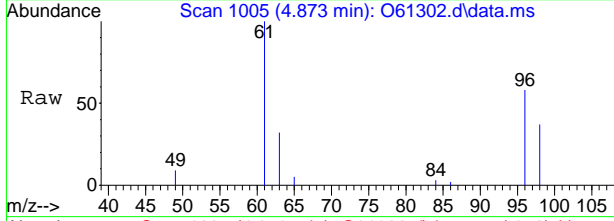
#5
 Methylene Chloride
 Concen: 1.03 ug/L
 RT: 4.703 min Scan# 960
 Delta R.T. 0.000 min
 Lab File: O61302.d
 Acq: 12 Sep 2020 9:04 pm

Tgt Ion	Ratio	Lower	Upper
49	100		
84	43.0	17.9	77.9
86	27.5	0.0	59.8

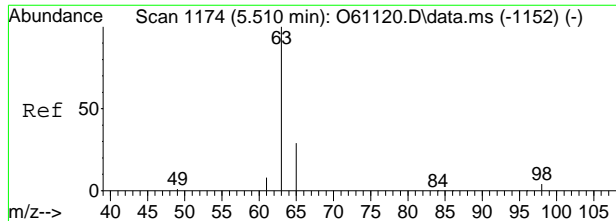


#6
 trans-1,2-Dichloroethene
 Concen: 0.26 ug/L m
 RT: 4.873 min Scan# 1005
 Delta R.T. -0.000 min
 Lab File: O61302.d
 Acq: 12 Sep 2020 9:04 pm

Tgt Ion	Ratio	Lower	Upper
61	100		
96	58.5	36.9	96.9
98	36.7	11.1	71.1



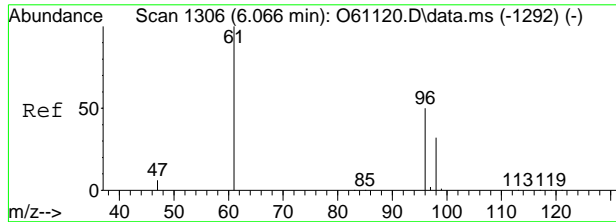
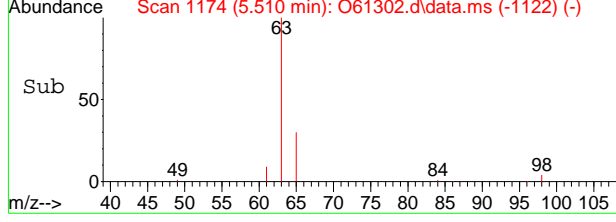
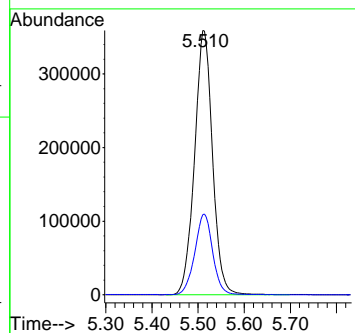
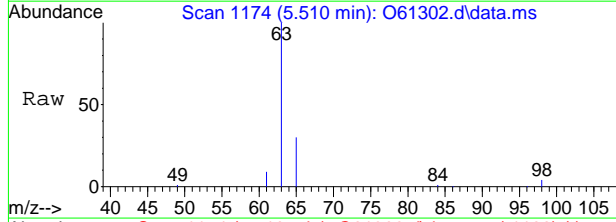
7.1.31
7



#7
 1,1-Dichloroethane
 Concen: 23.35 ug/L
 RT: 5.510 min Scan# 1174
 Delta R.T. -0.004 min
 Lab File: O61302.d
 Acq: 12 Sep 2020 9:04 pm

Tgt Ion: 63 Resp: 970575

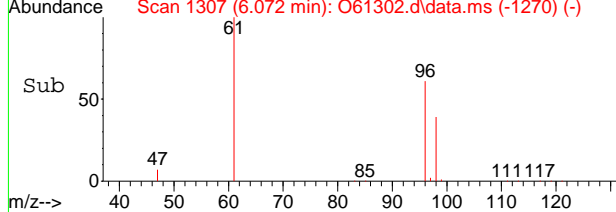
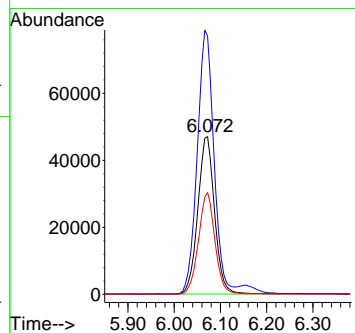
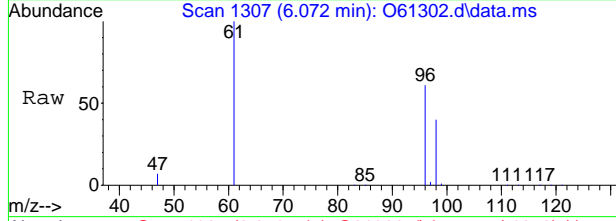
Ion	Ratio	Lower	Upper
63	100		
65	30.3	0.7	60.7



#8
 cis-1,2-Dichloroethene
 Concen: 5.75 ug/L
 RT: 6.072 min Scan# 1307
 Delta R.T. -0.000 min
 Lab File: O61302.d
 Acq: 12 Sep 2020 9:04 pm

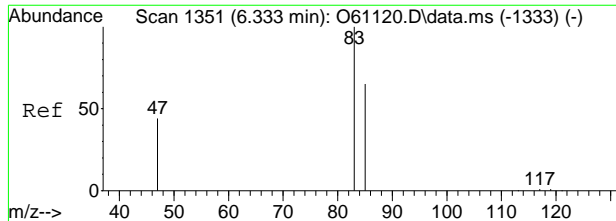
Tgt Ion: 96 Resp: 118076

Ion	Ratio	Lower	Upper
96	100		
61	163.8	107.0	167.0
98	64.6	34.1	94.1



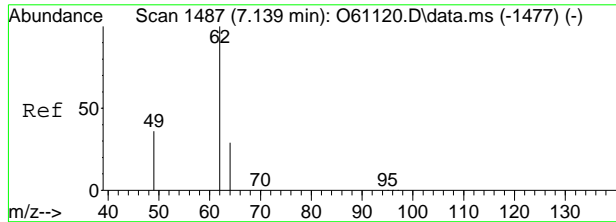
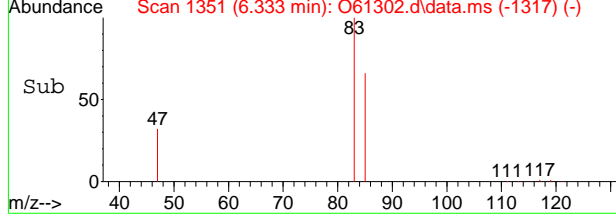
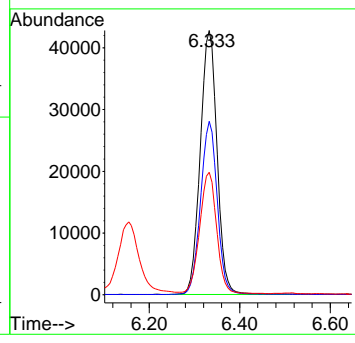
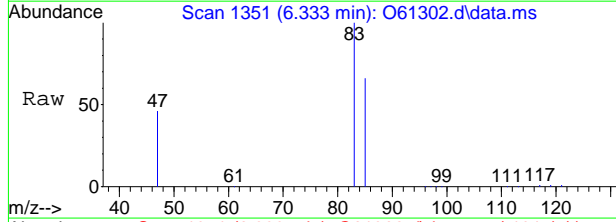
7.1.31
7





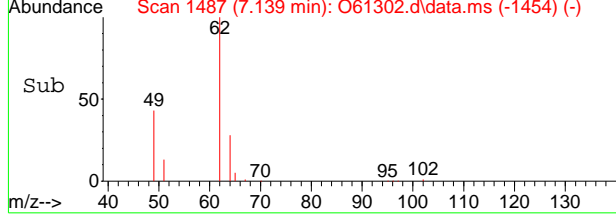
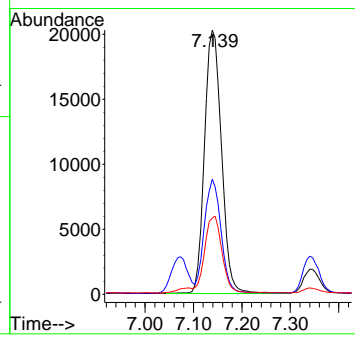
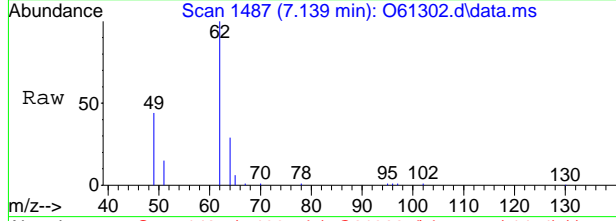
#9
 Chloroform
 Concen: 3.08 ug/L
 RT: 6.333 min Scan# 1351
 Delta R.T. -0.000 min
 Lab File: O61302.d
 Acq: 12 Sep 2020 9:04 pm

Tgt Ion	Resp	Lower	Upper
83	110132		
85	65.5	33.0	93.0
47	45.7	8.1	68.1



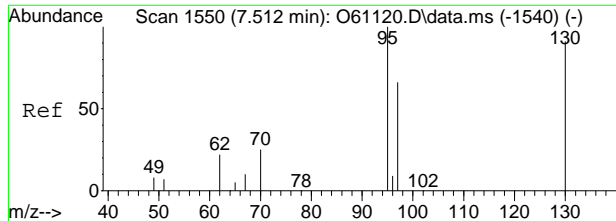
#14
 1,2-Dichloroethane
 Concen: 1.46 ug/L
 RT: 7.139 min Scan# 1487
 Delta R.T. -0.006 min
 Lab File: O61302.d
 Acq: 12 Sep 2020 9:04 pm

Tgt Ion	Resp	Lower	Upper
62	49444		
49	43.1	18.0	78.0
64	28.4	1.5	61.5



7.131
7

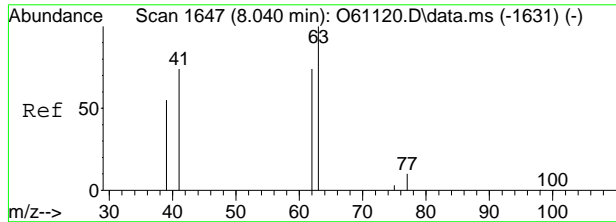
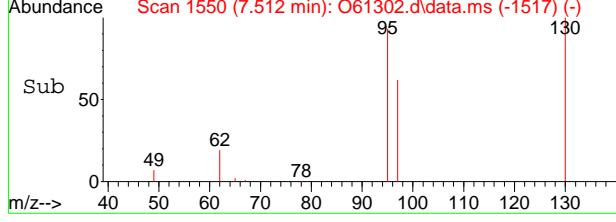
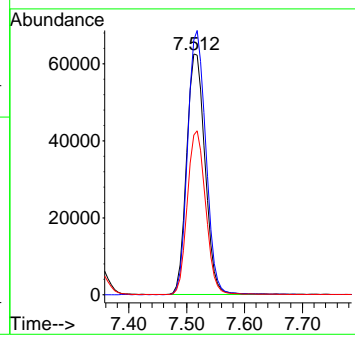
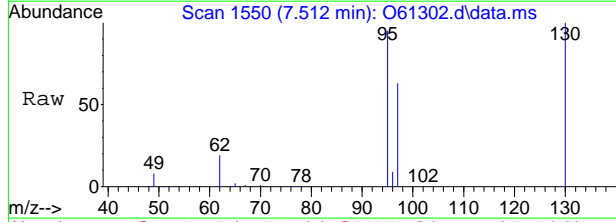




#15
 Trichloroethene
 Concen: 6.53 ug/L
 RT: 7.512 min Scan# 1550
 Delta R.T. -0.006 min
 Lab File: O61302.d
 Acq: 12 Sep 2020 9:04 pm

Tgt Ion: 95 Resp: 137629

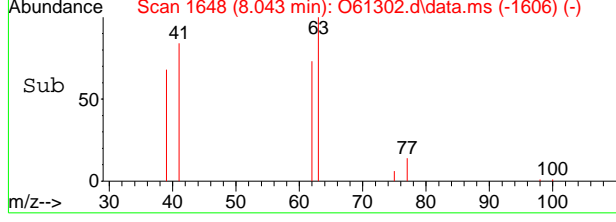
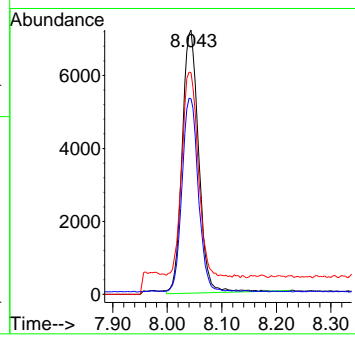
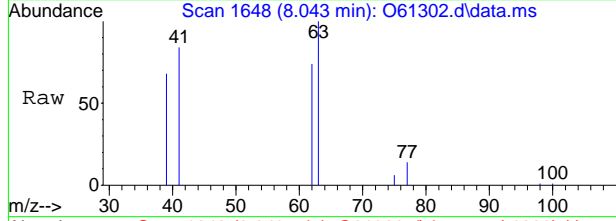
Ion	Ratio	Lower	Upper
95	100		
130	105.9	60.4	120.4
97	66.3	34.6	94.6



#16
 1,2-Dichloropropane
 Concen: 0.66 ug/L
 RT: 8.043 min Scan# 1648
 Delta R.T. 0.000 min
 Lab File: O61302.d
 Acq: 12 Sep 2020 9:04 pm

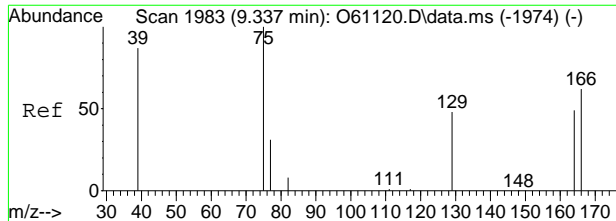
Tgt Ion: 63 Resp: 15170

Ion	Ratio	Lower	Upper
63	100		
62	73.8	42.7	102.7
41	77.8	54.5	114.5



7.1.31
7

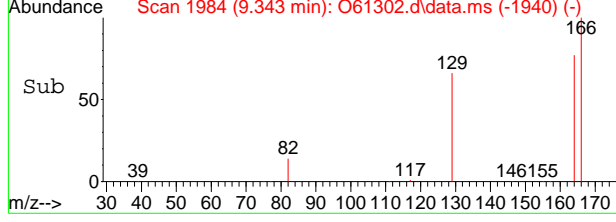
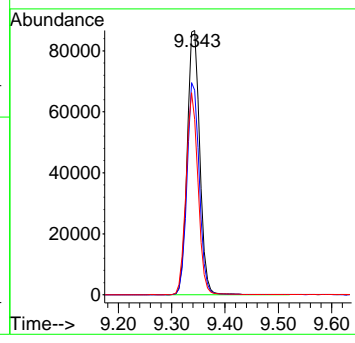
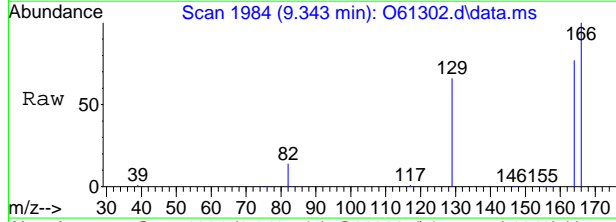




#21
 Tetrachloroethene
 Concen: 7.05 ug/L
 RT: 9.343 min Scan# 1984
 Delta R.T. 0.000 min
 Lab File: O61302.d
 Acq: 12 Sep 2020 9:04 pm

Tgt Ion:166 Resp: 141918

Ion	Ratio	Lower	Upper
166	100		
164	77.4	47.3	107.3
129	66.3	37.5	97.5



7.1.31
7



Manual Integration Approval Summary

Sample Number: FA78551-16 **Method:** SW846 8260B BY SIM
Lab FileID: O61302.D **Analyst approved:** 09/16/20 11:06 Juan Garcia
Injection Time: 09/12/20 21:04 **Supervisor approved:** 09/16/20 12:28 Melissa Mangual

Parameter	CAS	Sig#	R.T. (min.)	Reason
trans-1,2-Dichloroethylene	156-60-5		4.87	Overlapping peak

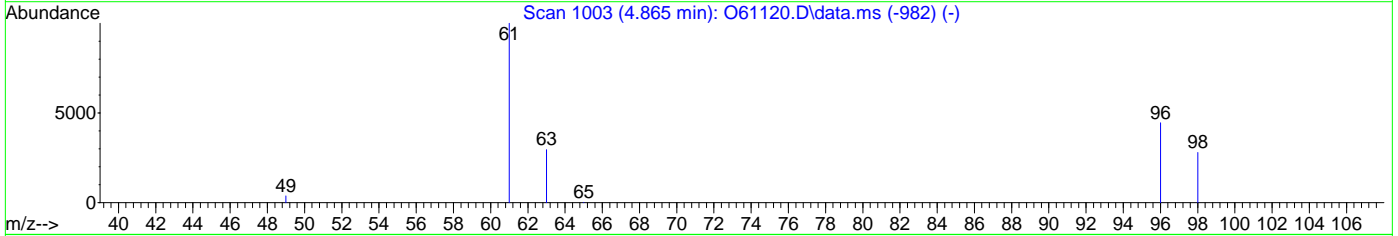
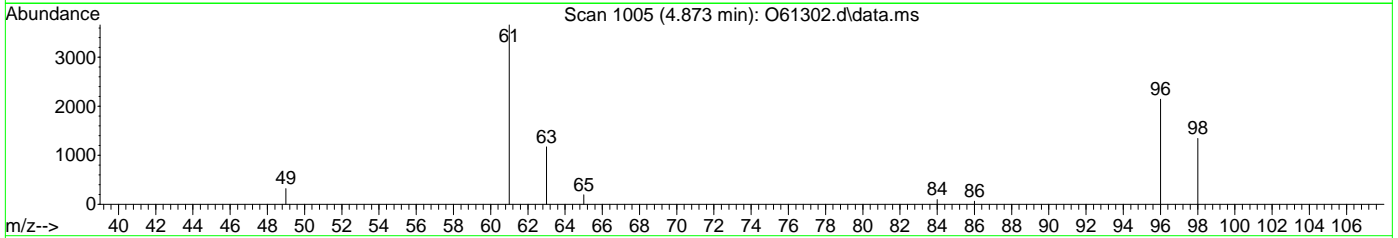
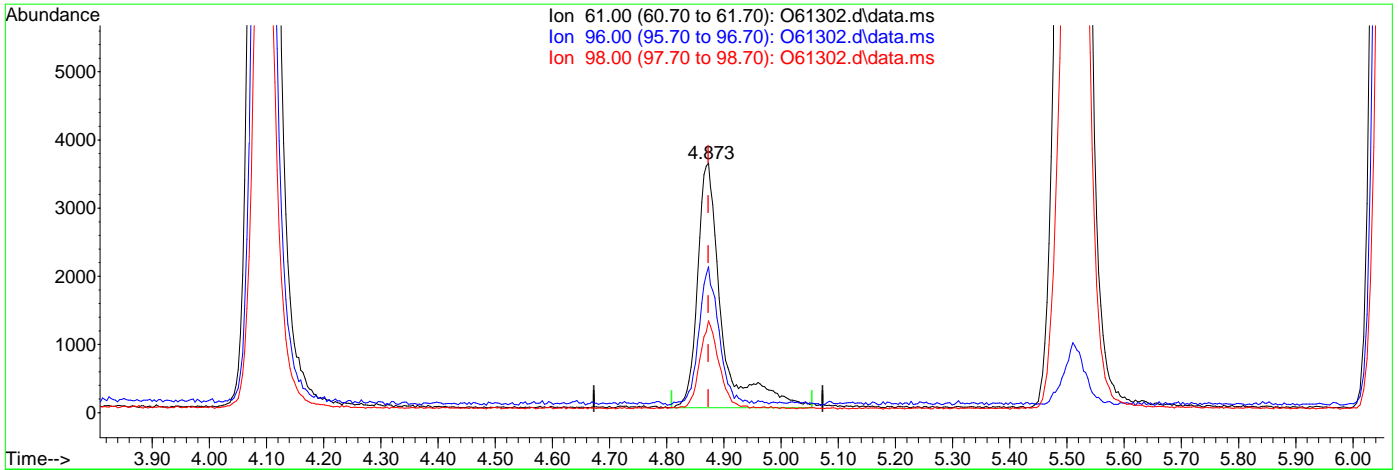
7.1.31.1

7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-14-2020\VO2359\
 Data File : O61302.d
 Acq On : 12 Sep 2020 9:04 pm
 Operator : stutip
 Sample : fa78551-16
 Misc : MS47193,VO2359,,,,,
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 14 07:20:00 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Sun Sep 13 19:20:40 2020
 Response via : Initial Calibration



(6) trans-1,2-Dichloroethene ()

4.873min (-0.000) 0.30ug/L

response 10546

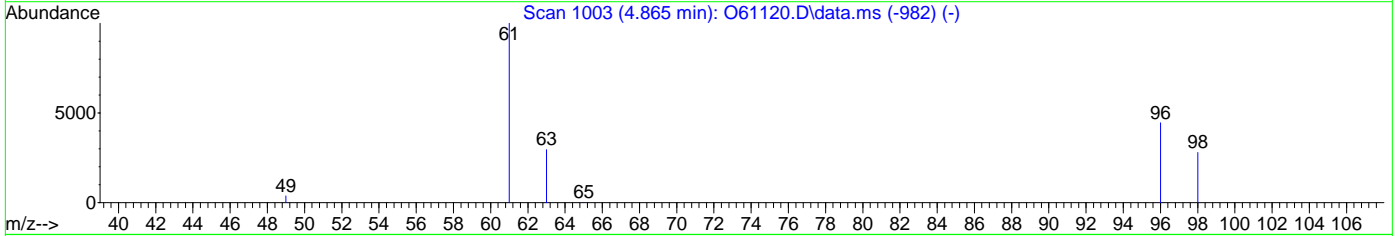
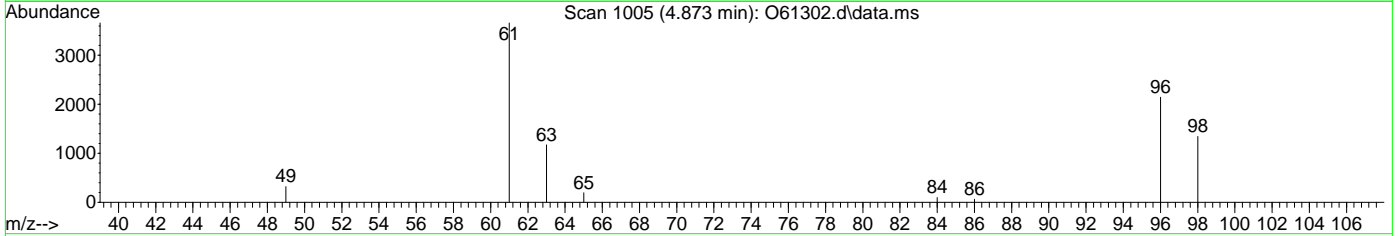
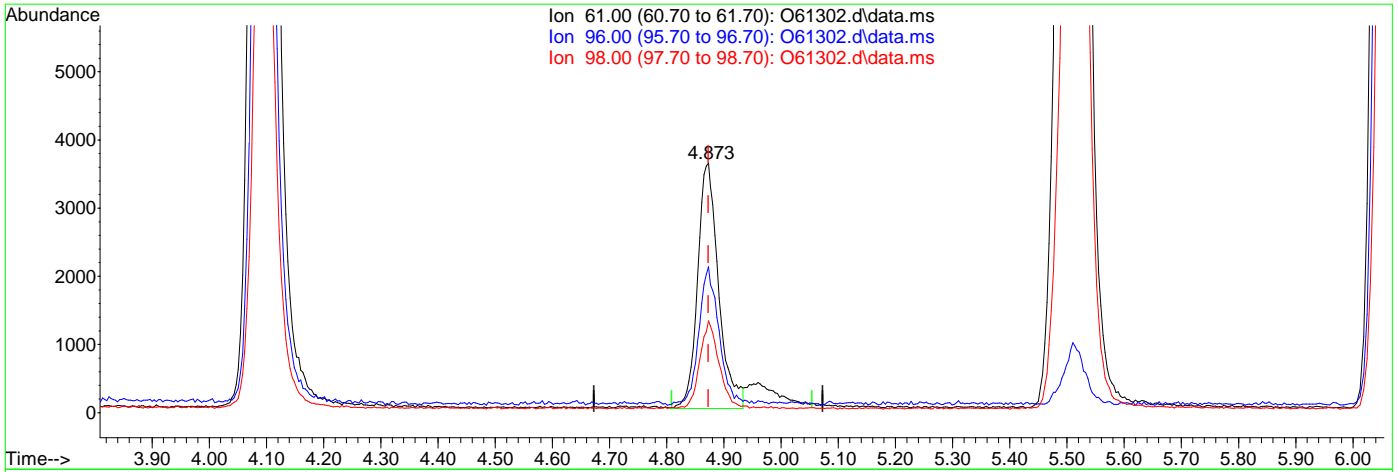
Ion	Exp%	Act%
61.00	100	100
96.00	66.90	56.16
98.00	41.10	35.52
0.00	0.00	0.00

7.1.31.2
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-14-2020\VO2359\
 Data File : O61302.d
 Acq On : 12 Sep 2020 9:04 pm
 Operator : stutip
 Sample : fa78551-16
 Misc : MS47193,VO2359,,,,,
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 14 07:20:00 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Sun Sep 13 19:20:40 2020
 Response via : Initial Calibration



(6) trans-1,2-Dichloroethene ()

4.873min (-0.000) 0.26ug/L m

response 9196

Ion	Exp%	Act%
61.00	100	100
96.00	66.90	58.48
98.00	41.10	36.72
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\091420\
 Data File : Z62342.D
 Acq On : 14 Sep 2020 8:12 pm
 Operator : JuanG
 Sample : FA78551-16,2X
 Misc : MS47193,VZ2418,,,,,2
 ALS Vial : 20 Sample Multiplier: 1

Quant Time: Sep 15 18:50:58 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Sun Sep 13 13:38:26 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	

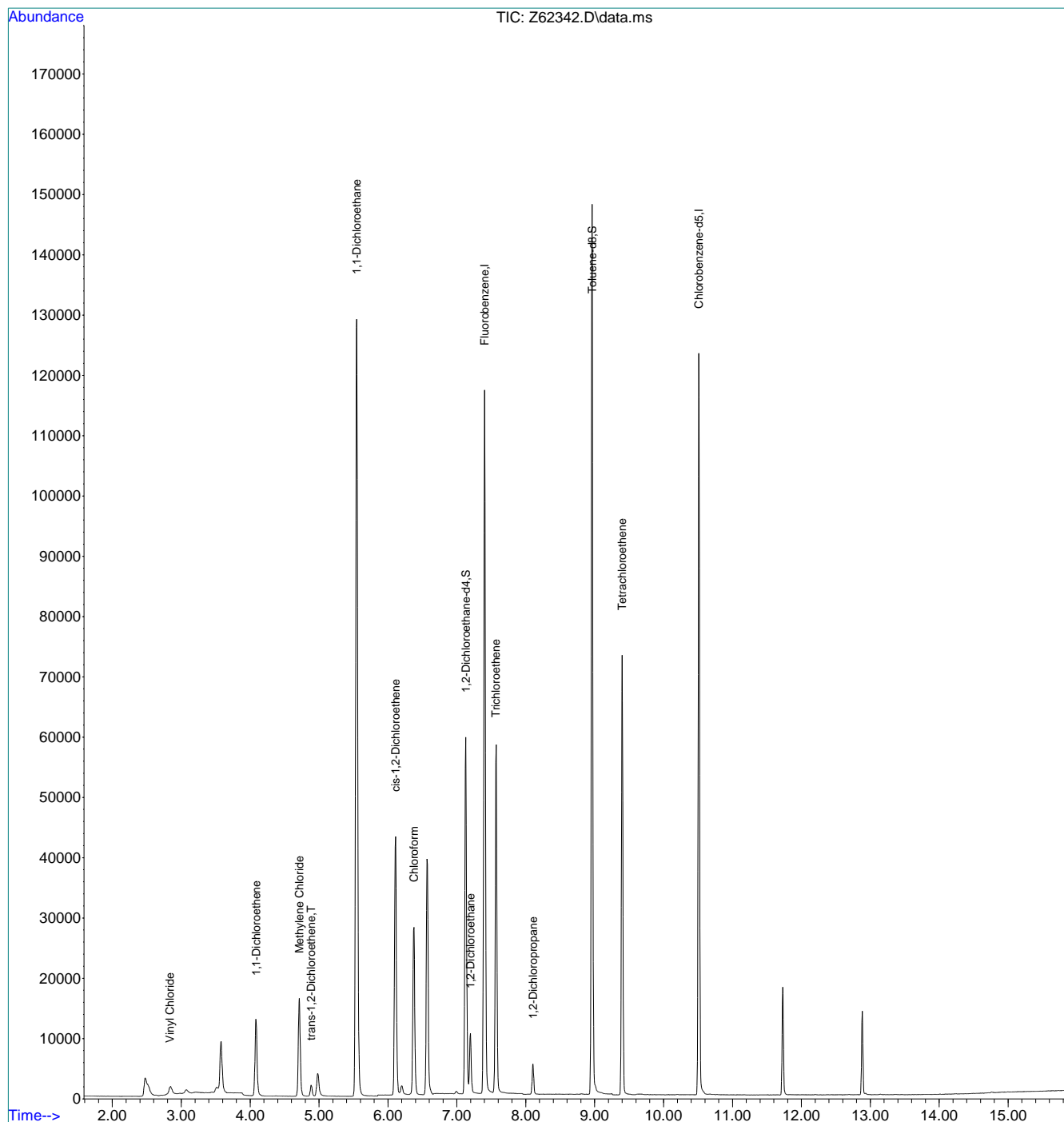
Internal Standards							
1) Fluorobenzene	7.401	96	1340569	5.00	ppb	0.00	
18) Chlorobenzene-d5	10.511	117	1092265	5.00	ppb	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.130	65	489761	5.91	ppb	0.00	
Spiked Amount	5.000	Range	79 - 125	Recovery	=	118.20%	
19) Toluene-d8	8.961	98	1294594	4.88	ppb	0.00	
Spiked Amount	5.000	Range	70 - 130	Recovery	=	97.60%	
Target Compounds							
2) Vinyl Chloride	2.835	62	18024	0.16	ppb	90	Qvalue
4) 1,1-Dichloroethene	4.087	96	73391	0.90	ppb	#	83
5) Methylene Chloride	4.713	84	108678	0.82	ppb		89
6) trans-1,2-Dichloroethene	4.886	96	10376	0.10	ppb		90
7) 1,1-Dichloroethane	5.546	63	1734808	10.33	ppb	#	99
8) cis-1,2-Dichloroethene	6.110	96	260190	2.37	ppb		92
9) Chloroform	6.377	83	270441	1.34	ppb		99
14) 1,2-Dichloroethane	7.198	62	98823	0.70	ppb		100
15) Trichloroethene	7.564	95	317959	2.78	ppb		95
16) 1,2-Dichloropropane	8.105	63	25251	0.27	ppb		99
21) Tetrachloroethene	9.399	166	310553	2.44	ppb		99

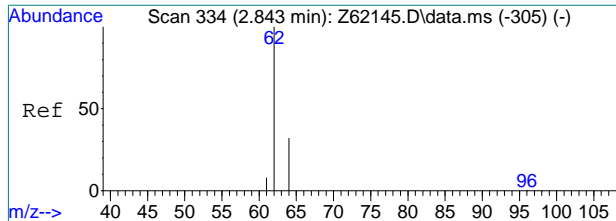
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\091420\
Data File : Z62342.D
Acq On : 14 Sep 2020 8:12 pm
Operator : JuanG
Sample : FA78551-16,2X
Misc : MS47193,VZ2418,,,,,2
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Sep 15 18:50:58 2020
Quant Method : C:\msdchem\1\methods\SIMCL091120.M
Quant Title : WATER-EPA 8260B
QLast Update : Sun Sep 13 13:38:26 2020
Response via : Initial Calibration

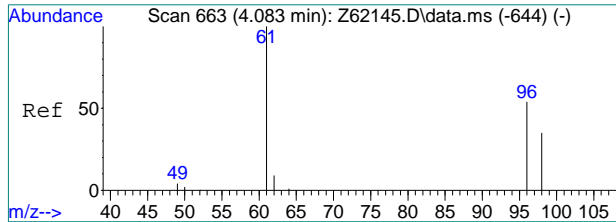
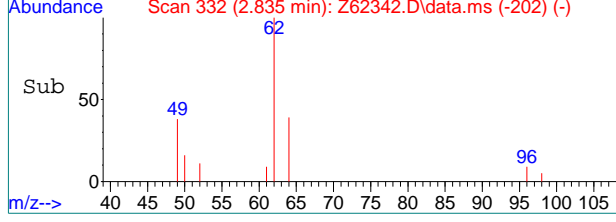
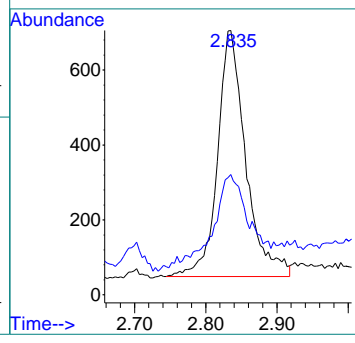
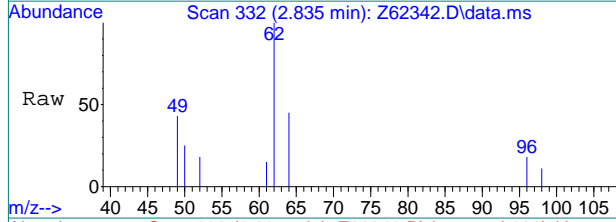




#2
 Vinyl Chloride
 Concen: 0.16 ppb
 RT: 2.835 min Scan# 332
 Delta R.T. -0.008 min
 Lab File: Z62342.D
 Acq: 14 Sep 2020 8:12 pm

Tgt Ion: 62 Resp: 18024

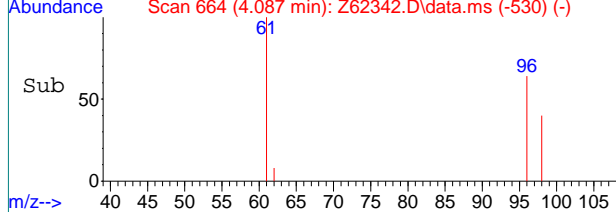
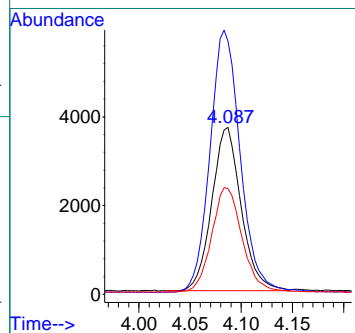
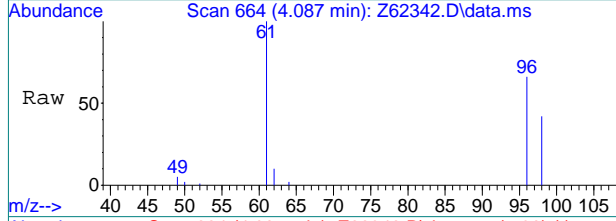
Ion	Ratio	Lower	Upper
62	100		
64	37.4	11.9	51.9



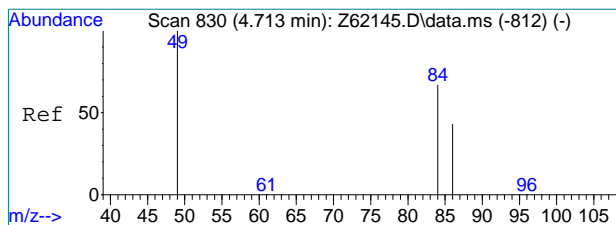
#4
 1,1-Dichloroethene
 Concen: 0.90 ppb
 RT: 4.087 min Scan# 664
 Delta R.T. 0.004 min
 Lab File: Z62342.D
 Acq: 14 Sep 2020 8:12 pm

Tgt Ion: 96 Resp: 73391

Ion	Ratio	Lower	Upper
96	100		
61	153.6	164.8	204.8#
98	63.4	45.1	85.1



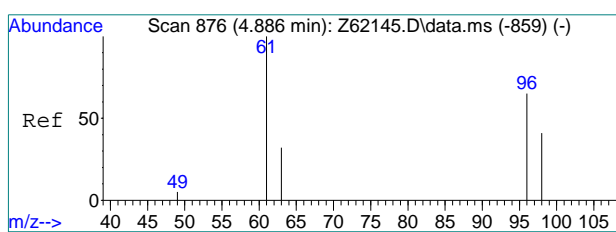
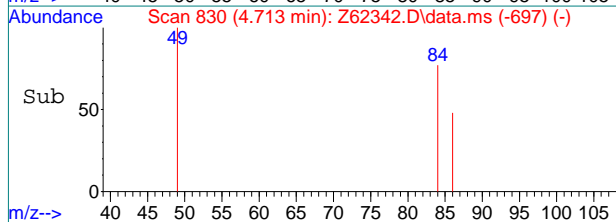
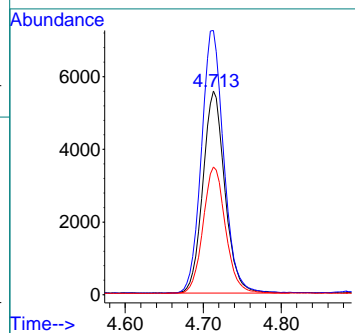
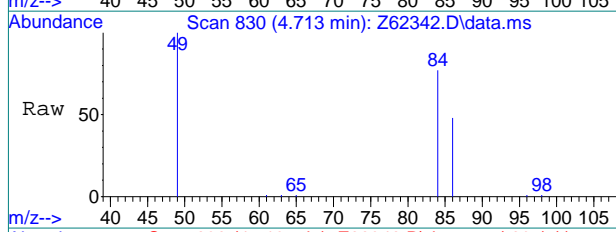
7.1.32
7



#5
 Methylene Chloride
 Concen: 0.82 ppb
 RT: 4.713 min Scan# 830
 Delta R.T. -0.000 min
 Lab File: Z62342.D
 Acq: 14 Sep 2020 8:12 pm

Tgt Ion: 84 Resp: 108678

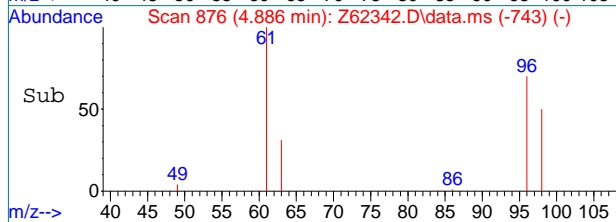
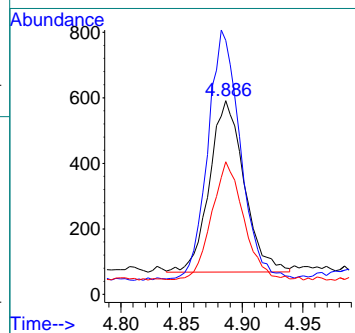
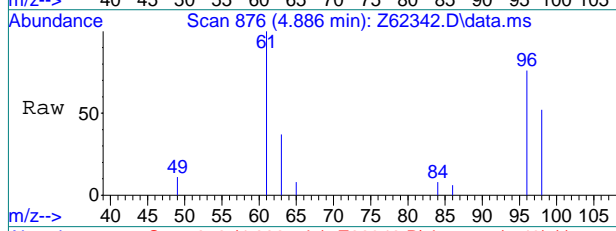
Ion	Ratio	Lower	Upper
84	100		
49	130.2	128.7	168.7
86	62.5	43.9	83.9



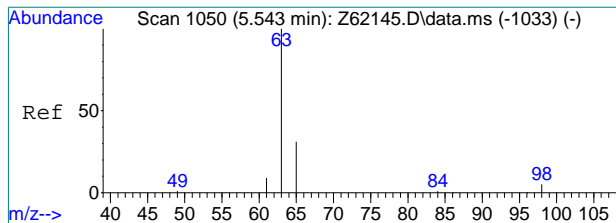
#6
 trans-1,2-Dichloroethene
 Concen: 0.10 ppb
 RT: 4.886 min Scan# 876
 Delta R.T. 0.000 min
 Lab File: Z62342.D
 Acq: 14 Sep 2020 8:12 pm

Tgt Ion: 96 Resp: 10376

Ion	Ratio	Lower	Upper
96	100		
61	140.0	134.2	174.2
98	69.0	43.4	83.4



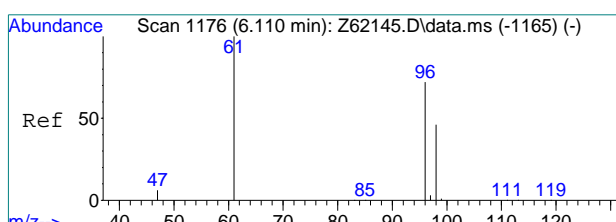
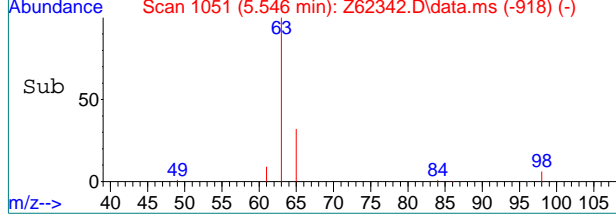
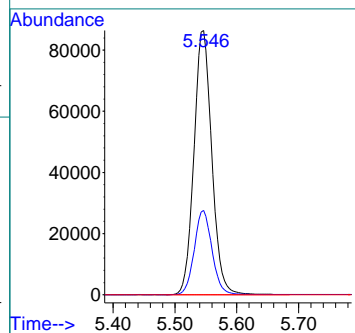
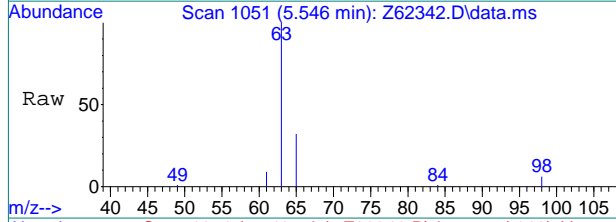
7.1.32
7



#7
 1,1-Dichloroethane
 Concen: 10.33 ppb
 RT: 5.546 min Scan# 1051
 Delta R.T. 0.000 min
 Lab File: Z62342.D
 Acq: 14 Sep 2020 8:12 pm

Tgt Ion: 63 Resp: 1734808

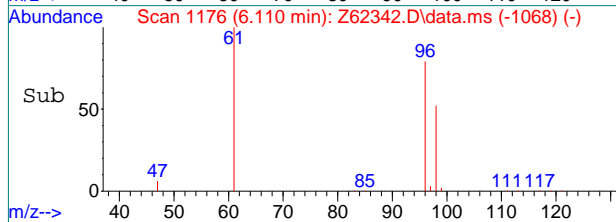
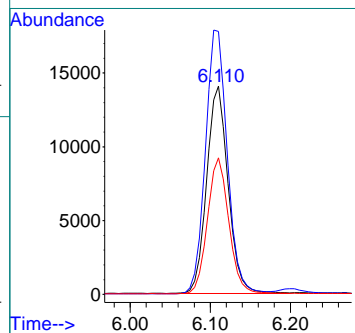
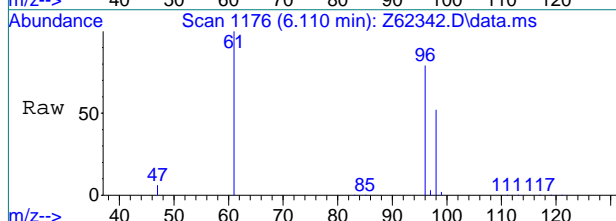
Ion	Ratio	Lower	Upper
63	100		
65	31.6	11.3	51.3
83	0.0	0.0	30.0

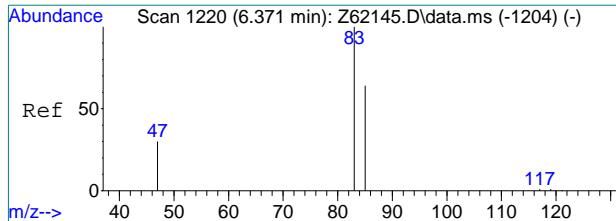


#8
 cis-1,2-Dichloroethene
 Concen: 2.37 ppb
 RT: 6.110 min Scan# 1176
 Delta R.T. 0.000 min
 Lab File: Z62342.D
 Acq: 14 Sep 2020 8:12 pm

Tgt Ion: 96 Resp: 260190

Ion	Ratio	Lower	Upper
96	100		
61	126.4	119.3	159.3
98	65.5	44.5	84.5

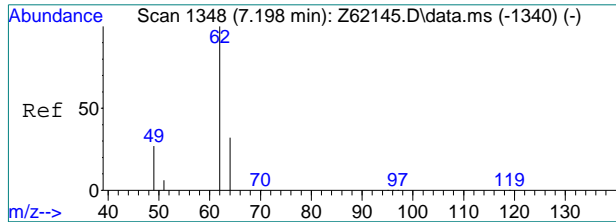
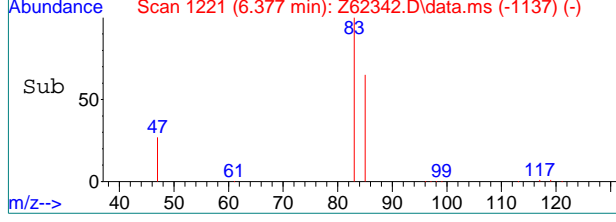
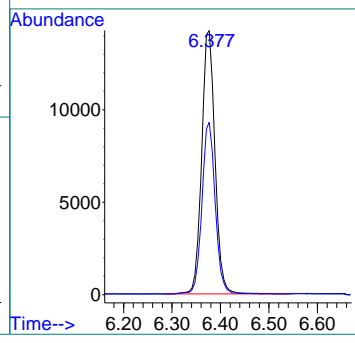
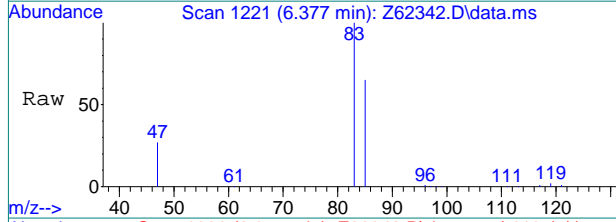




#9
 Chloroform
 Concen: 1.34 ppb
 RT: 6.377 min Scan# 1221
 Delta R.T. -0.000 min
 Lab File: Z62342.D
 Acq: 14 Sep 2020 8:12 pm

Tgt Ion: 83 Resp: 270441

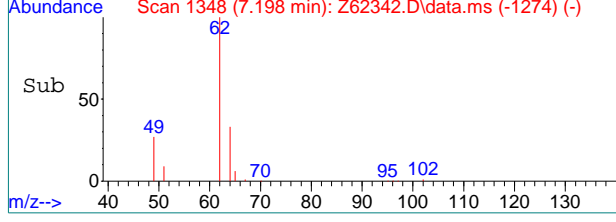
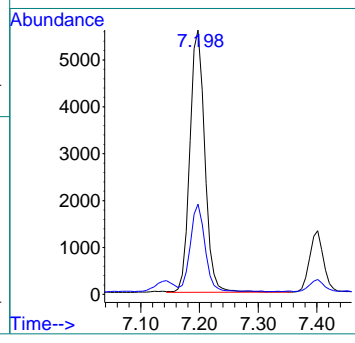
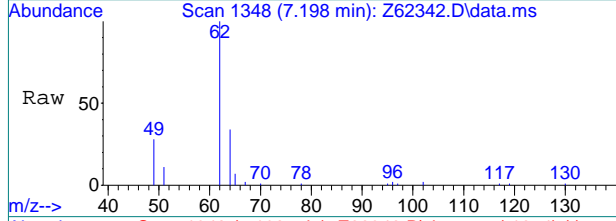
Ion	Ratio	Lower	Upper
83	100		
85	65.3	46.1	86.1



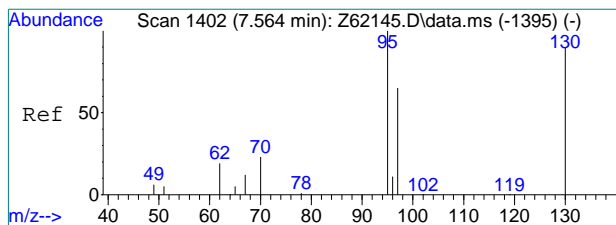
#14
 1,2-Dichloroethane
 Concen: 0.70 ppb
 RT: 7.198 min Scan# 1348
 Delta R.T. -0.000 min
 Lab File: Z62342.D
 Acq: 14 Sep 2020 8:12 pm

Tgt Ion: 62 Resp: 98823

Ion	Ratio	Lower	Upper
62	100		
64	32.2	12.3	52.3



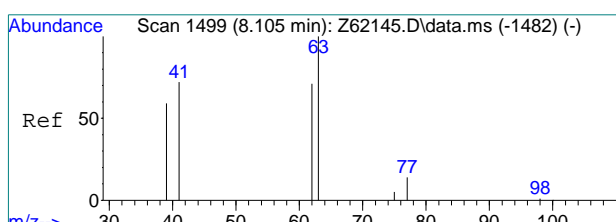
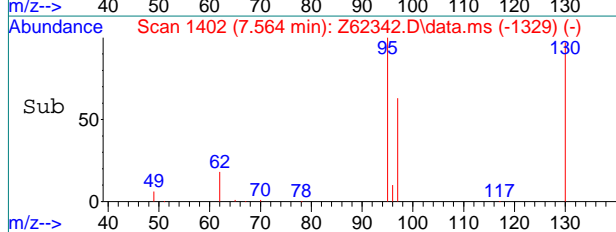
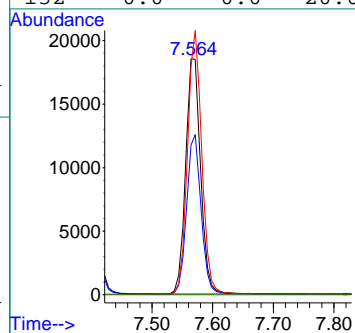
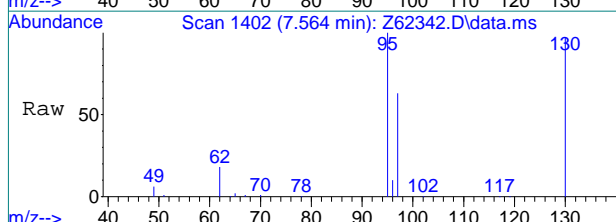
7.1.32
7



#15
 Trichloroethene
 Concen: 2.78 ppb
 RT: 7.564 min Scan# 1402
 Delta R.T. -0.007 min
 Lab File: Z62342.D
 Acq: 14 Sep 2020 8:12 pm

Tgt Ion: 95 Resp: 317959

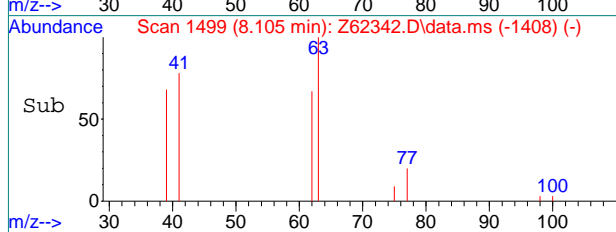
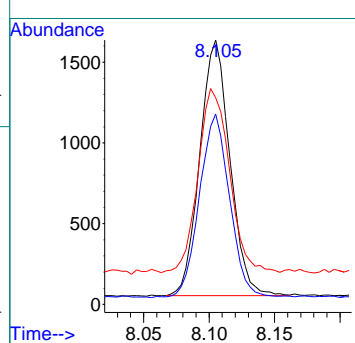
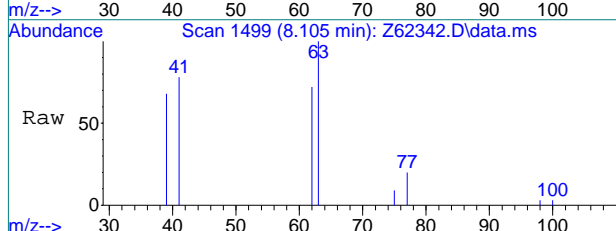
Ion	Ratio	Lower	Upper
95	100		
97	63.4	44.5	84.5
130	97.1	69.7	109.7
132	0.0	0.0	20.0



#16
 1,2-Dichloropropane
 Concen: 0.27 ppb
 RT: 8.105 min Scan# 1499
 Delta R.T. 0.000 min
 Lab File: Z62342.D
 Acq: 14 Sep 2020 8:12 pm

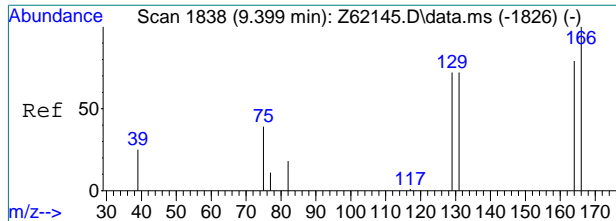
Tgt Ion: 63 Resp: 25251

Ion	Ratio	Lower	Upper
63	100		
62	72.0	51.6	91.6
41	74.8	43.7	103.7



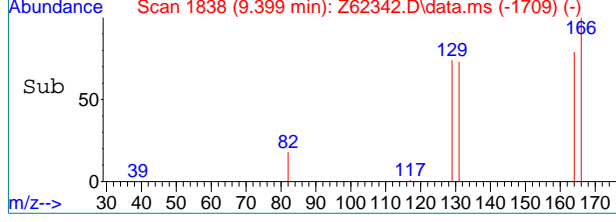
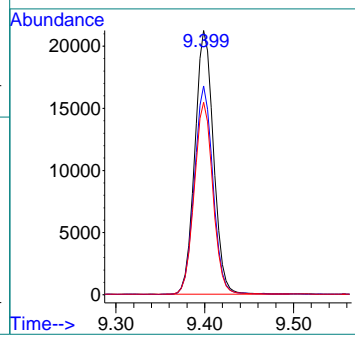
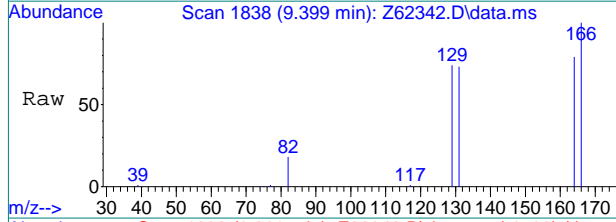
7.1.32
7





#21
 Tetrachloroethene
 Concen: 2.44 ppb
 RT: 9.399 min Scan# 1838
 Delta R.T. -0.000 min
 Lab File: Z62342.D
 Acq: 14 Sep 2020 8:12 pm

Tgt Ion	Ratio	Lower	Upper
166	100		
164	78.9	58.7	98.7
131	72.7	51.6	91.6



7.1.32
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-14-2020\VO2359\
Data File : O61303.d
Acq On : 12 Sep 2020 9:25 pm
Operator : stutip
Sample : fa78551-17
Misc : MS47193,VO2359,,,,,
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 14 08:00:03 2020
Quant Method : C:\msdchem\1\methods\SIMCL091120.M
Quant Title : Standard Methods 6200B
QLast Update : Sun Sep 13 19:20:40 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	

Internal Standards							
1) Fluorobenzene	7.346	96	217976	5.00	ug/L	0.00	
18) Chlorobenzene-d5	10.447	117	180623	5.00	ug/L	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.073	65	95729	5.44	ug/L	0.00	
Spiked Amount	5.000	Range	74 - 125	Recovery	=	108.80%	
19) Toluene-d8	8.900	98	189406	4.65	ug/L	0.00	
Spiked Amount	5.000	Range	88 - 111	Recovery	=	93.00%	
Target Compounds							
4) 1,1-Dichloroethene	4.092	61	17602	0.58	ug/L	92	Qvalue
7) 1,1-Dichloroethane	5.514	63	85351	2.11	ug/L	99	
8) cis-1,2-Dichloroethene	6.072	96	12463	0.62	ug/L	87	
9) Chloroform	6.333	83	39048	1.12	ug/L	95	
14) 1,2-Dichloroethane	7.139	62	15380	0.47	ug/L	94	
15) Trichloroethene	7.512	95	247961	12.10	ug/L	90	
21) Tetrachloroethene	9.337	166	193065	9.69	ug/L	93	

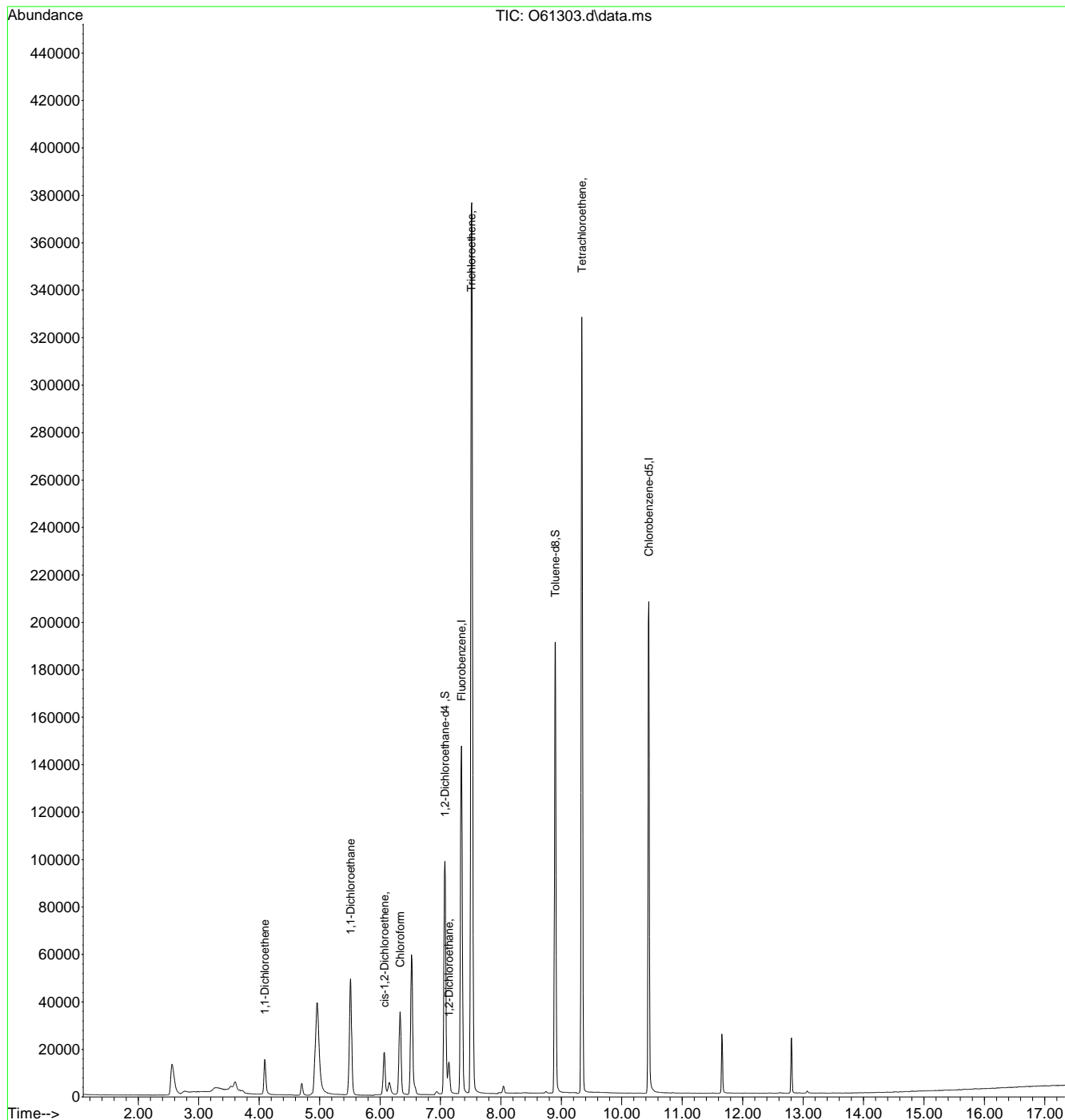
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.1.33
7

Quantitation Report (QT Reviewed)

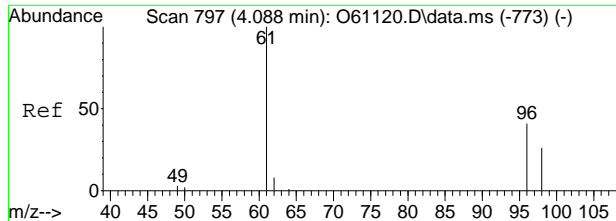
Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-14-2020\VO2359\
 Data File : O61303.d
 Acq On : 12 Sep 2020 9:25 pm
 Operator : stutip
 Sample : fa78551-17
 Misc : MS47193,VO2359,,,,,
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 14 08:00:03 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Sun Sep 13 19:20:40 2020
 Response via : Initial Calibration



7.1.33
7

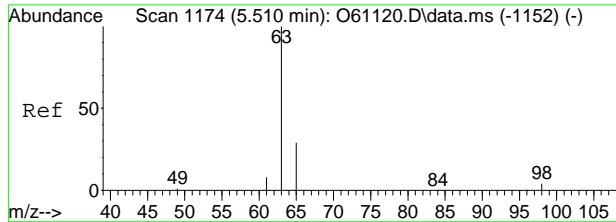
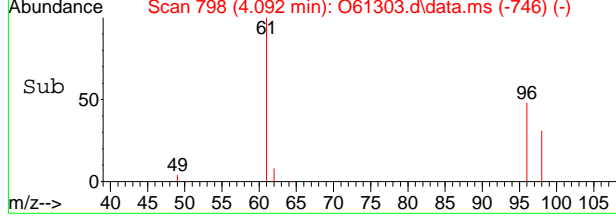
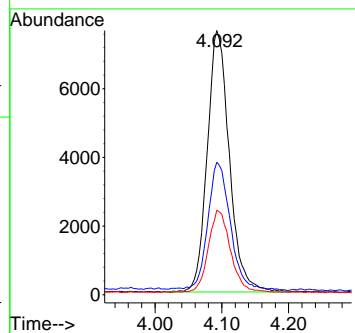
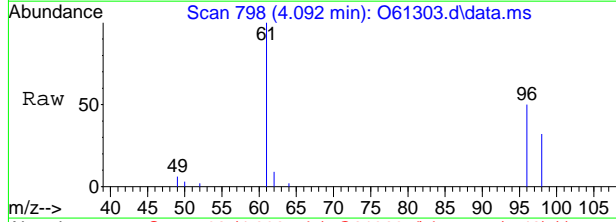




#4
 1,1-Dichloroethene
 Concen: 0.58 ug/L
 RT: 4.092 min Scan# 798
 Delta R.T. -0.004 min
 Lab File: O61303.d
 Acq: 12 Sep 2020 9:25 pm

Tgt Ion: 61 Resp: 17602

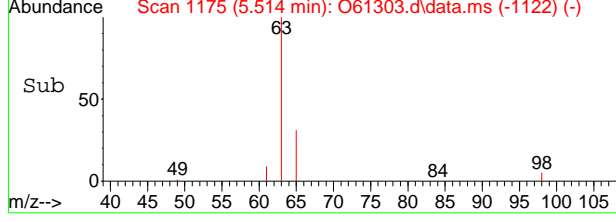
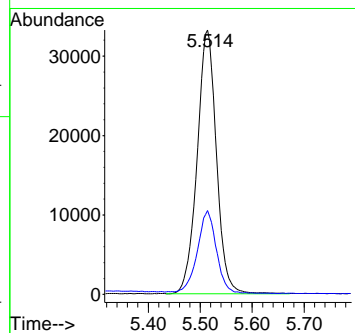
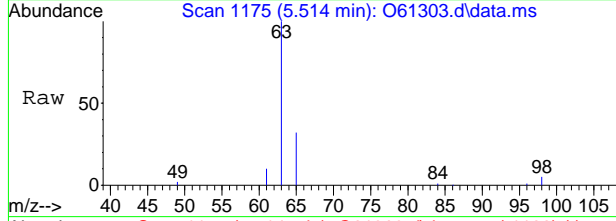
Ion	Ratio	Lower	Upper
61	100		
96	48.9	25.4	85.4
98	31.3	5.9	65.9



#7
 1,1-Dichloroethane
 Concen: 2.11 ug/L
 RT: 5.514 min Scan# 1175
 Delta R.T. -0.000 min
 Lab File: O61303.d
 Acq: 12 Sep 2020 9:25 pm

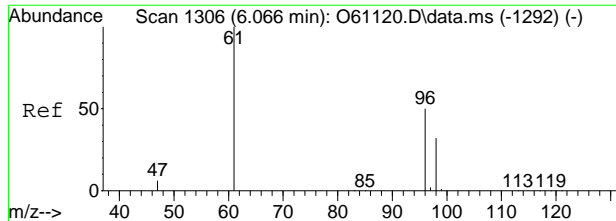
Tgt Ion: 63 Resp: 85351

Ion	Ratio	Lower	Upper
63	100		
65	31.4	0.7	60.7

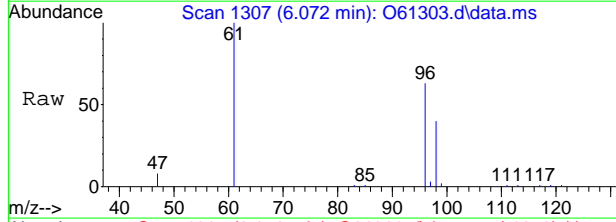


7.1.33
7



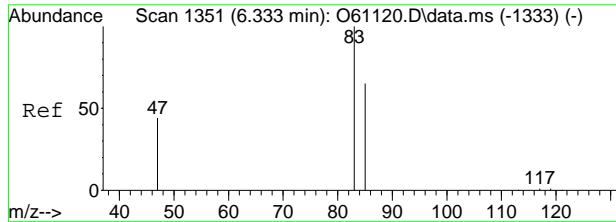
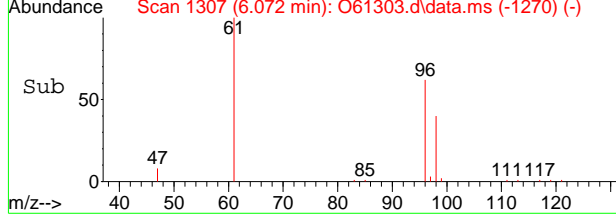
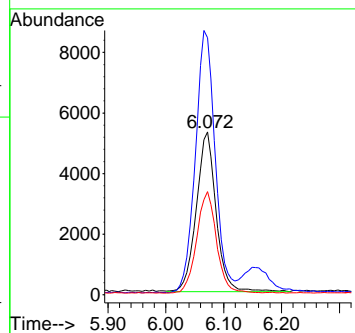


#8
 cis-1,2-Dichloroethene
 Concen: 0.62 ug/L
 RT: 6.072 min Scan# 1307
 Delta R.T. -0.000 min
 Lab File: O61303.d
 Acq: 12 Sep 2020 9:25 pm

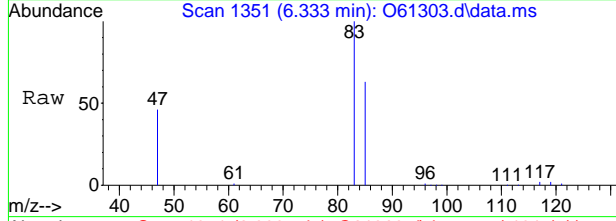


Tgt Ion: 96 Resp: 12463

Ion	Ratio	Lower	Upper
96	100		
61	159.8	107.0	167.0
98	63.6	34.1	94.1

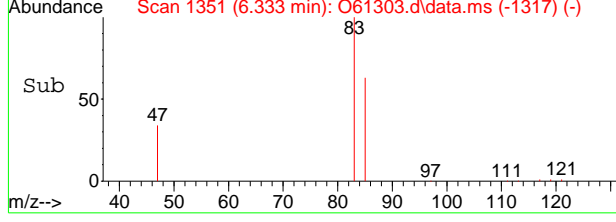
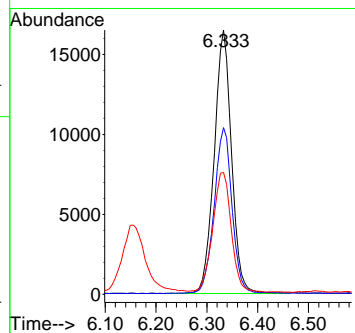


#9
 Chloroform
 Concen: 1.12 ug/L
 RT: 6.333 min Scan# 1351
 Delta R.T. -0.000 min
 Lab File: O61303.d
 Acq: 12 Sep 2020 9:25 pm



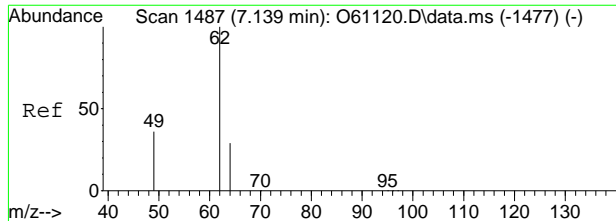
Tgt Ion: 83 Resp: 39048

Ion	Ratio	Lower	Upper
83	100		
85	62.8	33.0	93.0
47	45.3	8.1	68.1



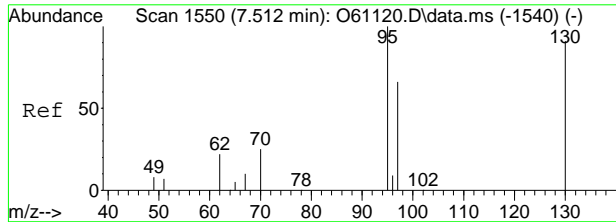
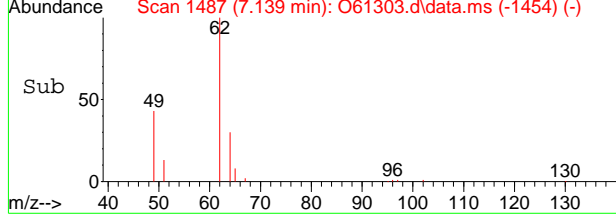
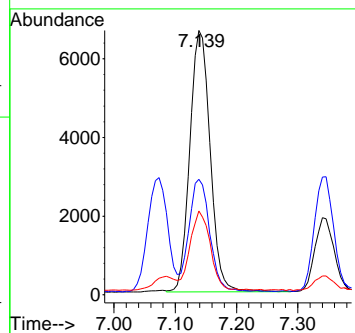
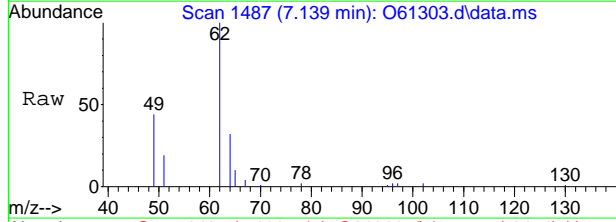
7.1.33
7





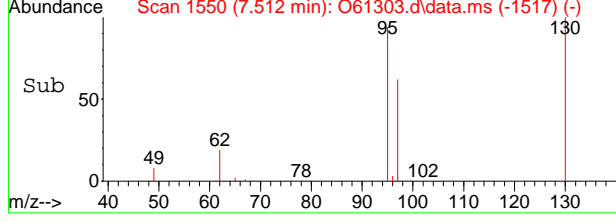
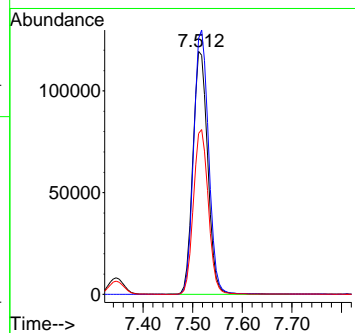
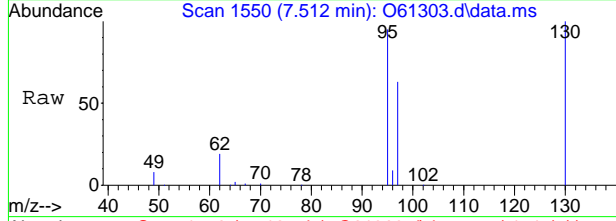
#14
 1,2-Dichloroethane
 Concen: 0.47 ug/L
 RT: 7.139 min Scan# 1487
 Delta R.T. -0.006 min
 Lab File: O61303.d
 Acq: 12 Sep 2020 9:25 pm

Tgt Ion	Resp	Lower	Upper
62	15380		
49	42.8	18.0	78.0
64	30.1	1.5	61.5



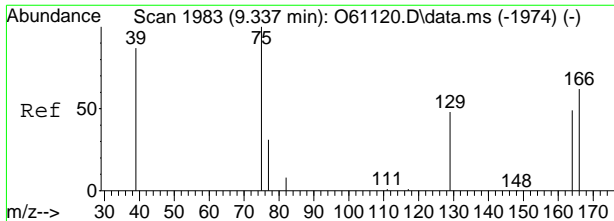
#15
 Trichloroethene
 Concen: 12.10 ug/L
 RT: 7.512 min Scan# 1550
 Delta R.T. -0.006 min
 Lab File: O61303.d
 Acq: 12 Sep 2020 9:25 pm

Tgt Ion	Resp	Lower	Upper
95	247961		
130	105.3	60.4	120.4
97	66.2	34.6	94.6



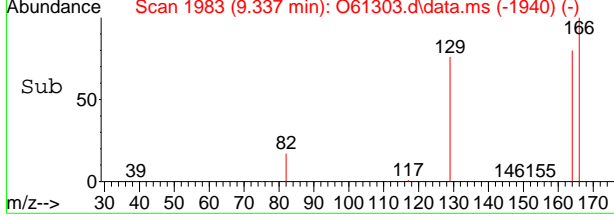
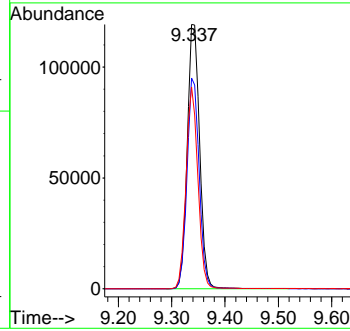
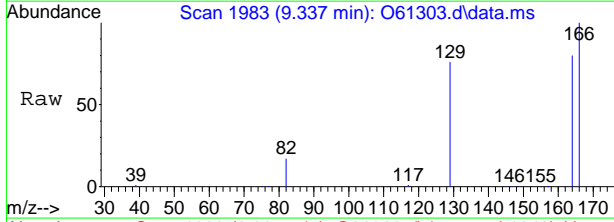
7.1.33
7





#21
 Tetrachloroethene
 Concen: 9.69 ug/L
 RT: 9.337 min Scan# 1983
 Delta R.T. -0.006 min
 Lab File: O61303.d
 Acq: 12 Sep 2020 9:25 pm

Tgt Ion	Resp
166	193065
166	100
164	79.7
129	76.3



7.1.33
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\091520\
 Data File : Z62379.D
 Acq On : 15 Sep 2020 9:47 pm
 Operator : JuanG
 Sample : FA78551-17
 Misc : MS47193,VZ2419,,,,,
 ALS Vial : 24 Sample Multiplier: 1

Quant Time: Sep 16 10:47:29 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Sun Sep 13 13:38:26 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

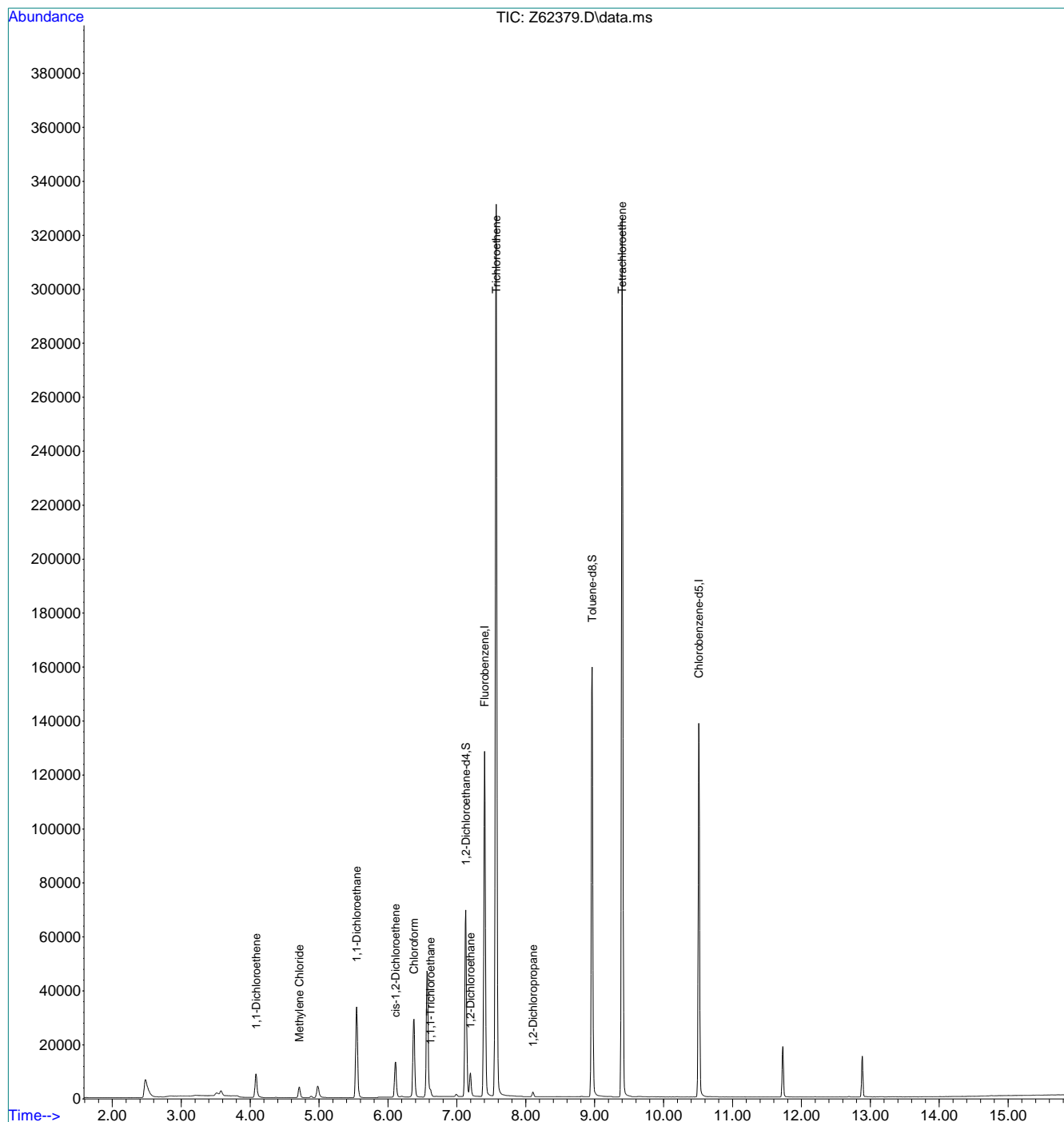
Internal Standards						
1) Fluorobenzene	7.401	96	1462983	5.00	ppb	0.00
18) Chlorobenzene-d5	10.511	117	1232583	5.00	ppb	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.130	65	578313	6.39	ppb	0.00
Spiked Amount	5.000	Range 79 - 125	Recovery	=	127.80%#	
19) Toluene-d8	8.961	98	1418424	4.74	ppb	0.00
Spiked Amount	5.000	Range 70 - 130	Recovery	=	94.80%	
Target Compounds						
4) 1,1-Dichloroethene	4.087	96	50346	0.57	ppb	# 86
5) Methylene Chloride	4.713	84	26779	0.18	ppb	# 87
7) 1,1-Dichloroethane	5.546	63	448983	2.45	ppb	# 99
8) cis-1,2-Dichloroethene	6.110	96	79757	0.66	ppb	93
9) Chloroform	6.377	83	281837	1.28	ppb	99
11) 1,1,1-Trichloroethane	6.614	97	19045	0.10	ppb	84
14) 1,2-Dichloroethane	7.198	62	84415	0.55	ppb	100
15) Trichloroethene	7.571	95	1784633	14.28	ppb	# 84
16) 1,2-Dichloropropane	8.105	63	8942	0.09	ppb	97
21) Tetrachloroethene	9.399	166	1390605	10.55	ppb	100

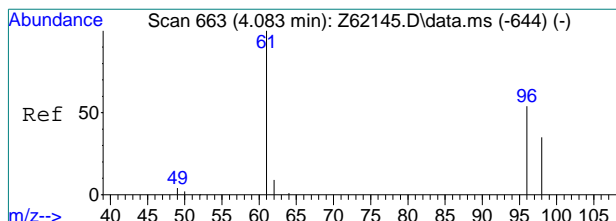
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\091520\
Data File : Z62379.D
Acq On : 15 Sep 2020 9:47 pm
Operator : JuanG
Sample : FA78551-17
Misc : MS47193,VZ2419,,,,,
ALS Vial : 24 Sample Multiplier: 1

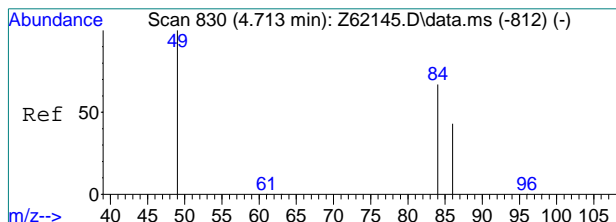
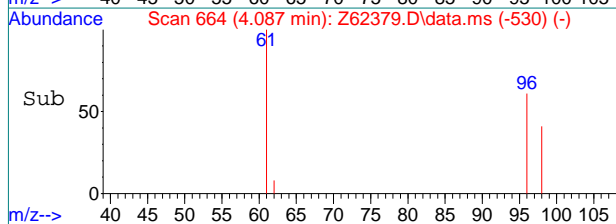
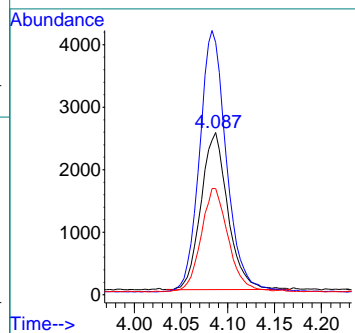
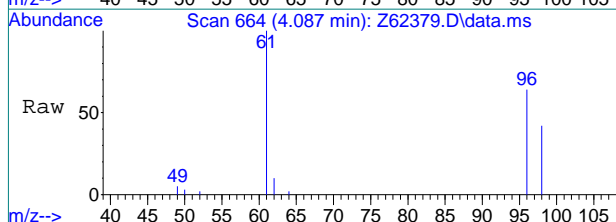
Quant Time: Sep 16 10:47:29 2020
Quant Method : C:\msdchem\1\methods\SIMCL091120.M
Quant Title : WATER-EPA 8260B
QLast Update : Sun Sep 13 13:38:26 2020
Response via : Initial Calibration





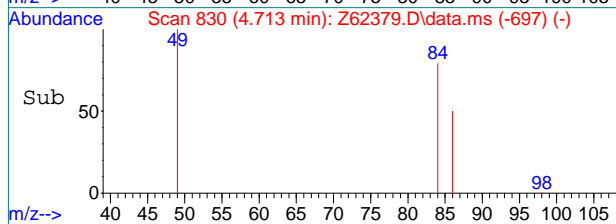
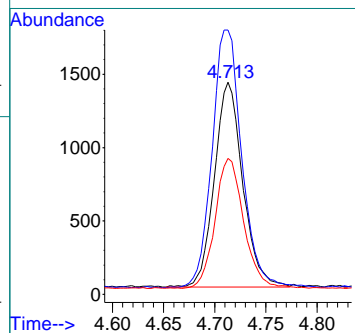
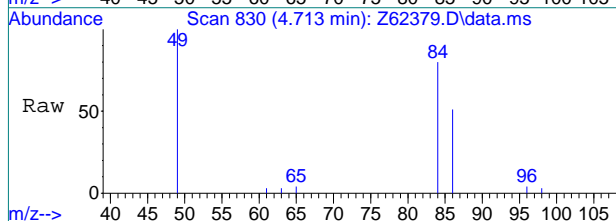
#4
 1,1-Dichloroethene
 Concen: 0.57 ppb
 RT: 4.087 min Scan# 664
 Delta R.T. 0.004 min
 Lab File: Z62379.D
 Acq: 15 Sep 2020 9:47 pm

Tgt Ion	Resp	Lower	Upper
96	50346		
61	158.5	164.8	204.8#
98	65.5	45.1	85.1

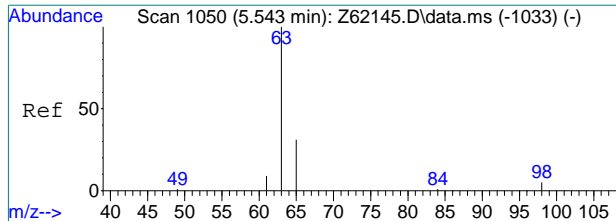


#5
 Methylene Chloride
 Concen: 0.18 ppb
 RT: 4.713 min Scan# 830
 Delta R.T. -0.000 min
 Lab File: Z62379.D
 Acq: 15 Sep 2020 9:47 pm

Tgt Ion	Resp	Lower	Upper
84	26779		
49	126.0	128.7	168.7#
86	63.4	43.9	83.9

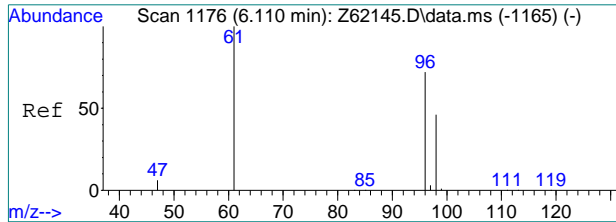
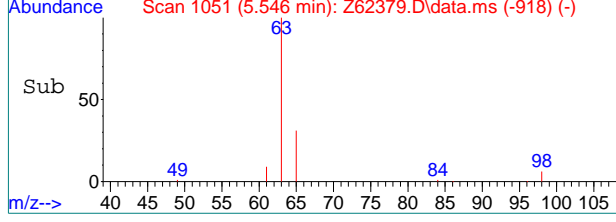
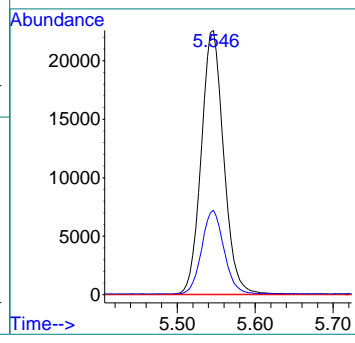
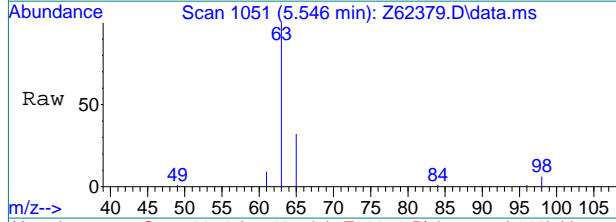


7.1.34
7



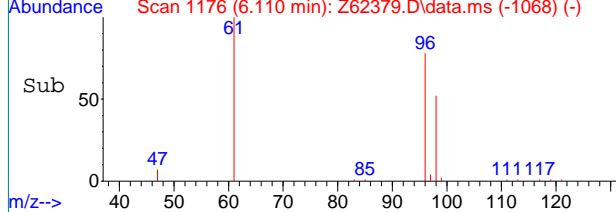
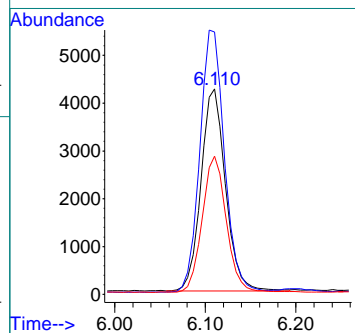
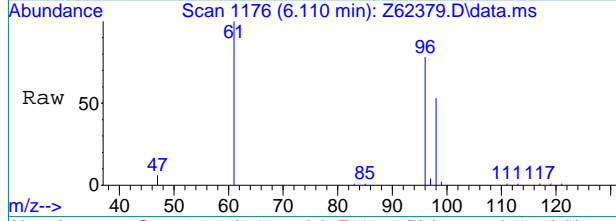
#7
 1,1-Dichloroethane
 Concen: 2.45 ppb
 RT: 5.546 min Scan# 1051
 Delta R.T. 0.000 min
 Lab File: Z62379.D
 Acq: 15 Sep 2020 9:47 pm

Tgt Ion	Resp	Lower	Upper
63	448983		
65	31.7	11.3	51.3
83	0.0	0.0	30.0

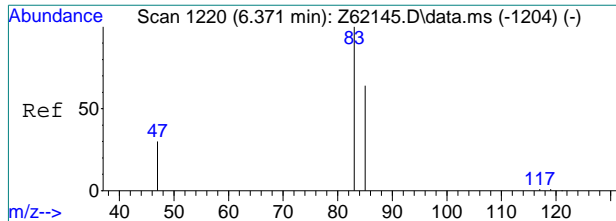


#8
 cis-1,2-Dichloroethene
 Concen: 0.66 ppb
 RT: 6.110 min Scan# 1176
 Delta R.T. 0.000 min
 Lab File: Z62379.D
 Acq: 15 Sep 2020 9:47 pm

Tgt Ion	Resp	Lower	Upper
96	79757		
61	128.8	119.3	159.3
98	67.3	44.5	84.5

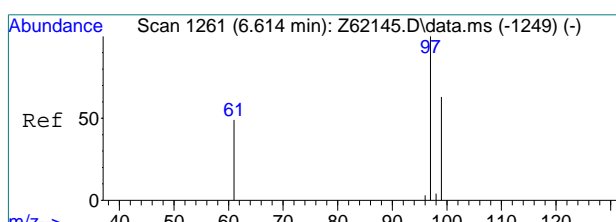
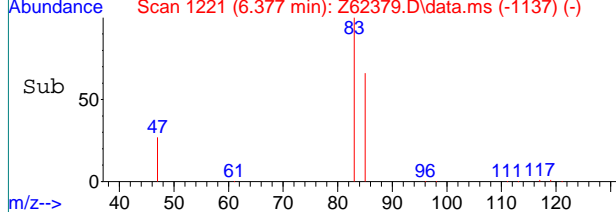
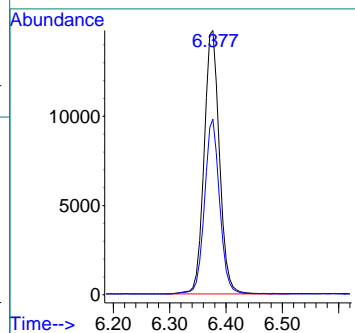
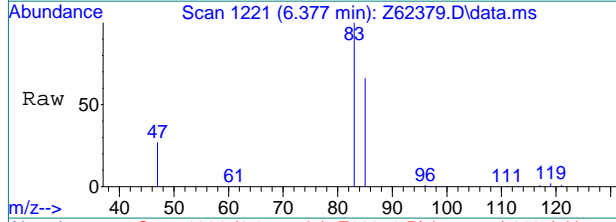


7.1.34
7



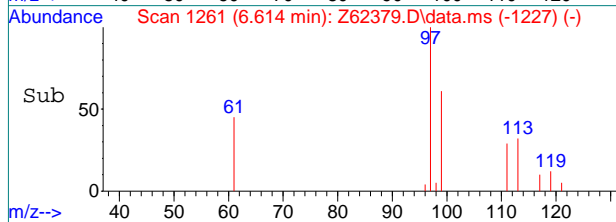
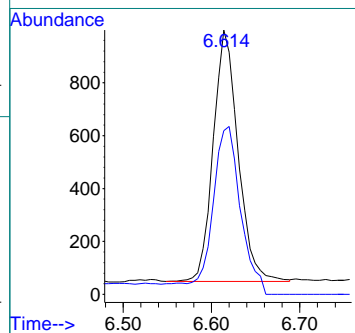
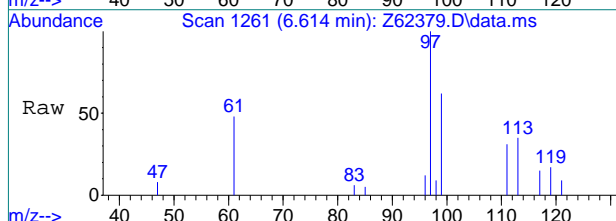
#9
 Chloroform
 Concen: 1.28 ppb
 RT: 6.377 min Scan# 1221
 Delta R.T. -0.000 min
 Lab File: Z62379.D
 Acq: 15 Sep 2020 9:47 pm

Tgt Ion	Resp	Lower	Upper
83	281837	100	
85	65.2	46.1	86.1

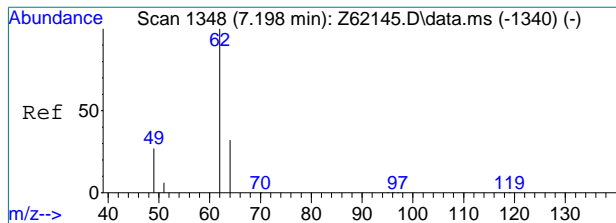


#11
 1,1,1-Trichloroethane
 Concen: 0.10 ppb
 RT: 6.614 min Scan# 1261
 Delta R.T. -0.000 min
 Lab File: Z62379.D
 Acq: 15 Sep 2020 9:47 pm

Tgt Ion	Resp	Lower	Upper
97	19045	100	
99	73.3	0.0	123.8



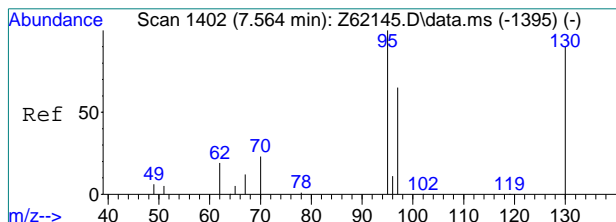
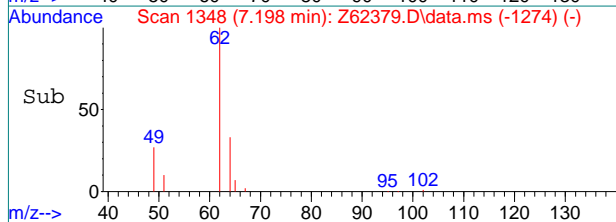
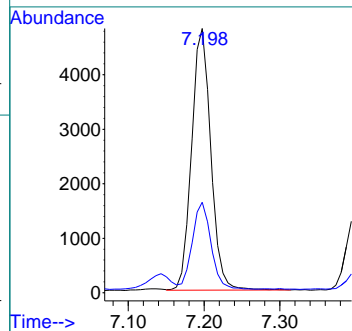
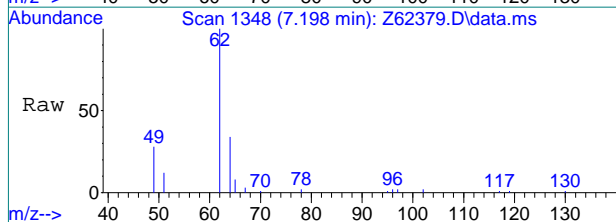
7.1.34
7



#14
 1,2-Dichloroethane
 Concen: 0.55 ppb
 RT: 7.198 min Scan# 1348
 Delta R.T. -0.000 min
 Lab File: Z62379.D
 Acq: 15 Sep 2020 9:47 pm

Tgt Ion: 62 Resp: 84415

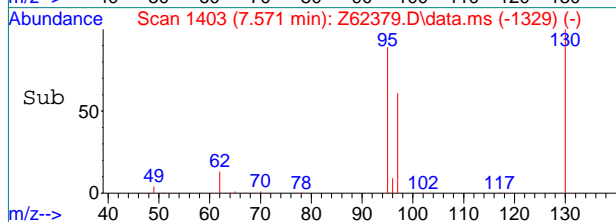
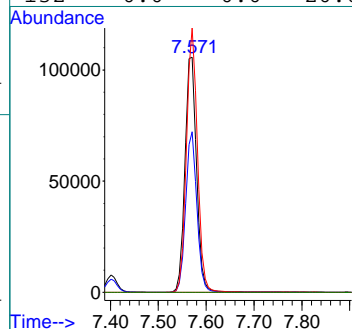
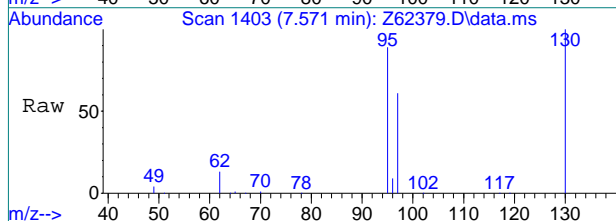
Ion	Ratio	Lower	Upper
62	100		
64	32.5	12.3	52.3

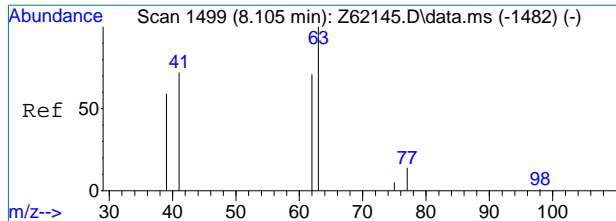


#15
 Trichloroethene
 Concen: 14.28 ppb
 RT: 7.571 min Scan# 1403
 Delta R.T. -0.000 min
 Lab File: Z62379.D
 Acq: 15 Sep 2020 9:47 pm

Tgt Ion: 95 Resp: 1784633

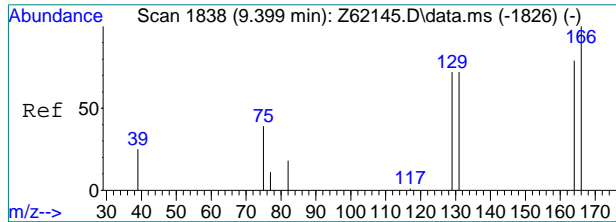
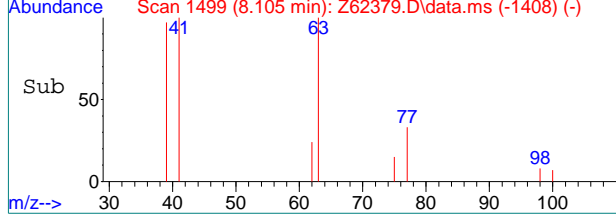
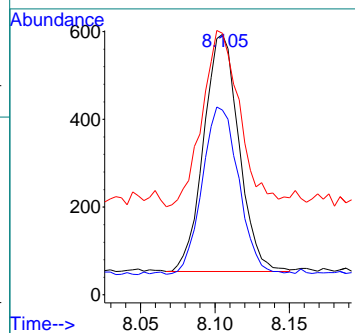
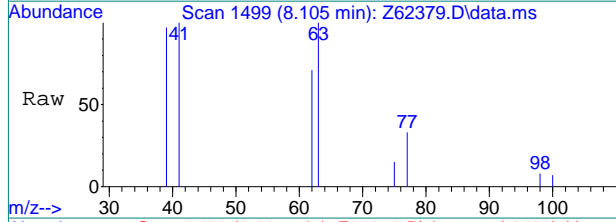
Ion	Ratio	Lower	Upper
95	100		
97	68.3	44.5	84.5
130	112.5	69.7	109.7#
132	0.0	0.0	20.0





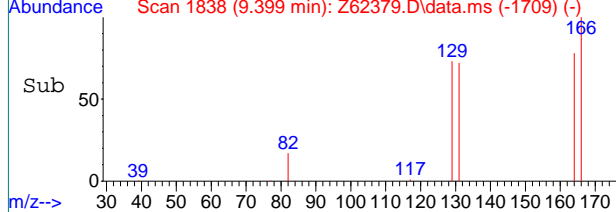
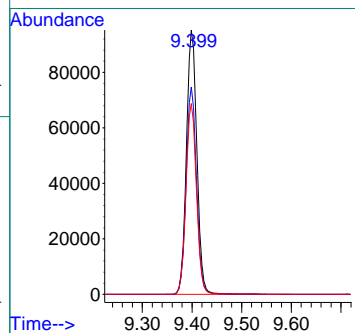
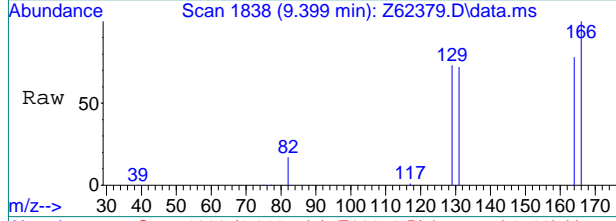
#16
 1,2-Dichloropropane
 Concen: 0.09 ppb
 RT: 8.105 min Scan# 1499
 Delta R.T. -0.000 min
 Lab File: Z62379.D
 Acq: 15 Sep 2020 9:47 pm

Tgt Ion	Resp	Lower	Upper
63	8942		
62	72.6	51.6	91.6
41	77.1	43.7	103.7



#21
 Tetrachloroethene
 Concen: 10.55 ppb
 RT: 9.399 min Scan# 1838
 Delta R.T. -0.000 min
 Lab File: Z62379.D
 Acq: 15 Sep 2020 9:47 pm

Tgt Ion	Resp	Lower	Upper
166	1390605		
164	78.4	58.7	98.7
131	72.2	51.6	91.6



7.1.34
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-14-2020\VO2359\
Data File : O61304.d
Acq On : 12 Sep 2020 9:45 pm
Operator : stutip
Sample : fa78551-18
Misc : MS47193,VO2359,,,,,
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 14 08:00:29 2020
Quant Method : C:\msdchem\1\methods\SIMCL091120.M
Quant Title : Standard Methods 6200B
QLast Update : Sun Sep 13 19:20:40 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Fluorobenzene	7.346	96	210971	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.447	117	171670	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.074	65	92432	5.42	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	108.40%	
19) Toluene-d8	8.900	98	181173	4.68	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	93.60%	
Target Compounds						
9) Chloroform	6.333	83	6814	0.20	ug/L	85
15) Trichloroethene	7.518	95	74142	3.74	ug/L	84

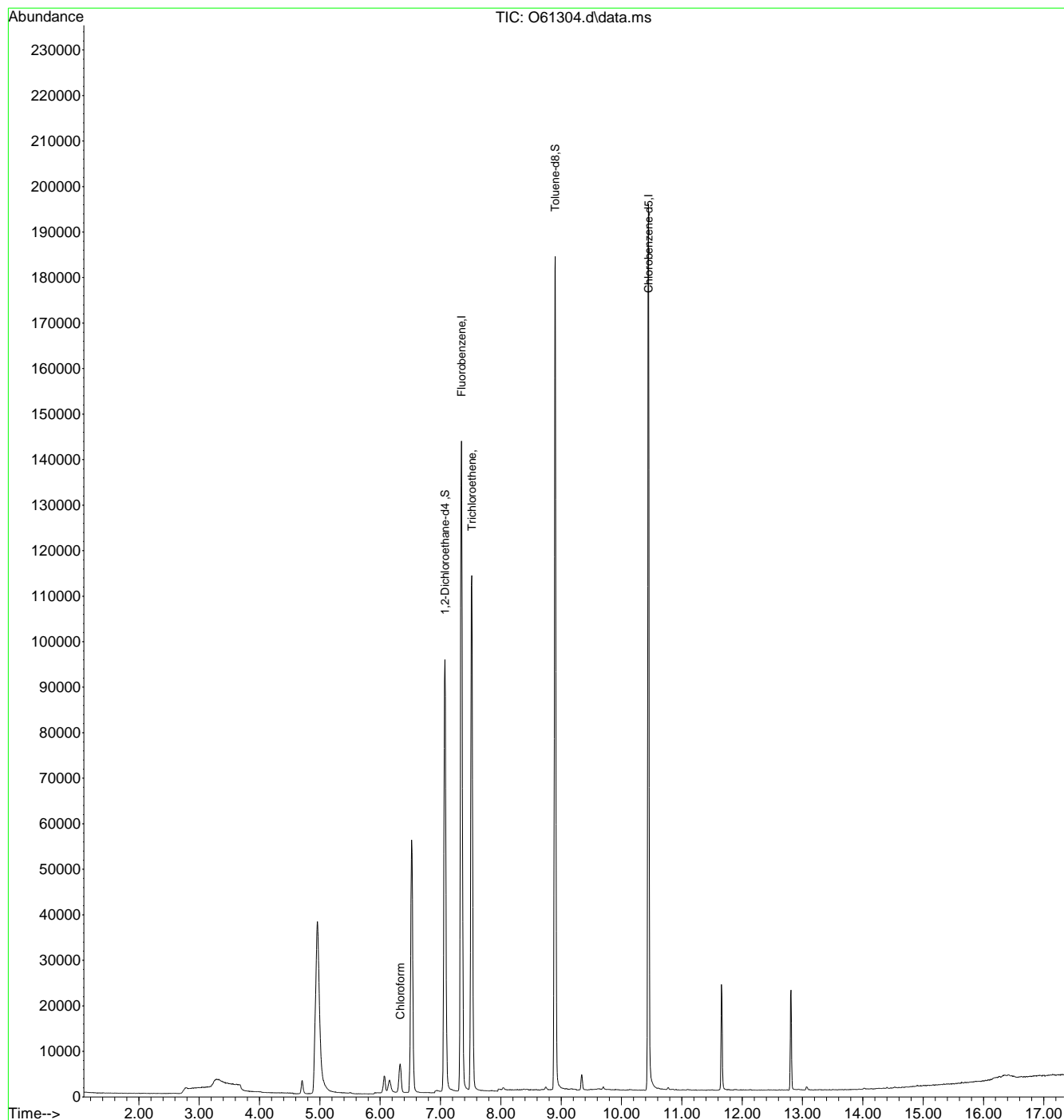
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.1.35
7

Quantitation Report (QT Reviewed)

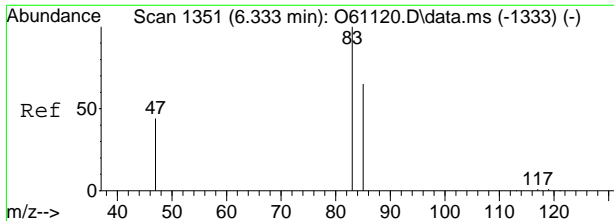
Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-14-2020\VO2359\
 Data File : O61304.d
 Acq On : 12 Sep 2020 9:45 pm
 Operator : stutip
 Sample : fa78551-18
 Misc : MS47193,VO2359,,,,,
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 14 08:00:29 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Sun Sep 13 19:20:40 2020
 Response via : Initial Calibration



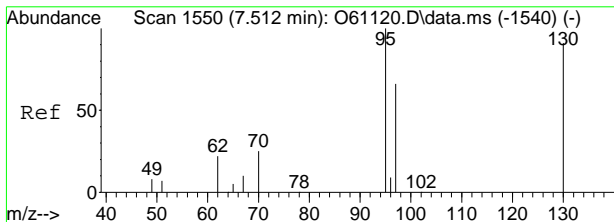
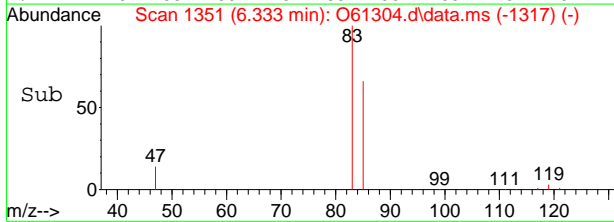
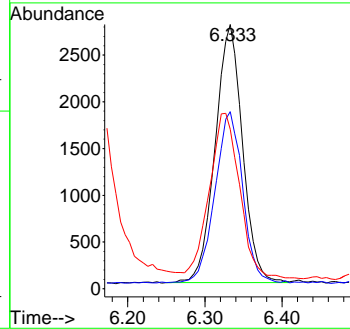
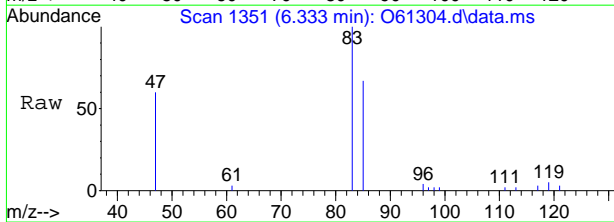
7.1.35
7





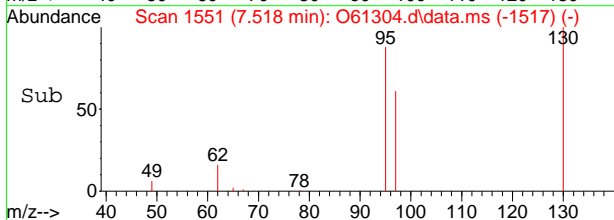
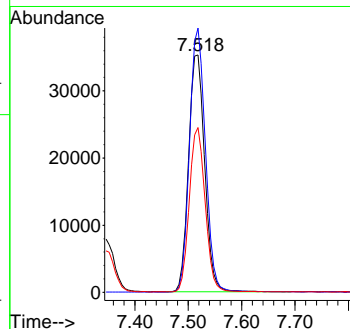
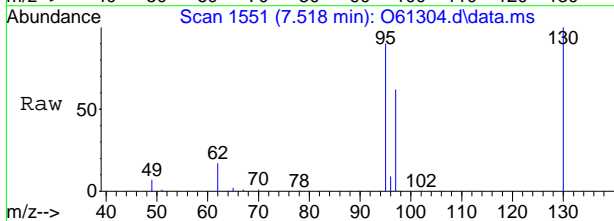
#9
 Chloroform
 Concen: 0.20 ug/L
 RT: 6.333 min Scan# 1351
 Delta R.T. -0.000 min
 Lab File: O61304.d
 Acq: 12 Sep 2020 9:45 pm

Tgt Ion	Resp	Lower	Upper
83	6814		
85	66.3	33.0	93.0
47	57.6	8.1	68.1



#15
 Trichloroethene
 Concen: 3.74 ug/L
 RT: 7.518 min Scan# 1551
 Delta R.T. 0.000 min
 Lab File: O61304.d
 Acq: 12 Sep 2020 9:45 pm

Tgt Ion	Resp	Lower	Upper
95	74142		
130	111.5	60.4	120.4
97	69.4	34.6	94.6



7.1.35
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-17-2020\vo2363\
 Data File : O61406.d
 Acq On : 16 Sep 2020 1:29 pm
 Operator : akarig
 Sample : FA78551-18
 Misc : MS47193,VO2363,,,,,
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 17 04:47:32 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091520.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 16 09:02:25 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)	

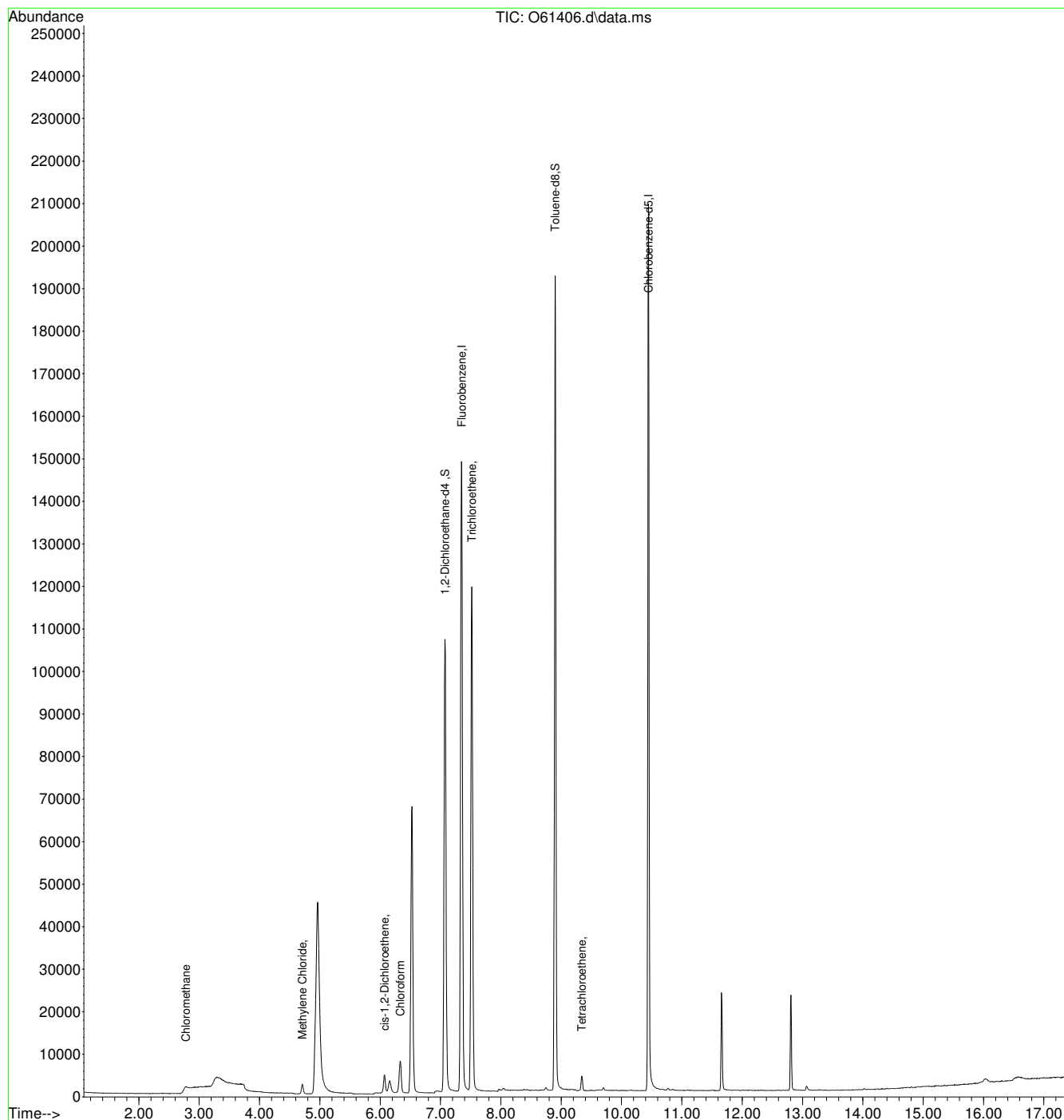
Internal Standards							
1) Fluorobenzene	7.352	96	224280	5.00	ug/L	0.00	
18) Chlorobenzene-d5	10.447	117	182597	5.00	ug/L	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.073	65	102599	5.43	ug/L	0.00	
Spiked Amount	5.000	Range	74 - 125	Recovery	=	108.60%	
19) Toluene-d8	8.900	98	189056	5.07	ug/L	0.00	
Spiked Amount	5.000	Range	88 - 111	Recovery	=	101.40%	
Target Compounds							
							Qvalue
3) Chloromethane	2.780	50	7285	0.16	ug/L		70
5) Methylene Chloride	4.707	49	2982	0.05	ug/L		99
8) cis-1,2-Dichloroethene	6.072	96	2792	0.14	ug/L		94
9) Chloroform	6.333	83	7686	0.21	ug/L		90
15) Trichloroethene	7.518	95	77393	3.75	ug/L		94
21) Tetrachloroethene	9.343	166	2417	0.12	ug/L		96

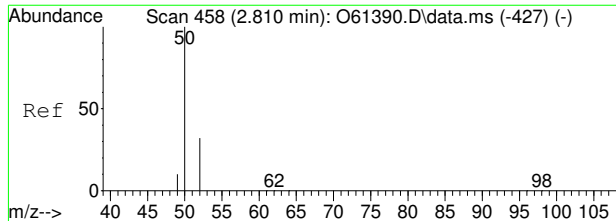
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

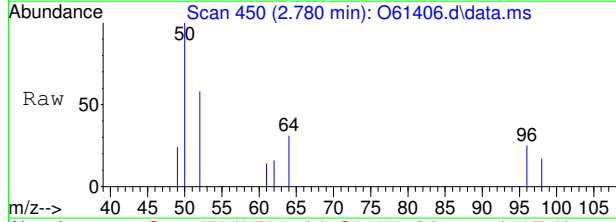
Data Path : C:\msdchem\1\data\johnm\September 2020\09-17-2020\vo2363\
Data File : O61406.d
Acq On : 16 Sep 2020 1:29 pm
Operator : akarig
Sample : FA78551-18
Misc : MS47193,VO2363,,,,,
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 17 04:47:32 2020
Quant Method : C:\msdchem\1\methods\SIMCL091520.M
Quant Title : Standard Methods 6200B
QLast Update : Wed Sep 16 09:02:25 2020
Response via : Initial Calibration



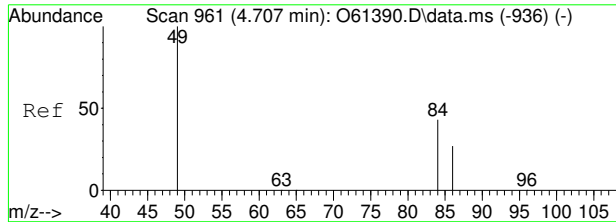
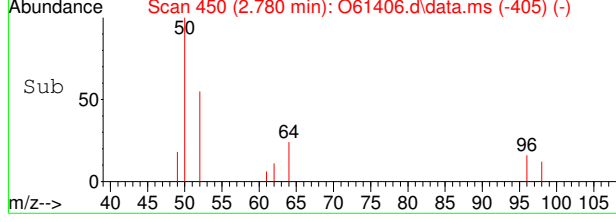
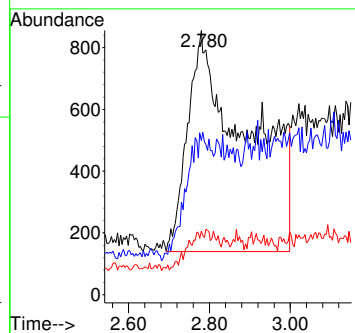


#3
 Chloromethane
 Concen: 0.16 ug/L
 RT: 2.780 min Scan# 450
 Delta R.T. -0.030 min
 Lab File: O61406.d
 Acq: 16 Sep 2020 1:29 pm



Tgt Ion: 50 Resp: 7285

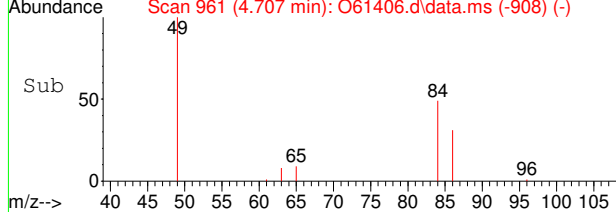
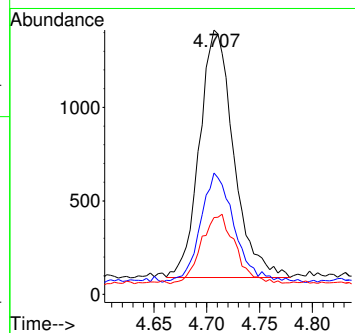
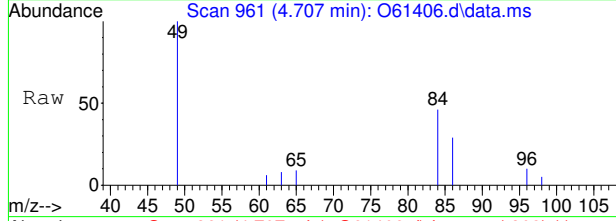
Ion	Ratio	Lower	Upper
50	100		
52	51.0	12.1	52.1
49	16.9	0.0	30.3



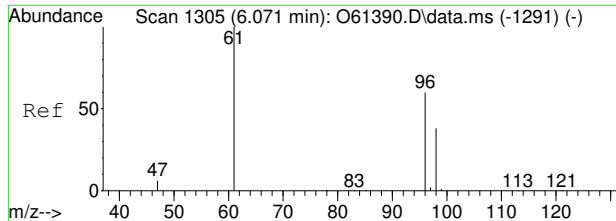
#5
 Methylene Chloride
 Concen: 0.05 ug/L
 RT: 4.707 min Scan# 961
 Delta R.T. -0.000 min
 Lab File: O61406.d
 Acq: 16 Sep 2020 1:29 pm

Tgt Ion: 49 Resp: 2982

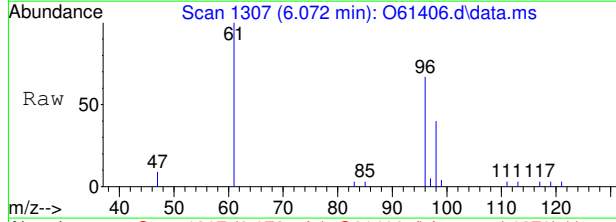
Ion	Ratio	Lower	Upper
49	100		
84	43.4	13.2	73.2
86	26.4	0.0	57.3



7.1.36
7

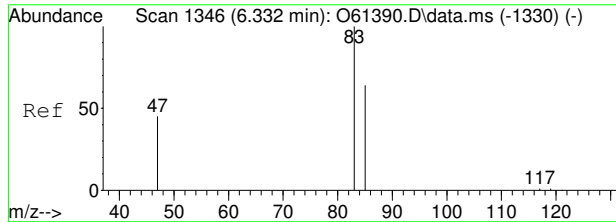
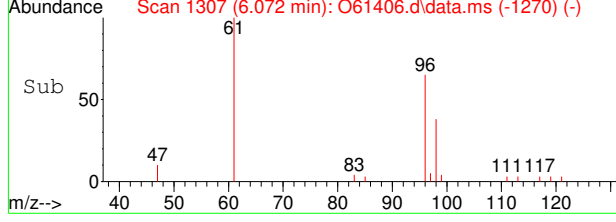
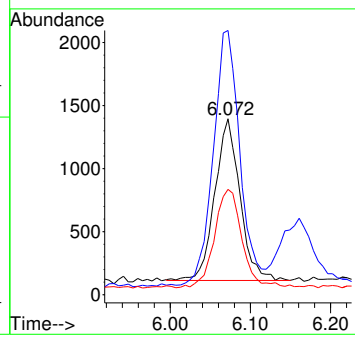


#8
 cis-1,2-Dichloroethene
 Concen: 0.14 ug/L
 RT: 6.072 min Scan# 1307
 Delta R.T. 0.001 min
 Lab File: O61406.d
 Acq: 16 Sep 2020 1:29 pm

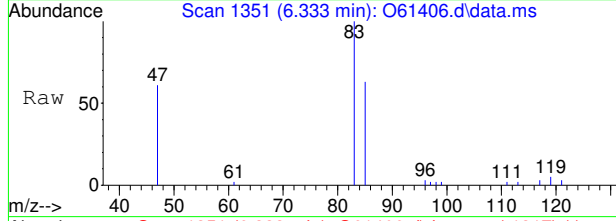


Tgt Ion: 96 Resp: 2792

Ion	Ratio	Lower	Upper
96	100		
61	157.6	135.7	195.7
98	59.7	33.1	93.1

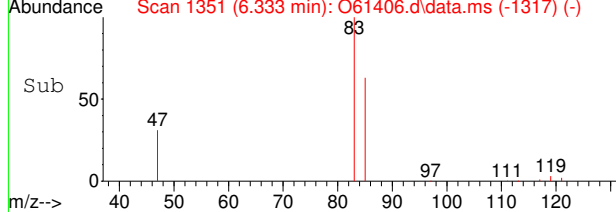
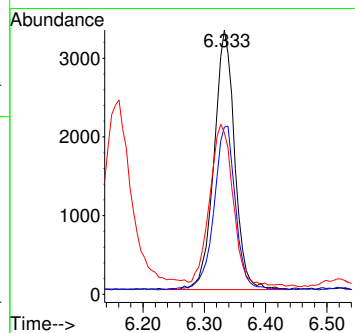


#9
 Chloroform
 Concen: 0.21 ug/L
 RT: 6.333 min Scan# 1351
 Delta R.T. 0.001 min
 Lab File: O61406.d
 Acq: 16 Sep 2020 1:29 pm

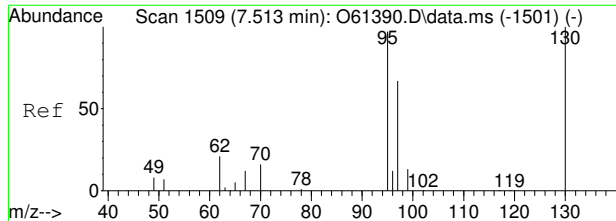


Tgt Ion: 83 Resp: 7686

Ion	Ratio	Lower	Upper
83	100		
85	62.6	33.9	93.9
47	58.8	14.9	74.9



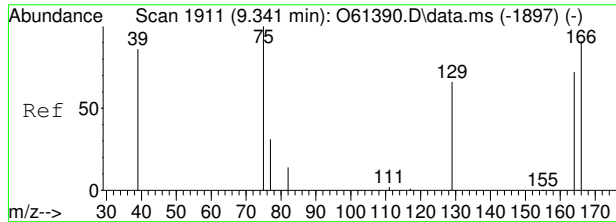
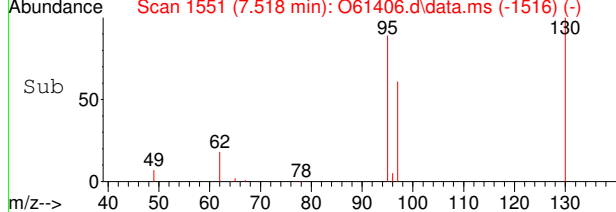
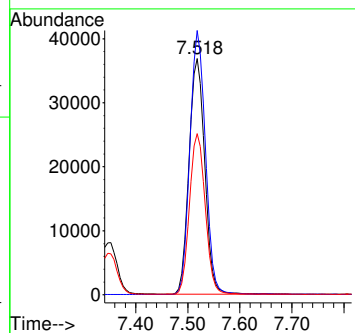
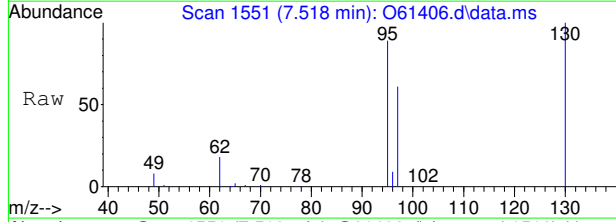
7.1.36
7



#15
 Trichloroethene
 Concen: 3.75 ug/L
 RT: 7.518 min Scan# 1551
 Delta R.T. 0.005 min
 Lab File: O61406.d
 Acq: 16 Sep 2020 1:29 pm

Tgt Ion: 95 Resp: 77393

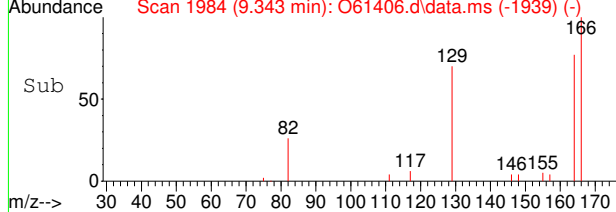
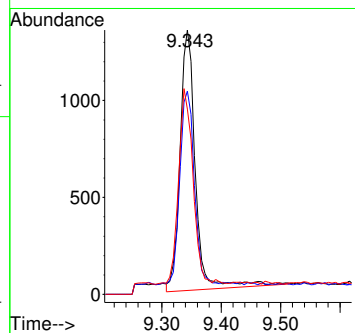
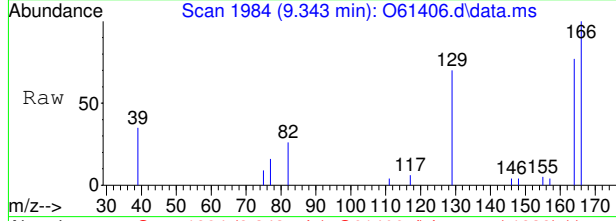
Ion	Ratio	Lower	Upper
95	100		
130	112.1	72.6	132.6
97	68.2	38.6	98.6



#21
 Tetrachloroethene
 Concen: 0.12 ug/L
 RT: 9.343 min Scan# 1984
 Delta R.T. 0.002 min
 Lab File: O61406.d
 Acq: 16 Sep 2020 1:29 pm

Tgt Ion: 166 Resp: 2417

Ion	Ratio	Lower	Upper
166	100		
164	76.0	49.1	109.1
129	68.5	42.2	102.2

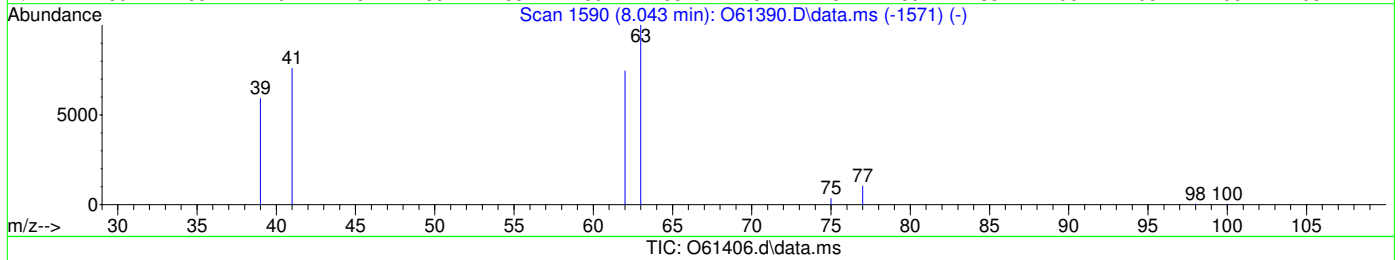
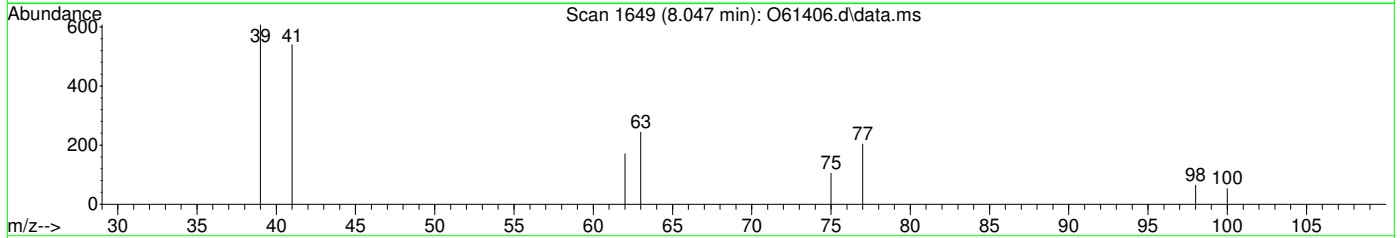
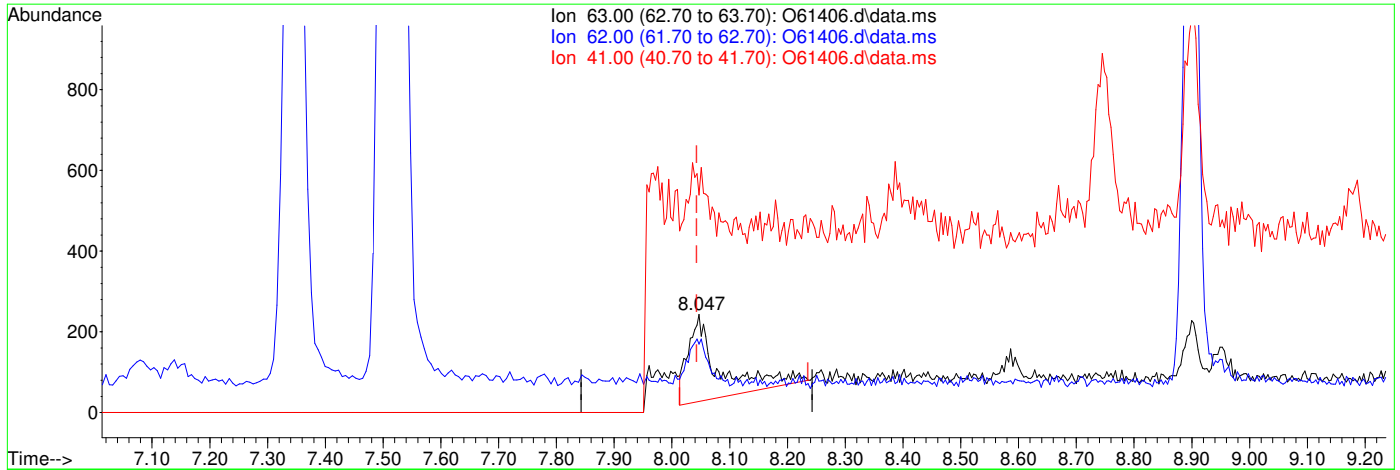


7.1.36
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-17-2020\vo2363\
 Data File : O61406.d
 Acq On : 16 Sep 2020 1:29 pm
 Operator : akarig
 Sample : FA78551-18
 Misc : MS47193,VO2363,,,,,
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 17 04:42:27 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091520.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 16 09:02:25 2020
 Response via : Initial Calibration



(16) 1,2-Dichloropropane

8.047min (+0.004) 0.04ug/L

response 811

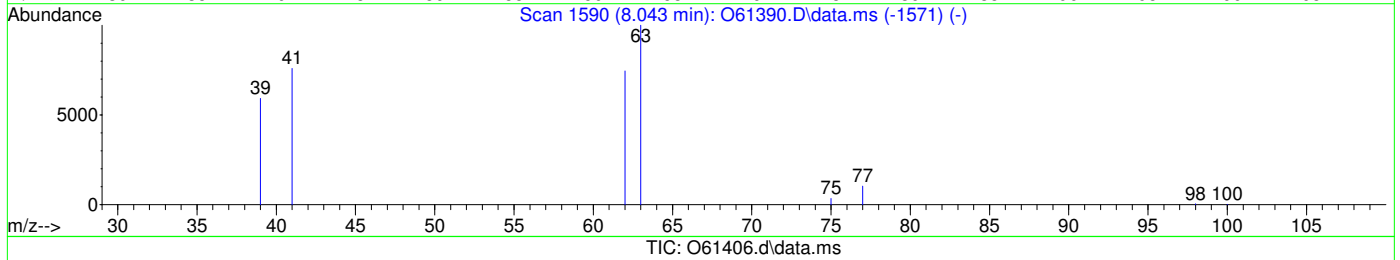
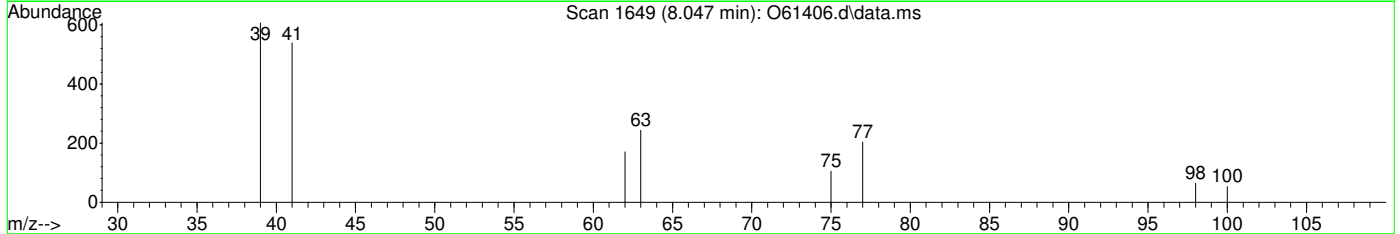
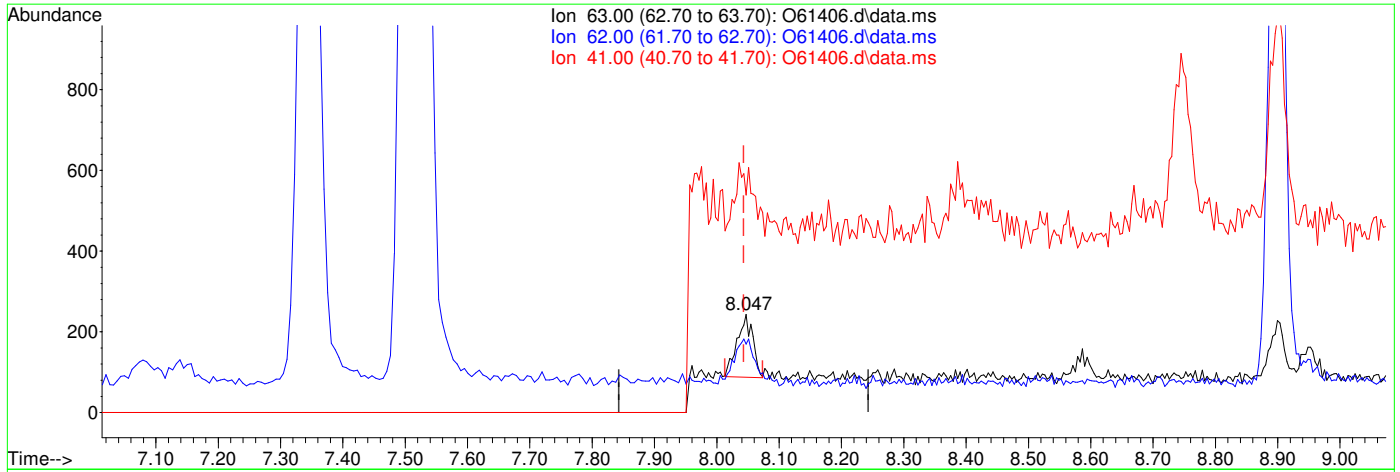
Ion	Exp%	Act%
63.00	100	100
62.00	74.50	60.12
41.00	75.90	57.06
0.00	0.00	0.00

7.1.36.1
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-17-2020\vo2363\
 Data File : O61406.d
 Acq On : 16 Sep 2020 1:29 pm
 Operator : akarig
 Sample : FA78551-18
 Misc : MS47193,VO2363,,,,,
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 17 04:42:27 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091520.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 16 09:02:25 2020
 Response via : Initial Calibration



(16) 1,2-Dichloropropane
 8.047min (+0.004) 0.01ug/L m
 response 271

Ion	Exp%	Act%
63.00	100	100
62.00	74.50	69.96
41.00	75.90	221.81#
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-14-2020\VO2359\
Data File : O61305.d
Acq On : 12 Sep 2020 10:05 pm
Operator : stutip
Sample : fa78551-19
Misc : MS47193,VO2359,,,,,
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 14 08:01:00 2020
Quant Method : C:\msdchem\1\methods\SIMCL091120.M
Quant Title : Standard Methods 6200B
QLast Update : Sun Sep 13 19:20:40 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Fluorobenzene	7.346	96	212593	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.447	117	173815	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.073	65	93599	5.45	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	109.00%	
19) Toluene-d8	8.900	98	183820	4.69	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	93.80%	
Target Compounds						
9) Chloroform	6.333	83	6783	0.20	ug/L	86
15) Trichloroethene	7.518	95	72362	3.62	ug/L	85

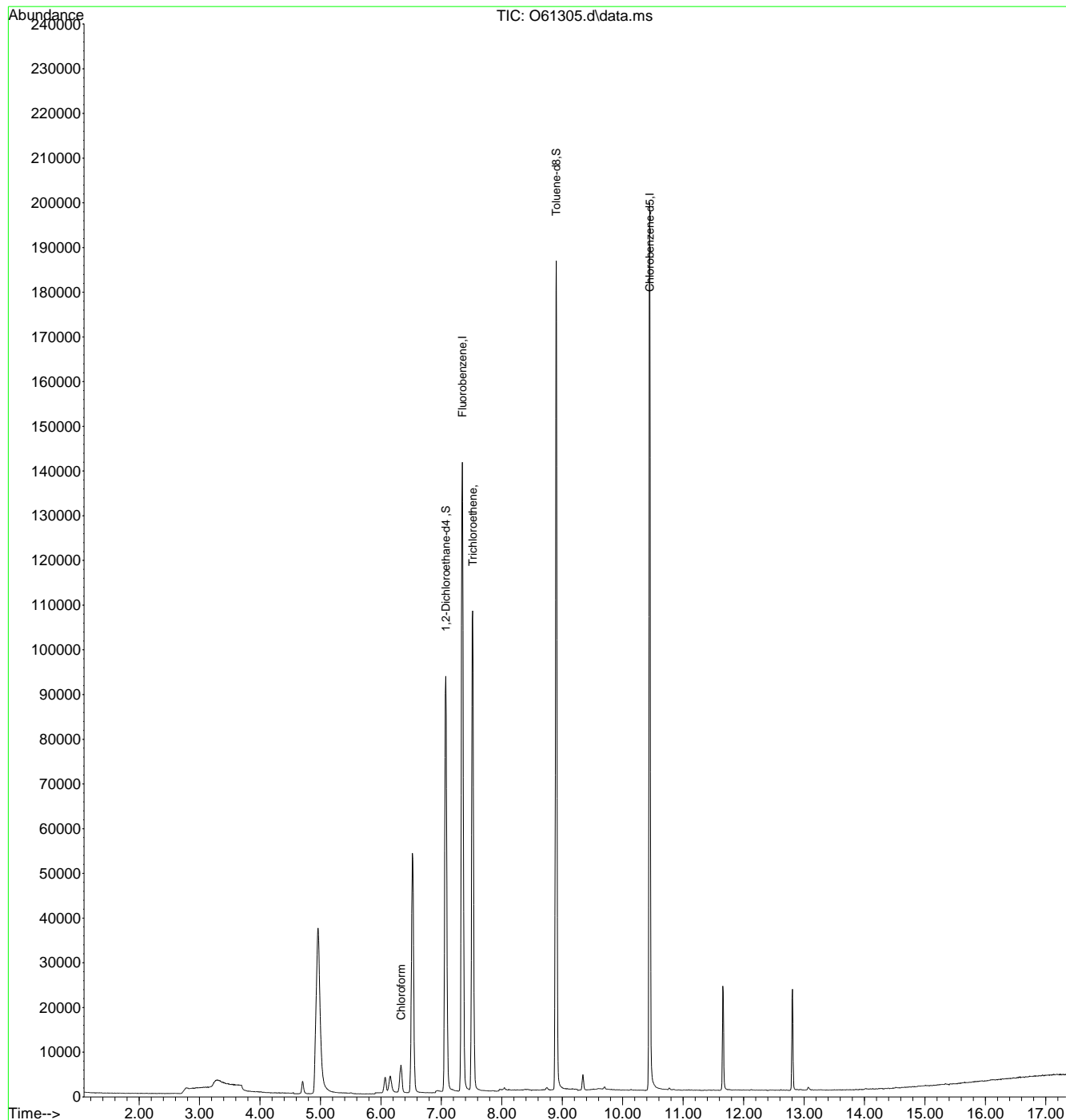
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.1.37
7

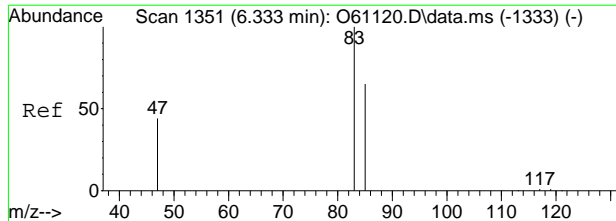
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-14-2020\VO2359\
 Data File : O61305.d
 Acq On : 12 Sep 2020 10:05 pm
 Operator : stutip
 Sample : fa78551-19
 Misc : MS47193,VO2359,,,,,
 ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 14 08:01:00 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Sun Sep 13 19:20:40 2020
 Response via : Initial Calibration

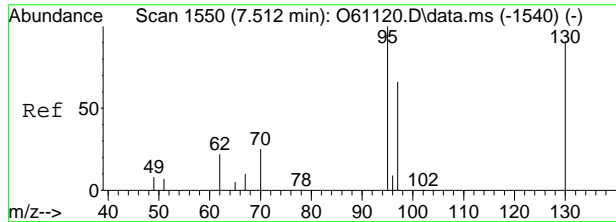
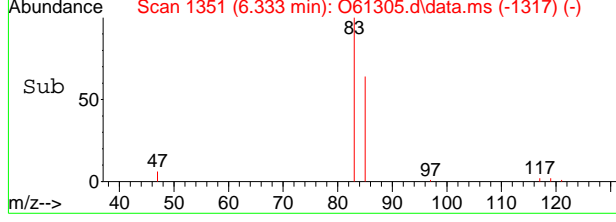
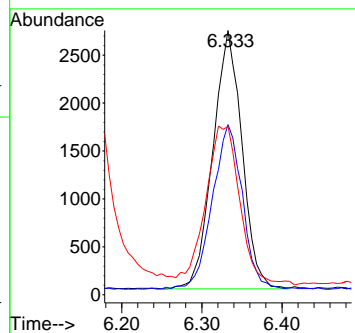
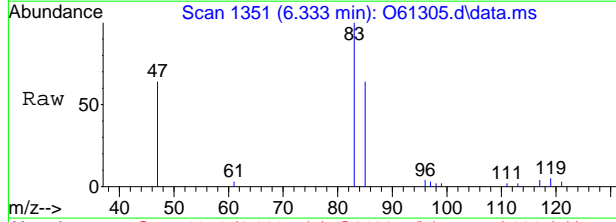


7.1.37
7



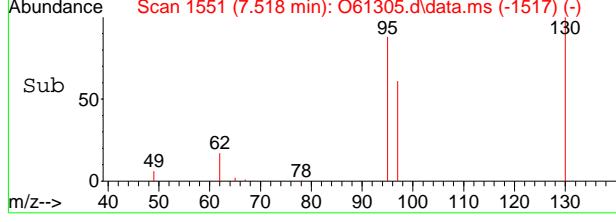
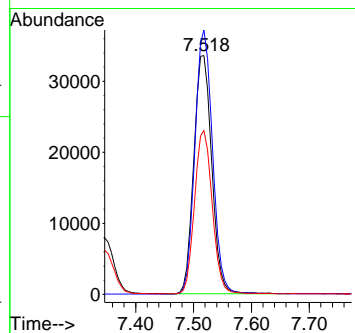
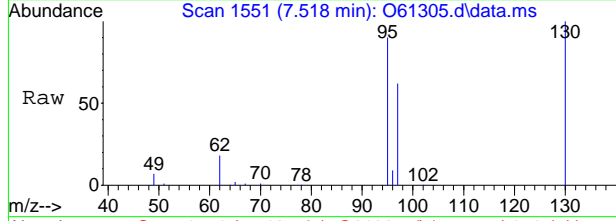
#9
 Chloroform
 Concen: 0.20 ug/L
 RT: 6.333 min Scan# 1351
 Delta R.T. -0.000 min
 Lab File: O61305.d
 Acq: 12 Sep 2020 10:05 pm

Tgt Ion	Resp	Lower	Upper
83	6783		
85	63.2	33.0	93.0
47	59.9	8.1	68.1



#15
 Trichloroethene
 Concen: 3.62 ug/L
 RT: 7.518 min Scan# 1551
 Delta R.T. 0.000 min
 Lab File: O61305.d
 Acq: 12 Sep 2020 10:05 pm

Tgt Ion	Resp	Lower	Upper
95	72362		
130	110.9	60.4	120.4
97	68.6	34.6	94.6



7.1.37
7



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\091520\
 Data File : Z62380.D
 Acq On : 15 Sep 2020 10:06 pm
 Operator : JuanG
 Sample : FA78551-19
 Misc : MS47193,VZ2419,,,,,
 ALS Vial : 25 Sample Multiplier: 1

Quant Time: Sep 16 10:47:31 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Sun Sep 13 13:38:26 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

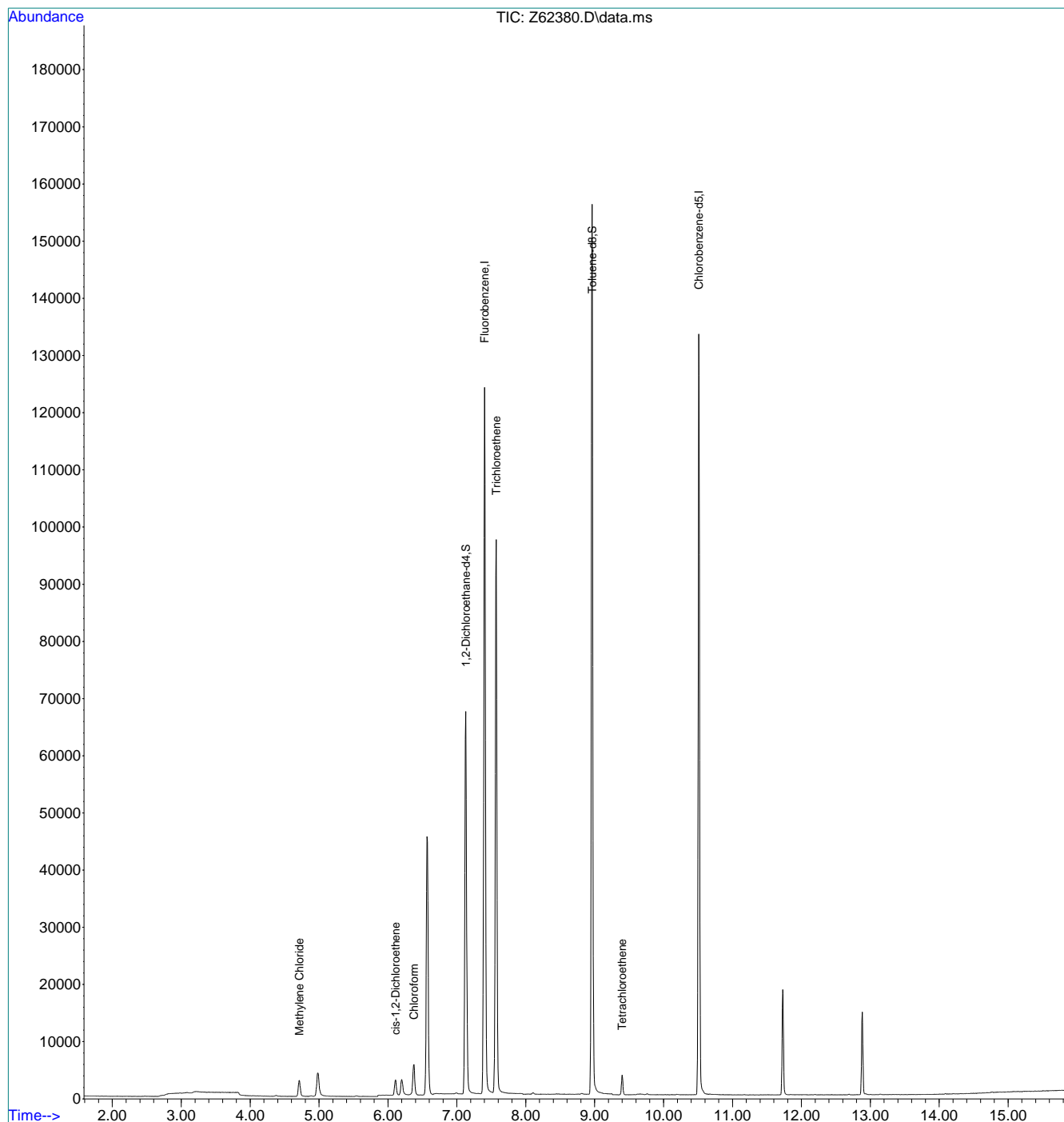
Internal Standards						
1) Fluorobenzene	7.401	96	1430433	5.00	ppb	0.00
18) Chlorobenzene-d5	10.511	117	1189416	5.00	ppb	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.130	65	564084	6.38	ppb	0.00
Spiked Amount	5.000	Range	79 - 125	Recovery	=	127.60%#
19) Toluene-d8	8.961	98	1371229	4.75	ppb	0.00
Spiked Amount	5.000	Range	70 - 130	Recovery	=	95.00%
Target Compounds						
5) Methylene Chloride	4.713	84	19657	0.14	ppb	# 87
8) cis-1,2-Dichloroethene	6.110	96	17013	0.14	ppb	91
9) Chloroform	6.377	83	51716	0.24	ppb	100
15) Trichloroethene	7.571	95	528732	4.33	ppb	# 85
21) Tetrachloroethene	9.399	166	15087	0.11	ppb	99

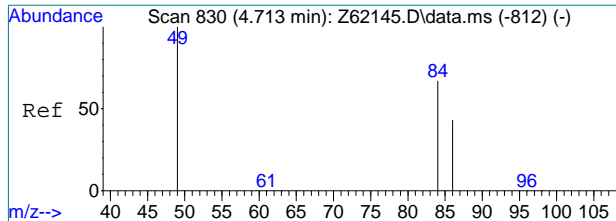
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\091520\
Data File : Z62380.D
Acq On : 15 Sep 2020 10:06 pm
Operator : JuanG
Sample : FA78551-19
Misc : MS47193,VZ2419,,,,,
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Sep 16 10:47:31 2020
Quant Method : C:\msdchem\1\methods\SIMCL091120.M
Quant Title : WATER-EPA 8260B
QLast Update : Sun Sep 13 13:38:26 2020
Response via : Initial Calibration

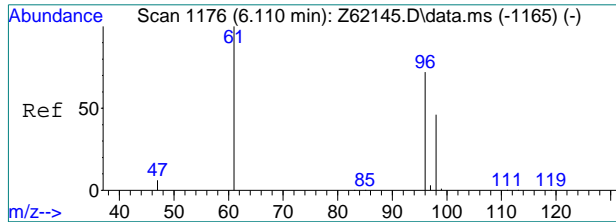
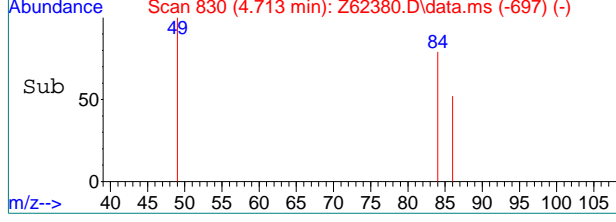
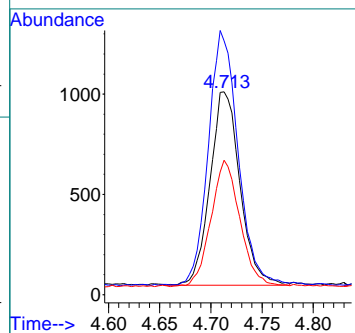
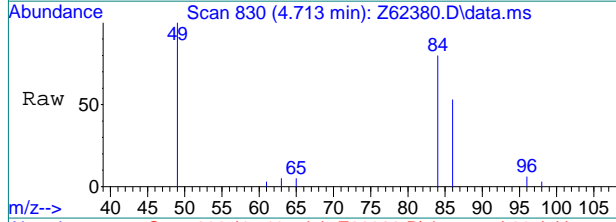




#5
 Methylene Chloride
 Concen: 0.14 ppb
 RT: 4.713 min Scan# 830
 Delta R.T. -0.000 min
 Lab File: Z62380.D
 Acq: 15 Sep 2020 10:06 pm

Tgt Ion: 84 Resp: 19657

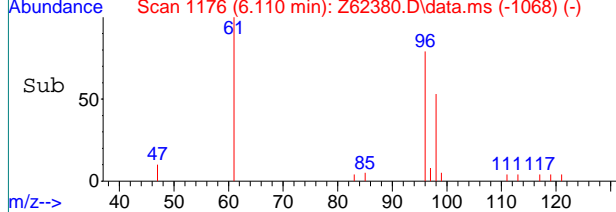
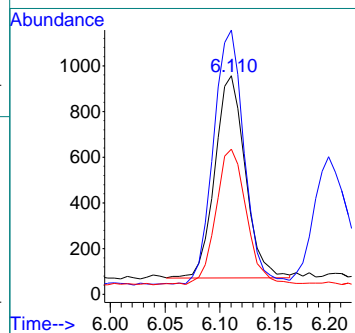
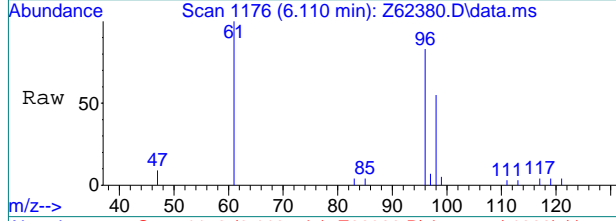
Ion	Ratio	Lower	Upper
84	100		
49	126.1	128.7	168.7#
86	65.1	43.9	83.9



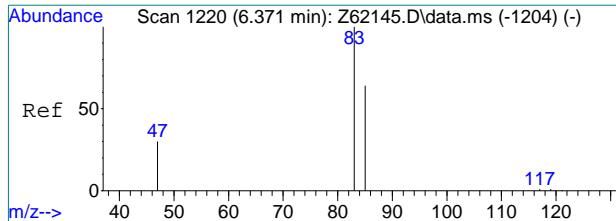
#8
 cis-1,2-Dichloroethene
 Concen: 0.14 ppb
 RT: 6.110 min Scan# 1176
 Delta R.T. 0.000 min
 Lab File: Z62380.D
 Acq: 15 Sep 2020 10:06 pm

Tgt Ion: 96 Resp: 17013

Ion	Ratio	Lower	Upper
96	100		
61	125.3	119.3	159.3
98	66.6	44.5	84.5

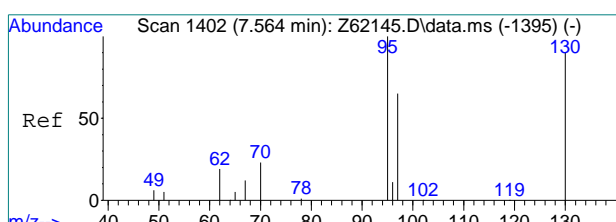
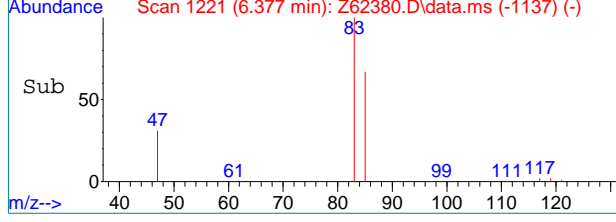
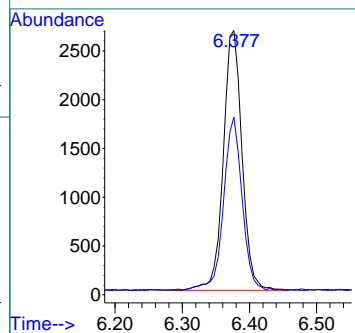
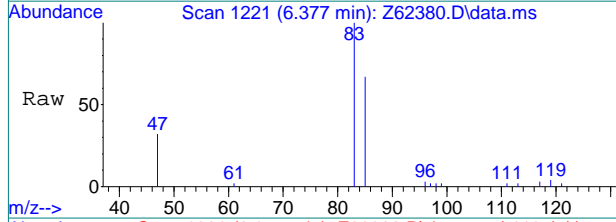


7.1.38
7



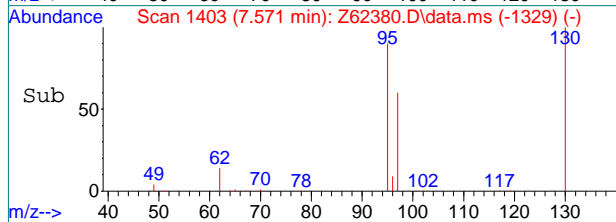
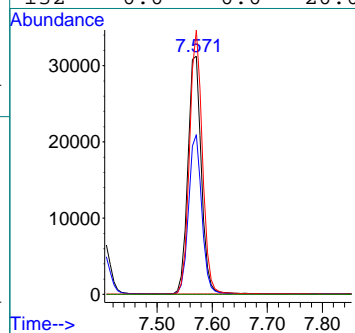
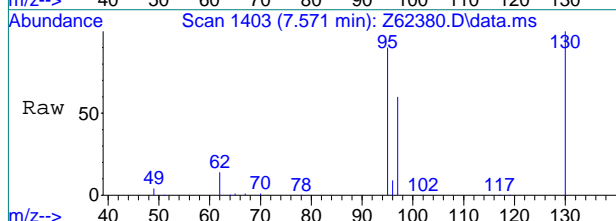
#9
 Chloroform
 Concen: 0.24 ppb
 RT: 6.377 min Scan# 1221
 Delta R.T. -0.000 min
 Lab File: Z62380.D
 Acq: 15 Sep 2020 10:06 pm

Tgt Ion	Resp	Lower	Upper
83	51716	100	
85	66.3	46.1	86.1



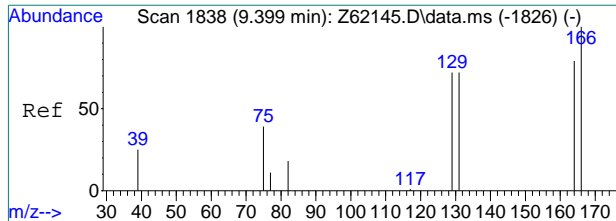
#15
 Trichloroethene
 Concen: 4.33 ppb
 RT: 7.571 min Scan# 1403
 Delta R.T. 0.000 min
 Lab File: Z62380.D
 Acq: 15 Sep 2020 10:06 pm

Tgt Ion	Resp	Lower	Upper
95	528732	100	
97	67.0	44.5	84.5
130	111.1	69.7	109.7#
132	0.0	0.0	20.0



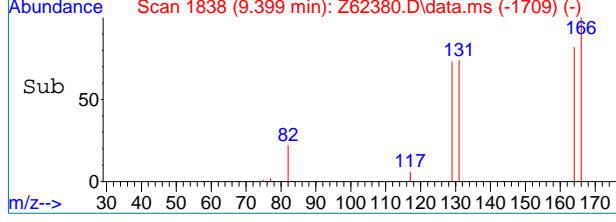
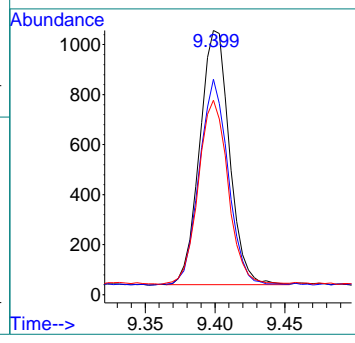
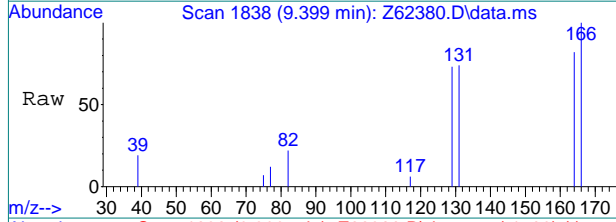
7.1.38
7





#21
 Tetrachloroethene
 Concen: 0.11 ppb
 RT: 9.399 min Scan# 1838
 Delta R.T. -0.000 min
 Lab File: Z62380.D
 Acq: 15 Sep 2020 10:06 pm

Tgt Ion	Ratio	Lower	Upper
166	100		
164	80.6	58.7	98.7
131	72.0	51.6	91.6



7.1.38
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-14-2020\VO2359\
Data File : O61306.d
Acq On : 12 Sep 2020 10:25 pm
Operator : stutip
Sample : fa78551-20
Misc : MS47193,VO2359,,,,,
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 14 08:01:15 2020
Quant Method : C:\msdchem\1\methods\SIMCL091120.M
Quant Title : Standard Methods 6200B
QLast Update : Sun Sep 13 19:20:40 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Fluorobenzene	7.346	96	207333	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.447	117	162383	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.068	65	91019	5.44	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	108.80%	
19) Toluene-d8	8.896	98	177631	4.85	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	97.00%	
Target Compounds						Qvalue

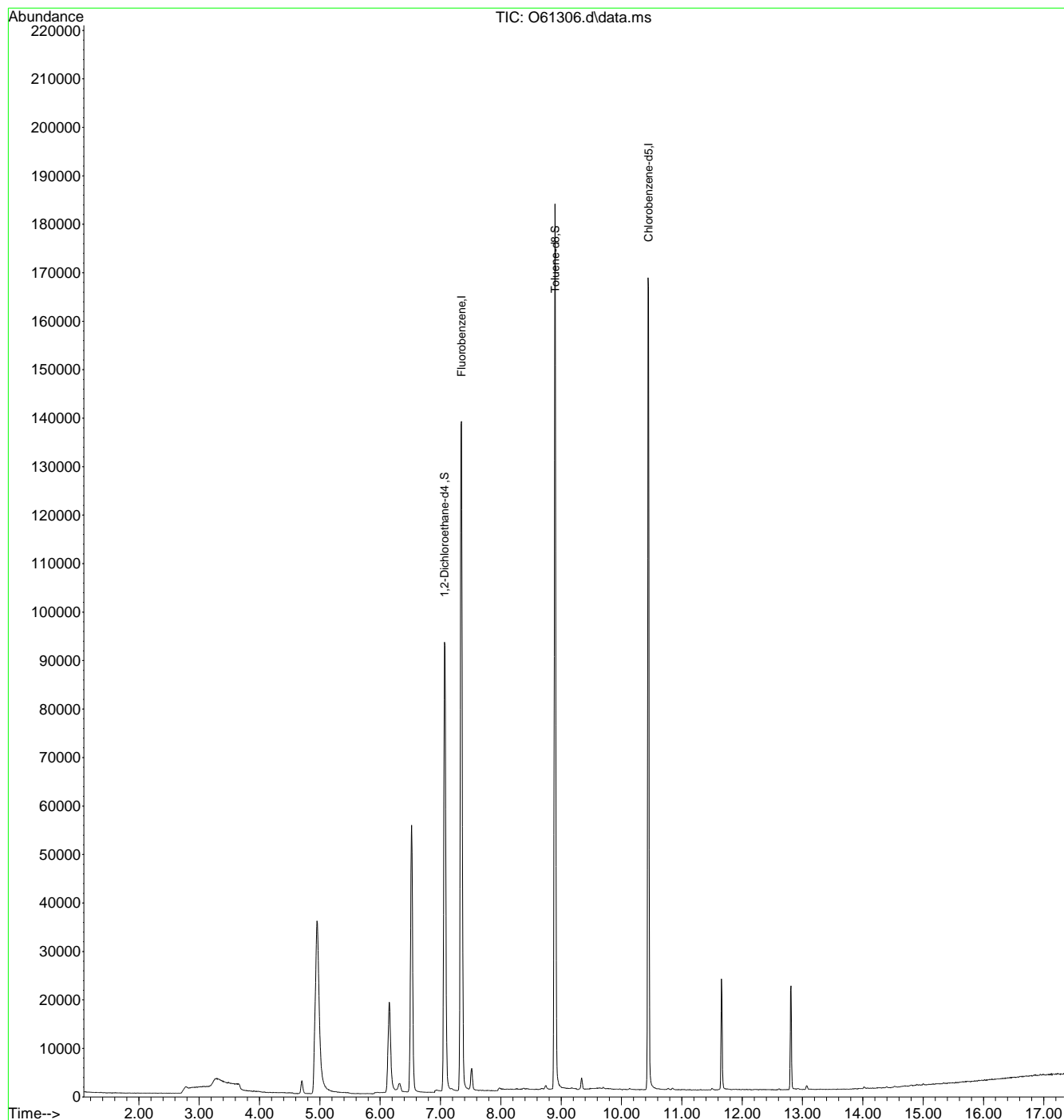
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.1.39
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-14-2020\VO2359\
Data File : O61306.d
Acq On : 12 Sep 2020 10:25 pm
Operator : stutip
Sample : fa78551-20
Misc : MS47193,VO2359,,,,,
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 14 08:01:15 2020
Quant Method : C:\msdchem\1\methods\SIMCL091120.M
Quant Title : Standard Methods 6200B
QLast Update : Sun Sep 13 19:20:40 2020
Response via : Initial Calibration



7.1.39
7



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\091520\
 Data File : Z62381.D
 Acq On : 15 Sep 2020 10:25 pm
 Operator : JuanG
 Sample : FA78551-20
 Misc : MS47193,VZ2419,,,,,
 ALS Vial : 26 Sample Multiplier: 1

Quant Time: Sep 16 10:47:33 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Sun Sep 13 13:38:26 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Fluorobenzene	7.401	96	1442469	5.00	ppb	0.00
18) Chlorobenzene-d5	10.511	117	1201458	5.00	ppb	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.130	65	571388	6.40	ppb	0.00
Spiked Amount	5.000	Range	79 - 125	Recovery	=	128.00%#
19) Toluene-d8	8.961	98	1375688	4.72	ppb	0.00
Spiked Amount	5.000	Range	70 - 130	Recovery	=	94.40%
Target Compounds						
5) Methylene Chloride	4.713	84	18752	0.13	ppb	Qvalue # 89
9) Chloroform	6.377	83	11350	0.05	ppb	97
15) Trichloroethene	7.571	95	21946	0.18	ppb	87
21) Tetrachloroethene	9.399	166	9567	0.07	ppb	96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

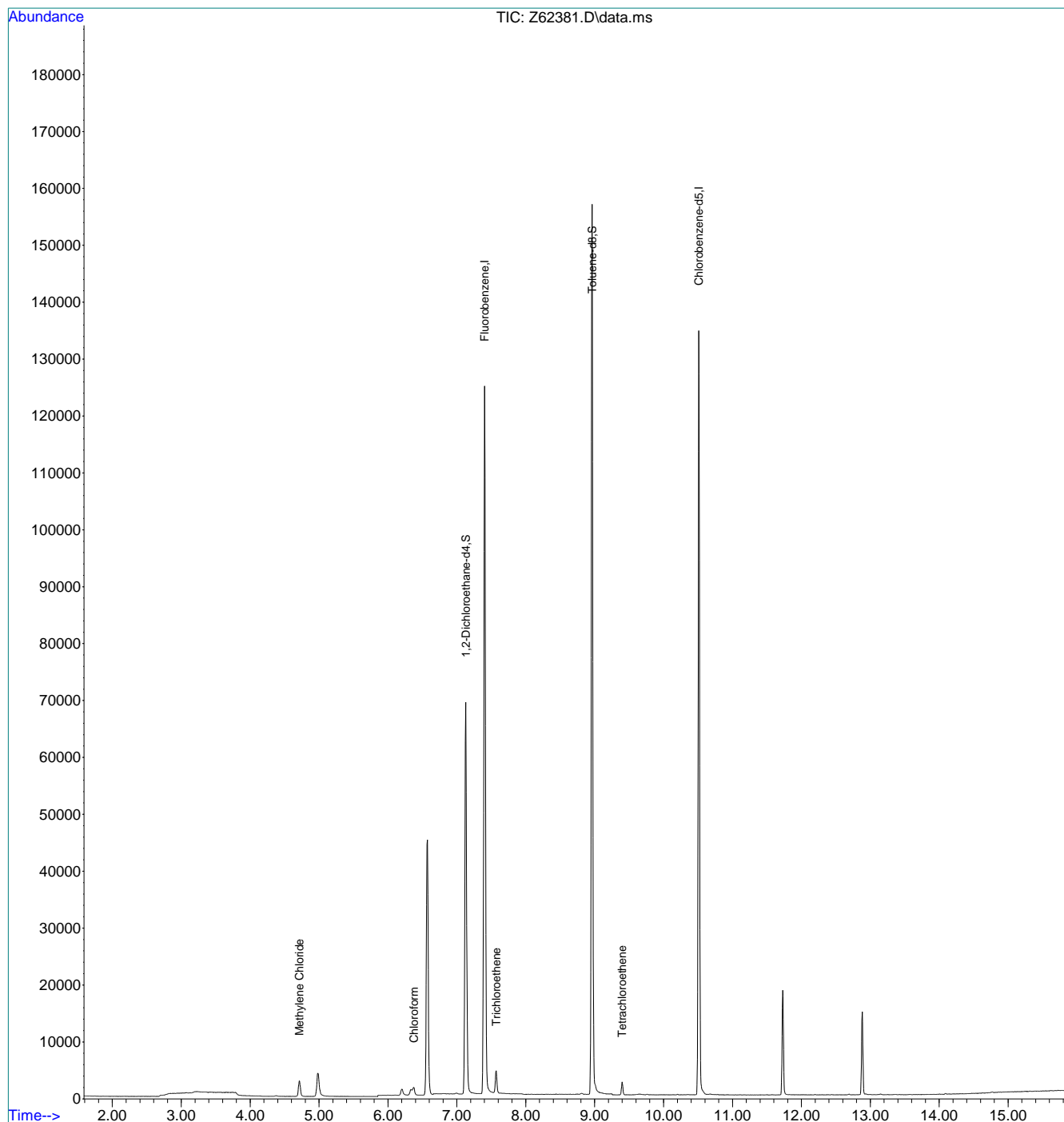
7.1.40

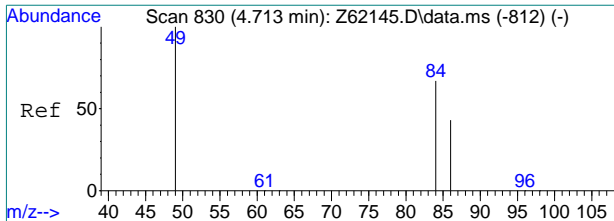
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\091520\
Data File : Z62381.D
Acq On : 15 Sep 2020 10:25 pm
Operator : JuanG
Sample : FA78551-20
Misc : MS47193,VZ2419,,,,,
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Sep 16 10:47:33 2020
Quant Method : C:\msdchem\1\methods\SIMCL091120.M
Quant Title : WATER-EPA 8260B
QLast Update : Sun Sep 13 13:38:26 2020
Response via : Initial Calibration

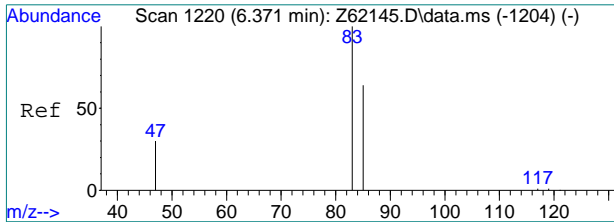
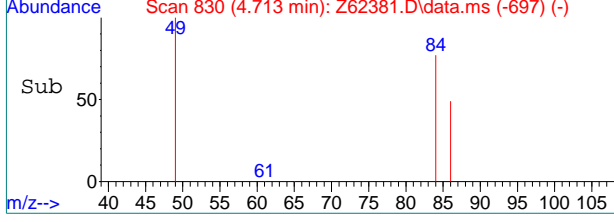
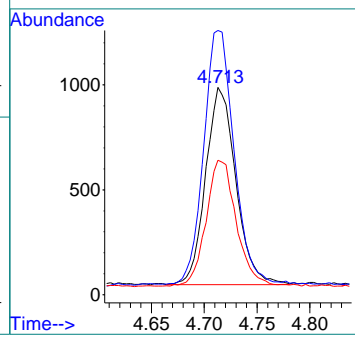
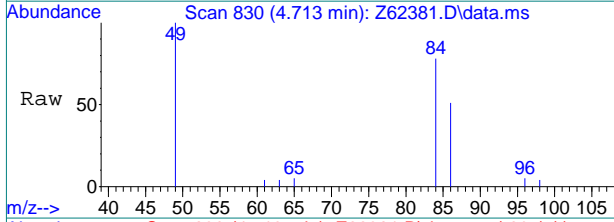




#5
 Methylene Chloride
 Concen: 0.13 ppb
 RT: 4.713 min Scan# 830
 Delta R.T. 0.000 min
 Lab File: Z62381.D
 Acq: 15 Sep 2020 10:25 pm

Tgt Ion: 84 Resp: 18752

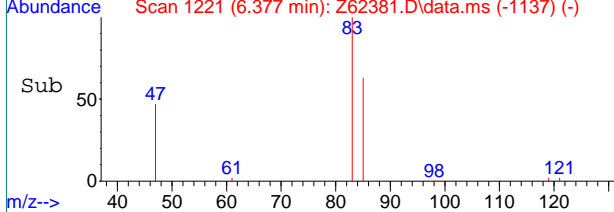
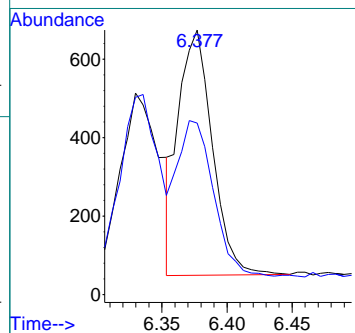
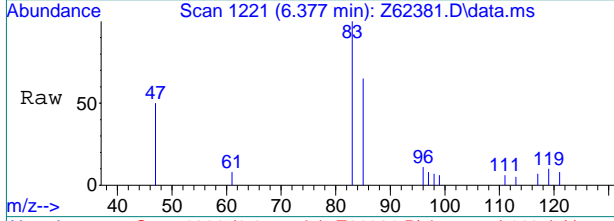
Ion	Ratio	Lower	Upper
84	100		
49	128.6	128.7	168.7#
86	63.6	43.9	83.9



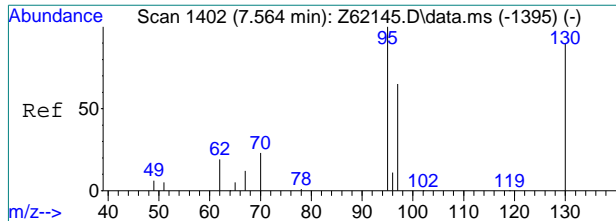
#9
 Chloroform
 Concen: 0.05 ppb
 RT: 6.377 min Scan# 1221
 Delta R.T. 0.000 min
 Lab File: Z62381.D
 Acq: 15 Sep 2020 10:25 pm

Tgt Ion: 83 Resp: 11350

Ion	Ratio	Lower	Upper
83	100		
85	68.7	46.1	86.1

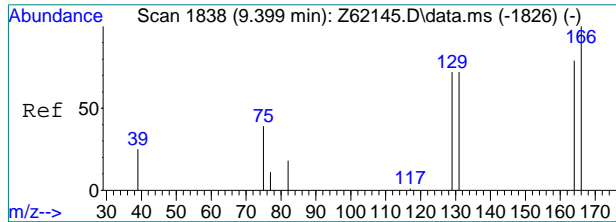
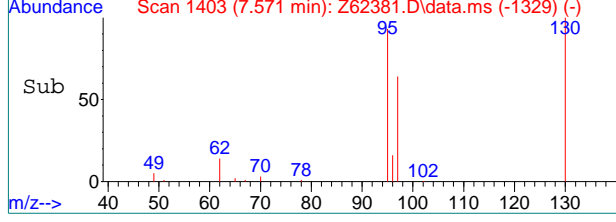
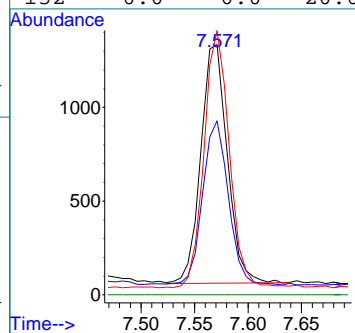
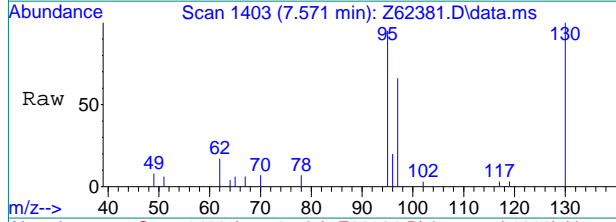


7.1.40
7



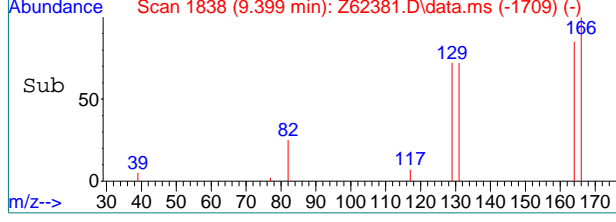
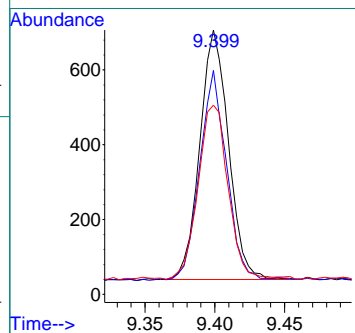
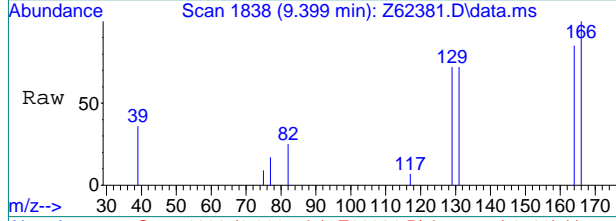
#15
 Trichloroethene
 Concen: 0.18 ppb
 RT: 7.571 min Scan# 1403
 Delta R.T. 0.000 min
 Lab File: Z62381.D
 Acq: 15 Sep 2020 10:25 pm

Tgt Ion	Resp	Lower	Upper
95	21946		
97	68.7	44.5	84.5
130	107.9	69.7	109.7
132	0.0	0.0	20.0



#21
 Tetrachloroethene
 Concen: 0.07 ppb
 RT: 9.399 min Scan# 1838
 Delta R.T. -0.000 min
 Lab File: Z62381.D
 Acq: 15 Sep 2020 10:25 pm

Tgt Ion	Resp	Lower	Upper
166	9567		
164	84.0	58.7	98.7
131	69.7	51.6	91.6



7.140
7



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-14-2020\VO2359\
Data File : O61307.d
Acq On : 12 Sep 2020 10:46 pm
Operator : stutip
Sample : fa78551-21
Misc : MS47193,VO2359,,,,,
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 14 08:01:33 2020
Quant Method : C:\msdchem\1\methods\SIMCL091120.M
Quant Title : Standard Methods 6200B
QLast Update : Sun Sep 13 19:20:40 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Fluorobenzene	7.346	96	203050	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.447	117	164109	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.074	65	89932	5.48	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	109.60%	
19) Toluene-d8	8.896	98	172679	4.67	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	93.40%	
Target Compounds						
15) Trichloroethene	7.512	95	10778	0.56	ug/L	91
21) Tetrachloroethene	9.343	166	5023	0.28	ug/L	97

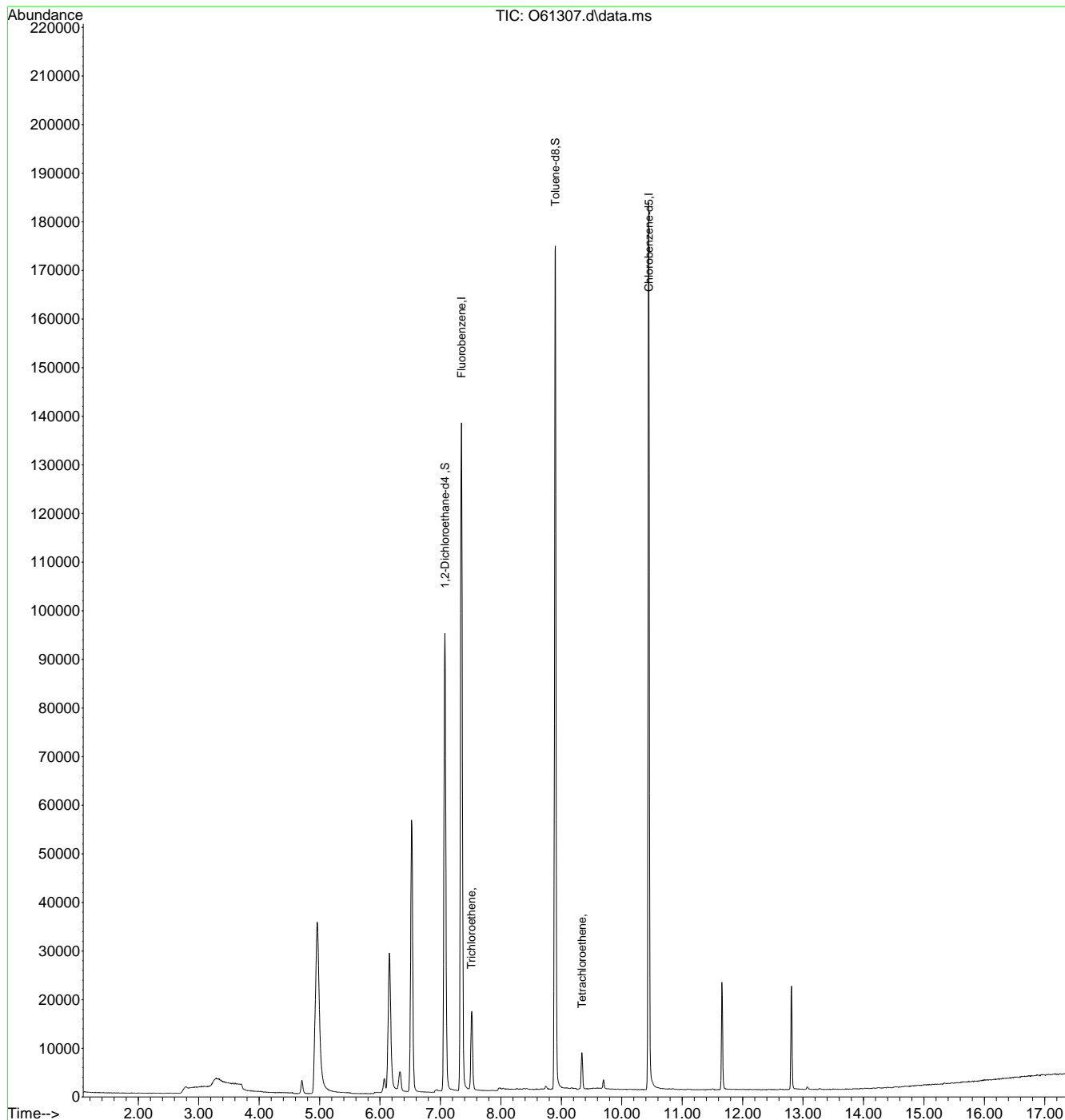
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.1.41
7

Quantitation Report (QT Reviewed)

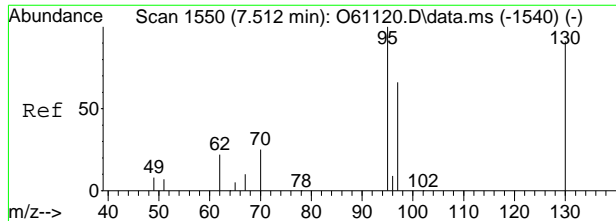
Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-14-2020\VO2359\
 Data File : O61307.d
 Acq On : 12 Sep 2020 10:46 pm
 Operator : stutip
 Sample : fa78551-21
 Misc : MS47193,VO2359,,,,,
 ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 14 08:01:33 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Sun Sep 13 19:20:40 2020
 Response via : Initial Calibration



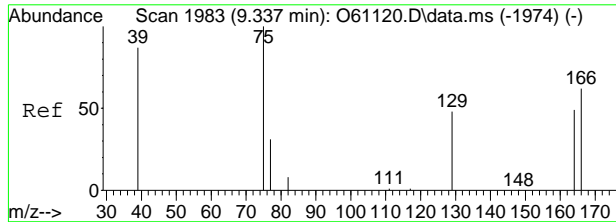
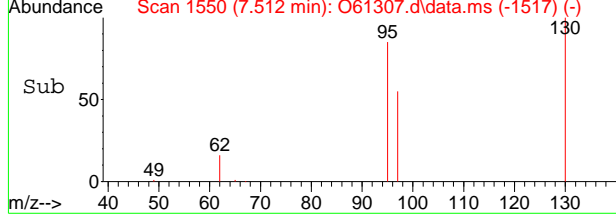
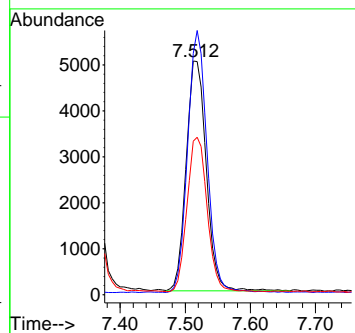
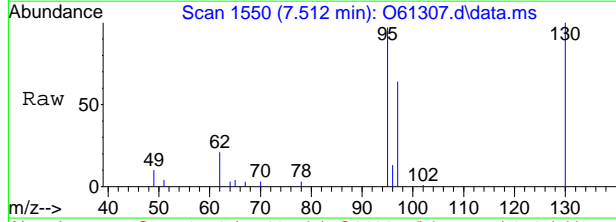
7.1.41
7





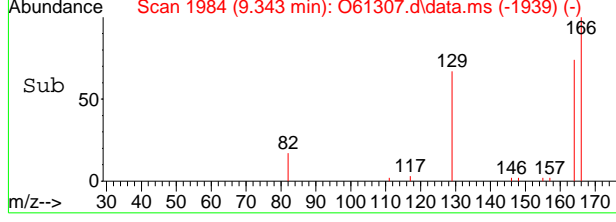
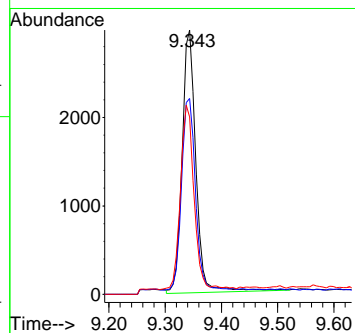
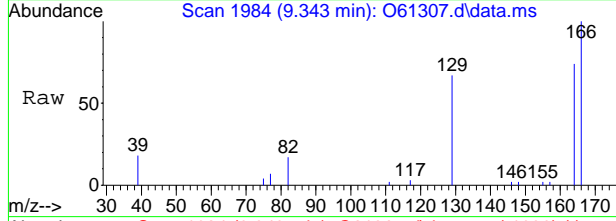
#15
 Trichloroethene
 Concen: 0.56 ug/L
 RT: 7.512 min Scan# 1550
 Delta R.T. -0.006 min
 Lab File: O61307.d
 Acq: 12 Sep 2020 10:46 pm

Tgt Ion	Resp	Lower	Upper
95	10778		
130	103.9	60.4	120.4
97	65.4	34.6	94.6



#21
 Tetrachloroethene
 Concen: 0.28 ug/L
 RT: 9.343 min Scan# 1984
 Delta R.T. 0.000 min
 Lab File: O61307.d
 Acq: 12 Sep 2020 10:46 pm

Tgt Ion	Resp	Lower	Upper
166	5023		
164	73.6	47.3	107.3
129	65.8	37.5	97.5



7.141



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\091520\
 Data File : Z62382.D
 Acq On : 15 Sep 2020 10:45 pm
 Operator : JuanG
 Sample : FA78551-21
 Misc : MS47193,VZ2419,,,,,
 ALS Vial : 27 Sample Multiplier: 1

Quant Time: Sep 16 10:47:35 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Sun Sep 13 13:38:26 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

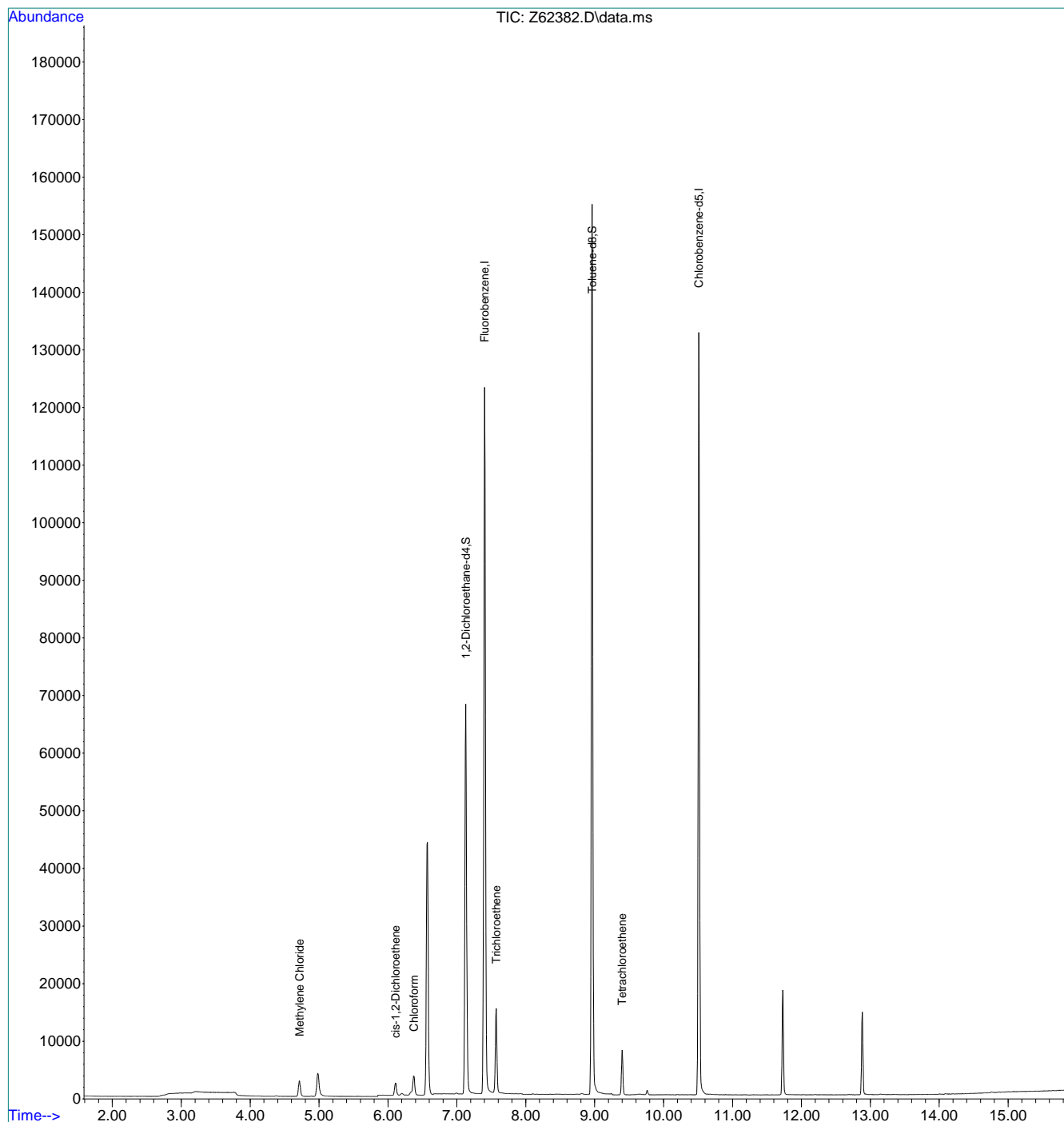
Internal Standards						
1) Fluorobenzene	7.401	96	1425076	5.00	ppb	0.00
18) Chlorobenzene-d5	10.511	117	1193005	5.00	ppb	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.130	65	559646	6.35	ppb	0.00
Spiked Amount	5.000	Range	79 - 125	Recovery	=	127.00%#
19) Toluene-d8	8.961	98	1359207	4.69	ppb	0.00
Spiked Amount	5.000	Range	70 - 130	Recovery	=	93.80%
Target Compounds						
5) Methylene Chloride	4.717	84	18317	0.13	ppb	Qvalue # 86
8) cis-1,2-Dichloroethene	6.110	96	13750	0.12	ppb	97
9) Chloroform	6.377	83	37316	0.17	ppb	87
15) Trichloroethene	7.571	95	79978	0.66	ppb	89
21) Tetrachloroethene	9.399	166	33480	0.24	ppb	99

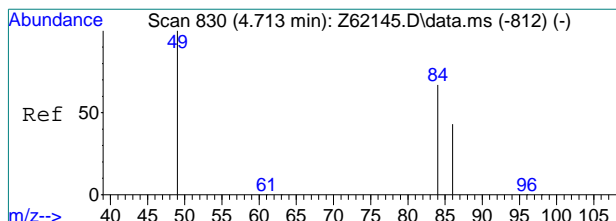
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\091520\
Data File : Z62382.D
Acq On : 15 Sep 2020 10:45 pm
Operator : JuanG
Sample : FA78551-21
Misc : MS47193,VZ2419,,,,,
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Sep 16 10:47:35 2020
Quant Method : C:\msdchem\1\methods\SIMCL091120.M
Quant Title : WATER-EPA 8260B
QLast Update : Sun Sep 13 13:38:26 2020
Response via : Initial Calibration

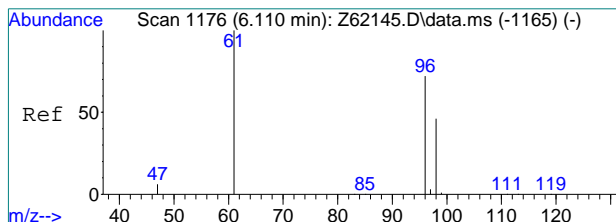
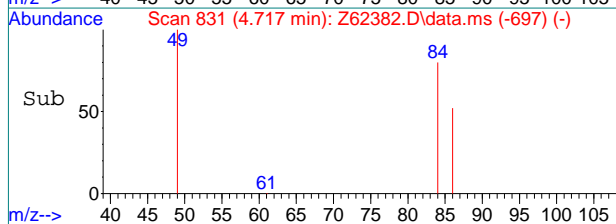
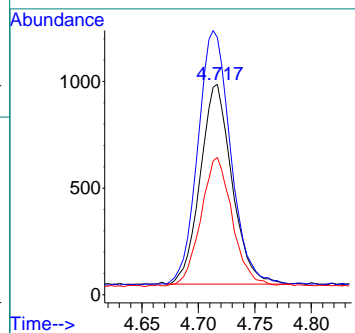
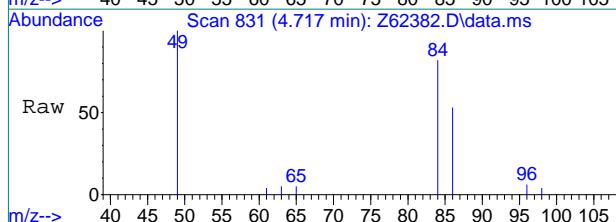




#5
 Methylene Chloride
 Concen: 0.13 ppb
 RT: 4.717 min Scan# 831
 Delta R.T. 0.004 min
 Lab File: Z62382.D
 Acq: 15 Sep 2020 10:45 pm

Tgt Ion: 84 Resp: 18317

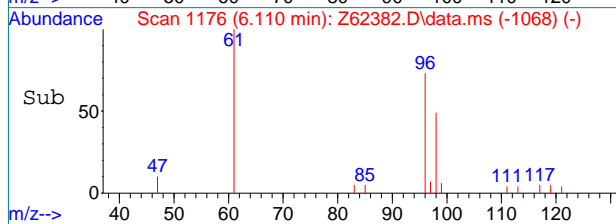
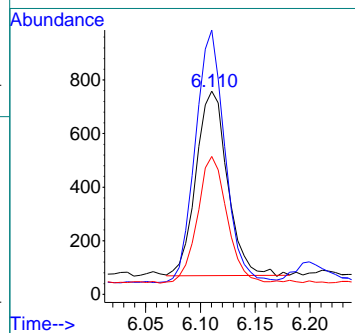
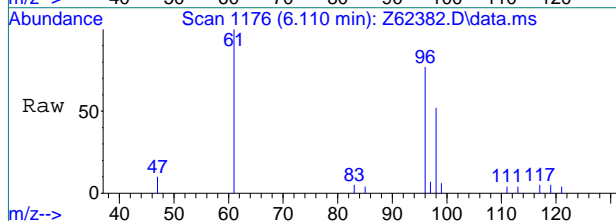
Ion	Ratio	Lower	Upper
84	100		
49	123.5	128.7	168.7#
86	64.1	43.9	83.9

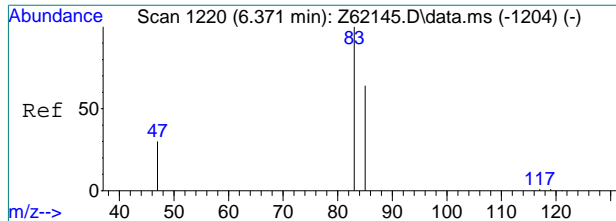


#8
 cis-1,2-Dichloroethene
 Concen: 0.12 ppb
 RT: 6.110 min Scan# 1176
 Delta R.T. 0.000 min
 Lab File: Z62382.D
 Acq: 15 Sep 2020 10:45 pm

Tgt Ion: 96 Resp: 13750

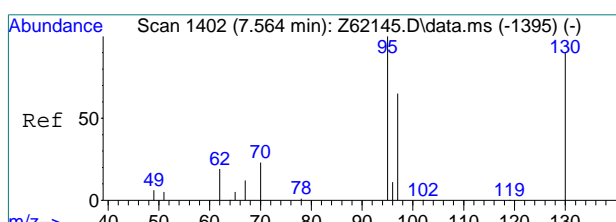
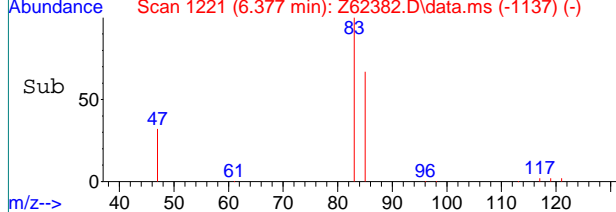
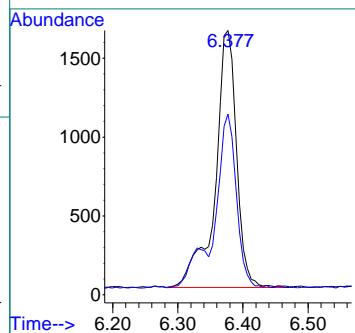
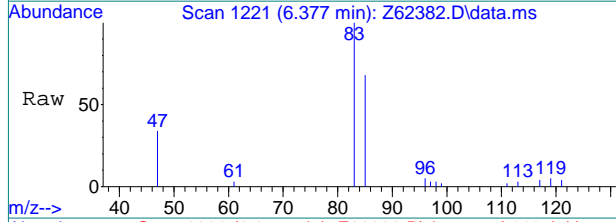
Ion	Ratio	Lower	Upper
96	100		
61	137.0	119.3	159.3
98	68.4	44.5	84.5





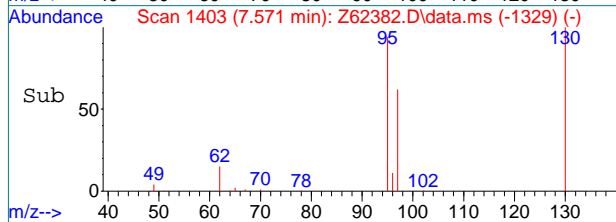
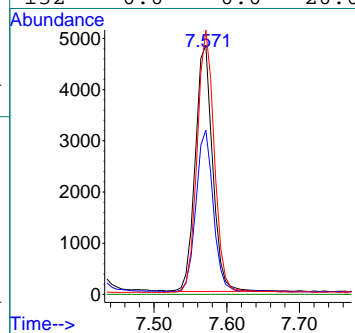
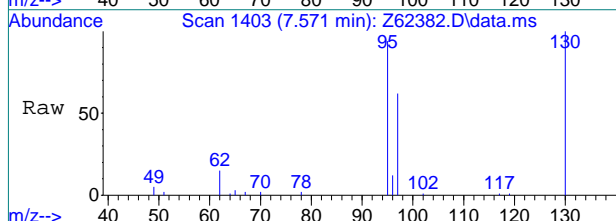
#9
 Chloroform
 Concen: 0.17 ppb
 RT: 6.377 min Scan# 1221
 Delta R.T. 0.000 min
 Lab File: Z62382.D
 Acq: 15 Sep 2020 10:45 pm

Tgt Ion	Resp	Lower	Upper
83	37316		
85	56.0	46.1	86.1

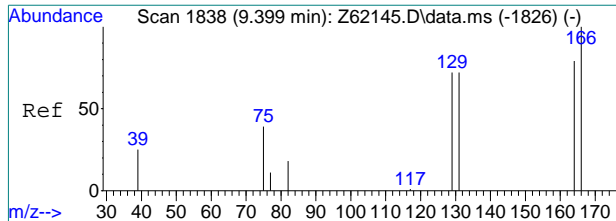


#15
 Trichloroethene
 Concen: 0.66 ppb
 RT: 7.571 min Scan# 1403
 Delta R.T. 0.000 min
 Lab File: Z62382.D
 Acq: 15 Sep 2020 10:45 pm

Tgt Ion	Resp	Lower	Upper
95	79978		
97	65.7	44.5	84.5
130	106.6	69.7	109.7
132	0.0	0.0	20.0

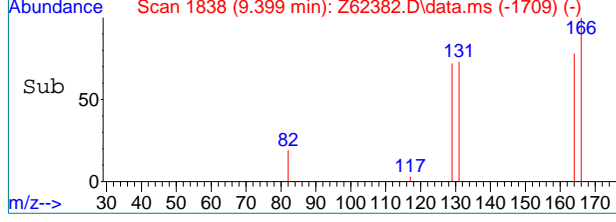
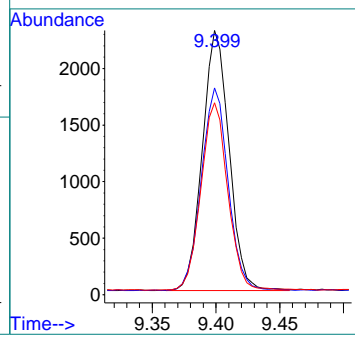
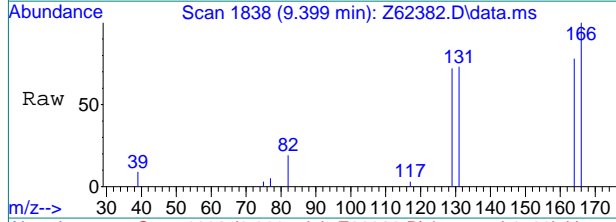


7.142
7



#21
 Tetrachloroethene
 Concen: 0.24 ppb
 RT: 9.399 min Scan# 1838
 Delta R.T. -0.000 min
 Lab File: Z62382.D
 Acq: 15 Sep 2020 10:45 pm

Tgt Ion	Resp	Lower	Upper
166	33480		
166	100		
164	77.8	58.7	98.7
131	71.9	51.6	91.6



7.1.42
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-14-2020\VO2359\
Data File : O61308.d
Acq On : 12 Sep 2020 11:06 pm
Operator : stutip
Sample : fa78551-22
Misc : MS47193,VO2359,,,,,
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 14 08:02:02 2020
Quant Method : C:\msdchem\1\methods\SIMCL091120.M
Quant Title : Standard Methods 6200B
QLast Update : Sun Sep 13 19:20:40 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Fluorobenzene	7.346	96	196239	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.447	117	159788	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.073	65	87803	5.54	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	110.80%	
19) Toluene-d8	8.900	98	169175	4.70	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	94.00%	
Target Compounds						
8) cis-1,2-Dichloroethene	6.072	96	11278	0.63	ug/L #	78
15) Trichloroethene	7.518	95	160819	8.72	ug/L	85
21) Tetrachloroethene	9.343	166	18163	1.05	ug/L	98

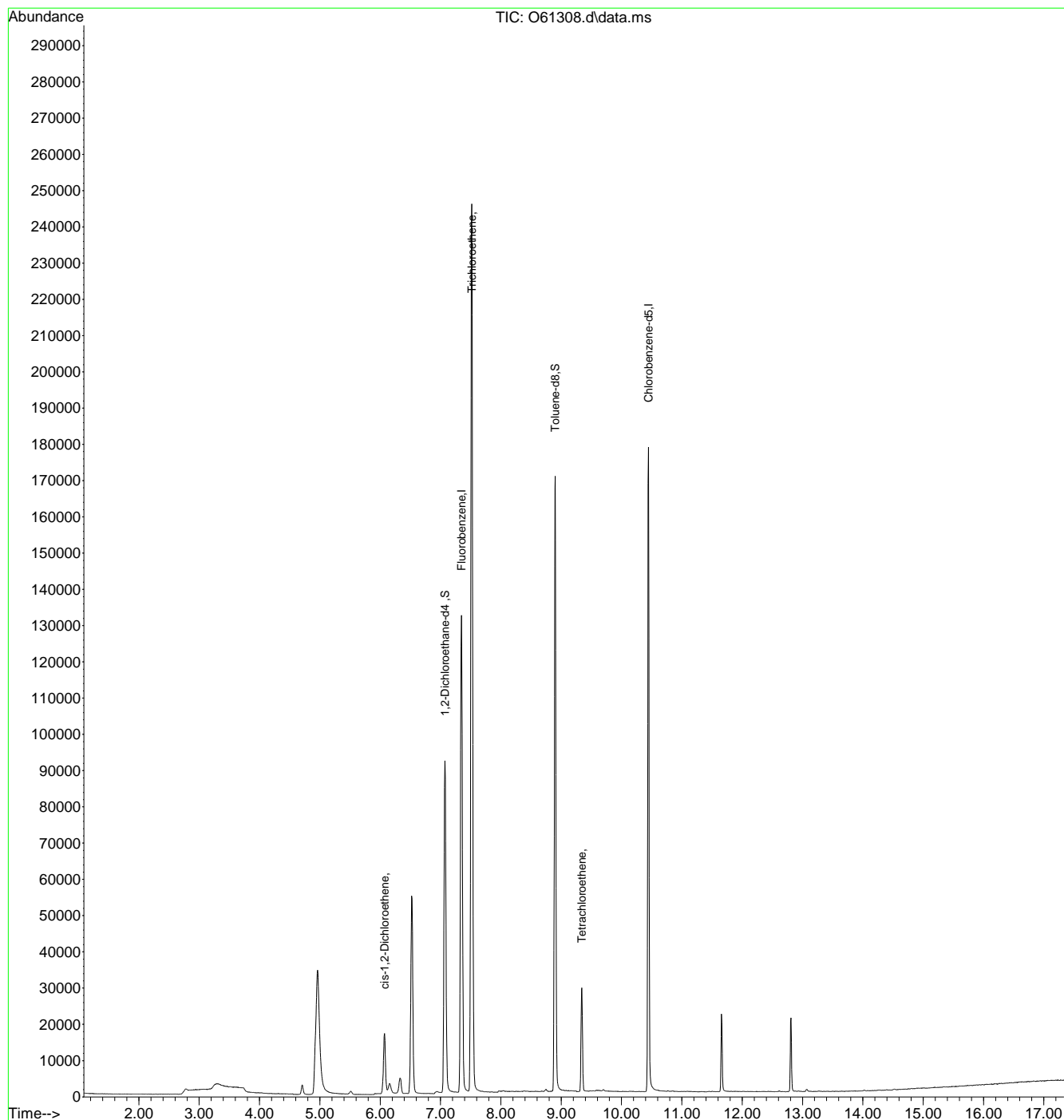
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.1.43
7

Quantitation Report (QT Reviewed)

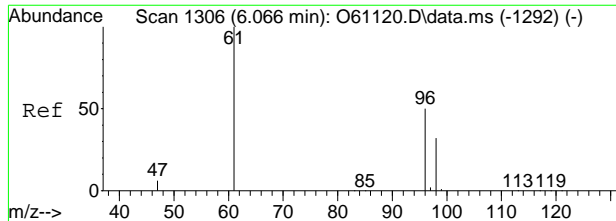
Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-14-2020\VO2359\
 Data File : O61308.d
 Acq On : 12 Sep 2020 11:06 pm
 Operator : stutip
 Sample : fa78551-22
 Misc : MS47193,VO2359,,,,,
 ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 14 08:02:02 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Sun Sep 13 19:20:40 2020
 Response via : Initial Calibration



7.1.43
7

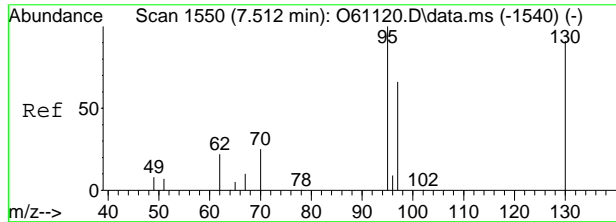
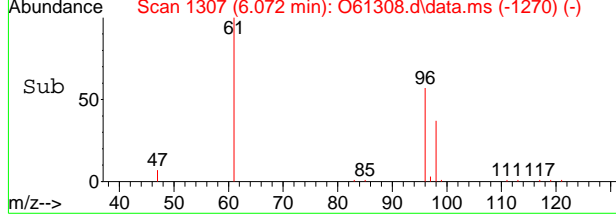
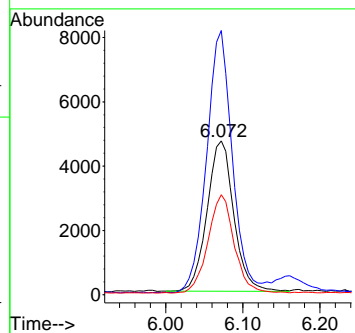
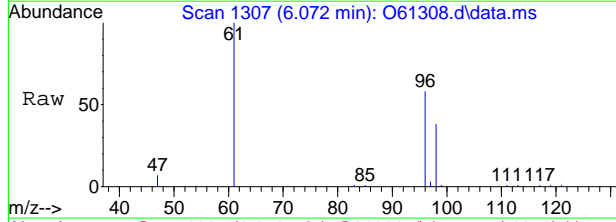




#8
 cis-1,2-Dichloroethene
 Concen: 0.63 ug/L
 RT: 6.072 min Scan# 1307
 Delta R.T. -0.000 min
 Lab File: O61308.d
 Acq: 12 Sep 2020 11:06 pm

Tgt Ion: 96 Resp: 11278

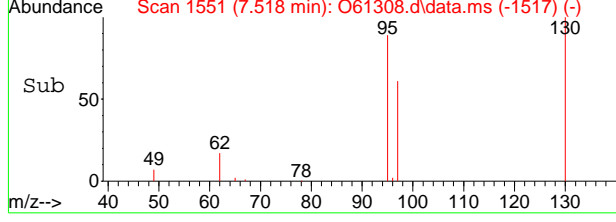
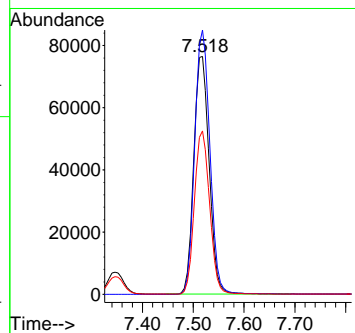
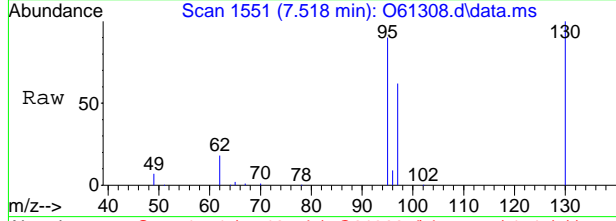
Ion	Ratio	Lower	Upper
96	100		
61	174.5	107.0	167.0#
98	65.2	34.1	94.1



#15
 Trichloroethene
 Concen: 8.72 ug/L
 RT: 7.518 min Scan# 1551
 Delta R.T. -0.000 min
 Lab File: O61308.d
 Acq: 12 Sep 2020 11:06 pm

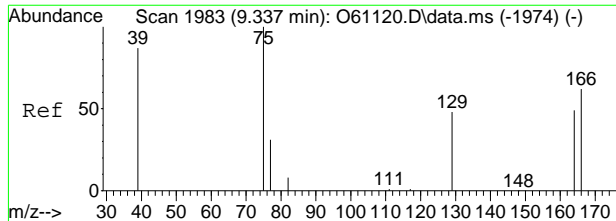
Tgt Ion: 95 Resp: 160819

Ion	Ratio	Lower	Upper
95	100		
130	111.2	60.4	120.4
97	68.6	34.6	94.6



7.1.43
7

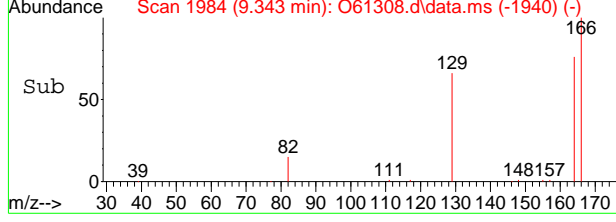
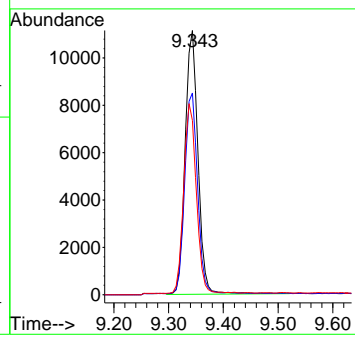
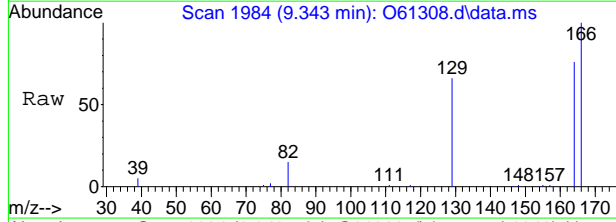




#21
 Tetrachloroethene
 Concen: 1.05 ug/L
 RT: 9.343 min Scan# 1984
 Delta R.T. 0.000 min
 Lab File: O61308.d
 Acq: 12 Sep 2020 11:06 pm

Tgt Ion:166 Resp: 18163

Ion	Ratio	Lower	Upper
166	100		
164	76.2	47.3	107.3
129	65.6	37.5	97.5



7.1.43
7



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\091520\
 Data File : Z62383.D
 Acq On : 15 Sep 2020 11:04 pm
 Operator : JuanG
 Sample : FA78551-22
 Misc : MS47193,VZ2419,,,,,
 ALS Vial : 28 Sample Multiplier: 1

Quant Time: Sep 16 10:47:37 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Sun Sep 13 13:38:26 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	

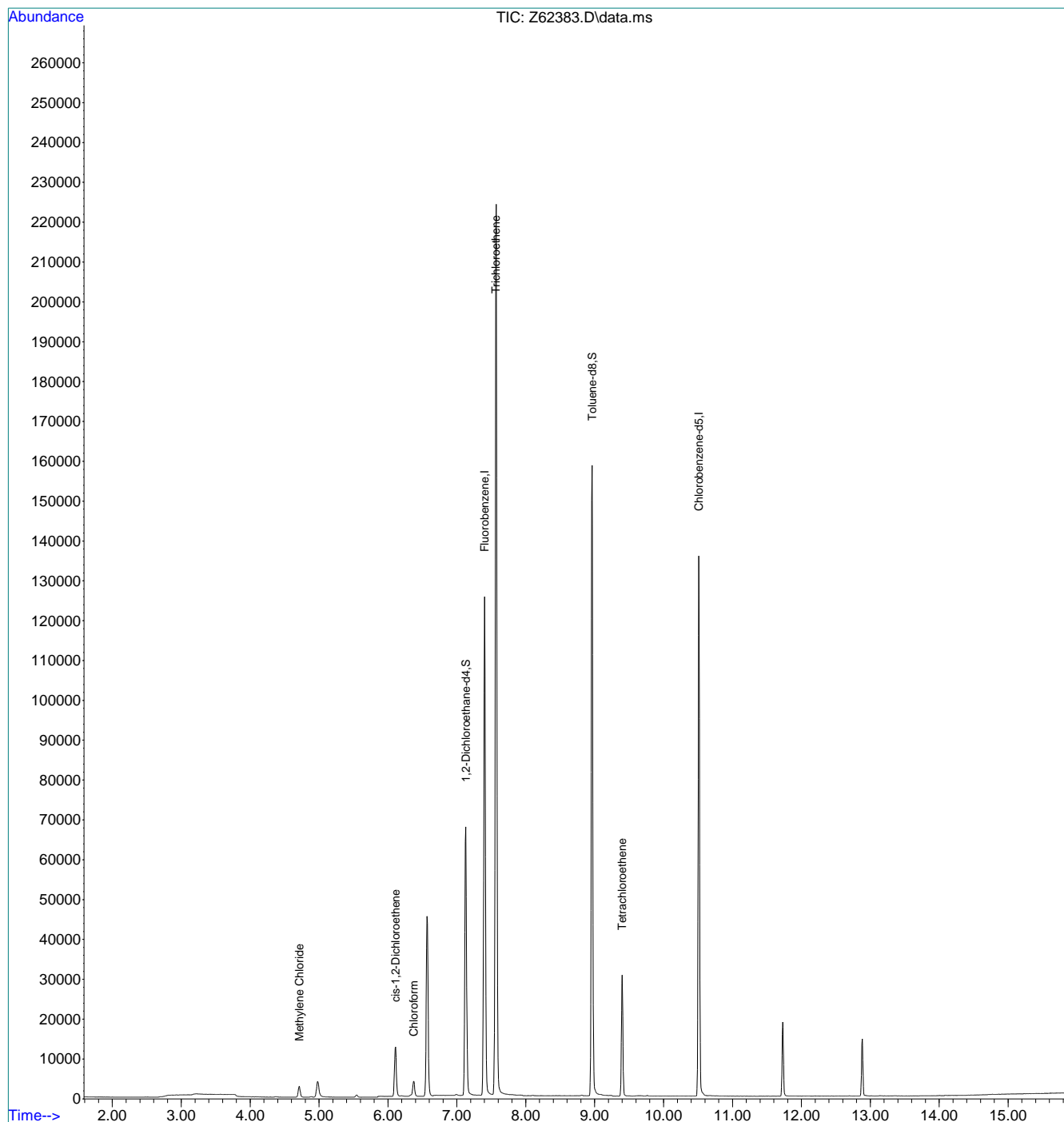
Internal Standards							
1) Fluorobenzene	7.401	96	1443164	5.00	ppb	0.00	
18) Chlorobenzene-d5	10.511	117	1210945	5.00	ppb	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.130	65	570510	6.39	ppb	0.00	
Spiked Amount	5.000	Range	79 - 125	Recovery	=	127.80%#	
19) Toluene-d8	8.961	98	1390398	4.73	ppb	0.00	
Spiked Amount	5.000	Range	70 - 130	Recovery	=	94.60%	
Target Compounds							
5) Methylene Chloride	4.713	84	19208	0.13	ppb	88	Qvalue
8) cis-1,2-Dichloroethene	6.110	96	77723	0.66	ppb	92	
9) Chloroform	6.371	83	37972	0.18	ppb	96	
15) Trichloroethene	7.564	95	1234157	10.01	ppb	96	
21) Tetrachloroethene	9.399	166	131124	0.91	ppb	99	

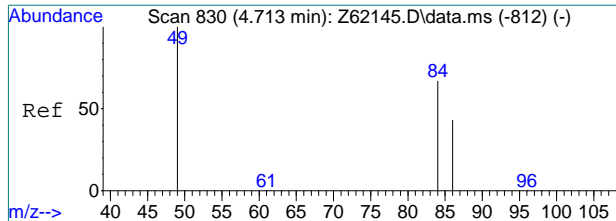
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\091520\
Data File : Z62383.D
Acq On : 15 Sep 2020 11:04 pm
Operator : JuanG
Sample : FA78551-22
Misc : MS47193,VZ2419,,,,,
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Sep 16 10:47:37 2020
Quant Method : C:\msdchem\1\methods\SIMCL091120.M
Quant Title : WATER-EPA 8260B
QLast Update : Sun Sep 13 13:38:26 2020
Response via : Initial Calibration

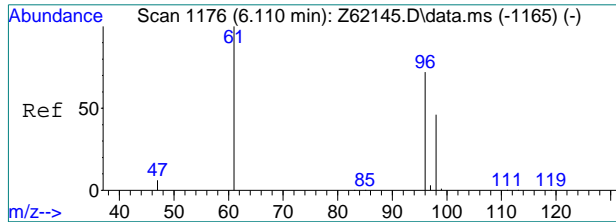
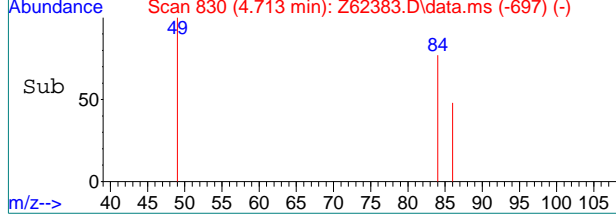
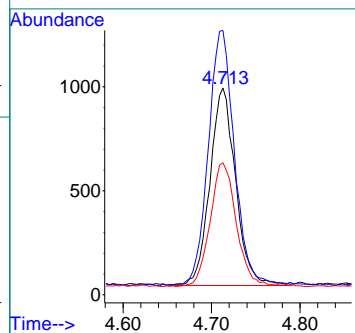
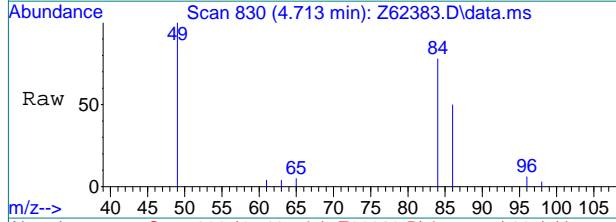




#5
 Methylene Chloride
 Concen: 0.13 ppb
 RT: 4.713 min Scan# 830
 Delta R.T. -0.000 min
 Lab File: Z62383.D
 Acq: 15 Sep 2020 11:04 pm

Tgt Ion: 84 Resp: 19208

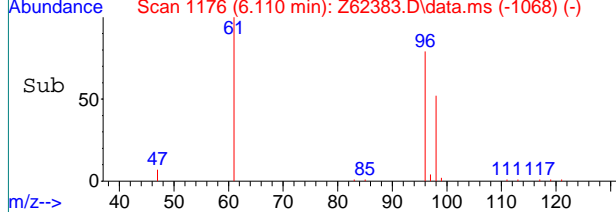
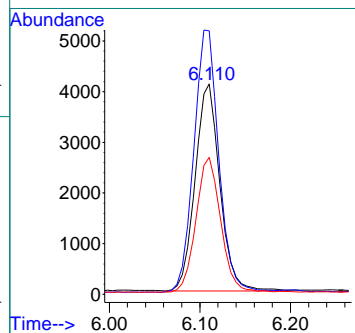
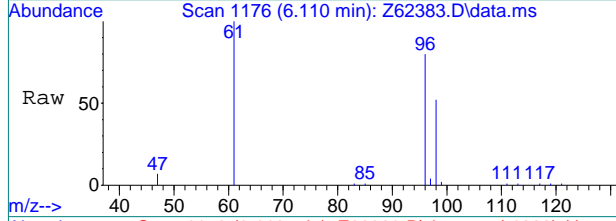
Ion	Ratio	Lower	Upper
84	100		
49	128.9	128.7	168.7
86	62.3	43.9	83.9



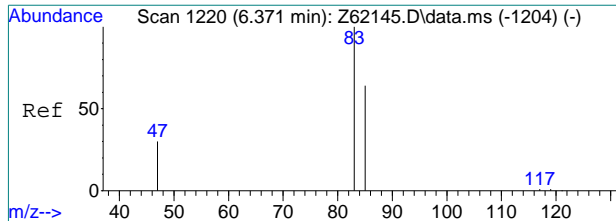
#8
 cis-1,2-Dichloroethene
 Concen: 0.66 ppb
 RT: 6.110 min Scan# 1176
 Delta R.T. 0.000 min
 Lab File: Z62383.D
 Acq: 15 Sep 2020 11:04 pm

Tgt Ion: 96 Resp: 77723

Ion	Ratio	Lower	Upper
96	100		
61	126.0	119.3	159.3
98	65.2	44.5	84.5



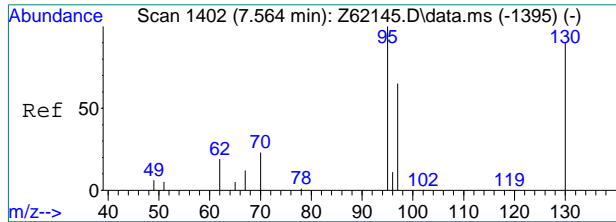
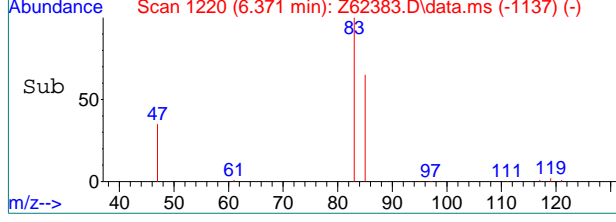
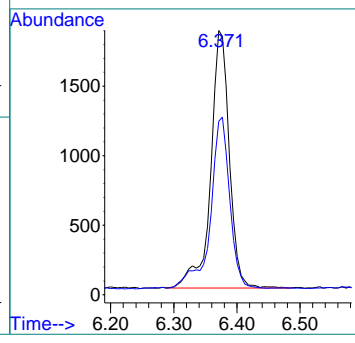
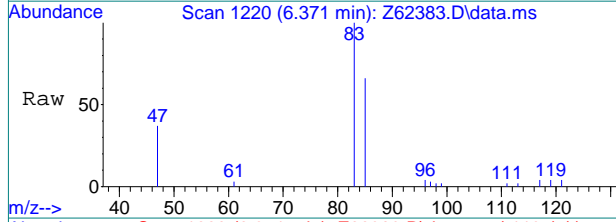
7.1.44
7



#9
 Chloroform
 Concen: 0.18 ppb
 RT: 6.371 min Scan# 1220
 Delta R.T. -0.006 min
 Lab File: Z62383.D
 Acq: 15 Sep 2020 11:04 pm

Tgt Ion: 83 Resp: 37972

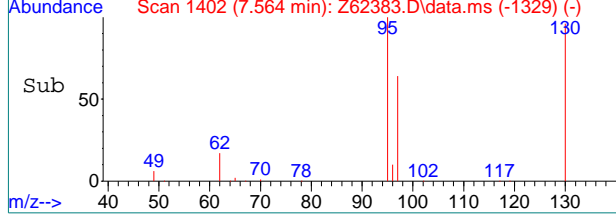
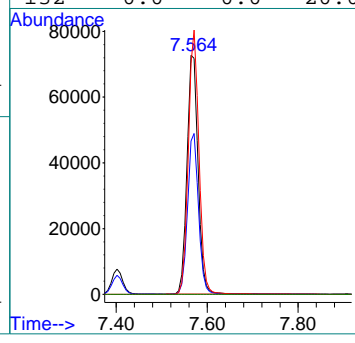
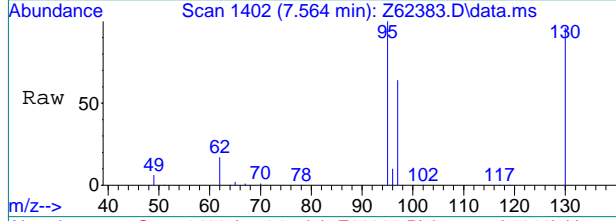
Ion	Ratio	Lower	Upper
83	100		
85	69.0	46.1	86.1



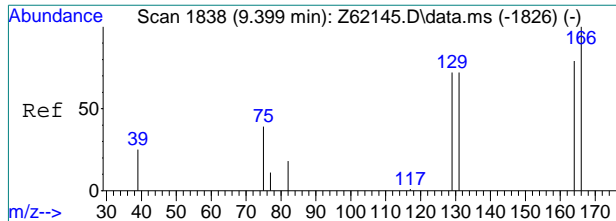
#15
 Trichloroethene
 Concen: 10.01 ppb
 RT: 7.564 min Scan# 1402
 Delta R.T. -0.007 min
 Lab File: Z62383.D
 Acq: 15 Sep 2020 11:04 pm

Tgt Ion: 95 Resp: 1234157

Ion	Ratio	Lower	Upper
95	100		
97	64.1	44.5	84.5
130	96.5	69.7	109.7
132	0.0	0.0	20.0

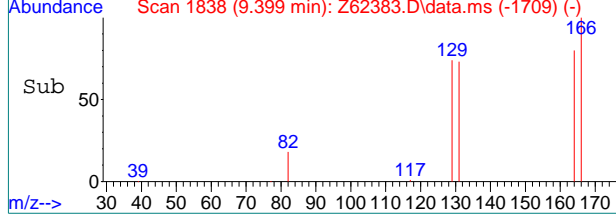
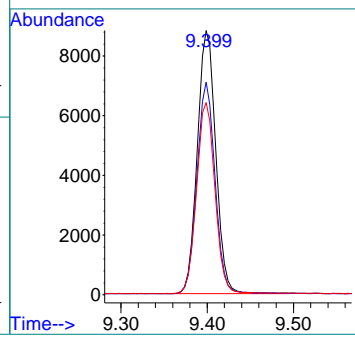
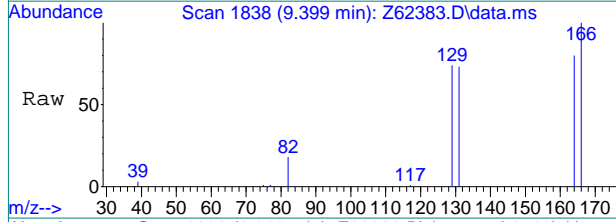


7.144
7



#21
 Tetrachloroethene
 Concen: 0.91 ppb
 RT: 9.399 min Scan# 1838
 Delta R.T. -0.000 min
 Lab File: Z62383.D
 Acq: 15 Sep 2020 11:04 pm

Tgt Ion	Ratio	Lower	Upper
166	100		
164	80.3	58.7	98.7
131	72.5	51.6	91.6



7.1.44
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-14-2020\VO2359\
Data File : O61309.d
Acq On : 12 Sep 2020 11:26 pm
Operator : stutip
Sample : fa78551-23
Misc : MS47193,VO2359,,,,,
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Sep 14 08:02:34 2020
Quant Method : C:\msdchem\1\methods\SIMCL091120.M
Quant Title : Standard Methods 6200B
QLast Update : Sun Sep 13 19:20:40 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Fluorobenzene	7.346	96	194241	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.447	117	160896	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.074	65	87296	5.56	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	111.20%	
19) Toluene-d8	8.896	98	167293	4.61	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	92.20%	
Target Compounds						
8) cis-1,2-Dichloroethene	6.066	96	18106	1.02	ug/L	# 82
15) Trichloroethene	7.512	95	222737	12.19	ug/L	89
21) Tetrachloroethene	9.343	166	20033	1.14	ug/L	97

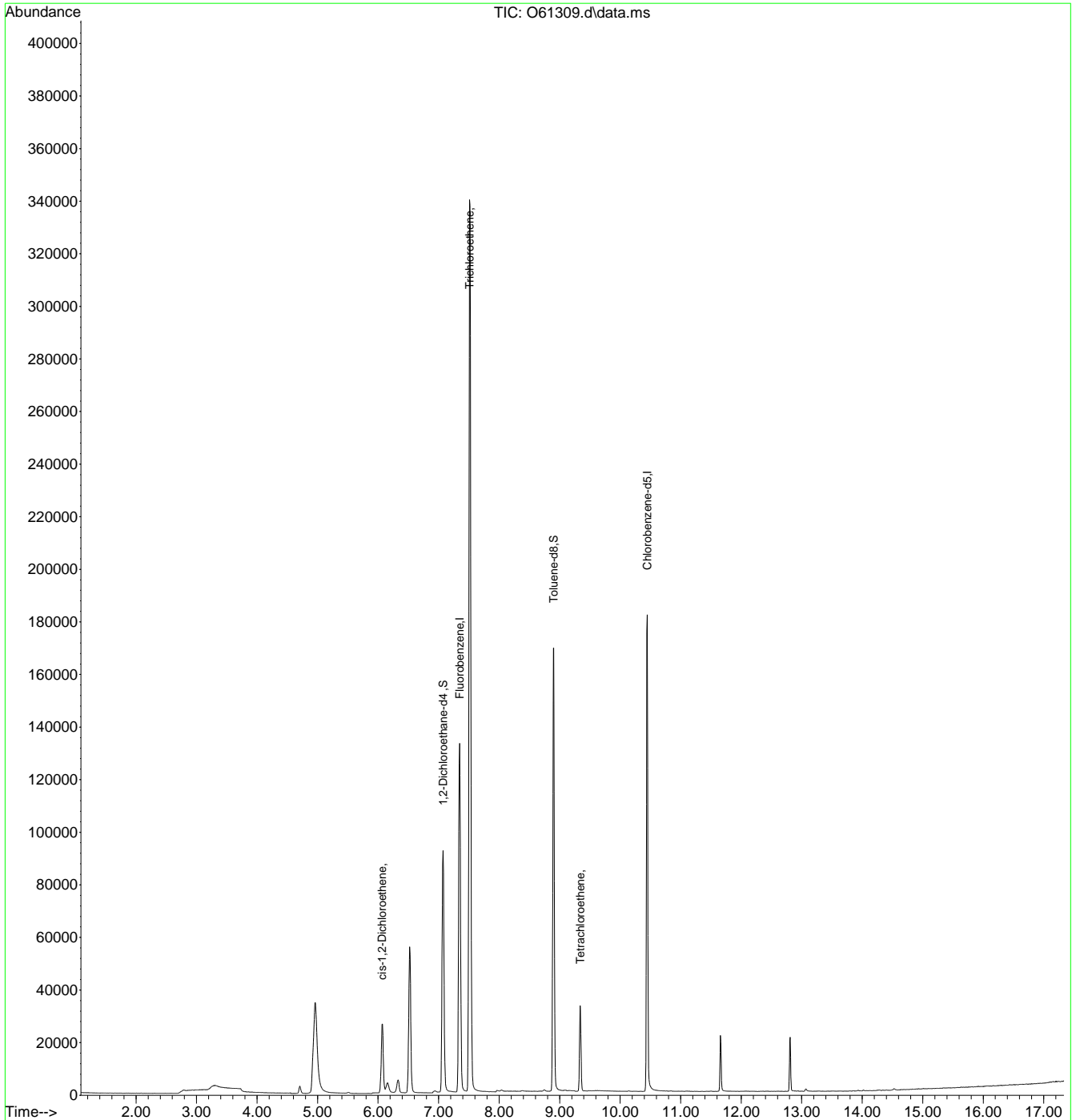
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.1.45
7

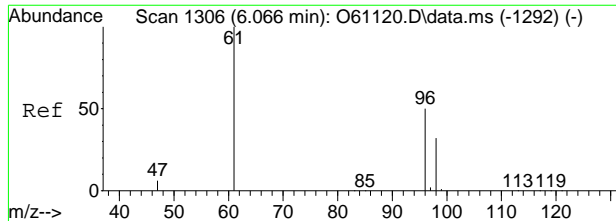
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-14-2020\VO2359\
 Data File : O61309.d
 Acq On : 12 Sep 2020 11:26 pm
 Operator : stutip
 Sample : fa78551-23
 Misc : MS47193,VO2359,,,,,
 ALS Vial : 15 Sample Multiplier: 1

Quant Time: Sep 14 08:02:34 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Sun Sep 13 19:20:40 2020
 Response via : Initial Calibration

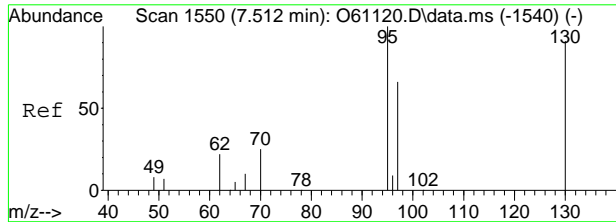
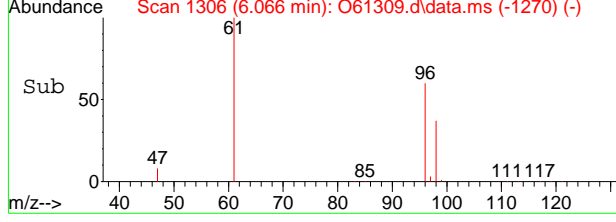
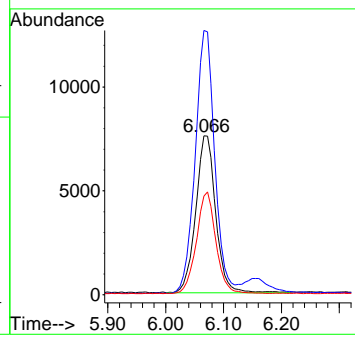
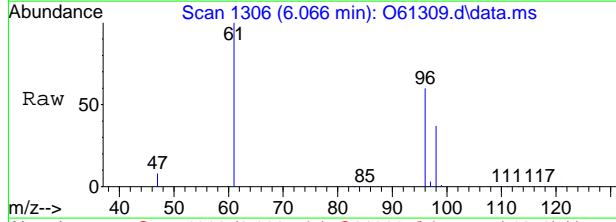


7.1.45
7



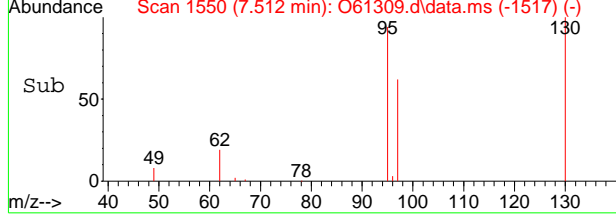
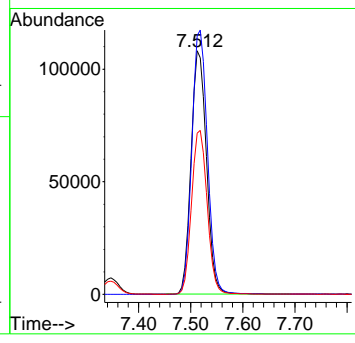
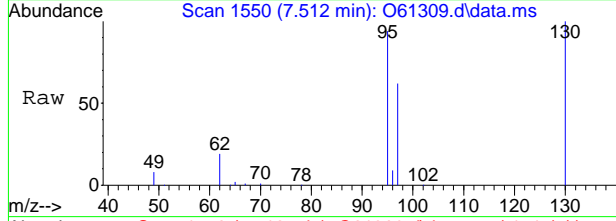
#8
 cis-1,2-Dichloroethene
 Concen: 1.02 ug/L
 RT: 6.066 min Scan# 1306
 Delta R.T. -0.006 min
 Lab File: O61309.d
 Acq: 12 Sep 2020 11:26 pm

Tgt Ion	Resp	Lower	Upper
96	18106		
61	167.5	107.0	167.0#
98	61.9	34.1	94.1



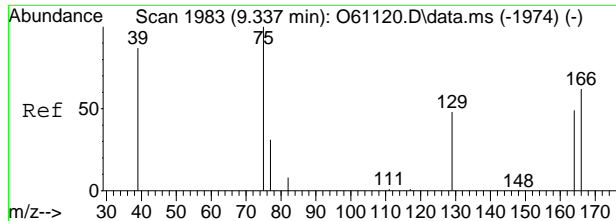
#15
 Trichloroethene
 Concen: 12.19 ug/L
 RT: 7.512 min Scan# 1550
 Delta R.T. -0.006 min
 Lab File: O61309.d
 Acq: 12 Sep 2020 11:26 pm

Tgt Ion	Resp	Lower	Upper
95	222737		
130	106.3	60.4	120.4
97	66.2	34.6	94.6



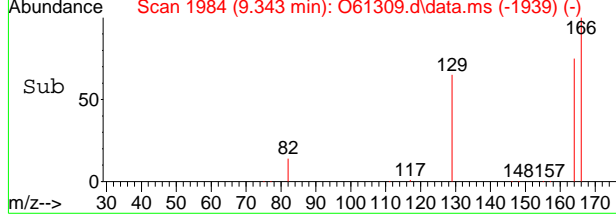
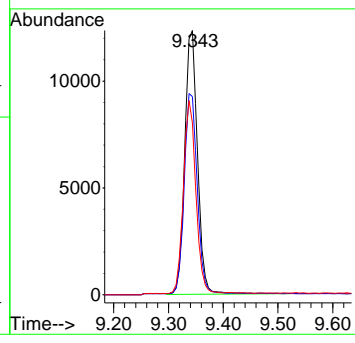
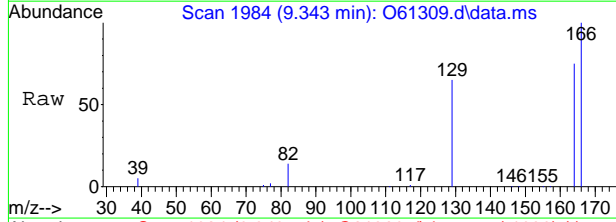
7.1.45
7





#21
 Tetrachloroethene
 Concen: 1.14 ug/L
 RT: 9.343 min Scan# 1984
 Delta R.T. 0.000 min
 Lab File: O61309.d
 Acq: 12 Sep 2020 11:26 pm

Tgt Ion	Ratio	Lower	Upper
166	100		
164	74.8	47.3	107.3
129	64.8	37.5	97.5



7.1.45
7



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-17-2020\vo2363\
 Data File : O61407.d
 Acq On : 16 Sep 2020 1:50 pm
 Operator : akarig
 Sample : FA78551-23
 Misc : MS47193,VO2363,,,,,
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 17 04:49:18 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091520.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 16 09:02:25 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)

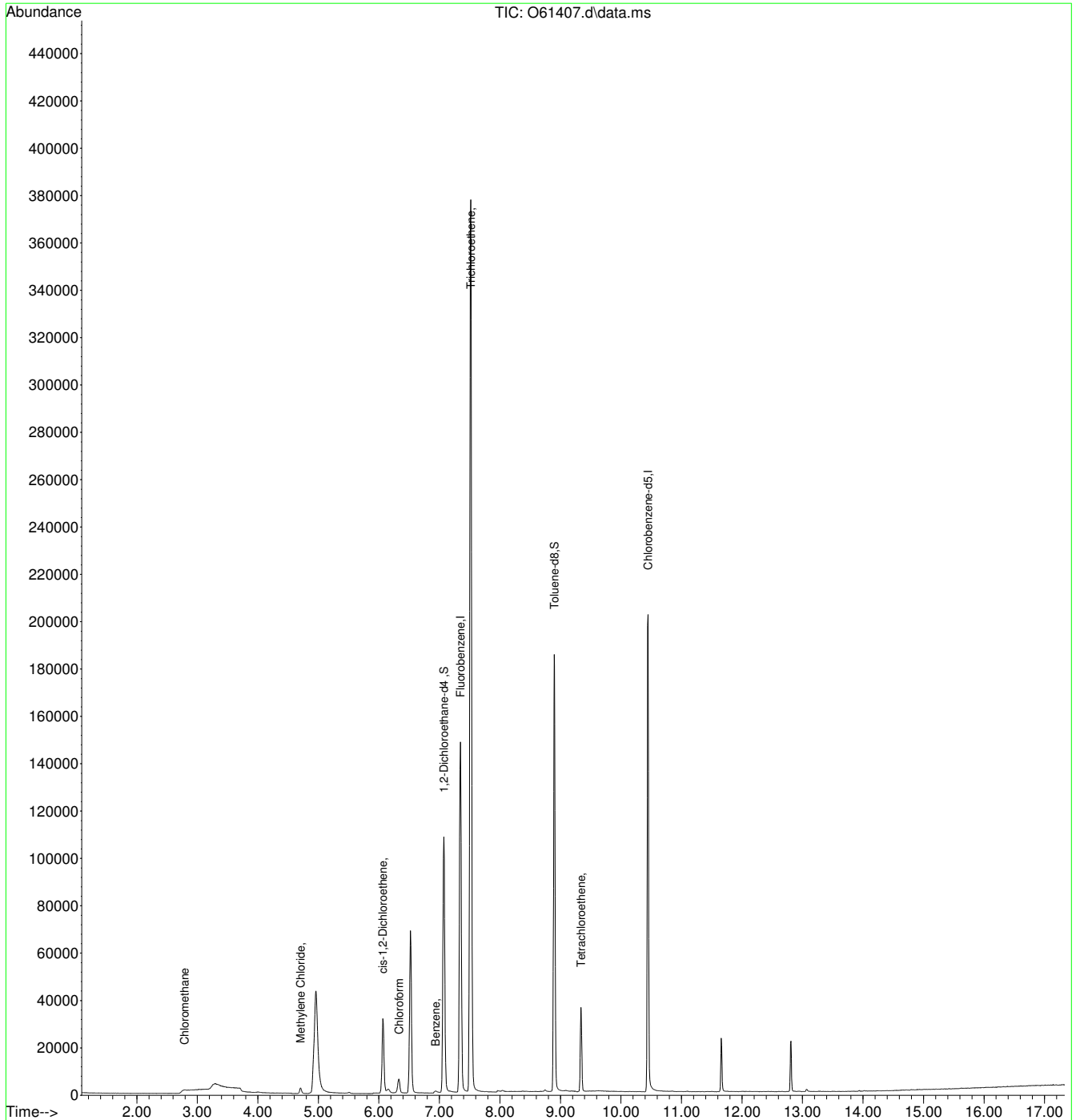
Internal Standards						
1) Fluorobenzene	7.346	96	216471	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.447	117	178619	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.074	65	100181	5.49	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	109.80%	
19) Toluene-d8	8.896	98	182321	5.00	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	100.00%	
Target Compounds						
						Qvalue
3) Chloromethane	2.788	50	6555	0.15	ug/L	# 63
5) Methylene Chloride	4.703	49	3131	0.05	ug/L	97
8) cis-1,2-Dichloroethene	6.066	96	20022	1.05	ug/L	99
9) Chloroform	6.333	83	6225	0.17	ug/L	90
12) Benzene	6.937	78	1590m	0.02	ug/L	
15) Trichloroethene	7.518	95	246152	12.35	ug/L	95
21) Tetrachloroethene	9.343	166	21898	1.07	ug/L	95

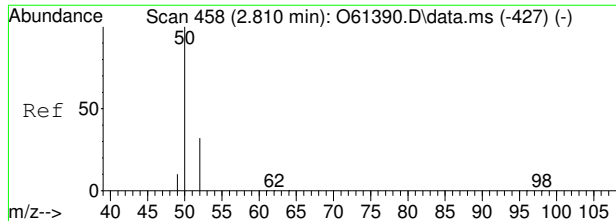
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-17-2020\vo2363\
Data File : O61407.d
Acq On : 16 Sep 2020 1:50 pm
Operator : akarig
Sample : FA78551-23
Misc : MS47193,VO2363,,,,,
ALS Vial : 8 Sample Multiplier: 1

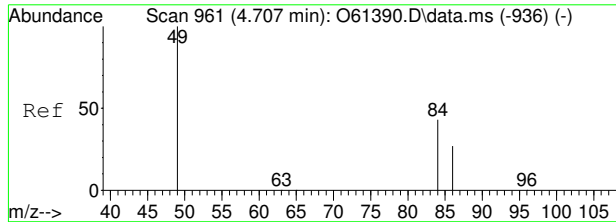
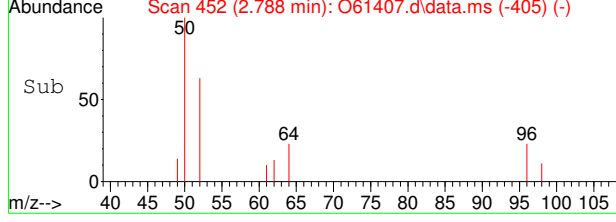
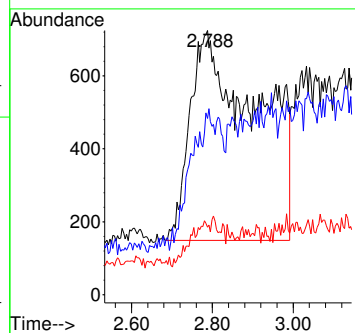
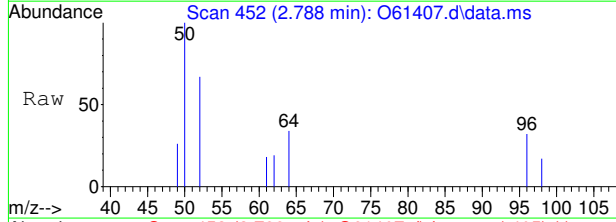
Quant Time: Sep 17 04:49:18 2020
Quant Method : C:\msdchem\1\methods\SIMCL091520.M
Quant Title : Standard Methods 6200B
QLast Update : Wed Sep 16 09:02:25 2020
Response via : Initial Calibration





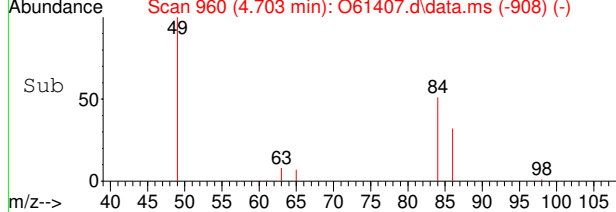
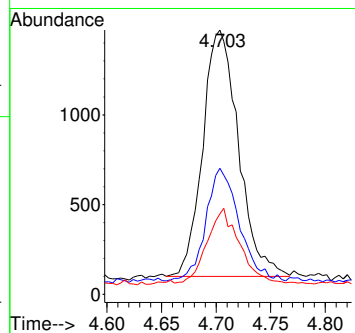
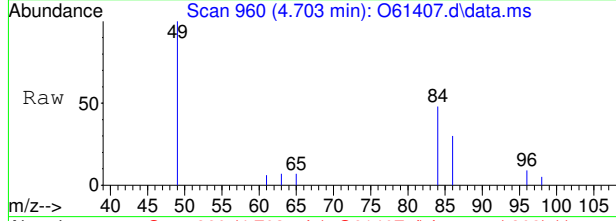
#3
 Chloromethane
 Concen: 0.15 ug/L
 RT: 2.788 min Scan# 452
 Delta R.T. -0.022 min
 Lab File: O61407.d
 Acq: 16 Sep 2020 1:50 pm

Tgt Ion	Resp	Lower	Upper
50	6555		
52	56.9	12.1	52.1#
49	15.8	0.0	30.3

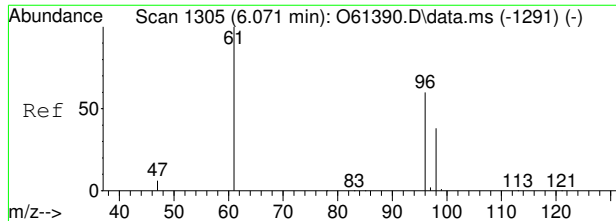


#5
 Methylene Chloride
 Concen: 0.05 ug/L
 RT: 4.703 min Scan# 960
 Delta R.T. -0.004 min
 Lab File: O61407.d
 Acq: 16 Sep 2020 1:50 pm

Tgt Ion	Resp	Lower	Upper
49	3131		
84	45.8	13.2	73.2
86	27.8	0.0	57.3

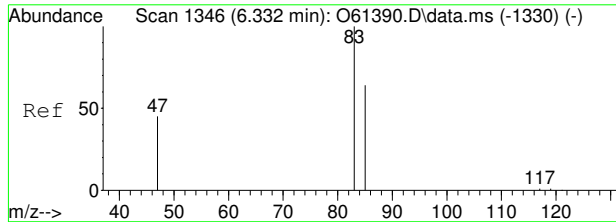
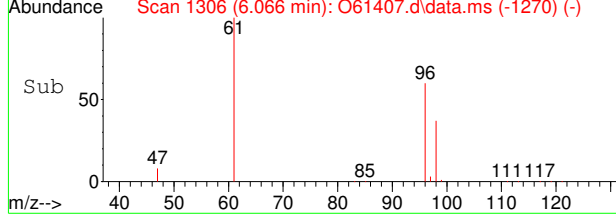
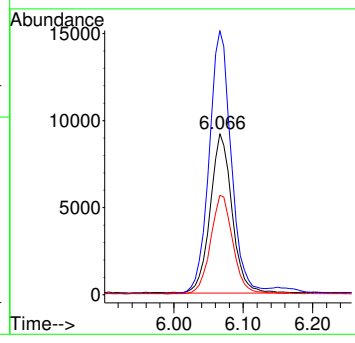
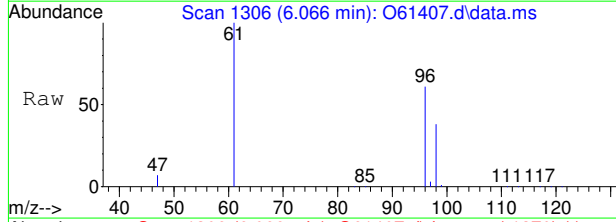


7.1.46
7



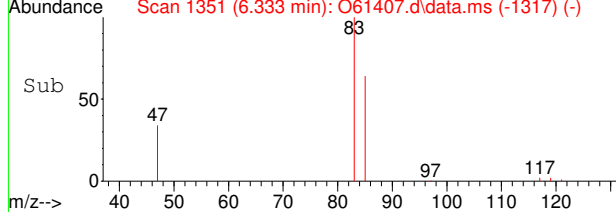
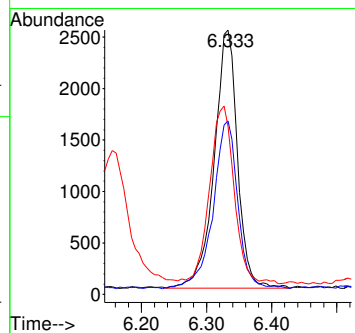
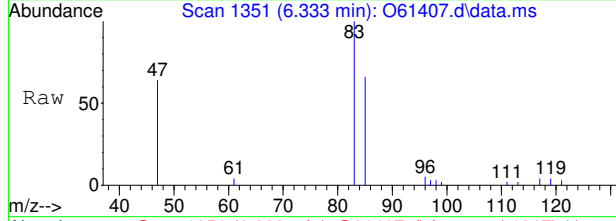
#8
 cis-1,2-Dichloroethene
 Concen: 1.05 ug/L
 RT: 6.066 min Scan# 1306
 Delta R.T. -0.005 min
 Lab File: O61407.d
 Acq: 16 Sep 2020 1:50 pm

Tgt Ion	Resp	Lower	Upper
96	20022		
61	165.3	135.7	195.7
98	62.0	33.1	93.1

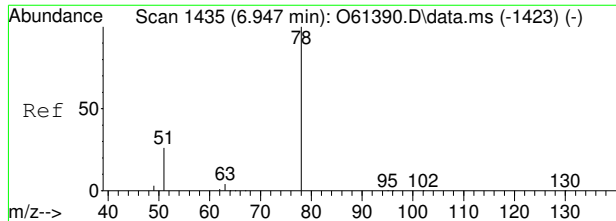


#9
 Chloroform
 Concen: 0.17 ug/L
 RT: 6.333 min Scan# 1351
 Delta R.T. 0.001 min
 Lab File: O61407.d
 Acq: 16 Sep 2020 1:50 pm

Tgt Ion	Resp	Lower	Upper
83	6225		
85	64.9	33.9	93.9
47	60.3	14.9	74.9



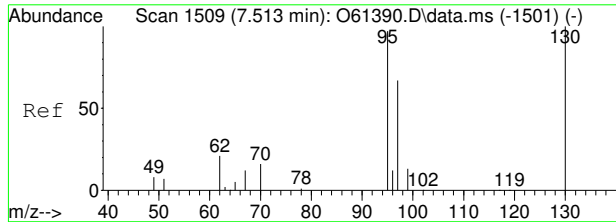
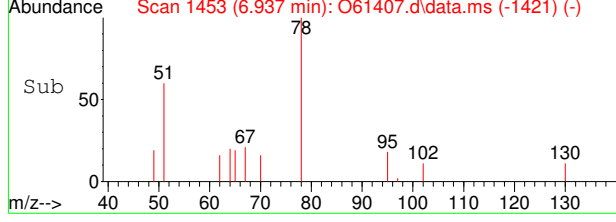
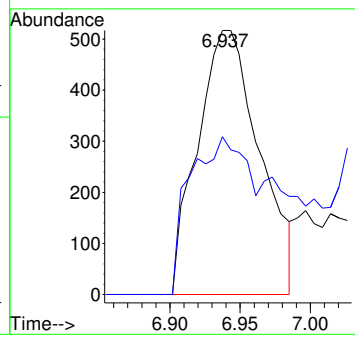
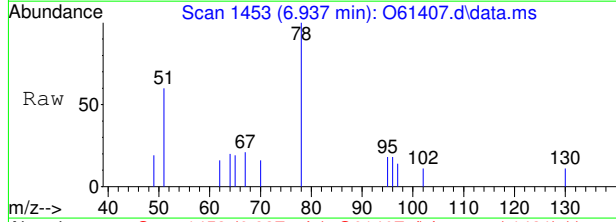
7.1.46
7



#12
Benzene
Concen: 0.02 ug/L m
RT: 6.937 min Scan# 1453
Delta R.T. -0.010 min
Lab File: O61407.d
Acq: 16 Sep 2020 1:50 pm

Tgt Ion: 78 Resp: 1590

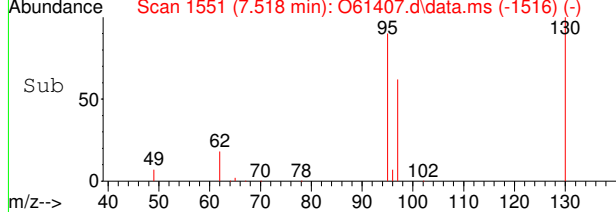
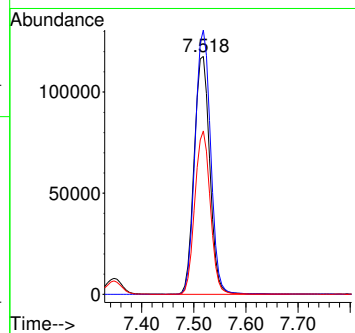
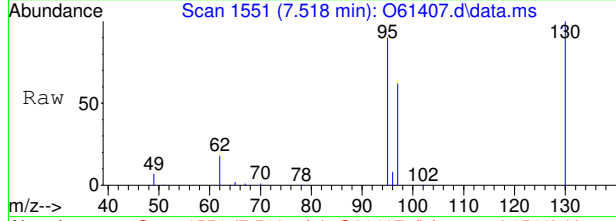
Ion	Ratio	Lower	Upper
78	100		
51	59.8	0.0	56.0#



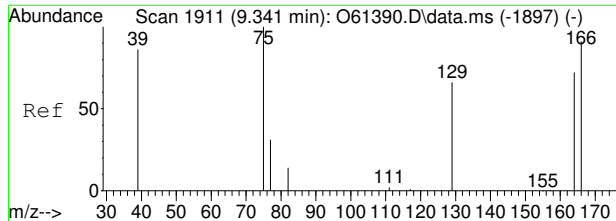
#15
Trichloroethene
Concen: 12.35 ug/L
RT: 7.518 min Scan# 1551
Delta R.T. 0.005 min
Lab File: O61407.d
Acq: 16 Sep 2020 1:50 pm

Tgt Ion: 95 Resp: 246152

Ion	Ratio	Lower	Upper
95	100		
130	111.2	72.6	132.6
97	68.6	38.6	98.6

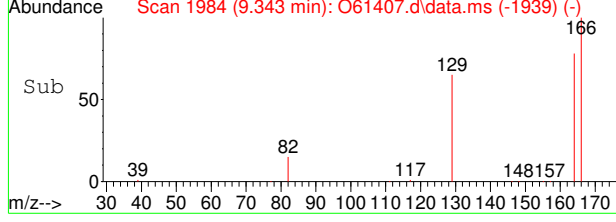
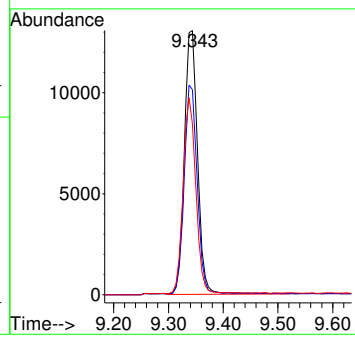
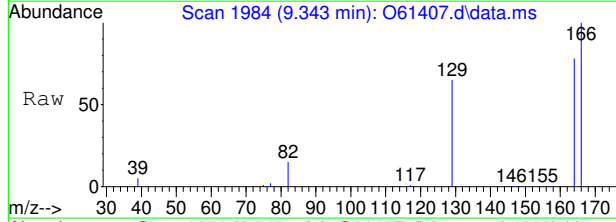


7.146
7



#21
 Tetrachloroethene
 Concen: 1.07 ug/L
 RT: 9.343 min Scan# 1984
 Delta R.T. 0.002 min
 Lab File: O61407.d
 Acq: 16 Sep 2020 1:50 pm

Tgt Ion	Resp
166	21898
166	100
164	77.4
129	64.5



7.1.46
7

Manual Integration Approval Summary

Sample Number: FA78551-23 **Method:** SW846 8260B BY SIM
Lab FileID: O61407.D **Analyst approved:** 09/17/20 15:24 Juan Garcia
Injection Time: 09/16/20 13:50 **Supervisor approved:** 09/18/20 14:35 Melissa Mangual

Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzene	71-43-2		6.94	Poor instrument integration

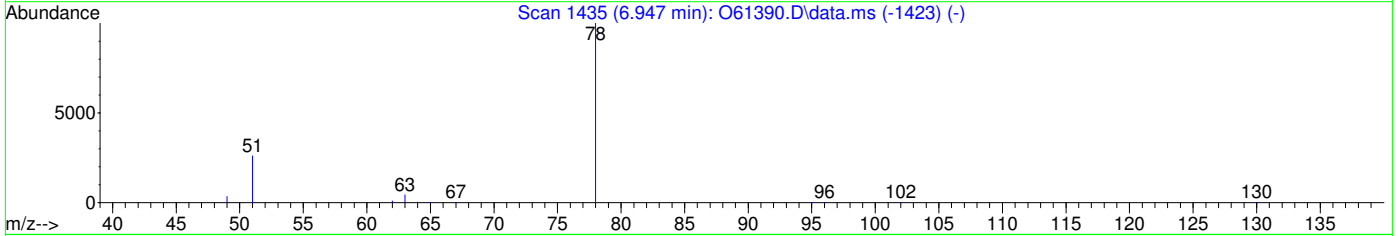
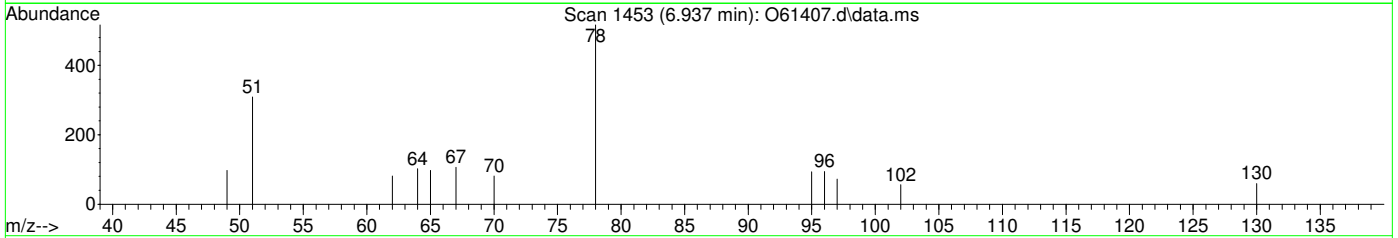
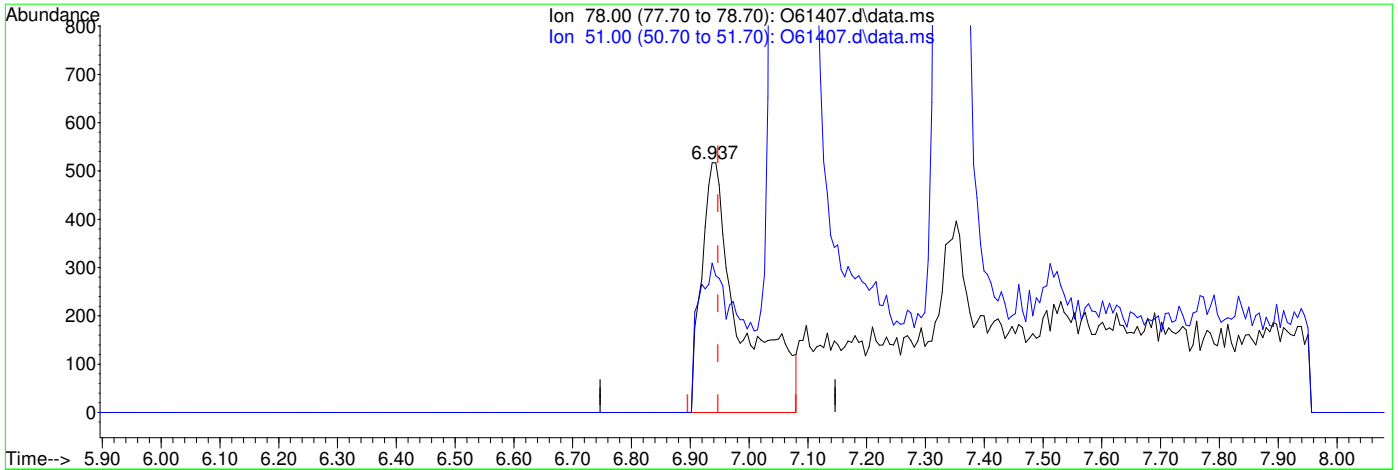
7.1.46.1

7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-17-2020\vo2363\
 Data File : O61407.d
 Acq On : 16 Sep 2020 1:50 pm
 Operator : akarig
 Sample : FA78551-23
 Misc : MS47193,VO2363,,,,,
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 17 04:42:30 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091520.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 16 09:02:25 2020
 Response via : Initial Calibration



TIC: O61407.d\data.ms

(12) Benzene ()

6.937min (-0.010) 0.04ug/L

response 2411

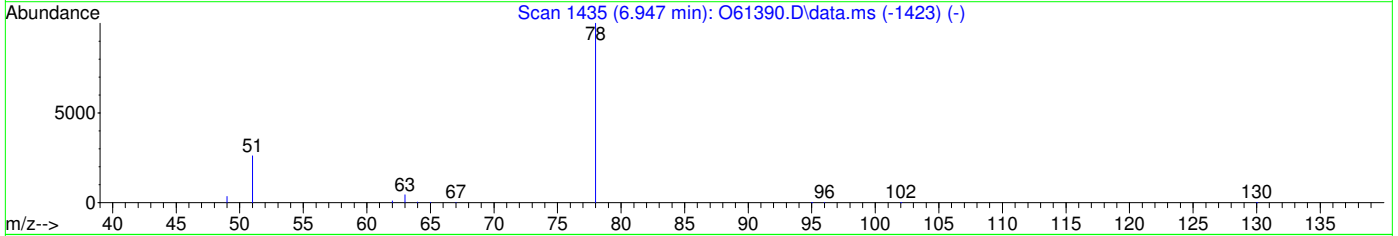
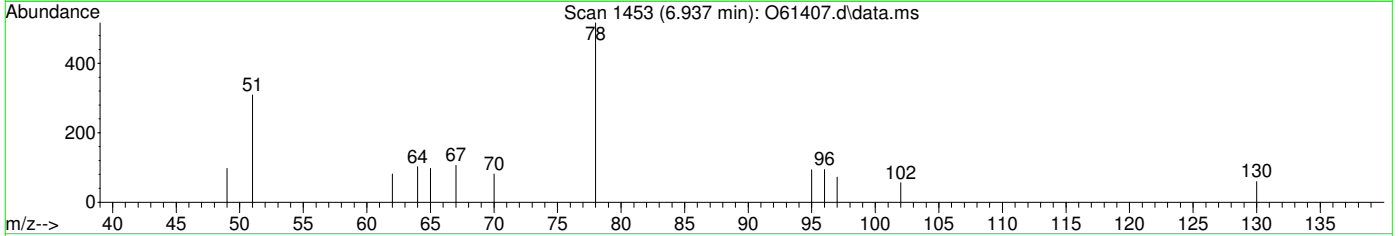
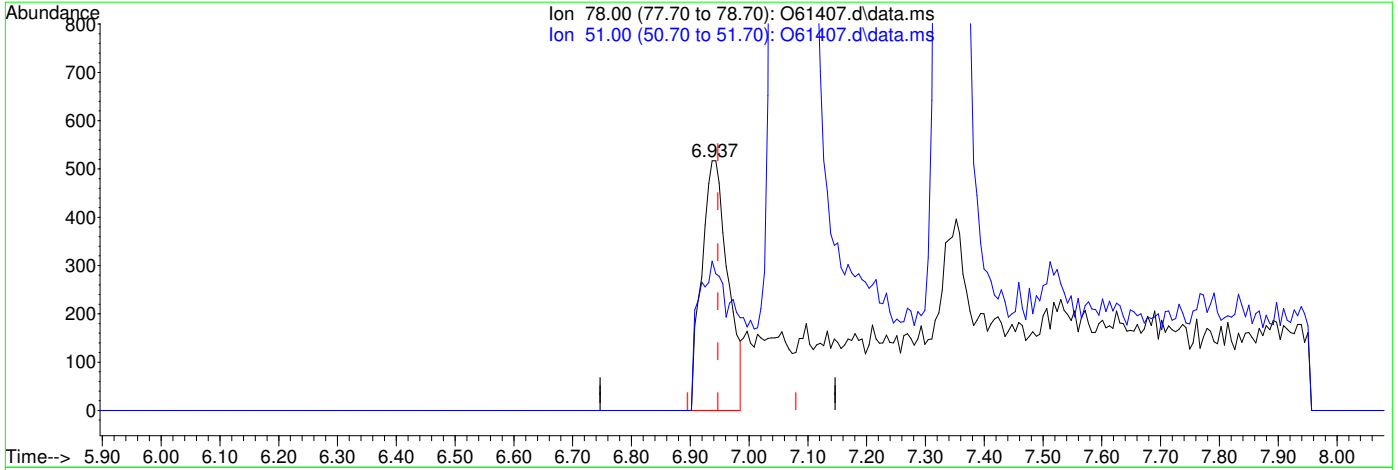
Ion	Exp%	Act%
78.00	100	100
51.00	26.00	59.77#
0.00	0.00	0.00
0.00	0.00	0.00

7.1.46.2
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-17-2020\vo2363\
 Data File : O61407.d
 Acq On : 16 Sep 2020 1:50 pm
 Operator : akarig
 Sample : FA78551-23
 Misc : MS47193,VO2363,,,,,
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 17 04:42:30 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091520.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 16 09:02:25 2020
 Response via : Initial Calibration



TIC: O61407.d\data.ms

(12) Benzene ()

6.937min (-0.010) 0.02ug/L m

response 1590

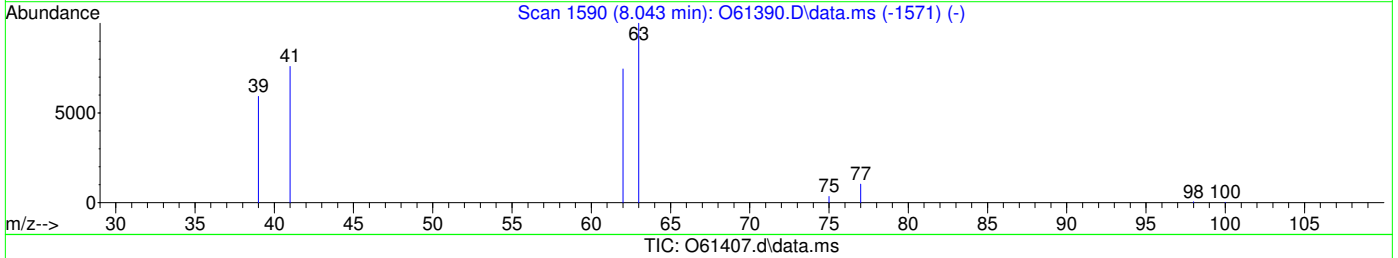
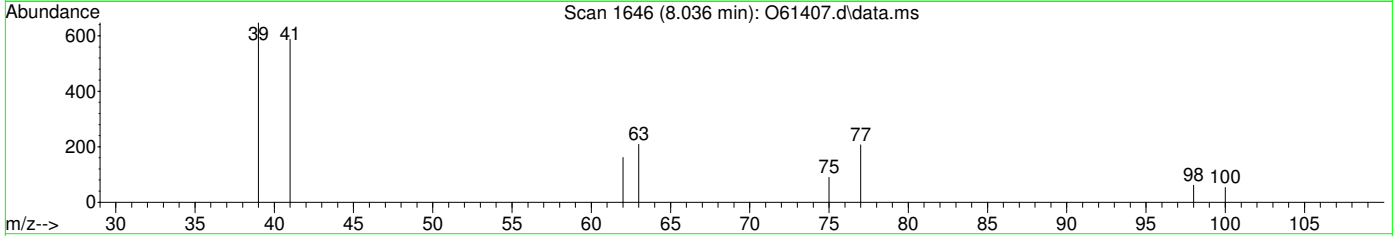
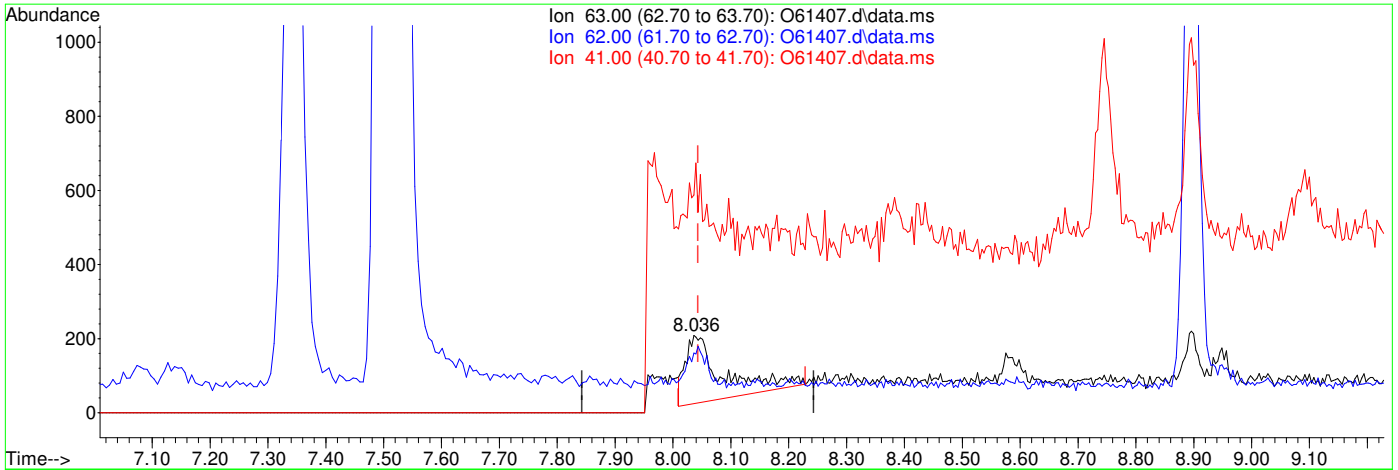
Ion	Exp%	Act%
78.00	100	100
51.00	26.00	59.77#
0.00	0.00	0.00
0.00	0.00	0.00

7.1.46.3
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-17-2020\vo2363\
 Data File : O61407.d
 Acq On : 16 Sep 2020 1:50 pm
 Operator : akarig
 Sample : FA78551-23
 Misc : MS47193,VO2363,,,,,
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 17 04:42:30 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091520.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 16 09:02:25 2020
 Response via : Initial Calibration



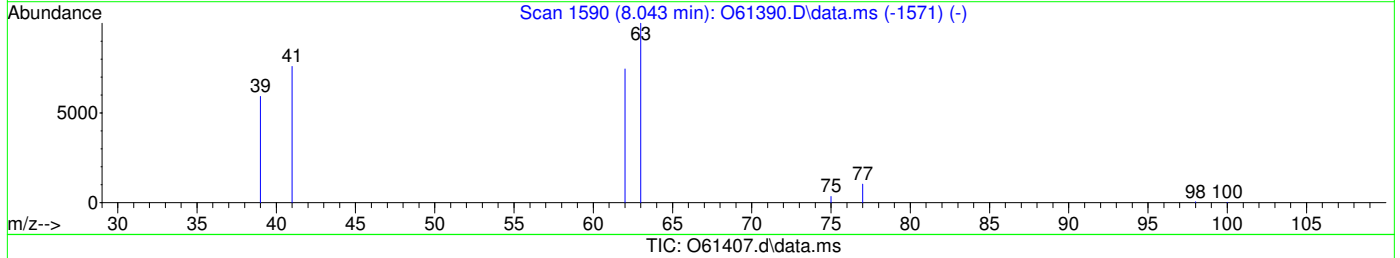
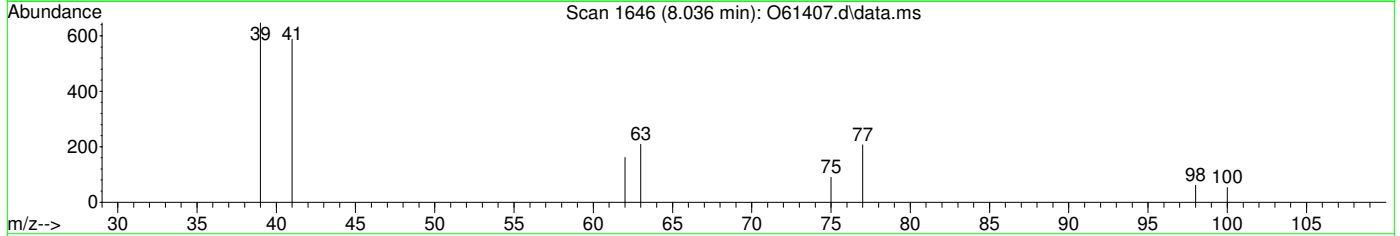
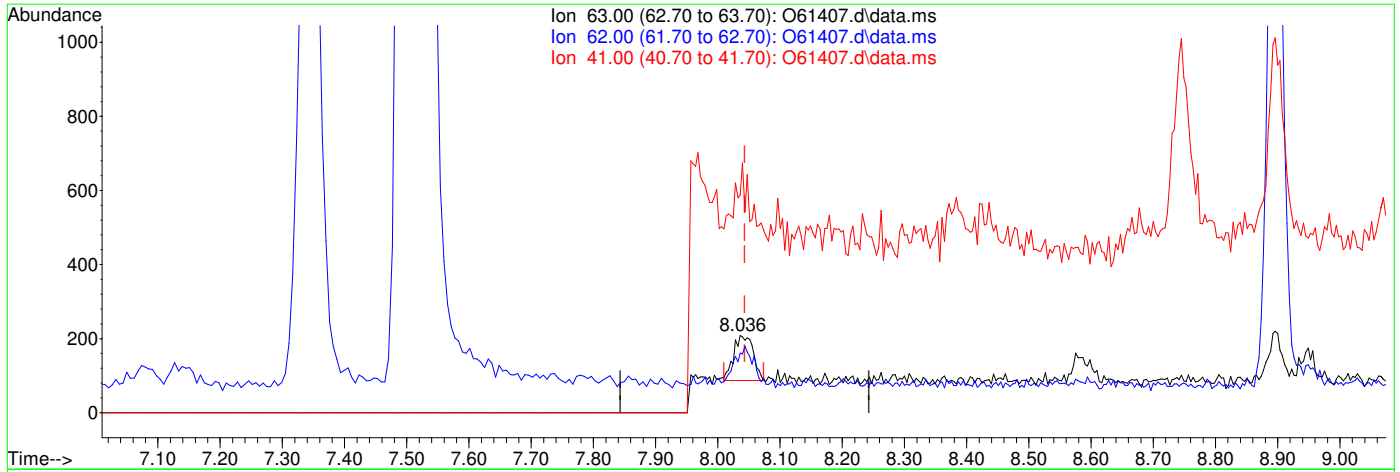
(16) 1,2-Dichloropropane
 8.036min (-0.007) 0.04ug/L
 response 818

Ion	Exp%	Act%
63.00	100	100
62.00	74.50	65.91
41.00	75.90	112.12#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-17-2020\vo2363\
 Data File : O61407.d
 Acq On : 16 Sep 2020 1:50 pm
 Operator : akarig
 Sample : FA78551-23
 Misc : MS47193,VO2363,,,,,
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 17 04:42:30 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091520.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 16 09:02:25 2020
 Response via : Initial Calibration



(16) 1,2-Dichloropropane
 8.036min (-0.007) 0.01ug/L m
 response 263

Ion	Exp%	Act%
63.00	100	100
62.00	74.50	77.03
41.00	75.90	281.34#
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-14-2020\VO2359\
 Data File : O61310.d
 Acq On : 12 Sep 2020 11:46 pm
 Operator : stutip
 Sample : fa78551-24
 Misc : MS47193,VO2359,,,,,
 ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 14 07:20:16 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Sun Sep 13 19:20:40 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Fluorobenzene	7.346	96	192803	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.447	117	152706	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.073	65	86545	5.56	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	111.20%	
19) Toluene-d8	8.900	98	166000	4.82	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	96.40%	
Target Compounds						
3) Chloromethane	2.780	50	11204	0.33	ug/L	Qvalue 83

(#) = qualifier out of range (m) = manual integration (+) = signals summed

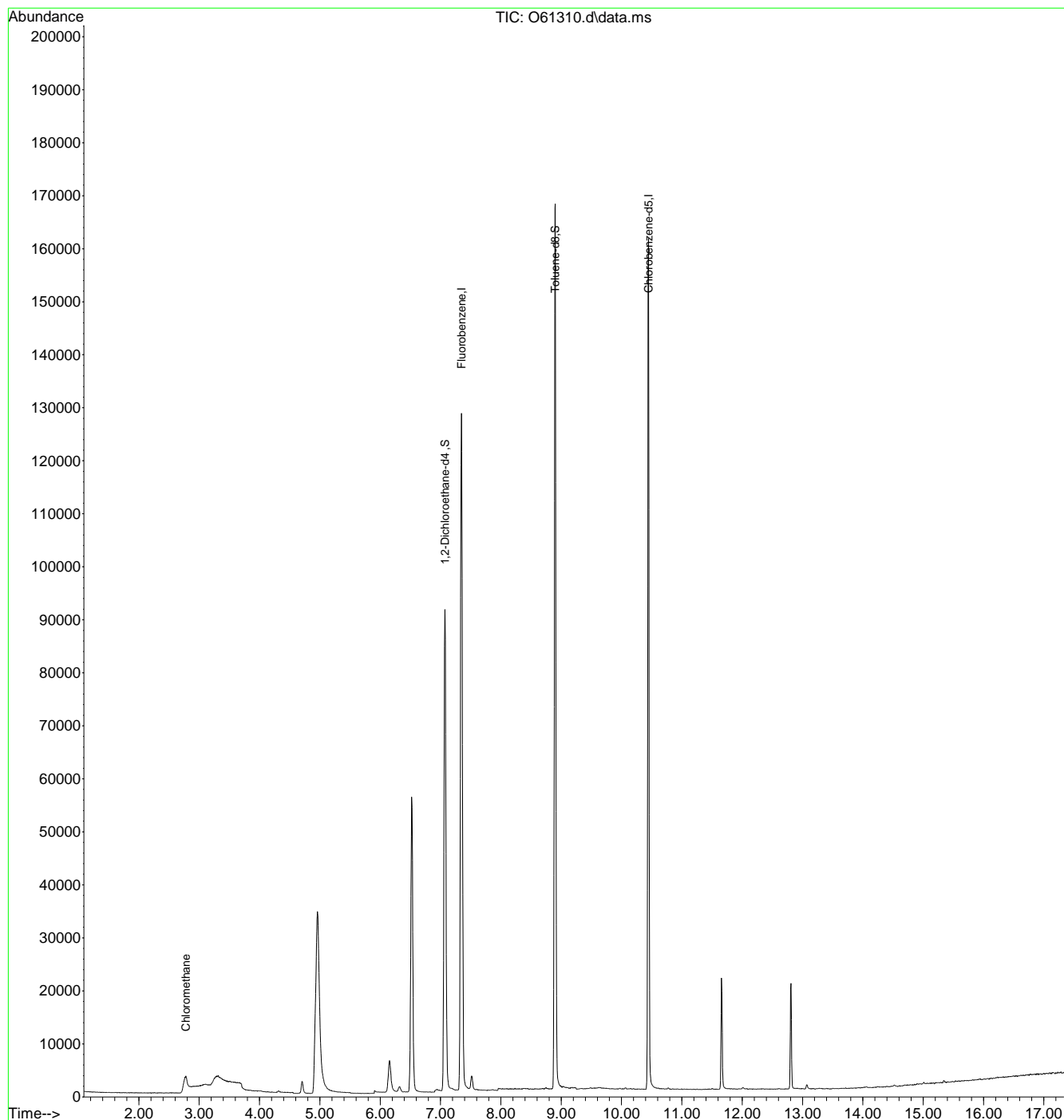
7.1.47
7



Quantitation Report (QT Reviewed)

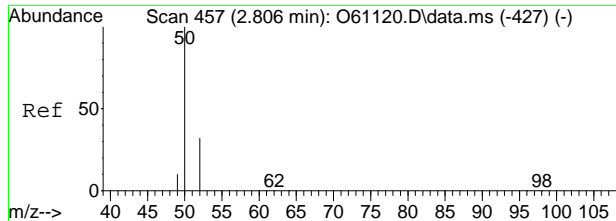
Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-14-2020\VO2359\
Data File : O61310.d
Acq On : 12 Sep 2020 11:46 pm
Operator : stutip
Sample : fa78551-24
Misc : MS47193,VO2359,,,,,
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 14 07:20:16 2020
Quant Method : C:\msdchem\1\methods\SIMCL091120.M
Quant Title : Standard Methods 6200B
QLast Update : Sun Sep 13 19:20:40 2020
Response via : Initial Calibration



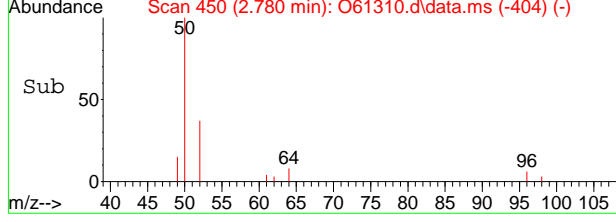
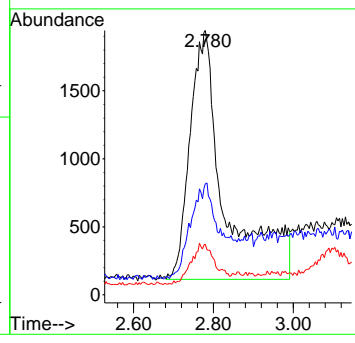
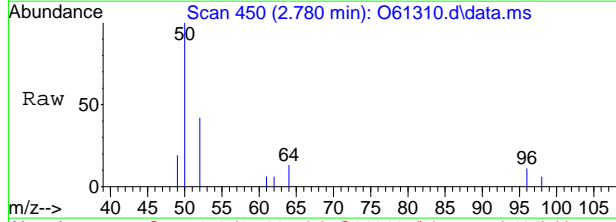
7.1.47
7





#3
 Chloromethane
 Concen: 0.33 ug/L
 RT: 2.780 min Scan# 450
 Delta R.T. -0.027 min
 Lab File: O61310.d
 Acq: 12 Sep 2020 11:46 pm

Tgt Ion	Ratio	Lower	Upper
50	100		
52	37.2	7.8	47.8
49	15.8	0.0	30.5



7.1.47
7



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-17-2020\vo2363\
 Data File : O61408.d
 Acq On : 16 Sep 2020 2:10 pm
 Operator : akarig
 Sample : FA78551-24
 Misc : MS47193,VO2363,,,,,
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 17 04:49:58 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091520.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 16 09:02:25 2020
 Response via : Initial Calibration

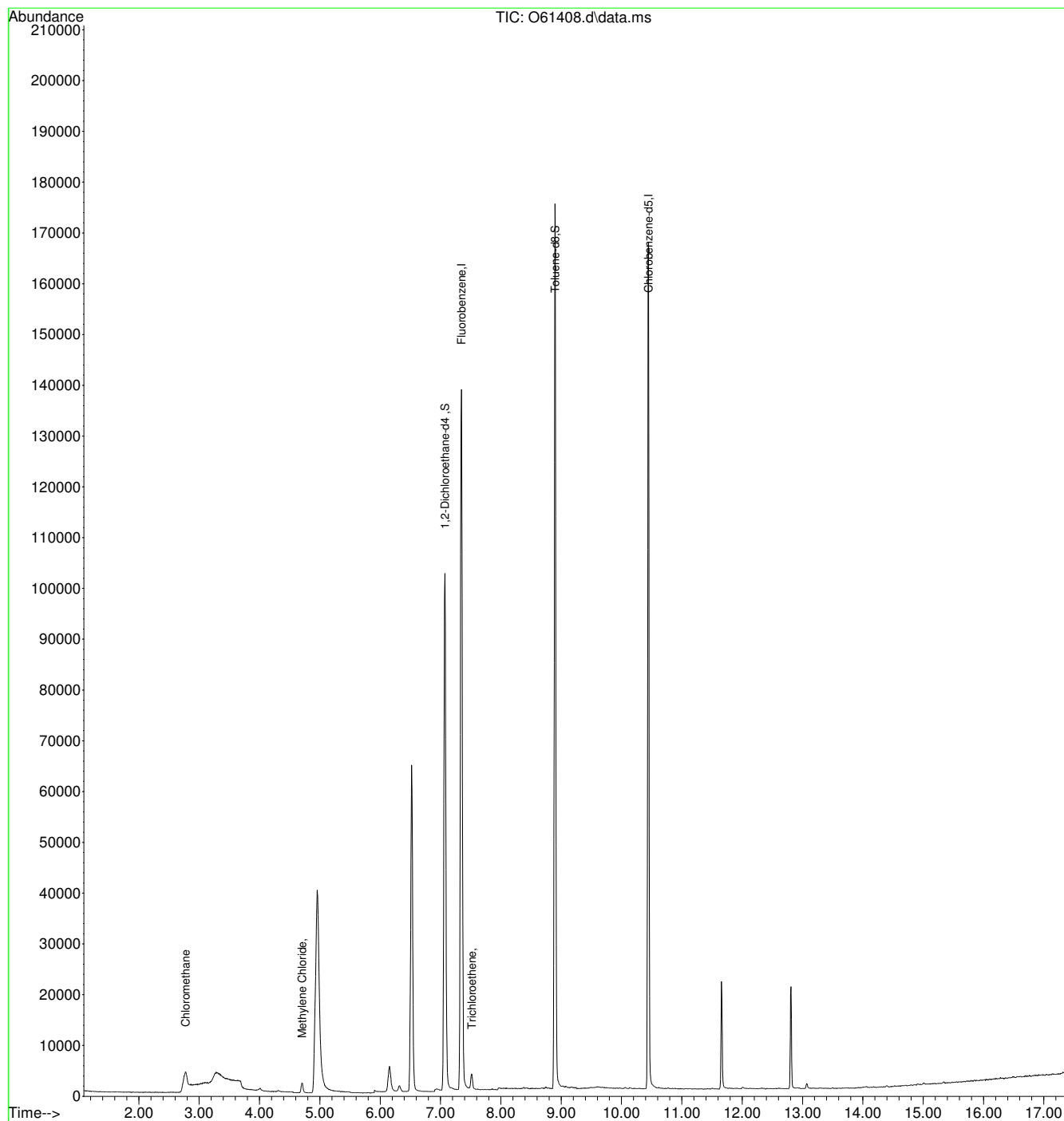
Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)	Qvalue
Internal Standards							
1) Fluorobenzene	7.346	96	206526	5.00	ug/L	0.00	
18) Chlorobenzene-d5	10.447	117	162387	5.00	ug/L	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.074	65	96659	5.56	ug/L	0.00	
Spiked Amount	5.000	Range 74 - 125	Recovery	=	111.20%		
19) Toluene-d8	8.896	98	172552	5.21	ug/L	0.00	
Spiked Amount	5.000	Range 88 - 111	Recovery	=	104.20%		
Target Compounds							
3) Chloromethane	2.773	50	14780	0.36	ug/L	94	
5) Methylene Chloride	4.703	49	2727	0.05	ug/L	97	
15) Trichloroethene	7.518	95	1962	0.10	ug/L	94	

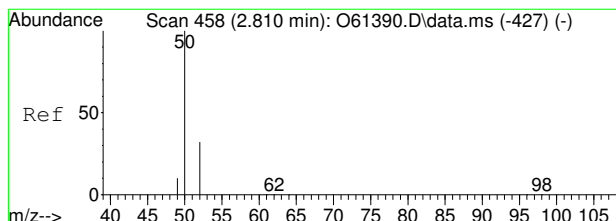
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-17-2020\vo2363\
Data File : O61408.d
Acq On : 16 Sep 2020 2:10 pm
Operator : akarig
Sample : FA78551-24
Misc : MS47193,VO2363,,,,,
ALS Vial : 9 Sample Multiplier: 1

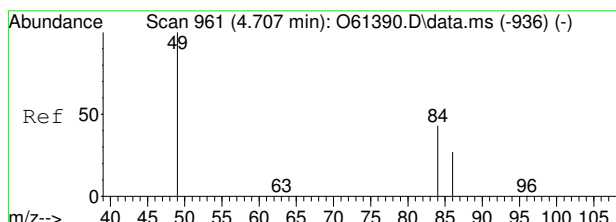
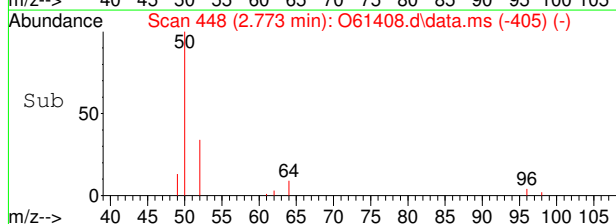
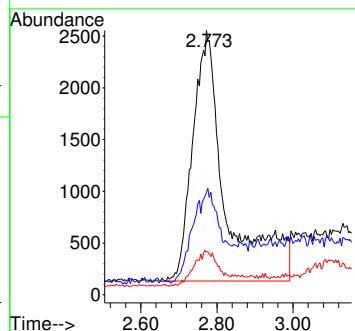
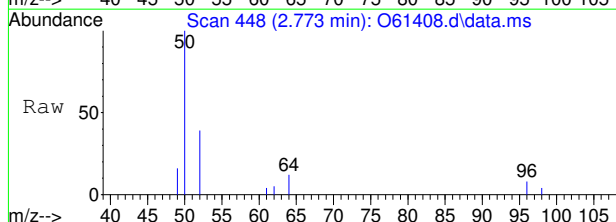
Quant Time: Sep 17 04:49:58 2020
Quant Method : C:\msdchem\1\methods\SIMCL091520.M
Quant Title : Standard Methods 6200B
QLast Update : Wed Sep 16 09:02:25 2020
Response via : Initial Calibration





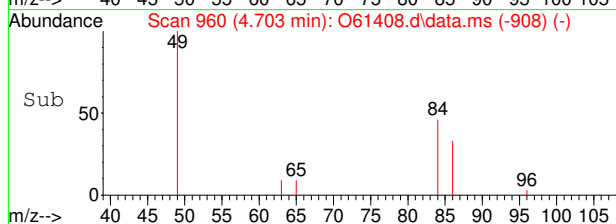
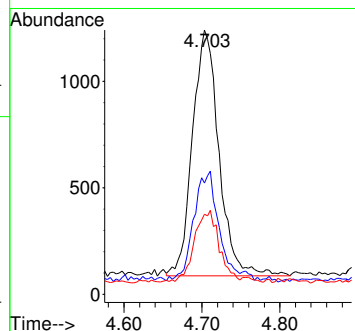
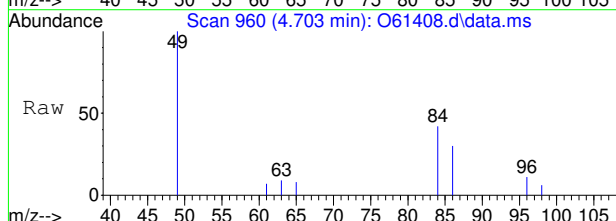
#3
 Chloromethane
 Concen: 0.36 ug/L
 RT: 2.773 min Scan# 448
 Delta R.T. -0.037 min
 Lab File: O61408.d
 Acq: 16 Sep 2020 2:10 pm

Tgt Ion	Ratio	Lower	Upper
50	100		
52	35.1	12.1	52.1
49	13.5	0.0	30.3

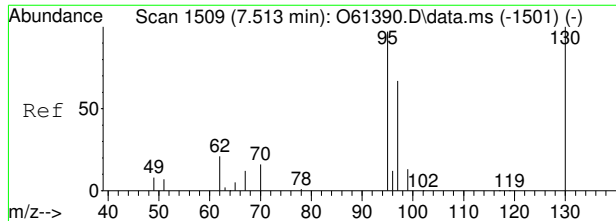


#5
 Methylene Chloride
 Concen: 0.05 ug/L
 RT: 4.703 min Scan# 960
 Delta R.T. -0.004 min
 Lab File: O61408.d
 Acq: 16 Sep 2020 2:10 pm

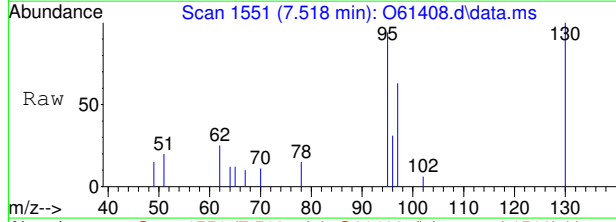
Tgt Ion	Ratio	Lower	Upper
49	100		
84	40.0	13.2	73.2
86	26.9	0.0	57.3



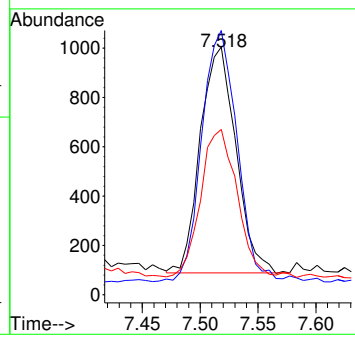
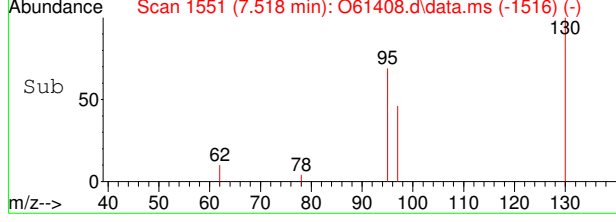
7.148
7



#15
 Trichloroethene
 Concen: 0.10 ug/L
 RT: 7.518 min Scan# 1551
 Delta R.T. 0.005 min
 Lab File: O61408.d
 Acq: 16 Sep 2020 2:10 pm



Tgt Ion	Resp
95	1962
130	110.2
97	65.2

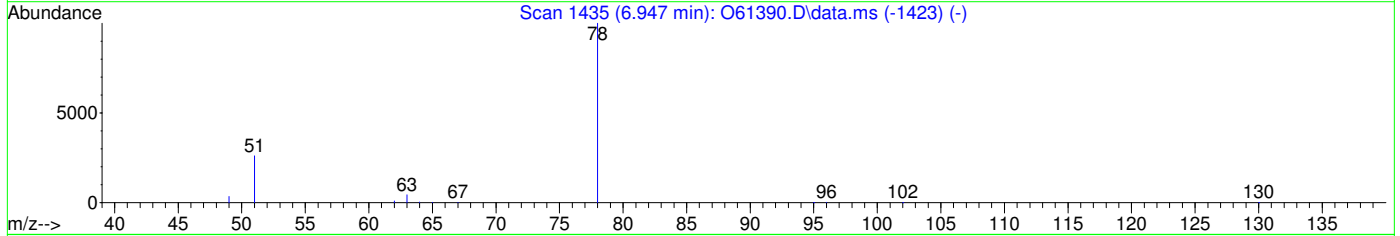
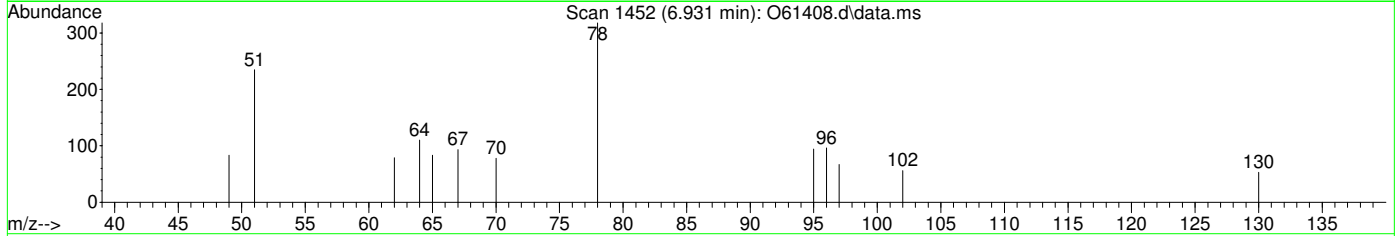
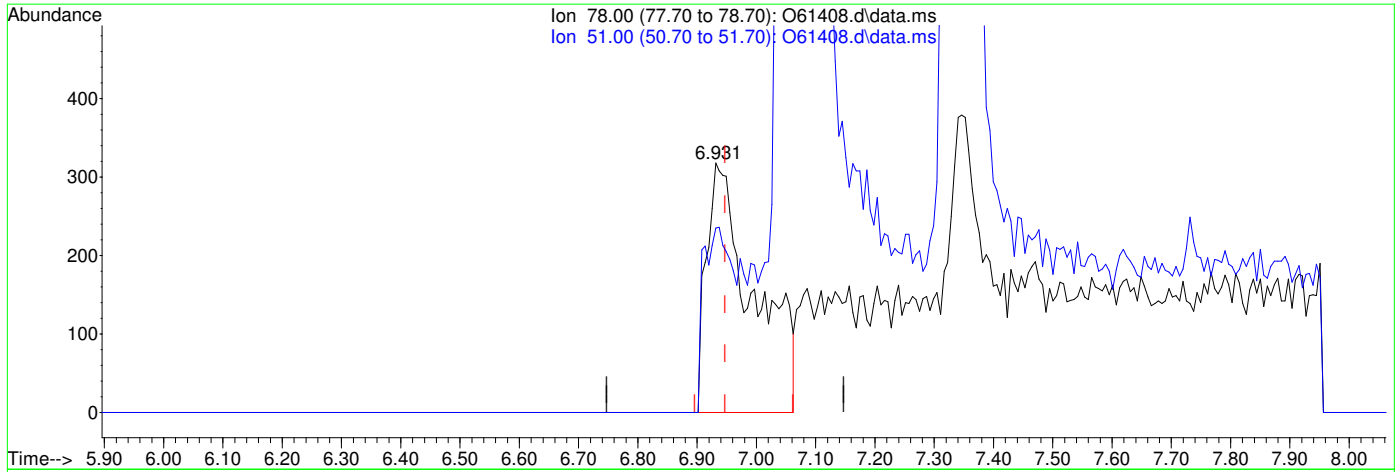


7.148
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-17-2020\vo2363\
 Data File : O61408.d
 Acq On : 16 Sep 2020 2:10 pm
 Operator : akarig
 Sample : FA78551-24
 Misc : MS47193,VO2363,,,,,
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 17 04:42:34 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091520.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 16 09:02:25 2020
 Response via : Initial Calibration



(12) Benzene ()

6.931min (-0.016) 0.03ug/L

response 1748

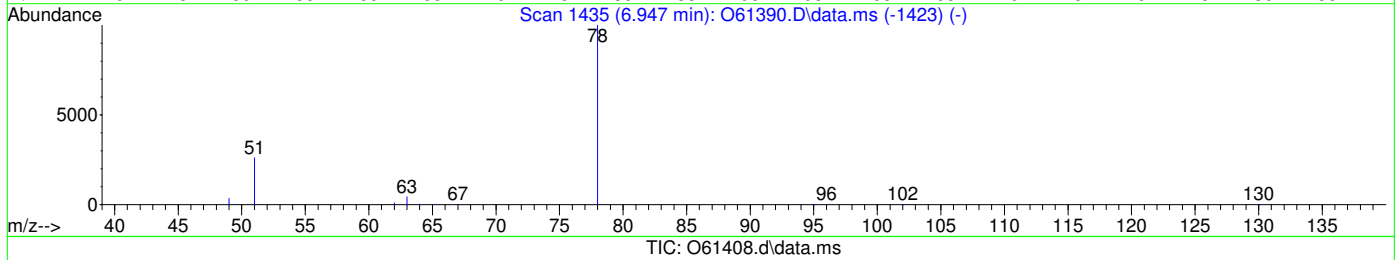
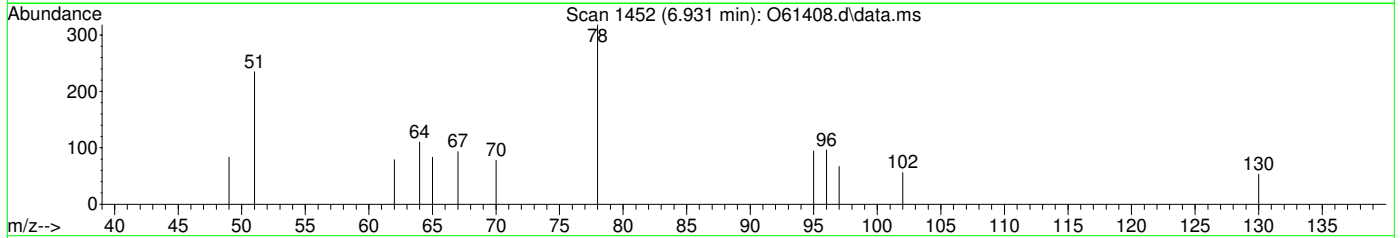
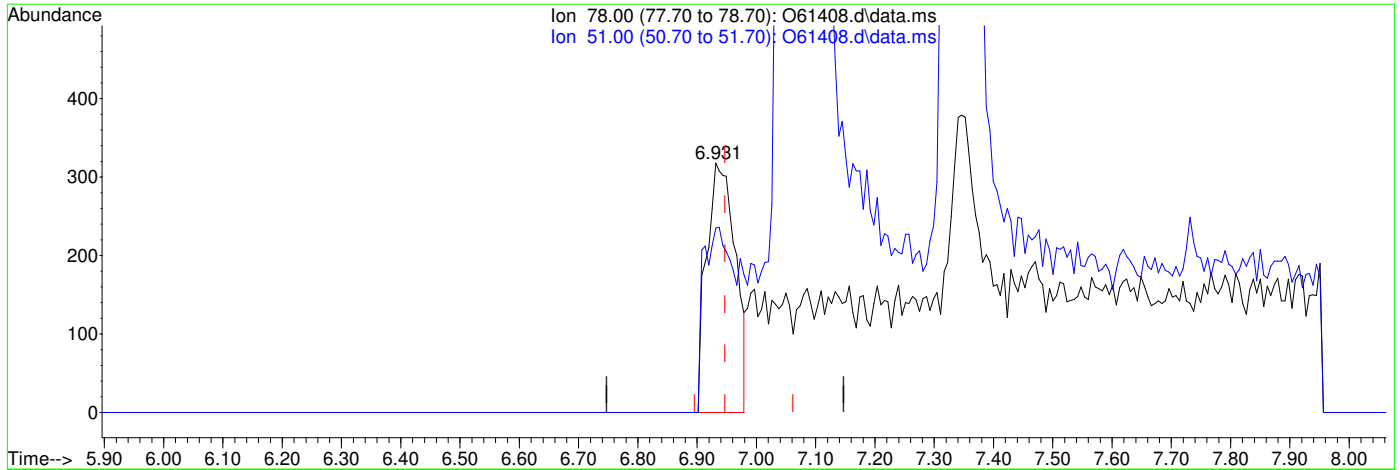
Ion	Exp%	Act%
78.00	100	100
51.00	26.00	73.90#
0.00	0.00	0.00
0.00	0.00	0.00

7.1.48.1
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-17-2020\vo2363\
 Data File : O61408.d
 Acq On : 16 Sep 2020 2:10 pm
 Operator : akarig
 Sample : FA78551-24
 Misc : MS47193,VO2363,,,,,
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 17 04:42:34 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091520.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 16 09:02:25 2020
 Response via : Initial Calibration



(12) Benzene ()

6.931min (-0.016) 0.02ug/L m

response 1072

Ion	Exp%	Act%
78.00	100	100
51.00	26.00	73.90#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-14-2020\VO2359\
Data File : O61311.d
Acq On : 13 Sep 2020 12:11 am
Operator : stutip
Sample : fa78551-25
Misc : MS47193,VO2359,,,,,
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Sep 14 08:03:23 2020
Quant Method : C:\msdchem\1\methods\SIMCL091120.M
Quant Title : Standard Methods 6200B
QLast Update : Sun Sep 13 19:20:40 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.340	96	194118	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.441	117	150807	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.068	65	87343	5.57	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	111.40%	
19) Toluene-d8	8.896	98	164892	4.85	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	97.00%	
Target Compounds						Qvalue

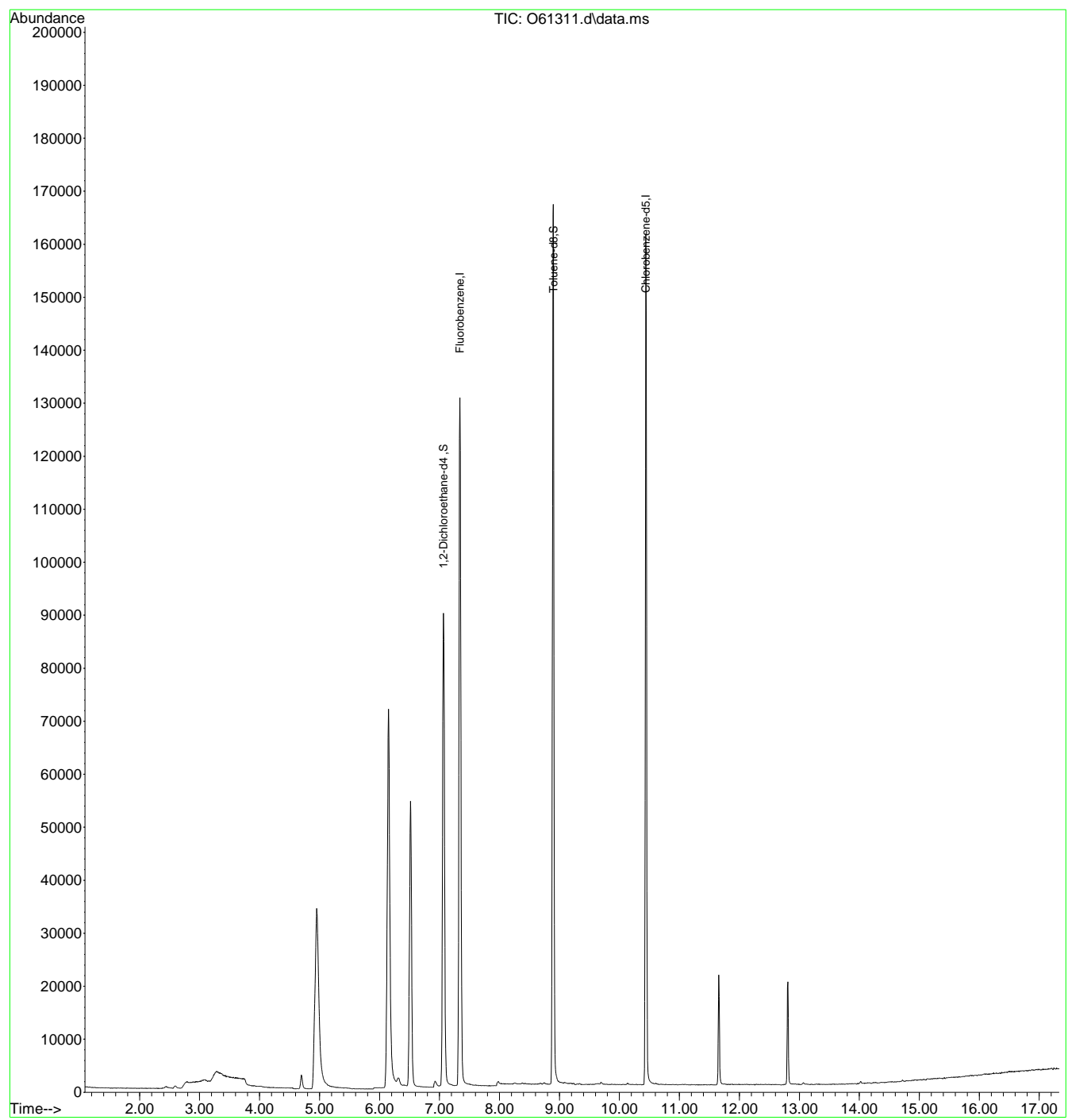
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.1.49
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-14-2020\VO2359\
Data File : O61311.d
Acq On : 13 Sep 2020 12:11 am
Operator : stutip
Sample : fa78551-25
Misc : MS47193,VO2359,,,,,
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Sep 14 08:03:23 2020
Quant Method : C:\msdchem\1\methods\SIMCL091120.M
Quant Title : Standard Methods 6200B
QLast Update : Sun Sep 13 19:20:40 2020
Response via : Initial Calibration



7.1.49
7



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-17-2020\vo2363\
 Data File : O61409.d
 Acq On : 16 Sep 2020 2:30 pm
 Operator : akarig
 Sample : FA78551-25
 Misc : MS47193,VO2363,,,,,
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 17 04:50:32 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091520.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 16 09:02:25 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)

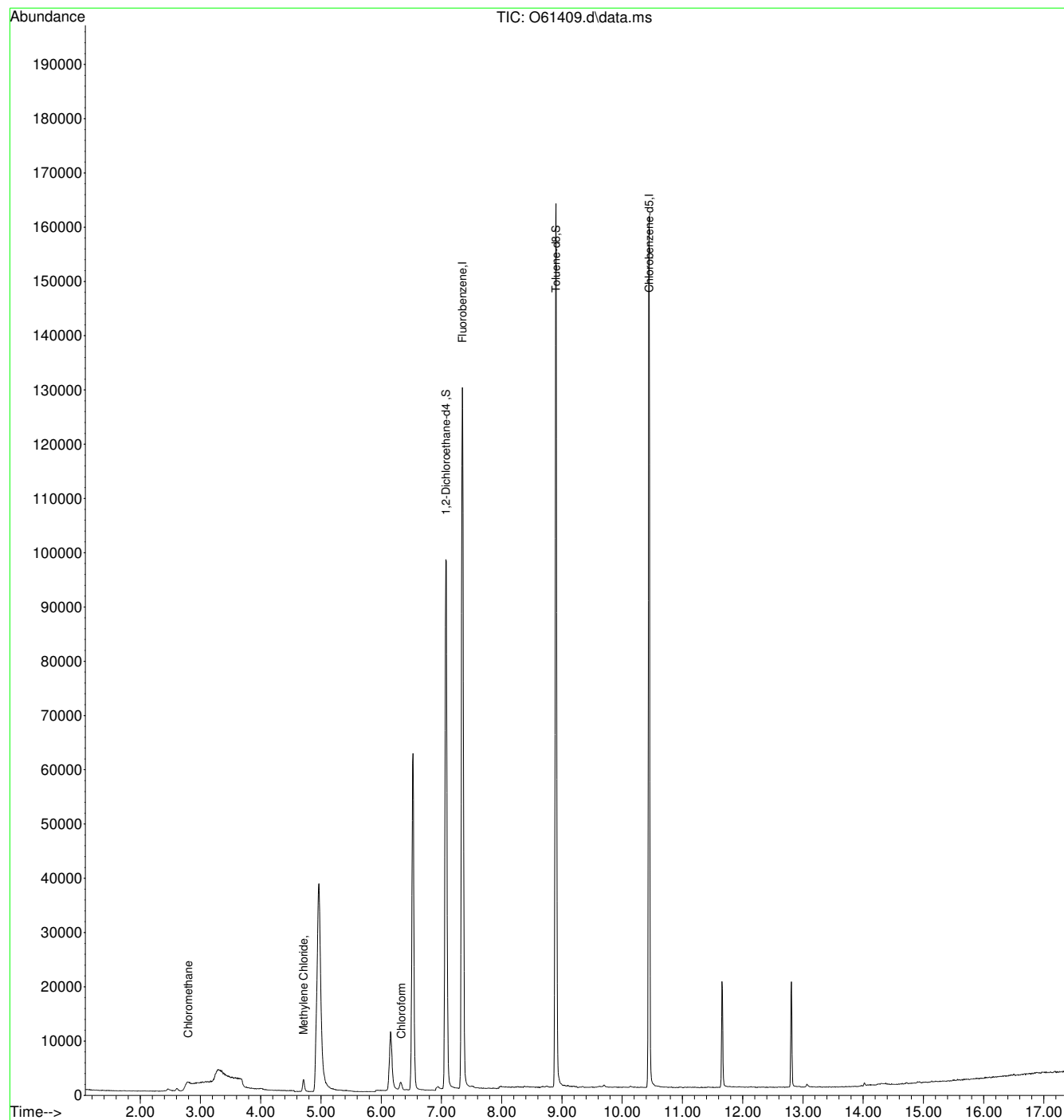
Internal Standards						
1) Fluorobenzene	7.346	96	197208	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.447	117	154209	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.073	65	93546	5.63	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	112.60%	
19) Toluene-d8	8.900	98	164240	5.22	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	104.40%	
Target Compounds						
3) Chloromethane	2.795	50	6441	0.16	ug/L #	64
5) Methylene Chloride	4.707	49	2975	0.05	ug/L	95
9) Chloroform	6.333	83	804	0.02	ug/L #	1

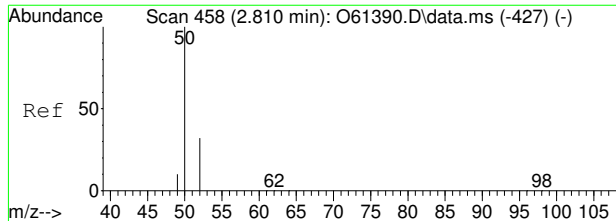
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-17-2020\vo2363\
Data File : O61409.d
Acq On : 16 Sep 2020 2:30 pm
Operator : akarig
Sample : FA78551-25
Misc : MS47193,VO2363,,,,,
ALS Vial : 10 Sample Multiplier: 1

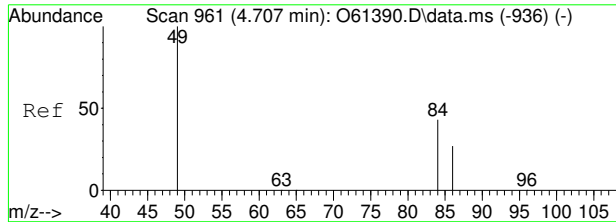
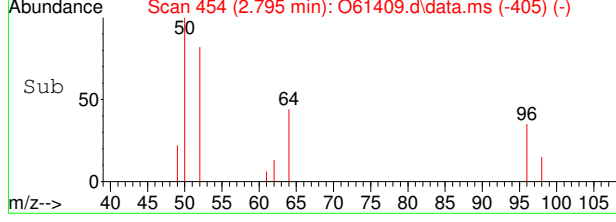
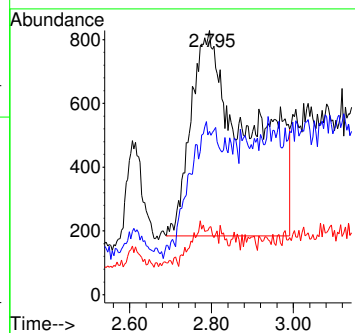
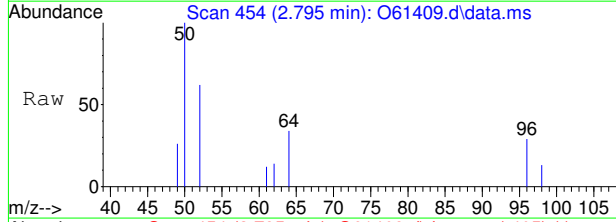
Quant Time: Sep 17 04:50:32 2020
Quant Method : C:\msdchem\1\methods\SIMCL091520.M
Quant Title : Standard Methods 6200B
QLast Update : Wed Sep 16 09:02:25 2020
Response via : Initial Calibration





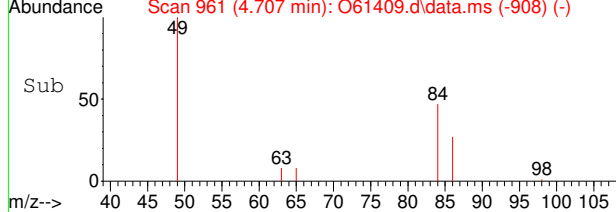
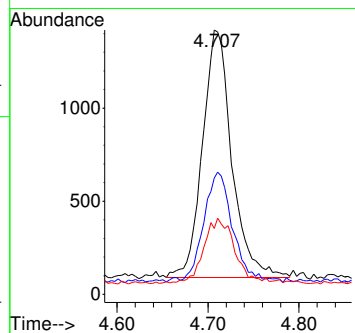
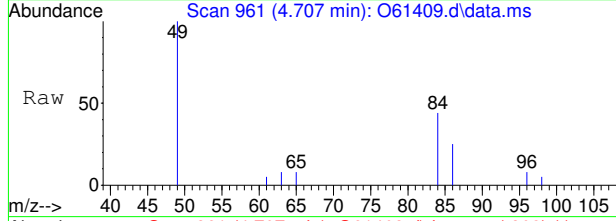
#3
 Chloromethane
 Concen: 0.16 ug/L
 RT: 2.795 min Scan# 454
 Delta R.T. -0.015 min
 Lab File: O61409.d
 Acq: 16 Sep 2020 2:30 pm

Tgt Ion	Resp	Lower	Upper
50	6441		
52	55.3	12.1	52.1#
49	17.4	0.0	30.3

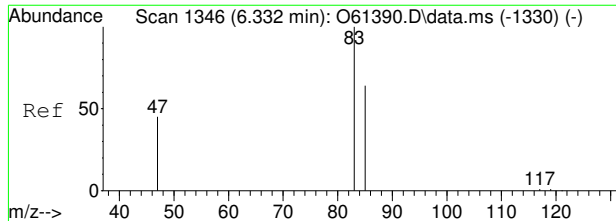


#5
 Methylene Chloride
 Concen: 0.05 ug/L
 RT: 4.707 min Scan# 961
 Delta R.T. -0.000 min
 Lab File: O61409.d
 Acq: 16 Sep 2020 2:30 pm

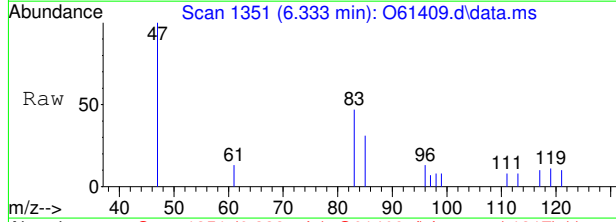
Tgt Ion	Resp	Lower	Upper
49	2975		
84	42.1	13.2	73.2
86	21.5	0.0	57.3



7.1.50
7

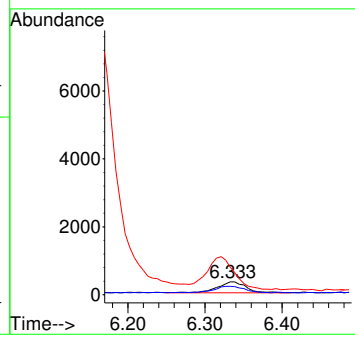
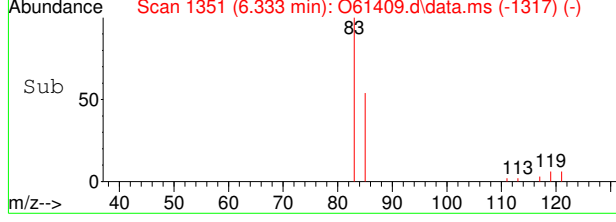


#9
 Chloroform
 Concen: 0.02 ug/L
 RT: 6.333 min Scan# 1351
 Delta R.T. 0.001 min
 Lab File: O61409.d
 Acq: 16 Sep 2020 2:30 pm



Tgt Ion: 83 Resp: 804

Ion	Ratio	Lower	Upper
83	100		
85	57.9	33.9	93.9
47	202.2	14.9	74.9#



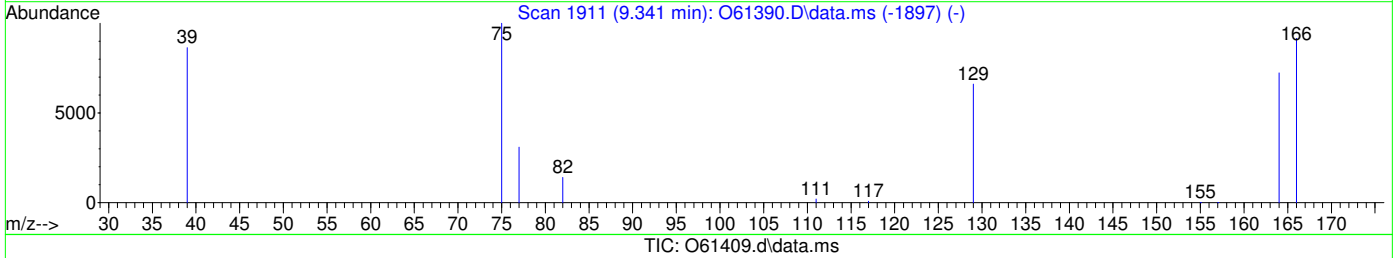
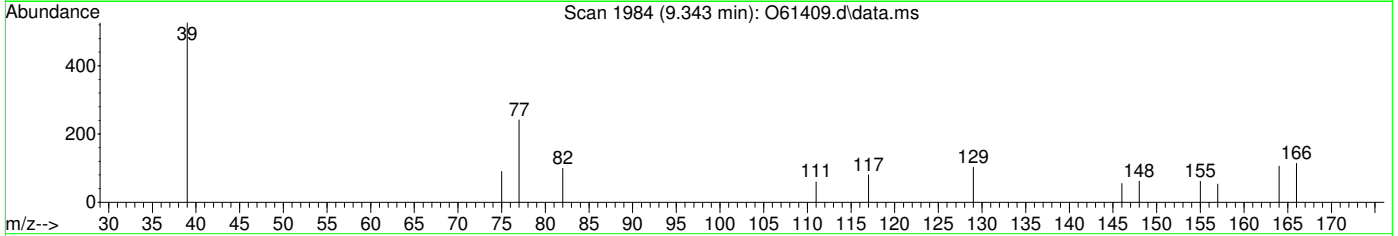
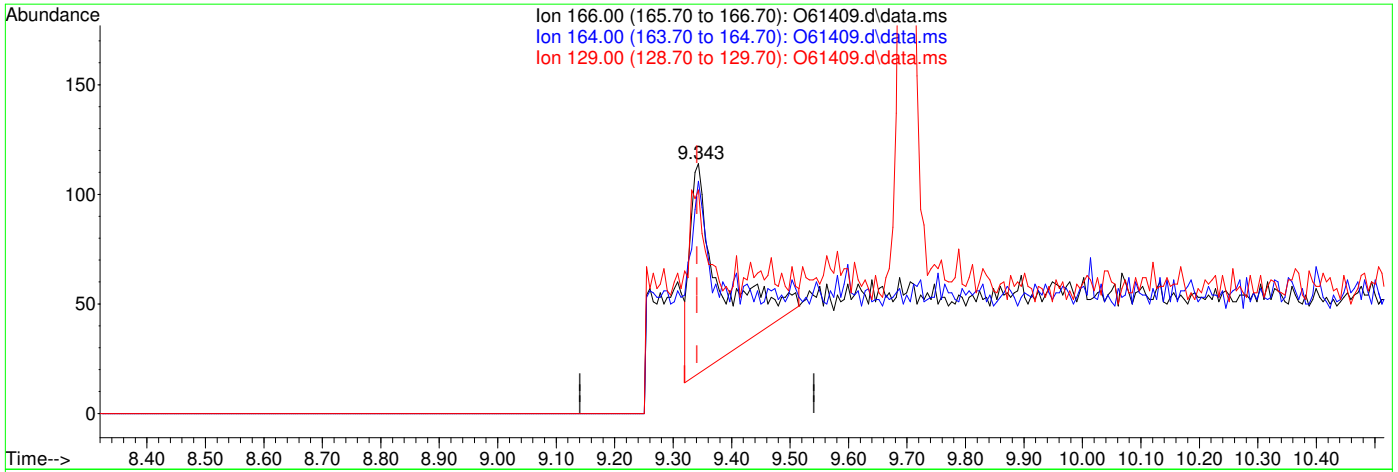
7.1.50
7



Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-17-2020\vo2363\
 Data File : O61409.d
 Acq On : 16 Sep 2020 2:30 pm
 Operator : akarig
 Sample : FA78551-25
 Misc : MS47193,VO2363,,,,,
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 17 04:42:37 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091520.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 16 09:02:25 2020
 Response via : Initial Calibration



(21) Tetrachloroethene ()

9.343min (+0.002) 0.02ug/L

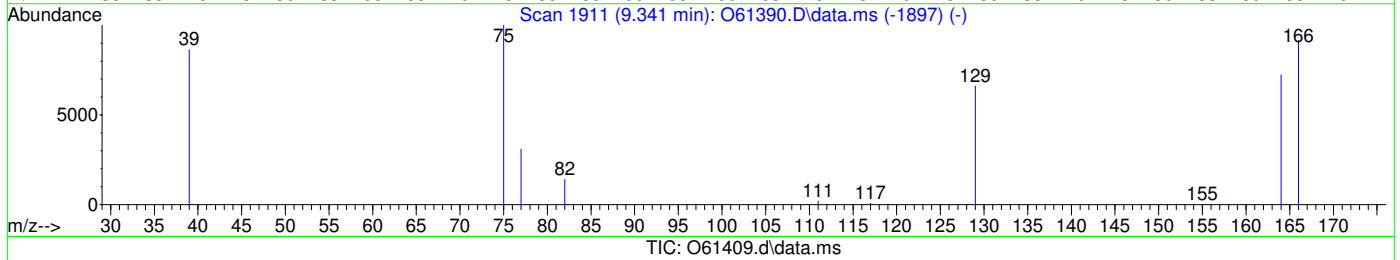
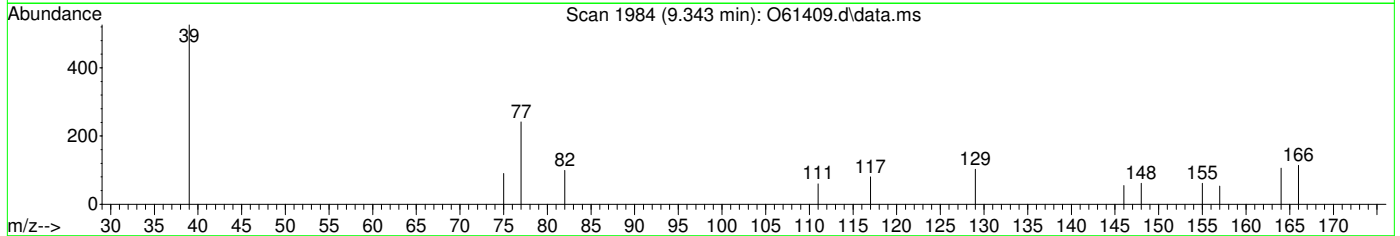
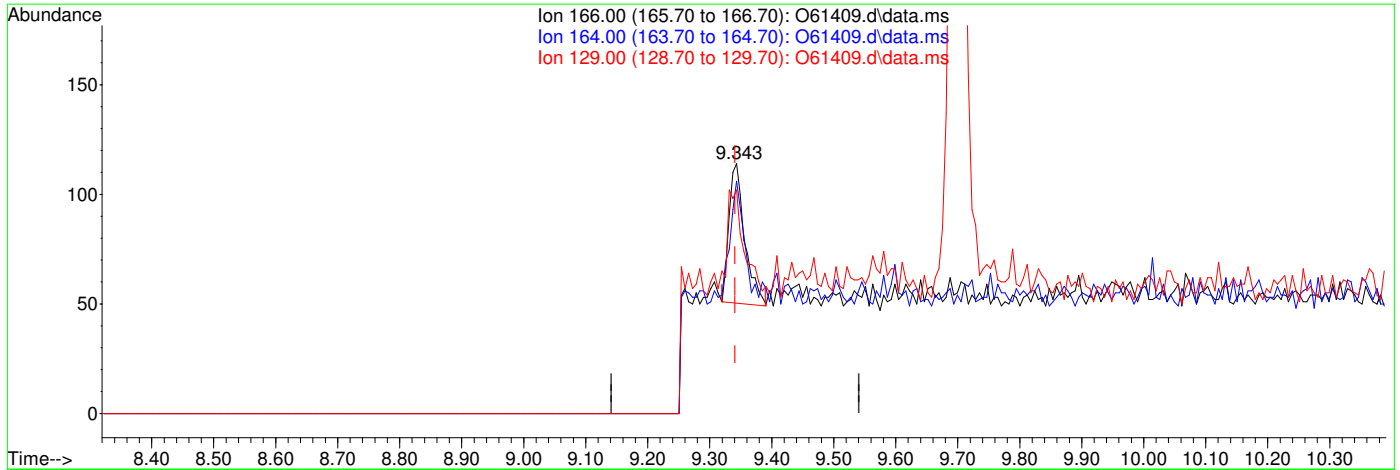
response 360

Ion	Exp%	Act%
166.00	100	100
164.00	79.10	81.54
129.00	72.20	69.23
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-17-2020\vo2363\
 Data File : O61409.d
 Acq On : 16 Sep 2020 2:30 pm
 Operator : akarig
 Sample : FA78551-25
 Misc : MS47193,VO2363,,,,,
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 17 04:42:37 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091520.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 16 09:02:25 2020
 Response via : Initial Calibration



(21) Tetrachloroethene ()

9.343min (+0.002) 0.01ug/L m

response 113

Ion	Exp%	Act%
166.00	100	100
164.00	79.10	92.98
129.00	72.20	89.47
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-14-2020\VO2359\
Data File : O61312.d
Acq On : 13 Sep 2020 12:31 am
Operator : stutip
Sample : fa78551-26
Misc : MS47193,VO2359,,,,,
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Sep 14 08:03:40 2020
Quant Method : C:\msdchem\1\methods\SIMCL091120.M
Quant Title : Standard Methods 6200B
QLast Update : Sun Sep 13 19:20:40 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Fluorobenzene	7.340	96	185209	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.447	117	176438	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.068	65	84397	5.64	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	112.80%	
19) Toluene-d8	8.896	98	157974	3.97	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	79.40%#	
Target Compounds						Qvalue

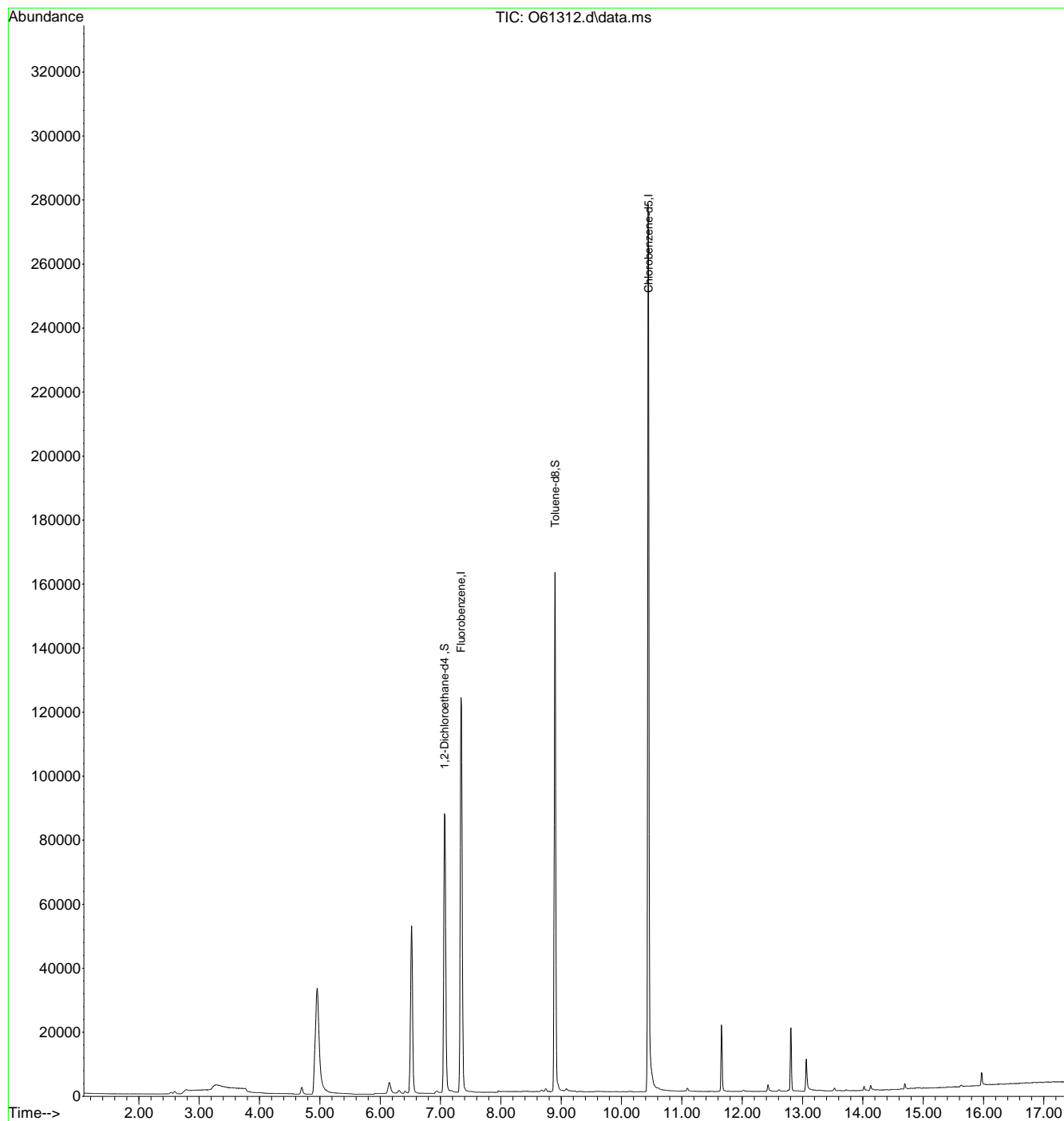
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.1.51
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-14-2020\VO2359\
Data File : O61312.d
Acq On : 13 Sep 2020 12:31 am
Operator : stutip
Sample : fa78551-26
Misc : MS47193,VO2359,,,,,
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Sep 14 08:03:40 2020
Quant Method : C:\msdchem\1\methods\SIMCL091120.M
Quant Title : Standard Methods 6200B
QLast Update : Sun Sep 13 19:20:40 2020
Response via : Initial Calibration



7.1.51
7



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-17-2020\vo2363\
 Data File : O61410.d
 Acq On : 16 Sep 2020 2:51 pm
 Operator : akarig
 Sample : FA78551-26
 Misc : MS47193,VO2363,,,,,
 ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 17 04:51:01 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091520.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 16 09:02:25 2020
 Response via : Initial Calibration

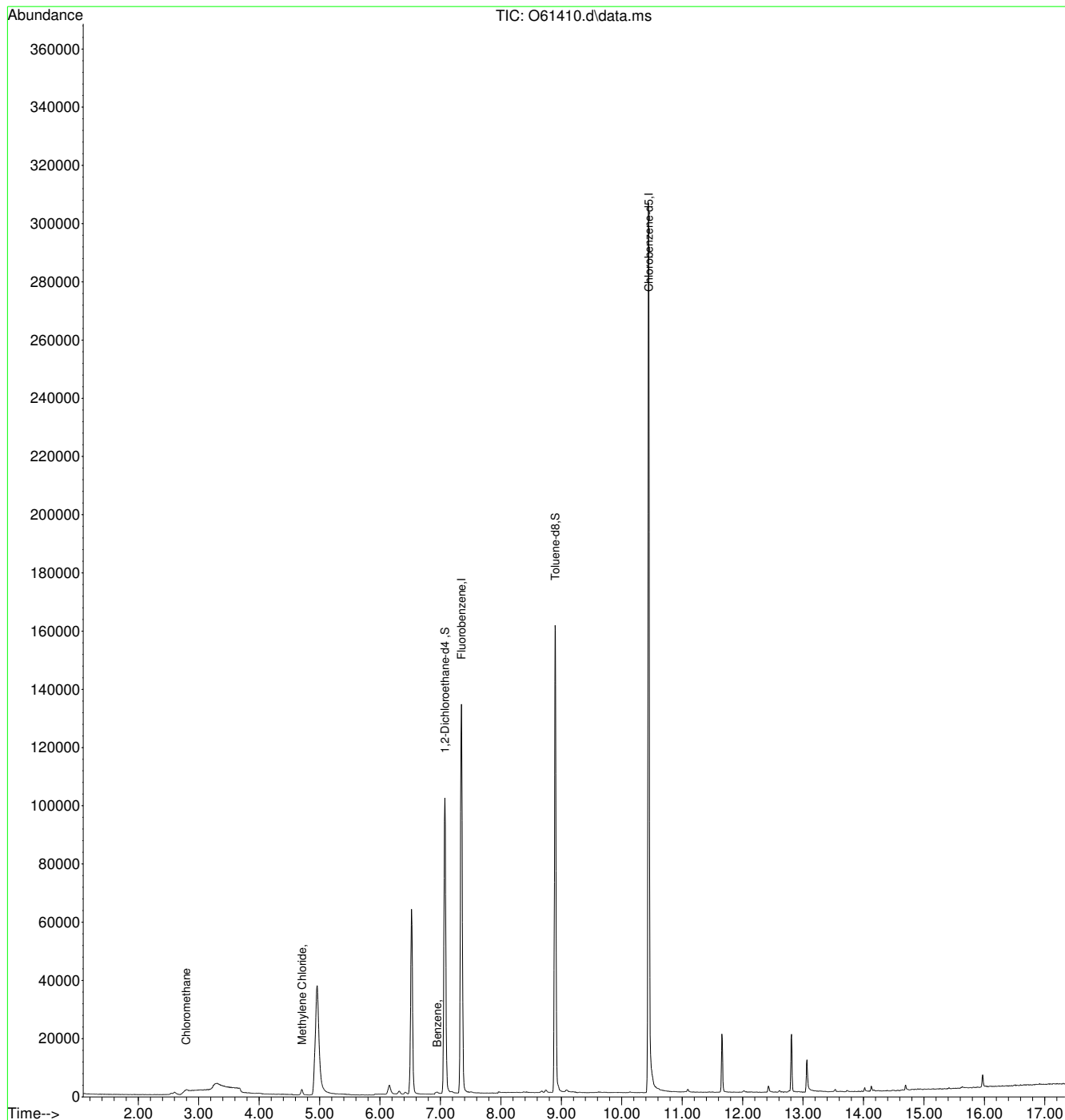
Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)
Internal Standards						
1) Fluorobenzene	7.346	96	194058	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.447	117	193477	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.074	65	92743	5.67	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	113.40%	
19) Toluene-d8	8.896	98	160321	4.06	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	81.20%#	
Target Compounds						
3) Chloromethane	2.791	50	6127	0.16	ug/L	83
5) Methylene Chloride	4.707	49	2453	0.04	ug/L	97
12) Benzene	6.943	78	1519m	0.03	ug/L	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

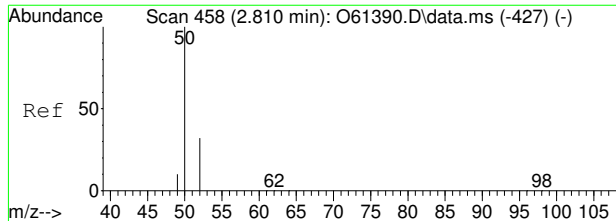
Data Path : C:\msdchem\1\data\johnm\September 2020\09-17-2020\vo2363\
 Data File : O61410.d
 Acq On : 16 Sep 2020 2:51 pm
 Operator : akarig
 Sample : FA78551-26
 Misc : MS47193,VO2363,,,,,
 ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 17 04:51:01 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091520.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 16 09:02:25 2020
 Response via : Initial Calibration



7.1.52
7

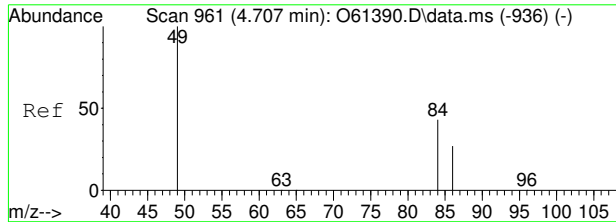
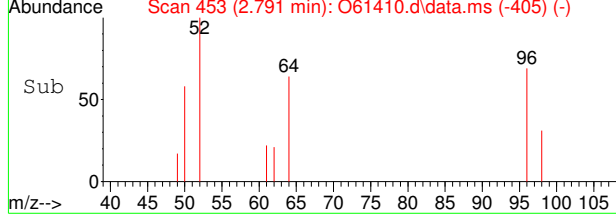
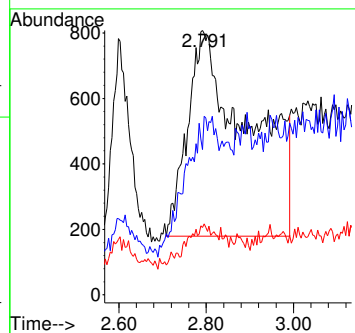
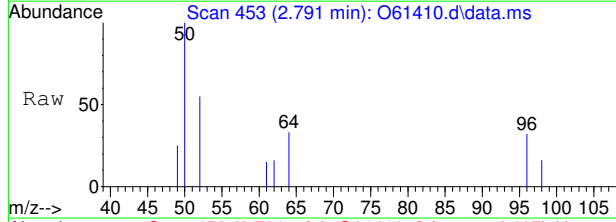




#3
 Chloromethane
 Concen: 0.16 ug/L
 RT: 2.791 min Scan# 453
 Delta R.T. -0.019 min
 Lab File: O61410.d
 Acq: 16 Sep 2020 2:51 pm

Tgt Ion: 50 Resp: 6127

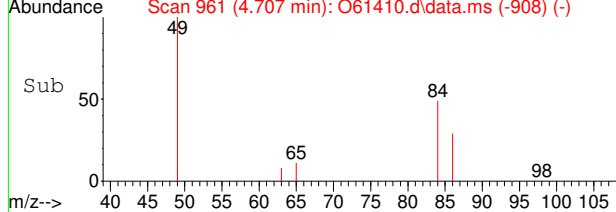
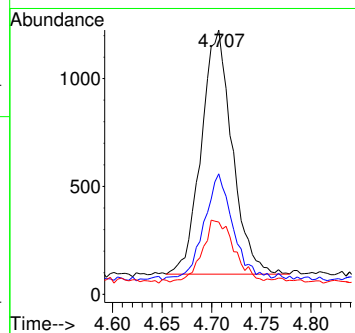
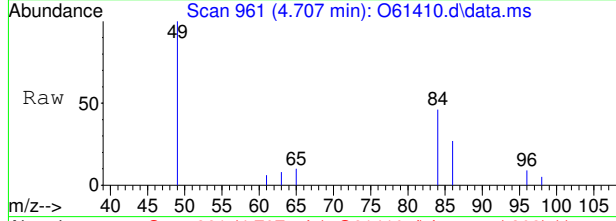
Ion	Ratio	Lower	Upper
50	100		
52	40.9	12.1	52.1
49	18.3	0.0	30.3



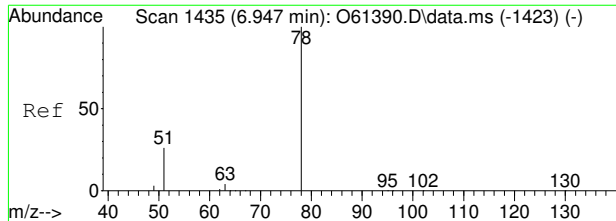
#5
 Methylene Chloride
 Concen: 0.04 ug/L
 RT: 4.707 min Scan# 961
 Delta R.T. 0.000 min
 Lab File: O61410.d
 Acq: 16 Sep 2020 2:51 pm

Tgt Ion: 49 Resp: 2453

Ion	Ratio	Lower	Upper
49	100		
84	42.4	13.2	73.2
86	23.9	0.0	57.3

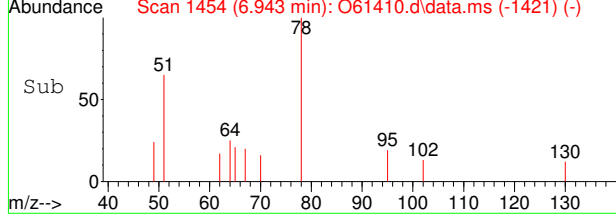
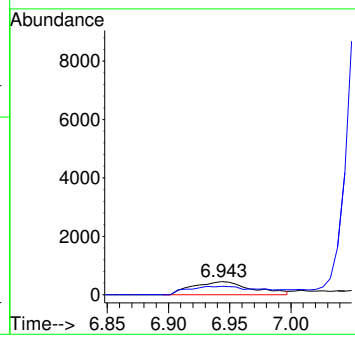
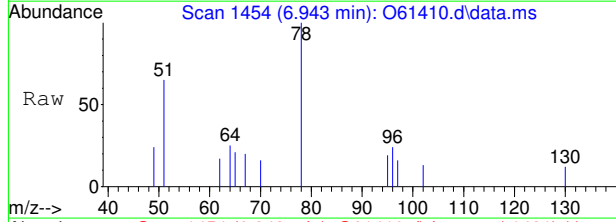


7.1.52
7



#12
 Benzene
 Concen: 0.03 ug/L m
 RT: 6.943 min Scan# 1454
 Delta R.T. -0.004 min
 Lab File: O61410.d
 Acq: 16 Sep 2020 2:51 pm

Tgt Ion	Ratio	Lower	Upper
78	100		
51	64.8	0.0	56.0#



7.1.52
7

Manual Integration Approval Summary

Sample Number: FA78551-26 **Method:** SW846 8260B BY SIM
Lab FileID: O61410.D **Analyst approved:** 09/17/20 15:29 Juan Garcia
Injection Time: 09/16/20 14:51 **Supervisor approved:** 09/18/20 14:42 Melissa Mangual

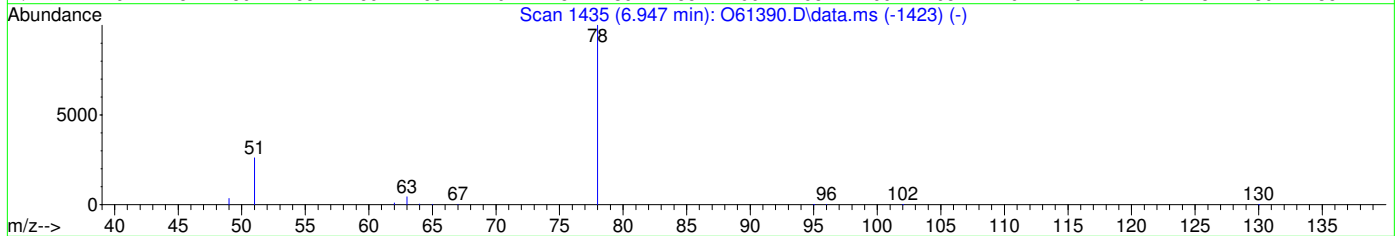
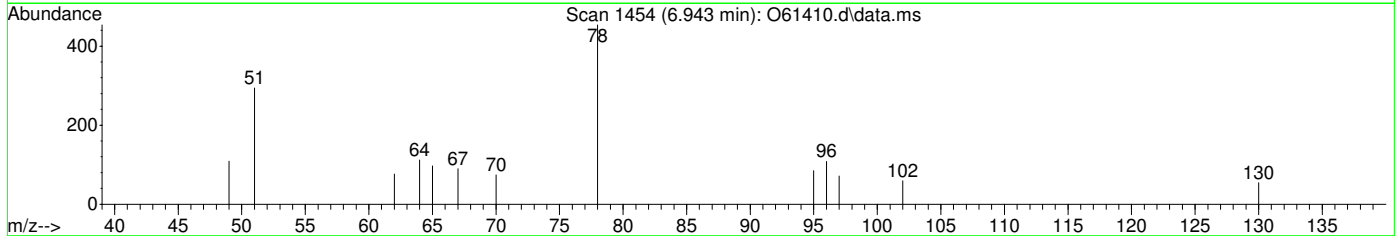
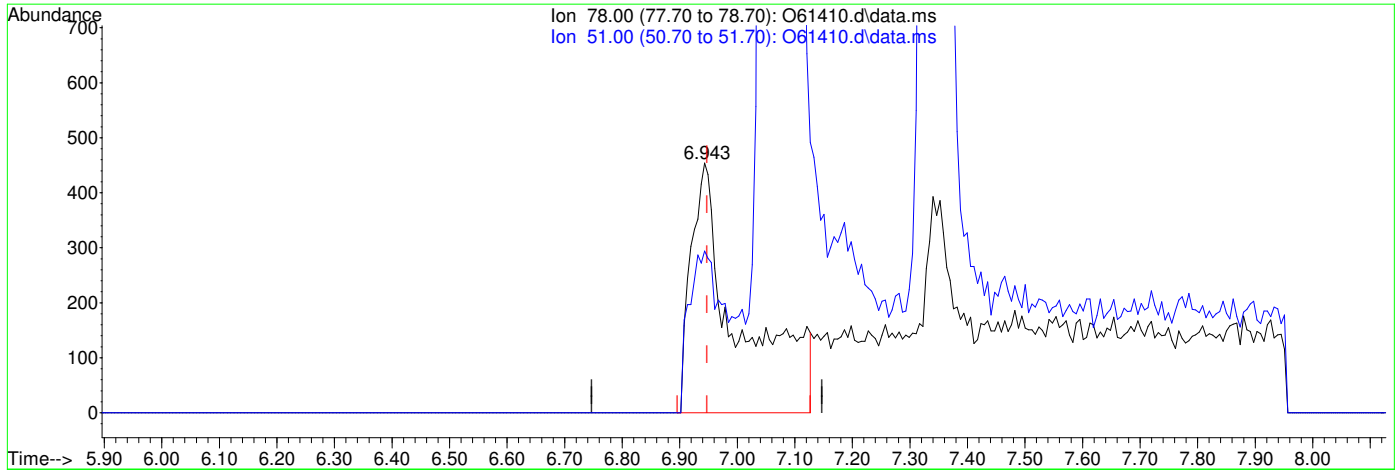
Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzene	71-43-2		6.94	Poor instrument integration

7.1.52.1
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-17-2020\vo2363\
 Data File : O61410.d
 Acq On : 16 Sep 2020 2:51 pm
 Operator : akarig
 Sample : FA78551-26
 Misc : MS47193,VO2363,,,,,
 ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 17 04:42:40 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091520.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 16 09:02:25 2020
 Response via : Initial Calibration



TIC: O61410.d\data.ms

(12) Benzene ()

6.943min (-0.004) 0.04ug/L

response 2597

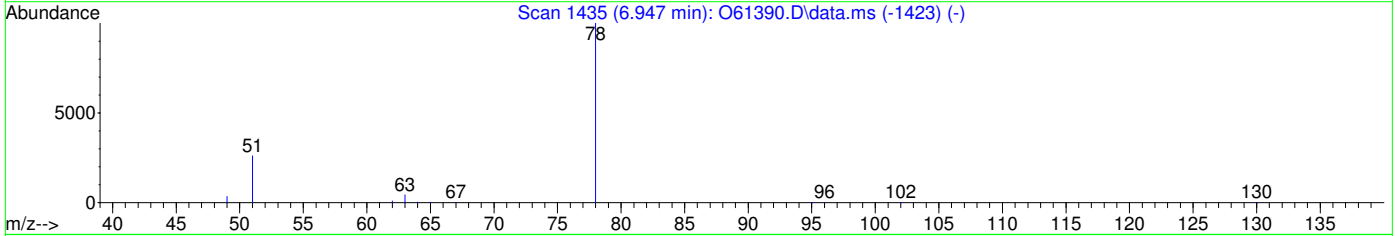
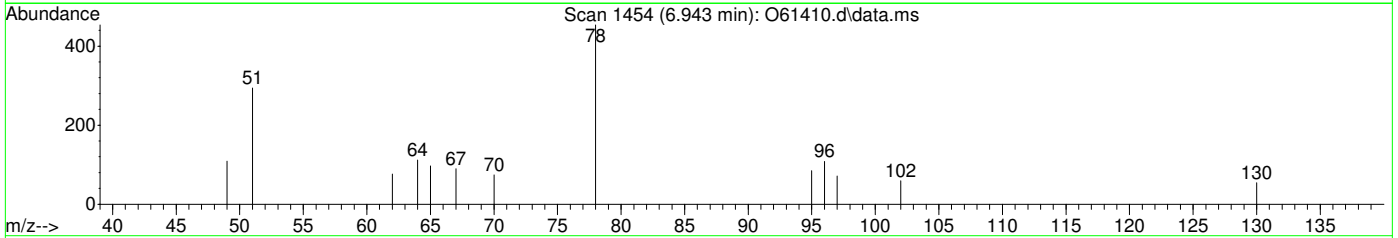
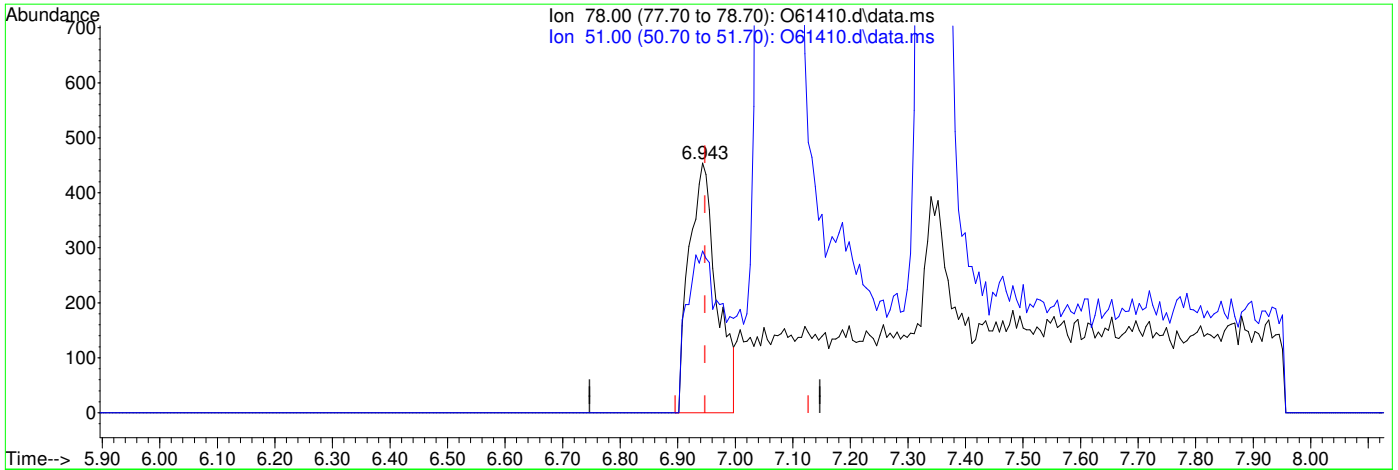
Ion	Exp%	Act%
78.00	100	100
51.00	26.00	64.76#
0.00	0.00	0.00
0.00	0.00	0.00

7-1.522
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-17-2020\vo2363\
 Data File : O61410.d
 Acq On : 16 Sep 2020 2:51 pm
 Operator : akarig
 Sample : FA78551-26
 Misc : MS47193,VO2363,,,,,
 ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 17 04:42:40 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091520.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 16 09:02:25 2020
 Response via : Initial Calibration



TIC: O61410.d\data.ms

(12) Benzene ()

6.943min (-0.004) 0.03ug/L m

response 1519

Ion	Exp%	Act%
78.00	100	100
51.00	26.00	64.76#
0.00	0.00	0.00
0.00	0.00	0.00

7.1.52.3

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-14-2020\VO2359\
Data File : O61313.d
Acq On : 13 Sep 2020 12:51 am
Operator : stutip
Sample : fa78551-27
Misc : MS47193,VO2359,,,,,
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Sep 14 08:04:00 2020
Quant Method : C:\msdchem\1\methods\SIMCL091120.M
Quant Title : Standard Methods 6200B
QLast Update : Sun Sep 13 19:20:40 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Fluorobenzene	7.346	96	184950	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.447	117	150061	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.073	65	84290	5.64	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	112.80%	
19) Toluene-d8	8.896	98	159539	4.72	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	94.40%	
Target Compounds						
4) 1,1-Dichloroethene	4.096	61	6513	0.25	ug/L	92
7) 1,1-Dichloroethane	5.514	63	64077	1.87	ug/L	100
9) Chloroform	6.333	83	41134	1.39	ug/L	94
15) Trichloroethene	7.512	95	18794	1.08	ug/L	86
21) Tetrachloroethene	9.343	166	48137	2.94	ug/L	98

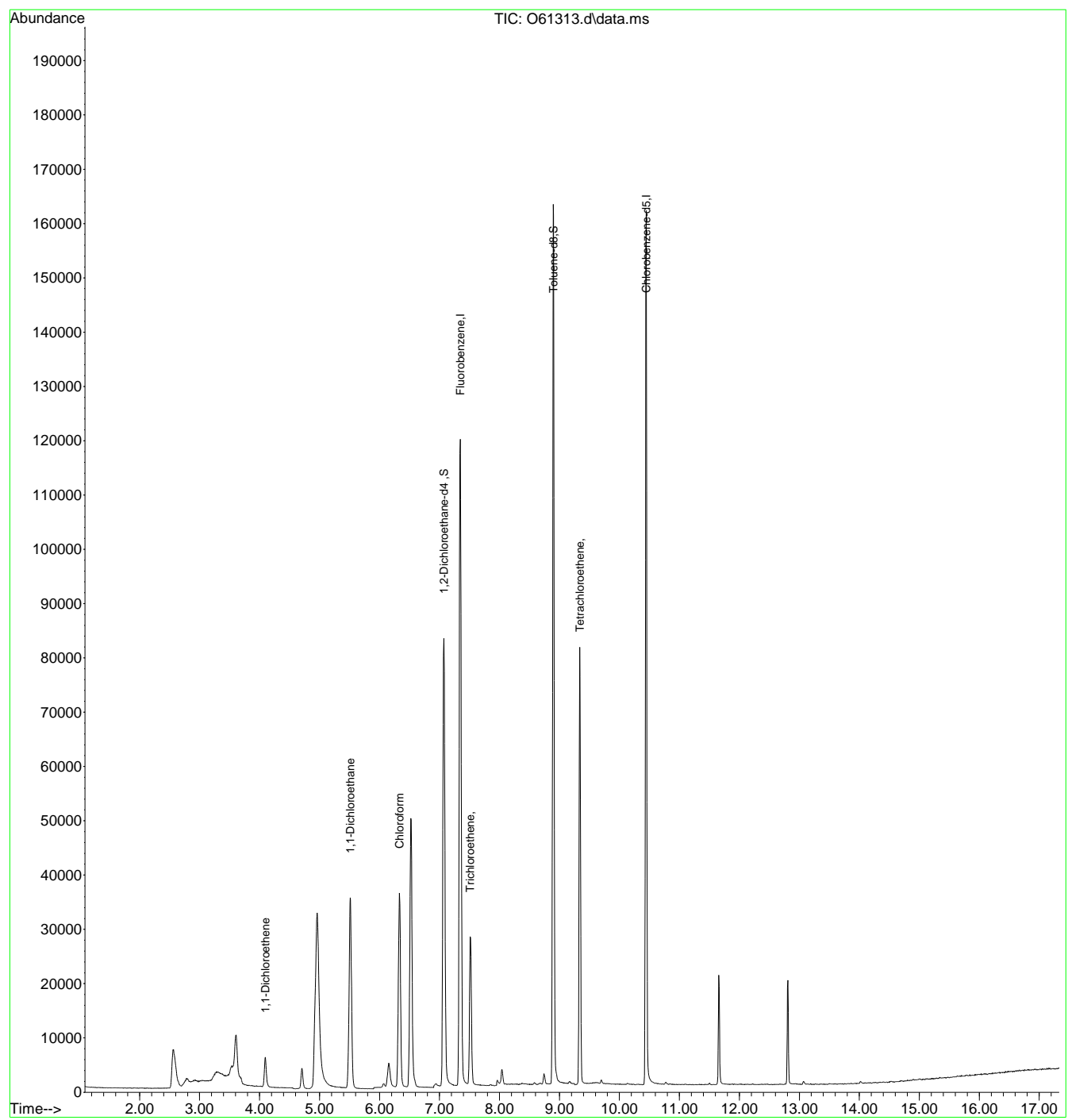
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.1.53
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Quantitation Report (QT Reviewed)

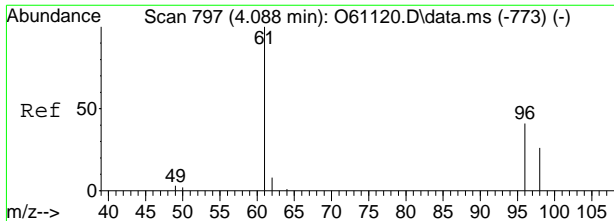
Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-14-2020\VO2359\
Data File : O61313.d
Acq On : 13 Sep 2020 12:51 am
Operator : stutip
Sample : fa78551-27
Misc : MS47193,VO2359,,,,,
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Sep 14 08:04:00 2020
Quant Method : C:\msdchem\1\methods\SIMCL091120.M
Quant Title : Standard Methods 6200B
QLast Update : Sun Sep 13 19:20:40 2020
Response via : Initial Calibration



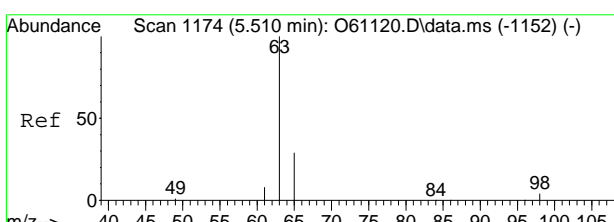
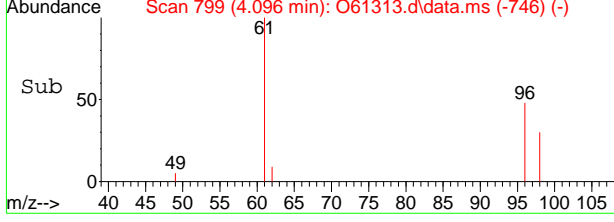
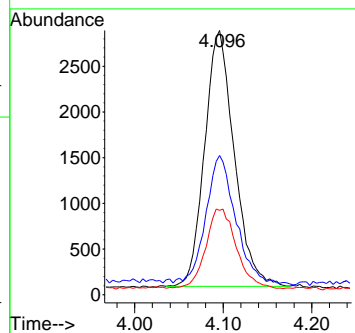
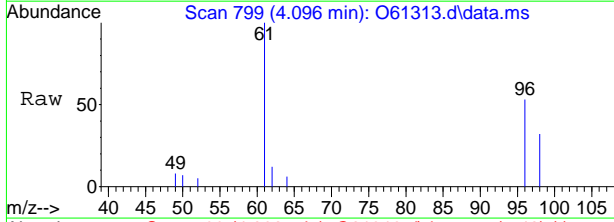
7.1.53
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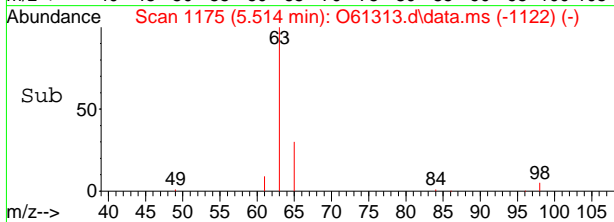
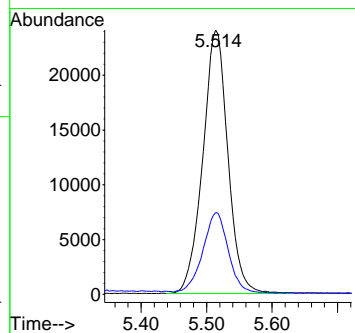
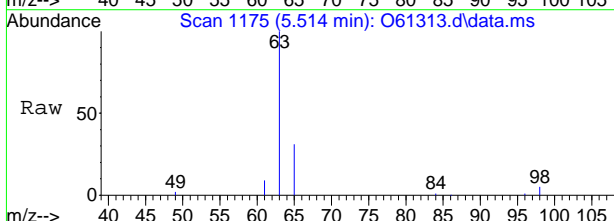
#4
 1,1-Dichloroethene
 Concen: 0.25 ug/L
 RT: 4.096 min Scan# 799
 Delta R.T. -0.000 min
 Lab File: O61313.d
 Acq: 13 Sep 2020 12:51 am

Tgt Ion	Resp	Lower	Upper
61	6513		
61	100		
96	50.1	25.4	85.4
98	30.4	5.9	65.9

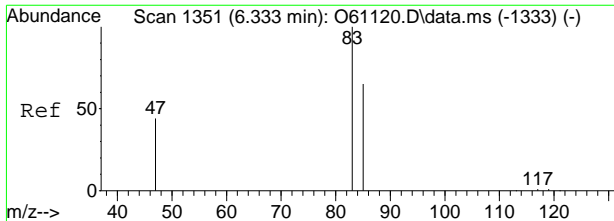


#7
 1,1-Dichloroethane
 Concen: 1.87 ug/L
 RT: 5.514 min Scan# 1175
 Delta R.T. -0.000 min
 Lab File: O61313.d
 Acq: 13 Sep 2020 12:51 am

Tgt Ion	Resp	Lower	Upper
63	64077		
63	100		
65	30.5	0.7	60.7

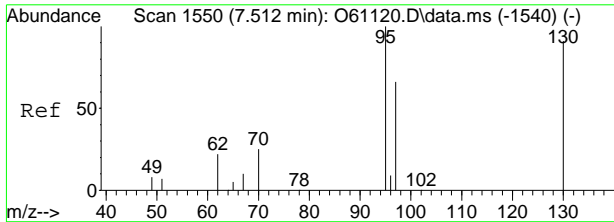
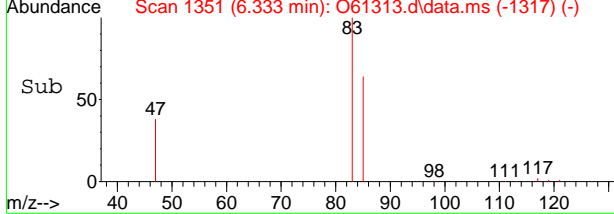
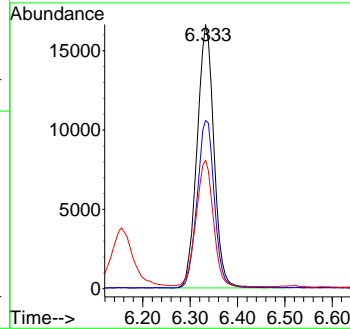
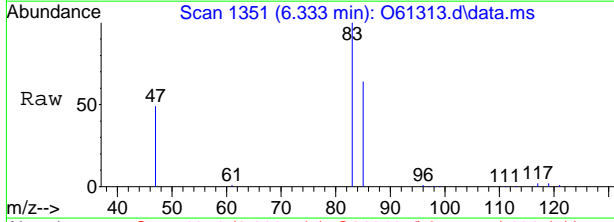


7.1.53
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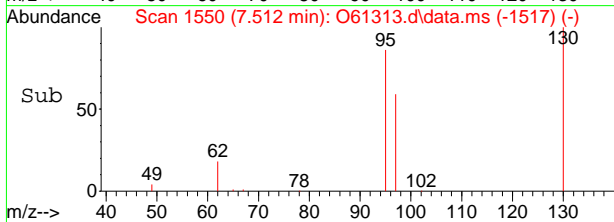
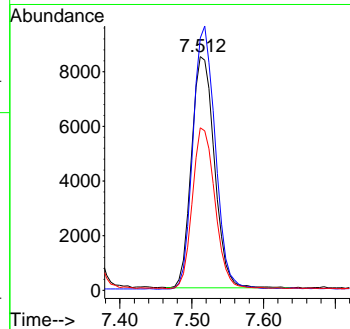
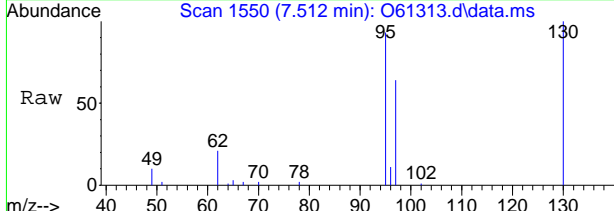
#9
 Chloroform
 Concen: 1.39 ug/L
 RT: 6.333 min Scan# 1351
 Delta R.T. -0.000 min
 Lab File: O61313.d
 Acq: 13 Sep 2020 12:51 am

Tgt Ion	Resp	Lower	Upper
83	41134		
85	63.6	33.0	93.0
47	47.7	8.1	68.1

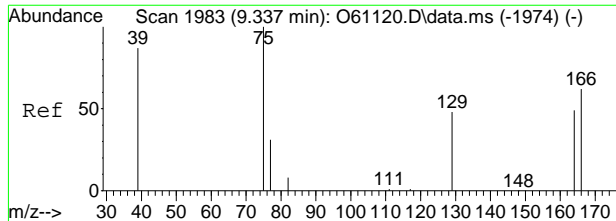


#15
 Trichloroethene
 Concen: 1.08 ug/L
 RT: 7.512 min Scan# 1550
 Delta R.T. -0.006 min
 Lab File: O61313.d
 Acq: 13 Sep 2020 12:51 am

Tgt Ion	Resp	Lower	Upper
95	18794		
130	108.4	60.4	120.4
97	69.5	34.6	94.6



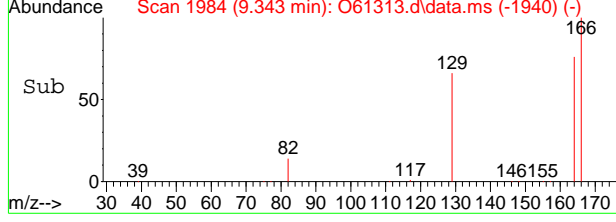
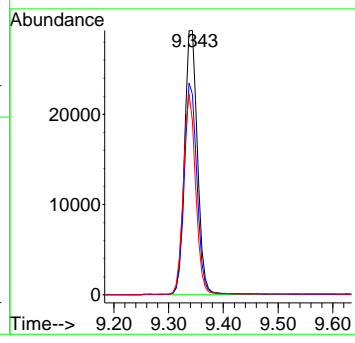
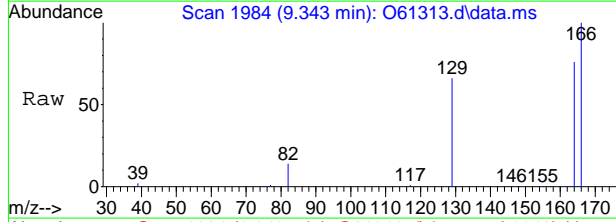
7.1.53
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#21
 Tetrachloroethene
 Concen: 2.94 ug/L
 RT: 9.343 min Scan# 1984
 Delta R.T. 0.000 min
 Lab File: O61313.d
 Acq: 13 Sep 2020 12:51 am

Tgt Ion:166 Resp: 48137

Ion	Ratio	Lower	Upper
166	100		
164	75.8	47.3	107.3
129	65.7	37.5	97.5



7.1.53
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Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-17-2020\vo2363\
 Data File : O61411.d
 Acq On : 16 Sep 2020 3:11 pm
 Operator : akarig
 Sample : FA78551-27
 Misc : MS47193,VO2363,,,,,
 ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 17 04:51:29 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091520.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 16 09:02:25 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)	

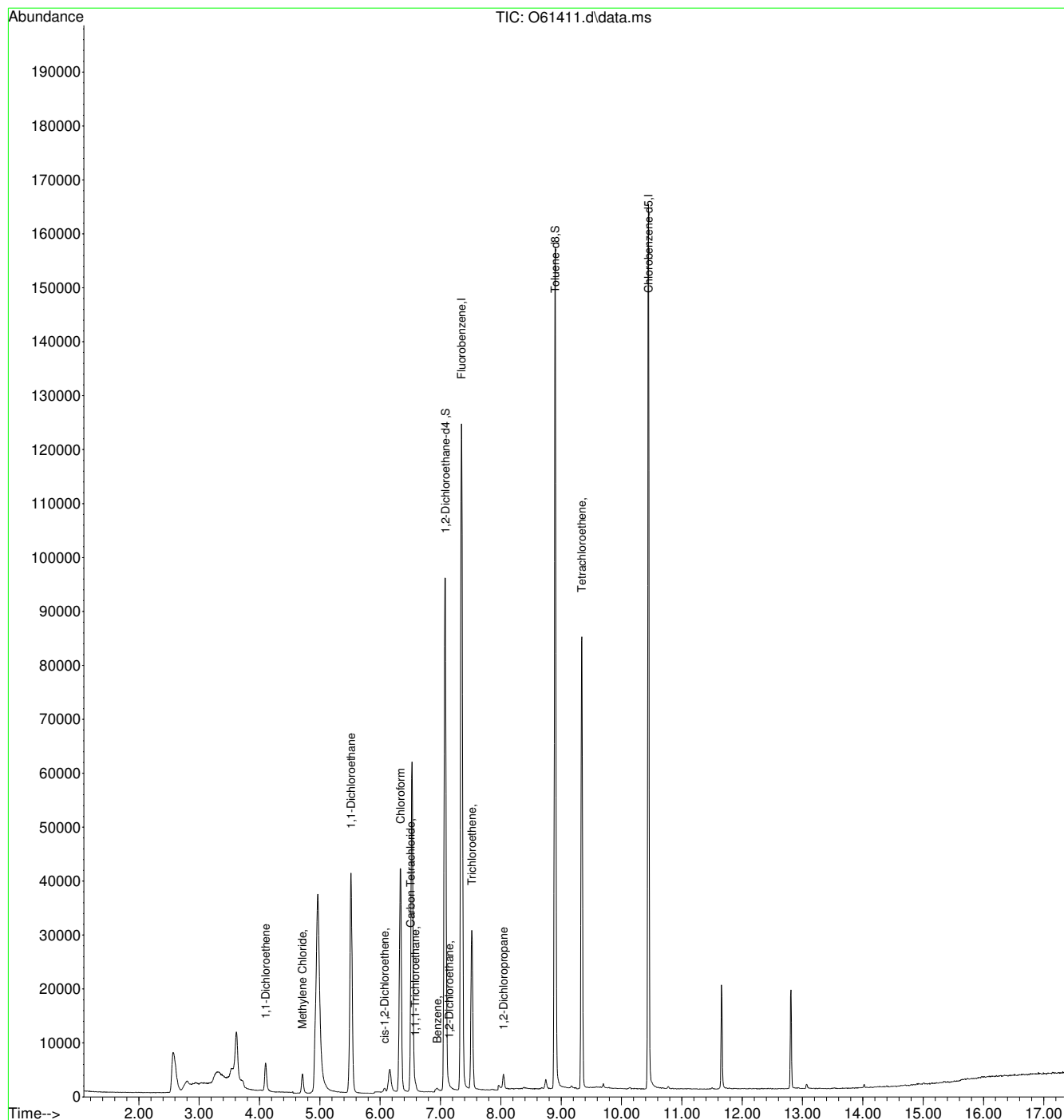
Internal Standards							
1) Fluorobenzene	7.346	96	188143	5.00	ug/L	0.00	
18) Chlorobenzene-d5	10.447	117	152706	5.00	ug/L	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.080	65	91489	5.77	ug/L	0.00	
Spiked Amount	5.000	Range 74 - 125	Recovery	=	115.40%		
19) Toluene-d8	8.900	98	156396	5.02	ug/L	0.00	
Spiked Amount	5.000	Range 88 - 111	Recovery	=	100.40%		
Target Compounds							
							Qvalue
4) 1,1-Dichloroethene	4.104	61	6466	0.23	ug/L		97
5) Methylene Chloride	4.711	49	4919	0.09	ug/L		99
7) 1,1-Dichloroethane	5.518	63	70146	1.91	ug/L		100
8) cis-1,2-Dichloroethene	6.072	96	607	0.04	ug/L		84
9) Chloroform	6.339	83	44975	1.45	ug/L		98
10) Carbon Tetrachloride	6.505	117	430	0.02	ug/L		86
11) 1,1,1-Trichloroethane	6.582	97	1164	0.05	ug/L		91
12) Benzene	6.943	78	1393m	0.02	ug/L		
14) 1,2-Dichloroethane	7.145	62	634	0.02	ug/L		95
15) Trichloroethene	7.518	95	19871	1.15	ug/L		95
16) 1,2-Dichloropropane	8.044	63	1917	0.10	ug/L		88
21) Tetrachloroethene	9.343	166	52122	2.98	ug/L		95

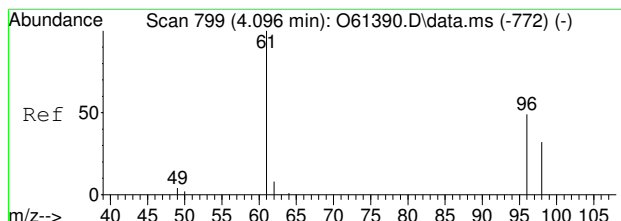
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-17-2020\vo2363\
 Data File : O61411.d
 Acq On : 16 Sep 2020 3:11 pm
 Operator : akarig
 Sample : FA78551-27
 Misc : MS47193,VO2363,,,,,
 ALS Vial : 12 Sample Multiplier: 1

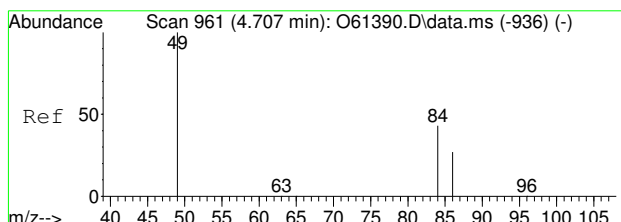
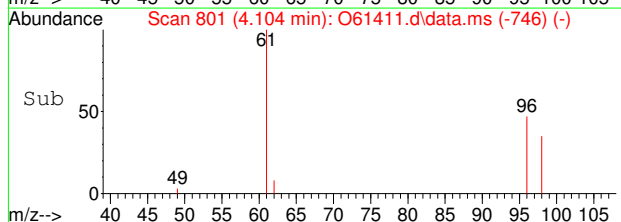
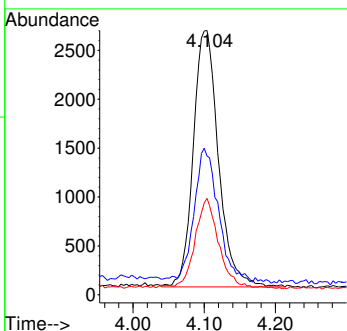
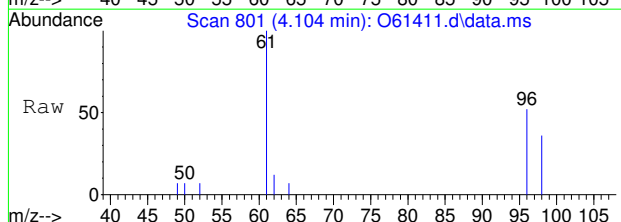
Quant Time: Sep 17 04:51:29 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091520.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 16 09:02:25 2020
 Response via : Initial Calibration





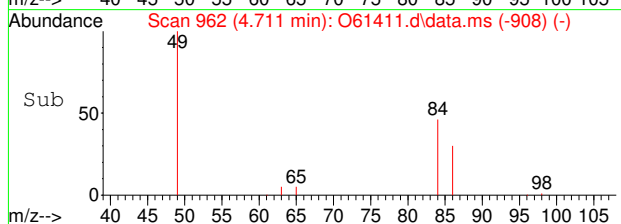
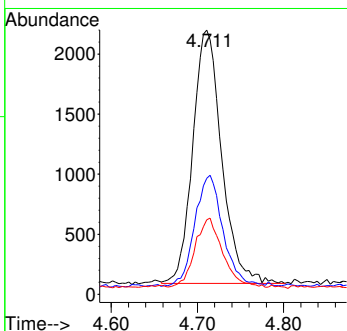
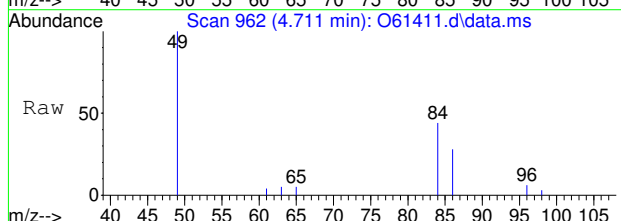
#4
 1,1-Dichloroethene
 Concen: 0.23 ug/L
 RT: 4.104 min Scan# 801
 Delta R.T. 0.008 min
 Lab File: O61411.d
 Acq: 16 Sep 2020 3:11 pm

Tgt Ion	Resp	Lower	Upper
61	6466		
96	48.7	19.3	79.3
98	35.0	1.9	61.9

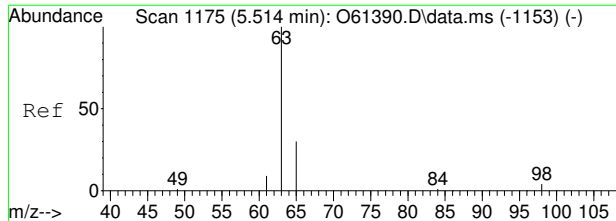


#5
 Methylene Chloride
 Concen: 0.09 ug/L
 RT: 4.711 min Scan# 962
 Delta R.T. 0.004 min
 Lab File: O61411.d
 Acq: 16 Sep 2020 3:11 pm

Tgt Ion	Resp	Lower	Upper
49	4919		
84	42.7	13.2	73.2
86	26.6	0.0	57.3



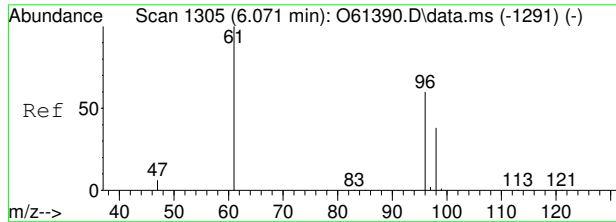
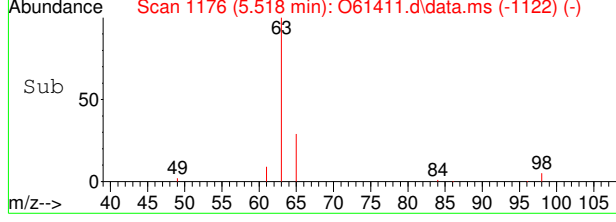
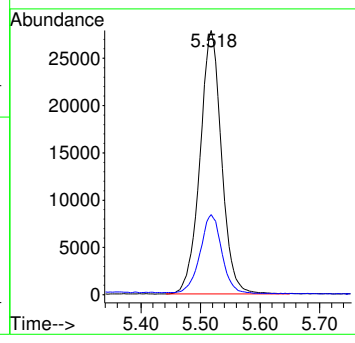
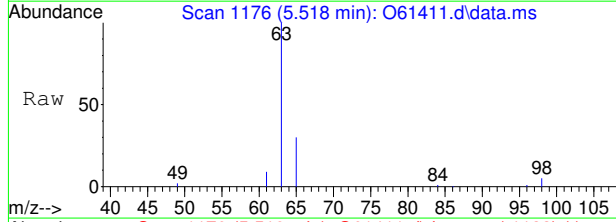
7.1.54
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#7
 1,1-Dichloroethane
 Concen: 1.91 ug/L
 RT: 5.518 min Scan# 1176
 Delta R.T. 0.004 min
 Lab File: O61411.d
 Acq: 16 Sep 2020 3:11 pm

Tgt Ion: 63 Resp: 70146

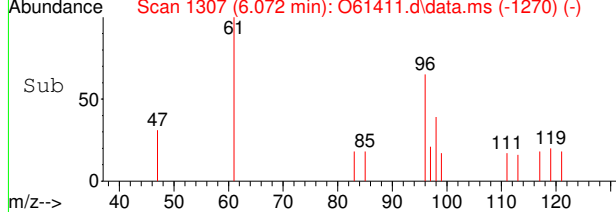
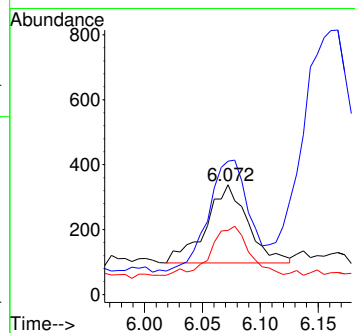
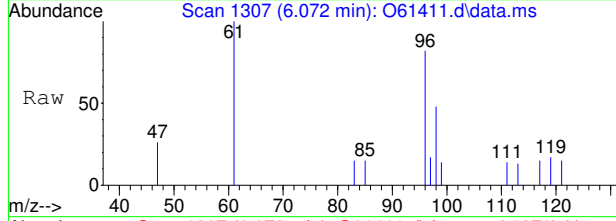
Ion	Ratio	Lower	Upper
63	100		
65	29.9	0.2	60.2



#8
 cis-1,2-Dichloroethene
 Concen: 0.04 ug/L
 RT: 6.072 min Scan# 1307
 Delta R.T. 0.001 min
 Lab File: O61411.d
 Acq: 16 Sep 2020 3:11 pm

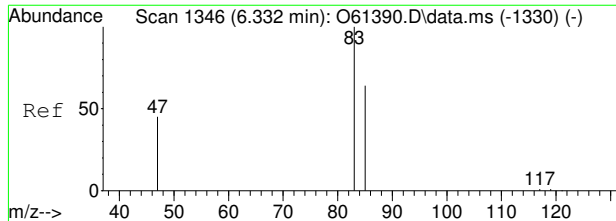
Tgt Ion: 96 Resp: 607

Ion	Ratio	Lower	Upper
96	100		
61	140.7	135.7	195.7
98	57.3	33.1	93.1



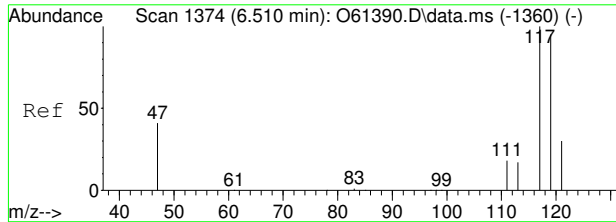
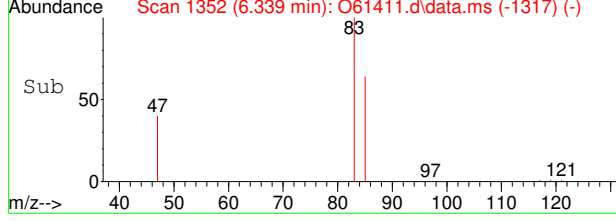
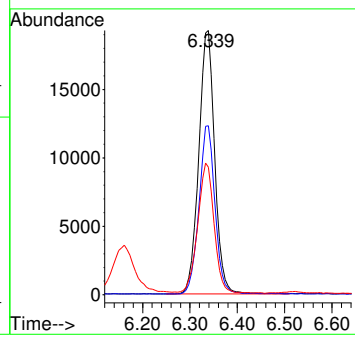
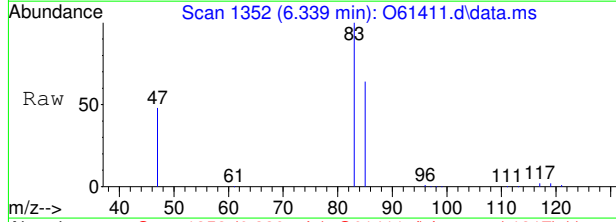
7.1.54
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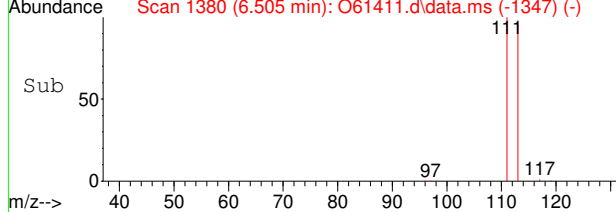
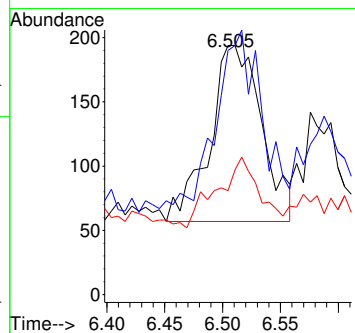
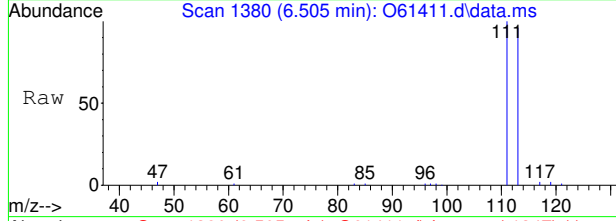
#9
 Chloroform
 Concen: 1.45 ug/L
 RT: 6.339 min Scan# 1352
 Delta R.T. 0.007 min
 Lab File: O61411.d
 Acq: 16 Sep 2020 3:11 pm

Tgt Ion	Ratio	Lower	Upper
83	100		
85	63.8	33.9	93.9
47	47.2	14.9	74.9

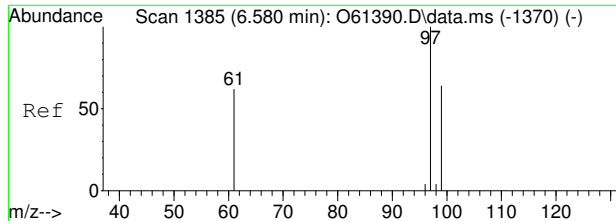


#10
 Carbon Tetrachloride
 Concen: 0.02 ug/L
 RT: 6.505 min Scan# 1380
 Delta R.T. -0.005 min
 Lab File: O61411.d
 Acq: 16 Sep 2020 3:11 pm

Tgt Ion	Ratio	Lower	Upper
117	100		
119	85.4	65.4	125.4
121	16.8	0.1	60.1

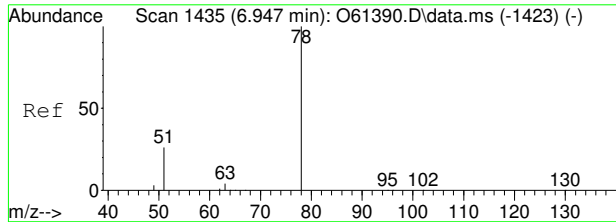
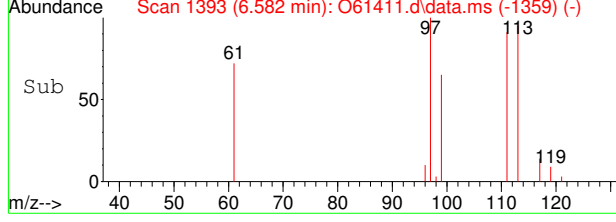
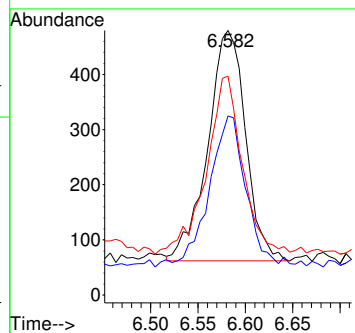
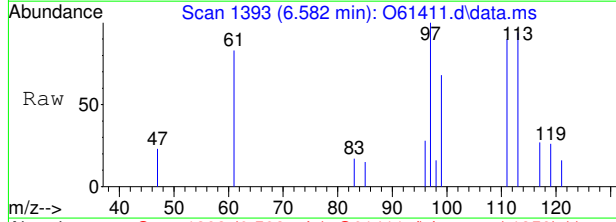


7.1.54
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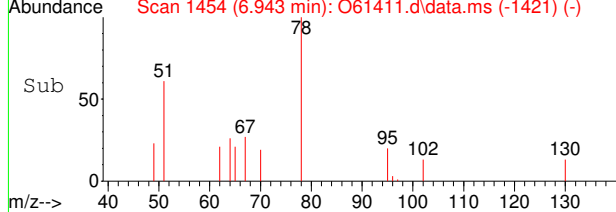
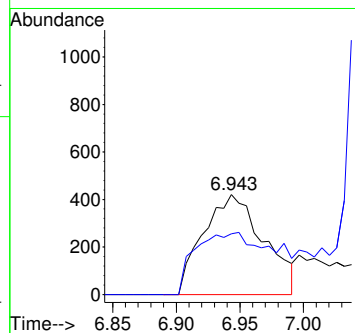
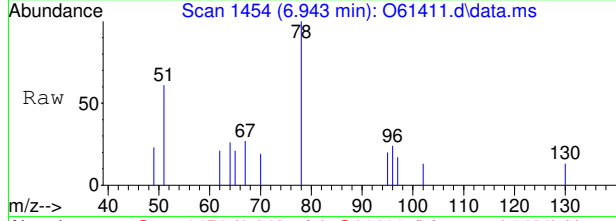
#11
 1,1,1-Trichloroethane
 Concen: 0.05 ug/L
 RT: 6.582 min Scan# 1393
 Delta R.T. 0.002 min
 Lab File: O61411.d
 Acq: 16 Sep 2020 3:11 pm

Tgt Ion	Resp	Lower	Upper
97	1164		
97	100		
99	64.1	33.8	93.8
61	76.3	32.6	92.6



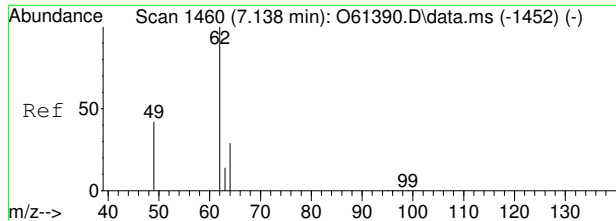
#12
 Benzene
 Concen: 0.02 ug/L m
 RT: 6.943 min Scan# 1454
 Delta R.T. -0.004 min
 Lab File: O61411.d
 Acq: 16 Sep 2020 3:11 pm

Tgt Ion	Resp	Lower	Upper
78	1393		
78	100		
51	60.8	0.0	56.0#

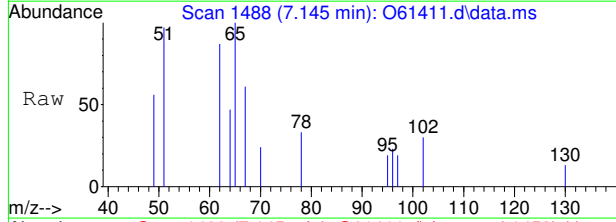


7.1.54
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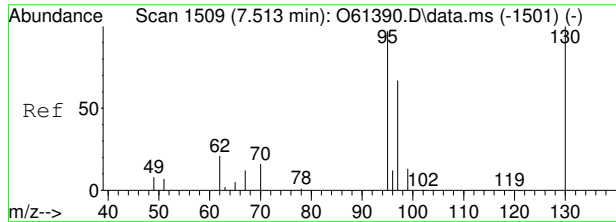
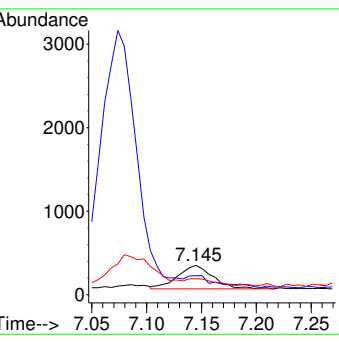
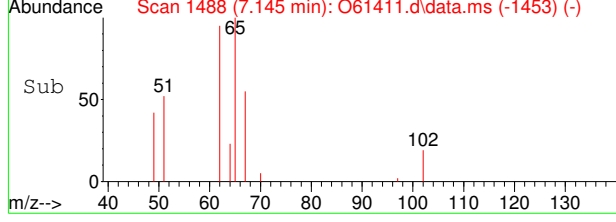


#14
 1,2-Dichloroethane
 Concen: 0.02 ug/L
 RT: 7.145 min Scan# 1488
 Delta R.T. 0.007 min
 Lab File: O61411.d
 Acq: 16 Sep 2020 3:11 pm

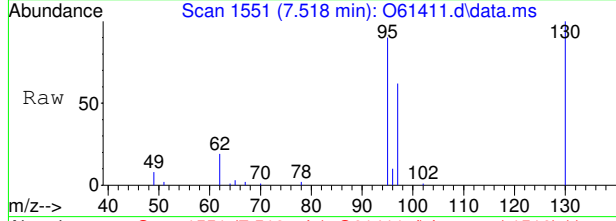


Tgt Ion: 62 Resp: 634

Ion	Ratio	Lower	Upper
62	100		
49	48.2	13.6	73.6
64	30.1	0.0	58.8

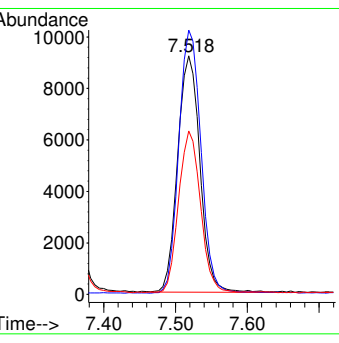
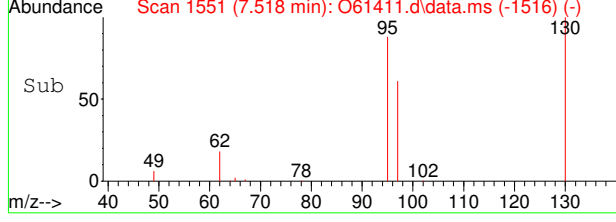


#15
 Trichloroethene
 Concen: 1.15 ug/L
 RT: 7.518 min Scan# 1551
 Delta R.T. 0.005 min
 Lab File: O61411.d
 Acq: 16 Sep 2020 3:11 pm

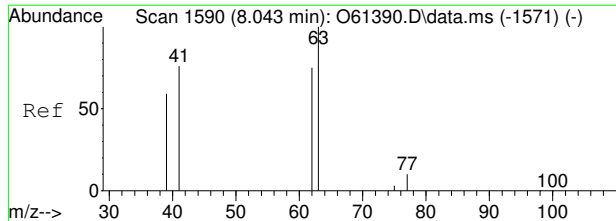


Tgt Ion: 95 Resp: 19871

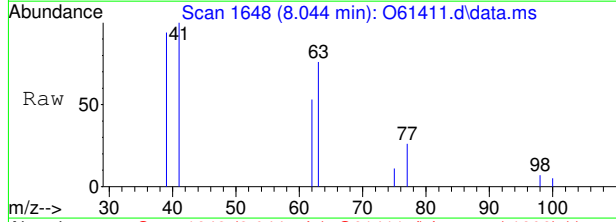
Ion	Ratio	Lower	Upper
95	100		
130	111.5	72.6	132.6
97	68.3	38.6	98.6



7.154
7

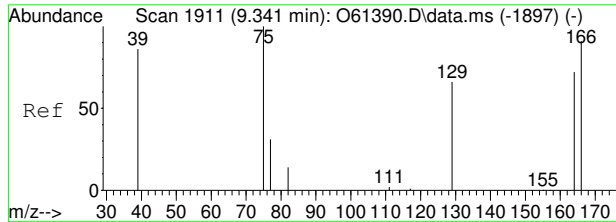
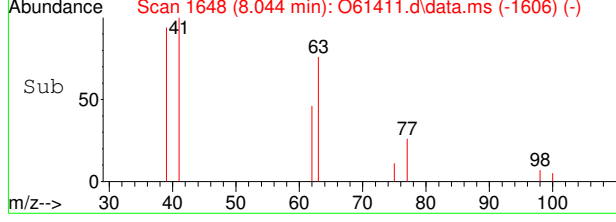
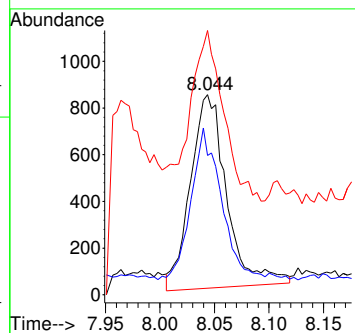


#16
 1,2-Dichloropropane
 Concen: 0.10 ug/L
 RT: 8.044 min Scan# 1648
 Delta R.T. 0.001 min
 Lab File: O61411.d
 Acq: 16 Sep 2020 3:11 pm

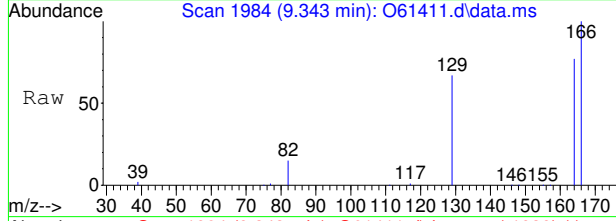


Tgt Ion: 63 Resp: 1917

Ion	Ratio	Lower	Upper
63	100		
62	67.9	44.5	104.5
41	89.4	45.9	105.9

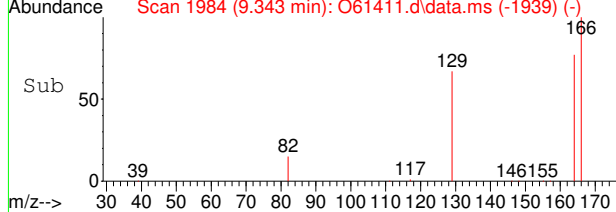
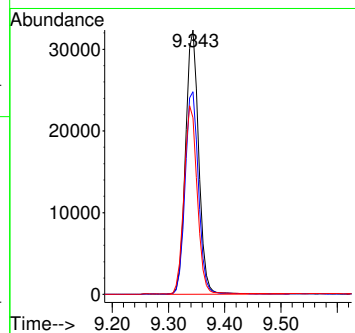


#21
 Tetrachloroethene
 Concen: 2.98 ug/L
 RT: 9.343 min Scan# 1984
 Delta R.T. 0.002 min
 Lab File: O61411.d
 Acq: 16 Sep 2020 3:11 pm



Tgt Ion: 166 Resp: 52122

Ion	Ratio	Lower	Upper
166	100		
164	76.6	49.1	109.1
129	66.7	42.2	102.2



7.1.54
 7

Manual Integration Approval Summary

Sample Number: FA78551-27 **Method:** SW846 8260B BY SIM
Lab FileID: O61411.D **Analyst approved:** 09/17/20 15:30 Juan Garcia
Injection Time: 09/16/20 15:11 **Supervisor approved:** 09/18/20 14:42 Melissa Mangual

Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzene	71-43-2		6.94	Poor instrument integration

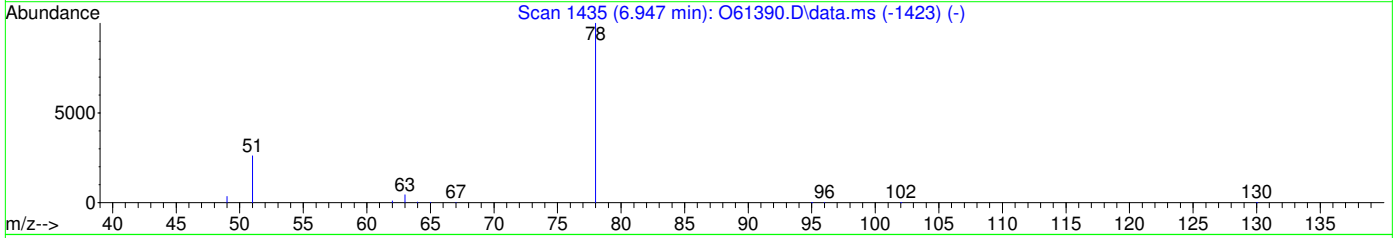
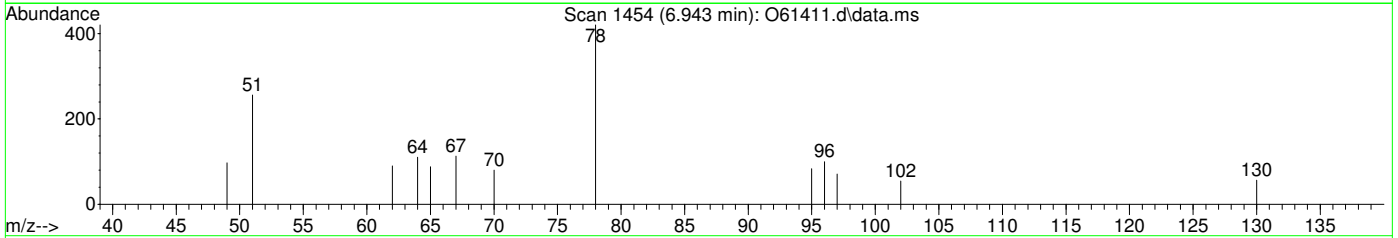
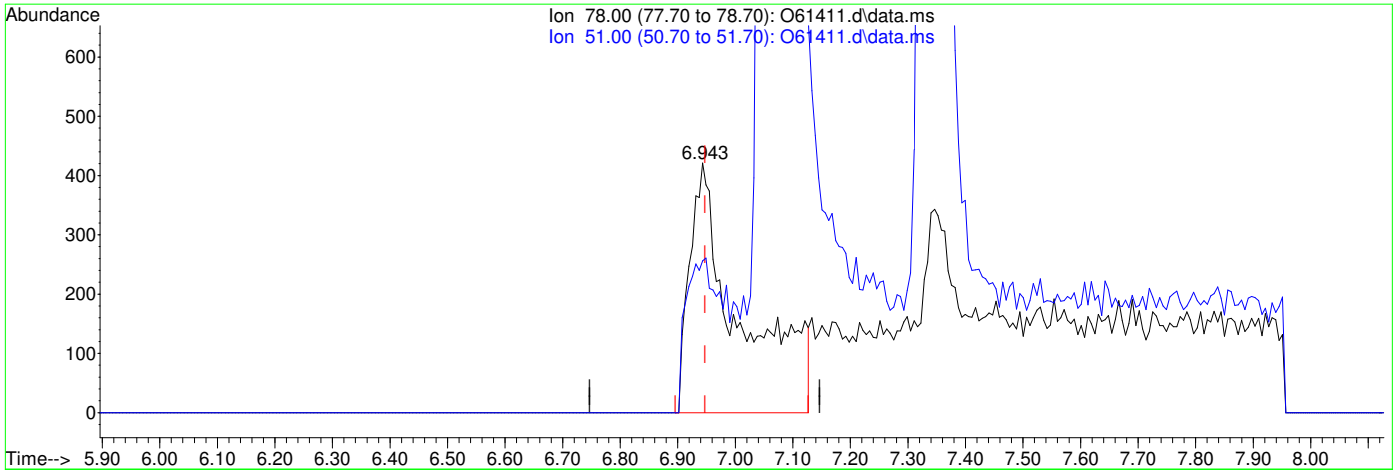
7.1.54.1

7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-17-2020\vo2363\
 Data File : O61411.d
 Acq On : 16 Sep 2020 3:11 pm
 Operator : akarig
 Sample : FA78551-27
 Misc : MS47193,VO2363,,,,,
 ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 17 04:42:43 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091520.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 16 09:02:25 2020
 Response via : Initial Calibration



TIC: O61411.d\data.ms

(12) Benzene ()

6.943min (-0.004) 0.04ug/L

response 2515

Ion	Exp%	Act%
78.00	100	100
51.00	26.00	60.81#
0.00	0.00	0.00
0.00	0.00	0.00

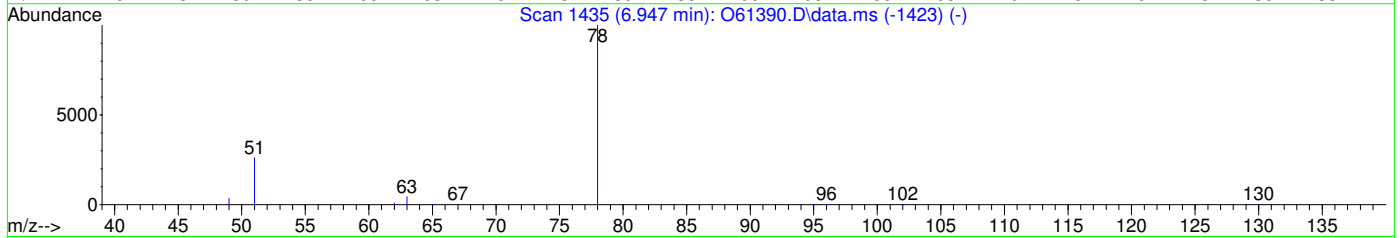
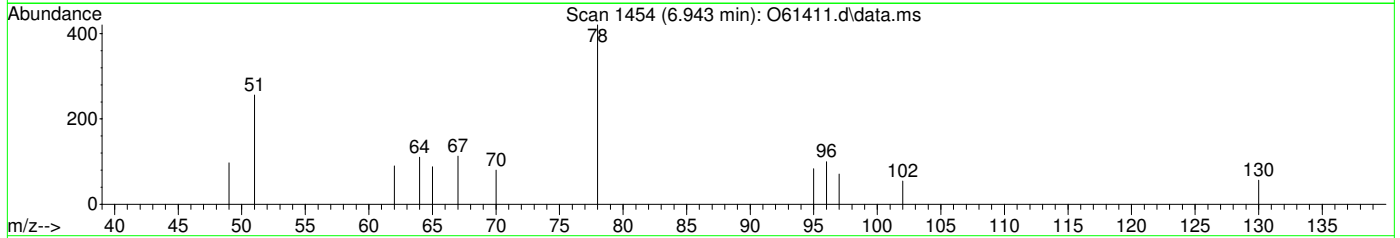
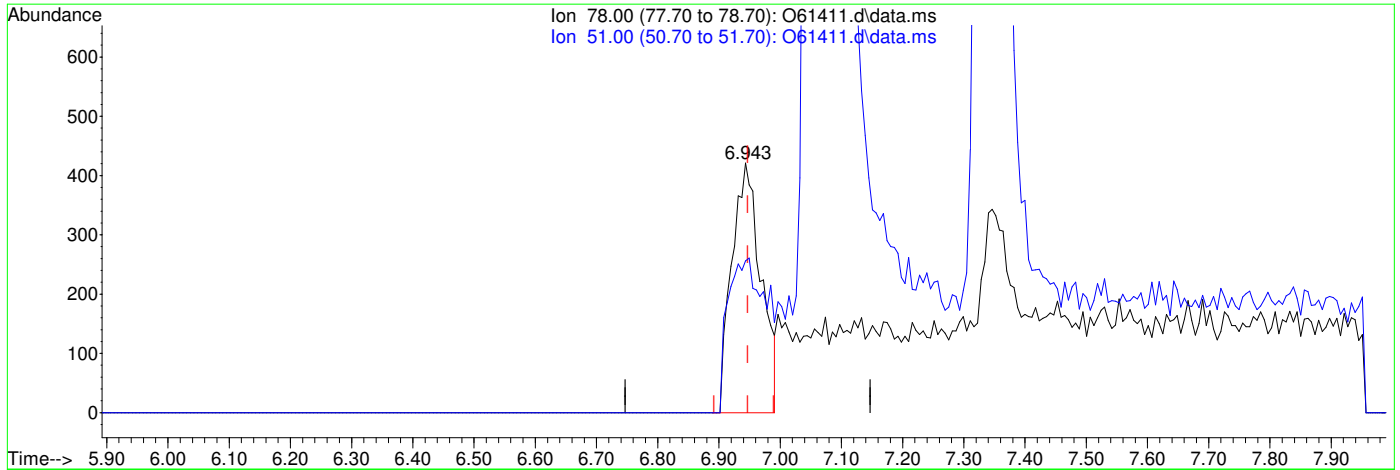
7.1.54.2

7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-17-2020\vo2363\
 Data File : O61411.d
 Acq On : 16 Sep 2020 3:11 pm
 Operator : akarig
 Sample : FA78551-27
 Misc : MS47193,VO2363,,,,,
 ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 17 04:42:43 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091520.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 16 09:02:25 2020
 Response via : Initial Calibration



TIC: O61411.d\data.ms

(12) Benzene ()

6.943min (-0.004) 0.02ug/L m

response 1393

Ion	Exp%	Act%
78.00	100	100
51.00	26.00	60.81#
0.00	0.00	0.00
0.00	0.00	0.00

7.1.54.3
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-14-2020\VO2358\
 Data File : O61276.d
 Acq On : 12 Sep 2020 11:55 am
 Operator : stutip
 Sample : mb
 Misc : MS47192,VO2358,,,,,
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 14 07:17:29 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Sun Sep 13 19:20:40 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

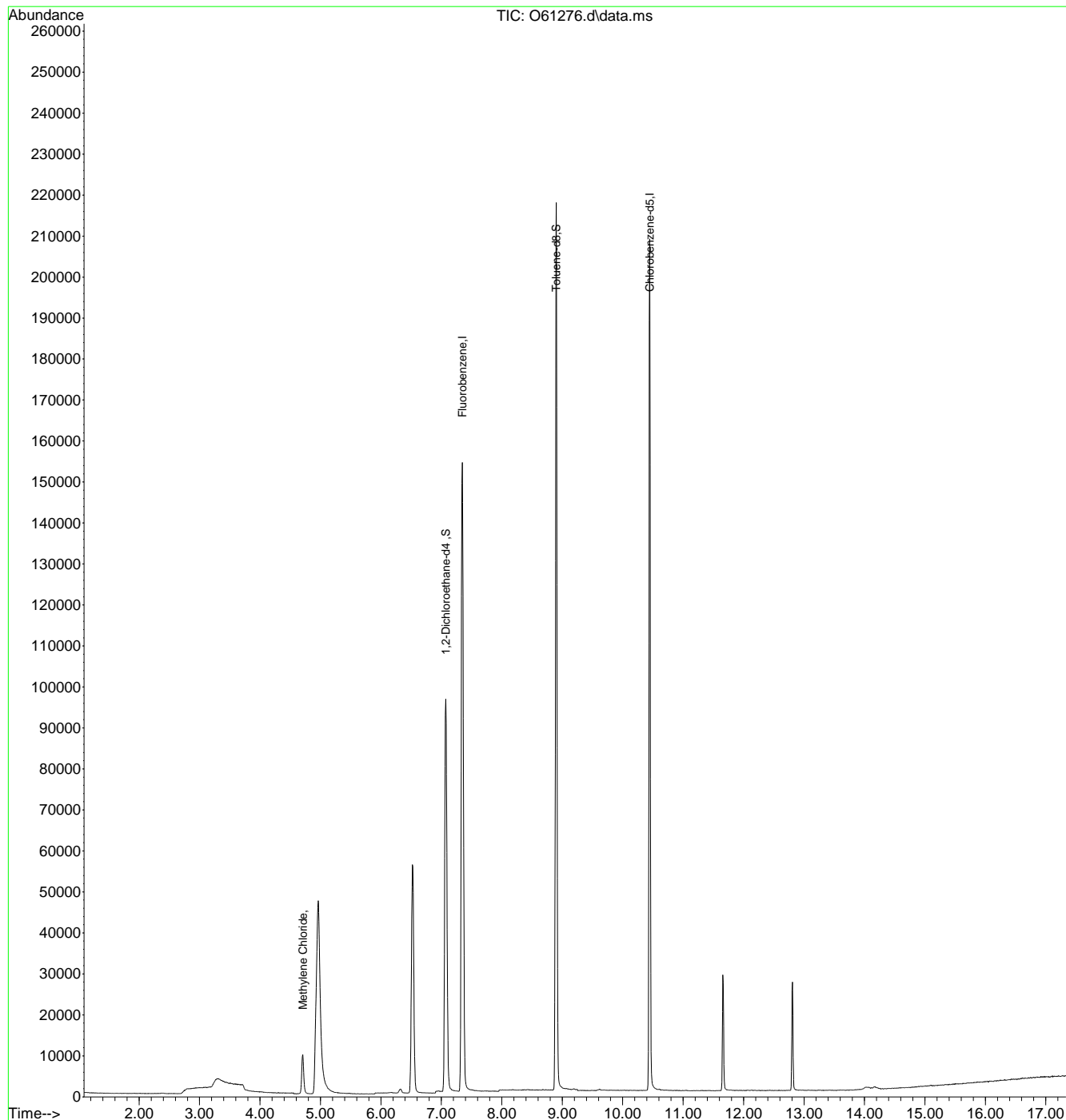
Internal Standards						
1) Fluorobenzene	7.346	96	252883	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.447	117	194316	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.073	65	106679	5.22	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	104.40%	
19) Toluene-d8	8.900	98	219465	5.01	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	100.20%	
Target Compounds						
5) Methylene Chloride	4.707	49	13212	0.24	ug/L	Qvalue 97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

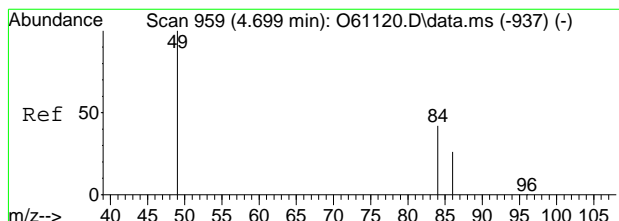
Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-14-2020\VO2358\
 Data File : O61276.d
 Acq On : 12 Sep 2020 11:55 am
 Operator : stutip
 Sample : mb
 Misc : MS47192,VO2358,,,,,
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 14 07:17:29 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Sun Sep 13 19:20:40 2020
 Response via : Initial Calibration



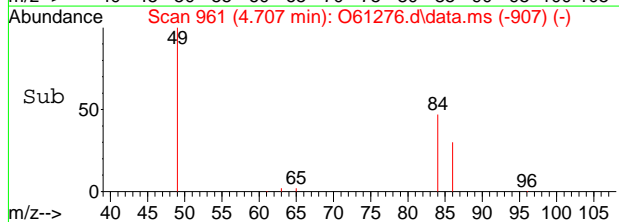
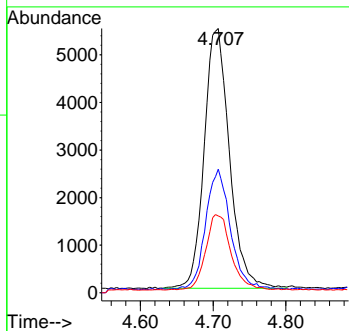
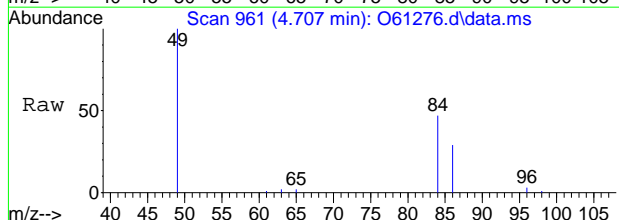
7.2.1
7





#5
 Methylene Chloride
 Concen: 0.24 ug/L
 RT: 4.707 min Scan# 961
 Delta R.T. 0.004 min
 Lab File: O61276.d
 Acq: 12 Sep 2020 11:55 am

Tgt Ion	Ratio	Lower	Upper
49	100		
84	46.1	17.9	77.9
86	28.5	0.0	59.8



7.2.1
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-14-2020\VO2359\
 Data File : O61296.d
 Acq On : 12 Sep 2020 7:03 pm
 Operator : stutip
 Sample : mb
 Misc : MS47192,VO2359,,,,,
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 14 07:19:48 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Sun Sep 13 19:20:40 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

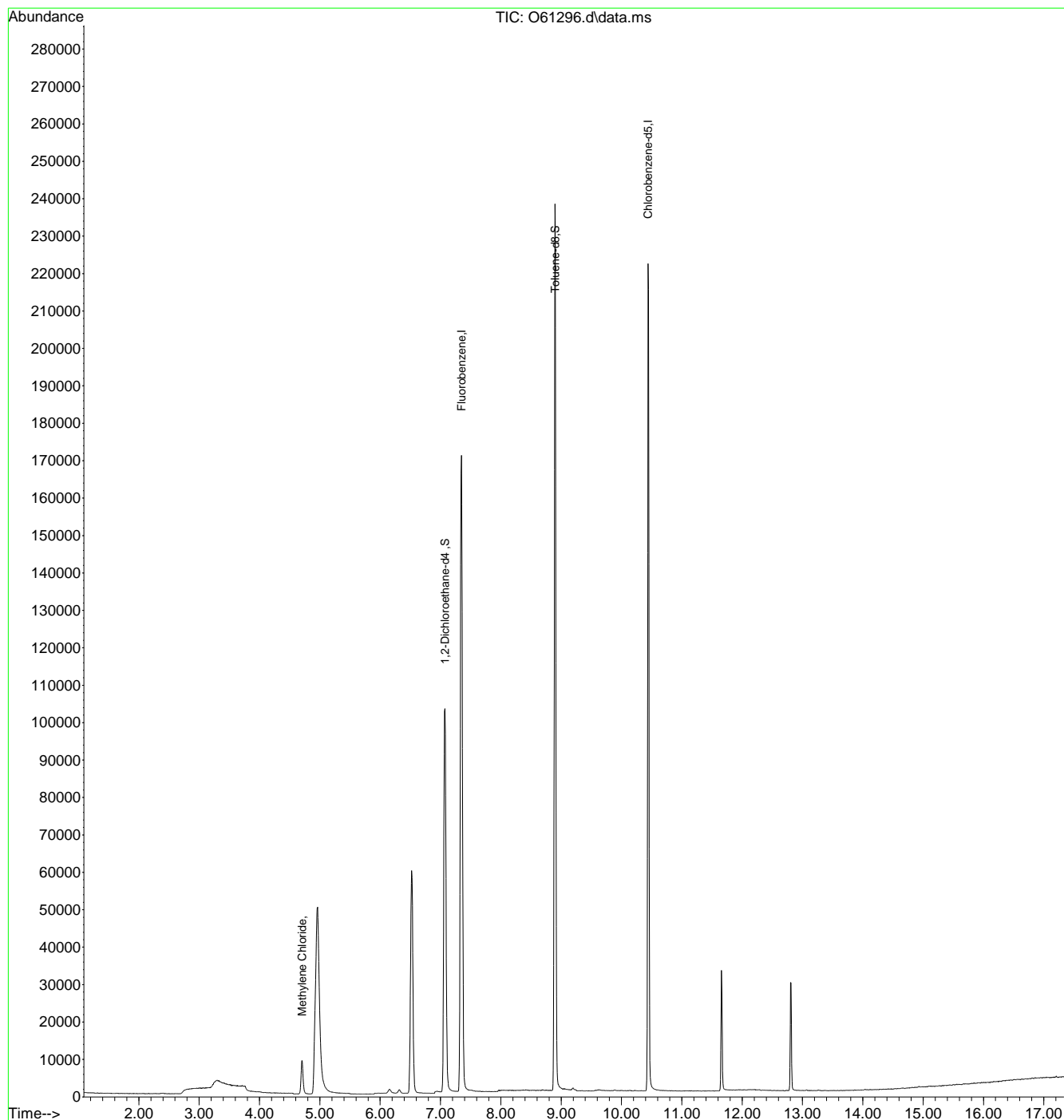
Internal Standards						
1) Fluorobenzene	7.346	96	277430	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.441	117	211417	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.074	65	115062	5.13	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	102.60%	
19) Toluene-d8	8.896	98	240488	5.04	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	100.80%	
Target Compounds						
5) Methylene Chloride	4.703	49	12248	0.20	ug/L	Qvalue 97

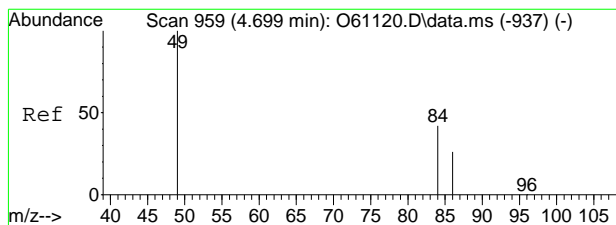
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-14-2020\VO2359\
Data File : O61296.d
Acq On : 12 Sep 2020 7:03 pm
Operator : stutip
Sample : mb
Misc : MS47192,VO2359,,,,,
ALS Vial : 2 Sample Multiplier: 1

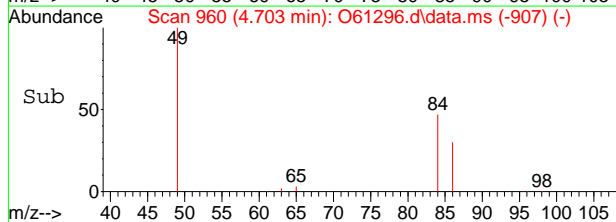
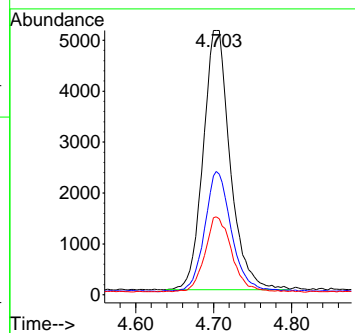
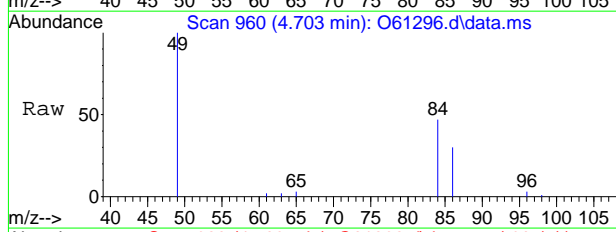
Quant Time: Sep 14 07:19:48 2020
Quant Method : C:\msdchem\1\methods\SIMCL091120.M
Quant Title : Standard Methods 6200B
QLast Update : Sun Sep 13 19:20:40 2020
Response via : Initial Calibration





#5
 Methylene Chloride
 Concen: 0.20 ug/L
 RT: 4.703 min Scan# 960
 Delta R.T. 0.000 min
 Lab File: O61296.d
 Acq: 12 Sep 2020 7:03 pm

Tgt Ion	Ratio	Lower	Upper
49	100		
84	45.8	17.9	77.9
86	28.8	0.0	59.8



7.22
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\091420\
 Data File : Z62325.D
 Acq On : 14 Sep 2020 1:57 pm
 Operator : JuanG
 Sample : MB
 Misc : MS47199,VZ2417,,,,,
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 15 18:50:24 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Sun Sep 13 13:38:26 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Fluorobenzene	7.401	96	1691138	5.00	ppb	0.00
18) Chlorobenzene-d5	10.511	117	1358393	5.00	ppb	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.130	65	586969	5.61	ppb	0.00
Spiked Amount	5.000	Range	79 - 125	Recovery	=	112.20%
19) Toluene-d8	8.961	98	1652313	5.01	ppb	0.00
Spiked Amount	5.000	Range	70 - 130	Recovery	=	100.20%
Target Compounds						
5) Methylene Chloride	4.713	84	82977	0.50	ppb	Qvalue 91

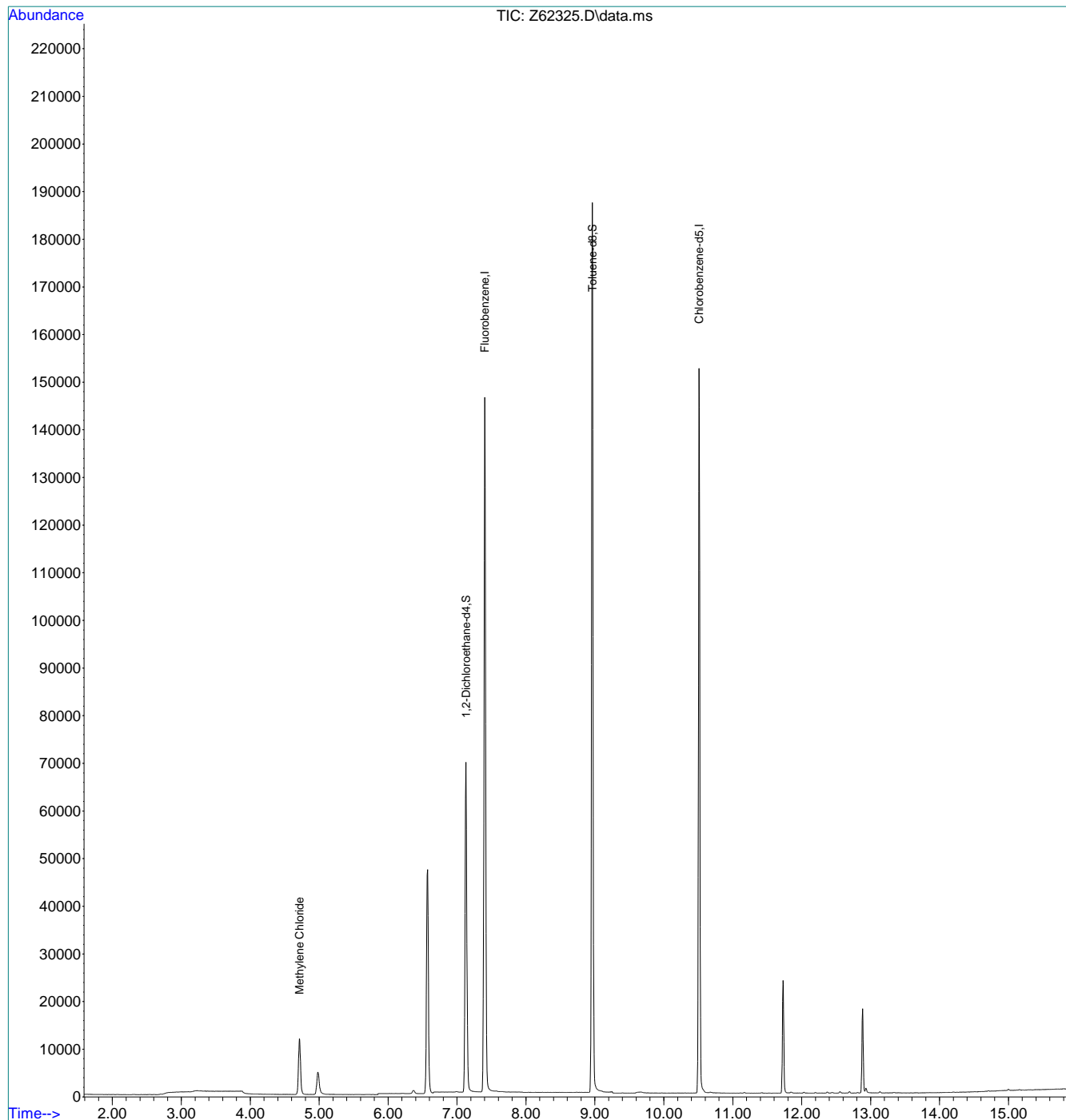
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.2.3
7

Quantitation Report (QT Reviewed)

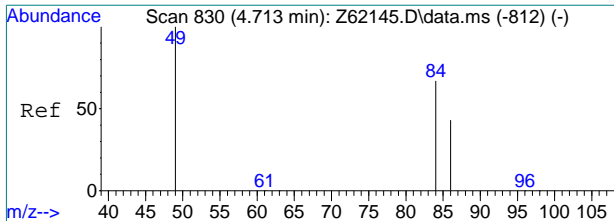
Data Path : C:\msdchem\1\data\091420\
 Data File : Z62325.D
 Acq On : 14 Sep 2020 1:57 pm
 Operator : JuanG
 Sample : MB
 Misc : MS47199,VZ2417,,,,,
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 15 18:50:24 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Sun Sep 13 13:38:26 2020
 Response via : Initial Calibration



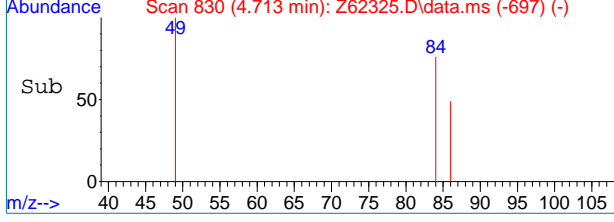
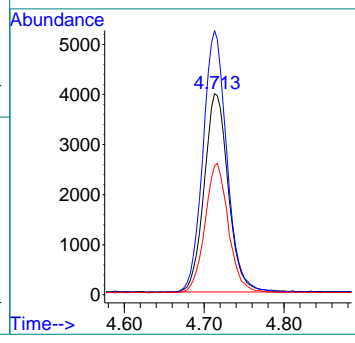
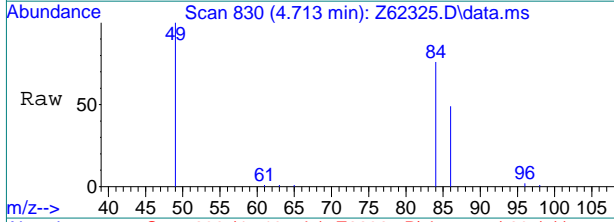
7.2.3
7





#5
 Methylene Chloride
 Concen: 0.50 ppb
 RT: 4.713 min Scan# 830
 Delta R.T. -0.000 min
 Lab File: Z62325.D
 Acq: 14 Sep 2020 1:57 pm

Tgt Ion	Ratio	Lower	Upper
84	100		
49	131.9	128.7	168.7
86	63.9	43.9	83.9



7.2.3
7



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\091520\
 Data File : Z62357.D
 Acq On : 15 Sep 2020 2:55 pm
 Operator : JuanG
 Sample : MB
 Misc : MS47199,VZ2418,,,,,
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 16 10:46:47 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Sun Sep 13 13:38:26 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Fluorobenzene	7.401	96	1858608	5.00	ppb	0.00
18) Chlorobenzene-d5	10.511	117	1502088	5.00	ppb	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.130	65	669468	5.82	ppb	0.00
Spiked Amount	5.000	Range	79 - 125	Recovery	=	116.40%
19) Toluene-d8	8.961	98	1803530	4.94	ppb	0.00
Spiked Amount	5.000	Range	70 - 130	Recovery	=	98.80%
Target Compounds						
5) Methylene Chloride	4.713	84	192088	1.05	ppb	Qvalue 90

(#) = qualifier out of range (m) = manual integration (+) = signals summed

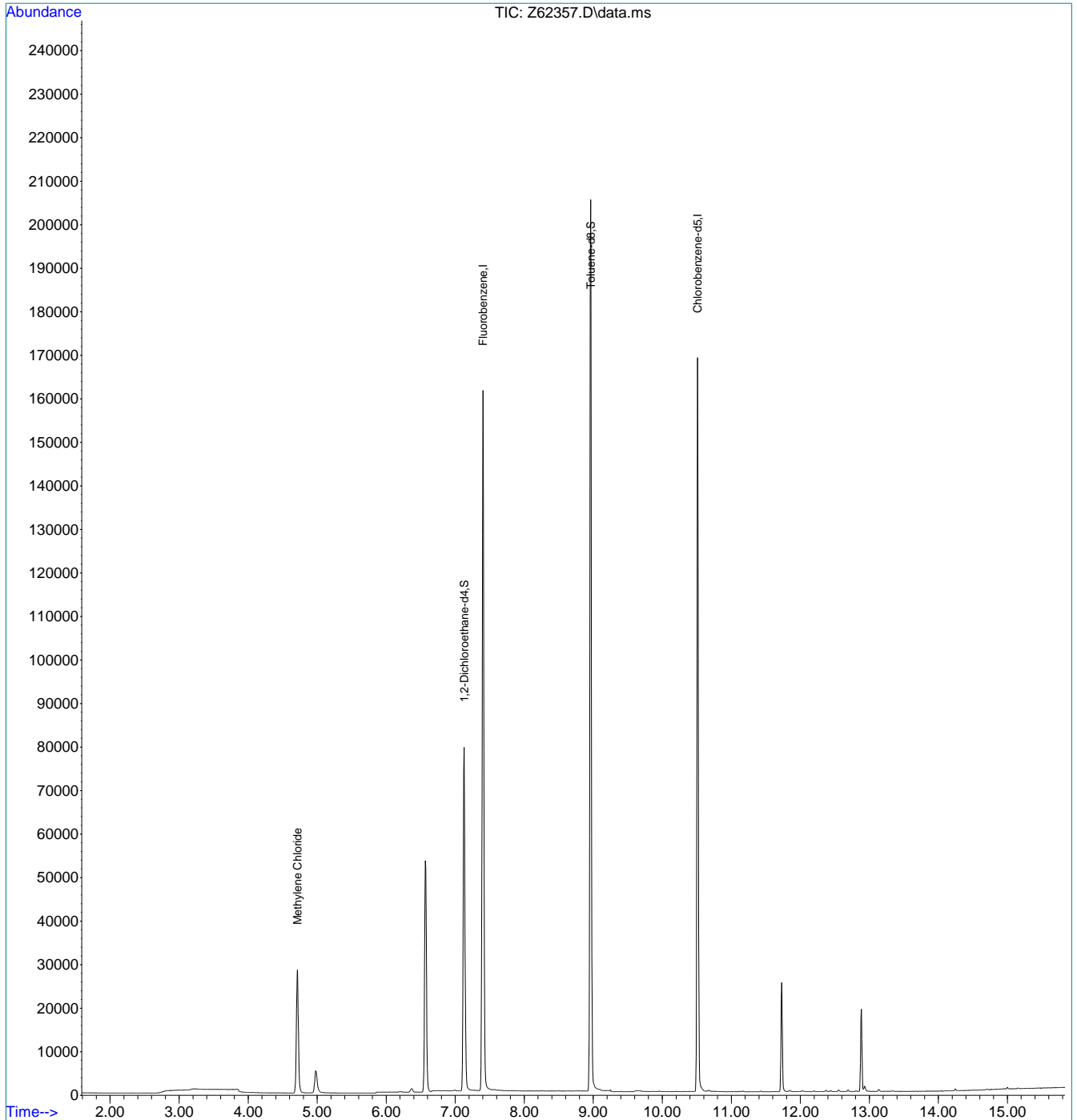
7.24

7

Quantitation Report (QT Reviewed)

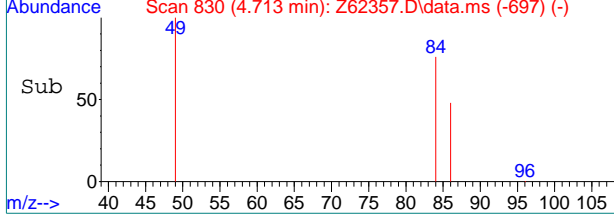
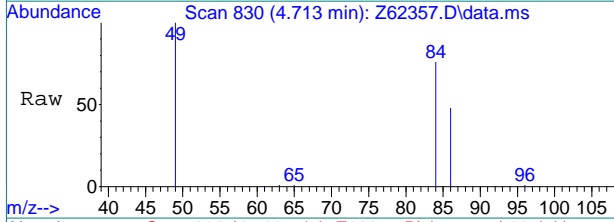
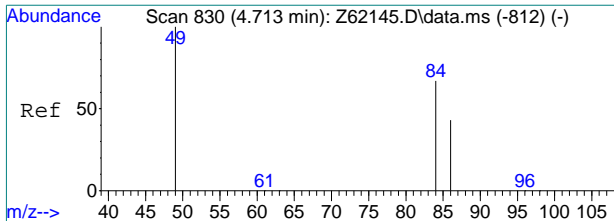
Data Path : C:\msdchem\1\data\091520\
 Data File : Z62357.D
 Acq On : 15 Sep 2020 2:55 pm
 Operator : JuanG
 Sample : MB
 Misc : MS47199,VZ2418,,,,,
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 16 10:46:47 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Sun Sep 13 13:38:26 2020
 Response via : Initial Calibration



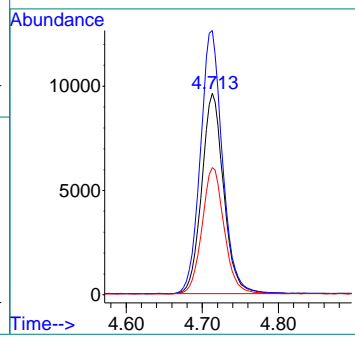
7.2.4
7





#5
 Methylene Chloride
 Concen: 1.05 ppb
 RT: 4.713 min Scan# 830
 Delta R.T. 0.000 min
 Lab File: Z62357.D
 Acq: 15 Sep 2020 2:55 pm

Tgt Ion	Ratio	Lower	Upper
84	100		
49	131.4	128.7	168.7
86	63.1	43.9	83.9



7.2.4
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-14-2020\VO2358\
 Data File : O61274.d
 Acq On : 12 Sep 2020 11:14 am
 Operator : stutip
 Sample : bs
 Misc : MS47191,VO2358,,,,,
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 14 07:28:25 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Sun Sep 13 19:20:40 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	

Internal Standards							
1) Fluorobenzene	7.340	96	316235	5.00	ug/L	0.00	
18) Chlorobenzene-d5	10.441	117	246436	5.00	ug/L	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.073	65	124521m	4.88	ug/L	0.00	
Spiked Amount	5.000	Range 74 - 125	Recovery	=	97.60%		
19) Toluene-d8	8.896	98	268859	4.84	ug/L	0.00	
Spiked Amount	5.000	Range 88 - 111	Recovery	=	96.80%		
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.901	62	177662	5.02	ug/L		97
3) Chloromethane	2.795	50	246019	4.71	ug/L		93
4) 1,1-Dichloroethene	4.085	61	240242	5.50	ug/L		92
5) Methylene Chloride	4.696	49	336900	4.92	ug/L		98
6) trans-1,2-Dichloroethene	4.861	61	267688	5.31	ug/L		84
7) 1,1-Dichloroethane	5.506	63	303824	5.18	ug/L		100
8) cis-1,2-Dichloroethene	6.066	96	143194	4.94	ug/L		83
9) Chloroform	6.327	83	247176	4.90	ug/L		96
10) Carbon Tetrachloride	6.504	117	177618	5.16	ug/L		87
11) 1,1,1-Trichloroethane	6.576	97	195842	5.04	ug/L		93
12) Benzene	6.937	78	510441m	5.23	ug/L		
14) 1,2-Dichloroethane	7.139	62	234326	4.91	ug/L		92
15) Trichloroethene	7.512	95	152939	5.14	ug/L		88
16) 1,2-Dichloropropane	8.040	63	168857	5.18	ug/L		93
17) cis-1,3-Dichloropropene	8.707	75	165943	4.91	ug/L		100
20) trans-1,3-Dichloropropene	9.343	75	161313	4.98	ug/L		98
21) Tetrachloroethene	9.337	166	142567	5.28	ug/L		94
22) 1,4-Dichlorobenzene	12.827	146	287490	5.04	ug/L		97
23) 1,2-Dibromo-3-Chloropr...	14.037	75	45105	4.45	ug/L		87

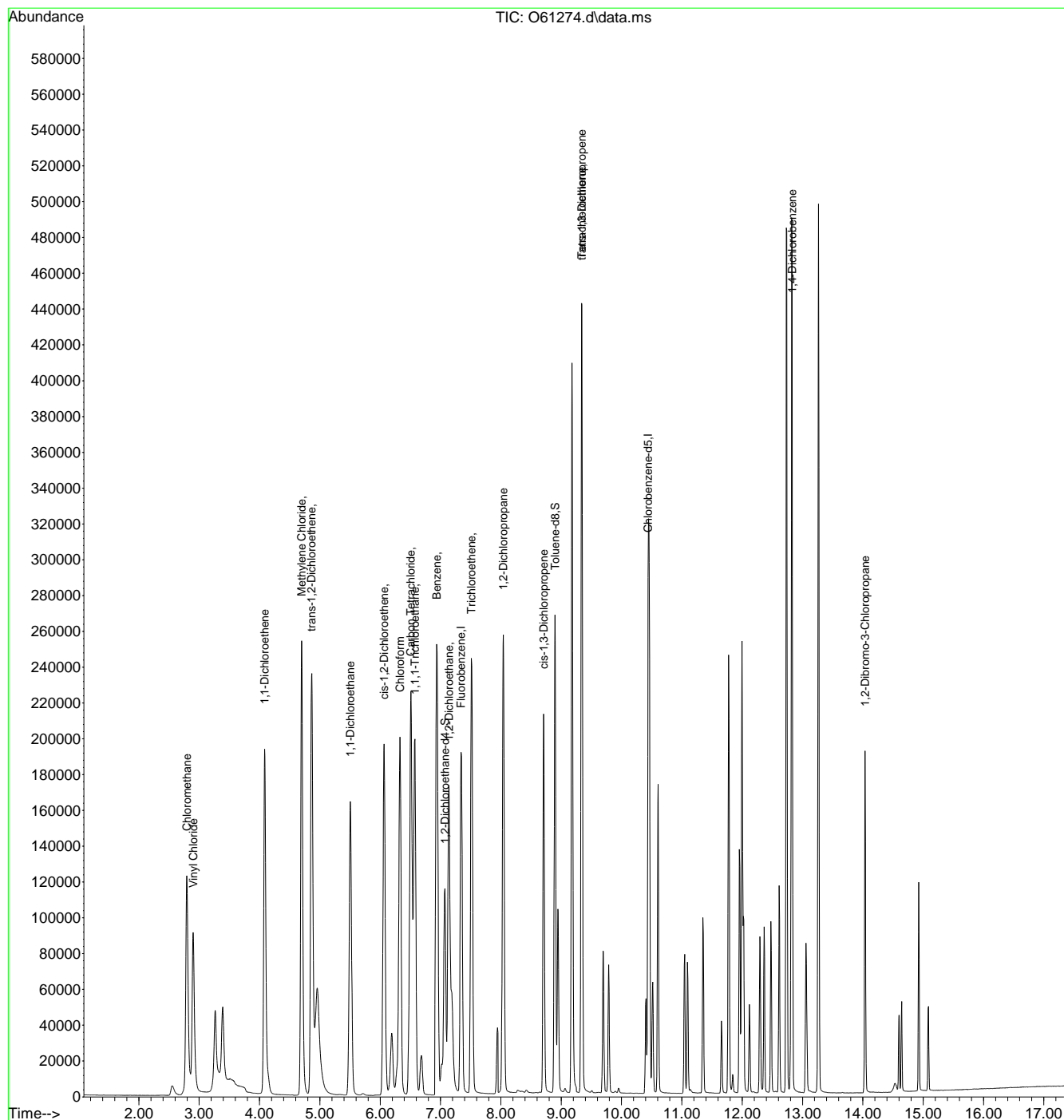
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.3.1
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-14-2020\VO2358\
 Data File : O61274.d
 Acq On : 12 Sep 2020 11:14 am
 Operator : stutip
 Sample : bs
 Misc : MS47191,VO2358,,,,,
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 14 07:28:25 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Sun Sep 13 19:20:40 2020
 Response via : Initial Calibration



7.3.1
7

Manual Integration Approval Summary

Sample Number: VO2358-BS **Method:** SW846 8260B BY SIM
Lab FileID: O61274.D **Analyst approved:** 09/14/20 07:45 Jennifer Ferreira
Injection Time: 09/12/20 11:14 **Supervisor approved:** 09/14/20 13:38 Melissa Mangual

Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzene	71-43-2		6.94	Poor instrument integration
1,2-Dichloroethane-D4	17060-07-0		7.07	Overlapping peak

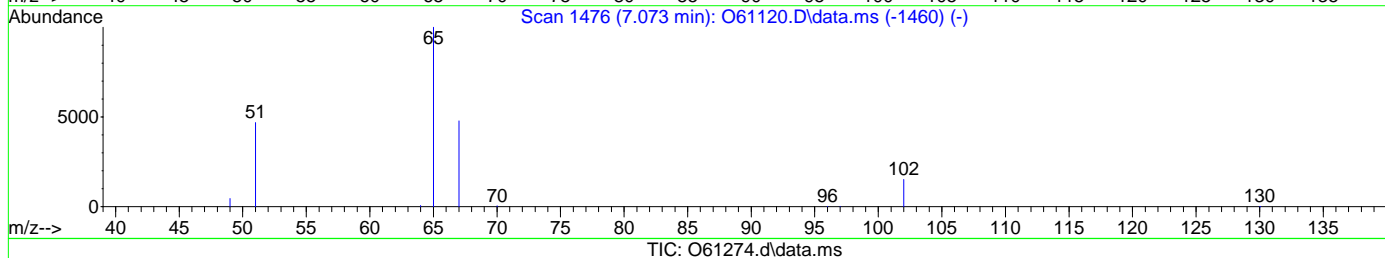
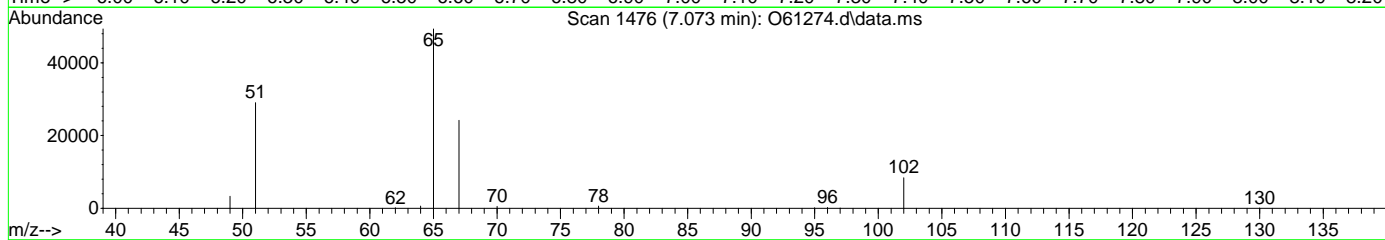
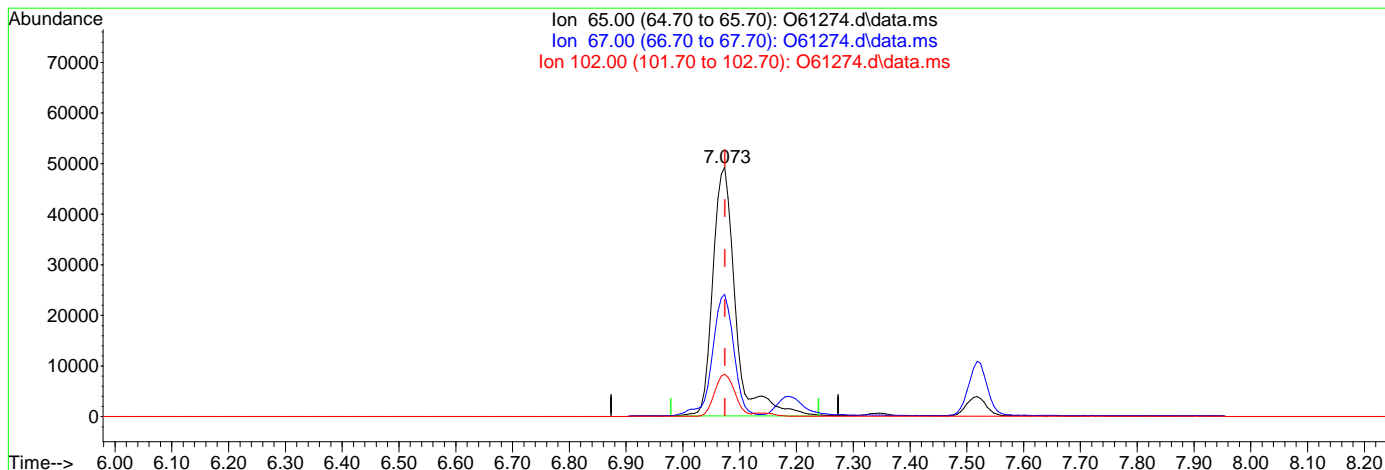
7.3.1.1

7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-14-2020\VO2358\
 Data File : O61274.d
 Acq On : 12 Sep 2020 11:14 am
 Operator : stutip
 Sample : bs
 Misc : MS47191,VO2358,,,,,
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 14 07:17:25 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Sun Sep 13 19:20:40 2020
 Response via : Initial Calibration



(13) 1,2-Dichloroethane-d4 (S)

7.073min (-0.001) 5.35ug/L

response 136560

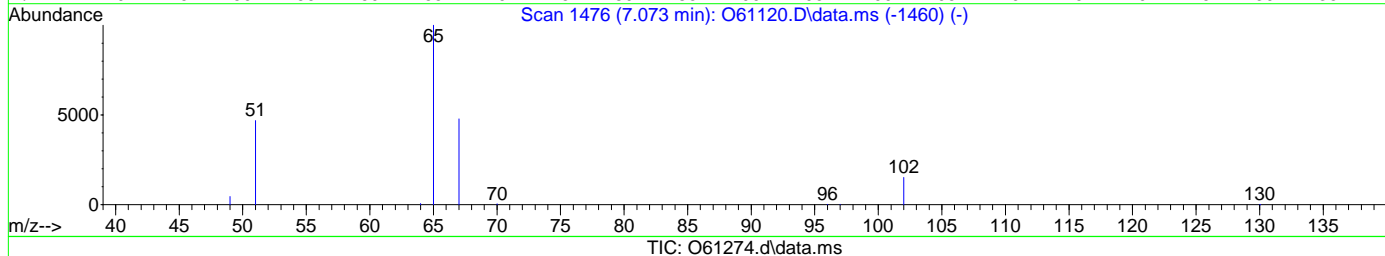
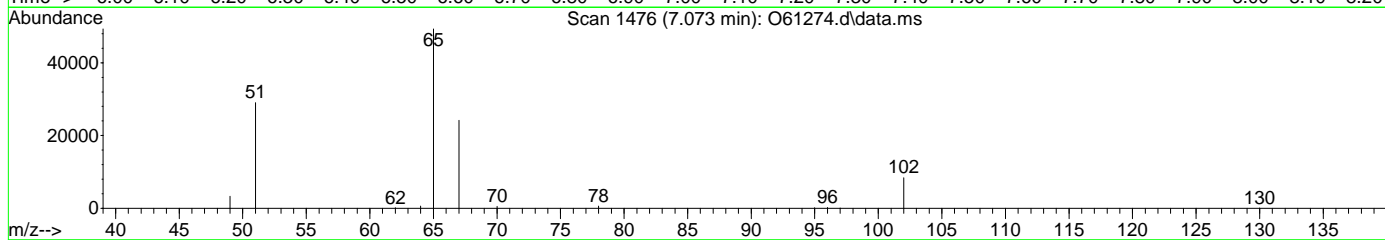
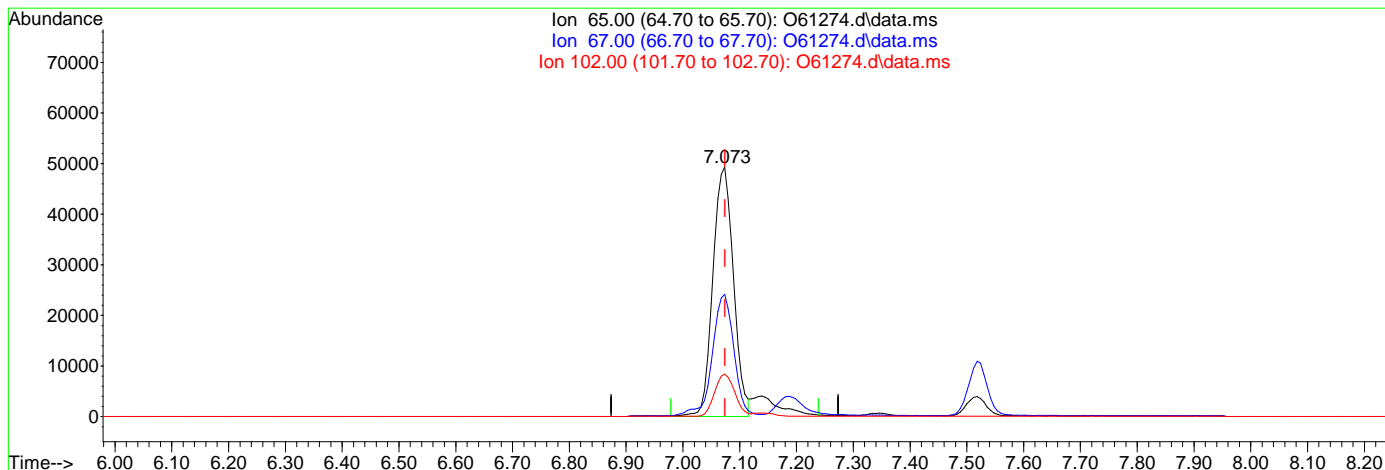
Ion	Exp%	Act%
65.00	100	100
67.00	53.50	48.79
102.00	16.10	16.97
0.00	0.00	0.00

7.3.12
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-14-2020\VO2358\
 Data File : O61274.d
 Acq On : 12 Sep 2020 11:14 am
 Operator : stutip
 Sample : bs
 Misc : MS47191,VO2358,,,,,
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 14 07:17:25 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Sun Sep 13 19:20:40 2020
 Response via : Initial Calibration



(13) 1,2-Dichloroethane-d4 (S)

7.073min (-0.001) 4.88ug/L m

response 124521

Ion	Exp%	Act%
-----	------	------

65.00	100	100
-------	-----	-----

67.00	53.50	49.00
-------	-------	-------

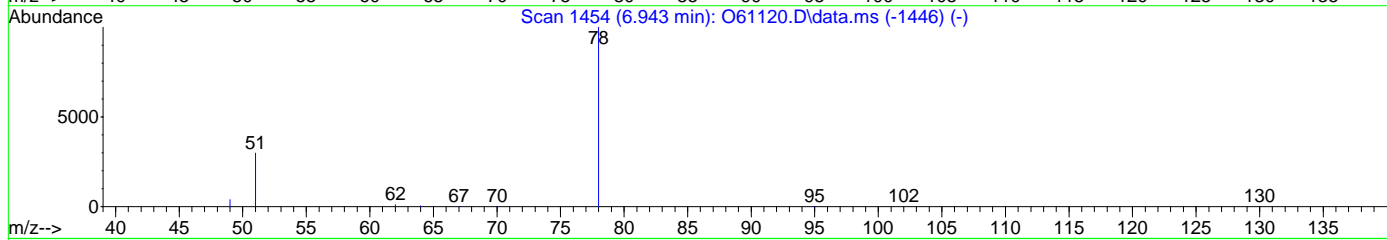
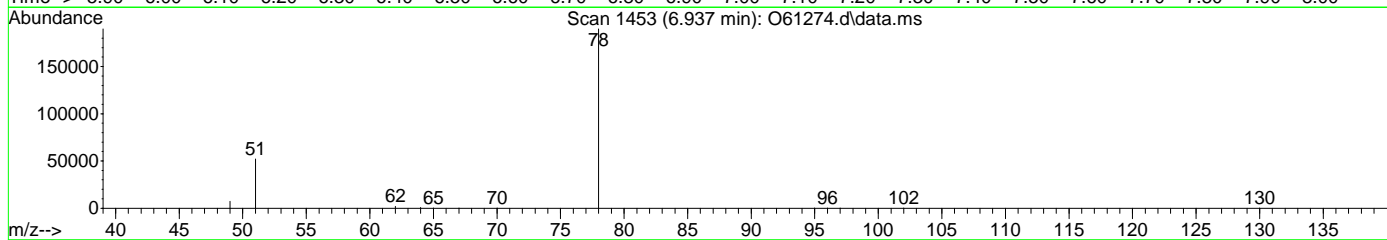
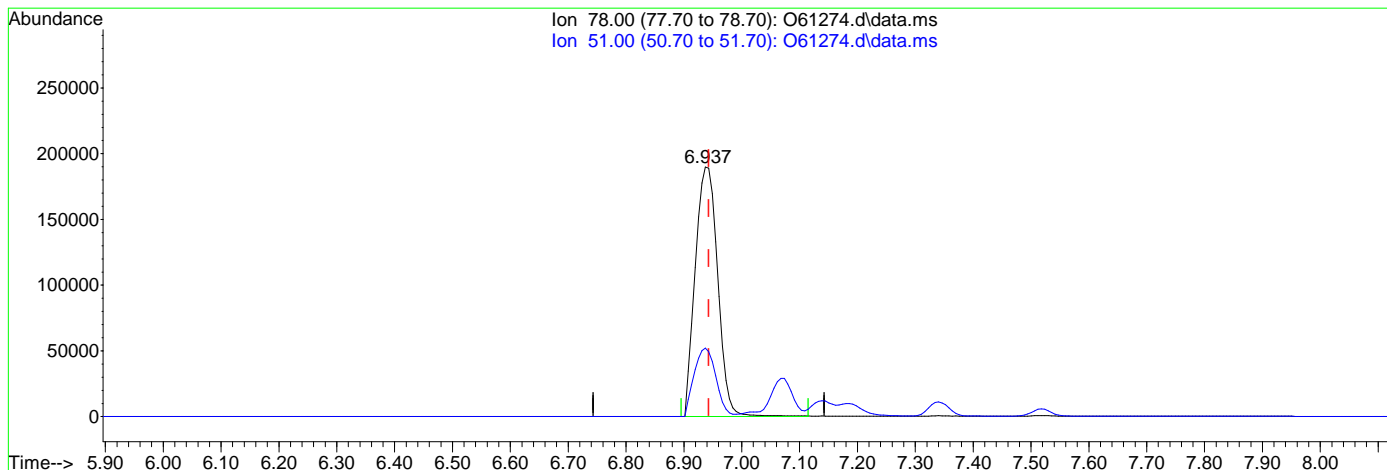
102.00	16.10	17.03
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0.00	0.00	0.00
------	------	------

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-14-2020\VO2358\
 Data File : O61274.d
 Acq On : 12 Sep 2020 11:14 am
 Operator : stutip
 Sample : bs
 Misc : MS47191,VO2358,,,,,
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 14 07:17:25 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Sun Sep 13 19:20:40 2020
 Response via : Initial Calibration



(12) Benzene ()

6.937min (-0.006) 5.26ug/L

response 513746

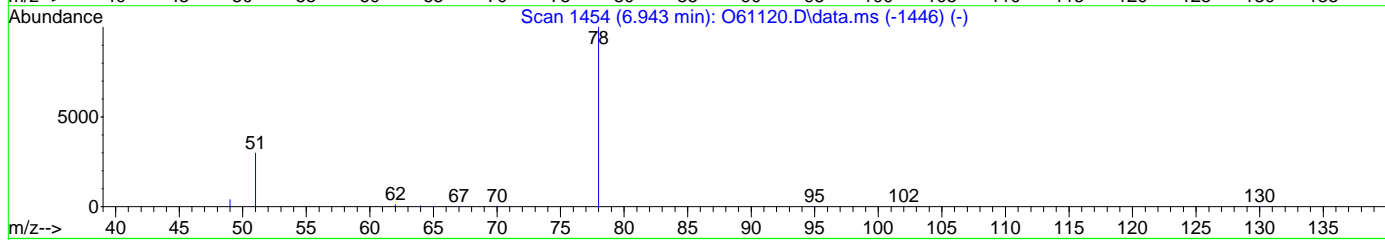
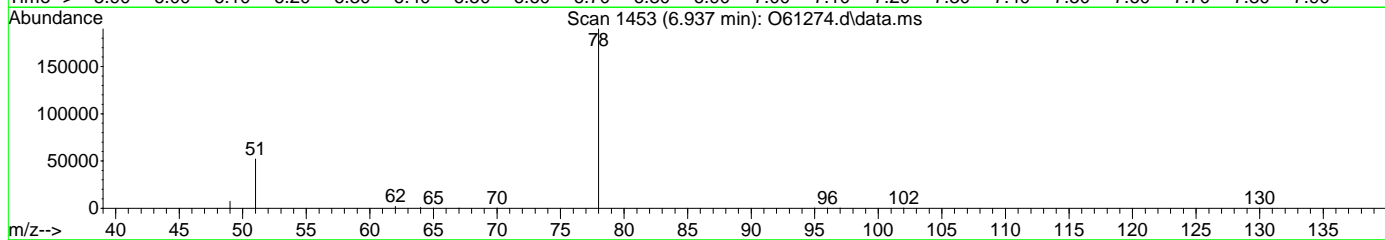
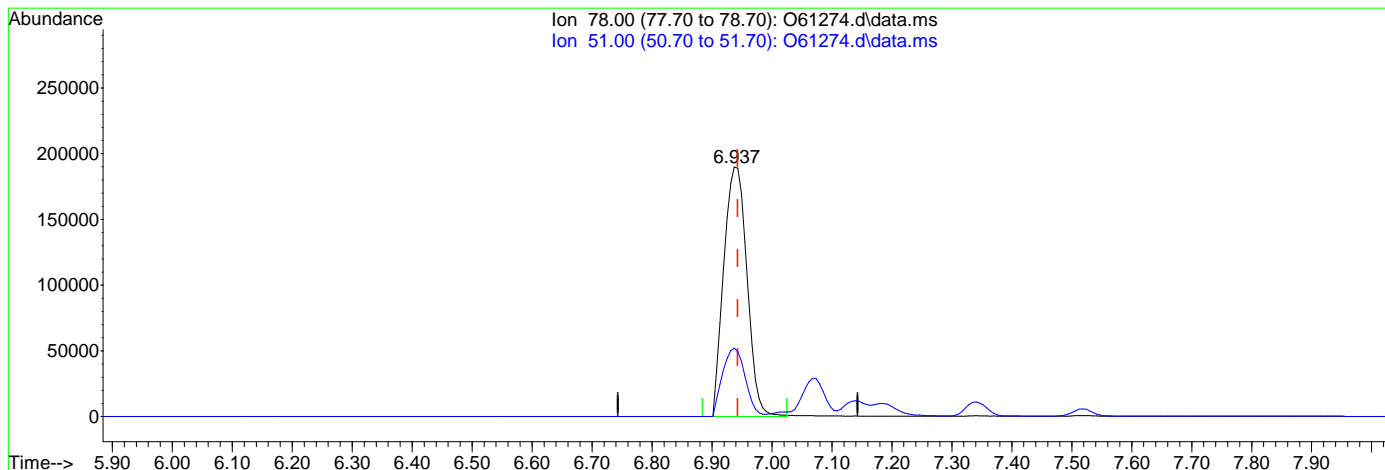
Ion	Exp%	Act%
78.00	100	100
51.00	26.20	27.48
0.00	0.00	0.00
0.00	0.00	0.00

7.3.1.4
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-14-2020\VO2358\
 Data File : O61274.d
 Acq On : 12 Sep 2020 11:14 am
 Operator : stutip
 Sample : bs
 Misc : MS47191,VO2358,,,,,
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 14 07:17:25 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Sun Sep 13 19:20:40 2020
 Response via : Initial Calibration



(12) Benzene ()

6.937min (-0.006) 5.23ug/L m

response 510441

Ion	Exp%	Act%
78.00	100	100
51.00	26.20	27.48
0.00	0.00	0.00
0.00	0.00	0.00

7.3.1.5
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-14-2020\VO2359\
 Data File : O61295.d
 Acq On : 12 Sep 2020 6:43 pm
 Operator : stutip
 Sample : bs
 Misc : MS47192,VO2359,,,,,
 ALS Vial : 21 Sample Multiplier: 1

Quant Time: Sep 14 07:55:28 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Sun Sep 13 19:20:40 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	

Internal Standards							
1) Fluorobenzene	7.340	96	312701	5.00	ug/L	0.00	
18) Chlorobenzene-d5	10.441	117	245098	5.00	ug/L	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.068	65	123087	4.87	ug/L	0.00	
Spiked Amount	5.000	Range 74 - 125	Recovery	=	97.40%		
19) Toluene-d8	8.892	98	263721	4.77	ug/L	0.00	
Spiked Amount	5.000	Range 88 - 111	Recovery	=	95.40%		
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.897	62	177855	5.08	ug/L		98
3) Chloromethane	2.795	50	244219	4.73	ug/L		94
4) 1,1-Dichloroethene	4.085	61	233679	5.41	ug/L		92
5) Methylene Chloride	4.692	49	334956	4.95	ug/L		96
6) trans-1,2-Dichloroethene	4.862	61	259090	5.20	ug/L		85
7) 1,1-Dichloroethane	5.503	63	293586	5.06	ug/L		100
8) cis-1,2-Dichloroethene	6.060	96	137790	4.81	ug/L		83
9) Chloroform	6.321	83	239244	4.80	ug/L		97
10) Carbon Tetrachloride	6.505	117	170875	5.02	ug/L		88
11) 1,1,1-Trichloroethane	6.570	97	186211	4.84	ug/L		92
12) Benzene	6.931	78	484068m	5.02	ug/L		
14) 1,2-Dichloroethane	7.133	62	224578	4.76	ug/L		92
15) Trichloroethene	7.512	95	144819	4.93	ug/L		85
16) 1,2-Dichloropropane	8.036	63	161802	5.02	ug/L		94
17) cis-1,3-Dichloropropene	8.707	75	156203	4.67	ug/L		97
20) trans-1,3-Dichloropropene	9.337	75	152362	4.73	ug/L		100
21) Tetrachloroethene	9.337	166	136480	5.09	ug/L		97
22) 1,4-Dichlorobenzene	12.821	146	276341	4.87	ug/L		98
23) 1,2-Dibromo-3-Chloropr...	14.037	75	48832	4.83	ug/L		90

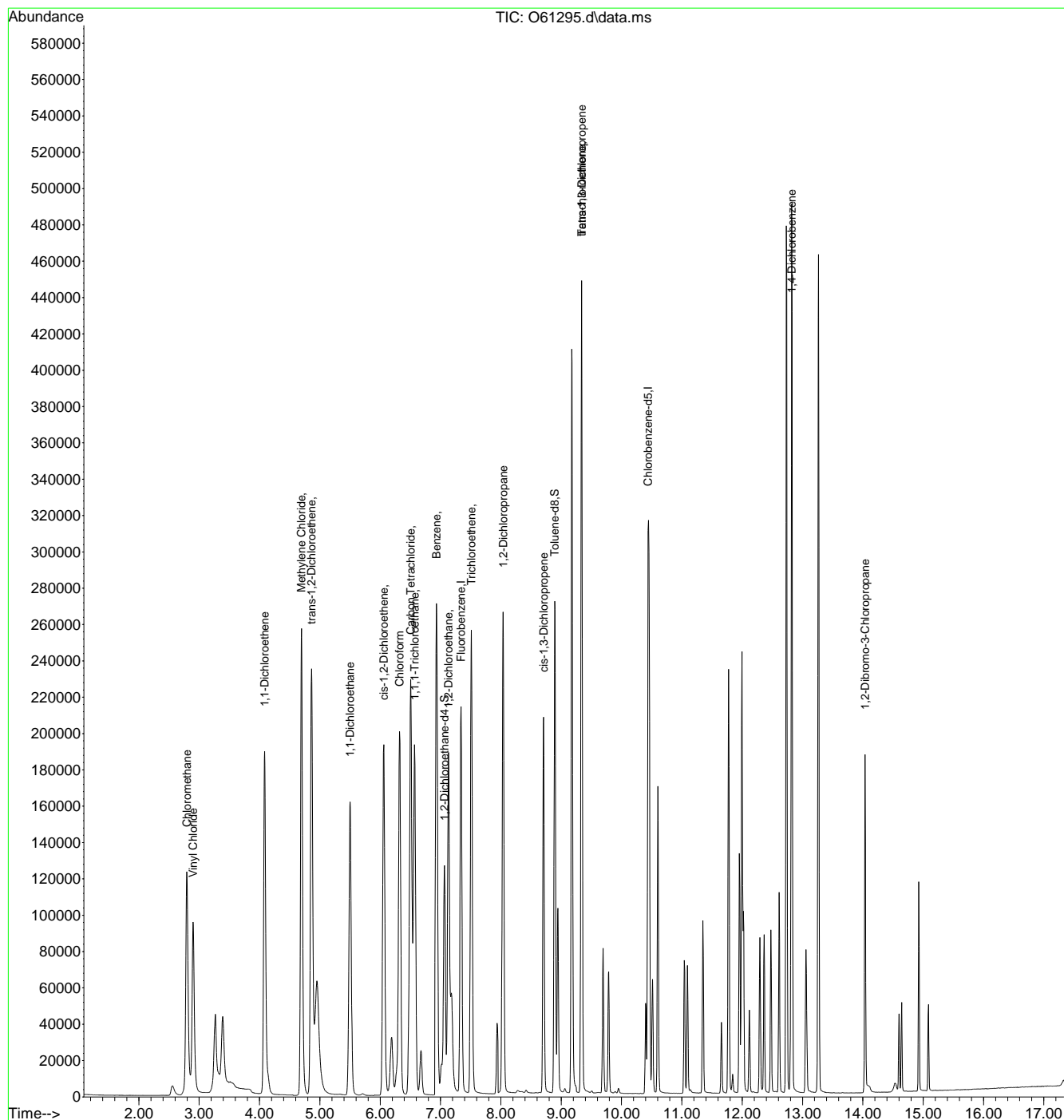
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.32
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-14-2020\VO2359\
 Data File : O61295.d
 Acq On : 12 Sep 2020 6:43 pm
 Operator : stutip
 Sample : bs
 Misc : MS47192,VO2359,,,,,
 ALS Vial : 21 Sample Multiplier: 1

Quant Time: Sep 14 07:55:28 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Sun Sep 13 19:20:40 2020
 Response via : Initial Calibration



7.3.2
7



Manual Integration Approval Summary

Sample Number: VO2359-BS **Method:** SW846 8260B BY SIM
Lab FileID: O61295.D **Analyst approved:** 09/14/20 08:16 Jennifer Ferreira
Injection Time: 09/12/20 18:43 **Supervisor approved:** 09/14/20 13:42 Melissa Mangual

Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzene	71-43-2		6.93	Poor instrument integration

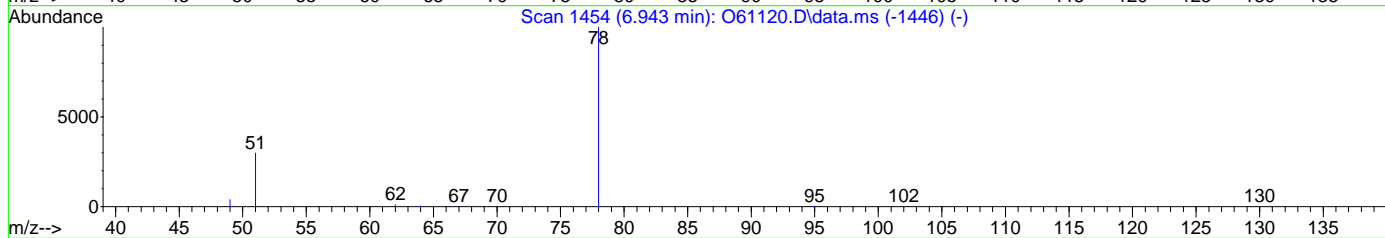
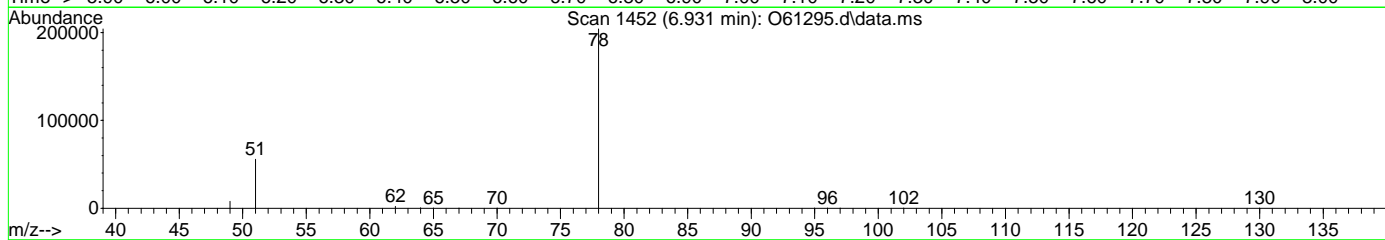
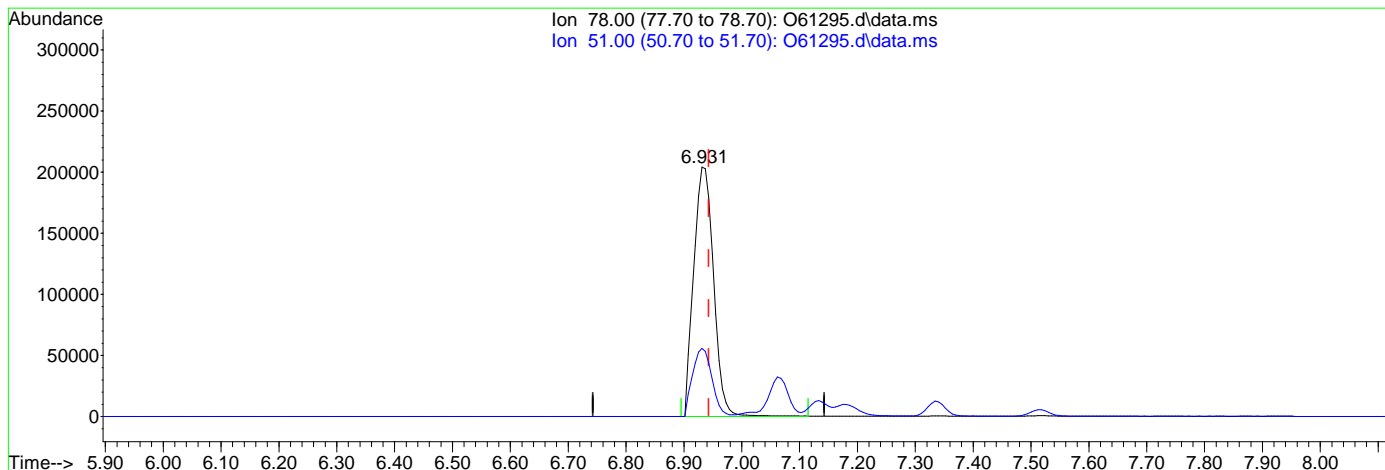
7.3.2.1

7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-14-2020\VO2359\
 Data File : O61295.d
 Acq On : 12 Sep 2020 6:43 pm
 Operator : stutip
 Sample : bs
 Misc : MS47192,VO2359,,,,,
 ALS Vial : 21 Sample Multiplier: 1

Quant Time: Sep 14 07:19:46 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Sun Sep 13 19:20:40 2020
 Response via : Initial Calibration



(12) Benzene ()

6.931min (-0.012) 5.07ug/L

response 488935

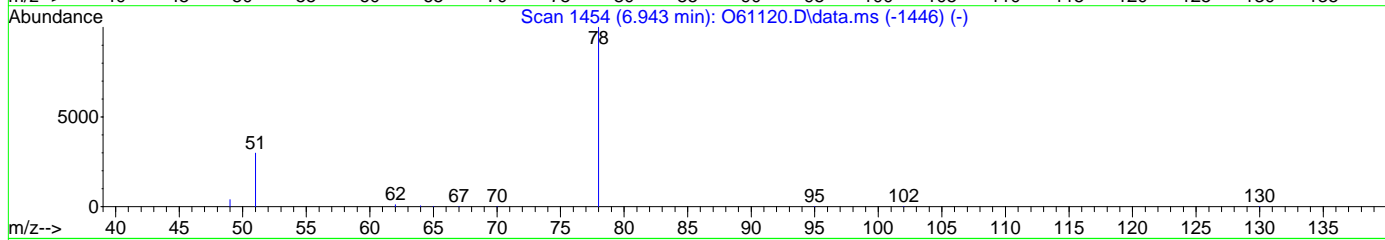
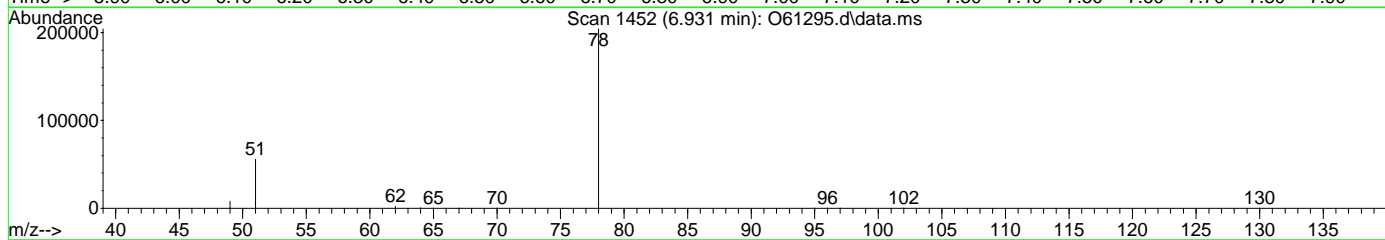
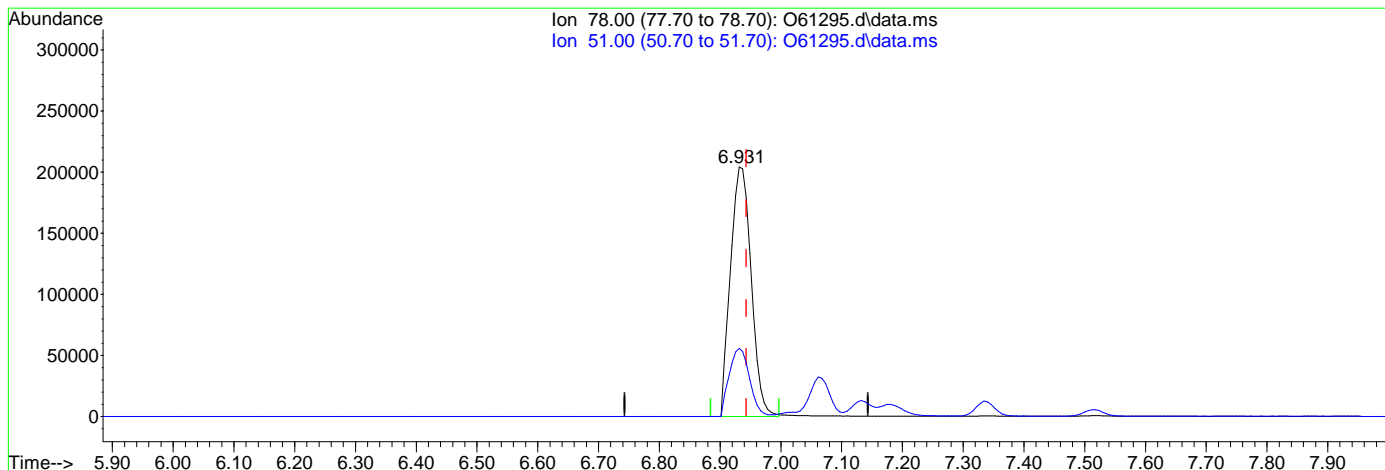
Ion	Exp%	Act%
78.00	100	100
51.00	26.20	27.34
0.00	0.00	0.00
0.00	0.00	0.00

7.3.2.2
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-14-2020\VO2359\
 Data File : O61295.d
 Acq On : 12 Sep 2020 6:43 pm
 Operator : stutip
 Sample : bs
 Misc : MS47192,VO2359,,,,,
 ALS Vial : 21 Sample Multiplier: 1

Quant Time: Sep 14 07:19:46 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Sun Sep 13 19:20:40 2020
 Response via : Initial Calibration



(12) Benzene ()

6.931min (-0.012) 5.02ug/L m

response 484068

Ion	Exp%	Act%
78.00	100	100
51.00	26.20	27.34
0.00	0.00	0.00
0.00	0.00	0.00

7.3.2.3
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\091420\
 Data File : Z62323.D
 Acq On : 14 Sep 2020 1:18 pm
 Operator : JuanG
 Sample : BS
 Misc : MS47199,VZ2418,,,,,
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 15 18:50:20 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Sun Sep 13 13:38:26 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	

Internal Standards							
1) Fluorobenzene	7.401	96	1802196	5.00	ppb	0.00	
18) Chlorobenzene-d5	10.511	117	1471249	5.00	ppb	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.123	65	612575	5.49	ppb	0.00	
Spiked Amount	5.000	Range 79 - 125	Recovery	=	109.80%		
19) Toluene-d8	8.958	98	1750191	4.90	ppb	0.00	
Spiked Amount	5.000	Range 70 - 130	Recovery	=	98.00%		
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.843	62	935650	6.24	ppb		99
3) Chloromethane	2.737	50	848544	6.70	ppb		100
4) 1,1-Dichloroethene	4.083	96	633900	5.80	ppb	#	89
5) Methylene Chloride	4.709	84	874936	5.18	ppb		91
6) trans-1,2-Dichloroethene	4.883	96	786014	5.91	ppb		93
7) 1,1-Dichloroethane	5.543	63	1365965	6.05	ppb	#	100
8) cis-1,2-Dichloroethene	6.104	96	807368	5.46	ppb		95
9) Chloroform	6.371	83	1541467	5.69	ppb		100
10) Carbon Tetrachloride	6.543	117	1052012	5.72	ppb		98
11) 1,1,1-Trichloroethane	6.614	97	1359082	5.73	ppb		99
12) Benzene	6.987	78	2983015	5.95	ppb		99
14) 1,2-Dichloroethane	7.191	62	1083005	5.73	ppb		100
15) Trichloroethene	7.564	95	881940	5.73	ppb		90
16) 1,2-Dichloropropane	8.101	63	719723	5.64	ppb		97
17) cis-1,3-Dichloropropene	8.773	75	831618	5.87	ppb		99
20) trans-1,3-Dichloropropene	9.407	75	696612	5.61	ppb		100
21) Tetrachloroethene	9.399	166	888303	5.33	ppb		98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

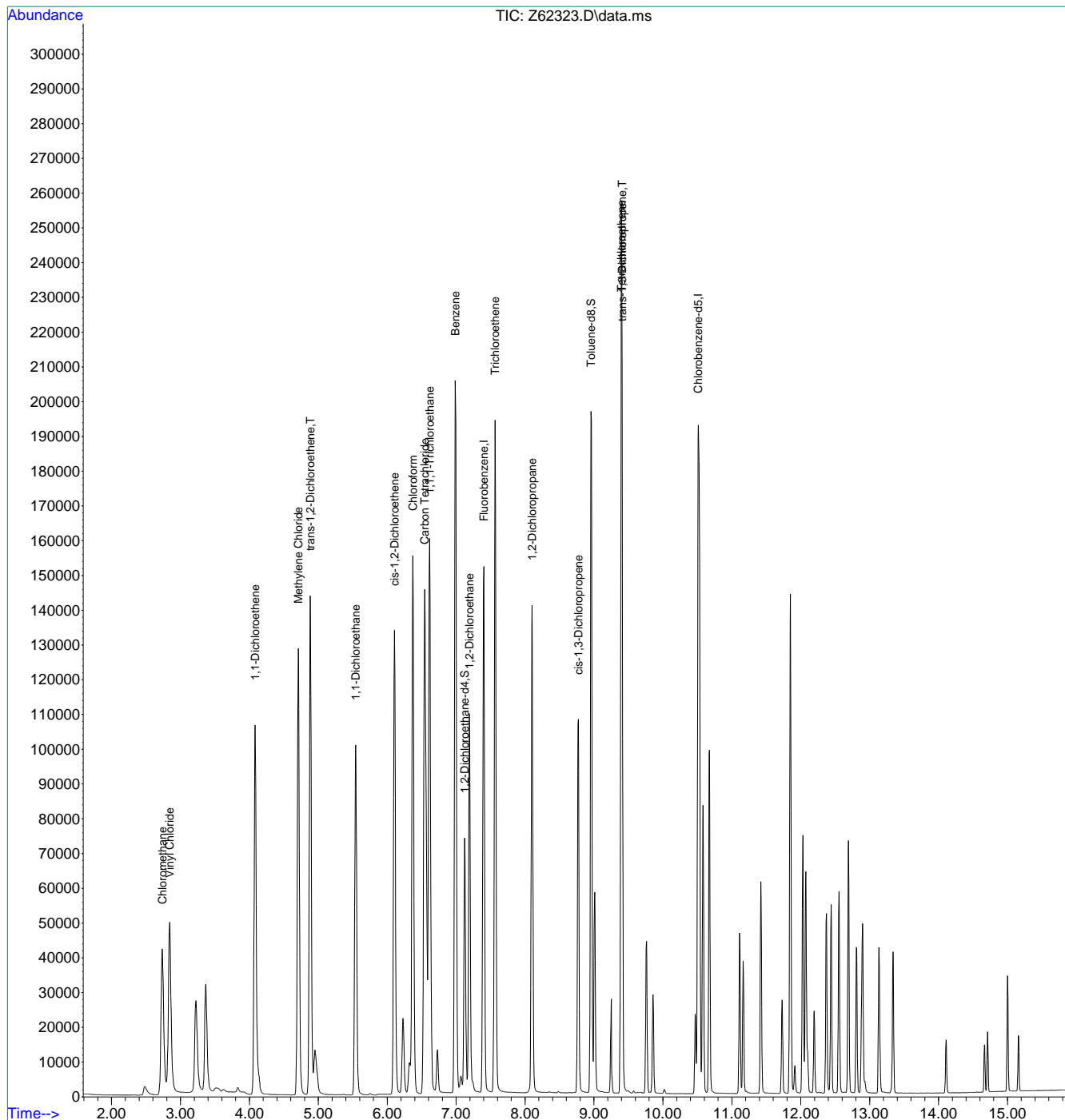
7.3.3
7



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\091420\
 Data File : Z62323.D
 Acq On : 14 Sep 2020 1:18 pm
 Operator : JuanG
 Sample : BS
 Misc : MS47199,VZ2418,,,,,
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 15 18:50:20 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Sun Sep 13 13:38:26 2020
 Response via : Initial Calibration



7.3.3
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\091520\
 Data File : Z62355.D
 Acq On : 15 Sep 2020 2:17 pm
 Operator : JuanG
 Sample : BS
 Misc : MS47199,VZ2419,,,,,
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 16 10:46:43 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Sun Sep 13 13:38:26 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	

Internal Standards							
1) Fluorobenzene	7.401	96	2106664	5.00	ppb	0.00	
18) Chlorobenzene-d5	10.511	117	1769955	5.00	ppb	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.130	65	730794	5.61	ppb	0.00	
Spiked Amount	5.000	Range	79 - 125	Recovery	=	112.20%	
19) Toluene-d8	8.961	98	2045274	4.76	ppb	0.00	
Spiked Amount	5.000	Range	70 - 130	Recovery	=	95.20%	
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.839	62	1131645	6.45	ppb		100
3) Chloromethane	2.733	50	944173	6.40	ppb		99
4) 1,1-Dichloroethene	4.087	96	746051	5.84	ppb	#	88
5) Methylene Chloride	4.713	84	1004467	5.08	ppb		90
6) trans-1,2-Dichloroethene	4.886	96	885823	5.70	ppb		94
7) 1,1-Dichloroethane	5.546	63	1567250	5.94	ppb	#	99
8) cis-1,2-Dichloroethene	6.110	96	910831	5.27	ppb		92
9) Chloroform	6.377	83	1777971	5.61	ppb		100
10) Carbon Tetrachloride	6.543	117	1141821	5.31	ppb		98
11) 1,1,1-Trichloroethane	6.614	97	1552196	5.60	ppb		99
12) Benzene	6.994	78	3434227	5.86	ppb		96
14) 1,2-Dichloroethane	7.198	62	1246624	5.64	ppb		100
15) Trichloroethene	7.571	95	1019225	5.66	ppb	#	84
16) 1,2-Dichloropropane	8.105	63	832362	5.58	ppb		97
17) cis-1,3-Dichloropropene	8.773	75	724596	4.47	ppb		98
20) trans-1,3-Dichloropropene	9.412	75	595469	4.01	ppb		98
21) Tetrachloroethene	9.399	166	1021546	5.08	ppb		100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

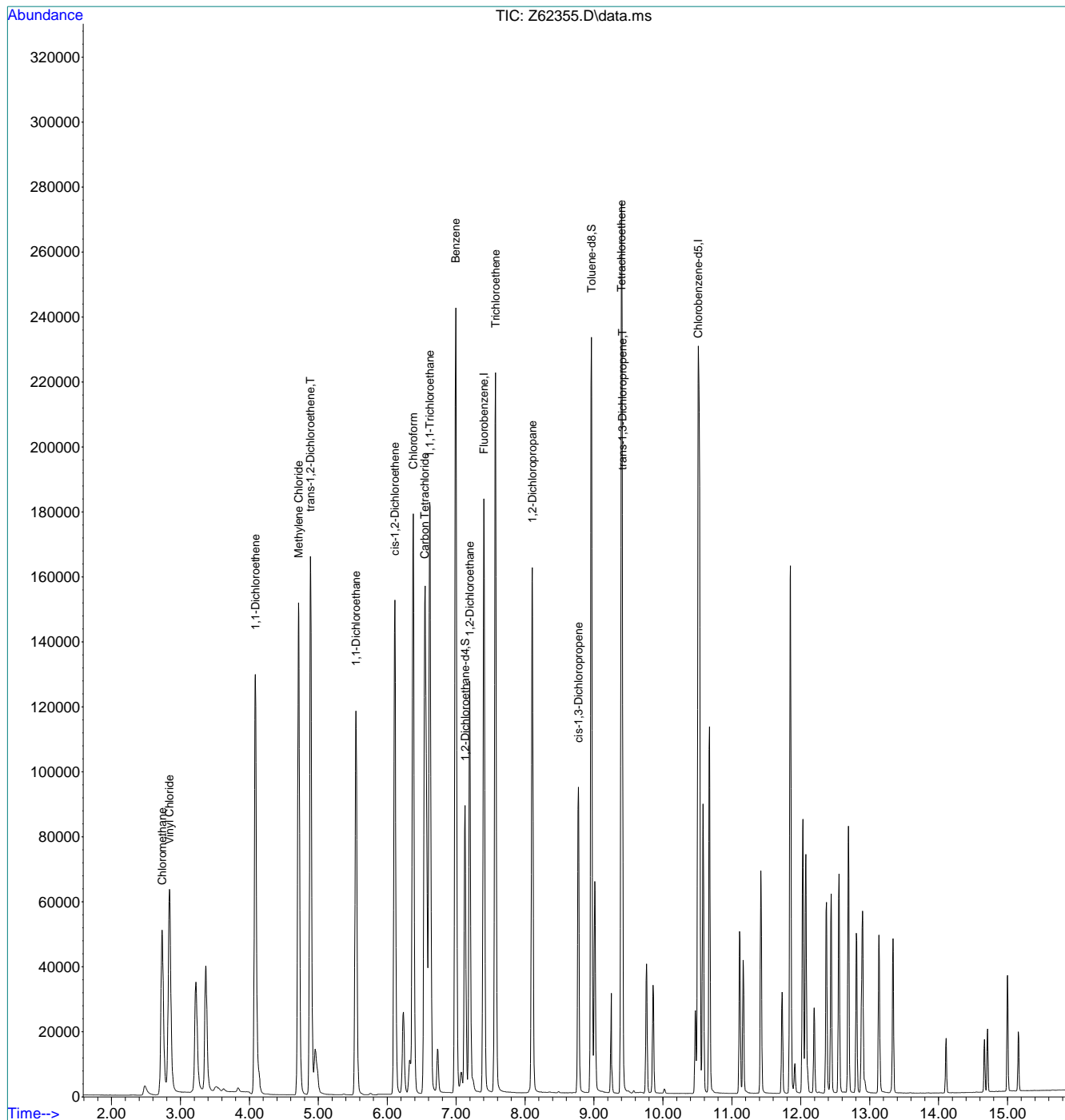
7.3.4
7



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\091520\
 Data File : Z62355.D
 Acq On : 15 Sep 2020 2:17 pm
 Operator : JuanG
 Sample : BS
 Misc : MS47199,VZ2419,,,,,
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 16 10:46:43 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Sun Sep 13 13:38:26 2020
 Response via : Initial Calibration



7.3.4
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-14-2020\VO2358\
 Data File : O61288.d
 Acq On : 12 Sep 2020 3:58 pm
 Operator : stutip
 Sample : fa78551-1ms,10
 Misc : MS47192,VO2358,,,,,10
 ALS Vial : 15 Sample Multiplier: 1

Quant Time: Sep 14 07:36:05 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Sun Sep 13 19:20:40 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	Qvalue

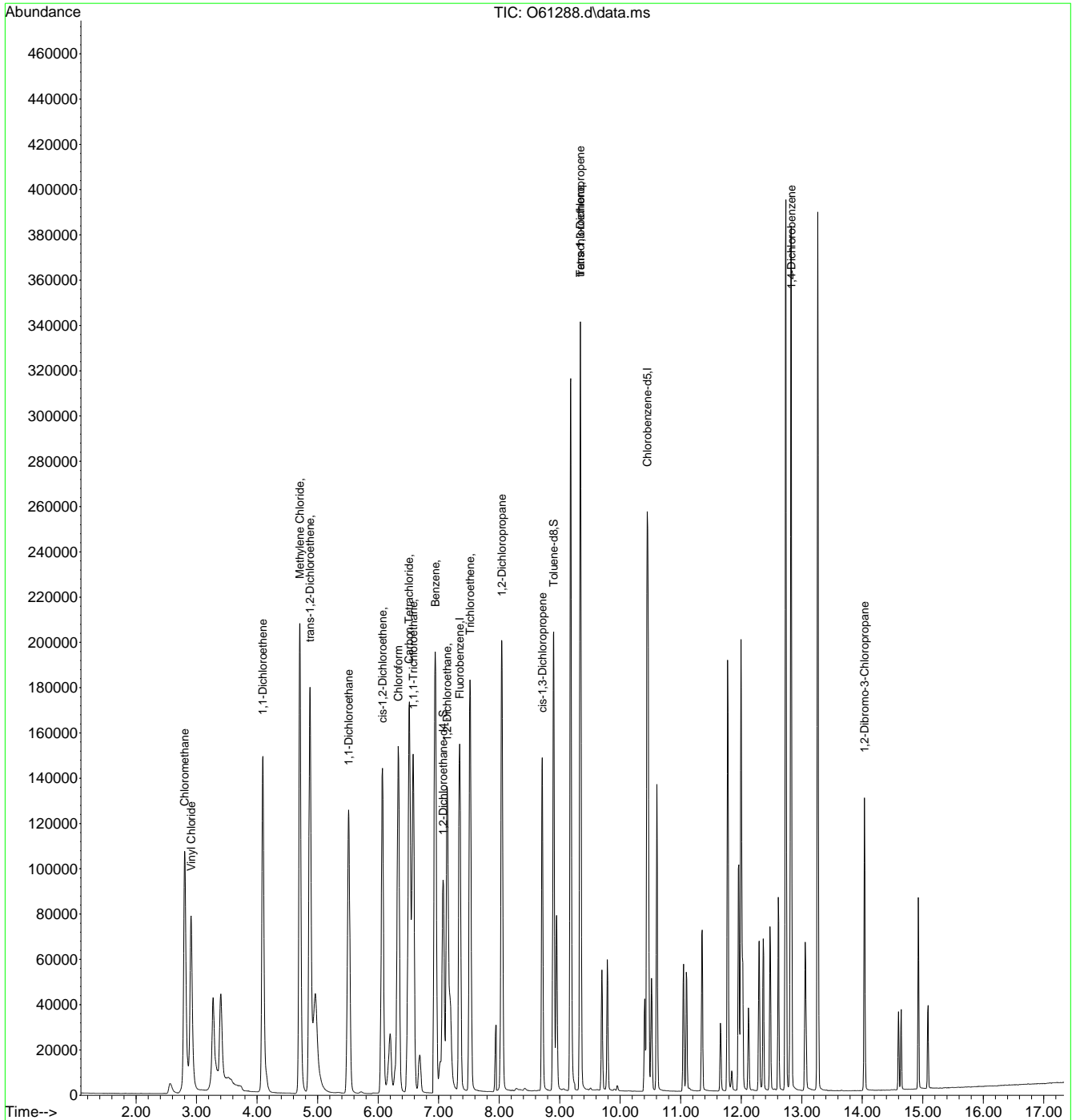
Internal Standards							
1) Fluorobenzene	7.346	96	248512	5.00	ug/L	0.00	
18) Chlorobenzene-d5	10.447	117	199484	5.00	ug/L	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.073	65	99740m	4.97	ug/L	0.00	
Spiked Amount	5.000	Range 74 - 125	Recovery	=	99.40%		
19) Toluene-d8	8.900	98	203731	4.53	ug/L	0.00	
Spiked Amount	5.000	Range 88 - 111	Recovery	=	90.60%		
Target Compounds							
2) Vinyl Chloride	2.908	62	152346	5.50	ug/L		97
3) Chloromethane	2.803	50	222514	5.48	ug/L		94
4) 1,1-Dichloroethene	4.092	61	186915	5.44	ug/L		91
5) Methylene Chloride	4.703	49	280815	5.22	ug/L		95
6) trans-1,2-Dichloroethene	4.873	61	203426	5.13	ug/L		86
7) 1,1-Dichloroethane	5.514	63	233824	5.08	ug/L		99
8) cis-1,2-Dichloroethene	6.072	96	105543	4.63	ug/L #		81
9) Chloroform	6.333	83	191082	4.82	ug/L		95
10) Carbon Tetrachloride	6.510	117	132053	4.89	ug/L		86
11) 1,1,1-Trichloroethane	6.582	97	147887	4.84	ug/L		91
12) Benzene	6.943	78	388964m	5.07	ug/L		
14) 1,2-Dichloroethane	7.139	62	178803	4.77	ug/L		93
15) Trichloroethene	7.518	95	108759	4.65	ug/L		86
16) 1,2-Dichloropropane	8.043	63	128505	5.01	ug/L		95
17) cis-1,3-Dichloropropene	8.711	75	110660	4.16	ug/L		99
20) trans-1,3-Dichloropropene	9.343	75	109181	4.16	ug/L		98
21) Tetrachloroethene	9.343	166	110936	5.08	ug/L		100
22) 1,4-Dichlorobenzene	12.827	146	227711	4.93	ug/L		97
23) 1,2-Dibromo-3-Chloropr...	14.037	75	30414	3.72	ug/L		88

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-14-2020\VO2358\
 Data File : O61288.d
 Acq On : 12 Sep 2020 3:58 pm
 Operator : stutip
 Sample : fa78551-1ms,10
 Misc : MS47192,VO2358,,,,,10
 ALS Vial : 15 Sample Multiplier: 1

Quant Time: Sep 14 07:36:05 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Sun Sep 13 19:20:40 2020
 Response via : Initial Calibration



Manual Integration Approval Summary

Sample Number: FA78551-1MS **Method:** SW846 8260B BY SIM
Lab FileID: O61288.D **Analyst approved:** 09/14/20 07:45 Jennifer Ferreira
Injection Time: 09/12/20 15:58 **Supervisor approved:** 09/17/20 15:34 Juan Garcia

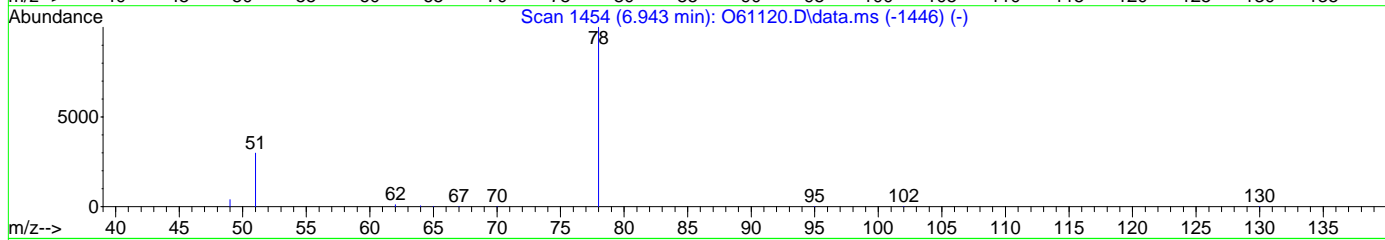
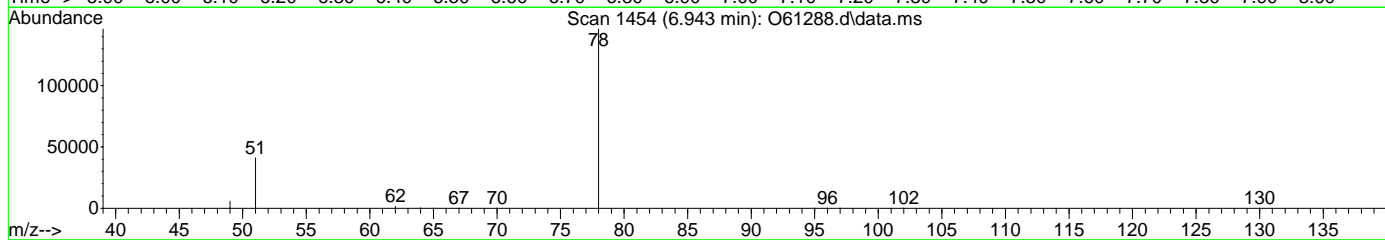
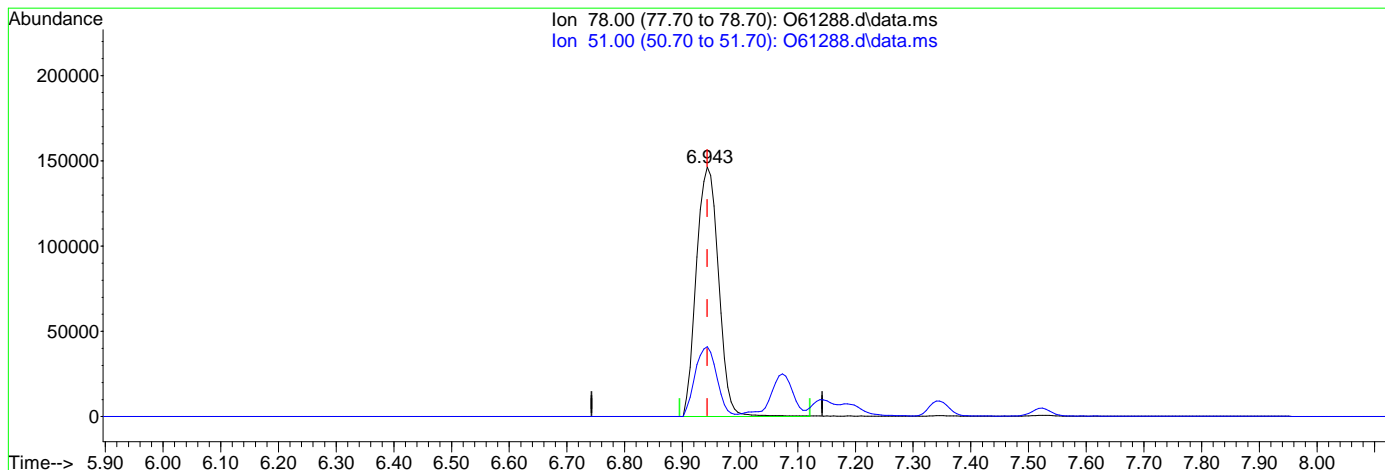
Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzene	71-43-2		6.94	Poor instrument integration
1,2-Dichloroethane-D4	17060-07-0		7.07	Overlapping peak

7.4.1.1
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-14-2020\VO2358\
 Data File : O61288.d
 Acq On : 12 Sep 2020 3:58 pm
 Operator : stutip
 Sample : fa78551-1ms,10
 Misc : MS47192,VO2358,,,,,10
 ALS Vial : 15 Sample Multiplier: 1

Quant Time: Sep 14 07:17:57 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Sun Sep 13 19:20:40 2020
 Response via : Initial Calibration



(12) Benzene ()

6.943min (+0.000) 5.10ug/L

response 391416

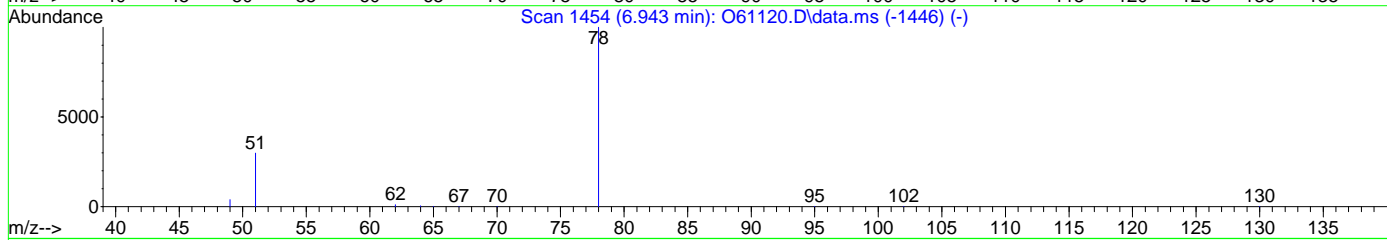
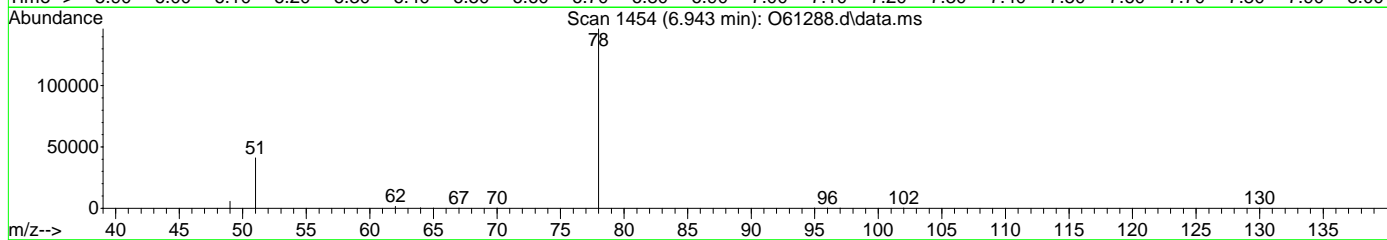
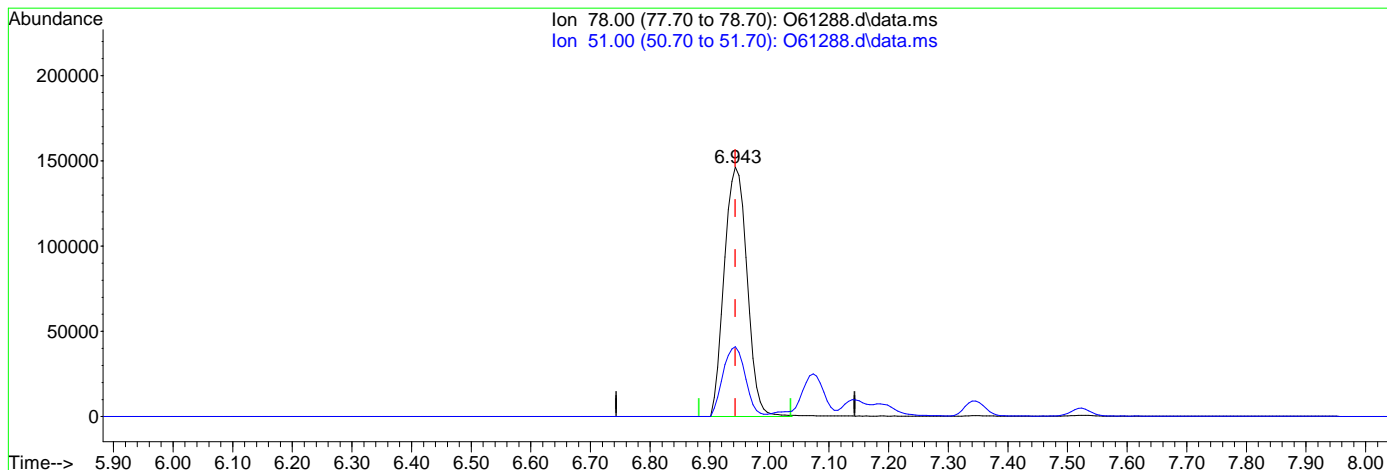
Ion	Exp%	Act%
78.00	100	100
51.00	26.20	28.04
0.00	0.00	0.00
0.00	0.00	0.00

7.4.1.2
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-14-2020\VO2358\
 Data File : O61288.d
 Acq On : 12 Sep 2020 3:58 pm
 Operator : stutip
 Sample : fa78551-1ms,10
 Misc : MS47192,VO2358,,,,,10
 ALS Vial : 15 Sample Multiplier: 1

Quant Time: Sep 14 07:17:57 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Sun Sep 13 19:20:40 2020
 Response via : Initial Calibration



(12) Benzene ()

6.943min (+0.000) 5.07ug/L m

response 388964

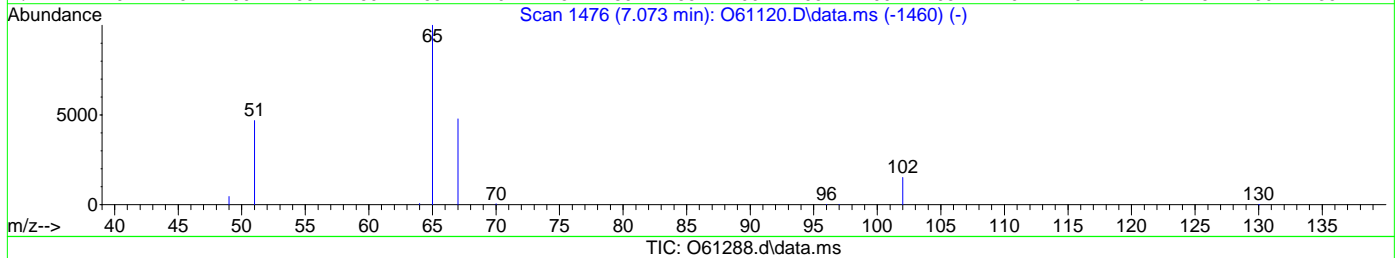
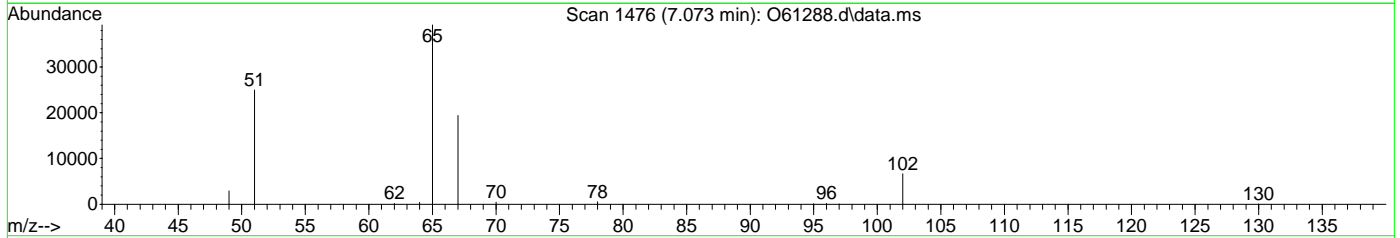
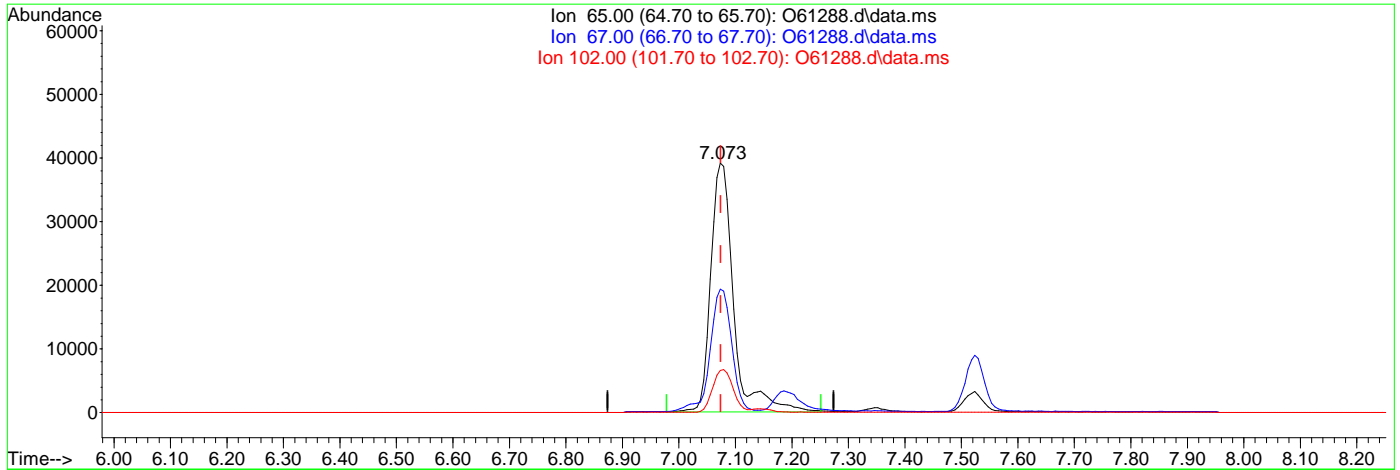
Ion	Exp%	Act%
78.00	100	100
51.00	26.20	28.04
0.00	0.00	0.00
0.00	0.00	0.00

7.4.1.3
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-14-2020\VO2358\
 Data File : O61288.d
 Acq On : 12 Sep 2020 3:58 pm
 Operator : stutip
 Sample : fa78551-1ms,10
 Misc : MS47192,VO2358,,,,,10
 ALS Vial : 15 Sample Multiplier: 1

Quant Time: Sep 14 07:17:57 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Sun Sep 13 19:20:40 2020
 Response via : Initial Calibration



(13) 1,2-Dichloroethane-d4 (S)

7.073min (-0.001) 5.49ug/L

response 110118

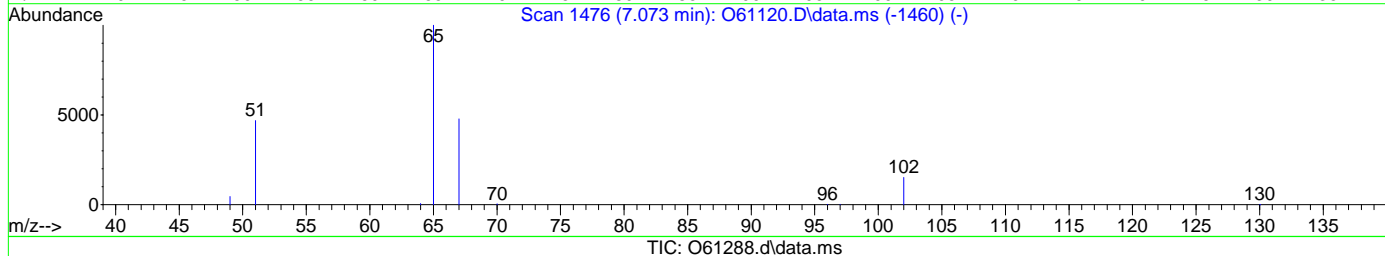
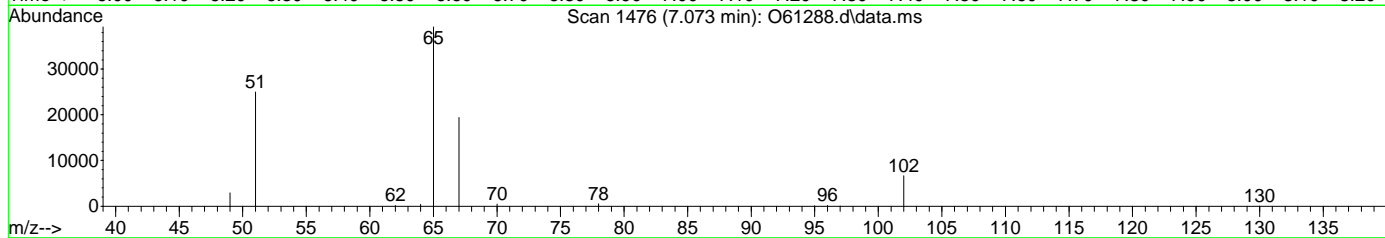
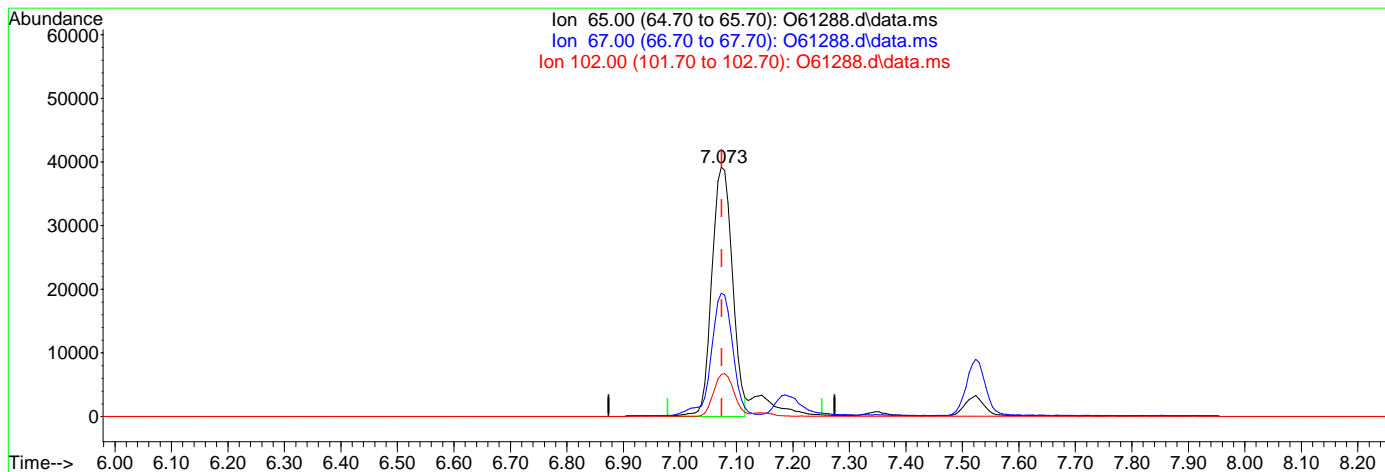
Ion	Exp%	Act%
65.00	100	100
67.00	53.50	49.15
102.00	16.10	16.85
0.00	0.00	0.00

7.4.1.4
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-14-2020\VO2358\
 Data File : O61288.d
 Acq On : 12 Sep 2020 3:58 pm
 Operator : stutip
 Sample : fa78551-1ms,10
 Misc : MS47192,VO2358,,,,,10
 ALS Vial : 15 Sample Multiplier: 1

Quant Time: Sep 14 07:17:57 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Sun Sep 13 19:20:40 2020
 Response via : Initial Calibration



(13) 1,2-Dichloroethane-d4 (S)

7.073min (-0.001) 4.97ug/L m

response 99740

Ion Exp% Act%

65.00 100 100

67.00 53.50 49.47

102.00 16.10 16.93

0.00 0.00 0.00

7.4.1.5
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-14-2020\VO2358\
 Data File : O61289.d
 Acq On : 12 Sep 2020 4:18 pm
 Operator : stutip
 Sample : fa78551-1msd,10
 Misc : MS47192,VO2358,,,,,10
 ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 14 07:36:36 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Sun Sep 13 19:20:40 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	

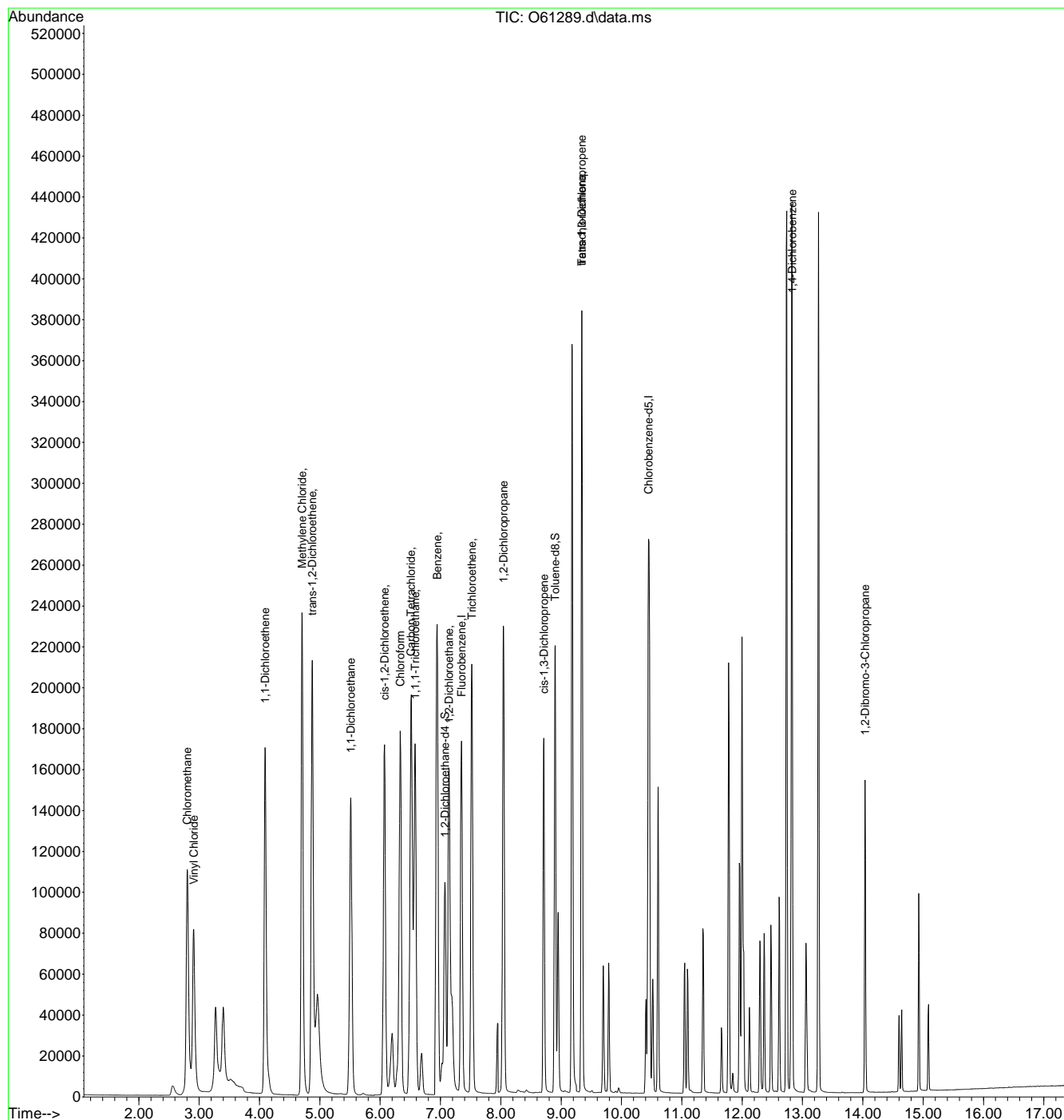
Internal Standards							
1) Fluorobenzene	7.346	96	264695	5.00	ug/L	0.00	
18) Chlorobenzene-d5	10.447	117	209153	5.00	ug/L	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.074	65	104944	4.91	ug/L	0.00	
Spiked Amount	5.000	Range 74 - 125	Recovery	=	98.20%		
19) Toluene-d8	8.900	98	218708	4.64	ug/L	0.00	
Spiked Amount	5.000	Range 88 - 111	Recovery	=	92.80%		
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.908	62	160929	5.45	ug/L		97
3) Chloromethane	2.803	50	230182	5.31	ug/L		94
4) 1,1-Dichloroethene	4.092	61	209635	5.73	ug/L		92
5) Methylene Chloride	4.703	49	312991	5.46	ug/L		96
6) trans-1,2-Dichloroethene	4.873	61	230784	5.47	ug/L		86
7) 1,1-Dichloroethane	5.514	63	263671	5.37	ug/L		100
8) cis-1,2-Dichloroethene	6.072	96	120809	4.98	ug/L #		82
9) Chloroform	6.333	83	214590	5.08	ug/L		96
10) Carbon Tetrachloride	6.511	117	151123	5.25	ug/L		87
11) 1,1,1-Trichloroethane	6.582	97	168341	5.17	ug/L		93
12) Benzene	6.943	78	439032m	5.37	ug/L		
14) 1,2-Dichloroethane	7.139	62	201879	5.06	ug/L		93
15) Trichloroethene	7.518	95	121979	4.90	ug/L		87
16) 1,2-Dichloropropane	8.043	63	145298	5.32	ug/L		94
17) cis-1,3-Dichloropropene	8.711	75	131056	4.63	ug/L		98
20) trans-1,3-Dichloropropene	9.343	75	127780	4.65	ug/L		99
21) Tetrachloroethene	9.343	166	123118	5.38	ug/L		99
22) 1,4-Dichlorobenzene	12.827	146	252080	5.20	ug/L		96
23) 1,2-Dibromo-3-Chloropr...	14.038	75	35743	4.16	ug/L		89

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-14-2020\VO2358\
 Data File : O61289.d
 Acq On : 12 Sep 2020 4:18 pm
 Operator : stutip
 Sample : fa78551-1msd,10
 Misc : MS47192,VO2358,,,,,10
 ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 14 07:36:36 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Sun Sep 13 19:20:40 2020
 Response via : Initial Calibration



Manual Integration Approval Summary

Sample Number: FA78551-1MSD **Method:** SW846 8260B BY SIM
Lab FileID: O61289.D **Analyst approved:** 09/14/20 07:45 Jennifer Ferreira
Injection Time: 09/12/20 16:18 **Supervisor approved:** 09/17/20 15:34 Juan Garcia

Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzene	71-43-2		6.94	Poor instrument integration

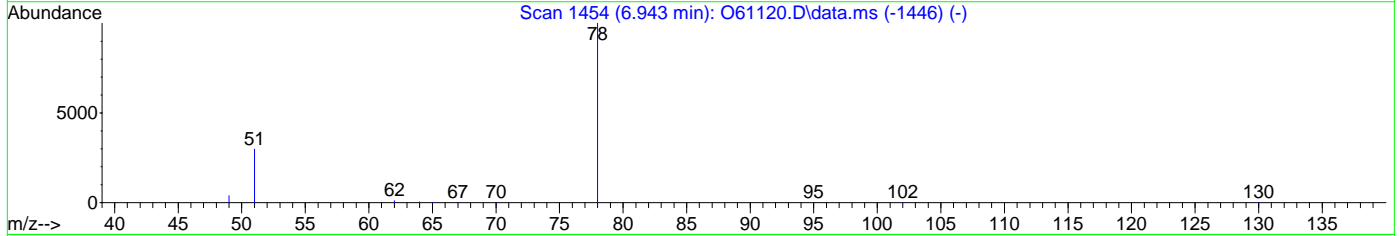
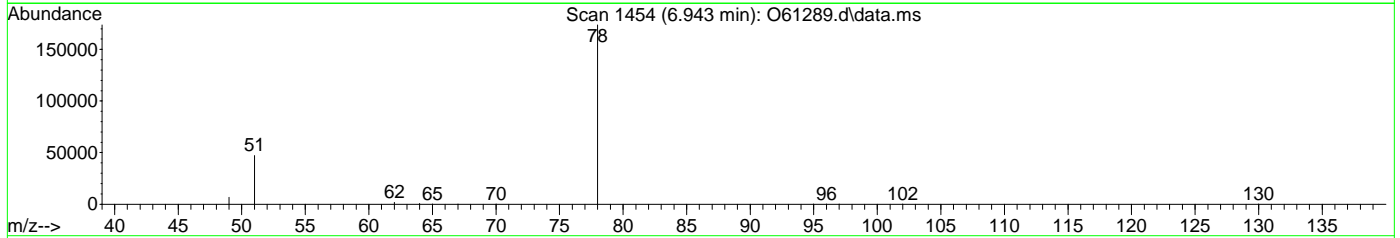
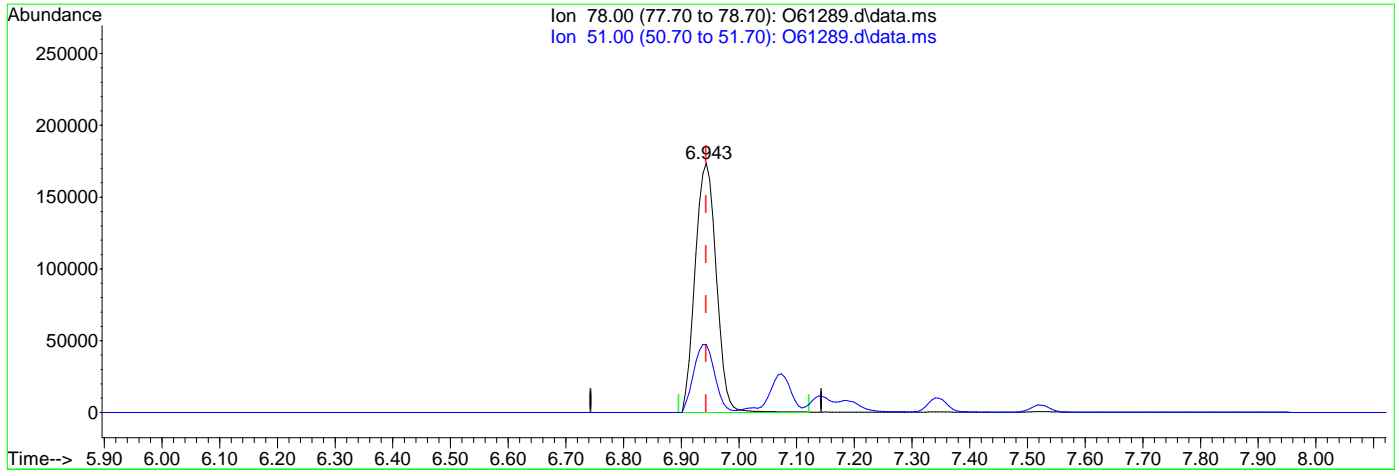
7.4.2.1

7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-14-2020\VO2358\
 Data File : O61289.d
 Acq On : 12 Sep 2020 4:18 pm
 Operator : stutip
 Sample : fa78551-1msd,10
 Misc : MS47192,VO2358,,,,,10
 ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 14 07:17:59 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Sun Sep 13 19:20:40 2020
 Response via : Initial Calibration



TIC: O61289.d\data.ms

(12) Benzene ()

6.943min (+0.000) 5.42ug/L

response 443030

Ion	Exp%	Act%
78.00	100	100
51.00	26.20	27.19
0.00	0.00	0.00
0.00	0.00	0.00

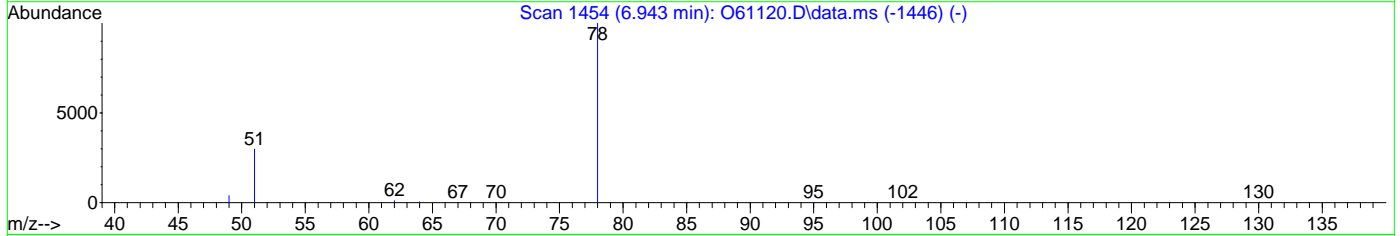
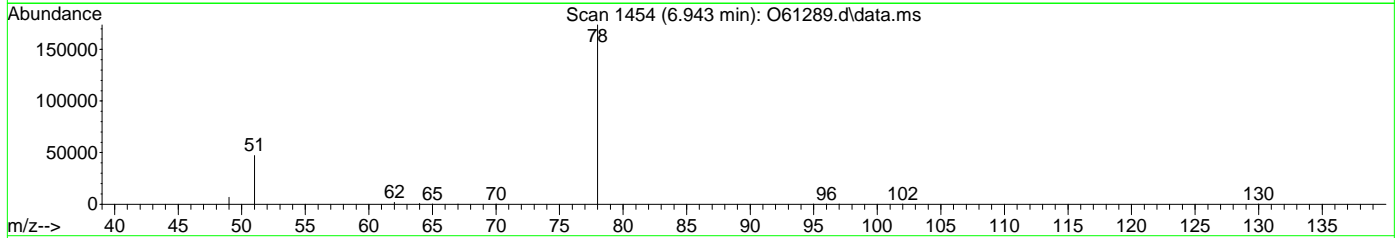
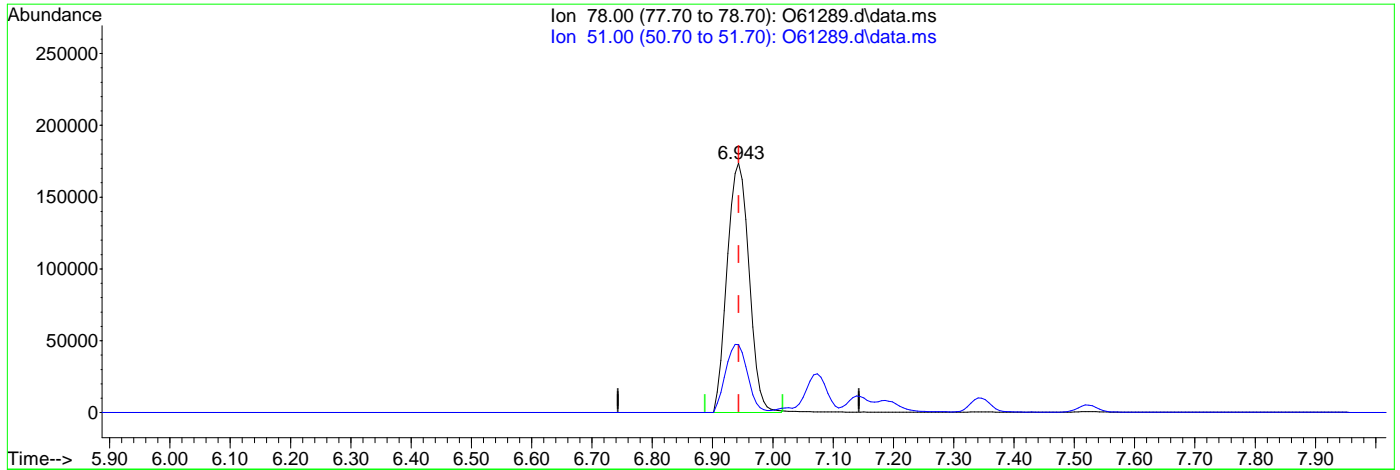
7.4.2.2

7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-14-2020\VO2358\
 Data File : O61289.d
 Acq On : 12 Sep 2020 4:18 pm
 Operator : stutip
 Sample : fa78551-1msd,10
 Misc : MS47192,VO2358,,,,,10
 ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 14 07:17:59 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Sun Sep 13 19:20:40 2020
 Response via : Initial Calibration



TIC: O61289.d\data.ms

(12) Benzene ()

6.943min (+0.000) 5.37ug/L m

response 439032

Ion	Exp%	Act%
78.00	100	100
51.00	26.20	27.19
0.00	0.00	0.00
0.00	0.00	0.00

7.4.2.3
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-14-2020\VO2359\
 Data File : O61318.d
 Acq On : 13 Sep 2020 2:33 am
 Operator : stutip
 Sample : fa78551-12ms,10
 Misc : MS47193,VO2359,,,,,10
 ALS Vial : 24 Sample Multiplier: 1

Quant Time: Sep 14 08:05:40 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Sun Sep 13 19:20:40 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	

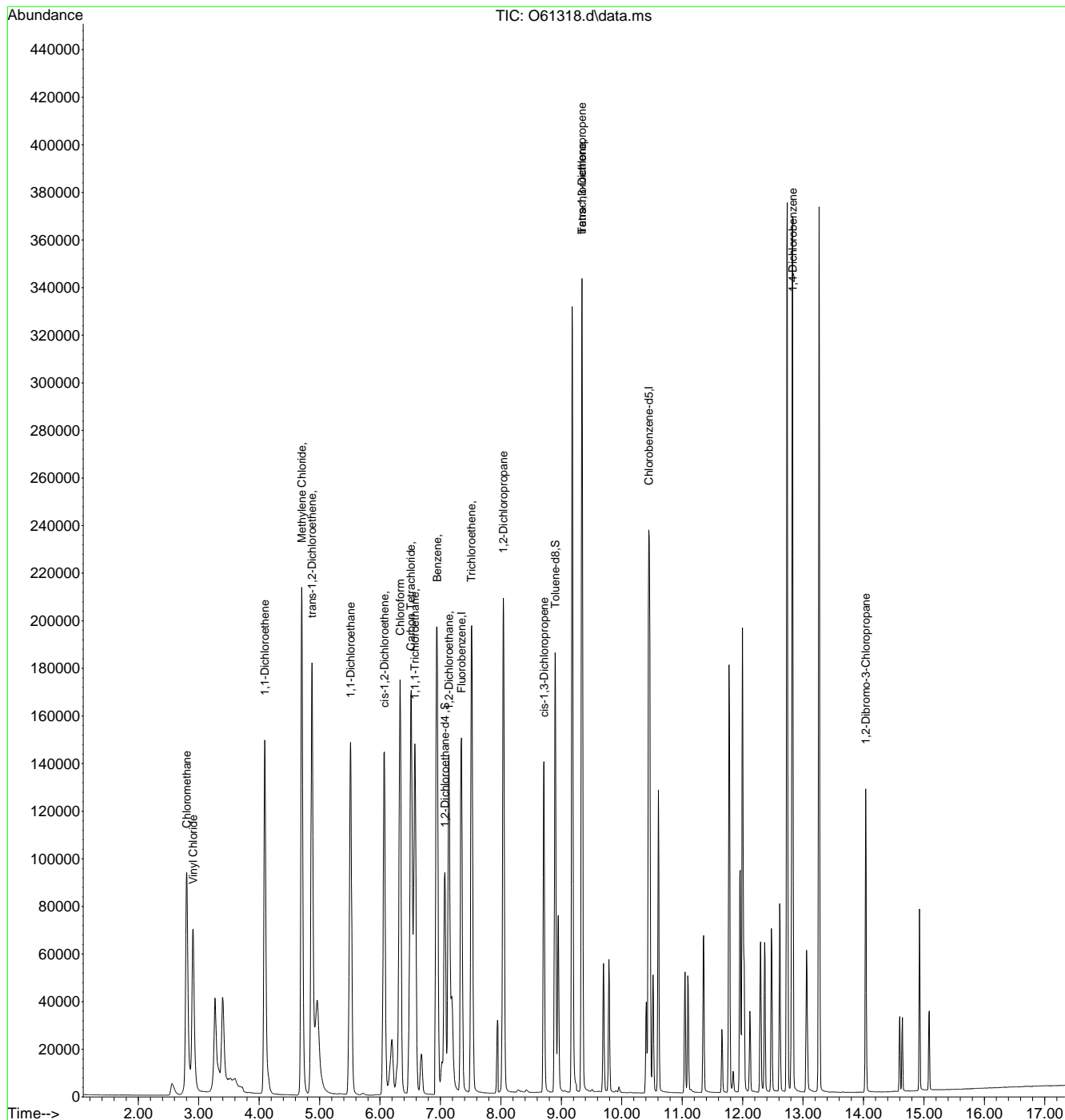
Internal Standards							
1) Fluorobenzene	7.346	96	224584	5.00	ug/L	0.00	
18) Chlorobenzene-d5	10.447	117	184530	5.00	ug/L	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.074	65	90998	5.02	ug/L	0.00	
Spiked Amount	5.000	Range 74 - 125	Recovery	=	100.40%		
19) Toluene-d8	8.896	98	180563	4.34	ug/L	0.00	
Spiked Amount	5.000	Range 88 - 111	Recovery	=	86.80%#		
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.905	62	134860	5.38	ug/L		96
3) Chloromethane	2.799	50	195041	5.30	ug/L		95
4) 1,1-Dichloroethene	4.092	61	177782	5.73	ug/L		91
5) Methylene Chloride	4.703	49	276789	5.69	ug/L		94
6) trans-1,2-Dichloroethene	4.873	61	191275	5.34	ug/L		86
7) 1,1-Dichloroethane	5.514	63	261805	6.29	ug/L		99
8) cis-1,2-Dichloroethene	6.072	96	99765	4.85	ug/L		86
9) Chloroform	6.333	83	201224	5.62	ug/L		95
10) Carbon Tetrachloride	6.511	117	128546	5.26	ug/L		88
11) 1,1,1-Trichloroethane	6.576	97	141972	5.14	ug/L		91
12) Benzene	6.943	78	369236m	5.33	ug/L		
14) 1,2-Dichloroethane	7.139	62	172888	5.10	ug/L		94
15) Trichloroethene	7.512	95	114362	5.42	ug/L		88
16) 1,2-Dichloropropane	8.040	63	125585	5.42	ug/L		95
17) cis-1,3-Dichloropropene	8.711	75	102580	4.27	ug/L		98
20) trans-1,3-Dichloropropene	9.343	75	102614	4.23	ug/L		99
21) Tetrachloroethene	9.343	166	120424	5.95	ug/L		99
22) 1,4-Dichlorobenzene	12.827	146	218966	5.12	ug/L		96
23) 1,2-Dibromo-3-Chloropr...	14.038	75	29872	3.95	ug/L		85

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-14-2020\VO2359\
 Data File : O61318.d
 Acq On : 13 Sep 2020 2:33 am
 Operator : stutip
 Sample : fa78551-12ms,10
 Misc : MS47193,VO2359,,,,,10
 ALS Vial : 24 Sample Multiplier: 1

Quant Time: Sep 14 08:05:40 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Sun Sep 13 19:20:40 2020
 Response via : Initial Calibration



7.4.3
7

Manual Integration Approval Summary

Sample Number: FA78551-12MS **Method:** SW846 8260B BY SIM
Lab FileID: O61318.D **Analyst approved:** 09/14/20 08:16 Jennifer Ferreira
Injection Time: 09/13/20 02:33 **Supervisor approved:** 09/16/20 15:24 Melissa Mangual

Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzene	71-43-2		6.94	Poor instrument integration

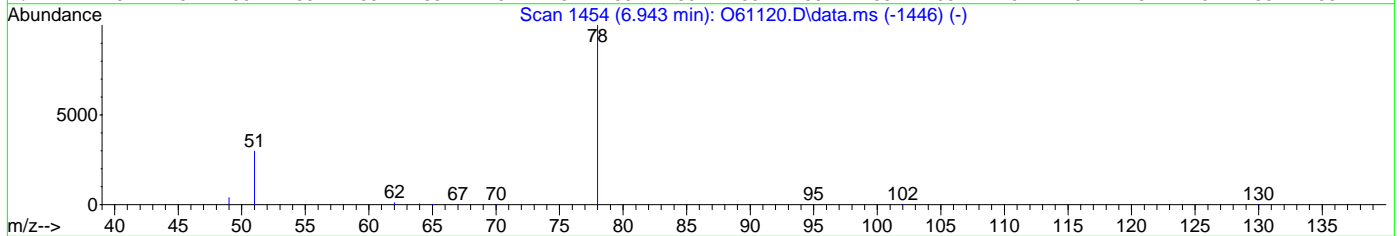
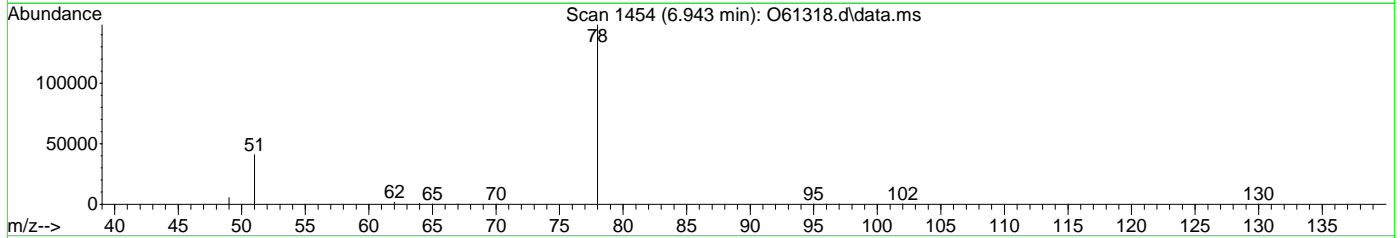
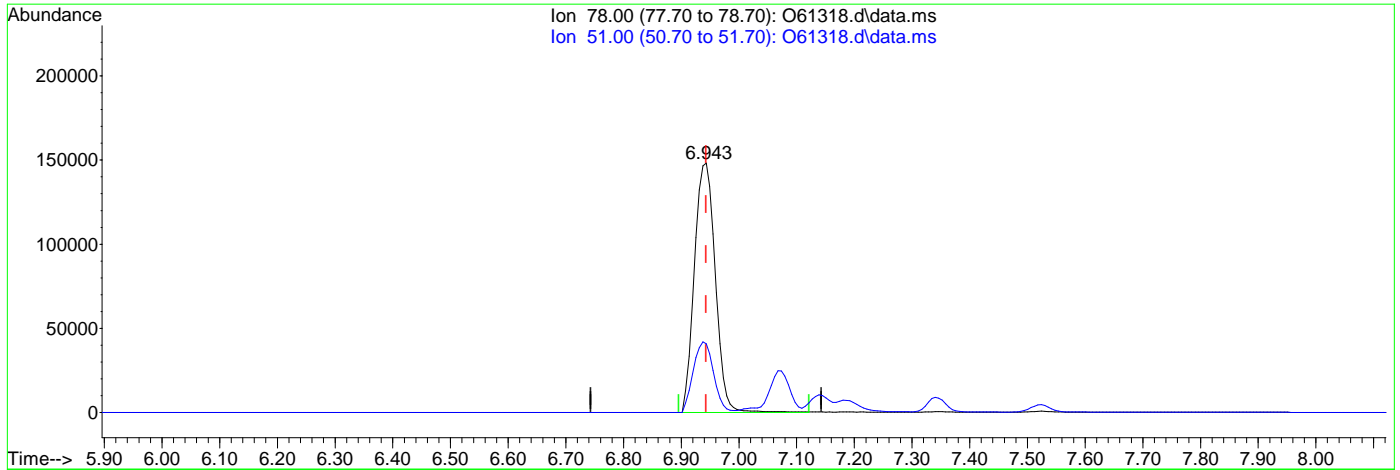
7.4.3.1

7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-14-2020\VO2359\
 Data File : O61318.d
 Acq On : 13 Sep 2020 2:33 am
 Operator : stutip
 Sample : fa78551-12ms,10
 Misc : MS47193,VO2359,,,,,10
 ALS Vial : 24 Sample Multiplier: 1

Quant Time: Sep 14 07:20:33 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Sun Sep 13 19:20:40 2020
 Response via : Initial Calibration



(12) Benzene ()

6.943min (+0.000) 5.39ug/L

response 373631

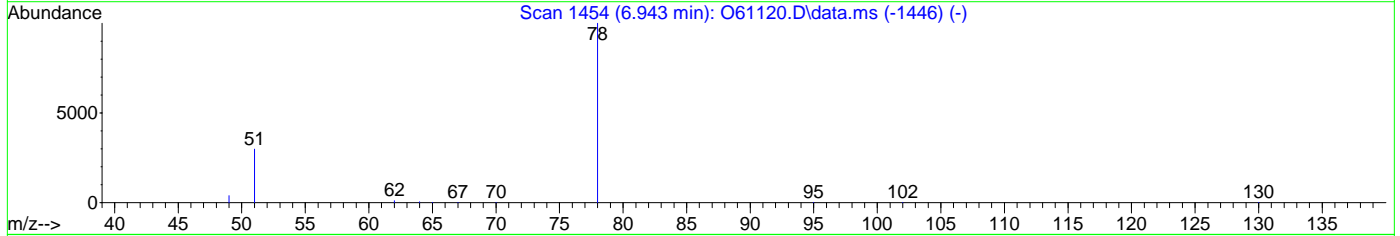
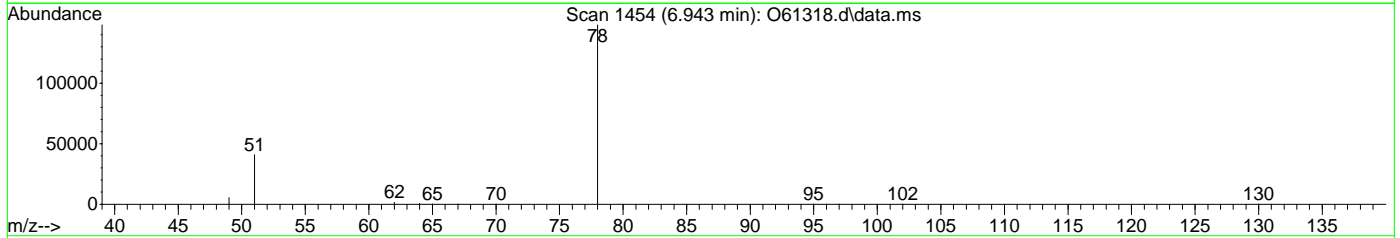
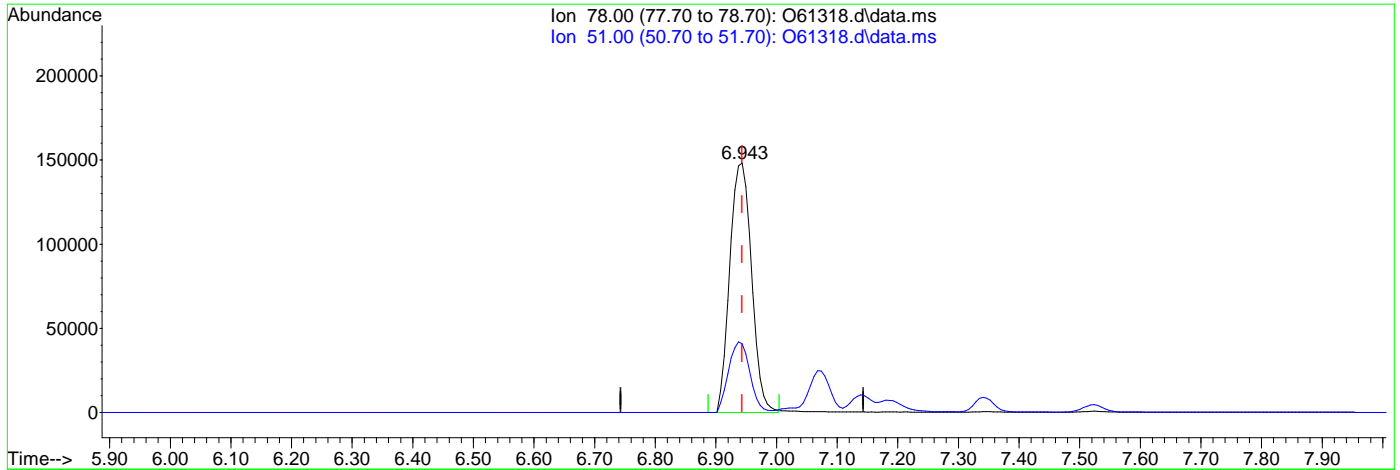
Ion	Exp%	Act%
78.00	100	100
51.00	26.20	27.55
0.00	0.00	0.00
0.00	0.00	0.00

74.32
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-14-2020\VO2359\
 Data File : O61318.d
 Acq On : 13 Sep 2020 2:33 am
 Operator : stutip
 Sample : fa78551-12ms,10
 Misc : MS47193,VO2359,,,,,10
 ALS Vial : 24 Sample Multiplier: 1

Quant Time: Sep 14 07:20:33 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Sun Sep 13 19:20:40 2020
 Response via : Initial Calibration



TIC: O61318.d\data.ms

(12) Benzene ()

6.943min (+0.000) 5.33ug/L m

response 369236

Ion	Exp%	Act%
78.00	100	100
51.00	26.20	27.55
0.00	0.00	0.00
0.00	0.00	0.00

74.3.3
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-14-2020\VO2359\
 Data File : O61319.d
 Acq On : 13 Sep 2020 2:53 am
 Operator : stutip
 Sample : fa78551-12msd,10
 Misc : MS47193,VO2359,,,,,10
 ALS Vial : 25 Sample Multiplier: 1

Quant Time: Sep 14 08:06:25 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Sun Sep 13 19:20:40 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	

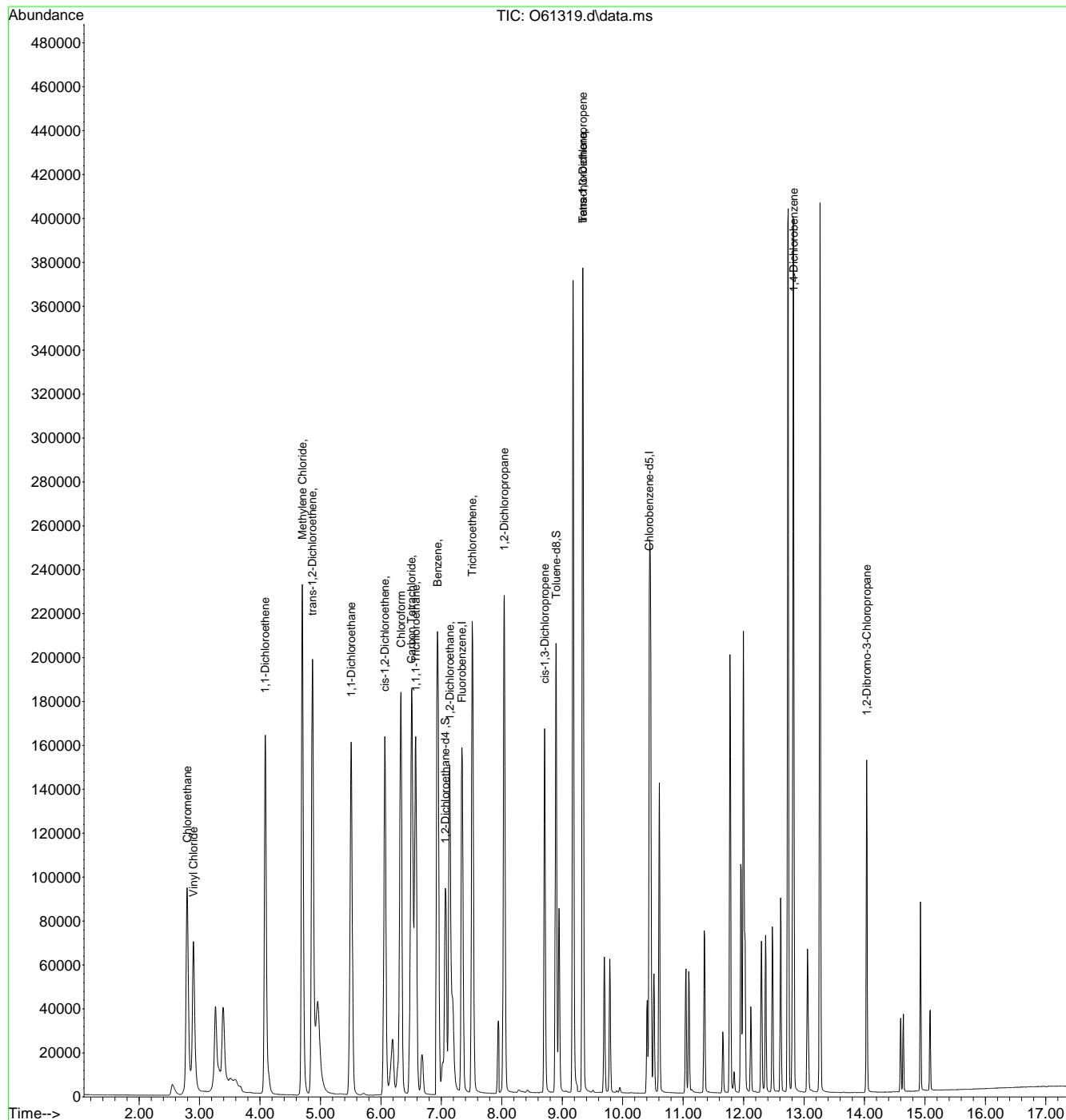
Internal Standards							
1) Fluorobenzene	7.340	96	240247	5.00	ug/L	0.00	
18) Chlorobenzene-d5	10.441	117	194673	5.00	ug/L	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.068	65	96426	4.97	ug/L	0.00	
Spiked Amount	5.000	Range 74 - 125	Recovery	=	99.40%		
19) Toluene-d8	8.896	98	195690	4.46	ug/L	0.00	
Spiked Amount	5.000	Range 88 - 111	Recovery	=	89.20%		
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.897	62	136759	5.09	ug/L		98
3) Chloromethane	2.795	50	196544	4.97	ug/L		94
4) 1,1-Dichloroethene	4.085	61	198133	5.97	ug/L		91
5) Methylene Chloride	4.699	49	304522	5.85	ug/L		96
6) trans-1,2-Dichloroethene	4.865	61	214149	5.59	ug/L		84
7) 1,1-Dichloroethane	5.510	63	284444	6.39	ug/L		100
8) cis-1,2-Dichloroethene	6.066	96	112539	5.11	ug/L #		82
9) Chloroform	6.333	83	218318	5.70	ug/L		96
10) Carbon Tetrachloride	6.505	117	142219	5.44	ug/L		87
11) 1,1,1-Trichloroethane	6.576	97	157020	5.31	ug/L		91
12) Benzene	6.937	78	409509m	5.52	ug/L		
14) 1,2-Dichloroethane	7.139	62	190496	5.26	ug/L		93
15) Trichloroethene	7.512	95	125532	5.56	ug/L		86
16) 1,2-Dichloropropane	8.040	63	138898	5.61	ug/L		95
17) cis-1,3-Dichloropropene	8.707	75	120328	4.68	ug/L		99
20) trans-1,3-Dichloropropene	9.343	75	119127	4.66	ug/L		99
21) Tetrachloroethene	9.337	166	130192	6.10	ug/L		96
22) 1,4-Dichlorobenzene	12.827	146	238523	5.29	ug/L		96
23) 1,2-Dibromo-3-Chloropr...	14.038	75	34843	4.35	ug/L		86

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-14-2020\VO2359\
 Data File : O61319.d
 Acq On : 13 Sep 2020 2:53 am
 Operator : stutip
 Sample : fa78551-12msd,10
 Misc : MS47193,VO2359,,,,,10
 ALS Vial : 25 Sample Multiplier: 1

Quant Time: Sep 14 08:06:25 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Sun Sep 13 19:20:40 2020
 Response via : Initial Calibration



7.4.4
7

Manual Integration Approval Summary

Sample Number: FA78551-12MSD **Method:** SW846 8260B BY SIM
Lab FileID: O61319.D **Analyst approved:** 09/14/20 08:16 Jennifer Ferreira
Injection Time: 09/13/20 02:53 **Supervisor approved:** 09/16/20 15:24 Melissa Mangual

Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzene	71-43-2		6.94	Poor instrument integration

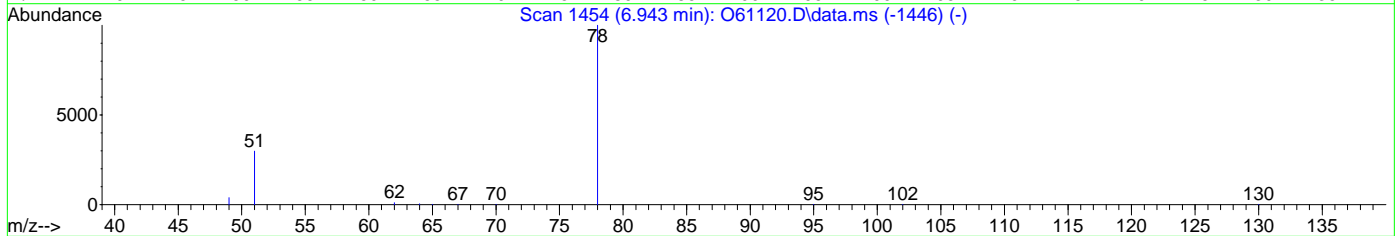
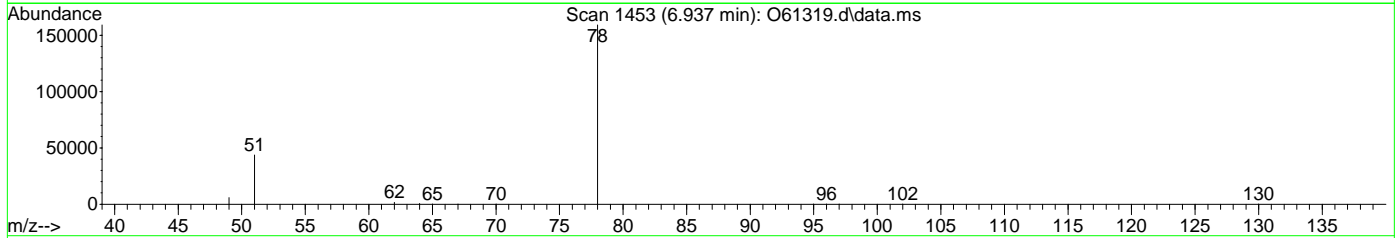
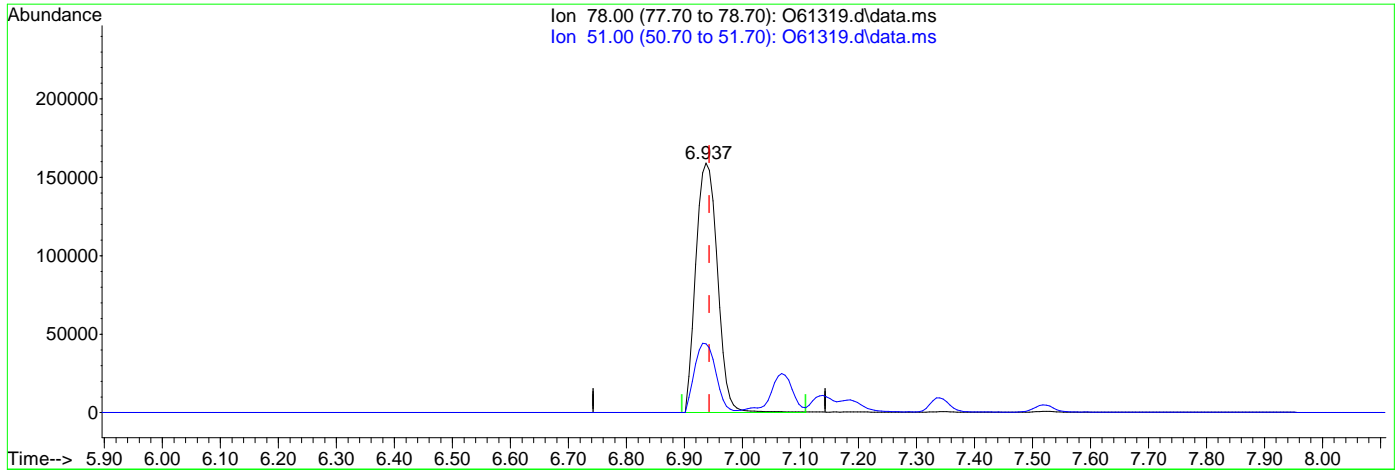
7.4.4.1

7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-14-2020\VO2359\
 Data File : O61319.d
 Acq On : 13 Sep 2020 2:53 am
 Operator : stutip
 Sample : fa78551-12msd,10
 Misc : MS47193,VO2359,,,,,10
 ALS Vial : 25 Sample Multiplier: 1

Quant Time: Sep 14 07:20:35 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Sun Sep 13 19:20:40 2020
 Response via : Initial Calibration



TIC: O61319.d\data.ms

(12) Benzene ()

6.937min (-0.006) 5.59ug/L

response 414158

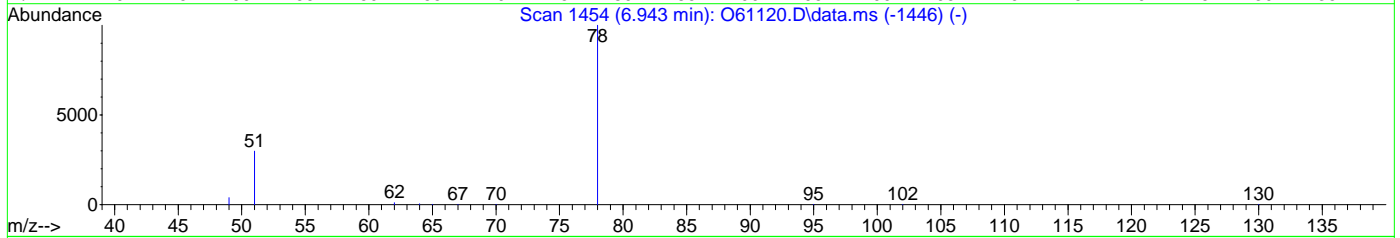
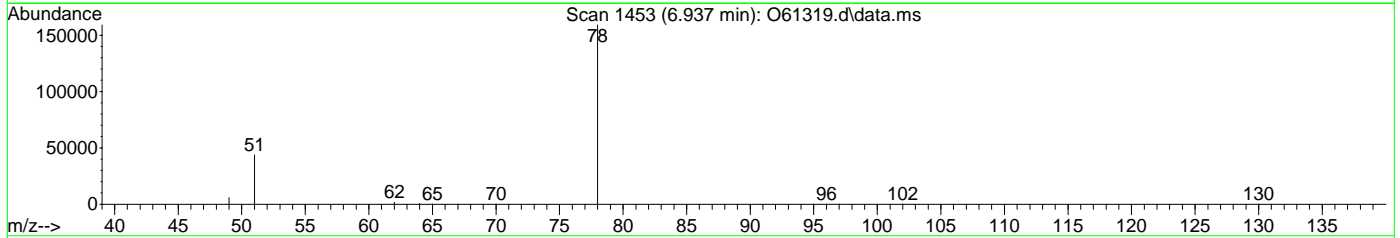
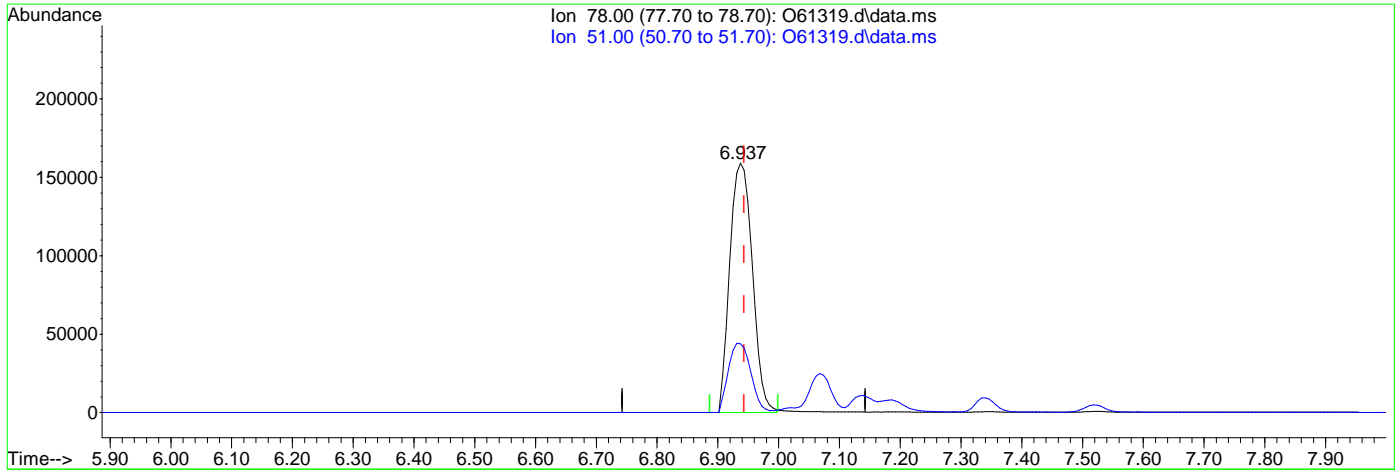
Ion	Exp%	Act%
78.00	100	100
51.00	26.20	27.50
0.00	0.00	0.00
0.00	0.00	0.00

7.4.4.2
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-14-2020\VO2359\
 Data File : O61319.d
 Acq On : 13 Sep 2020 2:53 am
 Operator : stutip
 Sample : fa78551-12msd,10
 Misc : MS47193,VO2359,,,,,10
 ALS Vial : 25 Sample Multiplier: 1

Quant Time: Sep 14 07:20:35 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Sun Sep 13 19:20:40 2020
 Response via : Initial Calibration



(12) Benzene ()

6.937min (-0.006) 5.52ug/L m

response 409509

Ion	Exp%	Act%
78.00	100	100
51.00	26.20	27.50
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\091420\
 Data File : Z62335.D
 Acq On : 14 Sep 2020 5:57 pm
 Operator : JuanG
 Sample : FA78551-15MS,10X
 Misc : MS47193,VZ2418,,,,,10
 ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 15 18:50:44 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Sun Sep 13 13:38:26 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	

Internal Standards							
1) Fluorobenzene	7.401	96	1535956	5.00	ppb	0.00	
18) Chlorobenzene-d5	10.511	117	1308662	5.00	ppb	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.130	65	540890	5.69	ppb	0.00	
Spiked Amount	5.000	Range 79 - 125	Recovery	=	113.80%		
19) Toluene-d8	8.961	98	1477825	4.65	ppb	0.00	
Spiked Amount	5.000	Range 70 - 130	Recovery	=	93.00%		
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.839	62	827363	6.47	ppb		100
3) Chloromethane	2.729	50	656815	6.13	ppb		100
4) 1,1-Dichloroethene	4.087	96	555274	5.97	ppb	#	88
5) Methylene Chloride	4.713	84	755384	5.25	ppb		91
6) trans-1,2-Dichloroethene	4.890	96	640859	5.65	ppb		89
7) 1,1-Dichloroethane	5.546	63	1514538	7.87	ppb	#	100
8) cis-1,2-Dichloroethene	6.110	96	715668	5.68	ppb		93
9) Chloroform	6.377	83	1357020	5.88	ppb		100
10) Carbon Tetrachloride	6.543	117	799644	5.10	ppb		98
11) 1,1,1-Trichloroethane	6.620	97	1120501	5.54	ppb		99
12) Benzene	6.994	78	2480344	5.80	ppb		96
14) 1,2-Dichloroethane	7.198	62	928890	5.76	ppb		100
15) Trichloroethene	7.571	95	839093	6.40	ppb		85
16) 1,2-Dichloropropane	8.105	63	608966	5.60	ppb		98
17) cis-1,3-Dichloropropene	8.773	75	419212	3.59	ppb		99
20) trans-1,3-Dichloropropene	9.411	75	341621	3.13	ppb		100
21) Tetrachloroethene	9.399	166	815385	5.51	ppb		100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

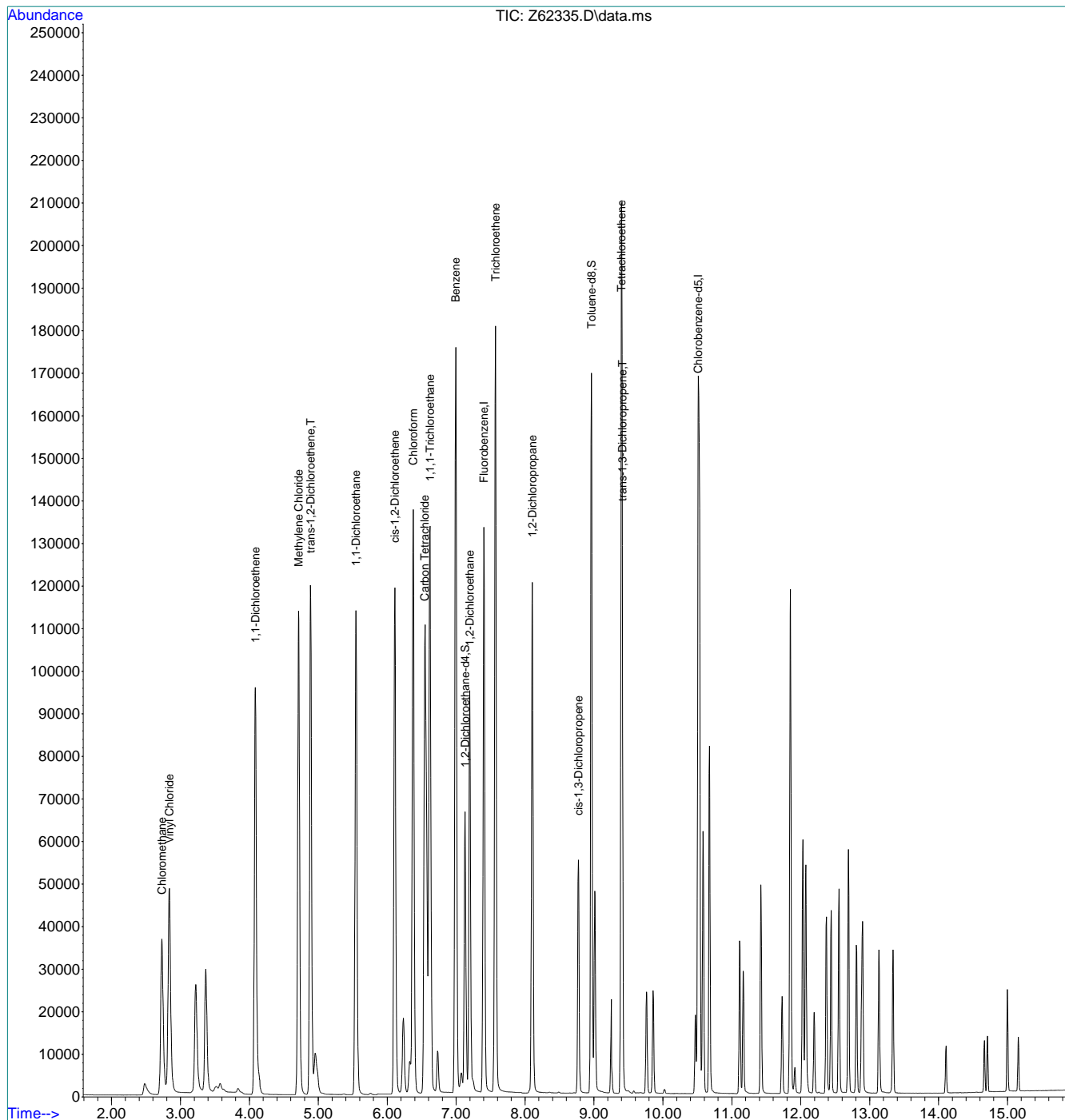
7.4.5
7



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\091420\
 Data File : Z62335.D
 Acq On : 14 Sep 2020 5:57 pm
 Operator : JuanG
 Sample : FA78551-15MS,10X
 Misc : MS47193,VZ2418,,,,,10
 ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 15 18:50:44 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Sun Sep 13 13:38:26 2020
 Response via : Initial Calibration



7.4.5
7



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\091420\
 Data File : Z62336.D
 Acq On : 14 Sep 2020 6:16 pm
 Operator : JuanG
 Sample : FA78551-15MSD,10X
 Misc : MS47193,VZ2418,,,,,10
 ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 15 18:50:46 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Sun Sep 13 13:38:26 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	

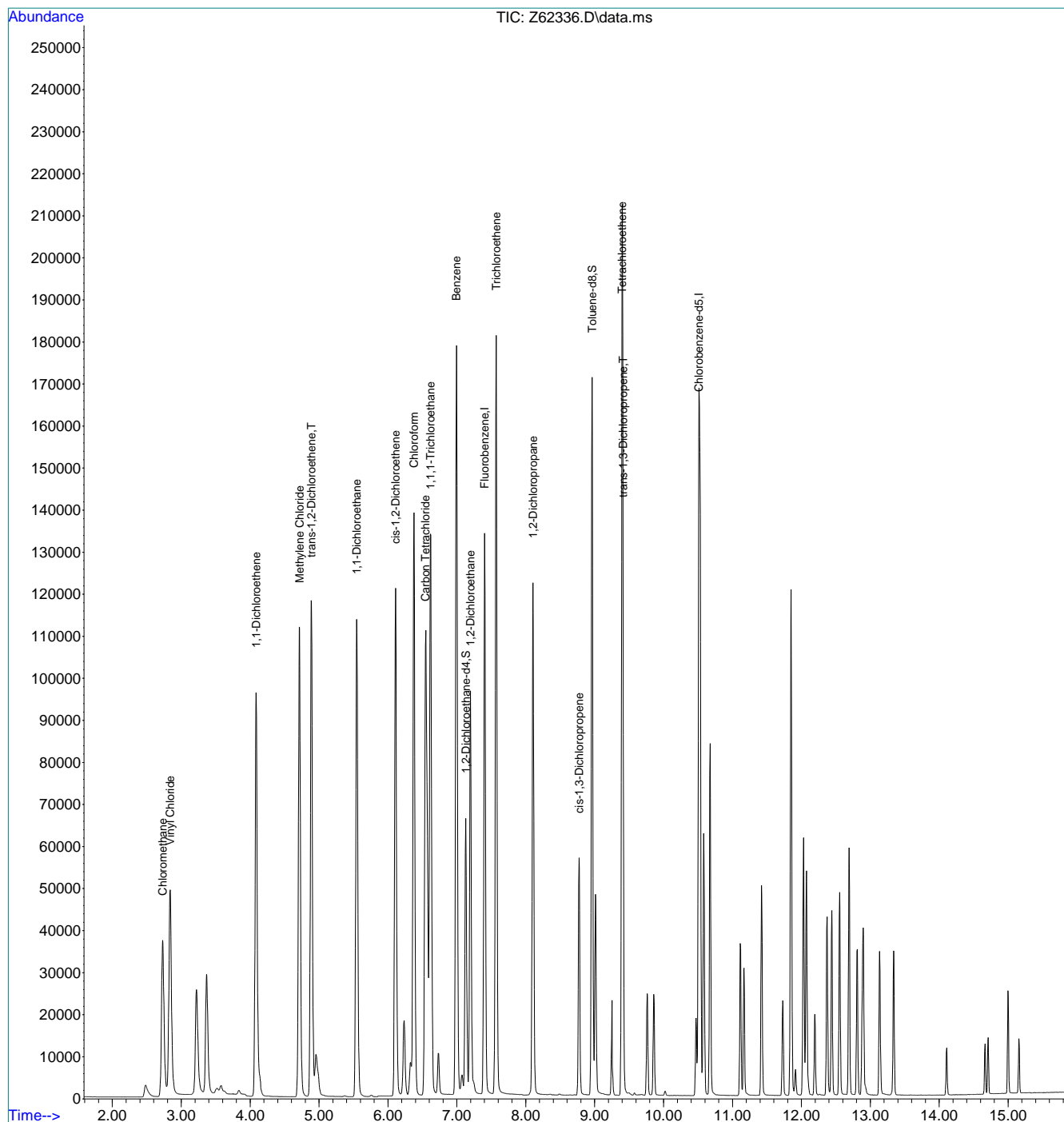
Internal Standards							
1) Fluorobenzene	7.401	96	1533862	5.00	ppb	0.00	
18) Chlorobenzene-d5	10.511	117	1295594	5.00	ppb	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.130	65	534924	5.64	ppb	0.00	
Spiked Amount	5.000	Range	79 - 125	Recovery	=	112.80%	
19) Toluene-d8	8.961	98	1472511	4.68	ppb	0.00	
Spiked Amount	5.000	Range	70 - 130	Recovery	=	93.60%	
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.839	62	843325	6.61	ppb		99
3) Chloromethane	2.729	50	672023	6.27	ppb		100
4) 1,1-Dichloroethene	4.087	96	560127	6.03	ppb	#	89
5) Methylene Chloride	4.717	84	755426	5.26	ppb	#	88
6) trans-1,2-Dichloroethene	4.890	96	642850	5.68	ppb		90
7) 1,1-Dichloroethane	5.546	63	1516870	7.90	ppb	#	99
8) cis-1,2-Dichloroethene	6.110	96	723747	5.75	ppb		93
9) Chloroform	6.377	83	1363274	5.91	ppb		100
10) Carbon Tetrachloride	6.543	117	803786	5.14	ppb		98
11) 1,1,1-Trichloroethane	6.614	97	1130968	5.60	ppb		99
12) Benzene	6.994	78	2500290	5.86	ppb		96
14) 1,2-Dichloroethane	7.197	62	932587	5.79	ppb		99
15) Trichloroethene	7.571	95	835348	6.38	ppb		85
16) 1,2-Dichloropropane	8.105	63	611948	5.63	ppb		98
17) cis-1,3-Dichloropropene	8.773	75	428263	3.67	ppb		98
20) trans-1,3-Dichloropropene	9.411	75	355484	3.28	ppb		99
21) Tetrachloroethene	9.399	166	817380	5.59	ppb		99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\091420\
 Data File : Z62336.D
 Acq On : 14 Sep 2020 6:16 pm
 Operator : JuanG
 Sample : FA78551-15MSD,10X
 Misc : MS47193,VZ2418,,,,,10
 ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 15 18:50:46 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Sun Sep 13 13:38:26 2020
 Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\091420\
 Data File : Z62343.D
 Acq On : 14 Sep 2020 8:31 pm
 Operator : JuanG
 Sample : FA78551-16MS,10X
 Misc : MS47193,VZ2418,,,,,10
 ALS Vial : 21 Sample Multiplier: 1

Quant Time: Sep 15 18:51:00 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Sun Sep 13 13:38:26 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	

Internal Standards							
1) Fluorobenzene	7.401	96	1386954	5.00	ppb	0.00	
18) Chlorobenzene-d5	10.511	117	1188096	5.00	ppb	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.130	65	495333	5.77	ppb	0.00	
Spiked Amount	5.000	Range	79 - 125	Recovery	=	115.40%	
19) Toluene-d8	8.961	98	1322568	4.58	ppb	0.00	
Spiked Amount	5.000	Range	70 - 130	Recovery	=	91.60%	
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.839	62	807074	6.99	ppb		99
3) Chloromethane	2.730	50	647405	6.65	ppb		99
4) 1,1-Dichloroethene	4.083	96	517868	6.16	ppb		90
5) Methylene Chloride	4.713	84	716989	5.54	ppb		89
6) trans-1,2-Dichloroethene	4.886	96	602489	5.89	ppb		92
7) 1,1-Dichloroethane	5.546	63	1458094	8.40	ppb	#	99
8) cis-1,2-Dichloroethene	6.110	96	679351	5.97	ppb		92
9) Chloroform	6.377	83	1300811	6.24	ppb		100
10) Carbon Tetrachloride	6.543	117	748786	5.29	ppb		98
11) 1,1,1-Trichloroethane	6.614	97	1061921	5.81	ppb		99
12) Benzene	6.994	78	2354216	6.10	ppb		96
14) 1,2-Dichloroethane	7.198	62	886147	6.09	ppb		100
15) Trichloroethene	7.564	95	804621	6.79	ppb		96
16) 1,2-Dichloropropane	8.105	63	579504	5.90	ppb		98
17) cis-1,3-Dichloropropene	8.773	75	374292	3.56	ppb		98
20) trans-1,3-Dichloropropene	9.412	75	310160	3.13	ppb		99
21) Tetrachloroethene	9.399	166	771732	5.76	ppb		100

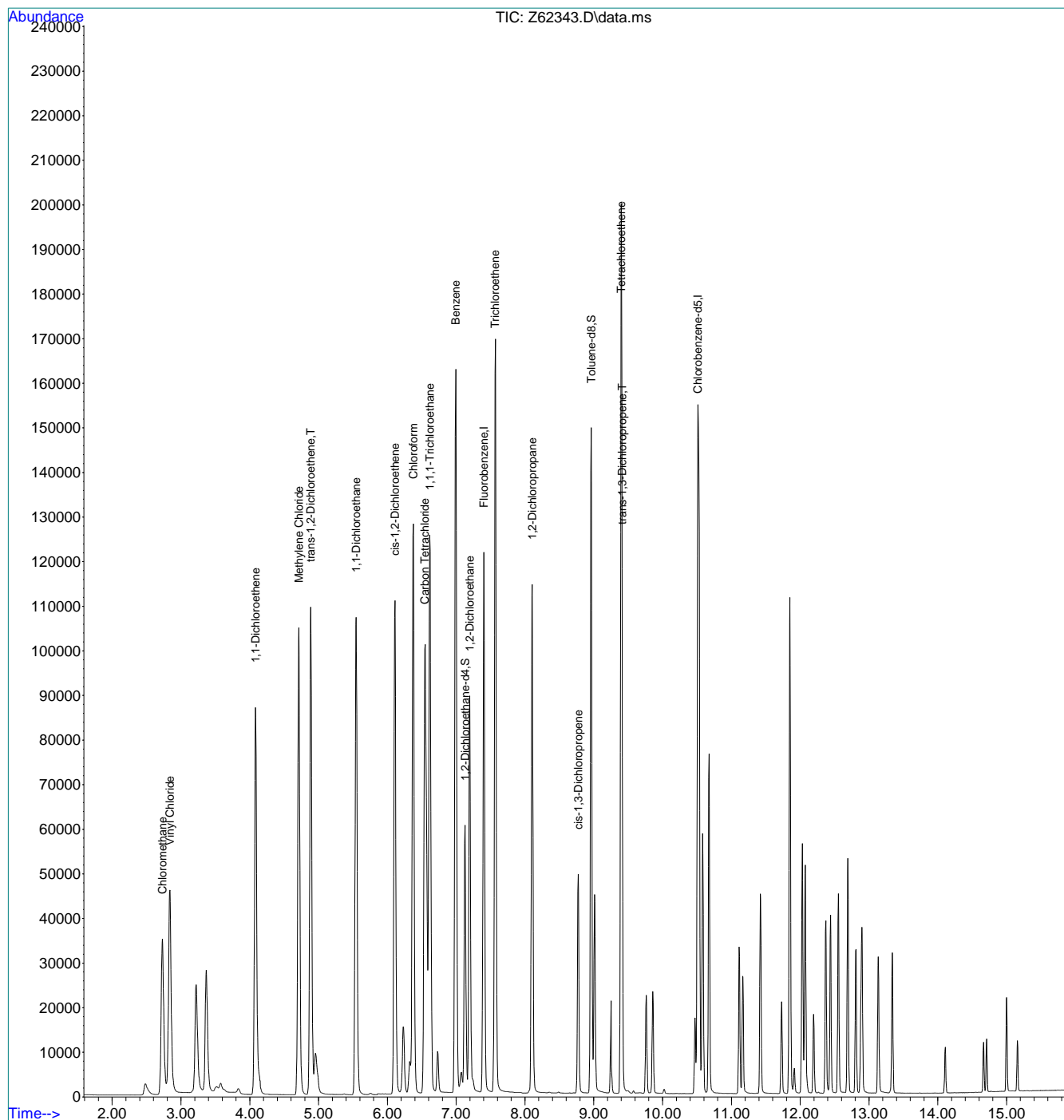
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.4.7
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\091420\
 Data File : Z62343.D
 Acq On : 14 Sep 2020 8:31 pm
 Operator : JuanG
 Sample : FA78551-16MS,10X
 Misc : MS47193,VZ2418,,,,,10
 ALS Vial : 21 Sample Multiplier: 1

Quant Time: Sep 15 18:51:00 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Sun Sep 13 13:38:26 2020
 Response via : Initial Calibration



7.4.7
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\091420\
 Data File : Z62344.D
 Acq On : 14 Sep 2020 8:50 pm
 Operator : JuanG
 Sample : FA78551-16MSD,10X
 Misc : MS47193,VZ2418,,,,,10
 ALS Vial : 22 Sample Multiplier: 1

Quant Time: Sep 15 18:51:02 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Sun Sep 13 13:38:26 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	

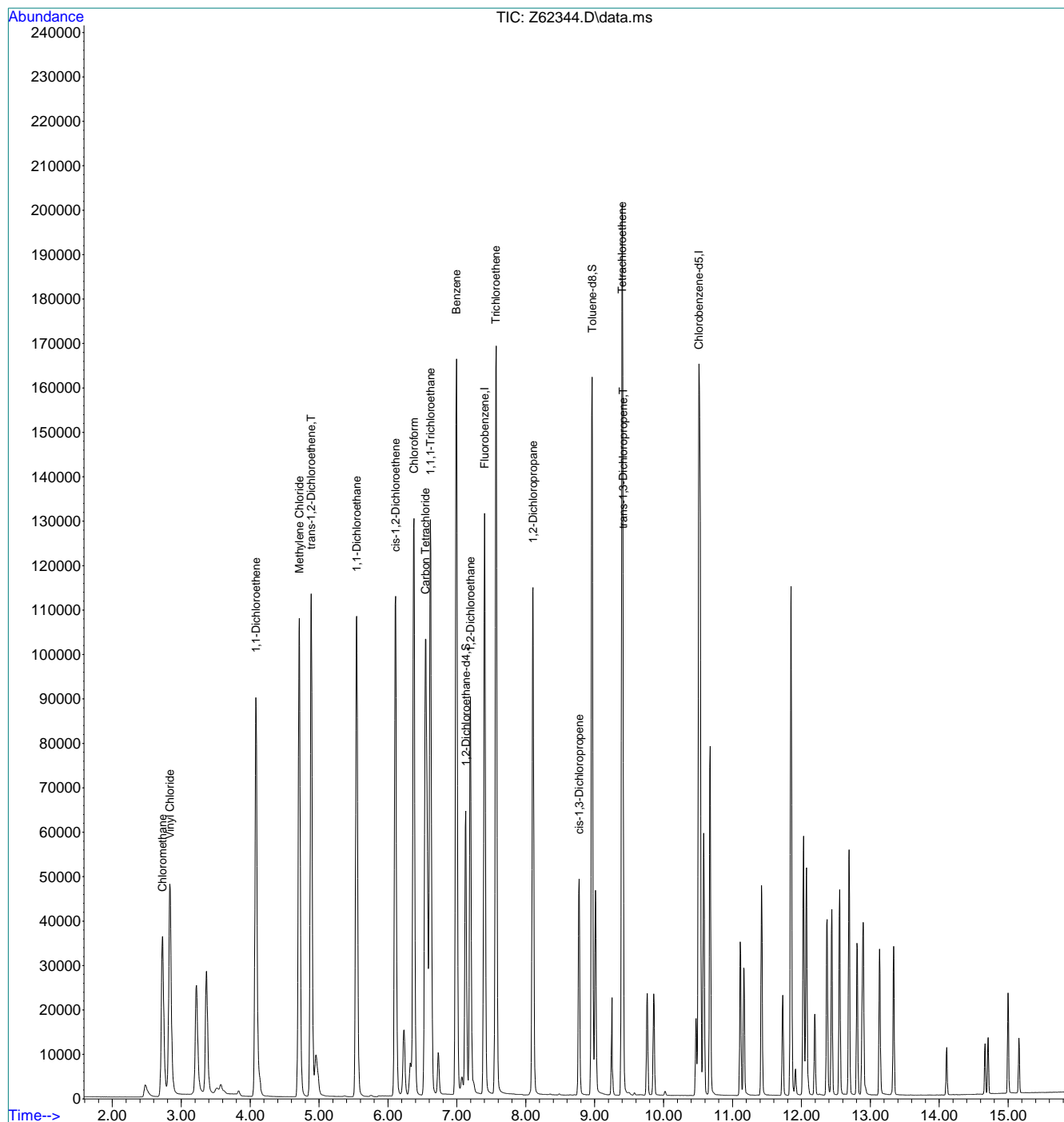
Internal Standards							
1) Fluorobenzene	7.401	96	1509625	5.00	ppb	0.00	
18) Chlorobenzene-d5	10.511	117	1278994	5.00	ppb	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.130	65	532659	5.70	ppb	0.00	
Spiked Amount	5.000	Range	79 - 125	Recovery	=	114.00%	
19) Toluene-d8	8.961	98	1443456	4.65	ppb	0.00	
Spiked Amount	5.000	Range	70 - 130	Recovery	=	93.00%	
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.835	62	810660	6.45	ppb		100
3) Chloromethane	2.726	50	651082	6.18	ppb		99
4) 1,1-Dichloroethene	4.083	96	536443	5.86	ppb		90
5) Methylene Chloride	4.713	84	736920	5.21	ppb		89
6) trans-1,2-Dichloroethene	4.887	96	618995	5.56	ppb		92
7) 1,1-Dichloroethane	5.546	63	1478399	7.82	ppb	#	99
8) cis-1,2-Dichloroethene	6.110	96	694821	5.61	ppb		92
9) Chloroform	6.377	83	1317867	5.81	ppb		100
10) Carbon Tetrachloride	6.543	117	759801	4.93	ppb		98
11) 1,1,1-Trichloroethane	6.614	97	1077727	5.42	ppb		99
12) Benzene	6.994	78	2406655	5.73	ppb		95
14) 1,2-Dichloroethane	7.198	62	897654	5.67	ppb		100
15) Trichloroethene	7.564	95	806658	6.26	ppb		95
16) 1,2-Dichloropropane	8.105	63	589376	5.51	ppb		98
17) cis-1,3-Dichloropropene	8.773	75	371999	3.26	ppb		98
20) trans-1,3-Dichloropropene	9.412	75	318991	2.99	ppb		98
21) Tetrachloroethene	9.399	166	781621	5.40	ppb		99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\091420\
Data File : Z62344.D
Acq On : 14 Sep 2020 8:50 pm
Operator : JuanG
Sample : FA78551-16MSD,10X
Misc : MS47193,VZ2418,,,,,10
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Sep 15 18:51:02 2020
Quant Method : C:\msdchem\1\methods\SIMCL091120.M
Quant Title : WATER-EPA 8260B
QLast Update : Sun Sep 13 13:38:26 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\091520\
 Data File : Z62370.D
 Acq On : 15 Sep 2020 6:53 pm
 Operator : JuanG
 Sample : FA78551-7ms
 Misc : MS47193,VZ2419,,,,,5
 ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 16 10:47:11 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Sun Sep 13 13:38:26 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	

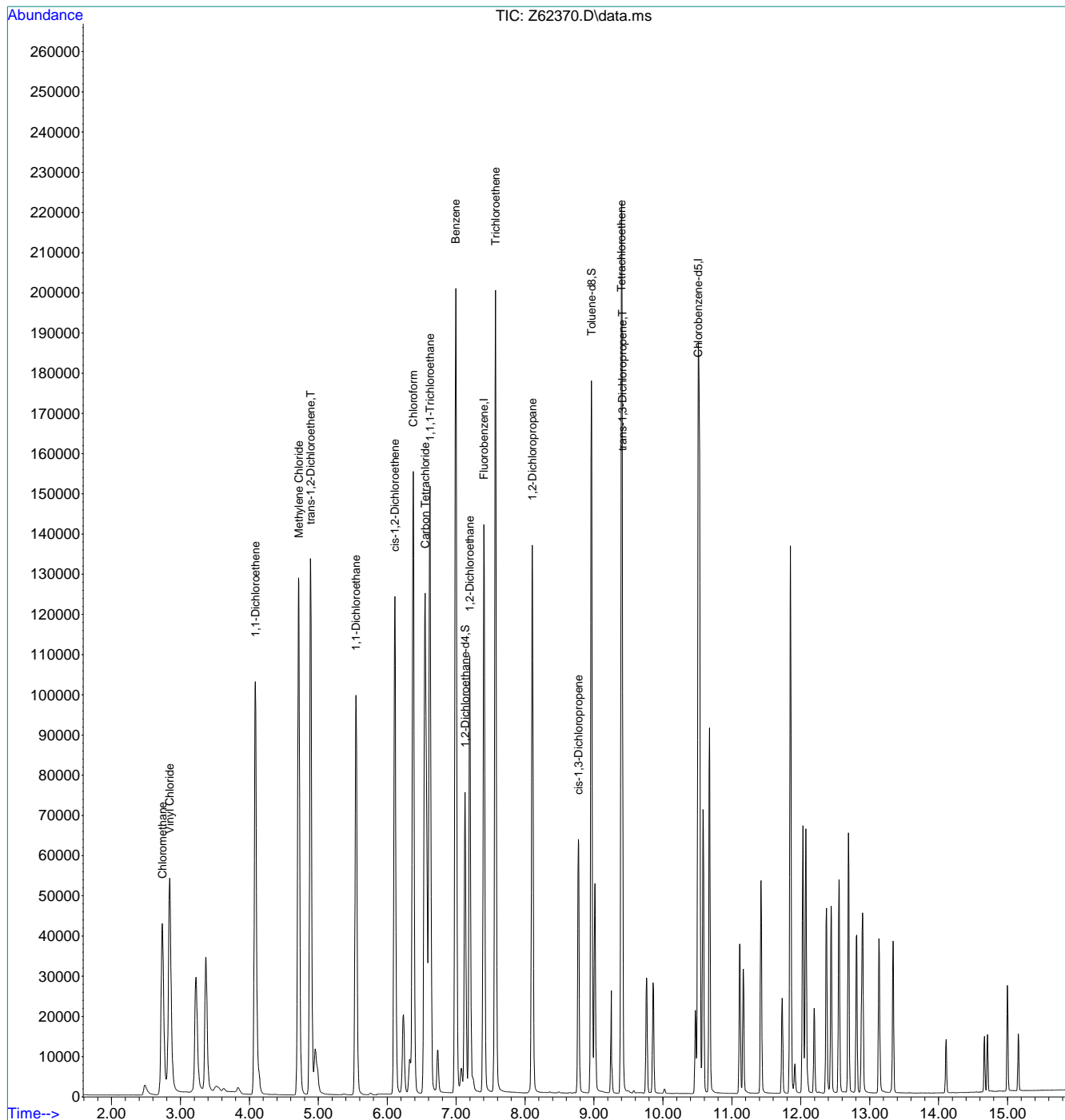
Internal Standards							
1) Fluorobenzene	7.401	96	1645715	5.00	ppb	0.00	
18) Chlorobenzene-d5	10.511	117	1440453	5.00	ppb	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.130	65	607842	5.97	ppb	0.00	
Spiked Amount	5.000	Range	79 - 125	Recovery	=	119.40%	
19) Toluene-d8	8.961	98	1548937	4.43	ppb	0.00	
Spiked Amount	5.000	Range	70 - 130	Recovery	=	88.60%	
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.842	62	994719	7.26	ppb		100
3) Chloromethane	2.737	50	820914	7.06	ppb		100
4) 1,1-Dichloroethene	4.087	96	620959	6.23	ppb	#	89
5) Methylene Chloride	4.717	84	880980	5.75	ppb	#	88
6) trans-1,2-Dichloroethene	4.890	96	728521	6.00	ppb		89
7) 1,1-Dichloroethane	5.546	63	1342600	6.52	ppb	#	100
8) cis-1,2-Dichloroethene	6.110	96	744732	5.52	ppb		94
9) Chloroform	6.377	83	1542687	6.24	ppb		100
10) Carbon Tetrachloride	6.549	117	908375	5.41	ppb		98
11) 1,1,1-Trichloroethane	6.620	97	1283871	5.92	ppb		99
12) Benzene	6.994	78	2851177	6.22	ppb		97
14) 1,2-Dichloroethane	7.198	62	1063721	6.16	ppb		100
15) Trichloroethene	7.571	95	909170	6.47	ppb		86
16) 1,2-Dichloropropane	8.105	63	696695	5.98	ppb		98
17) cis-1,3-Dichloropropene	8.773	75	483874	3.86	ppb		99
20) trans-1,3-Dichloropropene	9.411	75	405837	3.37	ppb		100
21) Tetrachloroethene	9.399	166	853215	5.22	ppb		99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\091520\
Data File : Z62370.D
Acq On : 15 Sep 2020 6:53 pm
Operator : JuanG
Sample : FA78551-7ms
Misc : MS47193,VZ2419,,,,,5
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 16 10:47:11 2020
Quant Method : C:\msdchem\1\methods\SIMCL091120.M
Quant Title : WATER-EPA 8260B
QLast Update : Sun Sep 13 13:38:26 2020
Response via : Initial Calibration



7.4.9
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\091520\
 Data File : Z62371.D
 Acq On : 15 Sep 2020 7:12 pm
 Operator : JuanG
 Sample : FA78551-7msd
 Misc : MS47193,VZ2419,,,,,5
 ALS Vial : 17 Sample Multiplier: 1

Quant Time: Sep 16 10:47:13 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Sun Sep 13 13:38:26 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	

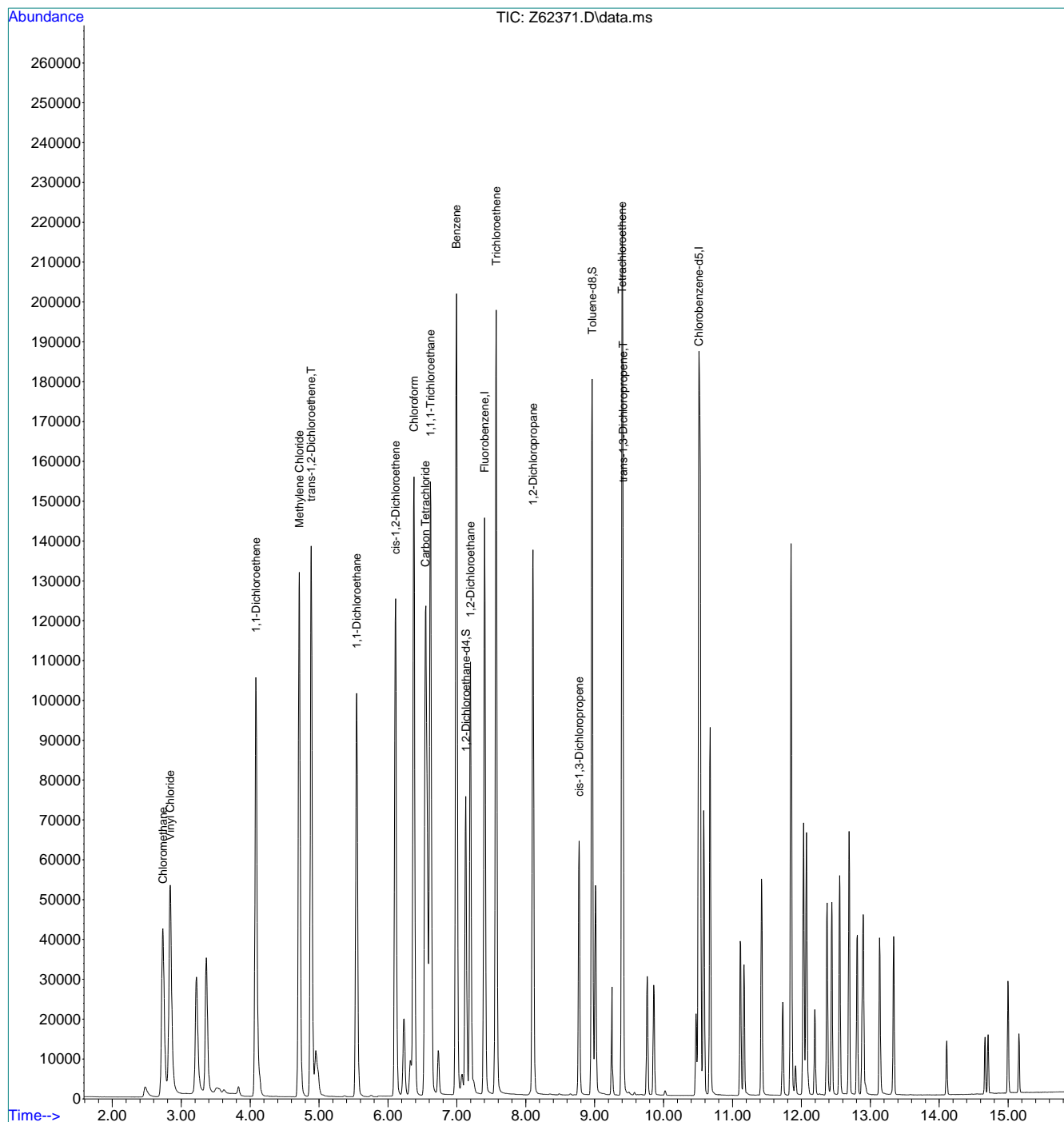
Internal Standards							
1) Fluorobenzene	7.401	96	1649663	5.00	ppb	0.00	
18) Chlorobenzene-d5	10.511	117	1429931	5.00	ppb	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.130	65	601391	5.89	ppb	0.00	
Spiked Amount	5.000	Range	79 - 125	Recovery	=	117.80%	
19) Toluene-d8	8.961	98	1564697	4.51	ppb	0.00	
Spiked Amount	5.000	Range	70 - 130	Recovery	=	90.20%	
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.839	62	1001338	7.29	ppb		100
3) Chloromethane	2.733	50	823939	7.07	ppb		100
4) 1,1-Dichloroethene	4.083	96	617040	6.17	ppb		90
5) Methylene Chloride	4.713	84	874108	5.69	ppb		89
6) trans-1,2-Dichloroethene	4.886	96	737641	6.06	ppb		91
7) 1,1-Dichloroethane	5.546	63	1345262	6.51	ppb	#	100
8) cis-1,2-Dichloroethene	6.110	96	757098	5.59	ppb		93
9) Chloroform	6.377	83	1537310	6.20	ppb		100
10) Carbon Tetrachloride	6.543	117	903271	5.37	ppb		98
11) 1,1,1-Trichloroethane	6.614	97	1283320	5.91	ppb		99
12) Benzene	6.994	78	2854011	6.22	ppb		96
14) 1,2-Dichloroethane	7.198	62	1056463	6.10	ppb		100
15) Trichloroethene	7.571	95	910257	6.46	ppb		85
16) 1,2-Dichloropropane	8.105	63	698282	5.98	ppb		98
17) cis-1,3-Dichloropropene	8.773	75	482764	3.84	ppb		98
20) trans-1,3-Dichloropropene	9.411	75	415391	3.47	ppb		98
21) Tetrachloroethene	9.399	166	850924	5.25	ppb		100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

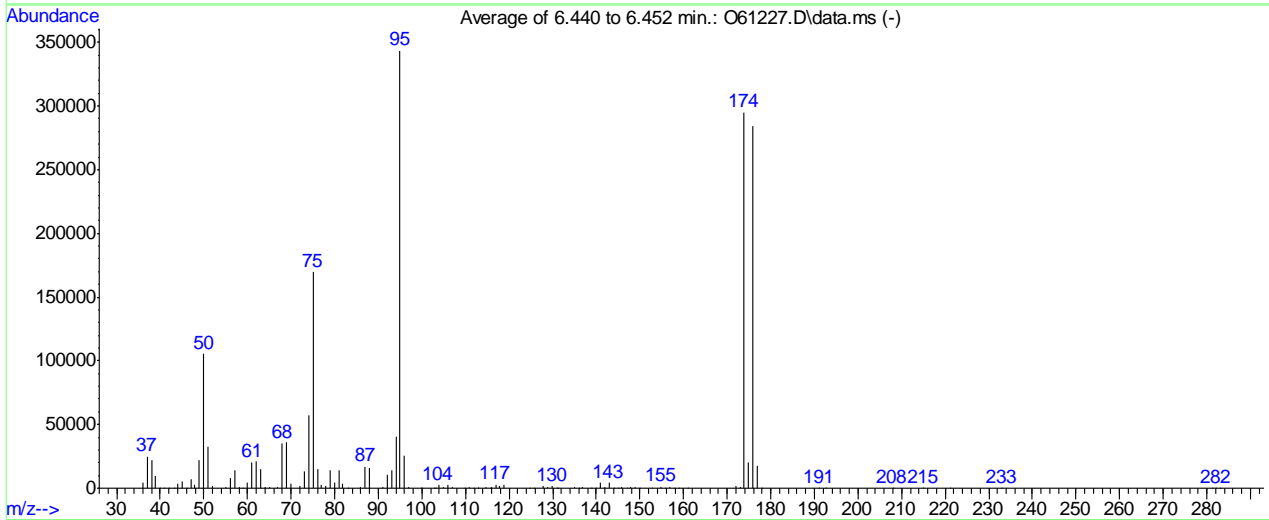
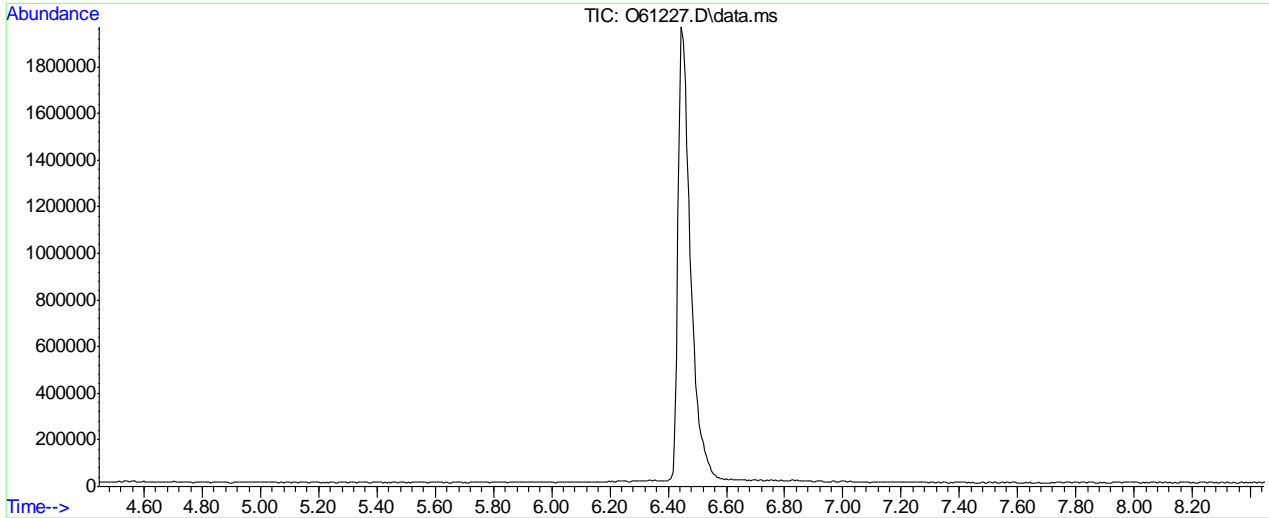
Data Path : C:\msdchem\1\data\091520\
Data File : Z62371.D
Acq On : 15 Sep 2020 7:12 pm
Operator : JuanG
Sample : FA78551-7msd
Misc : MS47193,VZ2419,,,,,5
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Sep 16 10:47:13 2020
Quant Method : C:\msdchem\1\methods\SIMCL091120.M
Quant Title : WATER-EPA 8260B
QLast Update : Sun Sep 13 13:38:26 2020
Response via : Initial Calibration



Methods: SW-846 8260B
 Data File : C:\msdchem\2\data\091120\O61227.D Vial: 100
 Acq On : 11 Sep 2020 2:01 pm Operator: stutip
 Sample : BFB Inst : MSVOA12
 Misc : MS47183,VO2356,,,,, Multiplr: 1.00
 MS Integration Params: rteint.p

Method : C:\msdchem\2\methods\SIMCL091120.M (RTE Integrator)
 Title : Standard Methods 6200B



AutoFind: Scans 468, 469, 470; Background Corrected with Scan 460

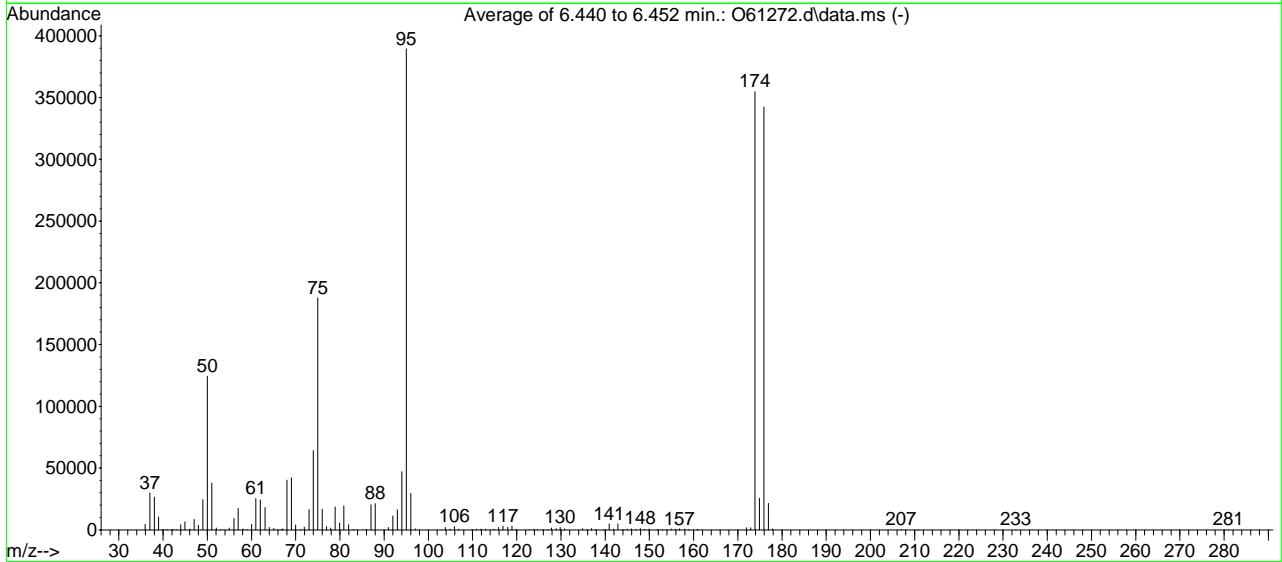
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	30.7	105346	PASS
75	95	30	60	49.4	169774	PASS
95	95	100	100	100.0	343616	PASS
96	95	5	9	7.4	25531	PASS
173	174	0.00	2	0.5	1340	PASS
174	95	50	100	85.8	294848	PASS
175	174	5	9	7.0	20565	PASS
176	174	95	101	96.4	284096	PASS
177	176	5	9	6.2	17677	PASS

O61227.D SIMCL091120.M Sun Sep 13 19:46:55 2020

Methods: SW-846 8260B

Data File : C:\msdchem\1\data\je...-2020\VO2358\O61272.d Vial: 2
 Acq On : 12 Sep 2020 10:34 am Operator: stutip
 Sample : bfb Inst : MSVOA12
 Misc : MS47191,VO2358,,,,, Multiplr: 1.00
 MS Integration Params: rteint.p

Method : C:\msdchem\1\methods\SIMCL091120.M (RTE Integrator)
 Title : Standard Methods 6200B



AutoFind: Scans 468, 469, 470; Background Corrected with Scan 459

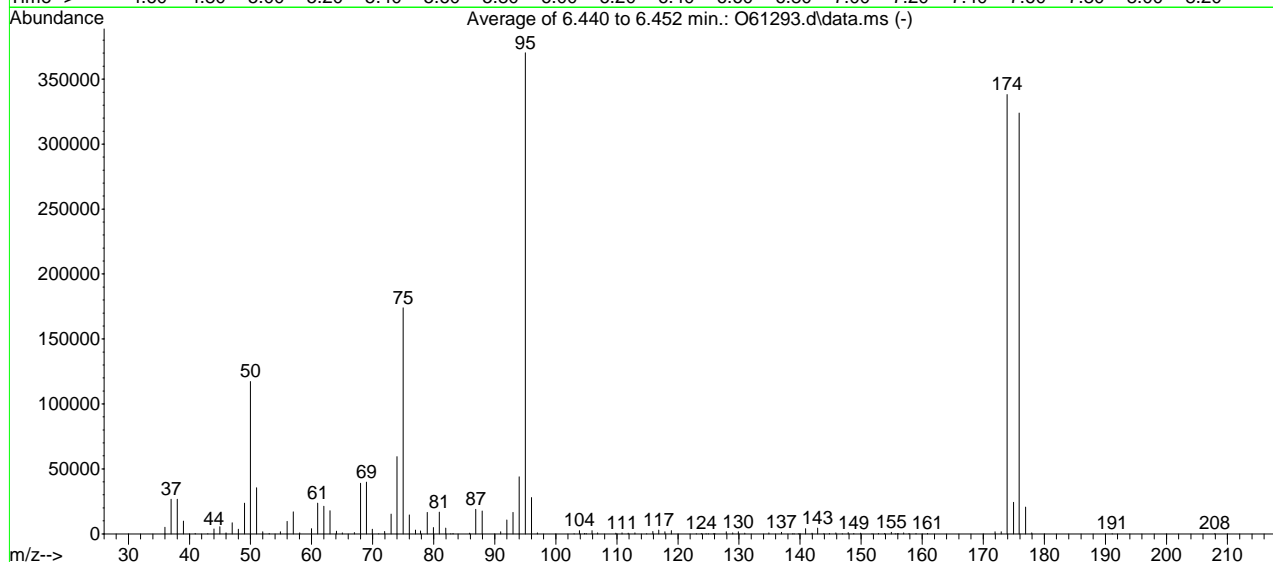
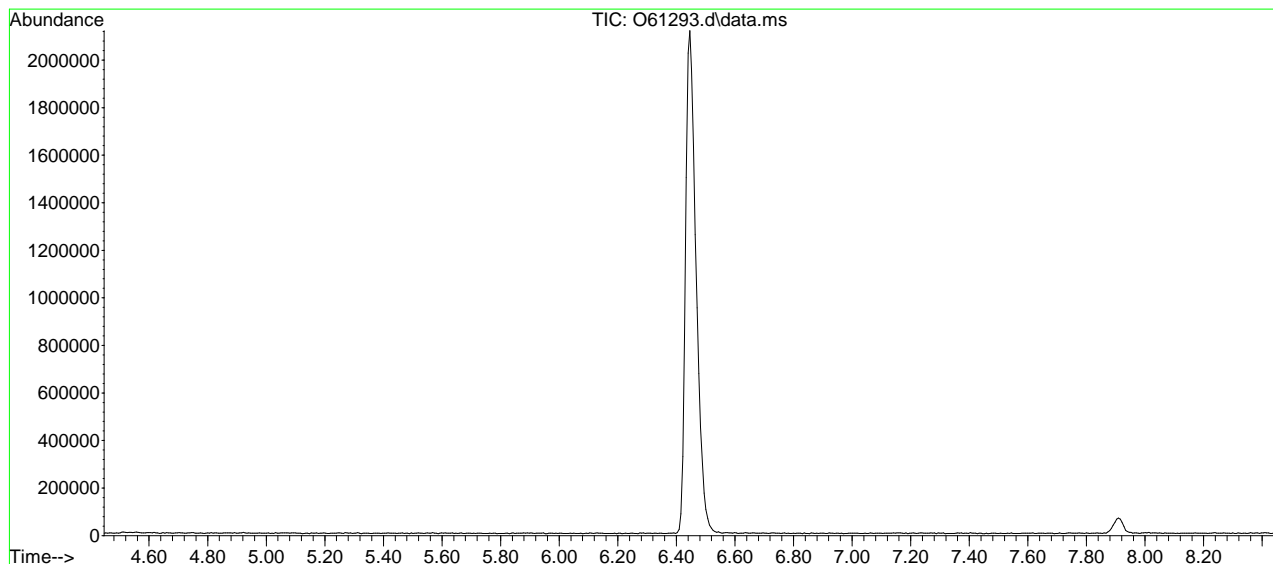
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	31.9	124139	PASS
75	95	30	60	48.2	187861	PASS
95	95	100	100	100.0	389419	PASS
96	95	5	9	7.6	29717	PASS
173	174	0.00	2	0.5	1621	PASS
174	95	50	100	91.1	354688	PASS
175	174	5	9	7.2	25424	PASS
176	174	95	101	96.5	342379	PASS
177	176	5	9	6.2	21387	PASS

O61272.d SIMCL091120.M Mon Sep 14 07:21:05 2020

Methods: SW-846 8260B

Data File : C:\msdchem\1\data\je...-2020\VO2359\O61293.d Vial: 20
 Acq On : 12 Sep 2020 5:31 pm Operator: stutip
 Sample : bfb Inst : MSVOA12
 Misc : MS47192,VO2359,,,,, Multiplr: 1.00
 MS Integration Params: rteint.p

Method : C:\msdchem\1\methods\SIMCL091120.M (RTE Integrator)
 Title : Standard Methods 6200B



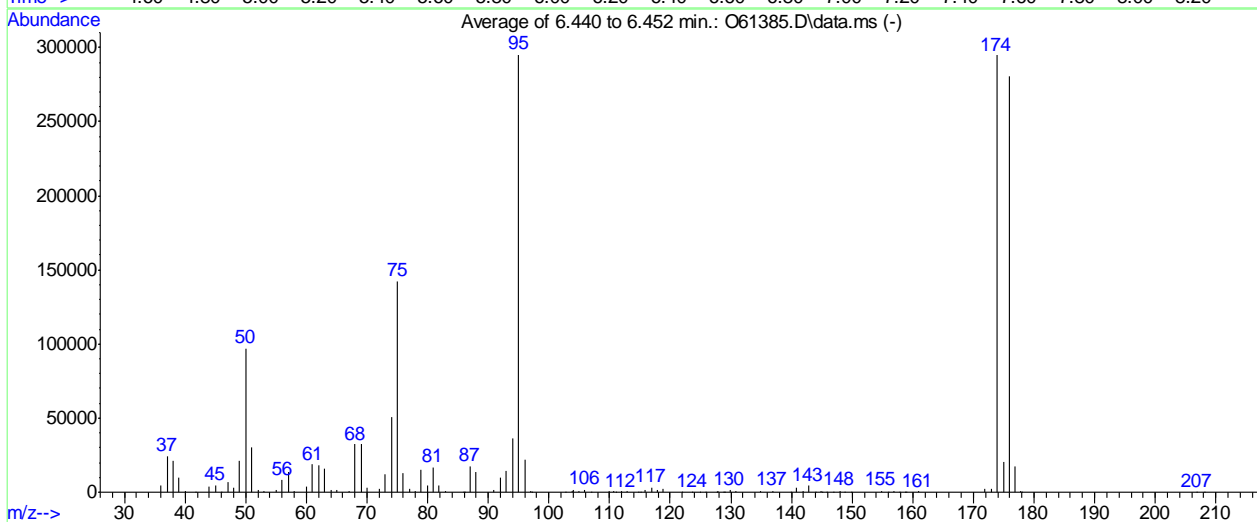
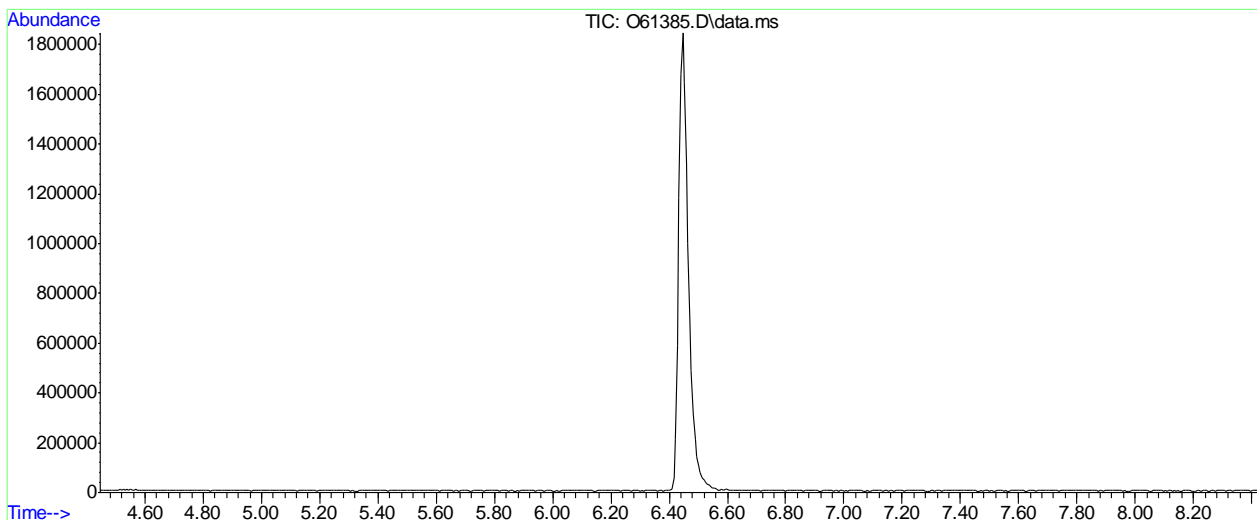
AutoFind: Scans 468, 469, 470; Background Corrected with Scan 459

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	31.7	117360	PASS
75	95	30	60	47.0	174059	PASS
95	95	100	100	100.0	370240	PASS
96	95	5	9	7.6	28037	PASS
173	174	0.00	2	0.5	1589	PASS
174	95	50	100	91.3	338069	PASS
175	174	5	9	7.2	24341	PASS
176	174	95	101	95.8	323925	PASS
177	176	5	9	6.4	20637	PASS

7.5.3
7

Methods: SW-846 8260B
 Data File : C:\msdchem\2\data\091520\O61385.D Vial: 4
 Acq On : 15 Sep 2020 2:52 pm Operator: manager
 Sample : bfb Inst : MSVOA12
 Misc : MS47193,VO2362,,,,, Multiplr: 1.00
 MS Integration Params: rteint.p

Method : C:\msdchem\2\methods\SIMCL091520.M (RTE Integrator)
 Title : Standard Methods 6200B



AutoFind: Scans 468, 469, 470; Background Corrected with Scan 459

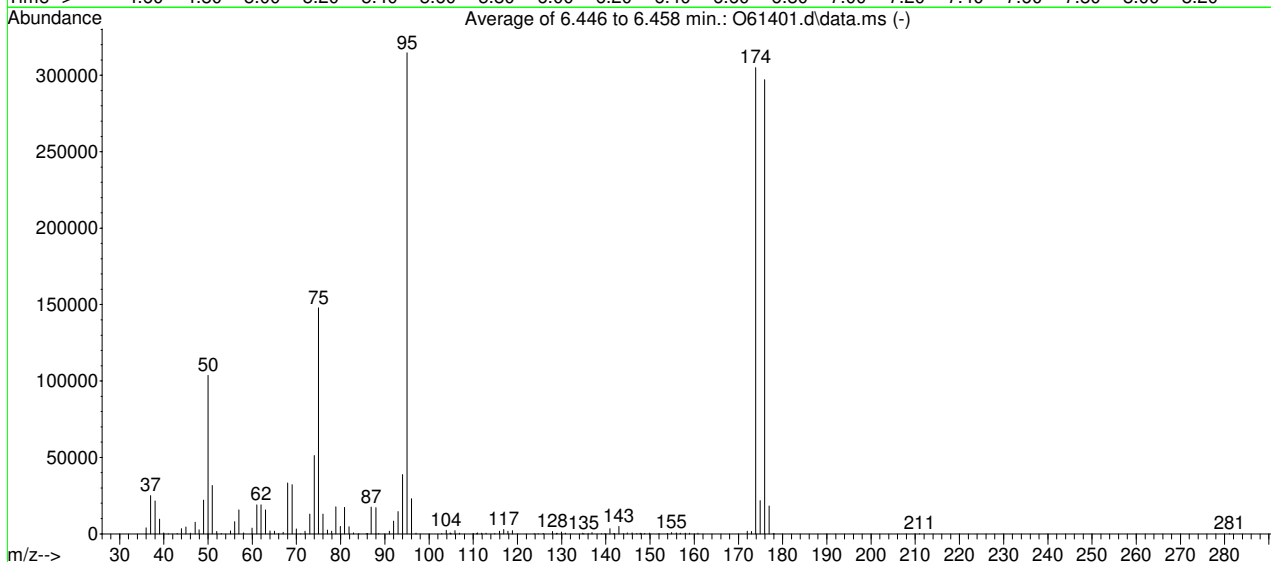
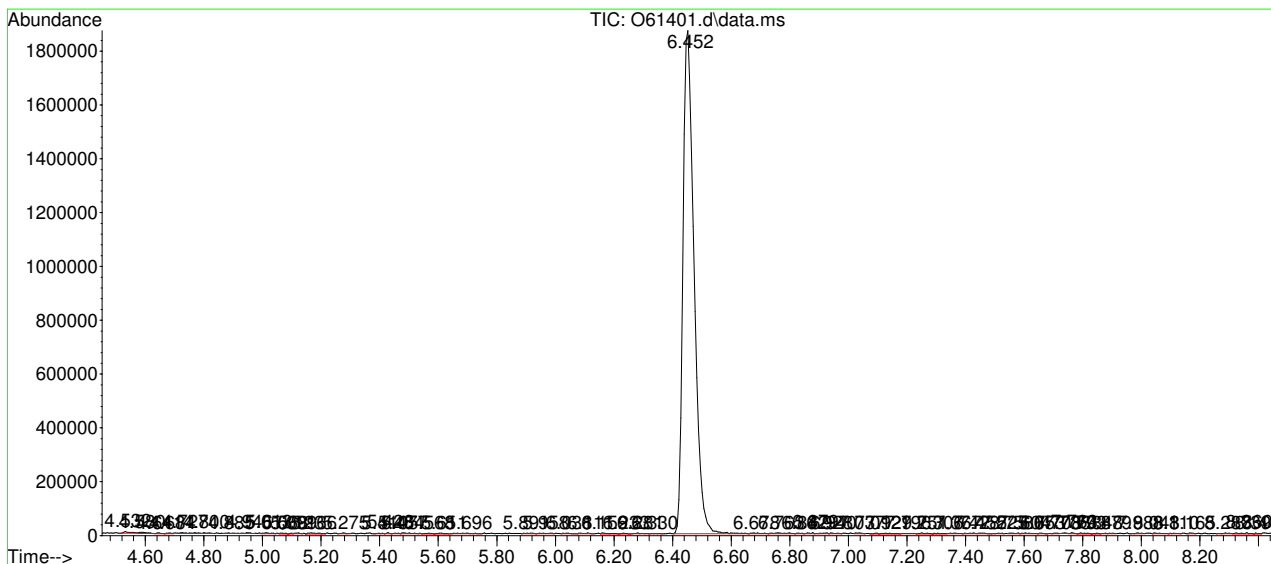
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	32.8	96941	PASS
75	95	30	60	48.2	142400	PASS
95	95	100	100	100.0	295275	PASS
96	95	5	9	7.6	22317	PASS
173	174	0.00	2	0.7	1976	PASS
174	95	50	100	99.9	294869	PASS
175	174	5	9	7.0	20685	PASS
176	174	95	101	95.2	280789	PASS
177	176	5	9	6.2	17438	PASS

7.5.4
7

Methods: SW-846 8260B

Data File : C:\msdchem\1\data\jo...-2020\vo2363\O61401.d Vial: 100
 Acq On : 16 Sep 2020 11:07 am Operator: akarig
 Sample : bfb Inst : MSVOA12
 Misc : MS47193,VO2363,,,,, Multiplr: 1.00
 MS Integration Params: rteint.p

Method : C:\msdchem\1\methods\SIMCL091520.M (RTE Integrator)
 Title : Standard Methods 6200B



AutoFind: Scans 469, 470, 471; Background Corrected with Scan 460

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result
50	95	15	40	33.0	103707	PASS
75	95	30	60	47.0	147861	PASS
95	95	100	100	100.0	314688	PASS
96	95	5	9	7.3	23037	PASS
173	174	0.00	2	0.5	1559	PASS
174	95	50	100	96.9	305045	PASS
175	174	5	9	7.2	21837	PASS
176	174	95	101	97.4	297067	PASS
177	176	5	9	6.1	18176	PASS

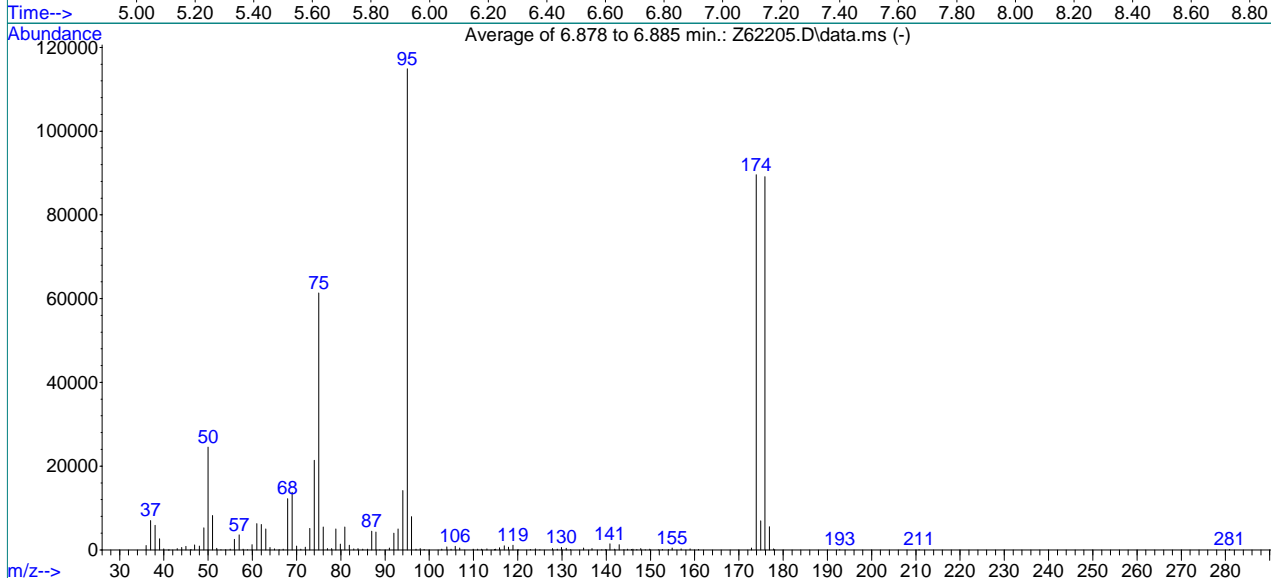
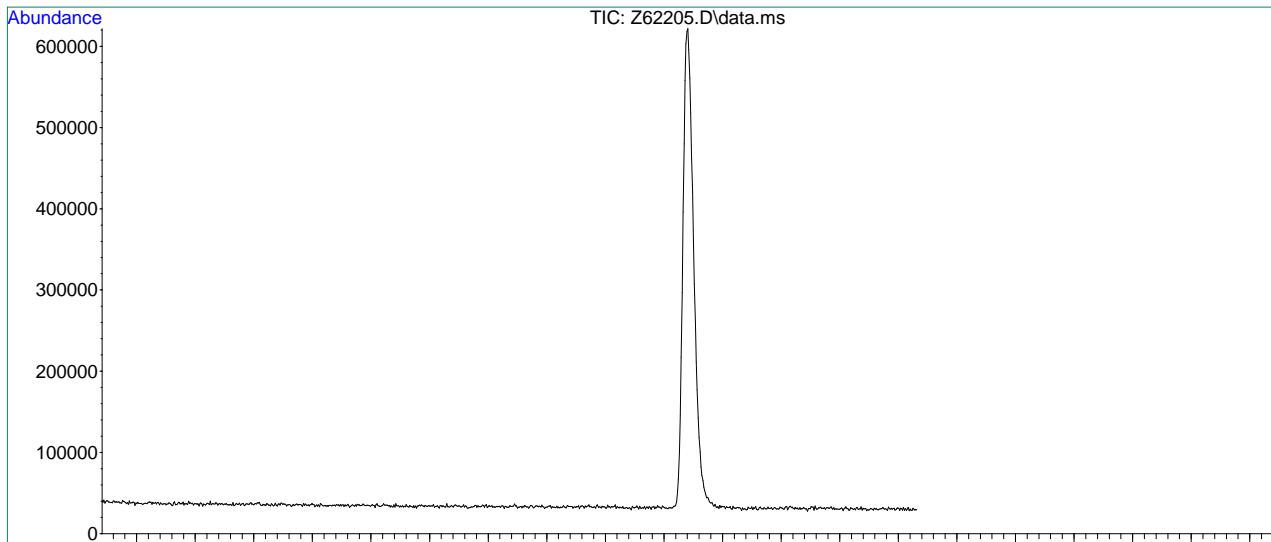
7.5.5
7

BFB

Data File : C:\msdchem\1\data\091120\Z62205.D
 Acq On : 11 Sep 2020 5:20 pm
 Sample : BFB
 Misc : MS47171,VZ2414,,,,,
 MS Integration Params: RTEINT.P

Vial: 100
 Operator: SHANICAO
 Inst : MSVOA15
 Multiplr: 1.00

Method : C:\msdchem\1\methods\SIMCL091120.M (RTE Integrator)
 Title : WATER-EPA 8260B



AutoFind: Scans 2112, 2113, 2114; Background Corrected with Scan 2095

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	21.4	24546	PASS
75	95	30	60	53.4	61341	PASS
95	95	100	100	100.0	114880	PASS
96	95	5	9	6.9	7912	PASS
173	174	0.00	2	0.5	429	PASS
174	95	50	100	78.0	89573	PASS
175	174	5	9	7.7	6903	PASS
176	174	95	101	99.5	89128	PASS
177	176	5	9	6.2	5541	PASS

7.5.6
7

Average of 6.878 to 6.885 min.: Z62205.D\data.ms

BFB

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.00	1011	48.00	892	58.90	60	70.00	922
37.00	6971	49.00	5241	59.95	1253	70.95	177
38.00	5869	49.95	24546	61.00	6279	71.95	655
39.00	2653	51.00	8188	62.00	6060	72.95	5098
39.95	227	51.95	363	63.00	4973	74.00	21419
41.00	0	52.90	63	64.00	544	75.00	61341
43.00	313	53.95	60	65.00	240	76.00	5430
44.00	548	55.00	143	66.10	58	76.95	281
44.95	816	55.95	2492	66.95	149	77.90	294
46.10	125	57.00	3597	68.00	12248	78.90	5021
46.95	1167	57.90	154	69.00	13760	79.90	1372

Average of 6.878 to 6.885 min.: Z62205.D\data.ms

BFB

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
80.90	5453	92.95	4978	106.85	414	120.10	70
81.90	1129	94.00	14133	109.90	170	122.85	126
82.95	219	95.00	114880	110.90	179	123.95	220
83.90	276	96.00	7912	111.80	175	125.00	58
84.95	162	97.00	153	113.00	244	127.85	303
86.05	163	97.95	274	114.70	110	128.90	142
86.95	4427	98.85	130	115.00	187	129.90	541
87.95	4242	102.85	150	115.85	519	130.95	388
88.80	60	103.95	710	116.95	998	131.90	56
90.95	419	104.90	190	117.90	667	134.90	414
92.00	4019	105.85	848	118.90	1119	136.80	272

Average of 6.878 to 6.885 min.: Z62205.D\data.ms

BFB

Modified:subtracted

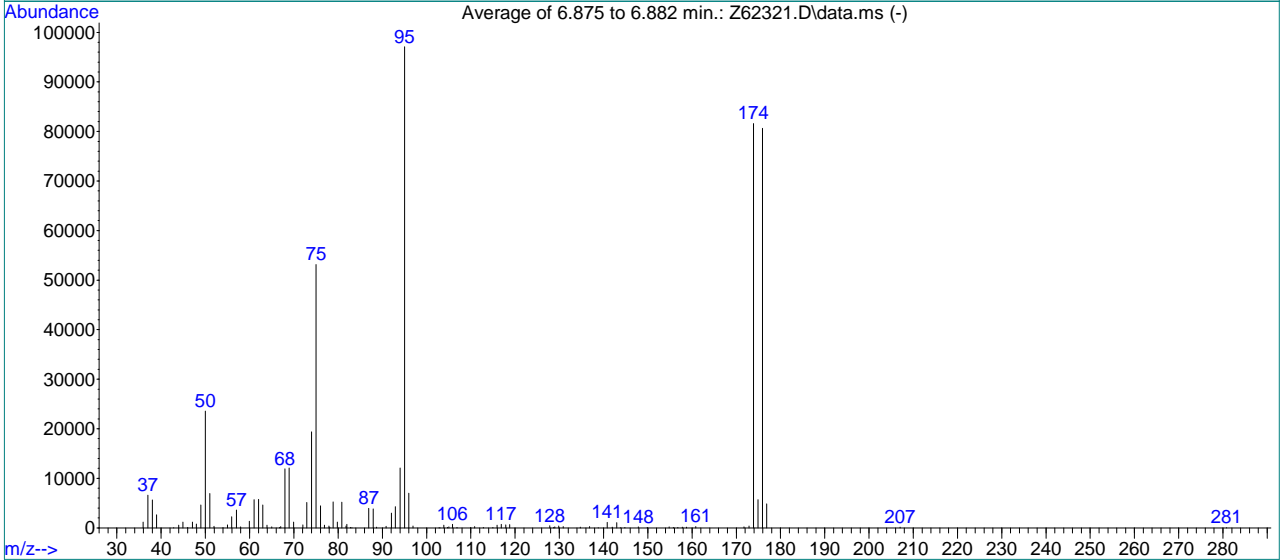
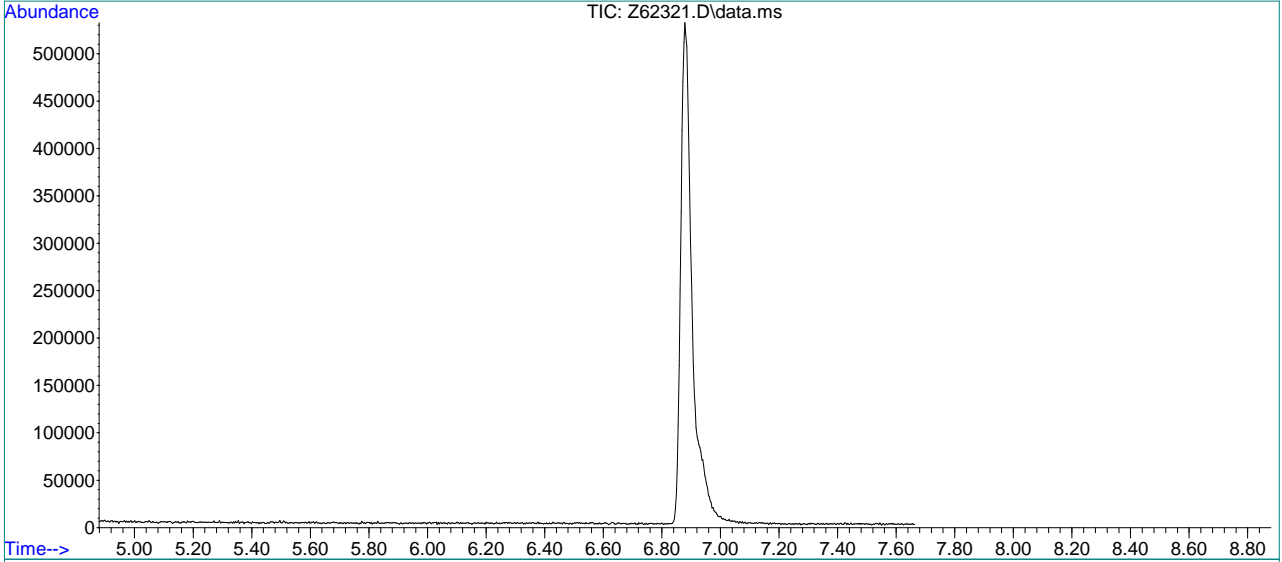
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
139.00	58	148.80	62	174.90	6903		
139.90	79	149.85	154	175.90	89128		
140.85	1457	151.80	52	176.90	5541		
141.90	160	152.70	111	177.85	205		
142.90	1269	154.10	53	178.10	53		
144.00	56	154.90	432	192.80	68		
144.85	153	156.90	235	210.70	66		
145.70	72	158.95	210	280.90	72		
146.00	182	160.85	116				
146.90	77	172.85	429				
147.80	337	173.90	89573				

BFB

Data File : C:\msdchem\1\data\091420\Z62321.D
 Acq On : 14 Sep 2020 11:56 am
 Sample : BFB
 Misc : MS47199,VZ2418,,,,,
 MS Integration Params: RTEINT.P

Vial: 3
 Operator: JuanG
 Inst : MSVOA15
 Multiplr: 1.00

Method : C:\msdchem\1\methods\SIMCL091120.M (RTE Integrator)
 Title : WATER-EPA 8260B



AutoFind: Scans 2111, 2112, 2113; Background Corrected with Scan 2097

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	24.3	23573	PASS
75	95	30	60	54.7	53144	PASS
95	95	100	100	100.0	97075	PASS
96	95	5	9	7.2	6990	PASS
173	174	0.00	2	0.5	393	PASS
174	95	50	100	84.0	81579	PASS
175	174	5	9	7.0	5714	PASS
176	174	95	101	98.8	80621	PASS
177	176	5	9	6.0	4844	PASS

7.5.7
7

Average of 6.875 to 6.882 min.: Z62321.D\data.ms

BFB

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
35.95	1146	50.00	23573	63.00	4618	75.00	53144
37.00	6608	51.00	6937	63.95	564	76.00	4457
38.00	5658	51.95	317	65.00	187	76.90	519
38.95	2607	54.00	53	66.80	109	77.90	372
42.85	35	55.00	621	67.05	254	78.10	155
44.00	565	55.95	2215	68.00	11935	78.85	5246
44.95	1149	57.00	3568	68.95	12098	79.85	1160
46.00	84	57.95	211	69.95	1183	80.85	5188
47.05	1171	59.95	1344	72.05	579	81.80	368
47.95	776	61.00	5664	72.95	5121	81.95	685
49.00	4634	62.00	5771	74.00	19389	82.80	67

Average of 6.875 to 6.882 min.: Z62321.D\data.ms

BFB

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
83.10	57	102.80	58	115.90	512	138.80	54
86.95	3934	103.00	57	116.85	730	140.85	1121
87.95	3836	103.90	558	117.90	594	141.95	168
88.70	131	104.70	70	118.80	673	142.95	1077
90.85	296	105.05	185	127.85	419	143.80	51
92.05	2951	105.85	706	128.70	63	144.80	99
92.95	4285	106.90	111	128.95	195	147.85	219
94.00	12087	110.00	80	129.85	373	149.90	110
95.00	97075	110.85	258	130.90	277	154.80	184
96.00	6990	112.80	80	134.75	148	155.80	79
96.95	389	114.95	103	136.85	235	156.80	107

Average of 6.875 to 6.882 min.: Z62321.D\data.ms

BFB

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
157.80	146						
158.75	169						
160.85	254						
171.75	189						
172.85	393						
173.90	81579						
174.90	5714						
175.90	80621						
176.90	4844						
207.05	155						
280.80	54						

7.57
7

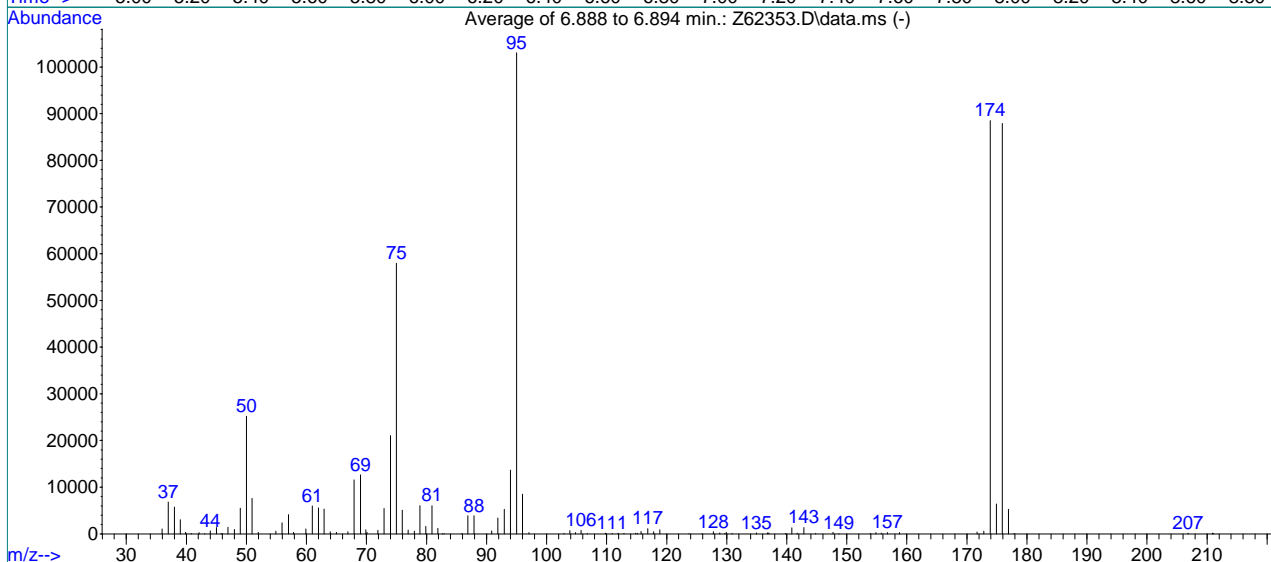
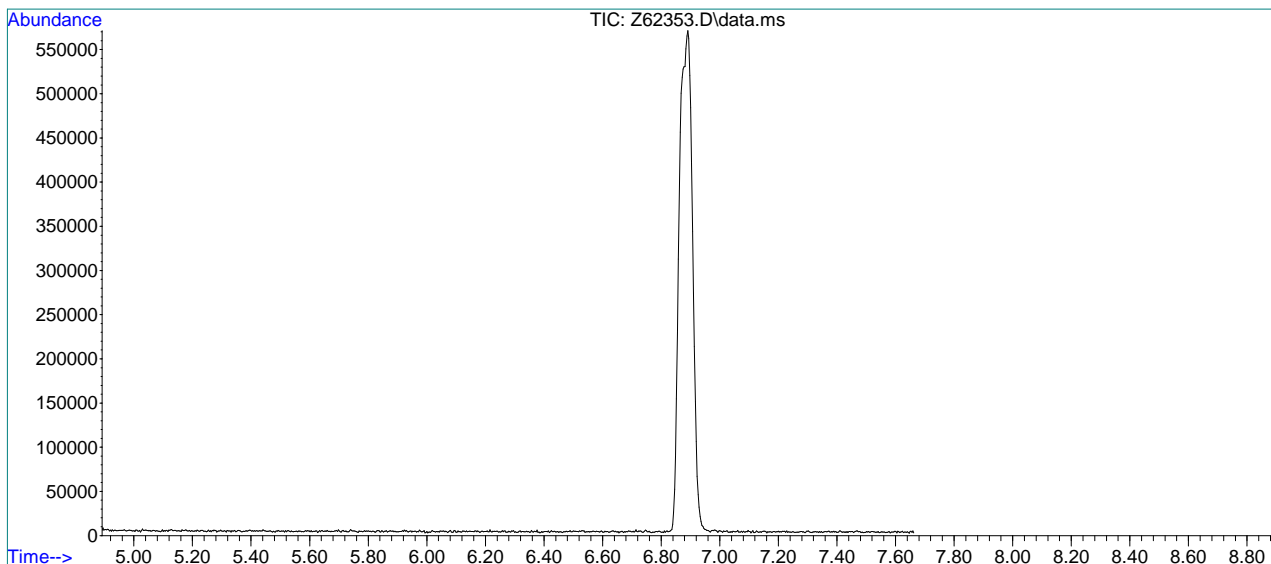


BFB

Data File : C:\msdchem\1\data\091520\Z62353.D
 Acq On : 15 Sep 2020 1:19 pm
 Sample : BFB
 Misc : MS47199,VZ2419,,,,,
 MS Integration Params: RTEINT.P

Vial: 3
 Operator: JuanG
 Inst : MSVOA15
 Multiplr: 1.00

Method : C:\msdchem\1\methods\SIMCL091120.M (RTE Integrator)
 Title : WATER-EPA 8260B



AutoFind: Scans 2115, 2116, 2117; Background Corrected with Scan 2097

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	24.4	25171	PASS
75	95	30	60	56.3	57957	PASS
95	95	100	100	100.0	103013	PASS
96	95	5	9	8.2	8476	PASS
173	174	0.00	2	0.6	575	PASS
174	95	50	100	85.9	88536	PASS
175	174	5	9	7.2	6388	PASS
176	174	95	101	99.3	87899	PASS
177	176	5	9	6.0	5269	PASS

7.5.8
7

Average of 6.888 to 6.894 min.: Z62353.D\data.ms

BFB

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
35.95	1082	46.00	54	59.90	1051	71.90	749
37.00	6827	46.95	1418	61.00	5985	72.95	5421
38.00	5751	48.00	927	62.00	5539	74.00	21035
39.00	3042	49.00	5485	62.95	5330	75.00	57957
39.90	361	50.00	25171	63.95	474	75.95	5059
40.80	65	50.95	7624	65.00	327	76.95	811
42.10	287	51.95	362	66.90	461	77.95	551
43.05	55	54.90	558	67.95	11545	78.90	6052
44.00	646	55.95	2387	69.00	12644	79.90	1614
45.00	1328	57.00	4106	69.90	883	80.90	6051
45.80	103	57.85	311	70.10	312	81.90	1173

Average of 6.888 to 6.894 min.: Z62353.D\data.ms

BFB

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
82.70	59	97.05	277	115.10	81	130.90	64
82.90	54	102.90	79	115.75	540	134.95	234
85.90	74	103.85	710	116.85	1108	136.80	194
86.90	3846	104.80	294	117.85	457	137.00	200
87.90	3874	105.75	744	118.85	872	139.80	100
90.85	647	106.75	103	123.70	55	140.85	1299
91.90	3418	109.80	144	125.90	63	141.75	124
92.95	5261	110.90	114	127.75	466	142.85	1358
94.00	13682	111.90	133	128.85	220	144.80	72
95.00	103013	112.90	119	129.70	121	147.70	345
96.00	8476	114.85	130	129.90	325	148.70	60

Average of 6.888 to 6.894 min.: Z62353.D\data.ms

BFB

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
153.90	105	177.85	117				
154.85	257	206.85	173				
155.75	128	210.90	149				
156.75	293	211.10	71				
158.75	257						
171.70	382						
172.80	575						
173.90	88536						
174.90	6388						
175.90	87899						
176.90	5269						

Quantitation Report (QT Reviewed)

Melissa Mangual
09/14/20 08:34

Data Path : C:\msdchem\2\data\091120\
 Data File : O61230.D
 Acq On : 11 Sep 2020 3:34 pm
 Operator : stutip
 Sample : IC2356-1 Inst : MSVOA12
 Misc : MS47201,VO2356,,,,,
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 11 18:00:06 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.346	96	316238	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.441	117	240066	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.074	65	128832	4.64	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	92.80%	
19) Toluene-d8	8.896	98	278677	4.75	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	95.00%	
Target Compounds						
2) Vinyl Chloride	2.905	62	3529	0.11	ug/L	100
3) Chloromethane	2.799	50	8825m	0.19	ug/L	
4) 1,1-Dichloroethene	4.089	61	4096	0.10	ug/L	83
5) Methylene Chloride	4.700	49	136057	1.74	ug/L	97
6) trans-1,2-Dichloroethene	4.869	61	5203	0.10	ug/L	83
7) 1,1-Dichloroethane	5.514	63	5816	0.10	ug/L	97
8) cis-1,2-Dichloroethene	6.072	96	2981	0.11	ug/L	88
9) Chloroform	6.333	83	5313	0.11	ug/L	81
10) Carbon Tetrachloride	6.505	117	3177	0.11	ug/L	80
11) 1,1,1-Trichloroethane	6.576	97	3749	0.11	ug/L	92
12) Benzene	6.943	78	10630m	0.11	ug/L	
14) 1,2-Dichloroethane	7.139	62	4857	0.09	ug/L	92
15) Trichloroethene	7.512	95	2945	0.11	ug/L	89
16) 1,2-Dichloropropane	8.040	63	3248m	0.09	ug/L	
17) cis-1,3-Dichloropropene	8.711	75	3070	0.08	ug/L	97
20) trans-1,3-Dichloropropene	9.343	75	2765	0.08	ug/L	91
21) Tetrachloroethene	9.343	166	2702m	0.12	ug/L	
22) 1,4-Dichlorobenzene	12.827	146	5272	0.10	ug/L	99
23) 1,2-Dibromo-3-Chloropr...	14.038	75	1605m	0.12	ug/L	

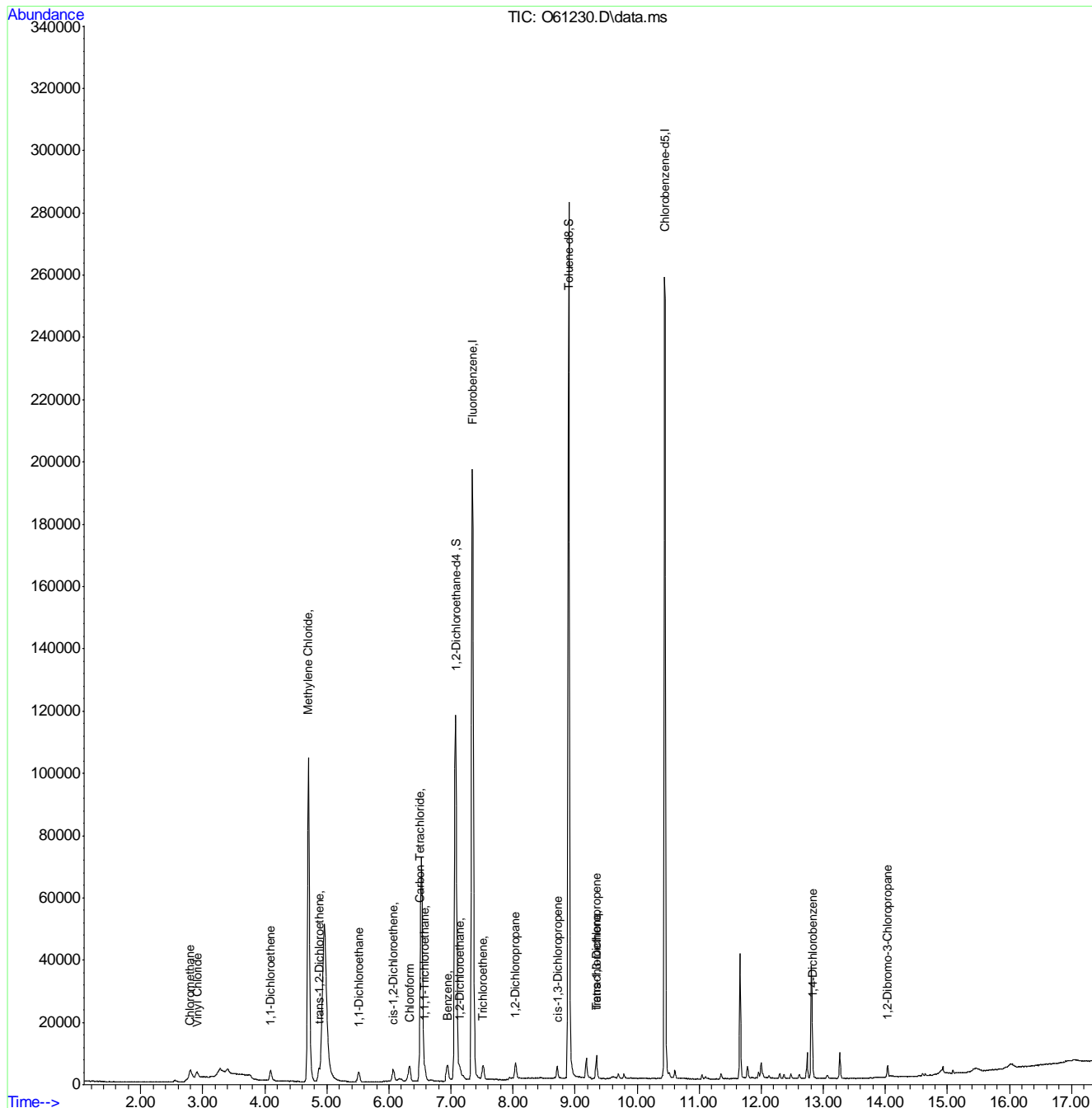
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\091120\
 Data File : O61230.D
 Acq On : 11 Sep 2020 3:34 pm
 Operator : stutip
 Sample : IC2356-1
 Misc : MS47201,VO2356,,,,,
 ALS Vial : 2 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 11 18:00:06 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration



1.9.7



Manual Integration Approval Summary

Sample Number: VO2356-IC2356 **Method:** SW846 8260B BY SIM
Lab FileID: O61230.D **Analyst approved:** 09/13/20 19:45 Stuti Patel
Injection Time: 09/11/20 15:34 **Supervisor approved:** 09/14/20 08:34 Melissa Mangual

Parameter	CAS	Sig#	R.T. (min.)	Reason
Methyl Chloride	74-87-3		2.80	Poor instrument integration
Benzene	71-43-2		6.94	Poor instrument integration
1,2-Dichloropropane	78-87-5		8.04	Poor instrument integration
Tetrachloroethylene	127-18-4		9.34	Poor instrument integration
1,2-Dibromo-3-chloropropane	96-12-8		14.04	Poor instrument integration

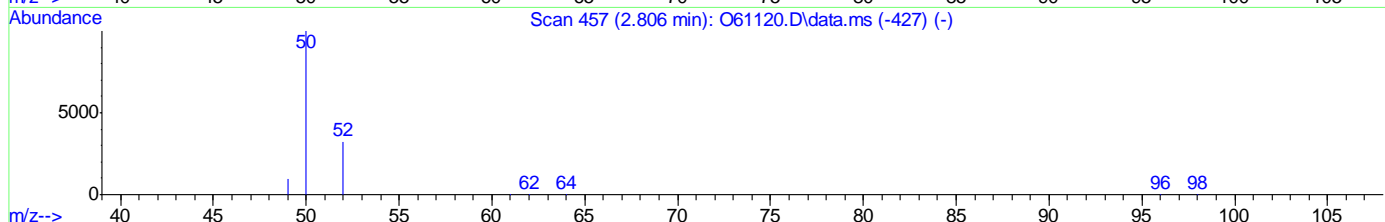
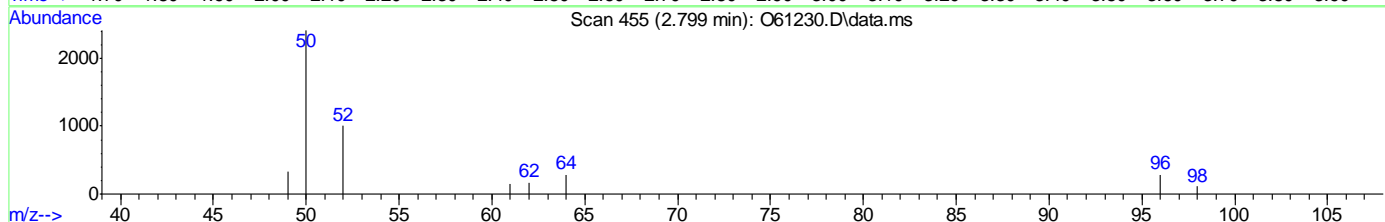
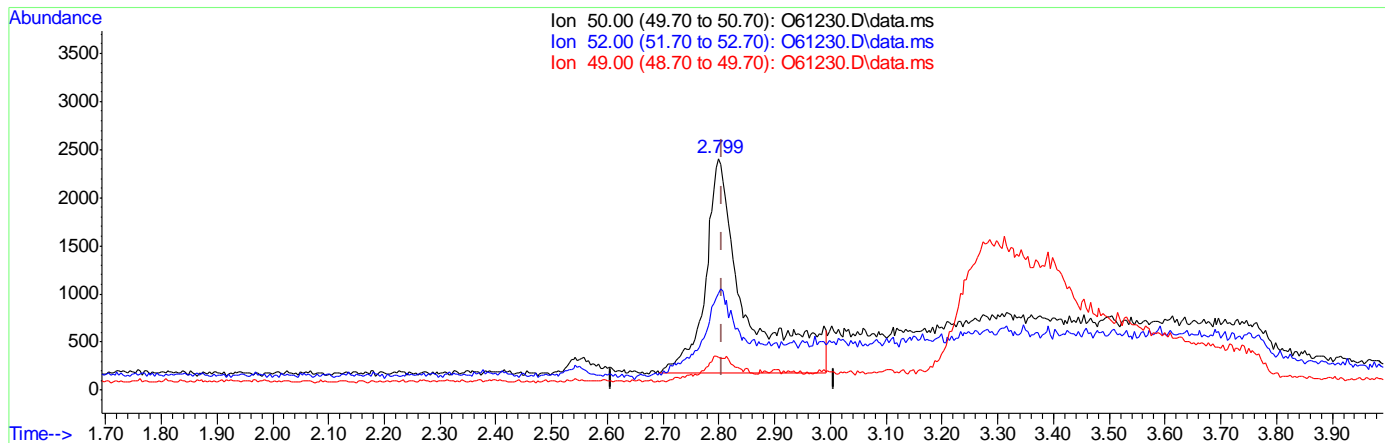
7.6.1.1

7

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\091120\
 Data File : O61230.D
 Acq On : 11 Sep 2020 3:34 pm
 Operator : MANAGER
 Sample : IC2356-1 Inst : MSVOA12
 Misc : MS47184,VO2356,,,,,
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 11 17:52:22 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration



(3) Chloromethane
 2.799min (-0.007) 0.24ug/L
 response 11047

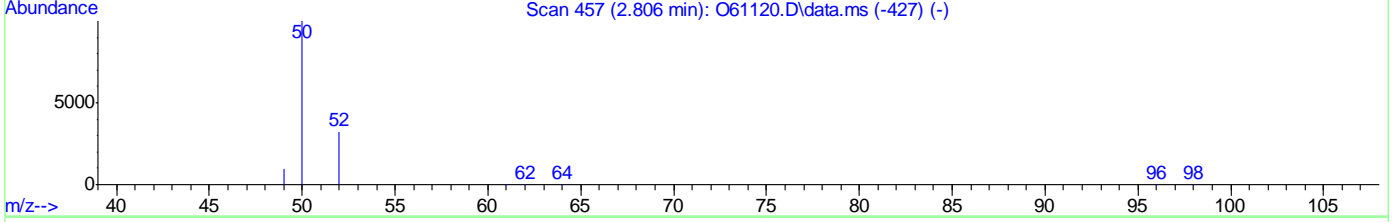
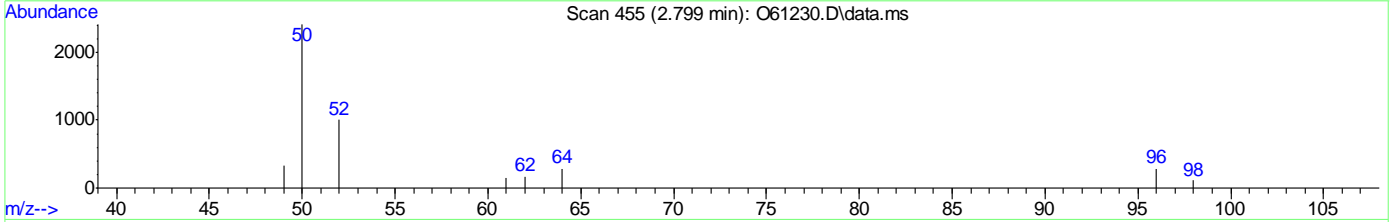
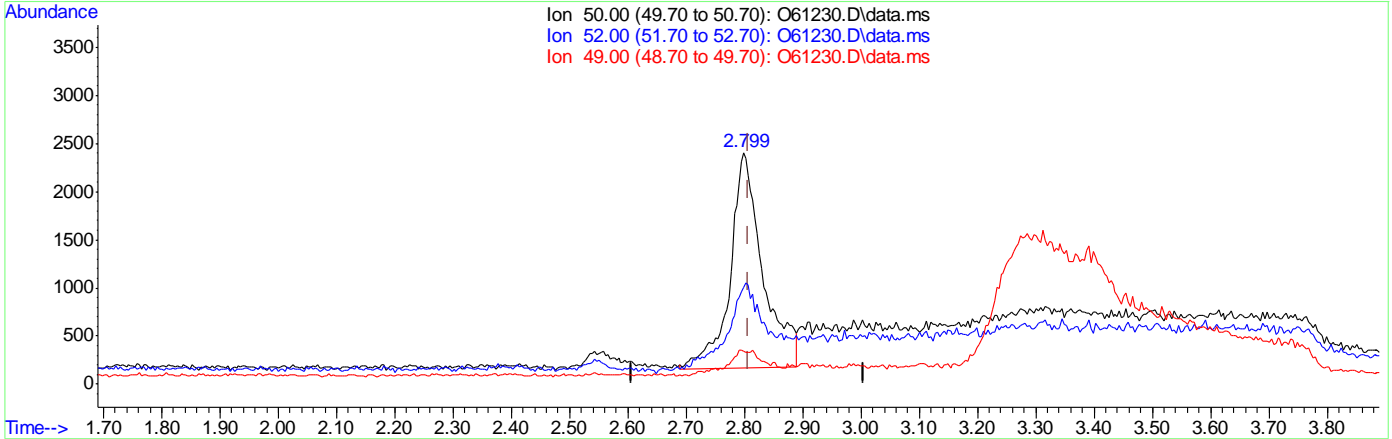
Ion	Exp%	Act%
50.00	100	100
52.00	27.80	37.05
49.00	10.50	11.15
0.00	0.00	0.00

7.6.1.2
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\091120\
 Data File : O61230.D
 Acq On : 11 Sep 2020 3:34 pm
 Operator : MANAGER
 Sample : IC2356-1 Inst : MSVOA12
 Misc : MS47184,VO2356,,,,,
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 11 17:52:22 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration



TIC: O61230.D\data.ms

(3) Chloromethane
 2.799min (-0.007) 0.19ug/L m
 response 8787

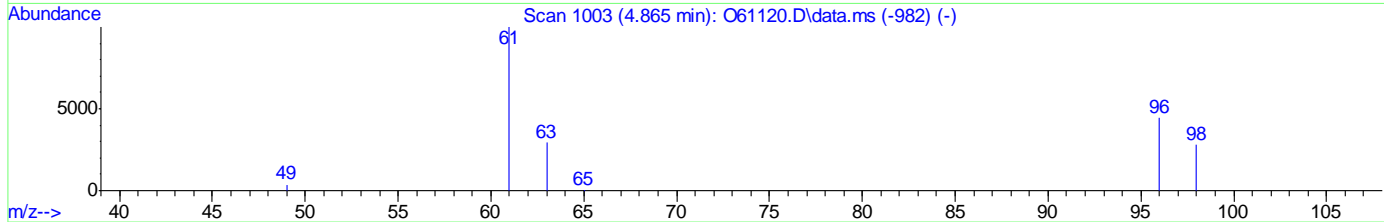
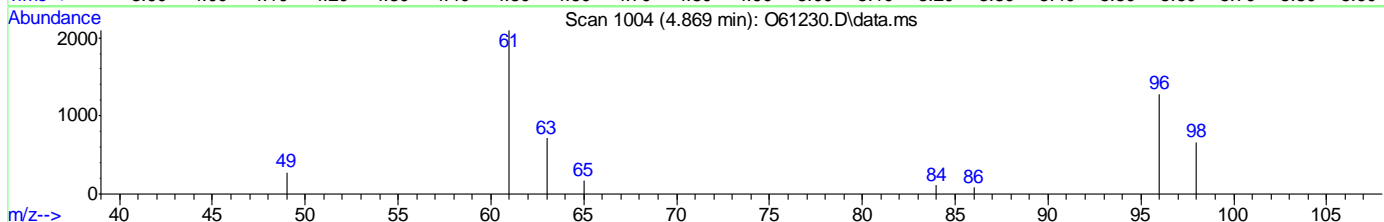
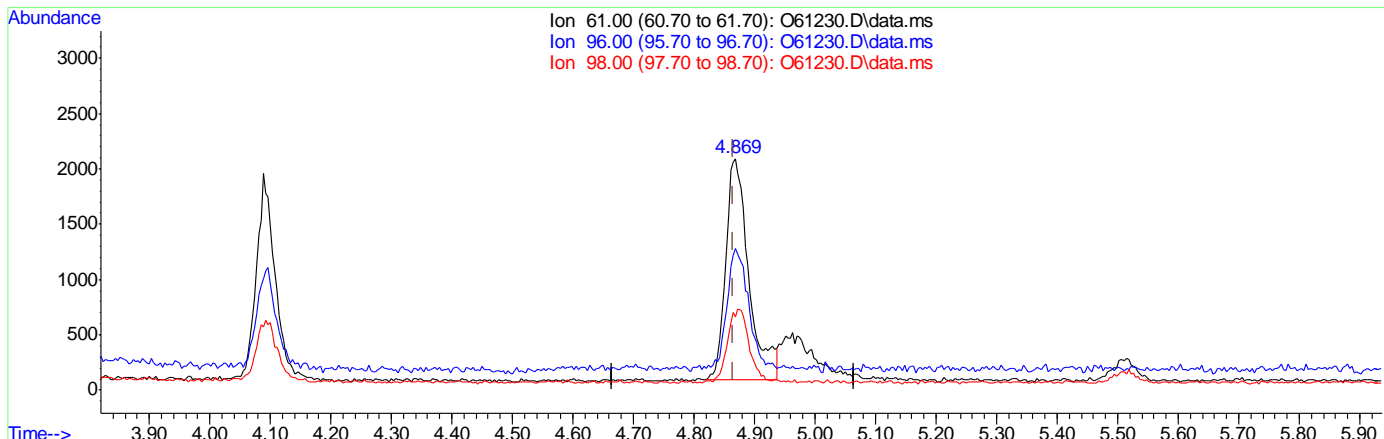
Ion	Exp%	Act%
50.00	100	100
52.00	27.80	41.69
49.00	10.50	14.00
0.00	0.00	0.00

7.6.1.3
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\091120\
 Data File : O61230.D
 Acq On : 11 Sep 2020 3:34 pm
 Operator : MANAGER
 Sample : IC2356-1 Inst : MSVOA12
 Misc : MS47184,VO2356,,,,,
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 11 17:52:22 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration



TIC: O61230.D\data.ms

(6) trans-1,2-Dichloroethene ()

4.869min (+0.004) 0.10ug/L

response 5203

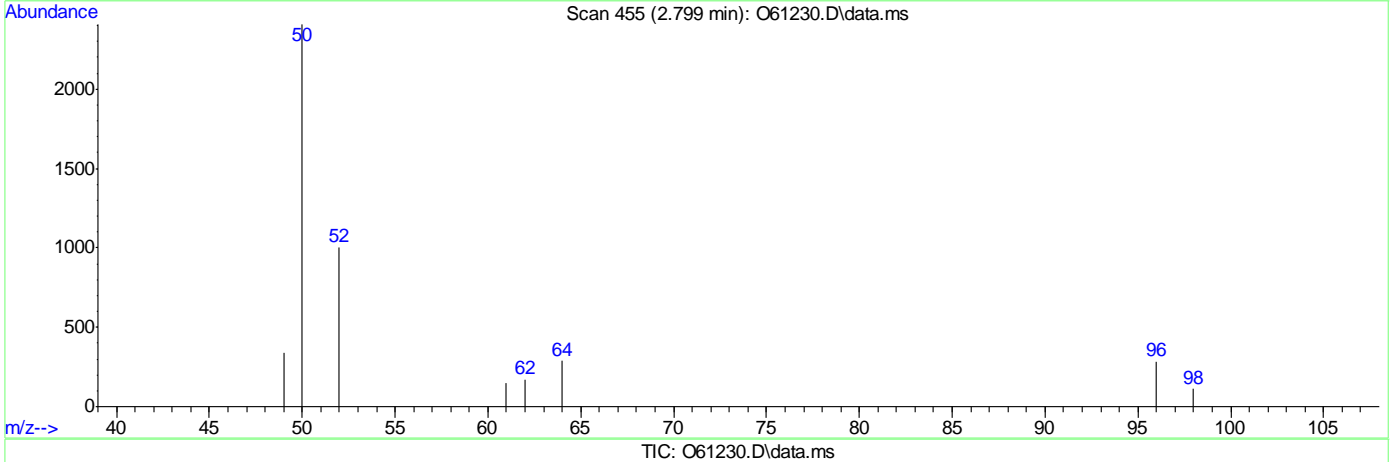
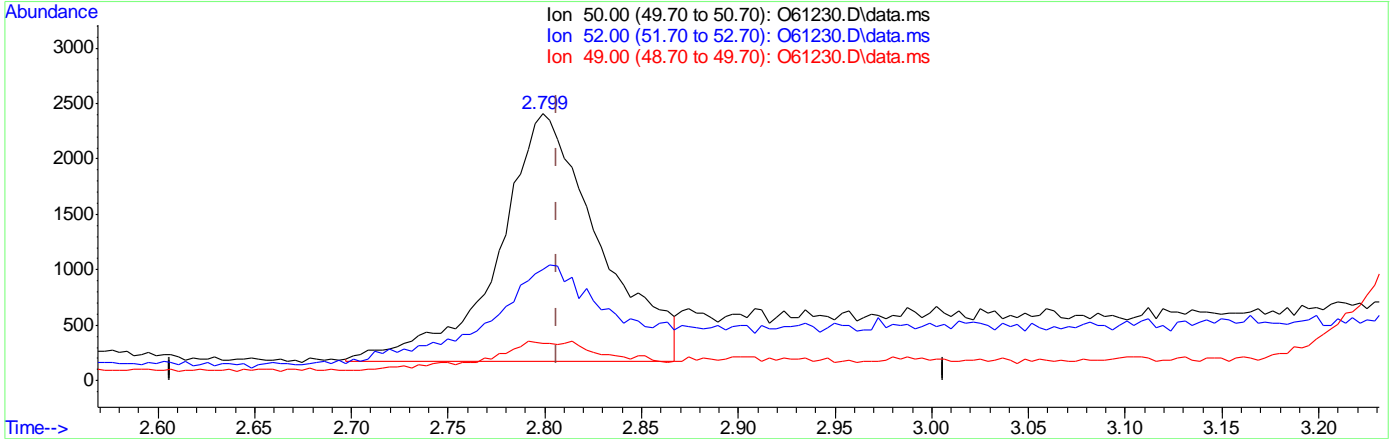
Ion	Exp%	Act%
61.00	100	100
96.00	66.90	54.30
98.00	41.10	28.92
0.00	0.00	0.00

7.6.1.4
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\091120\
 Data File : O61230.D
 Acq On : 11 Sep 2020 3:34 pm
 Operator : MANAGER
 Sample : IC2356-1 Inst : MSVOA12
 Misc : MS47184,VO2356,,,,,
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 11 17:52:22 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration



(3) Chloromethane

2.799min (-0.007) 0.17ug/L m

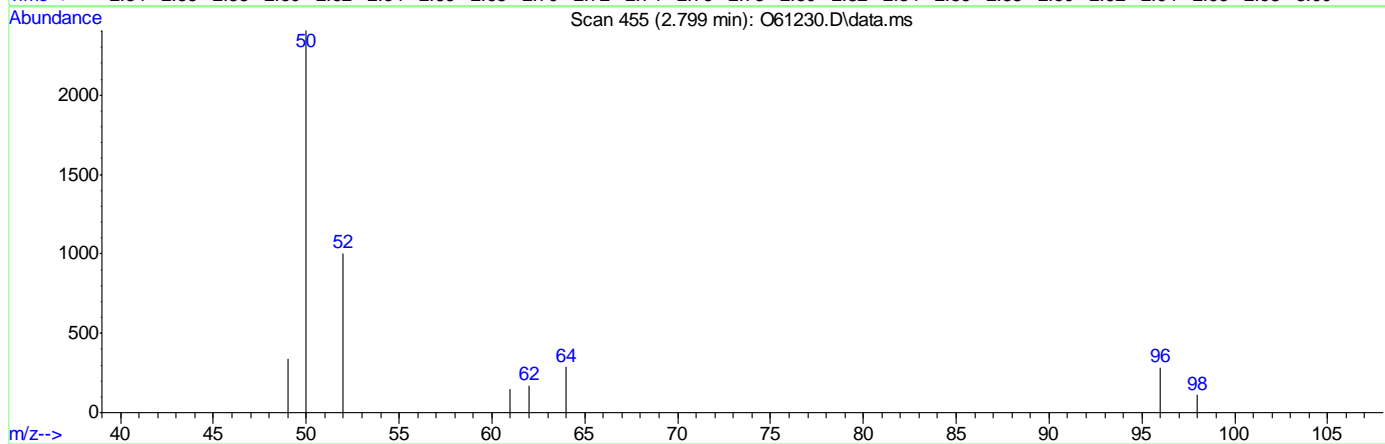
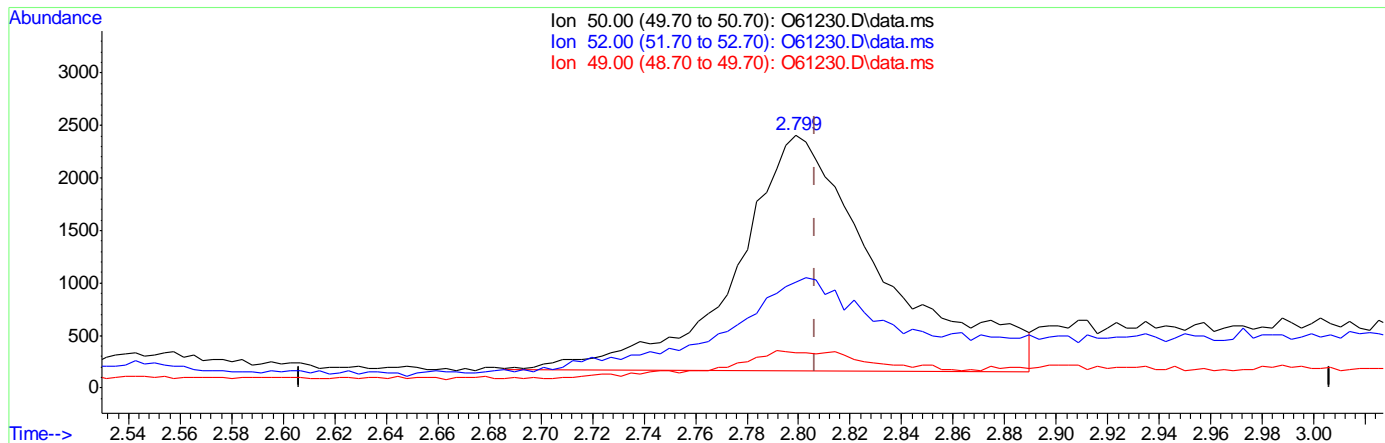
response 8061

Ion	Exp%	Act%
50.00	100	100
52.00	27.80	41.69
49.00	10.50	14.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\091120\
 Data File : O61230.D
 Acq On : 11 Sep 2020 3:34 pm
 Operator : MANAGER
 Sample : IC2356-1 Inst : MSVOA12
 Misc : MS47184,VO2356,,,,,
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 11 17:52:22 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration



(3) Chloromethane

2.799min (-0.007) 0.19ug/L m

response 8825

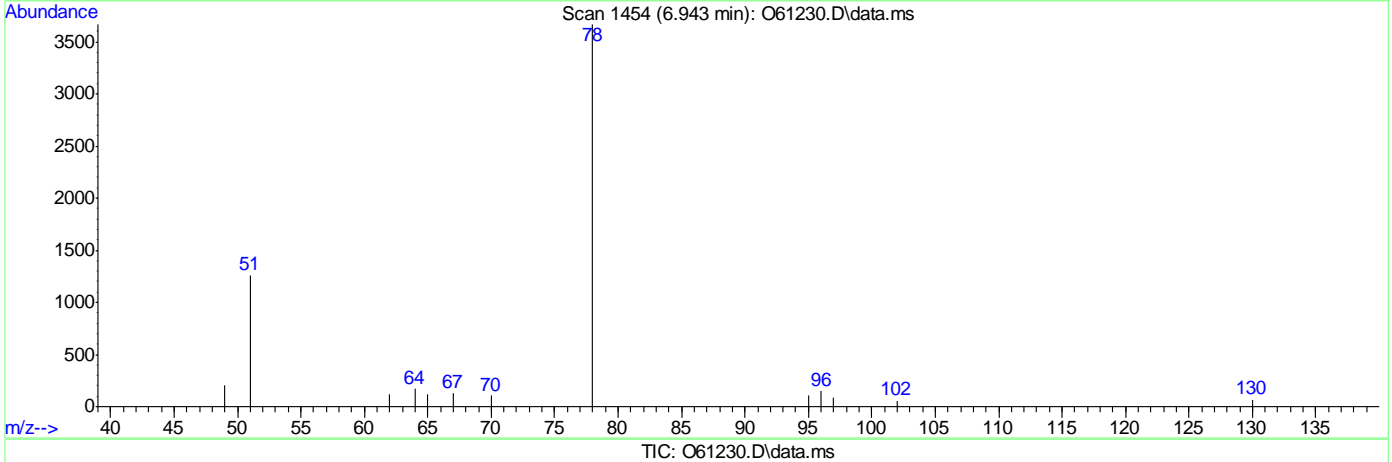
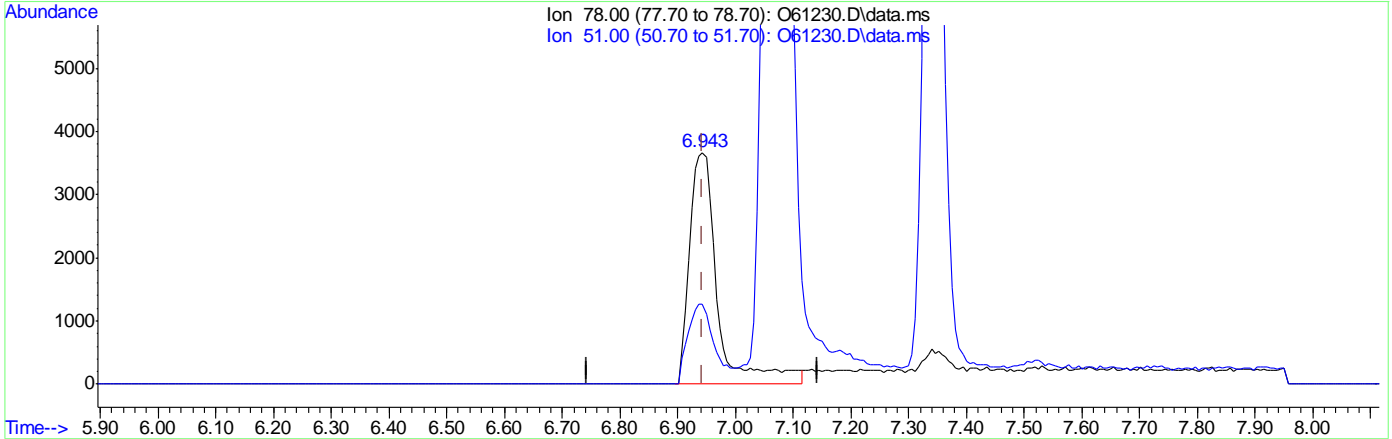
Ion	Exp%	Act%
50.00	100	100
52.00	27.80	41.69
49.00	10.50	14.00
0.00	0.00	0.00

7.6.1.6
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\091120\
 Data File : O61230.D
 Acq On : 11 Sep 2020 3:34 pm
 Operator : MANAGER
 Sample : IC2356-1 Inst : MSVOA12
 Misc : MS47184,VO2356,,,,,
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 11 17:52:22 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration



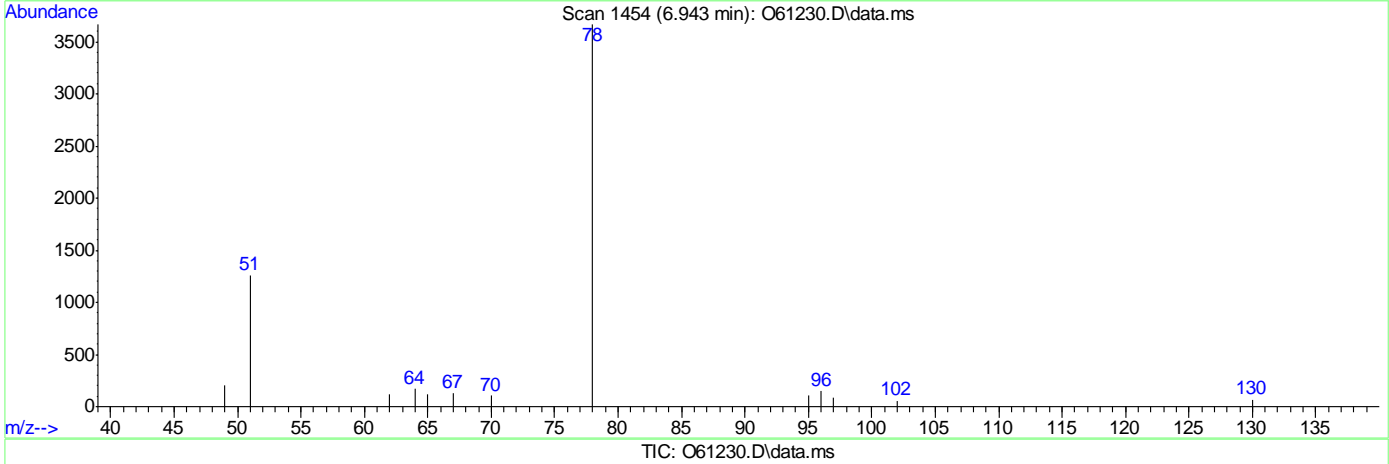
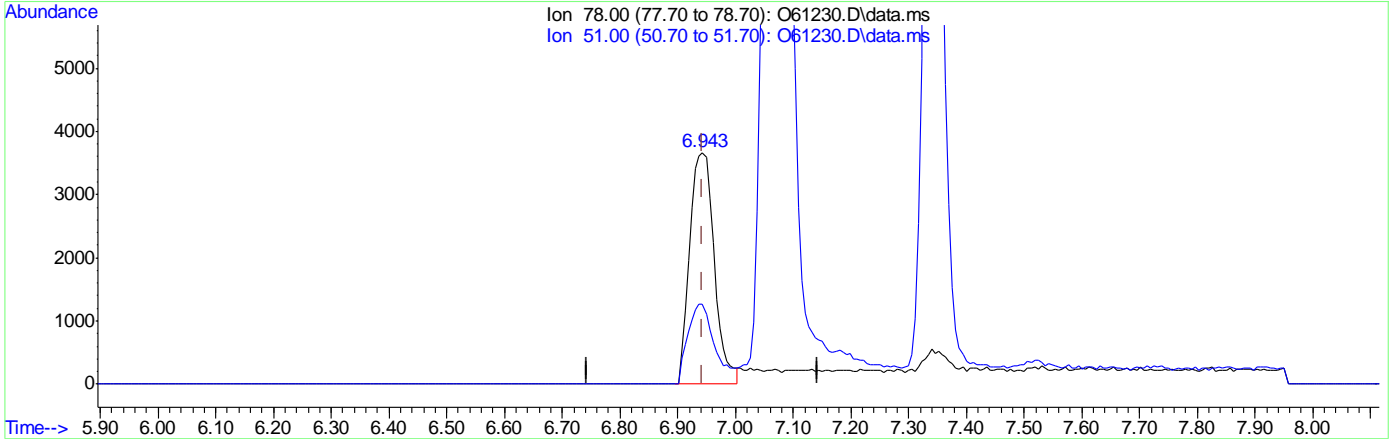
(12) Benzene ()
 6.943min (+0.000) 0.13ug/L
 response 12135

Ion	Exp%	Act%
78.00	100	100
51.00	26.20	34.36
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\091120\
 Data File : O61230.D
 Acq On : 11 Sep 2020 3:34 pm
 Operator : MANAGER
 Sample : IC2356-1 Inst : MSVOA12
 Misc : MS47184,VO2356,,,,,
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 11 17:52:22 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration



(12) Benzene ()
 6.943min (+0.000) 0.11ug/L m
 response 10630

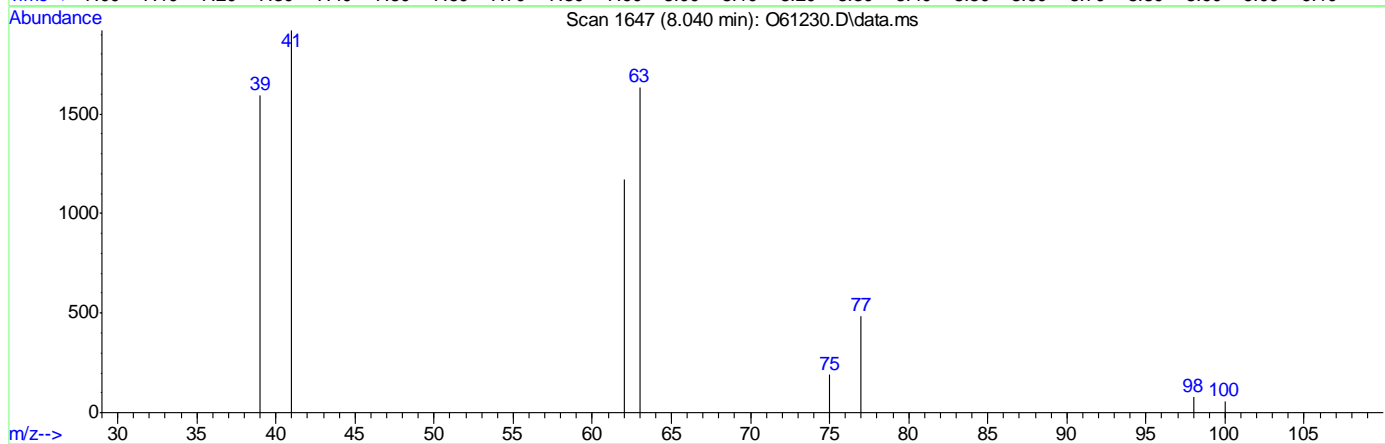
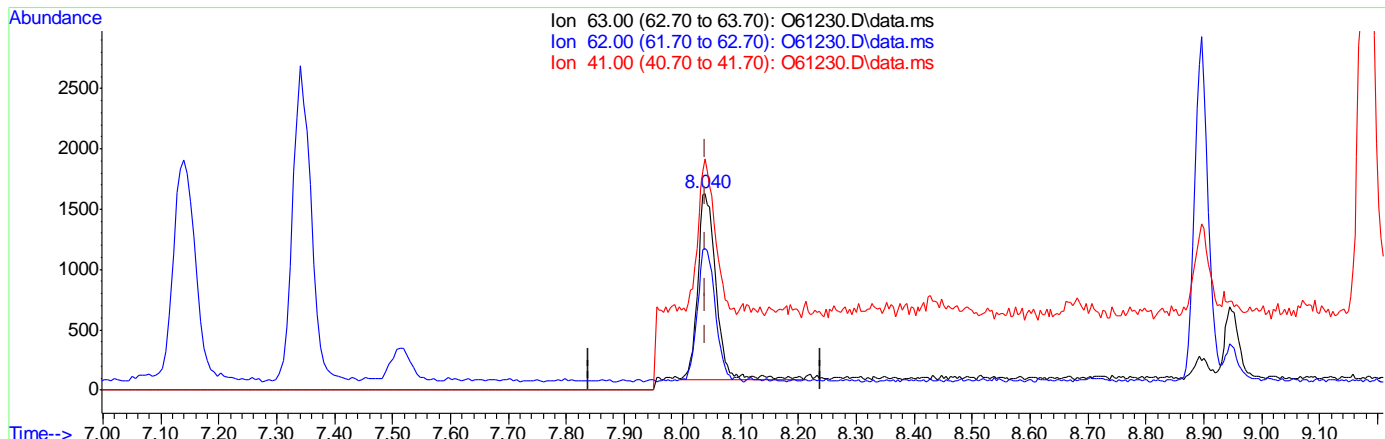
Ion	Exp%	Act%
78.00	100	100
51.00	26.20	34.36
0.00	0.00	0.00
0.00	0.00	0.00

7.6.1.8
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\091120\
 Data File : O61230.D
 Acq On : 11 Sep 2020 3:34 pm
 Operator : MANAGER
 Sample : IC2356-1 Inst : MSVOA12
 Misc : MS47184,VO2356,,,,,
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 11 17:52:22 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration



(16) 1,2-Dichloropropane
 8.040min (+0.000) 0.10ug/L
 response 3437

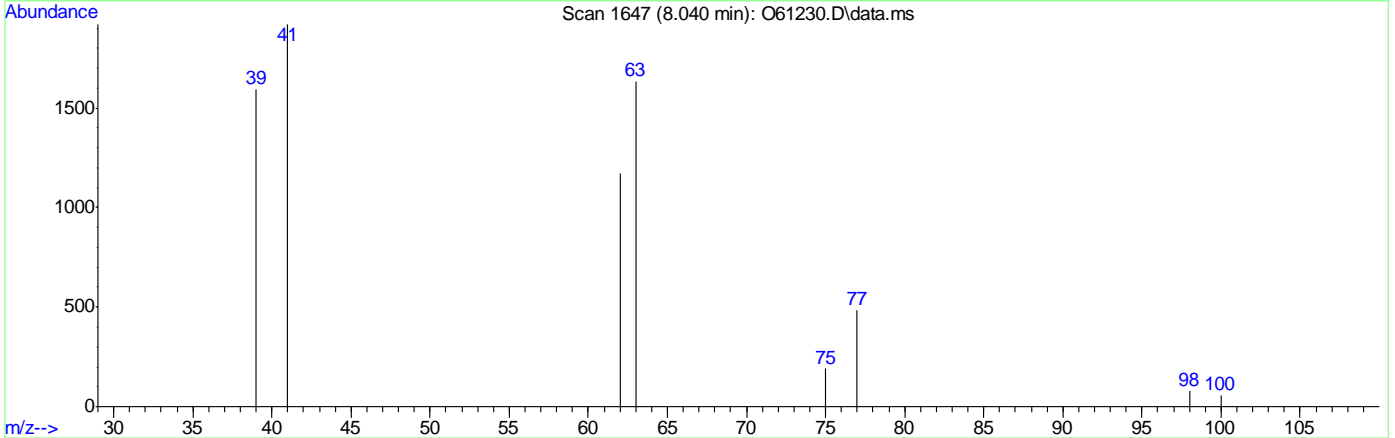
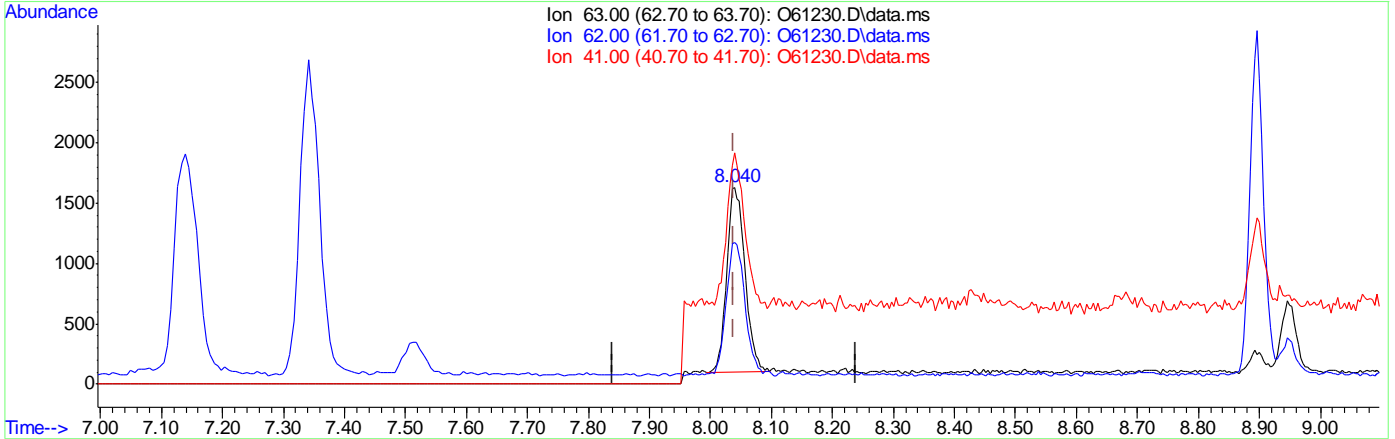
Ion	Exp%	Act%
63.00	100	100
62.00	72.70	70.53
41.00	84.50	81.61
0.00	0.00	0.00

7.6.1.9
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\091120\
 Data File : O61230.D
 Acq On : 11 Sep 2020 3:34 pm
 Operator : MANAGER
 Sample : IC2356-1 Inst : MSVOA12
 Misc : MS47184,VO2356,,,,,
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 11 17:52:22 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration



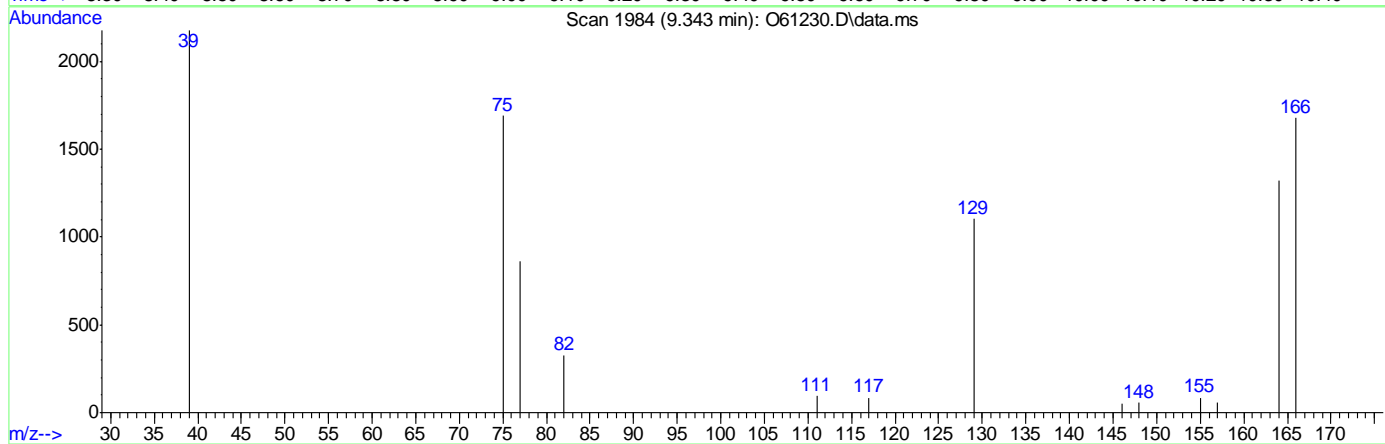
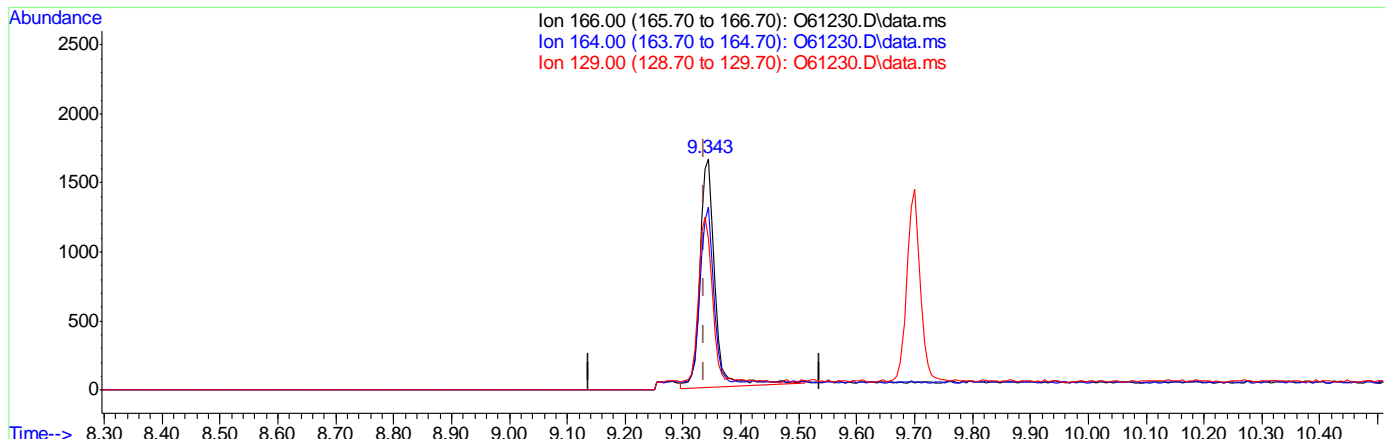
(16) 1,2-Dichloropropane
 8.040min (+0.000) 0.09ug/L m
 response 3248

Ion	Exp%	Act%
63.00	100	100
62.00	72.70	71.77
41.00	84.50	117.58#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\091120\
 Data File : O61230.D
 Acq On : 11 Sep 2020 3:34 pm
 Operator : MANAGER
 Sample : IC2356-1 Inst : MSVOA12
 Misc : MS47184,VO2356,,,,,
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 11 17:52:22 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration



(21) Tetrachloroethene ()
 9.343min (+0.006) 0.13ug/L
 response 2993

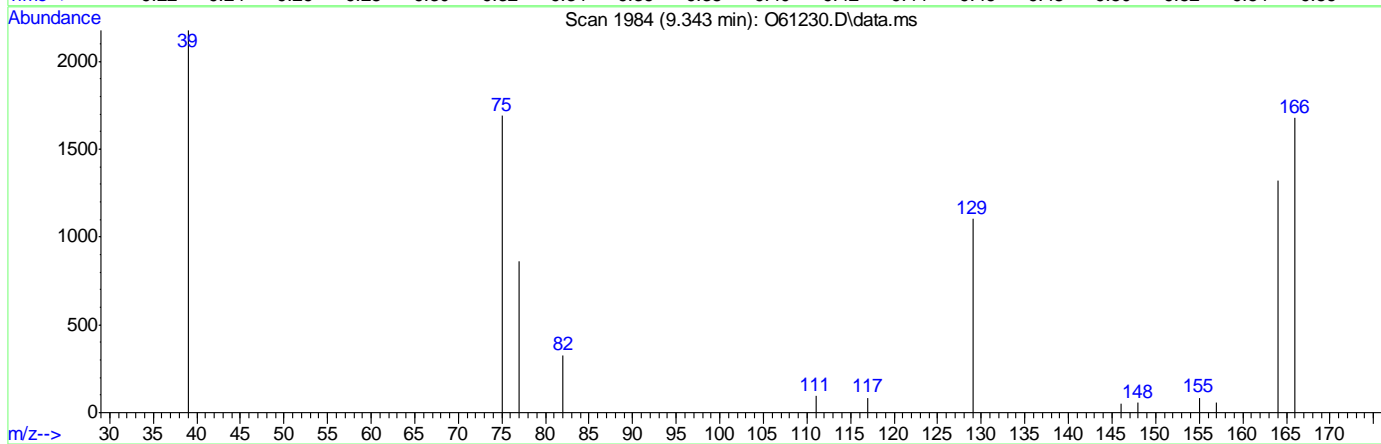
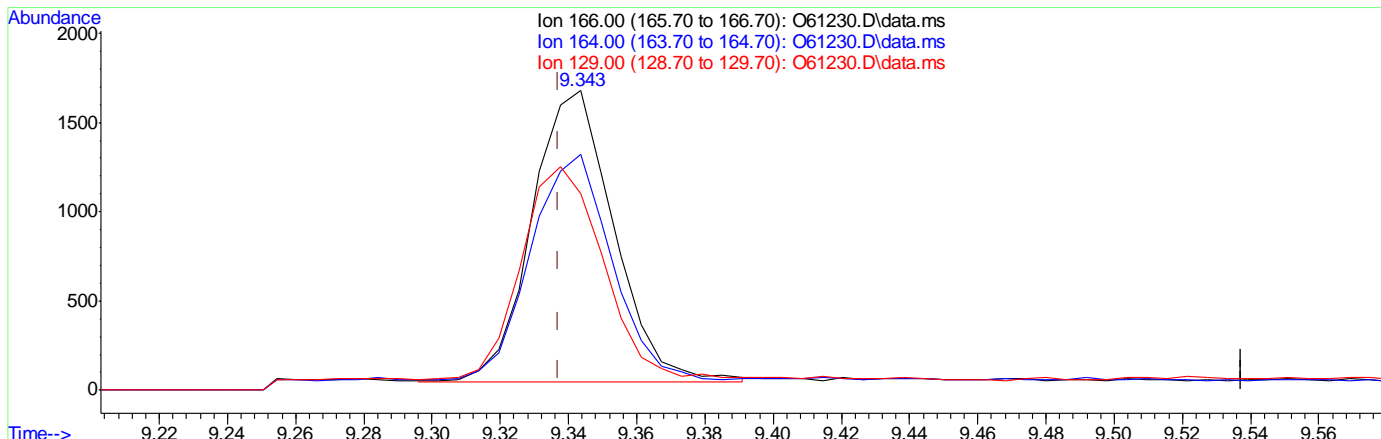
Ion	Exp%	Act%
166.00	100	100
164.00	77.30	77.82
129.00	67.50	64.20
0.00	0.00	0.00

7.6.1.11
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\091120\
 Data File : O61230.D
 Acq On : 11 Sep 2020 3:34 pm
 Operator : MANAGER
 Sample : IC2356-1 Inst : MSVOA12
 Misc : MS47184,VO2356,,,,,
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 11 17:52:22 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration



(21) Tetrachloroethene ()

9.343min (+0.006) 0.12ug/L m

response 2702

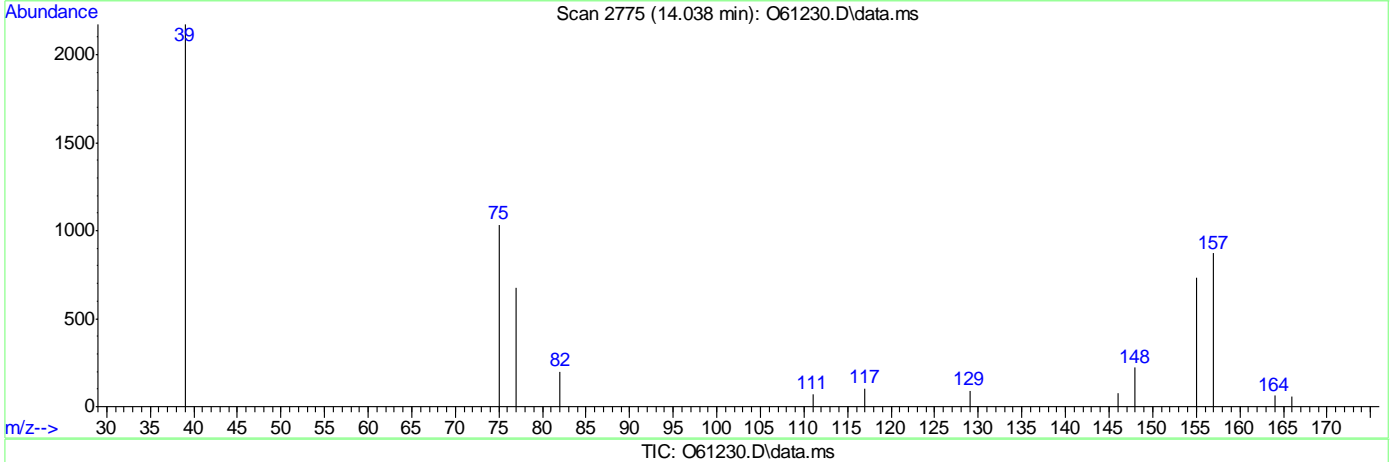
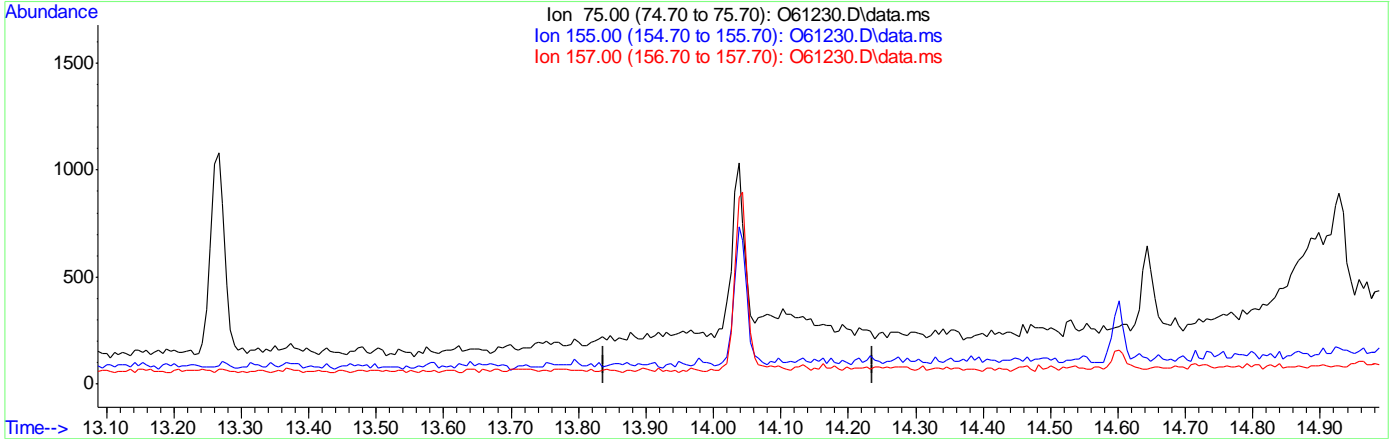
Ion	Exp%	Act%
166.00	100	100
164.00	77.30	78.83
129.00	67.50	65.71
0.00	0.00	0.00

7.6.1.12
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\091120\
 Data File : O61230.D
 Acq On : 11 Sep 2020 3:34 pm
 Operator : MANAGER
 Sample : IC2356-1 Inst : MSVOA12
 Misc : MS47184,VO2356,,,,,
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 11 17:52:22 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration



(23) 1,2-Dibromo-3-Chloropropane

14.037min (-14.037) 0.00ug/L

response 0

Ion	Exp%	Act%
75.00	100	0.00
155.00	88.00	0.00#
157.00	106.80	0.00#
0.00	0.00	0.00

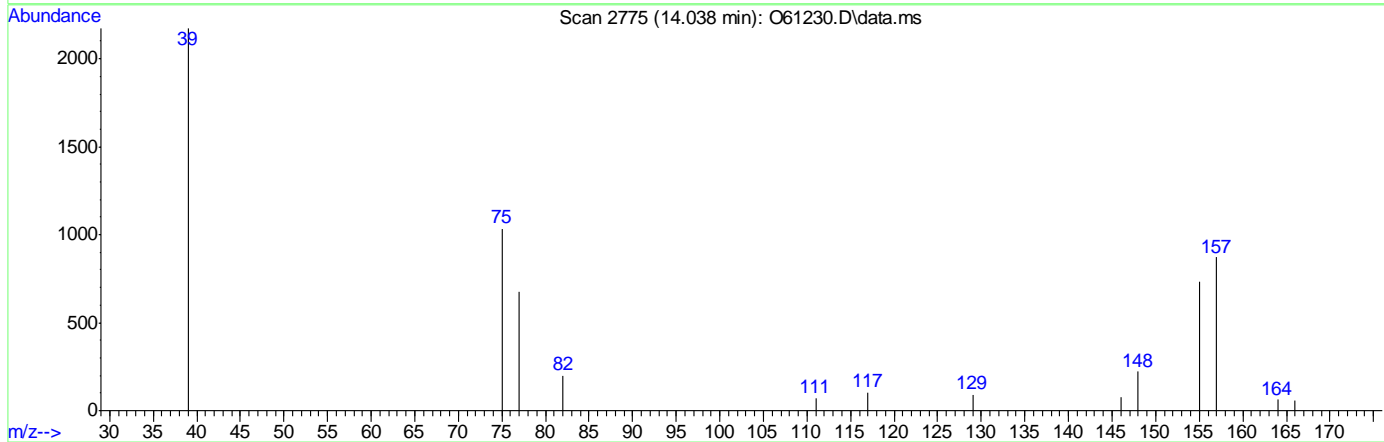
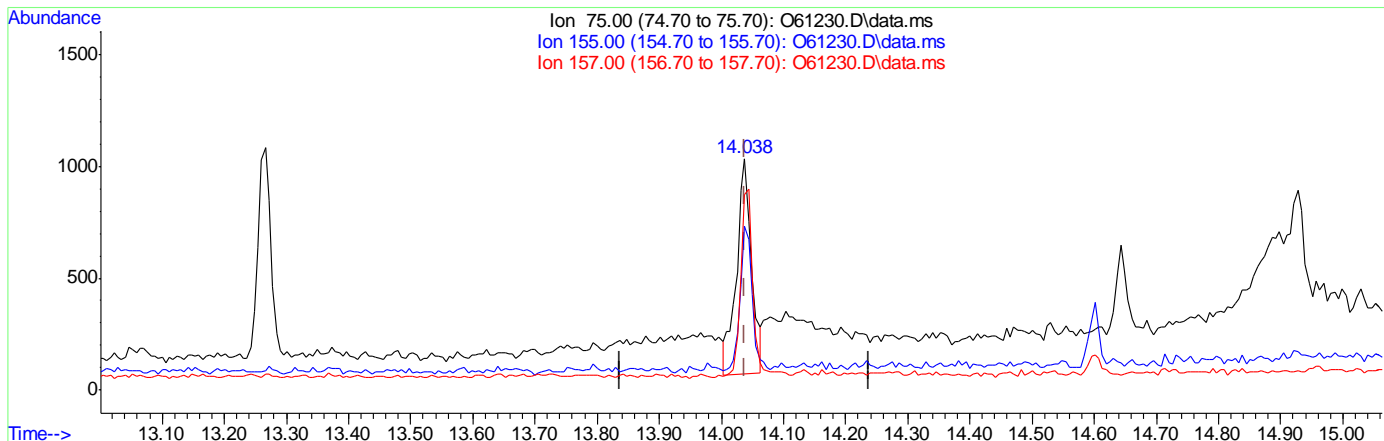
7.6.1.13
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\091120\
 Data File : O61230.D
 Acq On : 11 Sep 2020 3:34 pm
 Operator : MANAGER
 Sample : IC2356-1
 Misc : MS47184,VO2356,,,,,
 ALS Vial : 2 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 11 17:52:22 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration



(23) 1,2-Dibromo-3-Chloropropane

14.038min (+0.000) 0.12ug/L m

response 1605

Ion	Exp%	Act%
75.00	100	100
155.00	88.00	70.99
157.00	106.80	84.43#
0.00	0.00	0.00

7.6.1.14
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\091120\
 Data File : 061231.D
 Acq On : 11 Sep 2020 3:54 pm
 Operator : stutip
 Sample : IC2356-2 Inst : MSVOA12
 Misc : MS47201,VO2356,,,,,
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 11 18:02:23 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
Internal Standards							
1) Fluorobenzene	7.346	96	308238	5.00	ug/L	0.00	
18) Chlorobenzene-d5	10.447	117	234700	5.00	ug/L	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.074	65	125580	4.64	ug/L	0.00	
Spiked Amount	5.000	Range 74 - 125	Recovery	=	92.80%		
19) Toluene-d8	8.896	98	269907	4.71	ug/L	0.00	
Spiked Amount	5.000	Range 88 - 111	Recovery	=	94.20%		
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.908	62	19507	0.64	ug/L		96
3) Chloromethane	2.799	50	33695	0.75	ug/L		90
4) 1,1-Dichloroethene	4.092	61	22337	0.54	ug/L		92
5) Methylene Chloride	4.703	49	128834	1.69	ug/L		98
6) trans-1,2-Dichloroethene	4.869	61	28030	0.55	ug/L		84
7) 1,1-Dichloroethane	5.514	63	30310	0.52	ug/L		99
8) cis-1,2-Dichloroethene	6.066	96	14558	0.56	ug/L #		80
9) Chloroform	6.333	83	26026	0.55	ug/L		94
10) Carbon Tetrachloride	6.510	117	17328	0.59	ug/L		87
11) 1,1,1-Trichloroethane	6.576	97	19399	0.57	ug/L		89
12) Benzene	6.943	78	51252m	0.56	ug/L		
14) 1,2-Dichloroethane	7.139	62	24323	0.48	ug/L		91
15) Trichloroethene	7.512	95	15009	0.56	ug/L		93
16) 1,2-Dichloropropane	8.040	63	17486	0.52	ug/L		93
17) cis-1,3-Dichloropropene	8.711	75	15877	0.42	ug/L		96
20) trans-1,3-Dichloropropene	9.343	75	14216	0.40	ug/L		98
21) Tetrachloroethene	9.337	166	14813	0.65	ug/L		90
22) 1,4-Dichlorobenzene	12.827	146	27579	0.56	ug/L		98
23) 1,2-Dibromo-3-Chloropr...	14.037	75	6106	0.47	ug/L		98

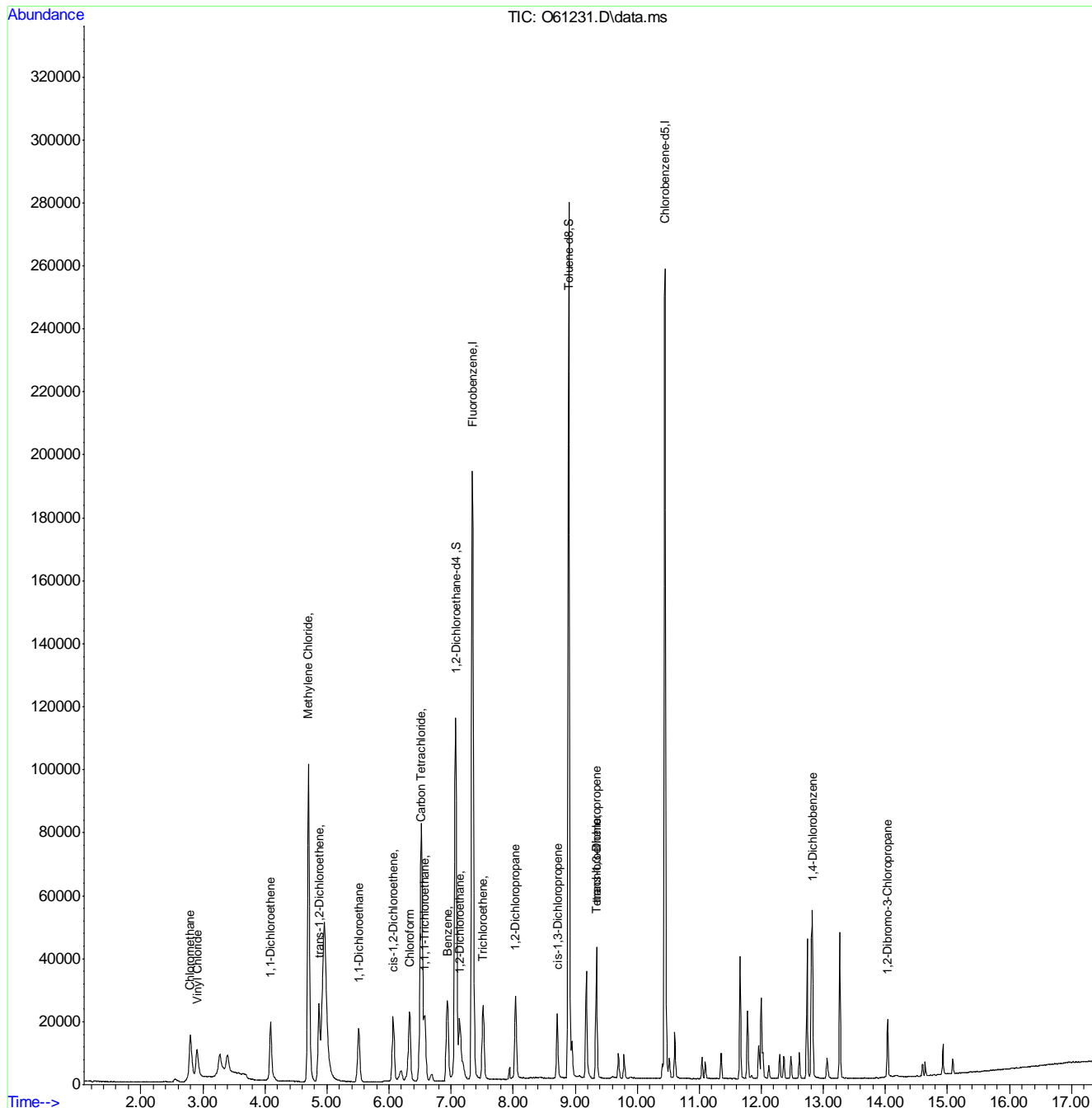
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\091120\
 Data File : 061231.D
 Acq On : 11 Sep 2020 3:54 pm
 Operator : stutip
 Sample : IC2356-2
 Misc : MS47201,VO2356,,,,,
 ALS Vial : 3 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 11 18:02:23 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration



7.6.2
7

Manual Integration Approval Summary

Sample Number: VO2356-IC2356 **Method:** SW846 8260B BY SIM
Lab FileID: O61231.D **Analyst approved:** 09/13/20 19:45 Stuti Patel
Injection Time: 09/11/20 15:54 **Supervisor approved:** 09/14/20 08:34 Melissa Mangual

Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzene	71-43-2		6.94	Poor instrument integration

7.6.2.1

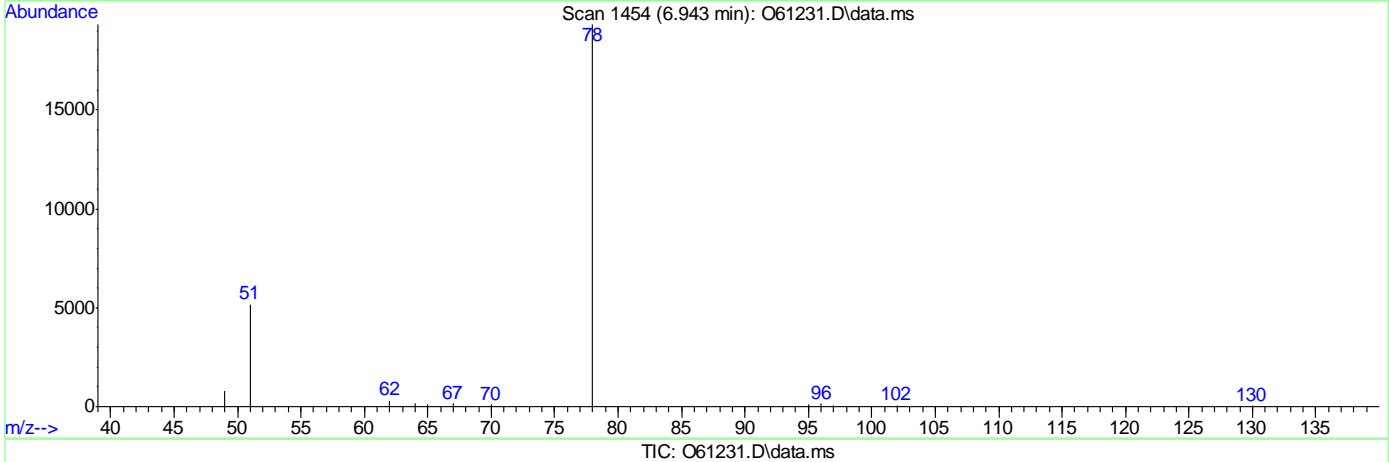
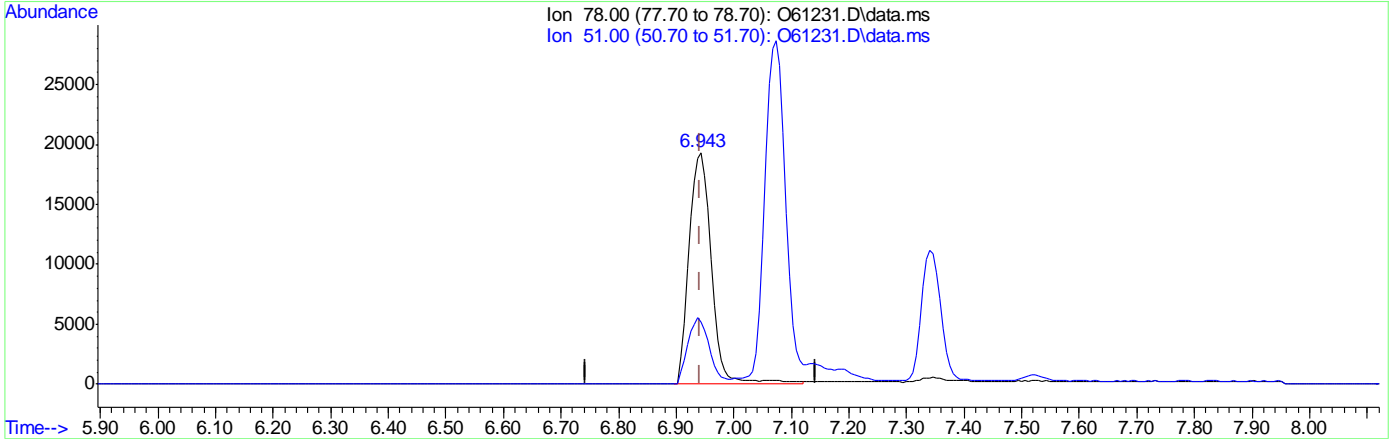
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\091120\
 Data File : O61231.D
 Acq On : 11 Sep 2020 3:54 pm
 Operator : MANAGER
 Sample : IC2356-2
 Misc : MS47184,VO2356,,,,,
 ALS Vial : 3 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 11 17:52:24 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration



(12) Benzene ()

6.943min (+0.000) 0.58ug/L

response 53149

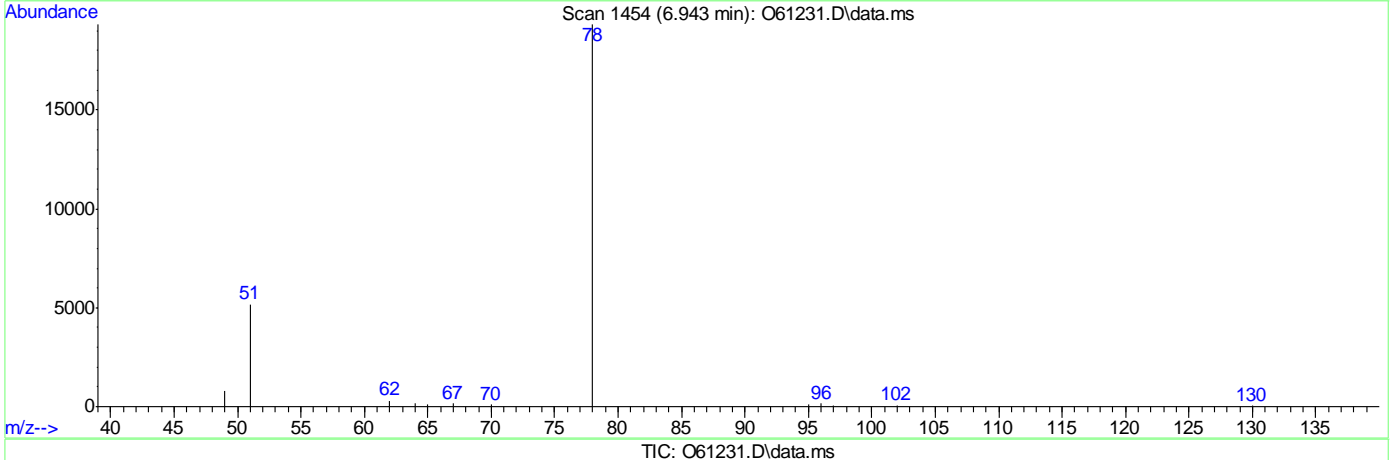
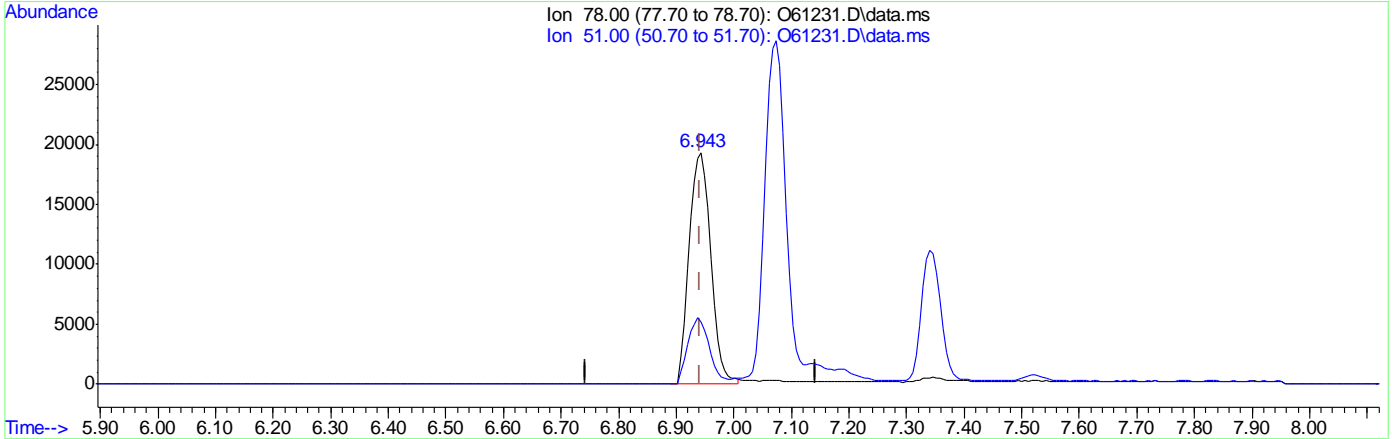
Ion	Exp%	Act%
78.00	100	100
51.00	26.20	26.78
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\091120\
 Data File : O61231.D
 Acq On : 11 Sep 2020 3:54 pm
 Operator : MANAGER
 Sample : IC2356-2
 Misc : MS47184,VO2356,,,,,
 ALS Vial : 3 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 11 17:52:24 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration



(12) Benzene ()
 6.943min (+0.000) 0.56ug/L m
 response 51252

Ion	Exp%	Act%
78.00	100	100
51.00	26.20	26.78
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\091120\
 Data File : O61232.D
 Acq On : 11 Sep 2020 4:14 pm
 Operator : stutip
 Sample : IC2356-3 Inst : MSVOA12
 Misc : MS47201,VO2356,,,,,
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 11 18:03:15 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
Internal Standards							
1) Fluorobenzene	7.346	96	317169	5.00	ug/L	0.00	
18) Chlorobenzene-d5	10.447	117	244669	5.00	ug/L	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.079	65	131106	4.71	ug/L	0.00	
Spiked Amount	5.000	Range 74 - 125	Recovery	=	94.20%		
19) Toluene-d8	8.900	98	274860	4.60	ug/L	0.00	
Spiked Amount	5.000	Range 88 - 111	Recovery	=	92.00%		
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.912	62	72414	2.35	ug/L		97
3) Chloromethane	2.810	50	108758	2.40	ug/L		94
4) 1,1-Dichloroethene	4.100	61	84017	1.96	ug/L		92
5) Methylene Chloride	4.707	49	235781	3.07	ug/L		98
6) trans-1,2-Dichloroethene	4.873	61	98273	1.88	ug/L		82
7) 1,1-Dichloroethane	5.518	63	114595	1.92	ug/L		99
8) cis-1,2-Dichloroethene	6.072	96	55181	2.08	ug/L #		81
9) Chloroform	6.339	83	96882	2.01	ug/L		96
10) Carbon Tetrachloride	6.510	117	64256	2.13	ug/L		87
11) 1,1,1-Trichloroethane	6.582	97	73085	2.10	ug/L		93
12) Benzene	6.943	78	190849m	2.02	ug/L		
14) 1,2-Dichloroethane	7.145	62	94612	1.82	ug/L		91
15) Trichloroethene	7.518	95	56329	2.04	ug/L		86
16) 1,2-Dichloropropane	8.043	63	65843	1.91	ug/L		94
17) cis-1,3-Dichloropropene	8.711	75	63086	1.64	ug/L		98
20) trans-1,3-Dichloropropene	9.343	75	59845	1.60	ug/L		98
21) Tetrachloroethene	9.343	166	52774	2.22	ug/L		99
22) 1,4-Dichlorobenzene	12.827	146	108631	2.11	ug/L		98
23) 1,2-Dibromo-3-Chloropr...	14.037	75	18565	1.37	ug/L		96

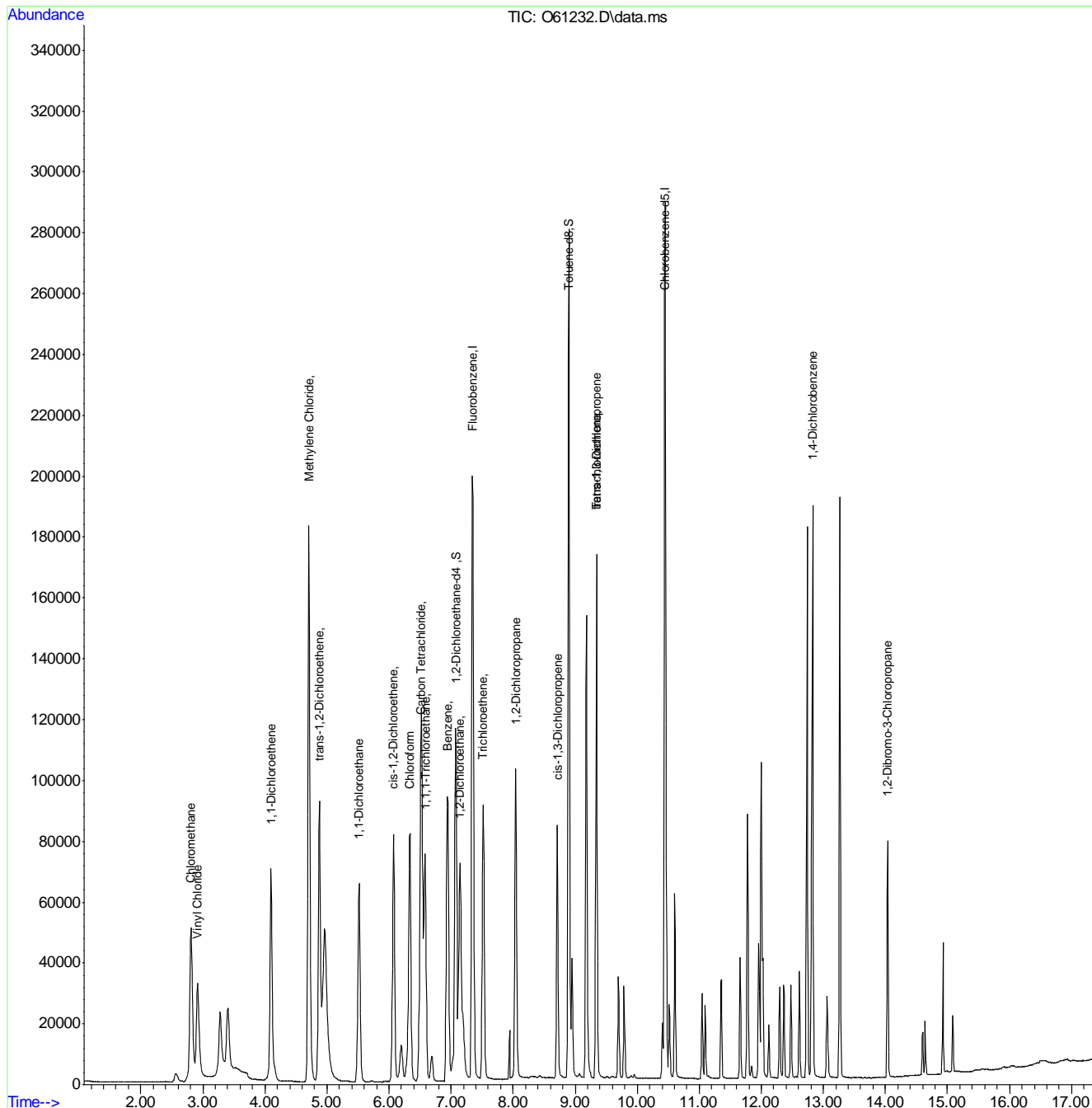
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\091120\
 Data File : O61232.D
 Acq On : 11 Sep 2020 4:14 pm
 Operator : stutip
 Sample : IC2356-3
 Misc : MS47201,VO2356,,,,,
 ALS Vial : 4 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 11 18:03:15 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration



7.6.3
7

Manual Integration Approval Summary

Sample Number: VO2356-IC2356 **Method:** SW846 8260B BY SIM
Lab FileID: O61232.D **Analyst approved:** 09/13/20 19:45 Stuti Patel
Injection Time: 09/11/20 16:14 **Supervisor approved:** 09/14/20 08:34 Melissa Mangual

Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzene	71-43-2		6.94	Poor instrument integration

7.6.3.1

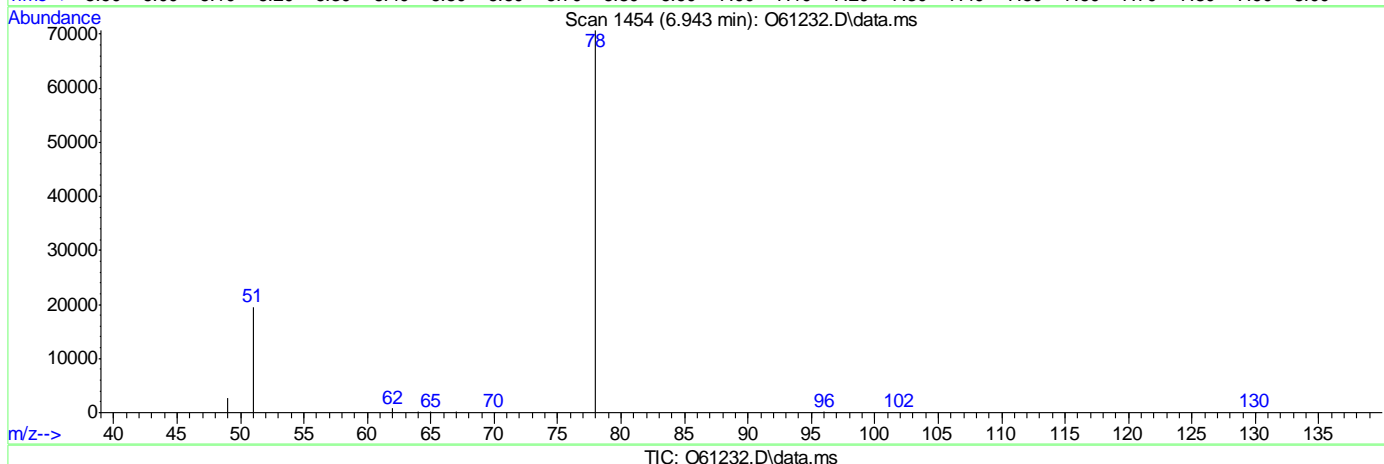
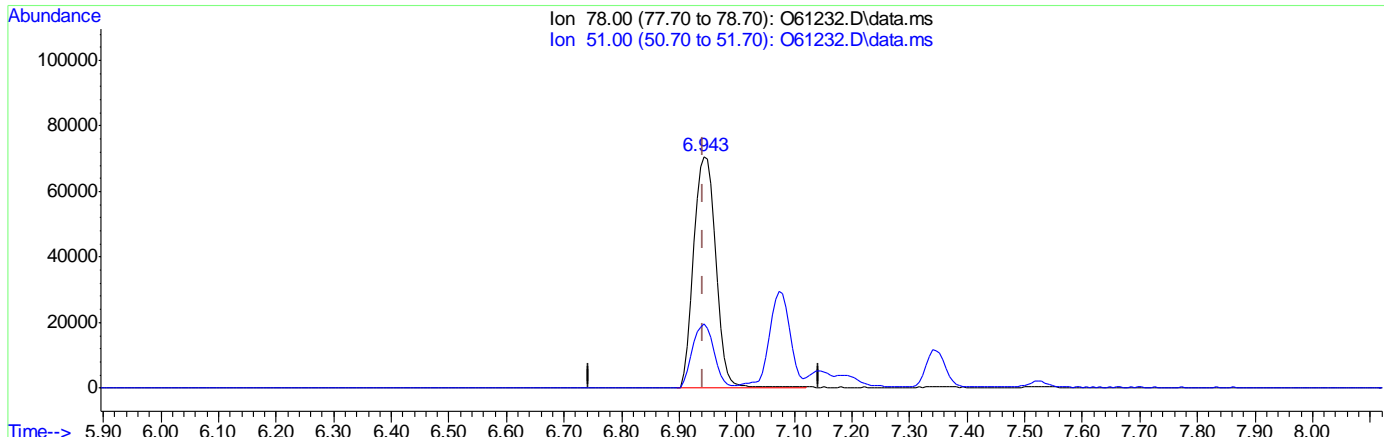
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\091120\
 Data File : O61232.D
 Acq On : 11 Sep 2020 4:14 pm
 Operator : MANAGER
 Sample : IC2356-3
 Misc : MS47184,VO2356,,,,,
 ALS Vial : 4 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 11 17:52:26 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration



(12) Benzene ()
 6.943min (+0.000) 2.05ug/L
 response 193530

Ion	Exp%	Act%
78.00	100	100
51.00	26.20	27.64
0.00	0.00	0.00
0.00	0.00	0.00

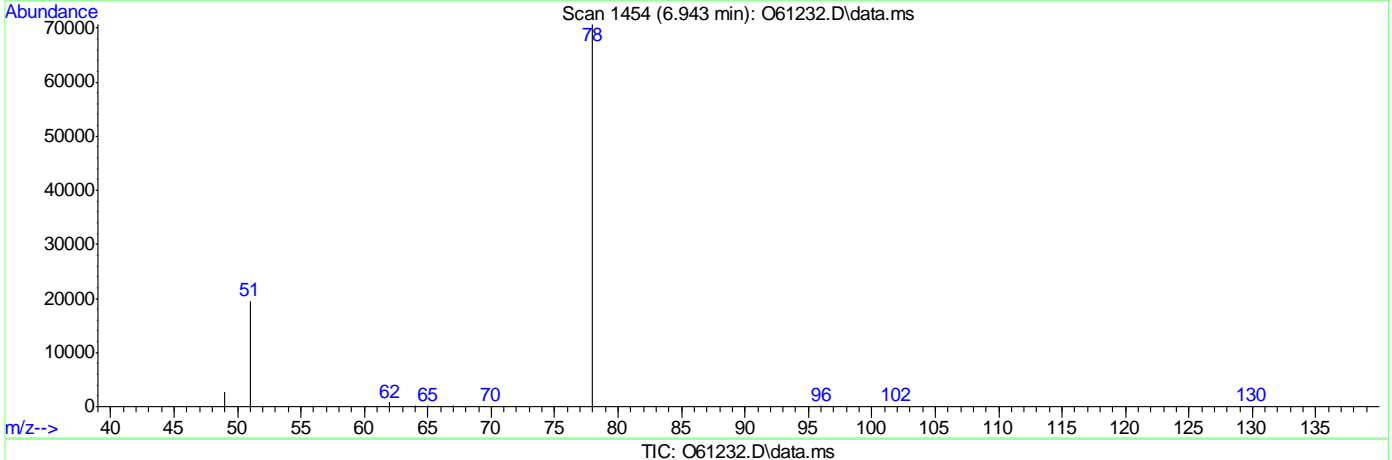
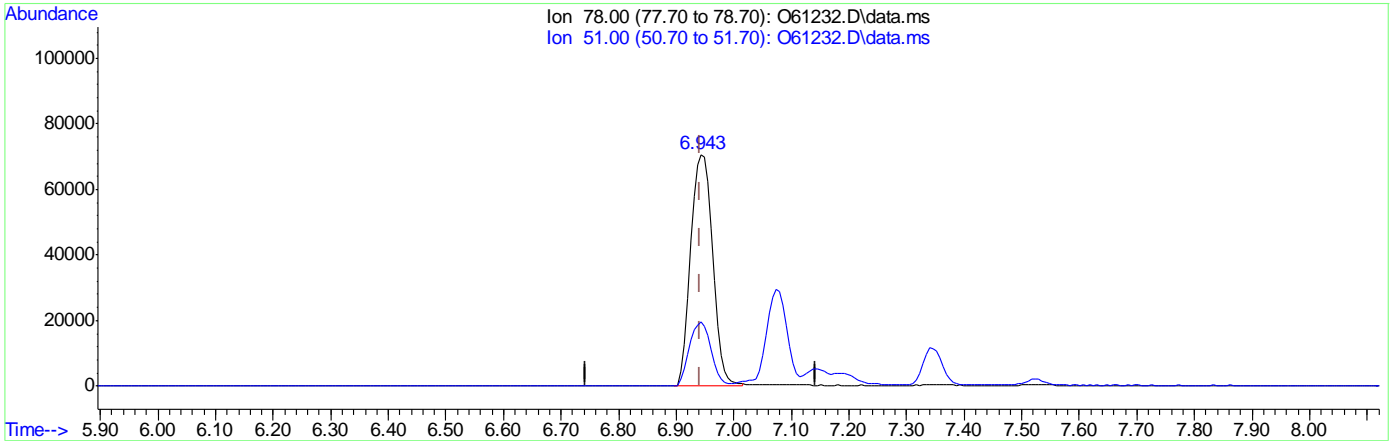
7.6.3.2
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\091120\
 Data File : O61232.D
 Acq On : 11 Sep 2020 4:14 pm
 Operator : MANAGER
 Sample : IC2356-3
 Misc : MS47184,VO2356,,,,,
 ALS Vial : 4 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 11 17:52:26 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration



(12) Benzene ()
 6.943min (+0.000) 2.02ug/L m
 response 190849

Ion	Exp%	Act%
78.00	100	100
51.00	26.20	27.64
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\091120\
 Data File : O61233.D
 Acq On : 11 Sep 2020 4:35 pm
 Operator : stutip
 Sample : IC2356-4 Inst : MSVOA12
 Misc : MS47201,VO2356,,,,,
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 11 18:03:03 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.346	96	331492	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.447	117	258539	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.074	65	143850	4.94	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	98.80%	
19) Toluene-d8	8.900	98	286563	4.53	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	90.60%	
Target Compounds						
						Qvalue
2) Vinyl Chloride	2.916	62	189960	6.08	ug/L	98
3) Chloromethane	2.810	50	274617	5.99	ug/L	94
4) 1,1-Dichloroethene	4.100	61	243476	5.42	ug/L	92
5) Methylene Chloride	4.707	49	387657	4.95	ug/L	99
6) trans-1,2-Dichloroethene	4.873	61	280716	5.19	ug/L	83
7) 1,1-Dichloroethane	5.518	63	322308	5.17	ug/L	100
8) cis-1,2-Dichloroethene	6.072	96	156323	5.64	ug/L #	81
9) Chloroform	6.339	83	274074	5.43	ug/L	96
10) Carbon Tetrachloride	6.517	117	189329	6.01	ug/L	88
11) 1,1,1-Trichloroethane	6.582	97	213837	5.87	ug/L	93
12) Benzene	6.943	78	539806m	5.49	ug/L	
14) 1,2-Dichloroethane	7.145	62	258506	4.75	ug/L	90
15) Trichloroethene	7.518	95	161314	5.59	ug/L	88
16) 1,2-Dichloropropane	8.044	63	181717	5.06	ug/L	93
17) cis-1,3-Dichloropropene	8.711	75	182931	4.54	ug/L	99
20) trans-1,3-Dichloropropene	9.343	75	176190	4.47	ug/L	99
21) Tetrachloroethene	9.343	166	150705	6.02	ug/L	98
22) 1,4-Dichlorobenzene	12.827	146	311628	5.72	ug/L	98
23) 1,2-Dibromo-3-Chloropr...	14.038	75	52936	3.70	ug/L	90

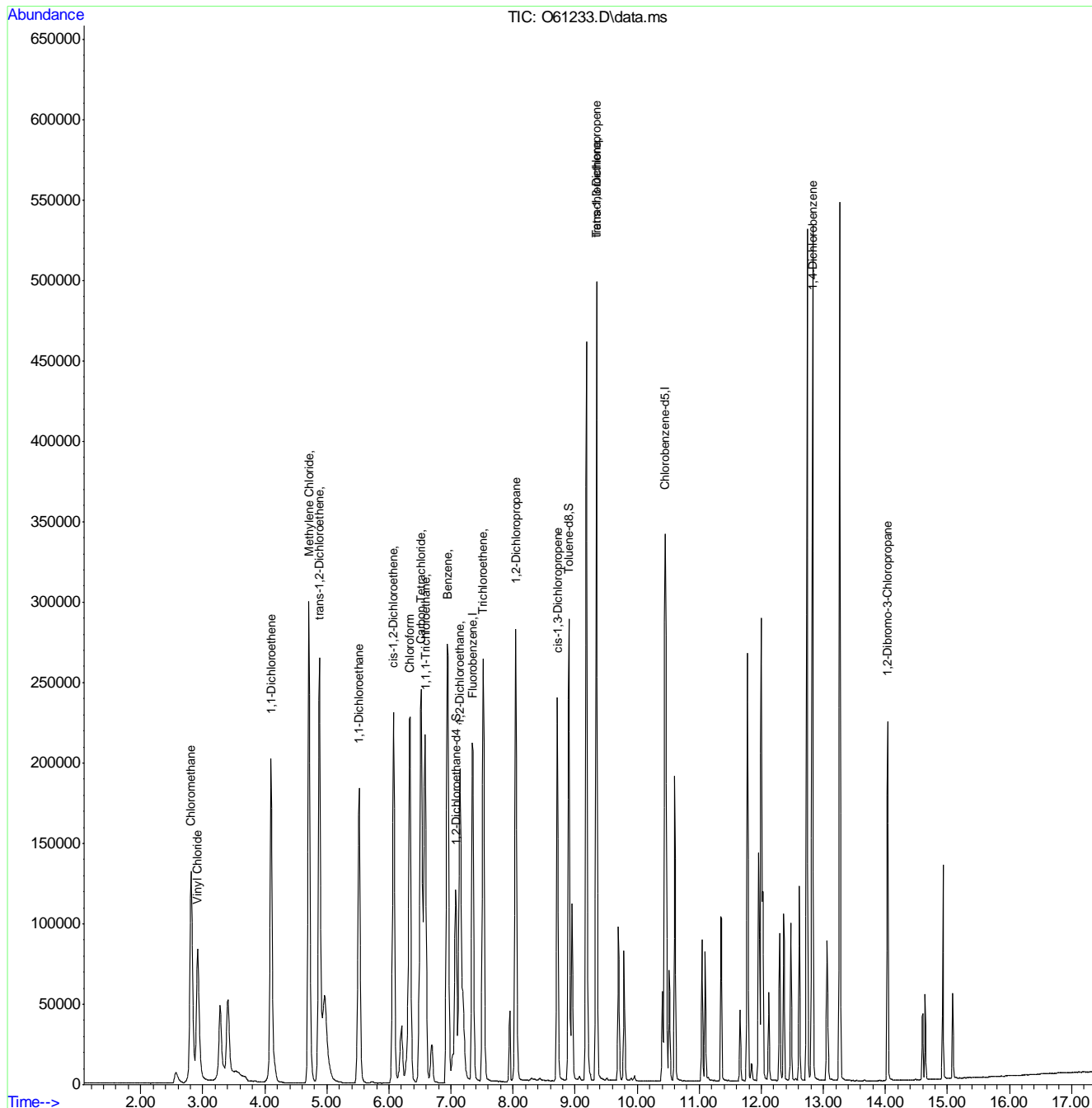
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\091120\
 Data File : O61233.D
 Acq On : 11 Sep 2020 4:35 pm
 Operator : stutip
 Sample : IC2356-4
 Misc : MS47201,VO2356,,,,,
 ALS Vial : 5 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 11 18:03:03 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration



Manual Integration Approval Summary

Sample Number: VO2356-IC2356 **Method:** SW846 8260B BY SIM
Lab FileID: O61233.D **Analyst approved:** 09/13/20 19:45 Stuti Patel
Injection Time: 09/11/20 16:35 **Supervisor approved:** 09/14/20 08:34 Melissa Mangual

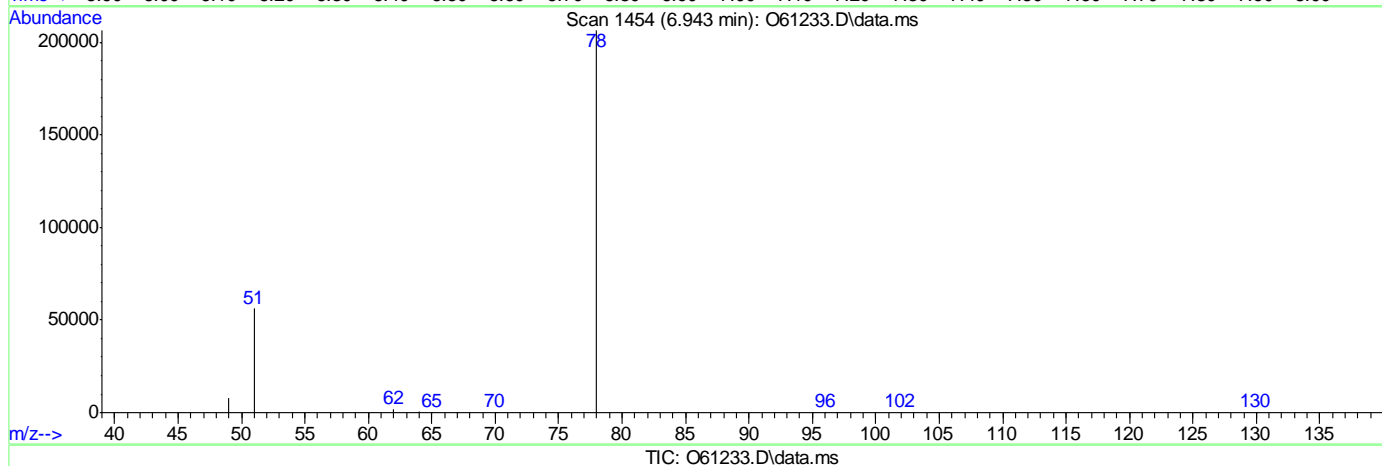
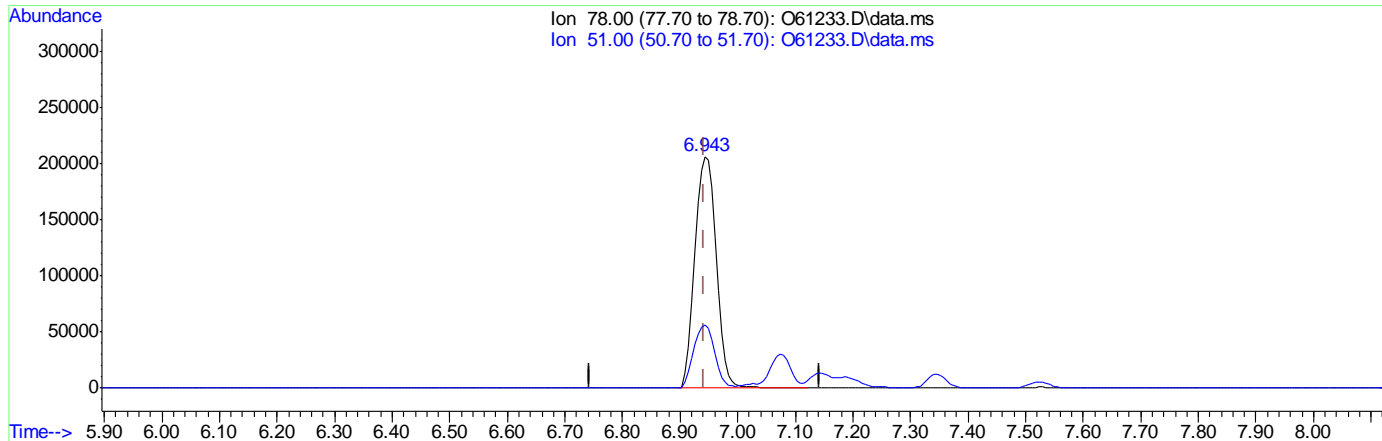
Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzene	71-43-2		6.94	Poor instrument integration

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\091120\
 Data File : O61233.D
 Acq On : 11 Sep 2020 4:35 pm
 Operator : MANAGER
 Sample : IC2356-4
 Misc : MS47184,VO2356,,,,,
 ALS Vial : 5 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 11 17:52:28 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration



(12) Benzene ()

6.943min (+0.000) 5.54ug/L

response 544298

Ion	Exp%	Act%
78.00	100	100
51.00	26.20	27.17
0.00	0.00	0.00
0.00	0.00	0.00

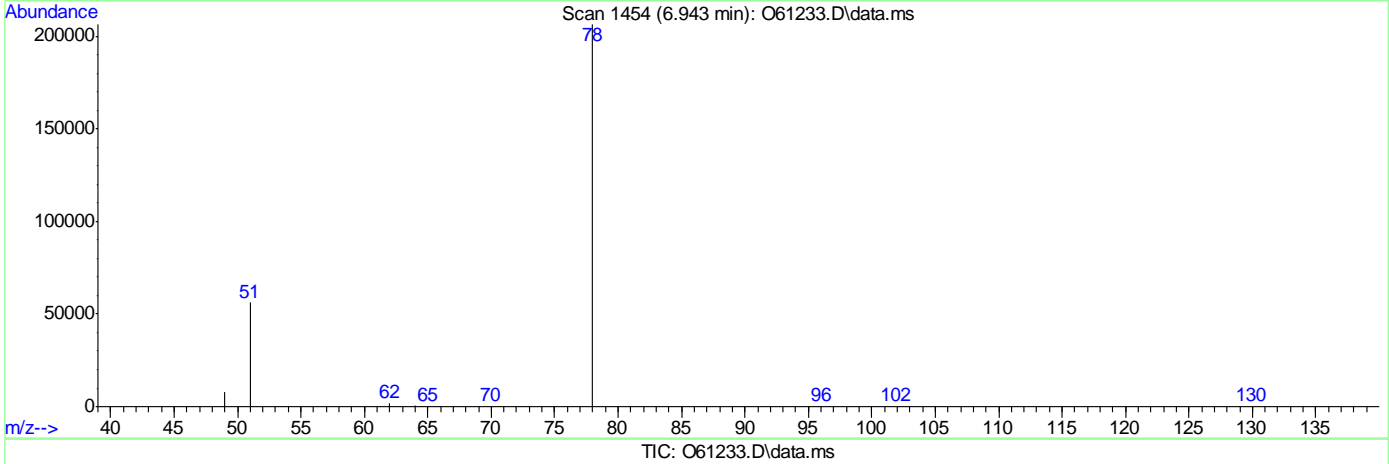
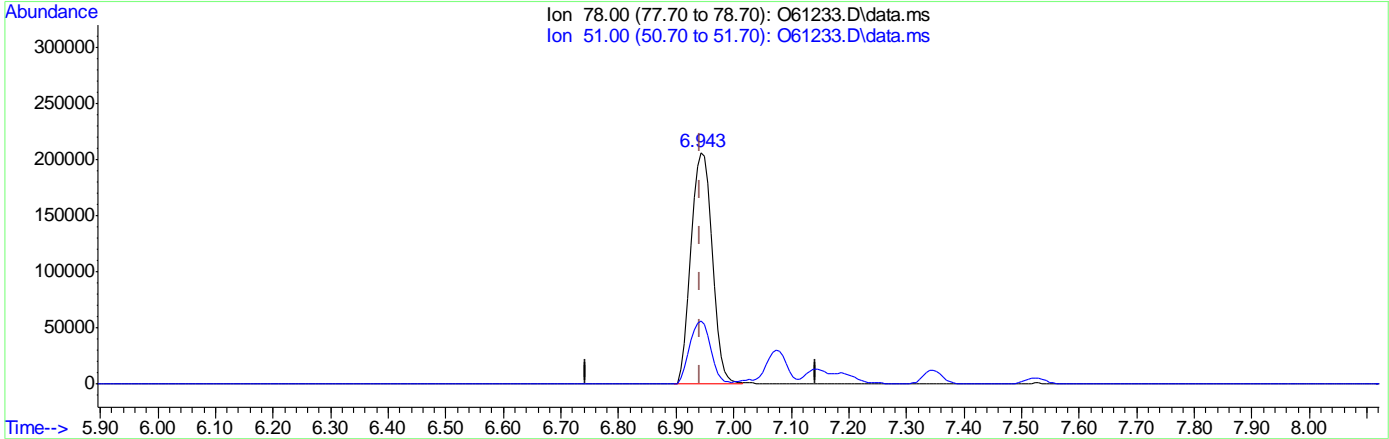
7.6.4.2

7

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\091120\
 Data File : O61233.D
 Acq On : 11 Sep 2020 4:35 pm
 Operator : MANAGER
 Sample : IC2356-4 Inst : MSVOA12
 Misc : MS47184,VO2356,,,,,
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 11 17:52:28 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration



(12) Benzene ()
 6.943min (+0.000) 5.49ug/L m
 response 539806

Ion	Exp%	Act%
78.00	100	100
51.00	26.20	27.17
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\091120\
 Data File : O61234.D
 Acq On : 11 Sep 2020 4:55 pm
 Operator : stutip
 Sample : ICC2356-5 Inst : MSVOA12
 Misc : MS47201,VO2356,,,,,
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 11 18:03:36 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.346	96	367891	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.447	117	288681	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.074	65	143276	4.43	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	88.60%	
19) Toluene-d8	8.900	98	317520	4.50	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	90.00%	
Target Compounds						
						Qvalue
2) Vinyl Chloride	2.908	62	385419	11.68	ug/L	97
3) Chloromethane	2.807	50	542034	11.18	ug/L	93
4) 1,1-Dichloroethene	4.096	61	516893	10.38	ug/L	93
5) Methylene Chloride	4.703	49	746865	9.11	ug/L	99
6) trans-1,2-Dichloroethene	4.873	61	592225	10.01	ug/L	86
7) 1,1-Dichloroethane	5.514	63	676382	9.78	ug/L	100
8) cis-1,2-Dichloroethene	6.072	96	333880	10.85	ug/L	84
9) Chloroform	6.333	83	573497	10.24	ug/L	97
10) Carbon Tetrachloride	6.511	117	409043	11.71	ug/L	87
11) 1,1,1-Trichloroethane	6.582	97	456875	11.31	ug/L	94
12) Benzene	6.943	78	1143203m	10.51	ug/L	
14) 1,2-Dichloroethane	7.145	62	542073	8.97	ug/L	90
15) Trichloroethene	7.518	95	346969	10.84	ug/L	88
16) 1,2-Dichloropropane	8.043	63	380072	9.56	ug/L	92
17) cis-1,3-Dichloropropene	8.711	75	405529	9.07	ug/L	96
20) trans-1,3-Dichloropropene	9.343	75	393915	8.95	ug/L	97
21) Tetrachloroethene	9.343	166	320442	11.51	ug/L	98
22) 1,4-Dichlorobenzene	12.827	146	679269	11.17	ug/L	97
23) 1,2-Dibromo-3-Chloropr...	14.038	75	120855	7.57	ug/L	87

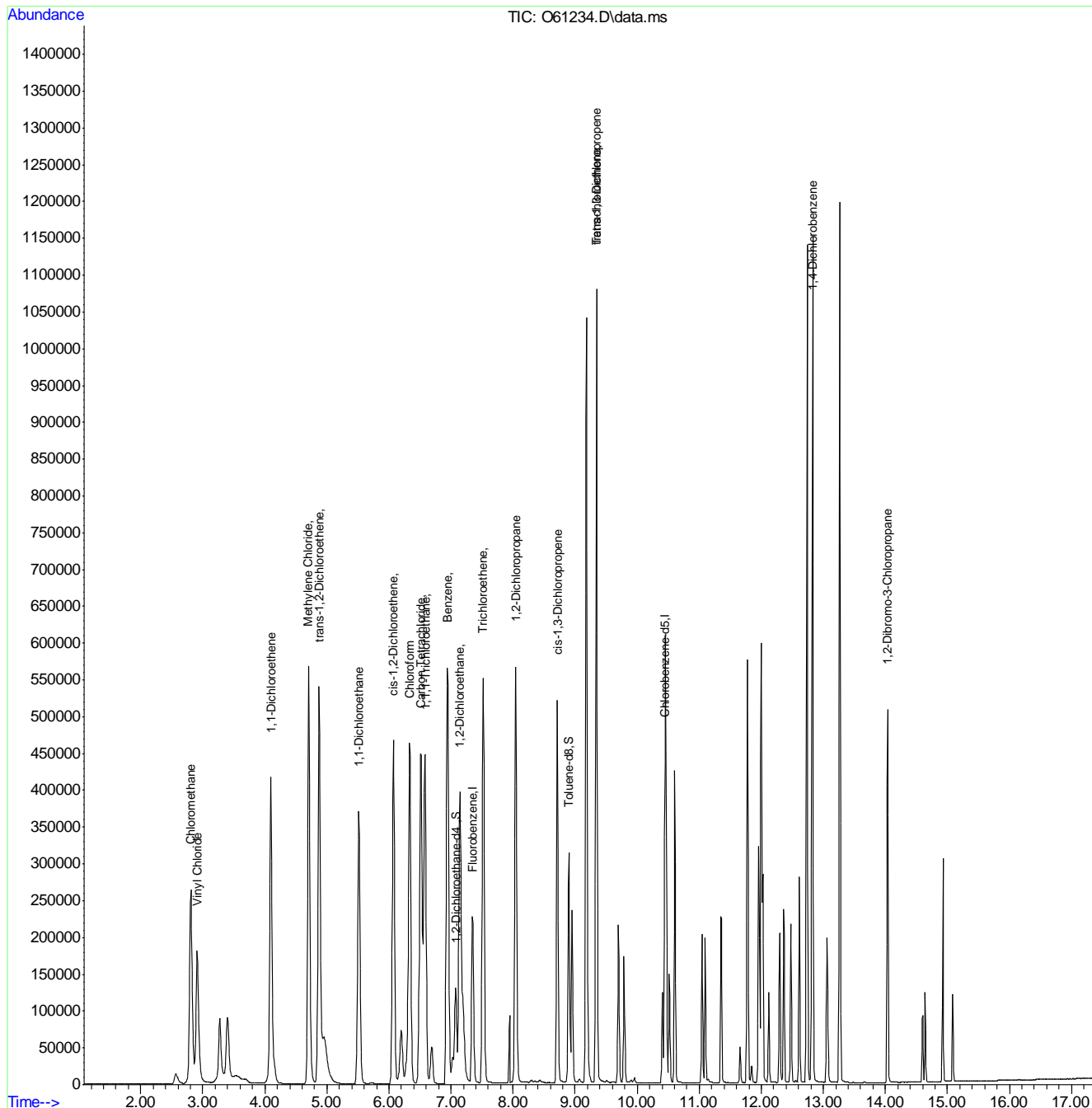
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\091120\
 Data File : O61234.D
 Acq On : 11 Sep 2020 4:55 pm
 Operator : stutip
 Sample : ICc2356-5
 Misc : MS47201,VO2356,,,,,
 ALS Vial : 6 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 11 18:03:36 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration



Manual Integration Approval Summary

Sample Number: VO2356-ICC2356 **Method:** SW846 8260B BY SIM
Lab FileID: O61234.D **Analyst approved:** 09/13/20 19:45 Stuti Patel
Injection Time: 09/11/20 16:55 **Supervisor approved:** 09/14/20 08:34 Melissa Mangual

Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzene	71-43-2		6.94	Poor instrument integration

7.6.5.1

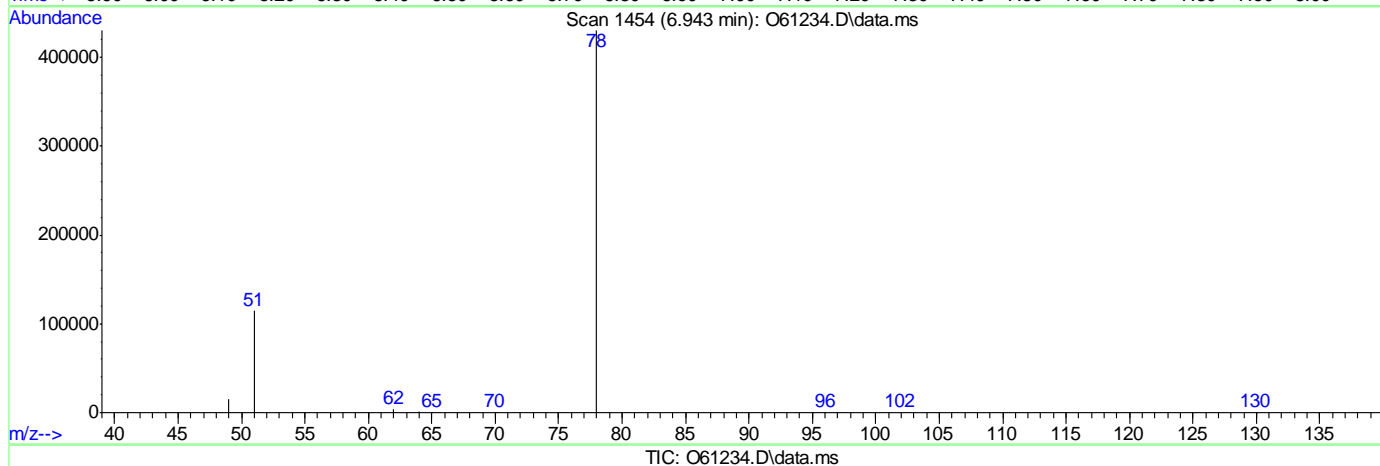
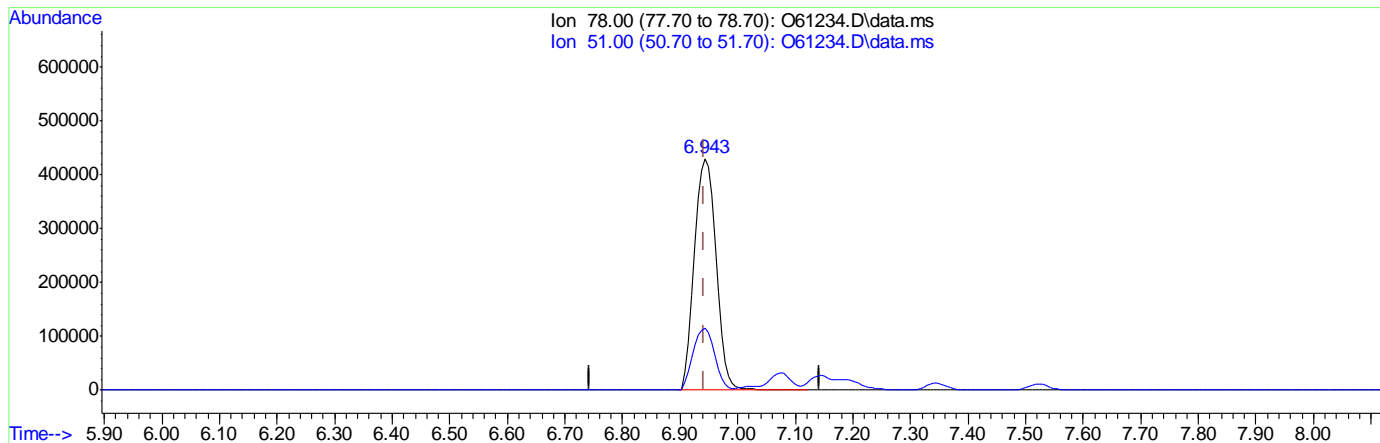
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\091120\
 Data File : O61234.D
 Acq On : 11 Sep 2020 4:55 pm
 Operator : MANAGER
 Sample : IC2356-5
 Misc : MS47184,VO2356,,,,,
 ALS Vial : 6 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 11 17:52:30 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration



(12) Benzene ()

6.943min (+0.000) 10.57ug/L

response 1149895

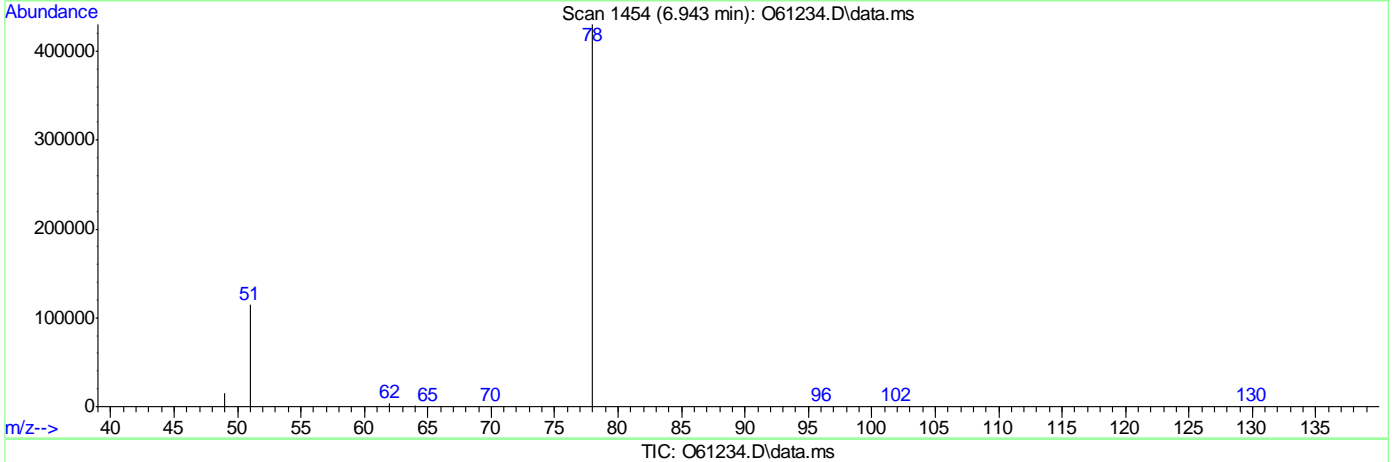
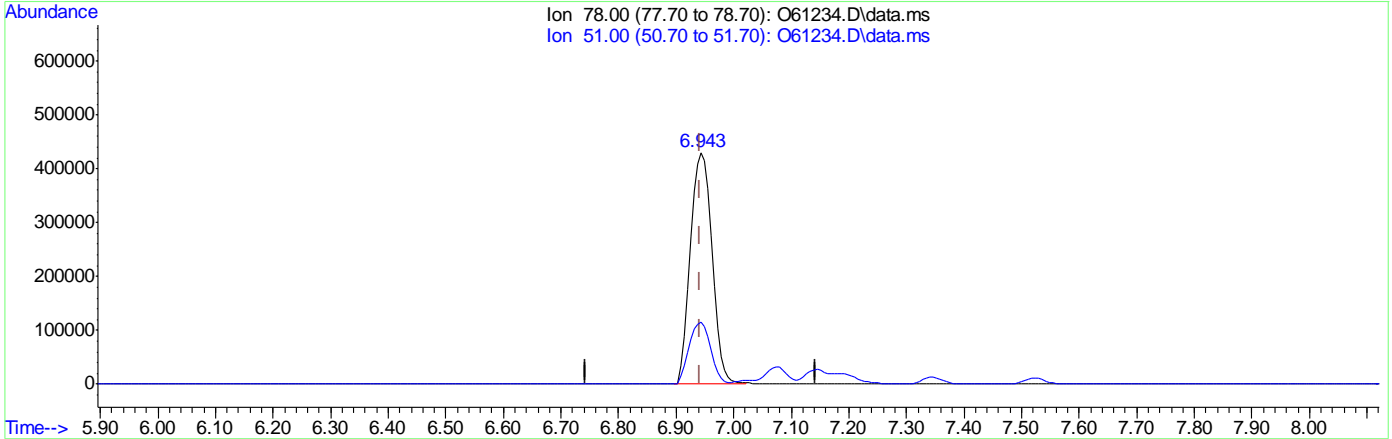
Ion	Exp%	Act%
78.00	100	100
51.00	26.20	26.68
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\091120\
 Data File : O61234.D
 Acq On : 11 Sep 2020 4:55 pm
 Operator : MANAGER
 Sample : IC2356-5
 Misc : MS47184,VO2356,,,,,
 ALS Vial : 6 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 11 17:52:30 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration



(12) Benzene ()
 6.943min (+0.000) 10.51ug/L m
 response 1143203

Ion	Exp%	Act%
78.00	100	100
51.00	26.20	26.68
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\091120\
 Data File : O61235.D
 Acq On : 11 Sep 2020 5:15 pm
 Operator : stutip
 Sample : IC2356-6 Inst : MSVOA12
 Misc : MS47201,VO2356,,,,,
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 11 18:03:51 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
Internal Standards							
1) Fluorobenzene	7.346	96	393958	5.00	ug/L	0.00	
18) Chlorobenzene-d5	10.447	117	307376	5.00	ug/L	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.073	65	153155	4.43	ug/L	0.00	
Spiked Amount	5.000	Range 74 - 125	Recovery	=	88.60%		
19) Toluene-d8	8.896	98	343376	4.57	ug/L	0.00	
Spiked Amount	5.000	Range 88 - 111	Recovery	=	91.40%		
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.897	62	581790	17.36	ug/L		98
3) Chloromethane	2.791	50	805942	16.33	ug/L		94
4) 1,1-Dichloroethene	4.085	61	794045	14.88	ug/L		93
5) Methylene Chloride	4.696	49	1121963	13.69	ug/L		100
6) trans-1,2-Dichloroethene	4.861	61	919410	14.72	ug/L		84
7) 1,1-Dichloroethane	5.506	63	1045292	14.12	ug/L		100
8) cis-1,2-Dichloroethene	6.066	96	524339	15.91	ug/L		84
9) Chloroform	6.333	83	891365	14.86	ug/L		97
10) Carbon Tetrachloride	6.505	117	634944	16.97	ug/L		88
11) 1,1,1-Trichloroethane	6.576	97	713480	16.49	ug/L		94
12) Benzene	6.943	78	1776329m	15.29	ug/L		
14) 1,2-Dichloroethane	7.139	62	860563	13.30	ug/L		90
15) Trichloroethene	7.512	95	544590	15.88	ug/L		90
16) 1,2-Dichloropropane	8.040	63	594236	13.99	ug/L		92
17) cis-1,3-Dichloropropene	8.711	75	663239	13.85	ug/L		93
20) trans-1,3-Dichloropropene	9.343	75	651125	13.89	ug/L		95
21) Tetrachloroethene	9.337	166	499062	16.90	ug/L		92
22) 1,4-Dichlorobenzene	12.827	146	1064594	16.45	ug/L		98
23) 1,2-Dibromo-3-Chloropr...	14.037	75	202684	11.92	ug/L		90

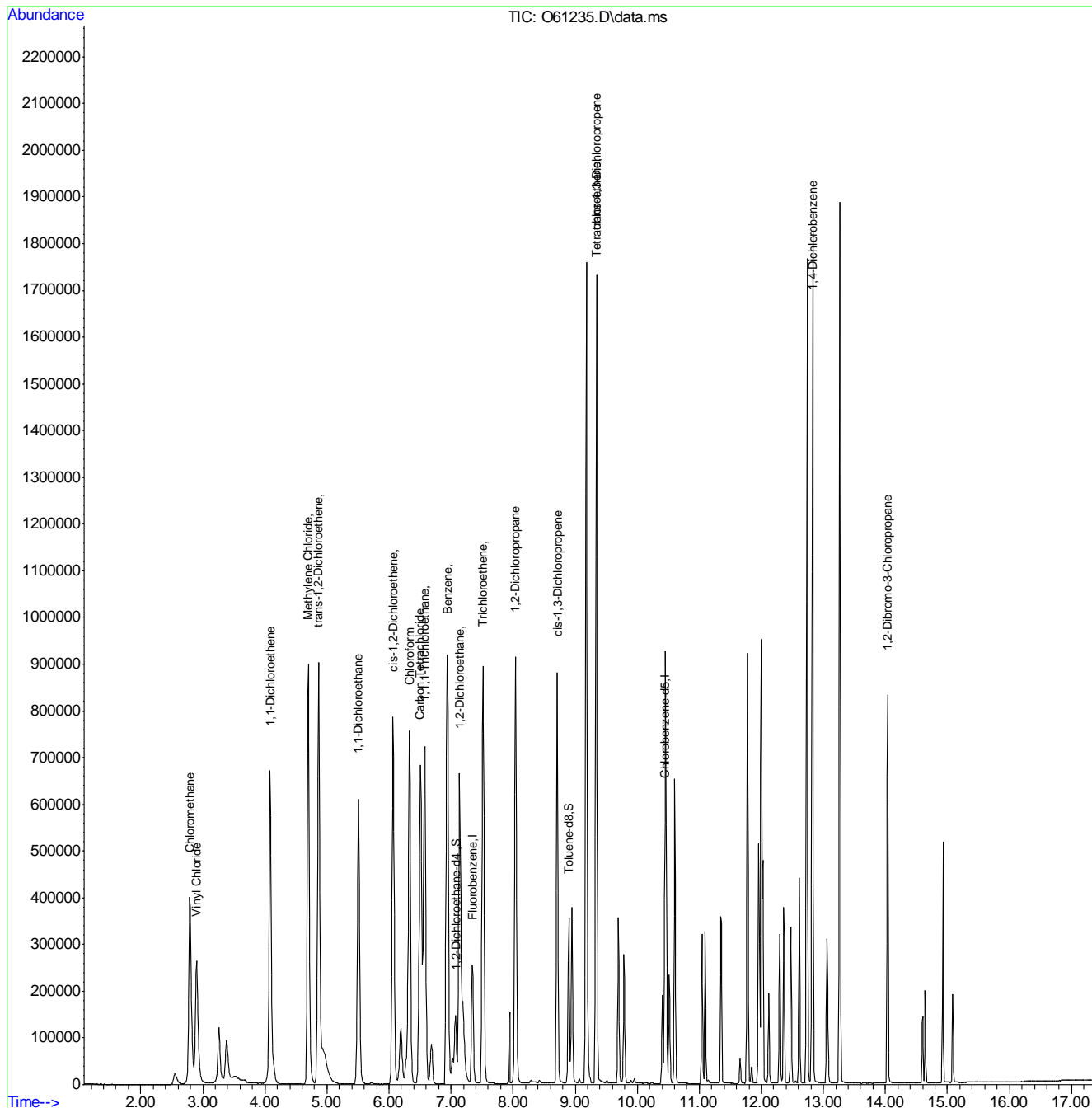
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\091120\
 Data File : O61235.D
 Acq On : 11 Sep 2020 5:15 pm
 Operator : stutip
 Sample : IC2356-6
 Misc : MS47201,VO2356,,,,,
 ALS Vial : 7 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 11 18:03:51 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration



9.9.7

Manual Integration Approval Summary

Sample Number: VO2356-IC2356 **Method:** SW846 8260B BY SIM
Lab FileID: O61235.D **Analyst approved:** 09/13/20 19:45 Stuti Patel
Injection Time: 09/11/20 17:15 **Supervisor approved:** 09/14/20 08:34 Melissa Mangual

Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzene	71-43-2		6.94	Poor instrument integration

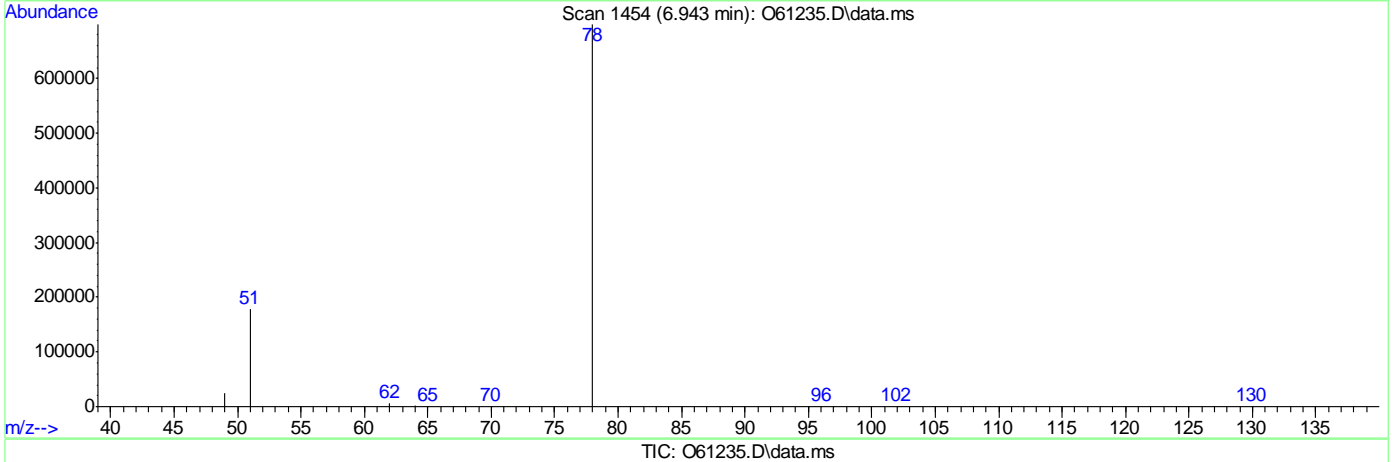
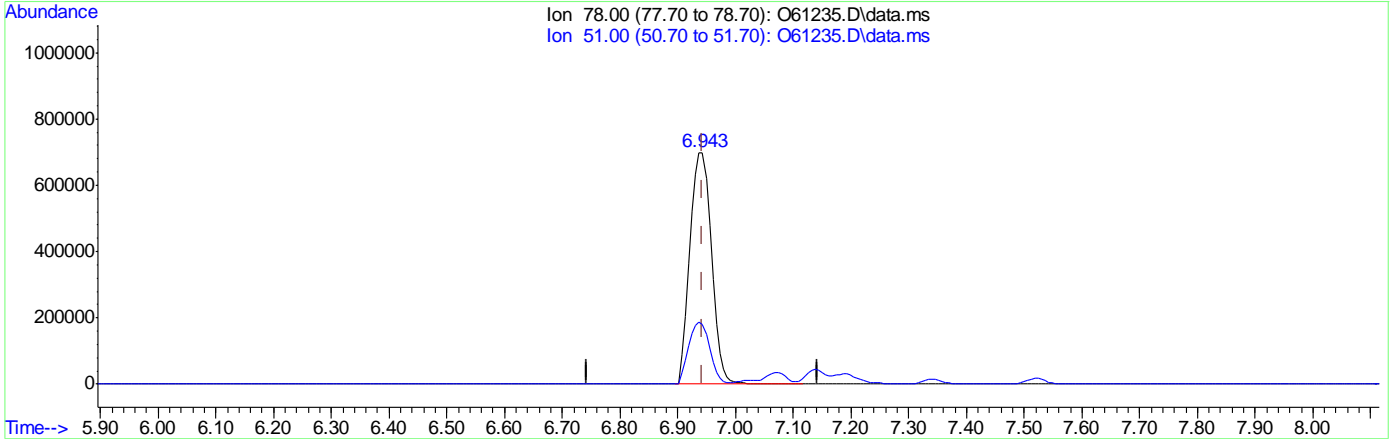
7.6.6.1

7

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\091120\
 Data File : O61235.D
 Acq On : 11 Sep 2020 5:15 pm
 Operator : MANAGER
 Sample : IC2356-6 Inst : MSVOA12
 Misc : MS47184,VO2356,,,,,
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 11 17:52:32 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration



(12) Benzene ()
 6.943min (+0.000) 15.36ug/L
 response 1784608

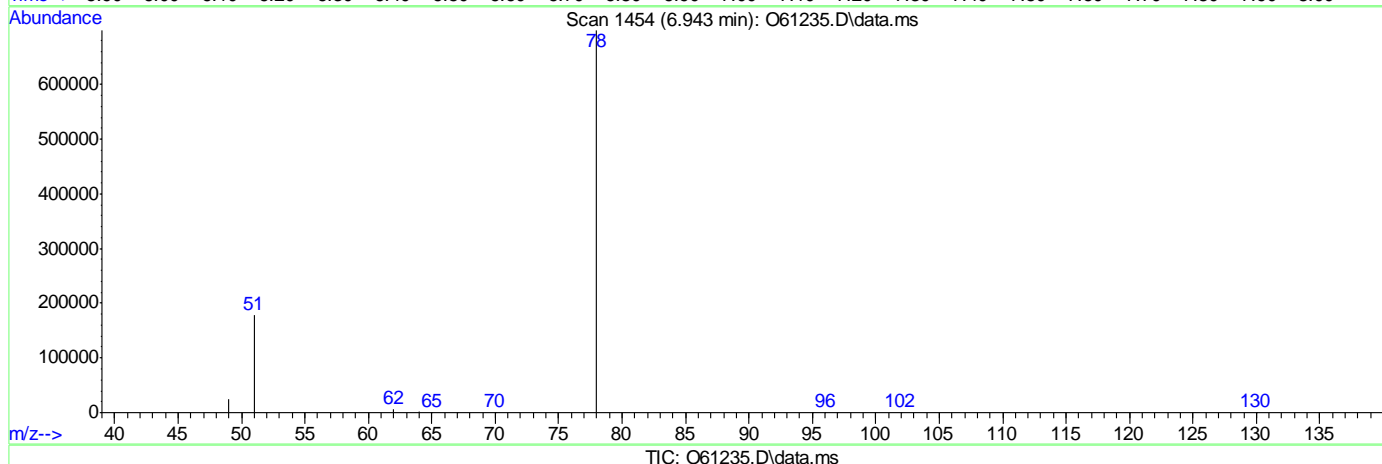
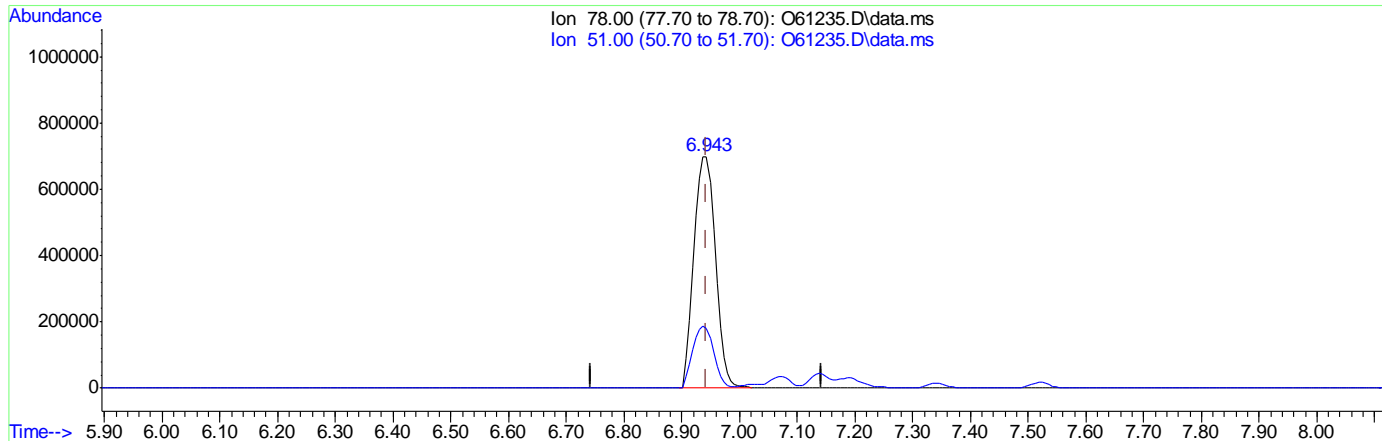
Ion	Exp%	Act%
78.00	100	100
51.00	26.20	25.61
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\091120\
 Data File : O61235.D
 Acq On : 11 Sep 2020 5:15 pm
 Operator : MANAGER
 Sample : IC2356-6
 Misc : MS47184,VO2356,,,,,
 ALS Vial : 7 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 11 17:52:32 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration



(12) Benzene ()
 6.943min (+0.000) 15.29ug/L m
 response 1776329

Ion	Exp%	Act%
78.00	100	100
51.00	26.20	25.61
0.00	0.00	0.00
0.00	0.00	0.00

7.6.6.3
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\091120\
 Data File : 061236.D
 Acq On : 11 Sep 2020 5:36 pm
 Operator : stutip
 Sample : IC2356-7 Inst : MSVOA12
 Misc : MS47201,VO2356,,,,,
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 11 18:04:12 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
Internal Standards							
1) Fluorobenzene	7.352	96	430313	5.00	ug/L	0.00	
18) Chlorobenzene-d5	10.447	117	330631	5.00	ug/L	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.079	65	166372	4.40	ug/L	0.00	
Spiked Amount	5.000	Range 74 - 125	Recovery	=	88.00%		
19) Toluene-d8	8.900	98	374232	4.63	ug/L	0.00	
Spiked Amount	5.000	Range 88 - 111	Recovery	=	92.60%		
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.908	62	814030	23.66	ug/L		98
3) Chloromethane	2.803	50	1116385	21.95	ug/L		94
4) 1,1-Dichloroethene	4.092	61	1194148	20.49	ug/L		94
5) Methylene Chloride	4.703	49	1613536	19.98	ug/L		98
6) trans-1,2-Dichloroethene	4.869	61	1391011	20.75	ug/L		85
7) 1,1-Dichloroethane	5.514	63	1560149	19.30	ug/L		100
8) cis-1,2-Dichloroethene	6.072	96	791148	21.98	ug/L		85
9) Chloroform	6.333	83	1332932	20.34	ug/L		97
10) Carbon Tetrachloride	6.510	117	982791	24.05	ug/L		88
11) 1,1,1-Trichloroethane	6.576	97	1094990	23.17	ug/L		95
12) Benzene	6.943	78	2670290m	21.11	ug/L		
14) 1,2-Dichloroethane	7.145	62	1260966	17.85	ug/L		89
15) Trichloroethene	7.518	95	818610	21.86	ug/L		88
16) 1,2-Dichloropropane	8.043	63	893916	19.34	ug/L		91
17) cis-1,3-Dichloropropene	8.711	75	1001044	19.14	ug/L		95
20) trans-1,3-Dichloropropene	9.343	75	975862	19.36	ug/L		94
21) Tetrachloroethene	9.343	166	748457	23.68	ug/L		97
22) 1,4-Dichlorobenzene	12.827	146	1570512	22.56	ug/L		98
23) 1,2-Dibromo-3-Chloropr...	14.037	75	297989	16.29	ug/L		91

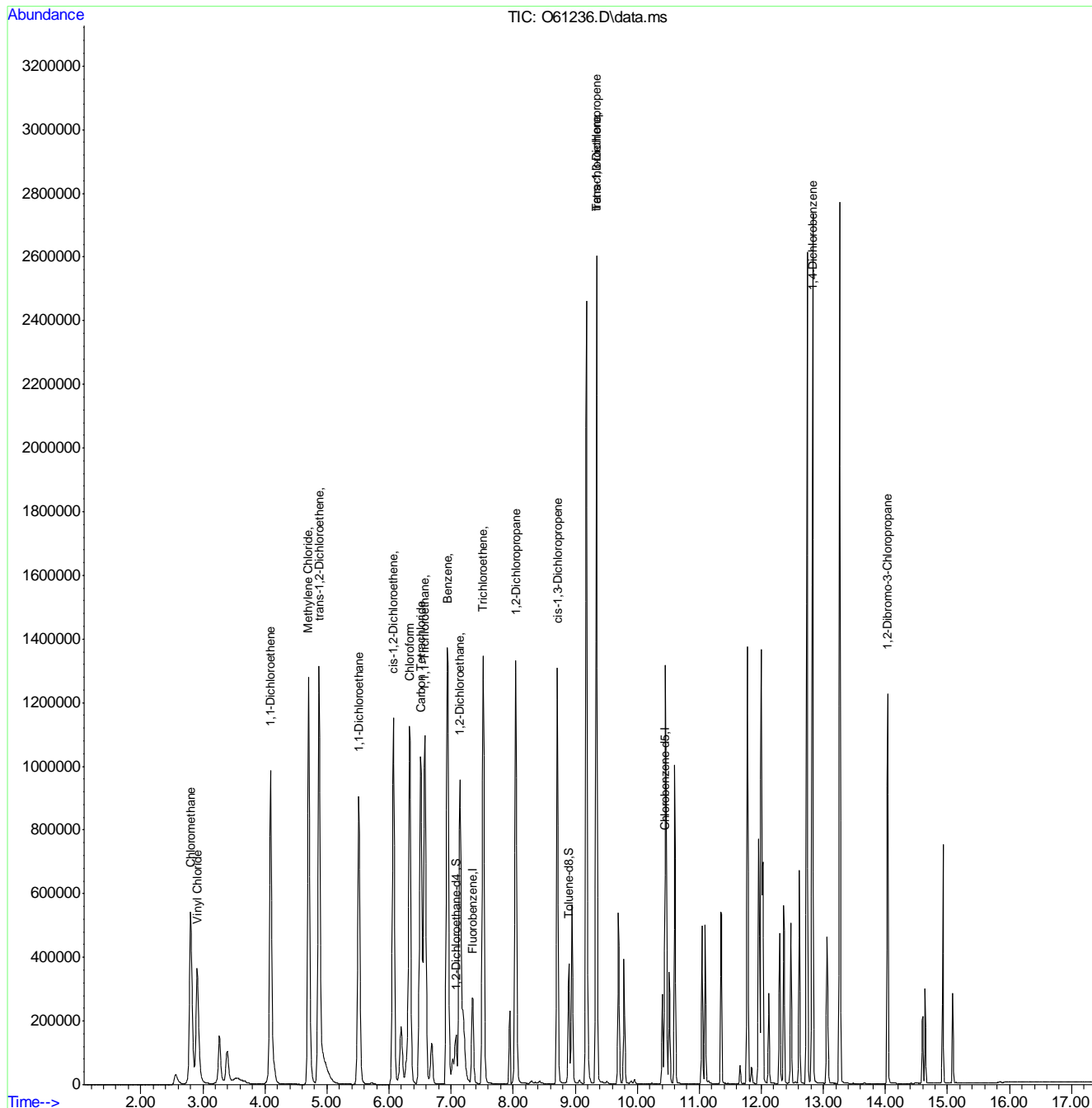
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\091120\
 Data File : O61236.D
 Acq On : 11 Sep 2020 5:36 pm
 Operator : stutip
 Sample : IC2356-7
 Misc : MS47201,VO2356,,,,,
 ALS Vial : 8 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 11 18:04:12 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration



7.6.7
7

Manual Integration Approval Summary

Sample Number: VO2356-IC2356 **Method:** SW846 8260B BY SIM
Lab FileID: O61236.D **Analyst approved:** 09/13/20 19:45 Stuti Patel
Injection Time: 09/11/20 17:36 **Supervisor approved:** 09/14/20 08:34 Melissa Mangual

Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzene	71-43-2		6.94	Poor instrument integration

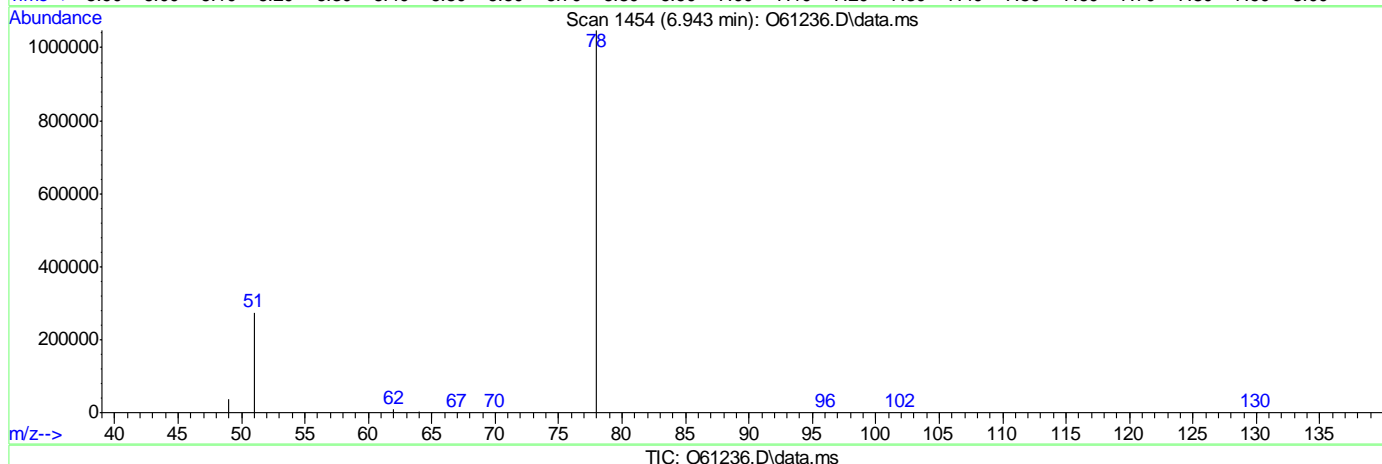
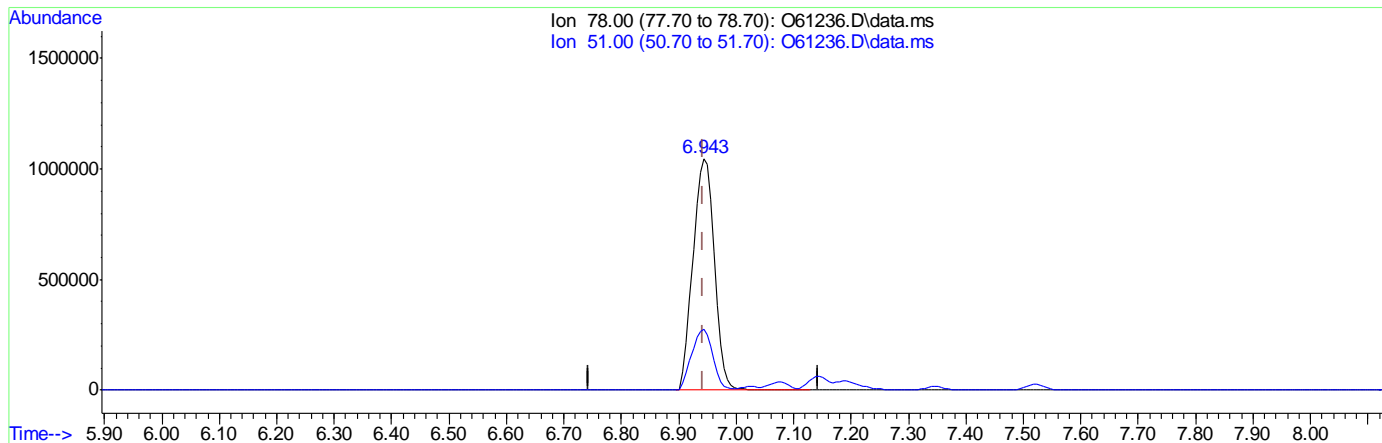
7.6.7.1

7

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\091120\
 Data File : O61236.D
 Acq On : 11 Sep 2020 5:36 pm
 Operator : MANAGER
 Sample : IC2356-7 Inst : MSVOA12
 Misc : MS47184,VO2356,,,,,
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 11 18:04:05 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration



(12) Benzene ()

6.943min (-0.000) 21.23ug/L

response 2686132

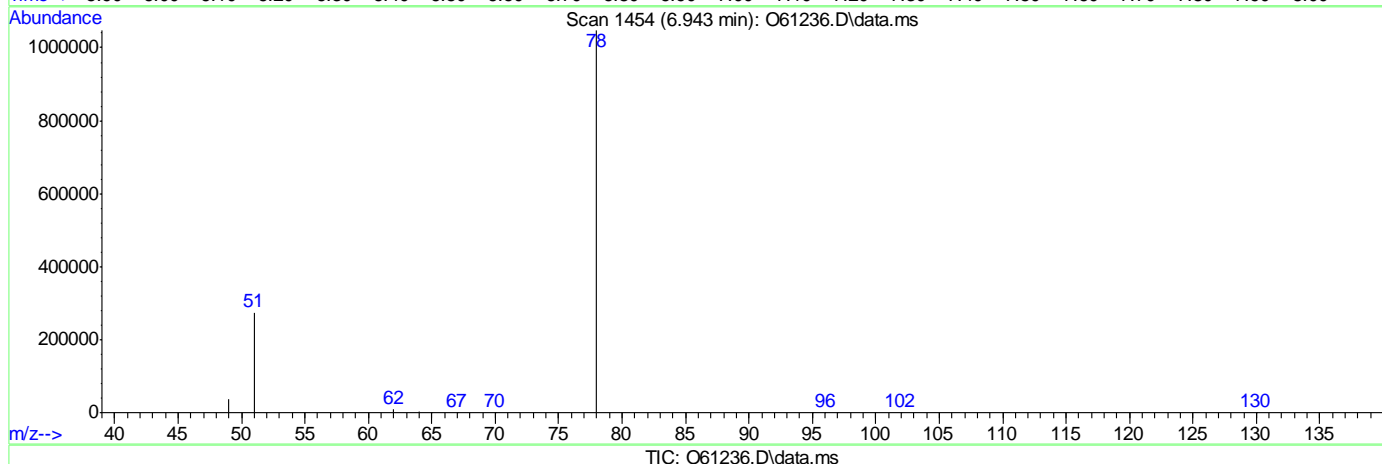
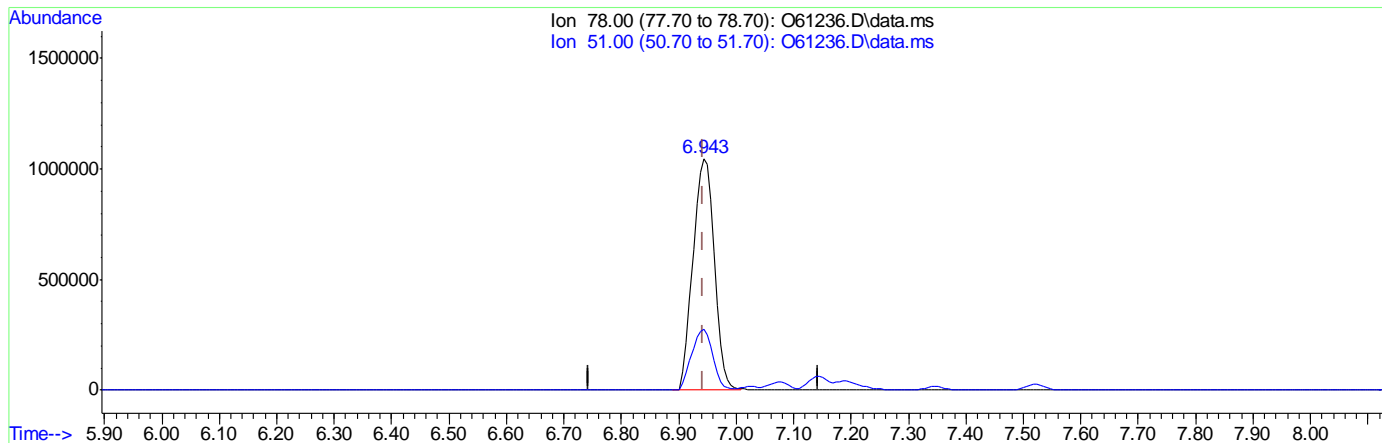
Ion	Exp%	Act%
78.00	100	100
51.00	26.20	26.17
0.00	0.00	0.00
0.00	0.00	0.00

7.6.7.2
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\091120\
 Data File : O61236.D
 Acq On : 11 Sep 2020 5:36 pm
 Operator : MANAGER
 Sample : IC2356-7 Inst : MSVOA12
 Misc : MS47184,VO2356,,,,,
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 11 18:04:05 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 09 12:10:38 2020
 Response via : Initial Calibration



(12) Benzene ()
 6.943min (-0.000) 21.11ug/L m
 response 2670290

Ion	Exp%	Act%
78.00	100	100
51.00	26.20	26.17
0.00	0.00	0.00
0.00	0.00	0.00

7.6.7.3
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\091120\
 Data File : O61238.D
 Acq On : 11 Sep 2020 6:16 pm
 Operator : stutip
 Sample : icv2356-5 Inst : MSVOA12
 Misc : MS47201,VO2356,,,,,
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 13 19:20:48 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Sun Sep 13 19:20:40 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.346	96	392529	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.447	117	305591	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.074	65	151418	4.78	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	95.60%	
19) Toluene-d8	8.896	98	341369	4.95	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	99.00%	
Target Compounds						
						Qvalue
2) Vinyl Chloride	2.905	62	359054	8.49	ug/L	98
3) Chloromethane	2.803	50	507353	8.27	ug/L	94
4) 1,1-Dichloroethene	4.092	61	507491	9.35	ug/L	91
5) Methylene Chloride	4.703	49	755284	8.89	ug/L	99
6) trans-1,2-Dichloroethene	4.869	61	597300	9.53	ug/L	84
7) 1,1-Dichloroethane	5.514	63	694519	9.54	ug/L	100
8) cis-1,2-Dichloroethene	6.072	96	347499	9.66	ug/L	85
9) Chloroform	6.333	83	585017	9.34	ug/L	97
10) Carbon Tetrachloride	6.511	117	409874	9.60	ug/L	88
11) 1,1,1-Trichloroethane	6.576	97	455396	9.43	ug/L	94
12) Benzene	6.943	78	1221796	10.10	ug/L	100
14) 1,2-Dichloroethane	7.139	62	581587	9.82	ug/L	90
15) Trichloroethene	7.518	95	365705	9.91	ug/L	88
16) 1,2-Dichloropropane	8.043	63	408716	10.10	ug/L	92
17) cis-1,3-Dichloropropene	8.711	75	449848	10.71	ug/L	94
20) trans-1,3-Dichloropropene	9.343	75	443597	11.04	ug/L	95
21) Tetrachloroethene	9.343	166	323529	9.60	ug/L	99
22) 1,4-Dichlorobenzene	12.827	146	714911	10.10	ug/L	98
23) 1,2-Dibromo-3-Chloropr...	14.038	75	131759	10.13	ug/L	93

(#) = qualifier out of range (m) = manual integration (+) = signals summed

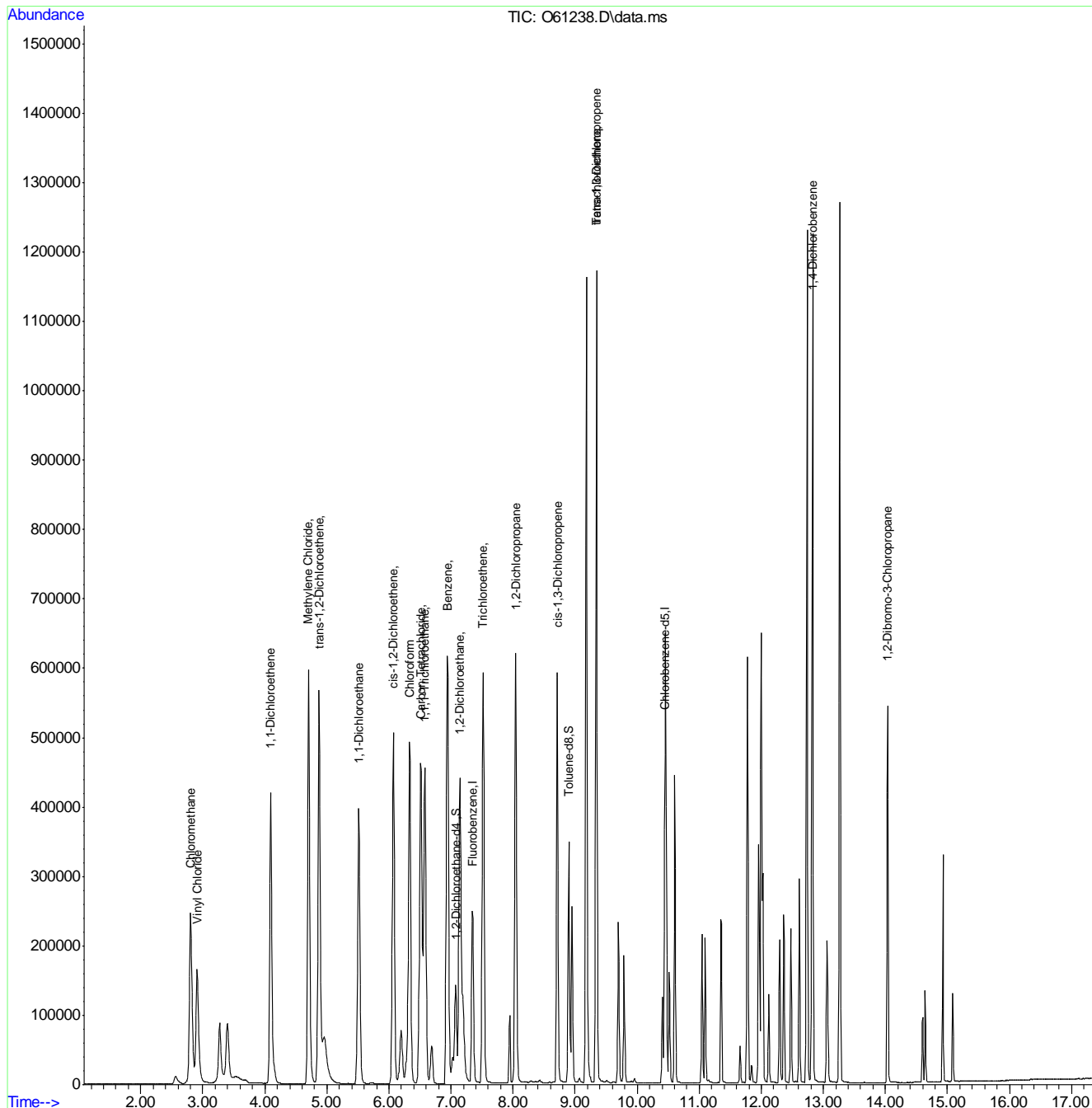
7.6.8
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\091120\
 Data File : O61238.D
 Acq On : 11 Sep 2020 6:16 pm
 Operator : stutip
 Sample : icv2356-5
 Misc : MS47201,VO2356,,,,,
 ALS Vial : 10 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 13 19:20:48 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Sun Sep 13 19:20:40 2020
 Response via : Initial Calibration

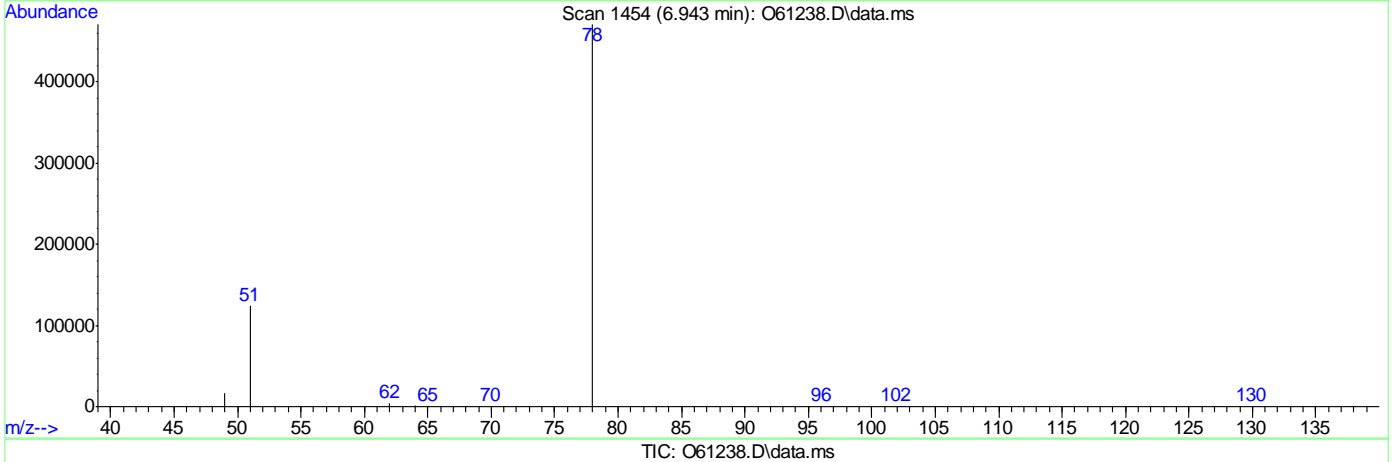
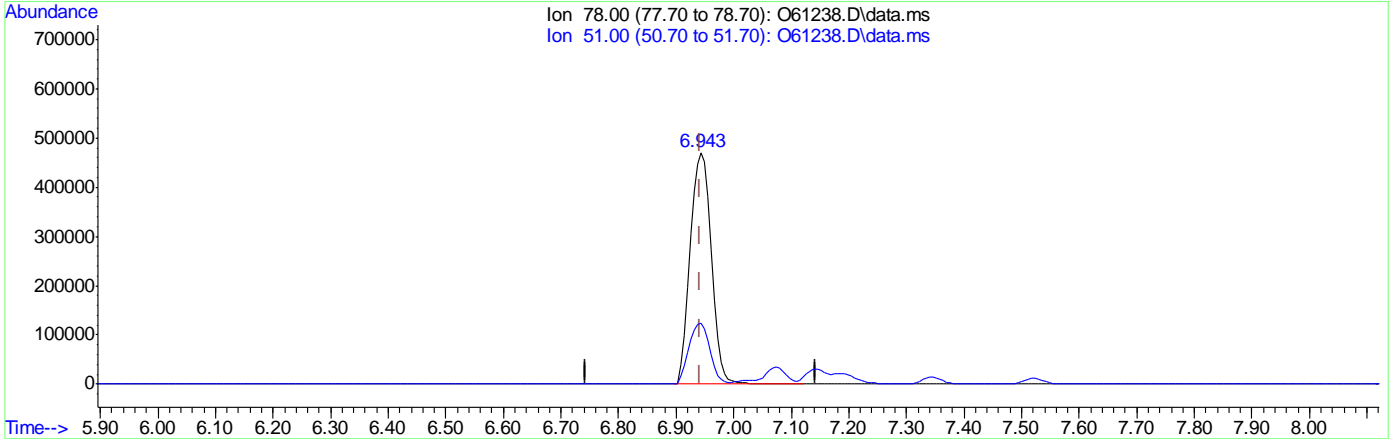


8'9'7

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\091120\
 Data File : O61238.D
 Acq On : 11 Sep 2020 6:16 pm
 Operator : MANAGER
 Sample : icv2356-5 Inst : MSVOA12
 Misc : MS47184,VO2356,,,,,
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 13 19:14:07 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Sat Sep 12 09:29:43 2020
 Response via : Initial Calibration



(12) Benzene ()
 6.943min (+0.000) 10.10ug/L
 response 1221796

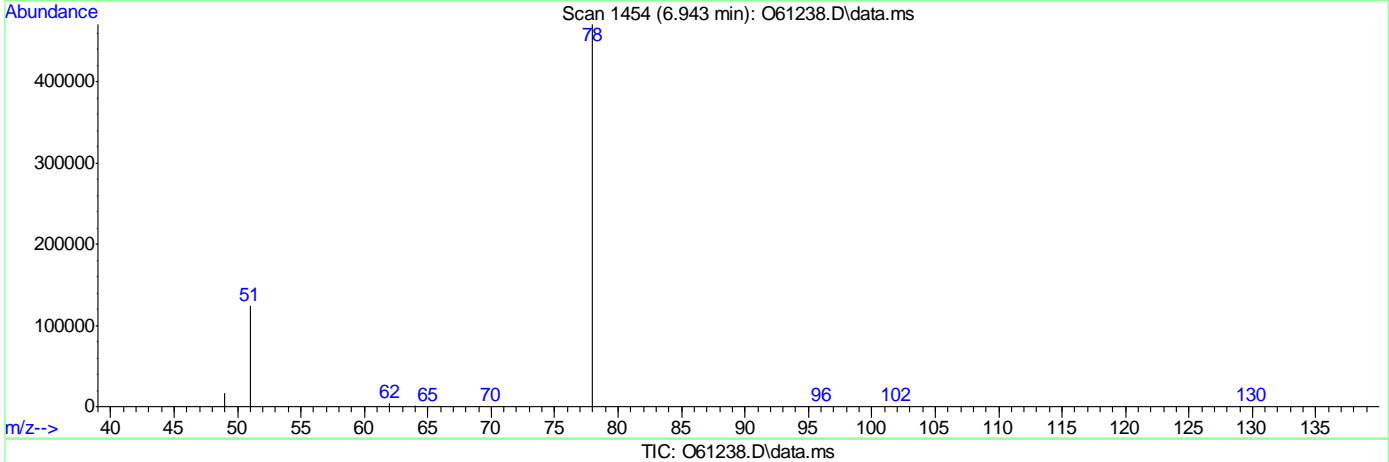
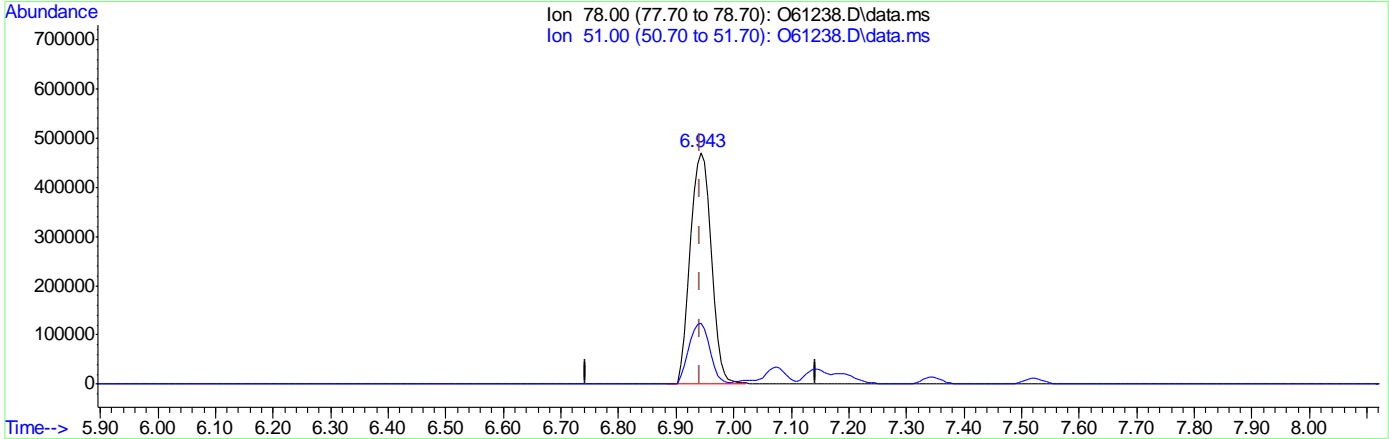
Ion	Exp%	Act%
78.00	100	100
51.00	26.20	26.31
0.00	0.00	0.00
0.00	0.00	0.00

7.68.1
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\091120\
 Data File : O61238.D
 Acq On : 11 Sep 2020 6:16 pm
 Operator : MANAGER
 Sample : icv2356-5 Inst : MSVOA12
 Misc : MS47184,VO2356,,,,,
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 13 19:14:07 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Sat Sep 12 09:29:43 2020
 Response via : Initial Calibration



(12) Benzene ()
 6.943min (+0.000) 10.04ug/L m
 response 1214827

Ion	Exp%	Act%
78.00	100	100
51.00	26.20	26.31
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-14-2020\VO2358\
 Data File : O61273.D
 Acq On : 12 Sep 2020 10:52 am
 Operator : stutip
 Sample : cc2356-5
 Misc : MS47191,VO2358,,,,,
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 14 07:25:12 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Sun Sep 13 19:20:40 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	

Internal Standards							
1) Fluorobenzene	7.340	96	312802	5.00	ug/L	0.00	
18) Chlorobenzene-d5	10.441	117	250188	5.00	ug/L	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.068	65	124310	4.92	ug/L	0.00	
Spiked Amount	5.000	Range 74 - 125	Recovery	=	98.40%		
19) Toluene-d8	8.896	98	268192	4.75	ug/L	0.00	
Spiked Amount	5.000	Range 88 - 111	Recovery	=	95.00%		
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.897	62	287759	8.54	ug/L		98
3) Chloromethane	2.791	50	420469	8.65	ug/L		94
4) 1,1-Dichloroethene	4.081	61	407172	9.42	ug/L		92
5) Methylene Chloride	4.692	49	623410	9.20	ug/L		97
6) trans-1,2-Dichloroethene	4.858	61	463481	9.28	ug/L		83
7) 1,1-Dichloroethane	5.503	63	534355	9.21	ug/L		99
8) cis-1,2-Dichloroethene	6.060	96	254683	8.89	ug/L #		82
9) Chloroform	6.327	83	443057	8.88	ug/L		96
10) Carbon Tetrachloride	6.505	117	300724	8.84	ug/L		88
11) 1,1,1-Trichloroethane	6.570	97	337656	8.78	ug/L		92
12) Benzene	6.937	78	870556m	9.02	ug/L		
14) 1,2-Dichloroethane	7.139	62	423762	8.98	ug/L		92
15) Trichloroethene	7.512	95	259443	8.82	ug/L		88
16) 1,2-Dichloropropane	8.040	63	298064	9.24	ug/L		93
17) cis-1,3-Dichloropropene	8.707	75	302522	9.04	ug/L		99
20) trans-1,3-Dichloropropene	9.343	75	296392	9.01	ug/L		98
21) Tetrachloroethene	9.338	166	242068	8.79	ug/L		95
22) 1,4-Dichlorobenzene	12.821	146	521353	9.00	ug/L		99
23) 1,2-Dibromo-3-Chloropr...	14.038	75	90116	8.54	ug/L		88

(#) = qualifier out of range (m) = manual integration (+) = signals summed

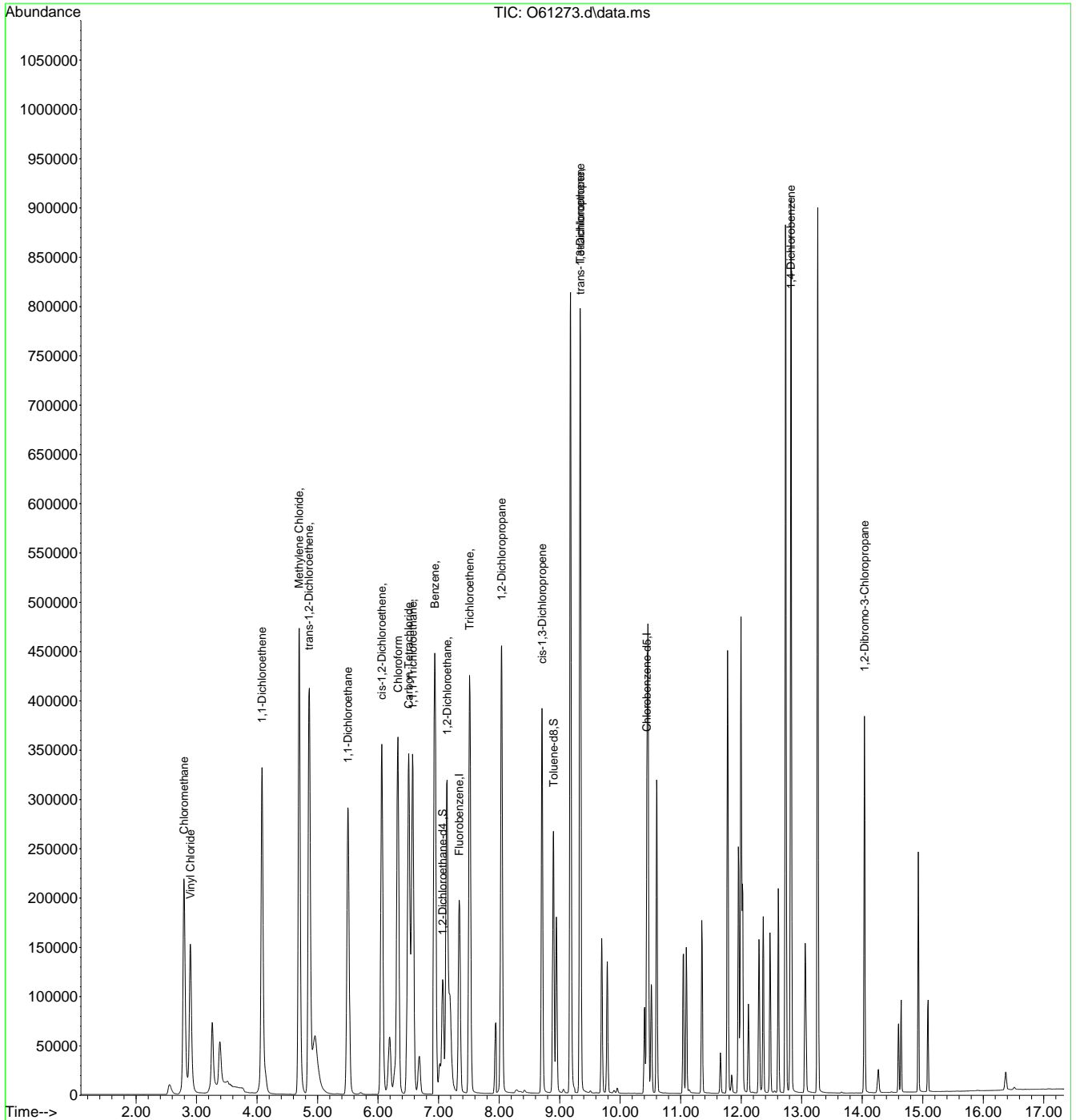
7.6.9
7



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-14-2020\VO2358\
 Data File : O61273.d
 Acq On : 12 Sep 2020 10:52 am
 Operator : stutip
 Sample : cc2356-5
 Misc : MS47191,VO2358,,,,,
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 14 07:25:12 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Sun Sep 13 19:20:40 2020
 Response via : Initial Calibration



Manual Integration Approval Summary

Sample Number: VO2358-CC2356 **Method:** SW846 8260B BY SIM
Lab FileID: O61273.D **Analyst approved:** 09/14/20 07:27 Jennifer Ferreira
Injection Time: 09/12/20 10:52 **Supervisor approved:** 09/14/20 13:38 Melissa Mangual

Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzene	71-43-2		6.94	Poor instrument integration

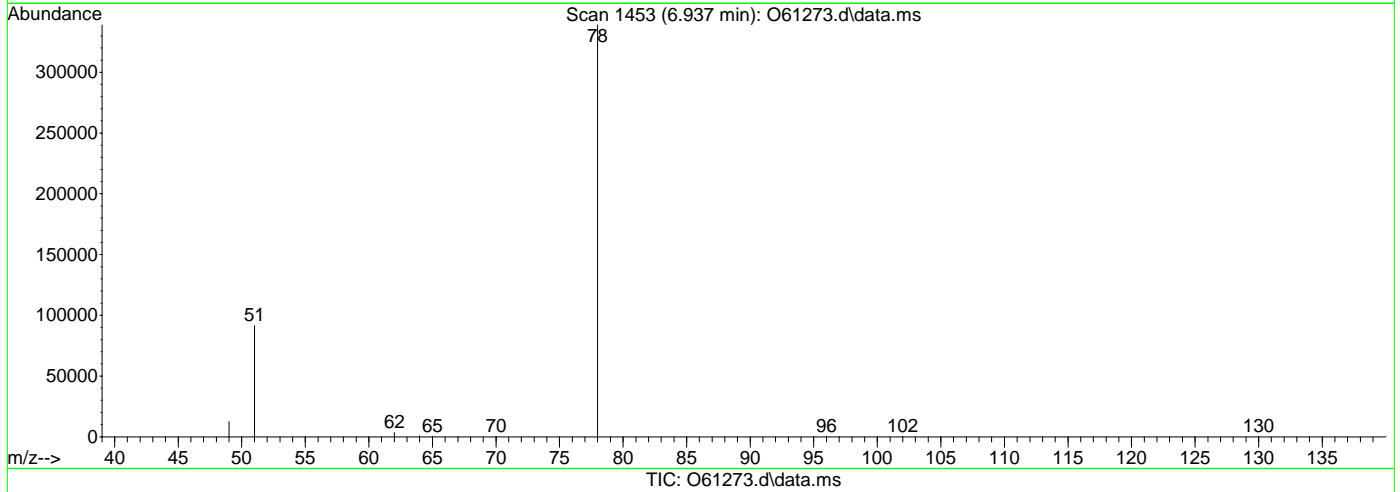
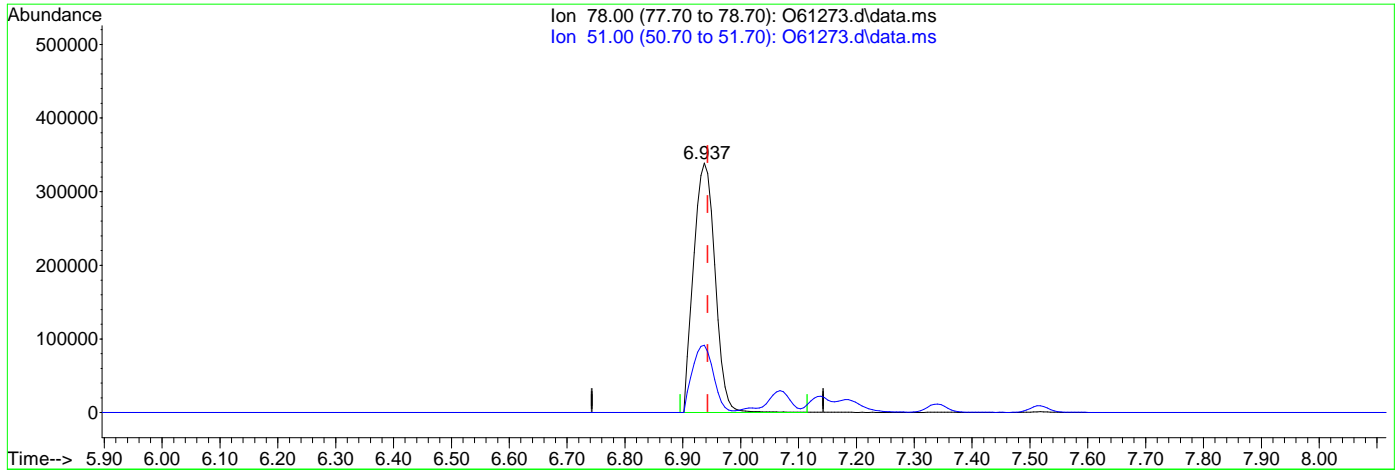
7.6.9.1

7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-14-2020\VO2358\
 Data File : O61273.d
 Acq On : 12 Sep 2020 10:52 am
 Operator : stutip
 Sample : cc2356-5
 Misc : MS47191,VO2358,,,,,
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 14 07:17:23 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Sun Sep 13 19:20:40 2020
 Response via : Initial Calibration



(12) Benzene ()

6.937min (-0.006) 9.08ug/L

response 875580

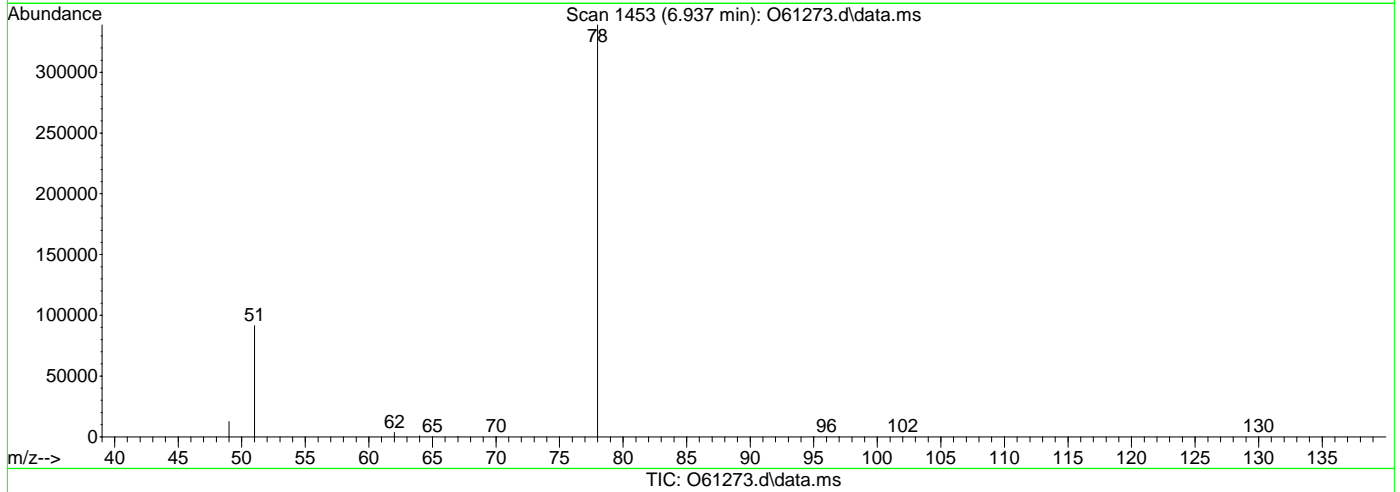
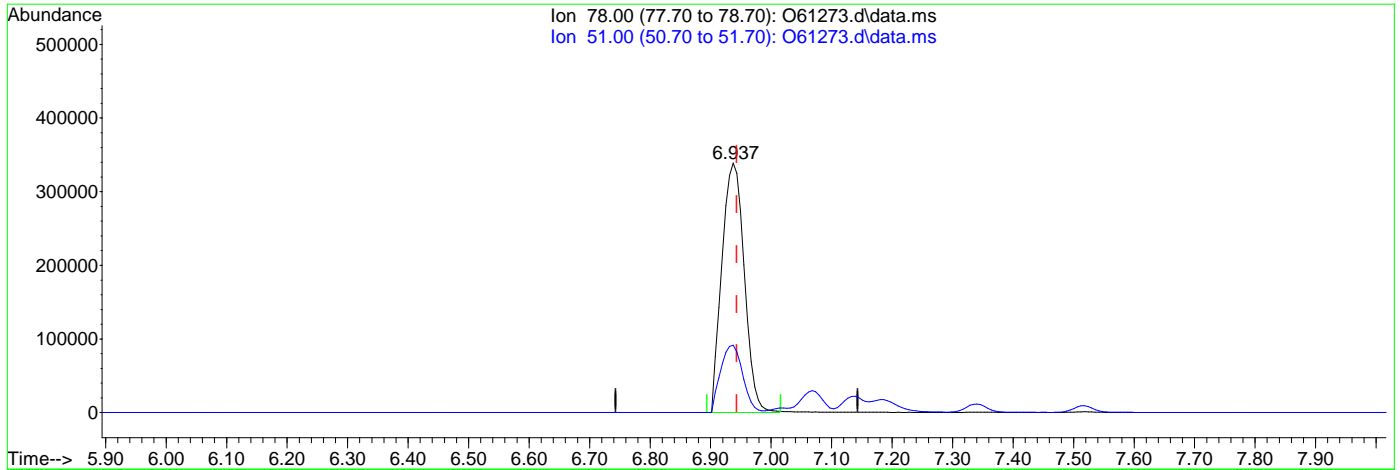
Ion	Exp%	Act%
78.00	100	100
51.00	26.20	26.98
0.00	0.00	0.00
0.00	0.00	0.00

7.6.9.2
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-14-2020\VO2358\
 Data File : O61273.d
 Acq On : 12 Sep 2020 10:52 am
 Operator : stutip
 Sample : cc2356-5
 Misc : MS47191,VO2358,,,,,
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 14 07:17:23 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Sun Sep 13 19:20:40 2020
 Response via : Initial Calibration



(12) Benzene ()

6.937min (-0.006) 9.02ug/L m

response 870556

Ion	Exp%	Act%
78.00	100	100
51.00	26.20	26.98
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-14-2020\VO2358\
 Data File : O61290.d
 Acq On : 12 Sep 2020 4:39 pm
 Operator : stutip
 Sample : ecc2356-5
 Misc : MS47192,VO2358,,,,,
 ALS Vial : 17 Sample Multiplier: 1

Quant Time: Sep 14 07:37:29 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Sun Sep 13 19:20:40 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	

Internal Standards							
1) Fluorobenzene	7.346	96	294586	5.00	ug/L	0.00	
18) Chlorobenzene-d5	10.447	117	233904	5.00	ug/L	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.073	65	115063	4.84	ug/L	0.00	
Spiked Amount	5.000	Range 74 - 125	Recovery	=	96.80%		
19) Toluene-d8	8.896	98	246441	4.67	ug/L	0.00	
Spiked Amount	5.000	Range 88 - 111	Recovery	=	93.40%		
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.901	62	323230	10.41	ug/L		98
3) Chloromethane	2.795	50	457194	10.26	ug/L		94
4) 1,1-Dichloroethene	4.085	61	437929	10.76	ug/L		92
5) Methylene Chloride	4.699	49	635128	9.96	ug/L		98
6) trans-1,2-Dichloroethene	4.865	61	493558	10.49	ug/L		84
7) 1,1-Dichloroethane	5.510	63	560229	10.26	ug/L		99
8) cis-1,2-Dichloroethene	6.066	96	265540	9.84	ug/L #		81
9) Chloroform	6.333	83	465591	9.91	ug/L		95
10) Carbon Tetrachloride	6.510	117	325691	10.17	ug/L		87
11) 1,1,1-Trichloroethane	6.576	97	365437	10.09	ug/L		92
12) Benzene	6.937	78	922972m	10.16	ug/L		
14) 1,2-Dichloroethane	7.139	62	441295	9.93	ug/L		92
15) Trichloroethene	7.512	95	279193	10.08	ug/L		90
16) 1,2-Dichloropropane	8.040	63	308673	10.17	ug/L		93
17) cis-1,3-Dichloropropene	8.711	75	308718	9.80	ug/L		96
20) trans-1,3-Dichloropropene	9.343	75	303302	9.86	ug/L		98
21) Tetrachloroethene	9.337	166	258959	10.03	ug/L		92
22) 1,4-Dichlorobenzene	12.827	146	550314	10.16	ug/L		97
23) 1,2-Dibromo-3-Chloropr...	14.037	75	90576	9.15	ug/L		86

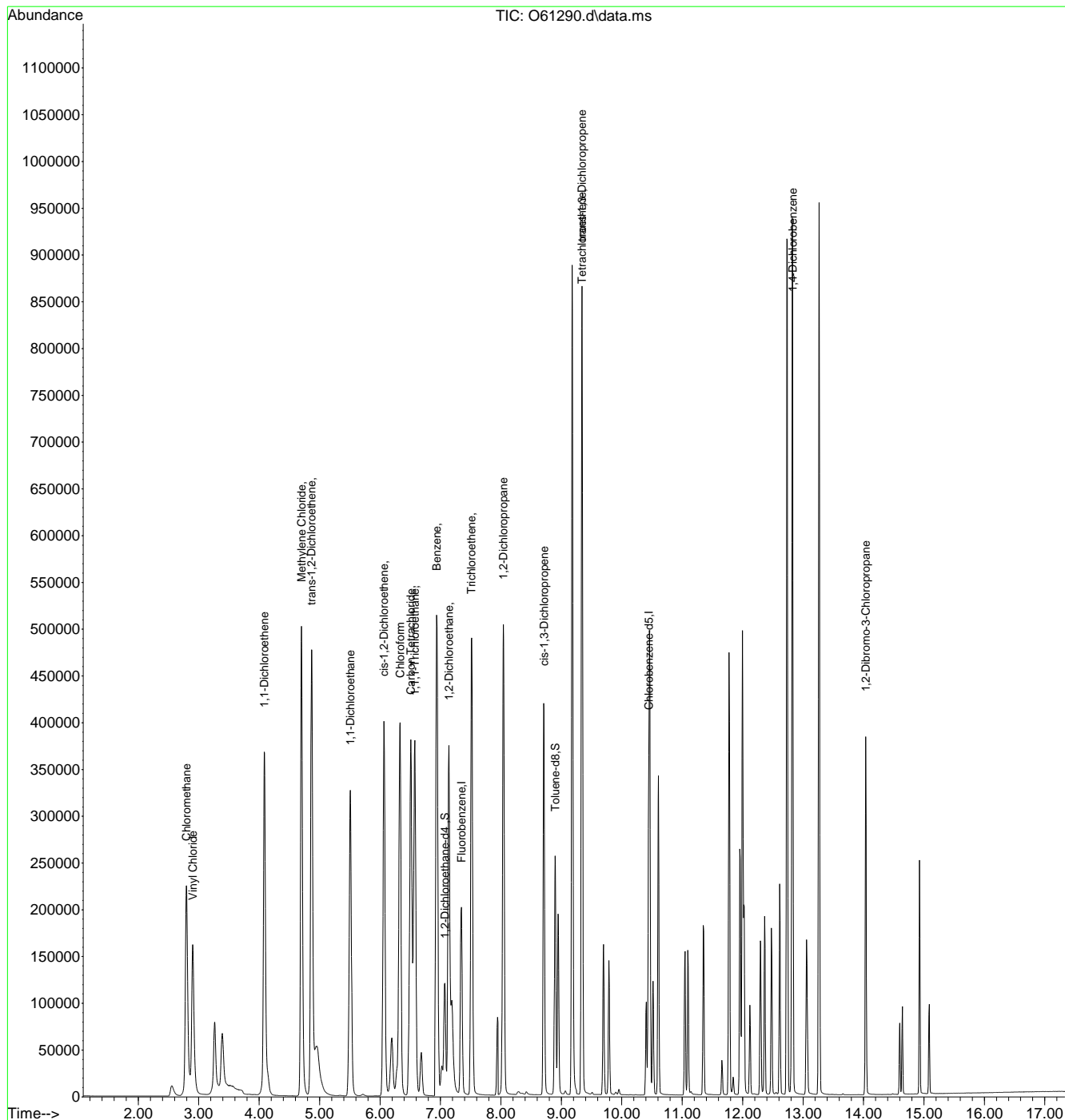
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.6.10
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-14-2020\VO2358\
 Data File : O61290.d
 Acq On : 12 Sep 2020 4:39 pm
 Operator : stutip
 Sample : ecc2356-5
 Misc : MS47192,VO2358,,,,,
 ALS Vial : 17 Sample Multiplier: 1

Quant Time: Sep 14 07:37:29 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Sun Sep 13 19:20:40 2020
 Response via : Initial Calibration



7.6.10
7



Manual Integration Approval Summary

Sample Number: VO2358-ECC2356 **Method:** SW846 8260B BY SIM
Lab FileID: O61290.D **Analyst approved:** 09/14/20 07:45 Jennifer Ferreira
Injection Time: 09/12/20 16:39 **Supervisor approved:** 09/14/20 13:38 Melissa Mangual

Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzene	71-43-2		6.94	Poor instrument integration

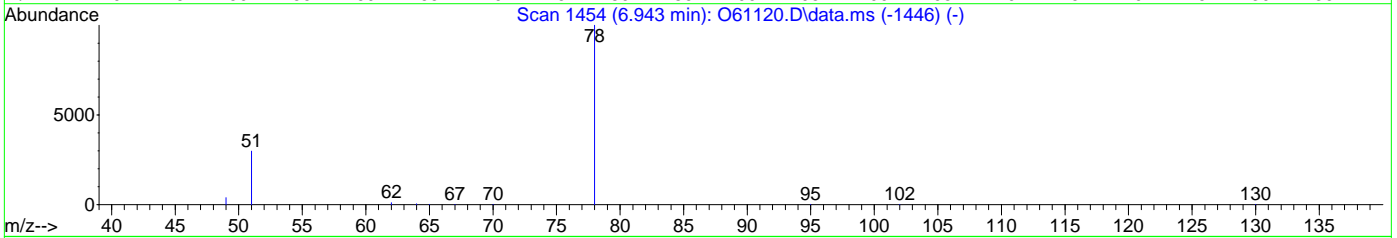
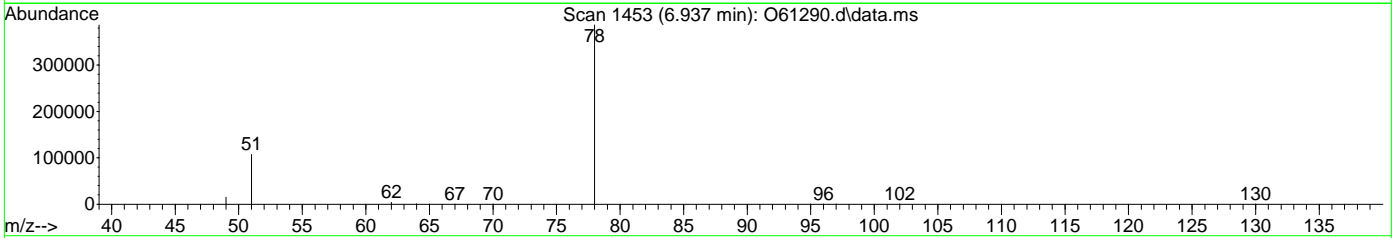
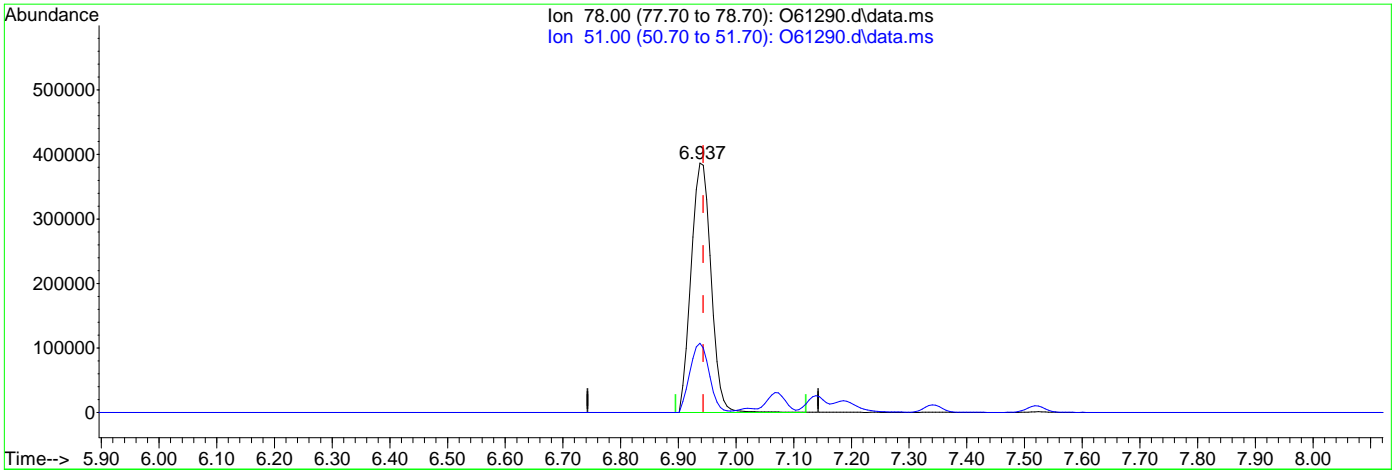
7.6.10.1

7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-14-2020\VO2358\
 Data File : O61290.d
 Acq On : 12 Sep 2020 4:39 pm
 Operator : stutip
 Sample : ecc2356-5
 Misc : MS47192,VO2358,,,,,
 ALS Vial : 17 Sample Multiplier: 1

Quant Time: Sep 14 07:18:01 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Sun Sep 13 19:20:40 2020
 Response via : Initial Calibration



TIC: O61290.d\data.ms

(12) Benzene ()

6.937min (-0.006) 10.25ug/L

response 930510

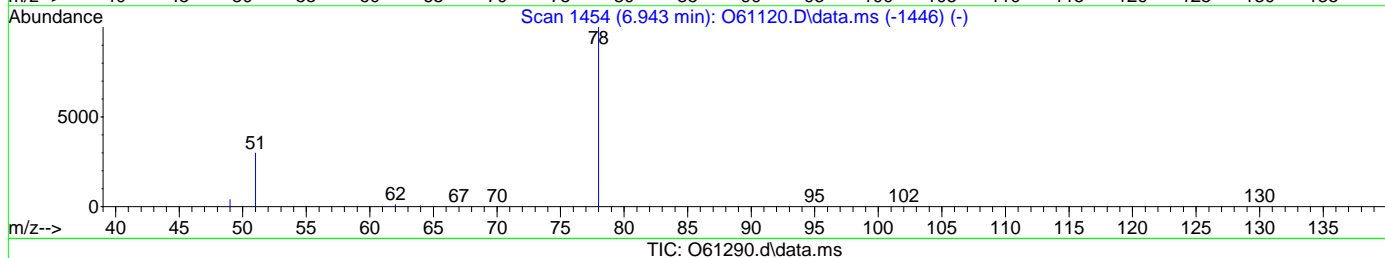
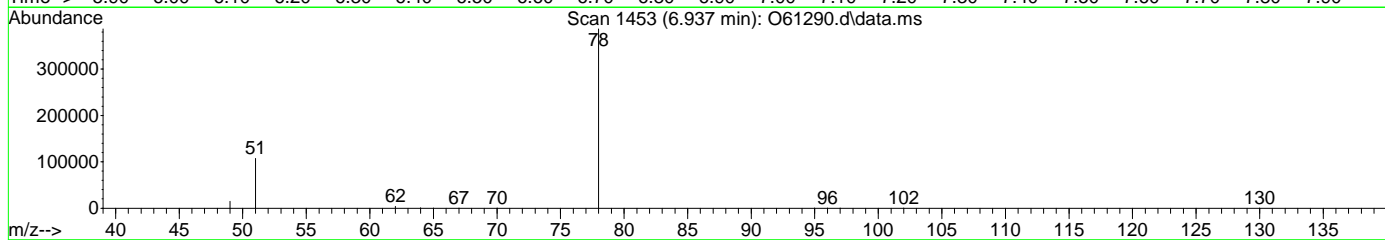
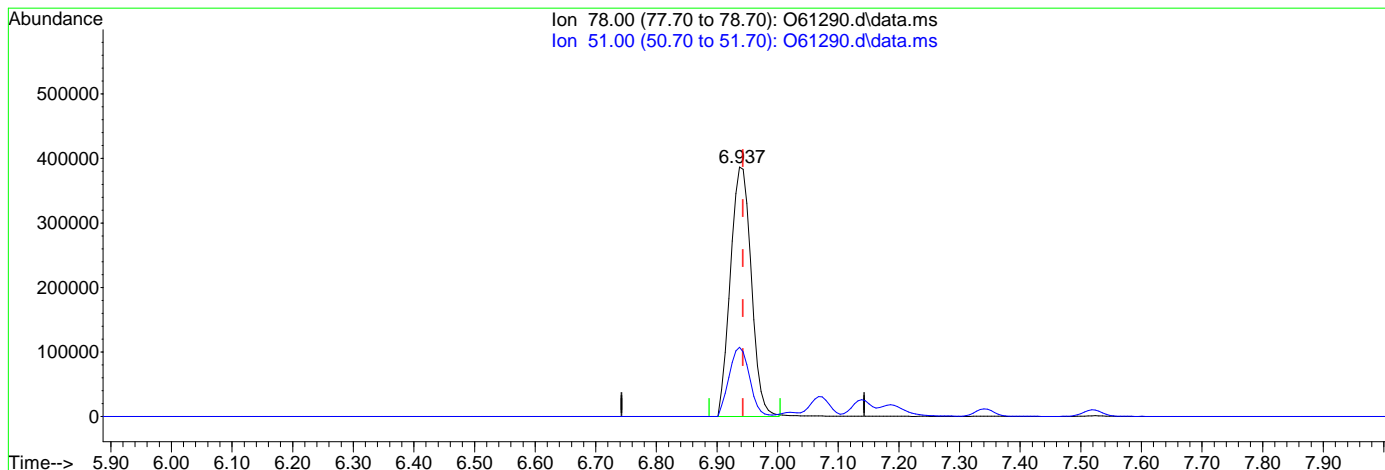
Ion	Exp%	Act%
78.00	100	100
51.00	26.20	27.78
0.00	0.00	0.00
0.00	0.00	0.00

7.6.10.2
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-14-2020\VO2358\
 Data File : O61290.d
 Acq On : 12 Sep 2020 4:39 pm
 Operator : stutip
 Sample : ecc2356-5
 Misc : MS47192,VO2358,,,,,
 ALS Vial : 17 Sample Multiplier: 1

Quant Time: Sep 14 07:18:01 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Sun Sep 13 19:20:40 2020
 Response via : Initial Calibration



(12) Benzene ()
 6.937min (-0.006) 10.16ug/L m
 response 922972

Ion	Exp%	Act%
78.00	100	100
51.00	26.20	27.78
0.00	0.00	0.00
0.00	0.00	0.00

7.6.10.3
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-14-2020\VO2359\
 Data File : O61294.d
 Acq On : 12 Sep 2020 5:54 pm
 Operator : stutip
 Sample : cc2356-5
 Misc : MS47192,VO2359,,,,,
 ALS Vial : 20 Sample Multiplier: 1

Quant Time: Sep 14 07:54:22 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Sun Sep 13 19:20:40 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	

Internal Standards							
1) Fluorobenzene	7.340	96	309205	5.00	ug/L	0.00	
18) Chlorobenzene-d5	10.441	117	244582	5.00	ug/L	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.068	65	120688	4.83	ug/L	0.00	
Spiked Amount	5.000	Range 74 - 125	Recovery	=	96.60%		
19) Toluene-d8	8.896	98	260486	4.72	ug/L	0.00	
Spiked Amount	5.000	Range 88 - 111	Recovery	=	94.40%		
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.901	62	330809	10.12	ug/L		98
3) Chloromethane	2.799	50	463828	9.85	ug/L		94
4) 1,1-Dichloroethene	4.085	61	445032	10.41	ug/L		93
5) Methylene Chloride	4.696	49	630485	9.42	ug/L		98
6) trans-1,2-Dichloroethene	4.862	61	494644	10.02	ug/L		84
7) 1,1-Dichloroethane	5.506	63	560770	9.78	ug/L		99
8) cis-1,2-Dichloroethene	6.060	96	268343	9.47	ug/L		83
9) Chloroform	6.327	83	466700	9.46	ug/L		96
10) Carbon Tetrachloride	6.505	117	329989	9.81	ug/L		87
11) 1,1,1-Trichloroethane	6.570	97	367835	9.67	ug/L		92
12) Benzene	6.937	78	922555m	9.68	ug/L		
14) 1,2-Dichloroethane	7.133	62	440855	9.45	ug/L		92
15) Trichloroethene	7.512	95	278304	9.57	ug/L		87
16) 1,2-Dichloropropane	8.040	63	310372	9.74	ug/L		92
17) cis-1,3-Dichloropropene	8.707	75	315125	9.53	ug/L		97
20) trans-1,3-Dichloropropene	9.343	75	308353	9.59	ug/L		97
21) Tetrachloroethene	9.337	166	265736	9.85	ug/L		95
22) 1,4-Dichlorobenzene	12.821	146	559912	9.88	ug/L		100
23) 1,2-Dibromo-3-Chloropr...	14.038	75	94636	9.15	ug/L		88

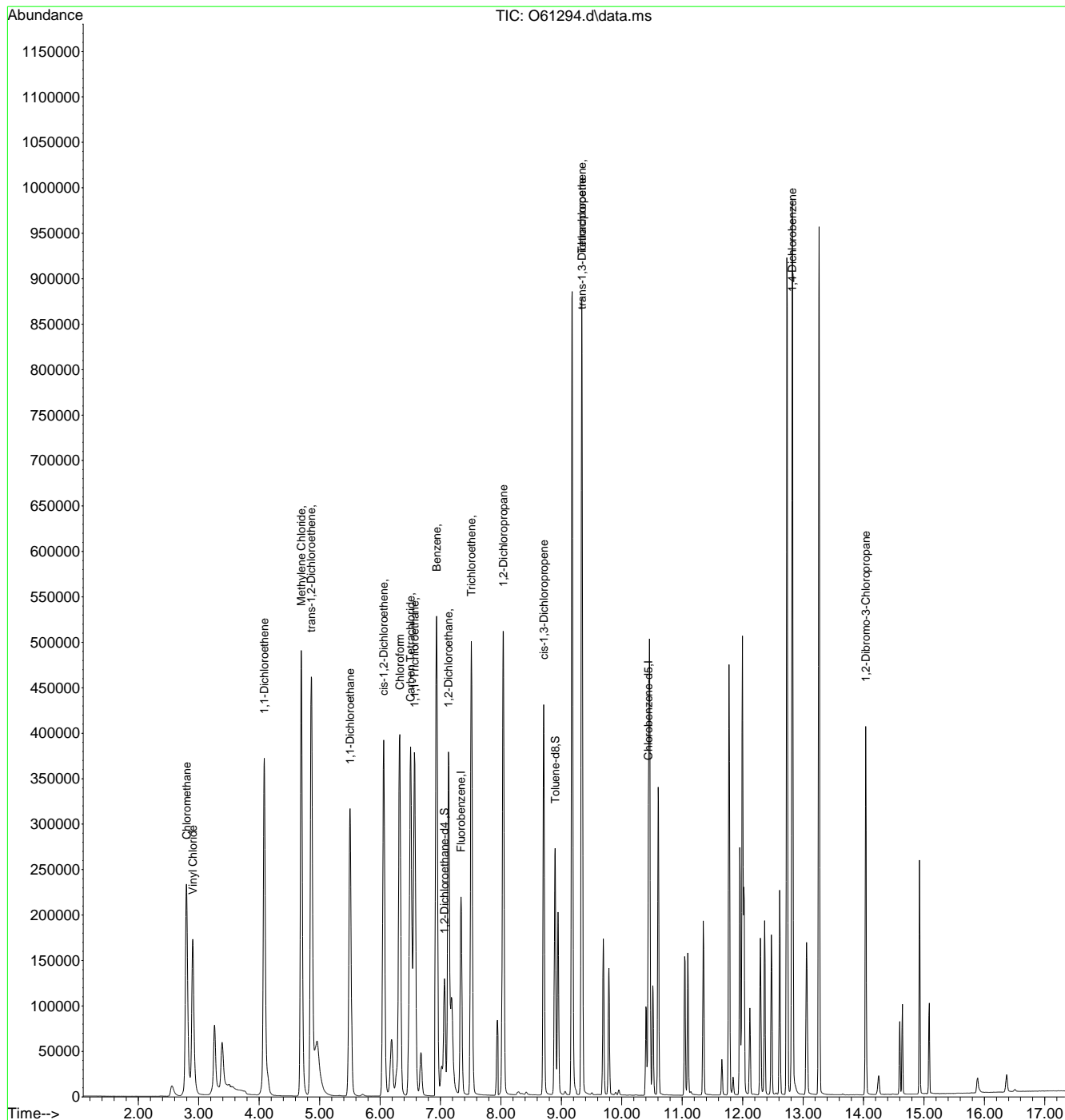
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.6.11
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-14-2020\VO2359\
 Data File : O61294.d
 Acq On : 12 Sep 2020 5:54 pm
 Operator : stutip
 Sample : cc2356-5
 Misc : MS47192,VO2359,,,,,
 ALS Vial : 20 Sample Multiplier: 1

Quant Time: Sep 14 07:54:22 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Sun Sep 13 19:20:40 2020
 Response via : Initial Calibration



7.6.11
7



Manual Integration Approval Summary

Sample Number: VO2359-CC2356 **Method:** SW846 8260B BY SIM
Lab FileID: O61294.D **Analyst approved:** 09/14/20 08:16 Jennifer Ferreira
Injection Time: 09/12/20 17:54 **Supervisor approved:** 09/14/20 13:42 Melissa Mangual

Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzene	71-43-2		6.94	Poor instrument integration

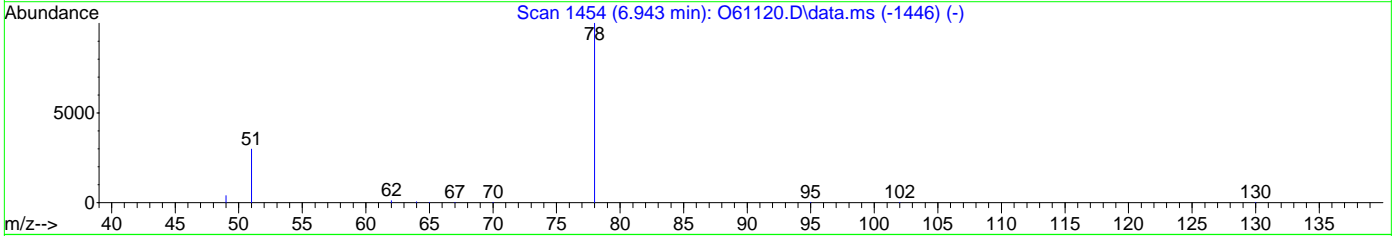
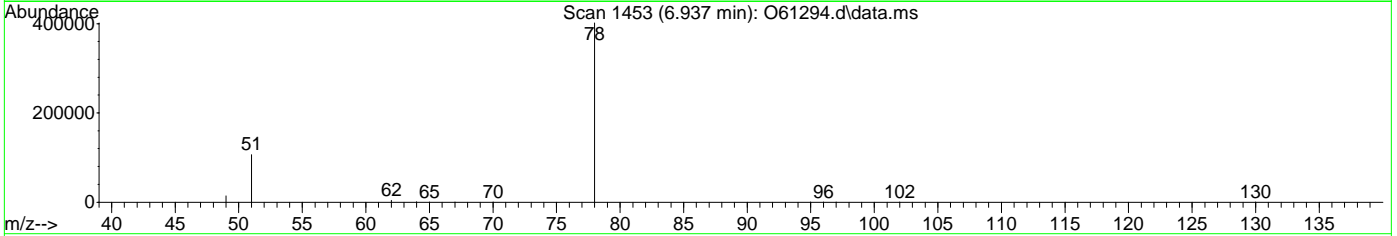
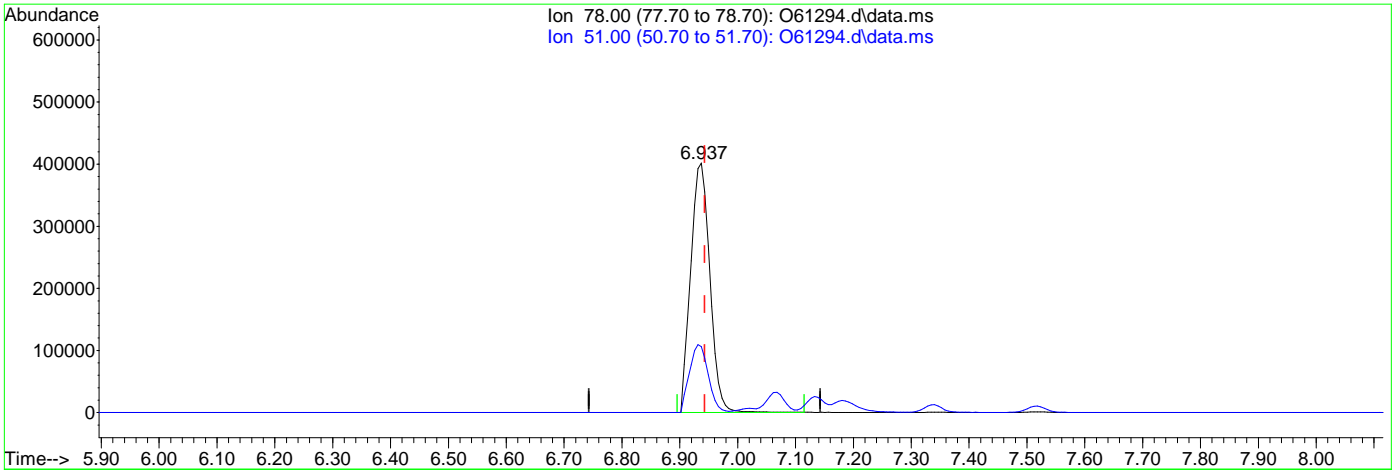
7.6.11.1

7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-14-2020\VO2359\
 Data File : O61294.d
 Acq On : 12 Sep 2020 5:54 pm
 Operator : stutip
 Sample : cc2356-5
 Misc : MS47192,VO2359,,,,,
 ALS Vial : 20 Sample Multiplier: 1

Quant Time: Sep 14 07:19:44 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Sun Sep 13 19:20:40 2020
 Response via : Initial Calibration



TIC: O61294.d\data.ms

(12) Benzene ()

6.937min (-0.006) 9.74ug/L

response 928324

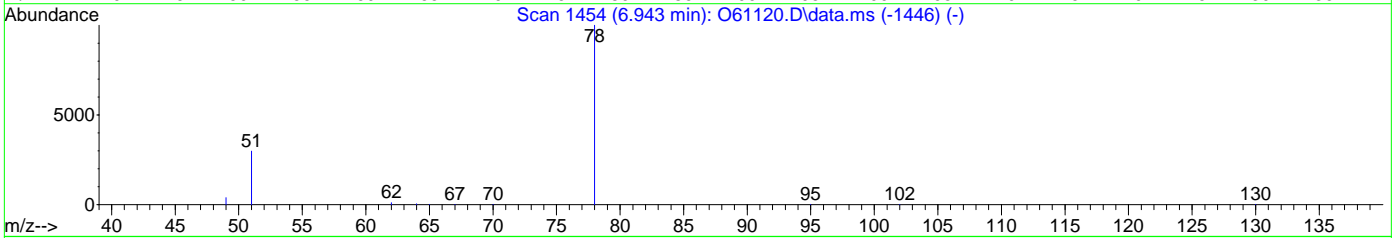
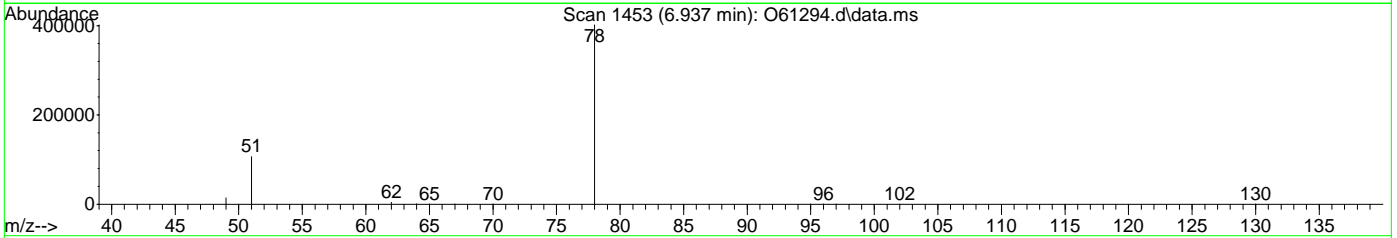
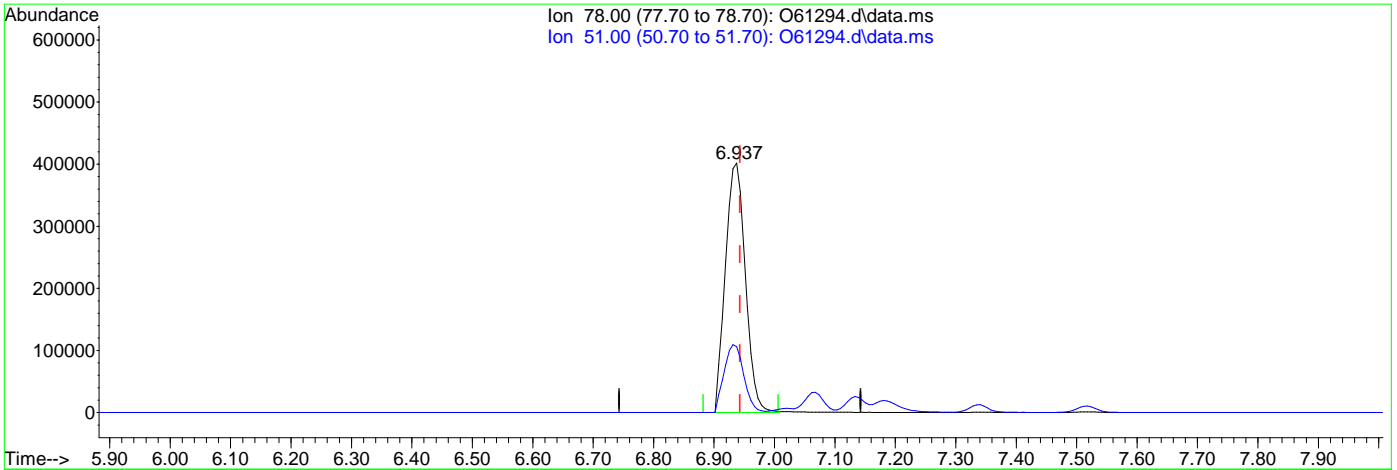
Ion	Exp%	Act%
78.00	100	100
51.00	26.20	26.48
0.00	0.00	0.00
0.00	0.00	0.00

7.6.11.2
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-14-2020\VO2359\
 Data File : O61294.d
 Acq On : 12 Sep 2020 5:54 pm
 Operator : stutip
 Sample : cc2356-5
 Misc : MS47192,VO2359,,,,,
 ALS Vial : 20 Sample Multiplier: 1

Quant Time: Sep 14 07:19:44 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Sun Sep 13 19:20:40 2020
 Response via : Initial Calibration



TIC: O61294.d\data.ms

(12) Benzene ()

6.937min (-0.006) 9.68ug/L m

response 922555

Ion	Exp%	Act%
78.00	100	100
51.00	26.20	26.48
0.00	0.00	0.00
0.00	0.00	0.00

7.6.11.3
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-14-2020\VO2359\
 Data File : O61320.d
 Acq On : 13 Sep 2020 3:13 am
 Operator : stutip
 Sample : ecc2356-5
 Misc : MS47193,VO2359,,,,,
 ALS Vial : 26 Sample Multiplier: 1

Quant Time: Sep 14 08:07:33 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Sun Sep 13 19:20:40 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	

Internal Standards							
1) Fluorobenzene	7.346	96	267420	5.00	ug/L	0.00	
18) Chlorobenzene-d5	10.447	117	216936	5.00	ug/L	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.074	65	105130	4.87	ug/L	0.00	
Spiked Amount	5.000	Range 74 - 125	Recovery	=	97.40%		
19) Toluene-d8	8.896	98	220851	4.52	ug/L	0.00	
Spiked Amount	5.000	Range 88 - 111	Recovery	=	90.40%		
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.912	62	305319	10.89	ug/L		97
3) Chloromethane	2.806	50	431249	10.74	ug/L		94
4) 1,1-Dichloroethene	4.092	61	401614	10.87	ug/L		92
5) Methylene Chloride	4.703	49	587576	10.15	ug/L		95
6) trans-1,2-Dichloroethene	4.873	61	448915	10.51	ug/L		86
7) 1,1-Dichloroethane	5.514	63	511732	10.32	ug/L		100
8) cis-1,2-Dichloroethene	6.072	96	239115	9.76	ug/L		85
9) Chloroform	6.333	83	423513	9.93	ug/L		95
10) Carbon Tetrachloride	6.511	117	299135	10.29	ug/L		88
11) 1,1,1-Trichloroethane	6.576	97	332443	10.11	ug/L		92
12) Benzene	6.943	78	840126m	10.19	ug/L		
14) 1,2-Dichloroethane	7.139	62	397168	9.84	ug/L		93
15) Trichloroethene	7.518	95	252177	10.03	ug/L		85
16) 1,2-Dichloropropane	8.043	63	279886	10.15	ug/L		93
17) cis-1,3-Dichloropropene	8.711	75	262190	9.17	ug/L		97
20) trans-1,3-Dichloropropene	9.343	75	259565	9.10	ug/L		99
21) Tetrachloroethene	9.343	166	239406	10.00	ug/L		100
22) 1,4-Dichlorobenzene	12.827	146	495375	9.86	ug/L		96
23) 1,2-Dibromo-3-Chloropr...	14.037	75	81346	8.88	ug/L		84

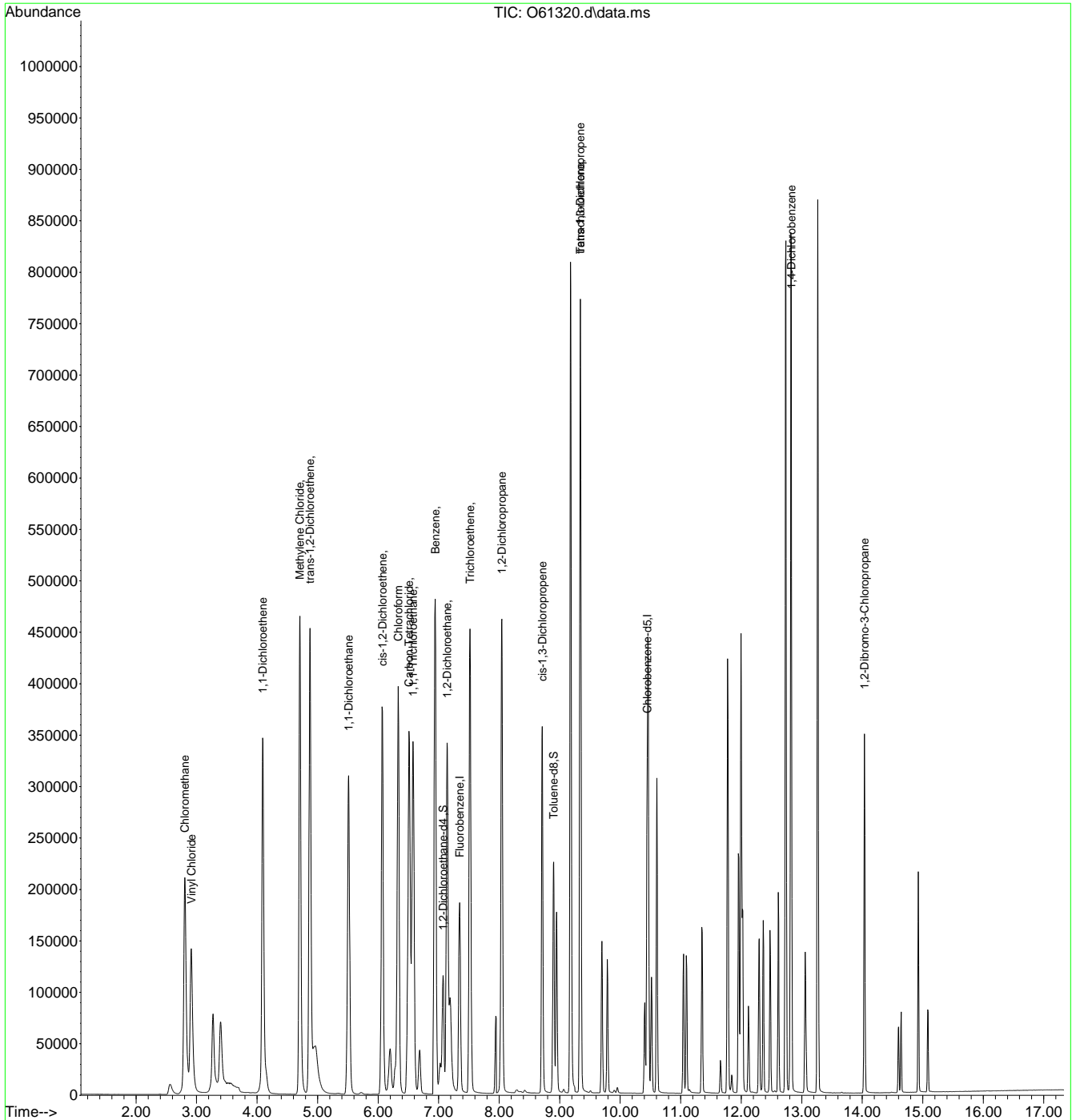
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.6.12
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-14-2020\VO2359\
 Data File : O61320.d
 Acq On : 13 Sep 2020 3:13 am
 Operator : stutip
 Sample : ecc2356-5
 Misc : MS47193,VO2359,,,,,
 ALS Vial : 26 Sample Multiplier: 1

Quant Time: Sep 14 08:07:33 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Sun Sep 13 19:20:40 2020
 Response via : Initial Calibration



Manual Integration Approval Summary

Sample Number: VO2359-ECC2356 **Method:** SW846 8260B BY SIM
Lab FileID: O61320.D **Analyst approved:** 09/14/20 08:16 Jennifer Ferreira
Injection Time: 09/13/20 03:13 **Supervisor approved:** 09/14/20 13:42 Melissa Mangual

Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzene	71-43-2		6.94	Poor instrument integration

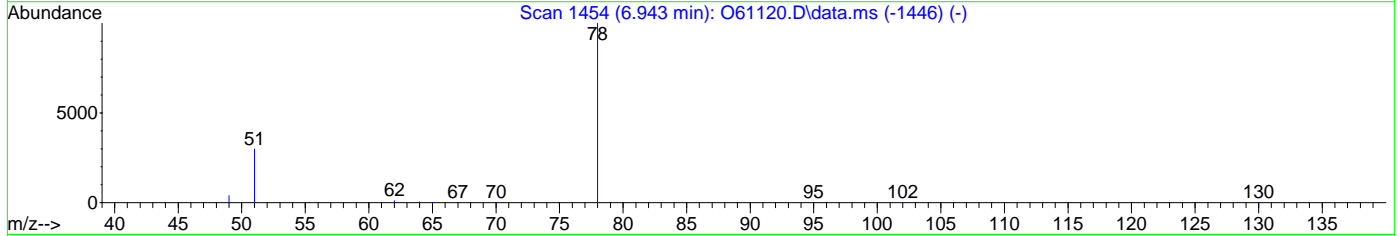
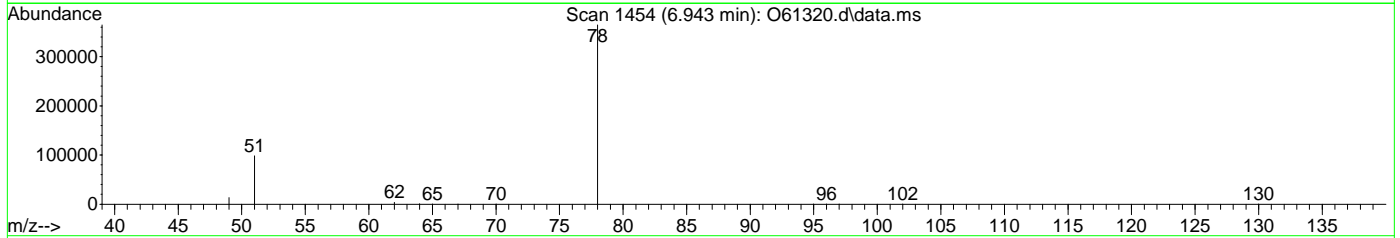
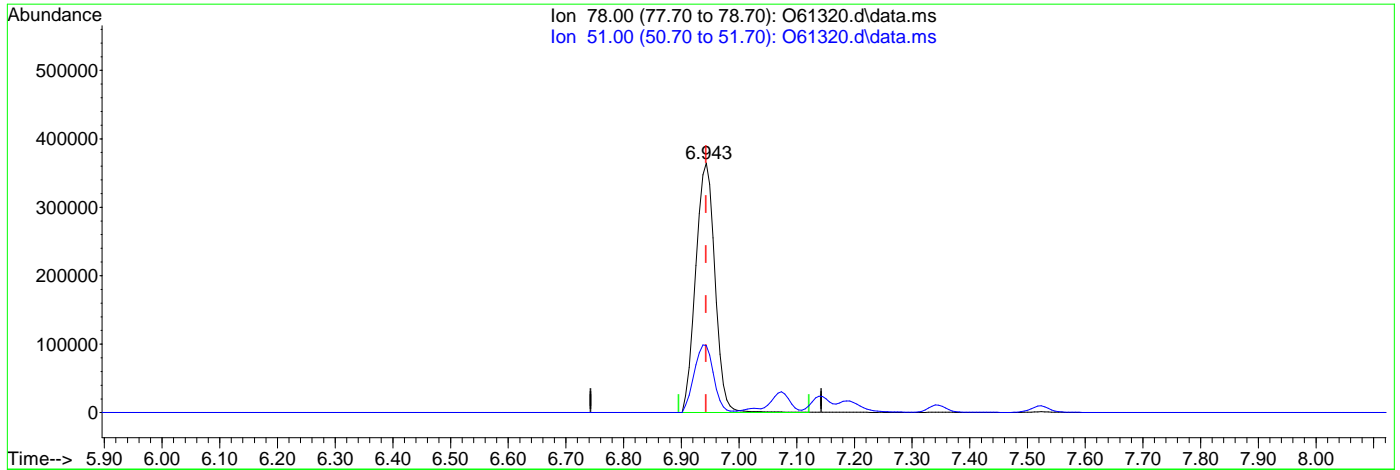
7.6.12.1

7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-14-2020\VO2359\
 Data File : O61320.d
 Acq On : 13 Sep 2020 3:13 am
 Operator : stutip
 Sample : ecc2356-5
 Misc : MS47193,VO2359,,,,,
 ALS Vial : 26 Sample Multiplier: 1

Quant Time: Sep 14 07:20:37 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Sun Sep 13 19:20:40 2020
 Response via : Initial Calibration



(12) Benzene ()

6.943min (+0.000) 10.26ug/L

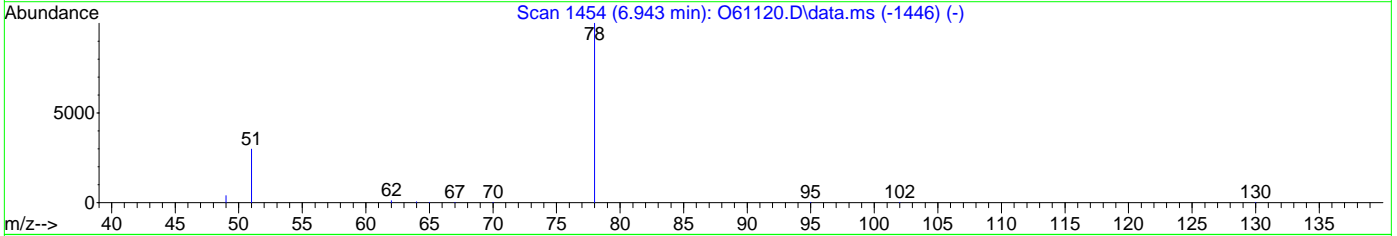
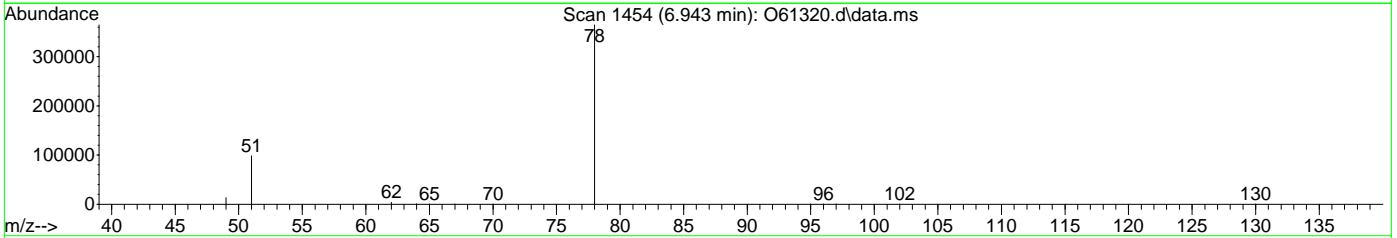
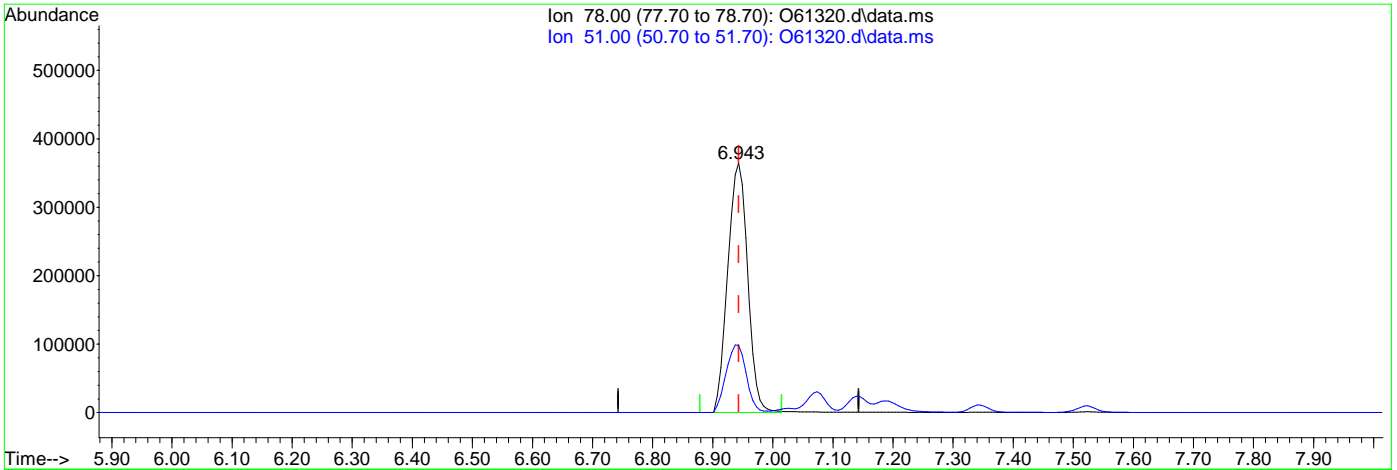
response 846134

Ion	Exp%	Act%
78.00	100	100
51.00	26.20	26.90
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\jenniferf\SEPTEMBER 2020\09-14-2020\VO2359\
 Data File : O61320.d
 Acq On : 13 Sep 2020 3:13 am
 Operator : stutip
 Sample : ecc2356-5
 Misc : MS47193,VO2359,,,,,
 ALS Vial : 26 Sample Multiplier: 1

Quant Time: Sep 14 07:20:37 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : Standard Methods 6200B
 QLast Update : Sun Sep 13 19:20:40 2020
 Response via : Initial Calibration



(12) Benzene ()

6.943min (+0.000) 10.19ug/L m

response 840126

Ion	Exp%	Act%
78.00	100	100
51.00	26.20	26.90
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\091520\
 Data File : O61386.D
 Acq On : 15 Sep 2020 3:46 pm
 Operator : AKARIG
 Sample : IC2362-1 Inst : MSVOA12
 Misc : MS47193,VO2362,,,,,
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 16 08:53:35 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091520.M
 Quant Title : Standard Methods 6200B
 QLast Update : Tue Sep 15 18:43:50 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.337	96	229016	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.444	117	173372	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.069	65	107070	5.52	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	110.40%	
19) Toluene-d8	8.892	98	187671	5.30	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	106.00%	
Target Compounds						
						Qvalue
2) Vinyl Chloride	2.908	62	3497	0.12	ug/L	86
3) Chloromethane	2.806	50	10347	0.23	ug/L	81
4) 1,1-Dichloroethene	4.089	61	3760	0.11	ug/L	89
5) Methylene Chloride	4.703	49	23924	0.48	ug/L	93
6) trans-1,2-Dichloroethene	4.869	61	4368	0.11	ug/L	85
7) 1,1-Dichloroethane	5.506	63	4952	0.11	ug/L	83
8) cis-1,2-Dichloroethene	6.065	96	2174	0.11	ug/L	85
9) Chloroform	6.326	83	4561	0.12	ug/L #	80
10) Carbon Tetrachloride	6.504	117	2997	0.12	ug/L	78
11) 1,1,1-Trichloroethane	6.573	97	2970	0.10	ug/L	91
12) Benzene	6.939	78	7546	0.10	ug/L	98
14) 1,2-Dichloroethane	7.130	62	3849	0.11	ug/L	91
15) Trichloroethene	7.513	95	2272	0.11	ug/L	79
16) 1,2-Dichloropropane	8.039	63	2508	0.10	ug/L	90
17) cis-1,3-Dichloropropene	8.707	75	2020	0.09	ug/L	92
20) trans-1,3-Dichloropropene	9.341	75	1765	0.09	ug/L	97
21) Tetrachloroethene	9.341	166	2221	0.12	ug/L	97
22) 1,4-Dichlorobenzene	12.824	146	3401	0.09	ug/L	98
23) 1,2-Dibromo-3-Chloropr...	14.035	75	694	0.11	ug/L	91

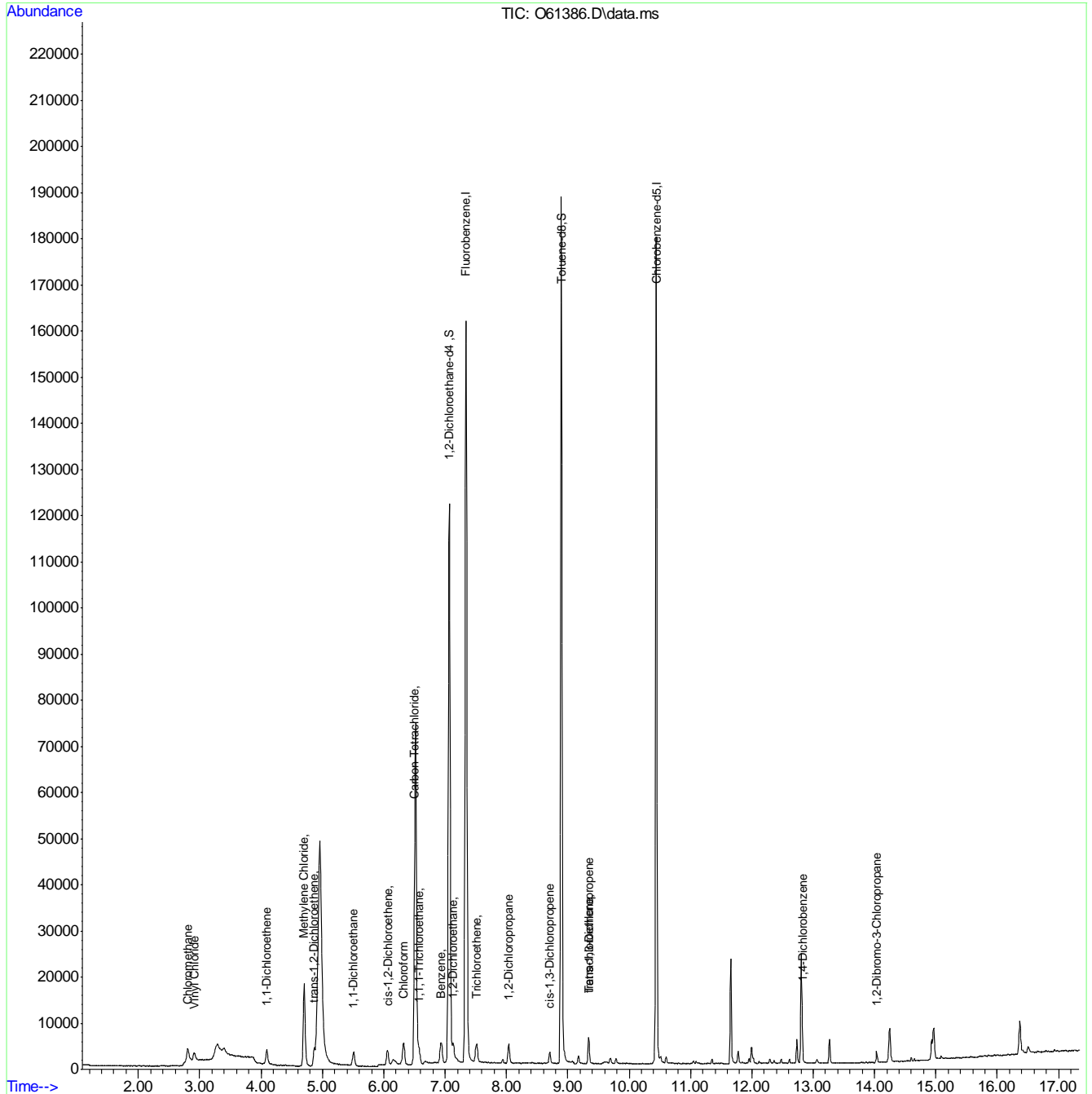
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\091520\
 Data File : O61386.D
 Acq On : 15 Sep 2020 3:46 pm
 Operator : AKARIG
 Sample : IC2362-1
 Misc : MS47193,VO2362,,,,,
 ALS Vial : 7 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 16 08:53:35 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091520.M
 Quant Title : Standard Methods 6200B
 QLast Update : Tue Sep 15 18:43:50 2020
 Response via : Initial Calibration



7.6.13
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\091520\
 Data File : O61387.D
 Acq On : 15 Sep 2020 4:06 pm
 Operator : AKARIG
 Sample : IC2362-2 Inst : MSVOA12
 Misc : MS47193,VO2362,,,,,
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 16 08:53:38 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091520.M
 Quant Title : Standard Methods 6200B
 QLast Update : Tue Sep 15 18:43:50 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
Internal Standards							
1) Fluorobenzene	7.345	96	226011	5.00	ug/L	0.00	
18) Chlorobenzene-d5	10.444	117	176974	5.00	ug/L	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.069	65	103896	5.42	ug/L	0.00	
Spiked Amount	5.000	Range 74 - 125	Recovery	=	108.40%		
19) Toluene-d8	8.896	98	184137	5.10	ug/L	0.00	
Spiked Amount	5.000	Range 88 - 111	Recovery	=	102.00%		
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.905	62	17348	0.59	ug/L		95
3) Chloromethane	2.803	50	29260	0.66	ug/L		90
4) 1,1-Dichloroethene	4.089	61	18331	0.54	ug/L		94
5) Methylene Chloride	4.700	49	45451	0.92	ug/L		92
6) trans-1,2-Dichloroethene	4.869	61	21650	0.57	ug/L		86
7) 1,1-Dichloroethane	5.510	63	23843	0.54	ug/L		97
8) cis-1,2-Dichloroethene	6.065	96	10308	0.52	ug/L		85
9) Chloroform	6.332	83	20374	0.55	ug/L		91
10) Carbon Tetrachloride	6.510	117	13730	0.53	ug/L		86
11) 1,1,1-Trichloroethane	6.580	97	15577	0.54	ug/L		91
12) Benzene	6.939	78	35661	0.50	ug/L		97
14) 1,2-Dichloroethane	7.138	62	18394	0.54	ug/L		95
15) Trichloroethene	7.513	95	10698	0.51	ug/L		84
16) 1,2-Dichloropropane	8.039	63	12209	0.52	ug/L		97
17) cis-1,3-Dichloropropene	8.707	75	9816	0.47	ug/L		97
20) trans-1,3-Dichloropropene	9.347	75	9088	0.45	ug/L		94
21) Tetrachloroethene	9.341	166	11087	0.57	ug/L		99
22) 1,4-Dichlorobenzene	12.824	146	17956	0.46	ug/L		98
23) 1,2-Dibromo-3-Chloropr...	14.035	75	3183	0.51	ug/L		97

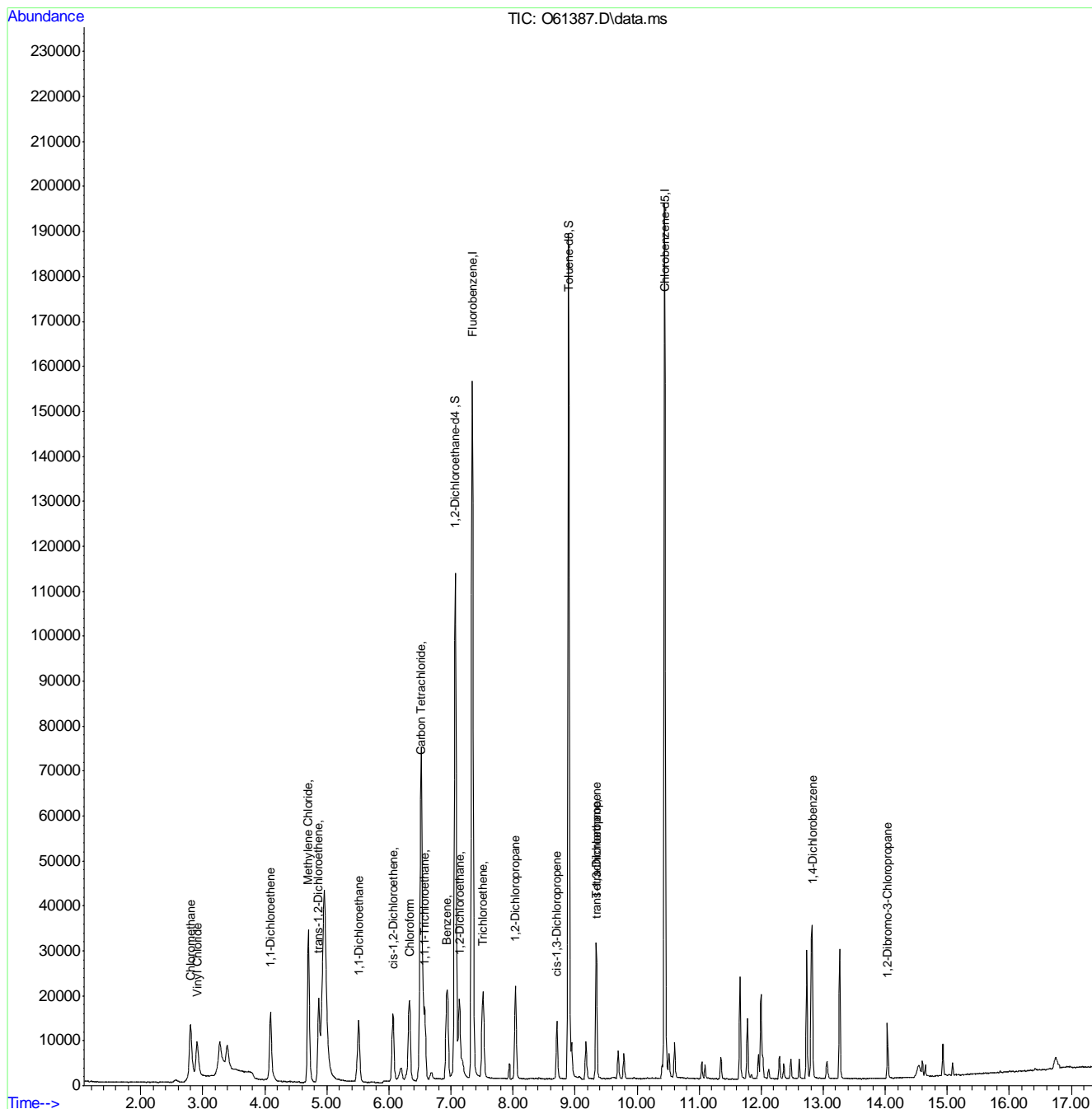
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\091520\
 Data File : O61387.D
 Acq On : 15 Sep 2020 4:06 pm
 Operator : AKARIG
 Sample : IC2362-2
 Misc : MS47193,VO2362,,,,,
 ALS Vial : 8 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 16 08:53:38 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091520.M
 Quant Title : Standard Methods 6200B
 QLast Update : Tue Sep 15 18:43:50 2020
 Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\091520\
 Data File : O61388.D
 Acq On : 15 Sep 2020 4:26 pm
 Operator : AKARIG
 Sample : IC2362-3 Inst : MSVOA12
 Misc : MS47193,VO2362,,,,,
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 16 08:55:51 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091520.M
 Quant Title : Standard Methods 6200B
 QLast Update : Tue Sep 15 18:43:50 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.344	96	245280	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.444	117	188641	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.077	65	105125m	5.06	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	101.20%	
19) Toluene-d8	8.899	98	191462	4.97	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	99.40%	
Target Compounds						
						Qvalue
2) Vinyl Chloride	2.916	62	66611	2.13	ug/L	96
3) Chloromethane	2.810	50	99140	2.10	ug/L	94
4) 1,1-Dichloroethene	4.096	61	72659	1.98	ug/L	92
5) Methylene Chloride	4.707	49	137024	2.56	ug/L	91
6) trans-1,2-Dichloroethene	4.877	61	81338	1.98	ug/L	85
7) 1,1-Dichloroethane	5.518	63	96687	2.02	ug/L	98
8) cis-1,2-Dichloroethene	6.071	96	41351	1.92	ug/L	84
9) Chloroform	6.332	83	80171	1.98	ug/L	93
10) Carbon Tetrachloride	6.510	117	54794	1.96	ug/L	87
11) 1,1,1-Trichloroethane	6.580	97	63074	2.00	ug/L	91
12) Benzene	6.947	78	147883	1.93	ug/L	99
14) 1,2-Dichloroethane	7.138	62	75583	2.03	ug/L	94
15) Trichloroethene	7.513	95	43463	1.92	ug/L	89
16) 1,2-Dichloropropane	8.043	63	50197	1.97	ug/L	97
17) cis-1,3-Dichloropropene	8.711	75	41268	1.80	ug/L	98
20) trans-1,3-Dichloropropene	9.346	75	40215	1.87	ug/L	98
21) Tetrachloroethene	9.341	166	43932	2.13	ug/L	97
22) 1,4-Dichlorobenzene	12.824	146	84276	2.05	ug/L	98
23) 1,2-Dibromo-3-Chloropr...	14.035	75	13753	2.03	ug/L	97

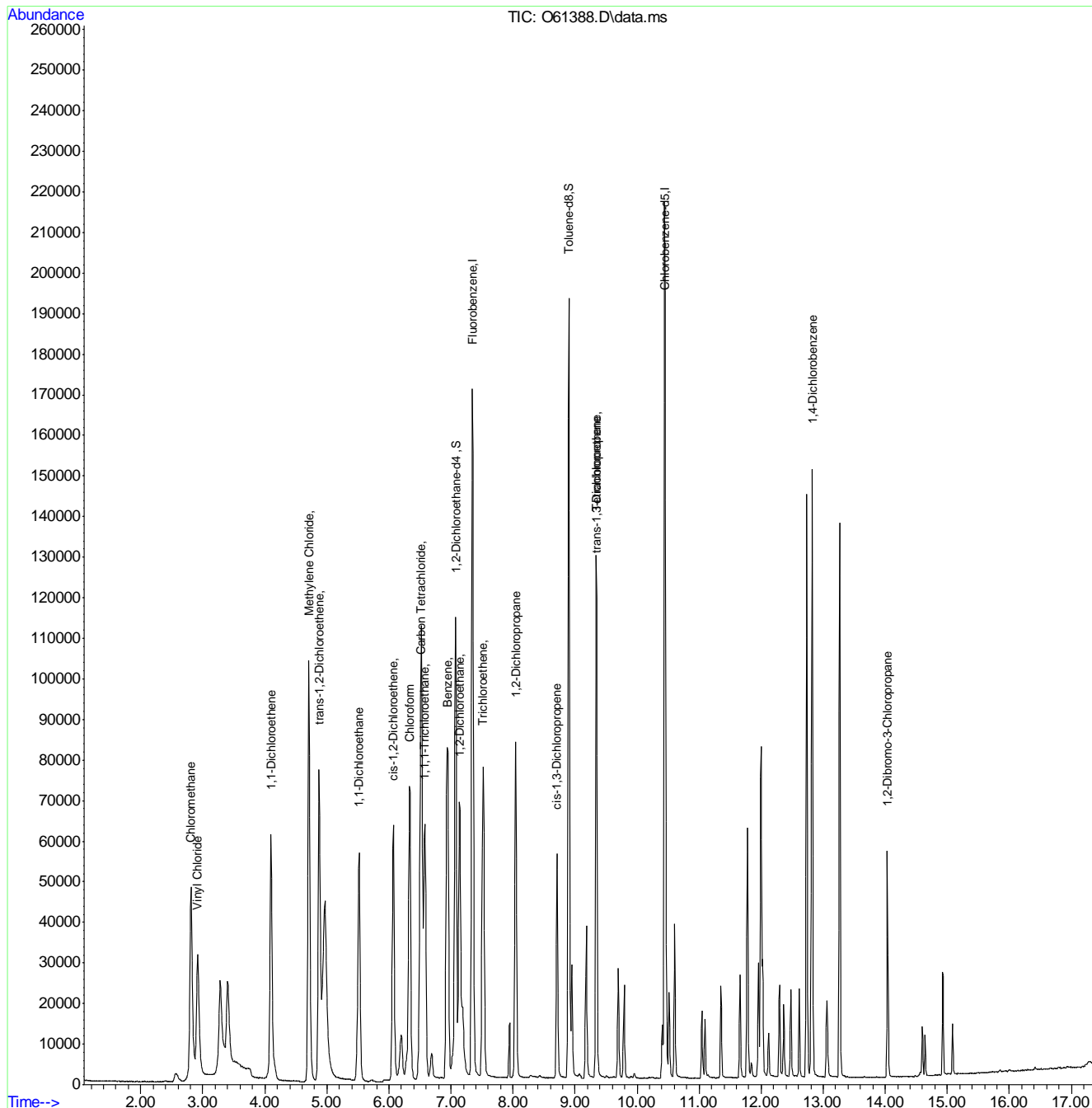
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\091520\
 Data File : O61388.D
 Acq On : 15 Sep 2020 4:26 pm
 Operator : AKARIG
 Sample : IC2362-3
 Misc : MS47193,VO2362,,,,,
 ALS Vial : 9 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 16 08:55:51 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091520.M
 Quant Title : Standard Methods 6200B
 QLast Update : Tue Sep 15 18:43:50 2020
 Response via : Initial Calibration



Manual Integration Approval Summary

Sample Number: VO2362-IC2362 **Method:** SW846 8260B BY SIM
Lab FileID: O61388.D **Analyst approved:** 09/16/20 09:09 Melissa Mangual
Injection Time: 09/15/20 16:26 **Supervisor approved:** 09/16/20 16:03 Juan Garcia

Parameter	CAS	Sig#	R.T. (min.)	Reason
1,2-Dichloroethane-D4	17060-07-0		7.08	Overlapping peak

7.6.15.1

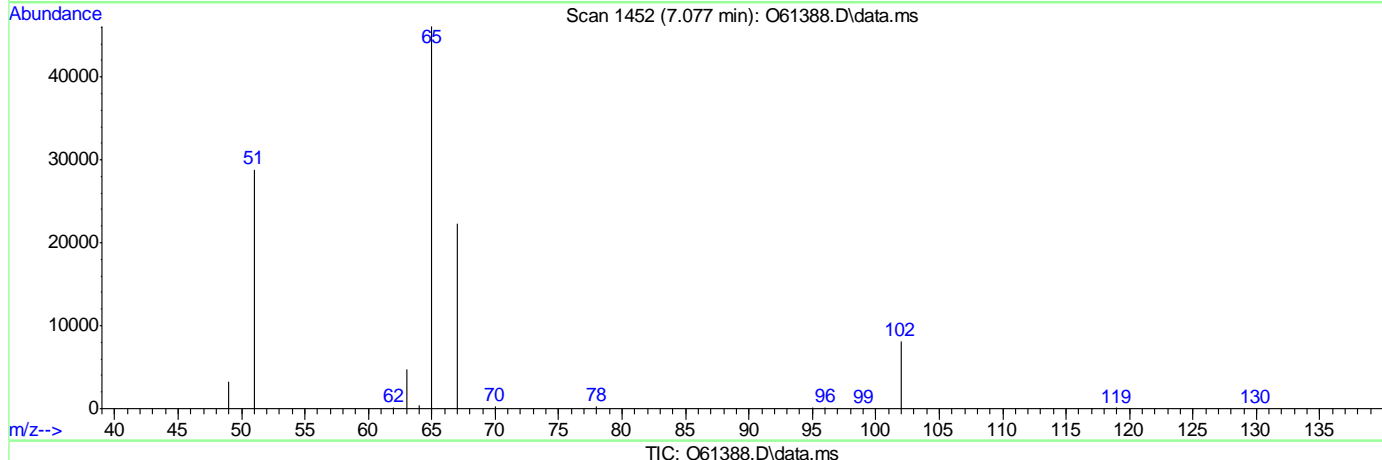
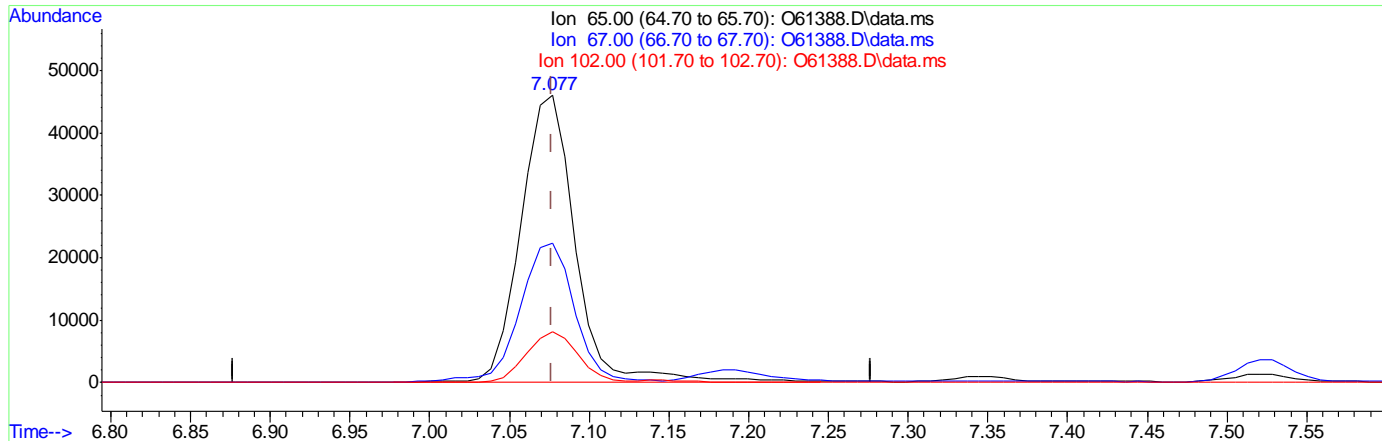
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\091520\
 Data File : O61388.D
 Acq On : 15 Sep 2020 4:26 pm
 Operator : AKARIG
 Sample : IC2362-3
 Misc : MS47193,VO2362,,,,,
 ALS Vial : 9 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 16 08:53:40 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091520.M
 Quant Title : Standard Methods 6200B
 QLast Update : Tue Sep 15 18:43:50 2020
 Response via : Initial Calibration



(13) 1,2-Dichloroethane-d4 (S)

7.077min (-0.000) 5.26ug/L

response 109386

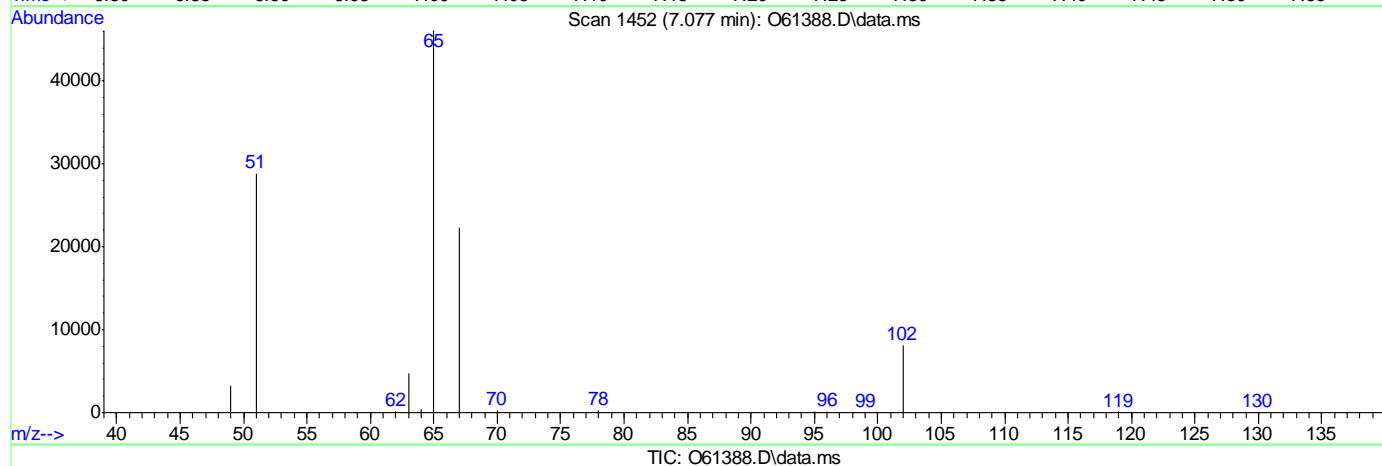
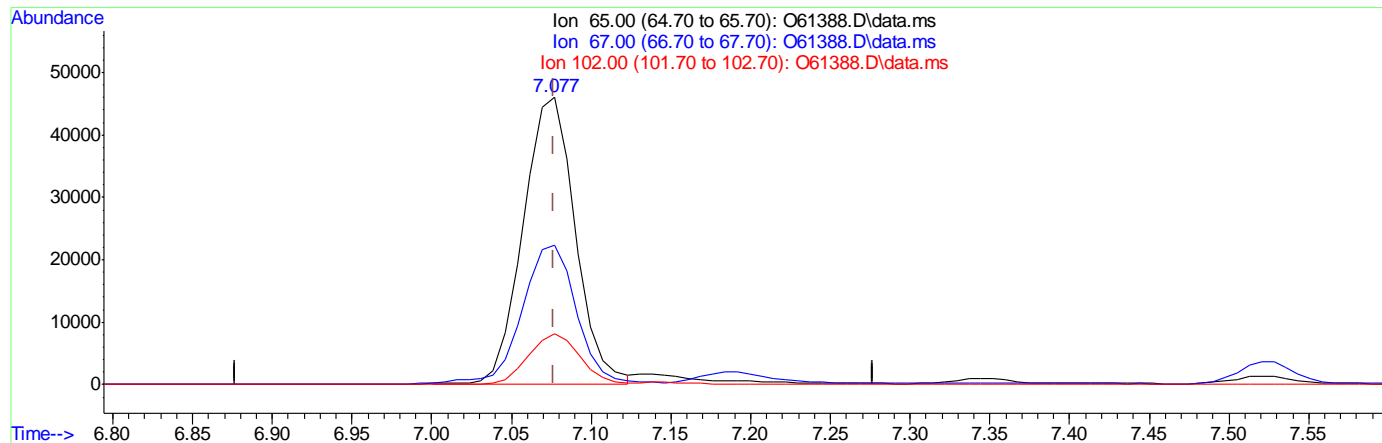
Ion	Exp%	Act%
65.00	100	100
67.00	53.50	48.32
102.00	16.10	17.60
0.00	0.00	0.00

7.6.15.2
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\091520\
 Data File : O61388.D
 Acq On : 15 Sep 2020 4:26 pm
 Operator : AKARIG
 Sample : IC2362-3 Inst : MSVOA12
 Misc : MS47193,VO2362,,,,,
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 16 08:53:40 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091520.M
 Quant Title : Standard Methods 6200B
 QLast Update : Tue Sep 15 18:43:50 2020
 Response via : Initial Calibration



(13) 1,2-Dichloroethane-d4 (S)

7.077min (-0.000) 5.06ug/L m

response 105125

Ion	Exp%	Act%
65.00	100	100
67.00	53.50	48.47
102.00	16.10	17.69
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\091520\
 Data File : O61389.D
 Acq On : 15 Sep 2020 4:47 pm
 Operator : AKARIG
 Sample : IC2362-4 Inst : MSVOA12
 Misc : MS47193,VO2362,,,,,
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 16 08:53:42 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091520.M
 Quant Title : Standard Methods 6200B
 QLast Update : Tue Sep 15 18:43:50 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.344	96	272056	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.442	117	219792	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.077	65	112029	4.86	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	97.20%	
19) Toluene-d8	8.896	98	215371	4.80	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	96.00%	
Target Compounds						
						Qvalue
2) Vinyl Chloride	2.912	62	155626	4.63	ug/L	98
3) Chloromethane	2.806	50	227154	4.53	ug/L	94
4) 1,1-Dichloroethene	4.092	61	198148	4.86	ug/L	92
5) Methylene Chloride	4.703	49	328922	5.55	ug/L	92
6) trans-1,2-Dichloroethene	4.873	61	219652	4.85	ug/L	85
7) 1,1-Dichloroethane	5.514	63	257348	4.85	ug/L	99
8) cis-1,2-Dichloroethene	6.071	96	114203	4.77	ug/L	84
9) Chloroform	6.332	83	214196	4.76	ug/L	94
10) Carbon Tetrachloride	6.510	117	145432	4.70	ug/L	87
11) 1,1,1-Trichloroethane	6.580	97	170526	4.87	ug/L	92
12) Benzene	6.939	78	412770	4.88	ug/L	96
14) 1,2-Dichloroethane	7.138	62	201620	4.88	ug/L	95
15) Trichloroethene	7.513	95	121414	4.84	ug/L	91
16) 1,2-Dichloropropane	8.043	63	137312	4.89	ug/L	95
17) cis-1,3-Dichloropropene	8.711	75	121847	4.80	ug/L	99
20) trans-1,3-Dichloropropene	9.344	75	121859	4.87	ug/L	98
21) Tetrachloroethene	9.338	166	121414	5.07	ug/L	96
22) 1,4-Dichlorobenzene	12.822	146	243863	5.08	ug/L	98
23) 1,2-Dibromo-3-Chloropr...	14.038	75	39546	4.92	ug/L #	77

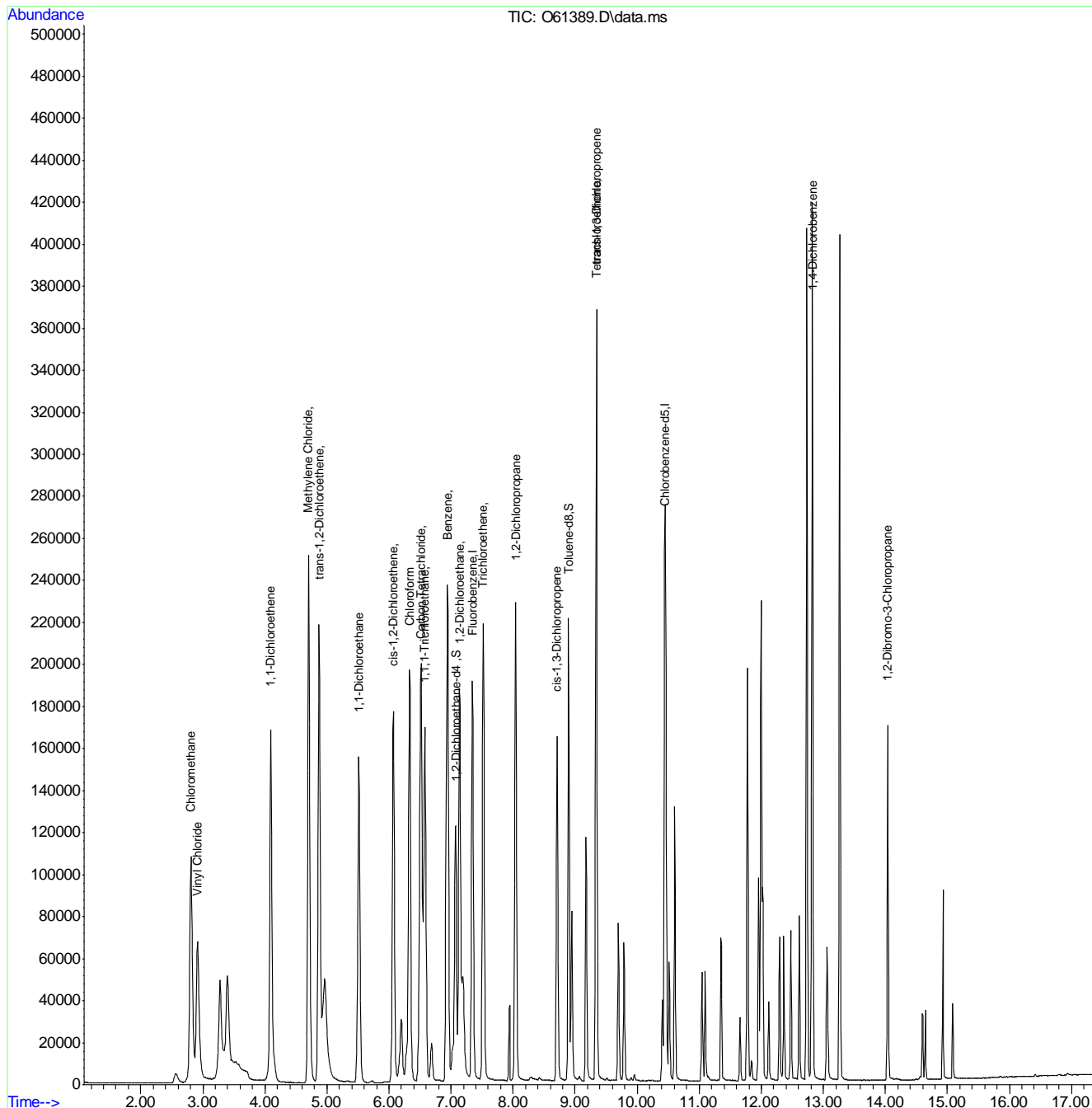
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\091520\
 Data File : O61389.D
 Acq On : 15 Sep 2020 4:47 pm
 Operator : AKARIG
 Sample : IC2362-4
 Misc : MS47193,VO2362,,,,,
 ALS Vial : 10 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 16 08:53:42 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091520.M
 Quant Title : Standard Methods 6200B
 QLast Update : Tue Sep 15 18:43:50 2020
 Response via : Initial Calibration



7.6.16
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\091520\
 Data File : O61390.D
 Acq On : 15 Sep 2020 5:07 pm
 Operator : AKARIG
 Sample : ICC2362-5 Inst : MSVOA12
 Misc : MS47193,VO2362,,,,,
 ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 16 08:53:44 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091520.M
 Quant Title : Standard Methods 6200B
 QLast Update : Tue Sep 15 18:43:50 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.345	96	305864	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.444	117	250755	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.077	65	122900	4.74	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	94.80%	
19) Toluene-d8	8.899	98	247079	4.83	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	96.60%	
Target Compounds						
						Qvalue
2) Vinyl Chloride	2.912	62	348299	9.89	ug/L	98
3) Chloromethane	2.810	50	493935	9.66	ug/L	94
4) 1,1-Dichloroethene	4.096	61	453746	9.90	ug/L	92
5) Methylene Chloride	4.707	49	695268	10.43	ug/L	94
6) trans-1,2-Dichloroethene	4.873	61	509355	10.15	ug/L	84
7) 1,1-Dichloroethane	5.514	63	581508	9.75	ug/L	99
8) cis-1,2-Dichloroethene	6.071	96	268026	9.96	ug/L	83
9) Chloroform	6.332	83	480741	9.51	ug/L	95
10) Carbon Tetrachloride	6.510	117	338356	9.72	ug/L	87
11) 1,1,1-Trichloroethane	6.580	97	394231	10.02	ug/L	92
12) Benzene	6.947	78	948911	10.11	ug/L	100
14) 1,2-Dichloroethane	7.138	62	452639	9.74	ug/L	94
15) Trichloroethene	7.513	95	281405	9.99	ug/L	90
16) 1,2-Dichloropropane	8.043	63	311763	10.06	ug/L	94
17) cis-1,3-Dichloropropene	8.711	75	299309	10.49	ug/L	99
20) trans-1,3-Dichloropropene	9.346	75	299356	10.49	ug/L	99
21) Tetrachloroethene	9.341	166	273381	10.09	ug/L	96
22) 1,4-Dichlorobenzene	12.824	146	568582	10.38	ug/L	98
23) 1,2-Dibromo-3-Chloropr...	14.035	75	94565	9.95	ug/L	94

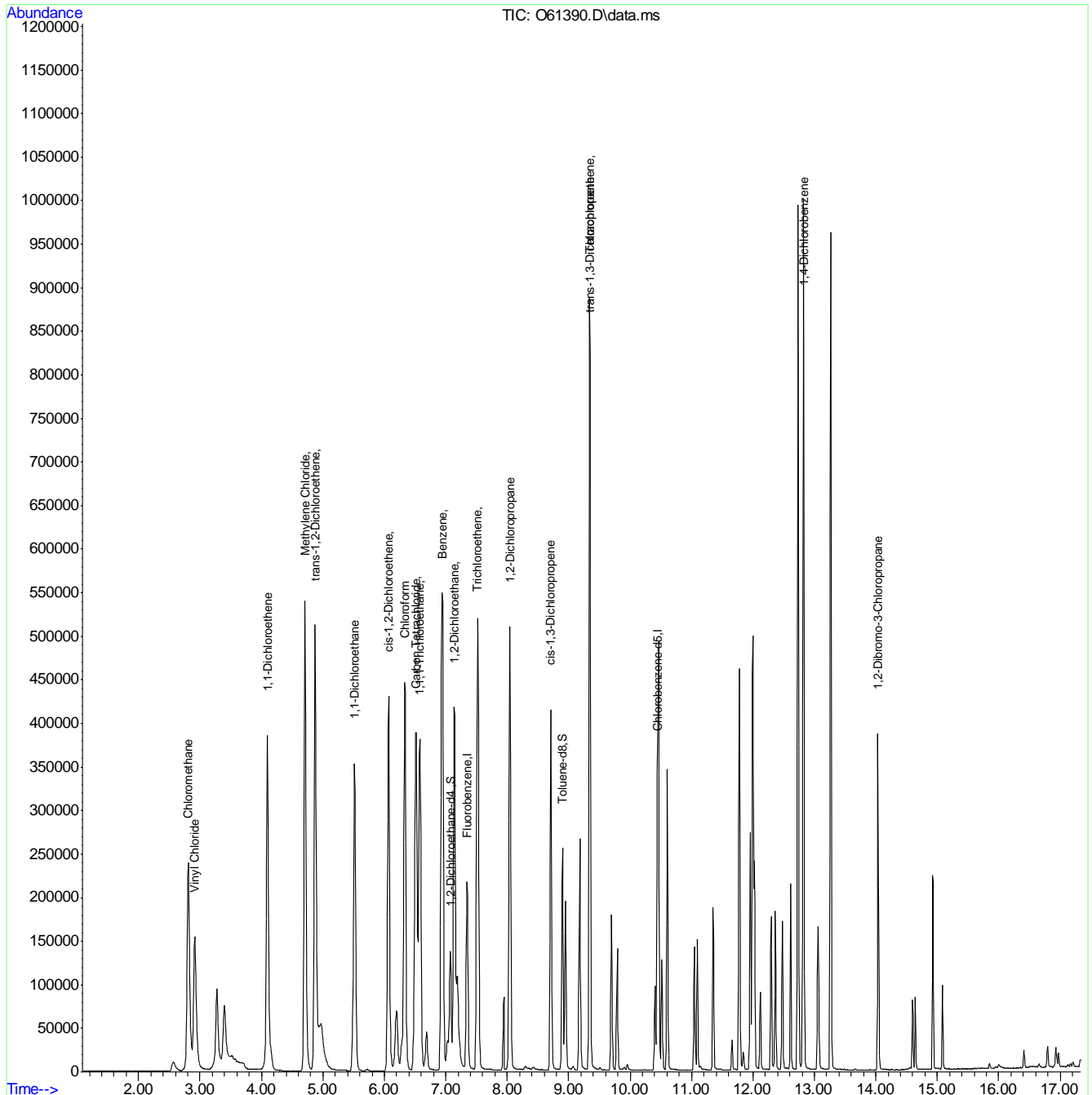
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\091520\
 Data File : O61390.D
 Acq On : 15 Sep 2020 5:07 pm
 Operator : AKARIG
 Sample : ICC2362-5
 Misc : MS47193,VO2362,,,,,
 ALS Vial : 11 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 16 08:53:44 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091520.M
 Quant Title : Standard Methods 6200B
 QLast Update : Tue Sep 15 18:43:50 2020
 Response via : Initial Calibration



7.6.17
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\091520\
 Data File : O61391.D
 Acq On : 15 Sep 2020 5:28 pm
 Operator : AKARIG
 Sample : IC2362-6 Inst : MSVOA12
 Misc : MS47193,VO2362,,,,,
 ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 16 08:53:46 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091520.M
 Quant Title : Standard Methods 6200B
 QLast Update : Tue Sep 15 18:43:50 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.344	96	339428	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.442	117	277837	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.077	65	133857	4.65	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	93.00%	
19) Toluene-d8	8.896	98	274683	4.84	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	96.80%	
Target Compounds						
						Qvalue
2) Vinyl Chloride	2.916	62	559724	15.58	ug/L	98
3) Chloromethane	2.806	50	774953	15.43	ug/L	94
4) 1,1-Dichloroethene	4.092	61	714734	14.06	ug/L	92
5) Methylene Chloride	4.703	49	1072294	14.50	ug/L	95
6) trans-1,2-Dichloroethene	4.873	61	821569	14.95	ug/L	86
7) 1,1-Dichloroethane	5.514	63	930777	14.07	ug/L	99
8) cis-1,2-Dichloroethene	6.071	96	442982	14.83	ug/L	84
9) Chloroform	6.332	83	773258	13.78	ug/L	95
10) Carbon Tetrachloride	6.510	117	548399	14.20	ug/L	87
11) 1,1,1-Trichloroethane	6.580	97	638534	14.62	ug/L	92
12) Benzene	6.939	78	1544743	15.02	ug/L	95
14) 1,2-Dichloroethane	7.138	62	730206	14.16	ug/L	94
15) Trichloroethene	7.513	95	464178	14.84	ug/L	91
16) 1,2-Dichloropropane	8.043	63	508572	15.05	ug/L	92
17) cis-1,3-Dichloropropene	8.711	75	517869	16.35	ug/L	97
20) trans-1,3-Dichloropropene	9.344	75	515811	16.32	ug/L	97
21) Tetrachloroethene	9.338	166	438978	14.74	ug/L	94
22) 1,4-Dichlorobenzene	12.822	146	967634	15.94	ug/L	99
23) 1,2-Dibromo-3-Chloropr...	14.032	75	165116	15.15	ug/L	85

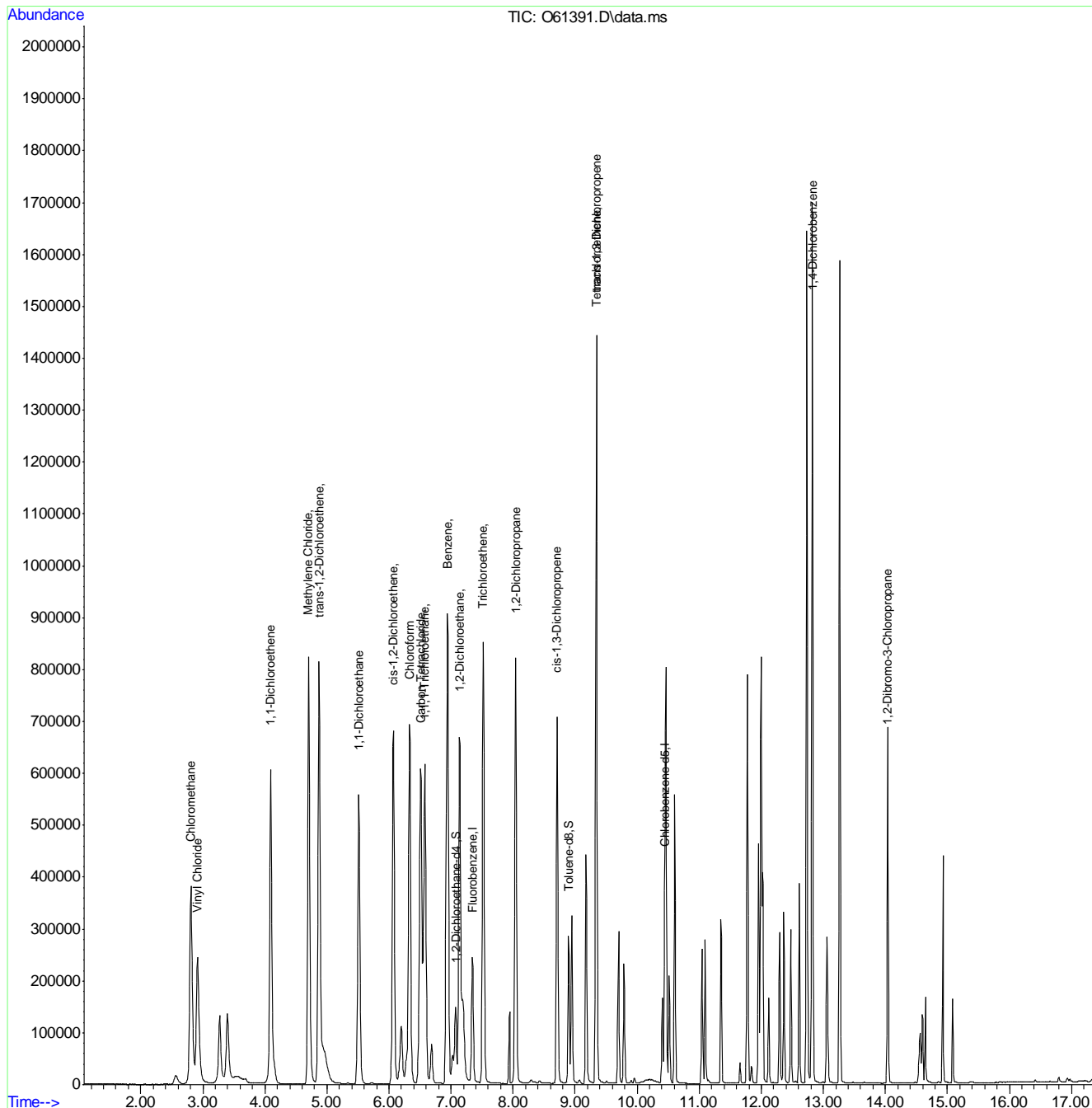
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\091520\
 Data File : O61391.D
 Acq On : 15 Sep 2020 5:28 pm
 Operator : AKARIG
 Sample : IC2362-6
 Misc : MS47193,VO2362,,,,,
 ALS Vial : 12 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 16 08:53:46 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091520.M
 Quant Title : Standard Methods 6200B
 QLast Update : Tue Sep 15 18:43:50 2020
 Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\091520\
 Data File : O61392.D
 Acq On : 15 Sep 2020 5:48 pm
 Operator : AKARIG
 Sample : IC2362-7 Inst : MSVOA12
 Misc : MS47193,VO2362,,,,,
 ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 16 08:53:48 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091520.M
 Quant Title : Standard Methods 6200B
 QLast Update : Tue Sep 15 18:43:50 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.344	96	392640	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.444	117	306840	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.069	65	151155	4.54	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	90.80%	
19) Toluene-d8	8.899	98	322677	5.15	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	103.00%	
Target Compounds						
						Qvalue
2) Vinyl Chloride	2.904	62	767009	19.70	ug/L	98
3) Chloromethane	2.803	50	1045788	20.12	ug/L	93
4) 1,1-Dichloroethene	4.085	61	1097413	18.66	ug/L	92
5) Methylene Chloride	4.703	49	1553383	18.16	ug/L	97
6) trans-1,2-Dichloroethene	4.869	61	1253396	20.00	ug/L	85
7) 1,1-Dichloroethane	5.510	63	1396794	18.25	ug/L	99
8) cis-1,2-Dichloroethene	6.065	96	682667	19.76	ug/L #	80
9) Chloroform	6.332	83	1161212	17.89	ug/L	96
10) Carbon Tetrachloride	6.510	117	841059	18.83	ug/L	88
11) 1,1,1-Trichloroethane	6.573	97	980373	19.40	ug/L	93
12) Benzene	6.939	78	2346508	19.97	ug/L	98
14) 1,2-Dichloroethane	7.138	62	1091602	18.30	ug/L	92
15) Trichloroethene	7.513	95	705476	19.50	ug/L	90
16) 1,2-Dichloropropane	8.043	63	767297	19.97	ug/L	91
17) cis-1,3-Dichloropropene	8.711	75	824147	22.49	ug/L	95
20) trans-1,3-Dichloropropene	9.346	75	806009	23.09	ug/L	94
21) Tetrachloroethene	9.341	166	655729	20.12	ug/L	96
22) 1,4-Dichlorobenzene	12.824	146	1385286	20.67	ug/L	98
23) 1,2-Dibromo-3-Chloropr...	14.035	75	247490	19.93	ug/L	97

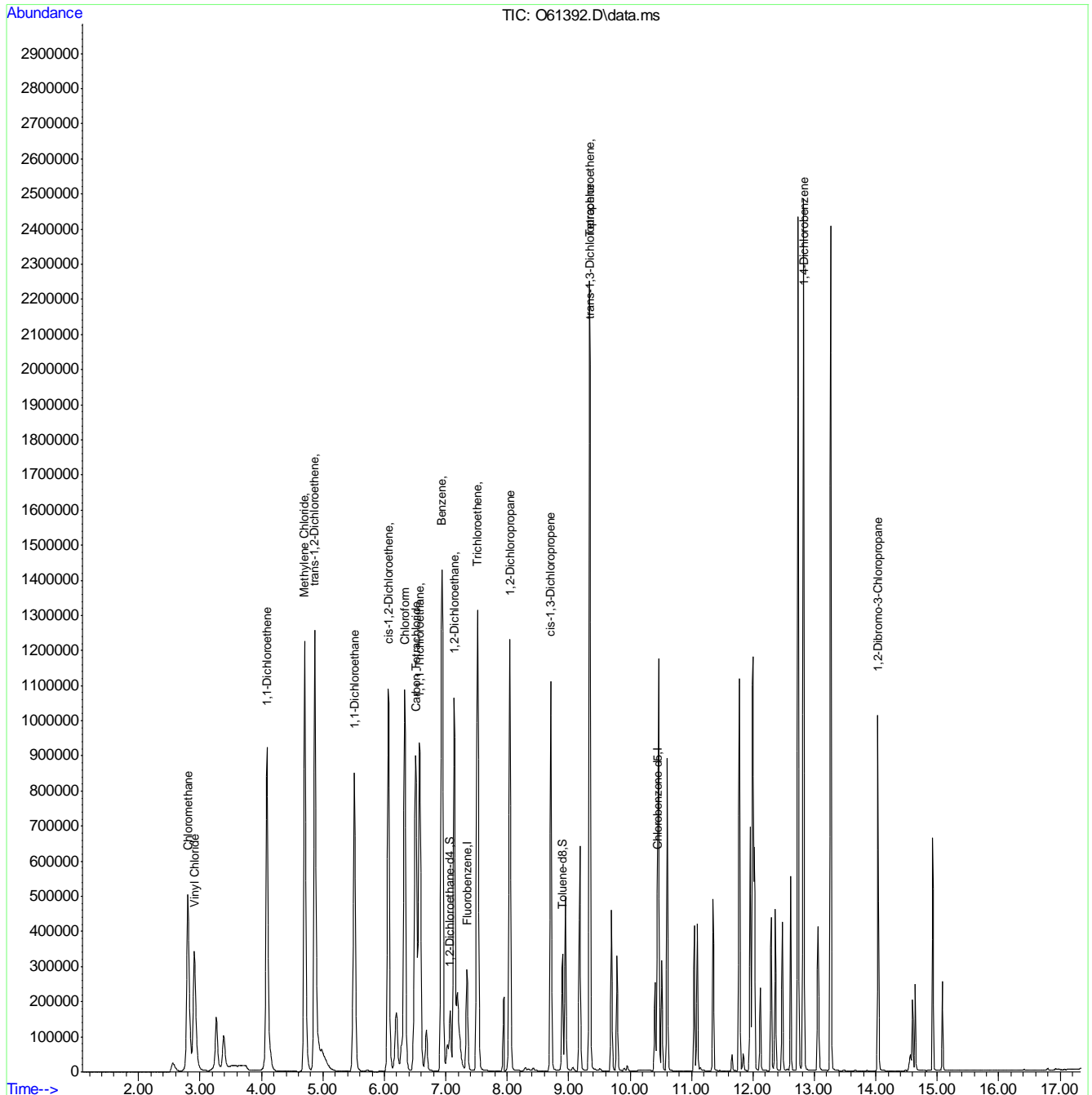
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\091520\
 Data File : O61392.D
 Acq On : 15 Sep 2020 5:48 pm
 Operator : AKARIG
 Sample : IC2362-7
 Misc : MS47193,VO2362,,,,,
 ALS Vial : 13 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 16 08:53:48 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091520.M
 Quant Title : Standard Methods 6200B
 QLast Update : Tue Sep 15 18:43:50 2020
 Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\091520\
 Data File : O61394.D
 Acq On : 15 Sep 2020 6:29 pm
 Operator : AKARIG
 Sample : ICV2362-5 Inst : MSVOA12
 Misc : MS47193,VO2362,,,,,
 ALS Vial : 15 Sample Multiplier: 1

Quant Time: Sep 16 09:05:28 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091520.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 16 09:02:25 2020
 Response via : Initial Calibration

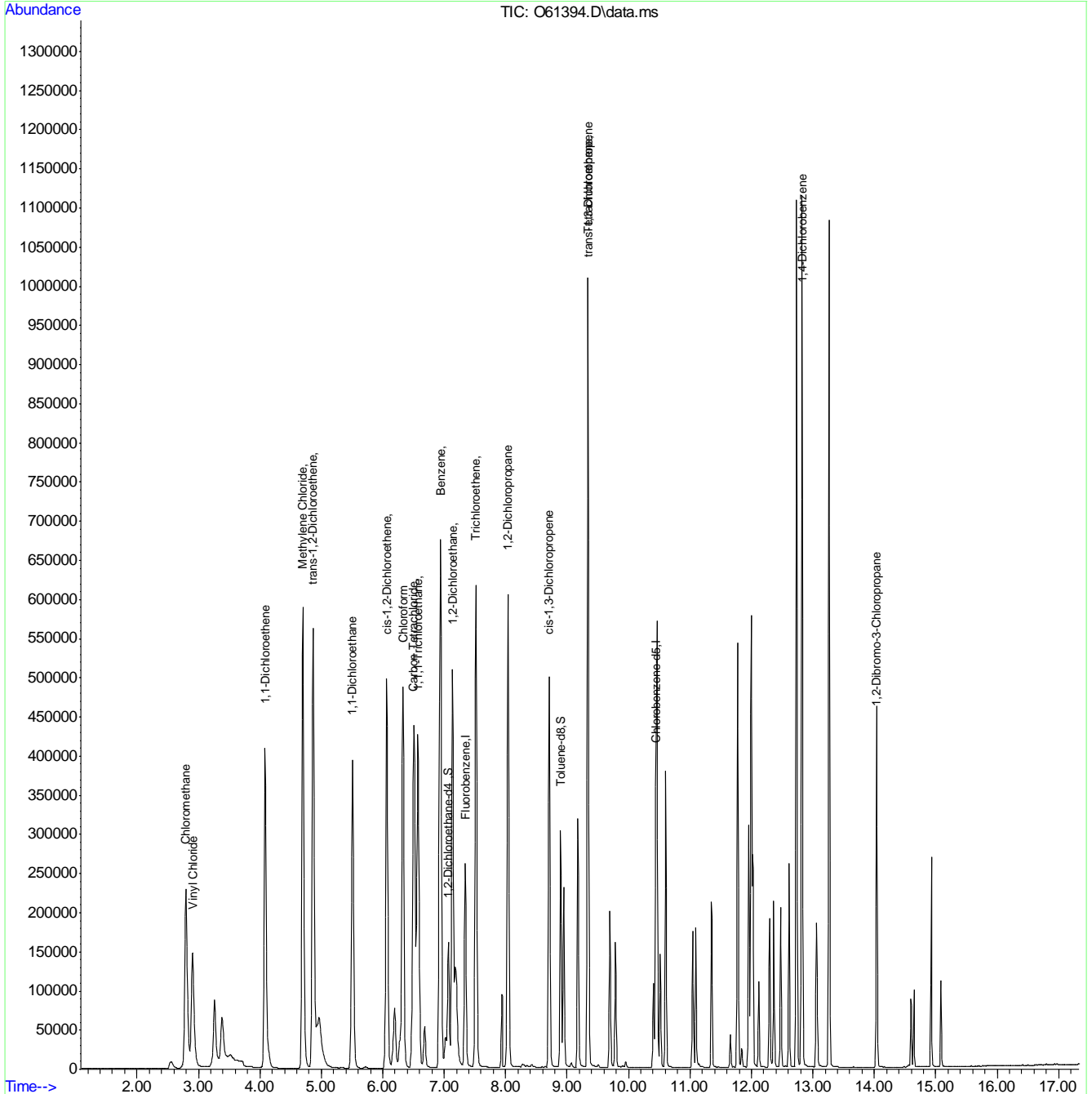
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.344	96	351400	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.442	117	277635	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.069	65	138509	4.68	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	93.60%	
19) Toluene-d8	8.896	98	288567	5.09	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	101.80%	
Target Compounds						
						Qvalue
2) Vinyl Chloride	2.904	62	336755	8.11	ug/L	100
3) Chloromethane	2.799	50	470043	7.70	ug/L	99
4) 1,1-Dichloroethene	4.085	61	485590	9.22	ug/L	100
5) Methylene Chloride	4.696	49	752004	8.78	ug/L	99
6) trans-1,2-Dichloroethene	4.865	61	563657	9.38	ug/L	99
7) 1,1-Dichloroethane	5.506	63	649866	9.49	ug/L	99
8) cis-1,2-Dichloroethene	6.065	96	309114	10.00	ug/L	99
9) Chloroform	6.332	83	532103	9.16	ug/L	98
10) Carbon Tetrachloride	6.503	117	372360	9.31	ug/L	99
11) 1,1,1-Trichloroethane	6.573	97	432252	9.56	ug/L	99
12) Benzene	6.939	78	1111283	10.24	ug/L	99
14) 1,2-Dichloroethane	7.138	62	519762	9.74	ug/L	97
15) Trichloroethene	7.513	95	324950	10.04	ug/L	98
16) 1,2-Dichloropropane	8.039	63	365668	10.11	ug/L	98
17) cis-1,3-Dichloropropene	8.711	75	369498	11.27	ug/L	96
20) trans-1,3-Dichloropropene	9.344	75	369218	11.69	ug/L	97
21) Tetrachloroethene	9.338	166	296478	9.33	ug/L	99
22) 1,4-Dichlorobenzene	12.822	146	635008	10.47	ug/L	97
23) 1,2-Dibromo-3-Chloropr...	14.032	75	111064	10.52	ug/L	89

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\091520\
 Data File : O61394.D
 Acq On : 15 Sep 2020 6:29 pm
 Operator : AKARIG
 Sample : ICV2362-5 Inst : MSVOA12
 Misc : MS47193,VO2362,,,,,
 ALS Vial : 15 Sample Multiplier: 1

Quant Time: Sep 16 09:05:28 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091520.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 16 09:02:25 2020
 Response via : Initial Calibration



7.6.20
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-17-2020\vo2363\
 Data File : O61402.d
 Acq On : 16 Sep 2020 11:32 am
 Operator : akarig
 Sample : cc2632-5
 Misc : MS47193,VO2363,,,,,
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 17 04:42:15 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091520.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 16 09:02:25 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)	

Internal Standards							
1) Fluorobenzene	7.340	96	325847	5.00	ug/L	0.00	
18) Chlorobenzene-d5	10.441	117	270075	5.00	ug/L	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.068	65	128979	4.70	ug/L	0.00	
Spiked Amount	5.000	Range 74 - 125	Recovery	=	94.00%		
19) Toluene-d8	8.896	98	270320	4.90	ug/L	0.00	
Spiked Amount	5.000	Range 88 - 111	Recovery	=	98.00%		
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.904	62	333326	8.74	ug/L		100
3) Chloromethane	2.803	50	470037	8.42	ug/L		100
4) 1,1-Dichloroethene	4.085	61	440506	9.02	ug/L		99
5) Methylene Chloride	4.699	49	662782	8.27	ug/L		98
6) trans-1,2-Dichloroethene	4.865	61	488055	8.76	ug/L		99
7) 1,1-Dichloroethane	5.506	63	558208	8.79	ug/L		100
8) cis-1,2-Dichloroethene	6.060	96	262000	9.14	ug/L		98
9) Chloroform	6.327	83	461945	8.58	ug/L		99
10) Carbon Tetrachloride	6.505	117	323952	8.74	ug/L		100
11) 1,1,1-Trichloroethane	6.576	97	357632	8.53	ug/L		99
12) Benzene	6.937	78	909169	9.03	ug/L		97
14) 1,2-Dichloroethane	7.139	62	433728	8.76	ug/L		98
15) Trichloroethene	7.512	95	266819	8.89	ug/L		96
16) 1,2-Dichloropropane	8.040	63	305758	9.12	ug/L		99
17) cis-1,3-Dichloropropene	8.707	75	299518	9.85	ug/L		99
20) trans-1,3-Dichloropropene	9.337	75	294504	9.58	ug/L		98
21) Tetrachloroethene	9.337	166	257791	8.34	ug/L		100
22) 1,4-Dichlorobenzene	12.821	146	542705	9.20	ug/L		99
23) 1,2-Dibromo-3-Chloropr...	14.037	75	92403	9.00	ug/L #		73

(#) = qualifier out of range (m) = manual integration (+) = signals summed

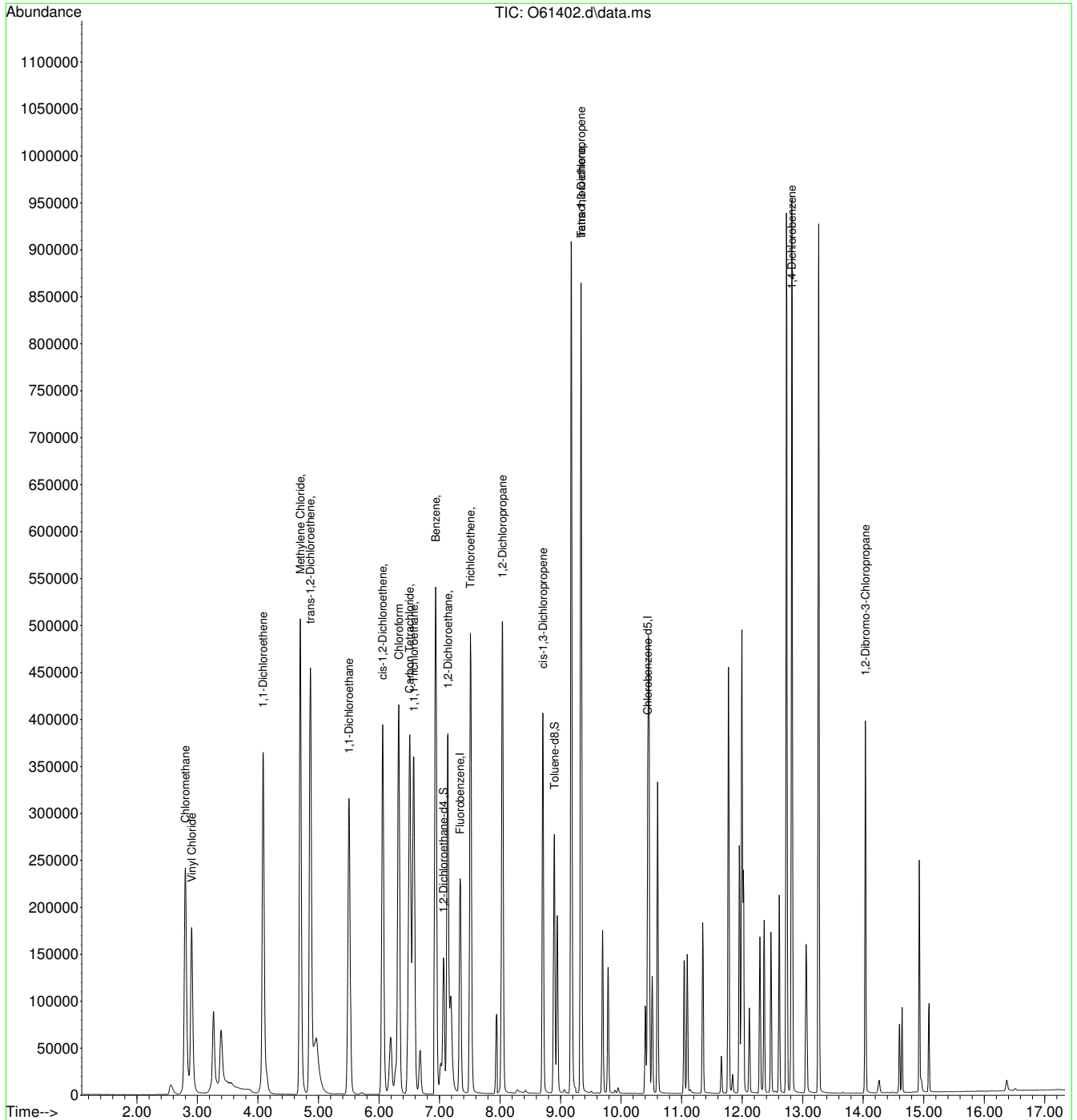
7.6.21
7



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\September 2020\09-17-2020\vo2363\
 Data File : O61402.d
 Acq On : 16 Sep 2020 11:32 am
 Operator : akarig
 Sample : cc2632-5
 Misc : MS47193,VO2363,,,,,
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 17 04:42:15 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091520.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 16 09:02:25 2020
 Response via : Initial Calibration



7.6.21

7



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\091620\
 Data File : O61422.D
 Acq On : 17 Sep 2020 8:05 am
 Operator : JuanG
 Sample : ecc2362-5 Inst : MSVOA12
 Misc : MS47193,VO2363,,,,,
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 17 15:41:58 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091520.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 16 09:02:25 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.340	96	264356	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.441	117	231809	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.068	65	112713	5.06	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	101.20%	
19) Toluene-d8	8.892	98	206233	4.36	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	87.20%#	
Target Compounds						
						Qvalue
2) Vinyl Chloride	2.901	62	291792	9.53	ug/L	100
3) Chloromethane	2.799	50	424538	9.59	ug/L	99
4) 1,1-Dichloroethene	4.081	61	439279	11.09	ug/L	98
5) Methylene Chloride	4.692	49	623492	9.89	ug/L	97
6) trans-1,2-Dichloroethene	4.858	61	437454	9.68	ug/L	99
7) 1,1-Dichloroethane	5.503	63	500022	9.70	ug/L	99
8) cis-1,2-Dichloroethene	6.060	96	219297	9.43	ug/L	98
9) Chloroform	6.321	83	419765	9.60	ug/L	99
10) Carbon Tetrachloride	6.499	117	295475	9.82	ug/L	100
11) 1,1,1-Trichloroethane	6.570	97	321489	9.45	ug/L	99
12) Benzene	6.931	78	776935	9.51	ug/L	93
14) 1,2-Dichloroethane	7.133	62	392115	9.76	ug/L	99
15) Trichloroethene	7.506	95	237878	9.77	ug/L	97
16) 1,2-Dichloropropane	8.036	63	265838	9.77	ug/L	98
17) cis-1,3-Dichloropropene	8.703	75	235080	9.53	ug/L	97
20) trans-1,3-Dichloropropene	9.337	75	243253	9.22	ug/L	97
21) Tetrachloroethene	9.337	166	240399	9.06	ug/L	95
22) 1,4-Dichlorobenzene	12.821	146	506530	10.00	ug/L	100
23) 1,2-Dibromo-3-Chloropr...	14.037	75	84784	9.62	ug/L #	71

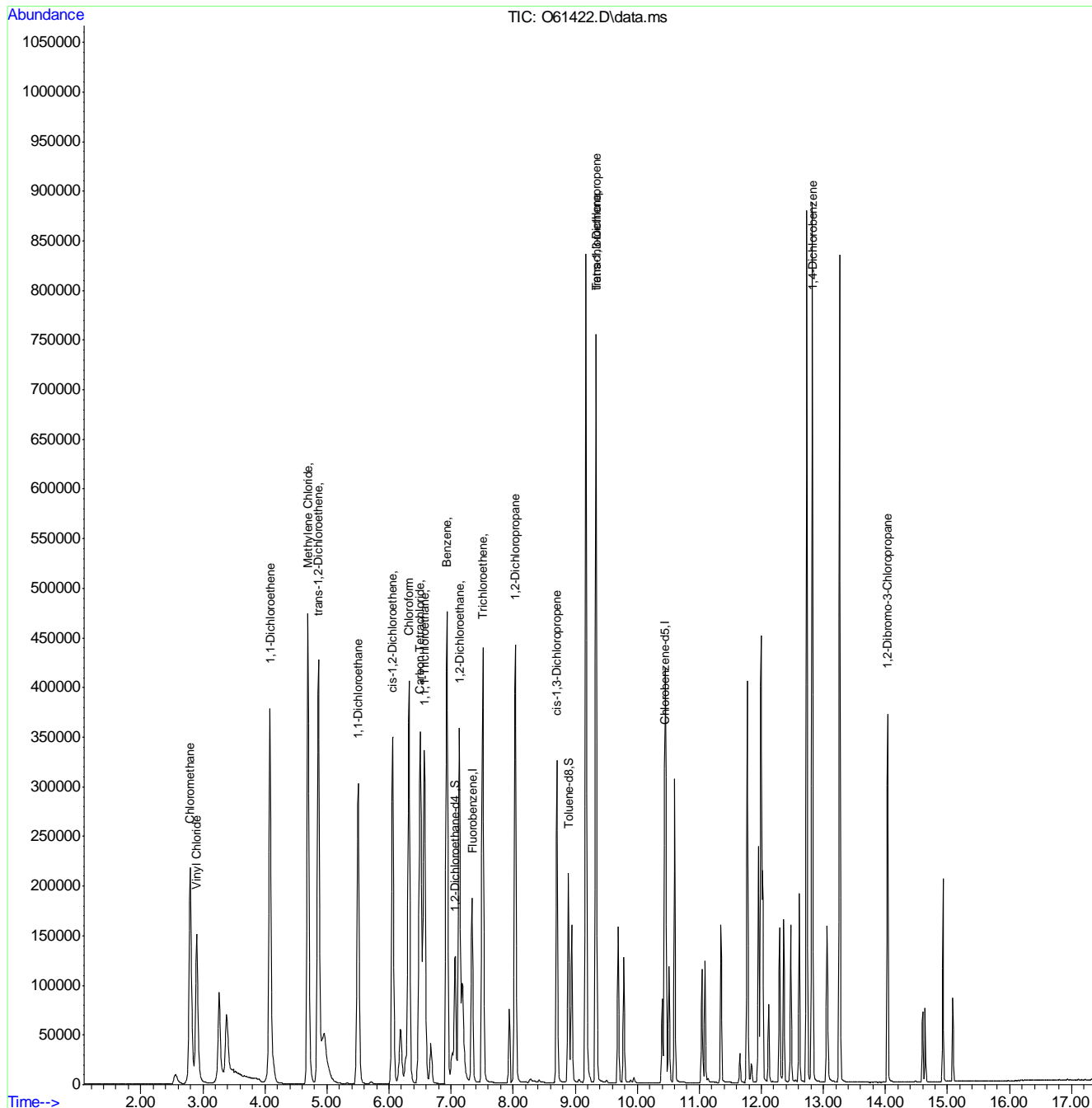
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\091620\
 Data File : O61422.D
 Acq On : 17 Sep 2020 8:05 am
 Operator : JuanG
 Sample : ecc2362-5
 Misc : MS47193,VO2363,,,,,
 ALS Vial : 2 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 17 15:41:58 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091520.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 16 09:02:25 2020
 Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\091120\
 Data File : Z62207.D
 Acq On : 11 Sep 2020 6:15 pm
 Operator : SHANICAO
 Sample : IC2414-1
 Misc : MS47171,VZ2414,,,,,
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 11 20:45:22 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Tue Sep 08 14:39:51 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	

Internal Standards							
1) Fluorobenzene	7.401	96	1911916	5.00	ppb	0.00	
18) Chlorobenzene-d5	10.511	117	1500837	5.00	ppb	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.123	65	582041	4.07	ppb	0.00	
Spiked Amount	5.000	Range 79 - 125	Recovery	=	81.40%		
19) Toluene-d8	8.961	98	1882184	5.19	ppb	0.00	
Spiked Amount	5.000	Range 70 - 130	Recovery	=	103.80%		
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.846	62	28495	0.14	ppb		64
3) Chloromethane	2.741	50	25350	0.11	ppb		98
4) 1,1-Dichloroethene	4.083	96	11716	0.09	ppb	#	82
5) Methylene Chloride	4.713	84	104791	0.50	ppb	#	85
6) trans-1,2-Dichloroethene	4.886	96	13680	0.09	ppb	#	86
7) 1,1-Dichloroethane	5.542	63	21987	0.07	ppb	#	93
8) cis-1,2-Dichloroethene	6.104	96	16012	0.10	ppb		90
9) Chloroform	6.371	83	29706	0.09	ppb		94
10) Carbon Tetrachloride	6.543	117	19024	0.09	ppb		96
11) 1,1,1-Trichloroethane	6.614	97	24317	0.09	ppb		56
12) Benzene	6.994	78	51294	0.09	ppb		91
14) 1,2-Dichloroethane	7.198	62	19143	0.08	ppb		99
15) Trichloroethene	7.564	95	15849	0.09	ppb		96
16) 1,2-Dichloropropane	8.101	63	13157	0.09	ppb		97
17) cis-1,3-Dichloropropene	8.773	75	13481	0.09	ppb		96
20) trans-1,3-Dichloropropene	9.411	75	10019	0.09	ppb		96
21) Tetrachloroethene	9.399	166	15170	0.09	ppb		97

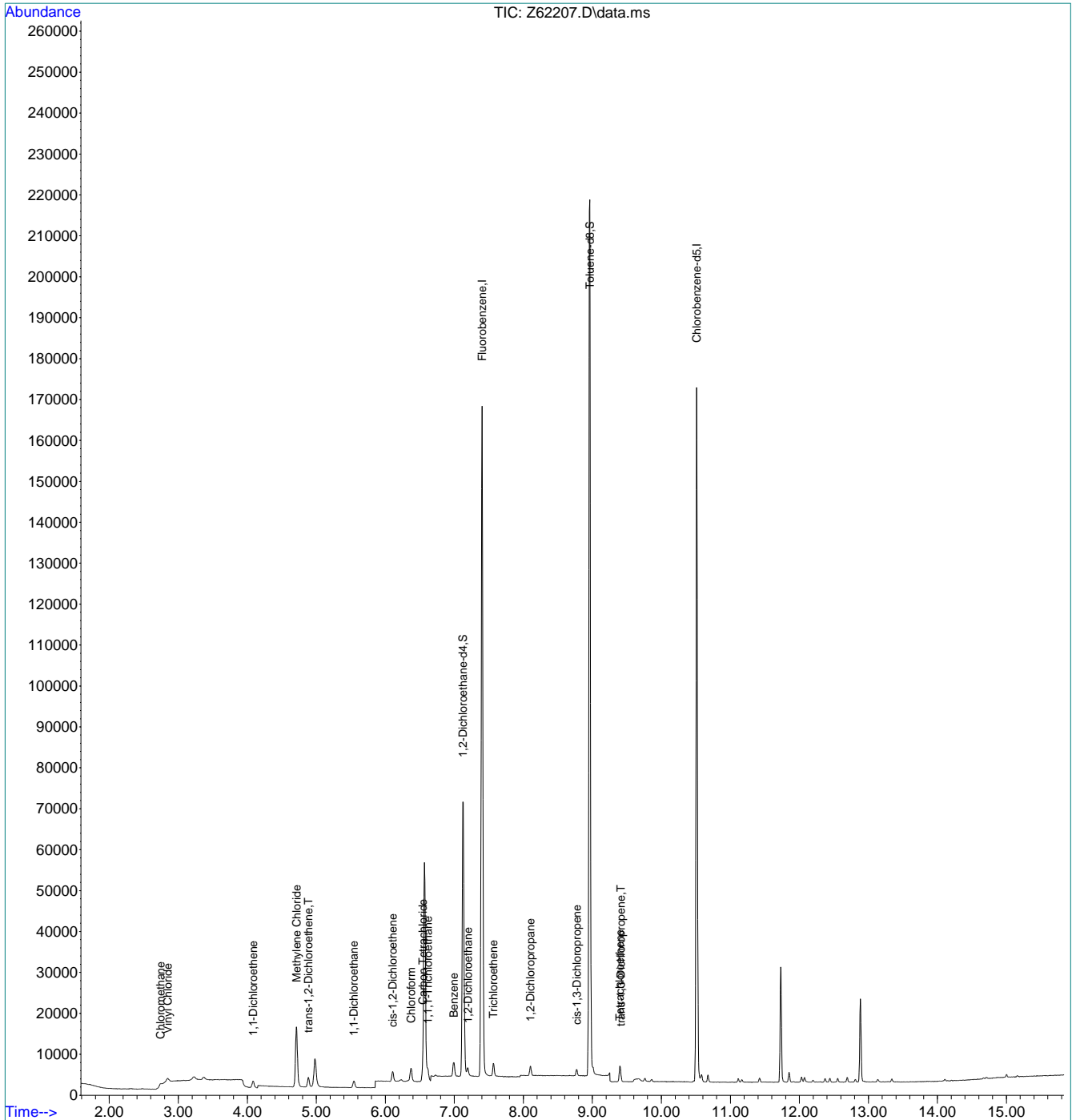
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.6.23
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\091120\
 Data File : Z62207.D
 Acq On : 11 Sep 2020 6:15 pm
 Operator : SHANICAO
 Sample : IC2414-1
 Misc : MS47171,VZ2414,,,,,
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 11 20:45:22 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Tue Sep 08 14:39:51 2020
 Response via : Initial Calibration



7.6.23
7



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\091120\
 Data File : Z62208.D
 Acq On : 11 Sep 2020 6:34 pm
 Operator : SHANICAO
 Sample : IC2414-2
 Misc : MS47171,VZ2414,,,,,
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 11 20:45:24 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Tue Sep 08 14:39:51 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	

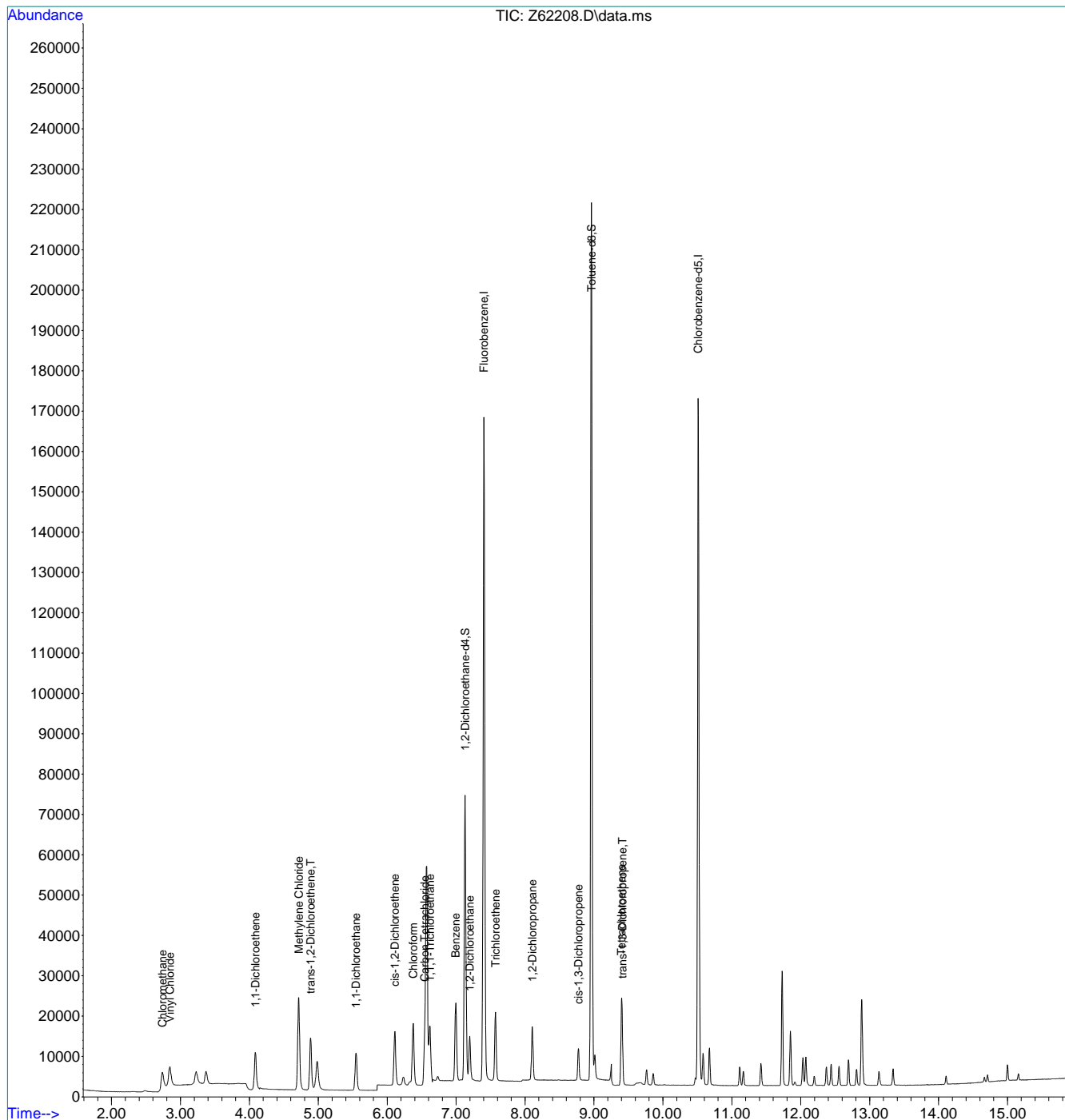
Internal Standards							
1) Fluorobenzene	7.401	96	1904308	5.00	ppb	0.00	
18) Chlorobenzene-d5	10.511	117	1505590	5.00	ppb	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.130	65	590498	4.14	ppb	0.00	
Spiked Amount	5.000	Range	79 - 125	Recovery	=	82.80%	
19) Toluene-d8	8.961	98	1879356	5.17	ppb	0.00	
Spiked Amount	5.000	Range	70 - 130	Recovery	=	103.40%	
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.846	62	100902	0.49	ppb		94
3) Chloromethane	2.737	50	94917	0.43	ppb		99
4) 1,1-Dichloroethene	4.087	96	56778	0.46	ppb	#	85
5) Methylene Chloride	4.717	84	159658	0.77	ppb	#	84
6) trans-1,2-Dichloroethene	4.890	96	72093	0.47	ppb	#	87
7) 1,1-Dichloroethane	5.546	63	125841	0.43	ppb	#	100
8) cis-1,2-Dichloroethene	6.110	96	81784	0.50	ppb		91
9) Chloroform	6.377	83	149761	0.46	ppb		99
10) Carbon Tetrachloride	6.543	117	93184	0.46	ppb		100
11) 1,1,1-Trichloroethane	6.620	97	125772	0.46	ppb		93
12) Benzene	6.994	78	278106	0.49	ppb		95
14) 1,2-Dichloroethane	7.198	62	107084	0.46	ppb		99
15) Trichloroethene	7.571	95	81536	0.46	ppb	#	84
16) 1,2-Dichloropropane	8.105	63	71854	0.47	ppb		96
17) cis-1,3-Dichloropropene	8.773	75	62431	0.42	ppb		97
20) trans-1,3-Dichloropropene	9.411	75	51134	0.43	ppb		97
21) Tetrachloroethene	9.399	166	81006	0.45	ppb		99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\091120\
 Data File : Z62208.D
 Acq On : 11 Sep 2020 6:34 pm
 Operator : SHANICAO
 Sample : IC2414-2
 Misc : MS47171,VZ2414,,,,,
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 11 20:45:24 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Tue Sep 08 14:39:51 2020
 Response via : Initial Calibration



7.6.24
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\091120\
 Data File : Z62209.D
 Acq On : 11 Sep 2020 6:53 pm
 Operator : SHANICAO
 Sample : IC2414-3
 Misc : MS47171,VZ2414,,,,,
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 11 20:45:26 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Tue Sep 08 14:39:51 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	

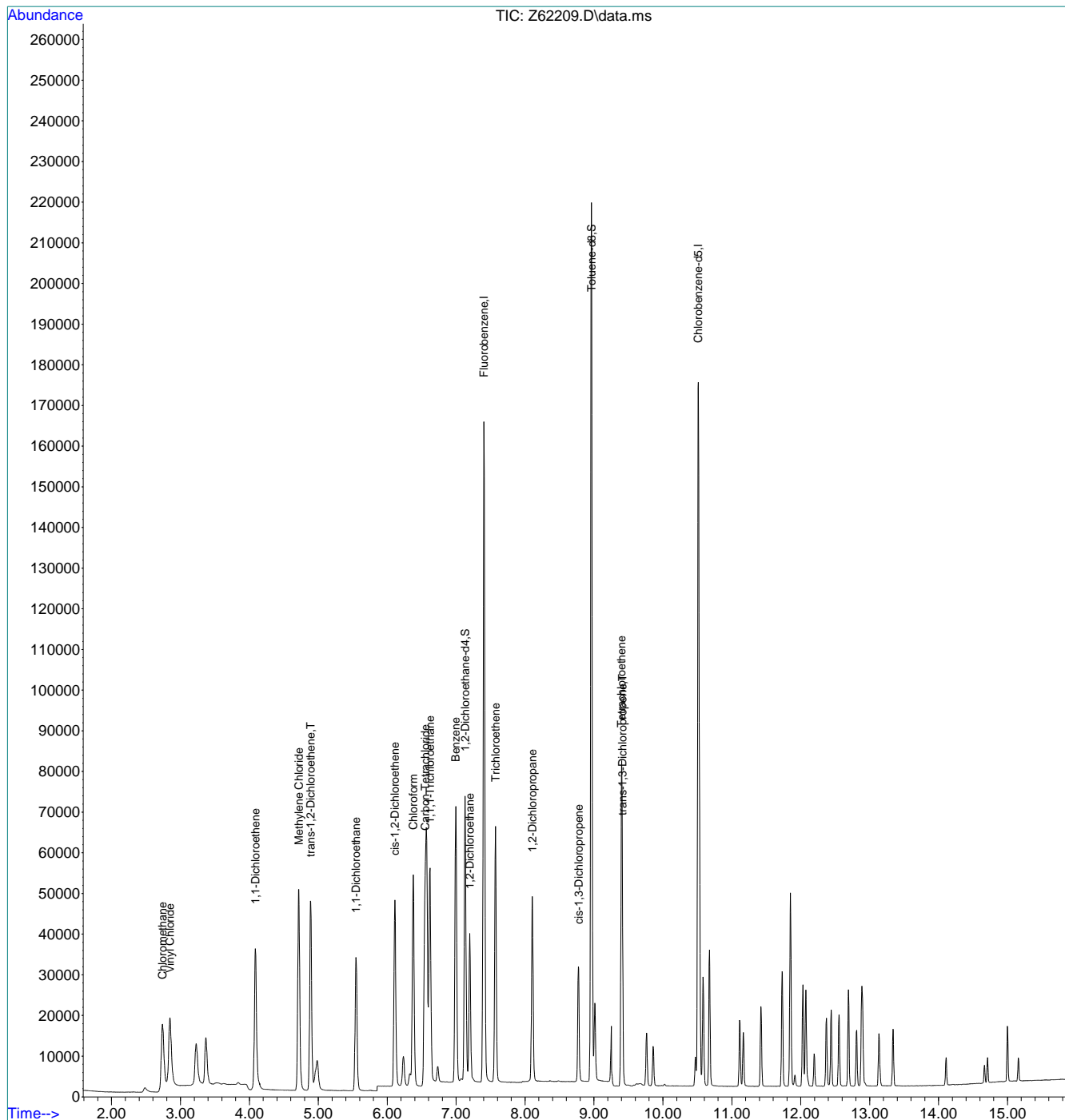
Internal Standards							
1) Fluorobenzene	7.401	96	1880383	5.00	ppb	0.00	
18) Chlorobenzene-d5	10.511	117	1501976	5.00	ppb	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.130	65	577590	4.10	ppb	0.00	
Spiked Amount	5.000	Range	79 - 125	Recovery	=	82.00%	
19) Toluene-d8	8.961	98	1874357	5.17	ppb	0.00	
Spiked Amount	5.000	Range	70 - 130	Recovery	=	103.40%	
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.846	62	355035	1.73	ppb		99
3) Chloromethane	2.737	50	361423	1.66	ppb		99
4) 1,1-Dichloroethene	4.087	96	211318	1.74	ppb	#	86
5) Methylene Chloride	4.717	84	343631	1.70	ppb	#	85
6) trans-1,2-Dichloroethene	4.890	96	256460	1.69	ppb	#	88
7) 1,1-Dichloroethane	5.546	63	437656	1.50	ppb	#	99
8) cis-1,2-Dichloroethene	6.110	96	282000	1.74	ppb		93
9) Chloroform	6.377	83	511484	1.59	ppb		99
10) Carbon Tetrachloride	6.549	117	347244	1.75	ppb		98
11) 1,1,1-Trichloroethane	6.620	97	460357	1.71	ppb		97
12) Benzene	6.994	78	967414	1.72	ppb		96
14) 1,2-Dichloroethane	7.198	62	357979	1.54	ppb		100
15) Trichloroethene	7.571	95	292723	1.66	ppb		86
16) 1,2-Dichloropropane	8.105	63	240964	1.60	ppb		94
17) cis-1,3-Dichloropropene	8.777	75	222972	1.51	ppb		97
20) trans-1,3-Dichloropropene	9.411	75	182860	1.51	ppb		99
21) Tetrachloroethene	9.399	166	294888	1.65	ppb		99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\091120\
 Data File : Z62209.D
 Acq On : 11 Sep 2020 6:53 pm
 Operator : SHANICAO
 Sample : IC2414-3
 Misc : MS47171,VZ2414,,,,,
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 11 20:45:26 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Tue Sep 08 14:39:51 2020
 Response via : Initial Calibration



7.6.25
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\091120\
 Data File : Z62210.D
 Acq On : 11 Sep 2020 7:13 pm
 Operator : SHANICAO
 Sample : IC2414-4
 Misc : MS47171,VZ2414,,,,,
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 11 20:45:28 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Tue Sep 08 14:39:51 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	

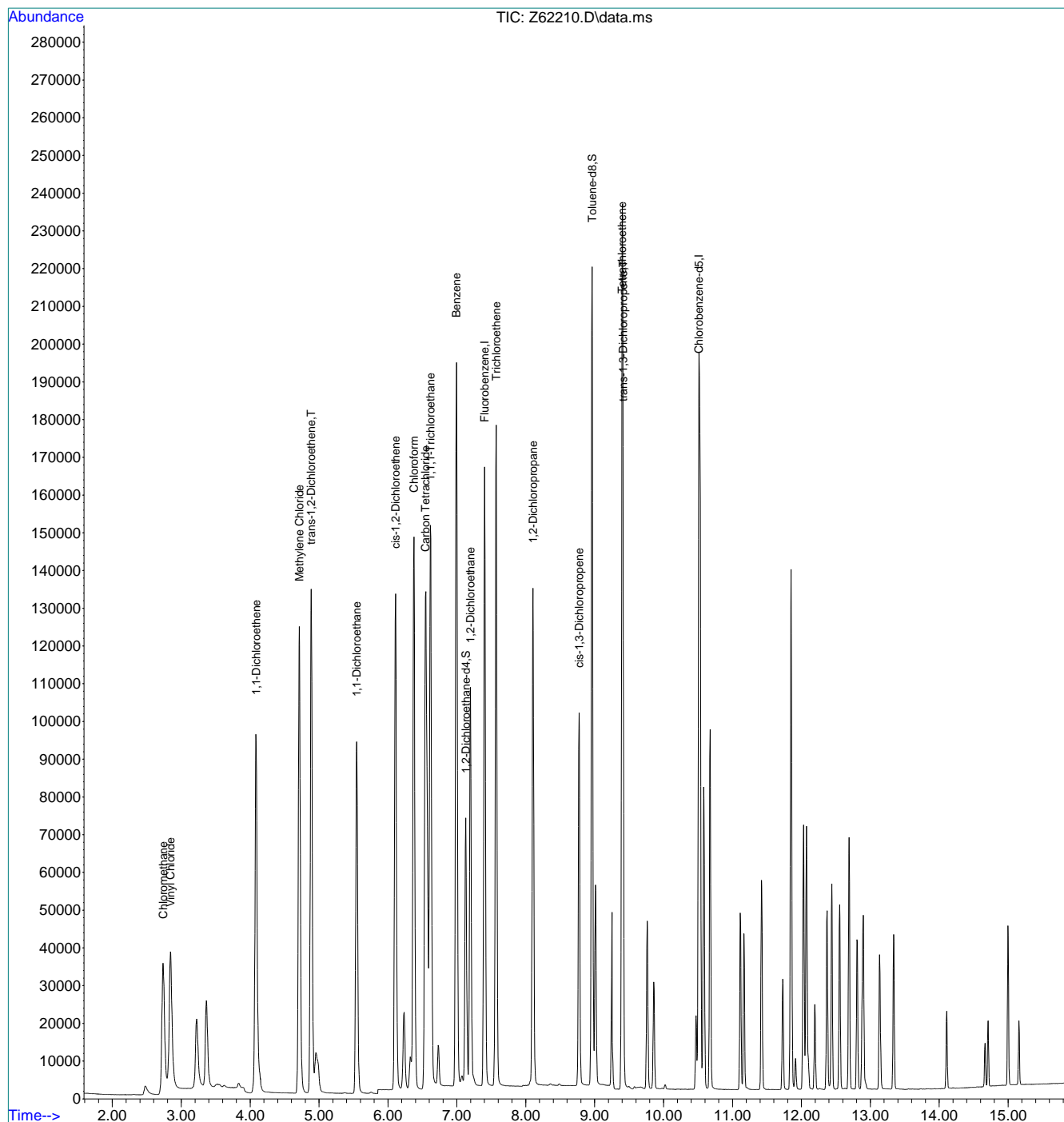
Internal Standards							
1) Fluorobenzene	7.401	96	1874569	5.00	ppb	0.00	
18) Chlorobenzene-d5	10.511	117	1501119	5.00	ppb	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.130	65	580143	4.14	ppb	0.00	
Spiked Amount	5.000	Range	79 - 125	Recovery	=	82.80%	
19) Toluene-d8	8.961	98	1856134	5.12	ppb	0.00	
Spiked Amount	5.000	Range	70 - 130	Recovery	=	102.40%	
Target Compounds							
2) Vinyl Chloride	2.843	62	746636	3.65	ppb	100	Qvalue
3) Chloromethane	2.737	50	689642	3.18	ppb	100	
4) 1,1-Dichloroethene	4.087	96	578860	4.78	ppb	#	84
5) Methylene Chloride	4.713	84	844960	4.28	ppb	#	87
6) trans-1,2-Dichloroethene	4.887	96	721782	4.77	ppb		90
7) 1,1-Dichloroethane	5.546	63	1240697	4.27	ppb	#	99
8) cis-1,2-Dichloroethene	6.110	96	799673	4.96	ppb		91
9) Chloroform	6.377	83	1469750	4.59	ppb		100
10) Carbon Tetrachloride	6.543	117	991099	5.00	ppb		98
11) 1,1,1-Trichloroethane	6.614	97	1287900	4.80	ppb		99
12) Benzene	6.994	78	2731897	4.86	ppb		94
14) 1,2-Dichloroethane	7.198	62	1039442	4.49	ppb		100
15) Trichloroethene	7.571	95	828558	4.70	ppb	#	84
16) 1,2-Dichloropropane	8.105	63	697663	4.66	ppb		93
17) cis-1,3-Dichloropropene	8.773	75	770426	4.98	ppb		99
20) trans-1,3-Dichloropropene	9.412	75	644715	4.96	ppb		99
21) Tetrachloroethene	9.399	166	826179	4.63	ppb		100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\091120\
Data File : Z62210.D
Acq On : 11 Sep 2020 7:13 pm
Operator : SHANICAO
Sample : IC2414-4
Misc : MS47171,VZ2414,,,,,
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 11 20:45:28 2020
Quant Method : C:\msdchem\1\methods\SIMCL091120.M
Quant Title : WATER-EPA 8260B
QLast Update : Tue Sep 08 14:39:51 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\091120\
 Data File : Z62211.D
 Acq On : 11 Sep 2020 7:32 pm
 Operator : SHANICAO
 Sample : ICC2414-5
 Misc : MS47171,VZ2414,,,,,
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 11 20:45:30 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Tue Sep 08 14:39:51 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	

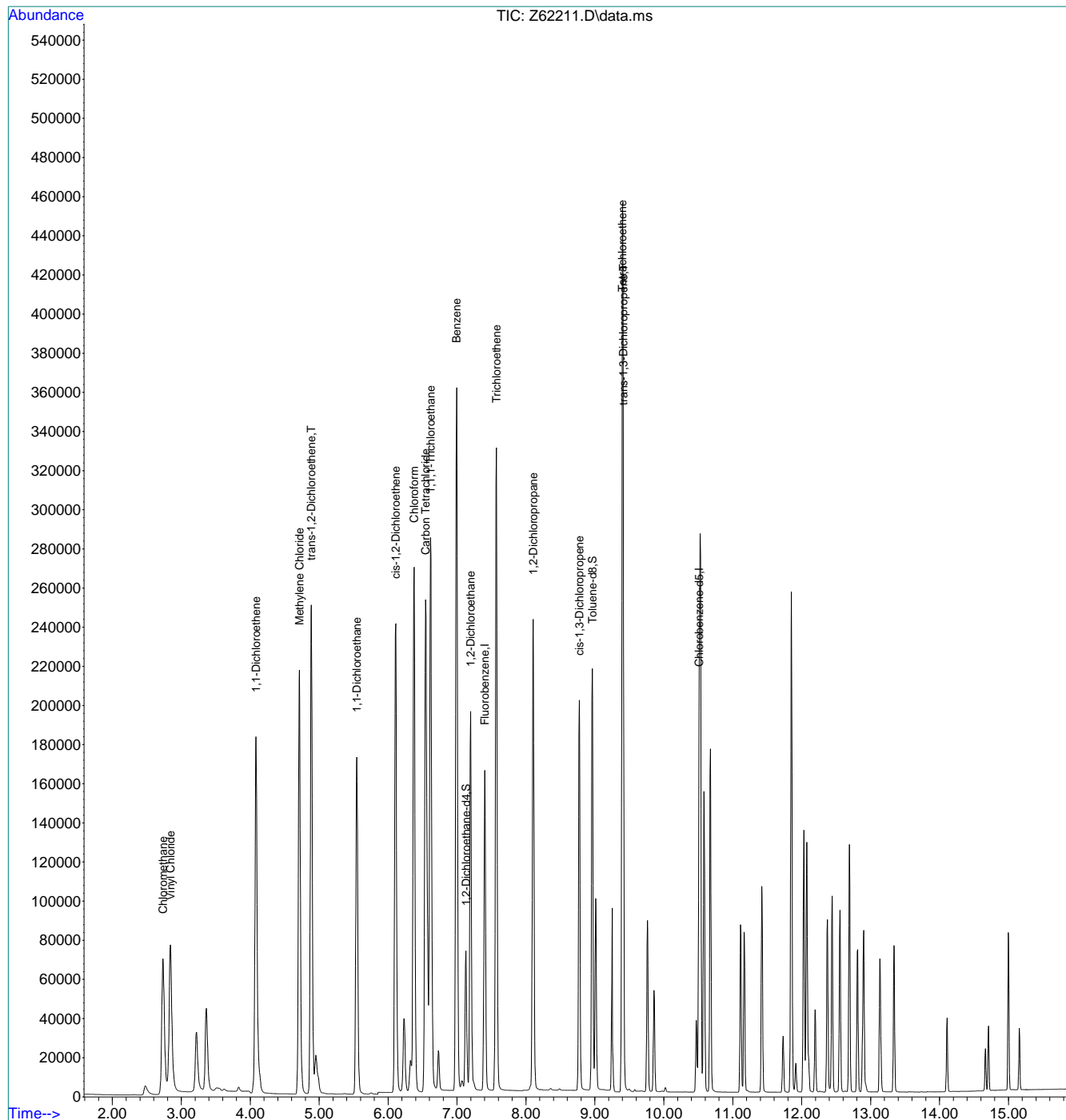
Internal Standards							
1) Fluorobenzene	7.401	96	1875869	5.00	ppb	0.00	
18) Chlorobenzene-d5	10.511	117	1507669	5.00	ppb	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.130	65	588321	4.19	ppb	0.00	
Spiked Amount	5.000	Range	79 - 125	Recovery	=	83.80%	
19) Toluene-d8	8.961	98	1858099	5.10	ppb	0.00	
Spiked Amount	5.000	Range	70 - 130	Recovery	=	102.00%	
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.843	62	1492558	7.29	ppb		99
3) Chloromethane	2.733	50	1346933	6.21	ppb		100
4) 1,1-Dichloroethene	4.083	96	1096324	9.05	ppb	#	86
5) Methylene Chloride	4.713	84	1470542	7.68	ppb	#	86
6) trans-1,2-Dichloroethene	4.886	96	1349910	8.92	ppb		89
7) 1,1-Dichloroethane	5.546	63	2297659	7.91	ppb	#	99
8) cis-1,2-Dichloroethene	6.110	96	1467363	9.09	ppb		90
9) Chloroform	6.377	83	2692203	8.40	ppb		99
10) Carbon Tetrachloride	6.543	117	1927309	9.72	ppb		98
11) 1,1,1-Trichloroethane	6.614	97	2452792	9.14	ppb		99
12) Benzene	6.994	78	5069961	9.02	ppb		94
14) 1,2-Dichloroethane	7.198	62	1897782	8.19	ppb		100
15) Trichloroethene	7.571	95	1558656	8.84	ppb	#	82
16) 1,2-Dichloropropane	8.105	63	1281972	8.55	ppb		93
17) cis-1,3-Dichloropropene	8.773	75	1534300	9.33	ppb		98
20) trans-1,3-Dichloropropene	9.411	75	1291984	9.12	ppb		98
21) Tetrachloroethene	9.399	166	1556787	8.70	ppb		99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\091120\
 Data File : Z62211.D
 Acq On : 11 Sep 2020 7:32 pm
 Operator : SHANICAO
 Sample : ICC2414-5
 Misc : MS47171,VZ2414,,,,,
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 11 20:45:30 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Tue Sep 08 14:39:51 2020
 Response via : Initial Calibration



7.6.27
7



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\091120\
 Data File : Z62212.D
 Acq On : 11 Sep 2020 7:51 pm
 Operator : SHANICAO
 Sample : IC2414-6
 Misc : MS47171,VZ2414,,,,,
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 13 13:35:41 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Tue Sep 08 14:39:51 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	

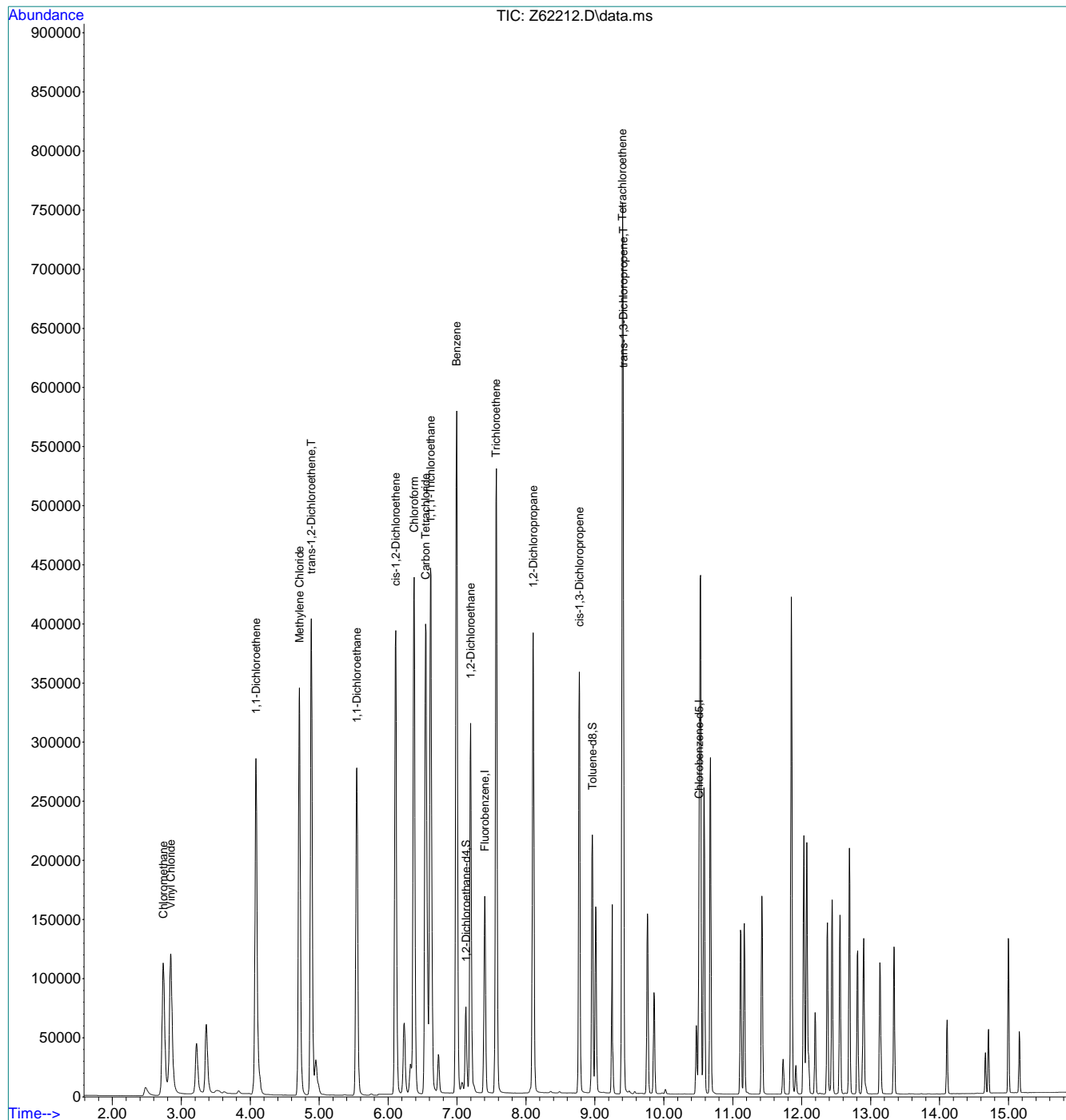
Internal Standards							
1) Fluorobenzene	7.401	96	1928565	5.00	ppb	0.00	
18) Chlorobenzene-d5	10.511	117	1554348	5.00	ppb	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.130	65	598324	4.15	ppb	0.00	
Spiked Amount	5.000	Range 79 - 125	Recovery	=	83.00%		
19) Toluene-d8	8.961	98	1902886	5.07	ppb	0.00	
Spiked Amount	5.000	Range 70 - 130	Recovery	=	101.40%		
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.846	62	2372157	11.27	ppb		99
3) Chloromethane	2.737	50	2193747m	9.84	ppb		
4) 1,1-Dichloroethene	4.083	96	1744774	14.01	ppb	#	85
5) Methylene Chloride	4.713	84	2365093	12.57	ppb	#	86
6) trans-1,2-Dichloroethene	4.886	96	2193890	14.11	ppb		89
7) 1,1-Dichloroethane	5.546	63	3742058	12.53	ppb	#	99
8) cis-1,2-Dichloroethene	6.110	96	2407966	14.50	ppb		90
9) Chloroform	6.377	83	4396659	13.34	ppb		99
10) Carbon Tetrachloride	6.543	117	3121791	15.31	ppb		98
11) 1,1,1-Trichloroethane	6.614	97	3949841	14.31	ppb		100
12) Benzene	6.994	78	8243521	14.26	ppb		94
14) 1,2-Dichloroethane	7.198	62	3118382	13.08	ppb		100
15) Trichloroethene	7.564	95	2545311	14.04	ppb		96
16) 1,2-Dichloropropane	8.105	63	2098124	13.62	ppb		94
17) cis-1,3-Dichloropropene	8.773	75	2732029	15.02	ppb		98
20) trans-1,3-Dichloropropene	9.411	75	2318445	14.41	ppb		99
21) Tetrachloroethene	9.399	166	2516093	13.63	ppb		100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\091120\
 Data File : Z62212.D
 Acq On : 11 Sep 2020 7:51 pm
 Operator : SHANICAO
 Sample : IC2414-6
 Misc : MS47171,VZ2414,,,,,
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 13 13:35:41 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Tue Sep 08 14:39:51 2020
 Response via : Initial Calibration



7.6.28
7

Manual Integration Approval Summary

Sample Number: VZ2414-IC2414 **Method:** SW846 8260B BY SIM
Lab FileID: Z62212.D **Analyst approved:** 09/13/20 13:47 Stuti Patel
Injection Time: 09/11/20 19:51 **Supervisor approved:** 09/14/20 11:09 Juan Garcia

Parameter	CAS	Sig#	R.T. (min.)	Reason
Methyl Chloride	74-87-3		2.74	Overlapping peak

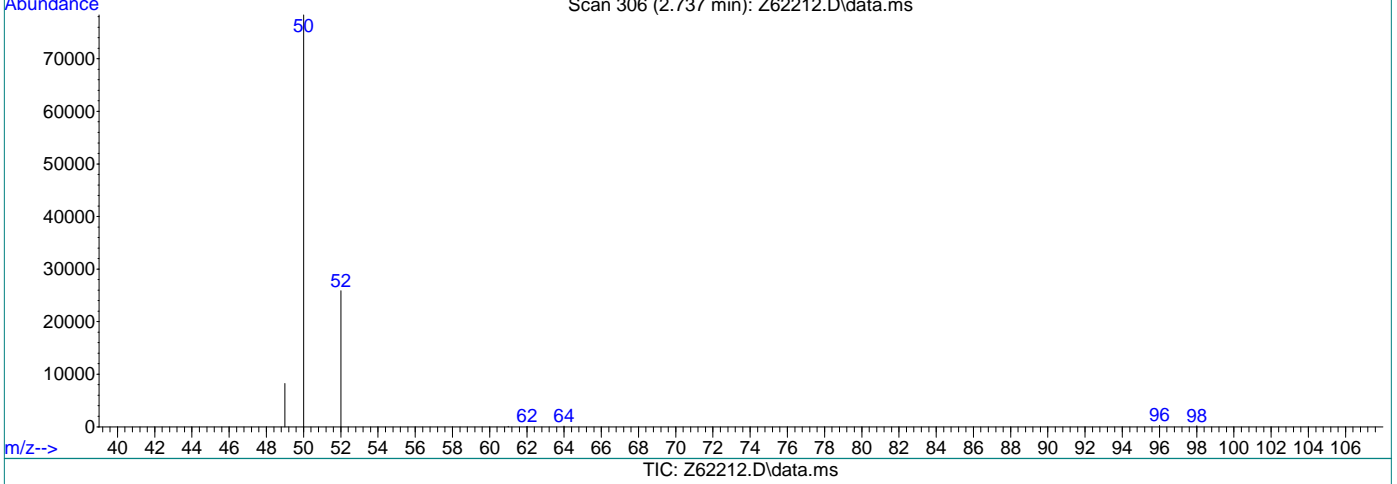
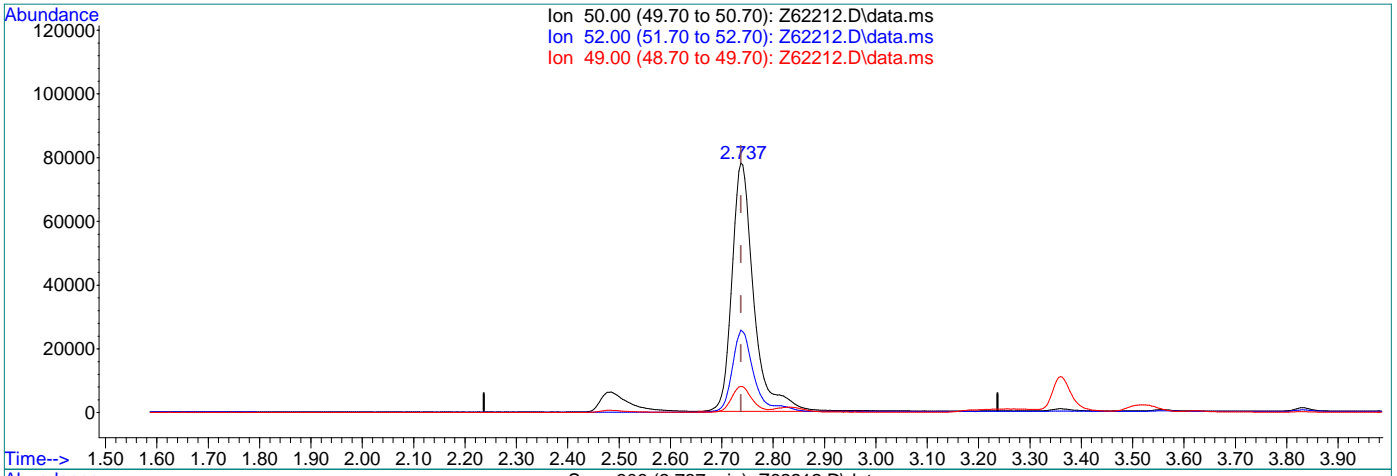
7.6.28.1

7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\091120\
 Data File : Z62212.D
 Acq On : 11 Sep 2020 7:51 pm
 Operator : SHANICAO
 Sample : IC2414-6
 Misc : MS47171,VZ2414,,,,,
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 11 20:45:32 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Tue Sep 08 14:39:51 2020
 Response via : Initial Calibration



(3) Chloromethane

2.737min (-0.000) 10.40ppb

response 2319513

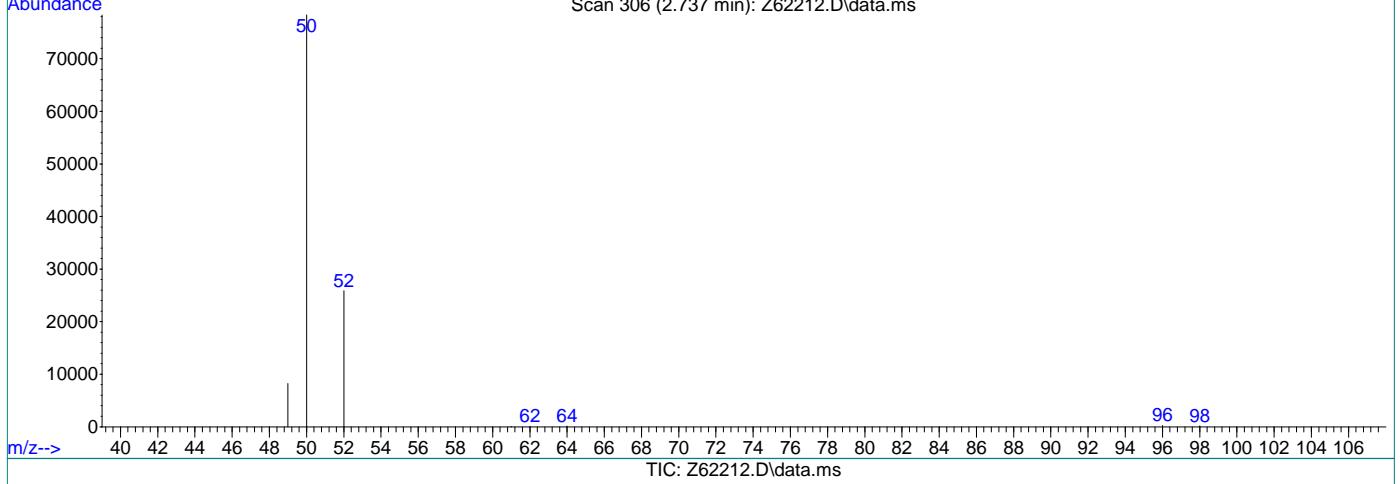
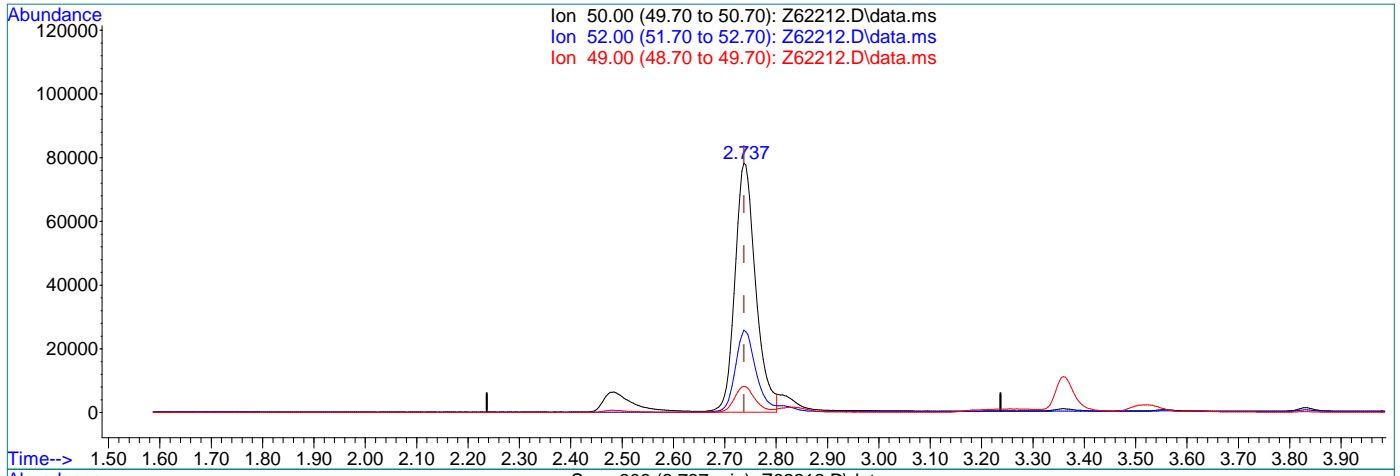
Ion	Exp%	Act%
50.00	100	100
52.00	32.60	33.01
49.00	10.80	10.46
0.00	0.00	0.00

7.6.28.2
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\091120\
 Data File : Z62212.D
 Acq On : 11 Sep 2020 7:51 pm
 Operator : SHANICAO
 Sample : IC2414-6
 Misc : MS47171,VZ2414,,,,,
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 11 20:45:32 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Tue Sep 08 14:39:51 2020
 Response via : Initial Calibration



(3) Chloromethane
 2.737min (-0.000) 9.84ppb m
 response 2193747

Ion	Exp%	Act%
50.00	100	100
52.00	32.60	33.03
49.00	10.80	10.53
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\091120\
 Data File : Z62213.D
 Acq On : 11 Sep 2020 8:13 pm
 Operator : SHANICAO
 Sample : IC2414-7
 Misc : MS47171,VZ2414,,,,,
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 13 13:36:00 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Tue Sep 08 14:39:51 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	

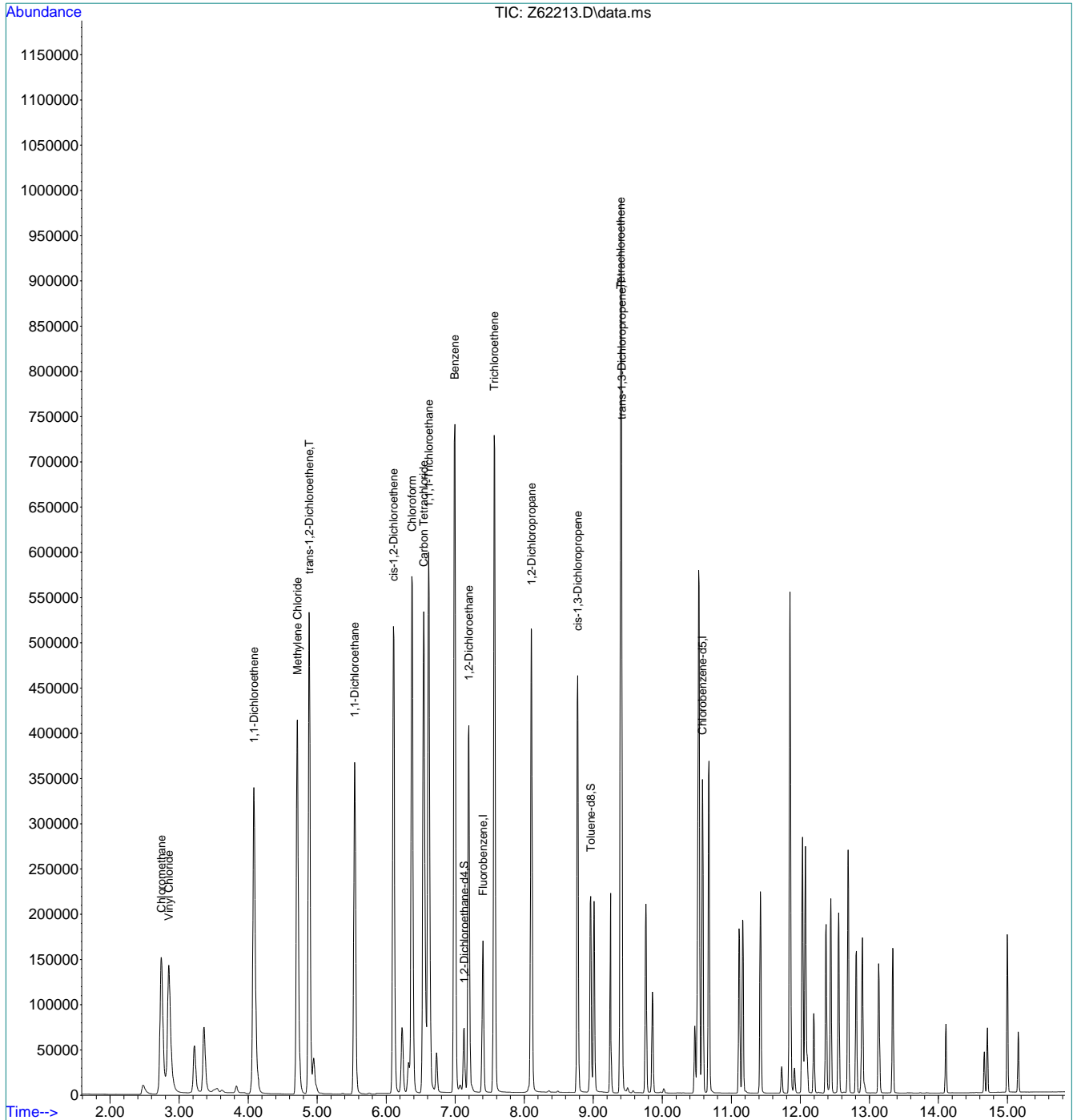
Internal Standards							
1) Fluorobenzene	7.401	96	1917621	5.00	ppb	0.00	
18) Chlorobenzene-d5	10.583	117	1788256	5.00	ppb	# 0.07	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.130	65	594422	4.14	ppb	0.00	
Spiked Amount	5.000	Range 79 - 125	Recovery	=	82.80%		
19) Toluene-d8	8.961	98	1887402	4.37	ppb	0.00	
Spiked Amount	5.000	Range 70 - 130	Recovery	=	87.40%		
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.850	62	3290825	15.73	ppb		100
3) Chloromethane	2.741	50	3221181m	14.53	ppb		
4) 1,1-Dichloroethene	4.083	96	2349554	18.97	ppb	#	85
5) Methylene Chloride	4.713	84	3082122	17.24	ppb	#	85
6) trans-1,2-Dichloroethene	4.886	96	2926695	18.93	ppb	#	87
7) 1,1-Dichloroethane	5.542	63	4937816	16.63	ppb	#	99
8) cis-1,2-Dichloroethene	6.104	96	3175295	19.23	ppb		94
9) Chloroform	6.371	83	5799532	17.70	ppb		99
10) Carbon Tetrachloride	6.543	117	4140429	20.43	ppb		98
11) 1,1,1-Trichloroethane	6.614	97	5188910	18.91	ppb		100
12) Benzene	6.994	78	10899346	18.97	ppb		93
14) 1,2-Dichloroethane	7.198	62	4096394	17.29	ppb		100
15) Trichloroethene	7.564	95	3527962	19.57	ppb		93
16) 1,2-Dichloropropane	8.105	63	2768908	18.07	ppb		93
17) cis-1,3-Dichloropropene	8.773	75	3527102	18.66	ppb		98
20) trans-1,3-Dichloropropene	9.411	75	2974601m	15.72	ppb		
21) Tetrachloroethene	9.399	166	3343761	15.75	ppb		99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\091120\
 Data File : Z62213.D
 Acq On : 11 Sep 2020 8:13 pm
 Operator : SHANICAO
 Sample : IC2414-7
 Misc : MS47171,VZ2414,,,,,
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 13 13:36:00 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Tue Sep 08 14:39:51 2020
 Response via : Initial Calibration



7.6.29
7

Manual Integration Approval Summary

Sample Number: VZ2414-IC2414 **Method:** SW846 8260B BY SIM
Lab FileID: Z62213.D **Analyst approved:** 09/13/20 13:47 Stuti Patel
Injection Time: 09/11/20 20:13 **Supervisor approved:** 09/14/20 11:09 Juan Garcia

Parameter	CAS	Sig#	R.T. (min.)	Reason
Methyl Chloride	74-87-3		2.74	Overlapping peak
trans-1,3-Dichloropropene	10061-02-6		9.41	Missed peak

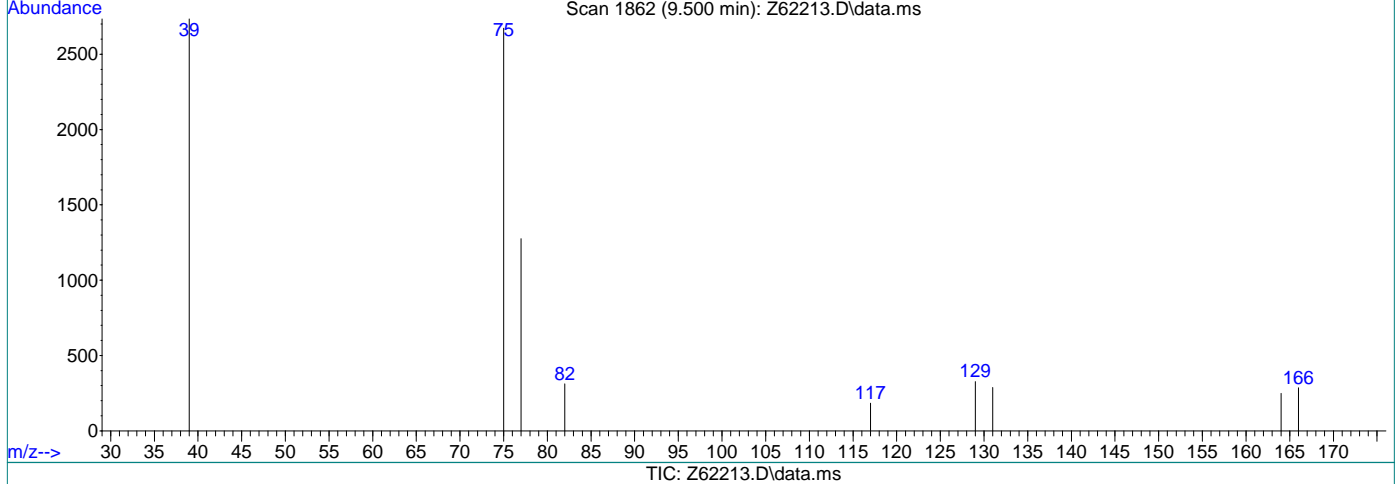
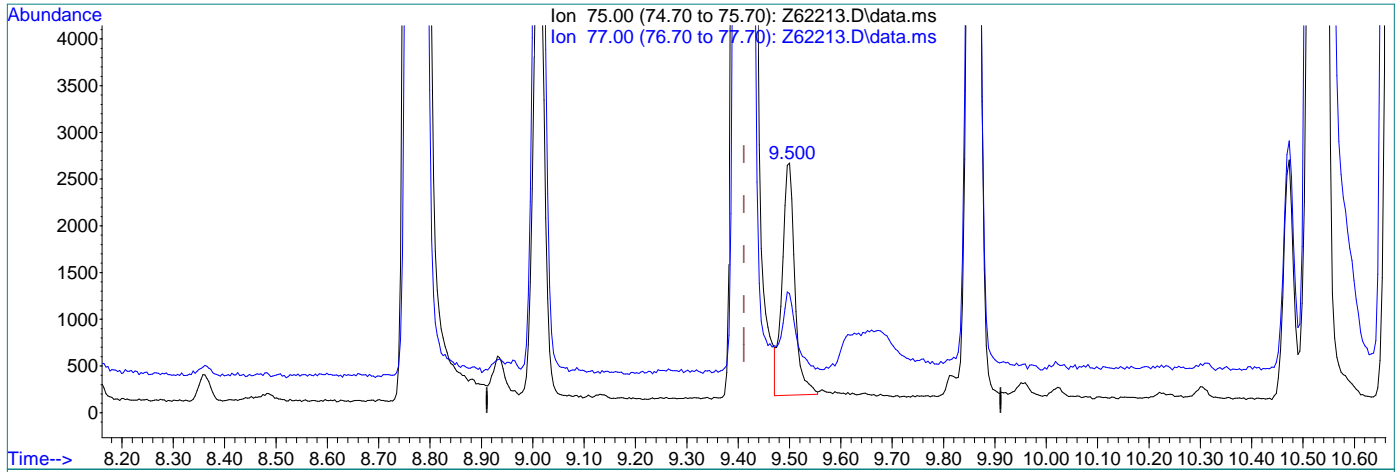
7.6.29.1

7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\091120\
 Data File : Z62213.D
 Acq On : 11 Sep 2020 8:13 pm
 Operator : SHANICAO
 Sample : IC2414-7
 Misc : MS47171,VZ2414,,,,,
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 11 20:45:34 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Tue Sep 08 14:39:51 2020
 Response via : Initial Calibration



(20) trans-1,3-Dichloropropene (T)

9.500min (+0.089) 0.30ppb

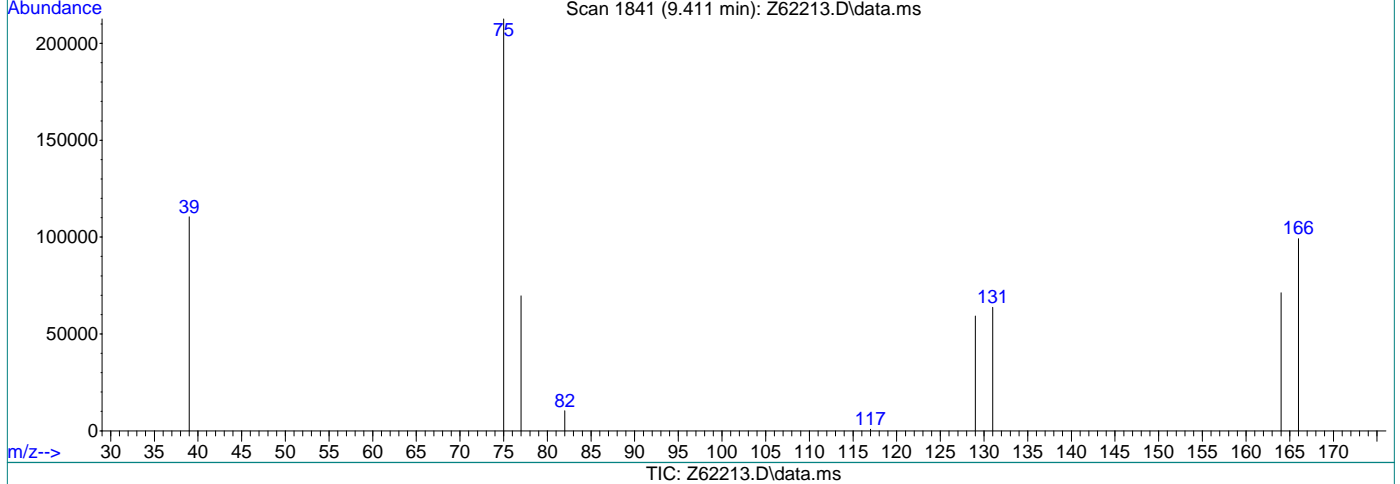
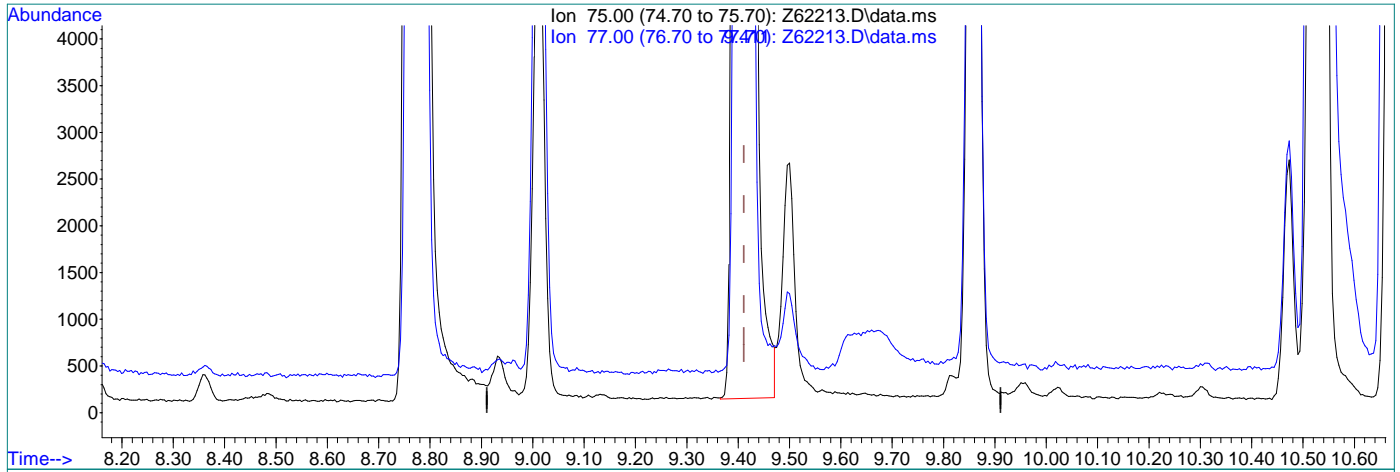
response 42280

Ion	Exp%	Act%
75.00	100	100
77.00	31.50	32.52
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\091120\
 Data File : Z62213.D
 Acq On : 11 Sep 2020 8:13 pm
 Operator : SHANICAO
 Sample : IC2414-7
 Misc : MS47171,VZ2414,,,,,
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 11 20:45:34 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Tue Sep 08 14:39:51 2020
 Response via : Initial Calibration



(20) trans-1,3-Dichloropropene (T)

9.411min (+0.000) 15.72ppb m

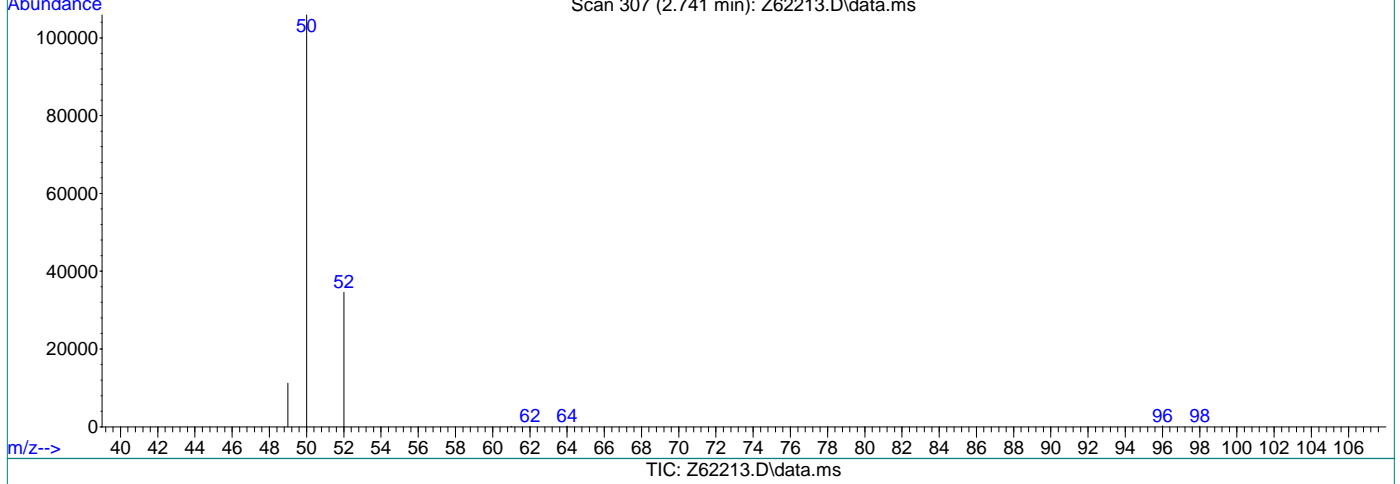
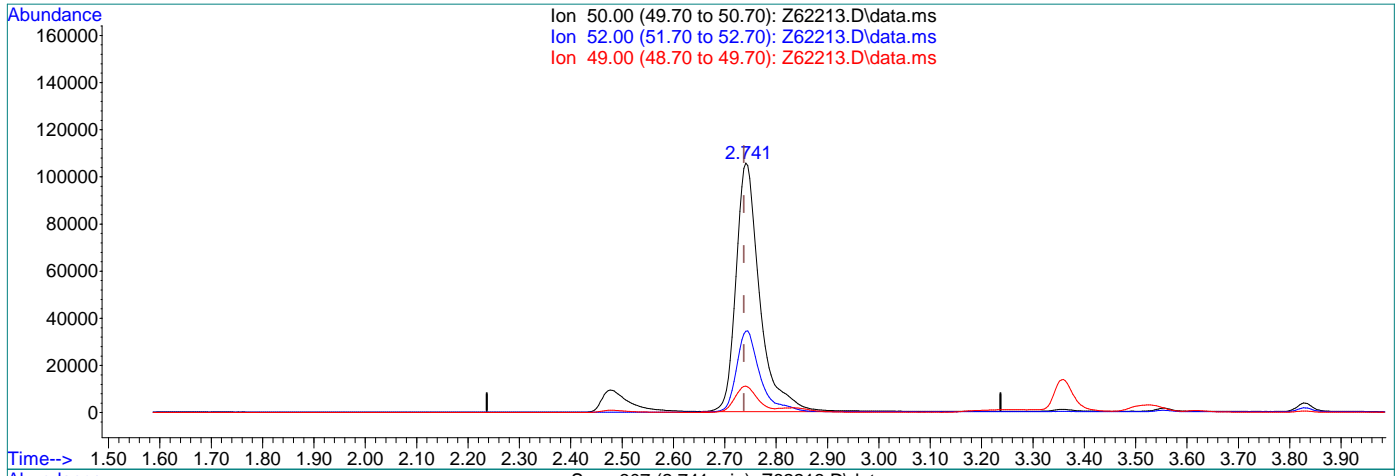
response 2974601

Ion	Exp%	Act%
75.00	100	100
77.00	31.50	32.77
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\091120\
 Data File : Z62213.D
 Acq On : 11 Sep 2020 8:13 pm
 Operator : SHANICAO
 Sample : IC2414-7
 Misc : MS47171,VZ2414,,,,,
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 11 20:49:58 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Tue Sep 08 14:39:51 2020
 Response via : Initial Calibration



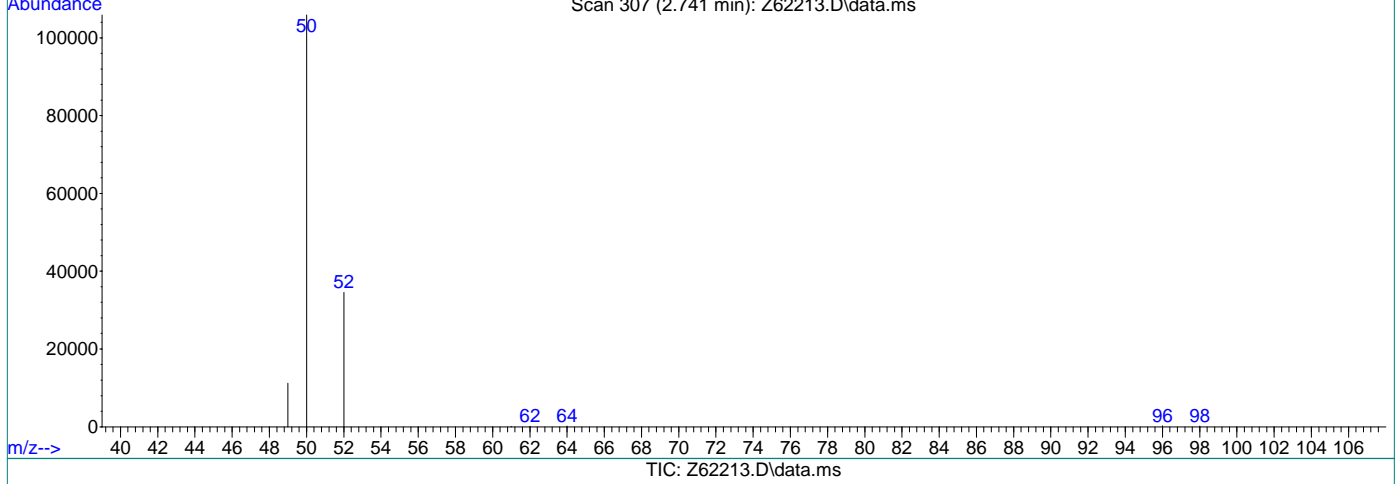
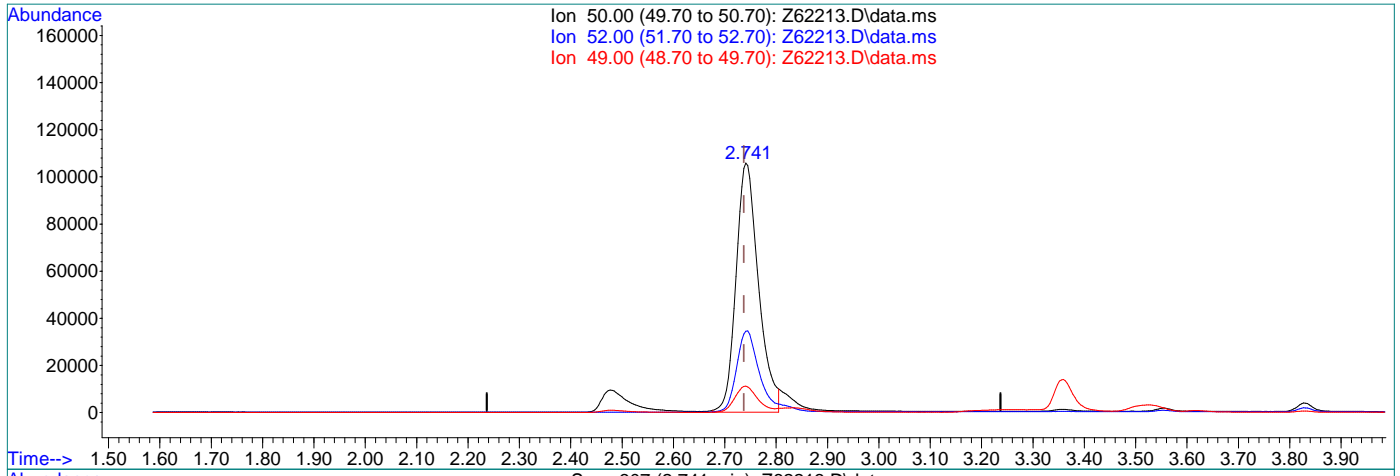
(3) Chloromethane
 2.741min (+0.004) 15.35ppb
 response 3403148

Ion	Exp%	Act%
50.00	100	100
52.00	32.60	32.61
49.00	10.80	10.56
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\091120\
 Data File : Z62213.D
 Acq On : 11 Sep 2020 8:13 pm
 Operator : SHANICAO
 Sample : IC2414-7
 Misc : MS47171,VZ2414,,,,,
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 11 20:49:58 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Tue Sep 08 14:39:51 2020
 Response via : Initial Calibration



(3) Chloromethane

2.741min (+0.004) 14.53ppb m

response 3221181

Ion	Exp%	Act%
50.00	100	100
52.00	32.60	32.60
49.00	10.80	10.61
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\091120\
 Data File : Z62215.D
 Acq On : 11 Sep 2020 8:51 pm
 Operator : SHANICAO
 Sample : ICV2414-5
 Misc : MS47171,VZ2414,,,,,
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 13 13:41:02 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Sun Sep 13 13:38:26 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	

Internal Standards							
1) Fluorobenzene	7.402	96	1913422	5.00	ppb	0.00	
18) Chlorobenzene-d5	10.512	117	1533777	5.00	ppb	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.131	65	601973	5.09	ppb	0.00	
Spiked Amount	5.000	Range	79 - 125	Recovery	=	101.80%	
19) Toluene-d8	8.962	98	1888455	5.07	ppb	0.00	
Spiked Amount	5.000	Range	70 - 130	Recovery	=	101.40%	
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.843	62	1616654	10.13	ppb		99
3) Chloromethane	2.733	50	1398748	9.96	ppb		100
4) 1,1-Dichloroethene	4.083	96	1273981	10.99	ppb	#	85
5) Methylene Chloride	4.713	84	1568776	9.19	ppb	#	87
6) trans-1,2-Dichloroethene	4.886	96	1451630	10.28	ppb		91
7) 1,1-Dichloroethane	5.546	63	2482127	10.36	ppb	#	99
8) cis-1,2-Dichloroethene	6.110	96	1578267	10.06	ppb		91
9) Chloroform	6.377	83	2861428	9.95	ppb		99
10) Carbon Tetrachloride	6.543	117	2066805	10.59	ppb		98
11) 1,1,1-Trichloroethane	6.614	97	2614500	10.38	ppb		100
12) Benzene	6.995	78	5609186	10.53	ppb		94
14) 1,2-Dichloroethane	7.199	62	2071875	10.32	ppb		100
15) Trichloroethene	7.565	95	1708163	10.45	ppb		95
16) 1,2-Dichloropropane	8.106	63	1410167	10.40	ppb		94
17) cis-1,3-Dichloropropene	8.774	75	1756808	10.89	ppb		98
20) trans-1,3-Dichloropropene	9.412	75	1511145	11.39	ppb		98
21) Tetrachloroethene	9.400	166	1702489	10.36	ppb		99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.6.30
7



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\091420\
 Data File : Z62322.D
 Acq On : 14 Sep 2020 12:22 pm
 Operator : JuanG
 Sample : CC2414-5
 Misc : MS47199,VZ2418,,,,,
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 15 18:50:18 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Sun Sep 13 13:38:26 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	

Internal Standards							
1) Fluorobenzene	7.402	96	1993481	5.00	ppb	0.00	
18) Chlorobenzene-d5	10.512	117	1656572	5.00	ppb	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.124	65	669922	5.43	ppb	0.00	
Spiked Amount	5.000	Range	79 - 125	Recovery	=	108.60%	
19) Toluene-d8	8.959	98	1947818	4.84	ppb	0.00	
Spiked Amount	5.000	Range	70 - 130	Recovery	=	96.80%	
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.839	62	2105885	12.65	ppb		100
3) Chloromethane	2.733	50	1974560	12.99	ppb		100
4) 1,1-Dichloroethene	4.083	96	1273632	10.54	ppb	#	87
5) Methylene Chloride	4.709	84	1825191	10.42	ppb		90
6) trans-1,2-Dichloroethene	4.883	96	1616036	10.99	ppb		93
7) 1,1-Dichloroethane	5.543	63	2809593	11.26	ppb	#	100
8) cis-1,2-Dichloroethene	6.104	96	1689110	10.33	ppb		94
9) Chloroform	6.371	83	3228525	10.77	ppb		99
10) Carbon Tetrachloride	6.543	117	2107524	10.36	ppb		98
11) 1,1,1-Trichloroethane	6.614	97	2824560	10.76	ppb		100
12) Benzene	6.988	78	6008784	10.83	ppb		97
14) 1,2-Dichloroethane	7.192	62	2242244	10.72	ppb		100
15) Trichloroethene	7.565	95	1752087	10.29	ppb		88
16) 1,2-Dichloropropane	8.102	63	1460518	10.34	ppb		97
17) cis-1,3-Dichloropropene	8.770	75	1799497	10.73	ppb		99
20) trans-1,3-Dichloropropene	9.409	75	1559226	10.91	ppb		99
21) Tetrachloroethene	9.396	166	1769776	9.92	ppb		99

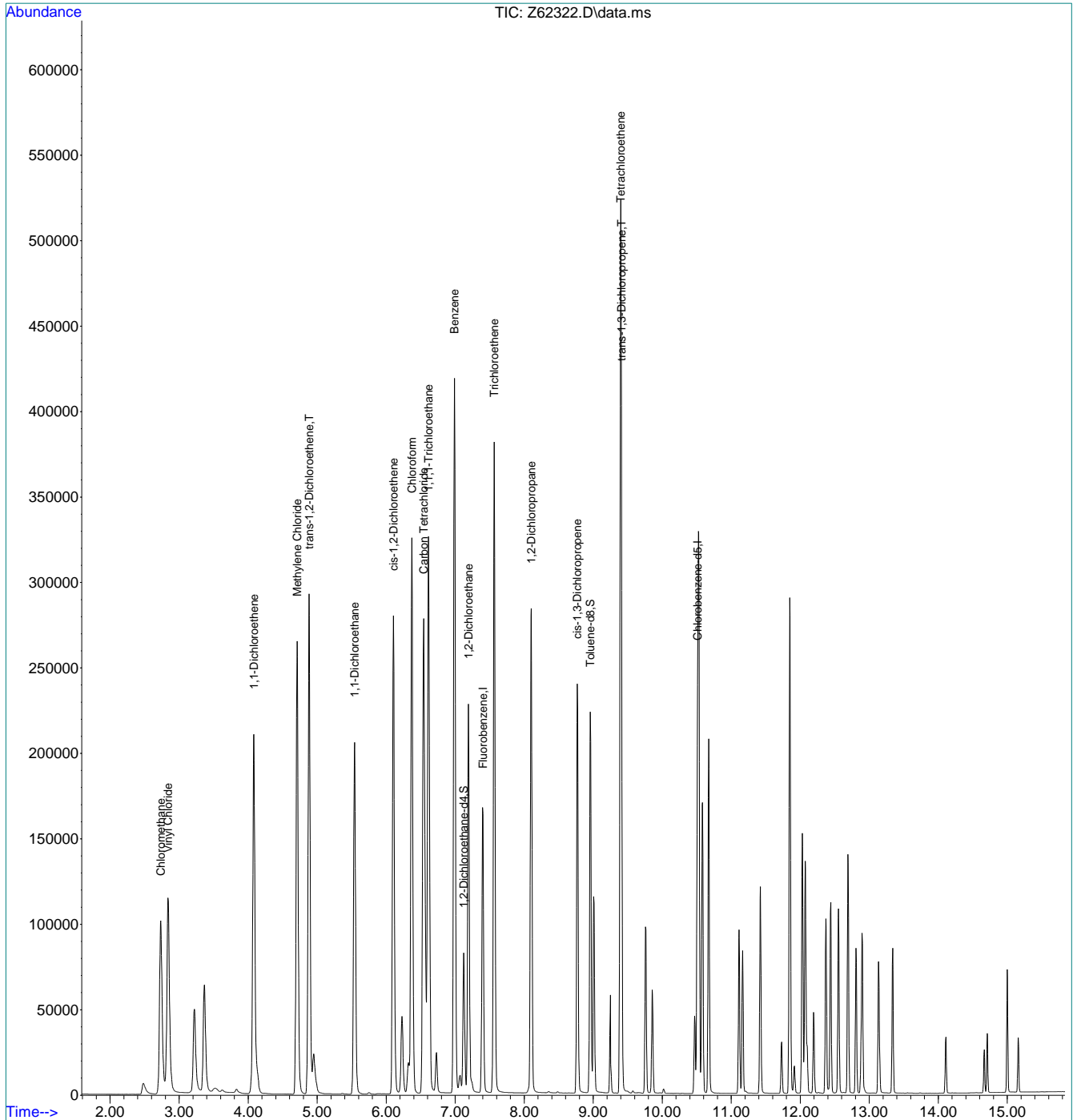
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.6.31
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\091420\
 Data File : Z62322.D
 Acq On : 14 Sep 2020 12:22 pm
 Operator : JuanG
 Sample : CC2414-5
 Misc : MS47199,VZ2418,,,,,
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 15 18:50:18 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Sun Sep 13 13:38:26 2020
 Response via : Initial Calibration



7.6.31
7



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\091420\
 Data File : Z62350.D
 Acq On : 14 Sep 2020 10:45 pm
 Operator : JuanG
 Sample : ECC2414-5
 Misc : MS47199,VZ2418,,,,,
 ALS Vial : 28 Sample Multiplier: 1

Quant Time: Sep 15 18:51:14 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Sun Sep 13 13:38:26 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	

Internal Standards							
1) Fluorobenzene	7.401	96	1446126	5.00	ppb	0.00	
18) Chlorobenzene-d5	10.511	117	1266288	5.00	ppb	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.130	65	507971	5.68	ppb	0.00	
Spiked Amount	5.000	Range 79 - 125	Recovery	=	113.60%		
19) Toluene-d8	8.961	98	1382085	4.49	ppb	0.00	
Spiked Amount	5.000	Range 70 - 130	Recovery	=	89.80%		
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.835	62	1591291	13.17	ppb		100
3) Chloromethane	2.726	50	1313920	12.06	ppb		100
4) 1,1-Dichloroethene	4.083	96	962000	10.98	ppb		89
5) Methylene Chloride	4.713	84	1395244	11.07	ppb		90
6) trans-1,2-Dichloroethene	4.886	96	1169228	10.96	ppb		92
7) 1,1-Dichloroethane	5.546	63	2112643	11.67	ppb	#	100
8) cis-1,2-Dichloroethene	6.110	96	1227954	10.35	ppb		93
9) Chloroform	6.377	83	2469996	11.36	ppb		100
10) Carbon Tetrachloride	6.543	117	1467048	9.94	ppb		98
11) 1,1,1-Trichloroethane	6.614	97	2071952	10.88	ppb		99
12) Benzene	6.994	78	4526705	11.25	ppb		96
14) 1,2-Dichloroethane	7.198	62	1694881	11.17	ppb		100
15) Trichloroethene	7.571	95	1381533	11.19	ppb	#	83
16) 1,2-Dichloropropane	8.105	63	1115314	10.89	ppb		97
17) cis-1,3-Dichloropropene	8.773	75	848630	7.32	ppb		98
20) trans-1,3-Dichloropropene	9.411	75	737530	6.86	ppb		99
21) Tetrachloroethene	9.399	166	1335838	9.78	ppb		99

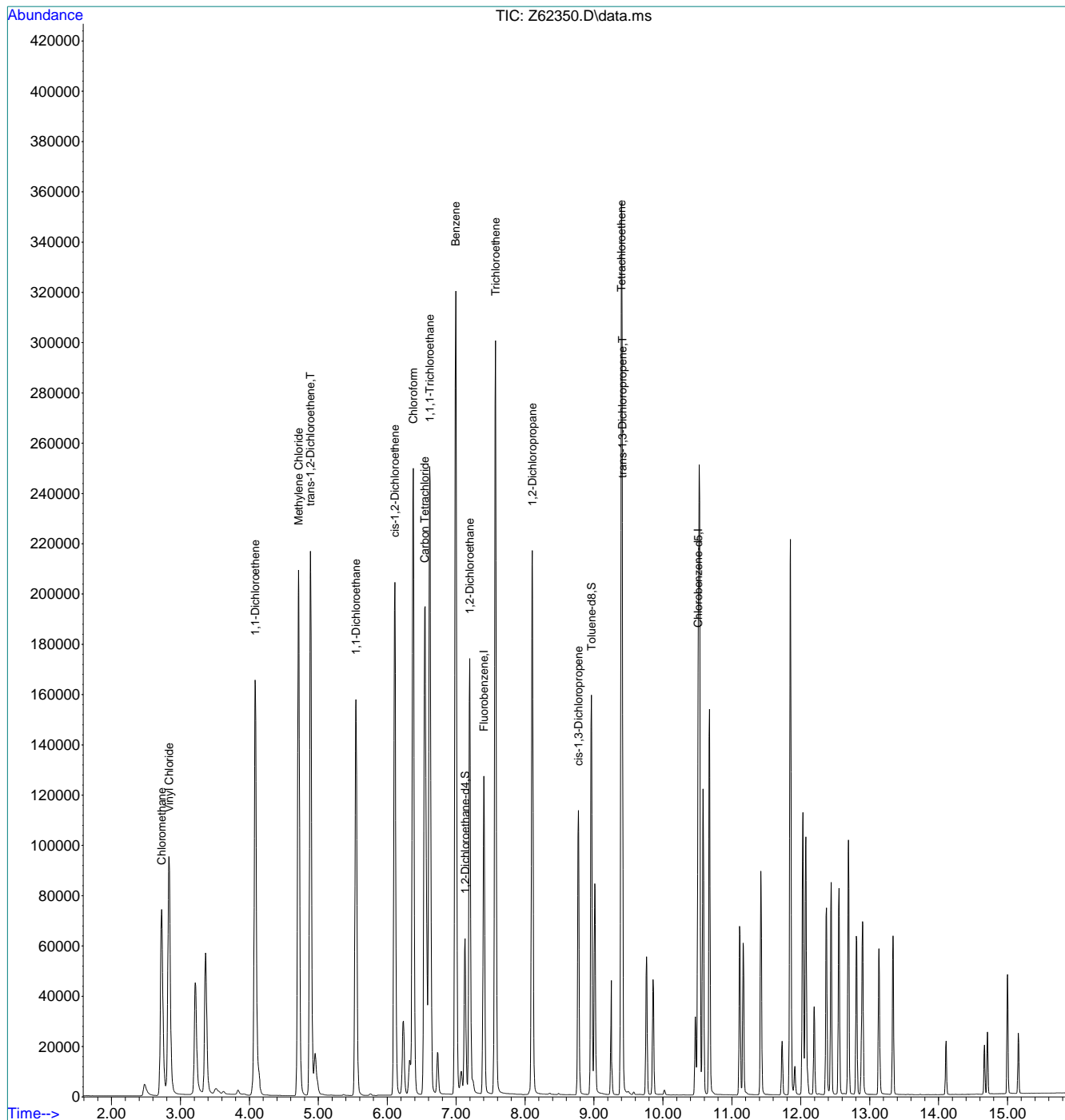
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.6.32
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\091420\
 Data File : Z62350.D
 Acq On : 14 Sep 2020 10:45 pm
 Operator : JuanG
 Sample : ECC2414-5
 Misc : MS47199,VZ2418,,,,,
 ALS Vial : 28 Sample Multiplier: 1

Quant Time: Sep 15 18:51:14 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Sun Sep 13 13:38:26 2020
 Response via : Initial Calibration



7.6.32
7



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\091520\
 Data File : Z62354.D
 Acq On : 15 Sep 2020 1:58 pm
 Operator : JuanG
 Sample : CC2414-5
 Misc : MS47199,VZ2419,,,,,
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 16 10:46:41 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Sun Sep 13 13:38:26 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	

Internal Standards							
1) Fluorobenzene	7.401	96	2207739	5.00	ppb	0.00	
18) Chlorobenzene-d5	10.511	117	1887969	5.00	ppb	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.123	65	760674	5.57	ppb	0.00	
Spiked Amount	5.000	Range	79 - 125	Recovery	=	111.40%	
19) Toluene-d8	8.958	98	2158639	4.71	ppb	0.00	
Spiked Amount	5.000	Range	70 - 130	Recovery	=	94.20%	
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.835	62	2538747	13.76	ppb		100
3) Chloromethane	2.730	50	2178313	12.95	ppb		100
4) 1,1-Dichloroethene	4.083	96	1527293	11.42	ppb	#	88
5) Methylene Chloride	4.709	84	2140045	11.14	ppb		90
6) trans-1,2-Dichloroethene	4.883	96	1880686	11.54	ppb		93
7) 1,1-Dichloroethane	5.543	63	3288723	11.90	ppb	#	100
8) cis-1,2-Dichloroethene	6.104	96	1933104	10.67	ppb		94
9) Chloroform	6.371	83	3801839	11.46	ppb		100
10) Carbon Tetrachloride	6.543	117	2502204	11.11	ppb		98
11) 1,1,1-Trichloroethane	6.614	97	3311282	11.39	ppb		99
12) Benzene	6.987	78	7019649	11.42	ppb		98
14) 1,2-Dichloroethane	7.191	62	2598866	11.22	ppb		100
15) Trichloroethene	7.564	95	2036070	10.80	ppb		91
16) 1,2-Dichloropropane	8.101	63	1702481	10.89	ppb		97
17) cis-1,3-Dichloropropene	8.773	75	2044430	10.97	ppb		98
20) trans-1,3-Dichloropropene	9.407	75	1794411	11.01	ppb		100
21) Tetrachloroethene	9.399	166	2070705	10.22	ppb		99

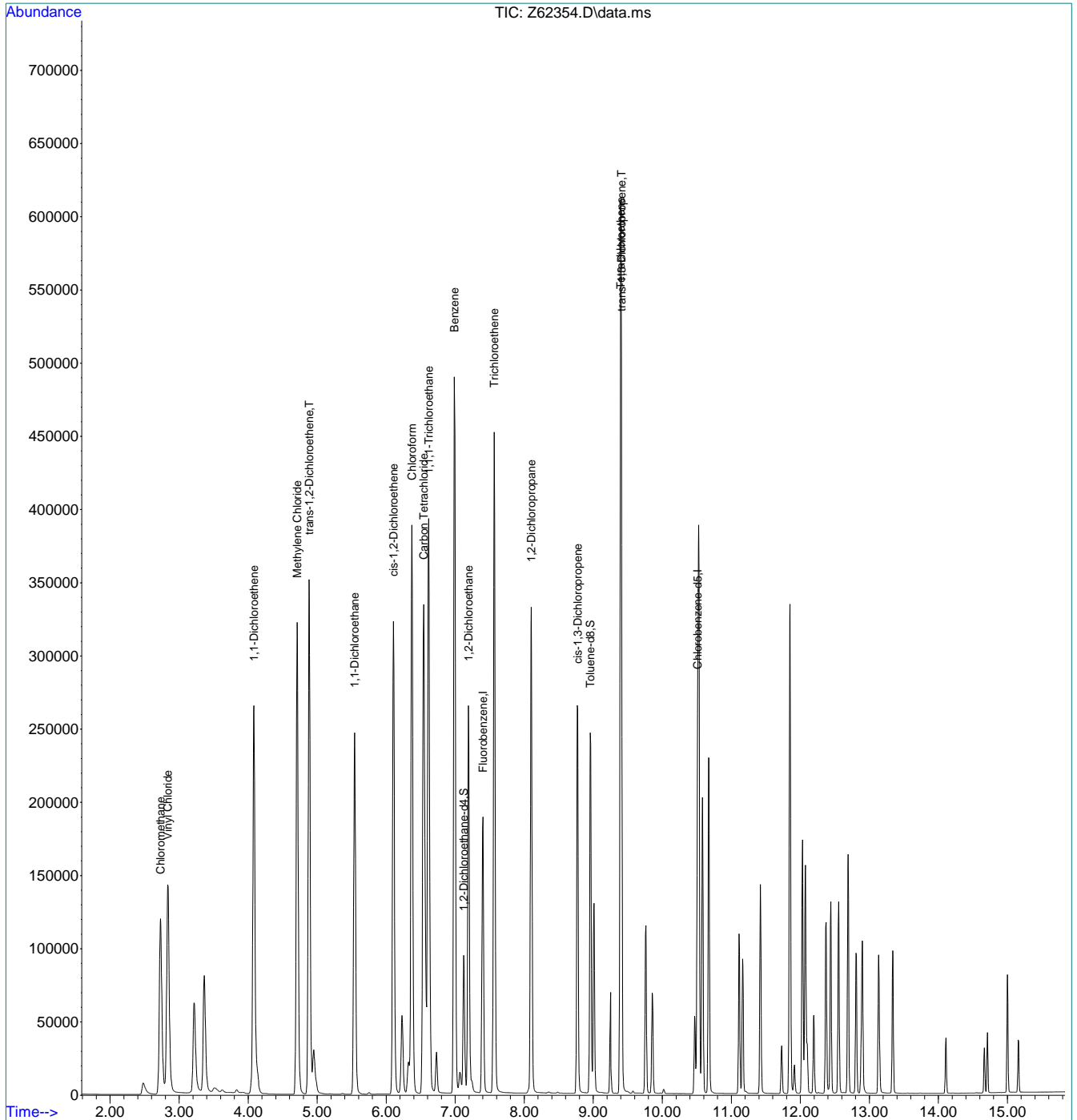
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.6.33
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\091520\
 Data File : Z62354.D
 Acq On : 15 Sep 2020 1:58 pm
 Operator : JuanG
 Sample : CC2414-5
 Misc : MS47199,VZ2419,,,,,
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 16 10:46:41 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Sun Sep 13 13:38:26 2020
 Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\091520\
 Data File : Z62384.D
 Acq On : 15 Sep 2020 11:23 pm
 Operator : JuanG
 Sample : ecc2414-5
 Misc : MS47193,VZ2419,,,,,
 ALS Vial : 29 Sample Multiplier: 1

Quant Time: Sep 16 10:47:39 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Sun Sep 13 13:38:26 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	

Internal Standards							
1) Fluorobenzene	7.401	96	1683040	5.00	ppb	0.00	
18) Chlorobenzene-d5	10.511	117	1525848	5.00	ppb	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.130	65	612442	5.88	ppb	0.00	
Spiked Amount	5.000	Range	79 - 125	Recovery	=	117.60%	
19) Toluene-d8	8.961	98	1594253	4.30	ppb	0.00	
Spiked Amount	5.000	Range	70 - 130	Recovery	=	86.00%	
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.835	62	1940447	13.80	ppb		100
3) Chloromethane	2.726	50	1605877	12.58	ppb		100
4) 1,1-Dichloroethene	4.083	96	1091067	10.70	ppb	#	87
5) Methylene Chloride	4.713	84	1610246	10.97	ppb	#	88
6) trans-1,2-Dichloroethene	4.886	96	1343033	10.81	ppb		89
7) 1,1-Dichloroethane	5.543	63	2458079	11.66	ppb	#	100
8) cis-1,2-Dichloroethene	6.104	96	1396155	10.11	ppb		95
9) Chloroform	6.371	83	2890420	11.43	ppb		100
10) Carbon Tetrachloride	6.543	117	1667181	9.71	ppb		98
11) 1,1,1-Trichloroethane	6.614	97	2366148	10.68	ppb		99
12) Benzene	6.994	78	5225981	11.16	ppb		94
14) 1,2-Dichloroethane	7.198	62	1976190	11.19	ppb		100
15) Trichloroethene	7.564	95	1620297	11.27	ppb		94
16) 1,2-Dichloropropane	8.101	63	1289987	10.82	ppb		97
17) cis-1,3-Dichloropropene	8.773	75	919293	6.85	ppb		99
20) trans-1,3-Dichloropropene	9.411	75	760585	5.90	ppb		99
21) Tetrachloroethene	9.399	166	1503813	9.06	ppb		100

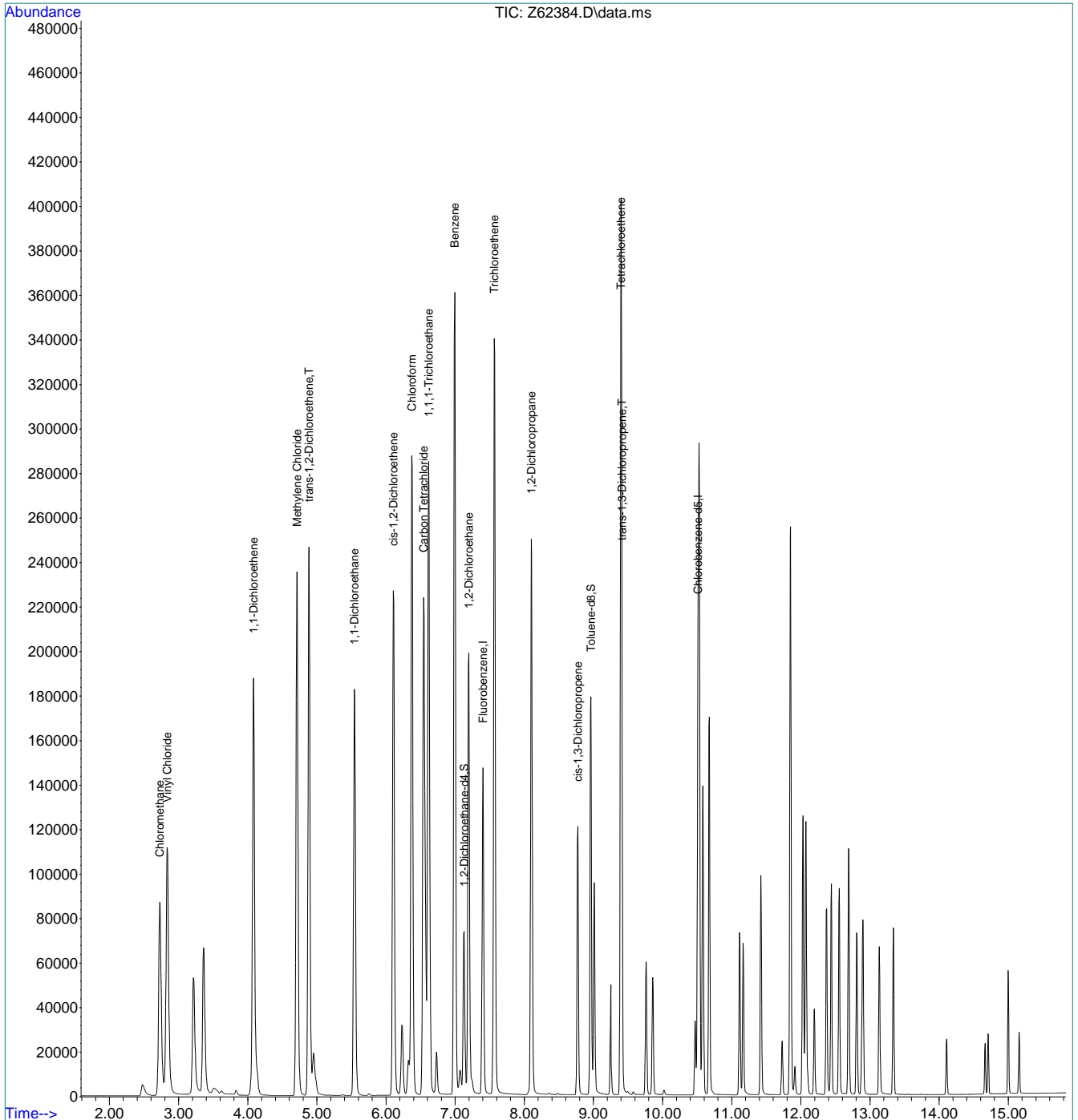
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.6.34
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\091520\
 Data File : Z62384.D
 Acq On : 15 Sep 2020 11:23 pm
 Operator : JuanG
 Sample : ecc2414-5
 Misc : MS47193,VZ2419,,,,,
 ALS Vial : 29 Sample Multiplier: 1

Quant Time: Sep 16 10:47:39 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Sun Sep 13 13:38:26 2020
 Response via : Initial Calibration



Date: 9/11/2020
 COLUMN TYPE: RTX VMS
 DETECTOR: 5975 MSD
 INSTRUMENT: MSVOA12-O
 PURGE PRESSURE: 8.4PSI
 PURGE VOLUME: 5 mL
 ANALYST: AKARI(G)stutip

METHODS*: SIMCLm
 METHOD FILE: SIMCL091120.M
 CALIB. DATE: 9/11/2020
 EM VOLTAGE: 1424v
 BFB RESPONSE: 6052279
 RUN ID: VO2356

BFB: V25942b
 ICAL/JC: V25806, VS0804
 ISTD/SUR: VS0799
 ICV/QC: VS0805 VS0802
 data reviewed by: stutip

PH LOT1-12 :230814
 ph lot 0.0-3.0 : 220416a
 KI PAPER LOT:030317
 SAMPLE ID VERIFIED BY:
 stutip
 DATE VERIFIED: 09/14/2020

Data File	Sample ID	DIL.	VIAL #	MATRIX	ALS POS.	SAMPLE METHOD	MANUALLY INTEGRATED PEAK RATIONAL, PEAK #	PH	CL	RR	COMMENTS
O61211	BLANK	-	-	w	1	ACQ_SIMCL		-	?		
O61212	BLANK	-	-	w	2	ACQ_SIMCL		-	-		
O61213	BLANK	-	-	w	2	ACQ_SIMCL		-	-		
O61214	BLANK	-	-	w	2	ACQ_SIMCL		-	-		
O61215	BFB	-	-	w	100	BFB		-	-		autofind 2ul failed, increased voltage
O61216	COND. STD.	-	-	w	2	ACQ_SIMCL		-	-		
O61217	BFB	-	-	w	100	BFB		-	-		autofind 2ul failed, increased voltage
O61218	BFB	-	-	w	100	BFB		-	-		autofind 2ul failed, increased voltage
O61219	BFB	-	-	w	100	BFB		-	-		autofind 2ul failed, returned
O61220	BFB	-	-	w	100	BFB		-	-		autofind 2ul failed, decreased voltage
O61221	BFB	-	-	w	100	BFB		-	-		autofind 2ul failed, decreased voltage
O61222	BFB	-	-	w	100	BFB		-	-		autofind 2ul failed, increased voltage
O61223	BFB	-	-	w	100	BFB		-	-		autofind 2ul failed, decreased voltage
O61224	BFB	-	-	w	100	BFB		-	-		autofind 2ul passed
O61225	CC2352-5	-	-	w	2	ACQ_SIMCL		-	-		50ul -> 50ml passed
O61226	BS	-	-	w	3	ACQ_SIMCL		-	-		20ul -> vial passed
O61227	BFB	-	-	w	100	BFB		-	-		pass autofind 2ul
O61228	BLANK	-	-	w	1	ACQ_SIMCL		-	-		
O61229	BLANK	-	-	w	1	ACQ_SIMCL		-	-		
O61230	IC2356-1	-	-	w	2	ACQ_SIMCL	pii-3,12,16,21,30	-	-		1ul -> 100ml
O61231	IC2356-2	-	-	w	3	ACQ_SIMCL	pii-12	-	-		5ul -> 100ml
O61232	IC2356-3	-	-	w	4	ACQ_SIMCL	pii-12	-	-		10ul -> 50ml
O61233	IC2356-4	-	-	w	5	ACQ_SIMCL	pii-12	-	-		25ul -> 50ml
O61234	ICe2356-5	-	-	w	6	ACQ_SIMCL	pii-12	-	-		50ul -> 50ml
O61235	IC2356-6	-	-	w	7	ACQ_SIMCL	pii-12	-	-		75ul -> 50ml
O61236	IC2356-7	-	-	w	8	ACQ_SIMCL	pii-12	-	-		100ul -> 50ml
O61237	BLANK	-	-	w	9	ACQ_SIMCL		-	-		
O61238	iev2356-5	-	-	w	10	ACQ_SIMCL	pii-12	-	-		50ul-50ml

* For NELAC purposes, Method 8280 includes analytes by SOP MS005 Matrix: Designate "W" for Water "S" for soil, "O" for Oil, "Liq" for Non-aqueous Liquid, and "TCLP" or "SPLP" for Leachate. Manual Integration Rational SOP QA029: MP Missed Peak, OP Overlapping Peak, SP Split Peak, PDB Poorly Defined Baseline, BR Baseline Ripple, PII Poor Instrument

SGS - O. LANDO

MSVQA12-O. ANALYSIS LOG

Date:	9/12/2020
COLUMN TYPE:	RTX VMS
DETECTOR:	5975 MSD
INSTRUMENT:	MSVQA12-O
PURGE PRESSURE:	8.4PSI
PURGE VOLUME:	5 mL
ANALYST:	stufip

METHODS:*	SIMCLM
METHOD FILE:	SIMCLO91120.M
CALIB. DATE:	9/11/2020
EM VOLTAGE:	1424V
BFB RESPONSE:	5748697
RUN ID:	VO2358

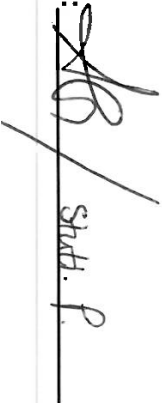
BFB:	V25942b
ICAL/CC:	V25806, VS0804
ISTD/SUR:	VS0799
ICV/QC:	VS0805 VS0802

PH LOT1-12:230814
ph lot 0.0-3.0 : 220416a
KI PAPER LOT:030317
SAMPLE ID VERIFIED BY:
stufip
DATE VERIFIED: 09/14/2020

Data file	Sample ID	DIL.	VIAL #	MATRIX	ALS POS.	SAMPLE METHOD	MANUALLY INTEGRATED PEAK RATIONAL, PEAK #	PH	CL ?	RR	COMMENTS
O61270	BLK	-	-	w	1	ACQ_SIMCL		-	-		
O61271	BLK	-	-	w	2	ACQ_SIMCL		-	-		
O61272	bfb	-	-	w	3	bfb		-	-		pass autofnd✓
O61273	cc2356-5	-	-	w	4	ACQ_SIMCL	#12(Pil)	-	-		50ul-50ml✓
O61274	bs	-	-	w	5	ACQ_SIMCL	#12(Pil) #13(OP)	-	-		20ul-40ml✓
O61275	mb	-	-	w	6	ACQ_SIMCL		-	-		ND✓
O61276	mb	-	-	w	7	ACQ_SIMCL		-	-		ND✓
O61277	fa78551-1	1x	1	w	8	ACQ_SIMCL		1	n	1x	
O61278	fa78551-2	1x	1	w	9	ACQ_SIMCL		1	n	1x	
O61279	fa78551-3	1x	1	w	10	ACQ_SIMCL		1	n	1x	
O61280	fa78551-4	1x	1	w	11	ACQ_SIMCL		1	n	1x	
O61281	fa78551-5	1x	1	w	12	ACQ_SIMCL		1	n	1x	
O61282	fa78551-6	1x	1	w	13	ACQ_SIMCL		1	n	1x	
O61283	fa78551-7	1x	1	w	14	ACQ_SIMCL		1	n	1x	
O61284	fa78551-8	1x	1	w	15	ACQ_SIMCL		1	n	1x	
O61285	fa78551-9	1x	1	w	16	ACQ_SIMCL		1	n	1x	
O61286	fa78551-10	1x	1	w	17	ACQ_SIMCL		1	n	1x	
O61287	fa78551-11	1x	1	w	18	ACQ_SIMCL		1	n	1x	
O61288	fa78551-1ms,10	10x	1	w	19	ACQ_SIMCL	5ml-50ml #12(Pil) #13(OP)	1	n		20ul-40ml✓
O61289	fa78551-1msd,10	10x	1	w	20	ACQ_SIMCL	5ml-50ml #12(Pil)	1	n		20ul-40ml✓
O61290	ecc2356-5		1	w	21	ACQ_SIMCL	#12(Pil)	-	n		50ul-50ml✓

* For NELAC purposes, Method 8260 includes analyses by SOP MS005 Matrix: Designate "W" for Water, "S" for soil, "O" for Oil, "Liq" for Non-aqueous Liquid, and "TCLP" or "SPLP" for Leachate.
 Manual Integration Rational SOP QA029: MP Missed Peak, OP Overlapping Peak, SP Split Peak, PDB Poorly Defined Baseline, BR Baseline Ripple, PII Poor Instrument

Analyst's Signature:



SGS - C. LANDO

MSV0A12-C ANALYSIS LOG

Date:	9/12/2020
COLUMN TYPE:	RTX VMS
DETECTOR:	5975 MSD
INSTRUMENT:	MSV0A12-C
PURGE PRESSURE:	8.4PSI
PURGE VOLUME:	5 mL
ANALYST:	stulp

METHODS:*	SIMCLM
METHOD FILE:	SIMCL091120.M
CALIB. DATE:	9/11/2020
EM VOLTAGE:	1424v
BFB RESPONSE	5316499
RUN ID:	VO2359

BFB:	V25942b
ICAL/CC:	V25806_VS0804
ISTD/SUR:	VS0799
ICV/QC:	VS0805_VS0802
data reviewed by: Jennifer F	

PH LOT1-12.230814
ph lot 0.0-3.0 : 220416a
KI PAPER LOT:030317
SAMPLE ID VERIFIED BY:
stulp
DATE VERIFIED: 09/14/2020

Data File	Sample ID	DIL.	VIAL #	MATRIX	ALS POS.	SAMPLE METHOD	MANUALLY INTEGRATED PEAK #	PH	CL	RR	COMMENTS
061291	bik	-	-	w	1	ACQ_SIMCL		-	-		
061292	bfb	-	-	w	2	bfb		-	-		autofind 2ul failed
061293	bfb	-	-	w	3	bfb		-	-		autofind 2ul passed✓
061294	cc2356-5	-	-	w	4	ACQ_SIMCL	#12(P11)	-	-		50ul-50ml ✓
061295	bs	-	-	w	5	ACQ_SIMCL		-	-		20ul-40ml ✓
061296	mb	-	-	w	6	ACQ_SIMCL		-	-		ND✓
061297	mb	-	-	w	7	ACQ_SIMCL		-	-		ND✓
061298	fa78551-12	1x	1	w	8	ACQ_SIMCL		1	n	1x	
061299	fa78551-13	1x	1	w	9	ACQ_SIMCL		1	n	1x	
061300	fa78551-14	1x	1	w	10	ACQ_SIMCL		1	n	1x	
061301	fa78551-15	1x	1	w	11	ACQ_SIMCL	#6(OP)	1	n	2x	11DCE↑
061302	fa78551-16	1x	1	w	12	ACQ_SIMCL	#6(OP)	1	n	2x	11DCE↑
061303	fa78551-17	1x	1	w	13	ACQ_SIMCL		1	n	1x	11DCE carryover
061304	fa78551-18	1x	1	w	14	ACQ_SIMCL		1	n	1x	
061305	fa78551-19	1x	2	w	15	ACQ_SIMCL		1	n	1x	
061306	fa78551-20	1x	1	w	16	ACQ_SIMCL		1	n	1x	
061307	fa78551-21	1x	1	w	17	ACQ_SIMCL		1	n	1x	
061308	fa78551-22	1x	1	w	18	ACQ_SIMCL		1	n	1x	
061309	fa78551-23	1x	1	w	19	ACQ_SIMCL		1	n	1x	
061310	fa78551-24	1x	1	w	20	ACQ_SIMCL		1	n	1x	
061311	fa78551-25	1x	1	w	21	ACQ_SIMCL		1	n	1x	
061312	fa78551-26	1x	1	w	22	ACQ_SIMCL		1	n	1x	SS Fail
061313	fa78551-27	1x	1	w	23	ACQ_SIMCL		1	n	1x	
061314	fa78551-21	1x	1	w	24	ACQ_SIMCL		1	n	1x	
061315	fa78551-22	1x	1	w	25	ACQ_SIMCL		1	n	1x	
061316	fa78551-23	1x	1	w	26	ACQ_SIMCL		1	n	1x	
061317	fa78551-24	1x	1	w	27	ACQ_SIMCL		1	n	1x	
061318	fa78551-12ms,10	10x	1	w	28	ACQ_SIMCL	5ml-50ml, #12(P11)	1	n		20ul-40m, Surr Failed/RR
061319	fa78551-12msd,10	10x	1	w	29	ACQ_SIMCL	5ml-50ml, #12(P11)	1	n		20ul-40ml ✓
061320	ecc2356-5			w	30	ACQ_SIMCL	#12(P11)				50ul-50ml ✓

* For NELAC purposes, Method 8260 includes analytes by SOP MS005 Matrix. Designate "W" for Water, "S" for soil, "O" for Oil, "Liq" for Non-aqueous Liquid, and "TCLP" or "SPLP" for Leachate.
 Manual Integration Rational SOP QA029: MP Missed Peak, OP Overlapping Peak, SP Split Peak, PDB Poorly Defined Baseline, BR Baseline Ripple, P11 Poor Instrument

Analyst's Signature: Stati P. / stulp

SGS -ORLANDO

MSV0A12-O-ANALYSIS LOG

Date:	9/16/2020
COLUMN TYPE:	RTX VMS
DETECTOR:	5975 MSD
INSTRUMENT:	MSV0A12-O
PURGE PRESSURE:	8.4PSI
PURGE VOLUME:	5 mL
ANALYST:	akarig

METHODS:*	SIMCLm
METHOD FILE:	SIMCL091520.M
CALIB. DATE:	9/15/2020
EM VOLTAGE:	1447V
BFB RESPONSE	4915783
RUN ID:	VO2363

BFB:	V25942b
ICAL/CC:	V25806 VS0804
ISTD/SUR:	VS0799
ICV/QC:	VS0805 VS0802
data reviewed by: johnm	

PH LOT1-12 :230814
ph lot 0.0-3.0 : 220416a
KI PAPER LOT:030317
SAMPLE ID VERIFIED BY:
akarig
DATE VERIFIED: 09/16/2020

Data File	Sample ID	DIL.	VIAL #	MATRIX	ALS POS.	SAMPLE METHOD	MANUALLY INTEGRATED PEAK RATIONAL, PEAK #	PH	CL	RR	COMMENTS
061398	BLK	-	-	w	1	ACQ_SIMCL		-	-		
061399	BLK	-	-	w	2	ACQ_SIMCL		-	-		
061400	bfb	-	-	w	100	bfb		-	-		autofind 2ul failed low
061401	bfb	-	-	w	100	bfb		-	-		autofind 2ul passed
061402	CC2362-5	-	-	w	3	ACQ_SIMCL		-	-		50ul -> 50ml passed
061403	BS	-	-	w	4	ACQ_SIMCL		-	-		20ul-40ml passed
061404	MB	-	-	w	5	ACQ_SIMCL		-	-		
061405	MB	-	-	w	6	ACQ_SIMCL		-	-		
061406	FAT8551-18	1X	2	w	7	ACQ_SIMCL	#16(PII)	1	n	1X	✓
061407	FAT8551-23	1X	3	w	8	ACQ_SIMCL	#12,16(PII)	1	n	1X	✓
061408	FAT8551-24	1X	2	w	9	ACQ_SIMCL	#12(PII)	1	n	1X	✓
061409	FAT8551-25	1X	2	w	10	ACQ_SIMCL	#21(PII)	1	n	1X	ND✓
061410	FAT8551-26	1X	1	w	11	ACQ_SIMCL	#12(PII)	1	n	1X	Surr Failed
061411	FAT8551-27	1X	2	w	12	ACQ_SIMCL	#12(PII)	1	n	1X	✓
061412	FAT8559-9	1X	2	w	13	ACQ_SIMCL	#12(PII)	1	n	1X	Surr Failed
061413	FAT8562-1	1X	1	w	14	ACQ_SIMCL	#12(PII)	1	n	1X	ND✓
061414	FAT8549-2	1X	2	w	15	ACQ_SIMCL	#12,16(PII)	1	n	1X	✓
061415	FAT8549-6	1X	2	w	16	ACQ_SIMCL	#12,16(PII)	1	n	1X	✓
061416	FAT8549-7	1X	2	w	17	ACQ_SIMCL	#12(PII)	1	n	1X	STD Failed
061417	FAT8549-8	1X	2	w	18	ACQ_SIMCL		1	n	1X	STD Failed
061418	FAT8549-11	1X	2	w	19	ACQ_SIMCL		1	n	1X	STD Failed
061419	FAT8549-12	1X	2	w	20	ACQ_SIMCL	#12(PII)	1	n	1X	STD Failed
061420	FAT8549-13	1X	2	w	21	ACQ_SIMCL	#16(PII)	1	n	1X	✓
061421	FAT8549-14	1X	2	w	22	ACQ_SIMCL	power failure	1	n	1X	STD Failed
061422	FAT8549-15	1X	2	w	23	ACQ_SIMCL					
061423	FAT8551-18MS	10X	2	w	24	ACQ_SIMCL					20ul-40ml
061424	FAT8551-18MSD	10X	2	w	25	ACQ_SIMCL					20ul-40ml
061425	ECC2362-5		2	w	26	ACQ_SIMCL					50ul -> 50ml

* For NELAC purposes, Method 8260 includes analytes by SOP MS005 Matrix: Designate "W" for Water, "S" for soil, "O" for Oil, "Liq" for Non-aqueous Liquid, and "TCLP" or "SPLP" for Leachate.
 Manual Integration Rational SOP QA029: MP Missed Peak, OP Overlapping Peak, SP Split Peak, PDB Poorly Defined Baseline, BR Baseline Ripple, PI Poor Instrument

Analyst's Signature:

MSVOA17-1A-ANALYSIS LOG

SGS -ORLANDO

DATE: 09/11/20		METHOD(S): SimCI		BFB: V25942A		PH LOT: 1 to 12 pH lot #: 200814					
COLUMN TYPE: RTX-VMS		METHOD FILE(S): simcl0911120.m		ICAL/CC: VS0806, VS0804		0 to 3 pH lot#: 220416					
DETECTOR: 5975C MSD		CALIB. DATE: 09/11/20		ISTD/SURR: VS0791		KI PAPER LOT: 060117					
INSTRUMENT: MSVOA15-z		EM VOLTAGE: 1718V		ICV/QC: VS0802, VS0805		Processed BY: SO/SPIES					
PURGE PRESSURE: 9.7psi		BFB Response: 15262853		AFA: VS0418A		SAMPLE ID VERIFIED BY:					
PURGE VOLUME: 5 mL		RUN ID: VZ2414				stutip					
ANALYST: STUTIP						DATE VERIFIED: 09/14/20					
Data File	Sample ID	DIL.	VIAL #	MATRIX	ALS POS.	SAMPLE METHOD	MANUALLY INTEGRATED PEAKS RATIONAL, PEAK #	PH	CL ?	RR	COMMENTS
Z62205	BFB	-	-	w	1	bfb		-	-	-	Passed Autofind✓
Z62206	MB	-	-	w	2	acq_simcl0214		-	-	-	✓
Z62207	IC2414-1	-	-	w	3	acq_simcl0214		-	-	-	1ul-100ml
Z62208	IC2414-2	-	-	w	4	acq_simcl0214		-	-	-	5ul-100ml
Z62209	IC2414-3	-	-	w	5	acq_simcl0214		-	-	-	10ul-50ml
Z62210	IC2414-4	-	-	w	6	acq_simcl0214		-	-	-	25ul-50ml
Z62211	IC2414-5	-	-	w	7	acq_simcl0214		-	-	-	50ul-50ml
Z62212	IC2414-6	-	-	w	8	acq_simcl0214	op-3	-	-	-	75ul-50ml
Z62213	IC2414-7	-	-	w	9	acq_simcl0214	mp-20,op-3	-	-	-	100ul-50ml
Z62214	MB	-	-	w	10	acq_simcl0214		-	-	-	
Z62215	ICV2414-5	-	-	w	11	acq_simcl0214		-	-	-	50µL→50mL ✓
Z62216	BS	-	-	w	12	acq_simcl0214		-	-	-	20ul-40ml✓
Z62217	MB	-	-	w	13	acq_simcl0214		-	-	-	xNot used
Z62218	MB	-	-	w	14	acq_simcl0214		-	-	-	ND✓
Z62219	FA78573-1	-	2	w	15	acq_simcl0214		1	NO	-	✓
Z62220	FA78573-2	-	2	w	16	acq_simcl0214		1	NO	-	✓
Z62221	FA78573-3	-	2	w	17	acq_simcl0214		1	NO	-	ND✓
Z62222	FA78573-4	-	2	w	18	acq_simcl0214		1	NO	-	ND✓
Z62223	FA78573-5	-	2	w	19	acq_simcl0214		1	NO	-	✓
Z62224	FA78573-6	-	2	w	20	acq_simcl0214		1	NO	-	✓
Z62225	FA78573-7	-	2	w	21	acq_simcl0214		1	NO	-	✓
Z62226	FA78573-8	-	2	w	22	acq_simcl0214		1	NO	-	✓
Z62227	FA78573-9	-	2	w	23	acq_simcl0214		1	NO	-	✓
Z62228	FA78573-10	-	2	w	24	acq_simcl0214		1	NO	-	✓
Z62229	FA78573-11	-	2	w	25	acq_simcl0214		1	NO	-	✓
Z62230	FA78573-12	-	2	w	26	acq_simcl0214		1	NO	-	✓
Z62231	FA78573-13	-	2	w	27	acq_simcl0214		1	NO	-	✓
Z62232	FA78573-14	-	2	w	28	acq_simcl0214		1	NO	-	ND✓
Z62233	FA78573-1MS,10	-	2	w	29	acq_simcl0214	5ml-50ml	1	NO	-	20ul-40ml✓
Z62234	FA78573-1MSD,10	-	2	w	30	acq_simcl0214	5ml-50ml	1	NO	-	20ul-40ml✓
Z62235	ECC2414-5	-	-	w	31	acq_simcl0214		-	-	-	50µL→50mL ✓

Analyst's Signature: 



MSVOA17-1A ANALYSIS LOG

SG ORLANDO

DATE: 09/14/20		METHOD FILE(s): simc1091120.m		BFB: VZ5942A		PH LOT: 1 to 12 pH lot #: 200814					
COLUMN TYPE: RTX-VMS		CALIB. DATE: 09/11/20		ICAL/CC: VS0806, VS0804		0 to 3 pH lot#: 220416					
DETECTOR: 5975C.MSD		EM VOLTAGE: 1776V		ISTD/SURR: VS0791		KI PAPER LOT: 060117					
INSTRUMENT: MSVOA15-z		BFB Response: 14432522		ICV/QC: VS0802, VS0805		Processed BY:					
PURGE PRESSURE: 9.7psi		RUN ID: VZ2418		AFA: VS0418A		SAMPLE ID VERIFIED BY:					
PURGE VOLUME: 5 mL						JuanG					
ANALYST: JuanG						DATE VERIFIED: 09/15/20					
Data File	Sample ID	DIL.	VIAL #	MATRIX	ALS POS.	SAMPLE METHOD	MANUALLY INTEGRATED PEAKS RATIONAL, PEAK #	PH	CL	RR	COMMENTS
Z62319	mb	-	-	w	1	acq_simc10214		-	-	-	✓
Z62320	mb	-	-	w	2	bfb		-	-	-	✓
Z62321	bfb	-	-	w	-	acq_simc10214		-	-	-	Passed Autofind ✓
Z62322	cc2414-5	-	-	w	1	acq_simc10214		-	-	-	50µL → 50mL ✓
Z62323	bs	-	-	w	2	acq_simc10214		-	-	-	20µL → 40mL ✓
Z62324	mb	-	-	w	3	acq_simc10214		-	-	-	✓
Z62325	mb	-	-	w	4	acq_simc10214		1	n	-	✓
Z62326	FA78549-30	1X	2	w	5	acq_simc10214		1	n	-	✓
Z62327	FA78549-31	1X	2	w	6	acq_simc10214		1	n	-	✓
Z62328	FA78549-32	1X	2	w	7	acq_simc10214		1	n	-	✓
Z62329	FA78549-33	1X	2	w	8	acq_simc10214		1	n	-	✓
Z62330	FA78549-34	1X	2	w	9	acq_simc10214		1	n	-	✓
Z62331	FA78549-35	1X	2	w	10	acq_simc10214		1	n	-	✓
Z62332	FA78549-36	1X	2	w	11	acq_simc10214		1	n	-	✓
Z62333	FA78549-37	1X	2	w	12	acq_simc10214		1	n	-	✓
Z62334	FA78551-15,2X	2X	2	w	13	acq_simc10214	25ml to 50ml	1	n	-	✓
Z62335	FA78551-15MS,10X	10X	2	w	14	acq_simc10214	10ml to 100ml	1	n	-	20µL → 40mL ✓
Z62336	FA78551-15MSD,10X	10X	2	w	15	acq_simc10214	10ml to 100ml	1	n	-	20µL → 40mL ✓
Z62337	FA78549-38	1X	2	w	16	acq_simc10214		1	n	-	✓
Z62338	FA78549-39	1X	2	w	17	acq_simc10214		1	n	-	✓
Z62339	FA78549-40	1X	2	w	18	acq_simc10214		1	n	-	✓
Z62340	FA78549-41	1X	2	w	19	acq_simc10214		1	n	-	✓
Z62341	FA78549-42	1X	2	w	20	acq_simc10214		1	n	-	✓
Z62342	FA78551-16,2X	2X	2	w	21	acq_simc10214	25ml to 50ml	1	n	-	✓
Z62343	FA78551-16MS,10X	10X	2	w	22	acq_simc10214	10ml to 100ml	1	n	-	20µL → 40mL ✓
Z62344	FA78551-16MSD,10X	10X	2	w	23	acq_simc10214	10ml to 100ml	1	n	-	20µL → 40mL ✓
Z62345	FA78565-21	1X	2	w	24	acq_simc10214		1	n	-	✓
Z62346	FA78565-22	1X	2	w	25	acq_simc10214		1	n	-	✓
Z62347	FA78565-23	1X	2	w	26	acq_simc10214		1	n	-	✓
Z62348	FA78565-24	1X	2	w	27	acq_simc10214		1	n	-	✓
Z62349	FA78565-25	1X	2	w	28	acq_simc10214		1	n	-	✓
Z62350	ECC2414-5	-	-	w	29	acq_simc10214		-	-	-	50µL → 50mL ✓

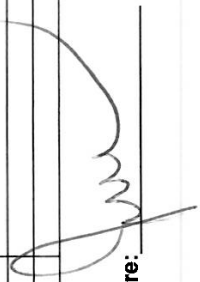
Analyst's Signature:



MSVOA17-1A-ANALYSIS LOG

SGS -ORLANDO

DATE: 09/15/20		METHOD(s):* SimCl		BFB: V25942A		PH LOT: 1 to 12 pH lot #: 200814				
COLUMN TYPE: RTX-VMS		METHOD FILE(s): simcl091120.m		ICAL/JCC: VS0806, VS0804		0 to 3 pH lot#: 220416				
DETECTOR: 5975C MSD		CALIB. DATE: 09/11/20		ISTD/SURR: VS0791		KI PAPER LOT: 060117				
INSTRUMENT: MSVOA15-z		EM VOLTAGE: 1812V		ICV/QC: VS0802, VS0805		Processed BY: JuanG				
PURGE PRESSURE: 9.7psi		BFB Response: 17763852		AFA: VS0418A		SAMPLE ID VERIFIED BY: JuanG				
PURGE VOLUME: 5 mL		RUN ID: VZ2419		DATE VERIFIED: 09/16/20		COMMENTS				
ANALYST: JuanG										
Data File	Sample ID	DIL.	VIAL #	MATRIX	ALS POS.	SAMPLE METHOD	MANUALLY INTEGRATED PEAKS RATIONAL, PEAK #	PH	CL	RR
Z62351	BLK	-	-	W	1	acq_simcl0214		-	-	-
Z62352	BLK	-	-	W	2	acq_simcl0214		-	-	-
Z62353	BFB	-	-	W	3	bf		-	-	-
Z62354	CC2414-5	-	-	W	4	acq_simcl0214		-	-	-
Z62355	BS	-	-	W	5	acq_simcl0214		-	-	-
Z62356	MB	-	-	W	6	acq_simcl0214		-	-	-
Z62357	MB	-	-	W	7	acq_simcl0214		-	-	-
Z62358	MB	-	-	W	8	acq_simcl0214	no liquid	-	-	-
Z62359	FA78565-26	1x	2	W	9	acq_simcl0214		1	n	-
Z62360	FA78565-27	1x	2	W	10	acq_simcl0214		1	n	-
Z62361	FA78551-1	1x	2	W	11	acq_simcl0214		1	n	-
Z62362	FA78551-2	1x	2	W	12	acq_simcl0214		1	n	-
Z62363	FA78551-3	1x	2	W	13	acq_simcl0214		1	n	-
Z62364	FA78551-4	1x	2	W	14	acq_simcl0214		1	n	-
Z62365	FA78551-5	1x	2	W	15	acq_simcl0214		1	n	-
Z62366	FA78551-6	1x	2	W	16	acq_simcl0214		1	n	-
Z62367	FA78551-7	1x	3	W	17	acq_simcl0214		1	n	-
Z62368	FA78551-8	1x	2	W	18	acq_simcl0214		1	n	-
Z62370	FA78551-7ms	1x	2	W	19	acq_simcl0214		1	n	-
Z62371	FA78551-7msd	1x	2	W	20	acq_simcl0214		1	n	-
Z62372	FA78551-9	1x	2	W	21	acq_simcl0214		1	n	-
Z62373	FA78551-10	1x	2	W	22	acq_simcl0214		1	n	-
Z62374	FA78551-11	1x	2	W	23	acq_simcl0214		1	n	-
Z62375	FA78551-12	1x	2	W	24	acq_simcl0214		1	n	-
Z62376	FA78551-13	1x	2	W	25	acq_simcl0214		1	n	-
Z62377	FA78551-14	1x	2	W	26	acq_simcl0214		1	n	-
Z62378	FA78551-15	1x	3	W	27	acq_simcl0214		1	n	-
Z62379	FA78551-17	1x	2	W	28	acq_simcl0214		1	n	-
Z62380	FA78551-19	1x	1	W	29	acq_simcl0214		1	n	-
Z62381	FA78551-20	1x	2	W	30	acq_simcl0214		1	n	-
Z62382	FA78551-21	1x	2	W	31	acq_simcl0214		1	n	-
Z62383	FA78551-22	1x	2	W	32	acq_simcl0214		1	n	-
Z62384	ecc241-5	-	-	W	33	acq_simcl0214		-	-	-

Analyst's Signature: 



Metals Analysis

QC Data Summaries

Includes the following where applicable:

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

SGS Instrument Runlog
Inorganics Analyses

Login Number: FA78551
Account: AHTNACAS - Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

File ID: SA091520M1.ICP Date Analyzed: 09/15/20 Methods: SW846 6010D
Analyst: LM Run ID: MA17052
Parameters: Sb,Cu,Pb

Time	Sample Description	Dilution Factor	PS Recov	Comments
09:40	MA17052-STD1	1		STDA
09:44	MA17052-STD2	1		STDB
09:50	MA17052-STD3	1		STDC
09:55	MA17052-HSTD1	1		
10:03	MA17052-ICV1	1		
10:09	MA17052-ICB1	1		
10:13	MA17052-CRIA1	1		
10:19	MA17052-CRIA2	1		
10:47	MA17052-ICSA1	1		
10:55	MA17052-ICSAB1	1		
11:16	MA17052-CCV1	1		
11:29	MA17052-CCB1	1		
11:36	MP37808-MB1	1		
11:41	MP37808-B1	1		
11:46	FA78542-1	1		(sample used for QC only; not part of login FA78551)
11:51	MP37808-D1	1		
11:56	MP37808-SD1	5		
12:01	MP37808-S1	1		
12:05	MP37808-S2	1		
12:10	MP37808-MB2	1		
12:15	MP37808-B2	1		
12:20	MP37810-MB1	1		
12:24	MA17052-CCV2	1		
12:29	MA17052-CCB2	1		
12:34	MP37810-B1	1		
12:38	FA78702-1	1		(sample used for QC only; not part of login FA78551)
12:43	MP37810-D1	1		
12:48	MP37810-SD1	5		
12:53	MP37810-PS1	1		
12:58	MP37810-S1	1		
13:02	MP37810-S2	1		
13:07	ZZZZZZ	1		
13:12	ZZZZZZ	1		

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SGS Instrument Runlog
Inorganics Analyses

Login Number: FA78551
Account: AHTNACAS - Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

File ID: SA091520M1.ICP Date Analyzed: 09/15/20 Methods: SW846 6010D
Analyst: LM Run ID: MA17052
Parameters: Sb,Cu,Pb

Time	Sample Description	Dilution Factor	PS Recov	Comments
13:16	ZZZZZZ	1		
13:21	MA17052-CCV3	1		
13:26	MA17052-CCB3	1		
13:31	ZZZZZZ	1		
13:35	ZZZZZZ	1		
13:40	ZZZZZZ	1		
13:45	ZZZZZZ	5		
13:55	ZZZZZZ	1		
14:00	ZZZZZZ	1		
14:05	ZZZZZZ	1		
14:10	FA78551-28F	1		
14:14	FA78551-29F	1		
14:19	MA17052-CCV4	1		
14:24	MA17052-CCB4	1		
14:29	FA78551-30F	1		
14:33	FA78551-31F	1		
----->	Last reportable sample/prep for job FA78551			
14:38	ZZZZZZ	5		
14:43	MA17052-CRIA3	1		
14:48	MA17052-ICSA2	1		
14:53	MA17052-ICSAB2	1		
14:58	MA17052-CCV5	1		
15:02	MA17052-CCB5	1		
----->	Last reportable CCB for job FA78551			
	Refer to raw data for calibration curve and standards.			

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REPORTED ELEMENTS SUMMARY

Login Number: FA78551
 Account: AHTNACAS - Ahtna Global, LLC
 Project: Fort Ord Groundwater Monitoring

File ID: SA091520M1.ICP Date Analyzed: 09/15/20 Methods: SW846 6010D
 Analyst: LM Run ID: MA17052
 Parameters: Sb,Cu,Pb

Time	Sample Description	Element: Dilution	S b	C u	P b
09:55	MA17052-HSTD1	1	X	X	X
10:03	MA17052-ICV1	1	X	X	X
10:09	MA17052-ICB1	1	X	X	X
10:13	MA17052-CRIA1	1	X	X	X
10:19	MA17052-CRIA2	1			
10:47	MA17052-ICSA1	1	X	X	X
10:55	MA17052-ICSAB1	1	X	X	X
11:16	MA17052-CCV1	1	X	X	X
11:29	MA17052-CCB1	1	X	X	X
11:36	MP37808-MB1	1			X
11:41	MP37808-B1	1			X
11:46	FA78542-1	1		X	(a)
11:51	MP37808-D1	1		X	
11:56	MP37808-SD1	5		X	
12:01	MP37808-S1	1		X	
12:05	MP37808-S2	1		X	
12:10	MP37808-MB2	1		X	
12:15	MP37808-B2	1		X	
12:20	MP37810-MB1	1	X	X	X
12:24	MA17052-CCV2	1	X	X	X
12:29	MA17052-CCB2	1	X	X	X
12:34	MP37810-B1	1	X	X	X
12:38	FA78702-1	1		X	(a)
12:43	MP37810-D1	1	X	X	X
12:48	MP37810-SD1	5	X	X	X
12:53	MP37810-PS1	1	X	X	X
12:58	MP37810-S1	1	X	X	X
13:02	MP37810-S2	1	X	X	X
13:07	ZZZZZZ	1			
13:12	ZZZZZZ	1			
13:16	ZZZZZZ	1			
13:21	MA17052-CCV3	1	X	X	X
13:26	MA17052-CCB3	1	X	X	X

Element: S C P
 b u b

REPORTED ELEMENTS SUMMARY

Login Number: FA78551
 Account: AHTNACAS - Ahtna Global, LLC
 Project: Fort Ord Groundwater Monitoring

File ID: SA091520M1.ICP Date Analyzed: 09/15/20 Methods: SW846 6010D
 Analyst: LM Run ID: MA17052
 Parameters: Sb,Cu,Pb

Time	Sample Description	Element: Dilution	S b	C u	P b
13:31	ZZZZZZ	1			
13:35	ZZZZZZ	1			
13:40	ZZZZZZ	1			
13:45	ZZZZZZ	5			
13:55	ZZZZZZ	1			
14:00	ZZZZZZ	1			
14:05	ZZZZZZ	1			
14:10	FA78551-28F	1	X	X	X
14:14	FA78551-29F	1	X	X	X
14:19	MA17052-CCV4	1	X	X	X
14:24	MA17052-CCB4	1	X	X	X
14:29	FA78551-30F	1	X	X	X
14:33	FA78551-31F	1	X	X	X
14:38	ZZZZZZ	5			
14:43	MA17052-CRIA3	1	X	X	X
14:48	MA17052-ICSA2	1	X	X	X
14:53	MA17052-ICSAB2	1	X	X	X
14:58	MA17052-CCV5	1	X	X	X
15:02	MA17052-CCB5	1	X	X	X

(a) Sample used for QC only; not part of login FA78551.

Element: S C P
 b u b

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INTERNAL STANDARD SUMMARY

Login Number: FA78551
 Account: AHTNACAS - Ahtna Global, LLC
 Project: Fort Ord Groundwater Monitoring

File ID: SA091520M1.ICP Date Analyzed: 09/15/20 Methods: SW846 6010D
 Analyst: LM Run ID: MA17052
 Parameters: Sb,Cu,Pb

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
09:40	MA17052-STD1	2596	31771	8419	1282
09:44	MA17052-STD2	2414	30032	8194	1054
09:50	MA17052-STD3	2627			
09:55	MA17052-HSTD1	2436	30070	8144	1059
10:03	MA17052-ICV1	2490	30803	8307	1130
10:09	MA17052-ICB1	2619 R	32056 R	8337 R	1283 R
10:13	MA17052-CRIA1	2583	31786	8293	1252
10:19	MA17052-CRIA2	2570			
10:47	MA17052-ICSA1	2230	28087	7876	1014
10:55	MA17052-ICSAB1	2280	28228	7950	971
11:16	MA17052-CCV1	2473	30850	8052	1107
11:29	MA17052-CCB1	2579	32048	8196	1255
11:36	MP37808-MB1	2566	32043	8295	1249
11:41	MP37808-B1	2499	31182	8095	1157
11:46	FA78542-1	2349	29580	7993	1095
11:51	MP37808-D1	2372	29484	7943	1099
11:56	MP37808-SD1	2500	31400	8130	1199
12:01	MP37808-S1	2377	29869	7945	1052
12:05	MP37808-S2	2391	30117	7948	1060
12:10	MP37808-MB2	2564	32428	8306	1252
12:15	MP37808-B2	2507	31383	8177	1169
12:20	MP37810-MB1	2573	32275	8314	1251
12:24	MA17052-CCV2	2476	30981	8080	1110
12:29	MA17052-CCB2	2583	32079	8243	1256
12:34	MP37810-B1	2488	31292	8247	1159
12:38	FA78702-1	2446	31166	8216	1168
12:43	MP37810-D1	2454	30984	8133	1172
12:48	MP37810-SD1	2540	30943	8278	1233
12:53	MP37810-PS1	2466	30932	8150	1155
12:58	MP37810-S1	2437	30640	8109	1111
13:02	MP37810-S2	2429	30534	8206	1104
13:07	ZZZZZZ	2461	30802	8165	1163
13:12	ZZZZZZ	2489	31376	8282	1197

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INTERNAL STANDARD SUMMARY

Login Number: FA78551
 Account: AHTNACAS - Ahtna Global, LLC
 Project: Fort Ord Groundwater Monitoring

File ID: SA091520M1.ICP Date Analyzed: 09/15/20 Methods: SW846 6010D
 Analyst: LM Run ID: MA17052
 Parameters: Sb,Cu,Pb

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
13:16	ZZZZZZ	2493	31144	8133	1190
13:21	MA17052-CCV3	2474	30929	8100	1110
13:26	MA17052-CCB3	2577	31938	8168	1250
13:31	ZZZZZZ	2523	31262	8146	1189
13:35	ZZZZZZ	2500	31375	8118	1190
13:40	ZZZZZZ	2485	31248	8172	1184
13:45	ZZZZZZ	2396	30785	8251	1129
13:55	ZZZZZZ	2530	31674	8239	1223
14:00	ZZZZZZ	2337	29222	8084	1052
14:05	ZZZZZZ	2586	32326	8391	1225
14:10	FA78551-28F	2434	30053	8008	1123
14:14	FA78551-29F	2422	30072	7983	1116
14:19	MA17052-CCV4	2504	30764	8046	1116
14:24	MA17052-CCB4	2612	31975	8210	1264
14:29	FA78551-30F	2429	30012	8046	1115
14:33	FA78551-31F	2483	30352	8068	1157
14:38	ZZZZZZ	2508	31028	8232	1186
14:43	MA17052-CRIA3	2592	31590	8108	1239
14:48	MA17052-ICSA2	2262	28308	7738	1026
14:53	MA17052-ICSAB2	2316	28391	7806	976
14:58	MA17052-CCV5	2513	30961	8057	1121
15:02	MA17052-CCB5	2617	32069	8203	1266

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

LEGEND:

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

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BLANK RESULTS SUMMARY
 Part 1 - Initial and Continuing Calibration Blanks

Login Number: FA78551
 Account: AHTNACAS - Ahtna Global, LLC
 Project: Fort Ord Groundwater Monitoring

File ID: SA091520M1.ICP Date Analyzed: 09/15/20 Methods: SW846 6010D
 QC Limits: result < RL Run ID: MA17052 Units: ug/l

Time:			10:09			11:29			12:29			13:26
Sample ID:	RL	IDL	ICB1	final	CCB1	final	CCB2	final	CCB3	final	final	
Metal			raw		raw		raw		raw		raw	
Aluminum	200	14										
Antimony	6.0	1	-1.10	<6.0	-0.800	<6.0	-1.30	<6.0	-1.10	<6.0		
Arsenic	10	1.3	anr									
Barium	200	1	anr									
Beryllium	4.0	.2										
Cadmium	5.0	.2	anr									
Calcium	1000	50										
Chromium	10	1	anr									
Cobalt	50	.2										
Copper	25	1	0.100	<25	0.800	<25	0.900	<25	0.900	<25		
Iron	300	17										
Lead	5.0	1	0.200	<5.0	-0.200	<5.0	0.300	<5.0	-0.600	<5.0		
Magnesium	5000	35										
Manganese	15	.5										
Molybdenum	50	.3										
Nickel	40	.4	anr									
Potassium	10000	200										
Selenium	10	2.4	anr									
Silver	10	.7	anr									
Sodium	10000	500	anr									
Strontium	10	.5										
Thallium	10	1.1										
Tin	50	.9										
Titanium	10	.5										
Vanadium	50	.5										
Zinc	20	3	anr									

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

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BLANK RESULTS SUMMARY
 Part 1 - Initial and Continuing Calibration Blanks

Login Number: FA78551
 Account: AHTNACAS - Ahtna Global, LLC
 Project: Fort Ord Groundwater Monitoring

File ID: SA091520M1.ICP Date Analyzed: 09/15/20 Methods: SW846 6010D
 QC Limits: result < RL Run ID: MA17052 Units: ug/l

Metal	RL	IDL	14:24 CCB4		15:02 CCB5	
			raw	final	raw	final
Aluminum	200	14				
Antimony	6.0	1	-0.400	<6.0	-0.400	<6.0
Arsenic	10	1.3	anr			
Barium	200	1	anr			
Beryllium	4.0	.2				
Cadmium	5.0	.2	anr			
Calcium	1000	50				
Chromium	10	1	anr			
Cobalt	50	.2				
Copper	25	1	0.600	<25	0.400	<25
Iron	300	17				
Lead	5.0	1	0.200	<5.0	0.300	<5.0
Magnesium	5000	35				
Manganese	15	.5				
Molybdenum	50	.3				
Nickel	40	.4	anr			
Potassium	10000	200				
Selenium	10	2.4	anr			
Silver	10	.7	anr			
Sodium	10000	500	anr			
Strontium	10	.5				
Thallium	10	1.1				
Tin	50	.9				
Titanium	10	.5				
Vanadium	50	.5				
Zinc	20	3	anr			

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

8.1.3
 8

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA78551
Account: AHTNACAS - Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

File ID: SA091520M1.ICP Date Analyzed: 09/15/20 Methods: SW846 6010D
QC Limits: 90 to 110 % Recovery Run ID: MA17052 Units: ug/l

Time:	10:03	11:16	12:24						
Sample ID:	ICV	ICV1	CCV	CCV1	CCV2				
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum									
Antimony	2000	2150	107.5	2000	1980	99.0	2000	1990	99.5
Arsenic	anr								
Barium	anr								
Beryllium									
Cadmium	anr								
Calcium									
Chromium	anr								
Cobalt									
Copper	2000	2000	100.0	2000	1990	99.5	2000	2000	100.0
Iron									
Lead	2000	2020	101.0	2000	1990	99.5	2000	2000	100.0
Magnesium									
Manganese									
Molybdenum									
Nickel	anr								
Potassium									
Selenium	anr								
Silver	anr								
Sodium	anr								
Strontium									
Thallium									
Tin									
Titanium									
Vanadium									
Zinc	anr								

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

8.1.4
8

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA78551
Account: AHTNACAS - Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

File ID: SA091520M1.ICP Date Analyzed: 09/15/20 Methods: SW846 6010D
QC Limits: 90 to 110 % Recovery Run ID: MA17052 Units: ug/l

Time:	13:21	14:19	14:58						
Sample ID:	CCV3	CCV4	CCV5						
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum									
Antimony	2000	2000	100.0	2000	1980	99.0	2000	1980	99.0
Arsenic	anr								
Barium	anr								
Beryllium									
Cadmium	anr								
Calcium									
Chromium	anr								
Cobalt									
Copper	2000	2020	101.0	2000	1990	99.5	2000	1990	99.5
Iron									
Lead	2000	2000	100.0	2000	2010	100.5	2000	2010	100.5
Magnesium									
Manganese									
Molybdenum									
Nickel	anr								
Potassium									
Selenium	anr								
Silver	anr								
Sodium	anr								
Strontium									
Thallium									
Tin									
Titanium									
Vanadium									
Zinc	anr								

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

8.1.4
8

HIGH STANDARD CHECK SUMMARY

Login Number: FA78551
 Account: AHTNACAS - Ahtna Global, LLC
 Project: Fort Ord Groundwater Monitoring

File ID: SA091520M1.ICP Date Analyzed: 09/15/20 Methods: SW846 6010D
 QC Limits: 95 to 105 % Recovery Run ID: MA17052 Units: ug/l

Time:	09:55		
Sample ID:	HSTD	HSTD1	
Metal	True	Results	% Rec
Aluminum			
Antimony	4000	3950	98.8
Arsenic	anr		
Barium	anr		
Beryllium			
Cadmium	anr		
Calcium			
Chromium	anr		
Cobalt			
Copper	4000	3960	99.0
Iron			
Lead	4000	3970	99.3
Magnesium			
Manganese			
Molybdenum			
Nickel	anr		
Potassium			
Selenium	anr		
Silver	anr		
Sodium	anr		
Strontium			
Thallium			
Tin			
Titanium			
Vanadium			
Zinc	anr		

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

8.1.5
 8

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: FA78551
 Account: AHTNACAS - Ahtna Global, LLC
 Project: Fort Ord Groundwater Monitoring

File ID: SA091520M1.ICP Date Analyzed: 09/15/20 Methods: SW846 6010D
 QC Limits: CRI 70-130% CRIA 70-130% Run ID: MA17052 Units: ug/l

Time:	10:13	10:19	14:43					
Sample ID:	CRI	CRIA	CRI A1	% Rec	CRI A2	% Rec	CRI A3	% Rec
Metal	True	True	Results		Results		Results	
Aluminum	400	200						
Antimony	10	5.0	4.40	88.0			4.20	84.0
Arsenic	20	10	anr					
Barium	400	200	anr					
Beryllium	10	5.0						
Cadmium	10	5.0	anr					
Calcium	2000	1000						
Chromium	20	10	anr					
Cobalt	100	50						
Copper	50	25	23.7	94.8			23.6	94.4
Iron	600	300						
Lead	10	5.0	4.80	96.0			4.40	88.0
Magnesium	10000	5000						
Manganese	30	15						
Molybdenum	100	50						
Nickel	80	40	anr					
Potassium	20000	10000						
Selenium	20	10						
Silver	20	10	anr					
Sodium	20000	10000	anr					
Strontium	20	10						
Thallium	20	10						
Tin	100	50						
Titanium	20	10						
Vanadium	100	50						
Zinc	40	20	anr					

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

8.1.6
 8

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

Login Number: FA78551
Account: AHTNACAS - Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

File ID: SA091520M1.ICP Date Analyzed: 09/15/20 Methods: SW846 6010D
QC Limits: 80 to 120 % Recovery Run ID: MA17052 Units: ug/l

Time:			10:47			10:55			14:48			14:53
Sample ID:	ICSA	ICSAB	ICSAL	% Rec	ICSAB1	% Rec	ICSAB2	% Rec	ICSAB2	% Rec		
Metal	True	True	Results		Results		Results		Results			
Aluminum	500000	500000	512000	102.4	522000	104.4	526000	105.2	523000	104.6		
Antimony		1000	0.100		1020	102.0	-3.20		1020	102.0		
Arsenic		1000	0.00		990	99.0	1.40		980	98.0		
Barium		500	-0.100		511	102.2	-0.300		513	102.6		
Beryllium		500	0.0200		484	96.8	0.0300		493	98.6		
Cadmium		1000	0.0900		912	91.2	-1.50		912	91.2		
Calcium	500000	500000	463000	92.6	472000	94.4	476000	95.2	485000	97.0		
Chromium		500	0.00		479	95.8	-0.100		483	96.6		
Cobalt		500	0.00		469	93.8	-0.100		472	94.4		
Copper		500	-0.200		537	107.4	0.400		529	105.8		
Iron	200000	200000	506000	101.2	191000	95.5	513000	102.6	192000	96.0		
Lead		1000	-0.100		926	92.6	-1.80		941	94.1		
Magnesium	500000	500000	538000	107.6	547000	109.4	552000	110.4	560000	112.0		
Manganese		500	0.600		493	98.6	0.800		497	99.4		
Molybdenum		1000	-0.700		906	90.6	-0.600		907	90.7		
Nickel		1000	0.00		920	92.0	0.200		923	92.3		
Potassium			-31.2		-19.6		-51.2		-14.8			
Selenium		1000	0.200		933	93.3	-3.80		933	93.3		
Silver		1000	-0.100		1080	108.0	0.300		1080	108.0		
Sodium			145		106		79.9		85.1			
Strontium		1000	-0.300		996	99.6	-0.800		996	99.6		
Thallium		1000	0.200		870	87.0	0.800		883	88.3		
Tin		1000	0.900		864	86.4	-0.200		871	87.1		
Titanium		1000	1.90		1040	104.0	2.00		1030	103.0		
Vanadium		500	-0.300		483	96.6	-0.600		487	97.4		
Zinc		1000	0.400		931	93.1	-0.100		943	94.3		

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

8.1.7
8

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: FA78551
Account: AHTNACAS - Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

QC Batch ID: MP37810
Matrix Type: AQUEOUS

Methods: SW846 6010D
Units: ug/l

Prep Date: 09/15/20

Metal	RL	IDL	MDL	MB raw	final
Aluminum	200	14	14		
Antimony	6.0	1	1	-0.40	<6.0
Arsenic	10	1.3	1.3		
Barium	200	1	1		
Beryllium	4.0	.2	.2		
Cadmium	5.0	.2	.2		
Calcium	1000	50	50		
Chromium	10	1	1		
Cobalt	50	.2	.2		
Copper	25	1	1	-0.90	<25
Iron	300	17	17		
Lead	5.0	1	1.1	0.0	<5.0
Magnesium	5000	35	35		
Manganese	15	.5	1		
Molybdenum	50	.3	.3		
Nickel	40	.4	.4		
Potassium	10000	200	200		
Selenium	10	2.4	2.9		
Silver	10	.7	.7		
Sodium	10000	500	500		
Strontium	10	.5	.5		
Thallium	10	1.1	1.4		
Tin	50	.9	1		
Titanium	10	.5	1		
Vanadium	50	.5	.6		
Zinc	20	3	4.4		

Associated samples MP37810: FA78551-28F, FA78551-29F, FA78551-30F, FA78551-31F

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

8.2.1
8

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA78551
 Account: AHTNACAS - Ahtna Global, LLC
 Project: Fort Ord Groundwater Monitoring

QC Batch ID: MP37810
 Matrix Type: AQUEOUS

Methods: SW846 6010D
 Units: ug/l

Prep Date: 09/15/20 09/15/20

Metal	FA78702-1 Original	DUP	RPD	QC Limits	FA78702-1 Original MS	Spikelot MPFLICP2	% Rec	QC Limits	
Aluminum									
Antimony	0.0	0.0	NC	0-20	0.0	517	500	103.4	80-120
Arsenic	anr								
Barium									
Beryllium									
Cadmium									
Calcium									
Chromium									
Cobalt									
Copper	0.0	0.0	NC	0-20	0.0	251	250	100.4	80-120
Iron									
Lead	0.0	0.0	NC	0-20	0.0	477	500	95.4	80-120
Magnesium									
Manganese									
Molybdenum									
Nickel	anr								
Potassium									
Selenium									
Silver									
Sodium	anr								
Strontium									
Thallium									
Tin									
Titanium									
Vanadium									
Zinc	anr								

Associated samples MP37810: FA78551-28F, FA78551-29F, FA78551-30F, FA78551-31F

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (N) Matrix Spike Rec. outside of QC limits
 (anr) Analyte not requested

8.2.2
8

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA78551
 Account: AHTNACAS - Ahtna Global, LLC
 Project: Fort Ord Groundwater Monitoring

QC Batch ID: MP37810
 Matrix Type: AQUEOUS

Methods: SW846 6010D
 Units: ug/l

Prep Date: 09/15/20

Metal	FA78702-1 Original MSD		SpikeLot MPFLICP2 % Rec		MSD RPD	QC Limit
Aluminum						
Antimony	0.0	524	500	104.8	1.3	20
Arsenic	anr					
Barium						
Beryllium						
Cadmium						
Calcium						
Chromium						
Cobalt						
Copper	0.0	255	250	102.0	1.6	20
Iron						
Lead	0.0	487	500	97.4	2.1	20
Magnesium						
Manganese						
Molybdenum						
Nickel	anr					
Potassium						
Selenium						
Silver						
Sodium	anr					
Strontium						
Thallium						
Tin						
Titanium						
Vanadium						
Zinc	anr					

Associated samples MP37810: FA78551-28F, FA78551-29F, FA78551-30F, FA78551-31F

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (N) Matrix Spike Rec. outside of QC limits
 (anr) Analyte not requested

8.2.2
8

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: FA78551
 Account: AHTNACAS - Ahtna Global, LLC
 Project: Fort Ord Groundwater Monitoring

QC Batch ID: MP37810
 Matrix Type: AQUEOUS

Methods: SW846 6010D
 Units: ug/l

Prep Date: 09/15/20

Metal	BSP Result	Spikelot MPFLICP2	% Rec	QC Limits
Aluminum				
Antimony	519	500	103.8	80-120
Arsenic	anr			
Barium				
Beryllium				
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper	255	250	102.0	80-120
Iron				
Lead	480	500	96.0	80-120
Magnesium				
Manganese				
Molybdenum				
Nickel	anr			
Potassium				
Selenium				
Silver				
Sodium	anr			
Strontium				
Thallium				
Tin				
Titanium				
Vanadium				
Zinc	anr			

Associated samples MP37810: FA78551-28F, FA78551-29F, FA78551-30F, FA78551-31F

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

8.2.3
 8

SERIAL DILUTION RESULTS SUMMARY

Login Number: FA78551
 Account: AHTNACAS - Ahtna Global, LLC
 Project: Fort Ord Groundwater Monitoring

QC Batch ID: MP37810
 Matrix Type: AQUEOUS

Methods: SW846 6010D
 Units: ug/l

Prep Date: 09/15/20

Metal	FA78702-1 Original	SDL 1:5	%DIF	QC Limits
Aluminum				
Antimony	0.00	0.00	NC	0-10
Arsenic	anr			
Barium				
Beryllium				
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper	0.00	0.00	NC	0-10
Iron				
Lead	0.00	0.00	NC	0-10
Magnesium				
Manganese				
Molybdenum				
Nickel	anr			
Potassium				
Selenium				
Silver				
Sodium	anr			
Strontium				
Thallium				
Tin				
Titanium				
Vanadium				
Zinc	anr			

Associated samples MP37810: FA78551-28F, FA78551-29F, FA78551-30F, FA78551-31F

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

8.2.4
 8

POST DIGESTATE SPIKE SUMMARY

Login Number: FA78551
 Account: AHTNACAS - Ahtna Global, LLC
 Project: Fort Ord Groundwater Monitoring

QC Batch ID: MP37810
 Matrix Type: AQUEOUS

Methods: SW846 6010D
 Units: ug/l

Prep Date:

09/15/20

Metal	Sample ml	Final ml	FA78702-1 Raw	PS Corr.** ug/l	Spike ml	Spike ug/ml	Spike ug/l	% Rec	QC Limits
Aluminum									
Antimony	9.8	10		102.8	0.2	5	100	102.8	80-120
Arsenic									
Barium									
Beryllium									
Cadmium									
Calcium									
Chromium									
Cobalt									
Copper	9.8	10		100.9	0.2	5	100	100.9	80-120
Iron									
Lead	9.8	10		46.2	0.2	2.5	50	92.4	80-120
Magnesium									
Manganese									
Molybdenum									
Nickel									
Potassium									
Selenium									
Silver									
Sodium									
Strontium									
Thallium									
Tin									
Titanium									
Vanadium									
Zinc									

Associated samples MP37810: FA78551-28F, FA78551-29F, FA78551-30F, FA78551-31F

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (**) Corr. sample result = Raw * (sample volume / final volume)
 (anr) Analyte not requested

8.2.5
8

Instrument Detection Limits

Job Number: FA78551
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Instrument ID: SSTRACE1	Effective Date: 01/27/15
--------------------------------	---------------------------------

Analyte	IDL ug/l
Aluminum	14
Antimony	1
Arsenic	1.3
Barium	1
Beryllium	.2
Cadmium	.2
Calcium	50
Chromium	1
Cobalt	.2
Copper	1
Iron	17
Lead	1
Magnesium	35
Manganese	.5
Molybdenum	.3
Nickel	.4
Potassium	200
Selenium	2.4
Silicon	5
Silver	.7
Sodium	500
Strontium	.5
Sulfur	5
Thallium	1.1
Tin	.9
Titanium	.5
Vanadium	.5
Zinc	3

The above applies to the following instrument runs:
MA17052



Instrument Linear Ranges

Job Number: FA78551
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Instrument ID: SSTRACE1	Effective Date: 08/13/13
--------------------------------	---------------------------------

Analyte	Linear Range ug/l
Aluminum	500000
Antimony	10000
Arsenic	10000
Barium	10000
Beryllium	10000
Cadmium	10000
Calcium	500000
Chromium	10000
Cobalt	10000
Copper	10000
Iron	500000
Lead	10000
Magnesium	500000
Manganese	10000
Molybdenum	10000
Nickel	10000
Potassium	80000
Selenium	10000
Silver	1000
Sodium	80000
Strontium	10000
Sulfur	10000
Thallium	10000
Tin	10000
Titanium	10000
Vanadium	10000
Zinc	10000

The above applies to the following instrument runs:
MA17052



Metals Analysis

Raw Data

Sample Name: Blank Acquired: 9/15/2020 9:40:14 Type: Cal
Method: 6010D_010716(v543) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE01: :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	0.003	-0.001	-0.007	-0.010	-0.0008	0.054	-0.0041	-0.013
Stddev	.0001	.0004	.0000	.0001	.0015	.0005	.00006	.0001
%RSD	28.96	524.0	4.615	8.386	184.65	9.731	15.161	10.48

#1	.0004	-.0005	-.0007	-.0011	-.00019	.0056	-.00041	-.0014
#2	.0002	.0002	-.0007	-.0010	-.00013	.0058	-.00048	-.0014
#3	.0004	.0000	-.0006	-.0009	-.00009	.0048	-.00035	-.0012

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	-0.001	0.062	0.008	-0.015	0.001	0.003	0.014	0.079
Stddev	.0001	.0002	.0002	.0009	.0001	.0000	.0001	.0003
%RSD	68.73	3.425	26.57	60.47	68.07	15.75	7.322	4.337

#1	-.0001	.0060	.0010	-.0005	.0001	.0002	.0013	.0075
#2	-.0002	.0062	.0006	-.0019	.0001	.0003	.0015	.0081
#3	.0000	.0065	.0007	-.0022	.0000	.0003	.0013	.0081

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	-0.007	-0.019	-0.002	0.002	0.041	0.002	-0.005	0.015
Stddev	.0001	.0004	.0002	.0001	.0001	.0001	.0003	.0002
%RSD	19.12	19.28	144.7	59.55	2.326	32.55	50.22	10.97

#1	-.0007	-.0015	.0000	.0003	.0040	.0002	-.0007	.0013
#2	-.0009	-.0020	-.0004	.0001	.0042	.0001	-.0007	.0016
#3	-.0007	-.0021	.0000	.0002	.0041	.0002	-.0002	.0014

Elem	Ti1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S
Avg	-0.022	-0.002	0.031
Stddev	.0001	.0002	.0000
%RSD	5.063	77.81	1.460

#1	-.0022	-.0004	.0030
#2	-.0021	-.0001	.0031
#3	-.0023	-.0002	.0030

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Sample Name: Blank Acquired: 9/15/2020 9:40:14 Type: Cal
Method: 6010D_010716(v543) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE01: :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1281.6	2595.9	31771.	8419.3
Stddev	2.2	5.3	113.	31.5
%RSD	.16916	.20469	.35606	.37375

#1	1282.6	2589.8	31644.	8455.1
#2	1283.0	2599.3	31811.	8395.9
#3	1279.1	2598.7	31860.	8407.0

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9.1
9

Sample Name: HighStd Acquired: 9/15/2020 9:44:30 Type: Cal
Method: 6010D_010716(v543) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE01: :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2630	10.62	5686	38.42	26.434	16.36	13.642	9.363
Stddev	.0004	.02	.0011	.04	.048	.03	.024	.012
%RSD	.1644	.1905	.1975	.1166	.18104	.2066	.17829	.1223

#1	.2634	10.64	.5677	38.47	26.483	16.39	13.614	9.350
#2	.2626	10.61	.5681	38.38	26.433	16.36	13.660	9.373
#3	.2630	10.60	.5698	38.41	26.387	16.33	13.652	9.365

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1.156	3.443	8.677	5.234	1.273	8.514	3.671	22.35
Stddev	.002	.012	.019	.008	.003	.009	.004	.08
%RSD	.1409	.3581	.2190	.1501	.2653	.1005	.0957	.3659

#1	1.155	3.454	8.698	5.241	1.277	8.506	3.667	22.44
#2	1.157	3.445	8.660	5.235	1.273	8.513	3.673	22.34
#3	1.158	3.429	8.674	5.225	1.270	8.523	3.673	22.28

Elem	Ni2316	Pb2203	Sb2068	Se1960	Sn1899	Sr4077	Ti3349	Ti1908
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5.673	2.927	8.797	3.714	1.361	48.66	6.406	1.053
Stddev	.007	.006	.0009	.0007	.002	.44	.003	.003
%RSD	.1308	.2105	.0971	.1928	.1671	.9052	.0468	.2547

#1	5.664	2.926	8.788	.3706	1.359	48.58	6.408	1.053
#2	5.678	2.921	8.806	.3720	1.363	48.27	6.407	1.050
#3	5.676	2.934	8.798	.3716	1.362	49.14	6.402	1.055

Elem	V_2924	Zn2062
Units	Cts/S	Cts/S
Avg	2.086	6.447
Stddev	.002	.018
%RSD	.1114	.2808

#1	2.088	6.427
#2	2.086	6.462
#3	2.083	6.454

Raw Data MA17052 page 3 of 87

Sample Name: HighStd Acquired: 9/15/2020 9:44:30 Type: Cal
Method: 6010D_010716(v543) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE01: :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1053.9	2413.8	30032.	8193.5
Stddev	1.7	5.1	16.	28.2
%RSD	.16590	.21316	.05391	.34461

#1	1052.3	2412.9	30019.	8165.3
#2	1055.8	2409.2	30050.	8193.5
#3	1053.5	2419.3	30027.	8221.8

Raw Data MA17052 page 4 of 87

Sample Name: HighSi Acquired: 9/15/2020 9:50:06 Type: Cal
 Method: 6010D_010716(v543) Mode: IR Corr. Factor: 1.000000
 User: admin SSTRACE01: :
 Comment:

Elem Si2124
 Units Cts/S
 Avg **12.31**
 Stddev .02
 %RSD .1921

#1 12.34
 #2 12.31
 #3 12.29

Int. Std. Y_2243
 Units Cts/S
 Avg **2627.2**
 Stddev 8.7
 %RSD .32927

#1 2617.7
 #2 2634.6
 #3 2629.2

Sample Name: HSTD Acquired: 9/15/2020 9:55:34 Type: QC
 Method: 6010D_010716(v543) Mode: CONC Corr. Factor: 1.000000
 User: admin SSTRACE01: :
 Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4960	79.51	3.962	3.958	3.9822	80.13	3.9587	3.976	3.961
Stddev	.0026	.41	.002	.015	.0089	.16	.0038	.004	.023
%RSD	.5319	.5176	.0443	.3713	.22444	.1975	.09533	.0982	.5812

#1	4952	79.96	3.960	3.973	3.9828	79.98	3.9618	3.979	3.960
#2	4989	79.15	3.962	3.943	3.9909	80.30	3.9545	3.972	3.939
#3	4938	79.42	3.964	3.957	3.9730	80.12	3.9597	3.977	3.984

Check ? Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass
 Value Range

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.956	79.82	79.25	80.20	3.972	3.980	79.19	3.962	3.970
Stddev	.017	.25	.09	.16	.015	.006	.26	.003	.007
%RSD	.4324	.3192	.1167	.2049	.3640	.1591	.3335	.0757	.1891

#1	3.952	80.11	79.33	80.32	3.961	3.982	79.49	3.966	3.979
#2	3.974	79.65	79.15	80.02	3.967	3.973	78.98	3.960	3.965
#3	3.940	79.69	79.27	80.27	3.989	3.985	79.09	3.961	3.967

Check ? Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass
 Value Range

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Ti1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.954	3.960	5.995	3.975	3.992	3.968	3.982	3.968	3.980
Stddev	.006	.004	.009	.011	.038	.013	.010	.019	.007
%RSD	.1442	.1015	.1525	.2875	.9432	.3327	.2619	.4780	.1669

#1	3.959	3.958	6.006	3.983	4.030	3.954	3.974	3.949	3.981
#2	3.948	3.965	5.989	3.962	3.955	3.973	3.994	3.968	3.973
#3	3.956	3.958	5.992	3.980	3.991	3.979	3.978	3.987	3.986

Check ? Chk Pass Chk Pass None Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass
 Value Range

Sample Name: HSTD Acquired: 9/15/2020 9:55:34 Type: QC
 Method: 6010D_010716(v543) Mode: CONC Corr. Factor: 1.000000
 User: admin SSTRACE01: :
 Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1059.4	2435.5	3007.0	8144.1
Siddev	1.1	4.2	108.	8.5
%RSD	.10734	.17088	.35991	.10376

#1	1058.5	2431.0	3019.0	8147.8
#2	1059.1	2439.2	2998.0	8134.4
#3	1060.7	2436.2	3004.0	8150.0

Sample Name: ICV Acquired: 9/15/2020 10:03:06 Type: QC
 Method: 6010D_010716(v543) Mode: CONC Corr. Factor: 1.000000
 User: admin SSTRACE01: :
 Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2425	39.97	2.039	2.044	2.0489	39.75	2.0724	2.078	2.068
Stddev	.0014	.08	.006	.004	.0052	.20	.0040	.001	.001
%RSD	.5948	.1915	.3072	.1734	.25240	.5017	.19429	.0466	.0701

#1	.2437	40.00	2.033	2.045	2.0511	39.90	2.0764	2.077	2.067
#2	.2409	40.03	2.045	2.047	2.0526	39.82	2.0723	2.078	2.069
#3	.2428	39.88	2.038	2.040	2.0430	39.52	2.0684	2.079	2.070

Check ? Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass
 Value Range

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.003	40.43	39.03	40.44	2.122	2.001	36.92	2.072	2.016
Stddev	.011	.21	.04	.32	.003	.003	.06	.002	.007
%RSD	.5322	.5167	.1062	.7881	.1497	.1695	.1662	.0968	.3456

#1	1.993	40.50	38.99	40.62	2.126	1.999	36.85	2.074	2.022
#2	2.003	40.60	39.08	40.63	2.119	1.998	36.97	2.071	2.009
#3	2.014	40.20	39.02	40.07	2.122	2.005	36.93	2.071	2.017

Check ? Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass
 Value Range

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Ti1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.146	2.028	1.553	1.935	2.149	2.101	2.101	2.094	2.066
Stddev	.004	.006	.0021	.001	.004	.001	.006	.004	.003
%RSD	.1626	.2844	1.371	.0459	.1737	.0685	.2792	.1892	.1214

#1	2.143	2.023	1.576	1.935	2.151	2.102	2.094	2.096	2.069
#2	2.146	2.035	1.550	1.935	2.152	2.101	2.106	2.089	2.065
#3	2.150	2.027	1.534	1.936	2.145	2.099	2.103	2.096	2.064

Check ? Chk Pass Chk Pass None Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass
 Value Range

Sample Name: ICV Acquired: 9/15/2020 10:03:06 Type: QC
 Method: 6010D_010716(v543) Mode: CONC Corr. Factor: 1.000000
 User: admin SSTRACE01: :
 Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1129.9	2489.8	3080.3	8306.6
Stddev	1.5	4.7	148.	38.7
%RSD	.13181	.18766	.48174	.46592
#1	1130.6	2491.1	30658.	8266.6
#2	1128.2	2484.6	30954.	8309.2
#3	1131.0	2493.7	30796.	8343.9

Check ? Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass
 High Limit
 Low Limit

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	.0036	-.0111	.0010	.0000	.0008	-.0016	-.0002	.0002
Stddev	.0001	.0008	.0112	.0150	.000	.0002	.0031	.0002	.0007
%RSD	124.3	22.01	101.1	1481.	1015.	32.28	197.0	72.24	274.8
#1	.0000	.0032	-.0223	-.0101	.0000	.0008	-.0004	.0001	.0010
#2	.0002	.0046	-.0110	.0181	.0000	.0010	-.0051	.0002	-.0002
#3	.0000	.0032	.0001	-.0049	.0000	.0005	.0008	.0004	.0000

Check ? Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass
 High Limit
 Low Limit

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Ti1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0011	-.0017	.0011	.0000	.0000	.0005	.0012	-.0001	.0000
Stddev	.0002	.0009	.0007	.000	.0000	.0001	.0011	.0002	.0002
%RSD	19.77	51.90	64.35	26050.	38.76	14.29	85.59	171.9	428.3
#1	-.0011	-.0009	.0013	-.0002	.0001	.0005	.0001	-.0003	-.0001
#2	-.0009	-.0027	.0016	.0002	.0000	.0004	.0014	.0001	.0000
#3	-.0013	-.0016	.0003	.0000	.0000	.0004	.0022	-.0001	.0001

Check ? Chk Pass Chk Pass None Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass
 High Limit
 Low Limit

Sample Name: ICB Acquired: 9/15/2020 10:09:28 Type: QC
 Method: 6010D_010716(v543) Mode: CONC Corr. Factor: 1.000000
 User: admin SSTRACE01: :
 Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	.0027	.0004	.0001	.00007	.0010	.00004	.0001	-.0002
Stddev	.0002	.0018	.0014	.0001	.00003	.0009	.00001	.0000	.0000
%RSD	232.2	65.95	357.8	87.81	39.883	86.00	21.442	17.81	10.79
#1	.0004	.0024	-.0006	.0000	.00006	.0013	.00005	.0001	-.0002
#2	.0000	.0011	-.0002	.0001	.00004	.0000	.00003	.0001	-.0002
#3	-.0001	.0046	.0019	.0000	.00009	.0017	.00005	.0002	-.0002

Check ? Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass
 High Limit
 Low Limit

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	.0036	-.0111	.0010	.0000	.0008	-.0016	-.0002	.0002
Stddev	.0001	.0008	.0112	.0150	.000	.0002	.0031	.0002	.0007
%RSD	124.3	22.01	101.1	1481.	1015.	32.28	197.0	72.24	274.8
#1	.0000	.0032	-.0223	-.0101	.0000	.0008	-.0004	.0001	.0010
#2	.0002	.0046	-.0110	.0181	.0000	.0010	-.0051	.0002	-.0002
#3	.0000	.0032	.0001	-.0049	.0000	.0005	.0008	.0004	.0000

Check ? Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass
 High Limit
 Low Limit

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Ti1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0011	-.0017	.0011	.0000	.0000	.0005	.0012	-.0001	.0000
Stddev	.0002	.0009	.0007	.000	.0000	.0001	.0011	.0002	.0002
%RSD	19.77	51.90	64.35	26050.	38.76	14.29	85.59	171.9	428.3
#1	-.0011	-.0009	.0013	-.0002	.0001	.0005	.0001	-.0003	-.0001
#2	-.0009	-.0027	.0016	.0002	.0000	.0004	.0014	.0001	.0000
#3	-.0013	-.0016	.0003	.0000	.0000	.0004	.0022	-.0001	.0001

Check ? Chk Pass Chk Pass None Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass
 High Limit
 Low Limit

Sample Name: ICB Acquired: 9/15/2020 10:09:28 Type: QC
 Method: 6010D_010716(v543) Mode: CONC Corr. Factor: 1.000000
 User: admin SSTRACE01: :
 Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1282.7	2618.6	32056.	8337.3
Stddev	3.3	6.9	52.	52.8
%RSD	.25974	.26520	.16071	.63285
#1	1279.3	2615.0	32016.	8278.9
#2	1286.0	2626.6	32114.	8381.5
#3	1282.7	2614.2	32037.	8351.6

Check ? Value Range

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0237	.3056	9.775	4.899	.0158	.0484	9.029	.0417	.0048
Stddev	.0003	.0030	.029	.025	.0001	.0001	.054	.0001	.0005
%RSD	1.413	.9894	.2959	.5203	.5360	.1103	.5947	.1319	9.746
#1	.0241	.3054	9.806	4.923	.0157	.0483	9.079	.0417	.0050
#2	.0235	.3027	9.749	4.901	.0158	.0484	8.972	.0417	.0052
#3	.0234	.3087	9.771	4.872	.0158	.0484	9.036	.0418	.0043

Check ? Value Range

Elem	Sb2068	Si2124	Sn1899	Sr4077	Ti3349	Ti1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0044	.1225	.0509	.0105	.0104	.0109	.0504	.0194
Stddev	.0017	.0005	.0006	.0000	.0001	.0006	.0002	.0000
%RSD	38.04	.4311	1.212	.4349	.4827	5.243	.4917	.2085
#1	.0055	.1220	.0503	.0105	.0105	.0103	.0502	.0194
#2	.0053	.1231	.0509	.0104	.0104	.0108	.0504	.0194
#3	.0025	.1225	.0515	.0104	.0104	.0114	.0506	.0195

Check ? Value Range

Sample Name: CRIA Acquired: 9/15/2020 10:13:15 Type: QC
 Method: 6010D_010716(v543) Mode: CONC Corr. Factor: 1.000000
 User: admin SSTRACE01: :
 Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0084	.2018	.0089	.2025	.00498	1.015	.00520	.0519	.0105
Stddev	.0004	.0050	.0005	.0001	.00002	.002	.00003	.0002	.0001
%RSD	4.759	2.459	5.101	.0616	.41716	.1634	.59998	.4248	1.073
#1	.0082	.2026	.0084	.2026	.00501	1.017	.00517	.0520	.0104
#2	.0088	.1965	.0093	.2025	.00498	1.014	.00523	.0520	.0106
#3	.0081	.2063	.0089	.2024	.00496	1.014	.00519	.0516	.0106

Check ? Value Range

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0237	.3056	9.775	4.899	.0158	.0484	9.029	.0417	.0048
Stddev	.0003	.0030	.029	.025	.0001	.0001	.054	.0001	.0005
%RSD	1.413	.9894	.2959	.5203	.5360	.1103	.5947	.1319	9.746
#1	.0241	.3054	9.806	4.923	.0157	.0483	9.079	.0417	.0050
#2	.0235	.3027	9.749	4.901	.0158	.0484	8.972	.0417	.0052
#3	.0234	.3087	9.771	4.872	.0158	.0484	9.036	.0418	.0043

Check ? Value Range

Elem	Sb2068	Si2124	Sn1899	Sr4077	Ti3349	Ti1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0044	.1225	.0509	.0105	.0104	.0109	.0504	.0194
Stddev	.0017	.0005	.0006	.0000	.0001	.0006	.0002	.0000
%RSD	38.04	.4311	1.212	.4349	.4827	5.243	.4917	.2085
#1	.0055	.1220	.0503	.0105	.0105	.0103	.0502	.0194
#2	.0053	.1231	.0509	.0104	.0104	.0108	.0504	.0194
#3	.0025	.1225	.0515	.0104	.0104	.0114	.0506	.0195

Check ? Value Range

Sample Name: CRIA Acquired: 9/15/2020 10:13:15 Type: QC
 Method: 6010D_010716(v543) Mode: CONC Corr. Factor: 1.000000
 User: admin SSTRACE01: :
 Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1252.4	2582.9	31786.	8293.4
Stddev	1.6	5.4	130.	56.5
%RSD	.12609	.20981	.40891	.68081
#1	1252.5	2584.8	31929.	8231.9
#2	1250.8	2576.8	31755.	8305.1
#3	1253.9	2587.1	31675.	8343.0

Sample Name: CRIA Acquired: 9/15/2020 10:19:14 Type: QC
 Method: 6010D_010716(v543) Mode: CONC Corr. Factor: 1.000000
 User: admin SSTRACE01: :
 Comment:

Elem	Se1960
Units	ppm
Avg	0088
Stddev	.0012
%RSD	13.96
#1	0079
#2	0102
#3	0084

Check ? Chk Pass
 Value
 Range

Int. Std.	Y_2243
Units	Cts/S
Avg	2570.4
Stddev	7.4
%RSD	.28699
#1	2573.0
#2	2576.2
#3	2562.1

Sample Name: SISIC Acquired: 9/15/2020 10:29:01 Type: QC
 Method: 6010D_010716(v543) Mode: CONC Corr. Factor: 1.000000
 User: admin SSTRACE01: :
 Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.003	0.097	-0.065	0.002	0.0004	0.073	0.0025	-0.005	0.000
Stddev	.0003	.0025	.0007	.0001	.00004	.0009	.00008	.0001	.000
%RSD	101.2	26.00	11.04	42.06	107.73	12.69	34.305	21.32	1045.
#1	.0000	.0125	-.0073	.0002	.00008	.0067	.00019	-.0004	-.0002
#2	-.0004	.0077	-.0059	.0001	.00001	.0069	.00034	-.0006	.0001
#3	-.0006	.0089	-.0062	.0003	.00002	.0084	.00020	-.0004	.0000

Check ? None None None None None None None None None
 Value
 Range

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.018	0.145	-0.047	-0.010	0.001	-0.006	0.021	-0.010	-0.009
Stddev	.0001	.0021	.0062	.0087	.0000	.0002	.0024	.0001	.0002
%RSD	3.665	14.75	132.3	86.10	44.23	25.95	115.9	6.324	18.28
#1	-0.018	0.147	-0.048	-0.013	.0001	-0.005	-0.006	-0.009	-0.009
#2	-0.018	0.123	-0.107	-0.187	.0000	-0.006	.0027	-0.010	-0.010
#3	-0.019	0.165	.0016	-.0104	.0001	-0.008	.0040	-0.011	-.0007

Check ? None None None None None None None None Chk Pass
 Value
 Range

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Ti1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.054	-0.017	50.01	0.002	0.000	0.000	0.009	-0.003	0.032
Stddev	.0011	.0033	.04	.0004	.0000	.000	.0008	.0001	.0000
%RSD	20.47	190.6	.0704	257.9	122.9	111.8	81.77	24.29	1.131
#1	-0.067	-0.050	50.03	-0.003	.0000	-0.001	.0012	-0.003	.0031
#2	-0.049	.0016	49.97	.0004	.0000	.0000	.0001	-0.003	.0032
#3	-0.046	-0.019	50.04	.0003	.0000	.0000	.0015	-0.004	.0032

Check ? None None Chk Pass None None None None None
 Value
 Range

Sample Name: SISIC Acquired: 9/15/2020 10:29:01 Type: QC
 Method: 6010D_010716(v543) Mode: CONC Corr. Factor: 1.000000
 User: admin SSTRACE01: :
 Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1256.9	2585.5	32224.	8330.6
Stddev	1.4	4.3	196.	42.0
%RSD	.10749	.16579	.60671	.50437
#1	1255.4	2583.2	32445.	8353.3
#2	1257.4	2590.5	32073.	8282.1
#3	1258.0	2582.9	32155.	8356.4

Sample Name: NASIC Acquired: 9/15/2020 10:38:48 Type: QC
Method: 6010D_010716(v543) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: :
Comment:

Table with 8 columns: Elem, Ag3280, Al3961, As1890, Ba4554, Be3130, Ca3179, Cd2265, Co2286. Rows include Units, Avg, Stddev, %RSD, and #1-3.

Table with 8 columns: #1, #2, #3. Rows include Avg, Stddev, %RSD.

Table with 8 columns: Check?, High Limit, Low Limit. Rows include Chk Pass, Chk Fail.

Table with 8 columns: Elem, Cr2677, Cu3247, Fe2599, K_7664, Mg2790, Mn2576, Mo2020, Na5895. Rows include Units, Avg, Stddev, %RSD, and #1-3.

Table with 8 columns: #1, #2, #3. Rows include Avg, Stddev, %RSD.

Table with 8 columns: Check?, High Limit, Low Limit. Rows include Chk Pass, Chk Fail.

Table with 8 columns: Elem, Ni2316, Pb2203, Sb2068, Se1960, Si2124, Sn1899, Sr4077, Ti3349. Rows include Units, Avg, Stddev, %RSD, and #1-3.

Table with 8 columns: #1, #2, #3. Rows include Avg, Stddev, %RSD.

Table with 8 columns: Check?, High Limit, Low Limit. Rows include Chk Fail, Chk Pass.

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Sample Name: NASIC Acquired: 9/15/2020 10:38:48 Type: QC
Method: 6010D_010716(v543) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: :
Comment:

Table with 4 columns: Elem, Tl1908, V_2924, Zn2062. Rows include Units, Avg, Stddev, %RSD, and #1-3.

Table with 4 columns: #1, #2, #3. Rows include Avg, Stddev, %RSD.

Table with 4 columns: Check?, High Limit, Low Limit. Rows include Chk Pass, Chk Fail.

Table with 4 columns: Int. Std., In2306, Y_2243, Y_3600, Y_3710. Rows include Units, Avg, Stddev, %RSD, and #1-3.

Table with 4 columns: #1, #2, #3. Rows include Avg, Stddev, %RSD.

Table with 4 columns: Check?, High Limit, Low Limit. Rows include Chk Pass, Chk Fail.

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Sample Name: ICSA Acquired: 9/15/2020 10:47:13 Type: QC
Method: 6010D_010716(v544) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: :
Comment:

Table with 10 columns: Elem, Ag3280, Al3961, As1890, Ba4554, Be3130, Ca3179, Cd2265, Co2286, Cr2677. Rows include Units, Avg, Stddev, %RSD, and #1-3.

Table with 10 columns: #1, #2, #3. Rows include Avg, Stddev, %RSD.

Table with 10 columns: Check?, High Limit, Low Limit. Rows include Chk Pass, Chk Fail.

Table with 10 columns: Elem, Cu3247, Fe2599, K_7664, Mg2790, Mn2576, Mo2020, Na5895, Ni2316, Pb2203. Rows include Units, Avg, Stddev, %RSD, and #1-3.

Table with 10 columns: #1, #2, #3. Rows include Avg, Stddev, %RSD.

Table with 10 columns: Check?, High Limit, Low Limit. Rows include Chk Pass, Chk Fail.

Table with 10 columns: Elem, Sb2068, Se1960, Si2124, Sn1899, Sr4077, Ti3349, Tl1908, V_2924, Zn2062. Rows include Units, Avg, Stddev, %RSD, and #1-3.

Table with 10 columns: #1, #2, #3. Rows include Avg, Stddev, %RSD.

Table with 10 columns: Check?, High Limit, Low Limit. Rows include Chk Pass, Chk Fail.

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Sample Name: ICSA Acquired: 9/15/2020 10:47:13 Type: QC
Method: 6010D_010716(v544) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: :
Comment:

Table with 5 columns: Int. Std., In2306, Y_2243, Y_3600, Y_3710. Rows include Units, Avg, Stddev, %RSD, and #1-3.

Table with 5 columns: #1, #2, #3. Rows include Avg, Stddev, %RSD.

Table with 5 columns: Check?, High Limit, Low Limit. Rows include Chk Pass, Chk Fail.

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Sample Name: ICSAB Acquired: 9/15/2020 10:55:16 Type: QC
 Method: 6010D_010716(v544) Mode: CONC Corr. Factor: 1.000000
 User: admin SSTRACE01: : :
 Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.079	521.9	9897	5105	48412	471.8	91157	4690	4790
Stddev	.005	2.7	.0045	.0021	.00115	1.8	.00160	.0011	.0032
%RSD	.4281	.5183	.4496	.4209	.23804	.3818	.17562	.2403	.6743
#1	1.075	521.1	9929	5117	48534	469.7	91338	4696	4784
#2	1.078	519.7	9917	5080	48305	472.8	91102	4698	4761
#3	1.084	525.0	9846	5117	48396	472.9	91032	4678	4825

Check ? Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass
 Value Range

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5368	190.5	-0.196	546.7	4931	.9056	1.060	9202	9259
Stddev	.0032	.4	.0105	1.3	.0014	.0017	.0016	.0020	.0011
%RSD	.5988	.2258	53.32	2.364	.2820	.1911	1.549	.2185	.1204
#1	.5368	190.3	-.0143	545.7	4922	.9056	.1078	9224	9260
#2	.5336	190.2	-.0317	546.2	4924	.9073	.1047	9195	9270
#3	.5401	191.0	-.0129	548.1	4947	.9038	.1054	9186	9248

Check ? Chk Pass Chk Pass None Chk Pass Chk Pass Chk Pass None Chk Pass Chk Pass
 Value Range

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Ti1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.022	.9325	.0352	8637	.9964	1.036	.8704	4830	9312
Stddev	.004	.0053	.0032	.0016	.0056	.003	.0040	.0011	.0005
%RSD	.4359	.5632	9.132	.1885	.5573	.2664	4.584	2.299	.0585
#1	1.023	.9280	.0354	8650	.9957	1.033	.8658	4818	9314
#2	1.026	.9383	.0319	8619	.9912	1.035	.8725	4840	9306
#3	1.017	.9312	.0383	8643	1.002	1.039	.8729	4832	9316

Check ? Chk Pass Chk Pass None Chk Pass None None Chk Pass Chk Pass Chk Pass
 Value Range

Sample Name: ICSAB Acquired: 9/15/2020 10:55:16 Type: QC
 Method: 6010D_010716(v544) Mode: CONC Corr. Factor: 1.000000
 User: admin SSTRACE01: : :
 Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	971.42	2279.8	28228.	7949.7
Stddev	2.36	9.3	65.	19.9
%RSD	.24306	.40878	.22911	.25046
#1	971.18	2274.0	28172.	7970.8
#2	969.19	2274.8	28214.	7931.3
#3	973.89	2290.5	28299.	7946.9

Sample Name: CCV Acquired: 9/15/2020 11:16:49 Type: QC
 Method: 6010D_010716(v544) Mode: CONC Corr. Factor: 1.000000
 User: admin SSTRACE01: : :
 Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2386	40.65	1.986	2.071	2.0495	40.40	2.0156	2.081	2.092
Stddev	.0014	.16	.005	.004	.0065	.15	.0007	.002	.002
%RSD	.5964	.3920	.2560	.1724	.31600	.3689	.03640	.0975	.1156
#1	.2380	40.57	1.982	2.075	2.0448	40.26	2.0148	2.081	2.090
#2	.2402	40.54	1.985	2.068	2.0468	40.39	2.0162	2.079	2.095
#3	.2376	40.83	1.992	2.072	2.0569	40.56	2.0157	2.083	2.092

Check ? Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass
 Value Range

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.991	39.94	40.04	40.24	2.020	2.131	39.82	2.043	1.992
Stddev	.011	.13	.08	.29	.004	.005	.06	.002	.004
%RSD	.5639	.3279	.1878	.7193	.1955	.2166	.1984	.1171	.2125
#1	2.001	39.80	40.09	39.92	2.017	2.129	39.90	2.043	1.993
#2	1.991	39.96	39.96	40.47	2.020	2.128	39.74	2.041	1.987
#3	1.979	40.06	40.09	40.35	2.025	2.136	39.83	2.046	1.995

Check ? Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass
 Value Range

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Ti1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.982	1.988	2.790	2.020	2.058	1.939	2.034	1.952	2.052
Stddev	.012	.013	.017	.006	.001	.002	.001	.004	.006
%RSD	.6056	.6448	.5962	.2825	.0491	.0816	.0478	.2180	.2911
#1	1.987	1.987	2.791	2.023	2.057	1.940	2.033	1.948	2.052
#2	1.969	1.976	2.772	2.013	2.057	1.938	2.035	1.953	2.058
#3	1.991	2.002	2.805	2.023	2.059	1.938	2.034	1.956	2.046

Check ? Chk Pass Chk Pass None Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass
 Value Range

Sample Name: CCV Acquired: 9/15/2020 11:16:49 Type: QC
 Method: 6010D_010716(v544) Mode: CONC Corr. Factor: 1.000000
 User: admin SSTRACE01: : :
 Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1107.4	2473.2	30850.	8051.7
Stddev	2.6	1.6	48.	40.9
%RSD	.23070	.06576	.15422	.50851
#1	1106.3	2471.9	30841.	8069.0
#2	1105.6	2475.1	30808.	8081.2
#3	1110.3	2472.7	30901.	8005.0

Sample Name: CCB Acquired: 9/15/2020 11:29:56 Type: QC
 Method: 6010D_010716(v544) Mode: CONC Corr. Factor: 1.000000
 User: admin SSTRACE01: : :
 Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.001	0.112	-0.007	0.004	0.0011	0.061	0.0038	0.004	0.002
Stddev	0.002	0.005	0.005	0.001	0.0002	0.008	0.0018	0.001	0.001
%RSD	173.9	4.696	78.62	13.07	21.289	13.44	47.955	38.68	79.06
#1	-0.004	0.106	-0.001	0.003	0.0012	0.070	0.0044	0.004	0.003
#2	-0.001	0.117	-0.011	0.004	0.0011	0.054	0.0053	0.005	0.001
#3	-0.001	0.112	-0.008	0.004	0.0008	0.059	0.0018	0.002	0.001

Check ? Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass
 High Limit
 Low Limit

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	0.008	0.007	-0.0088	-0.0070	0.0001	0.000	-0.0071	0.007	-0.002
Stddev	0.001	0.022	0.165	0.223	0.000	0.00	0.012	0.001	0.004
%RSD	14.89	339.0	187.0	315.9	48.59	422.3	16.30	8.304	237.6
#1	0.007	-0.008	0.012	-0.278	0.001	-0.001	-0.067	0.006	-0.002
#2	0.008	-0.032	0.002	-0.097	0.001	0.001	-0.084	0.006	0.003
#3	0.009	-0.005	-0.278	0.164	0.001	-0.001	-0.062	0.007	-0.006

Check ? Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass
 High Limit
 Low Limit

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Ti1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.008	-0.003	0.018	-0.001	0.000	-0.001	F_0.023	-0.001	0.003
Stddev	0.008	0.017	0.004	0.002	0.000	0.000	0.003	0.002	0.001
%RSD	109.6	627.5	24.22	149.9	39.51	42.22	13.16	208.3	43.79
#1	-0.008	-0.018	0.013	-0.002	0.001	-0.001	0.020	-0.003	0.003
#2	-0.001	-0.016	0.021	-0.002	0.000	-0.002	0.026	0.001	0.005
#3	-0.016	-0.006	0.020	0.001	0.000	-0.001	0.023	-0.001	0.002

Check ? Chk Pass Chk Pass None Chk Pass Chk Pass Chk Pass Chk Fail Chk Pass Chk Pass
 High Limit 0.020
 Low Limit -0.020

Sample Name: CCB Acquired: 9/15/2020 11:29:56 Type: QC
 Method: 6010D_010716(v544) Mode: CONC Corr. Factor: 1.000000
 User: admin SSTRACE01: : :
 Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1254.5	2578.8	32048.	8196.3
Stddev	1.0	6.4	104.	30.8
%RSD	0.8220	0.24919	0.32379	0.37550
#1	1254.9	2580.4	31955.	8179.8
#2	1255.3	2584.3	32030.	8231.8
#3	1253.3	2571.7	32160.	8177.2

Sample Name: MP37808-MB1 Acquired: 9/15/2020 11:36:56 Type: QC
 Method: 6010D_010716(v544) Mode: CONC Corr. Factor: 1.000000
 User: admin SSTRACE01: : :
 Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	0.000	0.059	-0.012	0.001	0.0001	0.048	0.0004	0.002	0.002
Stddev	0.004	0.052	0.009	0.000	0.0002	0.003	0.0004	0.001	0.003
%RSD	1739.	88.98	69.66	50.42	348.59	6.461	109.26	49.37	177.5
#1	-0.004	0.002	-0.022	0.001	0.0000	0.044	-0.0001	0.001	-0.002
#2	-0.002	0.105	-0.006	0.001	0.0003	0.049	0.0006	0.002	0.002
#3	0.003	0.070	-0.009	0.000	-0.0001	0.050	0.0007	0.002	0.005

Check ? Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass
 High Limit
 Low Limit

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.010	-0.019	-0.037	0.029	0.000	-0.005	-0.059	0.002	-0.003
Stddev	0.002	0.010	0.047	0.089	0.000	0.001	0.026	0.001	0.007
%RSD	16.32	55.56	127.0	305.8	24.00	30.29	44.39	61.00	295.6
#1	-0.010	-0.030	0.007	-0.064	0.000	-0.006	-0.031	0.001	0.006
#2	-0.008	-0.011	-0.032	0.113	0.000	-0.005	-0.063	0.002	-0.006
#3	-0.011	-0.014	-0.087	0.038	0.000	-0.003	-0.083	0.003	-0.008

Check ? Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass
 High Limit
 Low Limit

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Ti1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.013	-0.017	0.010	0.001	0.001	-0.004	0.010	-0.004	-0.008
Stddev	0.015	0.015	0.005	0.002	0.000	0.000	0.007	0.001	0.002
%RSD	114.8	84.67	1.072	344.3	61.58	9.792	73.53	29.18	20.19
#1	-0.001	-0.010	0.011	0.003	0.001	-0.004	0.011	-0.005	-0.007
#2	-0.029	-0.007	0.014	-0.002	0.001	-0.004	0.017	-0.003	-0.009
#3	-0.008	-0.034	0.053	0.001	0.000	-0.003	0.002	-0.005	-0.007

Check ? Chk Pass Chk Pass None Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass
 High Limit
 Low Limit

Sample Name: MP37808-MB1 Acquired: 9/15/2020 11:36:56 Type: QC
 Method: 6010D_010716(v544) Mode: CONC Corr. Factor: 1.000000
 User: admin SSTRACE01: : :
 Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1248.9	2565.7	32043.	8295.0
Stddev	3.7	3.6	89.	68.7
%RSD	0.29991	0.13942	0.27668	0.82862
#1	1248.9	2566.5	31941.	8252.3
#2	1252.7	2568.8	32080.	8374.2
#3	1245.2	2561.8	32106.	8258.3

Sample Name: MP37808-B1 Acquired: 9/15/2020 11:41:50 Type: QC
Method: 6010D_010716(v544) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Table with 10 columns: Elem, Units, Avg, Stddev, %RSD. Rows include Ag3280, Al3961, As1890, Ba4554, Be3130, Ca3179, Cd2265, Co2286, Cr2677 and #1, #2, #3.

Check ? Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass
Value Range

Table with 10 columns: Elem, Units, Avg, Stddev, %RSD. Rows include Cu3247, Fe2599, K_7664, Mg2790, Mn2576, Mo2020, Na5895, Ni2316, Pb2203 and #1, #2, #3.

Check ? Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass
Value Range

Table with 10 columns: Elem, Units, Avg, Stddev, %RSD. Rows include Sb2068, Se1960, Si2124, Sn1899, Sr4077, Ti3349, Tl1908, V_2924, Zn2062 and #1, #2, #3.

Check ? Chk Pass Chk Pass None Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass
Value Range

Sample Name: MP37808-B1 Acquired: 9/15/2020 11:41:50 Type: QC
Method: 6010D_010716(v544) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Table with 5 columns: Int. Std, Units, Avg, Stddev, %RSD. Rows include In2306, Y_2243, Y_3600, Y_3710 and #1, #2, #3.

Sample Name: FA78542-1 Acquired: 9/15/2020 11:46:22 Type: Unk
Method: 6010D_010716(v544) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Table with 10 columns: Elem, IS Ref, Units, Avg, Stddev, %RSD. Rows include Ag3280, Al3961, As1890, Ba4554, Be3130, Ca3179, Cd2265, Co2286, Cr2677 and #1, #2, #3.

Table with 10 columns: Elem, IS Ref, Units, Avg, Stddev, %RSD. Rows include Cu3247, Fe2599, K_7664, Mg2790, Mn2576, Mo2020, Na5895, Ni2316, Pb2203 and #1, #2, #3.

Table with 10 columns: Elem, IS Ref, Units, Avg, Stddev, %RSD. Rows include Sb2068, Se1960, Si2124, Sn1899, Sr4077, Ti3349, Tl1908, V_2924, Zn2062 and #1, #2, #3.

Table with 5 columns: Int. Std, Units, Avg, Stddev, %RSD. Rows include In2306, Y_2243, Y_3600, Y_3710 and #1, #2, #3.

Sample Name: MP37808-D1 Acquired: 9/15/2020 11:51:21 Type: Unk
Method: 6010D_010716(v544) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Table with 10 columns: Elem, IS Ref, Units, Avg, Stddev, %RSD. Rows include Ag3280, Al3961, As1890, Ba4554, Be3130, Ca3179, Cd2265, Co2286, Cr2677 and #1, #2, #3.

Table with 10 columns: Elem, IS Ref, Units, Avg, Stddev, %RSD. Rows include Cu3247, Fe2599, K_7664, Mg2790, Mn2576, Mo2020, Na5895, Ni2316, Pb2203 and #1, #2, #3.

Table with 10 columns: Elem, IS Ref, Units, Avg, Stddev, %RSD. Rows include Sb2068, Se1960, Si2124, Sn1899, Sr4077, Ti3349, Tl1908, V_2924, Zn2062 and #1, #2, #3.

Table with 5 columns: Int. Std, Units, Avg, Stddev, %RSD. Rows include In2306, Y_2243, Y_3600, Y_3710 and #1, #2, #3.

Sample Name: MP37808-SD1 Acquired: 9/15/2020 11:56:20 Type: Konk
 Method: 6010D_010716(v544) Mode: CONC Corr. Factor: 5.000000
 User: admin SSTRACE01: : :
 Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0006	.0662	-0.124	.1359	-0.0002	212.8	.00047	.0004
Stddev	.0017	.0180	.0045	.0002	.00016	.7	.00030	.0005
%RSD	284.6	27.14	36.40	.1826	834.25	.3416	65.201	111.5

#1	.0016	.0739	-.0099	.1362	.00014	213.4	.00012	.0003
#2	.0015	.0790	-.0177	.1358	-.00018	212.0	.00057	.0010
#3	-.0014	.0456	-.0097	.1357	-.00002	212.9	.00070	.0000

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0268	.0023	-.0103	132.6	.1032	.0004	.0062	14.13
Stddev	.0013	.0005	.0043	.6	.0624	.0001	.0008	.09
%RSD	4.910	23.27	41.98	.4160	60.50	17.19	12.29	.6431

#1	.0261	.0028	-.0081	133.2	.0434	.0004	.0057	14.23
#2	.0283	.0021	-.0153	132.2	.0982	.0003	.0057	14.05
#3	.0259	.0018	-.0076	132.4	.1679	.0004	.0070	14.11

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0006	.0049	-.0045	-.0134	.7125	-.0010	1.336	.0067
Stddev	.0011	.0011	.0054	.0086	.0094	.0020	.005	.0001
%RSD	196.8	23.31	120.0	64.16	1.320	203.7	.3896	2.184

#1	.0009	.0055	-.0079	-.0139	.7023	.0010	1.340	.0067
#2	-.0007	.0055	-.0074	-.0045	.7145	-.0010	1.338	.0065
#3	.0015	.0036	.0017	-.0216	.7208	-.0029	1.330	.0068

Elem	Tl1908	V_2924	Zn2062
IS Ref	(In2306)	(Y_3600)	(Y_2243)
Units	ppm	ppm	ppm
Avg	-.0007	-.0010	-.0007
Stddev	.0088	.0002	.0009
%RSD	127.2	21.20	129.7

#1	-.0105	-.0013	-.0008
#2	.0021	-.0009	.0003
#3	.0063	-.0010	-.0016

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Sample Name: MP37808-SD1 Acquired: 9/15/2020 11:56:20 Type: Konk
 Method: 6010D_010716(v544) Mode: CONC Corr. Factor: 5.000000
 User: admin SSTRACE01: : :
 Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1199.4	2499.8	3140.0	8129.8
Stddev	9.5	22.0	139.	44.3
%RSD	.79464	.87973	.44225	.54494

#1	1208.2	2522.2	3130.4	8085.1
#2	1189.3	2478.3	3133.6	8173.7
#3	1200.8	2499.0	3155.9	8130.8

Raw Data MA17052 page 34 of 87

Sample Name: MP37808-S1 Acquired: 9/15/2020 12:01:11 Type: Konk
 Method: 6010D_010716(v544) Mode: CONC Corr. Factor: 1.000000
 User: admin SSTRACE01: : :
 Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0499	27.52	2.017	2.200	.05100	229.9	.04779	.5086	.2286
Stddev	.0000	.15	.006	.010	.00023	.8	.00006	.0012	.0002
%RSD	.0346	.5386	.2763	.4550	.44982	.3552	.13552	.2309	.0724

#1	.0499	27.44	2.011	2.200	.05074	229.0	.04776	.5075	.2287
#2	.0499	27.42	2.018	2.189	.05117	230.4	.04775	.5083	.2286
#3	.0499	27.69	2.022	2.209	.05109	230.4	.04787	.5099	.2284

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2572	25.47	F 158.2	24.11	.4950	4982	37.59	4.967	.4838
Stddev	.0008	.10	.8	.11	.0011	.0003	.16	.0003	.0036
%RSD	.3001	.3933	.4821	.4521	.2283	.0503	4.363	.0597	.7358

#1	.2576	25.36	158.0	23.98	.4939	4983	37.58	4.964	.4802
#2	.2563	25.56	157.5	24.19	.4948	4979	37.43	4.968	.4873
#3	.2578	25.47	159.0	24.14	.4962	4983	37.75	4.969	.4838

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5247	2.022	1.263	.4978	1.845	5.322	1.917	.5069	.4949
Stddev	.0010	.012	.001	.0012	.003	.0011	.006	.0013	.0007
%RSD	.1940	.5924	.0623	.2490	.1555	.2129	.3193	.2655	.1322

#1	.5276	2.016	1.263	.4971	1.847	5.317	1.910	.5055	.4944
#2	.5247	2.014	1.262	.4970	1.842	5.314	1.919	.5069	.4946
#3	.5257	2.036	1.263	.4992	1.847	5.335	1.922	.5082	.4956

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1052.0	2376.9	2986.9	7945.4
Stddev	1.2	3.4	103.	25.7
%RSD	.11429	.14103	.34417	.32337

#1	1053.1	2373.2	2979.5	7972.1
#2	1050.7	2377.5	2998.7	7920.8
#3	1052.3	2379.9	2982.6	7943.3

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Sample Name: MP37808-S2 Acquired: 9/15/2020 12:05:54 Type: Konk
 Method: 6010D_010716(v544) Mode: CONC Corr. Factor: 1.000000
 User: admin SSTRACE01: : :
 Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0496	27.48	1.994	2.188	.05110	228.8	.04741	.5043	.2273
Stddev	.0004	.10	.008	.008	.00015	2.9	.00003	.0007	.0007
%RSD	.7102	.3480	.4220	.3765	.29953	1.259	.05487	.1306	.3204

#1	.0500	27.40	2.003	2.178	.05105	228.1	.04738	.5050	.2279
#2	.0495	27.47	1.993	2.194	.05098	226.4	.04741	.5042	.2276
#3	.0493	27.59	1.986	2.191	.05127	232.0	.04743	.5037	.2265

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2541	25.59	F 157.9	24.26	.4908	4.951	37.74	4.930	.4752
Stddev	.0011	.12	.4	.23	.0017	.0008	.16	.0010	.0048
%RSD	.4171	.4593	.2746	.9650	.3413	.1551	4.150	.2060	1.020

#1	.2544	25.65	157.4	24.34	.4921	4.958	37.56	4.936	.4703
#2	.2529	25.45	157.9	24.00	.4915	4.943	37.84	4.918	.4800
#3	.2549	25.66	158.3	24.45	.4889	4.951	37.83	4.935	.4753

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5207	1.996	1.240	.4907	1.826	5.295	1.883	.5049	.4906
Stddev	.0039	.005	.008	.0018	.002	.0008	.002	.0005	.0013
%RSD	.7399	.2543	.6428	.3596	.1202	.1428	.1039	.0904	.2648

#1	.5250	1.993	1.249	.4909	1.823	5.288	1.881	.5052	.4891
#2	.5196	1.993	1.233	.4889	1.827	5.293	1.882	.5044	.4913
#3	.5176	2.002	1.238	.4924	1.827	5.303	1.885	.5051	.4914

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1060.3	2390.7	3011.7	7948.3
Stddev	3.0	12.8	26.	91.6
%RSD	.27942	.53690	.08673	1.1527

#1	1058.4	2375.9	3014.1	7914.7
#2	1058.8			

Sample Name: MP37808-MB2 Acquired: 9/15/2020 12:10:36 Type: QC
 Method: 6010D_010716(v544) Mode: CONC Corr. Factor: 1.000000
 User: admin SSTRACE01: : :
 Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.002	0.0088	-0.023	0.001	0.0003	0.158	0.0004	0.000	0.004
Stddev	.0000	.0053	.0004	.0001	.0001	.0015	.00002	.000	.0000
%RSD	13.33	60.43	18.58	84.02	23.052	9.377	50.518	194.8	10.44
#1	-0.003	0.027	-0.020	0.001	0.0003	0.175	0.0007	-0.001	0.004
#2	-0.002	0.125	-0.028	0.001	0.0004	0.152	0.0002	0.000	0.005
#3	-0.002	0.114	-0.022	0.000	0.0003	0.148	0.0004	0.000	0.004

Check ? Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass
 High Limit
 Low Limit

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.012	0.0036	0.194	0.0089	0.000	-0.0005	0.334	0.000	-0.0008
Stddev	.0001	.0024	.0132	.0117	.0000	.0002	.0026	.0002	.0012
%RSD	8.470	67.17	67.91	132.3	197.4	31.09	7.913	3145.	153.2
#1	-0.011	0.052	0.343	0.214	0.000	-0.005	0.308	-0.002	-0.021
#2	-0.013	0.047	0.145	-0.018	0.000	-0.007	0.361	0.001	0.002
#3	-0.012	0.008	0.094	0.070	0.000	-0.004	0.332	0.001	-0.005

Check ? Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass
 High Limit
 Low Limit

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Ti1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.012	-0.0008	0.536	0.0003	0.001	-0.0001	-0.0006	-0.0004	-0.0007
Stddev	.0015	.0027	.0008	.0004	.0000	.0001	.0011	.0002	.0000
%RSD	126.9	328.3	1.561	132.0	14.80	66.84	179.8	62.04	2.283
#1	-0.029	-0.009	0.528	0.003	0.001	-0.002	-0.017	-0.001	-0.007
#2	-0.004	0.019	0.545	0.007	0.001	-0.002	-0.006	-0.005	-0.007
#3	-0.002	-0.035	0.534	-0.001	0.001	0.000	0.005	-0.006	-0.007

Check ? Chk Pass Chk Pass None Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass
 High Limit
 Low Limit

Sample Name: MP37808-MB2 Acquired: 9/15/2020 12:10:36 Type: QC
 Method: 6010D_010716(v544) Mode: CONC Corr. Factor: 1.000000
 User: admin SSTRACE01: : :
 Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1252.4	2564.1	32428.	8305.8
Stddev	2.5	10.4	161.	92.7
%RSD	.19885	.40391	.49690	1.1160
#1	1253.1	2574.9	32316.	8198.8
#2	1254.5	2563.1	32613.	8356.6
#3	1249.7	2554.2	32357.	8362.0

Sample Name: MP37808-B2 Acquired: 9/15/2020 12:15:30 Type: QC
 Method: 6010D_010716(v544) Mode: CONC Corr. Factor: 1.000000
 User: admin SSTRACE01: : :
 Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	0.486	27.00	1.929	2.069	0.5048	24.88	0.4837	5.188	2.106
Stddev	.0002	.09	.003	.009	.0022	.10	.00004	.0008	.0005
%RSD	.4155	.3290	.1392	.4536	.43255	.4089	.08186	.1630	.2266
#1	0.488	27.01	1.928	2.073	0.5061	24.96	0.4835	5.194	2.108
#2	0.486	27.08	1.926	2.075	0.5061	24.92	0.4841	5.191	2.100
#3	0.484	26.91	1.931	2.058	0.5023	24.76	0.4834	5.178	2.109

Check ? Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass
 Value Range

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	25.18	25.90	24.49	24.24	5.063	49.39	22.97	5.089	4.697
Stddev	.0013	.06	.15	.12	.0008	.0006	.09	.0005	.0017
%RSD	.5052	.2494	.6088	.4891	.1672	.1215	.3946	.1076	.3585
#1	25.24	25.89	24.60	24.21	5.071	49.38	23.05	5.095	4.677
#2	25.03	25.97	24.54	24.37	5.064	49.46	22.99	5.089	4.705
#3	25.27	25.84	24.32	24.14	5.054	49.34	22.87	5.084	4.708

Check ? Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass
 Value Range

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Ti1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.074	1.925	5.816	5.075	5.187	5.355	1.903	5.076	5.046
Stddev	.0017	.009	.0012	.0014	.0019	.0012	.005	.0014	.0021
%RSD	.3418	.4633	.2099	.2806	.3590	.2190	.2637	.2777	.4071
#1	5.060	1.921	5.811	5.091	5.191	5.369	1.898	5.091	5.064
#2	5.093	1.919	5.807	5.065	5.203	5.350	1.905	5.072	5.052
#3	5.068	1.935	5.830	5.068	5.166	5.347	1.907	5.064	5.024

Check ? Chk Pass Chk Pass None Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass
 Value Range

Sample Name: MP37808-B2 Acquired: 9/15/2020 12:15:30 Type: QC
 Method: 6010D_010716(v544) Mode: CONC Corr. Factor: 1.000000
 User: admin SSTRACE01: : :
 Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1169.2	2507.3	31383.	8176.8
Stddev	2.9	3.7	91.	37.5
%RSD	.24592	.14735	.28943	.45895
#1	1172.0	2511.5	31280.	8143.5
#2	1166.3	2505.5	31422.	8169.4
#3	1169.4	2504.8	31449.	8217.5

Sample Name: MP37810-MB1 Acquired: 9/15/2020 12:20:03 Type: QC
 Method: 6010D_010716(v544) Mode: CONC Corr. Factor: 1.000000
 User: admin SSTRACE01: : :
 Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.003	0.060	-0.012	0.001	0.0003	0.051	-0.0002	0.001
Stddev	.003	.0022	.003	.001	.0002	.008	.0001	.001
%RSD	106.5	36.73	24.25	58.12	59.739	15.50	62.088	147.2
#1	-0.003	0.085	-0.015	0.001	0.0002	0.060	-0.0003	0.000
#2	-0.000	0.045	-0.012	0.001	0.0005	0.044	-0.0001	0.000
#3	-0.005	0.050	-0.009	0.001	0.0002	0.050	-0.0004	0.002

Check ? Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass
 High Limit
 Low Limit

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	0.001	-0.009	0.022	0.050	0.059	0.000	-0.006	-0.050
Stddev	.002	.001	.0023	.0061	.0120	.0000	.0000	.0006
%RSD	367.1	6.883	106.7	123.4	204.2	362.8	6.902	11.39
#1	0.002	-0.010	0.048	-0.009	-0.030	0.000	-0.006	-0.051
#2	-0.002	-0.009	0.003	0.113	0.195	0.000	-0.006	-0.044
#3	0.001	-0.010	0.015	0.044	0.011	0.001	-0.006	-0.055

Check ? Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass
 High Limit
 Low Limit

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	0.001	0.000	-0.004	-0.021	0.504	0.001	0.000	-0.003
Stddev	.003	.007	.009	.004	.002	.004	.000	.001
%RSD	216.2	2204.	247.7	19.54	3.998	578.0	50.15	22.15
#1	0.003	-0.003	-0.014	-0.017	0.504	0.001	0.001	-0.002
#2	-0.002	0.008	0.001	-0.026	0.506	-0.003	0.000	-0.003
#3	0.004	-0.004	0.002	-0.021	0.502	0.004	0.000	-0.004

Check ? Chk Pass Chk Pass Chk Pass Chk Pass None Chk Pass Chk Pass Chk Pass
 High Limit
 Low Limit

Sample Name: MP37810-MB1 Acquired: 9/15/2020 12:20:03 Type: QC
 Method: 6010D_010716(v544) Mode: CONC Corr. Factor: 1.000000
 User: admin SSTRACE01: : :
 Comment:

Elem	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm
Avg	0.032	-0.002	-0.012
Stddev	.0014	.001	.001
%RSD	43.29	62.87	12.10
#1	0.016	-0.002	-0.011
#2	0.043	-0.001	-0.012
#3	0.035	-0.004	-0.014

Check ? Chk Pass Chk Pass Chk Pass
 High Limit
 Low Limit

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1251.2	2572.6	32275.	8314.3
Stddev	2.1	4.8	12.	20.6
%RSD	.17009	.18466	.03759	.24809
#1	1250.5	2574.3	32275.	8314.1
#2	1249.5	2567.3	32263.	8334.9
#3	1253.6	2576.3	32288.	8293.7

Sample Name: CCV Acquired: 9/15/2020 12:24:56 Type: QC
 Method: 6010D_010716(v544) Mode: CONC Corr. Factor: 1.000000
 User: admin SSTRACE01: : :
 Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.381	41.01	2.003	2.085	2.0527	40.45	2.0185	2.092	2.099
Stddev	.0012	.01	.007	.002	.0069	.16	.0050	.002	.012
%RSD	.5093	.0340	.3505	.1038	.33670	.4018	.24954	.1136	.5752
#1	.2383	41.03	1.997	2.082	2.0449	40.30	2.0130	2.089	2.111
#2	.2369	41.01	2.011	2.086	2.0553	40.42	2.0195	2.094	2.086
#3	.2393	41.00	2.002	2.085	2.0580	40.62	2.0229	2.091	2.100

Check ? Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass
 Value Range

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.001	40.04	40.19	40.50	2.010	2.148	39.90	2.046	1.995
Stddev	.010	.12	.13	.29	.008	.001	.15	.001	.003
%RSD	.5166	.2912	.3220	.7093	.3762	.0251	.3748	.0424	.1642
#1	1.999	39.96	40.14	40.54	2.017	2.148	39.79	2.045	1.993
#2	2.012	39.97	40.34	40.20	2.002	2.148	40.07	2.047	1.998
#3	1.992	40.17	40.10	40.77	2.013	2.149	39.83	2.047	1.993

Check ? Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass
 Value Range

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.993	1.994	2.802	2.027	2.077	1.934	2.041	1.938	2.057
Stddev	.005	.006	.004	.003	.000	.004	.002	.005	.006
%RSD	.2687	.2922	.1473	.1389	.0205	.2231	.1039	.2428	.3157
#1	1.990	1.989	2.797	2.025	2.078	1.938	2.039	1.939	2.050
#2	1.999	1.993	2.805	2.030	2.077	1.929	2.043	1.942	2.059
#3	1.990	2.000	2.804	2.027	2.077	1.934	2.042	1.933	2.063

Check ? Chk Pass Chk Pass None Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass
 Value Range

Sample Name: CCV Acquired: 9/15/2020 12:24:56 Type: QC
 Method: 6010D_010716(v544) Mode: CONC Corr. Factor: 1.000000
 User: admin SSTRACE01: : :
 Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1110.2	2476.0	30981.	8080.4
Stddev	2.8	5.4	128.	19.7
%RSD	.25160	.21676	.41172	.24380
#1	1107.8	2472.4	30906.	8092.9
#2	1109.5	2473.5	30909.	8090.6
#3	1113.3	2482.2	31129.	8057.7

Sample Name: CCB Acquired: 9/15/2020 12:29:28 Type: QC
 Method: 6010D_010716(v544) Mode: CONC Corr. Factor: 1.000000
 User: admin SSTRACE01: : :
 Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000	0.130	.0000	.0004	.00008	.0085	.00012	.0002	.0000
Stddev	.000	.0026	.000	.0000	.00003	.0014	.00004	.0001	.0003
%RSD	393.8	20.14	1390.	6.860	32.017	16.67	37.388	95.72	567.7
#1	.0000	.0115	.0000	.0004	.00010	.0094	.00008	.0001	.0003
#2	-.0002	.0160	-.0004	.0005	.00010	.0069	.00012	.0000	.0000
#3	.0001	.0114	.0003	.0004	.00005	.0092	.00017	.0003	-.0002

Check ? Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass
 High Limit
 Low Limit

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0009	0.125	-.0167	-.0078	.0001	F .0012	-.0039	.0004	.0003
Stddev	.0002	.0029	.0184	.0039	.0001	.0003	.0015	.0001	.0010
%RSD	21.96	23.33	110.4	50.15	85.79	24.10	39.29	15.67	376.7
#1	.0011	.0158	-.0132	-.0048	.0001	.0015	-.0053	.0005	-.0008
#2	.0008	.0104	-.0003	-.0064	.0000	.0011	-.0023	.0004	.0010
#3	.0007	.0111	-.0365	-.0123	.0001	.0009	-.0041	.0004	.0005

Check ? Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Fail Chk Pass Chk Pass Chk Pass
 High Limit
 Low Limit

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Ti1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0013	-.0007	.0040	-.0001	.0001	.0009	F .0027	-.0003	.0002
Stddev	.0003	.0011	.0004	.0001	.0000	.0001	.0008	.0000	.0000
%RSD	26.16	154.5	9.835	53.60	21.06	13.31	31.01	5.337	32.02
#1	-.0017	-.0007	.0036	-.0002	.0001	.0011	.0036	-.0003	.0002
#2	-.0010	-.0004	.0044	-.0001	.0001	.0009	.0028	-.0003	.0002
#3	-.0013	-.0019	.0039	.0000	.0001	.0009	.0019	-.0003	.0001

Check ? Chk Pass Chk Pass None Chk Pass Chk Pass Chk Pass Chk Fail Chk Pass Chk Pass
 High Limit
 Low Limit

Sample Name: CCB Acquired: 9/15/2020 12:29:28 Type: QC
 Method: 6010D_010716(v544) Mode: CONC Corr. Factor: 1.000000
 User: admin SSTRACE01: : :
 Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1255.8	2582.8	32079.	8243.3
Stddev	1.0	8.1	110.	21.6
%RSD	.07853	.31251	.34191	.26153
#1	1255.8	2591.3	32200.	8254.4
#2	1256.7	2581.8	32049.	8257.1
#3	1254.8	2575.3	31987.	8218.4

Sample Name: MP37810-B1 Acquired: 9/15/2020 12:34:22 Type: QC
 Method: 6010D_010716(v544) Mode: CONC Corr. Factor: 1.000000
 User: admin SSTRACE01: : :
 Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0497	27.24	1.962	2.065	.05029	24.84	.04910	.5230	.2089
Stddev	.0008	.11	.003	.003	.00041	.25	.00009	.0008	.0004
%RSD	1.698	.3893	.1653	.1591	.81333	1.008	.17992	.1466	.1797
#1	.0489	27.14	1.963	2.062	.05047	25.00	.04903	.5224	.2086
#2	.0505	27.35	1.964	2.065	.05057	24.96	.04908	.5239	.2094
#3	.0496	27.24	1.958	2.069	.04982	24.55	.04920	.5228	.2088

Check ? Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass
 Value Range

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2545	25.97	24.81	24.41	.5009	.4917	23.12	.5147	.4803
Stddev	.0003	.18	.10	.21	.0007	.0012	.07	.0004	.0013
%RSD	.1043	.7114	.3959	.8479	.1329	.2487	.3197	.0792	.2806
#1	.2544	26.04	24.57	24.53	.5013	.4912	23.05	.5142	.4818
#2	.2548	26.10	24.54	24.53	.5013	.4909	23.13	.5151	.4797
#3	.2543	25.76	24.72	24.17	.5002	.4931	23.20	.5147	.4794

Check ? Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass
 Value Range

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Ti1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5186	1.975	.5948	.5152	.5201	.5340	1.974	.5006	.5092
Stddev	.0011	.007	.0020	.0004	.0004	.0014	.004	.0012	.0011
%RSD	.2073	.3584	.3298	.0835	.0759	.2632	.2170	.2335	.2132
#1	.5195	1.970	.5942	.5156	.5198	.5346	1.976	.5006	.5105
#2	.5174	1.971	.5933	.5152	.5198	.5349	1.977	.5017	.5087
#3	.5187	1.983	.5970	.5147	.5205	.5323	1.969	.4994	.5085

Check ? Chk Pass Chk Pass None Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass
 Value Range

Sample Name: MP37810-B1 Acquired: 9/15/2020 12:34:22 Type: QC
 Method: 6010D_010716(v544) Mode: CONC Corr. Factor: 1.000000
 User: admin SSTRACE01: : :
 Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1159.4	2488.3	31292.	8246.9
Stddev	2.5	1.6	116.	82.4
%RSD	.21522	.06315	.36968	.99920
#1	1157.4	2489.1	31249.	8222.4
#2	1158.7	2486.4	31204.	8179.6
#3	1162.2	2489.2	31423.	8338.8

Sample Name: FA78702-1 Acquired: 9/15/2020 12:38:56 Type: Unk
 Method: 6010D_010716(v544) Mode: CONC Corr. Factor: 1.000000
 User: admin SSTRACE01: : :
 Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	0.002	0.016	0.060	0.127	0.0007	58.51	0.0007	0.0003	0.002
Stddev	0.003	0.038	0.011	0.004	0.0001	10	0.0009	0.001	0.005
%RSD	145.2	32.86	17.39	3.498	18.576	1.756	128.59	19.84	284.4

#1	0.000	0.019	0.057	0.1270	0.0007	58.52	-0.0002	-0.003	-0.003
#2	0.005	0.077	0.052	0.1269	0.0008	58.61	0.0015	-0.003	0.006
#3	0.000	0.0153	0.072	0.1262	0.0005	58.40	0.0006	-0.002	0.003

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.002	0.0487	7.014	13.73	1.500	0.000	24.35	0.000	0.000
Stddev	0.002	0.014	0.094	0.2	0.008	0.00	15	0.00	0.011
%RSD	86.76	2.862	1.336	1.390	5.137	705.3	6.065	440.6	248.7

#1	-0.002	0.0485	7.085	13.72	1.501	0.001	24.46	-0.002	0.006
#2	0.000	0.0475	6.908	13.71	1.492	0.001	24.40	0.001	-0.012
#3	-0.004	0.0502	7.050	13.75	1.508	-0.002	24.18	-0.001	0.008

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Ti1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.020	0.002	13.58	-0.003	0.7976	0.020	-0.001	-0.002	-0.003
Stddev	0.001	0.018	0.1	0.003	0.040	0.001	0.008	0.002	0.000
%RSD	5.161	900.0	1.069	78.41	5.077	4.163	1208.	107.4	14.95

#1	-0.019	0.020	13.56	-0.004	0.797	0.019	0.001	-0.001	-0.003
#2	-0.021	0.003	13.58	-0.001	8.003	0.020	-0.009	0.000	-0.003
#3	-0.020	-0.017	13.59	-0.006	7.930	0.020	0.006	-0.004	-0.003

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1167.8	2445.7	31166.	8215.6
Stddev	4.0	6.6	59.	8.9
%RSD	0.3414	0.27093	0.18876	0.10838

#1	1169.6	2448.3	31120.	8224.8
#2	1163.2	2438.2	31232.	8215.0
#3	1170.6	2450.7	31145.	8207.0

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Sample Name: MP37810-D1 Acquired: 9/15/2020 12:43:45 Type: Unk
 Method: 6010D_010716(v544) Mode: CONC Corr. Factor: 1.000000
 User: admin SSTRACE01: : :
 Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.004	0.102	0.053	1.224	0.0007	57.18	0.0018	-0.001	0.003
Stddev	0.003	0.027	0.003	0.002	0.0002	0.6	0.0009	0.001	0.002
%RSD	80.53	26.15	5.138	2.043	28.346	1.110	50.832	108.5	59.39

#1	-0.007	0.077	0.055	1.225	0.0010	57.25	0.0008	-0.003	0.001
#2	-0.002	0.100	0.053	1.225	0.0006	57.12	0.0025	-0.001	0.003
#3	-0.002	0.130	0.050	1.221	0.0006	57.17	0.0021	0.000	0.004

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.003	0.0364	6.655	13.47	1.465	-0.004	23.39	-0.001	0.002
Stddev	0.000	0.010	0.220	0.8	0.002	0.000	0.6	0.000	0.008
%RSD	16.44	2.715	3.312	6.247	1.057	5.270	2.592	65.57	327.4

#1	-0.003	0.371	6.597	13.55	1.465	-0.004	23.46	0.000	0.004
#2	-0.003	0.353	6.898	13.50	1.464	-0.004	23.35	-0.001	-0.011
#3	-0.002	0.368	6.469	13.38	1.467	-0.004	23.37	0.000	0.000

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Ti1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.031	-0.025	13.16	-0.002	0.7747	0.015	-0.010	-0.004	-0.004
Stddev	0.013	0.052	0.3	0.005	0.037	0.001	0.036	0.003	0.001
%RSD	41.74	209.8	1.922	305.0	4.824	6.397	367.1	72.87	21.52

#1	-0.037	-0.052	13.14	-0.004	0.770	0.016	-0.004	-0.001	-0.003
#2	-0.016	-0.057	13.19	-0.004	7.766	0.014	0.023	-0.004	-0.004
#3	-0.040	0.035	13.14	0.004	7.704	0.016	-0.049	-0.006	-0.005

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1171.7	2453.7	30984.	8133.1
Stddev	2.6	8.7	52.	20.0
%RSD	0.2243	0.35468	0.16830	0.24589

#1	1174.7	2457.0	30955.	8112.7
#2	1170.1	2443.8	31044.	8134.0
#3	1170.2	2460.3	30953.	8152.6

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Sample Name: MP37810-SD1 Acquired: 9/15/2020 12:48:33 Type: Unk
 Method: 6010D_010716(v544) Mode: CONC Corr. Factor: 5.000000
 User: admin SSTRACE01: : :
 Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	0.038	0.143	0.000	0.1273	0.0017	60.35	0.0005	0.003	-0.005
Stddev	0.052	0.036	0.052	0.004	0.0018	0.9	0.0025	0.002	0.027
%RSD	137.4	24.88	140.70	3.454	105.03	1.145	506.77	46.40	513.5

#1	0.091	0.102	0.047	0.1269	0.0037	60.60	0.0014	0.004	-0.031
#2	0.035	0.164	0.009	0.127	0.0006	60.88	-0.0024	0.005	-0.008
#3	-0.013	0.164	-0.055	0.1271	0.0007	59.57	0.0025	0.002	0.023

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	0.0139	0.0294	6.602	14.02	2.177	-0.045	24.18	0.012	-0.032
Stddev	0.0197	0.076	0.949	0.17	0.096	0.010	0.4	0.009	0.037
%RSD	142.1	25.72	14.37	1.248	45.77	21.30	1.623	75.93	116.2

#1	0.0366	0.341	7.547	14.09	3.327	-0.042	24.14	0.022	0.011
#2	0.027	0.335	6.611	14.14	1.636	-0.055	24.19	0.008	-0.054
#3	0.023	0.207	5.649	13.82	1.567	-0.037	24.21	0.006	-0.053

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Ti1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.069	-0.227	13.50	-0.002	0.8020	0.053	0.001	-0.021	-0.008
Stddev	0.037	0.054	0.5	0.011	0.048	0.042	0.056	0.013	0.001
%RSD	53.52	23.95	3.935	629.3	6.041	79.87	758.7	61.16	15.17

#1	-0.031	-0.282	13.45	-0.004	0.8075	0.010	0.044	-0.036	-0.007
#2	-0.072	-0.173	13.56	0.011	7.987	0.026	-0.062	-0.017	-0.009
#3	-0.104	-0.226	13.49	-0.012	7.997	0.031	0.021	-0.011	-0.009

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
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Sample Name: MP37810-S1 Acquired: 9/15/2020 12:58:04 Type: Unk
 Method: 6010D_010716(v544) Mode: CONC Corr. Factor: 1.000000
 User: admin SSTRACE01: : :
 Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	0.493	26.98	1.971	2.162	0.5030	80.97	0.4811	5.091	2.052
Stddev	0.004	0.08	0.11	0.04	0.0047	0.88	0.0032	0.007	0.017
%RSD	.9072	.2807	.5802	.1743	.93617	1.088	.66711	.1443	.8167

#1	.0491	27.06	1.959	2.160	0.5083	81.96	0.4786	5.089	2.048
#2	.0490	26.91	1.971	2.160	0.5017	80.67	0.4799	5.085	2.038
#3	.0498	26.97	1.982	2.166	0.4991	80.27	0.4847	5.100	2.070

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	25.12	25.45	25.43	37.59	6.363	4.793	46.50	5.011	4.769
Stddev	0.006	0.08	0.07	0.21	0.0026	0.0018	0.22	0.012	0.008
%RSD	.2444	.3093	.2907	.5540	.4021	.3691	.4691	.2484	.1656

#1	.2515	25.54	25.48	37.82	6.337	4.780	46.49	5.012	4.766
#2	.2505	25.43	25.34	37.54	6.365	4.786	46.29	4.999	4.777
#3	.2515	25.39	25.46	37.42	6.388	4.813	46.73	5.023	4.762

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Ti1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.174	1.974	13.55	5.009	1.269	5.237	1.951	4.982	4.958
Stddev	0.008	0.12	0.06	0.010	0.001	0.016	0.12	0.010	0.006
%RSD	.1624	.5864	.4302	.2041	.0982	.2987	.6021	.1911	.1231

#1	.5183	1.979	13.56	5.020	1.268	5.239	1.938	4.992	4.960
#2	.5166	1.961	13.49	5.005	1.270	5.221	1.954	4.974	4.951
#3	.5175	1.983	13.60	5.001	1.270	5.252	1.961	4.979	4.962

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1110.6	2436.5	3064.0	8109.1
Stddev	.8	10.3	67.	75.0
%RSD	.06978	.42397	.21920	.92461

#1	1109.7	2427.6	3059.7	8022.6
#2	1110.7	2447.8	3071.8	8151.3
#3	1111.2	2433.9	3060.6	8153.5

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Sample Name: MP37810-S2 Acquired: 9/15/2020 13:02:38 Type: Unk
 Method: 6010D_010716(v544) Mode: CONC Corr. Factor: 1.000000
 User: admin SSTRACE01: : :
 Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	0.500	27.17	1.992	2.183	0.5065	81.43	0.4899	5.170	2.053
Stddev	0.003	0.09	0.05	0.08	0.0030	0.40	0.0018	0.015	0.007
%RSD	.5292	.3135	.2717	.3483	.59693	.4936	.36390	.2811	.3281

#1	.0501	27.12	1.988	2.178	0.5036	81.04	0.4903	5.154	2.050
#2	.0502	27.11	1.989	2.180	0.5096	81.85	0.4879	5.173	2.060
#3	.0497	27.26	1.998	2.192	0.5064	81.41	0.4914	5.183	2.047

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	25.53	25.57	25.58	37.65	6.413	4.842	47.04	5.086	4.868
Stddev	0.012	0.07	0.11	0.07	0.045	0.011	0.18	0.010	0.028
%RSD	.4641	.2912	.4385	.1890	.7019	.2172	.3843	.1995	.5739

#1	.2562	25.54	25.48	37.64	6.416	4.831	46.90	5.081	4.848
#2	.2558	25.66	25.57	37.73	6.457	4.844	46.97	5.080	4.857
#3	.2540	25.52	25.70	37.59	6.367	4.851	47.24	5.098	4.900

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Ti1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.238	1.994	13.78	5.079	1.282	5.281	1.982	5.048	5.033
Stddev	0.004	0.04	0.03	0.020	0.003	0.026	0.06	0.034	0.024
%RSD	.0687	.2137	.1824	.4022	.2064	.4916	.2969	.6774	.4845

#1	.5242	1.998	13.79	5.102	1.282	5.295	1.977	5.035	5.007
#2	.5238	1.990	13.75	5.073	1.280	5.298	1.988	5.086	5.036
#3	.5235	1.995	13.79	5.063	1.285	5.252	1.980	5.022	5.055

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1103.7	2429.0	3053.4	8205.5
Stddev	1.1	3.9	129.	16.4
%RSD	.09868	.16056	.42283	.19971

#1	1102.7	2424.6	3052.3	8199.2
#2	1104.9	2430.2	3041.0	8193.2
#3	1103.4	2432.1	3066.8	8224.1

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Sample Name: FA78702-2 Acquired: 9/15/2020 13:07:11 Type: Unk
 Method: 6010D_010716(v544) Mode: CONC Corr. Factor: 1.000000
 User: admin SSTRACE01: : :
 Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	0.000	0.235	0.079	1.639	0.0010	62.21	0.0011	0.005	0.000
Stddev	0.002	0.006	0.018	0.012	0.0001	.44	0.0003	0.000	0.001
%RSD	514.3	2.481	23.02	.7066	8.7388	.7057	30.527	7.277	298.2

#1	.0002	0.234	0.080	1.653	0.0010	61.72	0.0010	0.006	0.001
#2	.0002	0.230	0.060	1.632	0.0011	62.57	0.0009	0.005	0.002
#3	.0002	0.241	0.096	1.634	0.0009	62.34	0.0015	0.006	0.001

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.011	10.55	8.799	12.74	3.783	-0.002	34.68	0.003	-0.001
Stddev	0.000	0.013	0.203	0.09	0.006	0.002	.28	0.001	0.013
%RSD	4.042	1.260	2.305	.7306	.1573	122.5	.8095	30.72	253.5

#1	-0.011	10.67	8.957	12.64	3.784	-0.000	34.98	0.003	0.005
#2	-0.011	10.59	8.570	12.82	3.777	-0.002	34.43	0.002	-0.015
#3	-0.011	10.41	8.869	12.78	3.788	-0.004	34.62	0.003	0.009

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Ti1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.020	-0.002	11.96	-0.001	8.430	0.021	0.016	-0.004	0.005
Stddev	0.005	0.027	0.03	0.006	0.048	0.000	0.010	0.001	0.002
%RSD	26.05	1429.	.2612	1127.	.5704	1.355	59.23	32.71	44.56

#1	-0.018	-0.012	11.98	-0.006	8.485	0.021	0.023	-0.003	0.003
#2	-0.025	-0.009	11.93	0.006	8.401	0.021	0.020	-0.005	0.017
#3	-0.015	-0.022	11.98	-0.002	8.403	0.021	0.005	-0.005	0.006

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1163.1	2461.3	3080.2	8165.3
Stddev	1.5	4.3	11.	62.4
%RSD	.13098	.17533	.	

Sample Name: FA78702-4 Acquired: 9/15/2020 13:16:49 Type: Unk
 Method: 6010D_010716(v544) Mode: CONC Corr. Factor: 1.000000
 User: admin SSTRACE01: :
 Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0004	.0112	-0.0019	.0726	.0000	55.93	.00014	.0000	.0001
Stddev	.0002	.0034	.0004	.0003	.0001	.29	.00005	.000	.0002
%RSD	48.99	30.04	20.27	.4593	81530.	.5106	33.288	516.1	166.0

#1	.0003	.0124	-0.0016	.0727	-0.0001	56.26	.00014	-0.0001	.0002
#2	.0002	.0074	-0.0024	.0729	.0001	55.77	.00018	-0.0001	.0003
#3	.0006	.0138	-0.0018	.0722	.0000	55.76	.00009	.0001	-0.0001

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0546	-0.0031	2.835	9.806	.0004	.0007	10.16	.0149	-0.0009
Stddev	.0003	.0009	.014	.071	.0000	.0002	.05	.0002	.0010
%RSD	.4645	30.52	.5094	.7217	2.793	28.57	.4769	1.027	112.8

#1	.0546	-0.0029	2.835	9.885	.0004	.0010	10.15	.0149	-0.0011
#2	.0549	-0.0041	2.820	9.748	.0004	.0006	10.21	.0150	-0.0017
#3	.0544	-0.0023	2.849	9.786	.0004	.0006	10.12	.0147	.0002

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Ti1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.0019	-0.0008	16.00	.0000	.5130	.0014	.0015	.0014	.0209
Stddev	.0013	.0023	.04	.0004	.0012	.0000	.0021	.0004	.0001
%RSD	67.32	298.9	.2219	1126.	.2376	1.165	137.8	26.13	6784

#1	-0.0016	.0019	16.04	.0004	.5120	.0014	-0.0009	.0012	.0211
#2	-0.0008	-0.0024	15.98	.0000	.5144	.0014	.0026	.0012	.0208
#3	-0.0033	-0.0017	15.99	-0.0003	.5127	.0014	.0029	.0018	.0209

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1189.6	2492.6	31144.	8132.5
Stddev	1.3	3.3	164.	49.6
%RSD	.10988	.13278	.52790	.61034

#1	1188.6	2491.2	31319.	8075.7
#2	1191.1	2496.4	30993.	8154.2
#3	1189.2	2490.2	31120.	8167.5

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Sample Name: CCV Acquired: 9/15/2020 13:21:38 Type: QC
 Method: 6010D_010716(v544) Mode: CONC Corr. Factor: 1.000000
 User: admin SSTRACE01: :
 Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2396	40.93	2.003	2.084	2.0625	40.59	2.0288	2.094	2.086
Stddev	.0007	.07	.003	.007	.0066	.20	.0034	.002	.006
%RSD	.3042	.1634	.1620	.3235	.31872	.4966	.16994	.1050	.3097

#1	.2393	41.00	2.000	2.089	2.0604	40.43	2.0320	2.095	2.081
#2	.2391	40.86	2.007	2.076	2.0572	40.52	2.0293	2.095	2.083
#3	.2404	40.93	2.003	2.085	2.0699	40.81	2.0251	2.091	2.093

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.019	40.25	40.14	40.57	2.021	2.148	39.91	2.057	2.000
Stddev	.008	.18	.14	.24	.001	.002	.16	.003	.004
%RSD	.4122	.4579	.3424	.5801	.0576	.1043	.3928	.1573	.2256

#1	2.022	40.05	40.22	40.31	2.022	2.149	40.02	2.060	2.003
#2	2.009	40.41	39.98	40.62	2.022	2.150	39.73	2.056	2.002
#3	2.024	40.31	40.22	40.77	2.020	2.146	39.98	2.053	1.995

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Ti1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.004	2.007	2.812	2.035	2.077	1.947	2.036	1.953	2.069
Stddev	.007	.005	.010	.000	.002	.001	.001	.003	.002
%RSD	.3664	.2340	.3462	.0214	.1069	.0573	.0603	.1450	.1068

#1	2.010	2.012	2.823	2.034	2.080	1.946	2.035	1.956	2.068
#2	2.006	2.007	2.805	2.035	2.075	1.946	2.036	1.951	2.072
#3	1.996	2.003	2.807	2.035	2.076	1.948	2.037	1.951	2.068

Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

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Sample Name: CCV Acquired: 9/15/2020 13:21:38 Type: QC
 Method: 6010D_010716(v544) Mode: CONC Corr. Factor: 1.000000
 User: admin SSTRACE01: :
 Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1110.4	2473.6	30929.	8099.8
Stddev	3.1	8.4	44.	46.3
%RSD	.27577	.34138	.14208	.57183

#1	1108.0	2464.2	30915.	8137.9
#2	1109.4	2476.4	30978.	8113.2
#3	1113.9	2480.4	30893.	8048.3

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Sample Name: CCB Acquired: 9/15/2020 13:26:09 Type: QC
 Method: 6010D_010716(v544) Mode: CONC Corr. Factor: 1.000000
 User: admin SSTRACE01: :
 Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	.0192	-0.006	.0005	.0013	.0086	.00010	.0002	.0001
Stddev	.0004	.0009	.0005	.0001	.0001	.0001	.00003	.0000	.0003
%RSD	407.9	4.587	87.43	11.21	11.054	11.83	28.884	19.24	229.2

#1	.0003	.0189	-0.005	.0005	.0014	.0089	.00007	.0002	.0005
#2	-0.0004	.0202	-0.001	.0004	.0011	.0074	.00013	.0002	.0000
#3	.0003	.0185	-0.011	.0005	.0013	.0094	.00010	.0002	-0.0001

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0009	.0136	-0.075	-0.041	.0001	F .0012	-0.047	.0006	-0.0006
Stddev	.0002	.0022	.0084	.0135	.0000	.0004	.0046	.0003	.0004
%RSD	17.52	16.42	112.0	329.1	14.04	29.46	98.61	50.06	64.83

#1	.0008	.0153	-0.162	.0014	.0001	.0016	-0.031	.0007	-0.0003
#2	.0011	.0144	.0005	.0057	.0001	.0011	-0.098	.0008	-0.0011
#3	.0008	.0111	-0.068	-0.195	.0001	.0009	-0.010	.0002	-0.0005

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-0.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Ti1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.0011	-0.0004	.0043	.0000	.0001	.0010	F .0039	-0.0002	.0001
Stddev	.0008	.0018	.0007	.0004	.0000	.0001	.0004	.0001	.0001
%RSD	74.85	484.9	15.19	1228.	18.52	14.04	10.21	49.76	83.16

#1	-0.0004	-0.0022	.0051	-0.003	.0001	.0011	.0042	-0.001	.0000
#2	-0.0020	-0.0001	.0040	.0004	.0001	.0009	.0041	-0.002	.0001
#3	-0.00								

Sample Name: CCB Acquired: 9/15/2020 13:26:09 Type: QC
 Method: 6010D_010716(v544) Mode: CONC Corr. Factor: 1.000000
 User: admin SSTRACE01: : :
 Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1250.3	2577.1	31938.	8167.5
Stddev	3.3	12.8	120.	69.8
%RSD	.26173	.49582	.37464	.85407

#1	1254.0	2567.6	31889.	8087.5
#2	1247.8	2572.0	31851.	8199.5
#3	1249.0	2591.6	32074.	8215.6

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Sample Name: FA78584-1 Acquired: 9/15/2020 13:31:04 Type: Unk
 Method: 6010D_010716(v544) Mode: CONC Corr. Factor: 1.000000
 User: admin SSTRACE01: : :
 Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000	.0086	-.0026	.0001	.00009	.0631	.0005	.0001	.0001
Stddev	.000	.0057	.0008	.0002	.00004	.0017	.00004	.0001	.0002
%RSD	708.8	65.99	32.07	155.6	42.928	2.651	64.510	107.1	130.0

#1	-.0004	.0095	-.0018	.0000	.00006	.0636	.0005	.0000	.0000
#2	-.0001	.0026	-.0034	.0003	.00009	.0612	.0002	.0001	.0001
#3	.0001	.0139	-.0026	.0001	.00014	.0645	.00009	.0002	.0003

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0078	-.0021	.1760	-.0096	.0001	-.0006	62.59	.0014	.0004
Stddev	.0001	.0013	.0056	.0030	.0000	.0001	.42	.0001	.0014
%RSD	1.413	61.78	3.158	31.34	19.05	23.89	.6633	8.845	366.9

#1	.0076	-.0034	.1809	-.0074	.0002	-.0005	62.63	.0016	-.0003
#2	.0078	-.0008	.1700	-.0083	.0001	-.0008	62.15	.0014	-.0006
#3	.0078	-.0020	.1772	-.0130	.0001	-.0006	62.98	.0013	.0020

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Ti1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0026	.0004	10.96	.0002	.0001	-.0002	.0003	-.0002	.0330
Stddev	.0001	.0008	.00	.0001	.0000	.0000	.0008	.0001	.0001
%RSD	4.793	205.9	.0198	73.41	25.14	19.28	253.9	57.09	4375

#1	-.0027	-.0005	10.96	.0003	.0002	-.0001	.0008	-.0001	.0332
#2	-.0028	-.0008	.1700	-.0083	.0001	-.0008	62.15	.0014	-.0006
#3	-.0024	.0005	10.96	.0000	.0001	-.0002	.0007	-.0003	.0329

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1188.8	2523.3	31262.	8145.6
Stddev	1.8	.6	125.	99.1
%RSD	.15437	.02264	.40122	1.2168

#1	1190.6	2522.6	31131.	8092.4
#2	1188.9	2523.8	31275.	8084.4
#3	1187.0	2523.5	31381.	8259.9

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Sample Name: FA78584-2 Acquired: 9/15/2020 13:35:57 Type: Unk
 Method: 6010D_010716(v544) Mode: CONC Corr. Factor: 1.000000
 User: admin SSTRACE01: : :
 Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0001	.0108	-.0020	.0394	.0006	42.63	.0013	-.0001	.0004
Stddev	.0003	.0030	.0004	.0002	.0003	.43	.0003	.0001	.0003
%RSD	342.5	28.11	20.74	.5145	45.349	1.005	19.840	199.5	60.76

#1	-.0004	.0097	-.0023	.0395	.0003	42.91	.0010	.0001	.0007
#2	-.0001	.0084	-.0015	.0392	.0005	42.85	.0015	-.0002	.0002
#3	.0002	.0142	-.0021	.0396	.0008	42.14	.0015	-.0001	.0005

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0038	.0135	1.633	5.624	.0019	.0181	27.72	-.0001	-.0006
Stddev	.0001	.0013	.009	.050	.0000	.0003	.15	.0003	.0008
%RSD	3.111	9.341	.5727	.8865	1.443	1.720	.5487	294.8	135.4

#1	.0039	.0121	1.632	5.667	.0020	.0178	27.64	.0003	-.0001
#2	.0037	.0139	1.624	5.637	.0020	.0180	27.61	-.0003	-.0015
#3	.0037	.0145	1.642	5.569	.0019	.0184	27.89	-.0003	-.0001

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Ti1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0022	-.0006	12.15	.0000	.4493	.0014	-.0019	.0051	.0227
Stddev	.0007	.0011	.00	.001	.0017	.0000	.0013	.0001	.0002
%RSD	31.94	193.3	.0339	1960.	.3814	2.149	70.45	1.448	1.073

#1	-.0027	.0005	12.15	-.0001	.4505	.0013	-.0004	.0052	.0225
#2	-.0026	-.0004	12.14	-.0008	.4474	.0013	-.0025	.0051	.0229
#3	-.0014	-.0018	12.15	.0007	.4501	.0014	-.0027	.0050	.0229

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1190.0	2499.6	31375.	8117.6
Stddev	3.0	3.4	100.	82.6
%RSD	.25166	.13635	.31785	1.0181

#1	1193.2	2497.2	31321.	8047.7
#2	1187.4	2498.1	31315.	8096.4
#3	1189.3	2503.5	31491.	8208.8

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Sample Name: FA78584-3 Acquired: 9/15/2020 13:40:48 Type: Unk
 Method: 6010D_010716(v544) Mode: CONC Corr. Factor: 1.000000
 User: admin SSTRACE01: : :
 Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0004	.0095	-.0029	.0680	.00003	61.66	.0016	-.0002	.0006
Stddev	.0002	.0030	.0007	.0004	.00002	.45	.00008	.0000	.0004
%RSD	63.30	31.29	25.59	52.15	89.208	.7315	52.493	8.080	64.21

#1	-.0003	.0072	-.0025	.0684	.00005	61.17	.00021	-.0002	.0010
#2	-.0006	.0083	-.0038	.0680	.00001	62.95	.00006	-.0002	.0005
#3	-.0002	.0128	-.0024	.0677	.00001	61.75	.00021	-.0002	.0003

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0042	.0049	2.204	9.158	.0002	.0056	11.19	.0000	.0003
Stddev	.0001	.0012	.004	.052	.0000	.0001	.05	.0000	.0002
%RSD	1.425	24.12	.1697	.5683	19.76	2.337	.4411	368.5	56.08

#1	.0042	.0060	2.208	9.101	.0002	.0054	11.23	-.0001	.0001
#2	.0043	.0049	2.202	9.170	.0002	.0056	11.21	.0001	.0003
#3	.0043	.0037	2.201	9.203	.0001	.0057	11.13	.0000	.0005

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Ti1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0025	-.0005	17.12	-.0003	.3954	.0014	-.0030	.0020	.0099
Stddev	.0011	.0037	.04	.0002	.0020	.0001	.0013	.0002	.0002
%RSD	45.16	682.1	.2083	58.14	.5107	5.873	42.67	10.48	1.583

#1	-.0019	.0013	17.10	-.0003	.3978	.0013	-.0017	.0022	.0098
#2	-.0038	-.0048	17.16	-.0005	.3942	.0015	-.0042	.0018	.0099
#3	-.0018	.0019	17.09	-.0002	.3943	.0015	-.0030	.0020	.0101

Int. Std.	In2306	Y_2243	Y_3600	Y_
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Sample Name: FA78586-5 Acquired: 9/15/2020 13:45:39 Type: Unk
 Method: 6010D_010716(v544) Mode: CONC Corr. Factor: 5.000000
 User: admin SSTRACE01: : :
 Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.011	48.47	-0.040	0.531	0.0050	710.4	0.0039	0.059	0.181
Stddev	0.016	.32	0.031	0.003	0.0016	4.2	0.0049	0.007	0.018
%RSD	144.0	.6670	79.43	.6408	32.792	.5903	125.15	11.94	10.08

#1	-0.005	48.83	-0.033	0.535	0.0057	706.6	0.0042	0.067	0.193
#2	0.001	48.38	-0.012	0.529	0.0031	709.8	-0.0011	0.054	0.160
#3	-0.029	48.21	-0.074	0.529	0.0061	714.9	0.0086	0.056	0.190

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	0.266	4.024	106.6	36.57	2.016	0.054	226.9	0.157	0.018
Stddev	0.009	0.04	1.0	.02	0.009	0.009	2.8	0.003	0.031
%RSD	3.396	1.048	.9764	.0628	.4679	16.24	1.212	1.905	167.8

#1	0.276	4.029	107.6	36.55	2.009	0.051	229.8	0.158	0.048
#2	0.261	4.022	106.8	36.58	2.012	0.047	226.7	0.154	-0.014
#3	0.260	4.021	105.6	36.59	2.026	0.064	224.3	0.159	0.022

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Ti1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.083	0.138	13.42	0.049	8.144	1.003	-0.228	0.108	25.69
Stddev	0.078	0.164	.16	0.042	0.048	0.003	0.030	0.006	0.024
%RSD	94.28	119.2	1.186	84.80	.5892	.2997	13.35	5.172	93.33

#1	-0.057	0.085	13.26	0.050	8.188	1.005	-0.228	0.110	25.94
#2	-0.021	0.006	13.42	0.007	8.151	0.999	-0.198	0.112	25.67
#3	-0.170	0.322	13.58	0.091	8.092	1.004	-0.259	0.102	25.46

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1128.6	2395.7	30785.	8250.8
Stddev	2.2	20.9	69.	4.9
%RSD	.19158	.87272	.22437	.05948

#1	1126.1	2418.1	30852.	8256.1
#2	1129.9	2392.4	30790.	8246.3
#3	1129.9	2376.7	30714.	8250.1

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Sample Name: FA78586-6 Acquired: 9/15/2020 13:50:28 Type: Unk
 Method: 6010D_010716(v544) Mode: CONC Corr. Factor: 1.000000
 User: admin SSTRACE01: : :
 Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	0.001	3.597	-0.026	0.191	0.0002	110.0	0.0020	0.010	0.035
Stddev	0.002	0.09	0.005	0.000	0.0002	5	0.0013	0.001	0.006
%RSD	125.5	.2639	20.10	.2095	108.13	.4919	63.611	9.211	16.72

#1	0.000	3.606	-0.031	0.191	0.0005	109.6	0.0024	0.011	0.035
#2	0.003	3.587	-0.021	0.191	0.0001	109.9	0.0006	0.010	0.029
#3	0.000	3.598	-0.027	0.190	0.0001	110.6	0.0031	0.009	0.041

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	0.3317	1.086	58.92	14.20	0.448	0.015	F 293.2	0.061	0.046
Stddev	0.005	0.079	.07	.05	0.002	0.001	6.8	0.000	0.007
%RSD	1.444	8.099	.1170	.3508	.5535	7.168	2.329	.7557	14.68

#1	.3314	1.080	59.00	14.24	.0451	.0015	296.6	.0061	.0051
#2	.3315	1.082	58.89	14.15	.0448	.0016	285.4	.0060	.0038
#3	.3323	1.097	58.87	14.22	.0446	.0014	297.7	.0061	.0047

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Ti1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.014	-0.001	17.50	-0.0002	3.007	0.232	-0.039	0.015	1.612
Stddev	0.013	0.005	.02	0.004	0.010	0.002	0.007	0.002	0.010
%RSD	92.23	369.3	.1028	195.0	.3476	.7640	18.94	10.81	.6022

#1	-0.029	0.004	17.50	0.002	3.016	0.232	-0.039	0.013	1.623
#2	-0.004	-0.005	17.52	-0.005	3.009	0.230	-0.032	0.017	1.605
#3	-0.010	-0.002	17.49	-0.002	2.995	0.233	-0.047	0.015	1.609

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1046.8	2342.6	29400.	8104.1
Stddev	3.6	4.3	44.	5.3
%RSD	.34232	.18349	.14857	.63288

#1	1047.6	2345.5	29377.	8157.5
#2	1042.9	2337.6	29374.	8099.0
#3	1049.9	2344.6	29451.	8055.3

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Sample Name: FA78419-1 Acquired: 9/15/2020 13:55:23 Type: Unk
 Method: 6010D_010716(v544) Mode: CONC Corr. Factor: 1.000000
 User: admin SSTRACE01: : :
 Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.001	0.191	-0.031	0.037	0.0004	21.55	0.0020	-0.001	0.006
Stddev	0.002	0.019	0.007	0.001	0.0003	.13	0.0010	0.001	0.002
%RSD	337.5	10.20	22.77	1.708	63.482	.5868	48.159	109.7	39.02

#1	-0.002	0.188	-0.035	0.037	0.0005	21.66	0.0029	-0.001	0.007
#2	0.001	0.212	-0.023	0.036	0.0001	21.41	0.0010	-0.001	0.008
#3	-0.001	0.173	-0.037	0.037	0.0007	21.58	0.0021	0.000	0.003

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.010	-0.007	1.629	6.303	0.017	0.010	7.563	0.004	-0.005
Stddev	0.002	0.017	0.11	0.06	0.001	0.001	0.19	0.003	0.004
%RSD	22.97	247.0	6.915	1.044	4.612	7.734	2.470	63.81	87.72

#1	-0.007	0.013	1.616	6.341	0.017	0.009	7.562	0.001	-0.010
#2	-0.010	-0.015	1.637	6.227	0.017	0.011	7.544	0.006	-0.005
#3	-0.012	-0.018	1.634	6.342	0.018	0.010	7.582	0.005	-0.001

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Ti1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.028	0.000	16.75	-0.004	0.935	0.009	-0.009	-0.003	0.107
Stddev	0.012	0.03	.05	0.002	0.003	0.001	0.013	0.001	0.002
%RSD	44.23	23700.	.2717	43.16	.3424	7.016	146.7	38.47	1.692

#1	-0.017	-0.002	16.77	-0.006	0.934	0.009	-0.008	-0.005	0.107
#2	-0.041	-0.032	16.69	-0.002	0.932	0.008	-0.023	-0.002	0.108
#3	-0.025	0.034	16.78	-0.005	0.938	0.009	0.004	-0.003	0.105

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1222.6	2529.6	31674.	8239.1
Stddev	1.7	7.2	86.	82.4
%RSD	.13915	.28340	.27227	1.0005

#1	1221.7	2522.6	31653.	8163.6
#2	1221.6	2537.0	31768.	8327.0
#3	1224.6	2529.3	31600.	

Sample Name: FA78662-1 Acquired: 9/15/2020 14:05:14 Type: Unk
 Method: 6010D_010716(v544) Mode: CONC Corr. Factor: 1.000000
 User: admin SSTRACE01: : :
 Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.001	11.65	.0018	.0712	.00072	8.002	-0.00267	.0037
Stddev	.0001	.01	.0009	.0002	.00005	.071	.00005	.0001
%RSD	63.58	.1072	52.22	.3358	7.5922	.8867	1.8118	4.036

#1	.0000	11.67	.0028	.0715	.00070	7.985	-0.00271	.0036
#2	-0.002	11.65	.0016	.0712	.00078	8.079	-0.00269	.0036
#3	-0.002	11.64	.0010	.0710	.00068	7.940	-0.00262	.0039

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0220	.0036	50.12	1.570	4.311	.0787	.0001	6.751
Stddev	.0003	.0003	.21	.029	.015	.0002	.0001	.045
%RSD	1.196	8.660	4.268	1.817	.3484	.2995	94.58	.6693

#1	.0223	.0036	50.25	1.562	4.319	.0789	.0002	6.788
#2	.0220	.0033	50.25	1.547	4.321	.0789	.0002	6.701
#3	.0217	.0040	49.88	1.602	4.294	.0785	.0000	6.764

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0025	.0115	-0.0015	-0.0040	9.999	.0011	.0629	.0871
Stddev	.0002	.0004	.0021	.0034	.029	.0001	.0001	.0003
%RSD	6.991	3.874	146.5	84.11	.2877	7.869	.1955	.3843

#1	.0027	.0119	-0.0026	-0.0074	10.03	.0010	.0627	.0874
#2	.0024	.0117	.0010	-0.0040	9.983	.0011	.0630	.0873
#3	.0024	.0110	-0.0028	-0.0006	9.982	.0012	.0629	.0868

Elem	Tl1908	V_2924	Zn2062
IS Ref	(In2306)	(Y_3600)	(Y_2243)
Units	ppm	ppm	ppm
Avg	.0007	.0468	.0367
Stddev	.0015	.0005	.0001
%RSD	199.6	1.063	.3136

#1	.0011	.0467	.0368
#2	-0.0009	.0473	.0368
#3	.0020	.0463	.0366

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Sample Name: FA78662-1 Acquired: 9/15/2020 14:05:14 Type: Unk
 Method: 6010D_010716(v544) Mode: CONC Corr. Factor: 1.000000
 User: admin SSTRACE01: : :
 Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1225.0	2585.6	3232.6	8391.0
Stddev	1.9	11.2	65.	51.4
%RSD	.15483	.43488	.20084	.61247

#1	1223.2	2572.6	3225.8	8365.4
#2	1225.0	2591.6	3238.7	8357.6
#3	1226.9	2592.6	3233.4	8450.2

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Sample Name: FA78551-28F Acquired: 9/15/2020 14:10:01 Type: Unk
 Method: 6010D_010716(v544) Mode: CONC Corr. Factor: 1.000000
 User: admin SSTRACE01: : :
 Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000	.0285	-0.0026	.1413	.00002	57.31	.00020	-0.0001	.0055
Stddev	.000	.0017	.0008	.0008	.00005	.31	.00004	.0001	.0002
%RSD	194.2	5.957	30.55	.5633	209.33	.5492	18.253	86.20	4.004

#1	.0000	.0269	-0.0027	.1405	.00006	57.62	.00019	.0000	.0053
#2	.0003	.0283	-0.0017	.1421	-0.0003	57.32	.00017	-0.0002	.0058
#3	-0.0003	.0303	-0.0033	.1415	.00005	56.99	.00024	-0.0002	.0054

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002	.0150	3.696	40.90	.0059	-0.0009	F 102.4	.0030	-0.0006
Stddev	.0001	.0004	.006	.30	.0001	.0001	.5	.0001	.0004
%RSD	26.02	2.910	.1715	.7427	1.610	10.47	4.689	4.784	69.29

#1	.0003	.0153	3.694	41.18	.0059	-0.0010	101.8	.0031	-0.0007
#2	.0003	.0152	3.690	40.95	.0058	-0.0009	102.7	.0031	-0.0002
#3	.0002	.0145	3.702	40.58	.0059	-0.0009	102.7	.0029	-0.0010

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.0024	-0.0001	17.72	.0000	.7908	.0015	-0.0004	.0009	.0075
Stddev	.0013	.0018	.04	.001	.0027	.0001	.0015	.0003	.0001
%RSD	52.28	132.3	.2271	.3314	.3415	6.348	360.2	28.50	.7450

#1	-0.0012	-0.0006	17.70	.0006	.7879	.0014	.0009	.0007	.0074
#2	-0.0037	-0.0017	17.76	-0.0003	.7932	.0015	-0.0001	.0012	.0075
#3	-0.0024	.0019	17.69	-0.0003	.7914	.0016	-0.0020	.0009	.0075

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1122.9	2433.7	3005.3	8008.4
Stddev	.4	8.0	60.	57.8
%RSD	.03477	.33027	.20109	.72184

#1	1122.5	2426.3	3000.3	7946.0
#2	1123.0	2432.5	30120.	8019.0
#3	1123.3	2442.3	30036.	8060.2

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Sample Name: FA78551-29F Acquired: 9/15/2020 14:14:51 Type: Unk
 Method: 6010D_010716(v544) Mode: CONC Corr. Factor: 1.000000
 User: admin SSTRACE01: : :
 Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.0002	.0184	-0.0020	.1725	.00000	92.70	.00018	.0014	.0006
Stddev	.0003	.0018	.0007	.0003	.0001	.82	.00006	.0001	.0002
%RSD	178.0	9.677	34.76	.1576	1332.6	.8842	33.663	7.420	27.04

#1	-0.0005	.0165	-0.0024	.1723	-0.0006	93.61	.00020	.0013	.0004
#2	.0001	.0201	-0.0024	.1725	.00004	92.45	.00011	.0015	.0007
#3	-0.0002	.0185	-0.0012	.1728	.00001	92.03	.00022	.0014	.0006

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.0017	.1141	4.130	54.89	1.059	-0.0008	F 94.15	.0065	-0.0004
Stddev	.0001	.0016	.014	.47	.001	.0002	.10	.0002	.0002
%RSD	7.552	1.435	.3386	.8486	.0736	23.30	.1086	3.613	47.25

#1	-0.0016	.1144	4.129	55.40	1.058	-0.0010	94.10	.0064	-0.0004
#2	-0.0018	.1123	4.144	54.78	1.060	-0.0006	94.08	.0068	-0.0006
#3	-0.0018	.1155	4.116	54.49	1.058	-0.0007	94.27	.0064	-0.0002

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(Y_2243)	(In2306)	(Y_3600)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.0023	-0.0028	18.25	-0.0002	1.344	.0022	-0.0023	-0.0005	.0015
Stddev	.0014	.0021	.04	.0003	.004	.0002	.0017	.0000	.0001
%RSD	59.77	73.88	.2288	142.1	.2695	6.858	70.72	4.185	4.989

#1	-0.0034	-0.0018	18.21	-0.0004	1.346	.0023	-0.0027	-0.0005	.0015
#2	-0.0025	-0.0052	18.26	-0.0002	1.340	.0020	-0.0005	-0.0005	.0016
#3	-0.0008	-0.0014	18.29	.0001	1.346	.0022	-0.0038	-0.0005	.0015

Sample Name: CCV Acquired: 9/15/2020 14:19:40 Type: QC
 Method: 6010D_010716(v544) Mode: CONC Corr. Factor: 1.000000
 User: admin SSTRACE01: : :
 Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2394	40.91	1.990	2.069	2.0640	40.95	2.0310	2.086	2.124
Stddev	.0010	.02	.008	.001	.0043	.14	.0088	.012	.014
%RSD	.4296	.0380	.4143	.0462	.20695	.3534	.43082	.5668	.6492
#1	.2395	40.91	1.998	2.070	2.0640	40.99	2.0409	2.096	2.138
#2	.2384	40.90	1.989	2.068	2.0597	40.79	2.0275	2.089	2.111
#3	.2404	40.93	1.982	2.070	2.0682	41.07	2.0245	2.073	2.125

Check ? Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass
 Value Range

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.991	40.42	40.02	40.88	2.050	2.137	39.78	2.051	2.013
Stddev	.003	.06	.08	.14	.004	.010	.04	.008	.001
%RSD	.1330	.1543	.1969	.3525	.1804	.4735	.0942	.4012	.0716
#1	1.990	40.39	39.95	41.01	2.053	2.145	39.74	2.059	2.012
#2	1.989	40.38	40.01	40.73	2.046	2.140	39.80	2.052	2.013
#3	1.994	40.49	40.11	40.91	2.052	2.126	39.80	2.042	2.014

Check ? Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass
 Value Range

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Ti1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.982	1.994	2.797	2.034	2.066	1.954	2.045	1.967	2.089
Stddev	.008	.008	.007	.004	.004	.003	.007	.002	.012
%RSD	.4091	.3817	.2648	.2026	.2025	.1688	.3523	.1026	.5593
#1	1.988	1.997	2.800	2.037	2.070	1.957	2.037	1.965	2.102
#2	1.985	1.999	2.802	2.036	2.066	1.951	2.052	1.968	2.086
#3	1.973	1.985	2.788	2.029	2.061	1.956	2.046	1.969	2.080

Check ? Chk Pass Chk Pass None Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass
 Value Range

Sample Name: CCV Acquired: 9/15/2020 14:19:40 Type: QC
 Method: 6010D_010716(v544) Mode: CONC Corr. Factor: 1.000000
 User: admin SSTRACE01: : :
 Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1116.1	2504.4	3076.4	8046.4
Stddev	1.8	12.9	98.	40.7
%RSD	.15788	.51332	.31919	.50637
#1	1114.5	2492.5	30843.	8036.4
#2	1115.7	2502.8	30796.	8091.2
#3	1118.0	2518.0	30654.	8011.6

Sample Name: CCB Acquired: 9/15/2020 14:24:11 Type: QC
 Method: 6010D_010716(v544) Mode: CONC Corr. Factor: 1.000000
 User: admin SSTRACE01: : :
 Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	.0105	-0.0016	.0003	.00006	.0061	.00008	.0001
Stddev	.0004	.0019	.0018	.0000	.00003	.0003	.00006	.0001
%RSD	429.4	18.41	107.1	7.535	44.706	5.001	72.947	87.94
#1	.0001	.0115	-.0020	.0003	.00004	.0063	.00014	.0002
#2	-.0003	.0083	-.0032	.0004	.00006	.0057	.00002	.0000
#3	.0006	.0118	.0003	.0003	.00010	.0061	.00007	.0001

Check ? Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass
 High Limit Low Limit

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000	.0006	.0141	-0.0052	-0.0028	.0001	F .0011	.0030
Stddev	.0002	.0002	.0020	.0011	.0133	.0000	.0004	.0029
%RSD	555.0	31.33	14.32	21.38	469.6	78.21	40.11	96.88
#1	-.0001	.0007	.0163	-.0065	.0011	.0000	.0015	.0022
#2	.0002	.0004	.0136	-.0045	-.0177	.0001	.0012	.0062
#3	.0000	.0006	.0123	-.0047	.0080	.0001	.0006	.0005

Check ? Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Fail Chk Pass
 High Limit Low Limit

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0006	.0002	-0.0004	F -.0023	.0043	-0.0002	.0001	.0010
Stddev	.0001	.0008	.0006	.0012	.0002	.0002	.0000	.0001
%RSD	15.56	352.2	171.8	53.18	5.541	138.0	57.93	7.435
#1	.0007	.0002	-.0003	-.0025	.0046	-.0003	.0000	.0011
#2	.0006	-.0006	-.0010	-.0034	.0042	-.0003	.0001	.0010
#3	.0005	.0010	.0002	-.0010	.0042	.0001	.0000	.0009

Check ? Chk Pass Chk Pass Chk Pass Chk Fail None Chk Pass Chk Pass Chk Pass
 High Limit Low Limit

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0006	.0002	-0.0004	F -.0023	.0043	-0.0002	.0001	.0010
Stddev	.0001	.0008	.0006	.0012	.0002	.0002	.0000	.0001
%RSD	15.56	352.2	171.8	53.18	5.541	138.0	57.93	7.435
#1	.0007	.0002	-.0003	-.0025	.0046	-.0003	.0000	.0011
#2	.0006	-.0006	-.0010	-.0034	.0042	-.0003	.0001	.0010
#3	.0005	.0010	.0002	-.0010	.0042	.0001	.0000	.0009

Check ? Chk Pass Chk Pass Chk Pass Chk Fail None Chk Pass Chk Pass Chk Pass
 High Limit Low Limit

Sample Name: CCB Acquired: 9/15/2020 14:24:11 Type: QC
 Method: 6010D_010716(v544) Mode: CONC Corr. Factor: 1.000000
 User: admin SSTRACE01: : :
 Comment:

Elem	Ti1908	V_2924	Zn2062
Units	ppm	ppm	ppm
Avg	F .0029	-0.0005	.0001
Stddev	.0023	.0001	.0001
%RSD	78.65	24.29	77.60
#1	.0008	-.0006	.0003
#2	.0054	-.0005	.0001
#3	.0026	-.0004	.0001

Check ? Chk Fail Chk Pass Chk Pass
 High Limit Low Limit

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1264.3	2612.3	3197.5	8209.5
Stddev	2.1	5.4	88.	74.5
%RSD	.16670	.20653	.27428	.90687
#1	1262.2	2611.7	31913.	8295.4
#2	1266.5	2618.0	31937.	8163.3
#3	1264.3	2607.3	32075.	8169.8

Check ? Chk Fail Chk Pass Chk Pass
 High Limit Low Limit

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0006	.0002	-0.0004	F -.0023	.0043	-0.0002	.0001	.0010
Stddev	.0001	.0008	.0006	.0012	.0002	.0002	.0000	.0001
%RSD	15.56	352.2	171.8	53.18	5.541	138.0	57.93	7.435
#1	.0007	.0002	-.0003	-.0025	.0046	-.0003	.0000	.0011
#2	.0006	-.0006	-.0010	-.0034	.0042	-.0003	.0001	.0010
#3	.0005	.0010	.0002	-.0010	.0042	.0001	.0000	.0009

Check ? Chk Pass Chk Pass Chk Pass Chk Fail None Chk Pass Chk Pass Chk Pass
 High Limit Low Limit

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0006	.0002	-0.0004	F -.0023	.0043	-0.0002	.0001	.0010
Stddev	.0001	.0008	.0006	.0012	.0002	.0002	.0000	.0001
%RSD	15.56	352.2	171.8	53.18	5.541	138.0	57.93	7.435
#1	.0007	.0002	-.0003	-.0025	.0046	-.0003	.0000	.0011
#2	.0006	-.0006	-.0010	-.0034	.0042	-.0003	.0001	.0010
#3	.0005	.0010	.0002	-.0010	.0042	.0001	.0000	.0009

Sample Name: FA78551-30F Acquired: 9/15/2020 14:29:05 Type: Unk
 Method: 6010D_010716(v544) Mode: CONC Corr. Factor: 1.000000
 User: admin SSTRACE01: : :
 Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002	0.184	0.046	0.065	0.0005	72.64	0.0019	0.019	0.007
Stddev	.0001	0.0067	0.019	0.002	0.0003	.39	0.0010	0.001	0.005
%RSD	57.88	36.28	41.49	.1818	56.677	5357	51.210	7.286	77.14

#1	.0001	0.257	.0031	.0967	.00003	72.19	.00022	.0019	.0007
#2	.0001	0.125	.0041	.0964	.00008	72.91	.00027	.0018	.0002
#3	.0003	0.170	.0068	.0964	.00003	72.81	.00008	.0021	.0012

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.0017	8.766	2.753	41.92	3.529	-0.0001	F 111.8	0.054	-0.0001
Stddev	.0001	0.062	.033	.32	.009	.0002	1.0	.0001	.0011
%RSD	4.625	7.106	1.210	.7623	.2588	221.1	.9362	2.366	1008.

#1	-0.0016	8.701	2.791	41.56	3.520	-0.0001	112.9	.0055	.0006
#2	-0.0017	8.825	2.741	42.16	3.538	-0.0002	111.7	.0053	-0.0014
#3	-0.0017	8.774	2.728	42.03	3.527	.0001	110.8	.0055	.0004

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Ti1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.0032	-0.020	21.62	0.003	8.721	0.020	-0.0022	0.001	0.078
Stddev	.0014	.0005	.05	.0003	.0022	.0001	.0013	.0002	.0000
%RSD	42.70	27.17	.2305	84.70	.2521	3.272	57.61	159.1	.4728

#1	-0.0040	-0.014	21.68	.0006	8.739	.0020	-0.0016	.0001	.0078
#2	-0.0039	-0.021	21.60	.0003	8.727	.0021	-0.0014	.0003	.0079
#3	-0.0016	-0.025	21.59	.0000	8.696	.0021	-0.0037	-0.0001	.0078

Int. Std. Units	In2306 Cts/S	Y_2243 Cts/S	Y_3600 Cts/S	Y_3710 Cts/S
Avg	1115.1	2428.5	3001.2	8046.1
Stddev	1.2	8.3	157.	43.8
%RSD	.10430	.34188	.52345	.54457

#1	1113.8	2419.4	3018.9	8095.5
#2	1115.9	2435.7	2988.8	8012.0
#3	1115.7	2430.4	2996.0	8030.8

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Sample Name: FA78551-31F Acquired: 9/15/2020 14:33:54 Type: Unk
 Method: 6010D_010716(v544) Mode: CONC Corr. Factor: 1.000000
 User: admin SSTRACE01: : :
 Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	0.097	-0.028	0.764	0.0003	34.94	0.0017	0.013	0.104
Stddev	.0002	0.0030	0.002	0.003	0.0004	.30	0.0002	0.000	0.002
%RSD	371.4	30.56	5.599	4.199	121.10	.8601	13.556	2.649	2.165

#1	.0002	0.080	-0.026	0.762	0.0003	35.28	0.0019	0.013	0.105
#2	-0.0002	0.080	-0.028	0.763	-0.0001	34.86	0.0017	0.013	0.101
#3	.0002	0.132	-0.029	0.768	0.0007	34.69	0.0015	0.013	0.105

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.0012	0.021	3.103	23.25	0.251	0.020	F 89.52	1.569	0.000
Stddev	.0001	.0011	.013	.23	.0001	.0000	.05	.0006	.0005
%RSD	6.017	53.91	4.023	.9677	.4414	2.106	.0563	.3715	1391.

#1	-0.0011	.0031	3.098	23.46	.0252	.0020	89.46	1.576	.0005
#2	-0.0012	.0009	3.117	23.26	.0252	.0020	89.55	1.565	.0000
#3	-0.0012	.0021	3.094	23.01	.0250	.0020	89.54	1.566	-0.004

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Ti1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.0012	0.010	16.05	-0.0001	4.858	0.014	0.008	0.007	0.043
Stddev	.0008	.0022	.03	.0002	.0007	.0001	.0015	.0004	.0001
%RSD	63.16	214.7	.1633	191.2	.1486	4.322	177.0	51.79	1.714

#1	-0.0016	-0.006	16.07	-0.0001	4.851	0.014	0.006	0.006	0.043
#2	-0.0018	0.001	16.07	-0.0003	4.865	0.014	0.024	0.012	0.044
#3	-0.0003	0.036	16.02	0.001	4.856	0.013	-0.0005	0.005	0.043

Int. Std. Units	In2306 Cts/S	Y_2243 Cts/S	Y_3600 Cts/S	Y_3710 Cts/S
Avg	1156.9	2482.8	3035.2	8067.6
Stddev	3.6	10.0	67.	90.0
%RSD	.31164	.40192	.22235	1.1152

#1	1157.5	2477.1	3028.3	7967.6
#2	1153.1	2476.9	3035.7	8093.1
#3	1160.2	2494.3	3041.8	8142.0

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Sample Name: FA78586-6 Acquired: 9/15/2020 14:38:43 Type: Unk
 Method: 6010D_010716(v544) Mode: CONC Corr. Factor: 5.000000
 User: admin SSTRACE01: : :
 Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	0.000	3.627	-0.138	0.191	0.0003	115.3	0.0035	0.014	0.037
Stddev	.000	.036	.0026	.0002	.00016	.2	.00013	.0001	.0011
%RSD	912.7	1.004	18.54	1.131	518.96	.1415	36.256	6.287	28.73

#1	-0.0001	3.668	-0.160	0.194	.00022	115.3	.00023	.0013	.0029
#2	.0001	3.615	-0.110	0.190	-0.0010	115.2	.00034	.0014	.0033
#3	.0000	3.599	-0.143	0.190	-0.0002	115.5	.00048	.0015	.0049

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3347	1.144	57.82	14.85	0.477	-0.018	292.9	0.065	0.069
Stddev	.0008	.017	.35	.12	.0006	.0008	1.2	.0006	.0031
%RSD	.2347	1.498	.6095	.8189	1.204	42.94	.3977	8.635	45.43

#1	.3356	1.125	58.16	14.73	.0484	-0.0017	294.0	.0070	.0092
#2	.3341	1.148	57.86	14.97	.0473	-0.0011	293.2	.0059	.0081
#3	.3343	1.159	57.45	14.84	.0476	-0.0026	291.7	.0066	.0033

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Ti1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.0069	-0.022	17.77	0.017	3.064	0.278	-0.006	-0.005	1.499
Stddev	.0072	.0095	.04	.0015	.0020	.0005	.0067	.0005	.0015
%RSD	105.1	426.2	.2013	85.18	.6394	1.890	1101.	113.8	.9720

#1	.0013	.0069	17.81	.0027	3.076	.0284	-0.0068	-0.0009	1.494
#2	-0.0125	-0.0015	17.76	.0024	3.074	.0275	.0065	.0001	1.516
#3	-0.0094	-0.0120	17.74	.0000	3.041	.0275	-0.0015	-0.0007	1.488

Int. Std. Units	In2306 Cts/S	Y_2243 Cts/S	Y_3600 Cts/S	Y_3710 Cts/S
Avg	1185.8	2508.1	3102.8	8231.9
Stddev	4.3	13.8	34.	49.3
%RSD	.36045	.54887	.11027	.59918

#1	1181.0	2492.4	3100.2	8239.2
#2	1187.6	2518.3	3101.4	8277.2
#3	1188.9	2513.4	3106.7	8179.4

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Sample Name: CRIA Acquired: 9/15/2020 14:43:33 Type: Unk
 Method: 6010D_010716(v544) Mode: CONC Corr. Factor: 1.000000
 User: admin SSTRACE01: : :
 Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca317
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Sample Name: ICSA Acquired: 9/15/2020 14:48:24 Type: Unk
Method: 6010D_010716(v544) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0003	F 525.5	.0014	-0.0003	.000003	476.2	-0.00150	-0.0001
Stddev	.0000	3.8	.0019	.0001	.00002	2.5	.00073	.0001
%RSD	4.293	.7266	132.9	28.10	65.506	.5267	48.433	68.24

#1	.0002	523.4	-.0004	-.0002	.000004	475.3	-.00094	-.0002
#2	.0003	529.9	.0013	-.0004	.000001	479.0	-.00233	.0000
#3	.0003	523.1	.0034	-.0003	.000005	474.3	-.00124	-.0001

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0001	.0004	F 512.9	-.0512	F 551.5	.0008	-.0006	.0799
Stddev	.0005	.0008	1.9	.0123	1.4	.0000	.0003	.0035
%RSD	364.4	180.2	.3606	23.99	.2521	3.456	52.36	4.357

#1	.0005	-.0004	511.9	-.0442	550.0	.0008	-.0002	.0833
#2	-.0005	.0005	515.1	-.0441	551.5	.0008	-.0007	.0801
#3	-.0004	.0011	511.8	-.0654	552.8	.0008	-.0008	.0764

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002	-.0018	-.0032	-.0038	.0081	-.0002	-.0008	.0020
Stddev	.0004	.0021	.0019	.0043	.0033	.0005	.0001	.0001
%RSD	247.3	118.4	57.73	112.5	40.46	251.4	8.061	3.317

#1	-.0001	-.0008	-.0042	.0008	.0115	-.0008	-.0008	.0019
#2	.0006	-.0042	-.0011	-.0076	.0077	.0000	-.0009	.0020
#3	.0000	-.0003	-.0044	-.0046	.0050	.0002	-.0008	.0021

Elem	Tl1908	V_2924	Zn2062
IS Ref	(In2306)	(Y_3600)	(Y_2243)
Units	ppm	ppm	ppm
Avg	.0008	-.0006	-.0001
Stddev	.0026	.0004	.0003
%RSD	311.0	56.42	344.2

#1	-.0018	-.0006	.0002
#2	.0033	-.0003	.0000
#3	.0010	-.0010	-.0004

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Sample Name: ICSA Acquired: 9/15/2020 14:48:24 Type: Unk
Method: 6010D_010716(v544) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1026.2	2261.6	28308.	7737.6
Stddev	4.8	6.4	162.	6.6
%RSD	.46851	.28477	.57356	.08569

#1	1021.4	2254.2	28153.	7730.1
#2	1031.0	2266.0	28294.	7742.7
#3	1026.2	2264.6	28477.	7740.0

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Sample Name: ICSAB Acquired: 9/15/2020 14:53:35 Type: Unk
Method: 6010D_010716(v544) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F 1.080	F 523.4	.9799	.5129	.49348	485.4	.91207	.4721	.4831
Stddev	.003	7.2	.0089	.0027	.00342	1.2	.00310	.0020	.0043
%RSD	.3111	1.376	.9101	.5286	.69256	.2441	.33981	.4176	.8862

#1	1.083	518.5	.9790	.5140	.49405	484.2	.90931	.4700	.4872
#2	1.076	531.7	.9714	.5148	.49657	485.5	.91147	.4724	.4834
#3	1.079	520.0	.9892	.5098	.48981	486.5	.91542	.4739	.4787

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5291	191.9	-.0148	F 559.7	.4965	.9065	.0851	.9228	.9411
Stddev	.0023	1.2	.0062	4.6	.0019	.0043	.0024	.0030	.0014
%RSD	.4276	.6202	41.72	.8189	.3791	.4794	2.855	.3238	.1466

#1	.5269	191.7	-.0138	558.9	.4985	.9029	.0869	.9205	.9411
#2	.5314	193.2	-.0215	564.6	.4962	.9052	.0824	.9216	.9397
#3	.5289	190.9	-.0092	555.6	.4948	.9113	.0861	.9262	.9425

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.015	.9332	.0384	.8712	.9960	1.033	.8830	.4868	.9432
Stddev	.006	0.016	.0010	.0040	.0051	.003	.0038	.0002	.0053
%RSD	.6197	1.132	2.705	.4604	.5085	.2545	.4322	.0356	.5588

#1	1.011	.9257	.0394	.8669	1.000	1.036	.8828	.4870	.9398
#2	1.011	.9286	.0386	.8718	.9970	1.034	.8792	.4869	.9405
#3	1.022	.9452	.0374	.8748	.9905	1.030	.8868	.4866	.9492

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	975.97	2315.6	28391.	7805.6
Stddev	4.21	7.2	35.	32.6
%RSD	.43131	.30969	.12438	.41751

#1	979.33	2323.9	28356.	7821.6
#2	977.33	2311.2	28391.	7768.1
#3	971.25	2311.8	28427.	7827.1

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Sample Name: CCV Acquired: 9/15/2020 14:58:28 Type: QC
Method: 6010D_010716(v544) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2410	40.36	1.987	2.049	2.0587	40.90	2.0289	2.085	2.105
Stddev	.0007	.20	.006	.013	.0095	.35	.0083	.005	.008
%RSD	.2865	.5049	.2904	.6129	.45879	.8465	4.1058	.2573	.3926

#1	.2402	40.55	1.983	2.057	2.0685	41.29	2.0368	2.088	2.110
#2	.2412	40.40	1.994	2.056	2.0580	40.64	2.0296	2.088	2.095
#3	.2415	40.15	1.984	2.035	2.0496	40.77	2.0202	2.079	2.109

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.988	40.13	39.75	40.71	2.037	2.127	39.43	2.049	2.007
Stddev	.025	.27	.18	.33	.006	.006	.19	.006	.002
%RSD	1.252	.6660	.4577	.8210	.2866	.2977	.4895	.2822	.0812

#1	1.960	40.44	39.85	41.06	2.038	2.131	39.53	2.054	2.008
#2	1.996	39.97	39.85	40.39	2.031	2.129	39.54	2.050	2.008
#3	2.008	39.99	39.54	40.67	2.042	2.120	39.20	2.042	2.005

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.978	1.991	2.788	2.029	2.041	1.944	2.043	1.964	2.081
Stddev	.003	.002	.007	.005	.012	.010	.007	.006	.009
%RSD	.1416	.0835	.2605	.2551	.5918	.4952	.3455	.3203	.4328

#1	1.981	1.990	2.791	2.029	2.049	1.936	2.047	1.961	2.091
#2	1.980	1.990	2.793	2.033	2.048	1.941	2.047	1.961	2.077
#3	1.975	1.993	2.780	2.023	2.027	1.954	2.035	1.972	2.074

Check ?	Value	Range	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass

Check ?	Value	Range	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass

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Sample Name: CCV Acquired: 9/15/2020 14:58:28 Type: QC
 Method: 6010D_010716(v544) Mode: CONC Corr. Factor: 1.000000
 User: admin SSTRACE01: : :
 Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1121.0	2513.2	30961.	8057.1
Stddev	4.7	10.9	71.	77.6
%RSD	.41634	.43519	.22808	.96271
#1	1116.0	2502.3	31040.	7967.9
#2	1121.8	2513.1	30937.	8108.1
#3	1125.2	2524.2	30905.	8095.4

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Sample Name: CCB Acquired: 9/15/2020 15:02:59 Type: QC
 Method: 6010D_010716(v544) Mode: CONC Corr. Factor: 1.000000
 User: admin SSTRACE01: : :
 Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.003	.0140	-0.001	.0003	.00016	.0105	.00012	.0001
Stddev	.0004	.0023	.0003	.0001	.00002	.0006	.00003	.0001
%RSD	133.3	16.35	392.1	21.94	13.299	6.116	25.327	59.92
#1	.0001	.0114	.0001	.0004	.00017	.0099	.00008	.0002
#2	-0.003	.0150	-0.004	.0004	.00013	.0112	.00012	.0002
#3	-0.007	.0156	.0001	.0003	.00017	.0103	.00014	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								
Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	.0004	.0199	-0.0108	-0.0058	.0001	F .0012	-0.0048
Stddev	.0001	.0001	.0021	.0083	.0147	.0000	.0002	.0033
%RSD	84.73	24.66	10.48	76.24	253.7	66.44	17.54	68.99
#1	.0001	.0005	.0211	-0.036	-.0148	.0001	.0014	-.0078
#2	.0000	.0003	.0211	-.0198	-.0137	.0001	.0013	-.0056
#3	.0001	.0005	.0175	-0.092	.0111	.0000	.0010	-.0012
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit							.0010	
Low Limit							-.0010	
Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002	.0003	-0.0004	F -0.0024	.0038	.0001	.0001	.0008
Stddev	.0001	.0004	.0004	.0017	.0002	.0004	.0000	.0000
%RSD	24.99	104.9	97.19	72.22	5.799	270.0	4.975	4.864
#1	.0002	.0001	-0.0007	-0.0022	.0038	.0004	.0001	.0009
#2	.0002	.0001	.0001	-0.0007	.0040	-.0003	.0001	.0008
#3	.0003	.0008	-0.0007	-0.0041	.0036	.0003	.0001	.0008
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	None	Chk Pass	Chk Pass	Chk Pass
High Limit				.0020				
Low Limit				-.0020				

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9.1
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Sample Name: CCB Acquired: 9/15/2020 15:02:59 Type: QC
 Method: 6010D_010716(v544) Mode: CONC Corr. Factor: 1.000000
 User: admin SSTRACE01: : :
 Comment:

Elem	Tl1908	V_2924	Zn2062	
Units	ppm	ppm	ppm	
Avg	F .0036	-0.0004	.0001	
Stddev	.0011	.0002	.0001	
%RSD	30.26	48.73	92.47	
#1	.0048	-.0003	.0001	
#2	.0026	-.0003	.0000	
#3	.0034	-.0007	.0003	
Check ?	Chk Fail	Chk Pass	Chk Pass	
High Limit	.0020			
Low Limit	-.0020			
Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1265.7	2617.2	32069.	8203.1
Stddev	3.3	6.6	184.	18.9
%RSD	.25846	.25143	.57224	.23099
#1	1262.3	2616.0	31864.	8202.6
#2	1268.9	2624.4	32217.	8184.4
#3	1265.8	2611.4	32125.	8222.3

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Element, Wavelength and Order	Use?	# IECs	IEC	k1	k2	Calc-in-fit?
Ag 328.068 {103}	<input checked="" type="checkbox"/>	2	V	-0.005817	0.000000	No
			Fe	0.000002	0.000000	No
Al 396.152 { 85}	<input checked="" type="checkbox"/>	1	Mo	0.040330	0.000000	No
As 189.042 {478}	<input checked="" type="checkbox"/>	5	Fe	-0.000055	0.000000	No
			Cr	-0.000653	0.000000	No
			Mo	0.000444	0.000000	No
			Al	0.000001	0.000000	No
			Si	0.000094	0.000000	No
Ba 455.403 { 74}	<input checked="" type="checkbox"/>	2	Fe	0.000019	0.000000	No
			Na	0.000000	0.000000	No
Be 313.042 {108}	<input checked="" type="checkbox"/>	2	V	0.000625	0.000000	No
			Ti	-0.000289	0.000000	No
Ca 317.933 {106}	<input checked="" type="checkbox"/>	None				
Cd 226.502 {449}	<input checked="" type="checkbox"/>	4	Fe	0.000231	0.000000	No
			Ca	-0.000000	0.000000	No
			Al	-0.000002	0.000000	No
			Ti	0.000103	0.000000	No
Co 228.616 {447}	<input checked="" type="checkbox"/>	3	Mo	-0.001220	0.000000	No
			Ti	0.002210	0.000000	No
			Fe	-0.000002	0.000000	No
Cr 267.716 {126}	<input checked="" type="checkbox"/>	4	Al	0.000005	0.000000	No
			Fe	-0.000016	0.000000	No
			Ca	0.000002	0.000000	No
			Cd	-0.000120	0.000000	No
Cu 324.754 {104}	<input checked="" type="checkbox"/>	10	Mo	0.000189	0.000000	No
			Sn	-0.000012	0.000000	No
			V	-0.000158	0.000000	No
			Al	0.000003	0.000000	No
			Mg	0.000003	0.000000	No
			Co	-0.000547	0.000000	No
			Cd	0.000190	0.000000	No
			Fe	-0.000094	0.000000	No
			Ca	0.000001	0.000000	No
			Ti	-0.000268	0.000000	No
Fe 259.940 {130}	<input checked="" type="checkbox"/>	None				
In 230.606 {446}	<input checked="" type="checkbox"/>	None				
K 766.490 { 44}	<input checked="" type="checkbox"/>	None				
Mg 279.079 {121}	<input checked="" type="checkbox"/>	None				
Mn 257.610 {131}	<input checked="" type="checkbox"/>	2	Fe	0.000002	0.000000	No
			Mg	0.000000	0.000000	No
Mo 202.030 {467}	<input checked="" type="checkbox"/>	1	Fe	-0.000009	0.000000	No
Na 589.592 { 57}	<input checked="" type="checkbox"/>	None				
Ni 231.604 {445}	<input checked="" type="checkbox"/>	8	Fe	-0.000021	0.000000	No
			Co	0.000112	0.000000	No
			Mo	0.000980	0.000000	No
			Sb	-0.000120	0.000000	No
			Al	0.000003	0.000000	No
			Be	-0.000304	0.000000	No
			Ti	0.000172	0.000000	No
			Na	0.000001	0.000000	No
Pb 220.353 {453}	<input checked="" type="checkbox"/>	8	Al	0.000201	0.000000	No
			Fe	-0.000005	0.000000	No
			Mo	-0.002189	0.000000	No
			Cu	0.000467	0.000000	No
			Ti	0.000036	0.000000	No
			Si	0.000045	0.000000	No
			Ca	-0.000005	0.000000	No

Element, Wavelength and Order	Use?	# IECs	IEC	k1	k2	Calc-in-fit?												
Sb 206.833 {463}	<input checked="" type="checkbox"/>	12	Cr	-0.000260	0.000000	No												
			Fe	0.000010	0.000000	No												
			Cr	0.011486	0.000000	No												
			Mo	-0.003119	0.000000	No												
			V	-0.000991	0.000000	No												
			Sn	-0.008695	0.000000	No												
			Ti	0.000278	0.000000	No												
			Ca	0.000001	0.000000	No												
			Ni	-0.000818	0.000000	No												
			Al	0.000004	0.000000	No												
			Mn	-0.000133	0.000000	No												
			Mg	-0.000002	0.000000	No												
Se 196.090 {472}	<input checked="" type="checkbox"/>	12	Si	0.000100	0.000000	No												
			Fe	0.000000	0.000000	No												
			Ca	0.000002	0.000000	No												
			Mn	0.000331	0.000000	No												
			Mo	0.000111	0.000000	No												
			Al	-0.000036	0.000000	No												
			V	0.000000	0.000000	No												
			Zn	0.000000	0.000000	No												
			Sr	-0.000111	0.000000	No												
			As	0.000125	0.000000	No												
			Cd	-0.000250	0.000000	No												
			Mg	-0.000004	0.000000	No												
Si 212.412 {459}	<input checked="" type="checkbox"/>	1	Cr	-0.000326	0.000000	No												
			Mo	0.000000	0.000000	No												
			Sn 189.989 {477}	<input checked="" type="checkbox"/>	1	Fe	0.000007	0.000000	No									
						Sr 407.771 {83}	<input checked="" type="checkbox"/>	1	Ca	0.000045	0.000000	No						
									Ti 334.941 {101}	<input checked="" type="checkbox"/>	1	Ca	-0.000010	0.000000	No			
												Tl 190.856 {477}	<input checked="" type="checkbox"/>	10	Co	0.004099	0.000000	No
															Fe	-0.000008	0.000000	No
															Al	-0.000020	0.000000	No
															Ba	-0.000051	0.000000	No
															Ti	-0.000648	0.000000	No
															Sb	0.000167	0.000000	No
															Ca	0.000011	0.000000	No
Cr	0.000340	0.000000													No			
Mg	-0.000002	0.000000													No			
V	-0.000485	0.000000	No															
V 292.402 {115}	<input checked="" type="checkbox"/>	5	Fe	0.000008	0.000000	No												
			Cr	-0.003634	0.000000	No												
			Mo	-0.008061	0.000000	No												
			Ti	0.000303	0.000000	No												
			Mn	-0.000333	0.000000	No												
Y 224.306 {450}*	<input checked="" type="checkbox"/>	None																
Y 360.073 {94}*	<input checked="" type="checkbox"/>	None																
Y 371.030 {91}*	<input checked="" type="checkbox"/>	None																
Zn 206.200 {463}	<input checked="" type="checkbox"/>	5	Cr	-0.001305	0.000000	No												
			Al	0.000011	0.000000	No												
			Ca	0.000003	0.000000	No												
			Fe	-0.000012	0.000000	No												
			As	0.001105	0.000000	No												

Element, Wavelength and Order	Date of Fit	Date of Cal.	Type of Fit	Weighting	A0	A1	A2	n (Exponent)
Ag 328.068 {103}	9/15/2020 10:54:52	9/15/2020 9:47:45	Linear	1/Conc	0.000314	0.550808	0.000000	1.000000
Al 396.152 { 85}	9/15/2020 10:54:52	9/15/2020 9:47:45	Linear	1/Conc	-0.000068	0.132440	0.000000	1.000000
As 189.042 {478}	9/15/2020 10:54:52	9/15/2020 9:47:45	Linear	1/Conc	-0.000655	0.142486	0.000000	1.000000
Ba 455.403 { 74}	9/15/2020 10:54:52	9/15/2020 9:47:45	Linear	1/Conc	-0.000997	9.601013	0.000000	1.000000
Be 313.042 {108}	9/15/2020 10:54:52	9/15/2020 9:47:45	Linear	1/Conc	-0.000080	6.606306	0.000000	1.000000
Ca 317.933 {106}	9/15/2020 10:54:52	9/15/2020 9:47:45	Linear	1/Conc	0.005401	0.204415	0.000000	1.000000
Cd 226.502 {449}	9/15/2020 10:54:52	9/15/2020 9:47:45	Linear	1/Conc	-0.000411	3.394781	0.000000	1.000000
Co 228.616 {447}	9/15/2020 10:54:52	9/15/2020 9:47:45	Linear	1/Conc	-0.001328	2.338830	0.000000	1.000000
Cr 267.716 {126}	9/15/2020 10:54:52	9/15/2020 9:47:45	Linear	1/Conc	-0.000131	0.289224	0.000000	1.000000
Cu 324.754 {104}	9/15/2020 10:54:52	9/15/2020 9:47:45	Linear	1/Conc	0.006240	0.861149	0.000000	1.000000
Fe 259.940 {130}	9/15/2020 10:54:52	9/15/2020 9:47:45	Linear	1/Conc	0.000796	0.108454	0.000000	1.000000
In 230.606 {446}*	9/15/2020 10:54:52	5/5/2010 12:30:54	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
K 766.490 { 44}	9/15/2020 10:54:52	9/15/2020 9:47:45	Linear	1/Conc	-0.001503	0.065442	0.000000	1.000000
Mg 279.079 {121}	9/15/2020 10:54:52	9/15/2020 9:47:45	Linear	1/Conc	0.000091	0.015912	0.000000	1.000000
Mn 257.610 {131}	9/15/2020 10:54:52	9/15/2020 9:47:45	Linear	1/Conc	0.000273	2.128350	0.000000	1.000000
Mo 202.030 {467}	9/15/2020 10:54:52	9/15/2020 9:47:45	Linear	1/Conc	0.001352	0.917589	0.000000	1.000000
Na 589.592 { 57}	9/15/2020 10:54:52	9/15/2020 9:47:45	Linear	1/Conc	0.007902	0.279323	0.000000	1.000000
Ni 231.604 {445}	9/15/2020 10:54:52	9/15/2020 9:47:45	Linear	1/Conc	-0.000748	1.417680	0.000000	1.000000
Pb 220.353 {453}	9/15/2020 10:54:52	9/15/2020 9:47:45	Linear	1/Conc	-0.001880	0.730865	0.000000	1.000000
Sb 206.833 {463}	9/15/2020 10:54:52	9/15/2020 9:47:45	Linear	1/Conc	-0.000160	0.220352	0.000000	1.000000
Se 196.090 {472}	9/15/2020 10:54:52	9/15/2020 9:47:45	Linear	1/Conc	0.000199	0.092884	0.000000	1.000000
Si 212.412 {459}	9/15/2020 10:54:52	9/15/2020 9:53:34	Linear	1/Conc	0.004115	0.246180	0.000000	1.000000
Sn 189.989 {477}	9/15/2020 10:54:52	9/15/2020 9:47:45	Linear	1/Conc	0.000164	0.340220	0.000000	1.000000
Sr 407.771 { 83}	9/15/2020 10:54:52	9/15/2020 9:47:45	Linear	1/Conc	-0.000520	12.155341	0.000000	1.000000
Ti 334.941 {101}	9/15/2020 10:54:52	9/15/2020 9:47:45	Linear	1/Conc	0.001458	1.601420	0.000000	1.000000
Tl 190.856 {477}	9/15/2020 10:54:52	9/15/2020 9:47:45	Linear	1/Conc	-0.002192	0.262983	0.000000	1.000000
V 292.402 {115}	9/15/2020 10:54:52	9/15/2020 9:47:45	Linear	1/Conc	-0.000212	0.527562	0.000000	1.000000
Y 224.306 {450}*	<not fit>	<Never Calibrated>	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
Y 360.073 { 94}*	<not fit>	<Never Calibrated>	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
Y 371.030 { 91}*	<not fit>	<Never Calibrated>	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
Zn 206.200 {463}	9/15/2020 10:54:52	9/15/2020 9:47:45	Linear	1/Conc	0.003057	1.611327	0.000000	1.000000

Element, Wavelength and Order	Correlation	Std Error of Est	Predicted MDL	Predicted MQL	Status	Reslope		QC Norm	
						Slope	Y-int	Slope factor	Offset
Ag 328.068 {103}	1.000000	0.000000	0.000411	0.001371	OK	1.000000	0.000000	1	0
Al 396.152 {85}	1.000000	0.000000	0.005187	0.017289	OK	1.000000	0.000000	1	0
As 189.042 {478}	1.000000	0.000000	0.001347	0.004490	OK	1.000000	0.000000	1	0
Ba 455.403 {74}	1.000000	0.000000	0.000092	0.000306	OK	1.000000	0.000000	1	0
Be 313.042 {108}	1.000000	0.000000	0.000050	0.000167	OK	1.000000	0.000000	1	0
Ca 317.933 {106}	1.000000	0.000000	0.001996	0.006653	OK	1.000000	0.000000	1	0
Cd 226.502 {449}	1.000000	0.000000	0.000083	0.000275	OK	1.000000	0.000000	1	0
Co 228.616 {447}	1.000000	0.000000	0.000135	0.000449	OK	1.000000	0.000000	1	0
Cr 267.716 {126}	1.000000	0.000000	0.000363	0.001211	OK	1.000000	0.000000	1	0
Cu 324.754 {104}	1.000000	0.000000	0.000189	0.000629	OK	1.000000	0.000000	1	0
Fe 259.940 {130}	1.000000	0.000000	0.001844	0.006148	OK	1.000000	0.000000	1	0
In 230.606 {446}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
K 766.490 {44}	1.000000	0.000000	0.018393	0.061310	OK	1.000000	0.000000	1	0
Mg 279.079 {121}	1.000000	0.000000	0.015731	0.052435	OK	1.000000	0.000000	1	0
Mn 257.610 {131}	1.000000	0.000000	0.000047	0.000157	OK	1.000000	0.000000	1	0
Mo 202.030 {467}	1.000000	0.000000	0.000202	0.000672	OK	1.000000	0.000000	1	0
Na 589.592 {57}	1.000000	0.000000	0.004100	0.013667	OK	1.000000	0.000000	1	0
Ni 231.604 {445}	1.000000	0.000000	0.000230	0.000768	OK	1.000000	0.000000	1	0
Pb 220.353 {453}	1.000000	0.000000	0.000936	0.003118	OK	1.000000	0.000000	1	0
Sb 206.833 {463}	1.000000	0.000000	0.001317	0.004390	OK	1.000000	0.000000	1	0
Se 196.090 {472}	1.000000	0.000000	0.002888	0.009625	OK	1.000000	0.000000	1	0
Si 212.412 {459}	1.000000	0.000000	0.000844	0.002814	OK	1.000000	0.000000	1	0
Sn 189.989 {477}	1.000000	0.000000	0.000490	0.001634	OK	1.000000	0.000000	1	0
Sr 407.771 {83}	1.000000	0.000000	0.000045	0.000151	OK	1.000000	0.000000	1	0
Ti 334.941 {101}	1.000000	0.000000	0.000104	0.000345	OK	1.000000	0.000000	1	0
Tl 190.856 {477}	1.000000	0.000000	0.001629	0.005429	OK	1.000000	0.000000	1	0
V 292.402 {115}	1.000000	0.000000	0.000263	0.000875	OK	1.000000	0.000000	1	0
Y 224.306 {450}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
Y 360.073 {94}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
Y 371.030 {91}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
Zn 206.200 {463}	1.000000	0.000000	0.000132	0.000440	OK	1.000000	0.000000	1	0

SGS Orlando

[24hr] **Date:** 09/15/20
Time: 8:11

Analysts Name:	Adam K
MP Batch ID:	37810
Method	SW846-3010A
Reagent Lot #	255830
Spk.Soln(A)	ACC1204
Vol. Used (ml)	0.5
Pipette#	KU15244
Conc. HNO3 (B)	254117
Conc. HCL (B)	ACC1184
NA	NA
NA	MET6815
NA	NA
NA	NA
HotBlock I.D.	10
Therm ID	6071
Temp. C	95
Corr. Factor	-1
Corrected Observed Temp. C	94
pH Paper Lot#	220416
Digestion Tube Lot#	MP3415

Bot#	Sample #	Initial Vol.(ml)	Final Vol.(ml)	pH<2	NA	NA	NA	NA	NA	NA	Comment
NA	Method Blank(MB)	50	50	NA							
NA	Spike Blank(SB)	50	50	NA							
1	Matrix Spike(MS)	50	50	Y							
1	Matrix Spike Dup(MSD)	50	50	Y							
1	Duplicate(DUP)	50	50	Y							
1(QC) C	FA78702-1	50	50	Y							
2	FA78702-2	50	50	Y							
3	FA78702-3	50	50	Y							
4	FA78702-4	50	50	Y							
5	FA78584-1	50	50	Y							
6	FA78584-2	50	50	Y							
7	FA78584-3	50	50	Y							
8	FA78586-5	50	50	Y							
9	FA78586-6	50	50	Y							
10	FA78419-1	50	50	Y							
11	FA78703-2	50	50	Y							
12	FA78662-1	50	50	Y							
13	FA78551-28F	50	50	Y							
14	FA78551-29F	50	50	Y							
15	FA78551-30F	50	50	Y							
16	FA78551-31F	50	50	Y							
17		50	50								
18		50	50								
19		50	50								
20		50	50								
21 [D]		50	50								
22 [D]		50	50								
23 [D]		50	50								
24 [D]		50	50								

Protected Worksheet

- A Used for SB, MS, MSD
- B For reagent volumes used refer to SOP MET 103, current version
- C Parent sample used to prepare MS, MSD, DUP
- D Additional matrix QC

9.2.1
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The results set forth herein are provided by SGS North America Inc.

e-Hardcopy 2.0
Automated Report

Technical Report for

Ahtna Global, LLC

DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA

21065.000.01.0000

SGS Job Number: FA79006

Sampling Date: 09/21/20

Report to:

Ahtna Global, LLC
9699 Blue Larkspur Lane Suite 203
Monterey, CA 93940
dliberman@ahtna.net; mfisher@ahtna.net;
hdillon@ahtna.net; eschmidt@ahtna.net;
ATTN: Derek Lieberman

Total number of pages in report: **136**



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

A handwritten signature in black ink that reads "Norm Farmer".

Norm Farmer
Technical Director

Client Service contact: Elvin Kumar 407-425-6700

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

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Test results relate only to samples analyzed.

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Sample Summary

Ahtna Global, LLC

Job No: FA79006

DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA

Project No: 21065.000.01.0000

Sample Number	Collected		Received	Matrix		Client Sample ID
	Date	Time By		Code	Type	
FA79006-1	09/21/20	13:12 MF	09/22/20	AQ	Trip Blank Water	2039MOU2207A
FA79006-2	09/21/20	13:16 MF	09/22/20	AQ	Ground Water	2039MOU2208F
FA79006-3	09/21/20	13:22 MF	09/22/20	AQ	Ground Water	2039MOU2209F
FA79006-4	09/21/20	13:28 MF	09/22/20	AQ	Ground Water	2039MOU2210F
FA79006-5	09/21/20	13:32 MF	09/22/20	AQ	Ground Water	2039MOU2211F
FA79006-6	09/21/20	13:37 MF	09/22/20	AQ	Ground Water	2039MOU2212F
FA79006-7	09/21/20	13:42 MF	09/22/20	AQ	Ground Water	2039MOU2213F
FA79006-8	09/21/20	13:46 MF	09/22/20	AQ	Ground Water	2039MOU2214F
FA79006-9	09/21/20	13:50 MF	09/22/20	AQ	Ground Water	2039MOU2215F
FA79006-10	09/21/20	13:55 MF	09/22/20	AQ	Ground Water	2039MOU2216F
FA79006-11	09/21/20	14:00 MF	09/22/20	AQ	Ground Water	2039MOU2217D

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: Ahtna Global, LLC

Job No: FA79006

Site: DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina,

Report Date 9/28/2020 4:03:14

10 Sample(s), 1 Trip Blank(s) and 0 Field Blank(s) were collected on 09/21/2020 and were received at SGS North America Inc - Orlando on 09/22/2020 properly preserved, at 2.2 Deg. C and intact. These Samples received an SGS Orlando job number of FA79006. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section. Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

MS Volatiles By Method SW846 8260B BY SIM

Matrix: AQ

Batch ID: VO2366

All samples were analyzed within the recommended method holding time.

Sample(s) FA79006-9MS, FA79006-9MSD were used as the QC samples indicated.

All method blanks for this batch meet method specific criteria.

Sample(s) FA79006-9 have compound(s) reported with a "B" qualifier, indicating analyte is found in the associated method blank.

FA79006-9 for 1,2-Dichloroethane-D4: Outside DOD QSM control limits.

FA79006-10 for 1,2-Dichloroethane-D4: Outside DOD QSM control limits.

FA79006-11 for 1,2-Dichloroethane-D4: Outside DOD QSM control limits.

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

Narrative prepared by:

Ariel Hartney, Client Services (*Signature on File*)

Summary of Hits

Job Number: FA79006
Account: Ahtna Global, LLC
Project: DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA
Collected: 09/21/20



Lab Sample ID	Client Sample ID	Result/ Qual	LOQ	LOD	Units	Method
---------------	------------------	-----------------	-----	-----	-------	--------

FA79006-1 2039MOU2207A

No hits reported in this sample.

FA79006-2 2039MOU2208F

No hits reported in this sample.

FA79006-3 2039MOU2209F

No hits reported in this sample.

FA79006-4 2039MOU2210F

Chloroform	0.35 J	0.50	0.25	ug/l	SW846 8260B BY SIM
1,1-Dichloroethane	0.48 J	0.50	0.25	ug/l	SW846 8260B BY SIM
1,2-Dichloroethane	0.16 J	0.50	0.25	ug/l	SW846 8260B BY SIM
cis-1,2-Dichloroethylene	1.9	0.50	0.25	ug/l	SW846 8260B BY SIM
Trichloroethylene	0.99	0.50	0.25	ug/l	SW846 8260B BY SIM

FA79006-5 2039MOU2211F

Chloroform	0.43 J	0.50	0.25	ug/l	SW846 8260B BY SIM
1,1-Dichloroethane	0.58	0.50	0.25	ug/l	SW846 8260B BY SIM
1,2-Dichloroethane	0.20 J	0.50	0.25	ug/l	SW846 8260B BY SIM
cis-1,2-Dichloroethylene	1.6	0.50	0.25	ug/l	SW846 8260B BY SIM

FA79006-6 2039MOU2212F

No hits reported in this sample.

FA79006-7 2039MOU2213F

Chloroform	0.36 J	0.50	0.25	ug/l	SW846 8260B BY SIM
1,1-Dichloroethane	0.49 J	0.50	0.25	ug/l	SW846 8260B BY SIM
1,2-Dichloroethane	0.17 J	0.50	0.25	ug/l	SW846 8260B BY SIM
cis-1,2-Dichloroethylene	1.8	0.50	0.25	ug/l	SW846 8260B BY SIM
Trichloroethylene	1.6	0.50	0.25	ug/l	SW846 8260B BY SIM

FA79006-8 2039MOU2214F

Chloroform	0.41 J	0.50	0.25	ug/l	SW846 8260B BY SIM
1,1-Dichloroethane	0.56	0.50	0.25	ug/l	SW846 8260B BY SIM
1,2-Dichloroethane	0.21 J	0.50	0.25	ug/l	SW846 8260B BY SIM
cis-1,2-Dichloroethylene	1.5	0.50	0.25	ug/l	SW846 8260B BY SIM

Summary of Hits

Job Number: FA79006
Account: Ahtna Global, LLC
Project: DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA
Collected: 09/21/20



Lab Sample ID Analyte	Client Sample ID	Result/ Qual	LOQ	LOD	Units	Method
Trichloroethylene		0.17 J	0.50	0.25	ug/l	SW846 8260B BY SIM
FA79006-9		2039MOU2215F				
Chloroform		0.32 J	0.50	0.25	ug/l	SW846 8260B BY SIM
1,1-Dichloroethane		0.55	0.50	0.25	ug/l	SW846 8260B BY SIM
1,2-Dichloroethane		0.11 J	0.50	0.25	ug/l	SW846 8260B BY SIM
cis-1,2-Dichloroethylene		1.5	0.50	0.25	ug/l	SW846 8260B BY SIM
Methylene Chloride		0.94 JB	2.0	0.50	ug/l	SW846 8260B BY SIM
Tetrachloroethylene		1.0	0.50	0.25	ug/l	SW846 8260B BY SIM
Trichloroethylene		4.6	0.50	0.25	ug/l	SW846 8260B BY SIM
FA79006-10		2039MOU2216F				
Chloroform		0.29 J	0.50	0.25	ug/l	SW846 8260B BY SIM
1,1-Dichloroethane		0.44 J	0.50	0.25	ug/l	SW846 8260B BY SIM
1,2-Dichloroethane		0.26 J	0.50	0.25	ug/l	SW846 8260B BY SIM
cis-1,2-Dichloroethylene		1.2	0.50	0.25	ug/l	SW846 8260B BY SIM
Tetrachloroethylene		0.80	0.50	0.25	ug/l	SW846 8260B BY SIM
Trichloroethylene		5.5	0.50	0.25	ug/l	SW846 8260B BY SIM
FA79006-11		2039MOU2217D				
Chloroform		0.29 J	0.50	0.25	ug/l	SW846 8260B BY SIM
1,1-Dichloroethane		0.44 J	0.50	0.25	ug/l	SW846 8260B BY SIM
1,2-Dichloroethane		0.25 J	0.50	0.25	ug/l	SW846 8260B BY SIM
cis-1,2-Dichloroethylene		1.2	0.50	0.25	ug/l	SW846 8260B BY SIM
Tetrachloroethylene		0.80	0.50	0.25	ug/l	SW846 8260B BY SIM
Trichloroethylene		5.5	0.50	0.25	ug/l	SW846 8260B BY SIM

Sample Results

Report of Analysis

SGS North America Inc.

Report of Analysis

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Client Sample ID:	2039MOU2207A		
Lab Sample ID:	FA79006-1	Date Sampled:	09/21/20
Matrix:	AQ - Trip Blank Water	Date Received:	09/22/20
Method:	SW846 8260B BY SIM	Percent Solids:	n/a
Project:	DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	O61466.D	1	09/22/20 17:10	JG	n/a	n/a	VO2366
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
71-43-2	Benzene	0.25 U	0.50	0.25	0.10	ug/l	
56-23-5	Carbon Tetrachloride	0.25 U	0.50	0.25	0.10	ug/l	
67-66-3	Chloroform	0.25 U	0.50	0.25	0.10	ug/l	
75-34-3	1,1-Dichloroethane	0.25 U	0.50	0.25	0.10	ug/l	
107-06-2	1,2-Dichloroethane	0.25 U	0.50	0.25	0.10	ug/l	
156-59-2	cis-1,2-Dichloroethylene	0.25 U	0.50	0.25	0.10	ug/l	
78-87-5	1,2-Dichloropropane	0.25 U	0.50	0.25	0.10	ug/l	
75-09-2	Methylene Chloride	0.50 U	2.0	0.50	0.50	ug/l	
127-18-4	Tetrachloroethylene	0.25 U	0.50	0.25	0.10	ug/l	
79-01-6	Trichloroethylene	0.25 U	0.50	0.25	0.10	ug/l	
75-01-4	Vinyl Chloride	0.050 U	0.10	0.050	0.050	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	107%		74-125%
2037-26-5	Toluene-D8	105%		88-111%

U = Not detected

LOD = Limit of Detection

J = Indicates an estimated value

LOQ = Limit of Quantitation

DL = Detection Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

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Client Sample ID:	2039MOU2208F		
Lab Sample ID:	FA79006-2	Date Sampled:	09/21/20
Matrix:	AQ - Ground Water	Date Received:	09/22/20
Method:	SW846 8260B BY SIM	Percent Solids:	n/a
Project:	DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	O61467.D	1	09/22/20 17:30	JG	n/a	n/a	VO2366
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
71-43-2	Benzene	0.25 U	0.50	0.25	0.10	ug/l	
56-23-5	Carbon Tetrachloride	0.25 U	0.50	0.25	0.10	ug/l	
67-66-3	Chloroform	0.25 U	0.50	0.25	0.10	ug/l	
75-34-3	1,1-Dichloroethane	0.25 U	0.50	0.25	0.10	ug/l	
107-06-2	1,2-Dichloroethane	0.25 U	0.50	0.25	0.10	ug/l	
156-59-2	cis-1,2-Dichloroethylene	0.25 U	0.50	0.25	0.10	ug/l	
78-87-5	1,2-Dichloropropane	0.25 U	0.50	0.25	0.10	ug/l	
75-09-2	Methylene Chloride	0.50 U	2.0	0.50	0.50	ug/l	
127-18-4	Tetrachloroethylene	0.25 U	0.50	0.25	0.10	ug/l	
79-01-6	Trichloroethylene	0.25 U	0.50	0.25	0.10	ug/l	
75-01-4	Vinyl Chloride	0.050 U	0.10	0.050	0.050	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	109%		74-125%
2037-26-5	Toluene-D8	105%		88-111%

U = Not detected

LOD = Limit of Detection

J = Indicates an estimated value

LOQ = Limit of Quantitation

DL = Detection Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

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Client Sample ID:	2039MOU2209F		
Lab Sample ID:	FA79006-3	Date Sampled:	09/21/20
Matrix:	AQ - Ground Water	Date Received:	09/22/20
Method:	SW846 8260B BY SIM	Percent Solids:	n/a
Project:	DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	O61468.D	1	09/22/20 17:50	JG	n/a	n/a	VO2366
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
71-43-2	Benzene	0.25 U	0.50	0.25	0.10	ug/l	
56-23-5	Carbon Tetrachloride	0.25 U	0.50	0.25	0.10	ug/l	
67-66-3	Chloroform	0.25 U	0.50	0.25	0.10	ug/l	
75-34-3	1,1-Dichloroethane	0.25 U	0.50	0.25	0.10	ug/l	
107-06-2	1,2-Dichloroethane	0.25 U	0.50	0.25	0.10	ug/l	
156-59-2	cis-1,2-Dichloroethylene	0.25 U	0.50	0.25	0.10	ug/l	
78-87-5	1,2-Dichloropropane	0.25 U	0.50	0.25	0.10	ug/l	
75-09-2	Methylene Chloride	0.50 U	2.0	0.50	0.50	ug/l	
127-18-4	Tetrachloroethylene	0.25 U	0.50	0.25	0.10	ug/l	
79-01-6	Trichloroethylene	0.25 U	0.50	0.25	0.10	ug/l	
75-01-4	Vinyl Chloride	0.050 U	0.10	0.050	0.050	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	111%		74-125%
2037-26-5	Toluene-D8	104%		88-111%

U = Not detected

LOD = Limit of Detection

J = Indicates an estimated value

LOQ = Limit of Quantitation

DL = Detection Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

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Client Sample ID:	2039MOU2210F		
Lab Sample ID:	FA79006-4	Date Sampled:	09/21/20
Matrix:	AQ - Ground Water	Date Received:	09/22/20
Method:	SW846 8260B BY SIM	Percent Solids:	n/a
Project:	DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	O61469.D	1	09/22/20 18:10	JG	n/a	n/a	VO2366
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
71-43-2	Benzene	0.25 U	0.50	0.25	0.10	ug/l	
56-23-5	Carbon Tetrachloride	0.25 U	0.50	0.25	0.10	ug/l	
67-66-3	Chloroform	0.35	0.50	0.25	0.10	ug/l	J
75-34-3	1,1-Dichloroethane	0.48	0.50	0.25	0.10	ug/l	J
107-06-2	1,2-Dichloroethane	0.16	0.50	0.25	0.10	ug/l	J
156-59-2	cis-1,2-Dichloroethylene	1.9	0.50	0.25	0.10	ug/l	
78-87-5	1,2-Dichloropropane	0.25 U	0.50	0.25	0.10	ug/l	
75-09-2	Methylene Chloride	0.50 U	2.0	0.50	0.50	ug/l	
127-18-4	Tetrachloroethylene	0.25 U	0.50	0.25	0.10	ug/l	
79-01-6	Trichloroethylene	0.99	0.50	0.25	0.10	ug/l	
75-01-4	Vinyl Chloride	0.050 U	0.10	0.050	0.050	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	112%		74-125%
2037-26-5	Toluene-D8	105%		88-111%

U = Not detected

LOD = Limit of Detection

J = Indicates an estimated value

LOQ = Limit of Quantitation

DL = Detection Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

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Client Sample ID:	2039MOU2211F	
Lab Sample ID:	FA79006-5	Date Sampled: 09/21/20
Matrix:	AQ - Ground Water	Date Received: 09/22/20
Method:	SW846 8260B BY SIM	Percent Solids: n/a
Project:	DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	O61470.D	1	09/22/20 18:30	JG	n/a	n/a	VO2366
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
71-43-2	Benzene	0.25 U	0.50	0.25	0.10	ug/l	
56-23-5	Carbon Tetrachloride	0.25 U	0.50	0.25	0.10	ug/l	
67-66-3	Chloroform	0.43	0.50	0.25	0.10	ug/l	J
75-34-3	1,1-Dichloroethane	0.58	0.50	0.25	0.10	ug/l	
107-06-2	1,2-Dichloroethane	0.20	0.50	0.25	0.10	ug/l	J
156-59-2	cis-1,2-Dichloroethylene	1.6	0.50	0.25	0.10	ug/l	
78-87-5	1,2-Dichloropropane	0.25 U	0.50	0.25	0.10	ug/l	
75-09-2	Methylene Chloride	0.50 U	2.0	0.50	0.50	ug/l	
127-18-4	Tetrachloroethylene	0.25 U	0.50	0.25	0.10	ug/l	
79-01-6	Trichloroethylene	0.25 U	0.50	0.25	0.10	ug/l	
75-01-4	Vinyl Chloride	0.050 U	0.10	0.050	0.050	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	112%		74-125%
2037-26-5	Toluene-D8	104%		88-111%

U = Not detected

LOD = Limit of Detection

J = Indicates an estimated value

LOQ = Limit of Quantitation

DL = Detection Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

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Client Sample ID:	2039MOU2212F	
Lab Sample ID:	FA79006-6	Date Sampled: 09/21/20
Matrix:	AQ - Ground Water	Date Received: 09/22/20
Method:	SW846 8260B BY SIM	Percent Solids: n/a
Project:	DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	O61471.D	1	09/22/20 18:50	JG	n/a	n/a	VO2366
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
71-43-2	Benzene	0.25 U	0.50	0.25	0.10	ug/l	
56-23-5	Carbon Tetrachloride	0.25 U	0.50	0.25	0.10	ug/l	
67-66-3	Chloroform	0.25 U	0.50	0.25	0.10	ug/l	
75-34-3	1,1-Dichloroethane	0.25 U	0.50	0.25	0.10	ug/l	
107-06-2	1,2-Dichloroethane	0.25 U	0.50	0.25	0.10	ug/l	
156-59-2	cis-1,2-Dichloroethylene	0.25 U	0.50	0.25	0.10	ug/l	
78-87-5	1,2-Dichloropropane	0.25 U	0.50	0.25	0.10	ug/l	
75-09-2	Methylene Chloride	0.50 U	2.0	0.50	0.50	ug/l	
127-18-4	Tetrachloroethylene	0.25 U	0.50	0.25	0.10	ug/l	
79-01-6	Trichloroethylene	0.25 U	0.50	0.25	0.10	ug/l	
75-01-4	Vinyl Chloride	0.050 U	0.10	0.050	0.050	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	115%		74-125%
2037-26-5	Toluene-D8	104%		88-111%

U = Not detected

LOD = Limit of Detection

J = Indicates an estimated value

LOQ = Limit of Quantitation

DL = Detection Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	2039MOU2213F		
Lab Sample ID:	FA79006-7	Date Sampled:	09/21/20
Matrix:	AQ - Ground Water	Date Received:	09/22/20
Method:	SW846 8260B BY SIM	Percent Solids:	n/a
Project:	DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	O61472.D	1	09/22/20 19:11	JG	n/a	n/a	VO2366
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
71-43-2	Benzene	0.25 U	0.50	0.25	0.10	ug/l	
56-23-5	Carbon Tetrachloride	0.25 U	0.50	0.25	0.10	ug/l	
67-66-3	Chloroform	0.36	0.50	0.25	0.10	ug/l	J
75-34-3	1,1-Dichloroethane	0.49	0.50	0.25	0.10	ug/l	J
107-06-2	1,2-Dichloroethane	0.17	0.50	0.25	0.10	ug/l	J
156-59-2	cis-1,2-Dichloroethylene	1.8	0.50	0.25	0.10	ug/l	
78-87-5	1,2-Dichloropropane	0.25 U	0.50	0.25	0.10	ug/l	
75-09-2	Methylene Chloride	0.50 U	2.0	0.50	0.50	ug/l	
127-18-4	Tetrachloroethylene	0.25 U	0.50	0.25	0.10	ug/l	
79-01-6	Trichloroethylene	1.6	0.50	0.25	0.10	ug/l	
75-01-4	Vinyl Chloride	0.050 U	0.10	0.050	0.050	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	116%		74-125%
2037-26-5	Toluene-D8	104%		88-111%

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
 LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

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SGS North America Inc.

Report of Analysis

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Client Sample ID:	2039MOU2214F		
Lab Sample ID:	FA79006-8	Date Sampled:	09/21/20
Matrix:	AQ - Ground Water	Date Received:	09/22/20
Method:	SW846 8260B BY SIM	Percent Solids:	n/a
Project:	DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	O61473.D	1	09/22/20 19:31	JG	n/a	n/a	VO2366
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
71-43-2	Benzene	0.25 U	0.50	0.25	0.10	ug/l	
56-23-5	Carbon Tetrachloride	0.25 U	0.50	0.25	0.10	ug/l	
67-66-3	Chloroform	0.41	0.50	0.25	0.10	ug/l	J
75-34-3	1,1-Dichloroethane	0.56	0.50	0.25	0.10	ug/l	
107-06-2	1,2-Dichloroethane	0.21	0.50	0.25	0.10	ug/l	J
156-59-2	cis-1,2-Dichloroethylene	1.5	0.50	0.25	0.10	ug/l	
78-87-5	1,2-Dichloropropane	0.25 U	0.50	0.25	0.10	ug/l	
75-09-2	Methylene Chloride	0.50 U	2.0	0.50	0.50	ug/l	
127-18-4	Tetrachloroethylene	0.25 U	0.50	0.25	0.10	ug/l	
79-01-6	Trichloroethylene	0.17	0.50	0.25	0.10	ug/l	J
75-01-4	Vinyl Chloride	0.050 U	0.10	0.050	0.050	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	117%		74-125%
2037-26-5	Toluene-D8	103%		88-111%

U = Not detected

LOD = Limit of Detection

J = Indicates an estimated value

LOQ = Limit of Quantitation

DL = Detection Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

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Client Sample ID:	2039MOU2215F		
Lab Sample ID:	FA79006-9	Date Sampled:	09/21/20
Matrix:	AQ - Ground Water	Date Received:	09/22/20
Method:	SW846 8260B BY SIM	Percent Solids:	n/a
Project:	DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	O61474.D	1	09/22/20 19:55	JG	n/a	n/a	VO2366
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
71-43-2	Benzene	0.25 U	0.50	0.25	0.10	ug/l	
56-23-5	Carbon Tetrachloride	0.25 U	0.50	0.25	0.10	ug/l	
67-66-3	Chloroform	0.32	0.50	0.25	0.10	ug/l	J
75-34-3	1,1-Dichloroethane	0.55	0.50	0.25	0.10	ug/l	
107-06-2	1,2-Dichloroethane	0.11	0.50	0.25	0.10	ug/l	J
156-59-2	cis-1,2-Dichloroethylene	1.5	0.50	0.25	0.10	ug/l	
78-87-5	1,2-Dichloropropane	0.25 U	0.50	0.25	0.10	ug/l	
75-09-2	Methylene Chloride	0.94	2.0	0.50	0.50	ug/l	JB
127-18-4	Tetrachloroethylene	1.0	0.50	0.25	0.10	ug/l	
79-01-6	Trichloroethylene	4.6	0.50	0.25	0.10	ug/l	
75-01-4	Vinyl Chloride	0.050 U	0.10	0.050	0.050	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	120% ^a		74-125%
2037-26-5	Toluene-D8	102%		88-111%

(a) Outside DOD QSM control limits.

U = Not detected

LOD = Limit of Detection

J = Indicates an estimated value

LOQ = Limit of Quantitation

DL = Detection Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

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Client Sample ID:	2039MOU2216F	Date Sampled:	09/21/20
Lab Sample ID:	FA79006-10	Date Received:	09/22/20
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B BY SIM		
Project:	DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	O61475.D	1	09/22/20 20:15	JG	n/a	n/a	VO2366
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
71-43-2	Benzene	0.25 U	0.50	0.25	0.10	ug/l	
56-23-5	Carbon Tetrachloride	0.25 U	0.50	0.25	0.10	ug/l	
67-66-3	Chloroform	0.29	0.50	0.25	0.10	ug/l	J
75-34-3	1,1-Dichloroethane	0.44	0.50	0.25	0.10	ug/l	J
107-06-2	1,2-Dichloroethane	0.26	0.50	0.25	0.10	ug/l	J
156-59-2	cis-1,2-Dichloroethylene	1.2	0.50	0.25	0.10	ug/l	
78-87-5	1,2-Dichloropropane	0.25 U	0.50	0.25	0.10	ug/l	
75-09-2	Methylene Chloride	0.50 U	2.0	0.50	0.50	ug/l	
127-18-4	Tetrachloroethylene	0.80	0.50	0.25	0.10	ug/l	
79-01-6	Trichloroethylene	5.5	0.50	0.25	0.10	ug/l	
75-01-4	Vinyl Chloride	0.050 U	0.10	0.050	0.050	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	122% ^a		74-125%
2037-26-5	Toluene-D8	102%		88-111%

(a) Outside DOD QSM control limits.

U = Not detected

LOD = Limit of Detection

J = Indicates an estimated value

LOQ = Limit of Quantitation

DL = Detection Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

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Client Sample ID:	2039MOU2217D		
Lab Sample ID:	FA79006-11	Date Sampled:	09/21/20
Matrix:	AQ - Ground Water	Date Received:	09/22/20
Method:	SW846 8260B BY SIM	Percent Solids:	n/a
Project:	DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	O61476.D	1	09/22/20 20:35	JG	n/a	n/a	VO2366
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
71-43-2	Benzene	0.25 U	0.50	0.25	0.10	ug/l	
56-23-5	Carbon Tetrachloride	0.25 U	0.50	0.25	0.10	ug/l	
67-66-3	Chloroform	0.29	0.50	0.25	0.10	ug/l	J
75-34-3	1,1-Dichloroethane	0.44	0.50	0.25	0.10	ug/l	J
107-06-2	1,2-Dichloroethane	0.25	0.50	0.25	0.10	ug/l	J
156-59-2	cis-1,2-Dichloroethylene	1.2	0.50	0.25	0.10	ug/l	
78-87-5	1,2-Dichloropropane	0.25 U	0.50	0.25	0.10	ug/l	
75-09-2	Methylene Chloride	0.50 U	2.0	0.50	0.50	ug/l	
127-18-4	Tetrachloroethylene	0.80	0.50	0.25	0.10	ug/l	
79-01-6	Trichloroethylene	5.5	0.50	0.25	0.10	ug/l	
75-01-4	Vinyl Chloride	0.050 U	0.10	0.050	0.050	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	124% ^a		74-125%
2037-26-5	Toluene-D8	102%		88-111%

(a) Outside DOD QSM control limits.

U = Not detected

LOD = Limit of Detection

J = Indicates an estimated value

LOQ = Limit of Quantitation

DL = Detection Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody
- QC Evaluation: DOD QSM5.x Limits

Ahtna FA79006 CHAIN OF CUSTODY

WATER / SOIL

Chain of Custody #: 0042
Carbon Copies: White - Laboratory Yellow - Ahtna

Project Information:		Analysis Requested	
Project Location: <u>Former Fort Ord, CA</u>	Sampler/s: <u>MARK FISLER</u>		
Project Name: <u>OU2 GWTP</u>	Report To: <u>Derek Lieberman</u>		
Project Number: <u>21065.000.01.0000</u>	E-Mail: <u>dlieberman@ahntna.net</u>		
Sampling Event/Site: <u>CCO BASE LINE (WPPA) R</u>	Laboratory: <u>SGS</u>		

Lab Sample Receipt

Laboratory Sample Delivery

Group #: _____

Custody Seal: _____

Temp (°C): _____

Lab Number	Sample Number/Description	Sample Collection		Matrix			Number of Preserved Bottles										VOCs 8260 - SIM	Metals 6010 C	Chloride 9056A	Turnaround Time	Notes	
		Date	Time	Water	Soil	Other	Total # of Bottles	HCl	HNO ₃	H ₂ SO ₄	NaOH	MeOH	NaHSO ₄	None	Other							
1	2039M0U2207A	9/21/20	1312	X			2	2										X			STD	TRIP BLANK
2	2039M0U2208F		1316	X			3	3										X			71 HA	
3	2039M0U2209F		1322	X			3	3										X			STD	
4	2039M0U2210F		1328	X			3	3										X			STD	
5	2039M0U2211F		1332	X			3	3										X			STD	
6	2039M0U2212F		1337	X			3	3										X			STD	
7	2039M0U2213F		1342	X			3	3										X			STD	
8	2039M0U2214F		1346	X			3	3										X			STD	
9	2039M0U2215F		1350	X			3	3										X			STD	
10	2039M0U2216F		1355	X			3	3										X			STD	
11	2039M0U2217D	↓	1400	T			3	3										T			STD	

WHA ASSESSMENT: 10

Turnaround Time: _____; Standard _____; 3-5 Day Rush _____; 48 Hour Rush _____; 24 Hour Rush _____

Shipment: _____ Method: _____ Tracking ID: AREVERIFICATION

Comments:

Chain of Custody Tracking:

Relinquished By: <u>[Signature]</u>	Date/Time: <u>9/21/20 (500)</u>	Received By: <u>FX</u>	Date/Time: _____
Relinquished By: <u>FX</u>	Date/Time: _____	Received By: <u>[Signature]</u>	Date/Time: <u>09/22/20 10:10</u>
Relinquished By: _____	Date/Time: _____	Received By Laboratory: _____	Date/Time: _____

2.20

FA79006: Chain of Custody

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SGS Sample Receipt Summary

Job Number: FA79006

Client: AHTNA

Project: OU2 GWTP - Fmr Fort Ord.

Date / Time Received: 9/22/2020 10:10:00 AM

Delivery Method: FedEx

Airbill #: 791078240846

Therm ID: IR 1;

Therm CF: -0.2;

of Coolers: 1

Cooler Temps (Raw Measured) °C: Cooler 1: (2.4);

Cooler Temps (Corrected) °C: Cooler 1: (2.2);

Cooler Information

Y or N

- 1. Custody Seals Present
- 2. Custody Seals Intact
- 3. Temp criteria achieved
- 4. Cooler temp verification IR Gun
- 5. Cooler media Ice (Bag)

Sample Information

Y or N N/A

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

Trip Blank Information

Y or N N/A

- 1. Trip Blank present / cooler
 - 2. Trip Blank listed on COC
- W or S N/A
- 3. Type Of TB Received

Misc. Information

Number of Encores: 25-Gram _____ 5-Gram _____
 Test Strip Lot #: pH 0-3 230315
 Residual Chlorine Test Strip Lot #: _____

Number of 5035 Field Kits: _____
 pH 10-12 219813A

Number of Lab Filtered Metals: _____
 Other: (Specify) _____

Comments

SM001
Rev. Date 05/24/17

Technician: JENNAK

Date: 9/22/2020 10:10:00 A

Reviewer: PH

Date: 9/22/2020

FA79006: Chain of Custody

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QC Evaluation: DOD QSM5.x Limits

Job Number: FA79006
Account: Ahtna Global, LLC
Project: DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA
Collected: 09/21/20

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
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VO2366 SW846 8260B BY SIM

VO2366-BS	71-43-2	Benzene	BSP	REC	100	%	79-120
VO2366-BS	56-23-5	Carbon Tetrachloride	BSP	REC	104	%	72-136
VO2366-BS	67-66-3	Chloroform	BSP	REC	96	%	79-124
VO2366-BS	75-34-3	1,1-Dichloroethane	BSP	REC	100	%	77-125
VO2366-BS	107-06-2	1,2-Dichloroethane	BSP	REC	96	%	73-128
VO2366-BS	156-59-2	cis-1,2-Dichloroethylene	BSP	REC	100	%	78-123
VO2366-BS	78-87-5	1,2-Dichloropropane	BSP	REC	100	%	78-122
VO2366-BS	75-09-2	Methylene Chloride	BSP	REC	88	%	74-124
VO2366-BS	127-18-4	Tetrachloroethylene	BSP	REC	102	%	74-129
VO2366-BS	79-01-6	Trichloroethylene	BSP	REC	102	%	79-123
VO2366-BS	75-01-4	Vinyl Chloride	BSP	REC	104	%	58-137
VO2366-BS	17060-07-0	1,2-Dichloroethane-D4	BSP	SURR	94	%	81-118
VO2366-BS	2037-26-5	Toluene-D8	BSP	SURR	99	%	89-112
FA79006-9MS	71-43-2	Benzene	MS	REC	104	%	79-120
FA79006-9MS	56-23-5	Carbon Tetrachloride	MS	REC	112	%	72-136
FA79006-9MS	67-66-3	Chloroform	MS	REC	105	%	79-124
FA79006-9MS	75-34-3	1,1-Dichloroethane	MS	REC	108	%	77-125
FA79006-9MS	107-06-2	1,2-Dichloroethane	MS	REC	106	%	73-128
FA79006-9MS	156-59-2	cis-1,2-Dichloroethylene	MS	REC	96	%	78-123
FA79006-9MS	78-87-5	1,2-Dichloropropane	MS	REC	108	%	78-122
FA79006-9MS	75-09-2	Methylene Chloride	MS	REC	99	%	74-124
FA79006-9MS	127-18-4	Tetrachloroethylene	MS	REC	105	%	74-129
FA79006-9MS	79-01-6	Trichloroethylene	MS	REC	98	%	79-123
FA79006-9MS	75-01-4	Vinyl Chloride	MS	REC	118	%	58-137
FA79006-9MS	17060-07-0	1,2-Dichloroethane-D4	MS	SURR	102	%	81-118
FA79006-9MS	2037-26-5	Toluene-D8	MS	SURR	89	%	89-112
FA79006-9MSD	71-43-2	Benzene	MSD	REC	103	%	79-120
FA79006-9MSD	71-43-2	Benzene	MSD	RPD	1	%	20
FA79006-9MSD	56-23-5	Carbon Tetrachloride	MSD	REC	110	%	72-136
FA79006-9MSD	56-23-5	Carbon Tetrachloride	MSD	RPD	1	%	20
FA79006-9MSD	67-66-3	Chloroform	MSD	REC	102	%	79-124
FA79006-9MSD	67-66-3	Chloroform	MSD	RPD	3	%	20
FA79006-9MSD	75-34-3	1,1-Dichloroethane	MSD	REC	105	%	77-125
FA79006-9MSD	75-34-3	1,1-Dichloroethane	MSD	RPD	2	%	20
FA79006-9MSD	107-06-2	1,2-Dichloroethane	MSD	REC	103	%	73-128
FA79006-9MSD	107-06-2	1,2-Dichloroethane	MSD	RPD	3	%	20
FA79006-9MSD	156-59-2	cis-1,2-Dichloroethylene	MSD	REC	97	%	78-123
FA79006-9MSD	156-59-2	cis-1,2-Dichloroethylene	MSD	RPD	1	%	20
FA79006-9MSD	78-87-5	1,2-Dichloropropane	MSD	REC	106	%	78-122
FA79006-9MSD	78-87-5	1,2-Dichloropropane	MSD	RPD	2	%	20
FA79006-9MSD	75-09-2	Methylene Chloride	MSD	REC	96	%	74-124
FA79006-9MSD	75-09-2	Methylene Chloride	MSD	RPD	3	%	20

* Sample used for QC is not from job FA79006

5.2
5

QC Evaluation: DOD QSM5.x Limits

Job Number: FA79006
Account: Ahtna Global, LLC
Project: DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA
Collected: 09/21/20

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
FA79006-9MSD	127-18-4	Tetrachloroethylene	MSD	REC	104	%	74-129
FA79006-9MSD	127-18-4	Tetrachloroethylene	MSD	RPD	0	%	20
FA79006-9MSD	79-01-6	Trichloroethylene	MSD	REC	94	%	79-123
FA79006-9MSD	79-01-6	Trichloroethylene	MSD	RPD	3	%	20
FA79006-9MSD	75-01-4	Vinyl Chloride	MSD	REC	112	%	58-137
FA79006-9MSD	75-01-4	Vinyl Chloride	MSD	RPD	6	%	20
FA79006-9MSD	17060-07-0	1,2-Dichloroethane-D4	MSD	SURR	100	%	81-118
FA79006-9MSD	2037-26-5	Toluene-D8	MSD	SURR	92	%	89-112
VO2366-MB	17060-07-0	1,2-Dichloroethane-D4	MB	SURR	104	%	81-118
VO2366-MB	2037-26-5	Toluene-D8	MB	SURR	105	%	89-112
FA79006-1	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	107	%	81-118
FA79006-1	2037-26-5	Toluene-D8	SAMP	SURR	105	%	89-112
FA79006-2	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	109	%	81-118
FA79006-2	2037-26-5	Toluene-D8	SAMP	SURR	105	%	89-112
FA79006-3	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	111	%	81-118
FA79006-3	2037-26-5	Toluene-D8	SAMP	SURR	104	%	89-112
FA79006-4	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	112	%	81-118
FA79006-4	2037-26-5	Toluene-D8	SAMP	SURR	105	%	89-112
FA79006-5	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	112	%	81-118
FA79006-5	2037-26-5	Toluene-D8	SAMP	SURR	104	%	89-112
FA79006-6	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	115	%	81-118
FA79006-6	2037-26-5	Toluene-D8	SAMP	SURR	104	%	89-112
FA79006-7	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	116	%	81-118
FA79006-7	2037-26-5	Toluene-D8	SAMP	SURR	104	%	89-112
FA79006-8	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	117	%	81-118
FA79006-8	2037-26-5	Toluene-D8	SAMP	SURR	103	%	89-112
FA79006-9	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	120 ^a	%	81-118
FA79006-9	2037-26-5	Toluene-D8	SAMP	SURR	102	%	89-112
FA79006-10	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	122 ^a	%	81-118
FA79006-10	2037-26-5	Toluene-D8	SAMP	SURR	102	%	89-112
FA79006-11	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	124 ^a	%	81-118
FA79006-11	2037-26-5	Toluene-D8	SAMP	SURR	102	%	89-112

(a) Outside DOD QSM control limits.

* Sample used for QC is not from job FA79006

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MS Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Instrument Performance Checks (BFB)
- Internal Standard Area Summaries
- Surrogate Recovery Summaries
- Initial and Continuing Calibration Summaries
- Run Sequence Reports

Method Blank Summary**Job Number:** FA79006**Account:** AHTNACAS Ahtna Global, LLC**Project:** DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VO2366-MB	O61464.D	1	09/22/20	JG	n/a	n/a	VO2366

The QC reported here applies to the following samples:**Method:** SW846 8260B BY SIM

FA79006-1, FA79006-2, FA79006-3, FA79006-4, FA79006-5, FA79006-6, FA79006-7, FA79006-8, FA79006-9, FA79006-10, FA79006-11

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	0.50	0.10	ug/l	
56-23-5	Carbon Tetrachloride	ND	0.50	0.10	ug/l	
67-66-3	Chloroform	ND	0.50	0.10	ug/l	
75-34-3	1,1-Dichloroethane	ND	0.50	0.10	ug/l	
107-06-2	1,2-Dichloroethane	ND	0.50	0.10	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	0.50	0.10	ug/l	
78-87-5	1,2-Dichloropropane	ND	0.50	0.10	ug/l	
75-09-2	Methylene Chloride	0.66	2.0	0.50	ug/l	J
127-18-4	Tetrachloroethylene	ND	0.50	0.10	ug/l	
79-01-6	Trichloroethylene	ND	0.50	0.10	ug/l	
75-01-4	Vinyl Chloride	ND	0.10	0.050	ug/l	

CAS No.	Surrogate Recoveries	Limits	
17060-07-0	1,2-Dichloroethane-D4	104%	74-125%
2037-26-5	Toluene-D8	105%	88-111%

Blank Spike Summary**Job Number:** FA79006**Account:** AHTNACAS Ahtna Global, LLC**Project:** DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VO2366-BS	O61463.D	1	09/22/20	JG	n/a	n/a	VO2366

The QC reported here applies to the following samples:**Method:** SW846 8260B BY SIM

FA79006-1, FA79006-2, FA79006-3, FA79006-4, FA79006-5, FA79006-6, FA79006-7, FA79006-8, FA79006-9, FA79006-10, FA79006-11

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
71-43-2	Benzene	5	5.0	100	81-122
56-23-5	Carbon Tetrachloride	5	5.2	104	76-136
67-66-3	Chloroform	5	4.8	96	80-124
75-34-3	1,1-Dichloroethane	5	5.0	100	81-122
107-06-2	1,2-Dichloroethane	5	4.8	96	75-125
156-59-2	cis-1,2-Dichloroethylene	5	5.0	100	78-120
78-87-5	1,2-Dichloropropane	5	5.0	100	76-124
75-09-2	Methylene Chloride	5	4.4	88	69-135
127-18-4	Tetrachloroethylene	5	5.1	102	76-135
79-01-6	Trichloroethylene	5	5.1	102	81-126
75-01-4	Vinyl Chloride	5	5.2	104	69-159

CAS No.	Surrogate Recoveries	BSP	Limits
17060-07-0	1,2-Dichloroethane-D4	94%	74-125%
2037-26-5	Toluene-D8	99%	88-111%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA79006
Account: AHTNACAS Ahtna Global, LLC
Project: DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA79006-9MS	O61477.D	5	09/22/20	JG	n/a	n/a	VO2366
FA79006-9MSD	O61478.D	5	09/22/20	JG	n/a	n/a	VO2366
FA79006-9	O61474.D	1	09/22/20	JG	n/a	n/a	VO2366

The QC reported here applies to the following samples:

Method: SW846 8260B BY SIM

FA79006-1, FA79006-2, FA79006-3, FA79006-4, FA79006-5, FA79006-6, FA79006-7, FA79006-8, FA79006-9, FA79006-10, FA79006-11

CAS No.	Compound	FA79006-9 ug/l	Spike Q ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	0.50 U	25	25.9	104	25	25.7	103	1	81-122/14
56-23-5	Carbon Tetrachloride	0.50 U	25	27.9	112	25	27.6	110	1	76-136/23
67-66-3	Chloroform	0.32 J	25	26.6	105	25	25.8	102	3	80-124/15
75-34-3	1,1-Dichloroethane	0.55	25	27.5	108	25	26.9	105	2	81-122/15
107-06-2	1,2-Dichloroethane	0.11 J	25	26.6	106	25	25.9	103	3	75-125/14
156-59-2	cis-1,2-Dichloroethylene	1.5	25	25.5	96	25	25.7	97	1	78-120/15
78-87-5	1,2-Dichloropropane	0.50 U	25	26.9	108	25	26.4	106	2	76-124/14
75-09-2	Methylene Chloride	0.94 JB	25	25.7	99	25	24.9	96	3	69-135/16
127-18-4	Tetrachloroethylene	1.0	25	27.2	105	25	27.1	104	0	76-135/16
79-01-6	Trichloroethylene	4.6	25	29.0	98	25	28.2	94	3	81-126/15
75-01-4	Vinyl Chloride	0.10 U	25	29.6	118	25	28.0	112	6	69-159/18

CAS No.	Surrogate Recoveries	MS	MSD	FA79006-9	Limits
17060-07-0	1,2-Dichloroethane-D4	102%	100%	120% ^a	74-125%
2037-26-5	Toluene-D8	89%	92%	102%	88-111%

(a) Outside DOD QSM control limits.

* = Outside of Control Limits.

6.3.1
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Instrument Performance Check (BFB)**Job Number:** FA79006**Account:** AHTNACAS Ahtna Global, LLC**Project:** DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA**Sample:** VO2365-BFB**Injection Date:** 09/18/20**Lab File ID:** O61437.D**Injection Time:** 08:17**Instrument ID:** GCMSO

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	101965	29.3	Pass
75	30.0 - 60.0% of mass 95	162539	46.7	Pass
95	Base peak, 100% relative abundance	348139	100.0	Pass
96	5.0 - 9.0% of mass 95	27092	7.78	Pass
173	Less than 2.0% of mass 174	1951	0.56 (0.59) ^a	Pass
174	50.0 - 100.0% of mass 95	329003	94.5	Pass
175	5.0 - 9.0% of mass 174	21733	6.24 (6.61) ^a	Pass
176	95.0 - 101.0% of mass 174	319701	91.8 (97.2) ^a	Pass
177	5.0 - 9.0% of mass 176	20736	5.96 (6.49) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VO2365-IC2365	O61438.D	09/18/20	08:59	00:42	Initial cal 1
VO2365-IC2365	O61439.D	09/18/20	09:19	01:02	Initial cal 2
VO2365-IC2365	O61440.D	09/18/20	09:39	01:22	Initial cal 3
VO2365-IC2365	O61441.D	09/18/20	09:59	01:42	Initial cal 4
VO2365-ICC2365	O61442.D	09/18/20	10:20	02:03	Initial cal 5
VO2365-IC2365	O61443.D	09/18/20	10:40	02:23	Initial cal 6
VO2365-IC2365	O61444.D	09/18/20	11:00	02:43	Initial cal 7
VO2365-ICV2365	O61449.D	09/18/20	13:45	05:28	Initial cal verification 5
VO2365-BS	O61450.D	09/18/20	14:23	06:06	Blank Spike
VO2365-MB	O61452.D	09/18/20	15:04	06:47	Method Blank
ZZZZZZ	O61453.D	09/18/20	15:24	07:07	(unrelated sample)
FA78549-15	O61454.D	09/18/20	15:45	07:28	(used for QC only; not part of job FA79006)
ZZZZZZ	O61455.D	09/18/20	16:05	07:48	(unrelated sample)
FA78549-15MS	O61456.D	09/18/20	16:26	08:09	Matrix Spike
FA78549-15MSD	O61457.D	09/18/20	16:46	08:29	Matrix Spike Duplicate
VO2365-ECC2365	O61458.D	09/18/20	17:07	08:50	Ending cal 5

Instrument Performance Check (BFB)

Job Number: FA79006
Account: AHTNACAS Ahtna Global, LLC
Project: DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA

Sample: VO2366-BFB	Injection Date: 09/22/20
Lab File ID: O61461.D	Injection Time: 14:45
Instrument ID: GCMSO	

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	114312	29.7	Pass
75	30.0 - 60.0% of mass 95	182549	47.5	Pass
95	Base peak, 100% relative abundance	384384	100.0	Pass
96	5.0 - 9.0% of mass 95	28608	7.44	Pass
173	Less than 2.0% of mass 174	2169	0.56 (0.63) ^a	Pass
174	50.0 - 100.0% of mass 95	343253	89.3	Pass
175	5.0 - 9.0% of mass 174	25035	6.51 (7.29) ^a	Pass
176	95.0 - 101.0% of mass 174	334891	87.1 (97.6) ^a	Pass
177	5.0 - 9.0% of mass 176	21597	5.62 (6.45) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VO2366-CC2365	O61462.D	09/22/20	15:19	00:34	Continuing cal 5
VO2366-BS	O61463.D	09/22/20	16:09	01:24	Blank Spike
VO2366-MB	O61464.D	09/22/20	16:29	01:44	Method Blank
FA79006-1	O61466.D	09/22/20	17:10	02:25	2039MOU2207A
FA79006-2	O61467.D	09/22/20	17:30	02:45	2039MOU2208F
FA79006-3	O61468.D	09/22/20	17:50	03:05	2039MOU2209F
FA79006-4	O61469.D	09/22/20	18:10	03:25	2039MOU2210F
FA79006-5	O61470.D	09/22/20	18:30	03:45	2039MOU2211F
FA79006-6	O61471.D	09/22/20	18:50	04:05	2039MOU2212F
FA79006-7	O61472.D	09/22/20	19:11	04:26	2039MOU2213F
FA79006-8	O61473.D	09/22/20	19:31	04:46	2039MOU2214F
FA79006-9	O61474.D	09/22/20	19:55	05:10	2039MOU2215F
FA79006-10	O61475.D	09/22/20	20:15	05:30	2039MOU2216F
FA79006-11	O61476.D	09/22/20	20:35	05:50	2039MOU2217D
FA79006-9MS	O61477.D	09/22/20	20:55	06:10	Matrix Spike
FA79006-9MSD	O61478.D	09/22/20	21:15	06:30	Matrix Spike Duplicate
VO2366-ECC2365	O61479.D	09/22/20	21:35	06:50	Ending cal 5

Internal Standard Area Summary

Job Number: FA79006
Account: AHTNACAS Ahtna Global, LLC
Project: DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA

Check Std: VO2366-CC2365	Injection Date: 09/22/20
Lab File ID: O61462.D	Injection Time: 15:19
Instrument ID: GCMSO	Method: SW846 8260B BY SIM

	IS 1 AREA	RT	IS 2 AREA	RT
Initial Cal ^a	317479	7.34	262197	10.44
Check Std ^b	366173	7.34	304573	10.44
Upper Limit ^c	732346	7.51	609146	10.61
Lower Limit ^d	183087	7.17	152287	10.27

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT
VO2366-BS	362213	7.34	291981	10.44
VO2366-MB	205190	7.34	158626	10.44
FA79006-1	266194	7.34	207246	10.44
FA79006-2	255761	7.34	197566	10.44
FA79006-3	247587	7.34	189970	10.44
FA79006-4	238625	7.34	183788	10.44
FA79006-5	236171	7.34	181858	10.44
FA79006-6	228045	7.34	176718	10.44
FA79006-7	224486	7.34	172421	10.44
FA79006-8	219845	7.34	170318	10.44
FA79006-9	212853	7.34	168017	10.44
FA79006-10	202920	7.34	160760	10.44
FA79006-11	202209	7.34	159962	10.44
FA79006-9MS	259449	7.34	217921	10.44
FA79006-9MSD	281651	7.34	231937	10.44
VO2366-ECC2365307398	7.34		257979	10.44

IS 1 = Fluorobenzene
IS 2 = Chlorobenzene-D5

- (a) Initial Cal is: VO2365-ICC2365 O61442.D 09/18/20 10:20
- (b) Check Std Limit = -50 to + 100% of initial cal area.
- (c) Upper Limit = + 100% of check standard area; Retention time + 0.167 minutes.
- (d) Lower Limit = -50% of check standard area; Retention time -0.167 minutes.

Surrogate Recovery Summary

Job Number: FA79006

Account: AHTNACAS Ahtna Global, LLC

Project: DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA

Method: SW846 8260B BY SIM	Matrix: AQ
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Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2
FA79006-1	O61466.D	107	105
FA79006-2	O61467.D	109	105
FA79006-3	O61468.D	111	104
FA79006-4	O61469.D	112	105
FA79006-5	O61470.D	112	104
FA79006-6	O61471.D	115	104
FA79006-7	O61472.D	116	104
FA79006-8	O61473.D	117	103
FA79006-9	O61474.D	120 ^a	102
FA79006-10	O61475.D	122 ^a	102
FA79006-11	O61476.D	124 ^a	102
FA79006-9MS	O61477.D	102	89
FA79006-9MSD	O61478.D	100	92
VO2366-BS	O61463.D	94	99
VO2366-MB	O61464.D	104	105

Surrogate Compounds	Recovery Limits
S1 = 1,2-Dichloroethane-D4	74-125%
S2 = Toluene-D8	88-111%

(a) Outside DOD QSM control limits.

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Initial Calibration Summary

Job Number: FA79006 **Sample:** VO2365-ICC2365
Account: AHTNACAS Ahtna Global, LLC **Lab FileID:** O61442.D
Project: DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA

Response Factor Report MSVOA12

Method : C:\msdchem\2\methods\SIMCL091820.M (RTE Integrator)
 Title : Standard Methods 6200B
 Last Update : Mon Sep 21 11:01:30 2020
 Response via : Initial Calibration

Calibration Files

1 =O61438.D 2 =O61439.D 3 =O61440.D 4 =O61441.D
 5 =O61442.D 6 =O61443.D 7 =O61444.D

Compound	1	2	3	4	5	6	7	Avg	%RSD
1) I Fluorobenzene	-----ISTD-----								
2) Vinyl Chloride	0.399	0.462	0.466	0.409	0.406	0.389	0.363	0.413	9.09
3) Chloromethane	1.423	0.806	0.673	0.598	0.581	0.547	0.502	0.733	43.67
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9993									
Response Ratio = 0.00000 + 0.67846 *A + -0.04479 *A^2									
4) 1,1-Dichloroethen	0.523	0.596	0.623	0.583	0.636	0.599	0.599	0.594	6.07
5) Methylene Chlorid	3.894	1.446	1.092	0.935	0.937	0.899	0.857	1.437	76.67
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9972									
Response Ratio = 0.00000 + 1.08942 *A + -0.06198 *A^2									
6) trans-1,2-Dichlor	0.650	0.746	0.705	0.661	0.733	0.714	0.711	0.703	5.01
7) 1,1-Dichloroethan	0.787	0.817	0.830	0.781	0.849	0.821	0.808	0.813	2.89
8) cis-1,2-Dichloroe	0.383	0.373	0.384	0.372	0.421	0.420	0.421	0.396	5.90
9) Chloroform	0.767	0.737	0.733	0.689	0.745	0.720	0.709	0.728	3.49
10) Carbon Tetrachlor	0.448	0.512	0.527	0.493	0.550	0.521	0.527	0.511	6.40
11) 1,1,1-Trichloroet	0.482	0.555	0.600	0.533	0.625	0.604	0.609	0.573	8.98
12) Benzene	1.257	1.284	1.345	1.305	1.460	1.421	1.413	1.355	5.73
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9993									
Response Ratio = 0.00000 + 1.41593 *A + 0.00042 *A^2									
13)S 1,2-Dichloroethan	0.446	0.449	0.432	0.395	0.392	0.380	0.376	0.410	7.62
14) 1,2-Dichloroethan	0.631	0.651	0.671	0.639	0.683	0.673	0.658	0.658	2.88
15) Trichloroethene	0.383	0.390	0.400	0.392	0.441	0.428	0.431	0.409	5.70
16) 1,2-Dichloropropa	0.416	0.431	0.439	0.426	0.465	0.454	0.448	0.440	3.94
17) cis-1,3-Dichlorop	0.345	0.375	0.399	0.411	0.481	0.495	0.508	0.431	14.82
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9992									
Response Ratio = 0.00000 + 0.40467 *A + 0.02773 *A^2									
18) I Chlorobenzene-d5	-----ISTD-----								
19)S Toluene-d8	1.079	1.080	1.037	1.004	0.998	1.019	1.041	1.037	3.20
20) trans-1,3-Dichlor	0.419	0.454	0.503	0.510	0.578	0.604	0.619	0.527	14.49
---- Linear regr., Force(0,0) ---- Coefficient = 0.9963									
Response Ratio = 0.00000 + 0.59013 *A									
21) Tetrachloroethene	0.442	0.507	0.531	0.486	0.527	0.505	0.519	0.503	6.09
22) 1,4-Dichlorobenze	0.813	0.865	1.001	0.979	1.089	1.097	1.107	0.993	11.78
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9995									
Response Ratio = 0.00000 + 0.98556 *A + 0.03344 *A^2									
23) 1,2-Dibromo-3-Chl	0.239	0.164	0.176	0.173	0.191	0.202	0.196	0.192	12.93

(#) = Out of Range

Initial Calibration Verification

Job Number: FA79006

Sample: VO2365-ICV2365

Account: AHTNACAS Ahtna Global, LLC

Lab FileID: O61449.D

Project: DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA

Evaluate Continuing Calibration Report

Data File : C:\msdchem\2\data\091820\O61449.D Vial: 12
 Acq On : 18 Sep 2020 1:45 pm Operator: JuanG
 Sample : icv2365-5 Inst : MSVOA12
 Misc : MS47193,VO2365,,,,, Multiplr: 1.00
 MS Integration Params: rteint.p

Method : C:\msdchem\2\methods\SIMCL091820.M (RTE Integrator)
 Title : Standard Methods 6200B
 Last Update : Mon Sep 21 11:01:30 2020
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	Fluorobenzene	1.000	1.000	0.0	109	0.00	7.34
2	Vinyl Chloride	0.413	0.403	2.4	108	0.01	2.92
	----- Amount	Calc.	%Drift	-----			
3	Chloromethane	10.000	9.381	6.2	104	0.02	2.81
	----- AvgRF	CCRF	%Dev	-----			
4	1,1-Dichloroethene	0.594	0.656	-10.4	112	0.00	4.09
	----- Amount	Calc.	%Drift	-----			
5	Methylene Chloride	10.000	9.694	3.1	109	0.00	4.71
	----- AvgRF	CCRF	%Dev	-----			
6	trans-1,2-Dichloroethene	0.703	0.746	-6.1	111	0.00	4.87
7	1,1-Dichloroethane	0.813	0.870	-7.0	112	0.00	5.51
8	cis-1,2-Dichloroethene	0.396	0.438	-10.6	113	0.00	6.07
9	Chloroform	0.728	0.750	-3.0	110	0.00	6.33
10	Carbon Tetrachloride	0.511	0.563	-10.2	111	0.00	6.51
11	1,1,1-Trichloroethane	0.573	0.633	-10.5	110	0.00	6.58
	----- Amount	Calc.	%Drift	-----			
12	Benzene	10.000	10.916	-9.2	115	0.00	6.94
	----- AvgRF	CCRF	%Dev	-----			
13 S	1,2-Dichloroethane-d4	0.410	0.383	6.6	106	0.00	7.07
14	1,2-Dichloroethane	0.658	0.712	-8.2	113	0.00	7.14
15	Trichloroethene	0.409	0.464	-13.4	115	0.00	7.51
16	1,2-Dichloropropane	0.440	0.491	-11.6	115	0.00	8.04
	----- Amount	Calc.	%Drift	-----			
17	cis-1,3-Dichloropropene	10.000	11.290	-12.9	119	0.00	8.71
	----- AvgRF	CCRF	%Dev	-----			
18 I	Chlorobenzene-d5	1.000	1.000	0.0	107	0.00	10.44
19 S	Toluene-d8	1.037	1.027	1.0	110	0.00	8.90
	----- Amount	Calc.	%Drift	-----			
20	trans-1,3-Dichloropropene	10.000	11.046	-10.5	120	0.00	9.34
	----- AvgRF	CCRF	%Dev	-----			
21	Tetrachloroethene	0.503	0.544	-8.2	110	0.00	9.34

Initial Calibration Verification

Job Number: FA79006

Sample: VO2365-ICV2365

Account: AHTNACAS Ahtna Global, LLC

Lab FileID: O61449.D

Project: DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA

	-----	Amount	Calc.	%Drift	-----		
22	1,4-Dichlorobenzene	10.000	10.973	-9.7	114	0.00	12.82
	-----	AvgRF	CCRF	%Dev	-----		
23	1,2-Dibromo-3-Chloropropa	0.192	0.210	-9.4	117	0.00	14.03

(#) = Out of Range

SPCC's out = 0 CCC's out = 0

O61442.D SIMCL091820.M

Mon Sep 21 11:49:47 2020

6.7.2

6

Continuing Calibration Summary

Job Number: FA79006

Sample: VO2366-CC2365

Account: AHTNACAS Ahtna Global, LLC

Lab FileID: O61462.D

Project: DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA

Evaluate Continuing Calibration Report

Data File : C:\msdchem\2\data\092220\O61462.D Vial: 1
 Acq On : 22 Sep 2020 3:19 pm Operator: JuanG
 Sample : cc2365-5 Inst : MSVOA12
 Misc : MS47193,VO2366,,,,, Multiplr: 1.00
 MS Integration Params: rteint.p

Method : C:\msdchem\2\methods\SIMCL091820.M (RTE Integrator)
 Title : Standard Methods 6200B
 Last Update : Mon Sep 21 11:01:30 2020
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	Fluorobenzene	1.000	1.000	0.0	115	0.00	7.34
2	Vinyl Chloride	0.413	0.394	4.6	112	0.00	2.90
	----- Amount	Calc.	%Drift	-----			
3	Chloromethane	10.000	9.044	9.6	107	0.00	2.80
	----- AvgRF	CCRF	%Dev	-----			
4	1,1-Dichloroethene	0.594	0.580	2.4	105	0.00	4.08
	----- Amount	Calc.	%Drift	-----			
5	Methylene Chloride	10.000	8.961	10.4	108	0.00	4.70
	----- AvgRF	CCRF	%Dev	-----			
6	trans-1,2-Dichloroethene	0.703	0.679	3.4	107	0.00	4.86
7	1,1-Dichloroethane	0.813	0.783	3.7	106	0.00	5.50
8	cis-1,2-Dichloroethene	0.396	0.396	0.0	108	0.00	6.06
9	Chloroform	0.728	0.686	5.8	106	0.00	6.33
10	Carbon Tetrachloride	0.511	0.511	0.0	107	0.00	6.50
11	1,1,1-Trichloroethane	0.573	0.580	-1.2	107	0.00	6.57
	----- Amount	Calc.	%Drift	-----			
12	Benzene	10.000	9.583	4.2	107	0.00	6.93
	----- AvgRF	CCRF	%Dev	-----			
13 S	1,2-Dichloroethane-d4	0.410	0.383	6.6	113	0.00	7.06
14	1,2-Dichloroethane	0.658	0.626	4.9	106	0.00	7.13
15	Trichloroethene	0.409	0.407	0.5	106	0.00	7.51
16	1,2-Dichloropropane	0.440	0.442	-0.5	110	0.00	8.04
	----- Amount	Calc.	%Drift	-----			
17	cis-1,3-Dichloropropene	10.000	9.971	0.3	110	0.00	8.71
	----- AvgRF	CCRF	%Dev	-----			
18 I	Chlorobenzene-d5	1.000	1.000	0.0	116	0.00	10.44
19 S	Toluene-d8	1.037	1.006	3.0	117	0.00	8.89
	----- Amount	Calc.	%Drift	-----			
20	trans-1,3-Dichloropropene	10.000	9.184	8.2	109	0.00	9.34
	----- AvgRF	CCRF	%Dev	-----			
21	Tetrachloroethene	0.503	0.482	4.2	106	0.00	9.33

Continuing Calibration Summary

Job Number: FA79006

Sample: VO2366-CC2365

Account: AHTNACAS Ahtna Global, LLC

Lab FileID: O61462.D

Project: DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA

	-----	Amount	Calc.	%Drift	-----		
22	1,4-Dichlorobenzene	10.000	9.574	4.3	107	0.00	12.82
	-----	AvgRF	CCRF	%Dev	-----		
23	1,2-Dibromo-3-Chloropropa	0.192	0.180	6.3	109	0.00	14.03

(#) = Out of Range

SPCC's out = 0 CCC's out = 0

O61442.D SIMCL091820.M

Wed Sep 23 17:57:23 2020

6.7.3

6

Continuing Calibration Summary

Job Number: FA79006

Sample: VO2366-ECC2365

Account: AHTNACAS Ahtna Global, LLC

Lab FileID: O61479.D

Project: DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA

Evaluate Continuing Calibration Report

Data File : C:\msdchem\2\data\092220\O61479.D Vial: 20
 Acq On : 22 Sep 2020 9:35 pm Operator: JuanG
 Sample : ecc2365-5 Inst : MSVOA12
 Misc : MS47270,VO2366,,,,, Multiplr: 1.00
 MS Integration Params: rteint.p

Method : C:\msdchem\2\methods\SIMCL091820.M (RTE Integrator)
 Title : Standard Methods 6200B
 Last Update : Mon Sep 21 11:01:30 2020
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 50% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	Fluorobenzene	1.000	1.000	0.0	97	0.00	7.34
2	Vinyl Chloride	0.413	0.425	-2.9	101	0.00	2.90
	----- Amount	Calc.	%Drift	-----			
3	Chloromethane	10.000	10.553	-5.5	103	0.00	2.80
	----- AvgRF	CCRF	%Dev	-----			
4	1,1-Dichloroethene	0.594	0.584	1.7	89	0.00	4.09
	----- Amount	Calc.	%Drift	-----			
5	Methylene Chloride	10.000	9.443	5.6	95	0.00	4.70
	----- AvgRF	CCRF	%Dev	-----			
6	trans-1,2-Dichloroethene	0.703	0.689	2.0	91	0.00	4.87
7	1,1-Dichloroethane	0.813	0.802	1.4	92	0.00	5.51
8	cis-1,2-Dichloroethene	0.396	0.387	2.3	89	0.00	6.06
9	Chloroform	0.728	0.704	3.3	92	0.00	6.33
10	Carbon Tetrachloride	0.511	0.511	0.0	90	0.00	6.51
11	1,1,1-Trichloroethane	0.573	0.587	-2.4	91	0.00	6.57
	----- Amount	Calc.	%Drift	-----			
12	Benzene	10.000	9.590	4.1	90	0.00	6.94
	----- AvgRF	CCRF	%Dev	-----			
13 S	1,2-Dichloroethane-d4	0.410	0.399	2.7	99	0.00	7.07
14	1,2-Dichloroethane	0.658	0.647	1.7	92	0.00	7.14
15	Trichloroethene	0.409	0.407	0.5	89	0.00	7.51
16	1,2-Dichloropropane	0.440	0.435	1.1	90	0.00	8.04
	----- Amount	Calc.	%Drift	-----			
17	cis-1,3-Dichloropropene	10.000	9.205	7.9	84	0.00	8.71
	----- AvgRF	CCRF	%Dev	-----			
18 I	Chlorobenzene-d5	1.000	1.000	0.0	98	0.00	10.44
19 S	Toluene-d8	1.037	0.966	6.8	95	0.00	8.90
	----- Amount	Calc.	%Drift	-----			
20	trans-1,3-Dichloropropene	10.000	8.613	13.9	86	0.00	9.34
	----- AvgRF	CCRF	%Dev	-----			
21	Tetrachloroethene	0.503	0.485	3.6	91	0.00	9.34

Continuing Calibration Summary

Job Number: FA79006

Sample: VO2366-ECC2365

Account: AHTNACAS Ahtna Global, LLC

Lab FileID: O61479.D

Project: DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA

	-----	Amount	Calc.	%Drift	-----		
22	1,4-Dichlorobenzene	10.000	9.639	3.6	91	0.00	12.82
	-----	AvgRF	CCRF	%Dev	-----		
23	1,2-Dibromo-3-Chloropropa	0.192	0.160	16.7	82	0.00	14.03
	-----				-----		

(#) = Out of Range SPCC's out = 0 CCC's out = 0
 O61442.D SIMCL091820.M Wed Sep 23 17:57:41 2020

6.7.4
6

Run Sequence Report**Job Number:** FA79006**Account:** AHTNACAS Ahtna Global, LLC**Project:** DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA

Run ID: VO2365	Method: SW846 8260B BY SIM	Instrument ID: GCMSO
-----------------------	-----------------------------------	-----------------------------

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
VO2365-BFB	O61437.D	09/18/20 08:17	n/a	BFB Tune
VO2365-IC2365	O61438.D	09/18/20 08:59	n/a	Initial cal 1
VO2365-IC2365	O61439.D	09/18/20 09:19	n/a	Initial cal 2
VO2365-IC2365	O61440.D	09/18/20 09:39	n/a	Initial cal 3
VO2365-IC2365	O61441.D	09/18/20 09:59	n/a	Initial cal 4
VO2365-ICC2365	O61442.D	09/18/20 10:20	n/a	Initial cal 5
VO2365-IC2365	O61443.D	09/18/20 10:40	n/a	Initial cal 6
VO2365-IC2365	O61444.D	09/18/20 11:00	n/a	Initial cal 7
VO2365-ICV2365	O61449.D	09/18/20 13:45	n/a	Initial cal verification 5
VO2365-BS	O61450.D	09/18/20 14:23	n/a	Blank Spike
VO2365-MB	O61452.D	09/18/20 15:04	n/a	Method Blank
ZZZZZZ	O61453.D	09/18/20 15:24	n/a	(unrelated sample)
FA78549-15	O61454.D	09/18/20 15:45	n/a	(used for QC only; not part of job FA79006)
ZZZZZZ	O61455.D	09/18/20 16:05	n/a	(unrelated sample)
FA78549-15MS	O61456.D	09/18/20 16:26	n/a	Matrix Spike
FA78549-15MSD	O61457.D	09/18/20 16:46	n/a	Matrix Spike Duplicate
VO2365-ECC2365	O61458.D	09/18/20 17:07	n/a	Ending cal 5

Run Sequence Report**Job Number:** FA79006**Account:** AHTNACAS Ahtna Global, LLC**Project:** DOD100221900-OU2 GWTP - OU2 Extraction Wells, Marina, CA

Run ID: VO2366	Method: SW846 8260B BY SIM	Instrument ID: GCMSO
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Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
VO2366-BFB	O61461.D	09/22/20 14:45	n/a	BFB Tune
VO2366-CC2365	O61462.D	09/22/20 15:19	n/a	Continuing cal 5
VO2366-BS	O61463.D	09/22/20 16:09	n/a	Blank Spike
VO2366-MB	O61464.D	09/22/20 16:29	n/a	Method Blank
FA79006-1	O61466.D	09/22/20 17:10	n/a	2039MOU2207A
FA79006-2	O61467.D	09/22/20 17:30	n/a	2039MOU2208F
FA79006-3	O61468.D	09/22/20 17:50	n/a	2039MOU2209F
FA79006-4	O61469.D	09/22/20 18:10	n/a	2039MOU2210F
FA79006-5	O61470.D	09/22/20 18:30	n/a	2039MOU2211F
FA79006-6	O61471.D	09/22/20 18:50	n/a	2039MOU2212F
FA79006-7	O61472.D	09/22/20 19:11	n/a	2039MOU2213F
FA79006-8	O61473.D	09/22/20 19:31	n/a	2039MOU2214F
FA79006-9	O61474.D	09/22/20 19:55	n/a	2039MOU2215F
FA79006-10	O61475.D	09/22/20 20:15	n/a	2039MOU2216F
FA79006-11	O61476.D	09/22/20 20:35	n/a	2039MOU2217D
FA79006-9MS	O61477.D	09/22/20 20:55	n/a	Matrix Spike
FA79006-9MSD	O61478.D	09/22/20 21:15	n/a	Matrix Spike Duplicate
VO2366-ECC2365	O61479.D	09/22/20 21:35	n/a	Ending cal 5

MS Volatiles

Raw Data

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\092220\
Data File : O61466.D
Acq On : 22 Sep 2020 5:10 pm
Operator : JuanG
Sample : fa79006-1 Inst : MSVOA12
Misc : MS47270,VO2366,,,,,
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 23 17:50:21 2020
Quant Method : C:\msdchem\2\methods\SIMCL091820.M
Quant Title : Standard Methods 6200B
QLast Update : Mon Sep 21 11:01:30 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.345	96	266194	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.444	117	207246	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.069	65	117253	5.37	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	107.40%	
19) Toluene-d8	8.896	98	225090	5.24	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	104.80%	
Target Compounds						
5) Methylene Chloride	4.700	49	11802	0.20	ug/L	98
21) Tetrachloroethene	9.341	166	910	0.04	ug/L	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

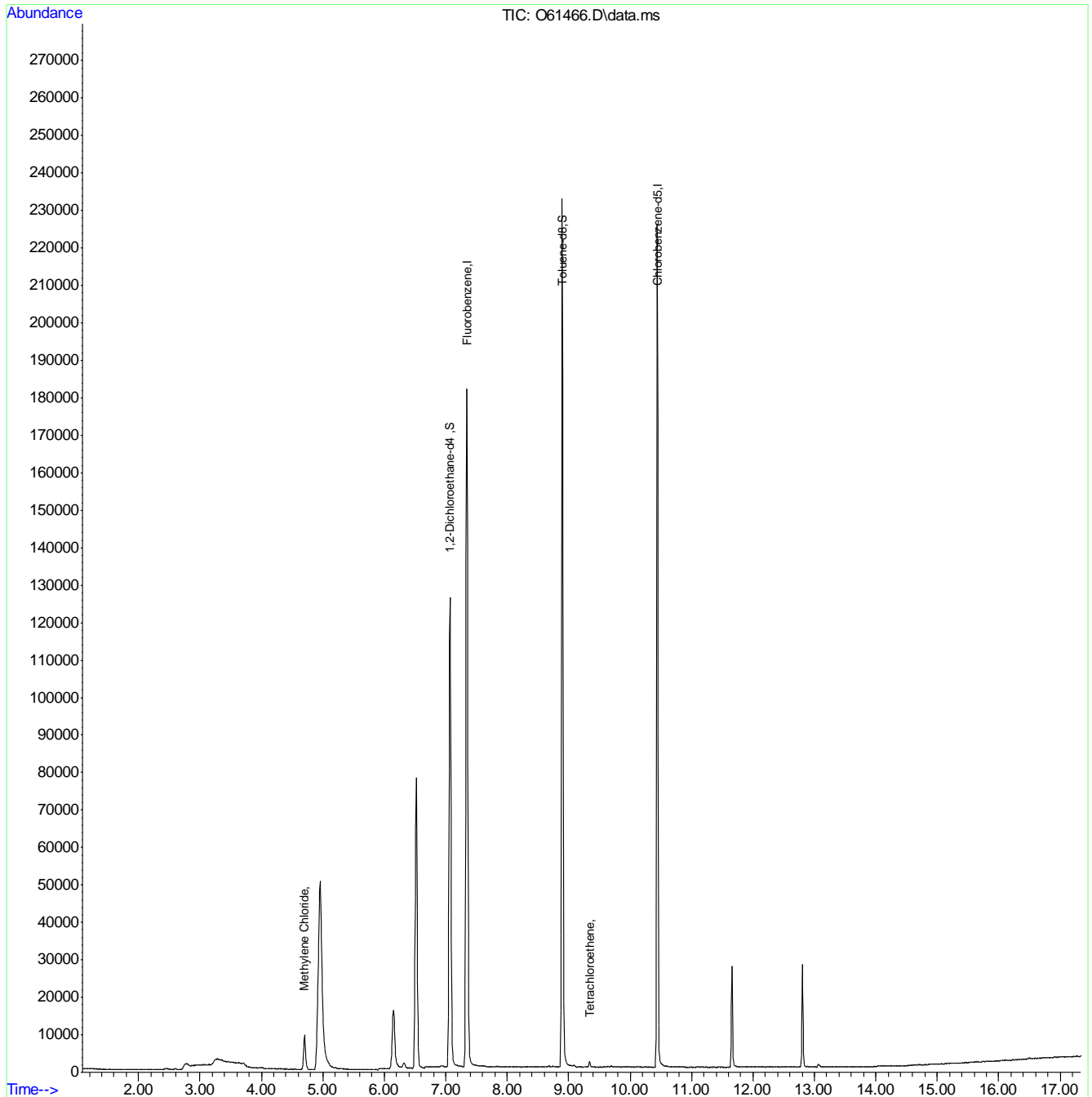
7.1.1
7

Quantitation Report (QT Reviewed)

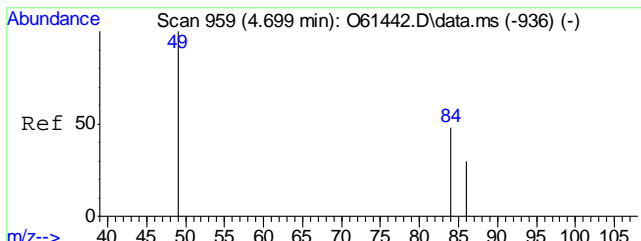
Data Path : C:\msdchem\2\data\092220\
Data File : O61466.D
Acq On : 22 Sep 2020 5:10 pm
Operator : JuanG
Sample : fa79006-1
Misc : MS47270,VO2366,,,,,
ALS Vial : 7 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 23 17:50:21 2020
Quant Method : C:\msdchem\2\methods\SIMCL091820.M
Quant Title : Standard Methods 6200B
QLast Update : Mon Sep 21 11:01:30 2020
Response via : Initial Calibration

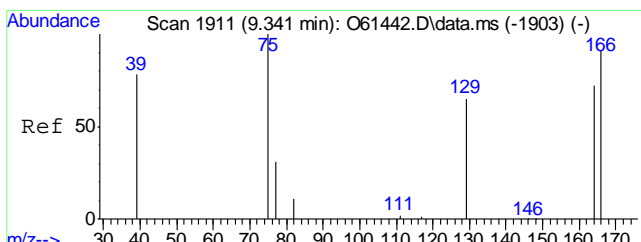
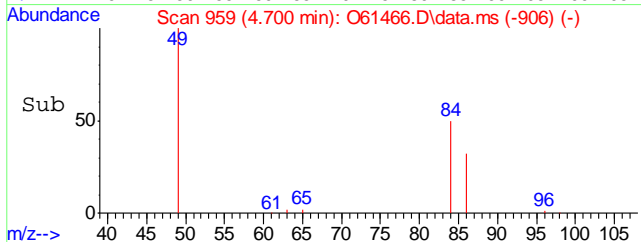
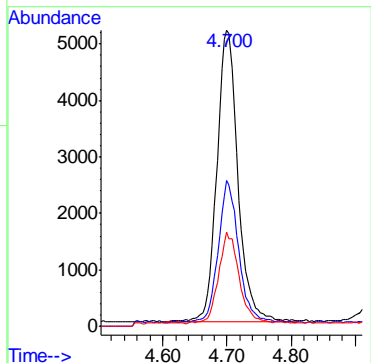
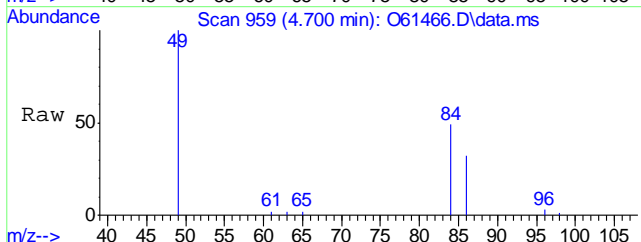


7.1.1
7



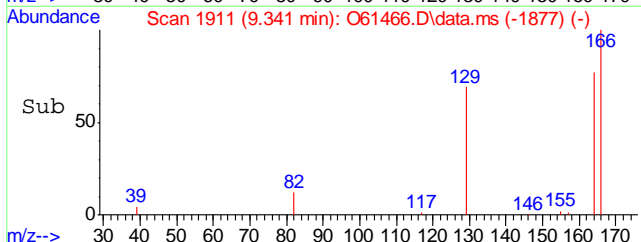
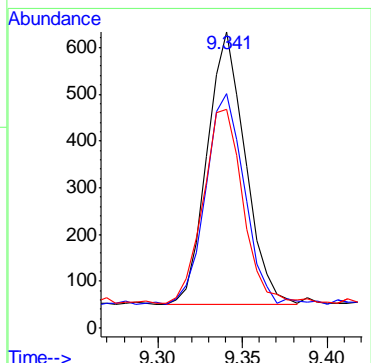
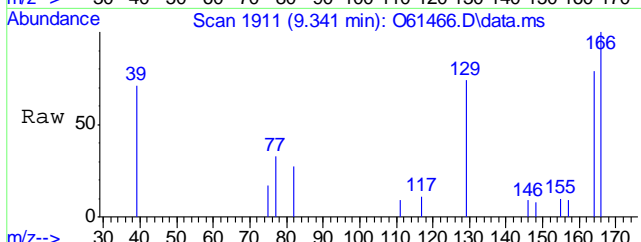
#5
 Methylene Chloride
 Concen: 0.20 ug/L
 RT: 4.700 min Scan# 959
 Delta R.T. 0.000 min
 Lab File: O61466.D
 Acq: 22 Sep 2020 5:10 pm

Tgt Ion	Resp	Lower	Upper
49	11802		
84	48.8	17.8	77.8
86	31.2	0.3	60.3



#21
 Tetrachloroethene
 Concen: 0.04 ug/L
 RT: 9.341 min Scan# 1911
 Delta R.T. 0.000 min
 Lab File: O61466.D
 Acq: 22 Sep 2020 5:10 pm

Tgt Ion	Resp	Lower	Upper
166	910		
164	77.4	48.9	108.9
129	71.0	41.3	101.3



7.1.1
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\092220\
 Data File : O61467.D
 Acq On : 22 Sep 2020 5:30 pm
 Operator : JuanG
 Sample : fa79006-2 Inst : MSVOA12
 Misc : MS47270,VO2366,,,,,
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 23 17:50:34 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Mon Sep 21 11:01:30 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.344	96	255761	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.444	117	197566	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.069	65	114503	5.46	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	109.20%	
19) Toluene-d8	8.899	98	214645	5.24	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	104.80%	
Target Compounds						
5) Methylene Chloride	4.703	49	10398	0.19	ug/L	Qvalue 98

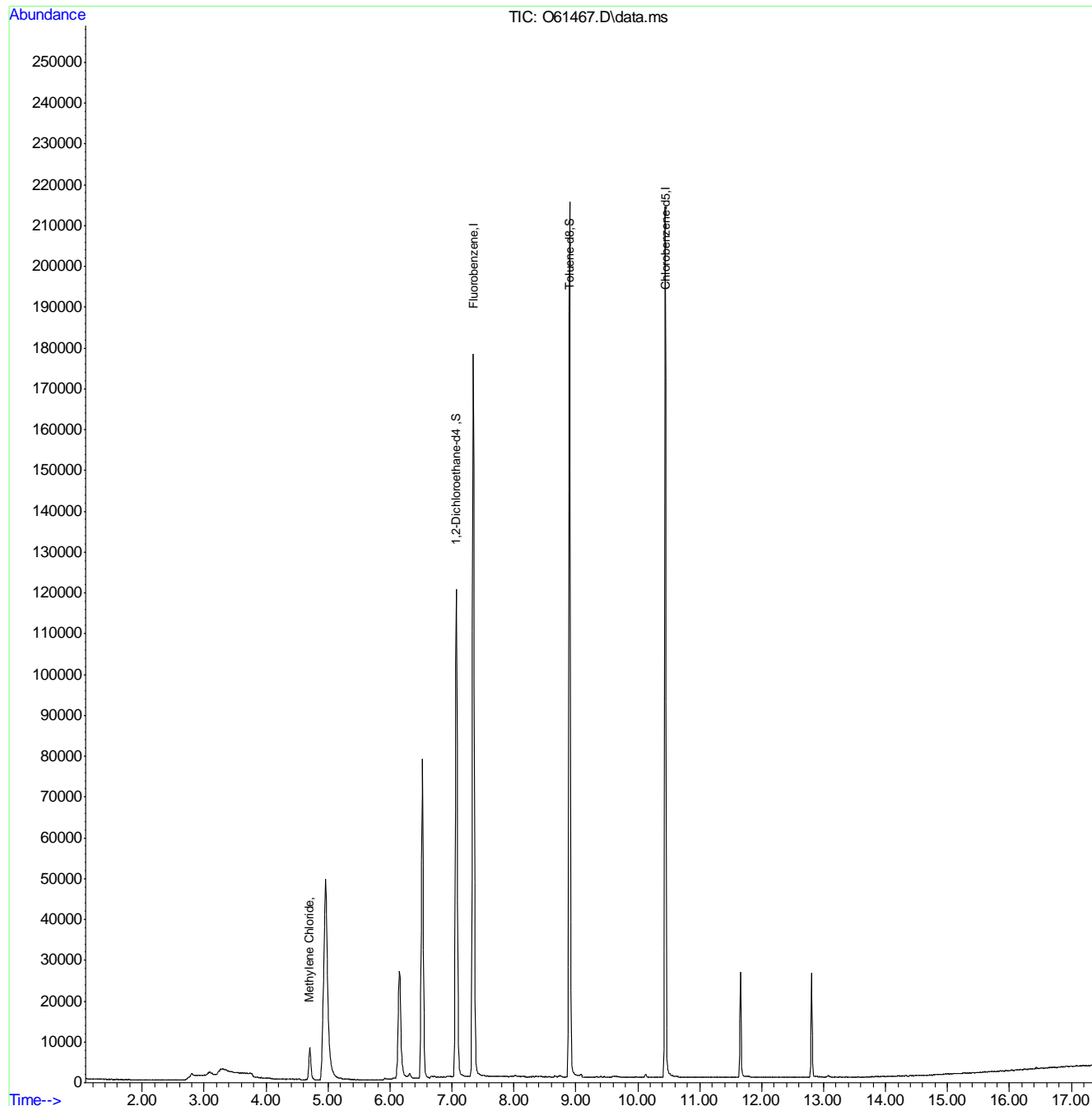
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7.12
7

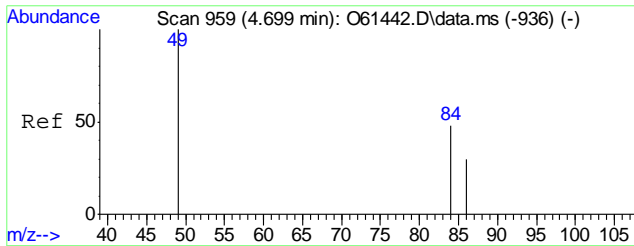
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\092220\
 Data File : O61467.D
 Acq On : 22 Sep 2020 5:30 pm
 Operator : JuanG
 Sample : fa79006-2 Inst : MSVOA12
 Misc : MS47270,VO2366,,,,,
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 23 17:50:34 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Mon Sep 21 11:01:30 2020
 Response via : Initial Calibration

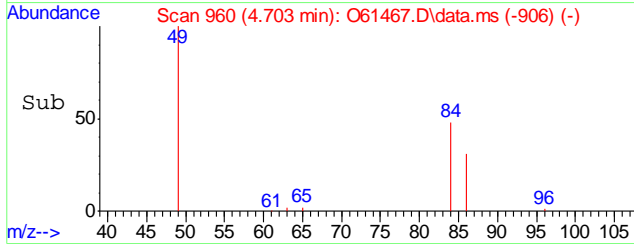
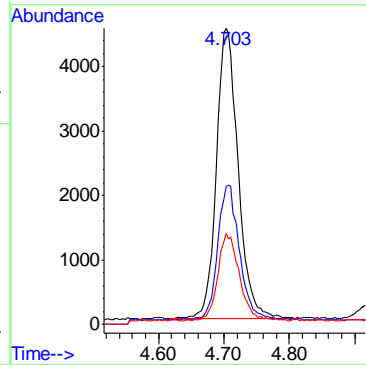
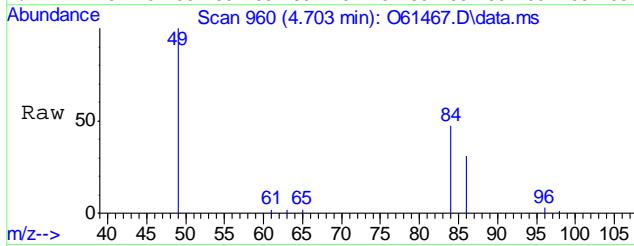


7.1.2
7



#5
 Methylene Chloride
 Concen: 0.19 ug/L
 RT: 4.703 min Scan# 960
 Delta R.T. 0.004 min
 Lab File: O61467.D
 Acq: 22 Sep 2020 5:30 pm

Tgt Ion	Resp	Lower	Upper
49	10398		
84	46.2	17.8	77.8
86	30.1	0.3	60.3



7.12
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\092220\
Data File : O61468.D
Acq On : 22 Sep 2020 5:50 pm
Operator : JuanG
Sample : fa79006-3 Inst : MSVOA12
Misc : MS47270,VO2366,,,,,
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 23 17:50:45 2020
Quant Method : C:\msdchem\2\methods\SIMCL091820.M
Quant Title : Standard Methods 6200B
QLast Update : Mon Sep 21 11:01:30 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.344	96	247587	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.442	117	189970	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.069	65	112267	5.53	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	110.60%	
19) Toluene-d8	8.896	98	205631	5.22	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	104.40%	
Target Compounds						
5) Methylene Chloride	4.699	49	11209	0.21	ug/L	Qvalue 99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.1.3
7

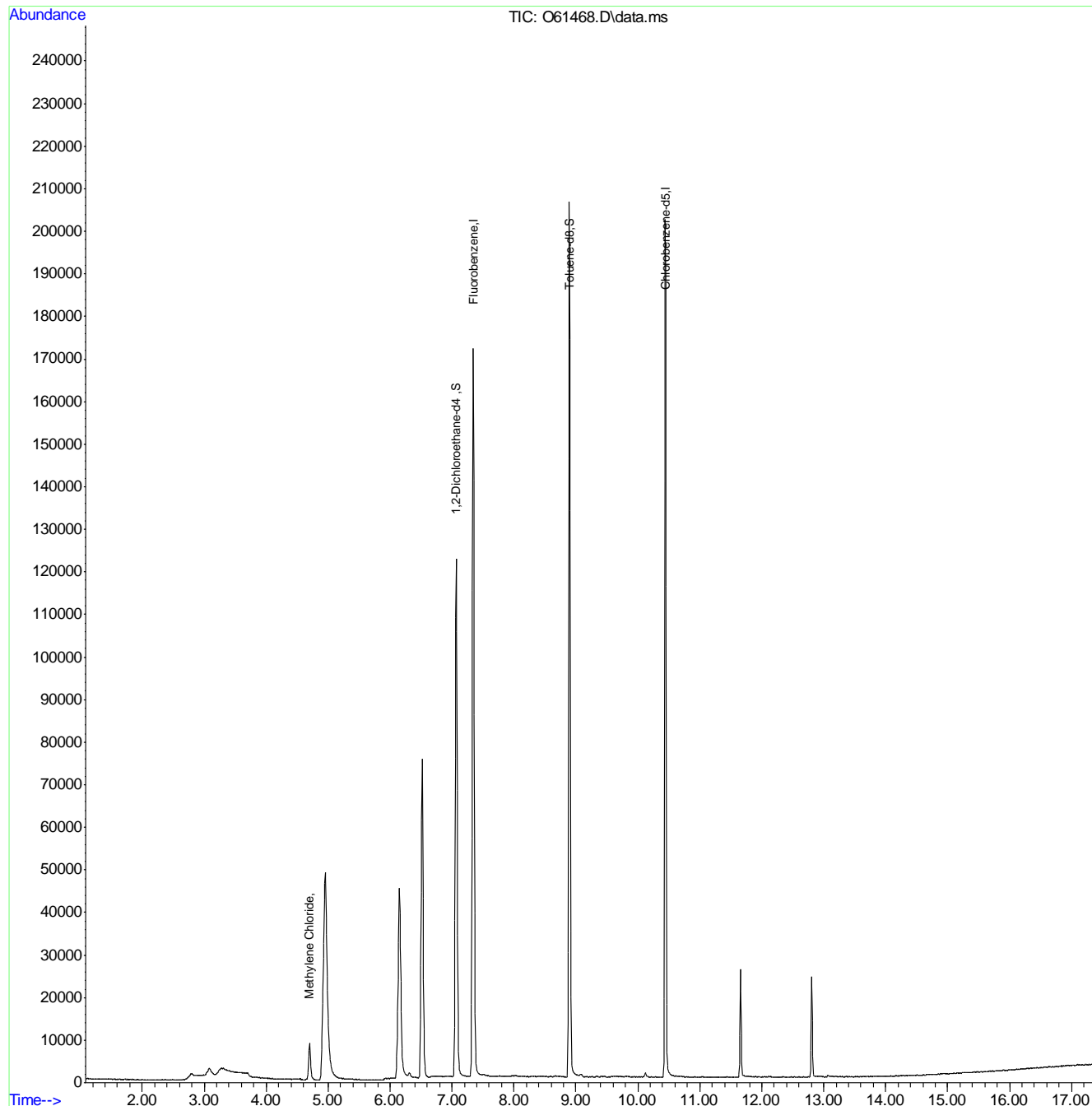


Quantitation Report (QT Reviewed)

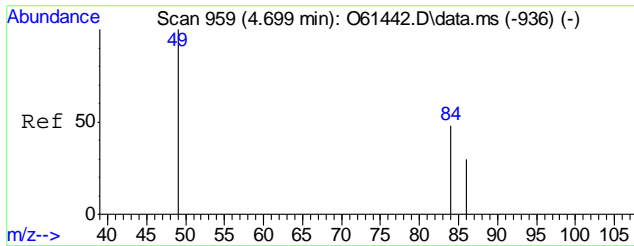
Data Path : C:\msdchem\2\data\092220\
 Data File : O61468.D
 Acq On : 22 Sep 2020 5:50 pm
 Operator : JuanG
 Sample : fa79006-3
 Misc : MS47270,VO2366,,,,,
 ALS Vial : 9 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 23 17:50:45 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Mon Sep 21 11:01:30 2020
 Response via : Initial Calibration

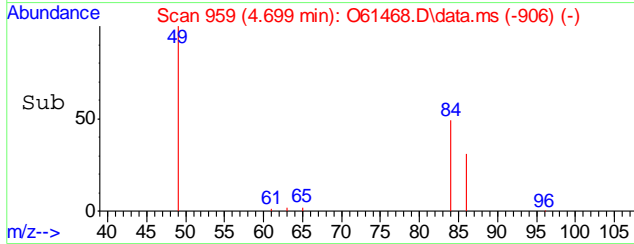
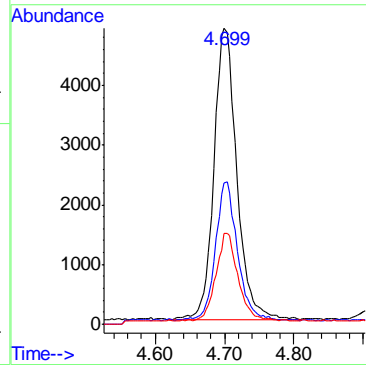
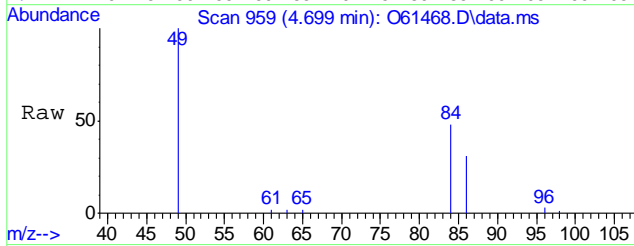


7.13
7



#5
 Methylene Chloride
 Concen: 0.21 ug/L
 RT: 4.699 min Scan# 959
 Delta R.T. -0.000 min
 Lab File: O61468.D
 Acq: 22 Sep 2020 5:50 pm

Tgt Ion	Ratio	Lower	Upper
49	100		
84	47.3	17.8	77.8
86	29.9	0.3	60.3



7.1.3
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\092220\
Data File : O61469.D
Acq On : 22 Sep 2020 6:10 pm
Operator : JuanG
Sample : fa79006-4 Inst : MSVOA12
Misc : MS47270,VO2366,,,,,
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 23 17:50:55 2020
Quant Method : C:\msdchem\2\methods\SIMCL091820.M
Quant Title : Standard Methods 6200B
QLast Update : Mon Sep 21 11:01:30 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.344	96	238625	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.442	117	183788	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.069	65	109949	5.62	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	112.40%	
19) Toluene-d8	8.896	98	199231	5.23	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	104.60%	
Target Compounds						
5) Methylene Chloride	4.699	49	11939	0.23	ug/L	97
6) trans-1,2-Dichloroethene	4.862	61	907	0.03	ug/L	87
7) 1,1-Dichloroethane	5.506	63	18591	0.48	ug/L	100
8) cis-1,2-Dichloroethene	6.065	96	36696	1.94	ug/L	97
9) Chloroform	6.326	83	12228	0.35	ug/L	90
10) Carbon Tetrachloride	6.510	117	1408	0.06	ug/L	96
14) 1,2-Dichloroethane	7.138	62	5074	0.16	ug/L	99
15) Trichloroethene	7.513	95	19414	0.99	ug/L	97
16) 1,2-Dichloropropane	8.039	63	1118	0.05	ug/L	91

(#) = qualifier out of range (m) = manual integration (+) = signals summed

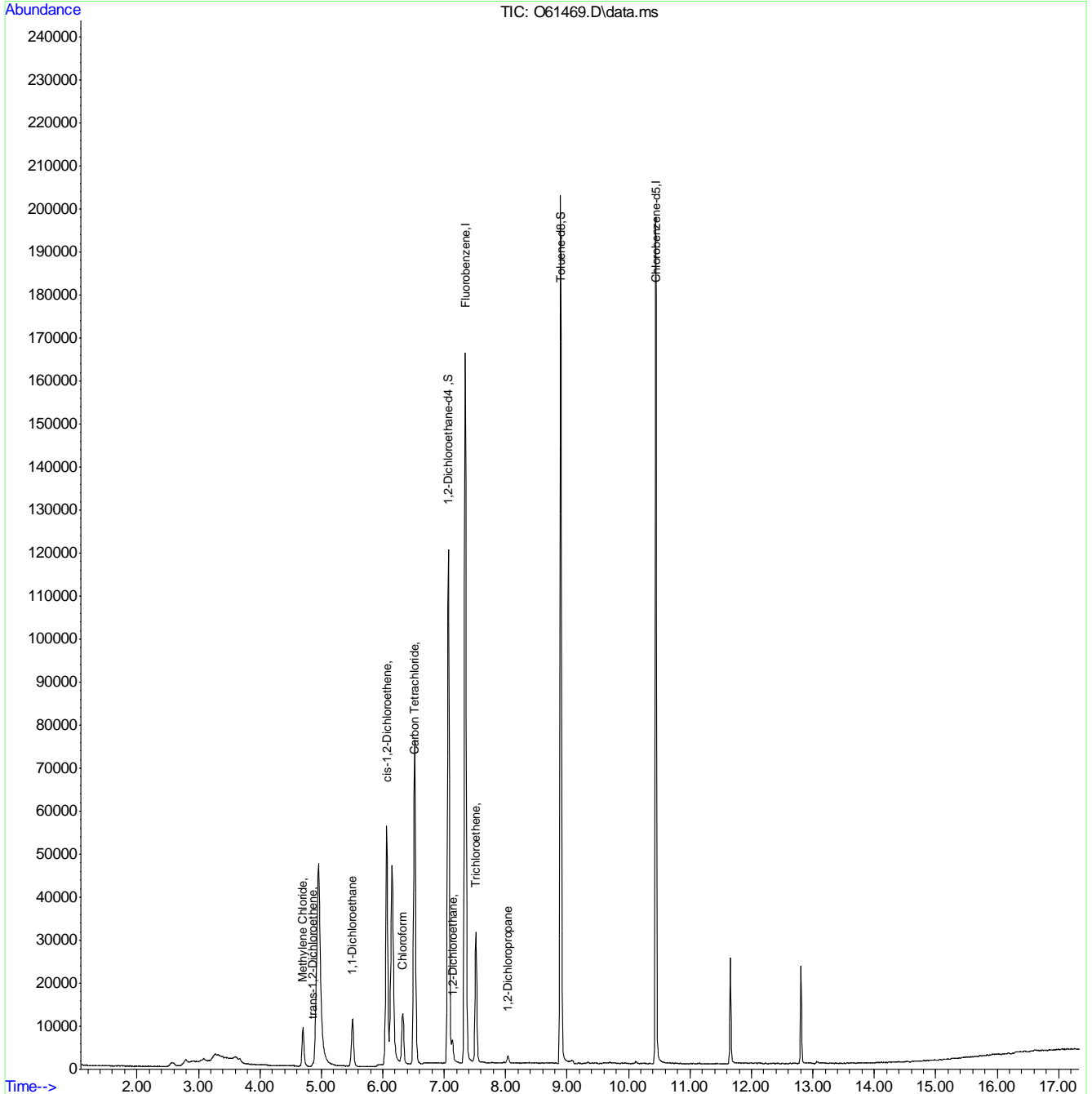
7.14
7

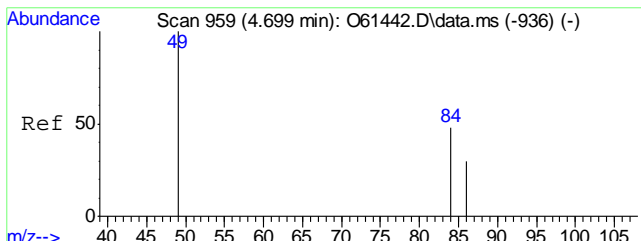
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\092220\
 Data File : O61469.D
 Acq On : 22 Sep 2020 6:10 pm
 Operator : JuanG
 Sample : fa79006-4
 Misc : MS47270,VO2366,,,,,
 ALS Vial : 10 Sample Multiplier: 1

Inst : MSVOA12

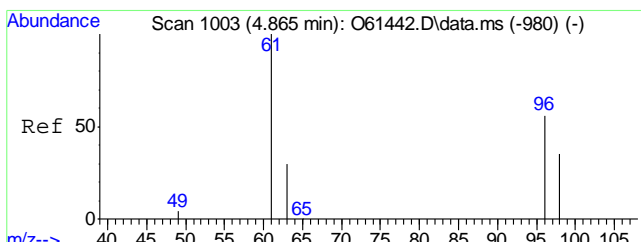
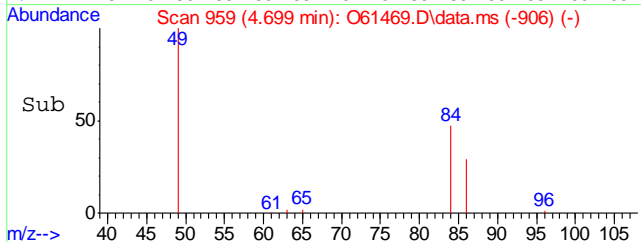
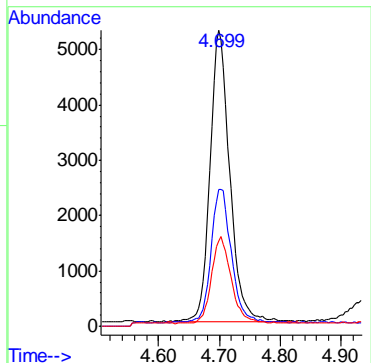
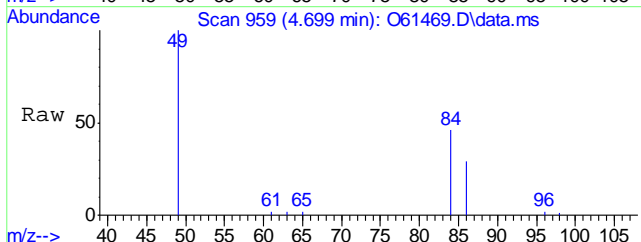
Quant Time: Sep 23 17:50:55 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Mon Sep 21 11:01:30 2020
 Response via : Initial Calibration





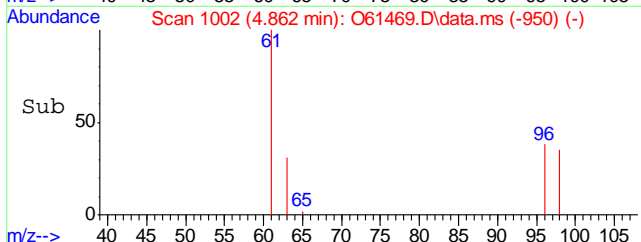
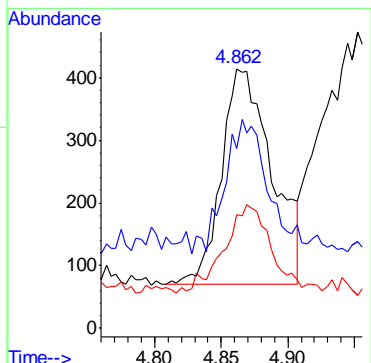
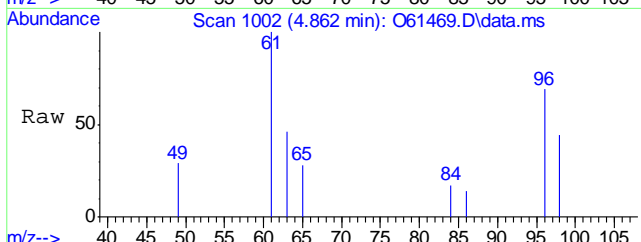
#5
Methylene Chloride
Concen: 0.23 ug/L
RT: 4.699 min Scan# 959
Delta R.T. -0.000 min
Lab File: O61469.D
Acq: 22 Sep 2020 6:10 pm

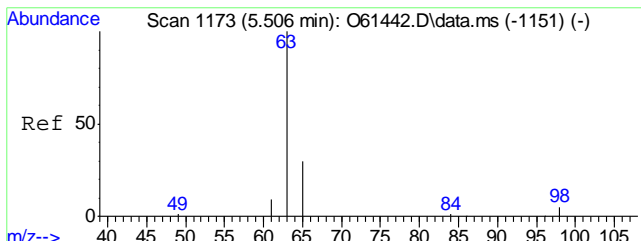
Tgt Ion	Resp	Lower	Upper
49	11939		
84	45.5	17.8	77.8
86	28.3	0.3	60.3



#6
trans-1,2-Dichloroethene
Concen: 0.03 ug/L
RT: 4.862 min Scan# 1002
Delta R.T. -0.004 min
Lab File: O61469.D
Acq: 22 Sep 2020 6:10 pm

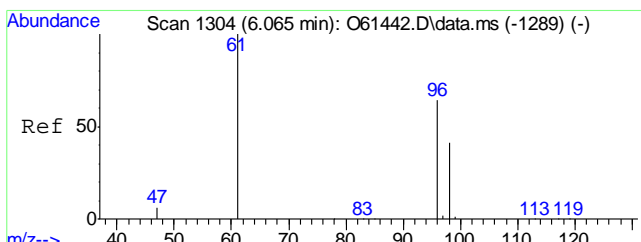
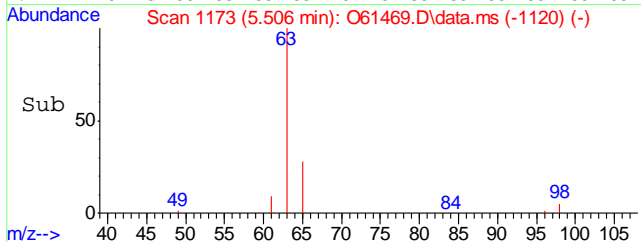
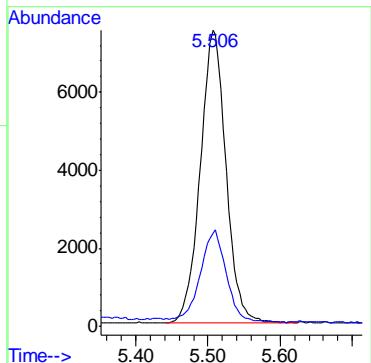
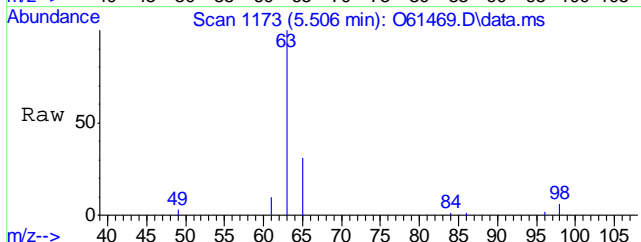
Tgt Ion	Resp	Lower	Upper
61	907		
96	41.1	25.7	85.7
98	34.1	5.3	65.3





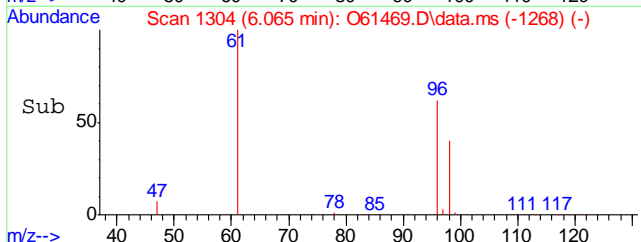
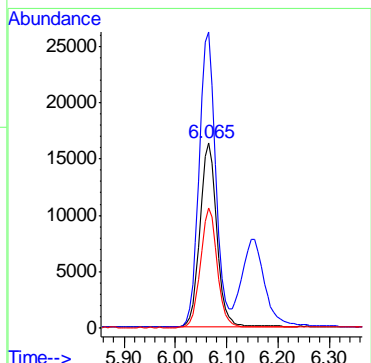
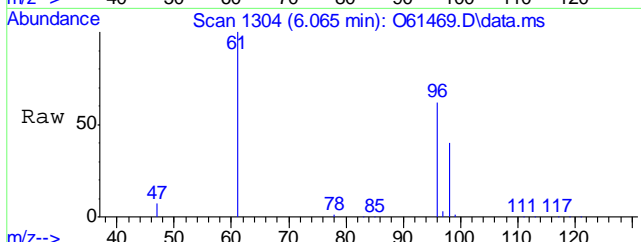
#7
 1,1-Dichloroethane
 Concen: 0.48 ug/L
 RT: 5.506 min Scan# 1173
 Delta R.T. -0.000 min
 Lab File: O61469.D
 Acq: 22 Sep 2020 6:10 pm

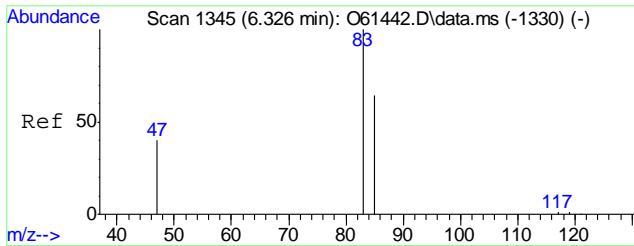
Tgt Ion	Resp	Lower	Upper
63	18591		
65	30.0	0.2	60.2



#8
 cis-1,2-Dichloroethene
 Concen: 1.94 ug/L
 RT: 6.065 min Scan# 1304
 Delta R.T. -0.000 min
 Lab File: O61469.D
 Acq: 22 Sep 2020 6:10 pm

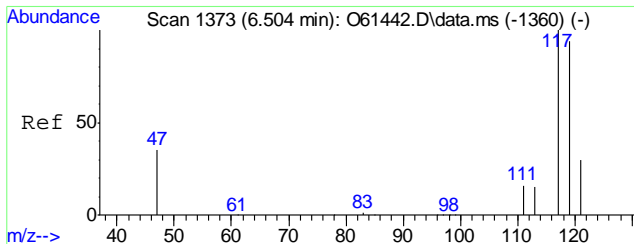
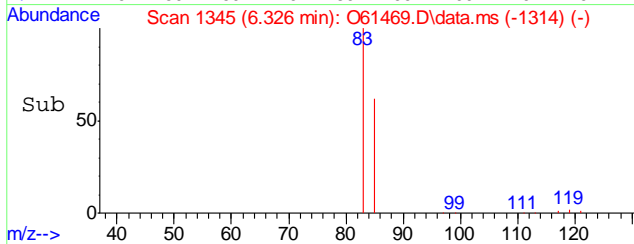
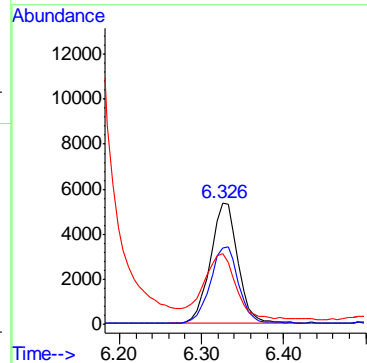
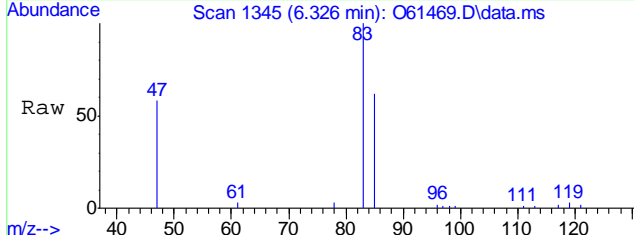
Tgt Ion	Resp	Lower	Upper
96	36696		
61	160.8	126.5	186.5
98	64.9	34.2	94.2





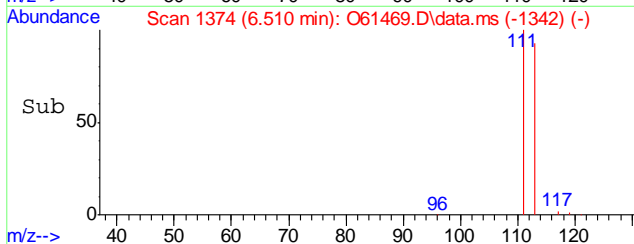
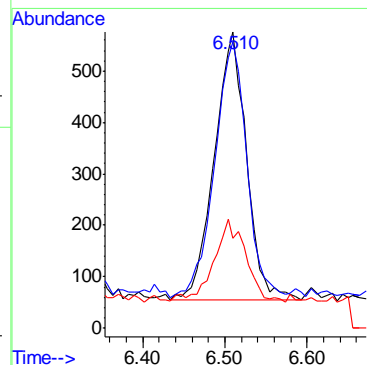
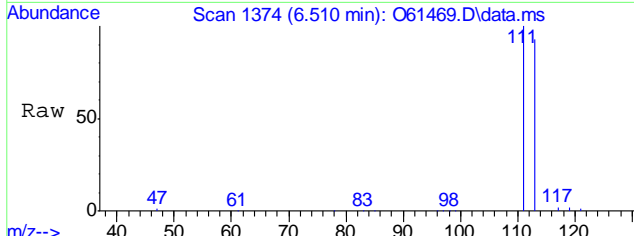
#9
 Chloroform
 Concen: 0.35 ug/L
 RT: 6.326 min Scan# 1345
 Delta R.T. -0.000 min
 Lab File: O61469.D
 Acq: 22 Sep 2020 6:10 pm

Tgt Ion	Resp	Lower	Upper
83	12228		
85	61.9	34.2	94.2
47	54.0	10.4	70.4

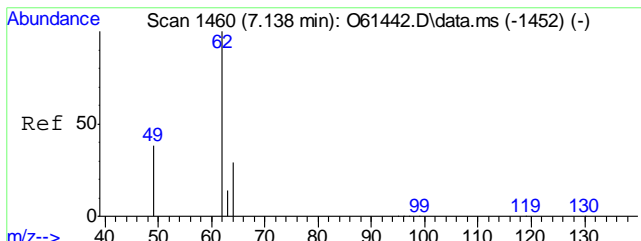


#10
 Carbon Tetrachloride
 Concen: 0.06 ug/L
 RT: 6.510 min Scan# 1374
 Delta R.T. 0.006 min
 Lab File: O61469.D
 Acq: 22 Sep 2020 6:10 pm

Tgt Ion	Resp	Lower	Upper
117	1408		
119	95.6	64.4	124.4
121	23.8	0.0	59.7

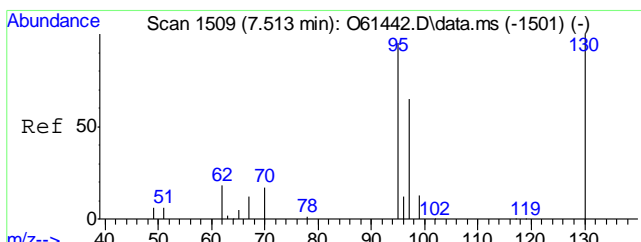
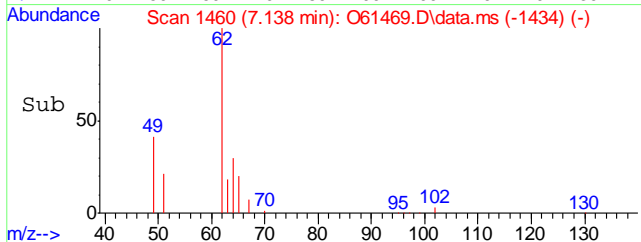
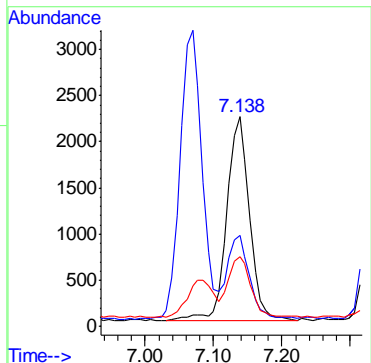
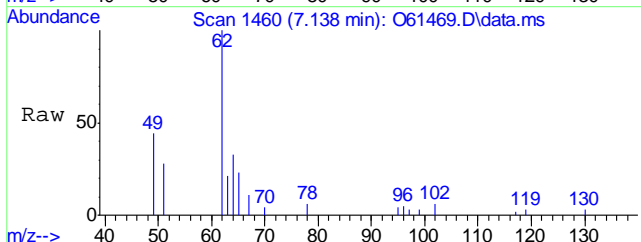


7.14
7



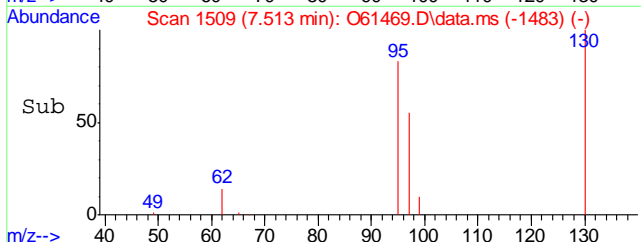
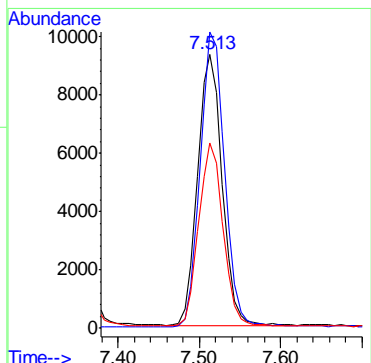
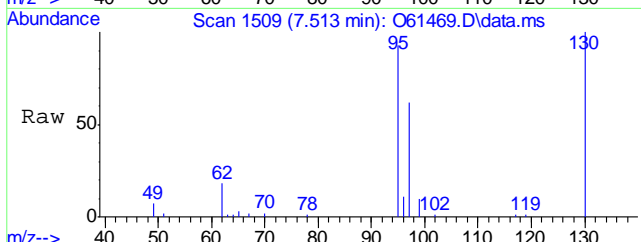
#14
1,2-Dichloroethane
Concen: 0.16 ug/L
RT: 7.138 min Scan# 1460
Delta R.T. -0.000 min
Lab File: O61469.D
Acq: 22 Sep 2020 6:10 pm

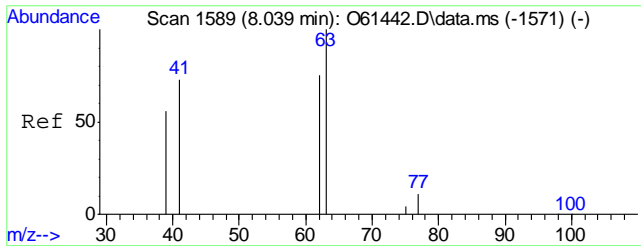
Tgt Ion	Resp	Lower	Upper
62	5074		
49	40.8	9.3	69.3
64	29.6	0.0	59.6



#15
Trichloroethene
Concen: 0.99 ug/L
RT: 7.513 min Scan# 1509
Delta R.T. -0.000 min
Lab File: O61469.D
Acq: 22 Sep 2020 6:10 pm

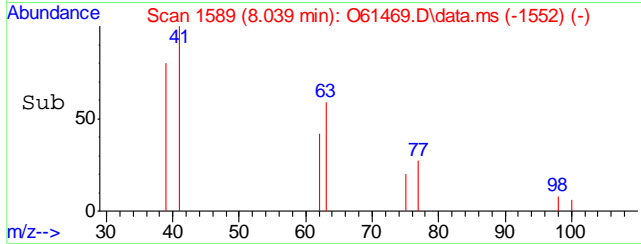
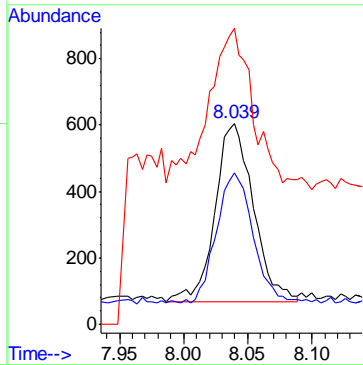
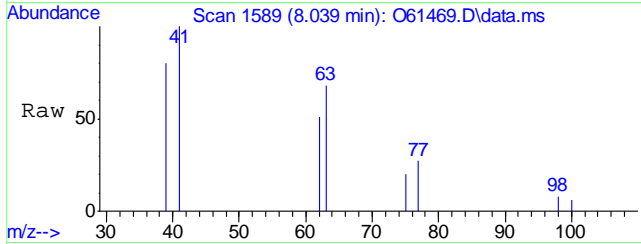
Tgt Ion	Resp	Lower	Upper
95	19414		
130	108.6	75.8	135.8
97	67.3	39.2	99.2





#16
 1,2-Dichloropropane
 Concen: 0.05 ug/L
 RT: 8.039 min Scan# 1589
 Delta R.T. -0.000 min
 Lab File: O61469.D
 Acq: 22 Sep 2020 6:10 pm

Tgt Ion	Resp	Lower	Upper
63	1118		
62	72.5	44.6	104.6
41	86.5	43.3	103.3



7.14
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\092220\
Data File : O61470.D
Acq On : 22 Sep 2020 6:30 pm
Operator : JuanG
Sample : fa79006-5 Inst : MSVOA12
Misc : MS47270,VO2366,,,,,
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 23 17:51:15 2020
Quant Method : C:\msdchem\2\methods\SIMCL091820.M
Quant Title : Standard Methods 6200B
QLast Update : Mon Sep 21 11:01:30 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Fluorobenzene	7.345	96	236171	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.444	117	181858	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.069	65	108806	5.62	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	112.40%	
19) Toluene-d8	8.896	98	196614	5.21	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	104.20%	
Target Compounds						
						Qvalue
5) Methylene Chloride	4.703	49	10898	0.21	ug/L	98
7) 1,1-Dichloroethane	5.510	63	22346	0.58	ug/L	98
8) cis-1,2-Dichloroethene	6.065	96	30885	1.65	ug/L	95
9) Chloroform	6.332	83	14719	0.43	ug/L	94
14) 1,2-Dichloroethane	7.138	62	6238	0.20	ug/L	95
15) Trichloroethene	7.513	95	668	0.03	ug/L	90
16) 1,2-Dichloropropane	8.039	63	505	0.02	ug/L #	78

(#) = qualifier out of range (m) = manual integration (+) = signals summed

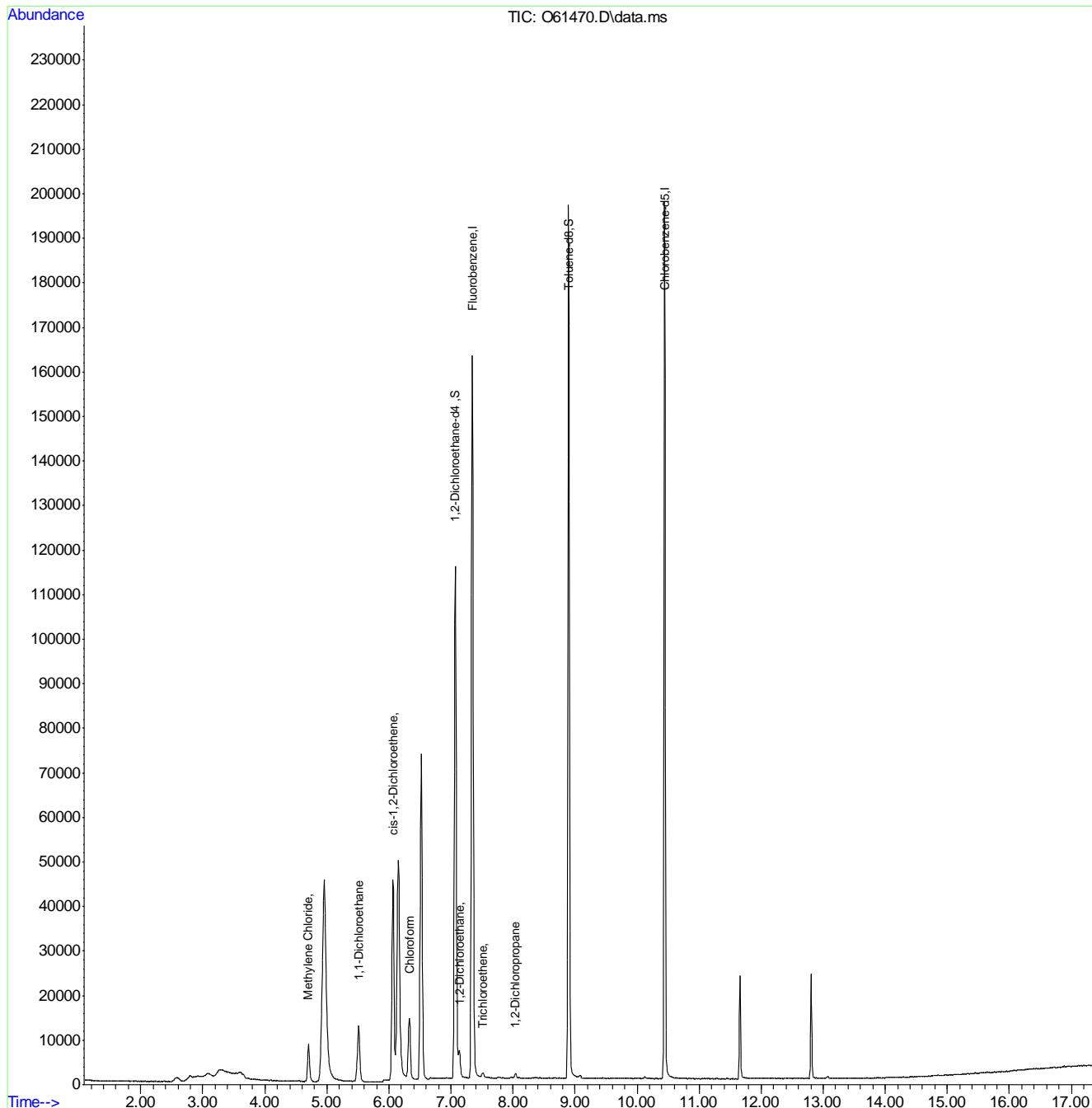
7.15
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Quantitation Report (QT Reviewed)

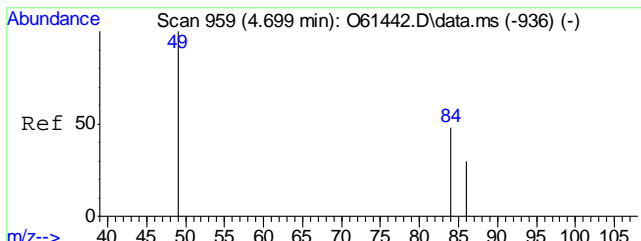
Data Path : C:\msdchem\2\data\092220\
 Data File : O61470.D
 Acq On : 22 Sep 2020 6:30 pm
 Operator : JuanG
 Sample : fa79006-5
 Misc : MS47270,VO2366,,,,,
 ALS Vial : 11 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 23 17:51:15 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Mon Sep 21 11:01:30 2020
 Response via : Initial Calibration

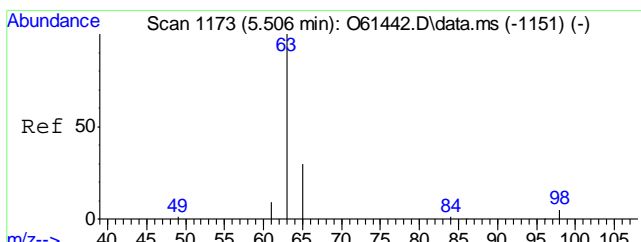
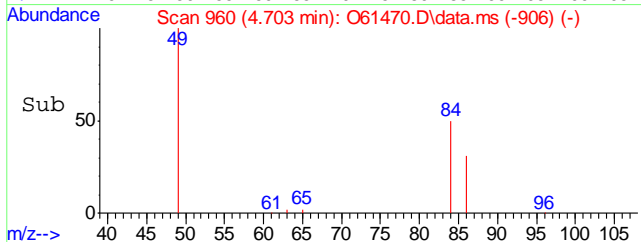
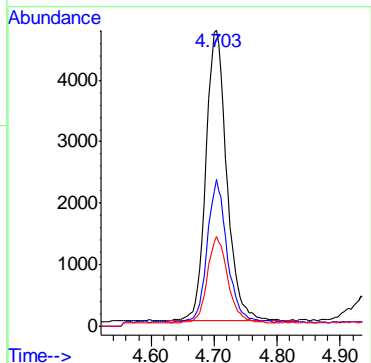
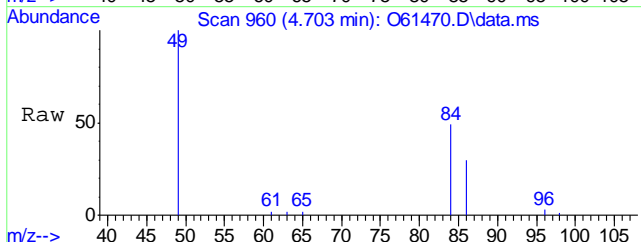


7.15
7



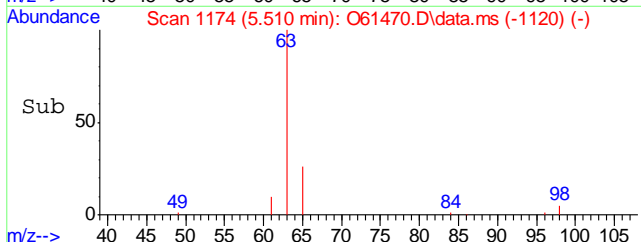
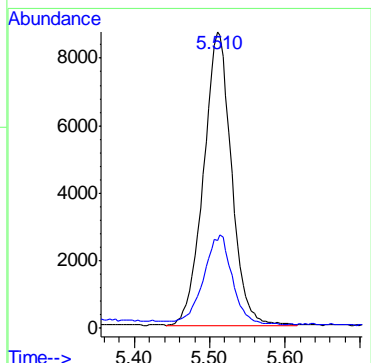
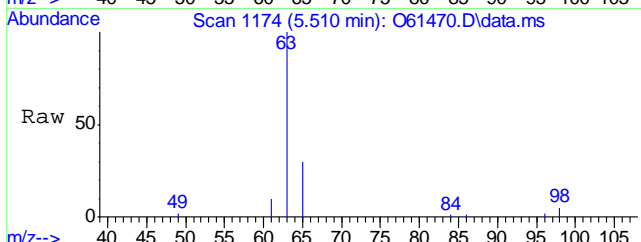
#5
 Methylene Chloride
 Concen: 0.21 ug/L
 RT: 4.703 min Scan# 960
 Delta R.T. 0.004 min
 Lab File: O61470.D
 Acq: 22 Sep 2020 6:30 pm

Tgt Ion	Resp	Lower	Upper
49	10898		
84	49.0	17.8	77.8
86	29.7	0.3	60.3

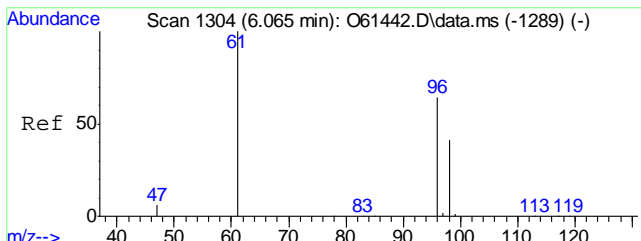


#7
 1,1-Dichloroethane
 Concen: 0.58 ug/L
 RT: 5.510 min Scan# 1174
 Delta R.T. 0.004 min
 Lab File: O61470.D
 Acq: 22 Sep 2020 6:30 pm

Tgt Ion	Resp	Lower	Upper
63	22346		
65	28.8	0.2	60.2



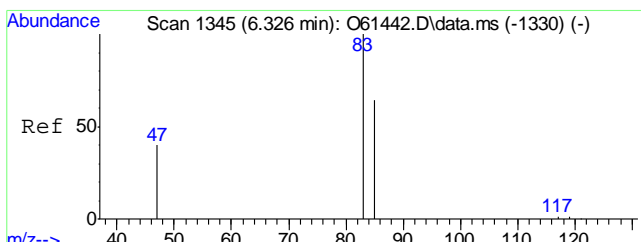
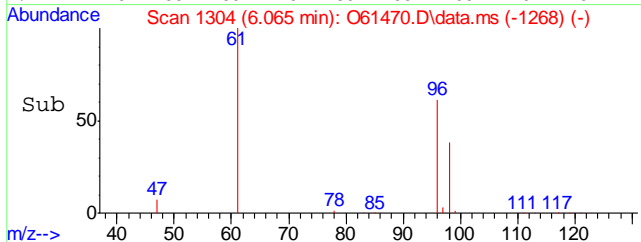
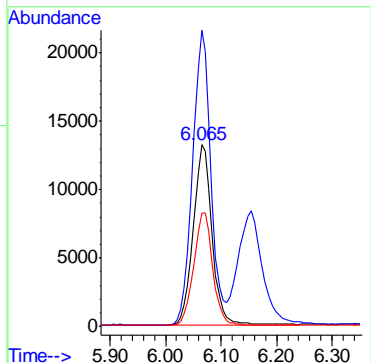
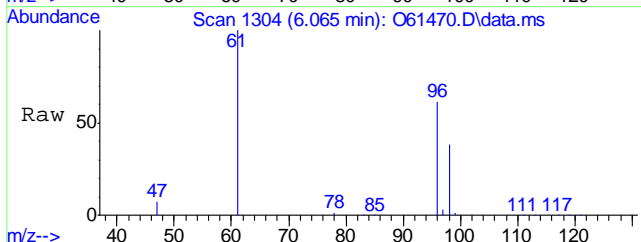
7.15
7



#8
 cis-1,2-Dichloroethene
 Concen: 1.65 ug/L
 RT: 6.065 min Scan# 1304
 Delta R.T. 0.000 min
 Lab File: O61470.D
 Acq: 22 Sep 2020 6:30 pm

Tgt Ion: 96 Resp: 30885

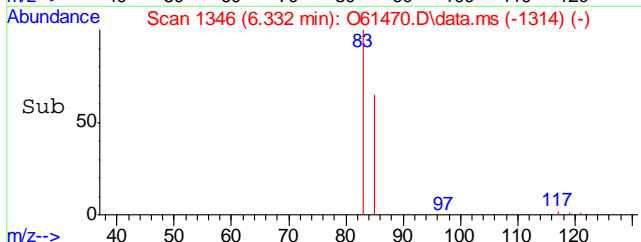
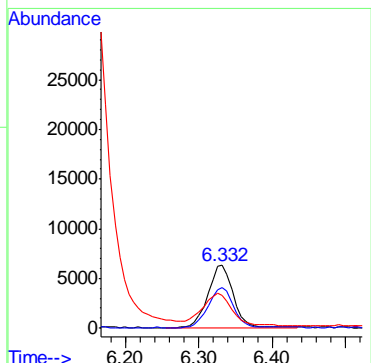
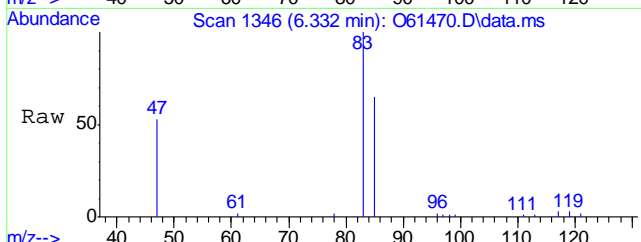
Ion	Ratio	Lower	Upper
96	100		
61	164.0	126.5	186.5
98	62.4	34.2	94.2



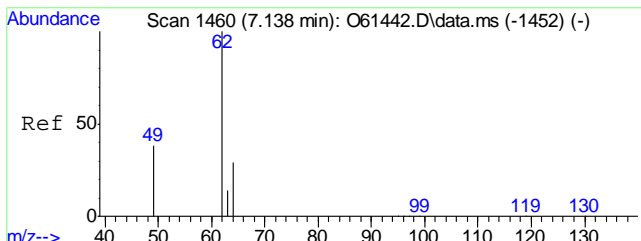
#9
 Chloroform
 Concen: 0.43 ug/L
 RT: 6.332 min Scan# 1346
 Delta R.T. 0.006 min
 Lab File: O61470.D
 Acq: 22 Sep 2020 6:30 pm

Tgt Ion: 83 Resp: 14719

Ion	Ratio	Lower	Upper
83	100		
85	64.5	34.2	94.2
47	49.0	10.4	70.4

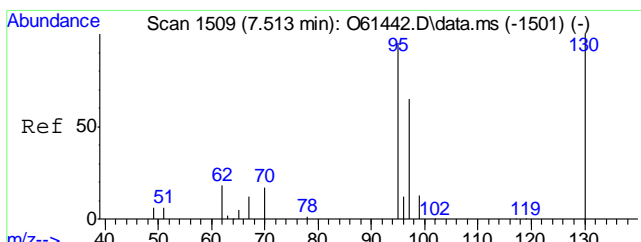
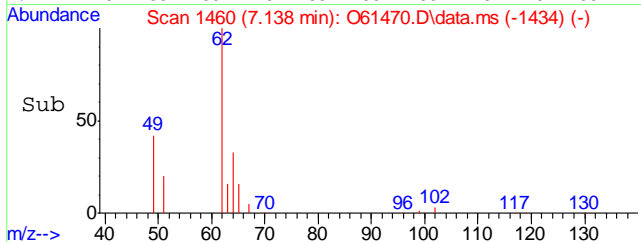
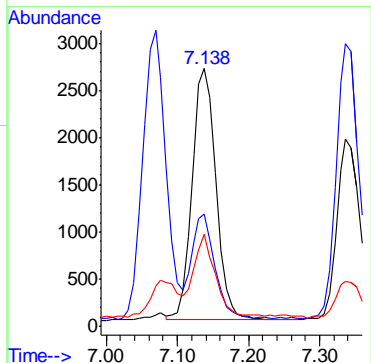
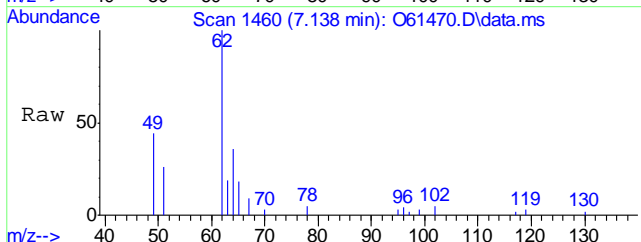


7.15
7



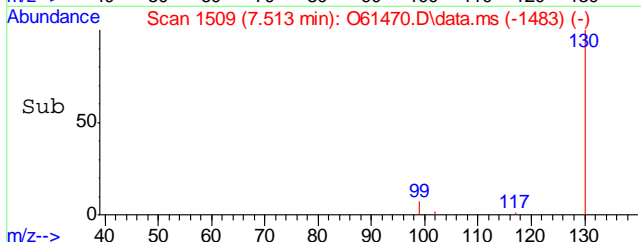
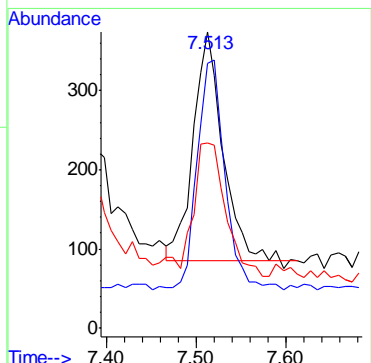
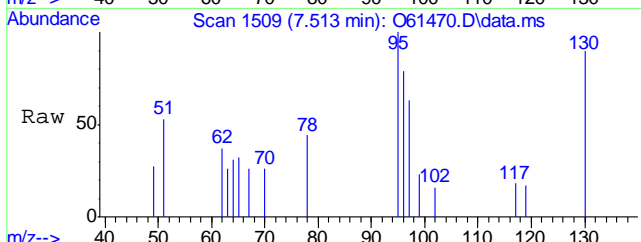
#14
 1,2-Dichloroethane
 Concen: 0.20 ug/L
 RT: 7.138 min Scan# 1460
 Delta R.T. 0.000 min
 Lab File: O61470.D
 Acq: 22 Sep 2020 6:30 pm

Tgt Ion	Resp	Lower	Upper
62	100		
49	42.0	9.3	69.3
64	32.5	0.0	59.6

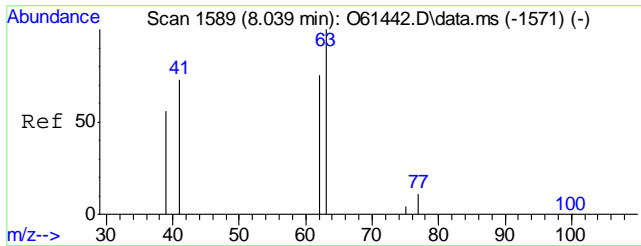


#15
 Trichloroethene
 Concen: 0.03 ug/L
 RT: 7.513 min Scan# 1509
 Delta R.T. 0.000 min
 Lab File: O61470.D
 Acq: 22 Sep 2020 6:30 pm

Tgt Ion	Resp	Lower	Upper
95	100		
130	98.3	75.8	135.8
97	57.4	39.2	99.2



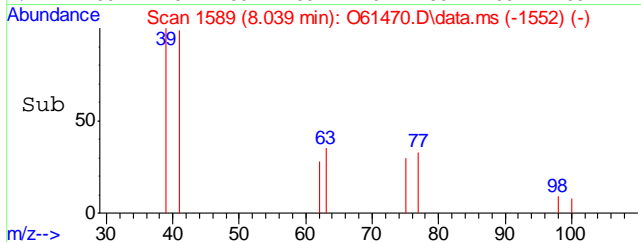
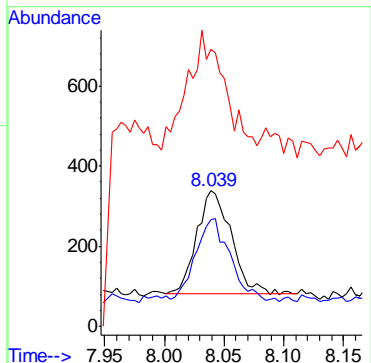
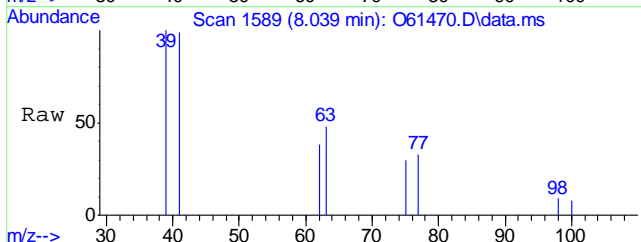
7.15
 7



#16
 1,2-Dichloropropane
 Concen: 0.02 ug/L
 RT: 8.039 min Scan# 1589
 Delta R.T. 0.000 min
 Lab File: O61470.D
 Acq: 22 Sep 2020 6:30 pm

Tgt Ion: 63 Resp: 505

Ion	Ratio	Lower	Upper
63	100		
62	79.7	44.6	104.6
41	105.9	43.3	103.3#



7.1.5
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\092220\
Data File : O61471.D
Acq On : 22 Sep 2020 6:50 pm
Operator : JuanG
Sample : fa79006-6 Inst : MSVOA12
Misc : MS47270,VO2366,,,,,
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 23 17:51:36 2020
Quant Method : C:\msdchem\2\methods\SIMCL091820.M
Quant Title : Standard Methods 6200B
QLast Update : Mon Sep 21 11:01:30 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.344	96	228045	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.442	117	176718	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.069	65	107501	5.75	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	115.00%	
19) Toluene-d8	8.896	98	189778	5.18	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	103.60%	
Target Compounds						
5) Methylene Chloride	4.703	49	9208	0.19	ug/L	Qvalue 99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

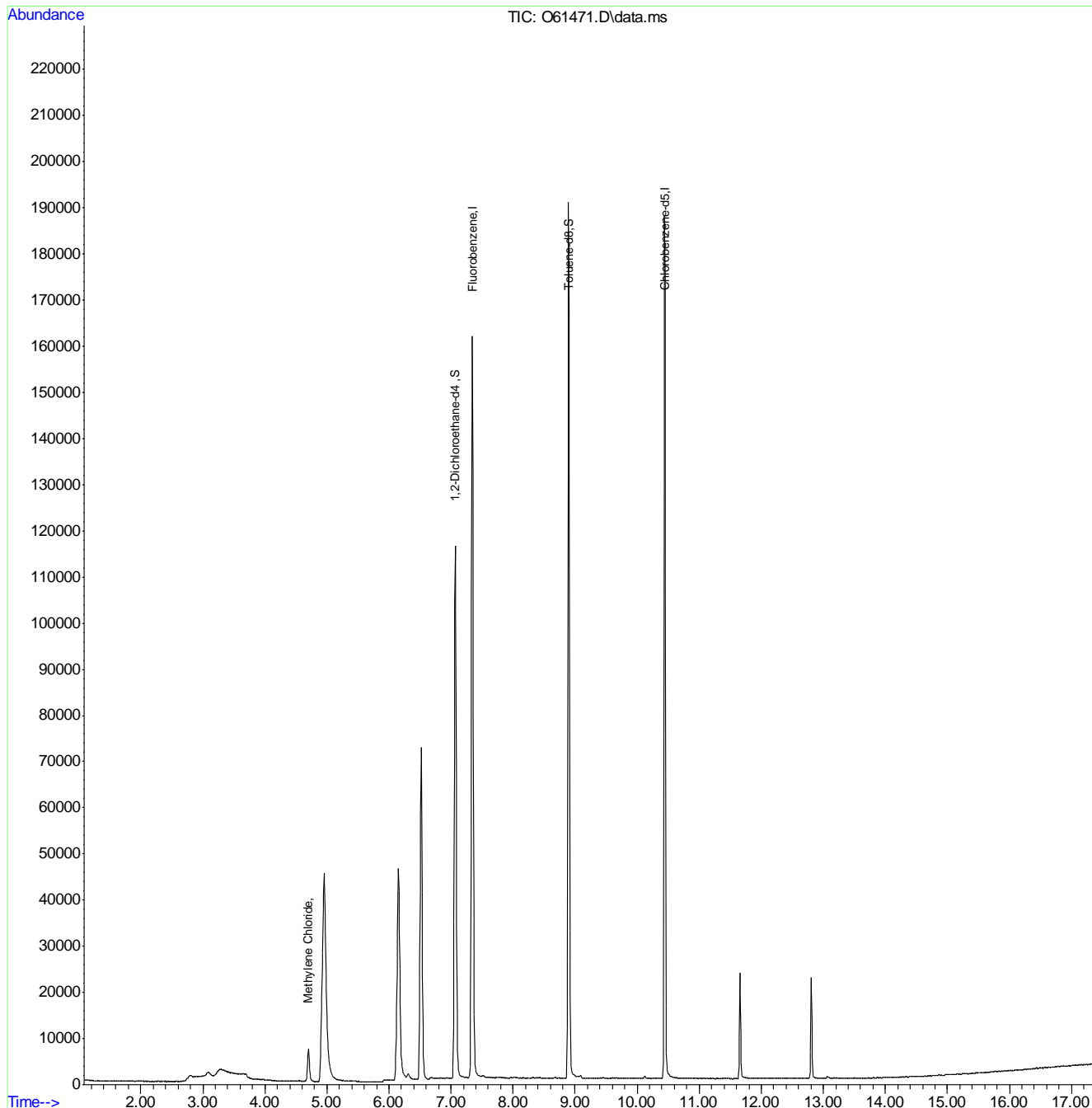
7.1.6
7

Quantitation Report (QT Reviewed)

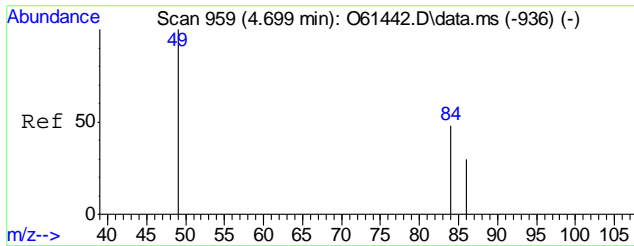
Data Path : C:\msdchem\2\data\092220\
 Data File : O61471.D
 Acq On : 22 Sep 2020 6:50 pm
 Operator : JuanG
 Sample : fa79006-6
 Misc : MS47270,VO2366,,,,,
 ALS Vial : 12 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 23 17:51:36 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Mon Sep 21 11:01:30 2020
 Response via : Initial Calibration

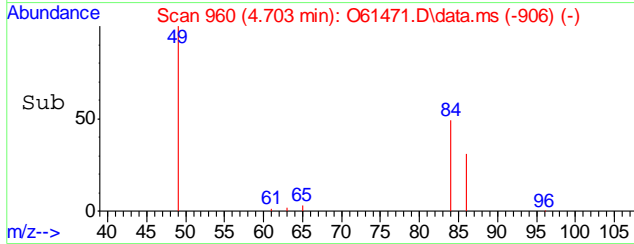
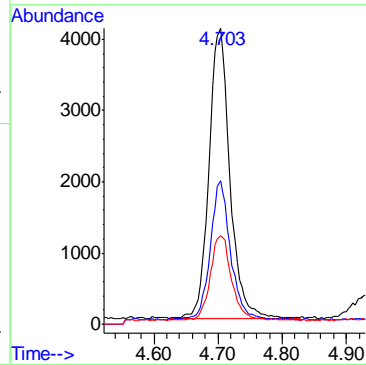
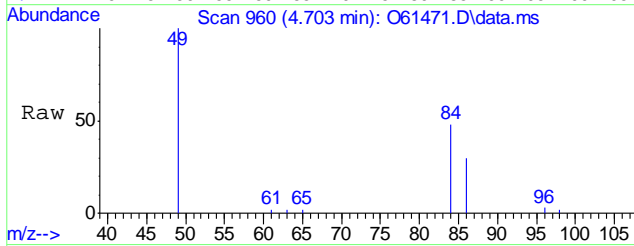


7.16
7



#5
 Methylene Chloride
 Concen: 0.19 ug/L
 RT: 4.703 min Scan# 960
 Delta R.T. 0.004 min
 Lab File: O61471.D
 Acq: 22 Sep 2020 6:50 pm

Tgt Ion	Resp	Lower	Upper
49	9208		
84	47.7	17.8	77.8
86	29.3	0.3	60.3



7.1.6
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\092220\
Data File : O61472.D
Acq On : 22 Sep 2020 7:11 pm
Operator : JuanG
Sample : fa79006-7 Inst : MSVOA12
Misc : MS47270,VO2366,,,,,
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 23 17:51:53 2020
Quant Method : C:\msdchem\2\methods\SIMCL091820.M
Quant Title : Standard Methods 6200B
QLast Update : Mon Sep 21 11:01:30 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.345	96	224486	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.444	117	172421	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.069	65	106618	5.79	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	115.80%	
19) Toluene-d8	8.899	98	185448	5.19	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	103.80%	
Target Compounds						
5) Methylene Chloride	4.703	49	10325	0.21	ug/L	93
7) 1,1-Dichloroethane	5.514	63	18045	0.49	ug/L	99
8) cis-1,2-Dichloroethene	6.065	96	32411	1.82	ug/L	96
9) Chloroform	6.332	83	11645	0.36	ug/L	93
10) Carbon Tetrachloride	6.510	117	1434	0.06	ug/L	96
14) 1,2-Dichloroethane	7.138	62	4994	0.17	ug/L	98
15) Trichloroethene	7.513	95	30094	1.64	ug/L	99
16) 1,2-Dichloropropane	8.043	63	1101	0.06	ug/L	90

(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.17
7

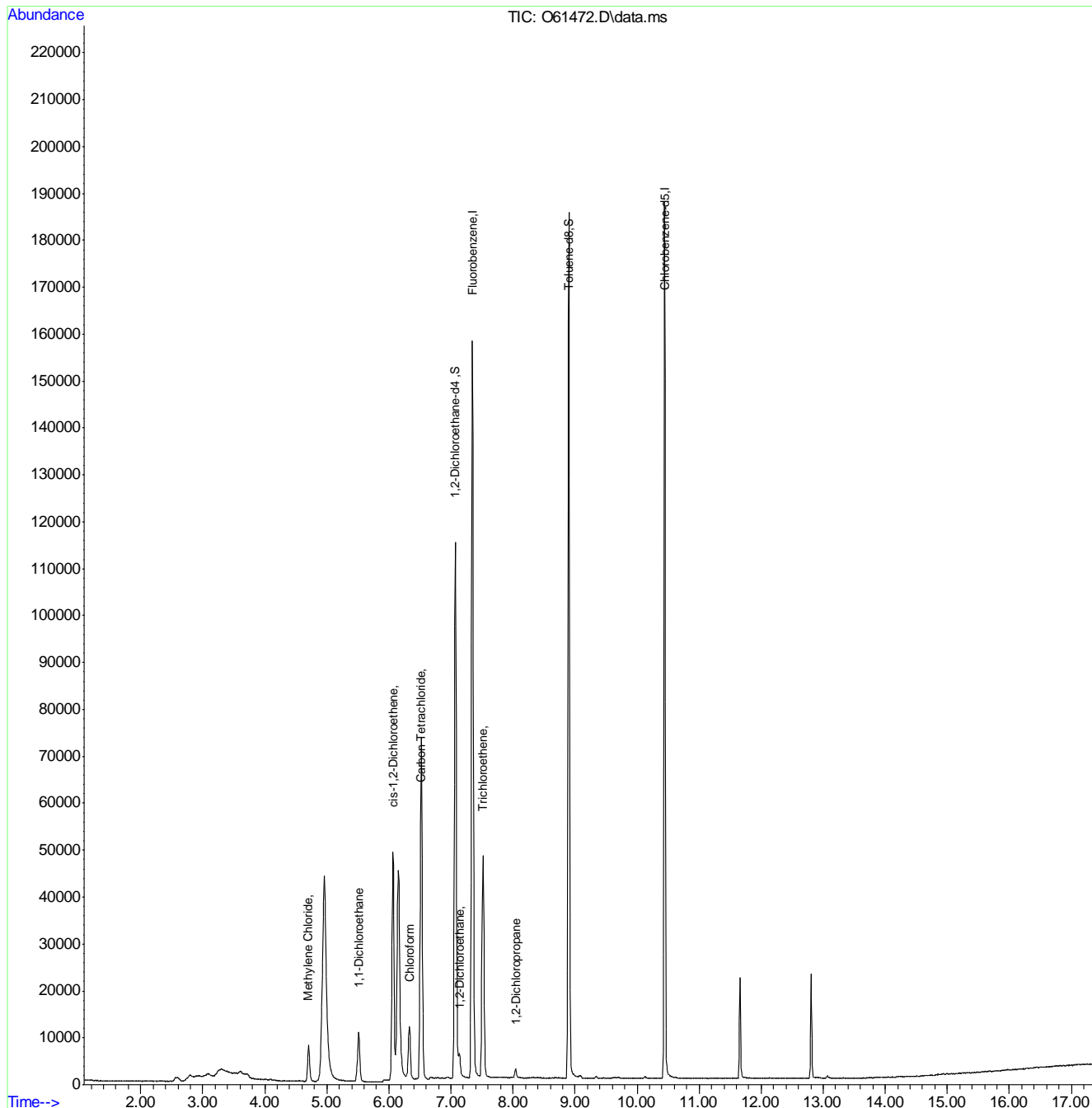


Quantitation Report (QT Reviewed)

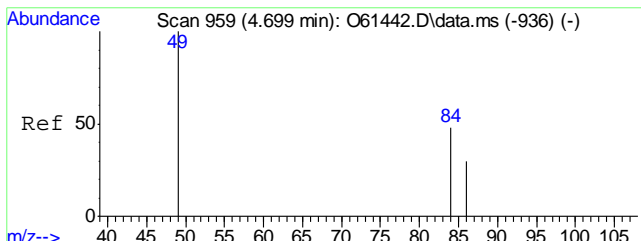
Data Path : C:\msdchem\2\data\092220\
 Data File : O61472.D
 Acq On : 22 Sep 2020 7:11 pm
 Operator : JuanG
 Sample : fa79006-7
 Misc : MS47270,VO2366,,,,,
 ALS Vial : 13 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 23 17:51:53 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Mon Sep 21 11:01:30 2020
 Response via : Initial Calibration

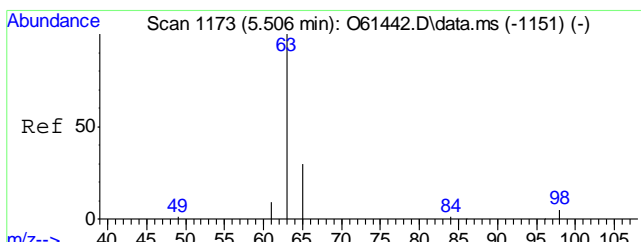
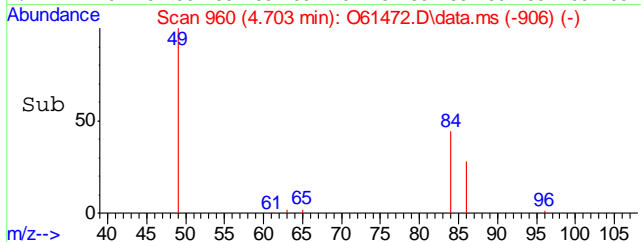
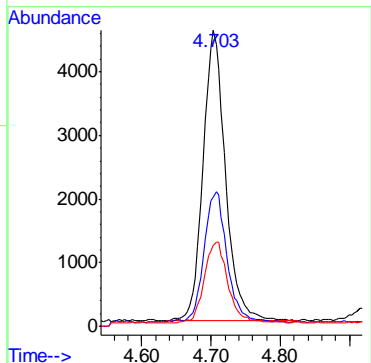
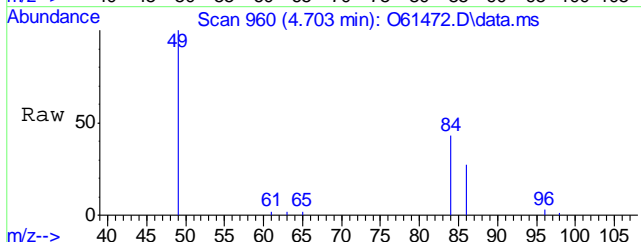


717
7



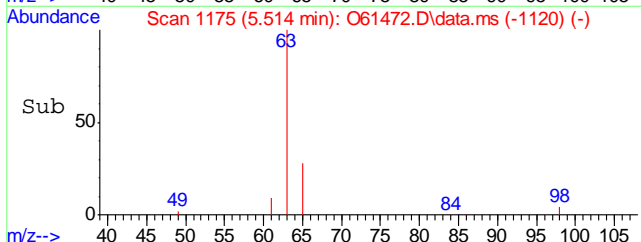
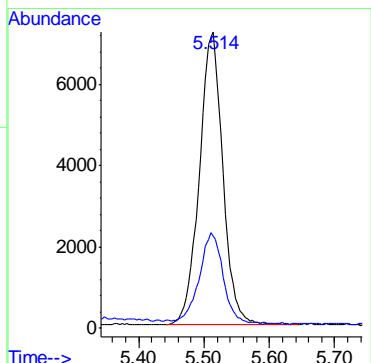
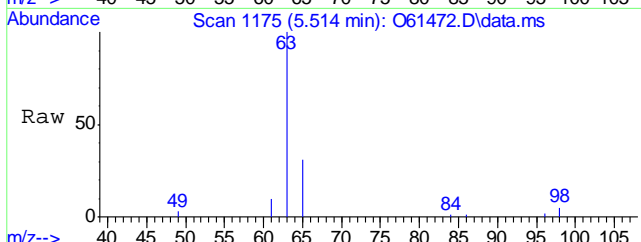
#5
 Methylene Chloride
 Concen: 0.21 ug/L
 RT: 4.703 min Scan# 960
 Delta R.T. 0.004 min
 Lab File: O61472.D
 Acq: 22 Sep 2020 7:11 pm

Tgt Ion	Resp	Lower	Upper
49	10325		
84	42.6	17.8	77.8
86	26.7	0.3	60.3

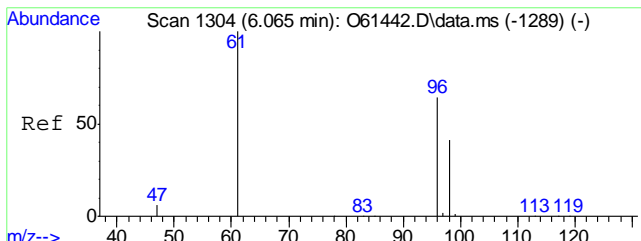


#7
 1,1-Dichloroethane
 Concen: 0.49 ug/L
 RT: 5.514 min Scan# 1175
 Delta R.T. 0.008 min
 Lab File: O61472.D
 Acq: 22 Sep 2020 7:11 pm

Tgt Ion	Resp	Lower	Upper
63	18045		
65	29.6	0.2	60.2

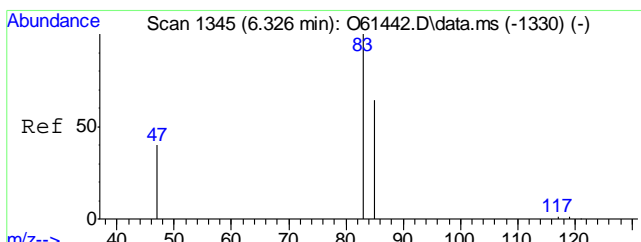
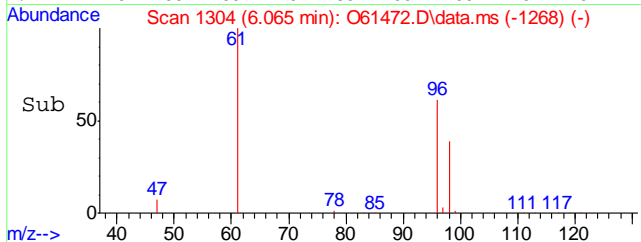
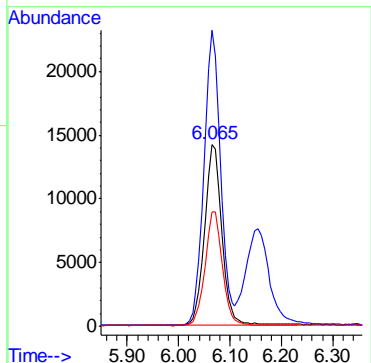
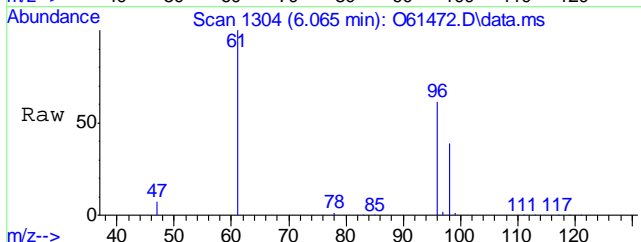


7.17



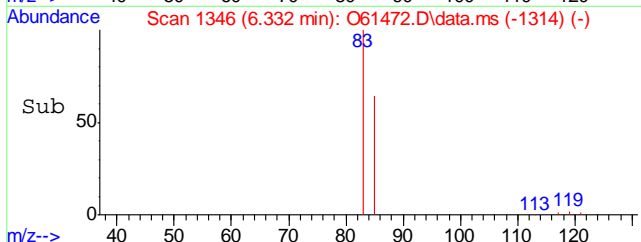
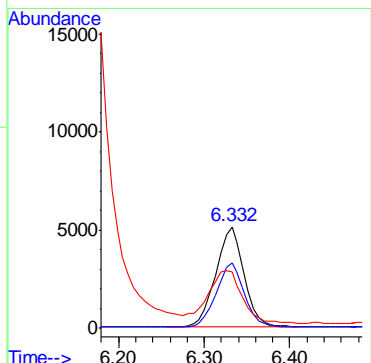
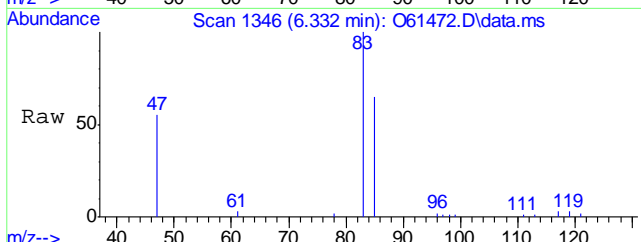
#8
 cis-1,2-Dichloroethene
 Concen: 1.82 ug/L
 RT: 6.065 min Scan# 1304
 Delta R.T. 0.000 min
 Lab File: O61472.D
 Acq: 22 Sep 2020 7:11 pm

Tgt Ion	Resp	Lower	Upper
96	32411		
96	100		
61	163.3	126.5	186.5
98	63.2	34.2	94.2

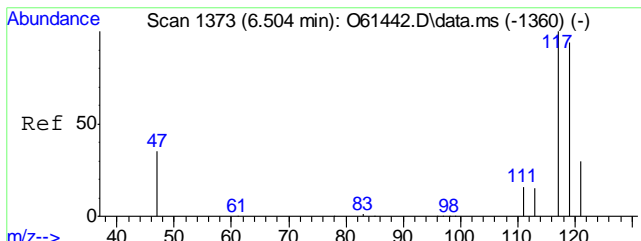


#9
 Chloroform
 Concen: 0.36 ug/L
 RT: 6.332 min Scan# 1346
 Delta R.T. 0.006 min
 Lab File: O61472.D
 Acq: 22 Sep 2020 7:11 pm

Tgt Ion	Resp	Lower	Upper
83	11645		
83	100		
85	64.2	34.2	94.2
47	51.0	10.4	70.4

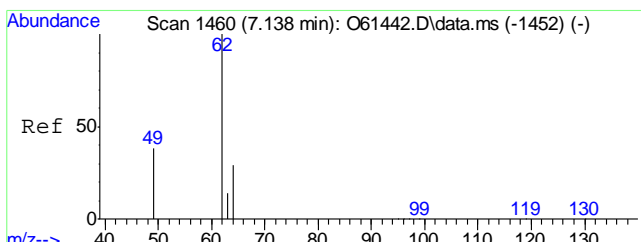
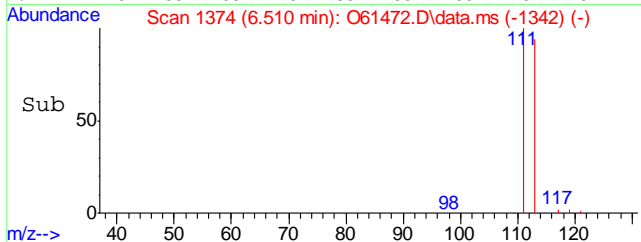
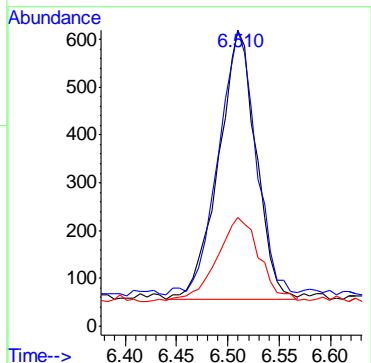
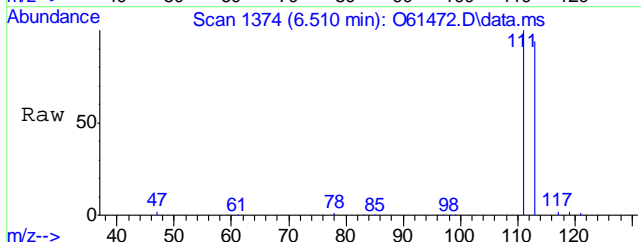


7.17
 7



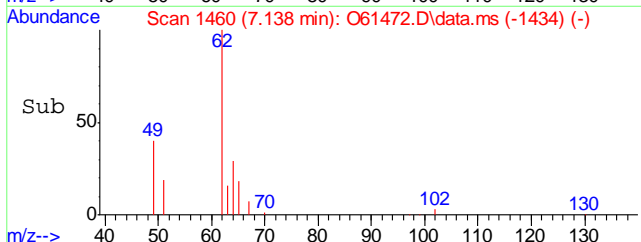
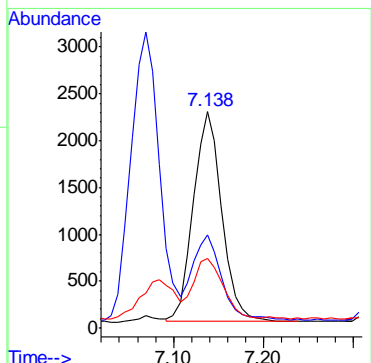
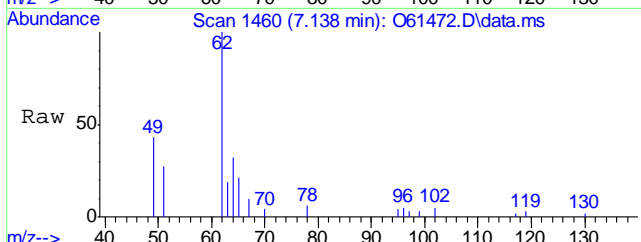
#10
 Carbon Tetrachloride
 Concen: 0.06 ug/L
 RT: 6.510 min Scan# 1374
 Delta R.T. 0.006 min
 Lab File: O61472.D
 Acq: 22 Sep 2020 7:11 pm

Tgt Ion	Resp	Lower	Upper
117	1434		
119	98.2	64.4	124.4
121	31.1	0.0	59.7



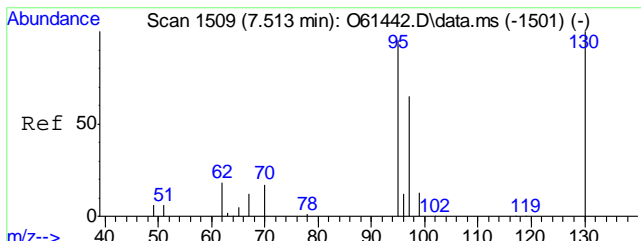
#14
 1,2-Dichloroethane
 Concen: 0.17 ug/L
 RT: 7.138 min Scan# 1460
 Delta R.T. 0.000 min
 Lab File: O61472.D
 Acq: 22 Sep 2020 7:11 pm

Tgt Ion	Resp	Lower	Upper
62	4994		
49	39.7	9.3	69.3
64	28.0	0.0	59.6



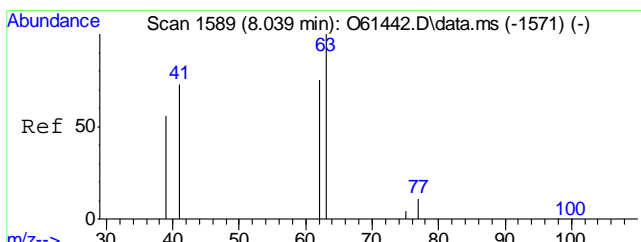
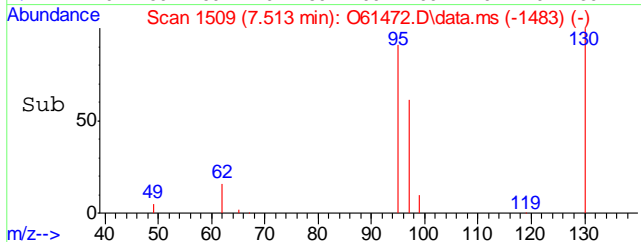
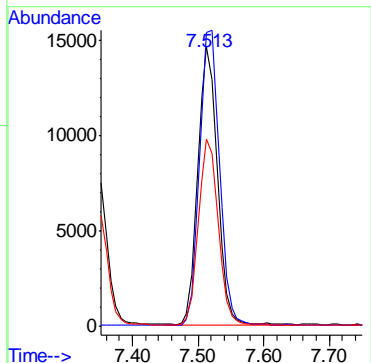
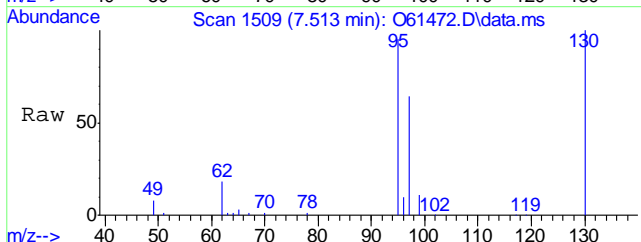
7.17





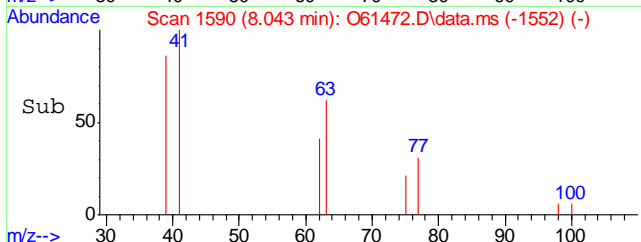
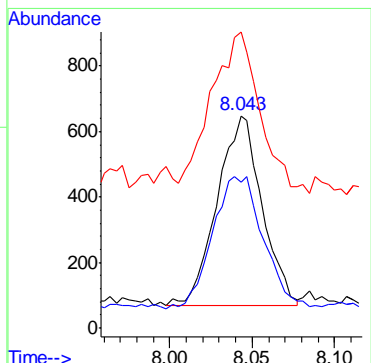
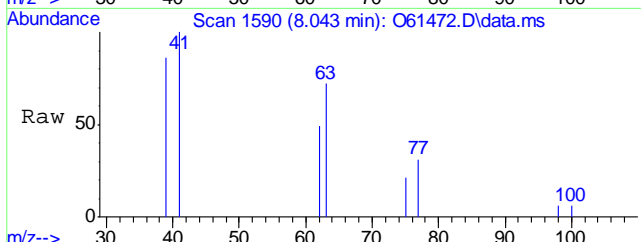
#15
 Trichloroethene
 Concen: 1.64 ug/L
 RT: 7.513 min Scan# 1509
 Delta R.T. 0.000 min
 Lab File: O61472.D
 Acq: 22 Sep 2020 7:11 pm

Tgt Ion	Resp	Lower	Upper
95	30094		
130	105.5	75.8	135.8
97	67.0	39.2	99.2



#16
 1,2-Dichloropropane
 Concen: 0.06 ug/L
 RT: 8.043 min Scan# 1590
 Delta R.T. 0.004 min
 Lab File: O61472.D
 Acq: 22 Sep 2020 7:11 pm

Tgt Ion	Resp	Lower	Upper
63	1101		
62	66.1	44.6	104.6
41	81.1	43.3	103.3



7.17

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\092220\
 Data File : O61473.D
 Acq On : 22 Sep 2020 7:31 pm
 Operator : JuanG
 Sample : fa79006-8 Inst : MSVOA12
 Misc : MS47270,VO2366,,,,,
 ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 23 10:31:31 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Mon Sep 21 11:01:30 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.345	96	219845	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.444	117	170318	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.069	65	105840	5.87	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	117.40%	
19) Toluene-d8	8.896	98	182595	5.17	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	103.40%	
Target Compounds						
						Qvalue
3) Chloromethane	2.795	50	10205	0.34	ug/L	94
5) Methylene Chloride	4.700	49	9965	0.21	ug/L	95
7) 1,1-Dichloroethane	5.510	63	20099	0.56	ug/L	98
8) cis-1,2-Dichloroethene	6.065	96	26391	1.51	ug/L	98
9) Chloroform	6.332	83	12980	0.41	ug/L	94
10) Carbon Tetrachloride	6.504	117	712	0.03	ug/L	98
14) 1,2-Dichloroethane	7.138	62	6081	0.21	ug/L	97
15) Trichloroethene	7.513	95	3088	0.17	ug/L	95
16) 1,2-Dichloropropane	8.039	63	711	0.04	ug/L	82

(#) = qualifier out of range (m) = manual integration (+) = signals summed

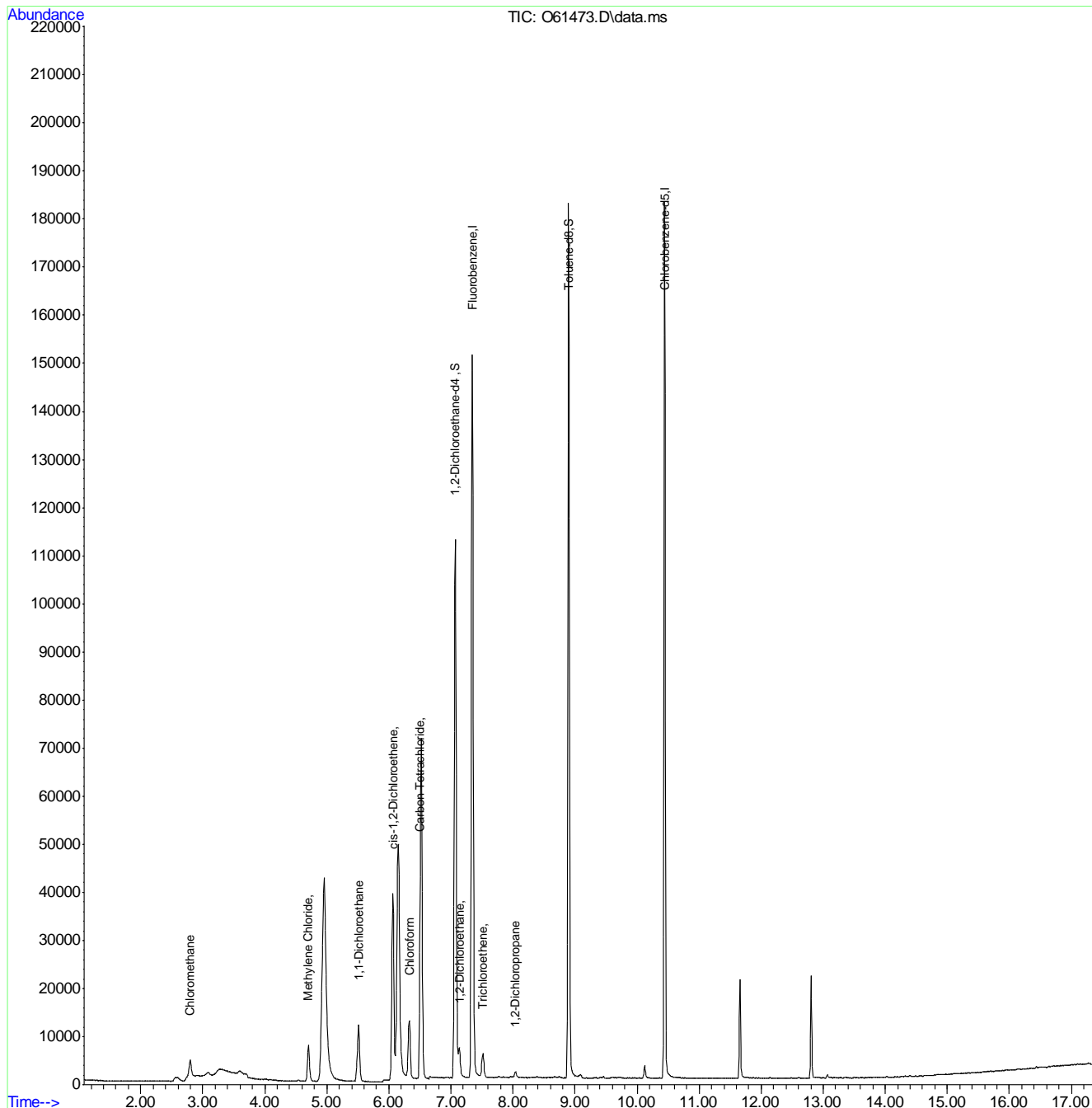
7.1.8
7

Quantitation Report (QT Reviewed)

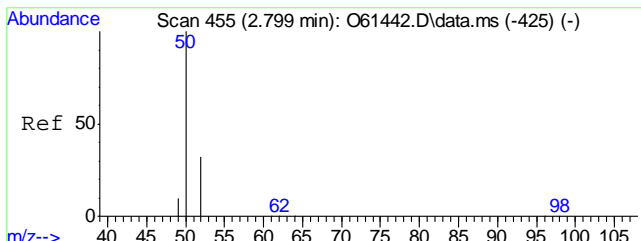
Data Path : C:\msdchem\2\data\092220\
 Data File : O61473.D
 Acq On : 22 Sep 2020 7:31 pm
 Operator : JuanG
 Sample : fa79006-8
 Misc : MS47270,VO2366,,,,,
 ALS Vial : 14 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 23 10:31:31 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Mon Sep 21 11:01:30 2020
 Response via : Initial Calibration

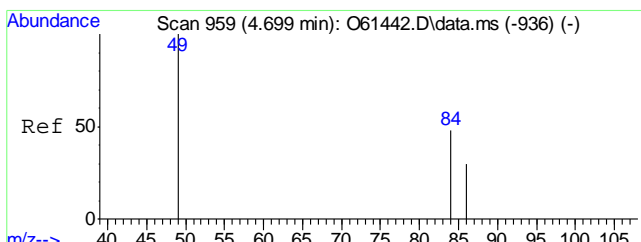
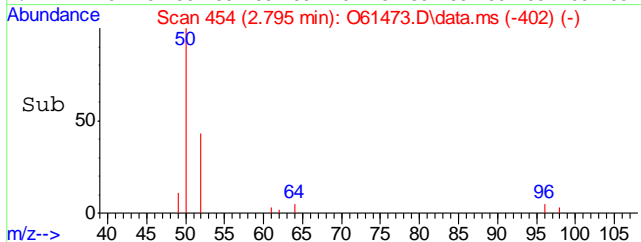
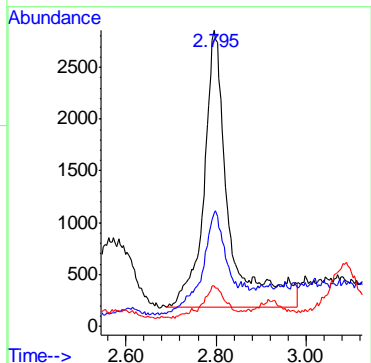
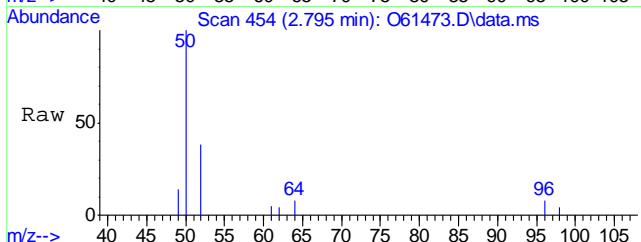


718
7



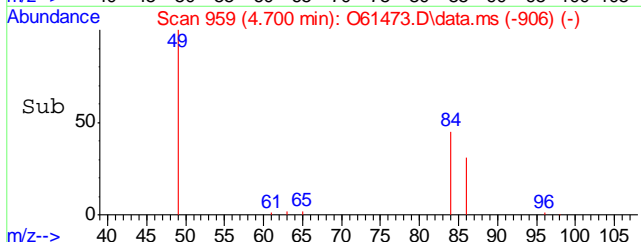
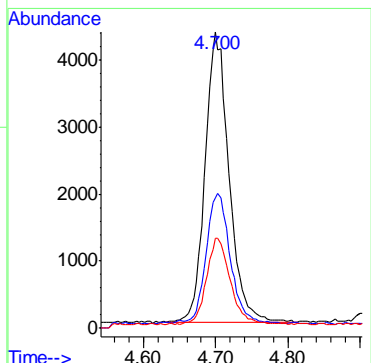
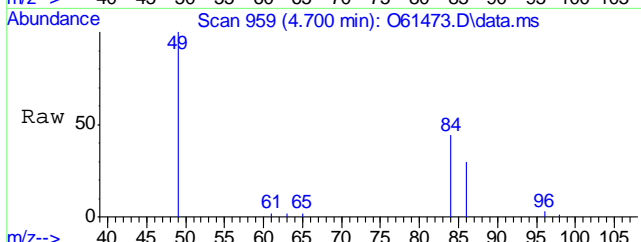
#3
Chloromethane
Concen: 0.34 ug/L
RT: 2.795 min Scan# 454
Delta R.T. -0.004 min
Lab File: O61473.D
Acq: 22 Sep 2020 7:31 pm

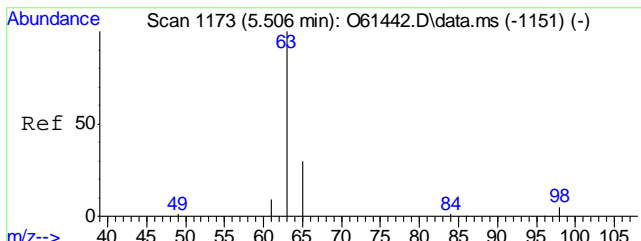
Tgt Ion	Resp	Lower	Upper
50	10205		
52	36.5	12.2	52.2
49	11.3	0.0	30.4



#5
Methylene Chloride
Concen: 0.21 ug/L
RT: 4.700 min Scan# 959
Delta R.T. 0.000 min
Lab File: O61473.D
Acq: 22 Sep 2020 7:31 pm

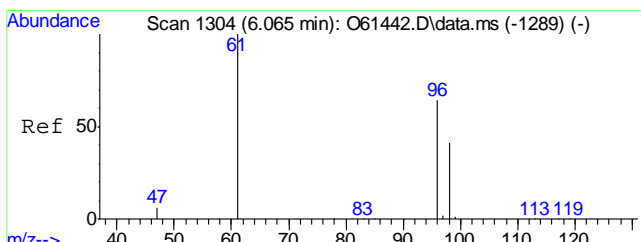
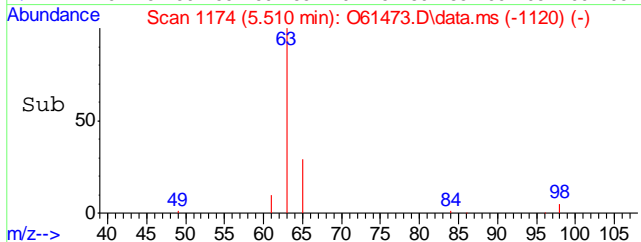
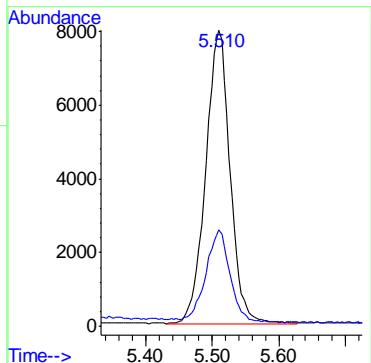
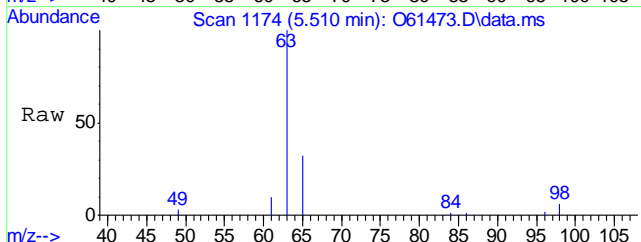
Tgt Ion	Resp	Lower	Upper
49	9965		
84	43.0	17.8	77.8
86	29.8	0.3	60.3





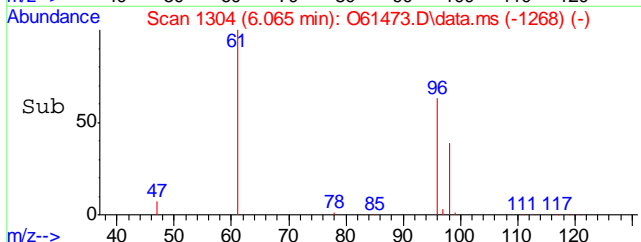
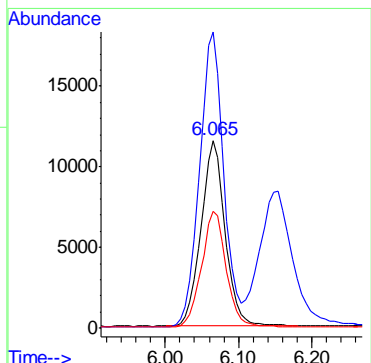
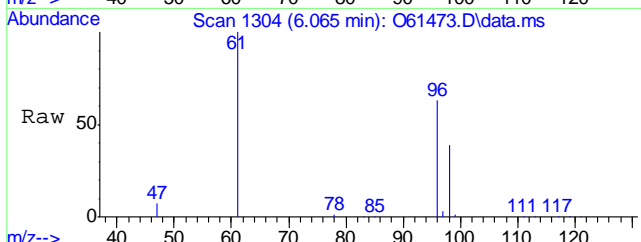
#7
 1,1-Dichloroethane
 Concen: 0.56 ug/L
 RT: 5.510 min Scan# 1174
 Delta R.T. 0.004 min
 Lab File: O61473.D
 Acq: 22 Sep 2020 7:31 pm

Tgt Ion	Resp	Lower	Upper
63	100		
65	31.4	0.2	60.2

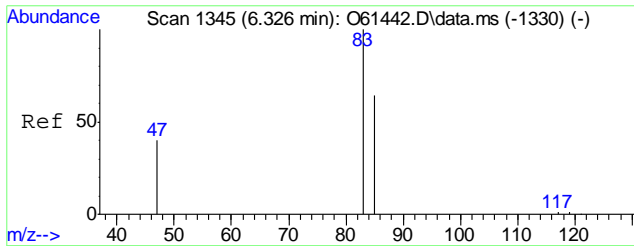


#8
 cis-1,2-Dichloroethene
 Concen: 1.51 ug/L
 RT: 6.065 min Scan# 1304
 Delta R.T. 0.000 min
 Lab File: O61473.D
 Acq: 22 Sep 2020 7:31 pm

Tgt Ion	Resp	Lower	Upper
96	100		
61	158.7	126.5	186.5
98	62.3	34.2	94.2

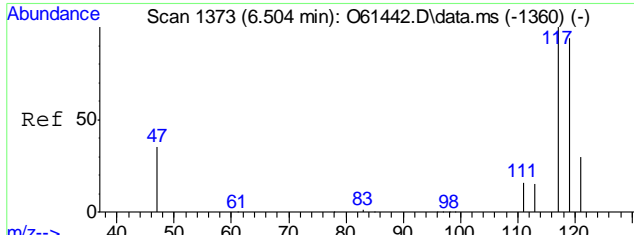
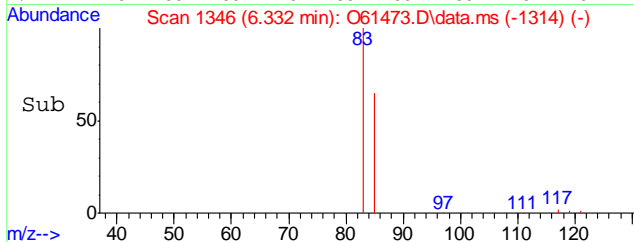
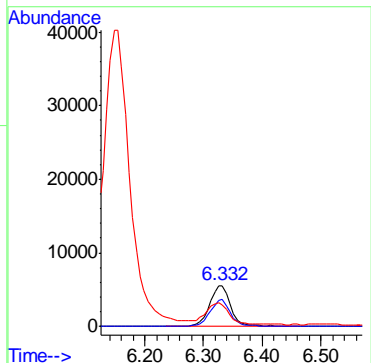
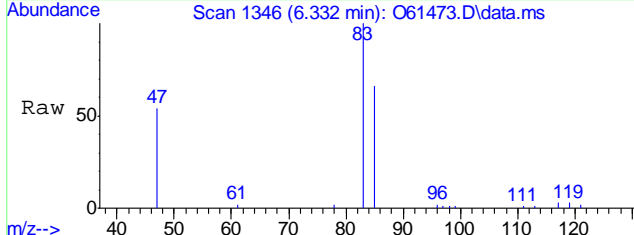


7.18
7



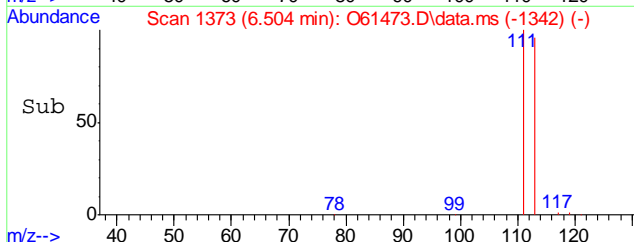
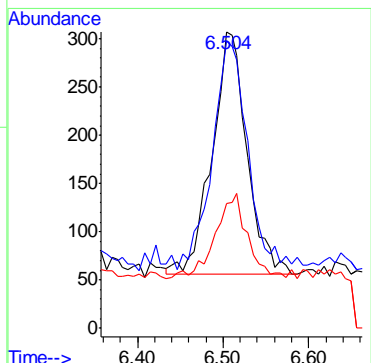
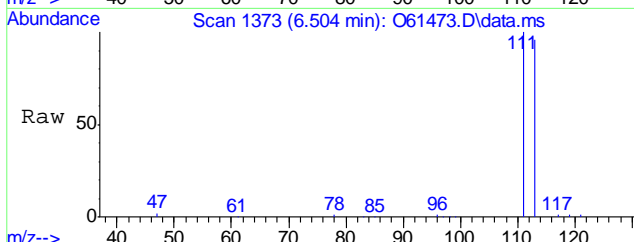
#9
 Chloroform
 Concen: 0.41 ug/L
 RT: 6.332 min Scan# 1346
 Delta R.T. 0.006 min
 Lab File: O61473.D
 Acq: 22 Sep 2020 7:31 pm

Tgt Ion	Resp	Lower	Upper
83	12980		
85	65.3	34.2	94.2
47	49.0	10.4	70.4

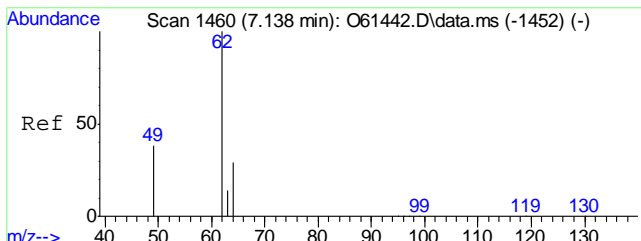


#10
 Carbon Tetrachloride
 Concen: 0.03 ug/L
 RT: 6.504 min Scan# 1373
 Delta R.T. 0.000 min
 Lab File: O61473.D
 Acq: 22 Sep 2020 7:31 pm

Tgt Ion	Resp	Lower	Upper
117	712		
119	92.0	64.4	124.4
121	30.7	0.0	59.7

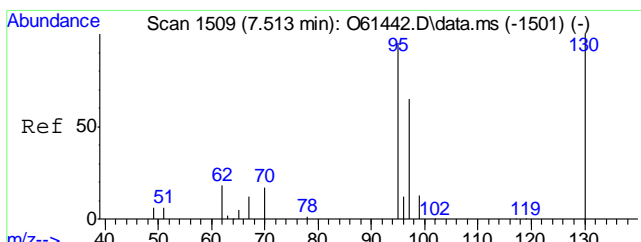
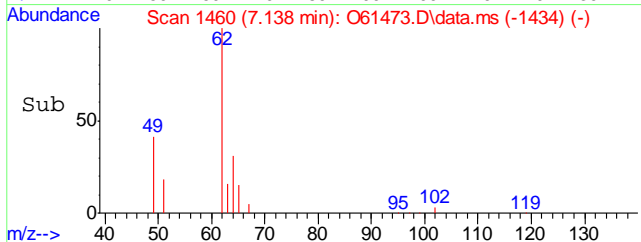
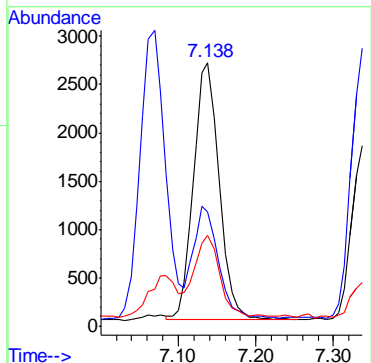
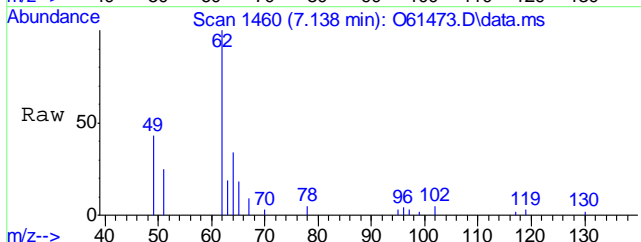


7.1.8
7



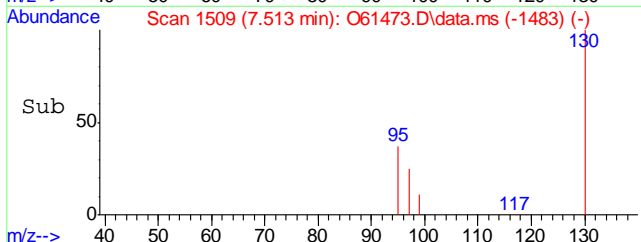
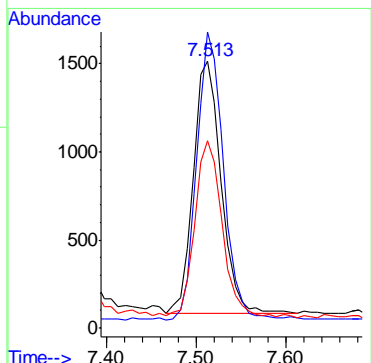
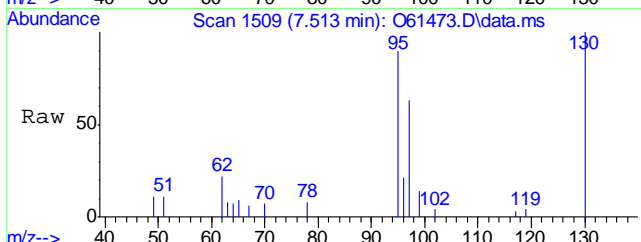
#14
 1,2-Dichloroethane
 Concen: 0.21 ug/L
 RT: 7.138 min Scan# 1460
 Delta R.T. 0.000 min
 Lab File: O61473.D
 Acq: 22 Sep 2020 7:31 pm

Tgt Ion	Resp	Lower	Upper
62	6081		
49	41.0	9.3	69.3
64	31.7	0.0	59.6

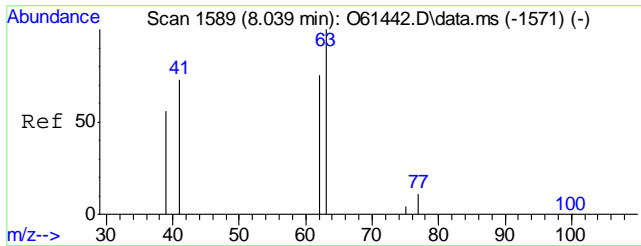


#15
 Trichloroethene
 Concen: 0.17 ug/L
 RT: 7.513 min Scan# 1509
 Delta R.T. 0.000 min
 Lab File: O61473.D
 Acq: 22 Sep 2020 7:31 pm

Tgt Ion	Resp	Lower	Upper
95	3088		
130	114.2	75.8	135.8
97	70.1	39.2	99.2

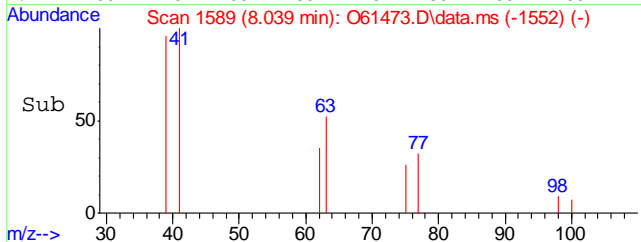
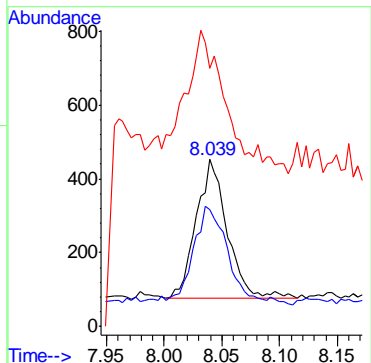
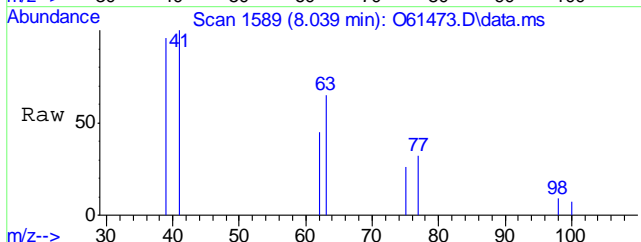


7.18
7



#16
 1,2-Dichloropropane
 Concen: 0.04 ug/L
 RT: 8.039 min Scan# 1589
 Delta R.T. 0.000 min
 Lab File: O61473.D
 Acq: 22 Sep 2020 7:31 pm

Tgt Ion	Resp	Lower	Upper
63	100		
62	65.1	44.6	104.6
41	53.2	43.3	103.3



7.1.8
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\092220\
Data File : O61474.D
Acq On : 22 Sep 2020 7:55 pm
Operator : JuanG
Sample : fa79006-9 Inst : MSVOA12
Misc : MS47270,VO2366,,,,,
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Sep 23 17:52:39 2020
Quant Method : C:\msdchem\2\methods\SIMCL091820.M
Quant Title : Standard Methods 6200B
QLast Update : Mon Sep 21 11:01:30 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.345	96	212853	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.444	117	168017	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.069	65	104400	5.98	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	119.60%	
19) Toluene-d8	8.896	98	178362	5.12	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	102.40%	
Target Compounds						
5) Methylene Chloride	4.703	49	43245	0.94	ug/L	97
7) 1,1-Dichloroethane	5.510	63	19162	0.55	ug/L	98
8) cis-1,2-Dichloroethene	6.065	96	25108	1.49	ug/L	94
9) Chloroform	6.332	83	9827	0.32	ug/L	92
10) Carbon Tetrachloride	6.504	117	1752	0.08	ug/L	93
14) 1,2-Dichloroethane	7.130	62	3204	0.11	ug/L	91
15) Trichloroethene	7.513	95	80060	4.60	ug/L	96
16) 1,2-Dichloropropane	8.043	63	1290	0.07	ug/L	91
21) Tetrachloroethene	9.341	166	17649	1.05	ug/L	97
22) 1,4-Dichlorobenzene	12.824	146	3069	0.09	ug/L	95

(#) = qualifier out of range (m) = manual integration (+) = signals summed



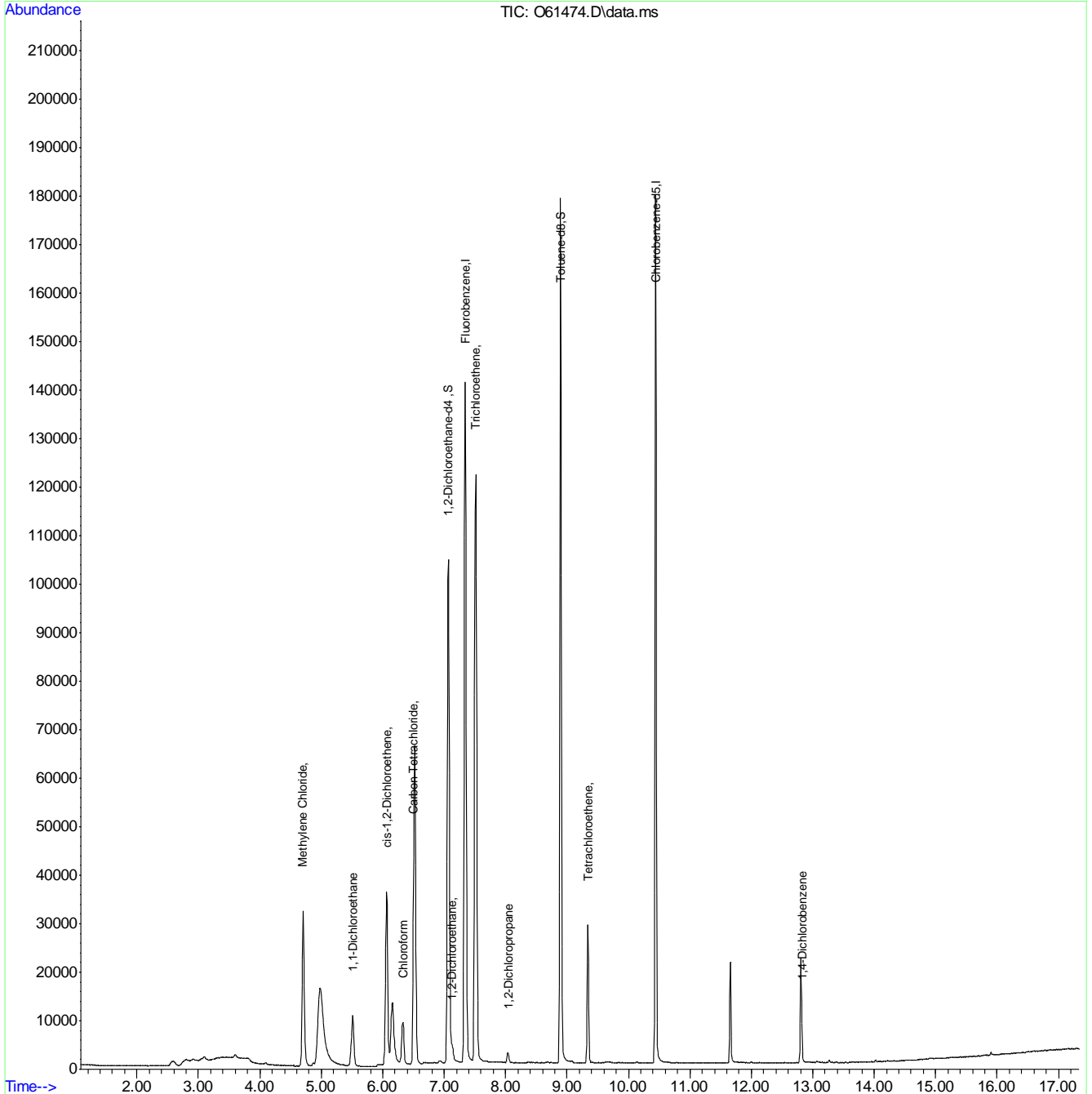
7.1.9
7

Quantitation Report (QT Reviewed)

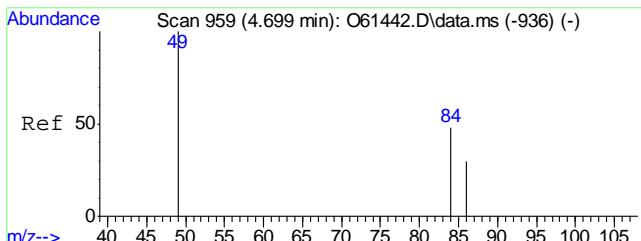
Data Path : C:\msdchem\2\data\092220\
 Data File : O61474.D
 Acq On : 22 Sep 2020 7:55 pm
 Operator : JuanG
 Sample : fa79006-9
 Misc : MS47270,VO2366,,,,,
 ALS Vial : 15 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 23 17:52:39 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Mon Sep 21 11:01:30 2020
 Response via : Initial Calibration

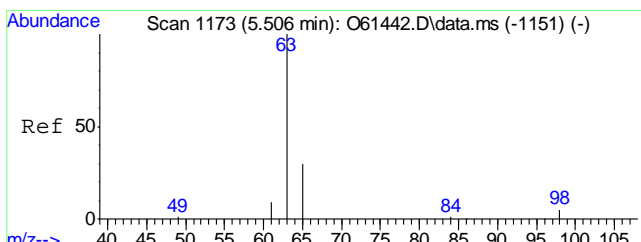
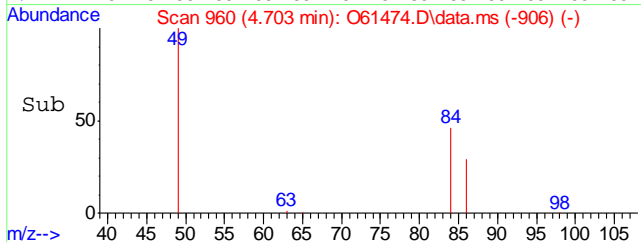
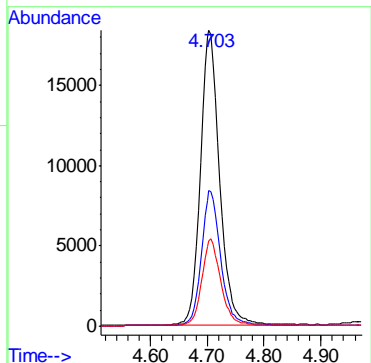
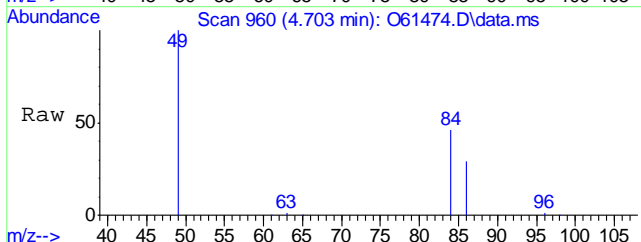


7 6 1 7



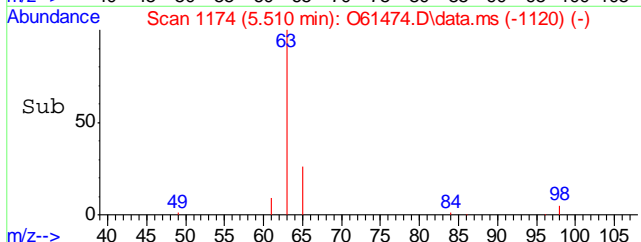
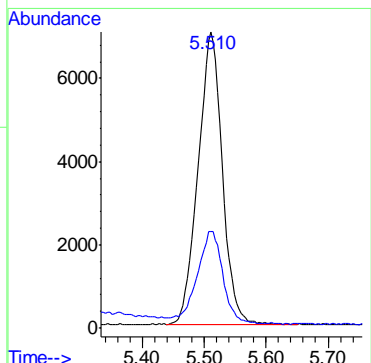
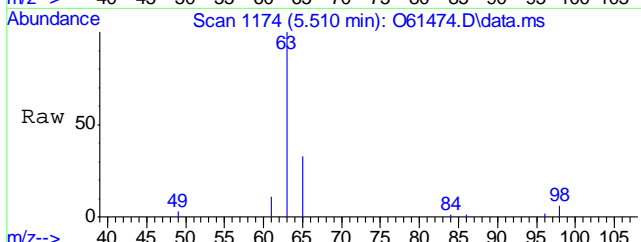
#5
 Methylene Chloride
 Concen: 0.94 ug/L
 RT: 4.703 min Scan# 960
 Delta R.T. 0.004 min
 Lab File: O61474.D
 Acq: 22 Sep 2020 7:55 pm

Tgt Ion	Resp	Lower	Upper
49	43245		
84	45.7	17.8	77.8
86	28.7	0.3	60.3

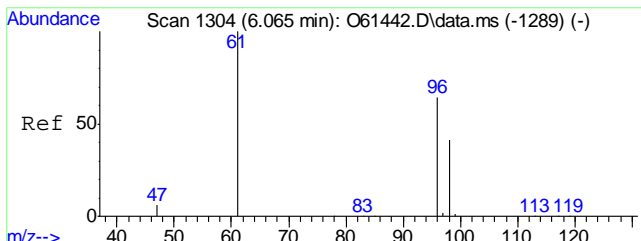


#7
 1,1-Dichloroethane
 Concen: 0.55 ug/L
 RT: 5.510 min Scan# 1174
 Delta R.T. 0.004 min
 Lab File: O61474.D
 Acq: 22 Sep 2020 7:55 pm

Tgt Ion	Resp	Lower	Upper
63	19162		
65	31.4	0.2	60.2

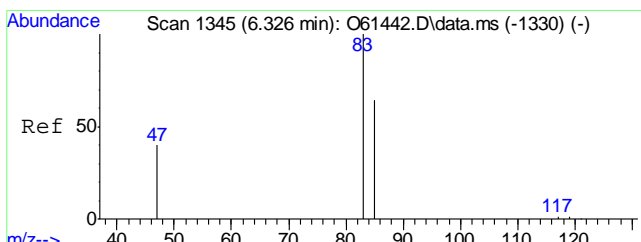
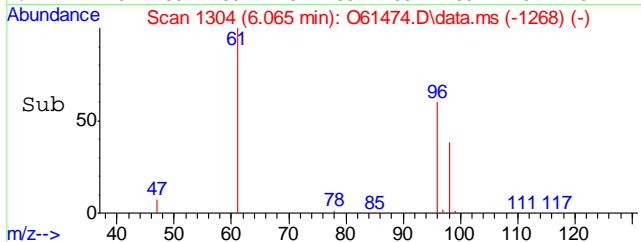
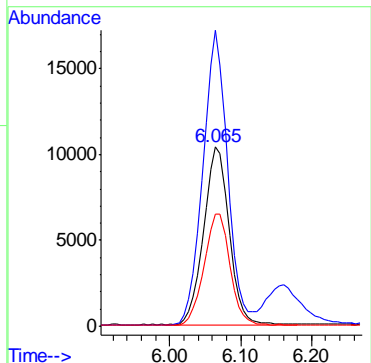
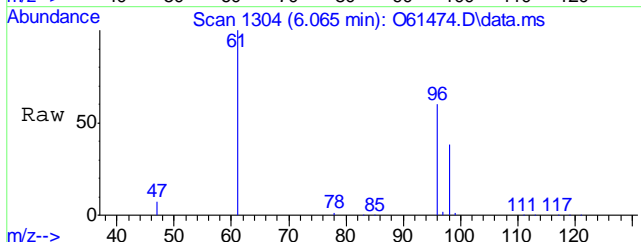


7.19
7



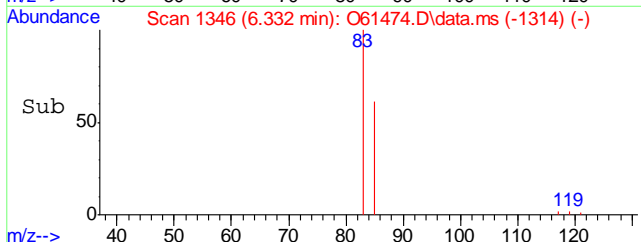
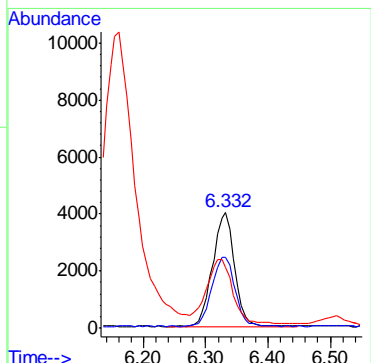
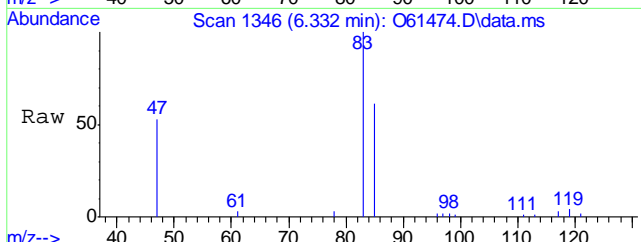
#8
 cis-1,2-Dichloroethene
 Concen: 1.49 ug/L
 RT: 6.065 min Scan# 1304
 Delta R.T. 0.000 min
 Lab File: O61474.D
 Acq: 22 Sep 2020 7:55 pm

Tgt Ion	Resp	Lower	Upper
96	25108		
96	100		
61	166.3	126.5	186.5
98	63.0	34.2	94.2

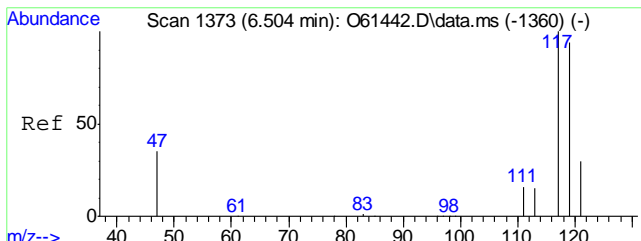


#9
 Chloroform
 Concen: 0.32 ug/L
 RT: 6.332 min Scan# 1346
 Delta R.T. 0.006 min
 Lab File: O61474.D
 Acq: 22 Sep 2020 7:55 pm

Tgt Ion	Resp	Lower	Upper
83	9827		
83	100		
85	60.7	34.2	94.2
47	49.7	10.4	70.4

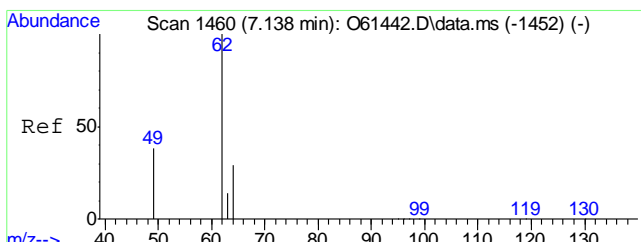
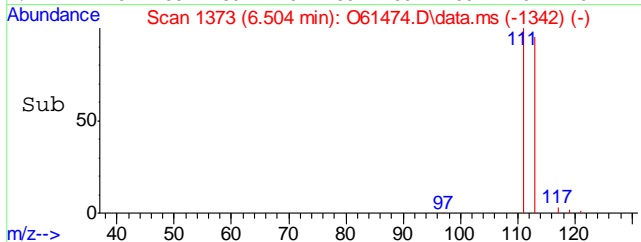
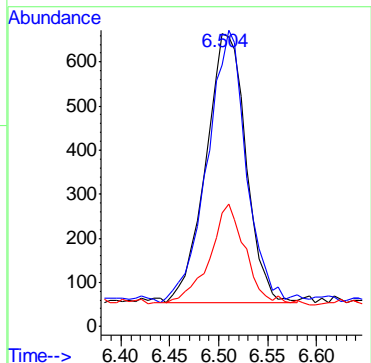
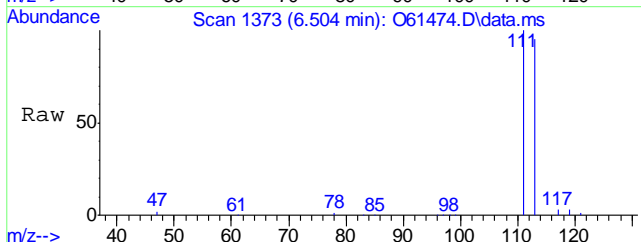


7.19
7



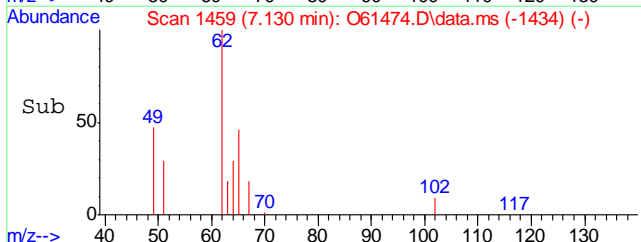
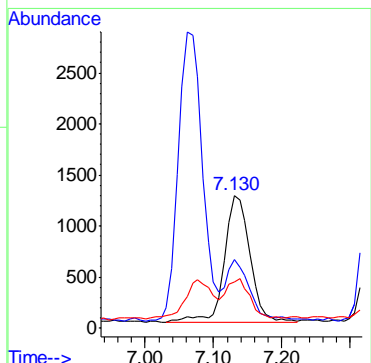
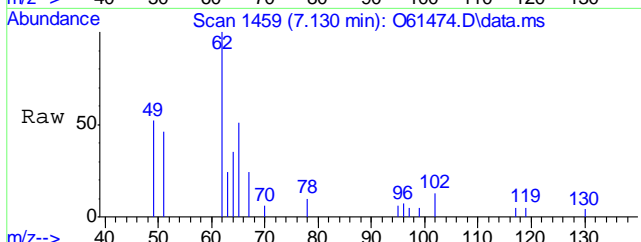
#10
 Carbon Tetrachloride
 Concen: 0.08 ug/L
 RT: 6.504 min Scan# 1373
 Delta R.T. 0.000 min
 Lab File: O61474.D
 Acq: 22 Sep 2020 7:55 pm

Tgt Ion	Resp	Lower	Upper
117	1752		
119	86.9	64.4	124.4
121	33.2	0.0	59.7

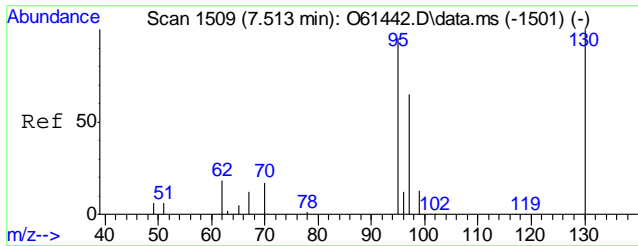


#14
 1,2-Dichloroethane
 Concen: 0.11 ug/L
 RT: 7.130 min Scan# 1459
 Delta R.T. -0.008 min
 Lab File: O61474.D
 Acq: 22 Sep 2020 7:55 pm

Tgt Ion	Resp	Lower	Upper
62	3204		
49	47.1	9.3	69.3
64	27.4	0.0	59.6

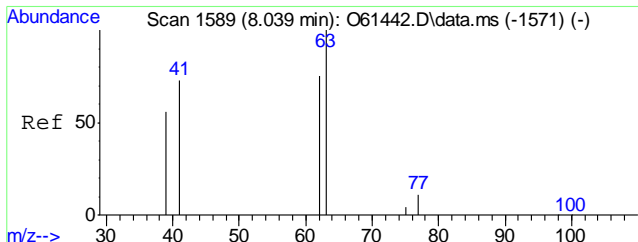
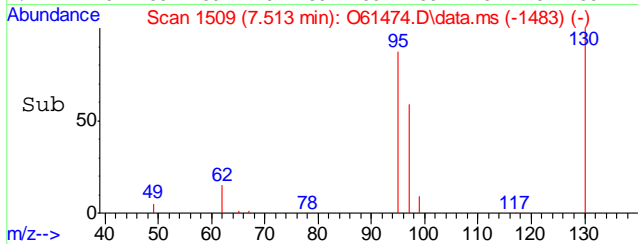
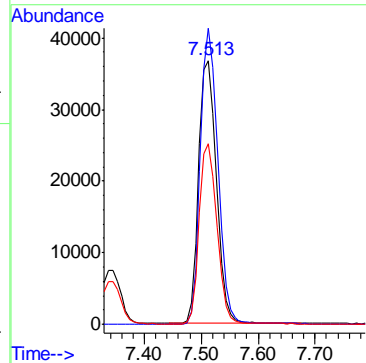
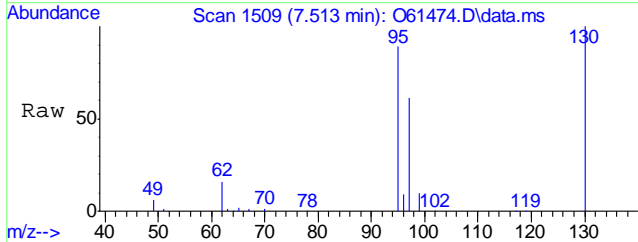


7.19
7



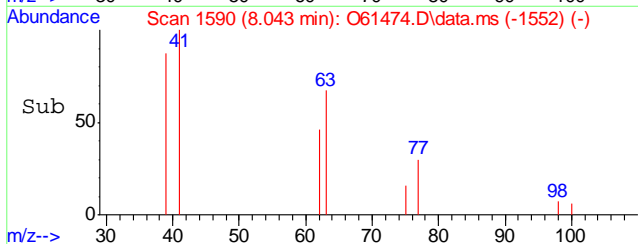
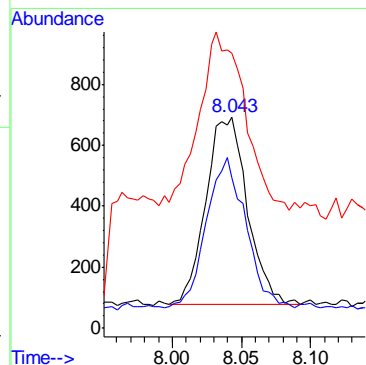
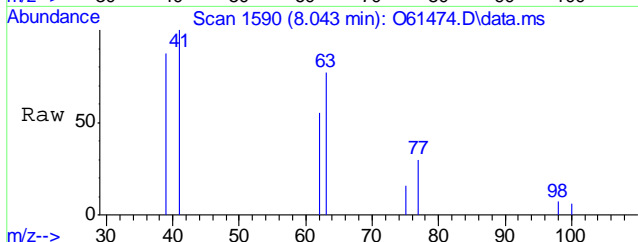
#15
 Trichloroethene
 Concen: 4.60 ug/L
 RT: 7.513 min Scan# 1509
 Delta R.T. 0.000 min
 Lab File: O61474.D
 Acq: 22 Sep 2020 7:55 pm

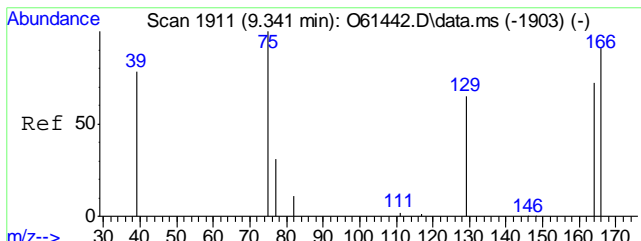
Tgt Ion	Resp	Lower	Upper
95	80060		
95	100		
130	112.4	75.8	135.8
97	68.4	39.2	99.2



#16
 1,2-Dichloropropane
 Concen: 0.07 ug/L
 RT: 8.043 min Scan# 1590
 Delta R.T. 0.004 min
 Lab File: O61474.D
 Acq: 22 Sep 2020 7:55 pm

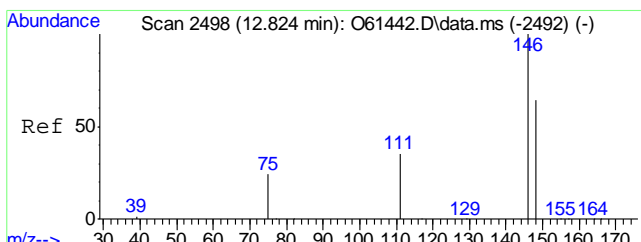
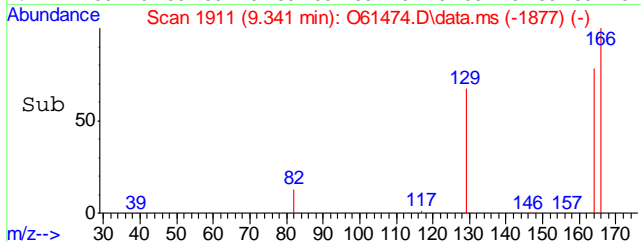
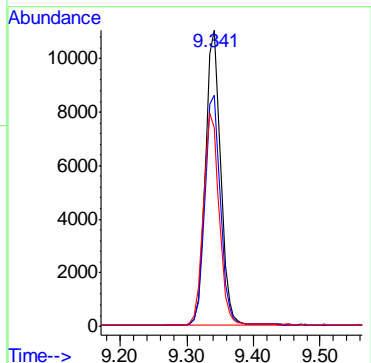
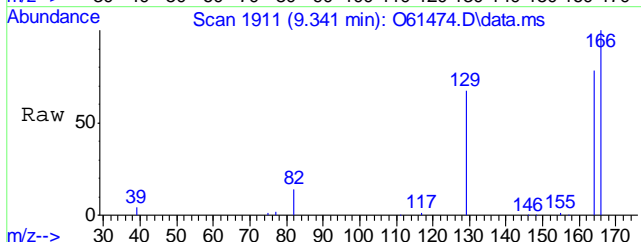
Tgt Ion	Resp	Lower	Upper
63	1290		
63	100		
62	68.4	44.6	104.6
41	82.2	43.3	103.3





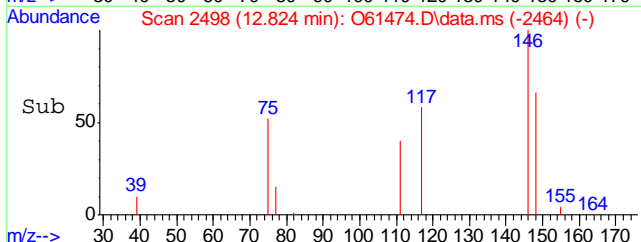
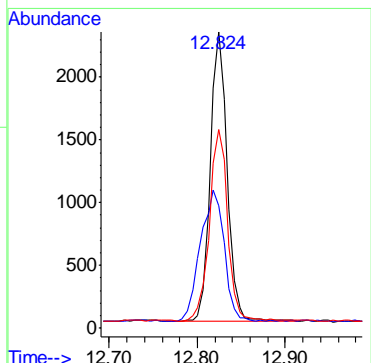
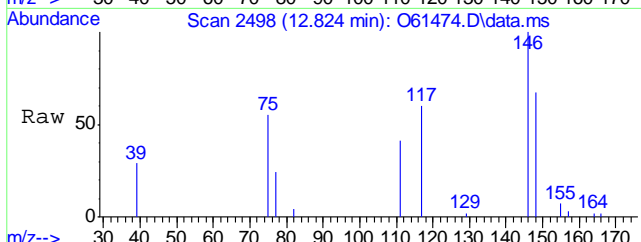
#21
 Tetrachloroethene
 Concen: 1.05 ug/L
 RT: 9.341 min Scan# 1911
 Delta R.T. 0.000 min
 Lab File: O61474.D
 Acq: 22 Sep 2020 7:55 pm

Tgt Ion	Resp	Lower	Upper
166	17649		
166	100		
164	77.8	48.9	108.9
129	66.8	41.3	101.3



#22
 1,4-Dichlorobenzene
 Concen: 0.09 ug/L
 RT: 12.824 min Scan# 2498
 Delta R.T. 0.000 min
 Lab File: O61474.D
 Acq: 22 Sep 2020 7:55 pm

Tgt Ion	Resp	Lower	Upper
146	3069		
146	100		
111	39.9	14.9	54.9
148	66.1	44.1	84.1



7.19
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\092220\
Data File : O61475.D
Acq On : 22 Sep 2020 8:15 pm
Operator : JuanG
Sample : fa79006-10 Inst : MSVOA12
Misc : MS47270,VO2366,,,,,
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 23 17:53:03 2020
Quant Method : C:\msdchem\2\methods\SIMCL091820.M
Quant Title : Standard Methods 6200B
QLast Update : Mon Sep 21 11:01:30 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.344	96	202920	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.442	117	160760	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.069	65	101600	6.11	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	122.20%	
19) Toluene-d8	8.896	98	170404	5.11	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	102.20%	
Target Compounds						
3) Chloromethane	2.799	50	6366	0.23	ug/L	81
4) 1,1-Dichloroethene	4.092	61	959	0.04	ug/L	93
5) Methylene Chloride	4.707	49	9031	0.20	ug/L	96
6) trans-1,2-Dichloroethene	4.869	61	714	0.03	ug/L	92
7) 1,1-Dichloroethane	5.514	63	14647	0.44	ug/L	99
8) cis-1,2-Dichloroethene	6.071	96	19930	1.24	ug/L	99
9) Chloroform	6.332	83	8492	0.29	ug/L	92
10) Carbon Tetrachloride	6.510	117	1862	0.09	ug/L	96
14) 1,2-Dichloroethane	7.138	62	6968	0.26	ug/L	97
15) Trichloroethene	7.513	95	91559	5.51	ug/L	98
16) 1,2-Dichloropropane	8.043	63	1134	0.06	ug/L	94
21) Tetrachloroethene	9.338	166	12870	0.80	ug/L	97
22) 1,4-Dichlorobenzene	12.822	146	2451	0.08	ug/L	93

(#) = qualifier out of range (m) = manual integration (+) = signals summed

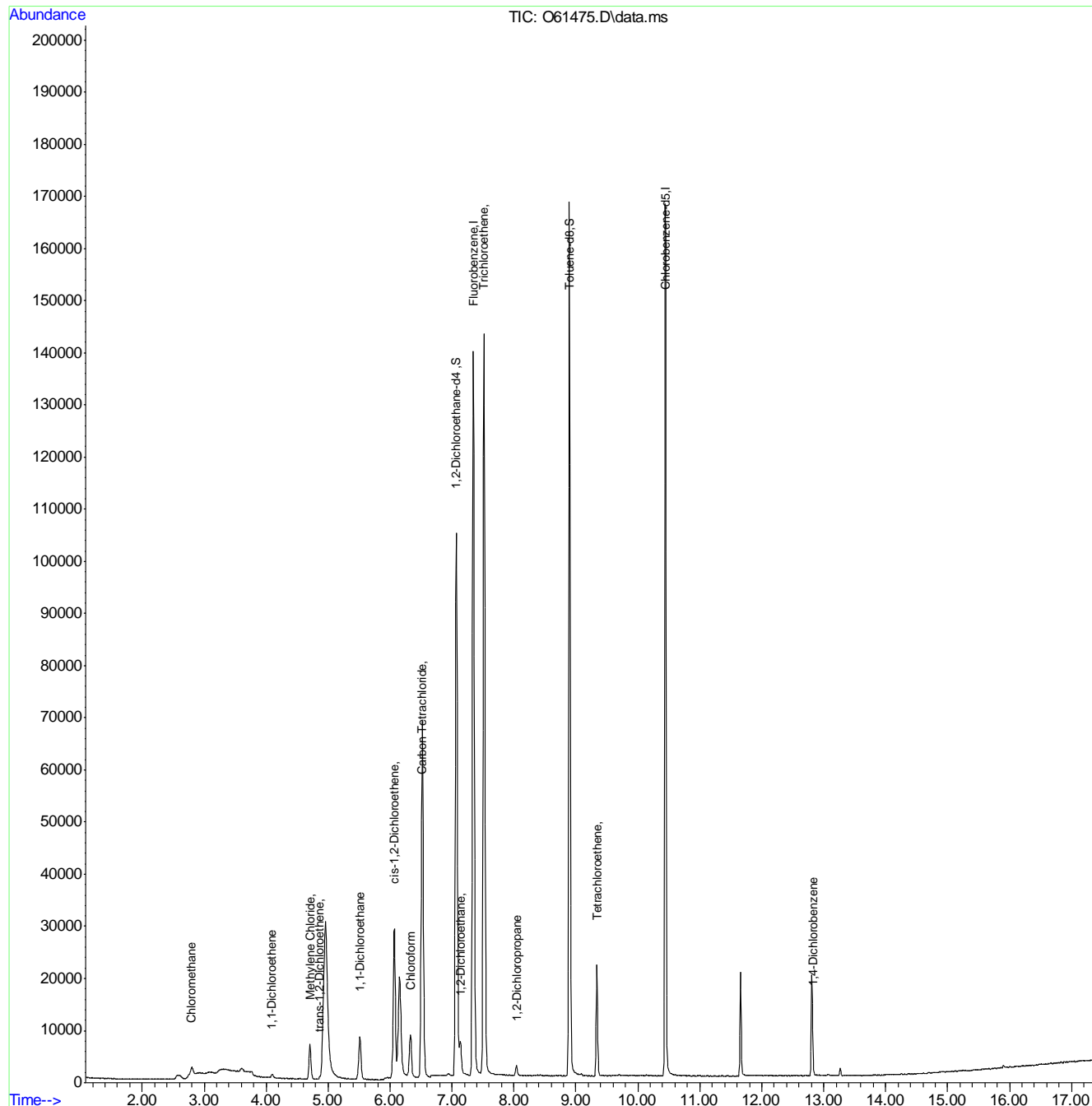
7.1.10
7

Quantitation Report (QT Reviewed)

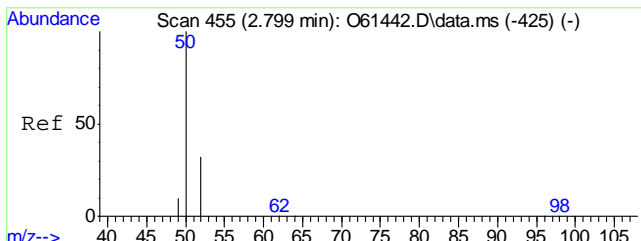
Data Path : C:\msdchem\2\data\092220\
 Data File : O61475.D
 Acq On : 22 Sep 2020 8:15 pm
 Operator : JuanG
 Sample : fa79006-10
 Misc : MS47270,VO2366,,,,,
 ALS Vial : 16 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 23 17:53:03 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Mon Sep 21 11:01:30 2020
 Response via : Initial Calibration

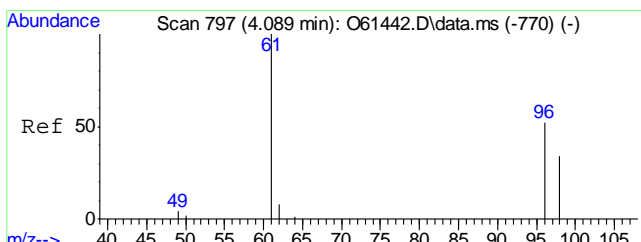
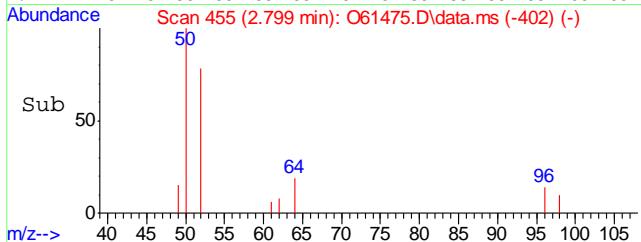
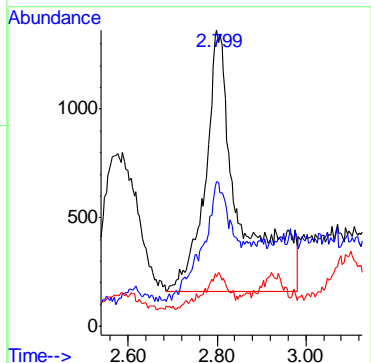
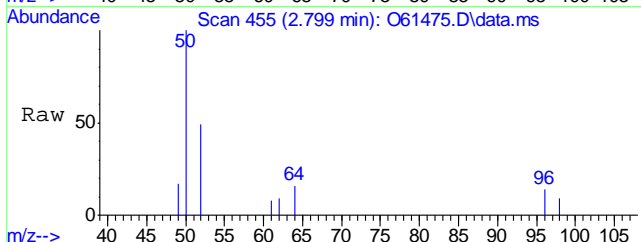


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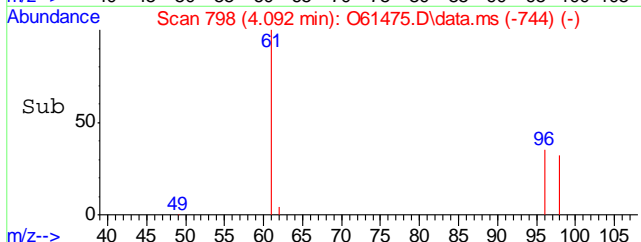
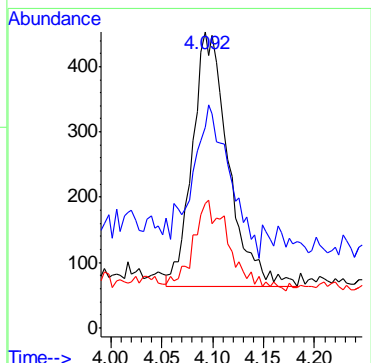
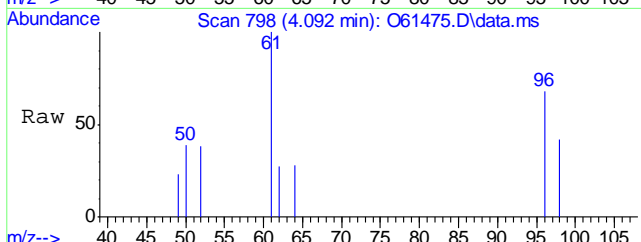
#3
 Chloromethane
 Concen: 0.23 ug/L
 RT: 2.799 min Scan# 455
 Delta R.T. -0.000 min
 Lab File: O61475.D
 Acq: 22 Sep 2020 8:15 pm

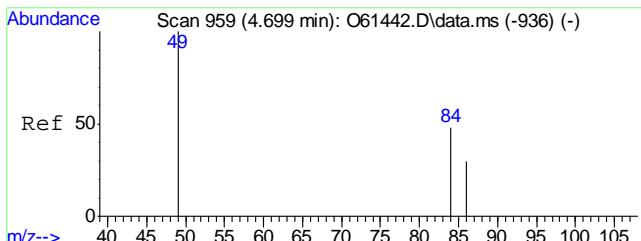
Tgt Ion	Resp	Lower	Upper
50	100		
52	46.0	12.2	52.2
49	11.2	0.0	30.4



#4
 1,1-Dichloroethene
 Concen: 0.04 ug/L
 RT: 4.092 min Scan# 798
 Delta R.T. 0.004 min
 Lab File: O61475.D
 Acq: 22 Sep 2020 8:15 pm

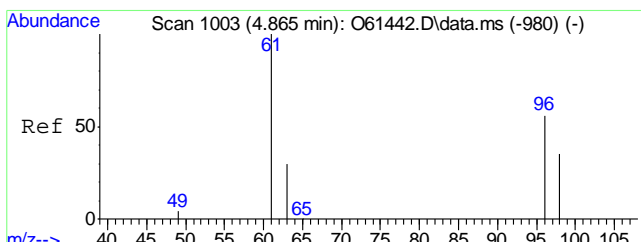
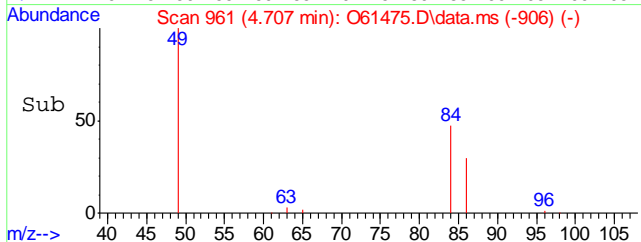
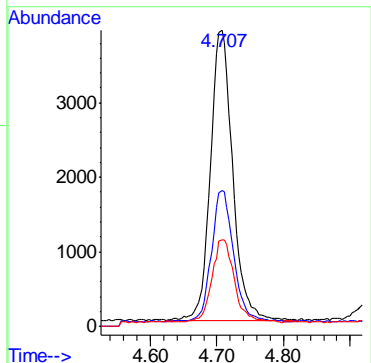
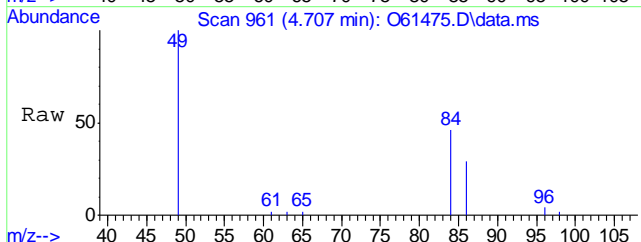
Tgt Ion	Resp	Lower	Upper
61	100		
96	44.9	22.4	82.4
98	33.1	4.4	64.4





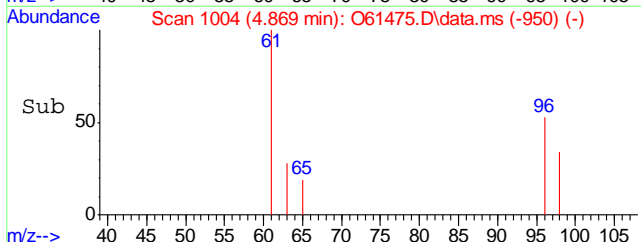
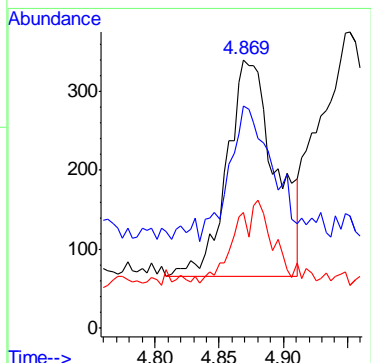
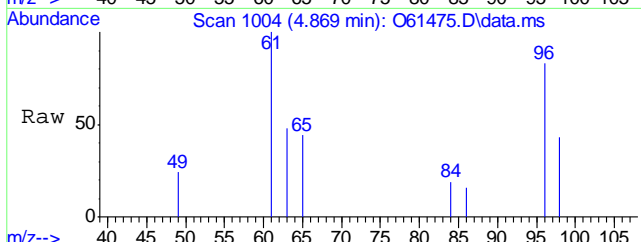
#5
 Methylene Chloride
 Concen: 0.20 ug/L
 RT: 4.707 min Scan# 961
 Delta R.T. 0.008 min
 Lab File: O61475.D
 Acq: 22 Sep 2020 8:15 pm

Tgt Ion	Ratio	Lower	Upper
49	100		
84	45.3	17.8	77.8
86	28.1	0.3	60.3

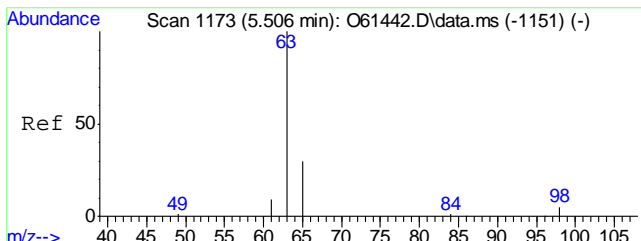


#6
 trans-1,2-Dichloroethene
 Concen: 0.03 ug/L
 RT: 4.869 min Scan# 1004
 Delta R.T. 0.004 min
 Lab File: O61475.D
 Acq: 22 Sep 2020 8:15 pm

Tgt Ion	Ratio	Lower	Upper
61	100		
96	58.0	25.7	85.7
98	26.3	5.3	65.3

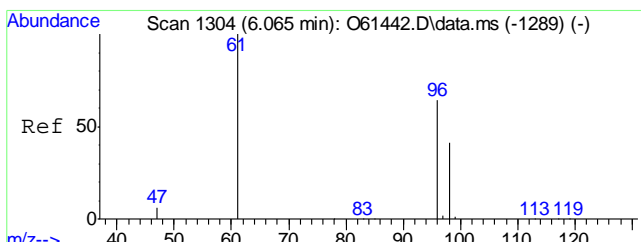
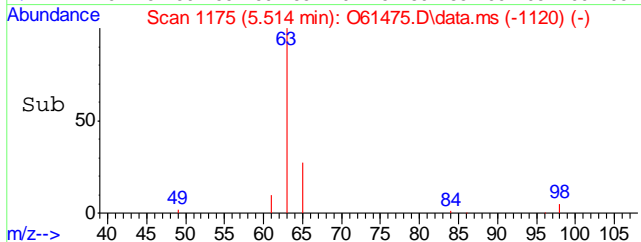
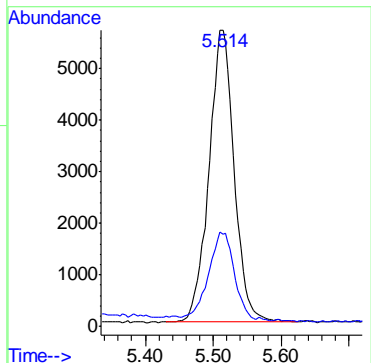
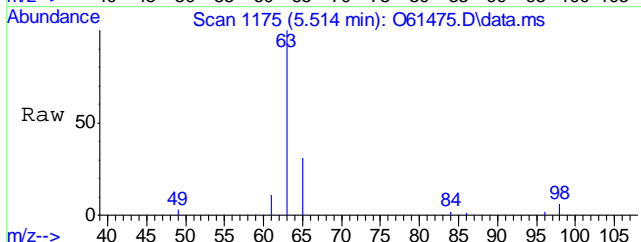


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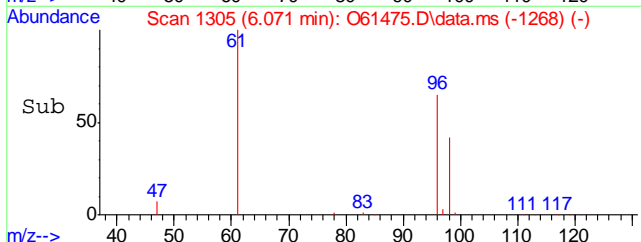
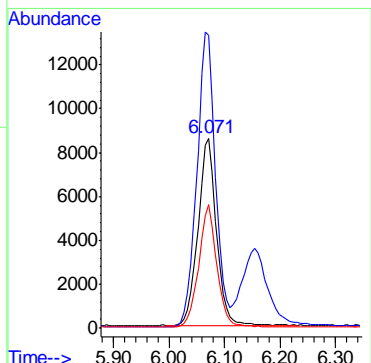
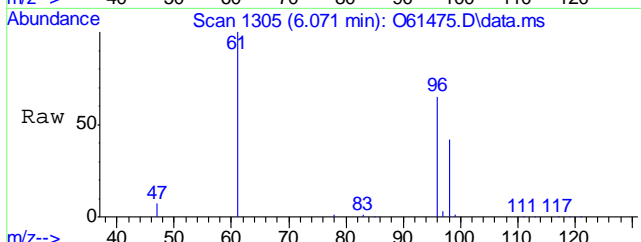
#7
1,1-Dichloroethane
Concen: 0.44 ug/L
RT: 5.514 min Scan# 1175
Delta R.T. 0.008 min
Lab File: O61475.D
Acq: 22 Sep 2020 8:15 pm

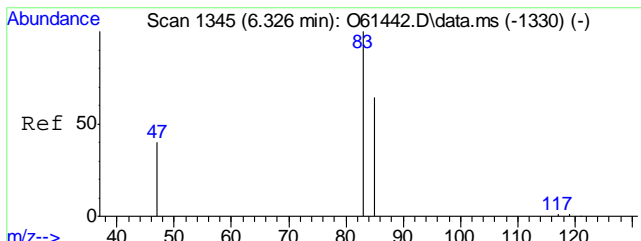
Tgt Ion	Resp	Lower	Upper
63	14647	100	
65	29.6	0.2	60.2



#8
cis-1,2-Dichloroethene
Concen: 1.24 ug/L
RT: 6.071 min Scan# 1305
Delta R.T. 0.006 min
Lab File: O61475.D
Acq: 22 Sep 2020 8:15 pm

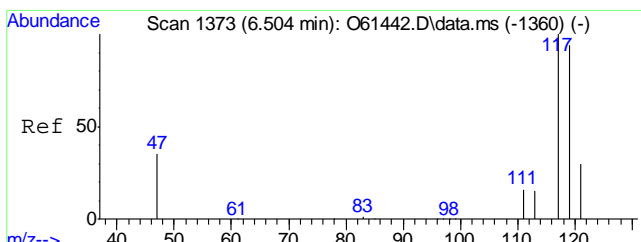
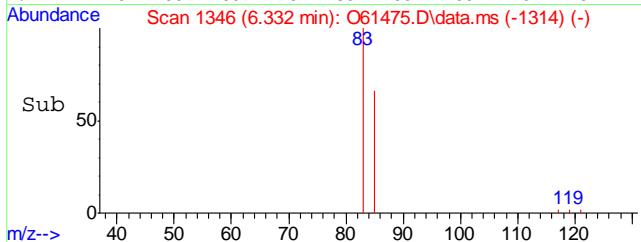
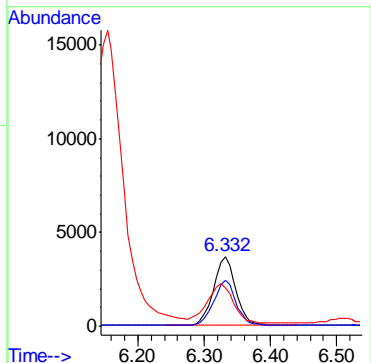
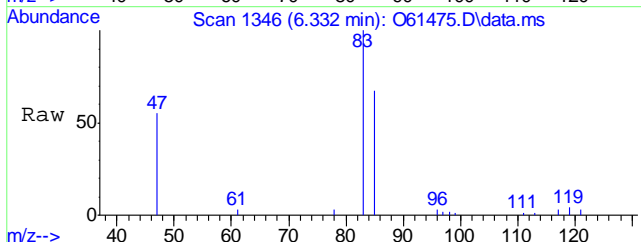
Tgt Ion	Resp	Lower	Upper
96	19930	100	
61	154.7	126.5	186.5
98	65.1	34.2	94.2





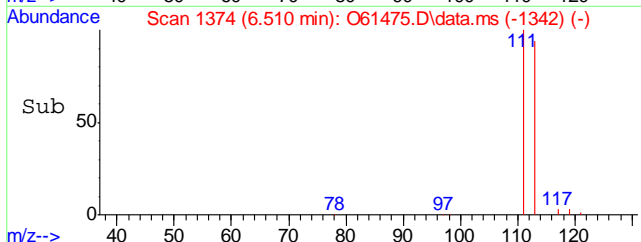
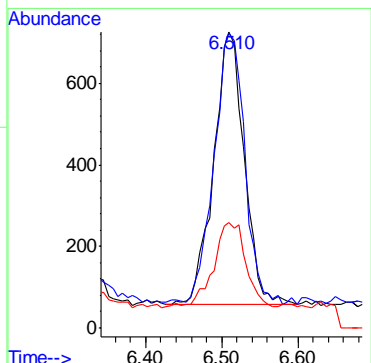
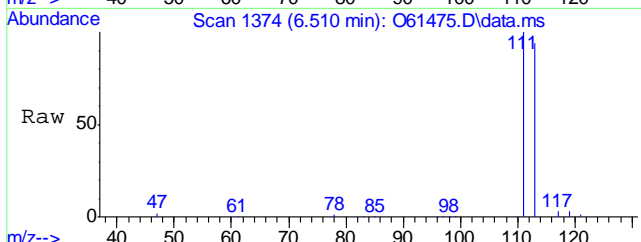
#9
Chloroform
Concen: 0.29 ug/L
RT: 6.332 min Scan# 1346
Delta R.T. 0.006 min
Lab File: O61475.D
Acq: 22 Sep 2020 8:15 pm

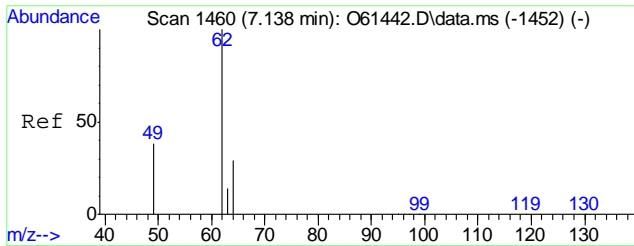
Tgt Ion	Resp	Lower	Upper
83	8492		
85	66.0	34.2	94.2
47	51.5	10.4	70.4



#10
Carbon Tetrachloride
Concen: 0.09 ug/L
RT: 6.510 min Scan# 1374
Delta R.T. 0.006 min
Lab File: O61475.D
Acq: 22 Sep 2020 8:15 pm

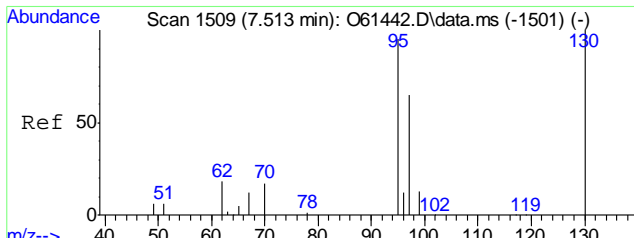
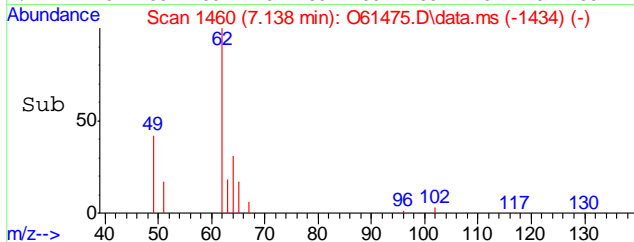
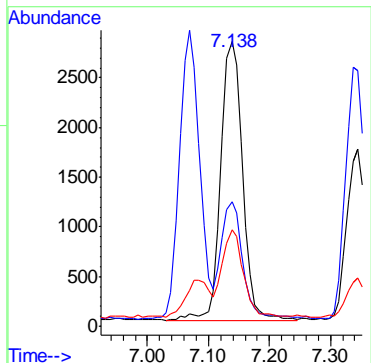
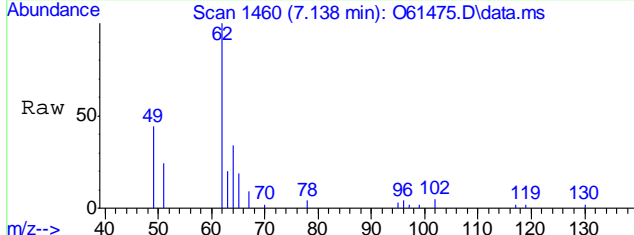
Tgt Ion	Resp	Lower	Upper
117	1862		
119	99.4	64.4	124.4
121	30.9	0.0	59.7





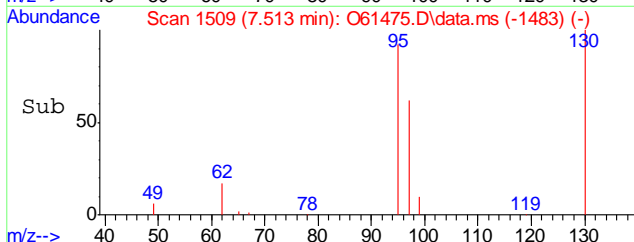
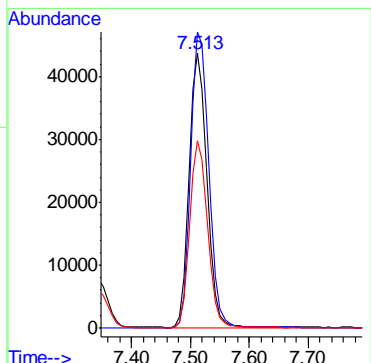
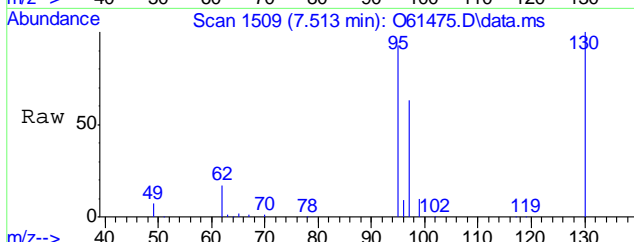
#14
 1,2-Dichloroethane
 Concen: 0.26 ug/L
 RT: 7.138 min Scan# 1460
 Delta R.T. -0.000 min
 Lab File: O61475.D
 Acq: 22 Sep 2020 8:15 pm

Tgt Ion	Resp	Lower	Upper
62	6968		
49	41.6	9.3	69.3
64	31.3	0.0	59.6

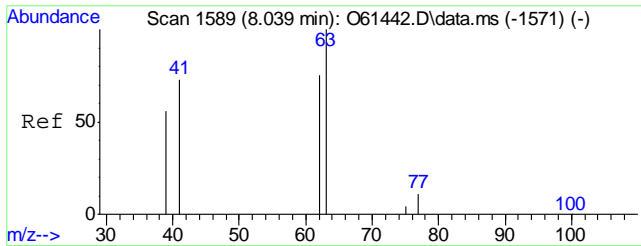


#15
 Trichloroethene
 Concen: 5.51 ug/L
 RT: 7.513 min Scan# 1509
 Delta R.T. -0.000 min
 Lab File: O61475.D
 Acq: 22 Sep 2020 8:15 pm

Tgt Ion	Resp	Lower	Upper
95	91559		
130	107.7	75.8	135.8
97	67.8	39.2	99.2

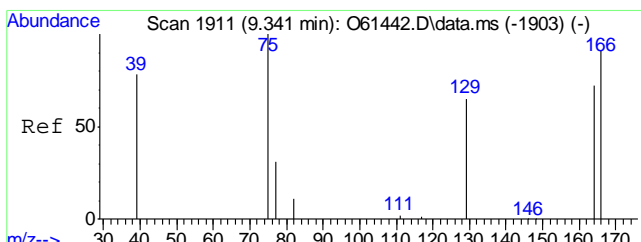
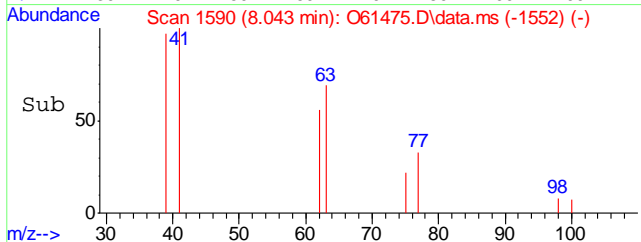
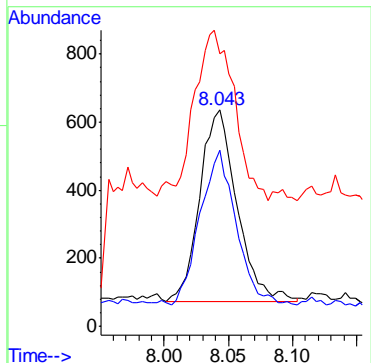
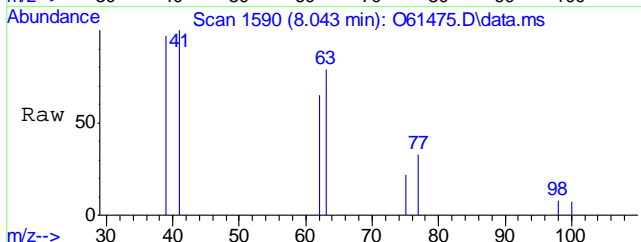


7.1.10
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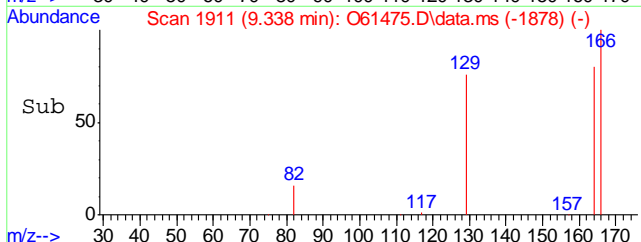
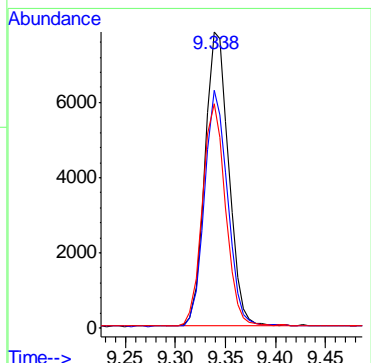
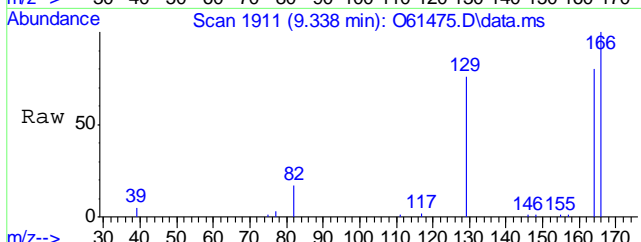
#16
 1,2-Dichloropropane
 Concen: 0.06 ug/L
 RT: 8.043 min Scan# 1590
 Delta R.T. 0.004 min
 Lab File: O61475.D
 Acq: 22 Sep 2020 8:15 pm

Tgt Ion	Resp	Lower	Upper
63	100		
62	81.0	44.6	104.6
41	76.3	43.3	103.3

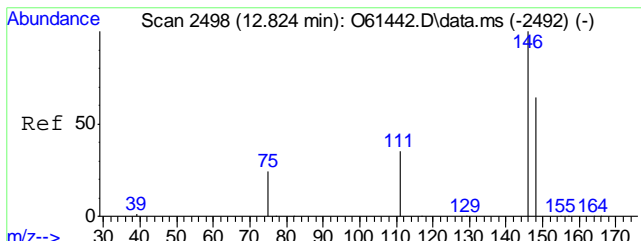


#21
 Tetrachloroethene
 Concen: 0.80 ug/L
 RT: 9.338 min Scan# 1911
 Delta R.T. -0.002 min
 Lab File: O61475.D
 Acq: 22 Sep 2020 8:15 pm

Tgt Ion	Resp	Lower	Upper
166	100		
164	80.1	48.9	108.9
129	75.6	41.3	101.3

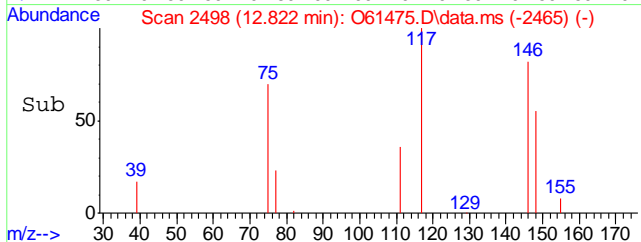
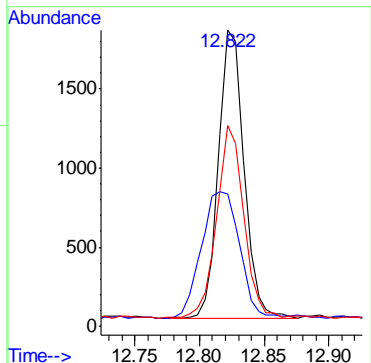
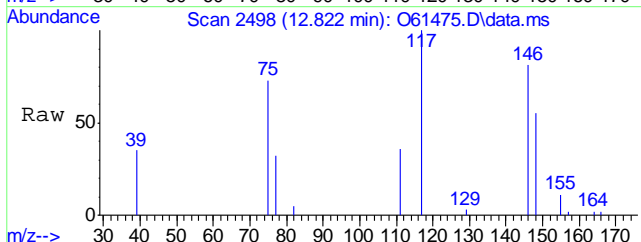


7.1.10
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#22
 1,4-Dichlorobenzene
 Concen: 0.08 ug/L
 RT: 12.822 min Scan# 2498
 Delta R.T. -0.002 min
 Lab File: O61475.D
 Acq: 22 Sep 2020 8:15 pm

Tgt Ion	Resp	Lower	Upper
146	2451		
146	100		
111	43.2	14.9	54.9
148	66.4	44.1	84.1



7.1.10
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\092220\
 Data File : O61476.D
 Acq On : 22 Sep 2020 8:35 pm
 Operator : JuanG
 Sample : fa79006-11 Inst : MSVOA12
 Misc : MS47270,VO2366,,,,,
 ALS Vial : 17 Sample Multiplier: 1

Quant Time: Sep 23 17:53:51 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Mon Sep 21 11:01:30 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
Internal Standards							
1) Fluorobenzene	7.344	96	202209	5.00	ug/L	0.00	
18) Chlorobenzene-d5	10.442	117	159962	5.00	ug/L	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.069	65	103066	6.22	ug/L	0.00	
Spiked Amount	5.000	Range 74 - 125	Recovery	=	124.40%		
19) Toluene-d8	8.896	98	168953	5.09	ug/L	0.00	
Spiked Amount	5.000	Range 88 - 111	Recovery	=	101.80%		
Target Compounds							
							Qvalue
4) 1,1-Dichloroethene	4.092	61	973	0.04	ug/L		95
5) Methylene Chloride	4.699	49	8990	0.20	ug/L		98
6) trans-1,2-Dichloroethene	4.869	61	640	0.02	ug/L		86
7) 1,1-Dichloroethane	5.506	63	14424	0.44	ug/L		98
8) cis-1,2-Dichloroethene	6.065	96	19391	1.21	ug/L		95
9) Chloroform	6.326	83	8584	0.29	ug/L		87
10) Carbon Tetrachloride	6.503	117	1834	0.09	ug/L		98
14) 1,2-Dichloroethane	7.130	62	6744	0.25	ug/L		97
15) Trichloroethene	7.513	95	90777	5.48	ug/L		96
16) 1,2-Dichloropropane	8.036	63	1142	0.06	ug/L		96
21) Tetrachloroethene	9.338	166	12791	0.80	ug/L		98
22) 1,4-Dichlorobenzene	12.822	146	2445	0.08	ug/L		93

(#) = qualifier out of range (m) = manual integration (+) = signals summed

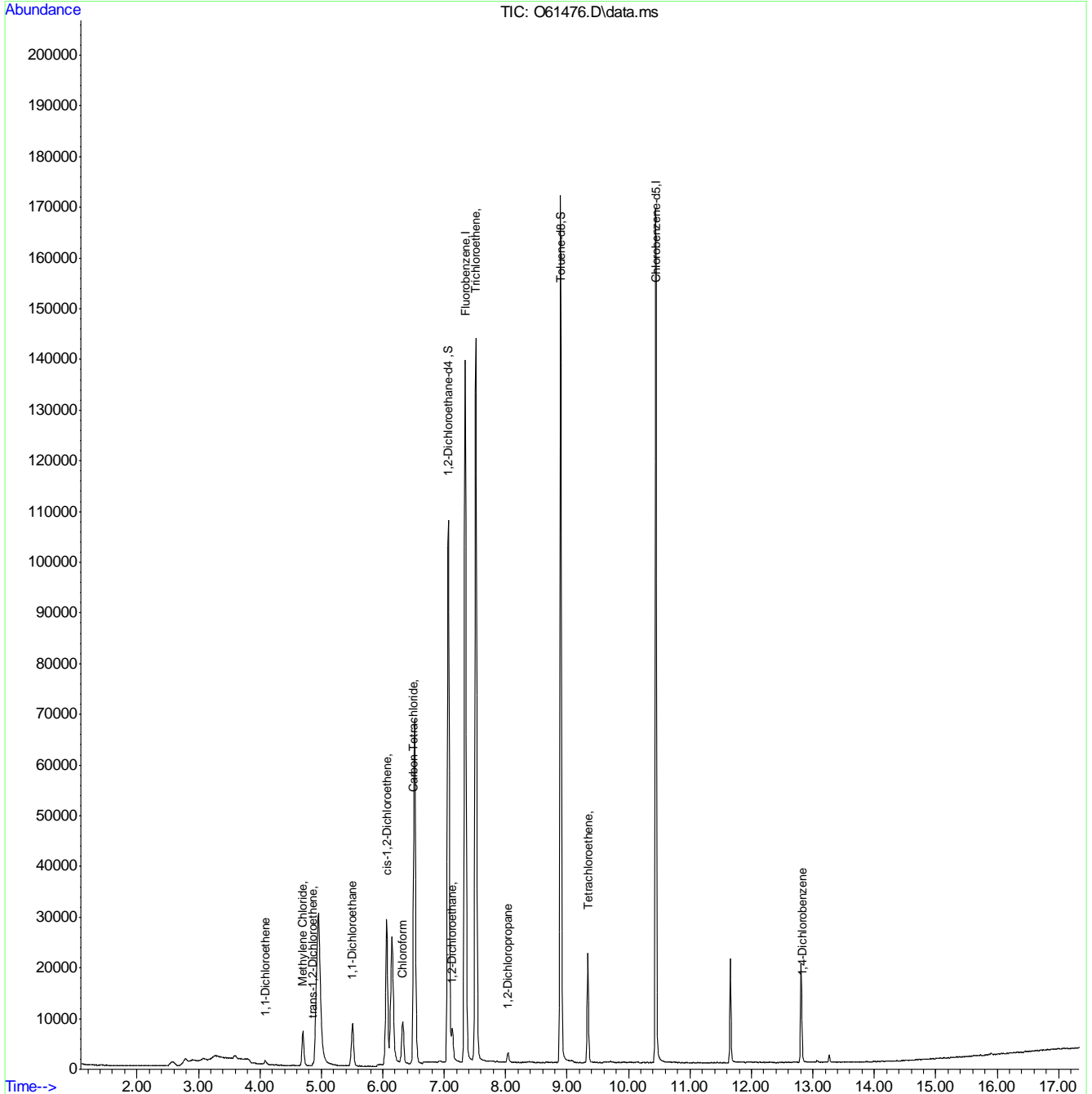
7.1.11
7

Quantitation Report (QT Reviewed)

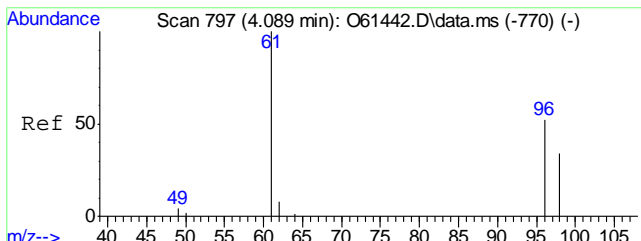
Data Path : C:\msdchem\2\data\092220\
 Data File : O61476.D
 Acq On : 22 Sep 2020 8:35 pm
 Operator : JuanG
 Sample : fa79006-11
 Misc : MS47270,VO2366,,,,,
 ALS Vial : 17 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 23 17:53:51 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Mon Sep 21 11:01:30 2020
 Response via : Initial Calibration

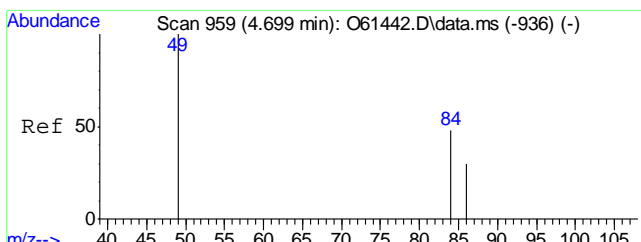
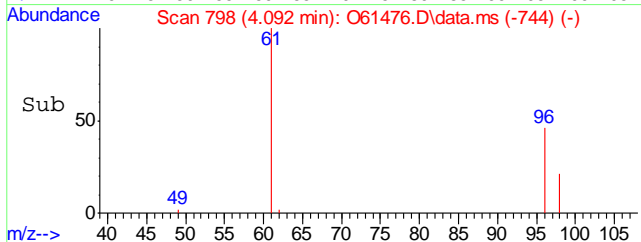
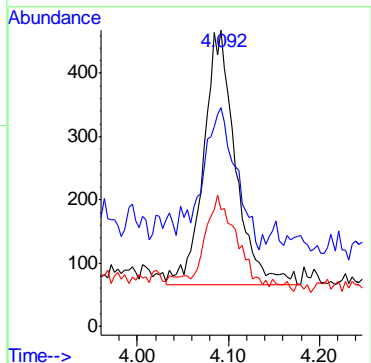
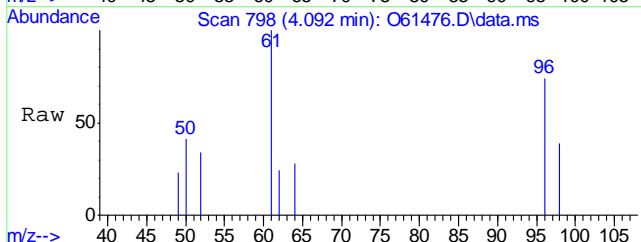


7.11.7
7



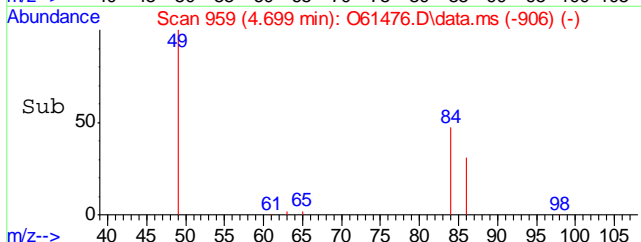
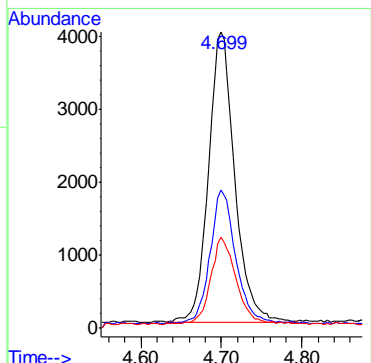
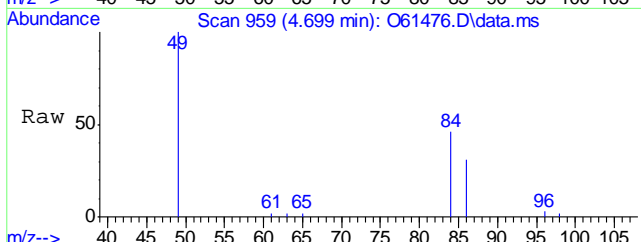
#4
 1,1-Dichloroethene
 Concen: 0.04 ug/L
 RT: 4.092 min Scan# 798
 Delta R.T. 0.004 min
 Lab File: O61476.D
 Acq: 22 Sep 2020 8:35 pm

Tgt Ion	Resp	Lower	Upper
61	973		
96	50.5	22.4	82.4
98	29.1	4.4	64.4

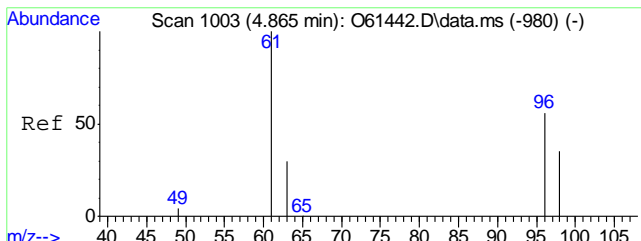


#5
 Methylene Chloride
 Concen: 0.20 ug/L
 RT: 4.699 min Scan# 959
 Delta R.T. -0.000 min
 Lab File: O61476.D
 Acq: 22 Sep 2020 8:35 pm

Tgt Ion	Resp	Lower	Upper
49	8990		
84	45.9	17.8	77.8
86	29.9	0.3	60.3

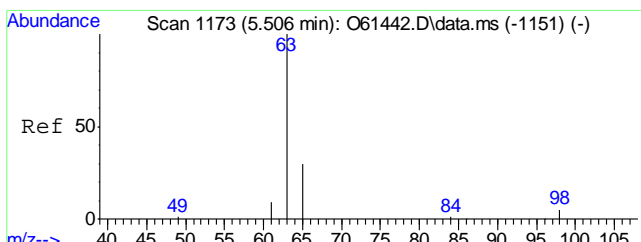
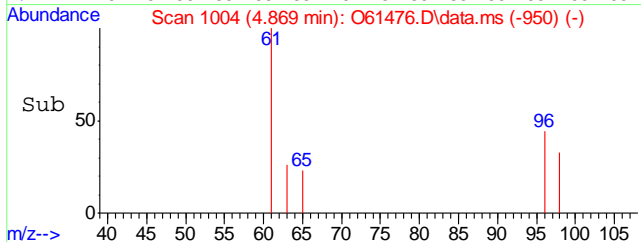
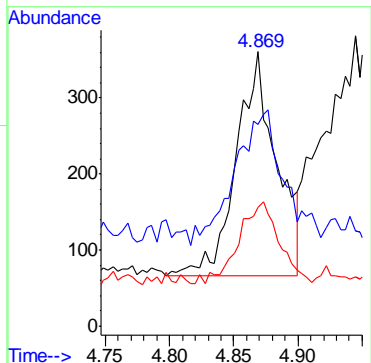
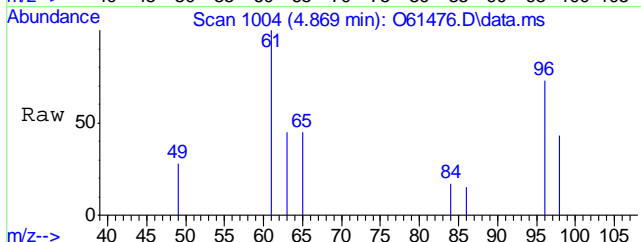


7.1.11
7



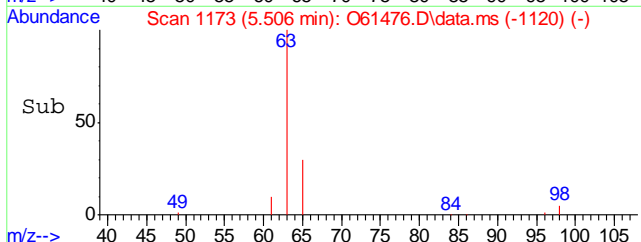
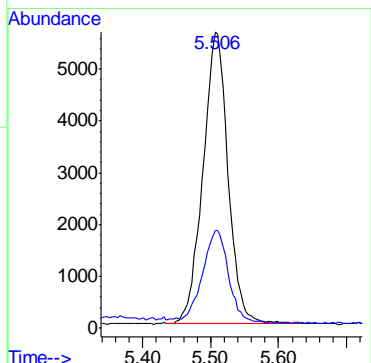
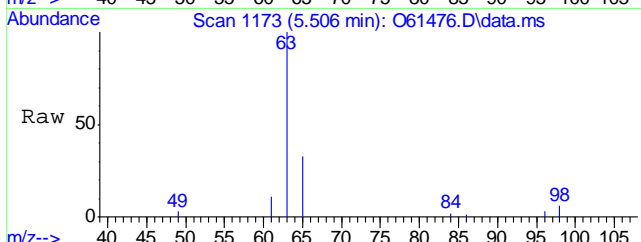
#6
 trans-1,2-Dichloroethene
 Concen: 0.02 ug/L
 RT: 4.869 min Scan# 1004
 Delta R.T. 0.004 min
 Lab File: O61476.D
 Acq: 22 Sep 2020 8:35 pm

Tgt Ion	Resp	Lower	Upper
61	640		
96	43.4	25.7	85.7
98	29.2	5.3	65.3

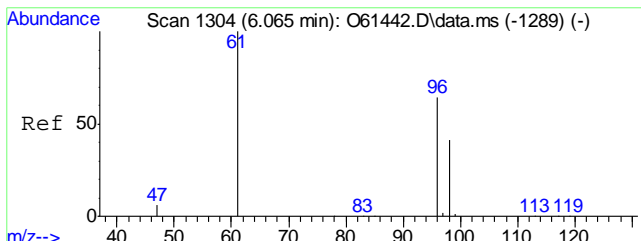


#7
 1,1-Dichloroethane
 Concen: 0.44 ug/L
 RT: 5.506 min Scan# 1173
 Delta R.T. -0.000 min
 Lab File: O61476.D
 Acq: 22 Sep 2020 8:35 pm

Tgt Ion	Resp	Lower	Upper
63	14424		
65	31.4	0.2	60.2

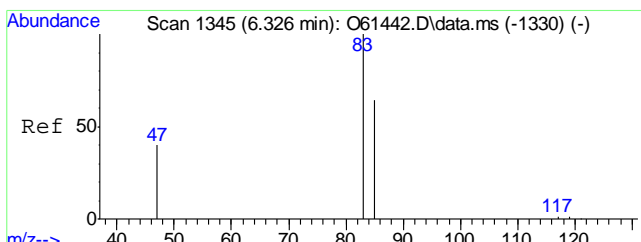
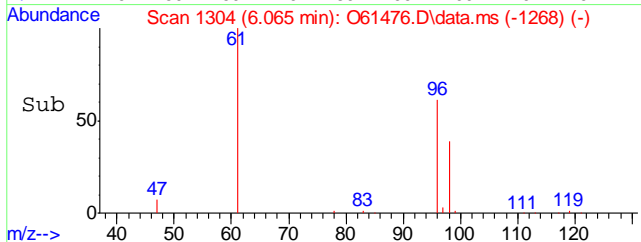
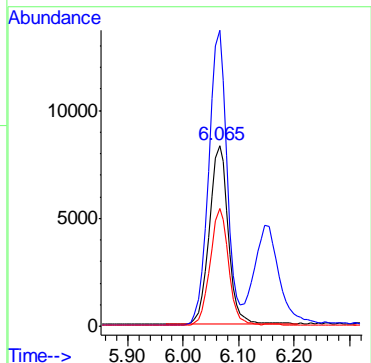
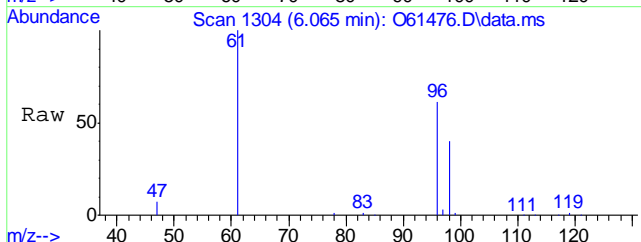


7.1.11
7



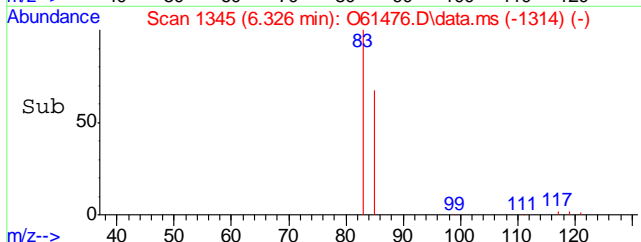
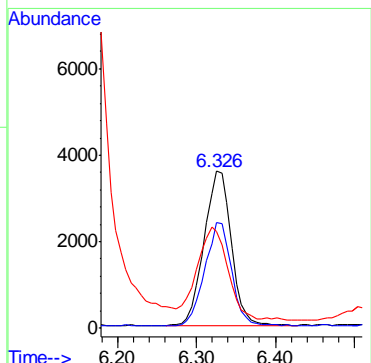
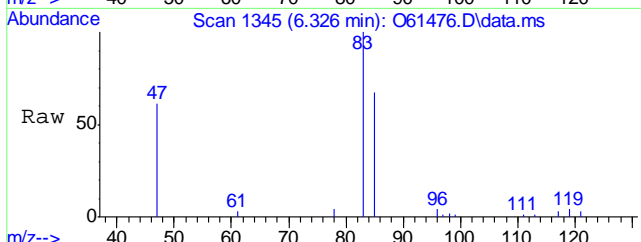
#8
 cis-1,2-Dichloroethene
 Concen: 1.21 ug/L
 RT: 6.065 min Scan# 1304
 Delta R.T. -0.000 min
 Lab File: O61476.D
 Acq: 22 Sep 2020 8:35 pm

Tgt Ion	Resp	Lower	Upper
96	19391		
96	100		
61	164.8	126.5	186.5
98	65.0	34.2	94.2

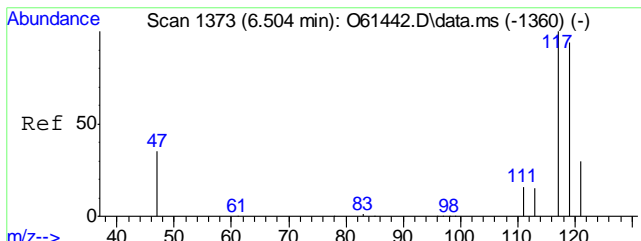


#9
 Chloroform
 Concen: 0.29 ug/L
 RT: 6.326 min Scan# 1345
 Delta R.T. -0.000 min
 Lab File: O61476.D
 Acq: 22 Sep 2020 8:35 pm

Tgt Ion	Resp	Lower	Upper
83	8584		
83	100		
85	66.9	34.2	94.2
47	57.2	10.4	70.4

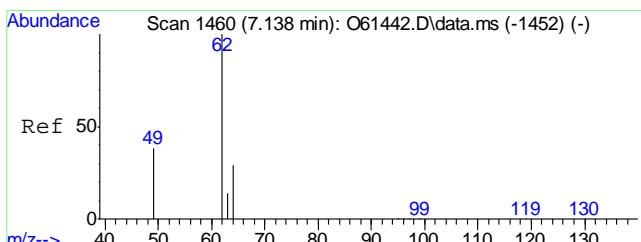
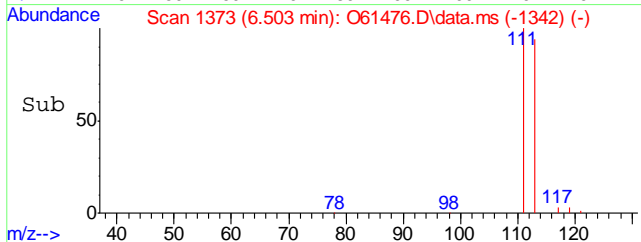
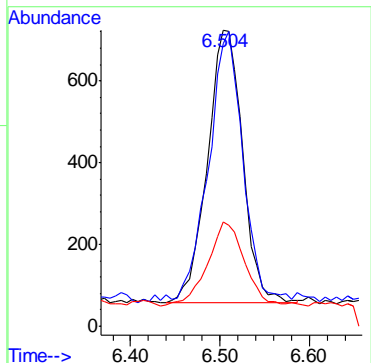
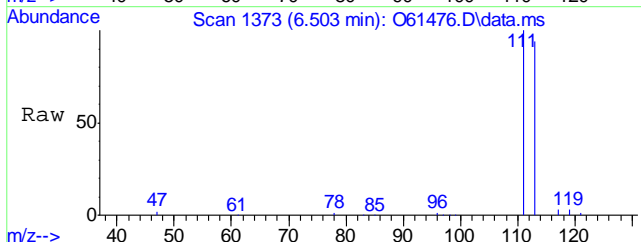


7.1.11
7



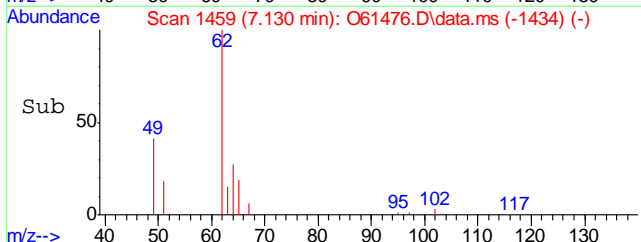
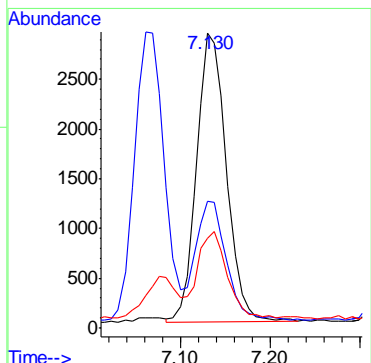
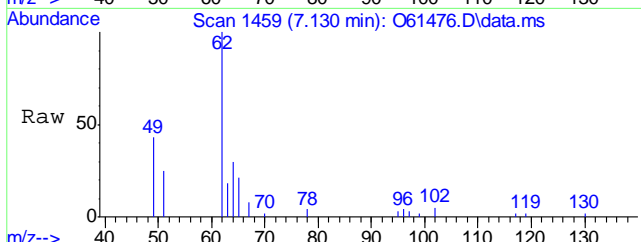
#10
 Carbon Tetrachloride
 Concen: 0.09 ug/L
 RT: 6.503 min Scan# 1373
 Delta R.T. -0.000 min
 Lab File: O61476.D
 Acq: 22 Sep 2020 8:35 pm

Tgt Ion	Resp	Lower	Upper
117	1834		
117	100		
119	92.3	64.4	124.4
121	30.5	0.0	59.7

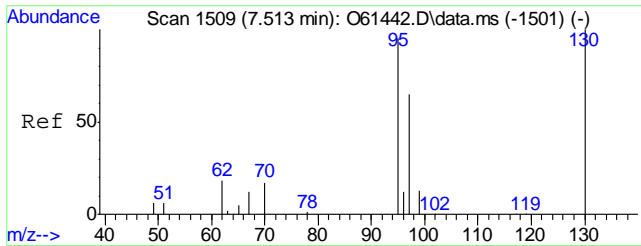


#14
 1,2-Dichloroethane
 Concen: 0.25 ug/L
 RT: 7.130 min Scan# 1459
 Delta R.T. -0.008 min
 Lab File: O61476.D
 Acq: 22 Sep 2020 8:35 pm

Tgt Ion	Resp	Lower	Upper
62	6744		
62	100		
49	40.7	9.3	69.3
64	27.0	0.0	59.6

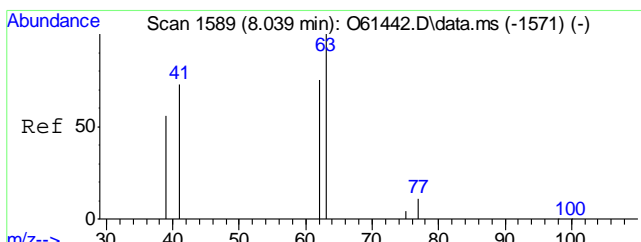
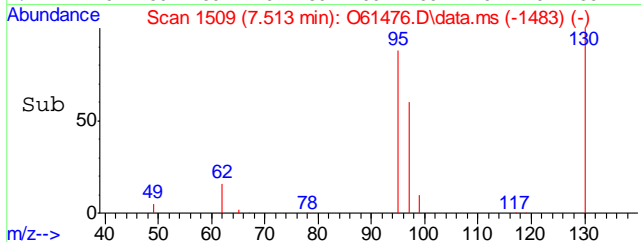
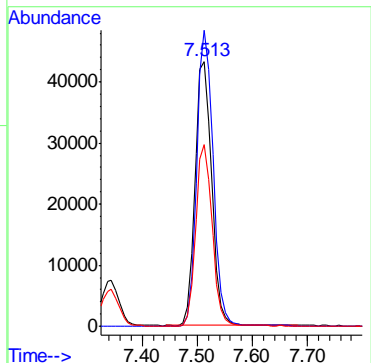
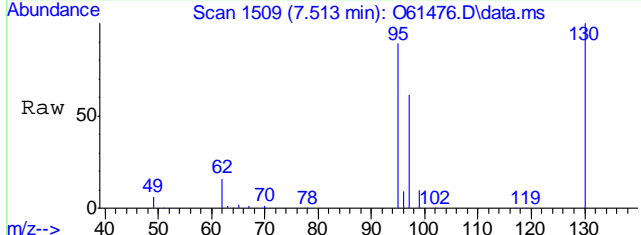


7.1.11
7



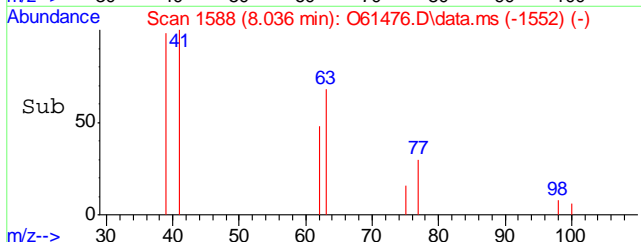
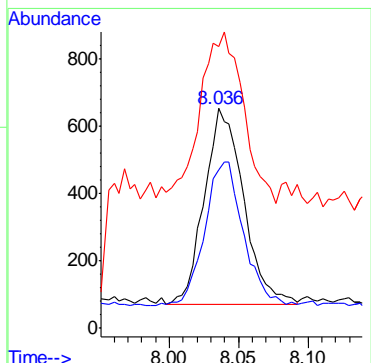
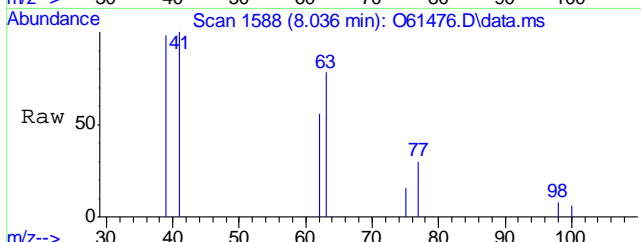
#15
 Trichloroethene
 Concen: 5.48 ug/L
 RT: 7.513 min Scan# 1509
 Delta R.T. -0.000 min
 Lab File: O61476.D
 Acq: 22 Sep 2020 8:35 pm

Tgt Ion	Resp	Lower	Upper
95	90777		
100			
130	111.9	75.8	135.8
97	68.5	39.2	99.2



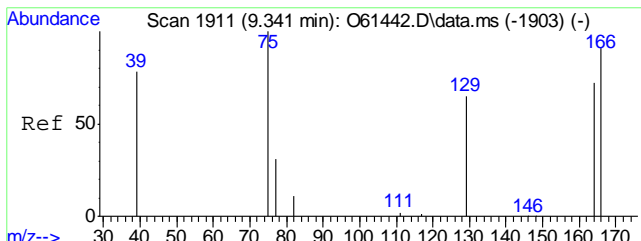
#16
 1,2-Dichloropropane
 Concen: 0.06 ug/L
 RT: 8.036 min Scan# 1588
 Delta R.T. -0.004 min
 Lab File: O61476.D
 Acq: 22 Sep 2020 8:35 pm

Tgt Ion	Resp	Lower	Upper
63	1142		
100			
62	68.6	44.6	104.6
41	74.5	43.3	103.3



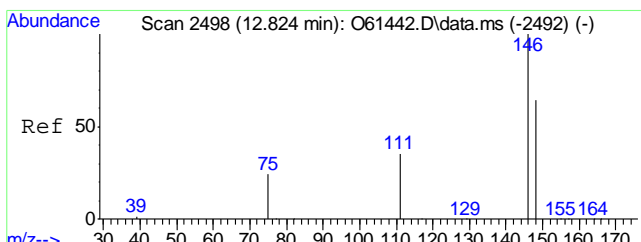
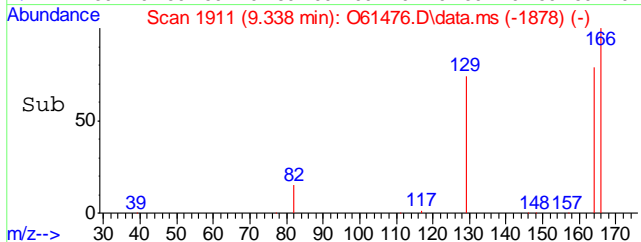
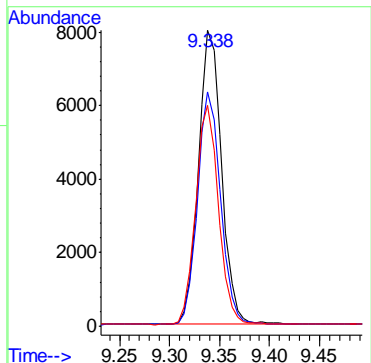
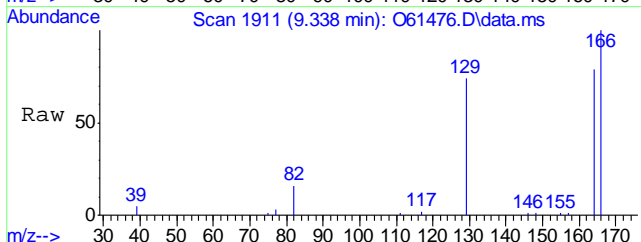
7.1.11
7





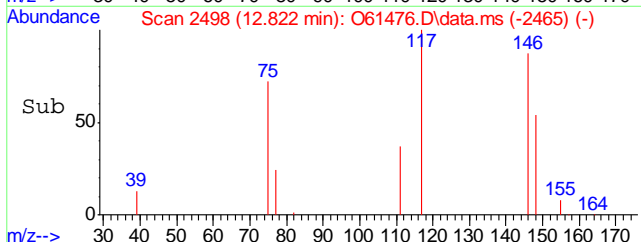
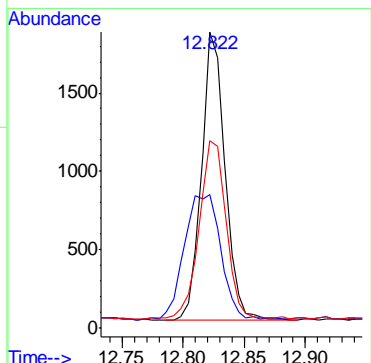
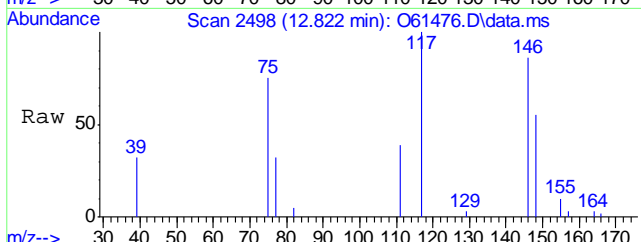
#21
 Tetrachloroethene
 Concen: 0.80 ug/L
 RT: 9.338 min Scan# 1911
 Delta R.T. -0.002 min
 Lab File: O61476.D
 Acq: 22 Sep 2020 8:35 pm

Tgt Ion	Resp	Lower	Upper
166	12791		
166	100		
164	79.0	48.9	108.9
129	74.2	41.3	101.3



#22
 1,4-Dichlorobenzene
 Concen: 0.08 ug/L
 RT: 12.822 min Scan# 2498
 Delta R.T. -0.002 min
 Lab File: O61476.D
 Acq: 22 Sep 2020 8:35 pm

Tgt Ion	Resp	Lower	Upper
146	2445		
146	100		
111	42.6	14.9	54.9
148	61.7	44.1	84.1



7.1.11 7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\092220\
 Data File : O61464.D
 Acq On : 22 Sep 2020 4:29 pm
 Operator : JuanG
 Sample : mb Inst : MSVOA12
 Misc : MS47270,VO2366,,,,,
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 23 17:49:55 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Mon Sep 21 11:01:30 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.345	96	205190	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.444	117	158626	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.069	65	87763	5.22	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	104.40%	
19) Toluene-d8	8.896	98	173266	5.27	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	105.40%	
Target Compounds						
5) Methylene Chloride	4.700	49	29163	0.66	ug/L	Qvalue 100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

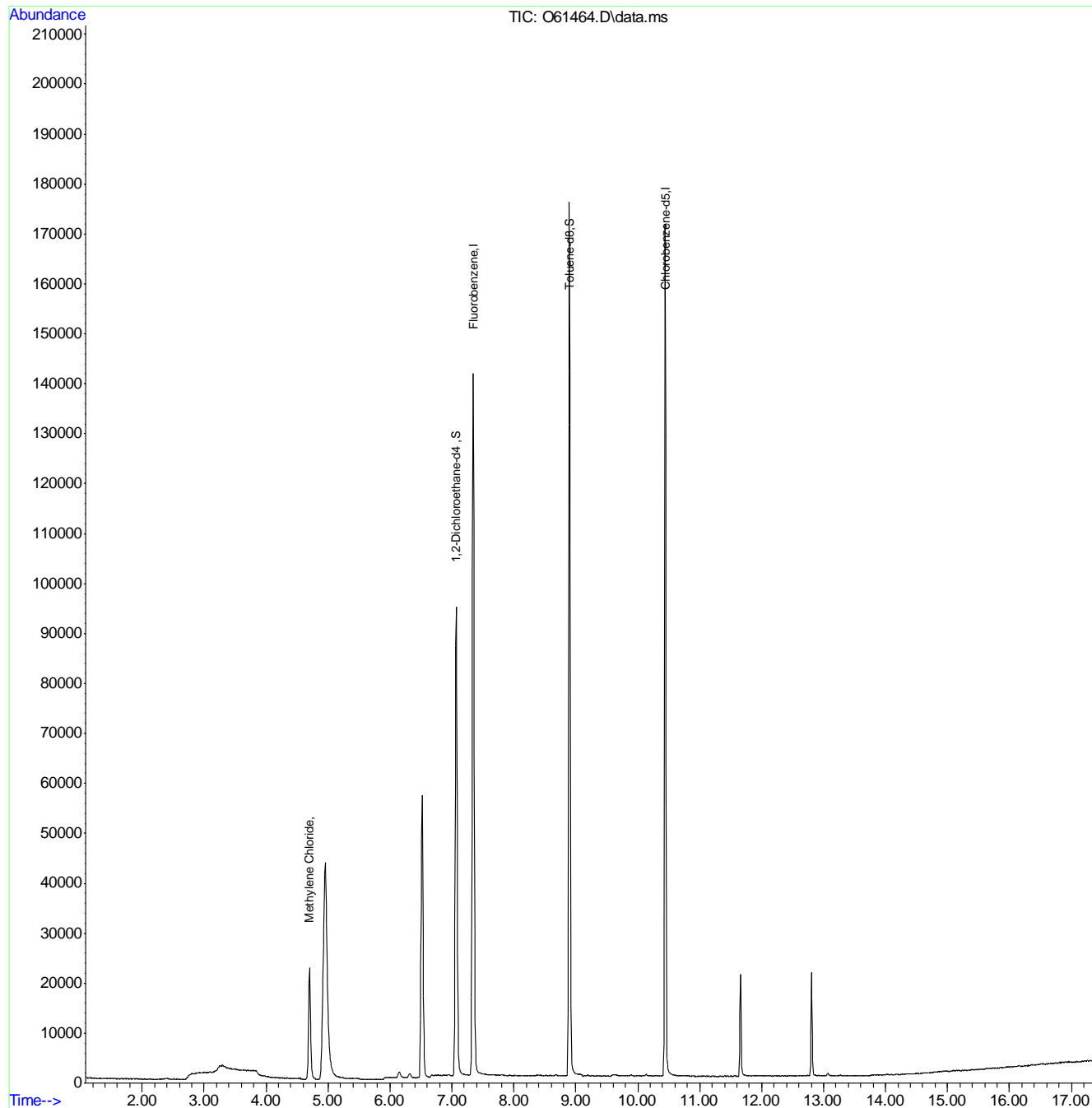
7.2.1
7

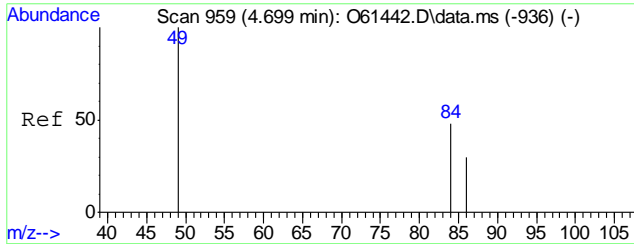
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\092220\
Data File : O61464.D
Acq On : 22 Sep 2020 4:29 pm
Operator : JuanG
Sample : mb
Misc : MS47270,VO2366,,,,,
ALS Vial : 3 Sample Multiplier: 1

Inst : MSVOA12

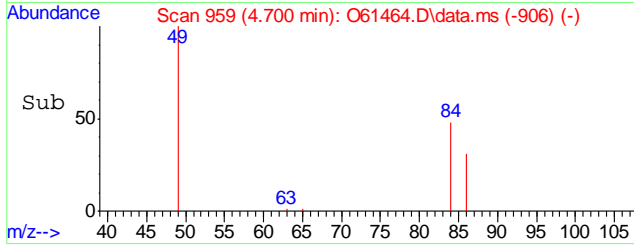
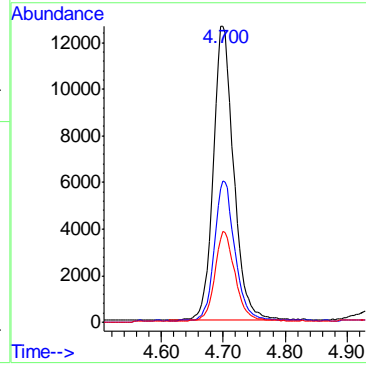
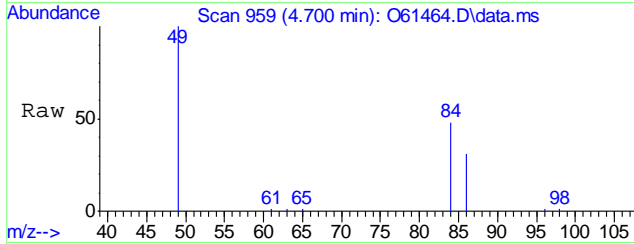
Quant Time: Sep 23 17:49:55 2020
Quant Method : C:\msdchem\2\methods\SIMCL091820.M
Quant Title : Standard Methods 6200B
QLast Update : Mon Sep 21 11:01:30 2020
Response via : Initial Calibration





#5
 Methylene Chloride
 Concen: 0.66 ug/L
 RT: 4.700 min Scan# 959
 Delta R.T. 0.000 min
 Lab File: O61464.D
 Acq: 22 Sep 2020 4:29 pm

Tgt Ion	Ratio	Lower	Upper
49	100		
84	47.5	17.8	77.8
86	30.3	0.3	60.3



7.2.1
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\092220\
 Data File : O61463.D
 Acq On : 22 Sep 2020 4:09 pm
 Operator : JuanG
 Sample : bs Inst : MSVOA12
 Misc : MS47193,VO2366,,,,,
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 23 10:31:11 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Mon Sep 21 11:01:30 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.337	96	362213	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.442	117	291981	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.061	65	140281	4.72	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	94.40%	
19) Toluene-d8	8.892	98	301101	4.97	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	99.40%	
Target Compounds						
						Qvalue
2) Vinyl Chloride	2.901	62	156324	5.22	ug/L	100
3) Chloromethane	2.799	50	209973	4.54	ug/L	99
4) 1,1-Dichloroethene	4.085	61	229316	5.33	ug/L	98
5) Methylene Chloride	4.696	49	332341	4.43	ug/L	100
6) trans-1,2-Dichloroethene	4.861	61	252855	4.97	ug/L	99
7) 1,1-Dichloroethane	5.502	63	292035	4.96	ug/L	99
8) cis-1,2-Dichloroethene	6.058	96	144672	5.04	ug/L	98
9) Chloroform	6.325	83	251240	4.76	ug/L	99
10) Carbon Tetrachloride	6.503	117	191313	5.17	ug/L	99
11) 1,1,1-Trichloroethane	6.573	97	214390	5.17	ug/L	99
12) Benzene	6.931	78	512398	4.99	ug/L	98
14) 1,2-Dichloroethane	7.130	62	228994	4.80	ug/L	100
15) Trichloroethene	7.505	95	152455	5.14	ug/L	98
16) 1,2-Dichloropropane	8.035	63	159792	5.02	ug/L	100
17) cis-1,3-Dichloropropene	8.703	75	162734	5.18	ug/L	98
20) trans-1,3-Dichloropropene	9.338	75	160934	4.67	ug/L	98
21) Tetrachloroethene	9.338	166	149293	5.09	ug/L	97
22) 1,4-Dichlorobenzene	12.822	146	298719	5.02	ug/L	98
23) 1,2-Dibromo-3-Chloropr...	14.032	75	50680	4.53	ug/L	91

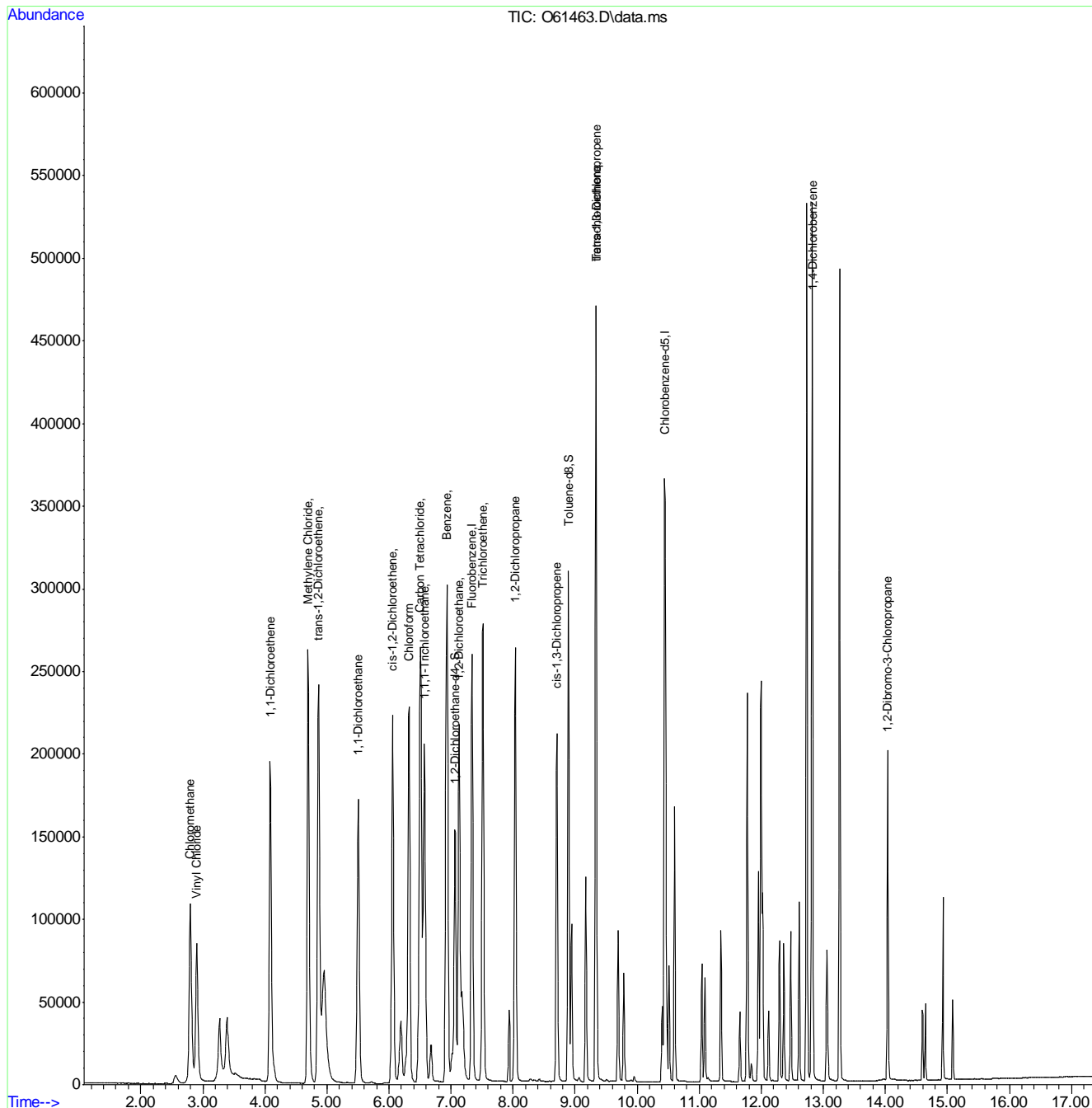
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\092220\
 Data File : O61463.D
 Acq On : 22 Sep 2020 4:09 pm
 Operator : JuanG
 Sample : bs
 Misc : MS47193,VO2366,,,,,
 ALS Vial : 2 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 23 10:31:11 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Mon Sep 21 11:01:30 2020
 Response via : Initial Calibration



7.3.1
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\092220\
 Data File : O61477.D
 Acq On : 22 Sep 2020 8:55 pm
 Operator : JuanG
 Sample : fa79006-9ms,5x Inst : MSVOA12
 Misc : MS47270,VO2366,,,,,5
 ALS Vial : 18 Sample Multiplier: 1

Quant Time: Sep 23 10:31:39 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Mon Sep 21 11:01:30 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
Internal Standards							
1) Fluorobenzene	7.344	96	259449	5.00	ug/L	0.00	
18) Chlorobenzene-d5	10.444	117	217921	5.00	ug/L	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.069	65	108663	5.11	ug/L	0.00	
Spiked Amount	5.000	Range 74 - 125	Recovery	=	102.20%		
19) Toluene-d8	8.896	98	200942	4.45	ug/L	0.00	
Spiked Amount	5.000	Range 88 - 111	Recovery	=	89.00%		
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.901	62	126888	5.92	ug/L		100
3) Chloromethane	2.795	50	185621	5.70	ug/L		100
4) 1,1-Dichloroethene	4.089	61	175209	5.69	ug/L		98
5) Methylene Chloride	4.699	49	273188	5.13	ug/L		97
6) trans-1,2-Dichloroethene	4.865	61	190769	5.23	ug/L		98
7) 1,1-Dichloroethane	5.510	63	231727	5.49	ug/L		99
8) cis-1,2-Dichloroethene	6.065	96	104746	5.09	ug/L		98
9) Chloroform	6.326	83	201253	5.32	ug/L		99
10) Carbon Tetrachloride	6.510	117	148307	5.59	ug/L		99
11) 1,1,1-Trichloroethane	6.573	97	168651	5.68	ug/L		97
12) Benzene	6.939	78	380786	5.18	ug/L		99
14) 1,2-Dichloroethane	7.138	62	181545	5.32	ug/L		98
15) Trichloroethene	7.513	95	123059	5.79	ug/L		97
16) 1,2-Dichloropropane	8.039	63	122680	5.38	ug/L		97
17) cis-1,3-Dichloropropene	8.707	75	100534	4.51	ug/L		96
20) trans-1,3-Dichloropropene	9.341	75	106028	4.12	ug/L		98
21) Tetrachloroethene	9.341	166	119332	5.45	ug/L		98
22) 1,4-Dichlorobenzene	12.824	146	233509	5.25	ug/L		100
23) 1,2-Dibromo-3-Chloropr...	14.035	75	35107	4.20	ug/L		98

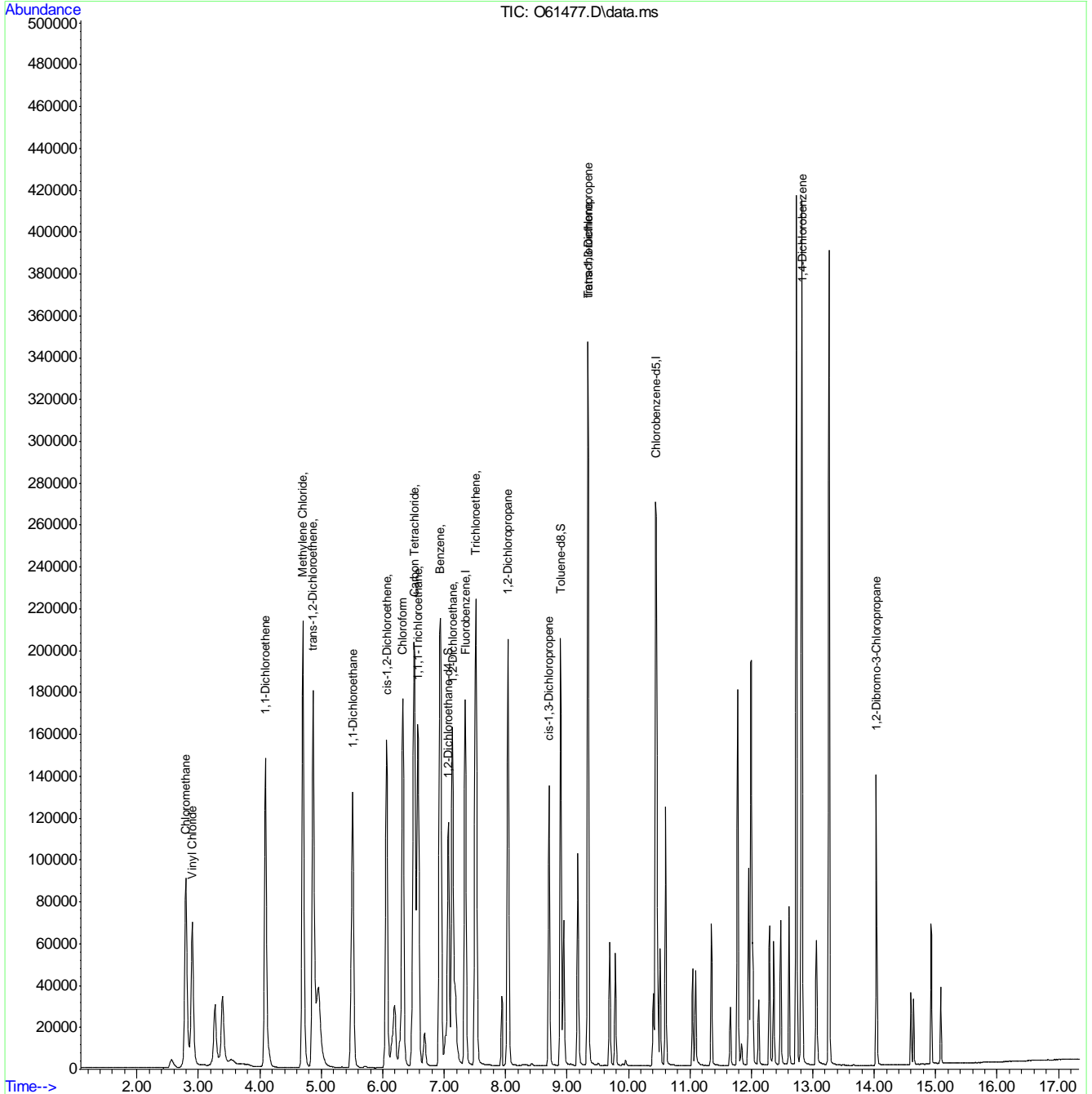
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\092220\
 Data File : O61477.D
 Acq On : 22 Sep 2020 8:55 pm
 Operator : JuanG
 Sample : fa79006-9ms,5x
 Misc : MS47270,VO2366,,,,,5
 ALS Vial : 18 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 23 10:31:39 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Mon Sep 21 11:01:30 2020
 Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\092220\
 Data File : O61478.D
 Acq On : 22 Sep 2020 9:15 pm
 Operator : JuanG
 Sample : fa79006-9msd,5x Inst : MSVOA12
 Misc : MS47270,VO2366,,,,,5
 ALS Vial : 19 Sample Multiplier: 1

Quant Time: Sep 23 10:31:41 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Mon Sep 21 11:01:30 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
Internal Standards							
1) Fluorobenzene	7.344	96	281651	5.00	ug/L	0.00	
18) Chlorobenzene-d5	10.442	117	231937	5.00	ug/L	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.069	65	115651	5.01	ug/L	0.00	
Spiked Amount	5.000	Range 74 - 125	Recovery	=	100.20%		
19) Toluene-d8	8.896	98	221594	4.61	ug/L	0.00	
Spiked Amount	5.000	Range 88 - 111	Recovery	=	92.20%		
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.908	62	130553	5.61	ug/L		100
3) Chloromethane	2.806	50	190807	5.37	ug/L		99
4) 1,1-Dichloroethene	4.096	61	184573	5.52	ug/L		99
5) Methylene Chloride	4.703	49	288771	4.99	ug/L		96
6) trans-1,2-Dichloroethene	4.873	61	206515	5.22	ug/L		100
7) 1,1-Dichloroethane	5.514	63	246760	5.39	ug/L		100
8) cis-1,2-Dichloroethene	6.071	96	114679	5.14	ug/L		100
9) Chloroform	6.332	83	212093	5.17	ug/L		99
10) Carbon Tetrachloride	6.510	117	159198	5.53	ug/L		99
11) 1,1,1-Trichloroethane	6.580	97	177646	5.51	ug/L		99
12) Benzene	6.939	78	410498	5.15	ug/L		96
14) 1,2-Dichloroethane	7.138	62	192335	5.19	ug/L		98
15) Trichloroethene	7.513	95	129798	5.63	ug/L		100
16) 1,2-Dichloropropane	8.039	63	130705	5.28	ug/L		97
17) cis-1,3-Dichloropropene	8.711	75	112768	4.65	ug/L		98
20) trans-1,3-Dichloropropene	9.344	75	115476	4.22	ug/L		99
21) Tetrachloroethene	9.338	166	126400	5.42	ug/L		97
22) 1,4-Dichlorobenzene	12.822	146	245852	5.19	ug/L		98
23) 1,2-Dibromo-3-Chloropr...	14.032	75	36701	4.13	ug/L		90

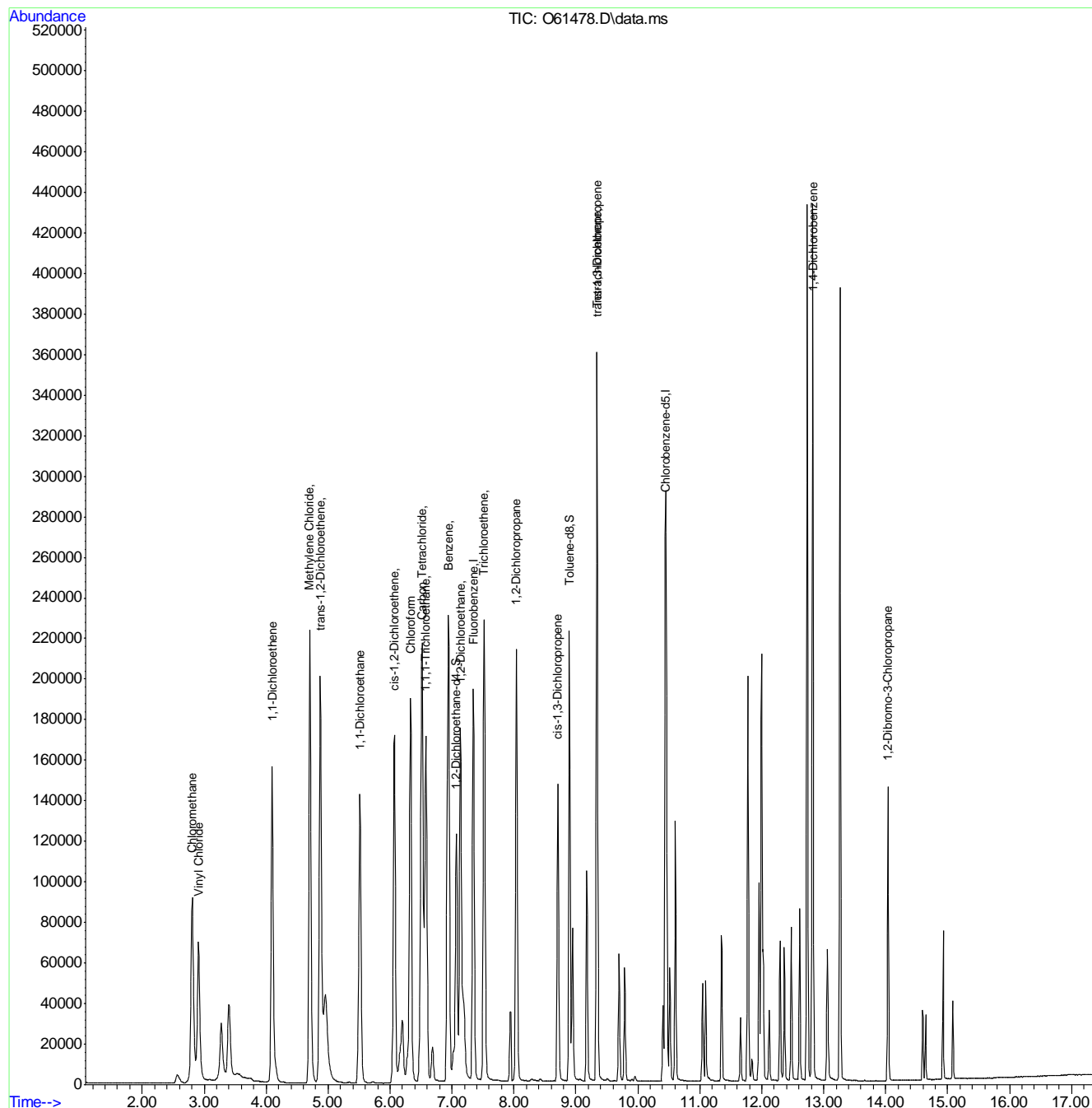
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\092220\
 Data File : O61478.D
 Acq On : 22 Sep 2020 9:15 pm
 Operator : JuanG
 Sample : fa79006-9msd,5x
 Misc : MS47270,VO2366,,,,,5
 ALS Vial : 19 Sample Multiplier: 1

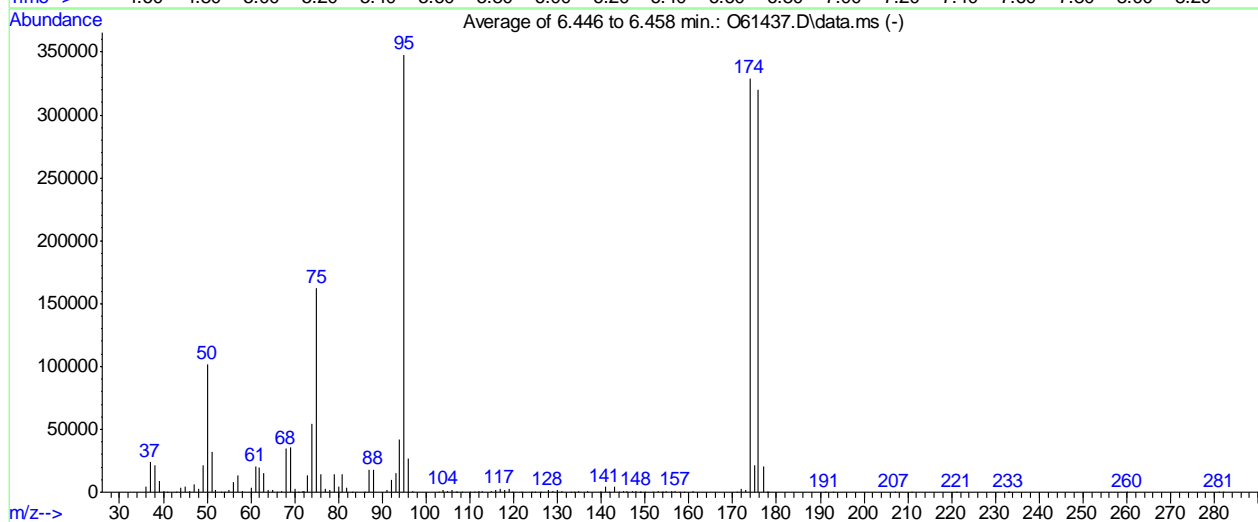
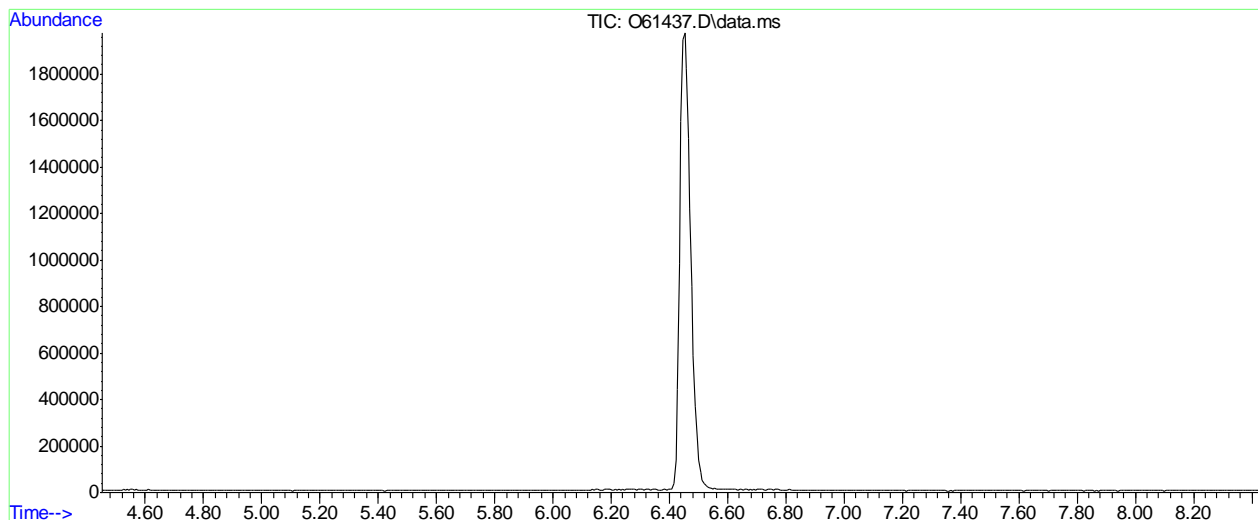
Inst : MSVOA12

Quant Time: Sep 23 10:31:41 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Mon Sep 21 11:01:30 2020
 Response via : Initial Calibration



Methods: SW-846 8260B
 Data File : C:\msdchem\2\data\091820\O61437.D Vial: 100
 Acq On : 18 Sep 2020 8:17 am Operator: melissam
 Sample : bfb Inst : MSVOA12
 Misc : MS47193,VO2365,,,,, Multiplr: 1.00
 MS Integration Params: rteint.p

Method : C:\msdchem\2\methods\SIMCL091820.M (RTE Integrator)
 Title : Standard Methods 6200B



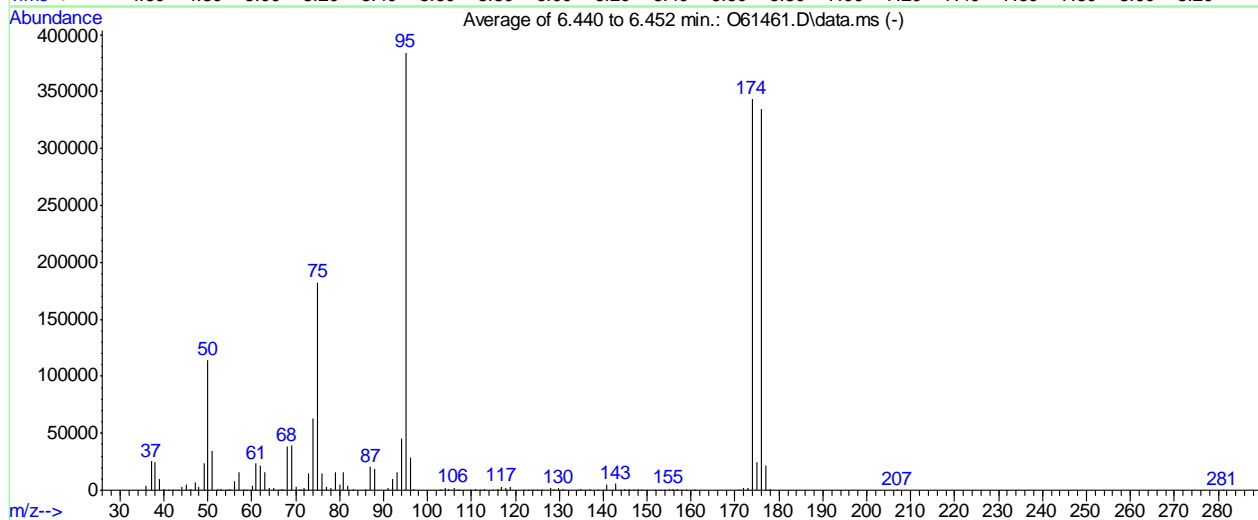
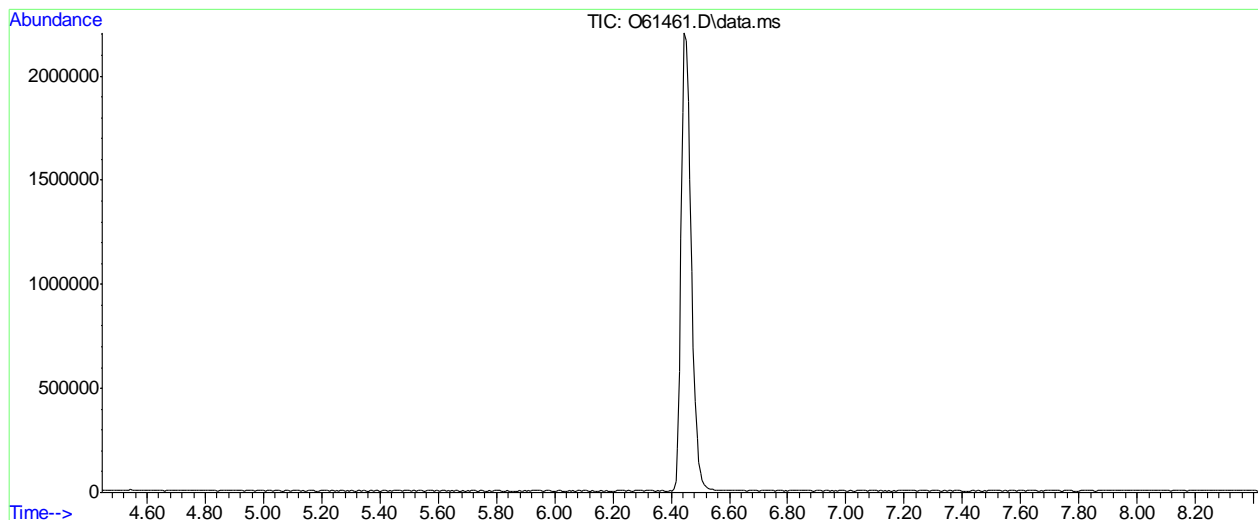
AutoFind: Scans 469, 470, 471; Background Corrected with Scan 460

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	29.3	101965	PASS
75	95	30	60	46.7	162539	PASS
95	95	100	100	100.0	348139	PASS
96	95	5	9	7.8	27092	PASS
173	174	0.00	2	0.6	1951	PASS
174	95	50	100	94.5	329003	PASS
175	174	5	9	6.6	21733	PASS
176	174	95	101	97.2	319701	PASS
177	176	5	9	6.5	20736	PASS

O61437.D SIMCL091820.M Mon Sep 21 11:26:30 2020

Methods: SW-846 8260B
 Data File : C:\msdchem\2\data\092220\O61461.D Vial: 100
 Acq On : 22 Sep 2020 2:45 pm Operator: JuanG
 Sample : bfb Inst : MSVOA12
 Misc : MS47193,VO2366,,,,, Multiplr: 1.00
 MS Integration Params: rteint.p

Method : C:\msdchem\2\methods\SIMCL091820.M (RTE Integrator)
 Title : Standard Methods 6200B



AutoFind: Scans 468, 469, 470; Background Corrected with Scan 459

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	29.7	114312	PASS
75	95	30	60	47.5	182549	PASS
95	95	100	100	100.0	384384	PASS
96	95	5	9	7.4	28608	PASS
173	174	0.00	2	0.6	2169	PASS
174	95	50	100	89.3	343253	PASS
175	174	5	9	7.3	25035	PASS
176	174	95	101	97.6	334891	PASS
177	176	5	9	6.4	21597	PASS

O61461.D SIMCL091820.M Wed Sep 23 17:49:13 2020

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\091820\
 Data File : O61438.D
 Acq On : 18 Sep 2020 8:59 am
 Operator : manager
 Sample : ic2365-1 Inst : MSVOA12
 Misc : MS47193,VO2365,,,,,
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 21 10:58:45 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Fri Sep 18 12:33:03 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
Internal Standards							
1) Fluorobenzene	7.337	96	261236	5.00	ug/L	0.00	
18) Chlorobenzene-d5	10.444	117	202163	5.00	ug/L	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.069	65	116570	5.44	ug/L	0.00	
Spiked Amount	5.000	Range 74 - 125	Recovery	=	108.80%		
19) Toluene-d8	8.892	98	218200	5.20	ug/L	0.00	
Spiked Amount	5.000	Range 88 - 111	Recovery	=	104.00%		
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.901	62	2083	0.10	ug/L		93
3) Chloromethane	2.799	50	7435	0.21	ug/L		90
4) 1,1-Dichloroethene	4.092	61	2731	0.09	ug/L		98
5) Methylene Chloride	4.699	49	20345	0.36	ug/L		98
6) trans-1,2-Dichloroethene	4.865	61	3398	0.09	ug/L		99
7) 1,1-Dichloroethane	5.506	63	4113	0.10	ug/L		92
8) cis-1,2-Dichloroethene	6.065	96	1999	0.10	ug/L		96
9) Chloroform	6.326	83	4005	0.11	ug/L		86
10) Carbon Tetrachloride	6.504	117	2341	0.09	ug/L		98
11) 1,1,1-Trichloroethane	6.574	97	2520	0.08	ug/L		97
12) Benzene	6.931	78	6565	0.09	ug/L		99
14) 1,2-Dichloroethane	7.130	62	3299	0.10	ug/L		96
15) Trichloroethene	7.513	95	2001	0.09	ug/L		93
16) 1,2-Dichloropropane	8.036	63	2172	0.09	ug/L		96
17) cis-1,3-Dichloropropene	8.707	75	1804	0.09	ug/L		99
20) trans-1,3-Dichloropropene	9.341	75	1693	0.07	ug/L		100
21) Tetrachloroethene	9.341	166	1788	0.09	ug/L		86
22) 1,4-Dichlorobenzene	12.824	146	3287	0.08	ug/L		99
23) 1,2-Dibromo-3-Chloropr...	14.035	75	966	0.12	ug/L #		74

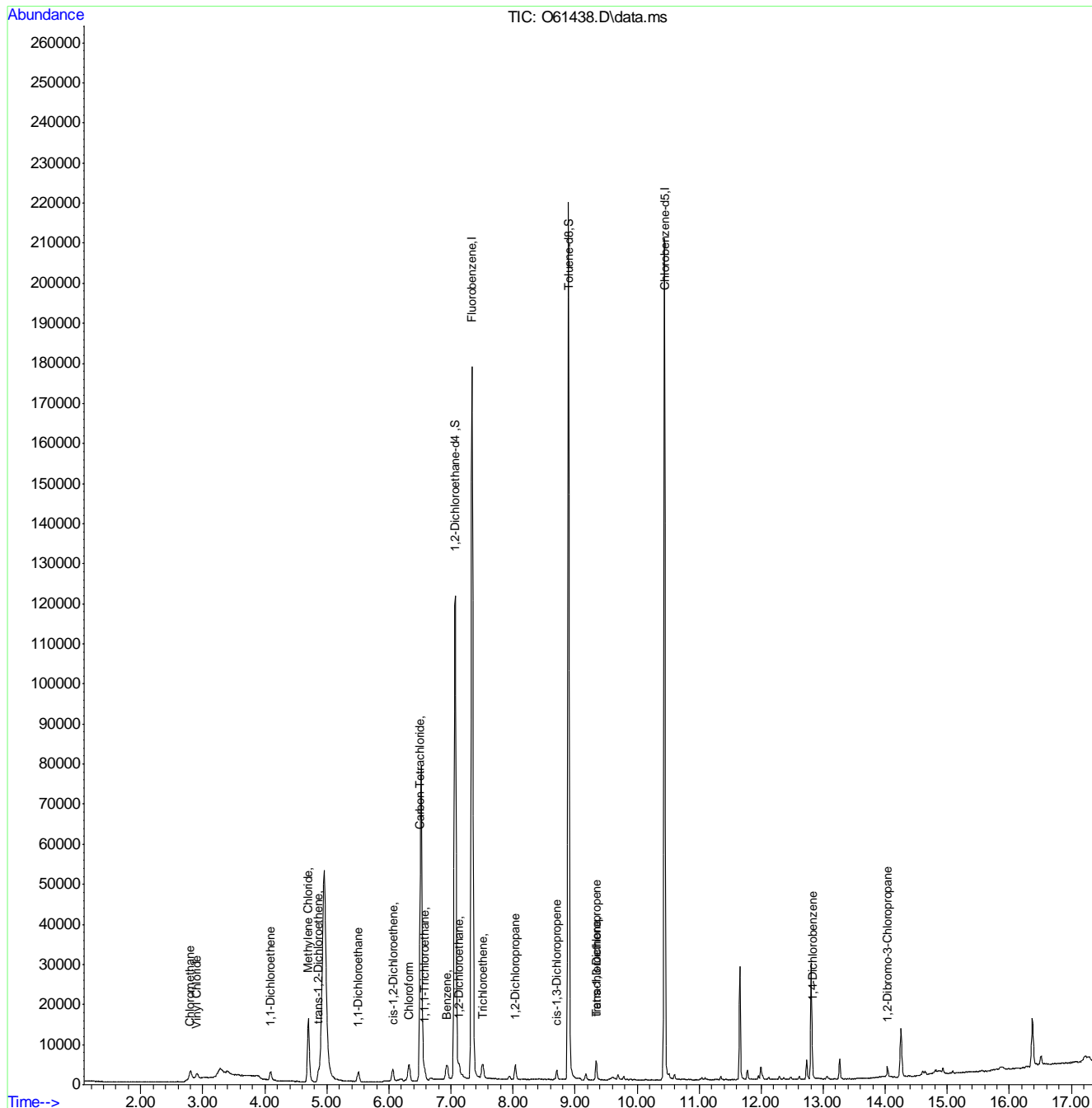
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\091820\
 Data File : O61438.D
 Acq On : 18 Sep 2020 8:59 am
 Operator : manager
 Sample : ic2365-1
 Misc : MS47193,VO2365,,,,,
 ALS Vial : 1 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 21 10:58:45 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Fri Sep 18 12:33:03 2020
 Response via : Initial Calibration



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Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\091820\
 Data File : O61439.D
 Acq On : 18 Sep 2020 9:19 am
 Operator : manager
 Sample : ic2365-2 Inst : MSVOA12
 Misc : MS47193,VO2365,,,,,
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 18 11:15:13 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 16 09:02:25 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.344	96	252171	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.444	117	194840	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.069	65	113152	5.33	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	106.60%	
19) Toluene-d8	8.896	98	210430	5.29	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	105.80%	
Target Compounds						
						Qvalue
2) Vinyl Chloride	2.908	62	11644	0.35	ug/L	100
3) Chloromethane	2.810	50	20323	0.41	ug/L	97
4) 1,1-Dichloroethene	4.096	61	15033	0.40	ug/L	96
5) Methylene Chloride	4.707	49	36456	0.51	ug/L	95
6) trans-1,2-Dichloroethene	4.873	61	18800	0.44	ug/L	98
7) 1,1-Dichloroethane	5.514	63	20598	0.42	ug/L	99
8) cis-1,2-Dichloroethene	6.071	96	9414	0.42	ug/L	95
9) Chloroform	6.332	83	18583	0.45	ug/L	100
10) Carbon Tetrachloride	6.510	117	12911	0.45	ug/L	99
11) 1,1,1-Trichloroethane	6.580	97	13989	0.43	ug/L	99
12) Benzene	6.939	78	32370	0.42	ug/L	99
14) 1,2-Dichloroethane	7.138	62	16414	0.43	ug/L	97
15) Trichloroethene	7.513	95	9833	0.42	ug/L	97
16) 1,2-Dichloropropane	8.043	63	10856	0.42	ug/L	96
17) cis-1,3-Dichloropropene	8.711	75	9449	0.40	ug/L	94
20) trans-1,3-Dichloropropene	9.346	75	8839	0.40	ug/L	95
21) Tetrachloroethene	9.341	166	9884	0.44	ug/L	95
22) 1,4-Dichlorobenzene	12.824	146	16845	0.40	ug/L	99
23) 1,2-Dibromo-3-Chloropr...	14.035	75	3203	0.43	ug/L	97

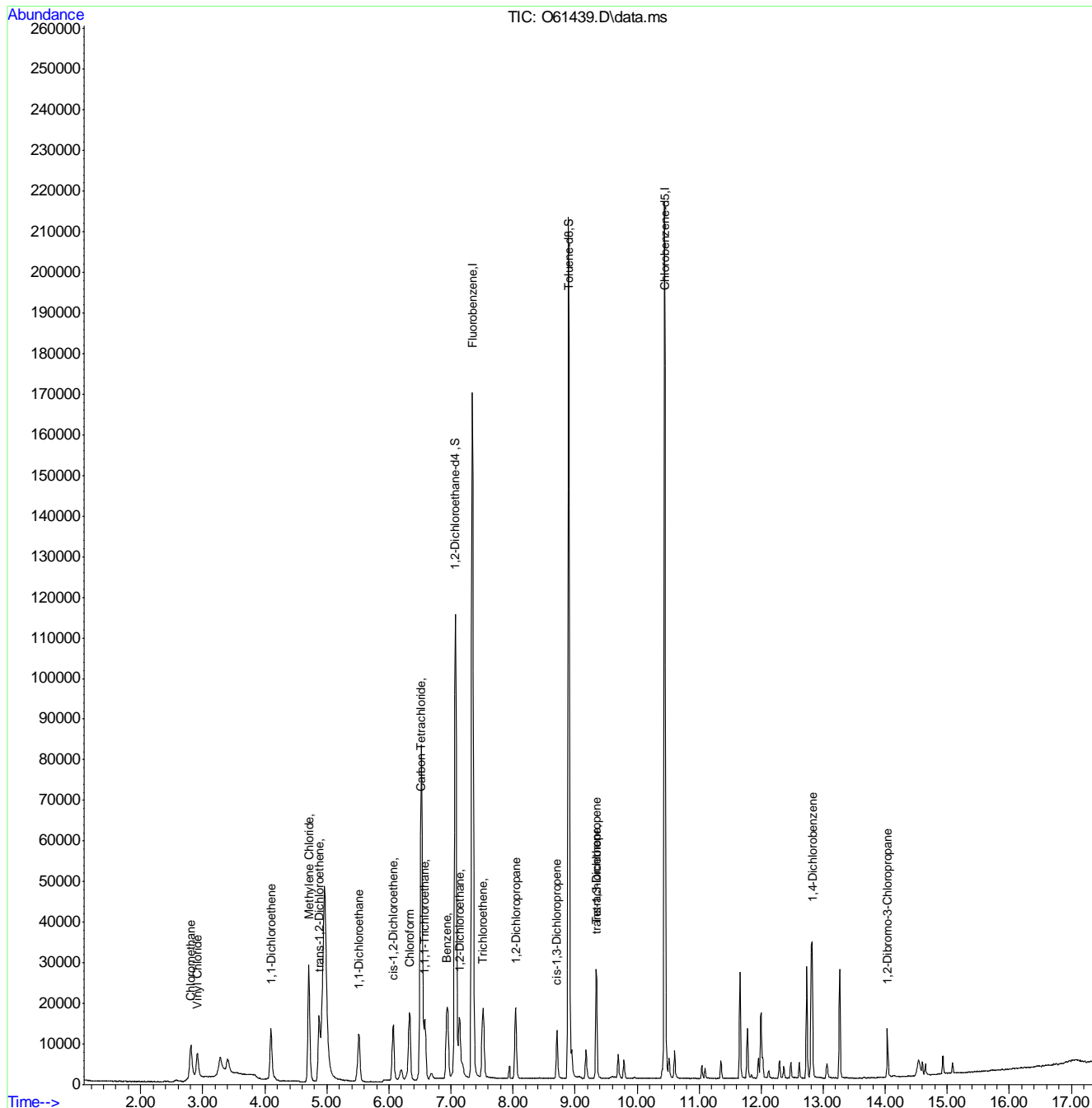
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\091820\
 Data File : O61439.D
 Acq On : 18 Sep 2020 9:19 am
 Operator : manager
 Sample : ic2365-2
 Misc : MS47193,VO2365,,,,,
 ALS Vial : 2 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 18 11:15:13 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 16 09:02:25 2020
 Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\091820\
 Data File : O61440.D
 Acq On : 18 Sep 2020 9:39 am
 Operator : manager
 Sample : ic2365-3 Inst : MSVOA12
 Misc : MS47193,VO2365,,,,,
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 18 11:15:15 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 16 09:02:25 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.345	96	268141	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.444	117	209010	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.069	65	115751	5.12	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	102.40%	
19) Toluene-d8	8.896	98	216803	5.08	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	101.60%	
Target Compounds						
						Qvalue
2) Vinyl Chloride	2.905	62	49935	1.44	ug/L	98
3) Chloromethane	2.799	50	72140	1.38	ug/L	99
4) 1,1-Dichloroethene	4.092	61	66773	1.66	ug/L	97
5) Methylene Chloride	4.700	49	117124	1.58	ug/L	96
6) trans-1,2-Dichloroethene	4.869	61	75666	1.65	ug/L	95
7) 1,1-Dichloroethane	5.510	63	89006	1.70	ug/L	99
8) cis-1,2-Dichloroethene	6.065	96	41201	1.75	ug/L	98
9) Chloroform	6.332	83	78619	1.77	ug/L	97
10) Carbon Tetrachloride	6.510	117	56528	1.85	ug/L	99
11) 1,1,1-Trichloroethane	6.580	97	64352	1.87	ug/L	97
12) Benzene	6.939	78	144210	1.74	ug/L	99
14) 1,2-Dichloroethane	7.138	62	71965	1.77	ug/L	95
15) Trichloroethene	7.513	95	42878	1.74	ug/L	96
16) 1,2-Dichloropropane	8.039	63	47054	1.71	ug/L	99
17) cis-1,3-Dichloropropene	8.707	75	42794	1.71	ug/L	95
20) trans-1,3-Dichloropropene	9.341	75	42016	1.77	ug/L	95
21) Tetrachloroethene	9.341	166	44410	1.86	ug/L	97
22) 1,4-Dichlorobenzene	12.824	146	83651	1.83	ug/L	99
23) 1,2-Dibromo-3-Chloropr...	14.035	75	14699	1.85	ug/L	99

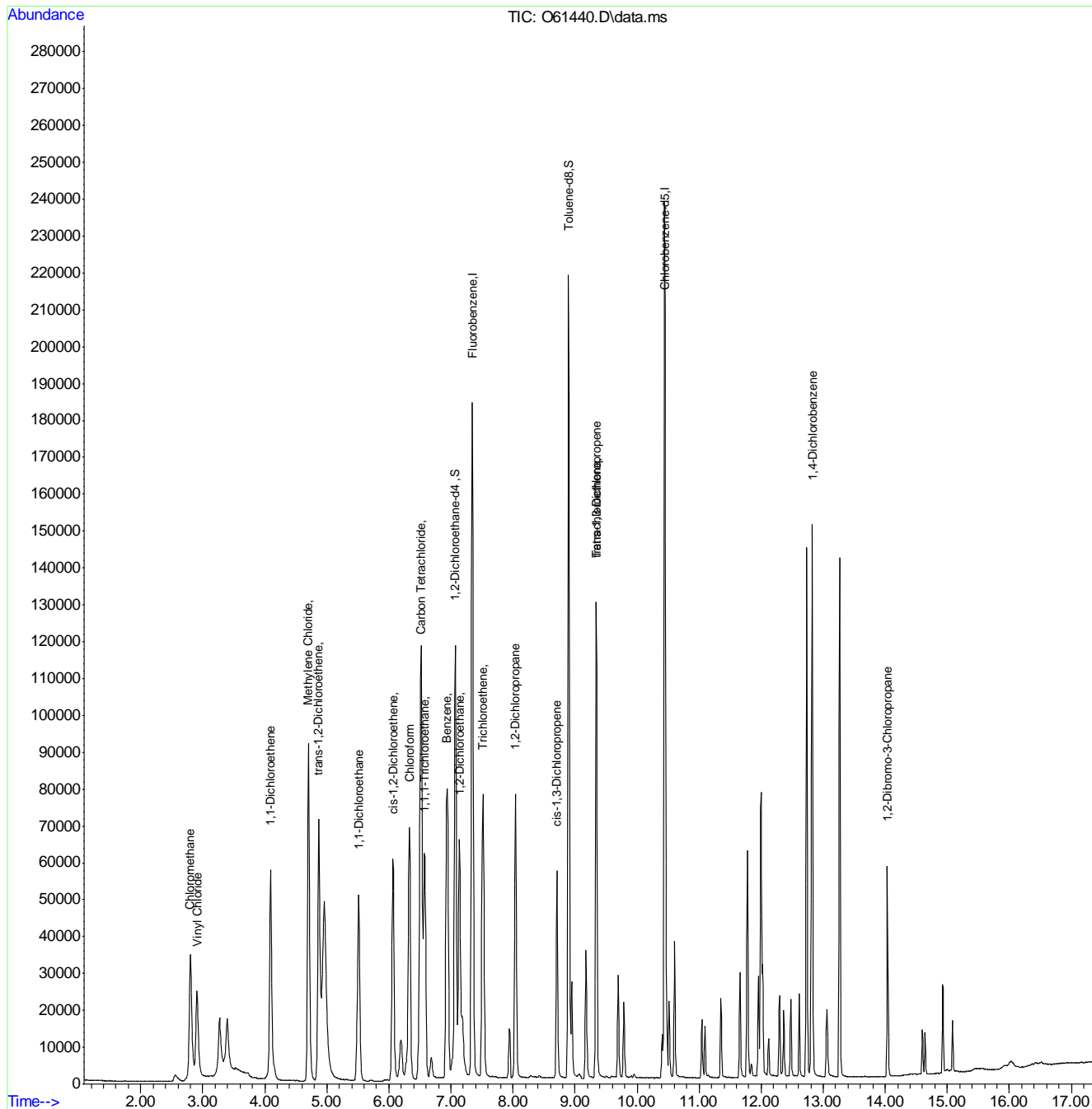
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\091820\
Data File : O61440.D
Acq On : 18 Sep 2020 9:39 am
Operator : manager
Sample : ic2365-3
Misc : MS47193,VO2365,,,,,
ALS Vial : 3 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 18 11:15:15 2020
Quant Method : C:\msdchem\2\methods\SIMCL091820.M
Quant Title : Standard Methods 6200B
QLast Update : Wed Sep 16 09:02:25 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\091820\
 Data File : O61441.D
 Acq On : 18 Sep 2020 9:59 am
 Operator : manager
 Sample : ic2365-4 Inst : MSVOA12
 Misc : MS47193,VO2365,,,,,
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 18 11:15:17 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 16 09:02:25 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.344	96	294808	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.442	117	237988	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.069	65	116529	4.69	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	93.80%	
19) Toluene-d8	8.896	98	239015	4.92	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	98.40%	
Target Compounds						
						Qvalue
2) Vinyl Chloride	2.901	62	120675	3.25	ug/L	98
3) Chloromethane	2.795	50	176395	3.17	ug/L	100
4) 1,1-Dichloroethene	4.085	61	171754	3.89	ug/L	97
5) Methylene Chloride	4.699	49	275783	3.49	ug/L	94
6) trans-1,2-Dichloroethene	4.865	61	194812	3.86	ug/L	97
7) 1,1-Dichloroethane	5.510	63	230378	4.01	ug/L	99
8) cis-1,2-Dichloroethene	6.065	96	109559	4.22	ug/L	96
9) Chloroform	6.325	83	203003	4.17	ug/L	98
10) Carbon Tetrachloride	6.503	117	145473	4.34	ug/L	99
11) 1,1,1-Trichloroethane	6.573	97	157017	4.14	ug/L	98
12) Benzene	6.939	78	384822	4.23	ug/L	99
14) 1,2-Dichloroethane	7.138	62	188429	4.21	ug/L	96
15) Trichloroethene	7.513	95	115676	4.26	ug/L	96
16) 1,2-Dichloropropane	8.039	63	125456	4.14	ug/L	100
17) cis-1,3-Dichloropropene	8.707	75	121235	4.41	ug/L	96
20) trans-1,3-Dichloropropene	9.344	75	121382	4.48	ug/L	94
21) Tetrachloroethene	9.338	166	115720	4.25	ug/L	99
22) 1,4-Dichlorobenzene	12.822	146	233075	4.48	ug/L	98
23) 1,2-Dibromo-3-Chloropr...	14.032	75	41267	4.56	ug/L	90

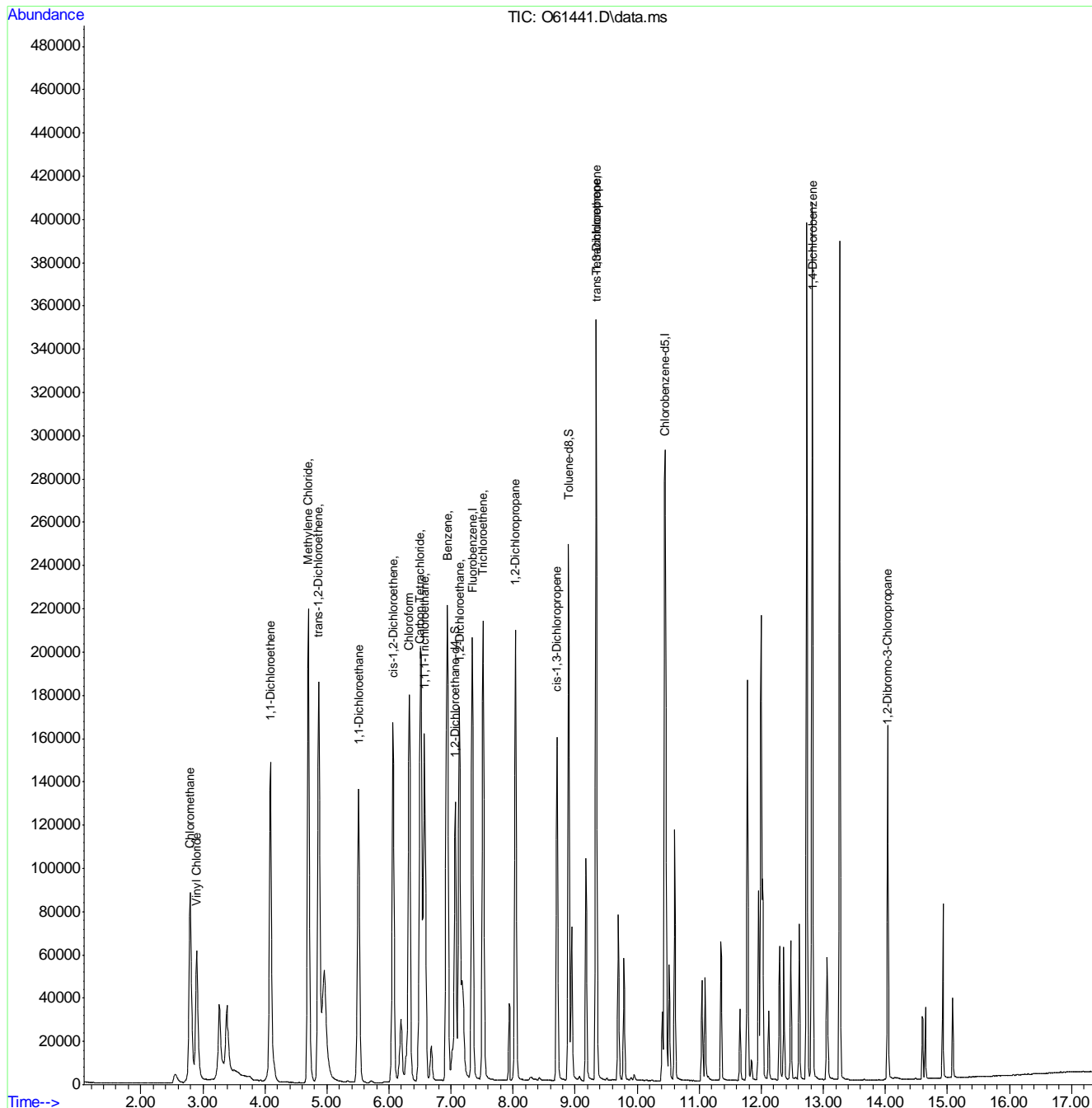
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\091820\
 Data File : O61441.D
 Acq On : 18 Sep 2020 9:59 am
 Operator : manager
 Sample : ic2365-4
 Misc : MS47193,VO2365,,,,,
 ALS Vial : 4 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 18 11:15:17 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 16 09:02:25 2020
 Response via : Initial Calibration



7.6.4
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\091820\
 Data File : O61442.D
 Acq On : 18 Sep 2020 10:20 am
 Operator : manager
 Sample : icc2365-5 Inst : MSVOA12
 Misc : MS47193,VO2365,,,,,
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 18 13:28:13 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Fri Sep 18 12:33:03 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.344	96	317479	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.444	117	262197	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.069	65	124374	4.78	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	95.60%	
19) Toluene-d8	8.896	98	261566	4.81	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	96.20%	
Target Compounds						
						Qvalue
2) Vinyl Chloride	2.904	62	258010	9.83	ug/L	100
3) Chloromethane	2.799	50	368949	9.84	ug/L	100
4) 1,1-Dichloroethene	4.089	61	403552	10.70	ug/L	100
5) Methylene Chloride	4.699	49	594962	9.66	ug/L	100
6) trans-1,2-Dichloroethene	4.865	61	465324	10.43	ug/L	100
7) 1,1-Dichloroethane	5.506	63	538909	10.44	ug/L	100
8) cis-1,2-Dichloroethene	6.065	96	267602	10.63	ug/L	100
9) Chloroform	6.326	83	473177	10.23	ug/L	100
10) Carbon Tetrachloride	6.504	117	349387	10.76	ug/L	100
11) 1,1,1-Trichloroethane	6.573	97	396800	10.91	ug/L	100
12) Benzene	6.939	78	927336	10.31	ug/L	100
14) 1,2-Dichloroethane	7.138	62	433891	10.38	ug/L	100
15) Trichloroethene	7.513	95	279983	10.77	ug/L	100
16) 1,2-Dichloropropane	8.039	63	295419	10.58	ug/L	100
17) cis-1,3-Dichloropropene	8.711	75	305456	10.40	ug/L	100
20) trans-1,3-Dichloropropene	9.341	75	303355	9.80	ug/L	100
21) Tetrachloroethene	9.341	166	276313	10.48	ug/L	100
22) 1,4-Dichlorobenzene	12.824	146	571165	10.33	ug/L	100
23) 1,2-Dibromo-3-Chloropr...	14.035	75	100354	9.98	ug/L	100

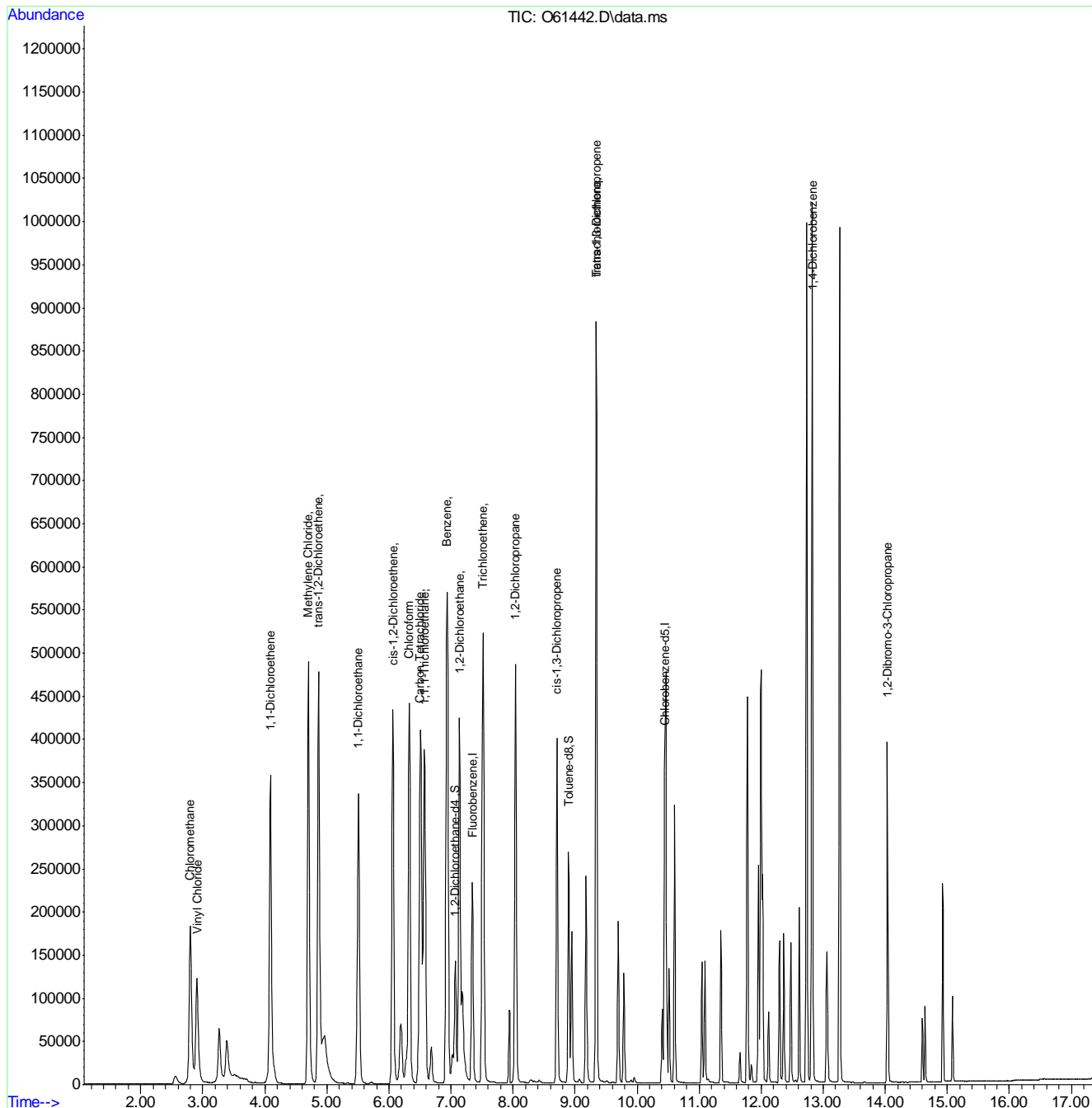
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\091820\
 Data File : O61442.D
 Acq On : 18 Sep 2020 10:20 am
 Operator : manager
 Sample : icc2365-5
 Misc : MS47193,VO2365,,,,,
 ALS Vial : 5 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 18 13:28:13 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Fri Sep 18 12:33:03 2020
 Response via : Initial Calibration



7.6.5
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\091820\
 Data File : O61443.D
 Acq On : 18 Sep 2020 10:40 am
 Operator : manager
 Sample : ic2365-6 Inst : MSVOA12
 Misc : MS47193,VO2365,,,,,
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 18 11:15:21 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 16 09:02:25 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
Internal Standards							
1) Fluorobenzene	7.344	96	349600	5.00	ug/L	0.00	
18) Chlorobenzene-d5	10.444	117	284296	5.00	ug/L	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.069	65	133006	4.52	ug/L	0.00	
Spiked Amount	5.000	Range 74 - 125	Recovery	=	90.40%		
19) Toluene-d8	8.896	98	289639	4.99	ug/L	0.00	
Spiked Amount	5.000	Range 88 - 111	Recovery	=	99.80%		
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.901	62	408210	10.18	ug/L		99
3) Chloromethane	2.799	50	573827	9.85	ug/L		100
4) 1,1-Dichloroethene	4.085	61	628074	11.99	ug/L		96
5) Methylene Chloride	4.696	49	942585	11.72	ug/L		95
6) trans-1,2-Dichloroethene	4.865	61	748951	12.53	ug/L		95
7) 1,1-Dichloroethane	5.506	63	860860	12.63	ug/L		99
8) cis-1,2-Dichloroethene	6.065	96	440975	14.33	ug/L		96
9) Chloroform	6.332	83	755124	13.07	ug/L		95
10) Carbon Tetrachloride	6.504	117	546583	13.74	ug/L		100
11) 1,1,1-Trichloroethane	6.573	97	633035	14.07	ug/L		96
12) Benzene	6.939	78	1489877	13.80	ug/L		99
14) 1,2-Dichloroethane	7.138	62	706014	13.29	ug/L		95
15) Trichloroethene	7.513	95	448714	13.94	ug/L		96
16) 1,2-Dichloropropane	8.039	63	476629	13.25	ug/L		96
17) cis-1,3-Dichloropropene	8.711	75	519158	15.91	ug/L		90
20) trans-1,3-Dichloropropene	9.341	75	514875	15.92	ug/L		93
21) Tetrachloroethene	9.341	166	430942	13.24	ug/L		98
22) 1,4-Dichlorobenzene	12.824	146	935228	15.06	ug/L		99
23) 1,2-Dibromo-3-Chloropr...	14.035	75	172288	15.94	ug/L		91

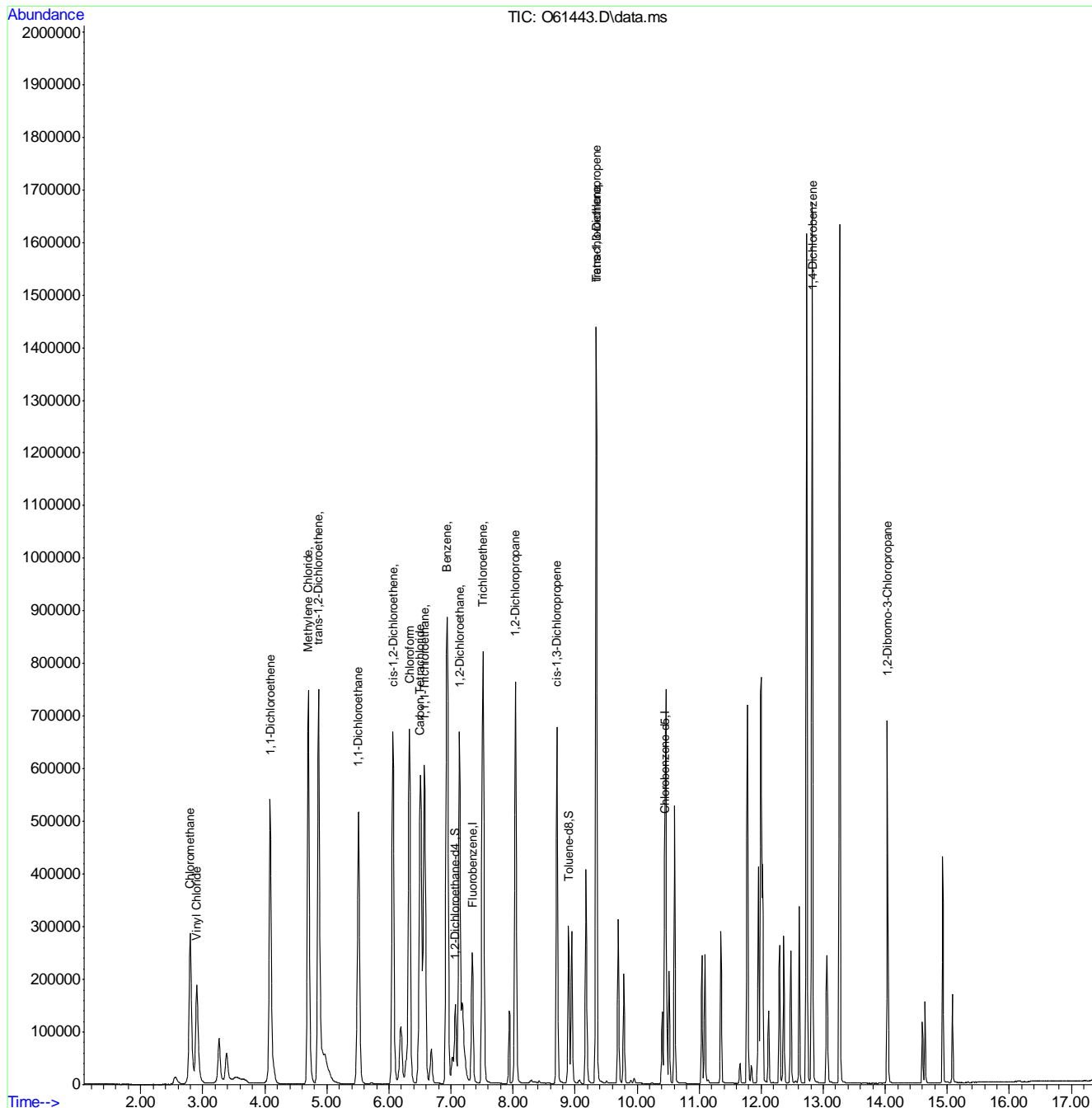
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\091820\
 Data File : O61443.D
 Acq On : 18 Sep 2020 10:40 am
 Operator : manager
 Sample : ic2365-6
 Misc : MS47193,VO2365,,,,,
 ALS Vial : 6 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 18 11:15:21 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 16 09:02:25 2020
 Response via : Initial Calibration



9.9.7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\091820\
 Data File : O61444.D
 Acq On : 18 Sep 2020 11:00 am
 Operator : manager
 Sample : ic2365-7 Inst : MSVOA12
 Misc : MS47193,VO2365,,,,,
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 18 11:18:15 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 16 09:02:25 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.345	96	378436	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.444	117	303929	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.069	65	142322	4.46	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	89.20%	
19) Toluene-d8	8.896	98	316353	5.10	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	102.00%	
Target Compounds						
						Qvalue
2) Vinyl Chloride	2.905	62	549351	13.23	ug/L	99
3) Chloromethane	2.803	50	759194	12.80	ug/L	99
4) 1,1-Dichloroethene	4.089	61	906550	15.99	ug/L	96
5) Methylene Chloride	4.703	49	1296523	16.47	ug/L	91
6) trans-1,2-Dichloroethene	4.869	61	1075792	16.62	ug/L	95
7) 1,1-Dichloroethane	5.510	63	1223744	16.59	ug/L	99
8) cis-1,2-Dichloroethene	6.065	96	636570	19.12	ug/L	97
9) Chloroform	6.332	83	1072728	17.15	ug/L	95
10) Carbon Tetrachloride	6.510	117	798020	18.53	ug/L	99
11) 1,1,1-Trichloroethane	6.574	97	922417	18.95	ug/L	96
12) Benzene	6.939	78	2138246	18.29	ug/L	100
14) 1,2-Dichloroethane	7.138	62	996784	17.34	ug/L	95
15) Trichloroethene	7.513	95	652438	18.72	ug/L	99
16) 1,2-Dichloropropane	8.043	63	678346	17.42	ug/L	95
17) cis-1,3-Dichloropropene	8.711	75	768754	21.77	ug/L	91
20) trans-1,3-Dichloropropene	9.341	75	752317	21.75	ug/L	92
21) Tetrachloroethene	9.341	166	630648	18.12	ug/L	99
22) 1,4-Dichlorobenzene	12.824	146	1345441	20.27	ug/L	99
23) 1,2-Dibromo-3-Chloropr...	14.035	75	238266	20.62	ug/L	92

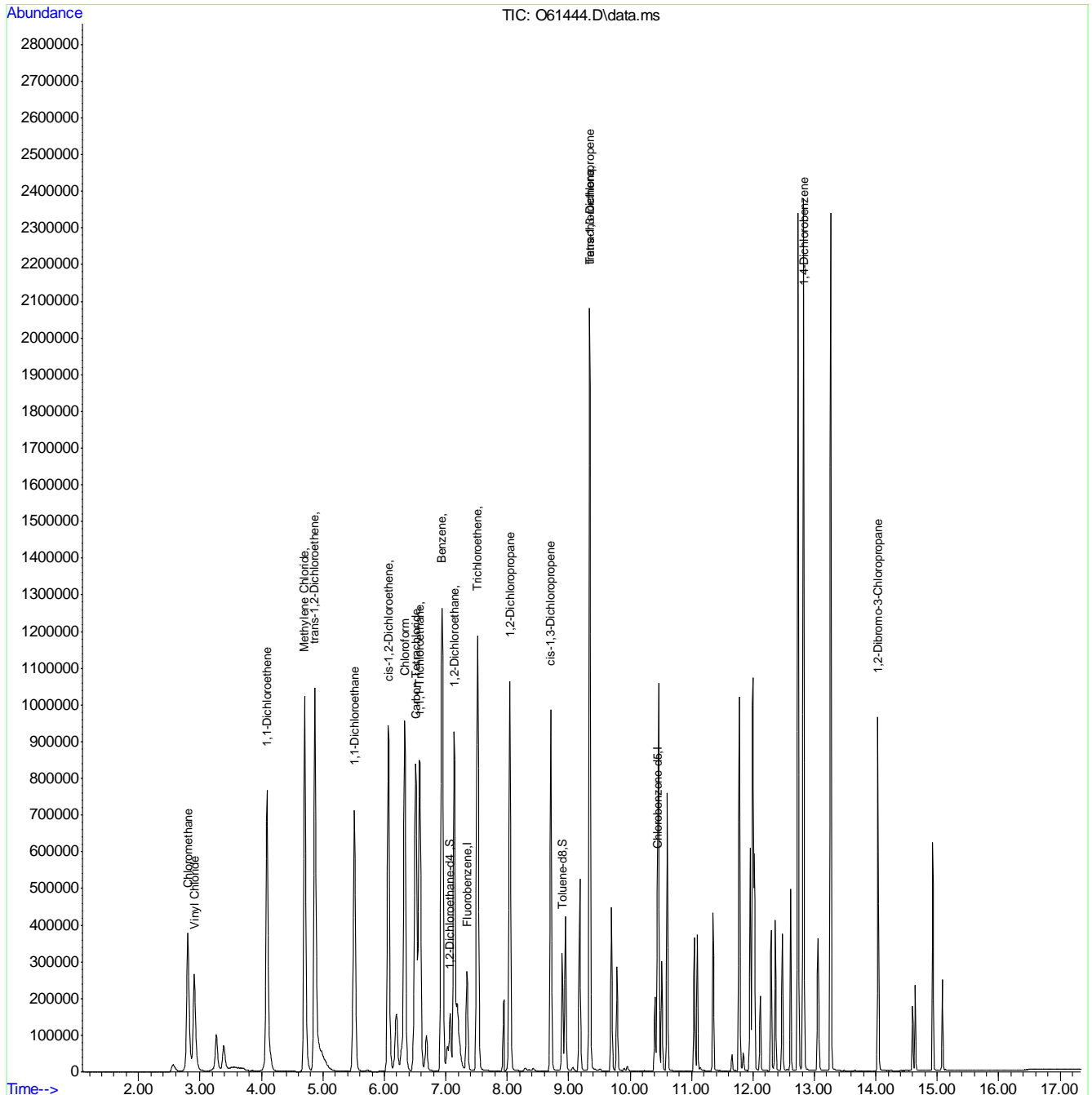
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\091820\
 Data File : O61444.D
 Acq On : 18 Sep 2020 11:00 am
 Operator : manager
 Sample : ic2365-7
 Misc : MS47193,VO2365,,,,,
 ALS Vial : 7 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 18 11:18:15 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Wed Sep 16 09:02:25 2020
 Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\091820\
 Data File : O61449.D
 Acq On : 18 Sep 2020 1:45 pm
 Operator : manager
 Sample : icv2365-5 Inst : MSVOA12
 Misc : MS47193,VO2365,,,,,
 ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 21 11:02:09 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Mon Sep 21 11:01:30 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
Internal Standards							
1) Fluorobenzene	7.345	96	345404	5.00	ug/L	0.00	
18) Chlorobenzene-d5	10.444	117	280094	5.00	ug/L	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.069	65	132346	4.67	ug/L	0.00	
Spiked Amount	5.000	Range 74 - 125	Recovery	=	93.40%		
19) Toluene-d8	8.896	98	287603	4.95	ug/L	0.00	
Spiked Amount	5.000	Range 88 - 111	Recovery	=	99.00%		
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.916	62	278141	9.74	ug/L		100
3) Chloromethane	2.814	50	385205	9.38	ug/L		100
4) 1,1-Dichloroethene	4.092	61	453054	11.04	ug/L		98
5) Methylene Chloride	4.707	49	649105	9.69	ug/L		99
6) trans-1,2-Dichloroethene	4.873	61	515172	10.61	ug/L		99
7) 1,1-Dichloroethane	5.514	63	601290	10.70	ug/L		100
8) cis-1,2-Dichloroethene	6.071	96	302659	11.06	ug/L		99
9) Chloroform	6.332	83	518250	10.30	ug/L		99
10) Carbon Tetrachloride	6.510	117	388731	11.01	ug/L		99
11) 1,1,1-Trichloroethane	6.580	97	437431	11.06	ug/L		99
12) Benzene	6.939	78	1068476	10.92	ug/L		98
14) 1,2-Dichloroethane	7.138	62	491591	10.81	ug/L		99
15) Trichloroethene	7.513	95	320798	11.35	ug/L		100
16) 1,2-Dichloropropane	8.039	63	339084	11.16	ug/L		99
17) cis-1,3-Dichloropropene	8.707	75	364460	11.29	ug/L		99
20) trans-1,3-Dichloropropene	9.341	75	365164	11.05	ug/L		98
21) Tetrachloroethene	9.341	166	304680	10.82	ug/L		99
22) 1,4-Dichlorobenzene	12.824	146	650957	10.97	ug/L		100
23) 1,2-Dibromo-3-Chloropr...	14.035	75	117662	10.96	ug/L		95

(#) = qualifier out of range (m) = manual integration (+) = signals summed

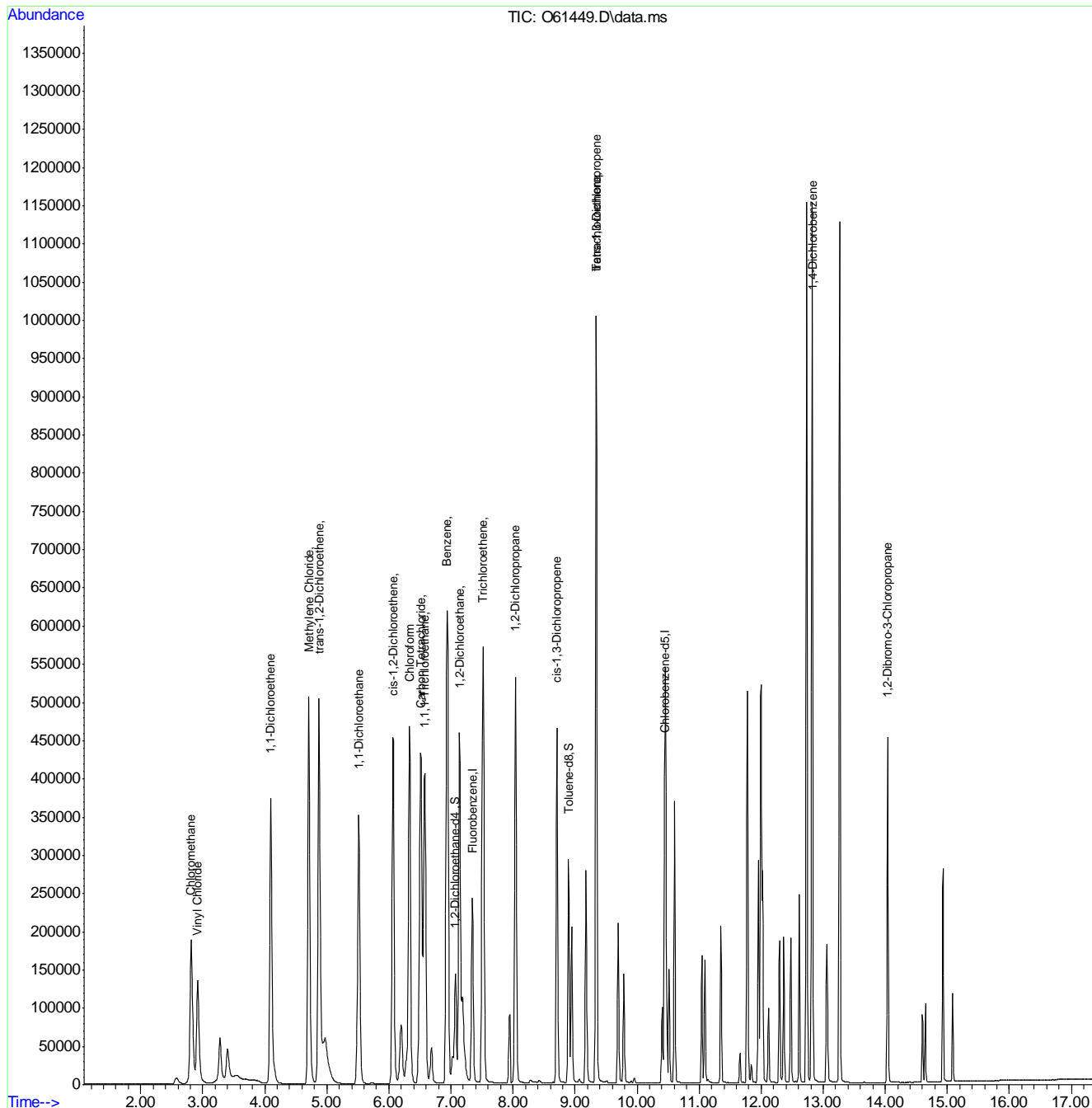
7.6.8

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\091820\
 Data File : O61449.D
 Acq On : 18 Sep 2020 1:45 pm
 Operator : manager
 Sample : icv2365-5
 Misc : MS47193,VO2365,,,,,
 ALS Vial : 12 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 21 11:02:09 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Mon Sep 21 11:01:30 2020
 Response via : Initial Calibration



8'9'7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\092220\
 Data File : O61462.D
 Acq On : 22 Sep 2020 3:19 pm
 Operator : JuanG
 Sample : cc2365-5 Inst : MSVOA12
 Misc : MS47193,VO2366,,,,,
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 23 10:31:09 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Mon Sep 21 11:01:30 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
Internal Standards							
1) Fluorobenzene	7.337	96	366173	5.00	ug/L	0.00	
18) Chlorobenzene-d5	10.439	117	304573	5.00	ug/L	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.062	65	140342	4.67	ug/L	0.00	
Spiked Amount	5.000	Range 74 - 125	Recovery	=	93.40%		
19) Toluene-d8	8.892	98	306507	4.85	ug/L	0.00	
Spiked Amount	5.000	Range 88 - 111	Recovery	=	97.00%		
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.901	62	288462	9.53	ug/L		99
3) Chloromethane	2.799	50	395706	9.04	ug/L		100
4) 1,1-Dichloroethene	4.085	61	424801	9.77	ug/L		99
5) Methylene Chloride	4.696	49	642071	8.96	ug/L		99
6) trans-1,2-Dichloroethene	4.862	61	497277	9.66	ug/L		100
7) 1,1-Dichloroethane	5.503	63	573566	9.63	ug/L		100
8) cis-1,2-Dichloroethene	6.059	96	289874	9.99	ug/L		98
9) Chloroform	6.326	83	502562	9.42	ug/L		98
10) Carbon Tetrachloride	6.504	117	374533	10.00	ug/L		99
11) 1,1,1-Trichloroethane	6.574	97	424918	10.13	ug/L		98
12) Benzene	6.932	78	994233	9.58	ug/L		98
14) 1,2-Dichloroethane	7.130	62	458633	9.51	ug/L		99
15) Trichloroethene	7.505	95	298176	9.95	ug/L		97
16) 1,2-Dichloropropane	8.036	63	323869	10.06	ug/L		99
17) cis-1,3-Dichloropropene	8.707	75	335866	9.97	ug/L		98
20) trans-1,3-Dichloropropene	9.341	75	330149	9.18	ug/L		97
21) Tetrachloroethene	9.335	166	293874	9.60	ug/L		97
22) 1,4-Dichlorobenzene	12.824	146	612118	9.57	ug/L		98
23) 1,2-Dibromo-3-Chloropr...	14.035	75	109556	9.38	ug/L		93

(#) = qualifier out of range (m) = manual integration (+) = signals summed

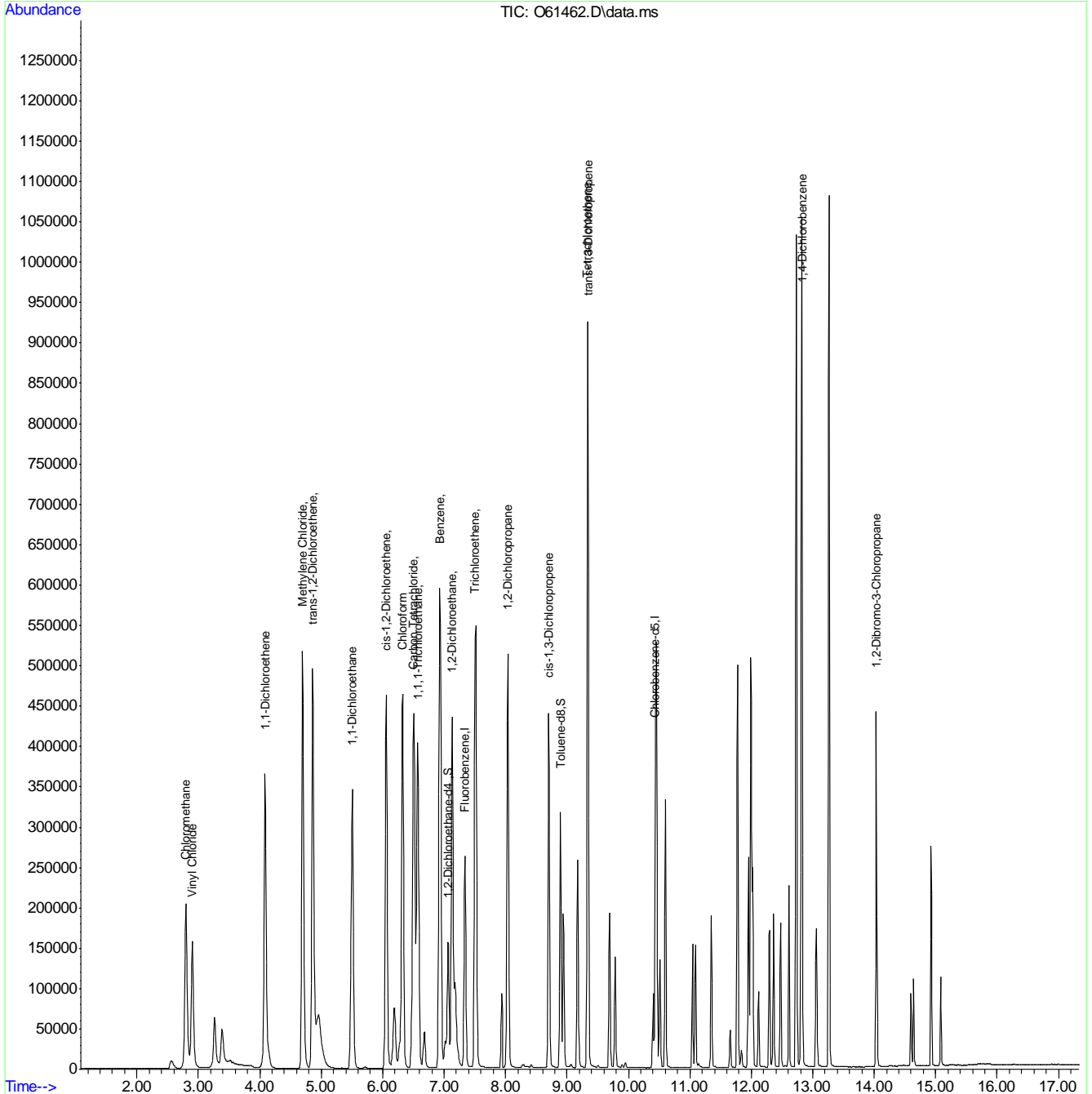
7.69
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\092220\
 Data File : O61462.D
 Acq On : 22 Sep 2020 3:19 pm
 Operator : JuanG
 Sample : cc2365-5
 Misc : MS47193,VO2366,,,,,
 ALS Vial : 1 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Sep 23 10:31:09 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Mon Sep 21 11:01:30 2020
 Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\092220\
 Data File : O61479.D
 Acq On : 22 Sep 2020 9:35 pm
 Operator : JuanG
 Sample : ecc2365-5 Inst : MSVOA12
 Misc : MS47270,VO2366,,,,,
 ALS Vial : 20 Sample Multiplier: 1

Quant Time: Sep 23 10:31:43 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Mon Sep 21 11:01:30 2020
 Response via : Initial Calibration

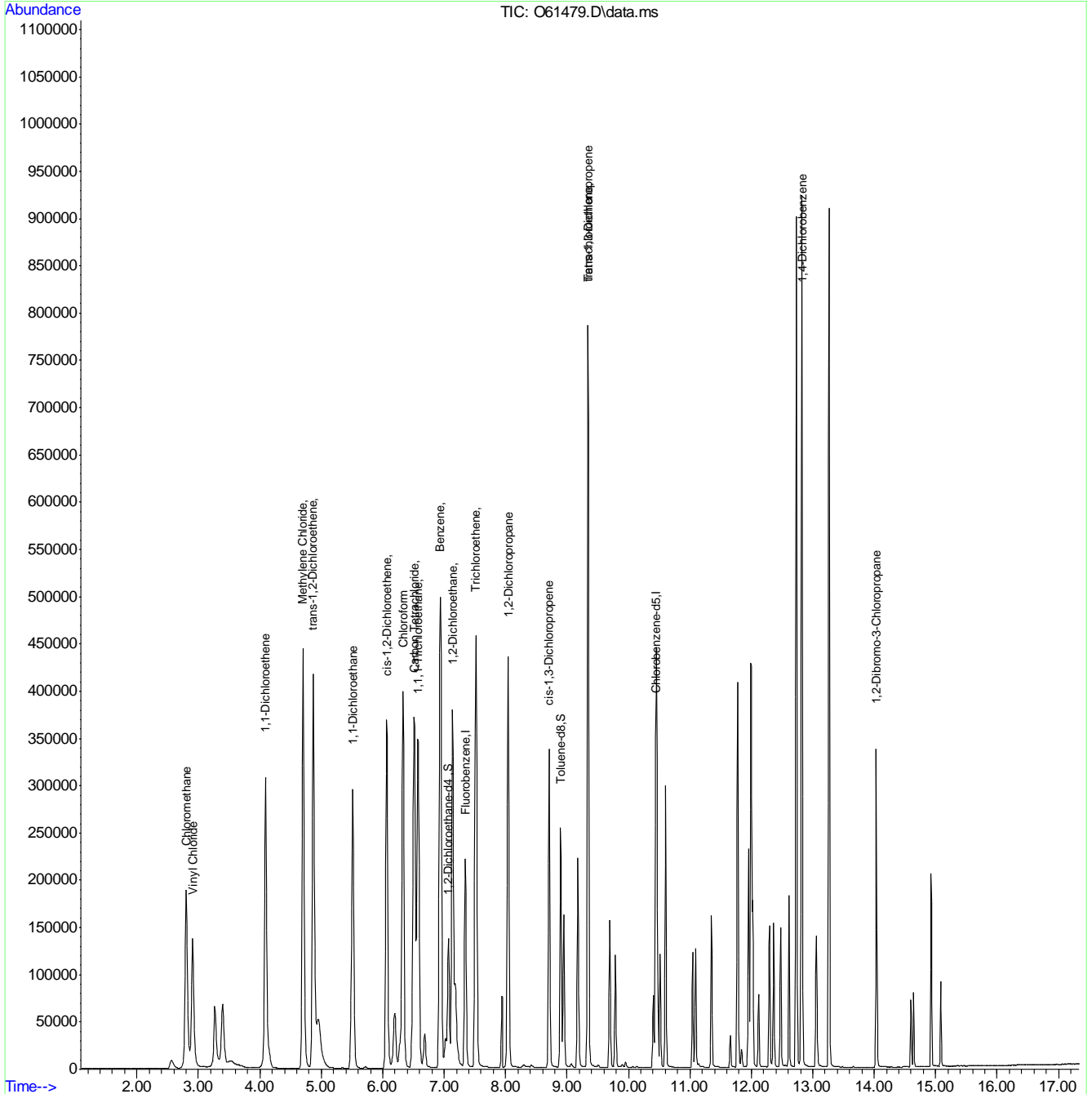
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
Internal Standards							
1) Fluorobenzene	7.344	96	307398	5.00	ug/L	0.00	
18) Chlorobenzene-d5	10.444	117	257979	5.00	ug/L	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.069	65	122520	4.86	ug/L	0.00	
Spiked Amount	5.000	Range 74 - 125	Recovery	=	97.20%		
19) Toluene-d8	8.896	98	249261	4.66	ug/L	0.00	
Spiked Amount	5.000	Range 88 - 111	Recovery	=	93.20%		
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.904	62	261143	10.27	ug/L		100
3) Chloromethane	2.803	50	378855	10.55	ug/L		100
4) 1,1-Dichloroethene	4.092	61	359223	9.84	ug/L		99
5) Methylene Chloride	4.703	49	564512	9.44	ug/L		98
6) trans-1,2-Dichloroethene	4.869	61	423444	9.80	ug/L		99
7) 1,1-Dichloroethane	5.510	63	493118	9.86	ug/L		100
8) cis-1,2-Dichloroethene	6.065	96	237807	9.76	ug/L		97
9) Chloroform	6.332	83	433113	9.67	ug/L		99
10) Carbon Tetrachloride	6.510	117	314134	9.99	ug/L		98
11) 1,1,1-Trichloroethane	6.573	97	361052	10.26	ug/L		98
12) Benzene	6.939	78	835280	9.59	ug/L		98
14) 1,2-Dichloroethane	7.138	62	397472	9.82	ug/L		99
15) Trichloroethene	7.513	95	250006	9.94	ug/L		99
16) 1,2-Dichloropropane	8.043	63	267220	9.88	ug/L		100
17) cis-1,3-Dichloropropene	8.711	75	257886	9.20	ug/L		100
20) trans-1,3-Dichloropropene	9.341	75	262242	8.61	ug/L		99
21) Tetrachloroethene	9.341	166	250097	9.65	ug/L		99
22) 1,4-Dichlorobenzene	12.824	146	522198	9.64	ug/L		99
23) 1,2-Dibromo-3-Chloropr...	14.035	75	82449	8.34	ug/L		94

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\092220\
 Data File : O61479.D
 Acq On : 22 Sep 2020 9:35 pm
 Operator : JuanG
 Sample : ecc2365-5 Inst : MSVOA12
 Misc : MS47270,VO2366,,,,,
 ALS Vial : 20 Sample Multiplier: 1

Quant Time: Sep 23 10:31:43 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Mon Sep 21 11:01:30 2020
 Response via : Initial Calibration



7.6.10
7

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

e-Hardcopy 2.0
Automated Report

Technical Report for

Ahtna Global, LLC

Fort Ord Groundwater Monitoring

21065.000.01.0000(Former Fort Ord GWMP - OU2)

SGS Job Number: FA79152

Sampling Dates: 09/23/20 - 09/24/20



Report to:

Ahtna Global, LLC
9699 Blue Larkspur Lane Suite 203
Monterey, CA 93940
dlieberman@ahtna.net; mfisher@ahtna.net;
hdillon@ahtna.net; eschmidt@ahtna.net;
ATTN: Derek Lieberman

Total number of pages in report: **173**



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

Norm Farmer
Technical Director

Client Service contact: Elvin Kumar 407-425-6700

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

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Test results relate only to samples analyzed.

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Sample Summary

Ahtna Global, LLC

Job No: FA79152

Fort Ord Groundwater Monitoring

Project No: 21065.000.01.0000(Former Fort Ord GWMP - OU2)

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
FA79152-1	09/23/20	15:10 SB	09/25/20	AQ	Ground Water	2039YOU2455F
FA79152-2	09/23/20	15:15 SB	09/25/20	AQ	Ground Water	2039YOU2456D
FA79152-3	09/24/20	10:10 SB	09/25/20	AQ	Ground Water	2039YOU2457C
FA79152-4	09/24/20	10:15 SB	09/25/20	AQ	Trip Blank Water	2039YOU2458A

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: Ahtna Global, LLC

Job No: FA79152

Site: Fort Ord Groundwater Monitoring

Report Date 10/12/2020 10:41:56

3 Sample(s), 1 Trip Blank(s) and 0 Field Blank(s) were collected on between 09/23/2020 and 09/24/2020 and were received at SGS North America Inc - Orlando on 09/25/2020 properly preserved, at 2.4 Deg. C and intact. These Samples received an SGS Orlando job number of FA79152. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section. Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

MS Volatiles By Method SW846 8260B BY SIM

Matrix: AQ

Batch ID: VO2370

FA79152-4: Confirmation run.

Matrix: AQ

Batch ID: VZ2433

Sample(s) FA79152-1MS, FA79152-1MSD were used as the QC samples indicated.

All method blanks for this batch meet method specific criteria.

The following samples were run outside of holding time for method SW846 8260B BY SIM: FA79152-1, FA79152-2

Matrix: AQ

Batch ID: VZ2434

Sample(s) FA79309-1MS, FA79309-1MSD were used as the QC samples indicated.

All method blanks for this batch meet method specific criteria.

The following samples were run outside of holding time for method SW846 8260B BY SIM: FA79152-4

FA79152-4: Sample re-analyzed beyond hold time; reported results are considered minimum values.

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

Narrative prepared by:

Ariel Hartney, Client Services (*Signature on File*)

Summary of Hits

Job Number: FA79152
Account: Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring
Collected: 09/23/20 thru 09/24/20



Lab Sample ID	Client Sample ID	Result/ Qual	LOQ	LOD	Units	Method
FA79152-1	2039YOU2455F					
Chloroform		0.73	0.50	0.25	ug/l	SW846 8260B BY SIM
1,1-Dichloroethane		0.74	0.50	0.25	ug/l	SW846 8260B BY SIM
Tetrachloroethylene		1.9	0.50	0.25	ug/l	SW846 8260B BY SIM
Trichloroethylene		0.48 J	0.50	0.25	ug/l	SW846 8260B BY SIM
FA79152-2	2039YOU2456D					
Chloroform		0.77	0.50	0.25	ug/l	SW846 8260B BY SIM
1,1-Dichloroethane		0.78	0.50	0.25	ug/l	SW846 8260B BY SIM
Tetrachloroethylene		2.1	0.50	0.25	ug/l	SW846 8260B BY SIM
Trichloroethylene		0.51	0.50	0.25	ug/l	SW846 8260B BY SIM
FA79152-3	2039YOU2457C					
No hits reported in this sample.						
FA79152-4	2039YOU2458A					
Tetrachloroethylene ^a		3.9	0.50	0.25	ug/l	SW846 8260B BY SIM

(a) Sample re-analyzed beyond hold time; reported results are considered minimum values.

Sample Results

Report of Analysis

SGS North America Inc.

Report of Analysis

Page 1 of 1

Client Sample ID:	2039YOU2455F	Date Sampled:	09/23/20
Lab Sample ID:	FA79152-1	Date Received:	09/25/20
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B BY SIM		
Project:	Fort Ord Groundwater Monitoring		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Z62700.D	1	10/07/20 15:17	AG	n/a	n/a	VZ2433
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
71-43-2	Benzene	0.25 U	0.50	0.25	0.10	ug/l	
56-23-5	Carbon Tetrachloride	0.25 U	0.50	0.25	0.10	ug/l	
67-66-3	Chloroform	0.73	0.50	0.25	0.10	ug/l	
75-34-3	1,1-Dichloroethane	0.74	0.50	0.25	0.10	ug/l	
107-06-2	1,2-Dichloroethane	0.25 U	0.50	0.25	0.10	ug/l	
156-59-2	cis-1,2-Dichloroethylene	0.25 U	0.50	0.25	0.10	ug/l	
78-87-5	1,2-Dichloropropane	0.25 U	0.50	0.25	0.10	ug/l	
75-09-2	Methylene Chloride	0.50 U	2.0	0.50	0.50	ug/l	
127-18-4	Tetrachloroethylene	1.9	0.50	0.25	0.10	ug/l	
79-01-6	Trichloroethylene	0.48	0.50	0.25	0.10	ug/l	J
75-01-4	Vinyl Chloride	0.050 U	0.10	0.050	0.050	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	108%		74-125%
2037-26-5	Toluene-D8	106%		88-111%

U = Not detected

LOD = Limit of Detection

J = Indicates an estimated value

LOQ = Limit of Quantitation

DL = Detection Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

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Client Sample ID:	2039YOU2456D	Date Sampled:	09/23/20
Lab Sample ID:	FA79152-2	Date Received:	09/25/20
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B BY SIM		
Project:	Fort Ord Groundwater Monitoring		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Z62701.D	1	10/07/20 15:36	AG	n/a	n/a	VZ2433
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
71-43-2	Benzene	0.25 U	0.50	0.25	0.10	ug/l	
56-23-5	Carbon Tetrachloride	0.25 U	0.50	0.25	0.10	ug/l	
67-66-3	Chloroform	0.77	0.50	0.25	0.10	ug/l	
75-34-3	1,1-Dichloroethane	0.78	0.50	0.25	0.10	ug/l	
107-06-2	1,2-Dichloroethane	0.25 U	0.50	0.25	0.10	ug/l	
156-59-2	cis-1,2-Dichloroethylene	0.25 U	0.50	0.25	0.10	ug/l	
78-87-5	1,2-Dichloropropane	0.25 U	0.50	0.25	0.10	ug/l	
75-09-2	Methylene Chloride	0.50 U	2.0	0.50	0.50	ug/l	
127-18-4	Tetrachloroethylene	2.1	0.50	0.25	0.10	ug/l	
79-01-6	Trichloroethylene	0.51	0.50	0.25	0.10	ug/l	
75-01-4	Vinyl Chloride	0.050 U	0.10	0.050	0.050	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	110%		74-125%
2037-26-5	Toluene-D8	105%		88-111%

U = Not detected

LOD = Limit of Detection

J = Indicates an estimated value

LOQ = Limit of Quantitation

DL = Detection Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Page 1 of 1

Client Sample ID:	2039YOU2457C	Date Sampled:	09/24/20
Lab Sample ID:	FA79152-3	Date Received:	09/25/20
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B BY SIM		
Project:	Fort Ord Groundwater Monitoring		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Z62702.D	1	10/07/20 15:56	AG	n/a	n/a	VZ2433
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
71-43-2	Benzene	0.25 U	0.50	0.25	0.10	ug/l	
56-23-5	Carbon Tetrachloride	0.25 U	0.50	0.25	0.10	ug/l	
67-66-3	Chloroform	0.25 U	0.50	0.25	0.10	ug/l	
75-34-3	1,1-Dichloroethane	0.25 U	0.50	0.25	0.10	ug/l	
107-06-2	1,2-Dichloroethane	0.25 U	0.50	0.25	0.10	ug/l	
156-59-2	cis-1,2-Dichloroethylene	0.25 U	0.50	0.25	0.10	ug/l	
78-87-5	1,2-Dichloropropane	0.25 U	0.50	0.25	0.10	ug/l	
75-09-2	Methylene Chloride	0.50 U	2.0	0.50	0.50	ug/l	
127-18-4	Tetrachloroethylene	0.25 U	0.50	0.25	0.10	ug/l	
79-01-6	Trichloroethylene	0.25 U	0.50	0.25	0.10	ug/l	
75-01-4	Vinyl Chloride	0.050 U	0.10	0.050	0.050	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	110%		74-125%
2037-26-5	Toluene-D8	103%		88-111%

U = Not detected

LOD = Limit of Detection

J = Indicates an estimated value

LOQ = Limit of Quantitation

DL = Detection Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Page 1 of 1

Client Sample ID:	2039YOU2458A	Date Sampled:	09/24/20
Lab Sample ID:	FA79152-4	Date Received:	09/25/20
Matrix:	AQ - Trip Blank Water	Percent Solids:	n/a
Method:	SW846 8260B BY SIM		
Project:	Fort Ord Groundwater Monitoring		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	Z62716.D	1	10/09/20 15:00	AG	n/a	n/a	VZ2434
Run #2 ^b	O61565.D	1	10/03/20 20:45	AG	n/a	n/a	VO2370

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
71-43-2	Benzene	0.25 U	0.50	0.25	0.10	ug/l	
56-23-5	Carbon Tetrachloride	0.25 U	0.50	0.25	0.10	ug/l	
67-66-3	Chloroform	0.25 U	0.50	0.25	0.10	ug/l	
75-34-3	1,1-Dichloroethane	0.25 U	0.50	0.25	0.10	ug/l	
107-06-2	1,2-Dichloroethane	0.25 U	0.50	0.25	0.10	ug/l	
156-59-2	cis-1,2-Dichloroethylene	0.25 U	0.50	0.25	0.10	ug/l	
78-87-5	1,2-Dichloropropane	0.25 U	0.50	0.25	0.10	ug/l	
75-09-2	Methylene Chloride	0.50 U	2.0	0.50	0.50	ug/l	
127-18-4	Tetrachloroethylene	3.9	0.50	0.25	0.10	ug/l	
79-01-6	Trichloroethylene	0.25 U	0.50	0.25	0.10	ug/l	
75-01-4	Vinyl Chloride	0.050 U	0.10	0.050	0.050	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	113%	119%	74-125%
2037-26-5	Toluene-D8	105%	102%	88-111%

(a) Sample re-analyzed beyond hold time; reported results are considered minimum values.
 (b) Confirmation run.

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
 LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

4.4
 4

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody
- QC Evaluation: DOD QSM5.x Limits

Project Information:										Analysis Requested					Lab Sample Receipt			
Project Location: <u>Former Fort Ord, CA</u>			Sampler/s: <u>S. Bennett</u>							VOCs 8260 - SIM Metals 6010 C Chloride 9056A					Laboratory Sample Delivery			
Project Name: <u>Groundwater Monitoring Program</u>			Report To: <u>Derek Lieberman</u>												Group #:			
Project Number: <u>21065.000.01.0000</u>			E-Mail: <u>dlieberman@ahntna.net</u>												Custody Seal:			
Sampling Event/Site: <u>3Q2020</u>			Laboratory: <u>SGS</u>												Temp (°C): <u>2.4°C IR#1</u>			
Lab Number	Sample Collection		Matrix			Number of Preserved Bottles										Notes		
	Sample Number/Description	Date	Time	Water	Soil	Other	Total # of Bottles	HCl	HNO ₃	H ₂ SO ₄	NaOH	MeOH	NaHCO ₃	None	Other			
1	2039Y002454F	9.23.20	1442	X			3	3								X		
1	2039Y002455F	9.23.20	1510	X			3	3								X		
2	2039Y002456D	9.23.20	1515	X			3	3								X		
3	2039Y002457C	9.24.20	1010	X			3	3								X		
4	2039Y002458A	9.24.20	1015	X			2	2								X		
										INITIAL ASSESSMENT: <u>MK</u>								
										LABEL VERIFICATION: <u>DD</u>								
Turnaround Time: <input checked="" type="checkbox"/> Standard <input type="checkbox"/> 3-5 Day Rush <input type="checkbox"/> 48 Hour Rush <input type="checkbox"/> 24 Hour Rush										Shipment Method:		Tracking ID:						
Comments:																		
OU2 report																		
Chain of Custody Tracking:																		
Relinquished By Sampler: <u>S. Bennett</u>				Date/Time: <u>9.24.20/1200</u>				Received By: <u>FX</u>				Date/Time: <u>9/25/20 1000</u>						
Relinquished By: <u>FX</u>				Date/Time:				Received By: <u>Carson H. Velgude</u>				Date/Time: <u>9/25/20 1000</u>						
Relinquished By:				Date/Time:				Received By Laboratory:				Date/Time:						

5.1
5

SGS Sample Receipt Summary

Job Number: FA79152

Client: AHTNA

Project: Former Fort Ord, CA - OU2

Date / Time Received: 9/25/2020 10:00:00 AM

Delivery Method: FedEx

Airbill #: 771623867825

Therm ID: IR 1;	Therm CF: -0.2;	# of Coolers: 1
Cooler Temps (Raw Measured) °C: Cooler 1: (2.6);		
Cooler Temps (Corrected) °C: Cooler 1: (2.4);		

Cooler Information	Y	or	N
1. Custody Seals Present	<input checked="" type="checkbox"/>		<input type="checkbox"/>
2. Custody Seals Intact	<input checked="" type="checkbox"/>		<input type="checkbox"/>
3. Temp criteria achieved	<input checked="" type="checkbox"/>		<input type="checkbox"/>
4. Cooler temp verification	IR Gun		
5. Cooler media	Ice (Bag)		

Trip Blank Information	Y	or	N	N/A
1. Trip Blank present / cooler	<input checked="" type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
2. Trip Blank listed on COC	<input checked="" type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>

3. Type Of TB Received	W	or	S	N/A
	<input checked="" type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>

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

Misc. Information			
Number of Encores: 25-Gram _____	5-Gram _____	Number of 5035 Field Kits: _____	Number of Lab Filtered Metals: _____
Test Strip Lot #: pH 0-3 _____	230315 _____	pH 10-12 _____	219813A _____
Residual Chlorine Test Strip Lot #: _____			

Comments

SM001 Rev. Date 05/24/17 Technician: PETERH Date: 9/25/2020 10:00:00 A Reviewer: PH Date: 9/26/2020

5.1
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QC Evaluation: DOD QSM5.x Limits

Job Number: FA79152
Account: Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring
Collected: 09/23/20 thru 09/24/20

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
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QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
VZ2433	SW846 8260B BY SIM						
VZ2433-BS	71-43-2	Benzene	BSP	REC	94	%	79-120
VZ2433-BS	56-23-5	Carbon Tetrachloride	BSP	REC	100	%	72-136
VZ2433-BS	67-66-3	Chloroform	BSP	REC	88	%	79-124
VZ2433-BS	75-34-3	1,1-Dichloroethane	BSP	REC	92	%	77-125
VZ2433-BS	107-06-2	1,2-Dichloroethane	BSP	REC	88	%	73-128
VZ2433-BS	156-59-2	cis-1,2-Dichloroethylene	BSP	REC	88	%	78-123
VZ2433-BS	78-87-5	1,2-Dichloropropane	BSP	REC	90	%	78-122
VZ2433-BS	75-09-2	Methylene Chloride	BSP	REC	82	%	74-124
VZ2433-BS	127-18-4	Tetrachloroethylene	BSP	REC	110	%	74-129
VZ2433-BS	79-01-6	Trichloroethylene	BSP	REC	94	%	79-123
VZ2433-BS	75-01-4	Vinyl Chloride	BSP	REC	90	%	58-137
VZ2433-BS	17060-07-0	1,2-Dichloroethane-D4	BSP	SURR	100	%	81-118
VZ2433-BS	2037-26-5	Toluene-D8	BSP	SURR	104	%	89-112
FA79152-1MS	71-43-2	Benzene	MS	REC	100	%	79-120
FA79152-1MS	56-23-5	Carbon Tetrachloride	MS	REC	97	%	72-136
FA79152-1MS	67-66-3	Chloroform	MS	REC	96	%	79-124
FA79152-1MS	75-34-3	1,1-Dichloroethane	MS	REC	99	%	77-125
FA79152-1MS	107-06-2	1,2-Dichloroethane	MS	REC	98	%	73-128
FA79152-1MS	156-59-2	cis-1,2-Dichloroethylene	MS	REC	93	%	78-123
FA79152-1MS	78-87-5	1,2-Dichloropropane	MS	REC	97	%	78-122
FA79152-1MS	75-09-2	Methylene Chloride	MS	REC	86	%	74-124
FA79152-1MS	127-18-4	Tetrachloroethylene	MS	REC	115	%	74-129
FA79152-1MS	79-01-6	Trichloroethylene	MS	REC	102	%	79-123
FA79152-1MS	75-01-4	Vinyl Chloride	MS	REC	97	%	58-137
FA79152-1MS	17060-07-0	1,2-Dichloroethane-D4	MS	SURR	105	%	81-118
FA79152-1MS	2037-26-5	Toluene-D8	MS	SURR	99	%	89-112
FA79152-1MSD	71-43-2	Benzene	MSD	REC	96	%	79-120
FA79152-1MSD	71-43-2	Benzene	MSD	RPD	4	%	20
FA79152-1MSD	56-23-5	Carbon Tetrachloride	MSD	REC	92	%	72-136
FA79152-1MSD	56-23-5	Carbon Tetrachloride	MSD	RPD	6	%	20
FA79152-1MSD	67-66-3	Chloroform	MSD	REC	92	%	79-124
FA79152-1MSD	67-66-3	Chloroform	MSD	RPD	5	%	20
FA79152-1MSD	75-34-3	1,1-Dichloroethane	MSD	REC	94	%	77-125
FA79152-1MSD	75-34-3	1,1-Dichloroethane	MSD	RPD	4	%	20
FA79152-1MSD	107-06-2	1,2-Dichloroethane	MSD	REC	93	%	73-128
FA79152-1MSD	107-06-2	1,2-Dichloroethane	MSD	RPD	5	%	20
FA79152-1MSD	156-59-2	cis-1,2-Dichloroethylene	MSD	REC	89	%	78-123
FA79152-1MSD	156-59-2	cis-1,2-Dichloroethylene	MSD	RPD	4	%	20
FA79152-1MSD	78-87-5	1,2-Dichloropropane	MSD	REC	92	%	78-122
FA79152-1MSD	78-87-5	1,2-Dichloropropane	MSD	RPD	5	%	20
FA79152-1MSD	75-09-2	Methylene Chloride	MSD	REC	84	%	74-124
FA79152-1MSD	75-09-2	Methylene Chloride	MSD	RPD	2	%	20

* Sample used for QC is not from job FA79152

QC Evaluation: DOD QSM5.x Limits

Job Number: FA79152
Account: Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring
Collected: 09/23/20 thru 09/24/20

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
FA79152-1MSD	127-18-4	Tetrachloroethylene	MSD	REC	109	%	74-129
FA79152-1MSD	127-18-4	Tetrachloroethylene	MSD	RPD	4	%	20
FA79152-1MSD	79-01-6	Trichloroethylene	MSD	REC	97	%	79-123
FA79152-1MSD	79-01-6	Trichloroethylene	MSD	RPD	5	%	20
FA79152-1MSD	75-01-4	Vinyl Chloride	MSD	REC	93	%	58-137
FA79152-1MSD	75-01-4	Vinyl Chloride	MSD	RPD	4	%	20
FA79152-1MSD	17060-07-0	1,2-Dichloroethane-D4	MSD	SURR	103	%	81-118
FA79152-1MSD	2037-26-5	Toluene-D8	MSD	SURR	100	%	89-112
VZ2433-MB	17060-07-0	1,2-Dichloroethane-D4	MB	SURR	105	%	81-118
VZ2433-MB	2037-26-5	Toluene-D8	MB	SURR	111	%	89-112
FA79152-1	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	108	%	81-118
FA79152-1	2037-26-5	Toluene-D8	SAMP	SURR	106	%	89-112
FA79152-2	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	110	%	81-118
FA79152-2	2037-26-5	Toluene-D8	SAMP	SURR	105	%	89-112
FA79152-3	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	110	%	81-118
FA79152-3	2037-26-5	Toluene-D8	SAMP	SURR	103	%	89-112
VZ2434	SW846 8260B BY SIM						
VZ2434-BS	71-43-2	Benzene	BSP	REC	92	%	79-120
VZ2434-BS	56-23-5	Carbon Tetrachloride	BSP	REC	96	%	72-136
VZ2434-BS	67-66-3	Chloroform	BSP	REC	88	%	79-124
VZ2434-BS	75-34-3	1,1-Dichloroethane	BSP	REC	92	%	77-125
VZ2434-BS	107-06-2	1,2-Dichloroethane	BSP	REC	86	%	73-128
VZ2434-BS	156-59-2	cis-1,2-Dichloroethylene	BSP	REC	88	%	78-123
VZ2434-BS	78-87-5	1,2-Dichloropropane	BSP	REC	88	%	78-122
VZ2434-BS	75-09-2	Methylene Chloride	BSP	REC	80	%	74-124
VZ2434-BS	127-18-4	Tetrachloroethylene	BSP	REC	106	%	74-129
VZ2434-BS	79-01-6	Trichloroethylene	BSP	REC	92	%	79-123
VZ2434-BS	75-01-4	Vinyl Chloride	BSP	REC	92	%	58-137
VZ2434-BS	17060-07-0	1,2-Dichloroethane-D4	BSP	SURR	99	%	81-118
VZ2434-BS	2037-26-5	Toluene-D8	BSP	SURR	103	%	89-112
FA79309-1MS*	71-43-2	Benzene	MS	REC	94	%	79-120
FA79309-1MS*	56-23-5	Carbon Tetrachloride	MS	REC	94	%	72-136
FA79309-1MS*	67-66-3	Chloroform	MS	REC	94	%	79-124
FA79309-1MS*	75-34-3	1,1-Dichloroethane	MS	REC	96	%	77-125
FA79309-1MS*	107-06-2	1,2-Dichloroethane	MS	REC	93	%	73-128
FA79309-1MS*	156-59-2	cis-1,2-Dichloroethylene	MS	REC	87	%	78-123
FA79309-1MS*	78-87-5	1,2-Dichloropropane	MS	REC	92	%	78-122
FA79309-1MS*	75-09-2	Methylene Chloride	MS	REC	86	%	74-124
FA79309-1MS*	127-18-4	Tetrachloroethylene	MS	REC	102	%	74-129
FA79309-1MS*	79-01-6	Trichloroethylene	MS	REC	97	%	79-123
FA79309-1MS*	75-01-4	Vinyl Chloride	MS	REC	97	%	58-137
FA79309-1MS*	17060-07-0	1,2-Dichloroethane-D4	MS	SURR	108	%	81-118
FA79309-1MS*	2037-26-5	Toluene-D8	MS	SURR	95	%	89-112

* Sample used for QC is not from job FA79152

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QC Evaluation: DOD QSM5.x Limits

Job Number: FA79152
Account: Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring
Collected: 09/23/20 thru 09/24/20

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
FA79309-1MSD*	71-43-2	Benzene	MSD	REC	105	%	79-120
FA79309-1MSD*	71-43-2	Benzene	MSD	RPD	11	%	20
FA79309-1MSD*	56-23-5	Carbon Tetrachloride	MSD	REC	102	%	72-136
FA79309-1MSD*	56-23-5	Carbon Tetrachloride	MSD	RPD	9	%	20
FA79309-1MSD*	67-66-3	Chloroform	MSD	REC	102	%	79-124
FA79309-1MSD*	67-66-3	Chloroform	MSD	RPD	9	%	20
FA79309-1MSD*	75-34-3	1,1-Dichloroethane	MSD	REC	105	%	77-125
FA79309-1MSD*	75-34-3	1,1-Dichloroethane	MSD	RPD	9	%	20
FA79309-1MSD*	107-06-2	1,2-Dichloroethane	MSD	REC	102	%	73-128
FA79309-1MSD*	107-06-2	1,2-Dichloroethane	MSD	RPD	9	%	20
FA79309-1MSD*	156-59-2	cis-1,2-Dichloroethylene	MSD	REC	97	%	78-123
FA79309-1MSD*	156-59-2	cis-1,2-Dichloroethylene	MSD	RPD	11	%	20
FA79309-1MSD*	78-87-5	1,2-Dichloropropane	MSD	REC	102	%	78-122
FA79309-1MSD*	78-87-5	1,2-Dichloropropane	MSD	RPD	10	%	20
FA79309-1MSD*	75-09-2	Methylene Chloride	MSD	REC	96	%	74-124
FA79309-1MSD*	75-09-2	Methylene Chloride	MSD	RPD	11	%	20
FA79309-1MSD*	127-18-4	Tetrachloroethylene	MSD	REC	118	%	74-129
FA79309-1MSD*	127-18-4	Tetrachloroethylene	MSD	RPD	13	%	20
FA79309-1MSD*	79-01-6	Trichloroethylene	MSD	REC	109	%	79-123
FA79309-1MSD*	79-01-6	Trichloroethylene	MSD	RPD	11	%	20
FA79309-1MSD*	75-01-4	Vinyl Chloride	MSD	REC	102	%	58-137
FA79309-1MSD*	75-01-4	Vinyl Chloride	MSD	RPD	4	%	20
FA79309-1MSD*	17060-07-0	1,2-Dichloroethane-D4	MSD	SURR	106	%	81-118
FA79309-1MSD*	2037-26-5	Toluene-D8	MSD	SURR	97	%	89-112
VZ2434-MB	17060-07-0	1,2-Dichloroethane-D4	MB	SURR	112	%	81-118
VZ2434-MB	2037-26-5	Toluene-D8	MB	SURR	106	%	89-112
FA79152-4	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	113	%	81-118
FA79152-4	2037-26-5	Toluene-D8	SAMP	SURR	105	%	89-112

* Sample used for QC is not from job FA79152

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QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Instrument Performance Checks (BFB)
- Internal Standard Area Summaries
- Surrogate Recovery Summaries
- Initial and Continuing Calibration Summaries
- Run Sequence Reports

Method Blank Summary

Job Number: FA79152
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VZ2433-MB	Z62699.D	1	10/07/20	AG	n/a	n/a	VZ2433

The QC reported here applies to the following samples:

Method: SW846 8260B BY SIM

FA79152-1, FA79152-2, FA79152-3

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	0.50	0.10	ug/l	
56-23-5	Carbon Tetrachloride	ND	0.50	0.10	ug/l	
67-66-3	Chloroform	ND	0.50	0.10	ug/l	
75-34-3	1,1-Dichloroethane	ND	0.50	0.10	ug/l	
107-06-2	1,2-Dichloroethane	ND	0.50	0.10	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	0.50	0.10	ug/l	
78-87-5	1,2-Dichloropropane	ND	0.50	0.10	ug/l	
75-09-2	Methylene Chloride	0.71	2.0	0.50	ug/l	J
127-18-4	Tetrachloroethylene	ND	0.50	0.10	ug/l	
79-01-6	Trichloroethylene	ND	0.50	0.10	ug/l	
75-01-4	Vinyl Chloride	ND	0.10	0.050	ug/l	

CAS No.	Surrogate Recoveries	Limits	
17060-07-0	1,2-Dichloroethane-D4	105%	74-125%
2037-26-5	Toluene-D8	111%	88-111%

Method Blank Summary

Job Number: FA79152
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VZ2434-MB	Z62715.D	1	10/09/20	AG	n/a	n/a	VZ2434

The QC reported here applies to the following samples:

Method: SW846 8260B BY SIM

FA79152-4

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	0.50	0.10	ug/l	
56-23-5	Carbon Tetrachloride	ND	0.50	0.10	ug/l	
67-66-3	Chloroform	ND	0.50	0.10	ug/l	
75-34-3	1,1-Dichloroethane	ND	0.50	0.10	ug/l	
107-06-2	1,2-Dichloroethane	ND	0.50	0.10	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	0.50	0.10	ug/l	
78-87-5	1,2-Dichloropropane	ND	0.50	0.10	ug/l	
75-09-2	Methylene Chloride	ND	2.0	0.50	ug/l	
127-18-4	Tetrachloroethylene	ND	0.50	0.10	ug/l	
79-01-6	Trichloroethylene	ND	0.50	0.10	ug/l	
75-01-4	Vinyl Chloride	ND	0.10	0.050	ug/l	

CAS No.	Surrogate Recoveries	Limits	
17060-07-0	1,2-Dichloroethane-D4	112%	74-125%
2037-26-5	Toluene-D8	106%	88-111%

Blank Spike Summary

Job Number: FA79152
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VZ2433-BS	Z62697.D	1	10/07/20	AG	n/a	n/a	VZ2433

The QC reported here applies to the following samples:

Method: SW846 8260B BY SIM

FA79152-1, FA79152-2, FA79152-3

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
71-43-2	Benzene	5	4.7	94	81-122
56-23-5	Carbon Tetrachloride	5	5.0	100	76-136
67-66-3	Chloroform	5	4.4	88	80-124
75-34-3	1,1-Dichloroethane	5	4.6	92	81-122
107-06-2	1,2-Dichloroethane	5	4.4	88	75-125
156-59-2	cis-1,2-Dichloroethylene	5	4.4	88	78-120
78-87-5	1,2-Dichloropropane	5	4.5	90	76-124
75-09-2	Methylene Chloride	5	4.1	82	69-135
127-18-4	Tetrachloroethylene	5	5.5	110	76-135
79-01-6	Trichloroethylene	5	4.7	94	81-126
75-01-4	Vinyl Chloride	5	4.5	90	69-159

CAS No.	Surrogate Recoveries	BSP	Limits
17060-07-0	1,2-Dichloroethane-D4	100%	74-125%
2037-26-5	Toluene-D8	104%	88-111%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA79152
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VZ2434-BS	Z62711.D	1	10/09/20	AG	n/a	n/a	VZ2434

The QC reported here applies to the following samples:

Method: SW846 8260B BY SIM

FA79152-4

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
71-43-2	Benzene	5	4.6	92	81-122
56-23-5	Carbon Tetrachloride	5	4.8	96	76-136
67-66-3	Chloroform	5	4.4	88	80-124
75-34-3	1,1-Dichloroethane	5	4.6	92	81-122
107-06-2	1,2-Dichloroethane	5	4.3	86	75-125
156-59-2	cis-1,2-Dichloroethylene	5	4.4	88	78-120
78-87-5	1,2-Dichloropropane	5	4.4	88	76-124
75-09-2	Methylene Chloride	5	4.0	80	69-135
127-18-4	Tetrachloroethylene	5	5.3	106	76-135
79-01-6	Trichloroethylene	5	4.6	92	81-126
75-01-4	Vinyl Chloride	5	4.6	92	69-159

CAS No.	Surrogate Recoveries	BSP	Limits
17060-07-0	1,2-Dichloroethane-D4	99%	74-125%
2037-26-5	Toluene-D8	103%	88-111%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA79152
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA79152-1MS	Z62704.D	10	10/07/20	AG	n/a	n/a	VZ2433
FA79152-1MSD	Z62705.D	10	10/07/20	AG	n/a	n/a	VZ2433
FA79152-1	Z62700.D	1	10/07/20	AG	n/a	n/a	VZ2433

The QC reported here applies to the following samples:

Method: SW846 8260B BY SIM

FA79152-1, FA79152-2, FA79152-3

CAS No.	Compound	FA79152-1 ug/l	Spike Q ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	0.50 U	50	50.0	100	50	47.9	96	4	81-122/14
56-23-5	Carbon Tetrachloride	0.50 U	50	48.7	97	50	45.9	92	6	76-136/23
67-66-3	Chloroform	0.73	50	48.8	96	50	46.6	92	5	80-124/15
75-34-3	1,1-Dichloroethane	0.74	50	50.1	99	50	47.9	94	4	81-122/15
107-06-2	1,2-Dichloroethane	0.50 U	50	48.8	98	50	46.4	93	5	75-125/14
156-59-2	cis-1,2-Dichloroethylene	0.50 U	50	46.3	93	50	44.6	89	4	78-120/15
78-87-5	1,2-Dichloropropane	0.50 U	50	48.6	97	50	46.1	92	5	76-124/14
75-09-2	Methylene Chloride	2.0 U	50	42.9	86	50	42.2	84	2	69-135/16
127-18-4	Tetrachloroethylene	1.9	50	59.2	115	50	56.6	109	4	76-135/16
79-01-6	Trichloroethylene	0.48 J	50	51.5	102	50	49.2	97	5	81-126/15
75-01-4	Vinyl Chloride	0.10 U	50	48.6	97	50	46.6	93	4	69-159/18

CAS No.	Surrogate Recoveries	MS	MSD	FA79152-1	Limits
17060-07-0	1,2-Dichloroethane-D4	105%	103%	108%	74-125%
2037-26-5	Toluene-D8	99%	100%	106%	88-111%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA79152
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA79309-1MS	Z62721.D	10	10/09/20	AG	n/a	n/a	VZ2434
FA79309-1MSD	Z62722.D	10	10/09/20	AG	n/a	n/a	VZ2434
FA79309-1	Z62717.D	1	10/09/20	AG	n/a	n/a	VZ2434

The QC reported here applies to the following samples:

Method: SW846 8260B BY SIM

FA79152-4

CAS No.	Compound	FA79309-1 ug/l	Spike Q ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	0.50 U	50	47.2	94	50	52.7	105	11	81-122/14
56-23-5	Carbon Tetrachloride	0.50 U	50	46.9	94	50	51.2	102	9	76-136/23
67-66-3	Chloroform	0.50 U	50	46.9	94	50	51.2	102	9	80-124/15
75-34-3	1,1-Dichloroethane	0.50 U	50	48.0	96	50	52.3	105	9	81-122/15
107-06-2	1,2-Dichloroethane	0.50 U	50	46.7	93	50	51.2	102	9	75-125/14
156-59-2	cis-1,2-Dichloroethylene	0.50 U	50	43.5	87	50	48.5	97	11	78-120/15
78-87-5	1,2-Dichloropropane	0.50 U	50	46.1	92	50	51.2	102	10	76-124/14
75-09-2	Methylene Chloride	2.0 U	50	42.9	86	50	48.1	96	11	69-135/16
127-18-4	Tetrachloroethylene	4.1	50	55.2	102	50	63.0	118	13	76-135/16
79-01-6	Trichloroethylene	0.50 U	50	48.7	97	50	54.3	109	11	81-126/15
75-01-4	Vinyl Chloride	0.10 U	50	48.6	97	50	50.8	102	4	69-159/18

CAS No.	Surrogate Recoveries	MS	MSD	FA79309-1	Limits
17060-07-0	1,2-Dichloroethane-D4	108%	106%	114%	74-125%
2037-26-5	Toluene-D8	95%	97%	105%	88-111%

* = Outside of Control Limits.

Instrument Performance Check (BFB)

Job Number: FA79152
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Sample: VO2369-BFB	Injection Date: 10/02/20
Lab File ID: O61539.D	Injection Time: 13:41
Instrument ID: GCMSO	

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	161771	29.2	Pass
75	30.0 - 60.0% of mass 95	247168	44.7	Pass
95	Base peak, 100% relative abundance	553216	100.0	Pass
96	5.0 - 9.0% of mass 95	41491	7.50	Pass
173	Less than 2.0% of mass 174	3440	0.62 (0.65) ^a	Pass
174	50.0 - 100.0% of mass 95	525269	94.9	Pass
175	5.0 - 9.0% of mass 174	37976	6.86 (7.23) ^a	Pass
176	95.0 - 101.0% of mass 174	502016	90.7 (95.6) ^a	Pass
177	5.0 - 9.0% of mass 176	33309	6.02 (6.64) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VO2369-IC2369	O61540.D	10/02/20	14:33	00:52	Initial cal 1
VO2369-IC2369	O61541.D	10/02/20	14:55	01:14	Initial cal 2
VO2369-IC2369	O61542.D	10/02/20	15:15	01:34	Initial cal 3
VO2369-IC2369	O61543.D	10/02/20	15:35	01:54	Initial cal 4
VO2369-ICC2369	O61544.D	10/02/20	15:55	02:14	Initial cal 5
VO2369-IC2369	O61545.D	10/02/20	16:15	02:34	Initial cal 6
VO2369-IC2369	O61546.D	10/02/20	16:36	02:55	Initial cal 7
VO2369-ICV2369	O61548.D	10/02/20	17:23	03:42	Initial cal verification 5

Instrument Performance Check (BFB)

Job Number: FA79152
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Sample: VO2370-BFB	Injection Date: 10/03/20
Lab File ID: O61552.D	Injection Time: 13:34
Instrument ID: GCMSO	

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	138635	28.6	Pass
75	30.0 - 60.0% of mass 95	218176	45.0	Pass
95	Base peak, 100% relative abundance	484992	100.0	Pass
96	5.0 - 9.0% of mass 95	35523	7.32	Pass
173	Less than 2.0% of mass 174	2622	0.54 (0.58) ^a	Pass
174	50.0 - 100.0% of mass 95	451669	93.1	Pass
175	5.0 - 9.0% of mass 174	30813	6.35 (6.82) ^a	Pass
176	95.0 - 101.0% of mass 174	432533	89.2 (95.8) ^a	Pass
177	5.0 - 9.0% of mass 176	26715	5.51 (6.18) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VO2370-CC2369	O61554.D	10/03/20	15:58	02:24	Continuing cal 5
VO2370-BS	O61555.D	10/03/20	16:55	03:21	Blank Spike
VO2370-MB	O61557.D	10/03/20	18:05	04:31	Method Blank
FA79152-4	O61565.D	10/03/20	20:45	07:11	2039YOU2458A
FA79309-2MS	O61567.D	10/03/20	21:25	07:51	Matrix Spike
FA79309-2MSD	O61568.D	10/03/20	21:45	08:11	Matrix Spike Duplicate
VO2370-ECC2369	O61569.D	10/03/20	22:05	08:31	Ending cal 5

Instrument Performance Check (BFB)

Job Number: FA79152
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Sample: VZ2431-BFB	Injection Date: 10/01/20
Lab File ID: Z62654.D	Injection Time: 09:35
Instrument ID: GCMSZ	

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	43555	21.3	Pass
75	30.0 - 60.0% of mass 95	112171	54.7	Pass
95	Base peak, 100% relative abundance	204928	100.0	Pass
96	5.0 - 9.0% of mass 95	14329	6.99	Pass
173	Less than 2.0% of mass 174	1200	0.59 (0.68) ^a	Pass
174	50.0 - 100.0% of mass 95	175723	85.7	Pass
175	5.0 - 9.0% of mass 174	13587	6.63 (7.73) ^a	Pass
176	95.0 - 101.0% of mass 174	171477	83.7 (97.6) ^a	Pass
177	5.0 - 9.0% of mass 176	10768	5.25 (6.28) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VZ2431-IC2431	Z62655.D	10/01/20	10:01	00:26	Initial cal 1
VZ2431-IC2431	Z62656.D	10/01/20	10:20	00:45	Initial cal 2
VZ2431-IC2431	Z62657.D	10/01/20	10:40	01:05	Initial cal 3
VZ2431-IC2431	Z62658.D	10/01/20	10:59	01:24	Initial cal 4
VZ2431-ICC2431	Z62659.D	10/01/20	11:18	01:43	Initial cal 5
VZ2431-IC2431	Z62660.D	10/01/20	11:37	02:02	Initial cal 6
VZ2431-IC2431	Z62661.D	10/01/20	11:59	02:24	Initial cal 7
VZ2431-ICV2431	Z62663.D	10/01/20	13:17	03:42	Initial cal verification 5

Instrument Performance Check (BFB)

Job Number: FA79152
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Sample: VZ2433-BFB	Injection Date: 10/07/20
Lab File ID: Z62695.D	Injection Time: 12:20
Instrument ID: GCMSZ	

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	43800	20.7	Pass
75	30.0 - 60.0% of mass 95	116720	55.1	Pass
95	Base peak, 100% relative abundance	211968	100.0	Pass
96	5.0 - 9.0% of mass 95	16127	7.61	Pass
173	Less than 2.0% of mass 174	599	0.28 (0.32) ^a	Pass
174	50.0 - 100.0% of mass 95	186453	88.0	Pass
175	5.0 - 9.0% of mass 174	13734	6.48 (7.37) ^a	Pass
176	95.0 - 101.0% of mass 174	181803	85.8 (97.5) ^a	Pass
177	5.0 - 9.0% of mass 176	11884	5.61 (6.54) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VZ2433-CC2431	Z62696.D	10/07/20	13:04	00:44	Continuing cal 5
VZ2433-BS	Z62697.D	10/07/20	14:06	01:46	Blank Spike
VZ2433-MB	Z62699.D	10/07/20	14:58	02:38	Method Blank
FA79152-1	Z62700.D	10/07/20	15:17	02:57	2039YOU2455F
FA79152-2	Z62701.D	10/07/20	15:36	03:16	2039YOU2456D
FA79152-3	Z62702.D	10/07/20	15:56	03:36	2039YOU2457C
ZZZZZ	Z62703.D	10/07/20	16:15	03:55	(unrelated sample)
FA79152-1MS	Z62704.D	10/07/20	16:35	04:15	Matrix Spike
FA79152-1MSD	Z62705.D	10/07/20	16:54	04:34	Matrix Spike Duplicate
VZ2433-ECC2431	Z62706.D	10/07/20	17:13	04:53	Ending cal 5

Instrument Performance Check (BFB)

Job Number: FA79152
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Sample: VZ2434-BFB	Injection Date: 10/09/20
Lab File ID: Z62709.D	Injection Time: 10:33
Instrument ID: GCMSZ	

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	30064	20.5	Pass
75	30.0 - 60.0% of mass 95	76675	52.3	Pass
95	Base peak, 100% relative abundance	146496	100.0	Pass
96	5.0 - 9.0% of mass 95	11466	7.83	Pass
173	Less than 2.0% of mass 174	640	0.44 (0.51) ^a	Pass
174	50.0 - 100.0% of mass 95	124461	85.0	Pass
175	5.0 - 9.0% of mass 174	9891	6.75 (7.95) ^a	Pass
176	95.0 - 101.0% of mass 174	123539	84.3 (99.3) ^a	Pass
177	5.0 - 9.0% of mass 176	8626	5.89 (6.98) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VZ2434-CC2431	Z62710.D	10/09/20	10:56	00:23	Continuing cal 5
VZ2434-BS	Z62711.D	10/09/20	11:26	00:53	Blank Spike
VZ2434-MB	Z62715.D	10/09/20	13:57	03:24	Method Blank
FA79152-4	Z62716.D	10/09/20	15:00	04:27	2039YOU2458A
FA79309-1	Z62717.D	10/09/20	15:20	04:47	(used for QC only; not part of job FA79152)
ZZZZZZ	Z62718.D	10/09/20	15:39	05:06	(unrelated sample)
ZZZZZZ	Z62719.D	10/09/20	15:58	05:25	(unrelated sample)
ZZZZZZ	Z62720.D	10/09/20	16:18	05:45	(unrelated sample)
FA79309-1MS	Z62721.D	10/09/20	16:39	06:06	Matrix Spike
FA79309-1MSD	Z62722.D	10/09/20	16:58	06:25	Matrix Spike Duplicate
VZ2434-ECC2431	Z62723.D	10/09/20	17:18	06:45	Ending cal 5

Internal Standard Area Summary

Job Number: FA79152
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Check Std: VO2370-CC2369	Injection Date: 10/03/20
Lab File ID: O61554.D	Injection Time: 15:58
Instrument ID: GCMSO	Method: SW846 8260B BY SIM

	IS 1	RT	IS 2	RT
	AREA		AREA	
Initial Cal ^a	382487	7.34	330770	10.44
Check Std ^b	462144	7.34	405227	10.44
Upper Limit ^c	924288	7.51	810454	10.61
Lower Limit ^d	231072	7.17	202614	10.27

Lab	IS 1	RT	IS 2	RT
Sample ID	AREA		AREA	
VO2370-BS	409441	7.34	339821	10.44
VO2370-MB	287929	7.34	231265	10.44
FA79152-4 ^e	228883*	7.34	192299*	10.44
FA79309-2MS	307981	7.34	256432	10.44
FA79309-2MSD	327993	7.34	274268	10.44
VO2370-ECC2369373816	373816	7.34	322854	10.44

IS 1 = Fluorobenzene
IS 2 = Chlorobenzene-D5

- (a) Initial Cal is: VO2369-ICC2369 O61544.D 10/02/20 15:55
- (b) Check Std Limit = -50 to + 100% of initial cal area.
- (c) Upper Limit = + 100% of check standard area; Retention time + 0.167 minutes.
- (d) Lower Limit = -50% of check standard area; Retention time -0.167 minutes.
- (e) Confirmation run.

Internal Standard Area Summary

Job Number: FA79152
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Check Std: VZ2433-CC2431	Injection Date: 10/07/20
Lab File ID: Z62696.D	Injection Time: 13:04
Instrument ID: GCMSZ	Method: SW846 8260B BY SIM

	IS 1 AREA	RT	IS 2 AREA	RT
Initial Cal ^a	2158955	7.40	2125137	10.51
Check Std ^b	2888637	7.40	2414515	10.51
Upper Limit ^c	5777274	7.57	4829030	10.68
Lower Limit ^d	1444319	7.23	1207258	10.34

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT
VZ2433-BS	2644992	7.40	2160141	10.51
VZ2433-MB	2242817	7.40	1721479	10.51
FA79152-1	2109086	7.40	1708390	10.51
FA79152-2	1949614	7.40	1574101	10.51
FA79152-3	1814796	7.40	1481092	10.51
ZZZZZZ	1844426	7.40	1505350	10.51
FA79152-1MS	2074320	7.40	1754061	10.51
FA79152-1MSD	2135710	7.40	1782708	10.51
VZ2433-ECC2431	2103691	7.40	1786538	10.51

IS 1 = Fluorobenzene
IS 2 = Chlorobenzene-D5

- (a) Initial Cal is: VZ2431-ICC2431 Z62659.D 10/01/20 11:18
- (b) Check Std Limit = -50 to + 100% of initial cal area.
- (c) Upper Limit = + 100% of check standard area; Retention time + 0.167 minutes.
- (d) Lower Limit = -50% of check standard area; Retention time -0.167 minutes.

6.5.2
6

Internal Standard Area Summary

Job Number: FA79152
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Check Std: VZ2434-CC2431	Injection Date: 10/09/20
Lab File ID: Z62710.D	Injection Time: 10:56
Instrument ID: GCMSZ	Method: SW846 8260B BY SIM

	IS 1 AREA	RT	IS 2 AREA	RT
Initial Cal ^a	2158955	7.40	2125137	10.51
Check Std ^b	2666799	7.40	2275045	10.51
Upper Limit ^c	5333598	7.57	4550090	10.68
Lower Limit ^d	1333400	7.23	1137523	10.34

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT
VZ2434-BS	2501879	7.40	2089835	10.51
VZ2434-MB	1973056	7.40	1572552	10.51
FA79152-4 ^e	1959039	7.40	1556635	10.51
FA79309-1	1855025	7.40	1498780	10.51
ZZZZZZ	1844772	7.40	1470346	10.51
ZZZZZZ	1831251	7.40	1466911	10.51
ZZZZZZ	1684280	7.40	1346893	10.51
FA79309-1MS	1986535	7.40	1705513	10.51
FA79309-1MSD	1942066	7.40	1644753	10.51
VZ2434-ECC2431	2064125	7.40	1771099	10.51

IS 1 = Fluorobenzene
IS 2 = Chlorobenzene-D5

- (a) Initial Cal is: VZ2431-ICC2431 Z62659.D 10/01/20 11:18
- (b) Check Std Limit = -50 to + 100% of initial cal area.
- (c) Upper Limit = + 100% of check standard area; Retention time + 0.167 minutes.
- (d) Lower Limit = -50% of check standard area; Retention time -0.167 minutes.
- (e) Sample re-analyzed beyond hold time; reported results are considered minimum values.

6.5.3
6

Initial Calibration Summary

Job Number: FA79152
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Sample: VO2369-ICC2369
Lab FileID: O61544.D

Response Factor Report MSVOA12

Method : C:\msdchem\2\methods\SIMCL100220.M (RTE Integrator)
 Title : Standard Methods 6200B
 Last Update : Sat Oct 03 15:33:07 2020
 Response via : Initial Calibration

Calibration Files

1 =O61540.D 2 =O61541.D 3 =O61542.D 4 =O61543.D
 5 =O61544.D 6 =O61545.D 7 =O61546.D

Compound	1	2	3	4	5	6	7	Avg	%RSD
1) I Fluorobenzene	-----ISTD-----								
2) Vinyl Chloride	0.679	0.716	0.579	0.496	0.451	0.425	0.413	0.537	22.91
	---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9993								
	Response Ratio = 0.00000 + 0.50341 *A + -0.02359 *A^2								
3) Chloromethane	1.843	1.183	0.876	0.741	0.663	0.622	0.587	0.931	48.46
	---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9994								
	Response Ratio = 0.00000 + 0.76593 *A + -0.04568 *A^2								
4) 1,1-Dichloroethen	0.695	0.717	0.655	0.574	0.538	0.506	0.481	0.595	15.82
	---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9998								
	Response Ratio = 0.00000 + 0.60098 *A + -0.03044 *A^2								
5) Methylene Chlorid	3.638	1.850	1.216	1.009	0.915	0.847	1.579	67.88	
	---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9933								
	Response Ratio = 0.00000 + 1.27569 *A + -0.11106 *A^2								
6) trans-1,2-Dichlor	0.783	0.832	0.730	0.659	0.652	0.634	0.601	0.699	12.18
7) 1,1-Dichloroethan	1.079	0.952	0.888	0.797	0.768	0.733	0.696	0.845	16.14
	---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9999								
	Response Ratio = 0.00000 + 0.84289 *A + -0.03683 *A^2								
8) cis-1,2-Dichloroe	0.530	0.397	0.383	0.366	0.379	0.379	0.370	0.401	14.43
	---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9998								
	Response Ratio = 0.00000 + 0.38430 *A + -0.00315 *A^2								
9) Chloroform	1.324	0.873	0.805	0.723	0.695	0.660	0.631	0.816	29.29
	---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9999								
	Response Ratio = 0.00000 + 0.75982 *A + -0.03240 *A^2								
10) Carbon Tetrachlor	0.651	0.624	0.604	0.523	0.494	0.478	0.460	0.548	14.10
	---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9992								
	Response Ratio = 0.00000 + 0.56291 *A + -0.02715 *A^2								
11) 1,1,1-Trichloroet	0.703	0.689	0.637	0.554	0.568	0.551	0.526	0.604	11.90
12) Benzene	1.662	1.341	1.346	1.278	1.290	1.262	1.207	1.341	11.14
13)S 1,2-Dichloroethan	0.521	0.510	0.465	0.419	0.398	0.384	0.382	0.440	13.40
14) 1,2-Dichloroethan	1.185	0.791	0.729	0.675	0.649	0.621	0.598	0.750	27.06
	---- Quadratic regr., Force(0,0) ---- Coefficient = 1.0000								
	Response Ratio = 0.00000 + 0.70197 *A + -0.02629 *A^2								
15) Trichloroethene	0.607	0.423	0.424	0.402	0.403	0.392	0.378	0.433	18.20
	---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9999								
	Response Ratio = 0.00000 + 0.42421 *A + -0.01133 *A^2								
16) 1,2-Dichloropropa	0.729	0.473	0.447	0.420	0.413	0.402	0.389	0.468	25.35

6.7.1
6

Initial Calibration Summary

Job Number: FA79152
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Sample: VO2369-ICC2369
Lab FileID: O61544.D

-
- Quadratic regr., Force(0,0) ---- Coefficient = 1.0000
Response Ratio = 0.00000 + 0.43714 *A + -0.01193 *A^2
- 17) cis-1,3-Dichlorop 0.644 0.374 0.374 0.379 0.409 0.424 0.431 0.433 22.14
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9996
Response Ratio = 0.00000 + 0.37664 *A + 0.01422 *A^2
- 18) I Chlorobenzene-d5 -----ISTD-----
- 19)S Toluene-d8 1.032 1.025 0.978 0.931 0.917 0.946 0.970 0.971 4.57
- 20) trans-1,3-Dichlor 0.831 0.472 0.486 0.480 0.489 0.505 0.518 0.540 23.88
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9998
Response Ratio = 0.00000 + 0.47422 *A + 0.01040 *A^2
- 21) Tetrachloroethene 0.752 0.579 0.591 0.508 0.477 0.466 0.454 0.547 19.27
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9997
Response Ratio = 0.00000 + 0.51575 *A + -0.01591 *A^2
- 22) 1,4-Dichlorobenze 1.676 0.900 0.999 1.024 1.022 1.017 1.017 1.094 23.82
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9994
Response Ratio = 0.00000 + 1.02001 *A + -0.00062 *A^2
- 23) 1,2-Dibromo-3-Chl 0.418 0.196 0.187 0.172 0.172 0.173 0.176 0.214 42.50
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9993
Response Ratio = 0.00000 + 0.17826 *A + -0.00107 *A^2

(#) = Out of Range

SIMCL100220.M

Wed Oct 07 10:21:23 2020

Initial Calibration Verification

Job Number: FA79152
 Account: AHTNACAS Ahtna Global, LLC
 Project: Fort Ord Groundwater Monitoring

Sample: VO2369-ICV2369
 Lab FileID: O61548.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\2\data\100220\O61548.D Vial: 9
 Acq On : 2 Oct 2020 5:23 pm Operator: akarig
 Sample : icv2369-5 Inst : MSVOA12
 Misc : MS47193,VO2369,,,,, Multiplr: 1.00
 MS Integration Params: rteint.p

Method : C:\msdchem\2\methods\SIMCL100220.M (RTE Integrator)
 Title : Standard Methods 6200B
 Last Update : Sat Oct 03 15:33:07 2020
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	Fluorobenzene	1.000	1.000	0.0	106	0.00	7.34
	----- Amount	Calc.	%Drift	-----			
2	Vinyl Chloride	10.000	10.172	-1.7	109	0.00	2.89
3	Chloromethane	10.000	9.622	3.8	104	0.00	2.79
4	1,1-Dichloroethene	10.000	11.873	-18.7	124	0.00	4.08
5	Methylene Chloride	10.000	9.830	1.7	109	0.00	4.69
	----- AvgRF	CCRF	%Dev	-----			
6	trans-1,2-Dichloroethene	0.699	0.729	-4.3	118	0.00	4.86
	----- Amount	Calc.	%Drift	-----			
7	1,1-Dichloroethane	10.000	11.109	-11.1	117	0.00	5.50
8	cis-1,2-Dichloroethene	10.000	11.255	-12.6	119	0.00	6.06
9	Chloroform	10.000	10.799	-8.0	114	0.00	6.32
10	Carbon Tetrachloride	10.000	11.524	-15.2	124	0.00	6.50
	----- AvgRF	CCRF	%Dev	-----			
11	1,1,1-Trichloroethane	0.604	0.603	0.2	112	0.00	6.57
12	Benzene	1.341	1.488	-11.0	122	0.00	6.93
13 S	1,2-Dichloroethane-d4	0.440	0.388	11.8	103	0.00	7.06
	----- Amount	Calc.	%Drift	-----			
14	1,2-Dichloroethane	10.000	11.010	-10.1	116	0.00	7.13
15	Trichloroethene	10.000	11.646	-16.5	122	0.00	7.50
16	1,2-Dichloropropane	10.000	11.391	-13.9	120	0.00	8.04
17	cis-1,3-Dichloropropene	10.000	11.893	-18.9	126	0.00	8.70
	----- AvgRF	CCRF	%Dev	-----			
18 I	Chlorobenzene-d5	1.000	1.000	0.0	106	0.00	10.44
19 S	Toluene-d8	0.971	0.946	2.6	109	0.00	8.89
	----- Amount	Calc.	%Drift	-----			
20	trans-1,3-Dichloropropene	10.000	11.656	-16.6	125	0.00	9.34
21	Tetrachloroethene	10.000	11.344	-13.4	120	0.00	9.34
22	1,4-Dichlorobenzene	10.000	11.243	-12.4	118	0.00	12.82
23	1,2-Dibromo-3-Chloropropa	10.000	10.822	-8.2	117	0.00	14.03

(#) = Out of Range

SPCC's out = 0 CCC's out = 0

Initial Calibration Verification

Job Number: FA79152
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Sample: VO2369-ICV2369
Lab FileID: O61548.D

O61544.D SIMCL100220.M Wed Oct 07 10:21:10 2020

Continuing Calibration Summary

Job Number: FA79152
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Sample: VO2370-CC2369
Lab FileID: O61554.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\2\data\100320\O61554.D Vial: 4
 Acq On : 3 Oct 2020 3:58 pm Operator: akarig
 Sample : cc2369-5 Inst : MSVOA12
 Misc : MS47193,VO2370,,,,, Multiplr: 1.00
 MS Integration Params: rteint.p

Method : C:\msdchem\2\methods\SIMCL100220.M (RTE Integrator)
 Title : Standard Methods 6200B
 Last Update : Sat Oct 03 15:33:07 2020
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	Fluorobenzene	1.000	1.000	0.0	121	0.00	7.34
	----- Amount	Calc.	%Drift	-----			
2	Vinyl Chloride	10.000	9.540	4.6	117	0.00	2.89
3	Chloromethane	10.000	8.955	10.4	112	0.00	2.79
4	1,1-Dichloroethene	10.000	10.982	-9.8	132	0.00	4.08
5	Methylene Chloride	10.000	8.250	17.5	108	0.00	4.69
	----- AvgRF	CCRF	%Dev	-----			
6	trans-1,2-Dichloroethene	0.699	0.682	2.4	126	0.00	4.86
	----- Amount	Calc.	%Drift	-----			
7	1,1-Dichloroethane	10.000	10.285	-2.9	124	0.00	5.50
8	cis-1,2-Dichloroethene	10.000	10.683	-6.8	129	0.00	6.05
9	Chloroform	10.000	10.180	-1.8	123	0.00	6.32
10	Carbon Tetrachloride	10.000	10.838	-8.4	134	0.00	6.50
	----- AvgRF	CCRF	%Dev	-----			
11	1,1,1-Trichloroethane	0.604	0.575	4.8	122	0.00	6.57
12	Benzene	1.341	1.370	-2.2	128	0.00	6.93
13 S	1,2-Dichloroethane-d4	0.440	0.386	12.3	117	0.00	7.06
	----- Amount	Calc.	%Drift	-----			
14	1,2-Dichloroethane	10.000	10.093	-0.9	122	0.00	7.13
15	Trichloroethene	10.000	10.506	-5.1	126	0.00	7.50
16	1,2-Dichloropropane	10.000	10.523	-5.2	127	0.00	8.04
17	cis-1,3-Dichloropropene	10.000	11.208	-12.1	135	0.00	8.70
	----- AvgRF	CCRF	%Dev	-----			
18 I	Chlorobenzene-d5	1.000	1.000	0.0	123	0.00	10.44
19 S	Toluene-d8	0.971	0.953	1.9	127	0.00	8.89
	----- Amount	Calc.	%Drift	-----			
20	trans-1,3-Dichloropropene	10.000	10.560	-5.6	131	0.00	9.34
21	Tetrachloroethene	10.000	10.437	-4.4	129	0.00	9.33
22	1,4-Dichlorobenzene	10.000	10.172	-1.7	124	0.00	12.82
23	1,2-Dibromo-3-Chloropropa	10.000	9.938	0.6	125	0.00	14.03

(#) = Out of Range

SPCC's out = 0 CCC's out = 0

Continuing Calibration Summary

Job Number: FA79152
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Sample: VO2370-CC2369
Lab FileID: O61554.D

O61544.D SIMCL100220.M Thu Oct 08 19:48:53 2020

Continuing Calibration Summary

Job Number: FA79152
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Sample: VO2370-ECC2369
Lab FileID: O61569.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\2\data\100320\O61569.D Vial: 19
 Acq On : 3 Oct 2020 10:05 pm Operator: AKARIG
 Sample : ECC2369-5 Inst : MSVOA12
 Misc : MS47343,VO2370,,,,, Multiplr: 1.00
 MS Integration Params: rteint.p

Method : C:\msdchem\2\methods\SIMCL100220.M (RTE Integrator)
 Title : Standard Methods 6200B
 Last Update : Sat Oct 03 15:33:07 2020
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 50% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	Fluorobenzene	1.000	1.000	0.0	98	0.00	7.34
	----- Amount Calc. %Drift -----						
2	Vinyl Chloride	10.000	10.837	-8.4	106	0.00	2.90
3	Chloromethane	10.000	10.616	-6.2	105	0.00	2.79
4	1,1-Dichloroethene	10.000	11.925	-19.3	115	0.00	4.08
5	Methylene Chloride	10.000	10.580	-5.8	107	0.00	4.70
	----- AvgRF CCRF %Dev -----						
6	trans-1,2-Dichloroethene	0.699	0.764	-9.3	114	0.00	4.86
	----- Amount Calc. %Drift -----						
7	1,1-Dichloroethane	10.000	11.759	-17.6	113	0.00	5.50
8	cis-1,2-Dichloroethene	10.000	11.901	-19.0	116	0.00	6.06
9	Chloroform	10.000	11.780	-17.8	113	0.00	6.33
10	Carbon Tetrachloride	10.000	12.161	-21.6	120	0.00	6.50
	----- AvgRF CCRF %Dev -----						
11	1,1,1-Trichloroethane	0.604	0.691	-14.4	119	0.00	6.57
12	Benzene	1.341	1.528	-13.9	116	0.00	6.94
13 S	1,2-Dichloroethane-d4	0.440	0.390	11.4	96	0.00	7.07
	----- Amount Calc. %Drift -----						
14	1,2-Dichloroethane	10.000	11.626	-16.3	112	0.00	7.14
15	Trichloroethene	10.000	12.123	-21.2	117	0.00	7.51
16	1,2-Dichloropropane	10.000	11.815	-18.1	114	0.00	8.04
17	cis-1,3-Dichloropropene	10.000	11.856	-18.6	116	0.00	8.71
	----- AvgRF CCRF %Dev -----						
18 I	Chlorobenzene-d5	1.000	1.000	0.0	98	0.00	10.44
19 S	Toluene-d8	0.971	0.935	3.7	99	0.00	8.90
	----- Amount Calc. %Drift -----						
20	trans-1,3-Dichloropropene	10.000	11.553	-15.5	115	0.00	9.34
21	Tetrachloroethene	10.000	11.988	-19.9	117	0.00	9.34
22	1,4-Dichlorobenzene	10.000	11.727	-17.3	114	0.00	12.82
23	1,2-Dibromo-3-Chloropropa	10.000	11.108	-11.1	111	0.00	14.03

(#) = Out of Range

SPCC's out = 0 CCC's out = 0

Continuing Calibration Summary

Job Number: FA79152
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Sample: VO2370-ECC2369
Lab FileID: O61569.D

O61544.D SIMCL100220.M Thu Oct 08 19:49:10 2020

Initial Calibration Summary

Job Number: FA79152
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Sample: VZ2431-ICC2431
Lab FileID: Z62659.D

Response Factor Report MSVOA15

Method : C:\msdchem\1\methods\SIMCL100120.M (RTE Integrator)
 Title : WATER-EPA 8260B
 Last Update : Sat Oct 03 15:38:22 2020
 Response via : Initial Calibration

Calibration Files

1 =Z62655.D 2 =Z62656.D 3 =Z62657.D 4 =Z62658.D
 5 =Z62659.D 6 =Z62660.D 7 =Z62661.D

Compound	1	2	3	4	5	6	7	Avg	%RSD

1) I Fluorobenzene	-----ISTD-----								
2) Vinyl Chloride	0.635	0.677	0.651	0.645	0.625	0.586	0.608	0.632	4.72
3) Chloromethane	0.694	0.573	0.553	0.550	0.520	0.494	0.502	0.555	12.20
4) 1,1-Dichloroethen	0.321	0.374	0.371	0.374	0.365	0.345	0.337	0.355	5.91
5) Methylene Chlorid	2.064	0.961	0.705	0.590	0.559	0.534	0.902	0.902	65.45
	---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9953								
	Response Ratio = 0.00000 + 0.70811 *A + -0.04543 *A^2								
6)T trans-1,2-Dichlor	0.431	0.464	0.473	0.481	0.469	0.455	0.452	0.461	3.60
	---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9999								
	Response Ratio = 0.00000 + 0.48235 *A + -0.00787 *A^2								
7) 1,1-Dichloroethan	0.745	0.796	0.814	0.815	0.787	0.760	0.743	0.780	3.92
8) cis-1,2-Dichloroe	0.484	0.496	0.511	0.508	0.500	0.491	0.484	0.496	2.15
9) Chloroform	0.958	0.933	0.997	0.971	0.946	0.916	0.893	0.945	3.68
10) Carbon Tetrachlor	0.426	0.487	0.503	0.544	0.560	0.543	0.551	0.516	9.29
	---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9997								
	Response Ratio = 0.00000 + 0.54675 *A + 0.00078 *A^2								
11) 1,1,1-Trichloroet	0.647	0.745	0.780	0.807	0.802	0.766	0.749	0.757	7.14
12) Benzene	1.643	1.708	1.774	1.779	1.752	1.694	1.643	1.713	3.36
13)S 1,2-Dichloroethan	0.322	0.326	0.325	0.323	0.318	0.312	0.309	0.319	2.11
14) 1,2-Dichloroethan	0.630	0.595	0.650	0.619	0.598	0.586	0.565	0.606	4.75
15) Trichloroethene	0.464	0.470	0.496	0.494	0.494	0.475	0.462	0.479	3.10
16) 1,2-Dichloropropa	0.416	0.401	0.442	0.424	0.417	0.409	0.397	0.415	3.66
17) cis-1,3-Dichlorop	0.326	0.245	0.346	0.379	0.434	0.470	0.503	0.386	23.18
	---- Linear regr., Force(0,0) ---- Coefficient = 0.9946								
	Response Ratio = 0.00000 + 0.47889 *A								
18) I Chlorobenzene-d5	-----ISTD-----								
19)S Toluene-d8	1.133	1.089	1.064	1.051	1.044	1.048	1.056	1.069	2.96
20)T trans-1,3-Dichlor	0.240	0.152	0.238	0.278	0.340	0.388	0.439	0.296	33.29
	---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9995								
	Response Ratio = 0.00000 + 0.22278 *A + 0.05465 *A^2								
21) Tetrachloroethene	0.545	0.555	0.580	0.559	0.549	0.524	0.509	0.546	4.31

(#) = Out of Range									

SIMCL100120.M

Mon Oct 05 20:32:52 2020

6.7.5
6

Initial Calibration Verification

Job Number: FA79152
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Sample: VZ2431-ICV2431
Lab FileID: Z62663.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\100120\Z62663.D
 Acq On : 1 Oct 2020 1:17 pm
 Sample : icv2431-5
 Misc : MS47304,VZ2431,,,,,
 MS Integration Params: RTEINT.P
 Vial: 11
 Operator: AKARIG
 Inst : MSVOA15
 Multiplr: 1.00

Method : C:\msdchem\1\methods\SIMCL100120.M (RTE Integrator)
 Title : WATER-EPA 8260B
 Last Update : Sat Oct 03 15:38:22 2020
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	Fluorobenzene	1.000	1.000	0.0	93	0.00	7.40
2	Vinyl Chloride	0.632	0.638	-0.9	95	0.00	2.83
3	Chloromethane	0.555	0.508	8.5	91	0.00	2.72
4	1,1-Dichloroethene	0.355	0.400	-12.7	101	0.00	4.08
		----- Amount	Calc.	%Drift	-----		
5	Methylene Chloride	10.000	11.550	-15.5	109	0.00	4.71
6 T	trans-1,2-Dichloroethene	10.000	11.165	-11.6	103	0.00	4.88
		----- AvgRF	CCRF	%Dev	-----		
7	1,1-Dichloroethane	0.780	0.860	-10.3	101	0.00	5.54
8	cis-1,2-Dichloroethene	0.496	0.542	-9.3	100	0.00	6.10
9	Chloroform	0.945	1.001	-5.9	98	0.00	6.37
		----- Amount	Calc.	%Drift	-----		
10	Carbon Tetrachloride	10.000	11.998	-20.0	109	0.00	6.54
		----- AvgRF	CCRF	%Dev	-----		
11	1,1,1-Trichloroethane	0.757	0.863	-14.0	100	0.00	6.61
12	Benzene	1.713	1.914	-11.7	101	0.00	6.99
13 S	1,2-Dichloroethane-d4	0.319	0.316	0.9	92	0.00	7.12
14	1,2-Dichloroethane	0.606	0.637	-5.1	99	0.00	7.19
15	Trichloroethene	0.479	0.532	-11.1	100	0.00	7.56
16	1,2-Dichloropropane	0.415	0.453	-9.2	101	0.00	8.10
		----- Amount	Calc.	%Drift	-----		
17	cis-1,3-Dichloropropene	10.000	11.774	-17.7	120	0.00	8.77
		----- AvgRF	CCRF	%Dev	-----		
18 I	Chlorobenzene-d5	1.000	1.000	0.0	93	0.00	10.51
19 S	Toluene-d8	1.069	1.035	3.2	92	0.00	8.96
		----- Amount	Calc.	%Drift	-----		
20 T	trans-1,3-Dichloropropene	10.000	13.458	-34.6#	137	0.00	9.41
		----- AvgRF	CCRF	%Dev	-----		
21	Tetrachloroethene	0.546	0.577	-5.7	98	0.00	9.40

(#) = Out of Range

SPCC's out = 0 CCC's out = 0

Initial Calibration Verification

Job Number: FA79152
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Sample: VZ2431-ICV2431
Lab FileID: Z62663.D

Z62659.D SIMCL100120.M Mon Oct 05 20:49:17 2020

Continuing Calibration Summary

Job Number: FA79152
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Sample: VZ2433-CC2431
Lab FileID: Z62696.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\ed...-2020\vz2433\Z62696.d Vial: 3
 Acq On : 7 Oct 2020 1:04 pm Operator: AKARIG
 Sample : cc2431-5 Inst : MSVOA15
 Misc : MS47304,VZ2433,,,,, Multiplr: 1.00
 MS Integration Params: RTEINT.P

Method : C:\msdchem\1\methods\SIMCL100120.M (RTE Integrator)
 Title : WATER-EPA 8260B
 Last Update : Sat Oct 03 15:38:22 2020
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	Fluorobenzene	1.000	1.000	0.0	134	0.00	7.40
2	Vinyl Chloride	0.632	0.534	15.5	114	0.00	2.84
3	Chloromethane	0.555	0.476	14.2	123	0.00	2.73
4	1,1-Dichloroethene	0.355	0.331	6.8	121	0.00	4.08
		----- True	Calc.	% Drift	-----		
5	Methylene Chloride	10.000	8.517	14.8	122	0.00	4.71
6 T	trans-1,2-Dichloroethene	10.000	9.383	6.2	125	0.00	4.88
		----- AvgRF	CCRF	% Dev	-----		
7	1,1-Dichloroethane	0.780	0.736	5.6	125	0.00	5.54
8	cis-1,2-Dichloroethene	0.496	0.462	6.9	124	0.00	6.10
9	Chloroform	0.945	0.879	7.0	124	0.00	6.37
		----- True	Calc.	% Drift	-----		
10	Carbon Tetrachloride	10.000	10.012	-0.1	131	0.00	6.54
		----- AvgRF	CCRF	% Dev	-----		
11	1,1,1-Trichloroethane	0.757	0.743	1.8	124	0.00	6.61
12	Benzene	1.713	1.613	5.8	123	0.00	6.99
13 S	1,2-Dichloroethane-d4	0.319	0.310	2.8	131	0.00	7.12
14	1,2-Dichloroethane	0.606	0.550	9.2	123	0.00	7.19
15	Trichloroethene	0.479	0.452	5.6	122	0.00	7.56
16	1,2-Dichloropropane	0.415	0.377	9.2	121	0.00	8.10
		----- True	Calc.	% Drift	-----		
17	cis-1,3-Dichloropropene	10.000	9.710	2.9	143	0.00	8.77
		----- AvgRF	CCRF	% Dev	-----		
18 I	Chlorobenzene-d5	1.000	1.000	0.0	114	0.00	10.51
19 S	Toluene-d8	1.069	1.098	-2.7	119	0.00	8.96
		----- True	Calc.	% Drift	-----		
20 T	trans-1,3-Dichloropropene	10.000	13.277	-32.8#	164	0.00	9.41
		----- AvgRF	CCRF	% Dev	-----		
21	Tetrachloroethene	0.546	0.587	-7.5	121	0.00	9.40

(#) = Out of Range

SPCC's out = 0 CCC's out = 0

Continuing Calibration Summary

Job Number: FA79152
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Sample: VZ2433-CC2431
Lab FileID: Z62696.D

Z62659.D SIMCL100120.M Wed Oct 07 20:53:40 2020

Continuing Calibration Summary

Job Number: FA79152
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Sample: VZ2433-ECC2431
Lab FileID: Z62706.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\ed...-2020\vz2433\Z62706.d Vial: 13
 Acq On : 7 Oct 2020 5:13 pm Operator: AKARIG
 Sample : ecc2431-5 Inst : MSVOA15
 Misc : MS47304,VZ2433,,,,, Multiplr: 1.00
 MS Integration Params: RTEINT.P

Method : C:\msdchem\1\methods\SIMCL100120.M (RTE Integrator)
 Title : WATER-EPA 8260B
 Last Update : Sat Oct 03 15:38:22 2020
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 50% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	Fluorobenzene	1.000	1.000	0.0	97	0.00	7.40
2	Vinyl Chloride	0.632	0.607	4.0	95	0.00	2.84
3	Chloromethane	0.555	0.528	4.9	99	0.01	2.74
4	1,1-Dichloroethene	0.355	0.394	-11.0	105	0.00	4.08
	----- True	Calc.	% Drift	-----			
5	Methylene Chloride	10.000	9.593	4.1	98	0.00	4.71
6 T	trans-1,2-Dichloroethene	10.000	10.892	-8.9	105	0.00	4.89
	----- AvgRF	CCRF	% Dev	-----			
7	1,1-Dichloroethane	0.780	0.855	-9.6	106	0.00	5.55
8	cis-1,2-Dichloroethene	0.496	0.534	-7.7	104	0.00	6.11
9	Chloroform	0.945	1.032	-9.2	106	0.00	6.38
	----- True	Calc.	% Drift	-----			
10	Carbon Tetrachloride	10.000	11.424	-14.2	109	0.00	6.54
	----- AvgRF	CCRF	% Dev	-----			
11	1,1,1-Trichloroethane	0.757	0.874	-15.5	106	0.00	6.61
12	Benzene	1.713	1.890	-10.3	105	0.00	6.99
13 S	1,2-Dichloroethane-d4	0.319	0.321	-0.6	99	0.00	7.13
14	1,2-Dichloroethane	0.606	0.659	-8.7	107	0.00	7.20
15	Trichloroethene	0.479	0.543	-13.4	107	0.00	7.56
16	1,2-Dichloropropane	0.415	0.447	-7.7	104	0.00	8.11
	----- True	Calc.	% Drift	-----			
17	cis-1,3-Dichloropropene	10.000	9.982	0.2	107	0.00	8.77
	----- AvgRF	CCRF	% Dev	-----			
18 I	Chlorobenzene-d5	1.000	1.000	0.0	84	0.00	10.51
19 S	Toluene-d8	1.069	1.068	0.1	86	0.00	8.96
	----- True	Calc.	% Drift	-----			
20 T	trans-1,3-Dichloropropene	10.000	12.776	-27.8	115	0.00	9.41
	----- AvgRF	CCRF	% Dev	-----			
21	Tetrachloroethene	0.546	0.694	-27.1	106	0.00	9.40

(#) = Out of Range

SPCC's out = 0 CCC's out = 0

Continuing Calibration Summary

Job Number: FA79152
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Sample: VZ2433-ECC2431
Lab FileID: Z62706.D

Z62659.D SIMCL100120.M Wed Oct 07 20:53:23 2020

Continuing Calibration Summary

Job Number: FA79152
 Account: AHTNACAS Ahtna Global, LLC
 Project: Fort Ord Groundwater Monitoring

Sample: VZ2434-CC2431
 Lab FileID: Z62710.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\100920\Z62710.D Vial: 3
 Acq On : 9 Oct 2020 10:56 am Operator: AKARIG
 Sample : cc2431-5 Inst : MSVOA15
 Misc : MS47304,VZ2434,,,,, Multiplr: 1.00
 MS Integration Params: RTEINT.P

Method : C:\msdchem\1\methods\SIMCL100120.M (RTE Integrator)
 Title : WATER-EPA 8260B
 Last Update : Sat Oct 03 15:38:22 2020
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	Fluorobenzene	1.000	1.000	0.0	124	0.00	7.40
2	Vinyl Chloride	0.632	0.550	13.0	109	0.00	2.84
3	Chloromethane	0.555	0.491	11.5	117	0.00	2.73
4	1,1-Dichloroethene	0.355	0.344	3.1	116	0.00	4.08
	----- Amount	Calc.	%Drift	-----			
5	Methylene Chloride	10.000	8.976	10.2	118	0.00	4.71
6 T	trans-1,2-Dichloroethene	10.000	9.900	1.0	122	0.00	4.88
	----- AvgRF	CCRF	%Dev	-----			
7	1,1-Dichloroethane	0.780	0.778	0.3	122	0.00	5.54
8	cis-1,2-Dichloroethene	0.496	0.486	2.0	120	0.00	6.10
9	Chloroform	0.945	0.932	1.4	122	0.00	6.37
	----- Amount	Calc.	%Drift	-----			
10	Carbon Tetrachloride	10.000	10.279	-2.8	124	0.00	6.54
	----- AvgRF	CCRF	%Dev	-----			
11	1,1,1-Trichloroethane	0.757	0.777	-2.6	120	0.00	6.61
12	Benzene	1.713	1.695	1.1	120	0.00	6.99
13 S	1,2-Dichloroethane-d4	0.319	0.315	1.3	122	0.00	7.12
14	1,2-Dichloroethane	0.606	0.581	4.1	120	0.00	7.19
15	Trichloroethene	0.479	0.469	2.1	117	0.00	7.56
16	1,2-Dichloropropane	0.415	0.396	4.6	117	0.00	8.10
	----- Amount	Calc.	%Drift	-----			
17	cis-1,3-Dichloropropene	10.000	10.151	-1.5	138	0.00	8.77
	----- AvgRF	CCRF	%Dev	-----			
18 I	Chlorobenzene-d5	1.000	1.000	0.0	107	0.00	10.51
19 S	Toluene-d8	1.069	1.080	-1.0	111	0.00	8.96
	----- Amount	Calc.	%Drift	-----			
20 T	trans-1,3-Dichloropropene	10.000	13.744	-37.4#	162	0.00	9.41
	----- AvgRF	CCRF	%Dev	-----			
21	Tetrachloroethene	0.546	0.603	-10.4	118	0.00	9.40

(#) = Out of Range

SPCC's out = 0 CCC's out = 0

Continuing Calibration Summary

Job Number: FA79152
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Sample: VZ2434-CC2431
Lab FileID: Z62710.D

Z62659.D SIMCL100120.M Sat Oct 10 14:11:54 2020

Continuing Calibration Summary

Job Number: FA79152
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Sample: VZ2434-ECC2431
Lab FileID: Z62723.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\100920\Z62723.D Vial: 16
 Acq On : 9 Oct 2020 5:18 pm Operator: AKARIG
 Sample : ecc2431-5 Inst : MSVOA15
 Misc : MS47304,VZ2434,,,,, Multiplr: 1.00
 MS Integration Params: RTEINT.P

Method : C:\msdchem\1\methods\SIMCL100120.M (RTE Integrator)
 Title : WATER-EPA 8260B
 Last Update : Sat Oct 03 15:38:22 2020
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 50% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	Fluorobenzene	1.000	1.000	0.0	96	0.00	7.40
2	Vinyl Chloride	0.632	0.608	3.8	93	0.00	2.84
3	Chloromethane	0.555	0.517	6.8	95	0.00	2.73
4	1,1-Dichloroethene	0.355	0.387	-9.0	101	0.00	4.09
		----- Amount	Calc.	%Drift	-----		
5	Methylene Chloride	10.000	9.907	0.9	99	0.00	4.71
6 T	trans-1,2-Dichloroethene	10.000	10.766	-7.7	102	0.00	4.89
		----- AvgRF	CCRF	%Dev	-----		
7	1,1-Dichloroethane	0.780	0.852	-9.2	103	0.00	5.55
8	cis-1,2-Dichloroethene	0.496	0.525	-5.8	100	0.00	6.11
9	Chloroform	0.945	1.033	-9.3	104	0.00	6.38
		----- Amount	Calc.	%Drift	-----		
10	Carbon Tetrachloride	10.000	11.126	-11.3	104	0.00	6.54
		----- AvgRF	CCRF	%Dev	-----		
11	1,1,1-Trichloroethane	0.757	0.864	-14.1	103	0.00	6.61
12	Benzene	1.713	1.895	-10.6	103	0.00	6.99
13 S	1,2-Dichloroethane-d4	0.319	0.326	-2.2	98	0.00	7.13
14	1,2-Dichloroethane	0.606	0.661	-9.1	106	0.00	7.20
15	Trichloroethene	0.479	0.544	-13.6	105	0.00	7.57
16	1,2-Dichloropropane	0.415	0.452	-8.9	103	0.00	8.11
		----- Amount	Calc.	%Drift	-----		
17	cis-1,3-Dichloropropene	10.000	9.869	1.3	104	0.00	8.77
		----- AvgRF	CCRF	%Dev	-----		
18 I	Chlorobenzene-d5	1.000	1.000	0.0	83	0.00	10.51
19 S	Toluene-d8	1.069	1.050	1.8	84	0.00	8.96
		----- Amount	Calc.	%Drift	-----		
20 T	trans-1,3-Dichloropropene	10.000	12.539	-25.4	111	0.00	9.41
		----- AvgRF	CCRF	%Dev	-----		
21	Tetrachloroethene	0.546	0.686	-25.6	104	0.00	9.40

(#) = Out of Range

SPCC's out = 0 CCC's out = 0

Continuing Calibration Summary

Job Number: FA79152
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Sample: VZ2434-ECC2431
Lab FileID: Z62723.D

Z62659.D SIMCL100120.M Sat Oct 10 14:12:23 2020

Run Sequence Report

Job Number: FA79152
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Run ID: VO2369	Method: SW846 8260B BY SIM	Instrument ID: GCMSO
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Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
VO2369-BFB	O61539.D	10/02/20 13:41	n/a	BFB Tune
VO2369-IC2369	O61540.D	10/02/20 14:33	n/a	Initial cal 1
VO2369-IC2369	O61541.D	10/02/20 14:55	n/a	Initial cal 2
VO2369-IC2369	O61542.D	10/02/20 15:15	n/a	Initial cal 3
VO2369-IC2369	O61543.D	10/02/20 15:35	n/a	Initial cal 4
VO2369-ICC2369	O61544.D	10/02/20 15:55	n/a	Initial cal 5
VO2369-IC2369	O61545.D	10/02/20 16:15	n/a	Initial cal 6
VO2369-IC2369	O61546.D	10/02/20 16:36	n/a	Initial cal 7
VO2369-ICV2369	O61548.D	10/02/20 17:23	n/a	Initial cal verification 5

Run Sequence Report

Job Number: FA79152
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Run ID: VO2370	Method: SW846 8260B BY SIM	Instrument ID: GCMSO
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Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
VO2370-BFB	O61552.D	10/03/20 13:34	n/a	BFB Tune
VO2370-CC2369	O61554.D	10/03/20 15:58	n/a	Continuing cal 5
VO2370-BS	O61555.D	10/03/20 16:55	n/a	Blank Spike
VO2370-MB	O61557.D	10/03/20 18:05	n/a	Method Blank
FA79152-4	O61565.D	10/03/20 20:45	n/a	2039YOU2458A
FA79309-2MS	O61567.D	10/03/20 21:25	n/a	Matrix Spike
FA79309-2MSD	O61568.D	10/03/20 21:45	n/a	Matrix Spike Duplicate
VO2370-ECC2369	O61569.D	10/03/20 22:05	n/a	Ending cal 5

Run Sequence Report

Job Number: FA79152
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Run ID: VZ2431	Method: SW846 8260B BY SIM	Instrument ID: GCMSZ
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Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
VZ2431-BFB	Z62654.D	10/01/20 09:35	n/a	BFB Tune
VZ2431-IC2431	Z62655.D	10/01/20 10:01	n/a	Initial cal 1
VZ2431-IC2431	Z62656.D	10/01/20 10:20	n/a	Initial cal 2
VZ2431-IC2431	Z62657.D	10/01/20 10:40	n/a	Initial cal 3
VZ2431-IC2431	Z62658.D	10/01/20 10:59	n/a	Initial cal 4
VZ2431-ICC2431	Z62659.D	10/01/20 11:18	n/a	Initial cal 5
VZ2431-IC2431	Z62660.D	10/01/20 11:37	n/a	Initial cal 6
VZ2431-IC2431	Z62661.D	10/01/20 11:59	n/a	Initial cal 7
VZ2431-ICV2431	Z62663.D	10/01/20 13:17	n/a	Initial cal verification 5

Run Sequence Report

Job Number: FA79152
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Run ID: VZ2433	Method: SW846 8260B BY SIM	Instrument ID: GCMSZ
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Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
VZ2433-BFB	Z62695.D	10/07/20 12:20	n/a	BFB Tune
VZ2433-CC2431	Z62696.D	10/07/20 13:04	n/a	Continuing cal 5
VZ2433-BS	Z62697.D	10/07/20 14:06	n/a	Blank Spike
VZ2433-MB	Z62699.D	10/07/20 14:58	n/a	Method Blank
FA79152-1	Z62700.D	10/07/20 15:17	n/a	2039YOU2455F
FA79152-2	Z62701.D	10/07/20 15:36	n/a	2039YOU2456D
FA79152-3	Z62702.D	10/07/20 15:56	n/a	2039YOU2457C
ZZZZZZ	Z62703.D	10/07/20 16:15	n/a	(unrelated sample)
FA79152-1MS	Z62704.D	10/07/20 16:35	n/a	Matrix Spike
FA79152-1MSD	Z62705.D	10/07/20 16:54	n/a	Matrix Spike Duplicate
VZ2433-ECC2431	Z62706.D	10/07/20 17:13	n/a	Ending cal 5

Run Sequence Report

Job Number: FA79152
Account: AHTNACAS Ahtna Global, LLC
Project: Fort Ord Groundwater Monitoring

Run ID: VZ2434	Method: SW846 8260B BY SIM	Instrument ID: GCMSZ
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Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
VZ2434-BFB	Z62709.D	10/09/20 10:33	n/a	BFB Tune
VZ2434-CC2431	Z62710.D	10/09/20 10:56	n/a	Continuing cal 5
VZ2434-BS	Z62711.D	10/09/20 11:26	n/a	Blank Spike
VZ2434-MB	Z62715.D	10/09/20 13:57	n/a	Method Blank
FA79152-4	Z62716.D	10/09/20 15:00	n/a	2039YOU2458A
FA79309-1	Z62717.D	10/09/20 15:20	n/a	(used for QC only; not part of job FA79152)
ZZZZZZ	Z62718.D	10/09/20 15:39	n/a	(unrelated sample)
ZZZZZZ	Z62719.D	10/09/20 15:58	n/a	(unrelated sample)
ZZZZZZ	Z62720.D	10/09/20 16:18	n/a	(unrelated sample)
FA79309-1MS	Z62721.D	10/09/20 16:39	n/a	Matrix Spike
FA79309-1MSD	Z62722.D	10/09/20 16:58	n/a	Matrix Spike Duplicate
VZ2434-ECC2431	Z62723.D	10/09/20 17:18	n/a	Ending cal 5

MS Volatiles

Raw Data

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\edessas\10-08-2020\ vz2433\
Data File : Z62700.d
Acq On : 7 Oct 2020 3:17 pm
Operator : AKARIG
Sample : fa79152-1
Misc : MS47343,VZ2433,,,,,
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Oct 07 20:48:48 2020
Quant Method : C:\msdchem\1\methods\SIMCL100120.M
Quant Title : WATER-EPA 8260B
QLast Update : Sat Oct 03 15:38:22 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	

Internal Standards							
1) Fluorobenzene	7.401	96	2109086	5.00	ppb	0.00	
18) Chlorobenzene-d5	10.511	117	1708390	5.00	ppb	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.130	65	725146	5.38	ppb	0.00	
Spiked Amount	5.000	Range	79 - 125	Recovery	=	107.60%	
19) Toluene-d8	8.961	98	1939788	5.31	ppb	0.00	
Spiked Amount	5.000	Range	70 - 130	Recovery	=	106.20%	
Target Compounds							
3) Chloromethane	2.741	50	44506m	0.19	ppb		Qvalue
5) Methylene Chloride	4.713	84	86179	0.29	ppb		96
7) 1,1-Dichloroethane	5.543	63	242525	0.74	ppb	#	99
9) Chloroform	6.371	83	289881	0.73	ppb		99
15) Trichloroethene	7.564	95	97785	0.48	ppb		97
21) Tetrachloroethene	9.399	166	357452	1.92	ppb		98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

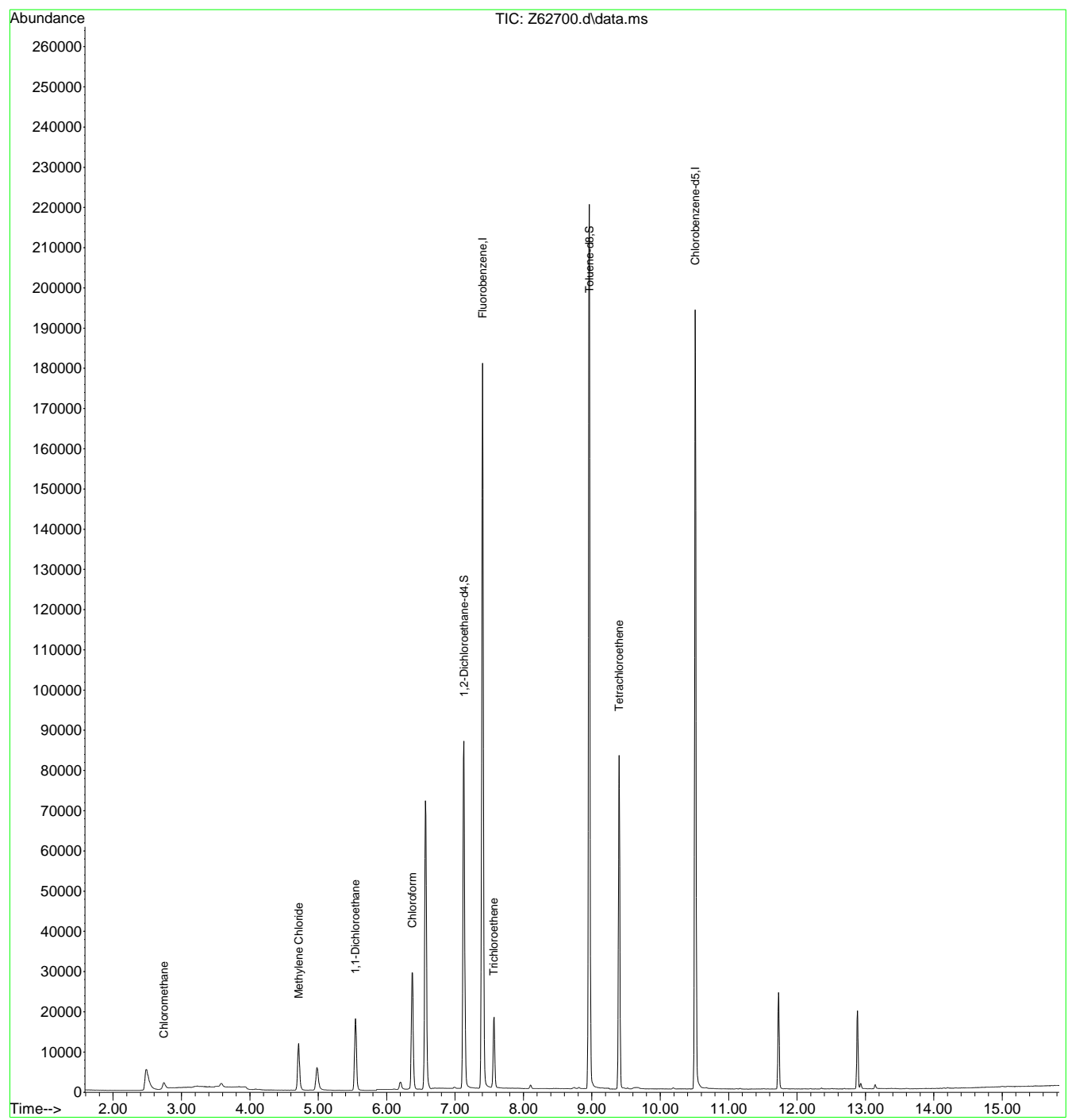
7.1.1
7



Quantitation Report (QT Reviewed)

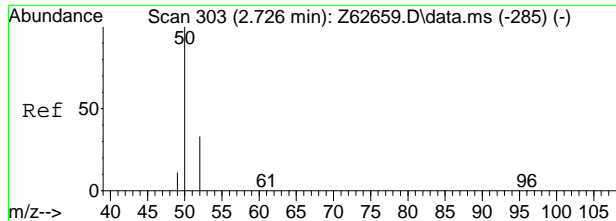
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Data File : Z62700.d
Acq On : 7 Oct 2020 3:17 pm
Operator : AKARIG
Sample : fa79152-1
Misc : MS47343,VZ2433,,,,,
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Oct 07 20:48:48 2020
Quant Method : C:\msdchem\1\methods\SIMCL100120.M
Quant Title : WATER-EPA 8260B
QLast Update : Sat Oct 03 15:38:22 2020
Response via : Initial Calibration



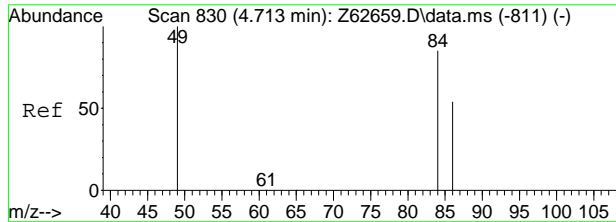
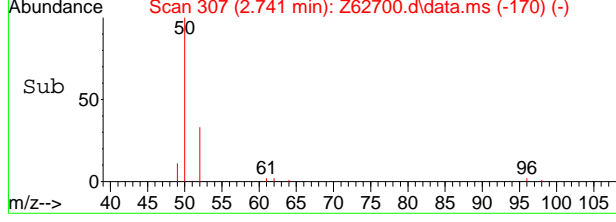
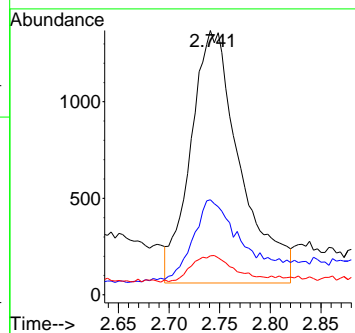
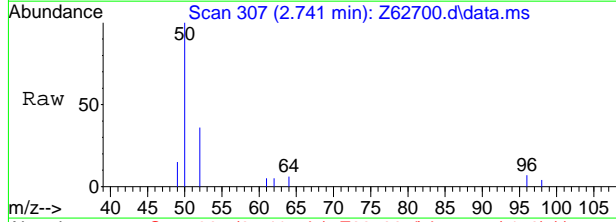
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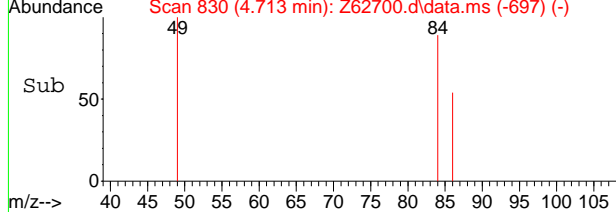
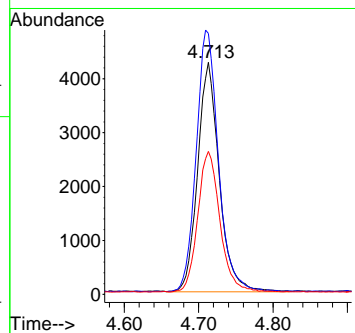
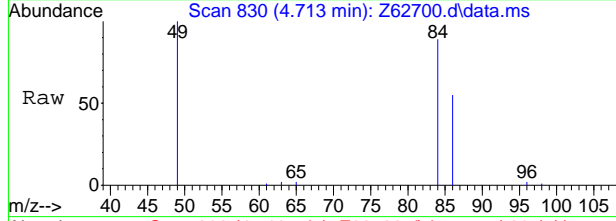
#3
 Chloromethane
 Concen: 0.19 ppb m
 RT: 2.741 min Scan# 307
 Delta R.T. 0.015 min
 Lab File: Z62700.d
 Acq: 7 Oct 2020 3:17 pm

Tgt Ion	Resp	Lower	Upper
50	44506		
52	36.0	12.9	52.9
49	14.7	0.0	30.7

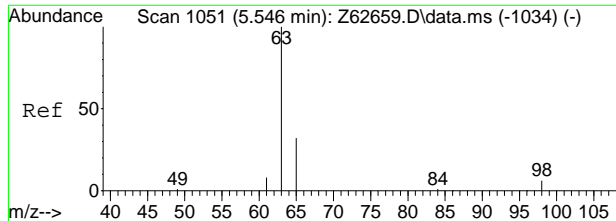


#5
 Methylene Chloride
 Concen: 0.29 ppb
 RT: 4.713 min Scan# 830
 Delta R.T. 0.000 min
 Lab File: Z62700.d
 Acq: 7 Oct 2020 3:17 pm

Tgt Ion	Resp	Lower	Upper
84	86179		
84	100		
49	112.5	98.2	138.2
86	61.1	43.5	83.5

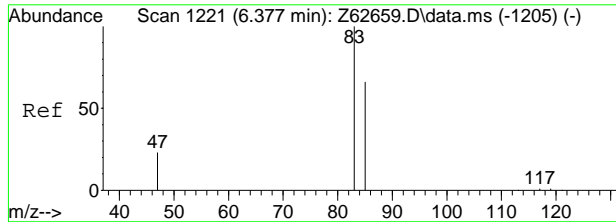
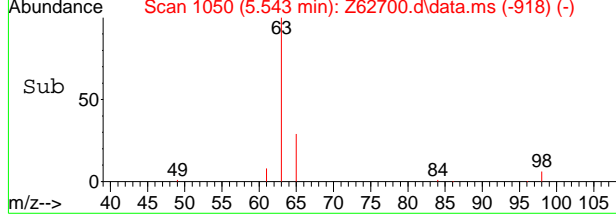
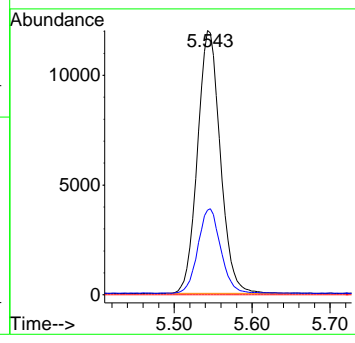
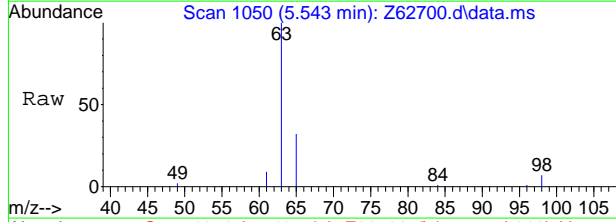


7.1.1



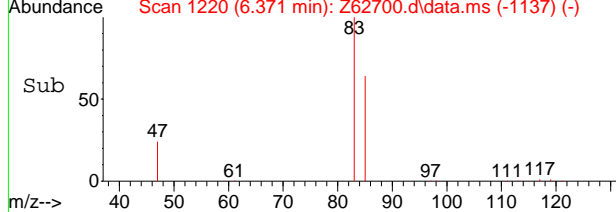
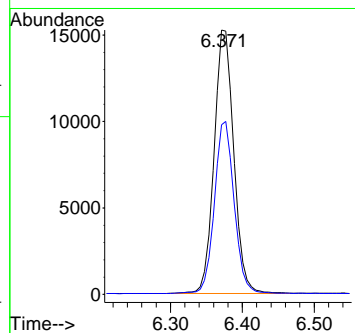
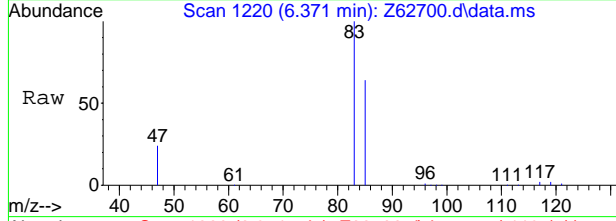
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 1,1-Dichloroethane
 Concen: 0.74 ppb
 RT: 5.543 min Scan# 1050
 Delta R.T. -0.003 min
 Lab File: Z62700.d
 Acq: 7 Oct 2020 3:17 pm

Tgt Ion	Resp	Lower	Upper
63	242525		
65	32.2	11.8	51.8
83	0.0	0.0	30.0



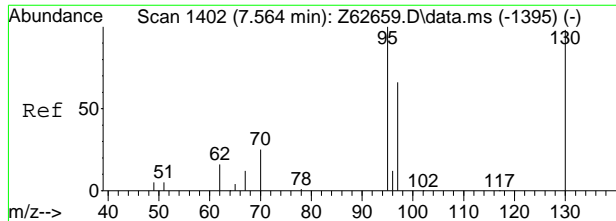
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 Chloroform
 Concen: 0.73 ppb
 RT: 6.371 min Scan# 1220
 Delta R.T. -0.006 min
 Lab File: Z62700.d
 Acq: 7 Oct 2020 3:17 pm

Tgt Ion	Resp	Lower	Upper
83	289881		
85	65.5	46.5	86.5



7.11
7

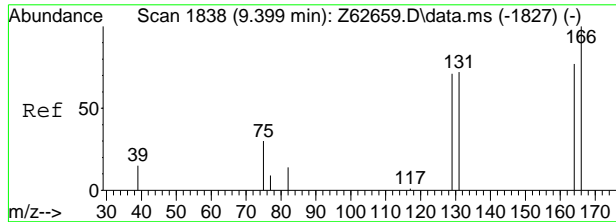
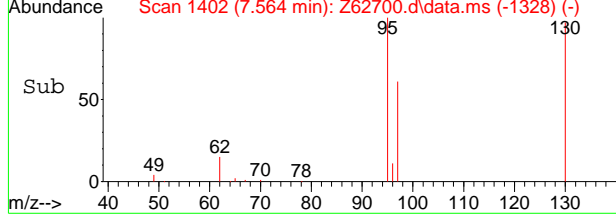
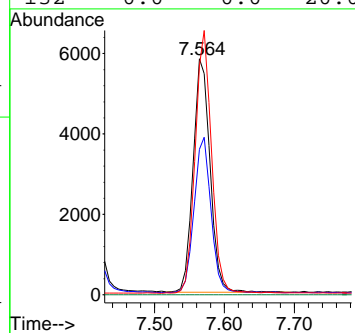
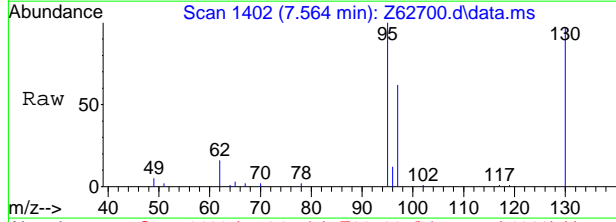




#15
 Trichloroethene
 Concen: 0.48 ppb
 RT: 7.564 min Scan# 1402
 Delta R.T. 0.000 min
 Lab File: Z62700.d
 Acq: 7 Oct 2020 3:17 pm

Tgt Ion	Resp
95	97785

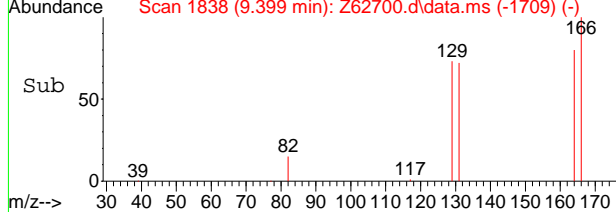
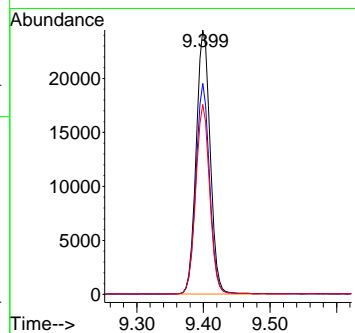
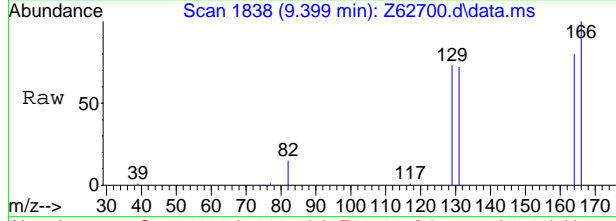
Ion	Ratio	Lower	Upper
95	100		
97	61.4	46.4	86.4
130	97.2	77.5	117.5
132	0.0	0.0	20.0



#21
 Tetrachloroethene
 Concen: 1.92 ppb
 RT: 9.399 min Scan# 1838
 Delta R.T. -0.000 min
 Lab File: Z62700.d
 Acq: 7 Oct 2020 3:17 pm

Tgt Ion	Resp
166	357452

Ion	Ratio	Lower	Upper
166	100		
164	79.8	56.9	96.9
131	71.8	51.8	91.8



7.1.1



Manual Integration Approval Summary

Sample Number: FA79152-1 **Method:** SW846 8260B BY SIM
Lab FileID: Z62700.D **Analyst approved:** 10/07/20 21:37 Edessa Sumagaysay
Injection Time: 10/07/20 15:17 **Supervisor approved:** 10/08/20 09:21 Melissa Mangual

Parameter	CAS	Sig#	R.T. (min.)	Reason
Methyl Chloride	74-87-3		2.74	Poor instrument integration

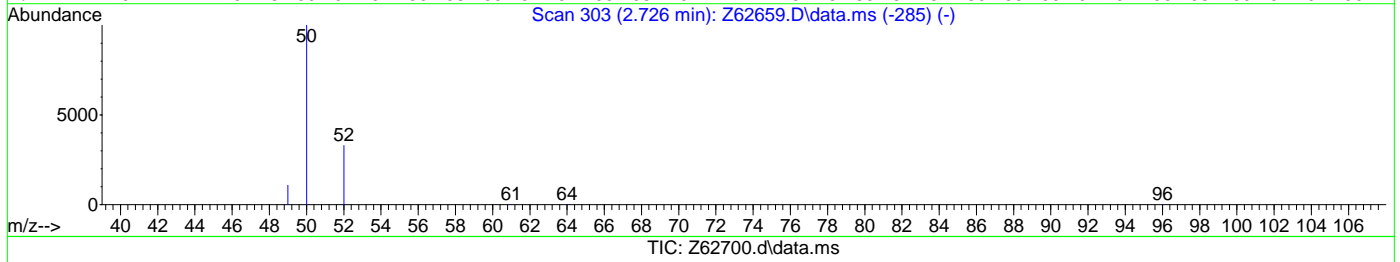
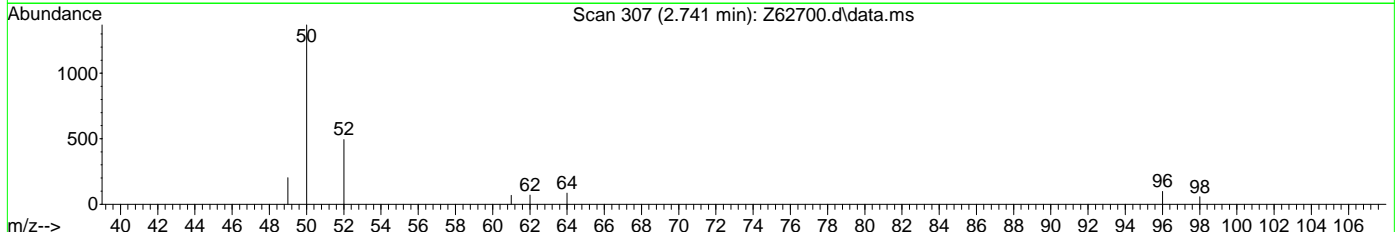
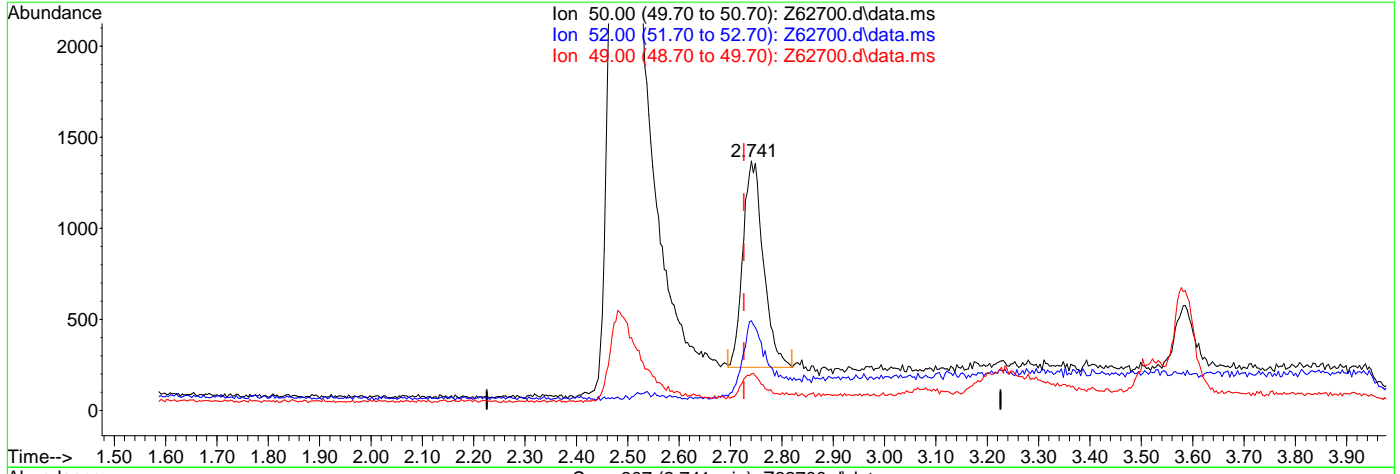
7.1.1.1

7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\edessas\10-08-2020\vz2433\
Data File : Z62700.d
Acq On : 7 Oct 2020 3:17 pm
Operator : AKARIG
Sample : fa79152-1
Misc : MS47304,VZ2433,,,,,
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Oct 07 20:46:18 2020
Quant Method : C:\msdchem\1\methods\SIMCL100120.M
Quant Title : WATER-EPA 8260B
QLast Update : Sat Oct 03 15:38:22 2020
Response via : Initial Calibration



(3) Chloromethane

2.741min (+0.015) 0.13ppb

response 31292

Ion	Exp%	Act%
50.00	100	100
52.00	32.90	36.48
49.00	10.70	11.04
0.00	0.00	0.00

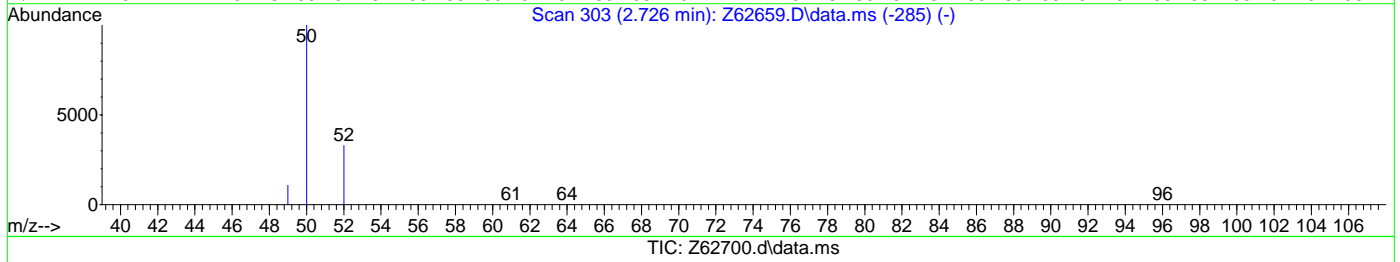
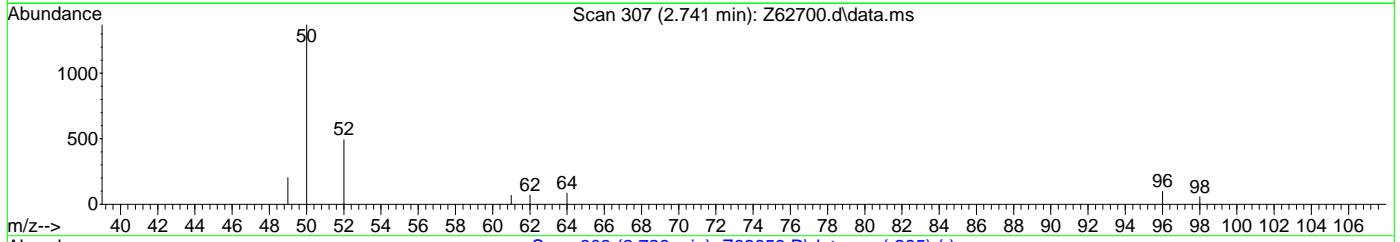
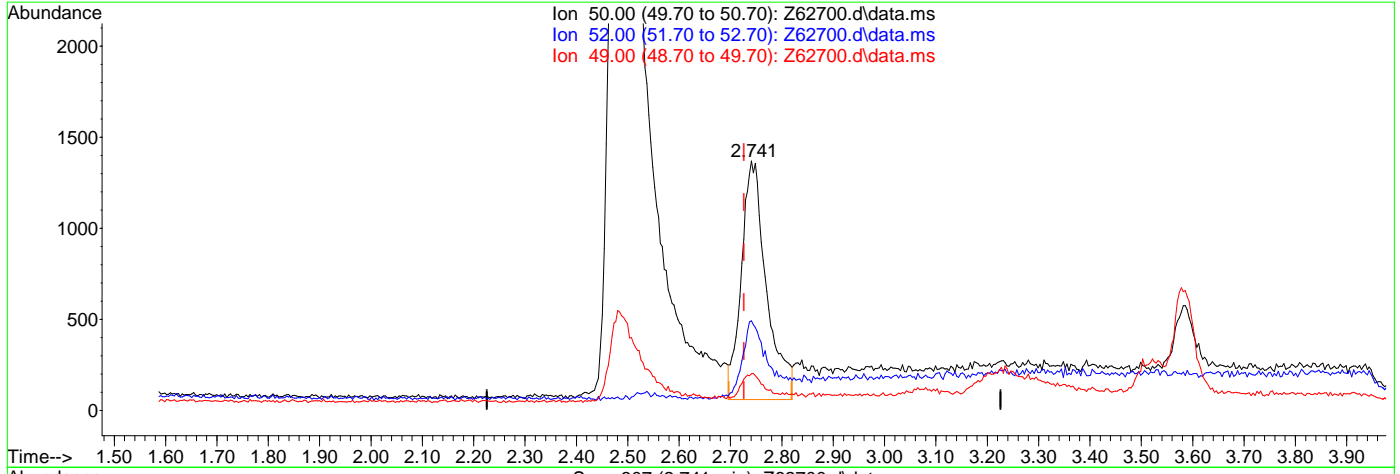


7.1.1.2
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\edessas\10-08-2020\vz2433\
Data File : Z62700.d
Acq On : 7 Oct 2020 3:17 pm
Operator : AKARIG
Sample : fa79152-1
Misc : MS47304,VZ2433,,,,,
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Oct 07 20:46:18 2020
Quant Method : C:\msdchem\1\methods\SIMCL100120.M
Quant Title : WATER-EPA 8260B
QLast Update : Sat Oct 03 15:38:22 2020
Response via : Initial Calibration



(3) Chloromethane

2.741min (+0.015) 0.19ppb m

response 44506

Ion	Exp%	Act%
50.00	100	100
52.00	32.90	35.99
49.00	10.70	14.74
0.00	0.00	0.00



7.1.1.3
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\edessas\10-08-2020\ vz2433\
Data File : Z62701.d
Acq On : 7 Oct 2020 3:36 pm
Operator : AKARIG
Sample : fa79152-2
Misc : MS47343,VZ2433,,,,,
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Oct 07 20:46:20 2020
Quant Method : C:\msdchem\1\methods\SIMCL100120.M
Quant Title : WATER-EPA 8260B
QLast Update : Sat Oct 03 15:38:22 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	

Internal Standards							
1) Fluorobenzene	7.401	96	1949614	5.00	ppb	0.00	
18) Chlorobenzene-d5	10.511	117	1574101	5.00	ppb	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.130	65	682354	5.48	ppb	0.00	
Spiked Amount	5.000	Range	79 - 125	Recovery	=	109.60%	
19) Toluene-d8	8.961	98	1774218	5.27	ppb	0.00	
Spiked Amount	5.000	Range	70 - 130	Recovery	=	105.40%	
Target Compounds							
5) Methylene Chloride	4.713	84	89006	0.32	ppb	98	Qvalue
7) 1,1-Dichloroethane	5.546	63	238101	0.78	ppb	#	100
9) Chloroform	6.377	83	284922	0.77	ppb		98
15) Trichloroethene	7.564	95	95052	0.51	ppb		97
21) Tetrachloroethene	9.399	166	353481	2.06	ppb		100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

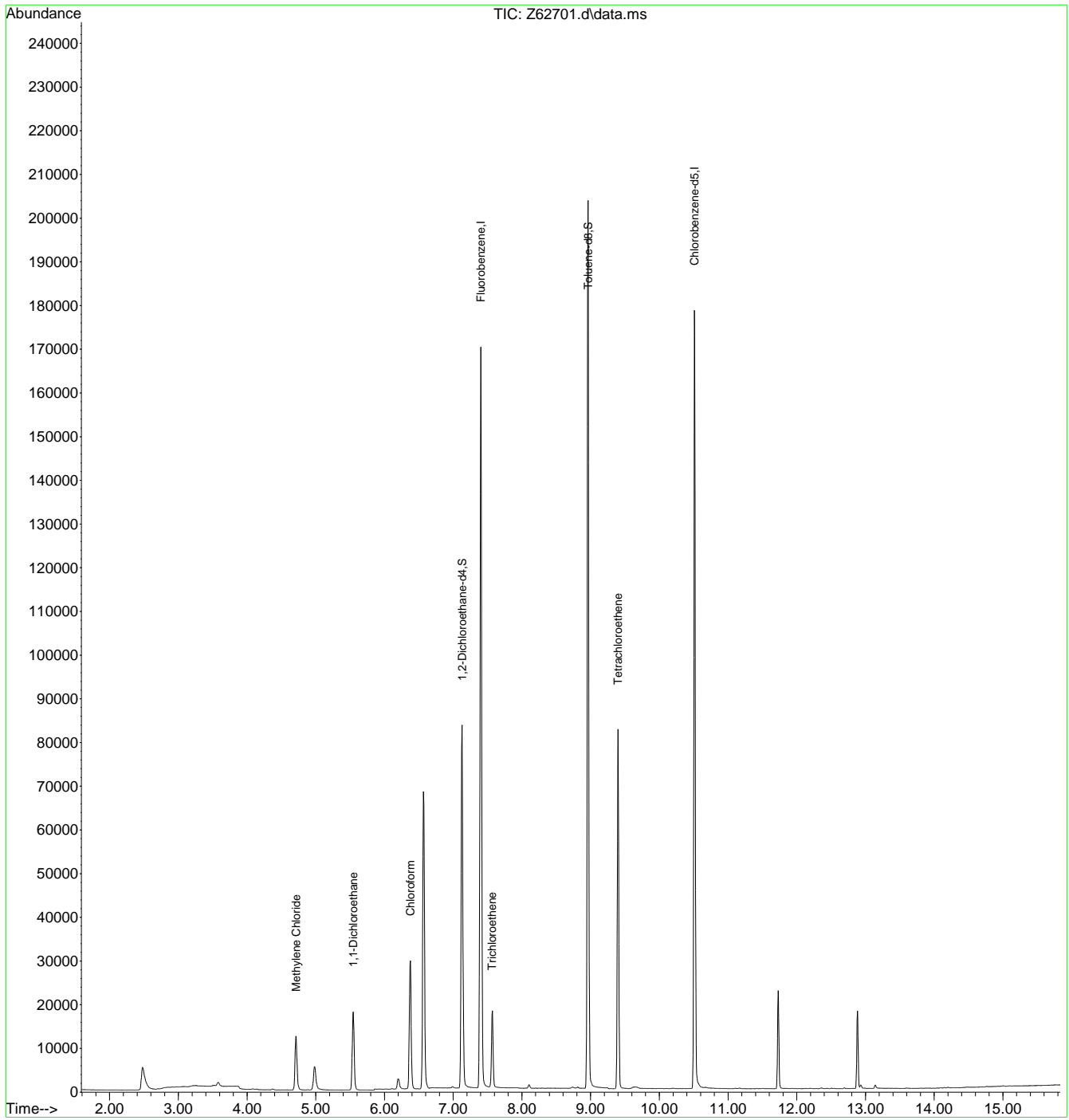
7.12
7



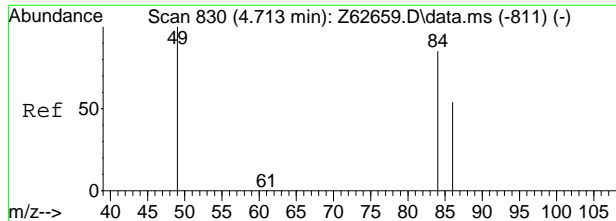
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\edessas\10-08-2020\vz2433\
Data File : Z62701.d
Acq On : 7 Oct 2020 3:36 pm
Operator : AKARIG
Sample : fa79152-2
Misc : MS47343,VZ2433,,,,,
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Oct 07 20:46:20 2020
Quant Method : C:\msdchem\1\methods\SIMCL100120.M
Quant Title : WATER-EPA 8260B
QLast Update : Sat Oct 03 15:38:22 2020
Response via : Initial Calibration



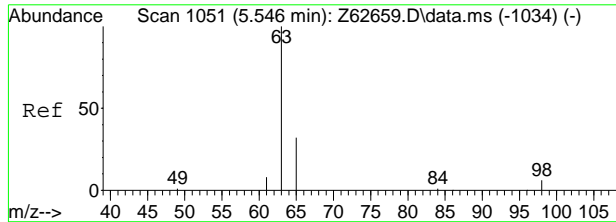
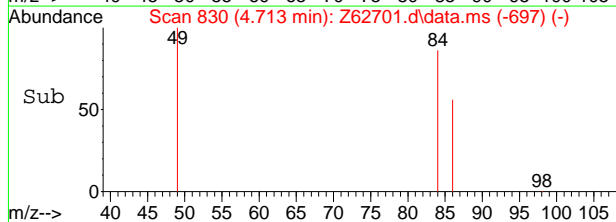
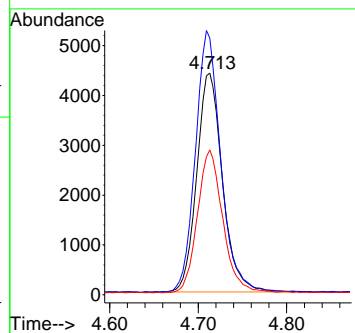
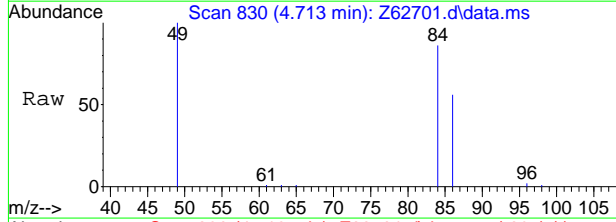
7.1.2
7



#5
 Methylene Chloride
 Concen: 0.32 ppb
 RT: 4.713 min Scan# 830
 Delta R.T. -0.000 min
 Lab File: Z62701.d
 Acq: 7 Oct 2020 3:36 pm

Tgt Ion: 84 Resp: 89006

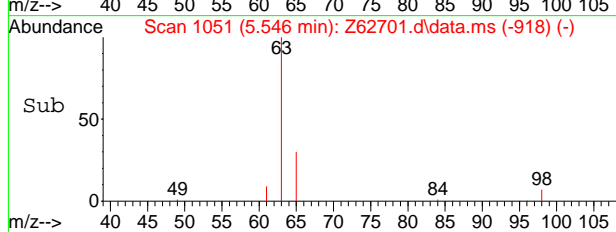
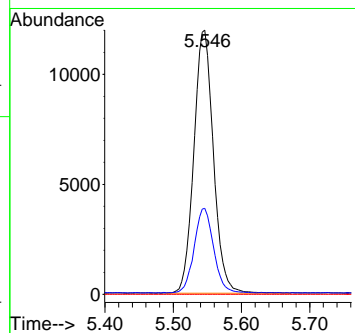
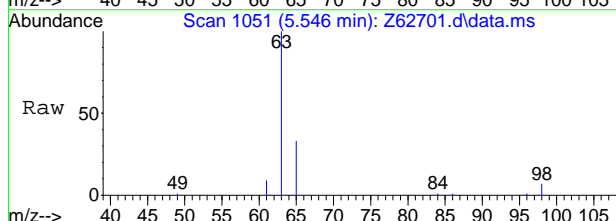
Ion	Ratio	Lower	Upper
84	100		
49	115.9	98.2	138.2
86	65.0	43.5	83.5



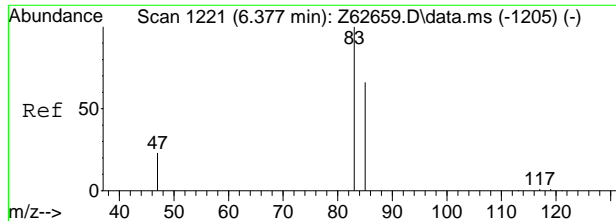
#7
 1,1-Dichloroethane
 Concen: 0.78 ppb
 RT: 5.546 min Scan# 1051
 Delta R.T. 0.000 min
 Lab File: Z62701.d
 Acq: 7 Oct 2020 3:36 pm

Tgt Ion: 63 Resp: 238101

Ion	Ratio	Lower	Upper
63	100		
65	31.9	11.8	51.8
83	0.0	0.0	30.0

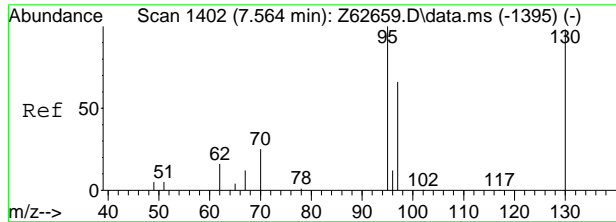
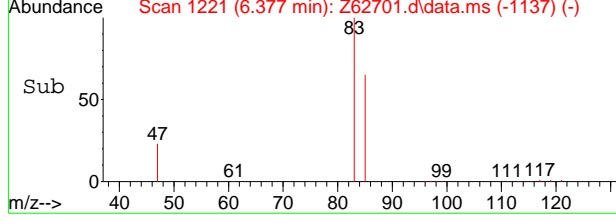
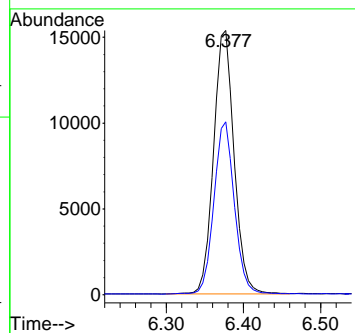
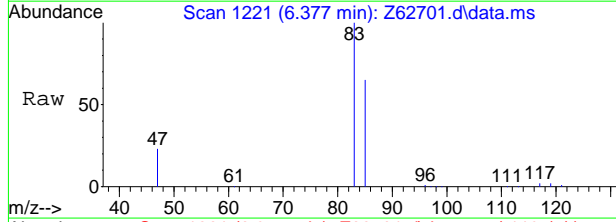


7.12
7



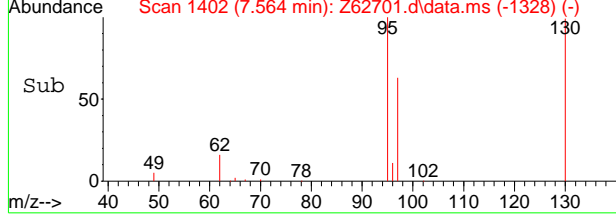
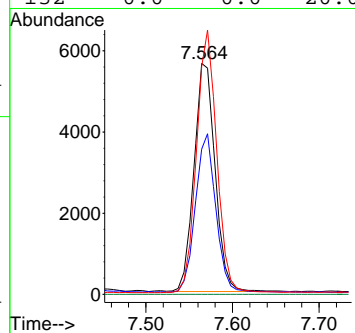
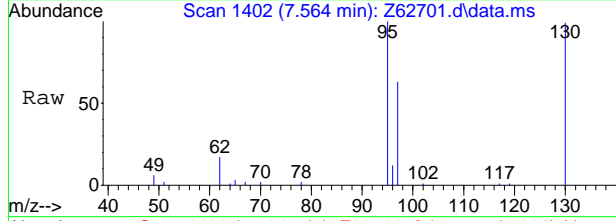
#9
 Chloroform
 Concen: 0.77 ppb
 RT: 6.377 min Scan# 1221
 Delta R.T. -0.000 min
 Lab File: Z62701.d
 Acq: 7 Oct 2020 3:36 pm

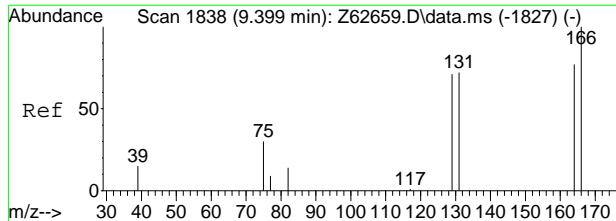
Tgt Ion	Resp	Lower	Upper
83	284922	100	
85	65.0	46.5	86.5



#15
 Trichloroethene
 Concen: 0.51 ppb
 RT: 7.564 min Scan# 1402
 Delta R.T. 0.000 min
 Lab File: Z62701.d
 Acq: 7 Oct 2020 3:36 pm

Tgt Ion	Resp	Lower	Upper
95	95052	100	
97	62.7	46.4	86.4
130	99.1	77.5	117.5
132	0.0	0.0	20.0

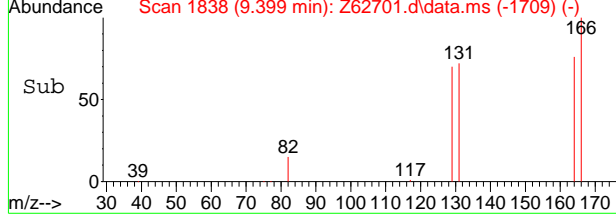
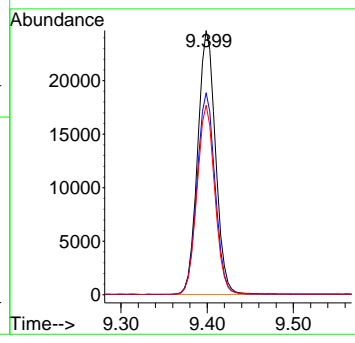
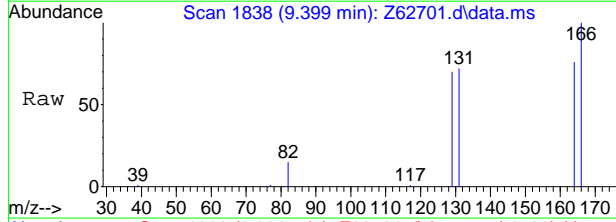




#21
 Tetrachloroethene
 Concen: 2.06 ppb
 RT: 9.399 min Scan# 1838
 Delta R.T. -0.000 min
 Lab File: Z62701.d
 Acq: 7 Oct 2020 3:36 pm

Tgt Ion:166 Resp: 353481

Ion	Ratio	Lower	Upper
166	100		
164	76.4	56.9	96.9
131	71.7	51.8	91.8



7.1.2
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\edessas\10-08-2020\vz2433\
Data File : Z62702.d
Acq On : 7 Oct 2020 3:56 pm
Operator : AKARIG
Sample : fa79152-3
Misc : MS47343,VZ2433,,,,,
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Oct 07 20:46:22 2020
Quant Method : C:\msdchem\1\methods\SIMCL100120.M
Quant Title : WATER-EPA 8260B
QLast Update : Sat Oct 03 15:38:22 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Fluorobenzene	7.401	96	1814796	5.00	ppb	0.00
18) Chlorobenzene-d5	10.511	117	1481092	5.00	ppb	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.130	65	638308	5.51	ppb	0.00
Spiked Amount	5.000	Range	79 - 125	Recovery	=	110.20%
19) Toluene-d8	8.961	98	1634493	5.16	ppb	0.00
Spiked Amount	5.000	Range	70 - 130	Recovery	=	103.20%
Target Compounds						
5) Methylene Chloride	4.713	84	61995	0.24	ppb	Qvalue 97

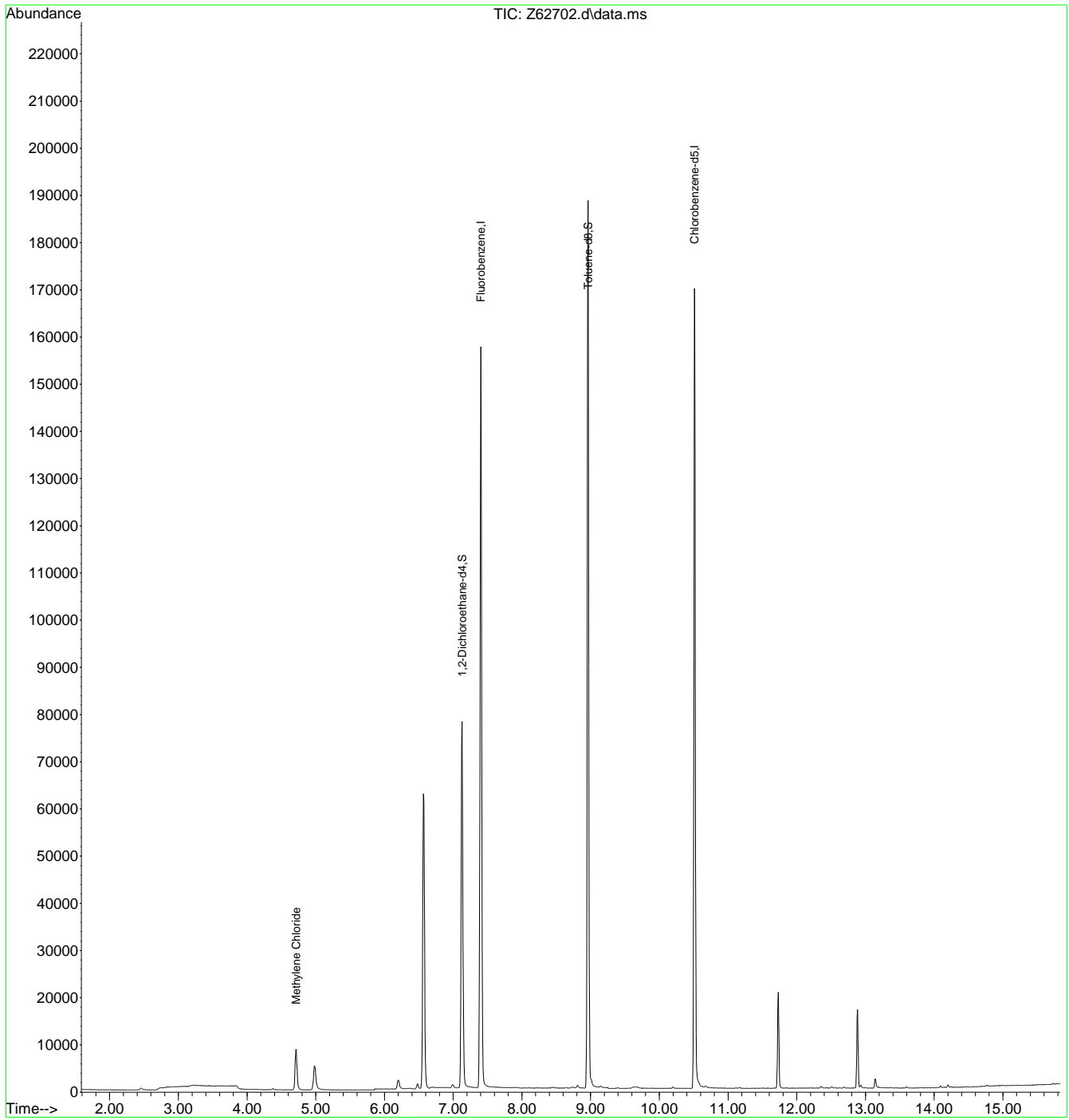
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.1.3
7

Quantitation Report (QT Reviewed)

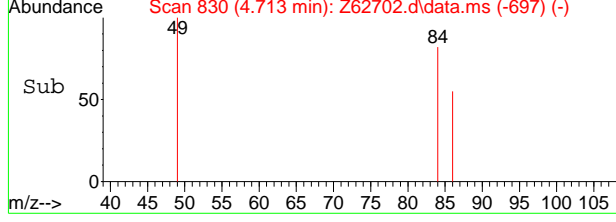
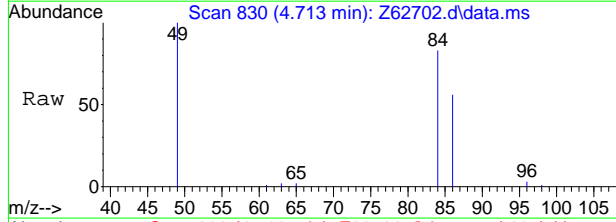
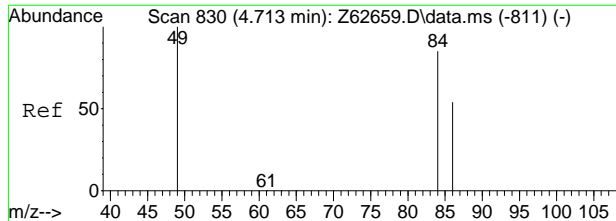
Data Path : C:\msdchem\1\data\edessas\10-08-2020\vz2433\
Data File : Z62702.d
Acq On : 7 Oct 2020 3:56 pm
Operator : AKARIG
Sample : fa79152-3
Misc : MS47343,VZ2433,,,,,
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Oct 07 20:46:22 2020
Quant Method : C:\msdchem\1\methods\SIMCL100120.M
Quant Title : WATER-EPA 8260B
QLast Update : Sat Oct 03 15:38:22 2020
Response via : Initial Calibration



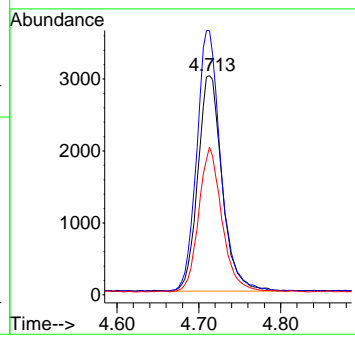
7.1.3
7





#5
 Methylene Chloride
 Concen: 0.24 ppb
 RT: 4.713 min Scan# 830
 Delta R.T. 0.000 min
 Lab File: Z62702.d
 Acq: 7 Oct 2020 3:56 pm

Tgt Ion	Ratio	Lower	Upper
84	100		
49	121.0	98.2	138.2
86	66.9	43.5	83.5



7.1.3
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\100920\
Data File : Z62716.D
Acq On : 9 Oct 2020 3:00 pm
Operator : AKARIG
Sample : fa79152-4
Misc : MS47343,VZ2434,,,,,
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Oct 10 13:33:47 2020
Quant Method : C:\msdchem\1\methods\SIMCL100120.M
Quant Title : WATER-EPA 8260B
QLast Update : Sat Oct 03 15:38:22 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	

Internal Standards							
1) Fluorobenzene	7.401	96	1959039	5.00	ppb	0.00	
18) Chlorobenzene-d5	10.511	117	1556635	5.00	ppb	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.123	65	706443	5.65	ppb	0.00	
Spiked Amount	5.000	Range	79 - 125	Recovery	=	113.00%	
19) Toluene-d8	8.957	98	1746176	5.24	ppb	0.00	
Spiked Amount	5.000	Range	70 - 130	Recovery	=	104.80%	
Target Compounds							
3) Chloromethane	2.729	50	19338	0.09	ppb	94	Qvalue
5) Methylene Chloride	4.709	84	104251	0.38	ppb	96	
21) Tetrachloroethene	9.399	166	662055	3.90	ppb	99	

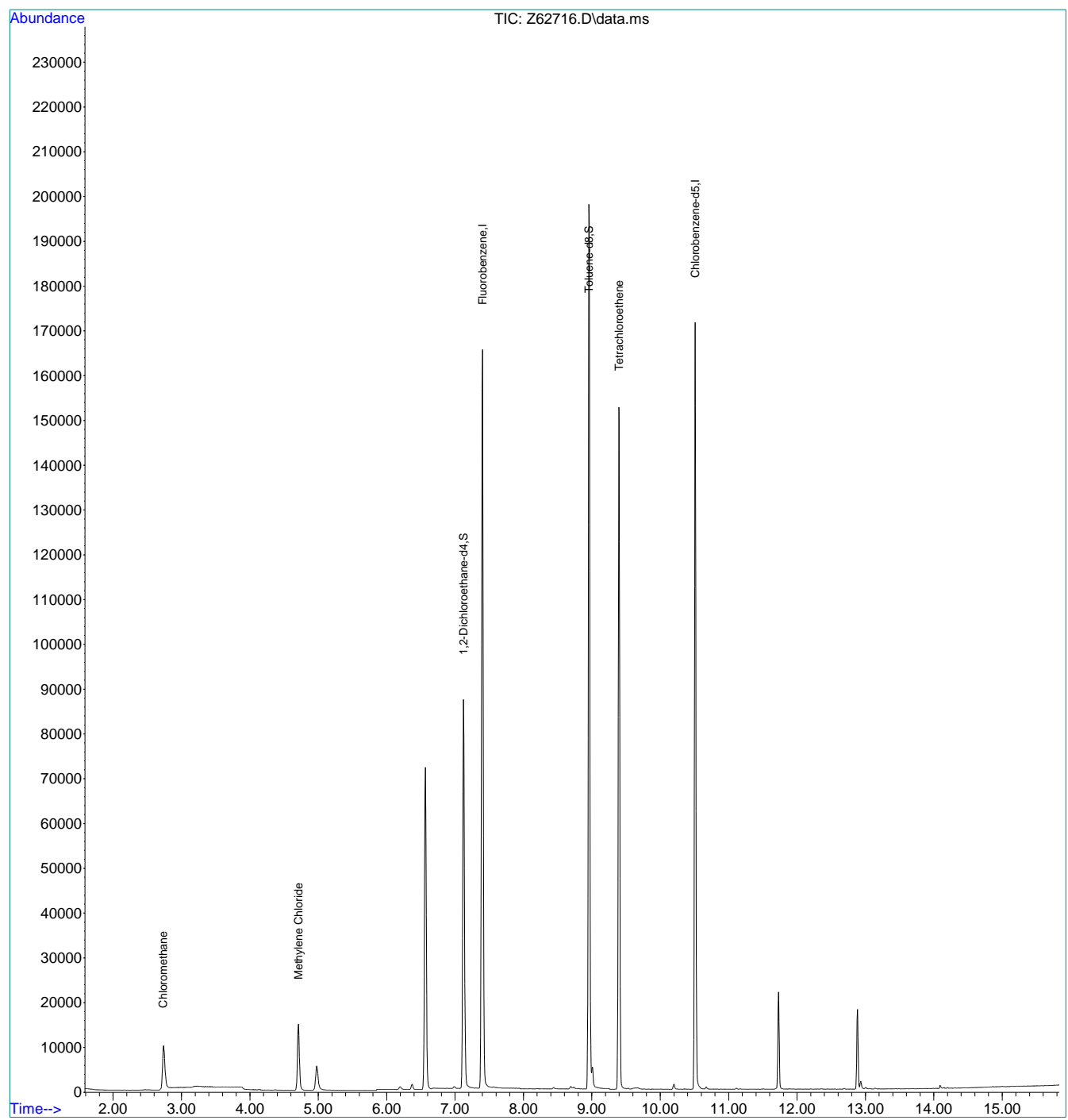
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.14
7

Quantitation Report (QT Reviewed)

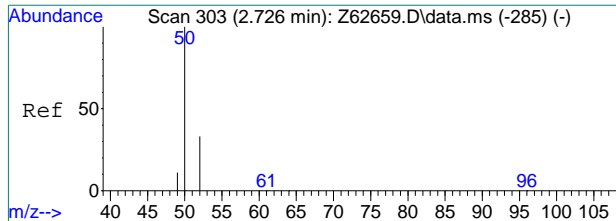
Data Path : C:\msdchem\1\data\100920\
Data File : Z62716.D
Acq On : 9 Oct 2020 3:00 pm
Operator : AKARIG
Sample : fa79152-4
Misc : MS47343,VZ2434,,,,,
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Oct 10 13:33:47 2020
Quant Method : C:\msdchem\1\methods\SIMCL100120.M
Quant Title : WATER-EPA 8260B
QLast Update : Sat Oct 03 15:38:22 2020
Response via : Initial Calibration

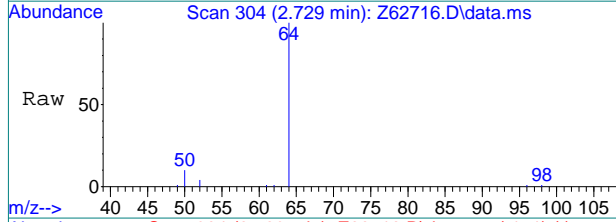


7.1.4
7



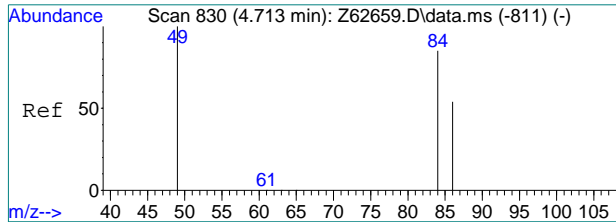
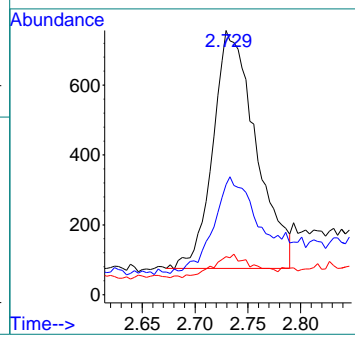
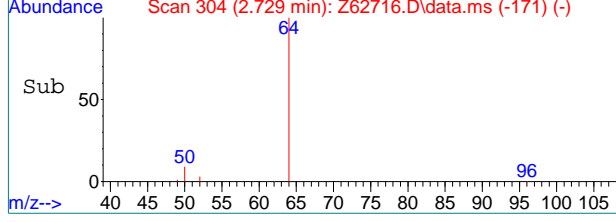


#3
 Chloromethane
 Concen: 0.09 ppb
 RT: 2.729 min Scan# 304
 Delta R.T. 0.003 min
 Lab File: Z62716.D
 Acq: 9 Oct 2020 3:00 pm

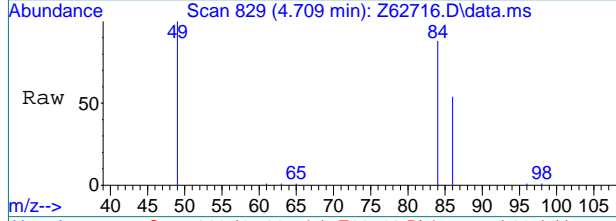


Tgt Ion: 50 Resp: 19338

Ion	Ratio	Lower	Upper
50	100		
52	36.7	12.9	52.9
49	8.5	0.0	30.7

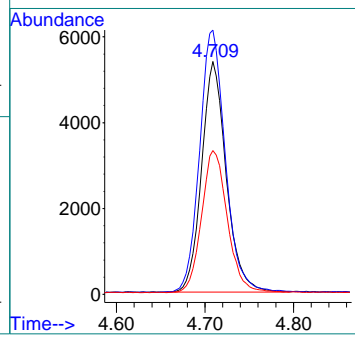
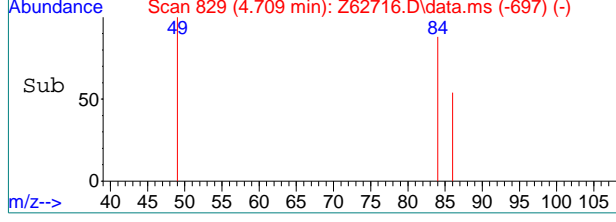


#5
 Methylene Chloride
 Concen: 0.38 ppb
 RT: 4.709 min Scan# 829
 Delta R.T. -0.004 min
 Lab File: Z62716.D
 Acq: 9 Oct 2020 3:00 pm

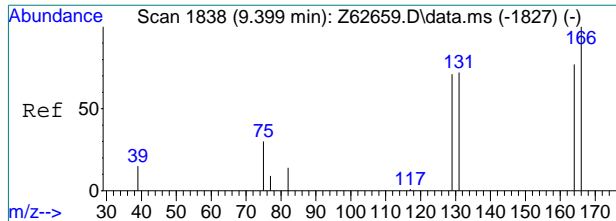


Tgt Ion: 84 Resp: 104251

Ion	Ratio	Lower	Upper
84	100		
49	113.5	98.2	138.2
86	61.5	43.5	83.5



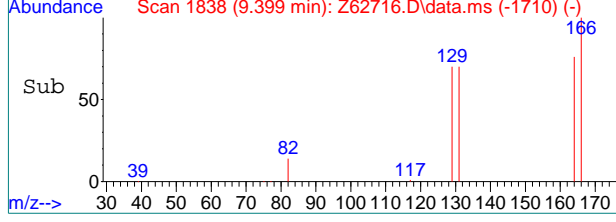
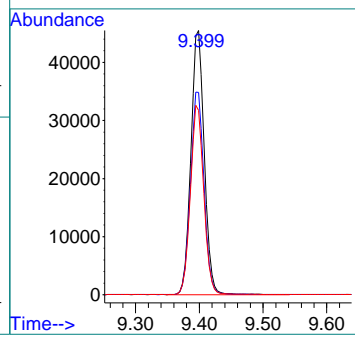
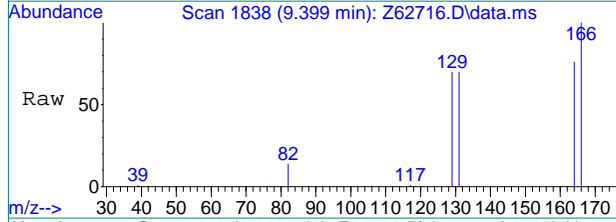
7.14
7



#21
 Tetrachloroethene
 Concen: 3.90 ppb
 RT: 9.399 min Scan# 1838
 Delta R.T. -0.000 min
 Lab File: Z62716.D
 Acq: 9 Oct 2020 3:00 pm

Tgt Ion: 166 Resp: 662055

Ion	Ratio	Lower	Upper
166	100		
164	76.4	56.9	96.9
131	69.7	51.8	91.8



7.1.4
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\100320\
 Data File : O61565.D
 Acq On : 3 Oct 2020 8:45 pm
 Operator : AKARIG
 Sample : FA79152-4 Inst : MSVOA12
 Misc : MS47343,VO2370,,,,,
 ALS Vial : 15 Sample Multiplier: 1

Quant Time: Oct 08 19:46:55 2020
 Quant Method : C:\msdchem\2\methods\SIMCL100220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Sat Oct 03 15:33:07 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.337	96	228883	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.442	117	192299	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.069	65	120052	5.96	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	119.20%	
19) Toluene-d8	8.896	98	189692	5.08	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	101.60%	
Target Compounds						
3) Chloromethane	2.788	50	14624	0.42	ug/L	96
5) Methylene Chloride	4.696	49	12696	0.22	ug/L	97
9) Chloroform	6.332	83	1549	0.04	ug/L #	75
21) Tetrachloroethene	9.338	166	86886	4.51	ug/L	99

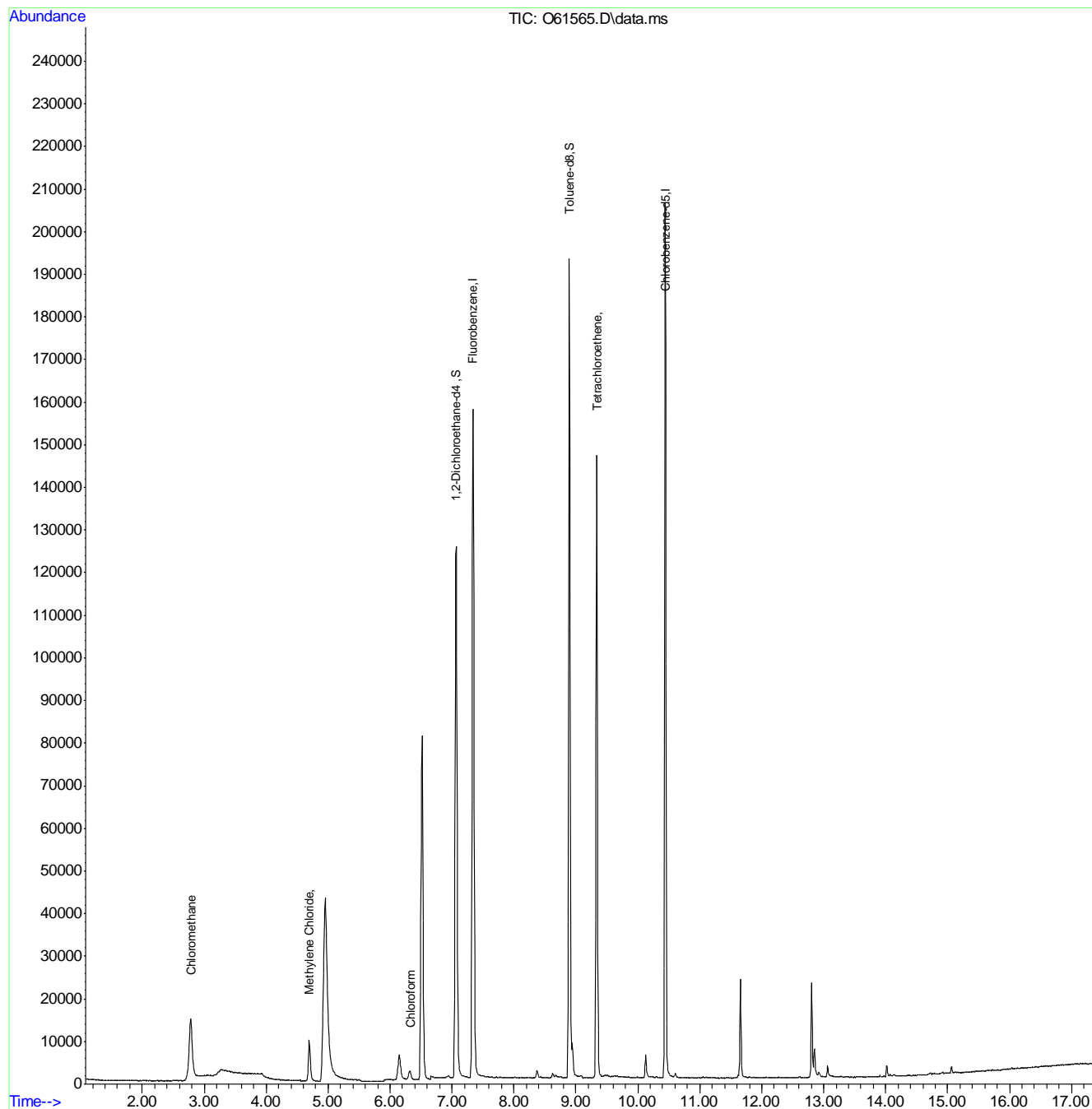
(#) = qualifier out of range (m) = manual integration (+) = signals summed

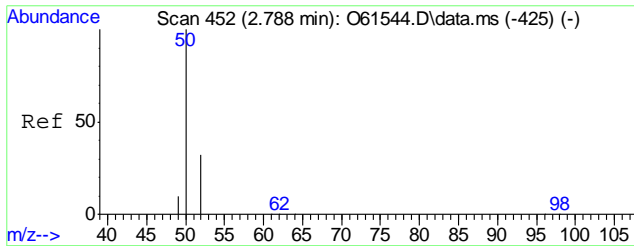
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\100320\
Data File : O61565.D
Acq On : 3 Oct 2020 8:45 pm
Operator : AKARIG
Sample : FA79152-4
Misc : MS47343,VO2370,,,,,
ALS Vial : 15 Sample Multiplier: 1

Inst : MSVOA12

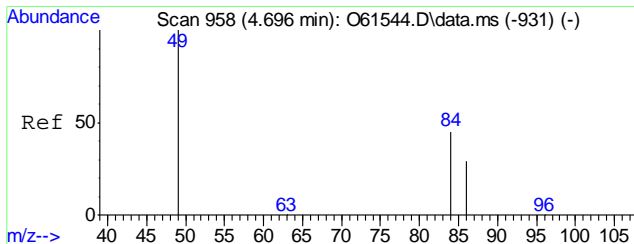
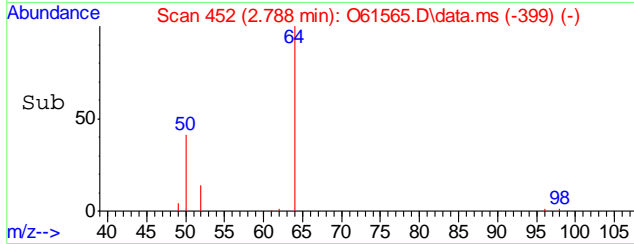
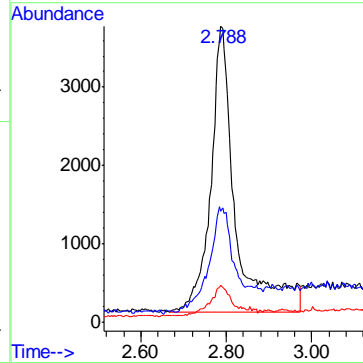
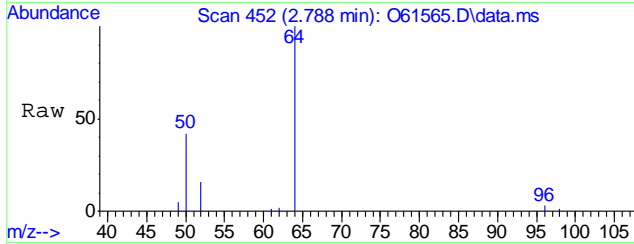
Quant Time: Oct 08 19:46:55 2020
Quant Method : C:\msdchem\2\methods\SIMCL100220.M
Quant Title : Standard Methods 6200B
QLast Update : Sat Oct 03 15:33:07 2020
Response via : Initial Calibration





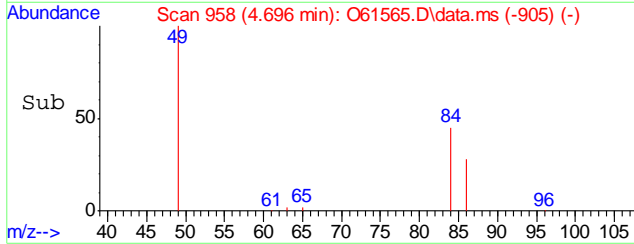
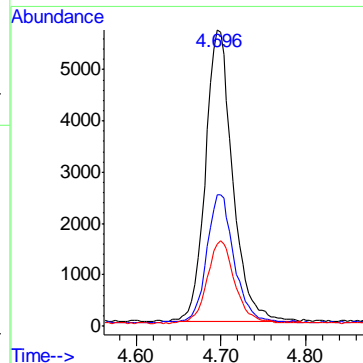
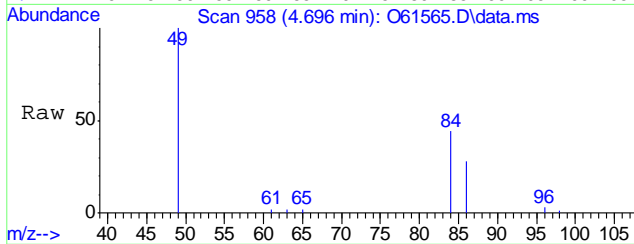
#3
 Chloromethane
 Concen: 0.42 ug/L
 RT: 2.788 min Scan# 452
 Delta R.T. -0.000 min
 Lab File: O61565.D
 Acq: 3 Oct 2020 8:45 pm

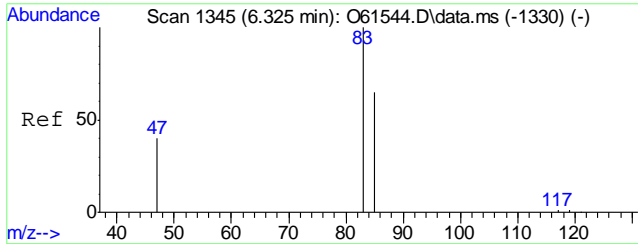
Tgt Ion	Resp	Lower	Upper
50	14624		
52	34.9	12.1	52.1
49	10.4	0.0	30.2



#5
 Methylene Chloride
 Concen: 0.22 ug/L
 RT: 4.696 min Scan# 958
 Delta R.T. -0.000 min
 Lab File: O61565.D
 Acq: 3 Oct 2020 8:45 pm

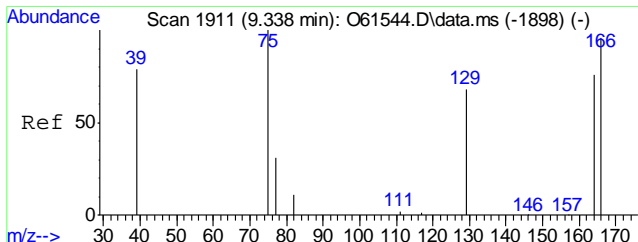
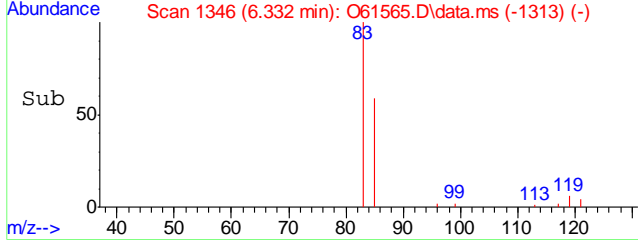
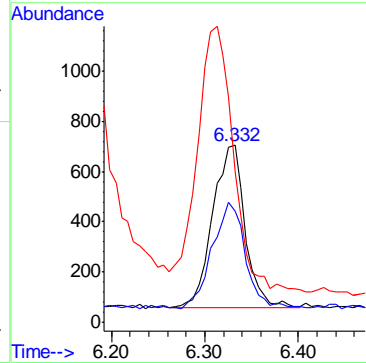
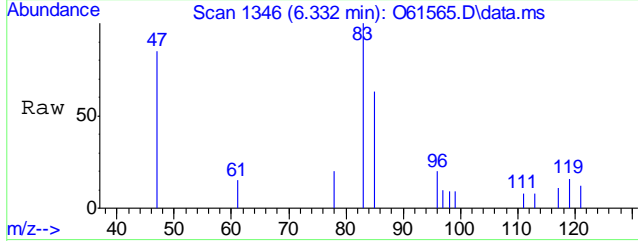
Tgt Ion	Resp	Lower	Upper
49	12696		
84	43.8	15.3	75.3
86	27.1	0.0	58.9





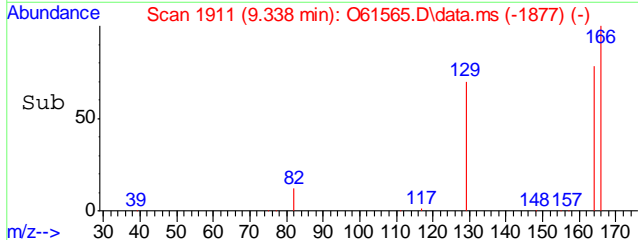
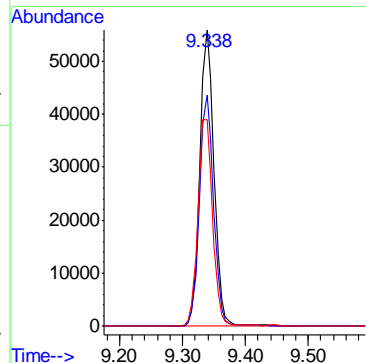
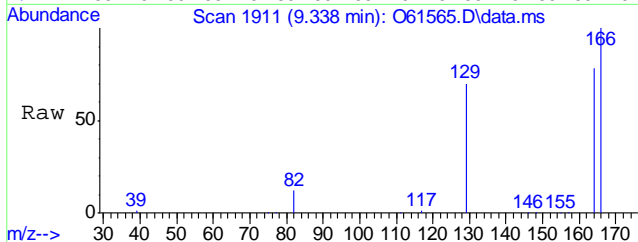
#9
 Chloroform
 Concen: 0.04 ug/L
 RT: 6.332 min Scan# 1346
 Delta R.T. 0.007 min
 Lab File: O61565.D
 Acq: 3 Oct 2020 8:45 pm

Tgt Ion	Resp	Lower	Upper
83	1549		
85	59.2	34.9	94.9
47	72.6	10.0	70.0#



#21
 Tetrachloroethene
 Concen: 4.51 ug/L
 RT: 9.338 min Scan# 1911
 Delta R.T. 0.000 min
 Lab File: O61565.D
 Acq: 3 Oct 2020 8:45 pm

Tgt Ion	Resp	Lower	Upper
166	86886		
164	78.2	48.8	108.8
129	69.8	40.2	100.2



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\edessas\10-08-2020\VZ2433\
 Data File : Z62699.d
 Acq On : 7 Oct 2020 2:58 pm
 Operator : AKARIG
 Sample : mb
 Misc : MS47343,VZ2433,,,,,
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Oct 07 20:46:16 2020
 Quant Method : C:\msdchem\1\methods\SIMCL100120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Sat Oct 03 15:38:22 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Fluorobenzene	7.401	96	2242817	5.00	ppb	0.00
18) Chlorobenzene-d5	10.511	117	1721479	5.00	ppb	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.130	65	755009	5.27	ppb	0.00
Spiked Amount	5.000	Range	79 - 125	Recovery	=	105.40%
19) Toluene-d8	8.961	98	2044401	5.55	ppb	0.00
Spiked Amount	5.000	Range	70 - 130	Recovery	=	111.00%
Target Compounds						
5) Methylene Chloride	4.713	84	222796	0.71	ppb	Qvalue 98

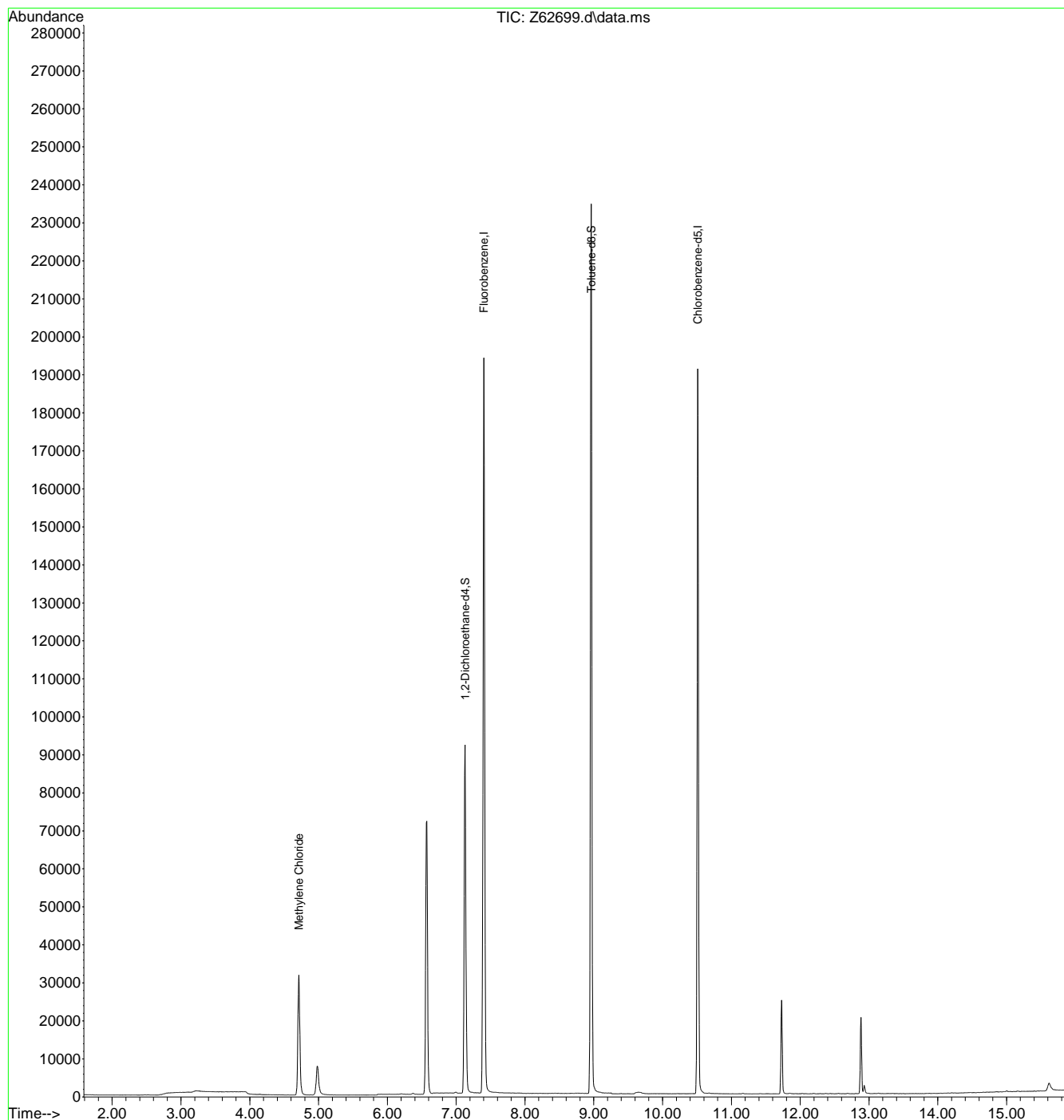
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.2.1
7

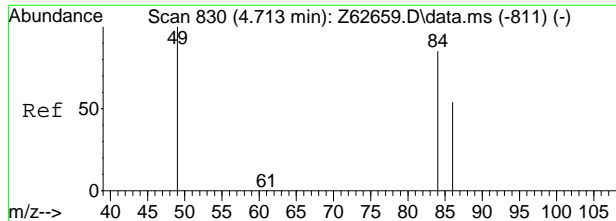
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\edessas\10-08-2020\ vz2433\
 Data File : Z62699.d
 Acq On : 7 Oct 2020 2:58 pm
 Operator : AKARIG
 Sample : mb
 Misc : MS47343,VZ2433,,,,,
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Oct 07 20:46:16 2020
 Quant Method : C:\msdchem\1\methods\SIMCL100120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Sat Oct 03 15:38:22 2020
 Response via : Initial Calibration

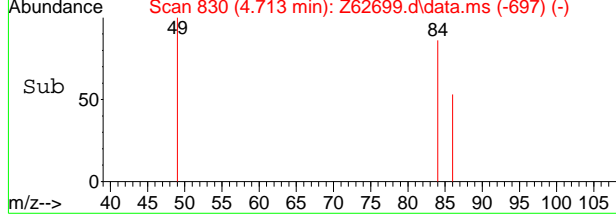
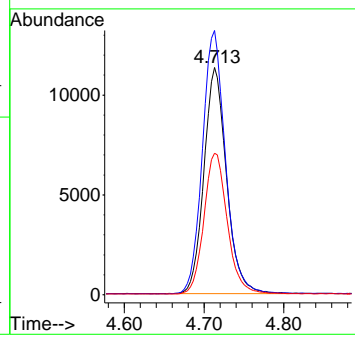
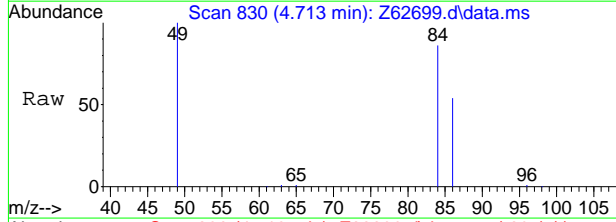


7.2.1
7



#5
 Methylene Chloride
 Concen: 0.71 ppb
 RT: 4.713 min Scan# 830
 Delta R.T. 0.000 min
 Lab File: Z62699.d
 Acq: 7 Oct 2020 2:58 pm

Tgt Ion	Ratio	Lower	Upper
84	100		
49	116.6	98.2	138.2
86	62.3	43.5	83.5



7.2.1
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\100920\
 Data File : Z62715.D
 Acq On : 9 Oct 2020 1:57 pm
 Operator : AKARIG
 Sample : mb
 Misc : MS47304,VZ2434,,,,,
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Oct 10 13:33:45 2020
 Quant Method : C:\msdchem\1\methods\SIMCL100120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Sat Oct 03 15:38:22 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Fluorobenzene	7.401	96	1973056	5.00	ppb	0.00
18) Chlorobenzene-d5	10.511	117	1572552	5.00	ppb	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.123	65	705193	5.60	ppb	0.00
Spiked Amount	5.000	Range	79 - 125	Recovery	=	112.00%
19) Toluene-d8	8.958	98	1776789	5.28	ppb	0.00
Spiked Amount	5.000	Range	70 - 130	Recovery	=	105.60%
Target Compounds						
5) Methylene Chloride	4.709	84	113104	0.41	ppb	Qvalue 96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

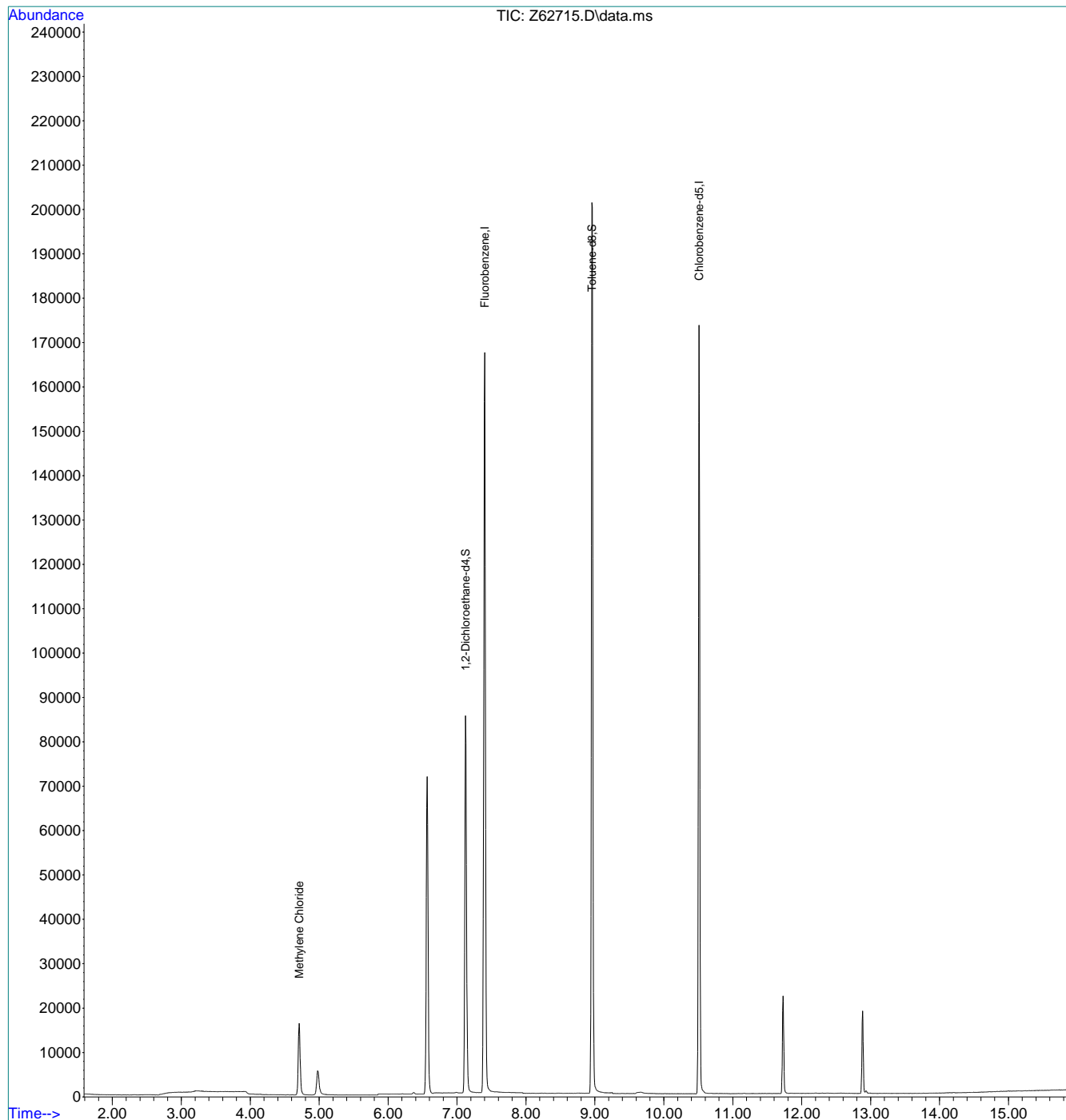
7.22
7



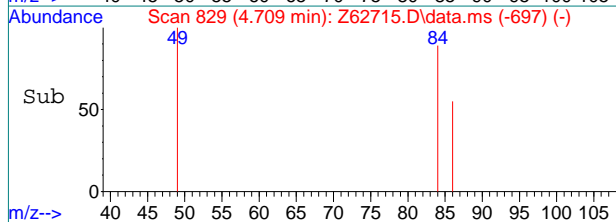
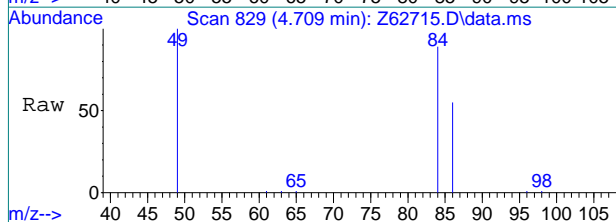
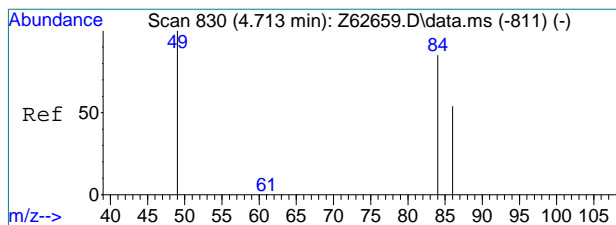
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\100920\
Data File : Z62715.D
Acq On : 9 Oct 2020 1:57 pm
Operator : AKARIG
Sample : mb
Misc : MS47304,VZ2434,,,,,
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Oct 10 13:33:45 2020
Quant Method : C:\msdchem\1\methods\SIMCL100120.M
Quant Title : WATER-EPA 8260B
QLast Update : Sat Oct 03 15:38:22 2020
Response via : Initial Calibration

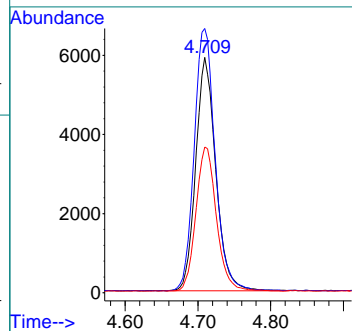


7.2.2
7



#5
 Methylene Chloride
 Concen: 0.41 ppb
 RT: 4.709 min Scan# 829
 Delta R.T. -0.004 min
 Lab File: Z62715.D
 Acq: 9 Oct 2020 1:57 pm

Tgt Ion	Ratio	Lower	Upper
84	100		
49	112.3	98.2	138.2
86	61.7	43.5	83.5



7.2.2
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\edessas\10-08-2020\VZ2433\
 Data File : Z62697.d
 Acq On : 7 Oct 2020 2:06 pm
 Operator : AKARIG
 Sample : bs
 Misc : MS47343,VZ2433,,,,,
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Oct 07 20:46:12 2020
 Quant Method : C:\msdchem\1\methods\SIMCL100120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Sat Oct 03 15:38:22 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	

Internal Standards							
1) Fluorobenzene	7.401	96	2644992	5.00	ppb	0.00	
18) Chlorobenzene-d5	10.511	117	2160141	5.00	ppb	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.123	65	846361	5.01	ppb	0.00	
Spiked Amount	5.000	Range 79 - 125	Recovery	=	100.20%		
19) Toluene-d8	8.958	98	2400893	5.20	ppb	0.00	
Spiked Amount	5.000	Range 70 - 130	Recovery	=	104.00%		
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.843	62	1511787	4.52	ppb		100
3) Chloromethane	2.737	50	1386910	4.72	ppb		100
4) 1,1-Dichloroethene	4.079	96	911609	4.85	ppb		97
5) Methylene Chloride	4.709	84	1446868	4.08	ppb		99
6) trans-1,2-Dichloroethene	4.883	96	1143914	4.55	ppb		96
7) 1,1-Dichloroethane	5.539	63	1903425	4.61	ppb	#	100
8) cis-1,2-Dichloroethene	6.104	96	1161984	4.42	ppb		98
9) Chloroform	6.371	83	2217188	4.44	ppb		100
10) Carbon Tetrachloride	6.543	117	1445976	4.99	ppb		100
11) 1,1,1-Trichloroethane	6.614	97	1907489	4.77	ppb		100
12) Benzene	6.987	78	4233416	4.67	ppb		98
14) 1,2-Dichloroethane	7.191	62	1422567	4.44	ppb		99
15) Trichloroethene	7.564	95	1199201	4.73	ppb		93
16) 1,2-Dichloropropane	8.101	63	981785	4.47	ppb		100
17) cis-1,3-Dichloropropene	8.769	75	1119483	4.42	ppb		100
20) trans-1,3-Dichloropropene	9.407	75	943427	7.12	ppb		98
21) Tetrachloroethene	9.399	166	1293601	5.48	ppb		98

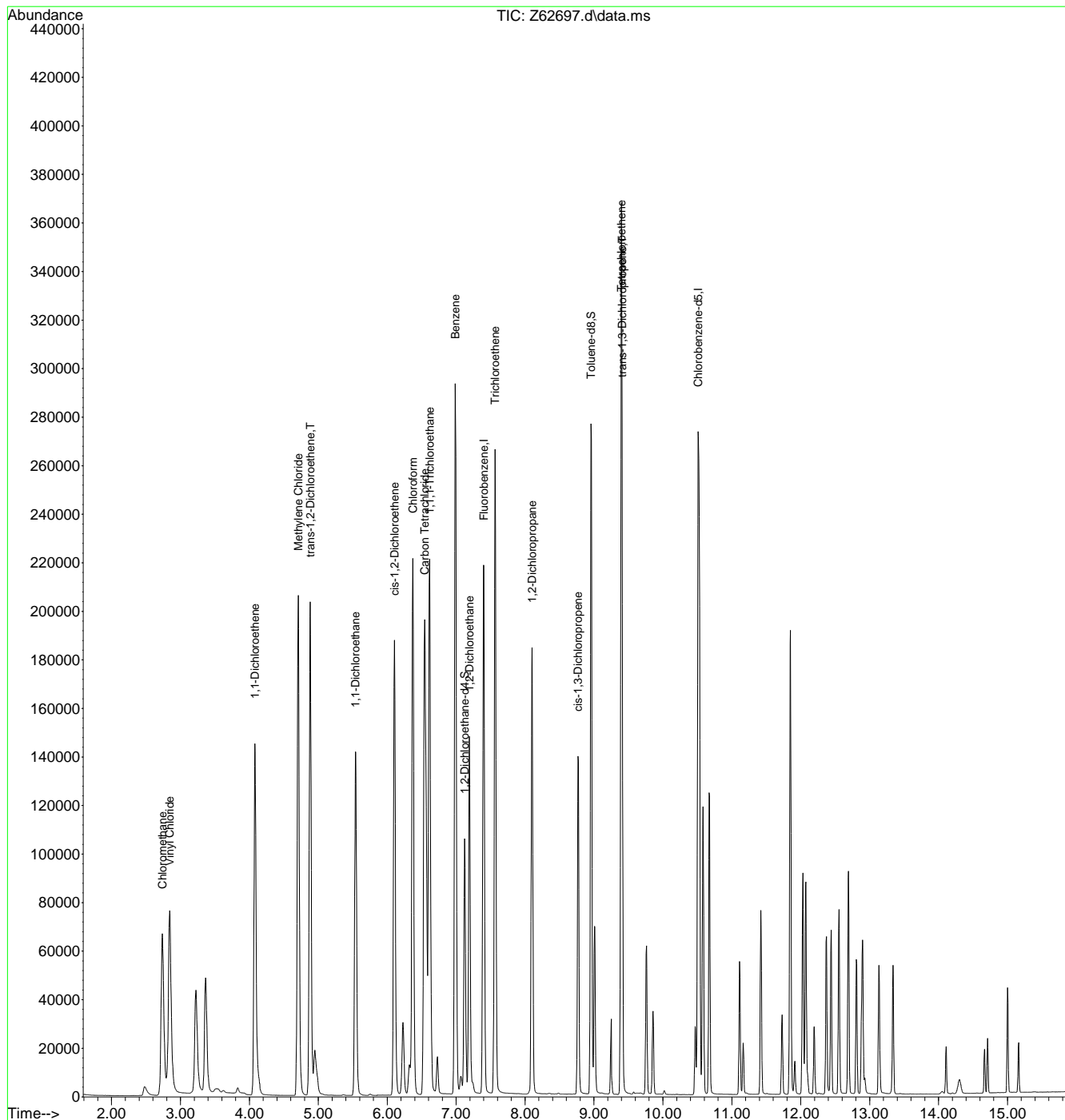
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.3.1
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\edessas\10-08-2020\vz2433\
 Data File : Z62697.d
 Acq On : 7 Oct 2020 2:06 pm
 Operator : AKARIG
 Sample : bs
 Misc : MS47343,VZ2433,,,,,
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Oct 07 20:46:12 2020
 Quant Method : C:\msdchem\1\methods\SIMCL100120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Sat Oct 03 15:38:22 2020
 Response via : Initial Calibration



7.3.1
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\100920\
 Data File : Z62711.D
 Acq On : 9 Oct 2020 11:26 am
 Operator : AKARIG
 Sample : bs
 Misc : MS47304,VZ2434,,,,,
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Oct 10 13:33:37 2020
 Quant Method : C:\msdchem\1\methods\SIMCL100120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Sat Oct 03 15:38:22 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	

Internal Standards							
1) Fluorobenzene	7.401	96	2501879	5.00	ppb	0.00	
18) Chlorobenzene-d5	10.511	117	2089835	5.00	ppb	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.123	65	793690	4.97	ppb	0.00	
Spiked Amount	5.000	Range	79 - 125	Recovery	=	99.40%	
19) Toluene-d8	8.957	98	2295320	5.14	ppb	0.00	
Spiked Amount	5.000	Range	70 - 130	Recovery	=	102.80%	
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.839	62	1471219	4.65	ppb		99
3) Chloromethane	2.733	50	1226057	4.41	ppb		100
4) 1,1-Dichloroethene	4.083	96	853685	4.80	ppb		99
5) Methylene Chloride	4.713	84	1355842	4.04	ppb		97
6) trans-1,2-Dichloroethene	4.886	96	1075652	4.52	ppb		93
7) 1,1-Dichloroethane	5.542	63	1790254	4.59	ppb	#	100
8) cis-1,2-Dichloroethene	6.104	96	1094325	4.41	ppb		98
9) Chloroform	6.371	83	2078392	4.40	ppb		100
10) Carbon Tetrachloride	6.543	117	1316462	4.81	ppb		99
11) 1,1,1-Trichloroethane	6.614	97	1776804	4.69	ppb		99
12) Benzene	6.987	78	3943807	4.60	ppb		97
14) 1,2-Dichloroethane	7.191	62	1297791	4.28	ppb		100
15) Trichloroethene	7.564	95	1107186	4.62	ppb		96
16) 1,2-Dichloropropane	8.101	63	912913	4.39	ppb		100
17) cis-1,3-Dichloropropene	8.773	75	1003801	4.19	ppb		100
20) trans-1,3-Dichloropropene	9.407	75	834323	6.62	ppb		98
21) Tetrachloroethene	9.399	166	1215985	5.33	ppb		98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

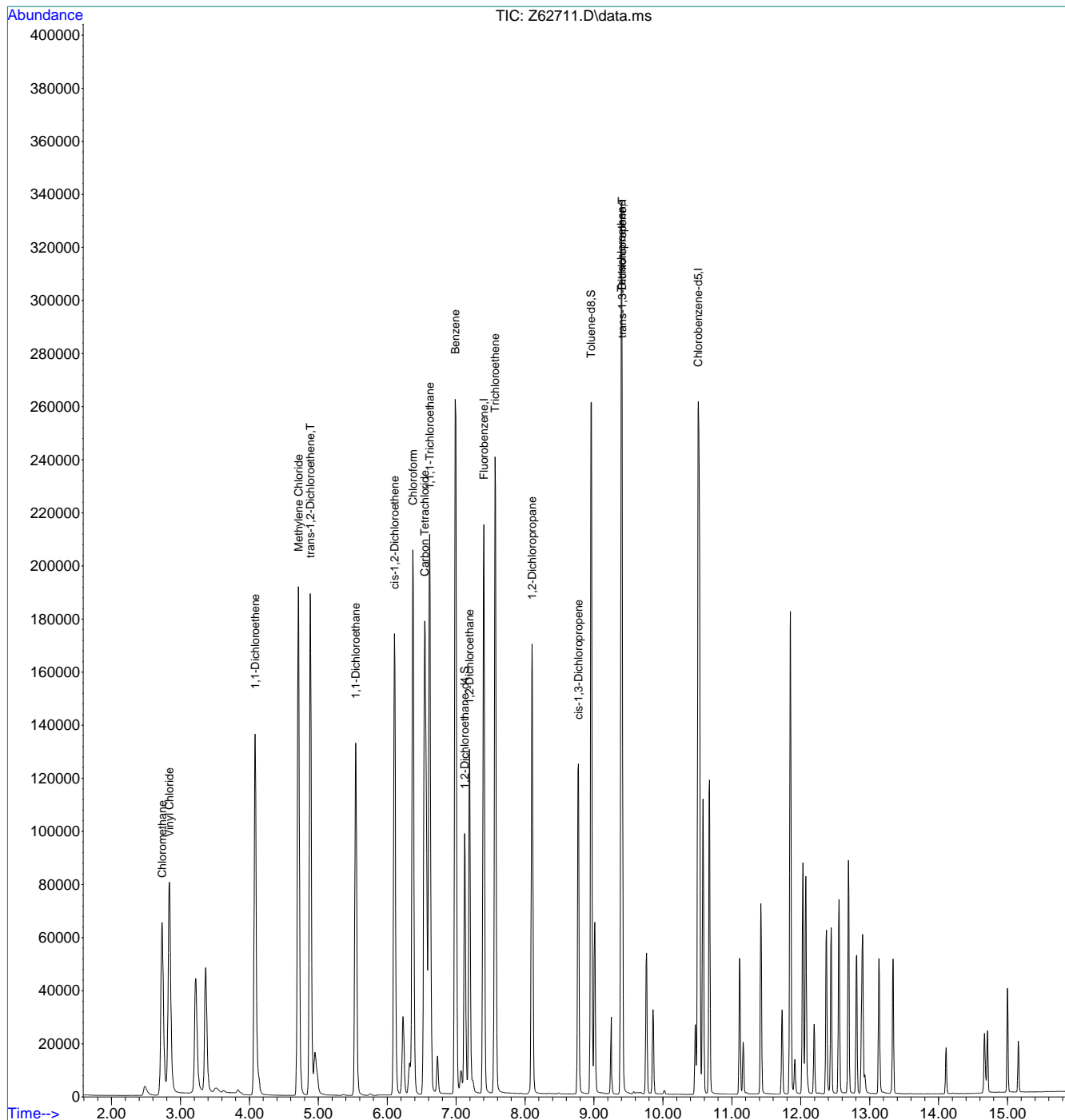
7.32
7



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\100920\
 Data File : Z62711.D
 Acq On : 9 Oct 2020 11:26 am
 Operator : AKARIG
 Sample : bs
 Misc : MS47304,VZ2434,,,,,
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Oct 10 13:33:37 2020
 Quant Method : C:\msdchem\1\methods\SIMCL100120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Sat Oct 03 15:38:22 2020
 Response via : Initial Calibration



7.3.2
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\edessas\10-08-2020\ vz2433\
 Data File : Z62704.d
 Acq On : 7 Oct 2020 4:35 pm
 Operator : AKARIG
 Sample : fa79152-1ms
 Misc : MS47343,VZ2433,,,,,10
 ALS Vial : 11 Sample Multiplier: 1

Quant Time: Oct 07 20:46:26 2020
 Quant Method : C:\msdchem\1\methods\SIMCL100120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Sat Oct 03 15:38:22 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	

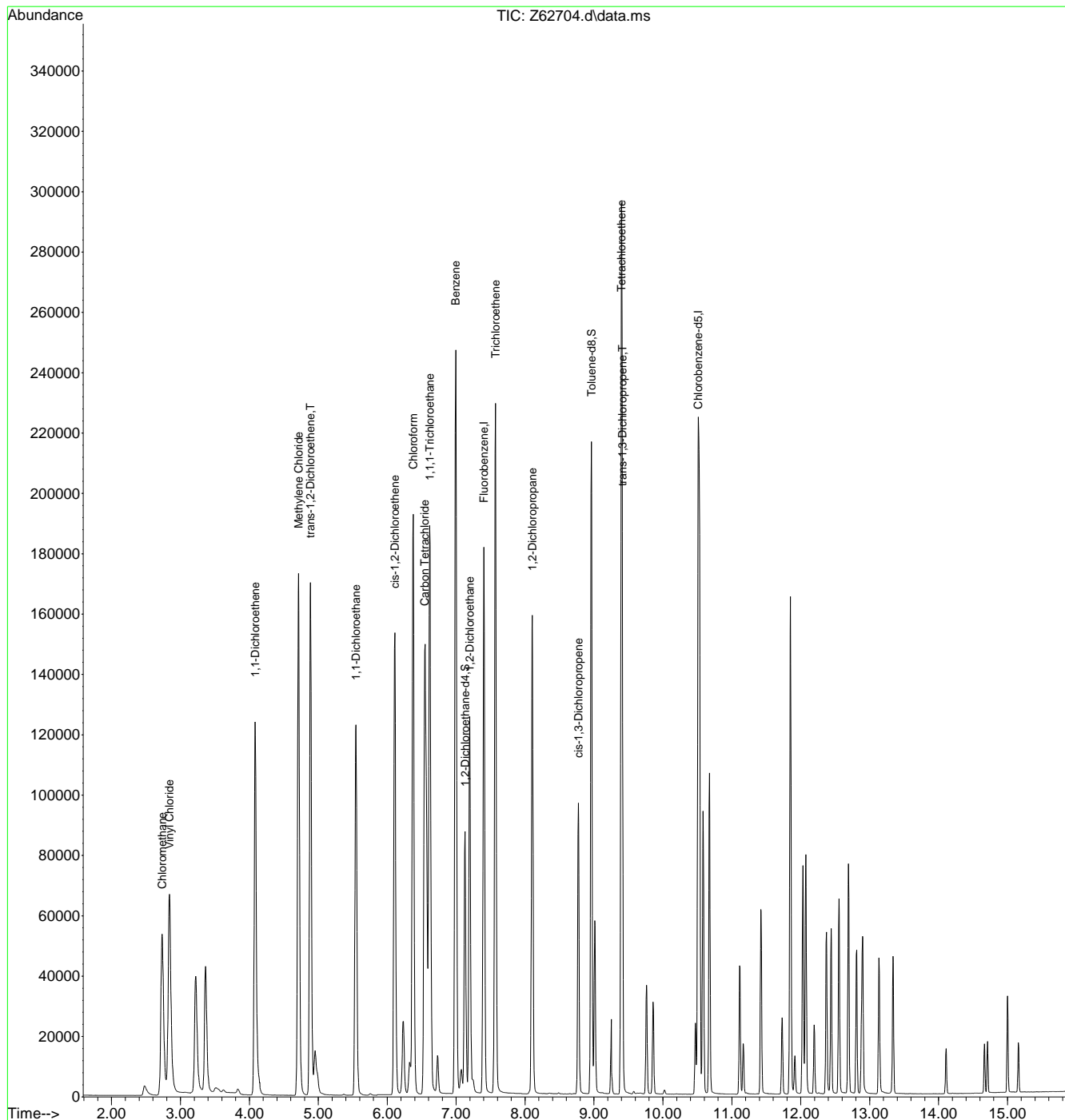
Internal Standards							
1) Fluorobenzene	7.401	96	2074320	5.00	ppb	0.00	
18) Chlorobenzene-d5	10.511	117	1754061	5.00	ppb	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.130	65	696567	5.26	ppb	0.00	
Spiked Amount	5.000	Range	79 - 125	Recovery	=	105.20%	
19) Toluene-d8	8.961	98	1854745	4.94	ppb	0.00	
Spiked Amount	5.000	Range	70 - 130	Recovery	=	98.80%	
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.839	62	1275751	4.86	ppb		99
3) Chloromethane	2.733	50	1064224	4.62	ppb		100
4) 1,1-Dichloroethene	4.083	96	762086	5.17	ppb		98
5) Methylene Chloride	4.713	84	1191211	4.29	ppb		99
6) trans-1,2-Dichloroethene	4.886	96	932729	4.73	ppb		95
7) 1,1-Dichloroethane	5.546	63	1621711	5.01	ppb	#	100
8) cis-1,2-Dichloroethene	6.110	96	952709	4.63	ppb		97
9) Chloroform	6.377	83	1914405	4.88	ppb		100
10) Carbon Tetrachloride	6.543	117	1105333	4.87	ppb		100
11) 1,1,1-Trichloroethane	6.614	97	1592419	5.07	ppb		100
12) Benzene	6.994	78	3553486	5.00	ppb		99
14) 1,2-Dichloroethane	7.198	62	1226904	4.88	ppb		100
15) Trichloroethene	7.571	95	1023345	5.15	ppb		86
16) 1,2-Dichloropropane	8.105	63	837162	4.86	ppb		99
17) cis-1,3-Dichloropropene	8.773	75	755225	3.80	ppb		100
20) trans-1,3-Dichloropropene	9.411	75	586673	5.72	ppb		99
21) Tetrachloroethene	9.399	166	1133087	5.92	ppb		99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\edessas\10-08-2020\vz2433\
 Data File : Z62704.d
 Acq On : 7 Oct 2020 4:35 pm
 Operator : AKARIG
 Sample : fa79152-1ms
 Misc : MS47343,VZ2433,,,,,10
 ALS Vial : 11 Sample Multiplier: 1

Quant Time: Oct 07 20:46:26 2020
 Quant Method : C:\msdchem\1\methods\SIMCL100120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Sat Oct 03 15:38:22 2020
 Response via : Initial Calibration



7.4.1
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\edessas\10-08-2020\ vz2433\
 Data File : Z62705.d
 Acq On : 7 Oct 2020 4:54 pm
 Operator : AKARIG
 Sample : fa79152-1msd
 Misc : MS47343,VZ2433,,,,,10
 ALS Vial : 12 Sample Multiplier: 1

Quant Time: Oct 07 20:46:28 2020
 Quant Method : C:\msdchem\1\methods\SIMCL100120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Sat Oct 03 15:38:22 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	

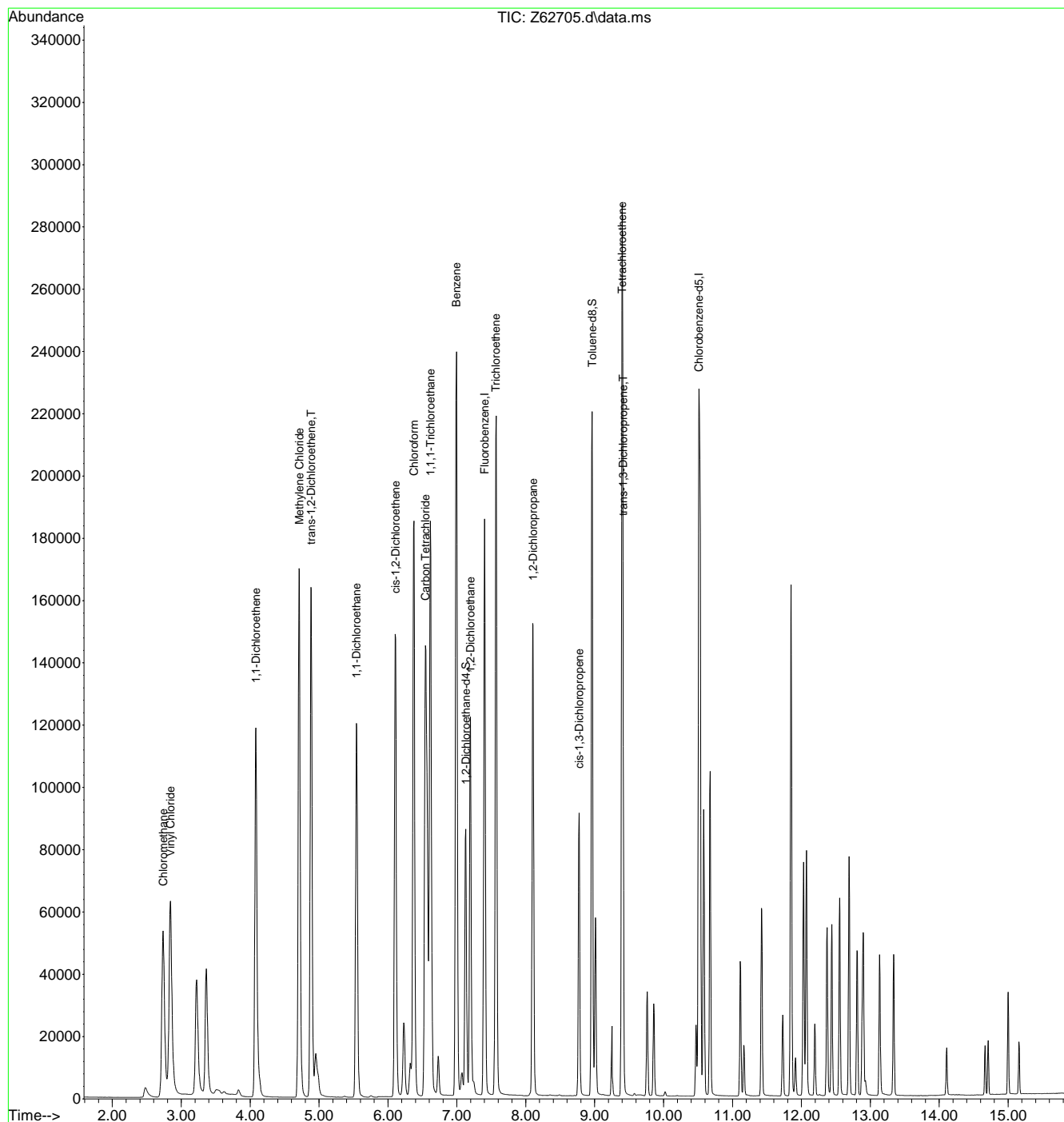
Internal Standards							
1) Fluorobenzene	7.401	96	2135710	5.00	ppb	0.00	
18) Chlorobenzene-d5	10.511	117	1782708	5.00	ppb	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.130	65	704160	5.16	ppb	0.00	
Spiked Amount	5.000	Range	79 - 125	Recovery	=	103.20%	
19) Toluene-d8	8.961	98	1908338	5.00	ppb	0.00	
Spiked Amount	5.000	Range	70 - 130	Recovery	=	100.00%	
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.843	62	1259130	4.66	ppb		99
3) Chloromethane	2.737	50	1071847	4.52	ppb		100
4) 1,1-Dichloroethene	4.083	96	759015	5.00	ppb		99
5) Methylene Chloride	4.713	84	1207767	4.22	ppb		98
6) trans-1,2-Dichloroethene	4.886	96	927218	4.57	ppb		94
7) 1,1-Dichloroethane	5.543	63	1596714	4.79	ppb	#	100
8) cis-1,2-Dichloroethene	6.110	96	944923	4.46	ppb		97
9) Chloroform	6.377	83	1881144	4.66	ppb		99
10) Carbon Tetrachloride	6.543	117	1074080	4.59	ppb		98
11) 1,1,1-Trichloroethane	6.614	97	1560078	4.83	ppb		100
12) Benzene	6.994	78	3502682	4.79	ppb		99
14) 1,2-Dichloroethane	7.198	62	1201632	4.64	ppb		100
15) Trichloroethene	7.564	95	1007118	4.92	ppb		99
16) 1,2-Dichloropropane	8.105	63	817799	4.61	ppb		100
17) cis-1,3-Dichloropropene	8.773	75	725362	3.55	ppb		100
20) trans-1,3-Dichloropropene	9.412	75	546028	5.31	ppb		99
21) Tetrachloroethene	9.399	166	1100864	5.66	ppb		100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\edessas\10-08-2020\vz2433\
Data File : Z62705.d
Acq On : 7 Oct 2020 4:54 pm
Operator : AKARIG
Sample : fa79152-1msd
Misc : MS47343,VZ2433,,,,,10
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Oct 07 20:46:28 2020
Quant Method : C:\msdchem\1\methods\SIMCL100120.M
Quant Title : WATER-EPA 8260B
QLast Update : Sat Oct 03 15:38:22 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\100920\
 Data File : Z62721.D
 Acq On : 9 Oct 2020 4:39 pm
 Operator : AKARIG
 Sample : fa79309-1ms,10
 Misc : MS47304,VZ2434,,,,,10
 ALS Vial : 14 Sample Multiplier: 1

Quant Time: Oct 10 13:33:57 2020
 Quant Method : C:\msdchem\1\methods\SIMCL100120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Sat Oct 03 15:38:22 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	

Internal Standards							
1) Fluorobenzene	7.401	96	1986535	5.00	ppb	0.00	
18) Chlorobenzene-d5	10.511	117	1705513	5.00	ppb	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.123	65	684415	5.40	ppb	0.00	
Spiked Amount	5.000	Range 79 - 125	Recovery	=	108.00%		
19) Toluene-d8	8.961	98	1741049	4.77	ppb	0.00	
Spiked Amount	5.000	Range 70 - 130	Recovery	=	95.40%		
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.839	62	1219764	4.86	ppb		99
3) Chloromethane	2.733	50	996773	4.52	ppb		99
4) 1,1-Dichloroethene	4.083	96	693864	4.92	ppb		99
5) Methylene Chloride	4.709	84	1140157	4.29	ppb		99
6) trans-1,2-Dichloroethene	4.886	96	849316	4.50	ppb		93
7) 1,1-Dichloroethane	5.542	63	1485897	4.80	ppb	#	100
8) cis-1,2-Dichloroethene	6.104	96	858557	4.35	ppb		98
9) Chloroform	6.371	83	1761255	4.69	ppb		99
10) Carbon Tetrachloride	6.543	117	1020588	4.69	ppb		99
11) 1,1,1-Trichloroethane	6.614	97	1463538	4.87	ppb		100
12) Benzene	6.994	78	3212989	4.72	ppb		98
14) 1,2-Dichloroethane	7.191	62	1124339	4.67	ppb		99
15) Trichloroethene	7.564	95	928282	4.87	ppb		98
16) 1,2-Dichloropropane	8.101	63	760232	4.61	ppb		99
17) cis-1,3-Dichloropropene	8.773	75	680105	3.57	ppb		99
20) trans-1,3-Dichloropropene	9.411	75	541732	5.48	ppb		99
21) Tetrachloroethene	9.399	166	1027300	5.52	ppb		99

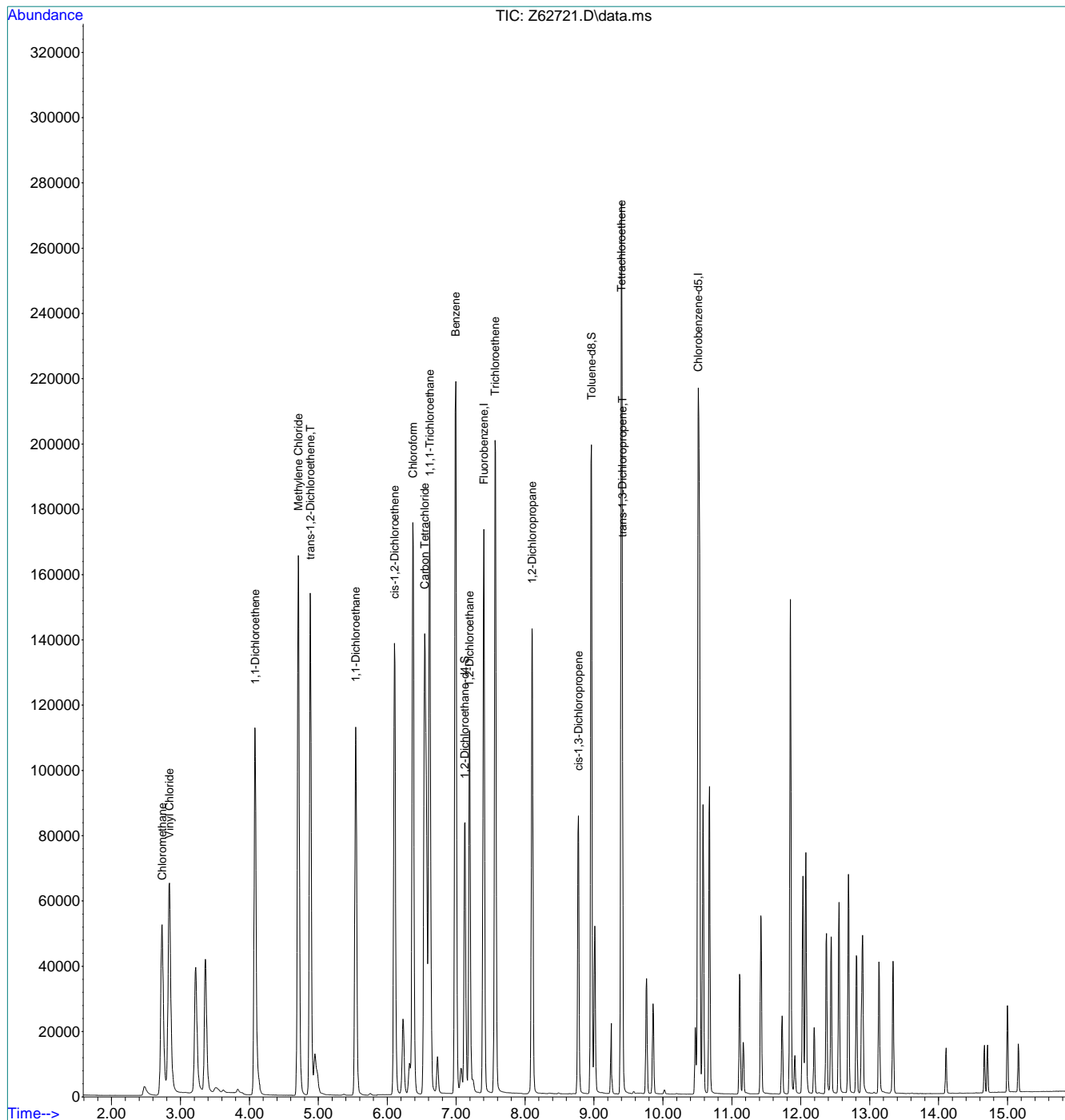
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.4.3
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\100920\
Data File : Z62721.D
Acq On : 9 Oct 2020 4:39 pm
Operator : AKARIG
Sample : fa79309-1ms,10
Misc : MS47304,VZ2434,,,,,10
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Oct 10 13:33:57 2020
Quant Method : C:\msdchem\1\methods\SIMCL100120.M
Quant Title : WATER-EPA 8260B
QLast Update : Sat Oct 03 15:38:22 2020
Response via : Initial Calibration



7.4.3
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\100920\
 Data File : Z62722.D
 Acq On : 9 Oct 2020 4:58 pm
 Operator : AKARIG
 Sample : fa79309-1msd,10
 Misc : MS47304,VZ2434,,,,,10
 ALS Vial : 15 Sample Multiplier: 1

Quant Time: Oct 10 13:33:59 2020
 Quant Method : C:\msdchem\1\methods\SIMCL100120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Sat Oct 03 15:38:22 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	

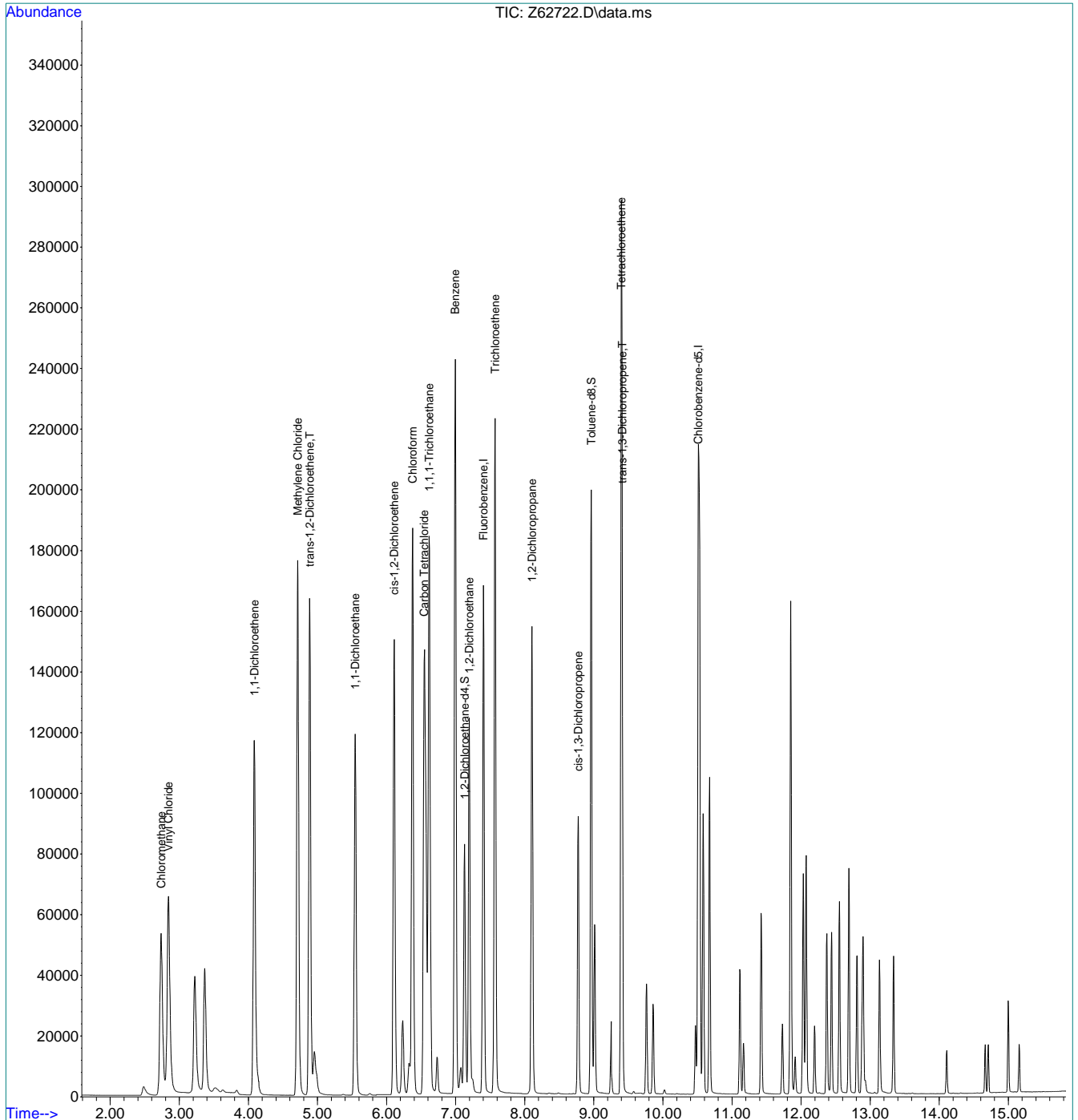
Internal Standards							
1) Fluorobenzene	7.401	96	1942066	5.00	ppb	0.00	
18) Chlorobenzene-d5	10.511	117	1644753	5.00	ppb	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.130	65	656577	5.29	ppb	0.00	
Spiked Amount	5.000	Range	79 - 125	Recovery	=	105.80%	
19) Toluene-d8	8.961	98	1713219	4.87	ppb	0.00	
Spiked Amount	5.000	Range	70 - 130	Recovery	=	97.40%	
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.843	62	1247636	5.08	ppb		100
3) Chloromethane	2.737	50	1036031	4.80	ppb		99
4) 1,1-Dichloroethene	4.087	96	743197	5.39	ppb		99
5) Methylene Chloride	4.713	84	1242413	4.81	ppb		100
6) trans-1,2-Dichloroethene	4.890	96	922787	5.01	ppb		93
7) 1,1-Dichloroethane	5.546	63	1584037	5.23	ppb	#	100
8) cis-1,2-Dichloroethene	6.110	96	934580	4.85	ppb		97
9) Chloroform	6.377	83	1877495	5.12	ppb		99
10) Carbon Tetrachloride	6.543	117	1088463	5.12	ppb		99
11) 1,1,1-Trichloroethane	6.614	97	1568196	5.34	ppb		99
12) Benzene	6.994	78	3504719	5.27	ppb		100
14) 1,2-Dichloroethane	7.198	62	1205245	5.12	ppb		99
15) Trichloroethene	7.571	95	1010509	5.43	ppb		88
16) 1,2-Dichloropropane	8.105	63	825253	5.12	ppb		100
17) cis-1,3-Dichloropropene	8.773	75	736253	3.96	ppb		100
20) trans-1,3-Dichloropropene	9.411	75	572145	5.91	ppb		99
21) Tetrachloroethene	9.399	166	1130733	6.30	ppb		99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\100920\
Data File : Z62722.D
Acq On : 9 Oct 2020 4:58 pm
Operator : AKARIG
Sample : fa79309-1msd,10
Misc : MS47304,VZ2434,,,,,10
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Oct 10 13:33:59 2020
Quant Method : C:\msdchem\1\methods\SIMCL100120.M
Quant Title : WATER-EPA 8260B
QLast Update : Sat Oct 03 15:38:22 2020
Response via : Initial Calibration

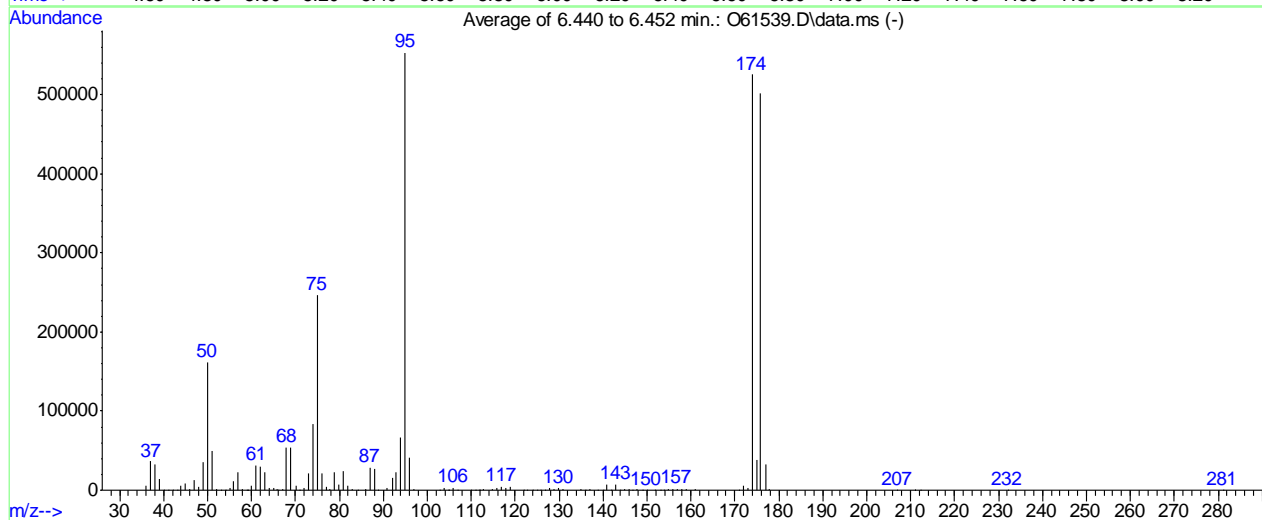
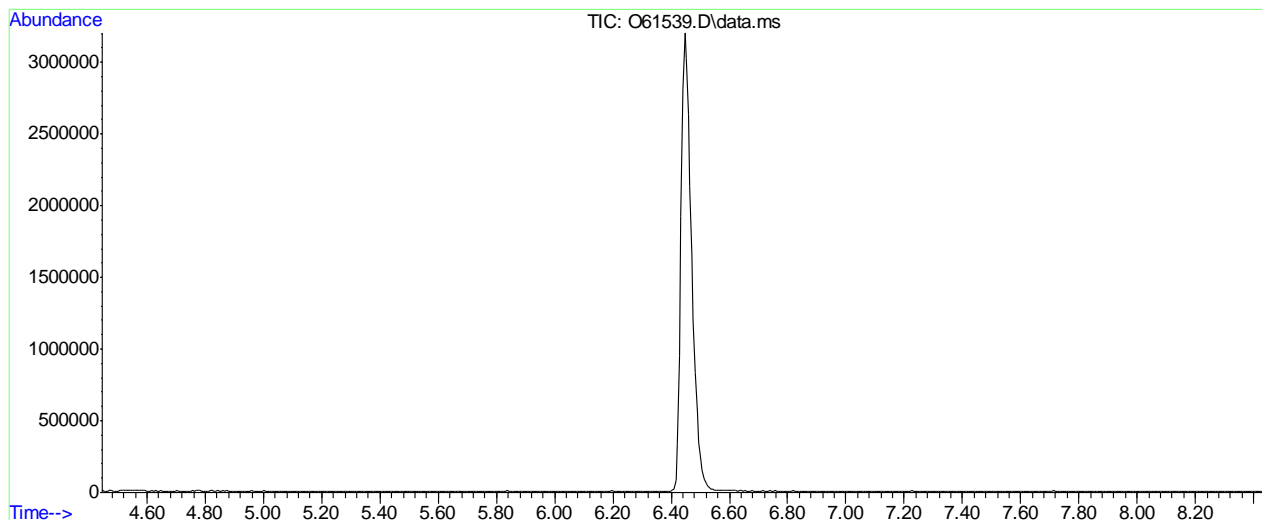


7.4.4
7



Methods: SW-846 8260B
 Data File : C:\msdchem\2\data\100220\O61539.D Vial: 100
 Acq On : 2 Oct 2020 1:41 pm Operator: akarig
 Sample : bfb Inst : MSVOA12
 Misc : MS47193,VO2369,,,,, Multiplr: 1.00
 MS Integration Params: rteint.p

Method : C:\msdchem\2\methods\SIMCL100220.M (RTE Integrator)
 Title : Standard Methods 6200B



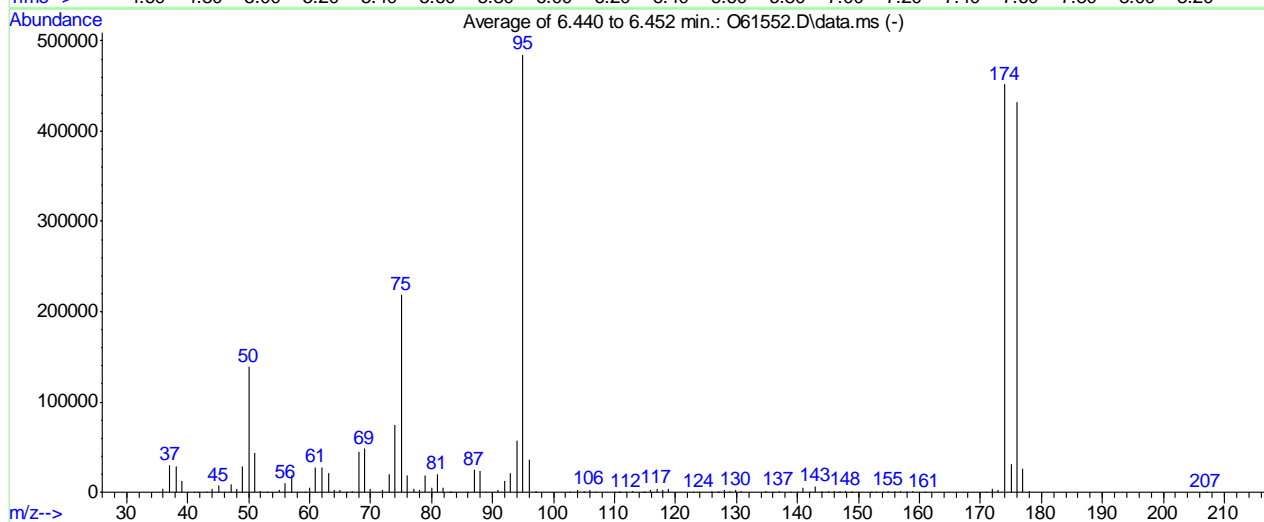
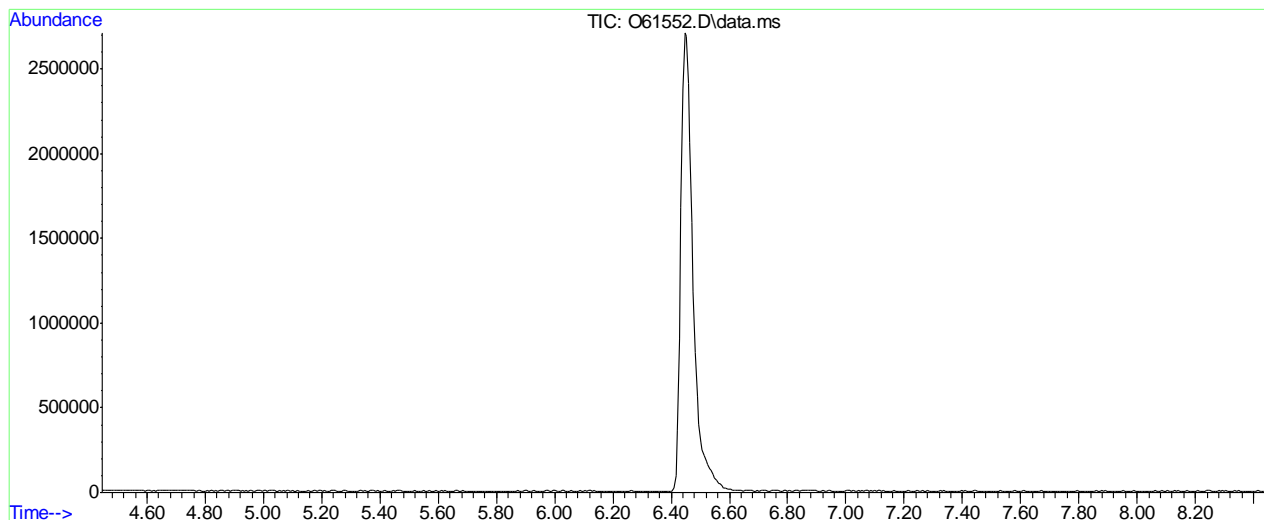
AutoFind: Scans 468, 469, 470; Background Corrected with Scan 459

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	29.2	161771	PASS
75	95	30	60	44.7	247168	PASS
95	95	100	100	100.0	553216	PASS
96	95	5	9	7.5	41491	PASS
173	174	0.00	2	0.7	3440	PASS
174	95	50	100	94.9	525269	PASS
175	174	5	9	7.2	37976	PASS
176	174	95	101	95.6	502016	PASS
177	176	5	9	6.6	33309	PASS

O61539.D SIMCL100220.M Wed Oct 07 10:49:32 2020

Methods: SW-846 8260B
 Data File : C:\msdchem\2\data\100320\O61552.D Vial: 100
 Acq On : 3 Oct 2020 1:34 pm Operator: akarig
 Sample : bfb Inst : MSVOA12
 Misc : MS47193,VO2370,,,,, Multiplr: 1.00
 MS Integration Params: rteint.p

Method : C:\msdchem\2\methods\SIMCL100220.M (RTE Integrator)
 Title : Standard Methods 6200B



AutoFind: Scans 468, 469, 470; Background Corrected with Scan 459

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	28.6	138635	PASS
75	95	30	60	45.0	218176	PASS
95	95	100	100	100.0	484992	PASS
96	95	5	9	7.3	35523	PASS
173	174	0.00	2	0.6	2622	PASS
174	95	50	100	93.1	451669	PASS
175	174	5	9	6.8	30813	PASS
176	174	95	101	95.8	432533	PASS
177	176	5	9	6.2	26715	PASS

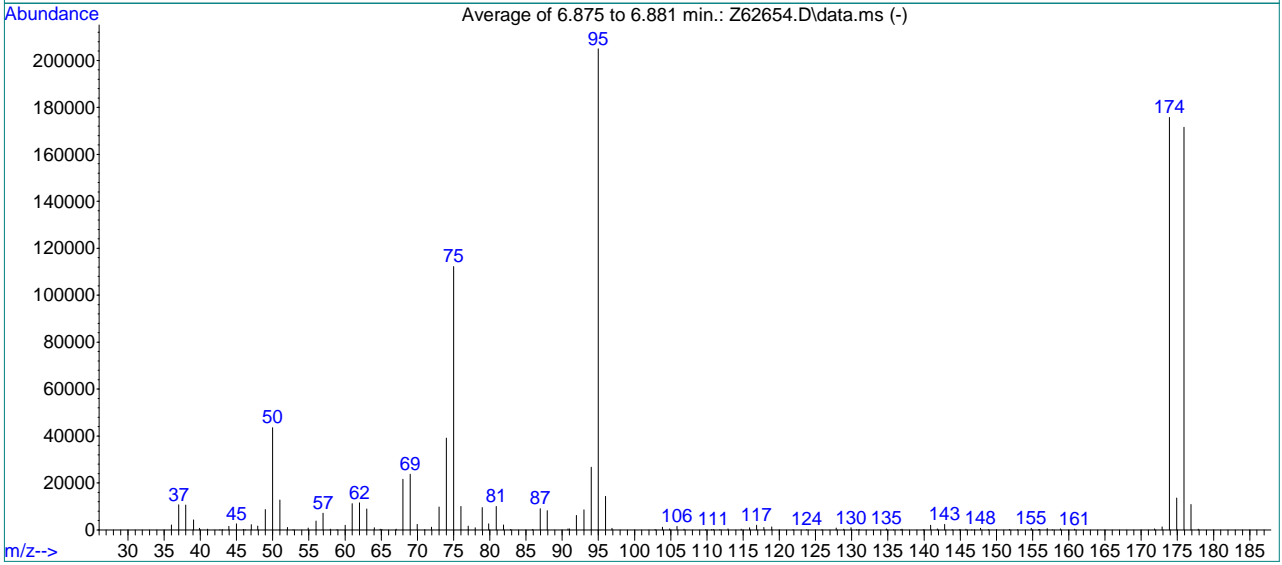
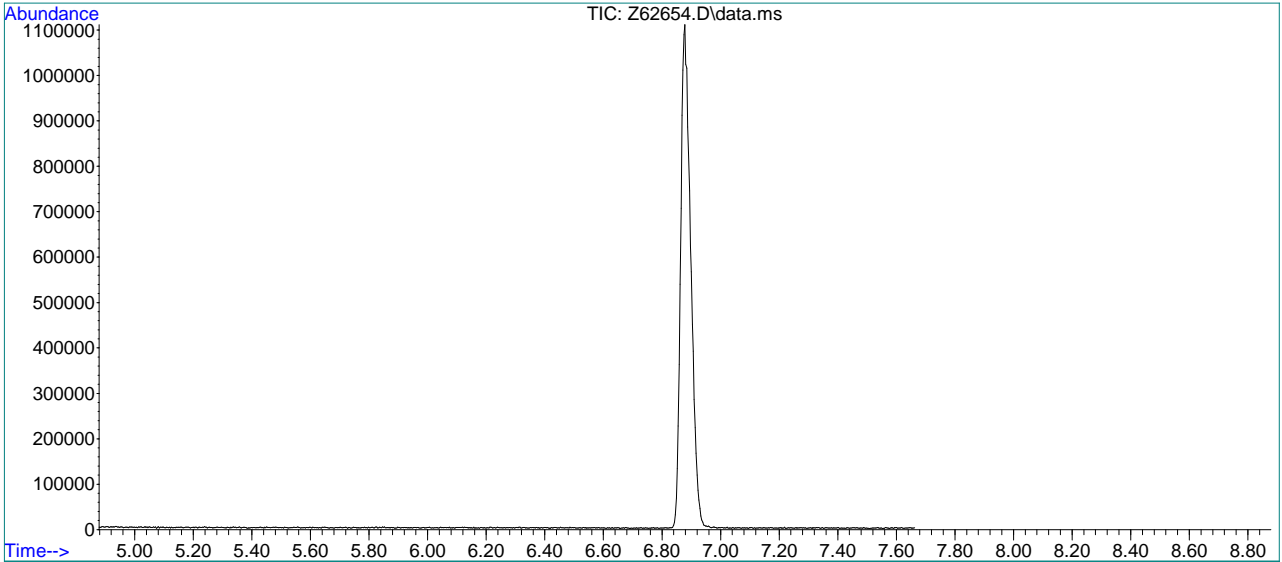
O61552.D SIMCL100220.M Thu Oct 08 19:49:41 2020

BFB

Data File : C:\msdchem\1\data\100120\Z62654.D
 Acq On : 1 Oct 2020 9:35 am
 Sample : bfb
 Misc : MS47304,VZ2431,,,,,
 MS Integration Params: RTEINT.P

Vial: 100
 Operator: AKARIG
 Inst : MSVOA15
 Multiplr: 1.00

Method : C:\msdchem\1\methods\SIMCL100120.M (RTE Integrator)
 Title : WATER-EPA 8260B



AutoFind: Scans 2111, 2112, 2113; Background Corrected with Scan 2095

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	21.3	43555	PASS
75	95	30	60	54.7	112171	PASS
95	95	100	100	100.0	204928	PASS
96	95	5	9	7.0	14329	PASS
173	174	0.00	2	0.7	1200	PASS
174	95	50	100	85.7	175723	PASS
175	174	5	9	7.7	13587	PASS
176	174	95	101	97.6	171477	PASS
177	176	5	9	6.3	10768	PASS



7.5.3
7

Average of 6.875 to 6.881 min.: Z62654.D\data.ms
bfb

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.00	2112	46.20	69	57.95	344	69.00	23757
37.00	10663	47.05	2218	58.90	51	69.95	2332
38.00	10556	47.95	1664	60.00	2004	71.00	74
39.05	4303	49.00	8710	61.00	11178	71.95	1084
39.90	640	50.00	43555	62.00	11492	73.00	9686
41.00	361	51.00	12735	63.00	8852	74.00	39091
42.70	86	52.05	980	64.05	921	75.00	112171
43.05	127	52.80	53	64.85	320	76.00	9933
43.95	1478	54.90	728	65.10	174	77.00	1620
45.00	2538	56.00	3732	67.05	351	78.00	879
45.95	205	56.95	7072	68.00	21616	78.95	9453

Average of 6.875 to 6.881 min.: Z62654.D\data.ms
bfb

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
79.85	2599	94.00	26731	110.90	173	127.85	816
80.90	10017	95.00	204928	111.80	143	128.90	290
81.90	2083	96.00	14329	112.90	391	129.90	844
82.85	242	96.90	632	114.75	317	130.70	109
85.90	208	102.85	149	115.90	878	131.05	224
86.95	8977	103.85	1085	116.85	1945	134.80	486
87.95	8196	104.85	473	117.85	1020	135.80	70
90.80	425	105.85	1558	118.95	1257	136.80	203
91.00	419	106.85	334	121.90	60	136.95	334
91.95	6134	109.80	66	123.80	78	139.90	77
93.00	8579	110.65	148	125.90	65	140.90	2036

Average of 6.875 to 6.881 min.: Z62654.D\data.ms
bfb

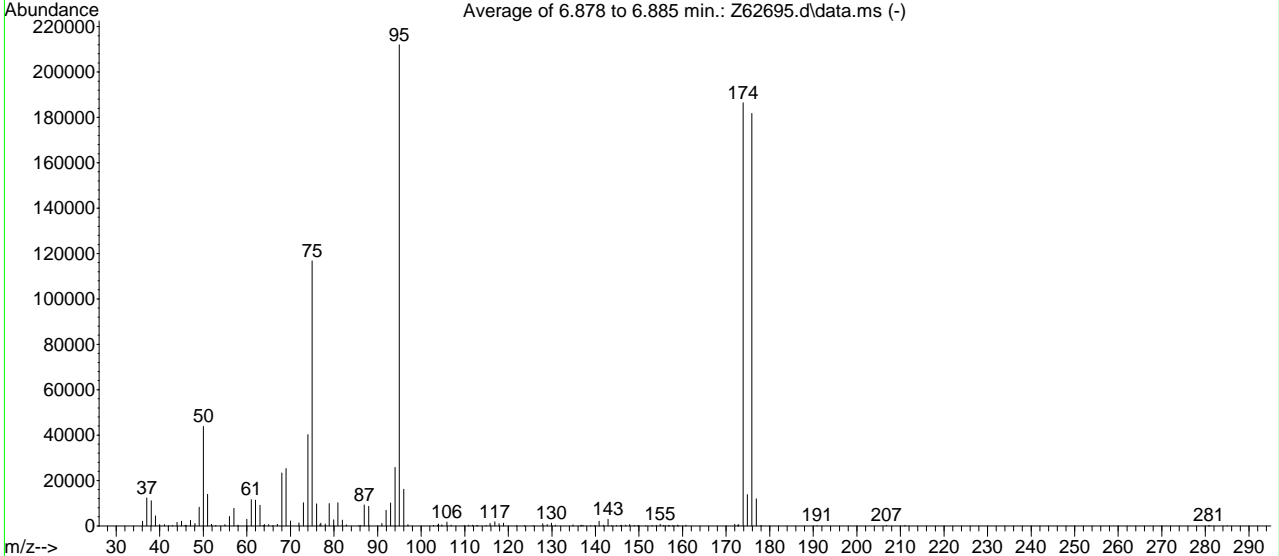
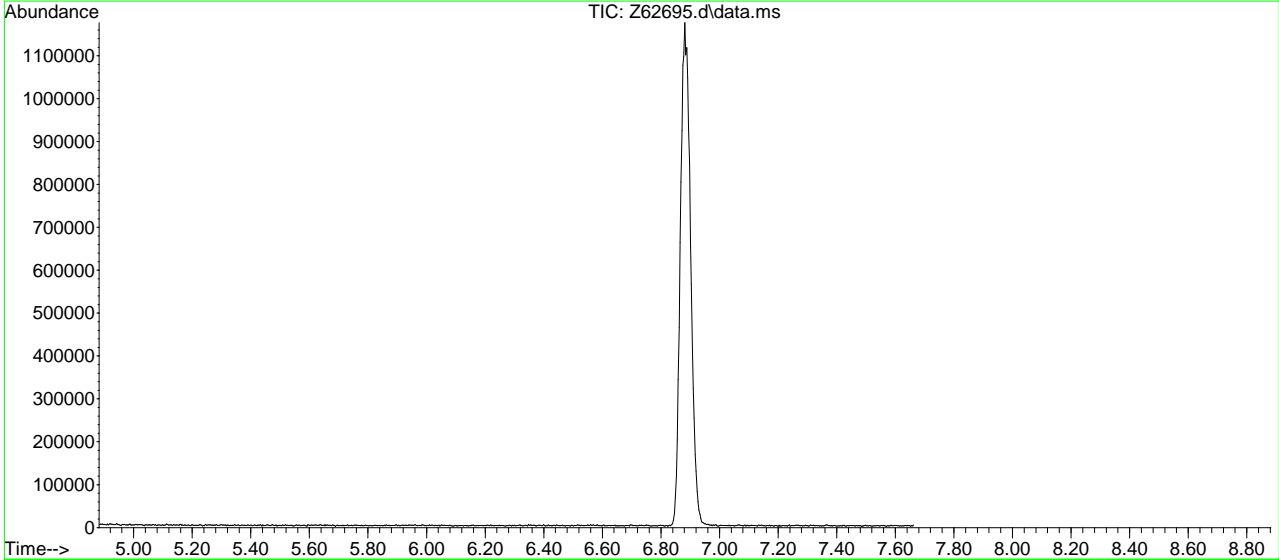
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
141.85	441	152.90	124	174.90	13587		
142.85	2359	154.80	653	175.90	171477		
143.90	108	155.80	92	176.90	10768		
144.95	129	155.95	160	177.90	288		
145.80	301	157.00	508				
146.60	55	157.70	75				
147.00	55	158.85	393				
147.80	690	160.80	345				
148.90	144	171.85	388				
150.00	56	172.90	1200				
151.80	247	173.90	175723				

BFB

Data File : C:\msdchem\1\data\ed...-2020\ vz2433\Z62695.d Vial: 100
 Acq On : 7 Oct 2020 12:20 pm Operator: AKARIG
 Sample : bfb Inst : MSVOA15
 Misc : MS47304,VZ2433,,,,, Multiplr: 1.00
 MS Integration Params: RTEINT.P

Method : C:\msdchem\1\methods\SIMCL100120.M (RTE Integrator)
 Title : WATER-EPA 8260B



AutoFind: Scans 2112, 2113, 2114; Background Corrected with Scan 2095

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	20.7	43800	PASS
75	95	30	60	55.1	116720	PASS
95	95	100	100	100.0	211968	PASS
96	95	5	9	7.6	16127	PASS
173	174	0.00	2	0.3	599	PASS
174	95	50	100	88.0	186453	PASS
175	174	5	9	7.4	13734	PASS
176	174	95	101	97.5	181803	PASS
177	176	5	9	6.5	11884	PASS

7.5.4
7

Average of 6.878 to 6.885 min.: Z62695.d\data.ms
bfb

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.05	2040	46.05	298	57.95	375	69.00	25301
37.00	12265	47.05	2433	59.95	2919	70.00	2177
38.05	11050	48.05	1113	61.00	11563	71.95	1278
39.00	4405	49.05	8209	62.00	11290	73.00	10253
39.95	533	50.00	43800	63.00	9086	74.00	40147
41.05	623	51.00	13869	63.80	240	75.00	116720
42.00	9	51.90	639	64.05	597	76.00	9716
42.85	174	52.85	200	65.00	528	76.80	611
43.95	1605	54.95	604	65.90	68	76.95	1186
45.00	2060	56.00	4157	67.00	700	78.00	843
45.80	158	57.00	7747	68.00	23291	78.90	9774

Average of 6.878 to 6.885 min.: Z62695.d\data.ms
bfb

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
79.90	2633	94.00	25733	110.90	291	125.70	51
80.90	10241	95.00	211968	111.85	332	127.90	879
81.90	2493	96.00	16127	112.80	232	128.95	586
82.80	405	96.95	537	113.00	76	129.90	1138
85.70	134	102.85	152	114.90	154	130.80	337
86.15	195	103.80	355	115.80	995	134.85	394
86.95	9236	103.95	847	116.90	1850	136.60	106
87.95	8631	104.75	393	117.85	983	136.85	361
91.00	1014	105.90	1628	118.90	1171	137.20	130
91.95	6834	106.85	320	121.90	92	138.90	57
92.95	10099	109.90	89	123.70	79	139.80	121

Average of 6.878 to 6.885 min.: Z62695.d\data.ms
bfb

Modified:subtracted

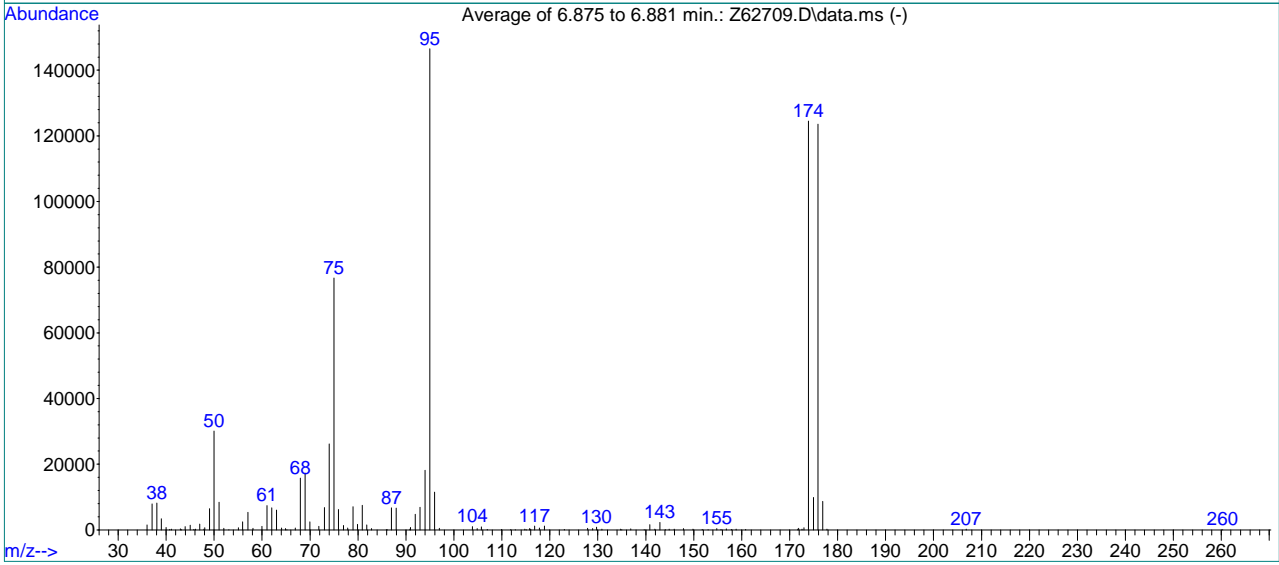
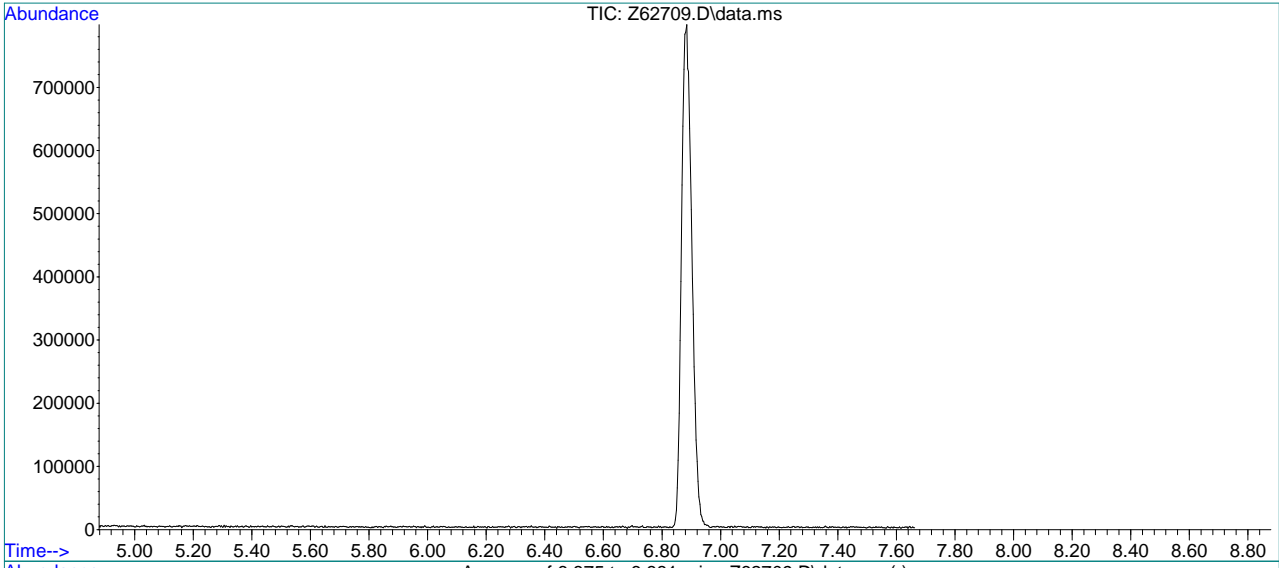
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
140.85	2093	150.00	108	158.85	274	190.90	55
141.90	344	151.60	57	159.10	94	206.80	174
142.90	2914	153.00	139	160.75	292	211.00	141
143.70	52	153.95	181	172.00	639	280.80	135
144.80	157	154.85	643	172.70	273	281.00	96
145.70	74	155.65	153	172.85	599	285.00	108
145.90	261	156.00	88	173.90	186453		
146.95	256	156.80	232	174.90	13734		
147.85	570	157.00	100	175.90	181803		
148.90	171	157.70	65	176.90	11884		
149.75	237	158.00	88	178.05	222		

BFB

Data File : C:\msdchem\1\data\100920\Z62709.D
 Acq On : 9 Oct 2020 10:33 am
 Sample : bfb
 Misc : MS47304,VZ2434,,,,,
 MS Integration Params: RTEINT.P

Vial: 100
 Operator: AKARIG
 Inst : MSVOA15
 Multiplr: 1.00

Method : C:\msdchem\1\methods\SIMCL100120.M (RTE Integrator)
 Title : WATER-EPA 8260B



AutoFind: Scans 2111, 2112, 2113; Background Corrected with Scan 2095

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	20.5	30064	PASS
75	95	30	60	52.3	76675	PASS
95	95	100	100	100.0	146496	PASS
96	95	5	9	7.8	11466	PASS
173	174	0.00	2	0.5	640	PASS
174	95	50	100	85.0	124461	PASS
175	174	5	9	7.9	9891	PASS
176	174	95	101	99.3	123539	PASS
177	176	5	9	7.0	8626	PASS

7.5.5
7

Average of 6.875 to 6.881 min.: Z62709.D\data.ms
bfb

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.00	1470	45.80	116	55.95	2419	68.00	15745
37.05	7913	46.10	203	57.05	5310	69.00	17253
38.05	8132	47.00	1781	58.10	515	69.95	2431
39.00	3368	47.90	231	60.00	1104	71.85	1041
40.00	696	48.05	658	61.00	7352	73.00	6799
40.75	136	49.05	6455	62.00	6709	74.00	26197
41.10	226	50.00	30064	63.00	6040	75.00	76675
42.95	264	51.05	8398	64.05	578	75.95	6220
43.20	76	52.05	508	64.90	414	77.00	1290
43.95	1030	53.10	57	65.20	88	77.85	563
45.00	1438	55.05	621	66.90	528	78.95	7046

Average of 6.875 to 6.881 min.: Z62709.D\data.ms
bfb

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
79.90	1684	92.95	6839	112.80	56	129.75	796
80.90	7443	94.00	18173	114.80	237	130.85	189
81.80	1493	95.00	146496	115.10	59	134.75	219
82.85	373	95.95	11466	115.80	410	135.00	91
85.90	85	96.95	467	116.00	254	136.85	334
86.10	78	103.85	1001	116.85	1171	139.70	55
86.95	6690	104.85	365	117.85	569	140.85	1566
87.95	6627	105.75	917	118.85	1122	141.90	190
90.80	176	106.95	166	123.00	151	142.95	2306
90.95	696	109.95	116	127.85	507	144.10	88
91.95	4763	111.80	51	128.90	398	144.85	253

Average of 6.875 to 6.881 min.: Z62709.D\data.ms
bfb

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
145.95	242	171.70	255				
147.85	417	171.90	484				
149.85	234	172.60	184				
151.80	154	173.00	640				
153.00	63	173.90	124461				
154.80	369	174.95	9891				
155.70	109	175.90	123539				
156.80	309	176.90	8626				
157.85	154	177.75	176				
158.85	254	206.80	186				
160.85	173	260.30	53				

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\100220\
 Data File : O61540.D
 Acq On : 2 Oct 2020 2:33 pm
 Operator : akarig
 Sample : ic2369-1 Inst : MSVOA12
 Misc : MS47193,VO2369,,,,,
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Oct 03 15:29:52 2020
 Quant Method : C:\msdchem\2\methods\SIMCL100220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Fri Oct 02 17:06:05 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.337	96	267997	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.438	117	212423	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.069	65	139651	5.92	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	118.40%	
19) Toluene-d8	8.892	98	219124	5.31	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	106.20%	
Target Compounds						
						Qvalue
2) Vinyl Chloride	2.908	62	3638	0.13	ug/L	94
3) Chloromethane	2.806	50	9881	0.24	ug/L	90
4) 1,1-Dichloroethene	4.096	61	3725	0.12	ug/L	97
5) Methylene Chloride	4.703	49	74199	1.11	ug/L	98
6) trans-1,2-Dichloroethene	4.873	61	4198	0.11	ug/L	95
7) 1,1-Dichloroethane	5.510	63	5786	0.13	ug/L	78
8) cis-1,2-Dichloroethene	6.059	96	2840	0.14	ug/L	95
9) Chloroform	6.326	83	7094	0.17	ug/L	86
10) Carbon Tetrachloride	6.504	117	3492	0.12	ug/L	87
11) 1,1,1-Trichloroethane	6.573	97	3770	0.12	ug/L	94
12) Benzene	6.939	78	8906	0.12	ug/L	97
14) 1,2-Dichloroethane	7.130	62	6350	0.17	ug/L	96
15) Trichloroethene	7.505	95	3256	0.14	ug/L	91
16) 1,2-Dichloropropane	8.036	63	3906	0.17	ug/L	94
17) cis-1,3-Dichloropropene	8.707	75	3453	0.17	ug/L	97
20) trans-1,3-Dichloropropene	9.341	75	3529	0.18	ug/L	90
21) Tetrachloroethene	9.335	166	3194	0.15	ug/L	93
22) 1,4-Dichlorobenzene	12.824	146	7121	0.16	ug/L	97
23) 1,2-Dibromo-3-Chloropr...	14.035	75	1777	0.23	ug/L	96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

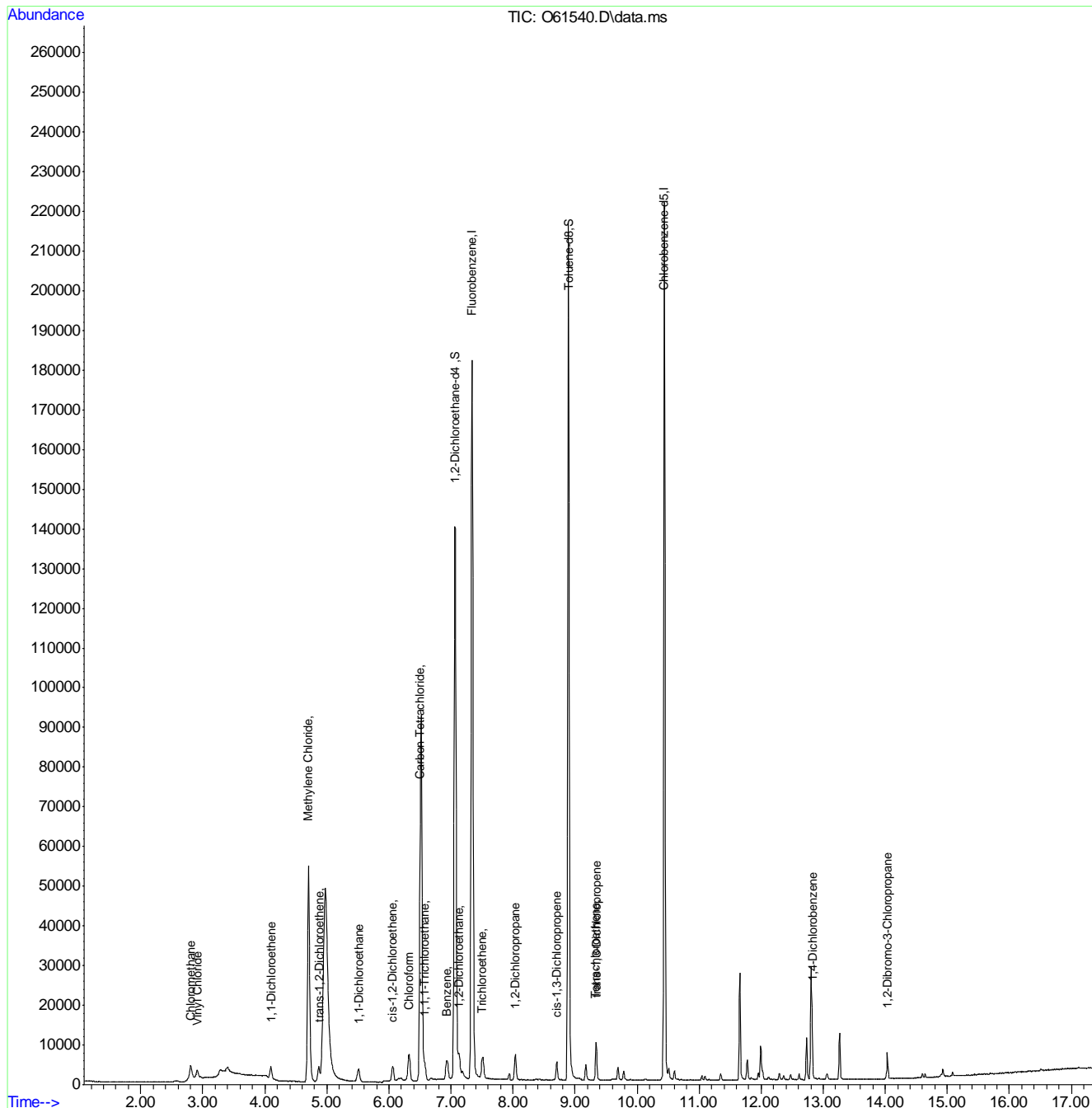
7.6.1
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\100220\
 Data File : O61540.D
 Acq On : 2 Oct 2020 2:33 pm
 Operator : akarig
 Sample : ic2369-1
 Misc : MS47193,VO2369,,,,,
 ALS Vial : 5 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Oct 03 15:29:52 2020
 Quant Method : C:\msdchem\2\methods\SIMCL100220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Fri Oct 02 17:06:05 2020
 Response via : Initial Calibration



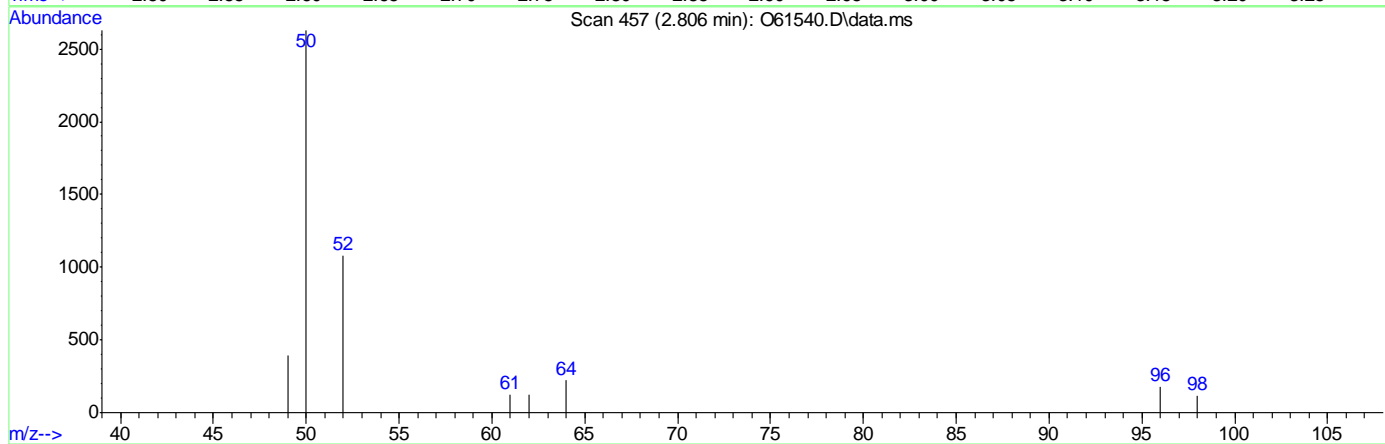
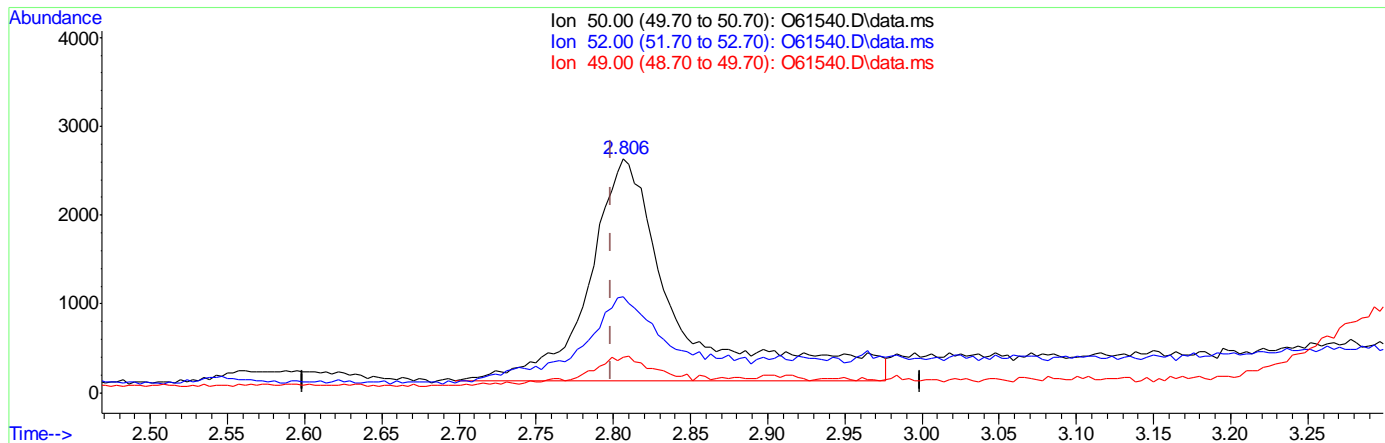
197

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\100220\
 Data File : O61540.D
 Acq On : 2 Oct 2020 2:33 pm
 Operator : akarig
 Sample : ic2369-1
 Misc : MS47193,VO2369,,,,,
 ALS Vial : 5 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Oct 02 14:51:52 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Mon Sep 21 11:01:30 2020
 Response via : Initial Calibration



TIC: O61540.D\data.ms

(3) Chloromethane

2.806min (+0.008) 0.27ug/L

response 9939

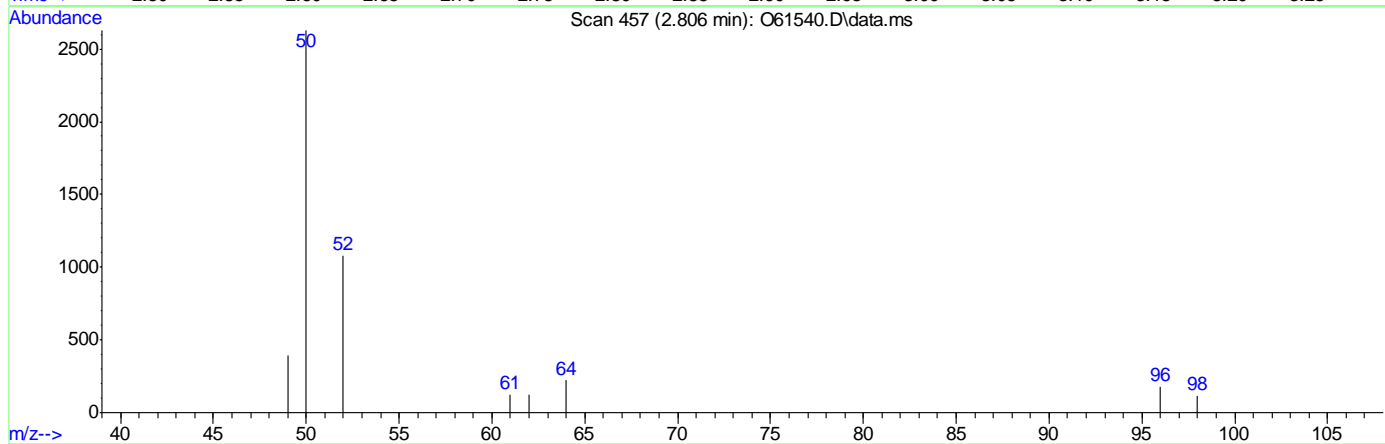
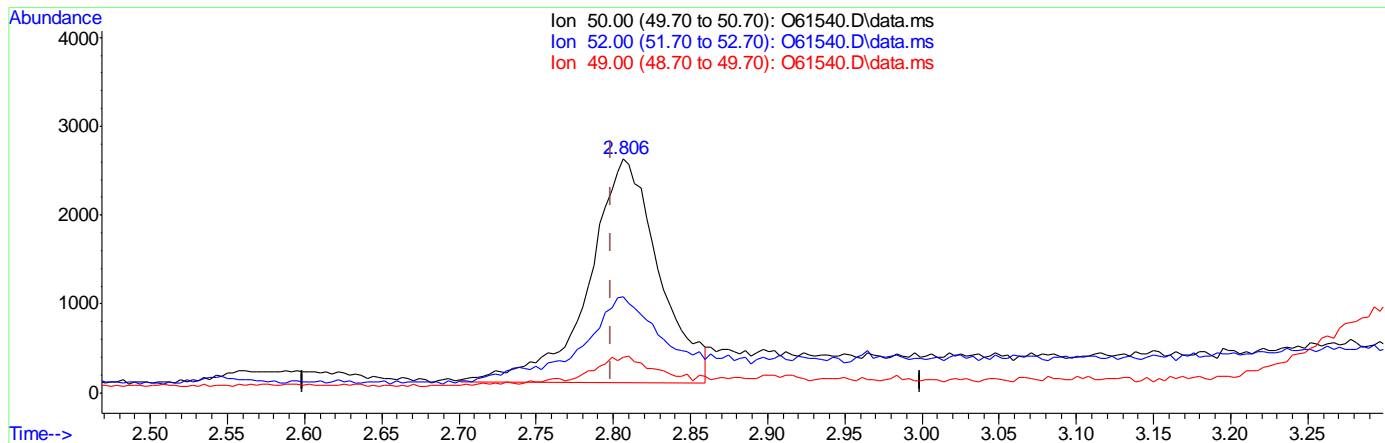
Ion	Exp%	Act%
50.00	100	100
52.00	32.20	38.84
49.00	10.40	12.26
0.00	0.00	0.00

7.6.1.1
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\100220\
 Data File : O61540.D
 Acq On : 2 Oct 2020 2:33 pm
 Operator : akarig
 Sample : ic2369-1 Inst : MSVOA12
 Misc : MS47193,VO2369,,,,,
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Oct 02 14:51:52 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Mon Sep 21 11:01:30 2020
 Response via : Initial Calibration



(3) Chloromethane

2.806min (+0.008) 0.22ug/L m

response 7929

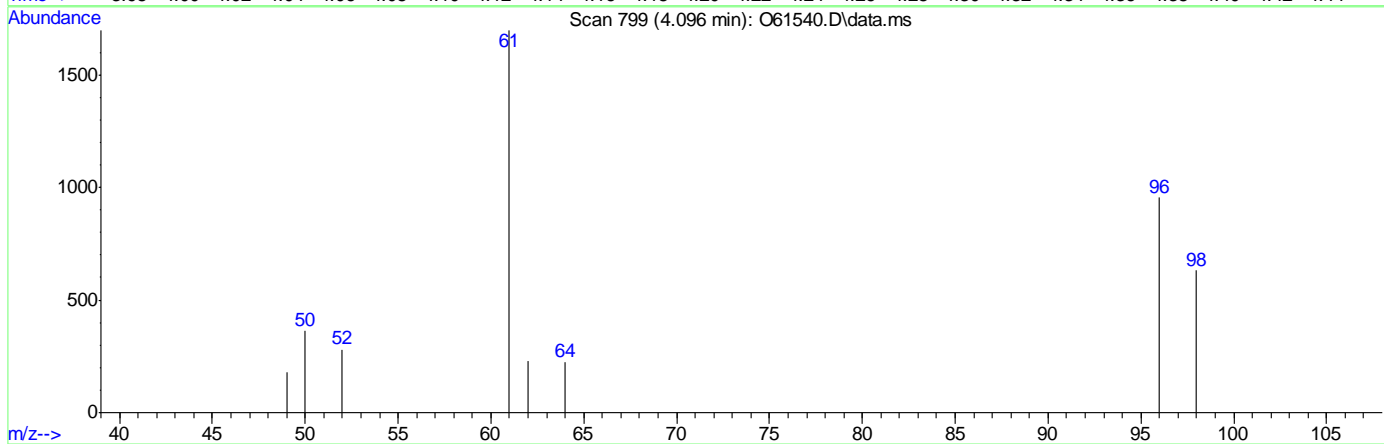
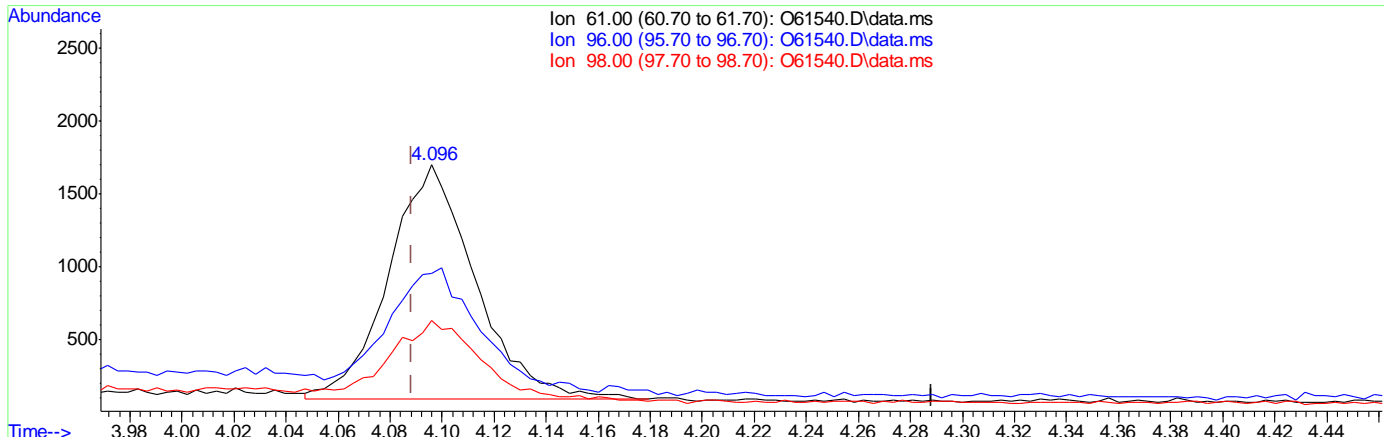
Ion	Exp%	Act%
50.00	100	100
52.00	32.20	41.13
49.00	10.40	14.95
0.00	0.00	0.00

7.6.1.2
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\100220\
 Data File : O61540.D
 Acq On : 2 Oct 2020 2:33 pm
 Operator : akarig
 Sample : ic2369-1 Inst : MSVOA12
 Misc : MS47193,VO2369,,,,,
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Oct 02 14:51:52 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Mon Sep 21 11:01:30 2020
 Response via : Initial Calibration



(4) 1,1-Dichloroethene
 4.096min (+0.008) 0.12ug/L
 response 3725

Ion	Exp%	Act%
61.00	100	100
96.00	52.40	49.97
98.00	34.40	34.35
0.00	0.00	0.00

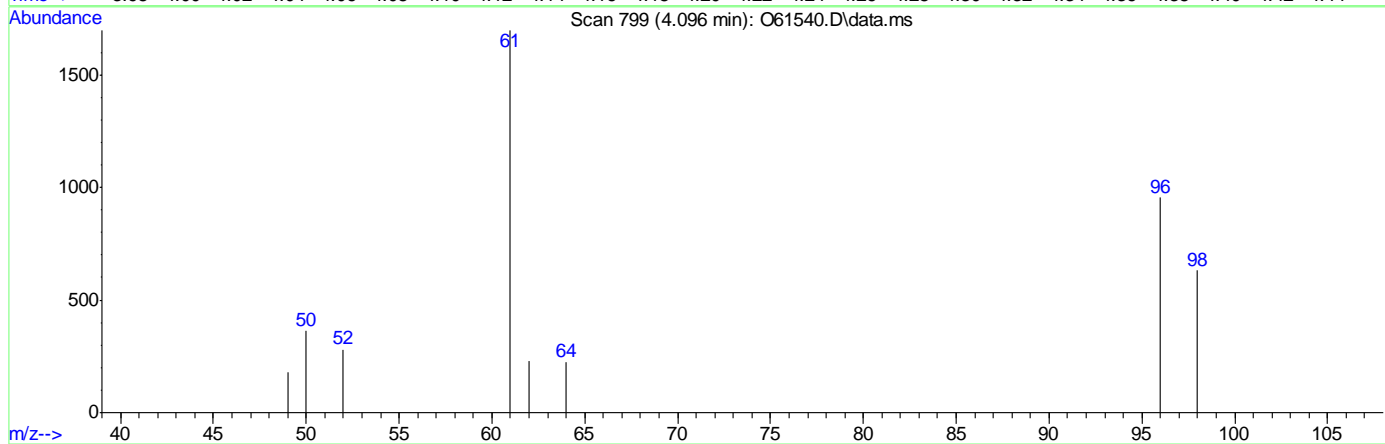
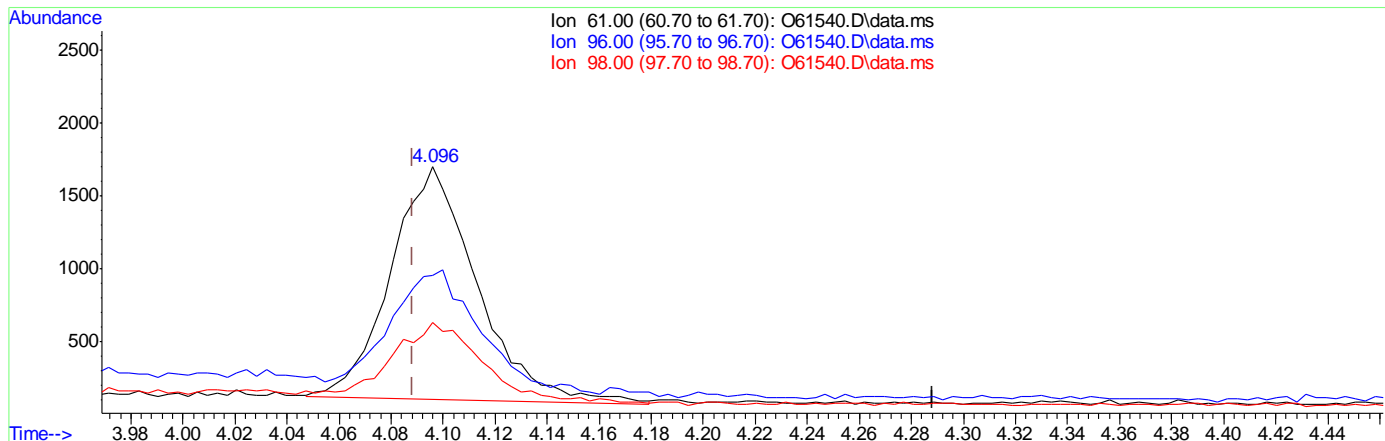
7.6.1.3
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\100220\
 Data File : O61540.D
 Acq On : 2 Oct 2020 2:33 pm
 Operator : akarig
 Sample : ic2369-1
 Misc : MS47193,VO2369,,,,,
 ALS Vial : 5 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Oct 02 14:51:52 2020
 Quant Method : C:\msdchem\2\methods\SIMCL091820.M
 Quant Title : Standard Methods 6200B
 QLast Update : Mon Sep 21 11:01:30 2020
 Response via : Initial Calibration



(4) 1,1-Dichloroethene

4.096min (+0.008) 0.12ug/L m

response 3681

Ion	Exp%	Act%
61.00	100	100
96.00	52.40	56.28
98.00	34.40	37.12
0.00	0.00	0.00

7.6.1.4

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\100220\
 Data File : O61541.D
 Acq On : 2 Oct 2020 2:55 pm
 Operator : akarig
 Sample : ic2369-2 Inst : MSVOA12
 Misc : MS47193,VO2369,,,,,
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Oct 02 15:13:04 2020
 Quant Method : C:\msdchem\2\methods\SIMCL100220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Mon Sep 21 11:01:30 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.337	96	253544	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.442	117	197703	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.069	65	129392	6.22	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	124.40%	
19) Toluene-d8	8.896	98	202736	4.94	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	98.80%	
Target Compounds						
						Qvalue
2) Vinyl Chloride	2.908	62	18143	0.87	ug/L	99
3) Chloromethane	2.806	50	29997	0.88	ug/L	97
4) 1,1-Dichloroethene	4.096	61	18187	0.60	ug/L	98
5) Methylene Chloride	4.703	49	92243	1.70	ug/L	96
6) trans-1,2-Dichloroethene	4.869	61	21103	0.59	ug/L	98
7) 1,1-Dichloroethane	5.510	63	24148	0.59	ug/L	96
8) cis-1,2-Dichloroethene	6.065	96	10075	0.50	ug/L	99
9) Chloroform	6.332	83	22122	0.60	ug/L	97
10) Carbon Tetrachloride	6.510	117	15830	0.61	ug/L	97
11) 1,1,1-Trichloroethane	6.573	97	17472	0.60	ug/L	97
12) Benzene	6.939	78	34005	0.47	ug/L	97
14) 1,2-Dichloroethane	7.130	62	20066	0.60	ug/L	99
15) Trichloroethene	7.505	95	10715	0.52	ug/L	99
16) 1,2-Dichloropropane	8.035	63	11984	0.54	ug/L	96
17) cis-1,3-Dichloropropene	8.707	75	9481	0.46	ug/L	93
20) trans-1,3-Dichloropropene	9.344	75	9340	0.40	ug/L	96
21) Tetrachloroethene	9.338	166	11441	0.58	ug/L	98
22) 1,4-Dichlorobenzene	12.822	146	17803	0.46	ug/L	99
23) 1,2-Dibromo-3-Chloropr...	14.032	75	3884	0.51	ug/L	89

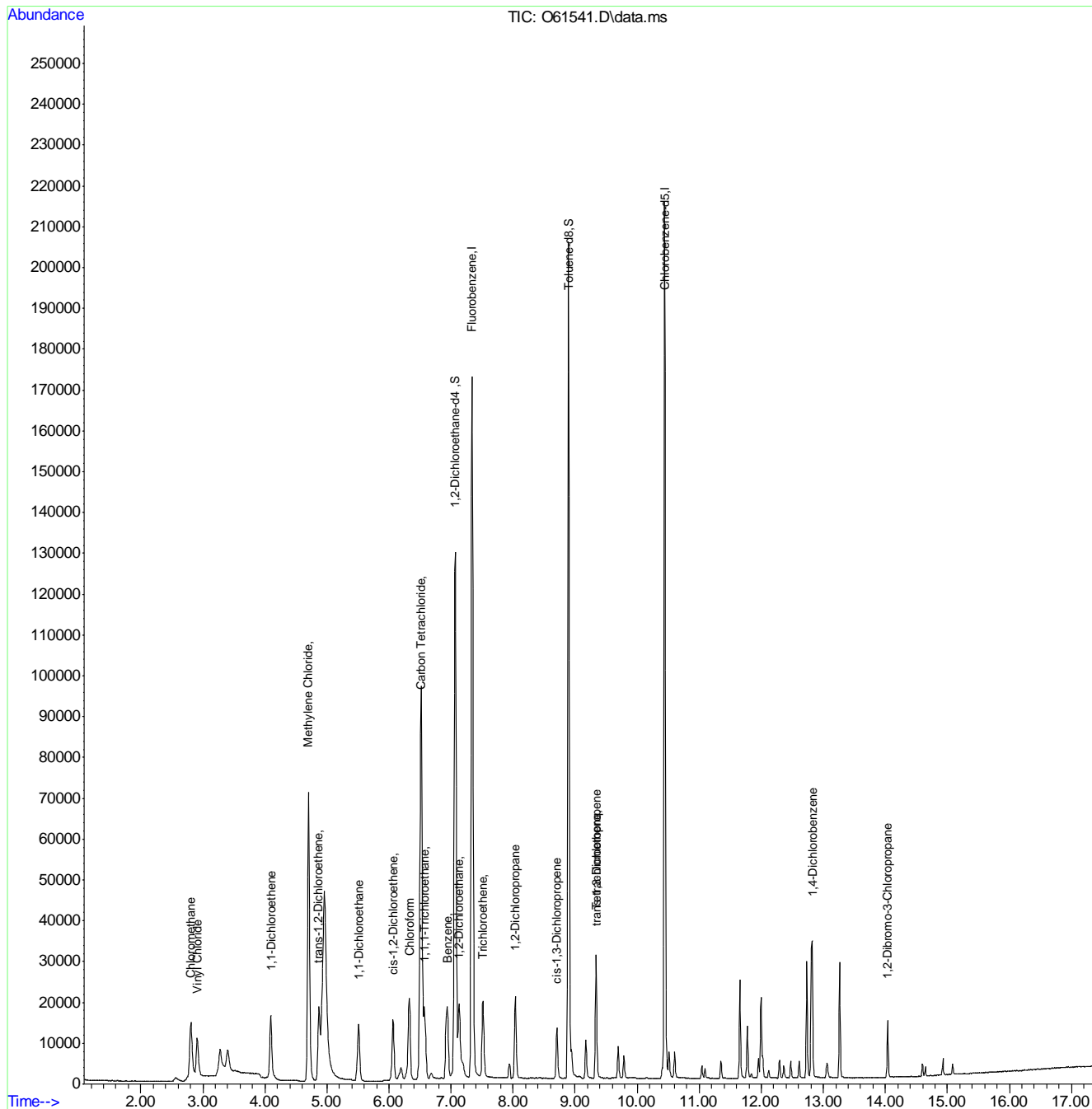
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\100220\
 Data File : O61541.D
 Acq On : 2 Oct 2020 2:55 pm
 Operator : akarig
 Sample : ic2369-2
 Misc : MS47193,VO2369,,,,,
 ALS Vial : 2 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Oct 02 15:13:04 2020
 Quant Method : C:\msdchem\2\methods\SIMCL100220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Mon Sep 21 11:01:30 2020
 Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\100220\
 Data File : O61542.D
 Acq On : 2 Oct 2020 3:15 pm
 Operator : akarig
 Sample : ic2369-3 Inst : MSVOA12
 Misc : MS47193,VO2369,,,,,
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Oct 02 15:51:32 2020
 Quant Method : C:\msdchem\2\methods\SIMCL100220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Mon Sep 21 11:01:30 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.337	96	294102	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.444	117	228113	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.069	65	136777	5.67	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	113.40%	
19) Toluene-d8	8.896	98	223118	4.72	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	94.40%	
Target Compounds						
						Qvalue
2) Vinyl Chloride	2.897	62	68152	2.80	ug/L	99
3) Chloromethane	2.795	50	103081	2.68	ug/L	99
4) 1,1-Dichloroethene	4.089	61	76997	2.20	ug/L	99
5) Methylene Chloride	4.699	49	217675	3.54	ug/L	96
6) trans-1,2-Dichloroethene	4.865	61	85821	2.08	ug/L	100
7) 1,1-Dichloroethane	5.506	63	104414	2.18	ug/L	99
8) cis-1,2-Dichloroethene	6.065	96	45088	1.93	ug/L	98
9) Chloroform	6.326	83	94667	2.21	ug/L	98
10) Carbon Tetrachloride	6.510	117	71006	2.36	ug/L	98
11) 1,1,1-Trichloroethane	6.574	97	74930	2.23	ug/L	98
12) Benzene	6.932	78	158325	1.90	ug/L	93
14) 1,2-Dichloroethane	7.130	62	85796	2.22	ug/L	99
15) Trichloroethene	7.505	95	49827	2.07	ug/L	98
16) 1,2-Dichloropropane	8.039	63	52631	2.03	ug/L	95
17) cis-1,3-Dichloropropene	8.707	75	43940	1.80	ug/L	96
20) trans-1,3-Dichloropropene	9.341	75	44340	1.65	ug/L	97
21) Tetrachloroethene	9.341	166	53903	2.35	ug/L	96
22) 1,4-Dichlorobenzene	12.824	146	91177m	2.00	ug/L	
23) 1,2-Dibromo-3-Chloropr...	14.035	75	17035	1.95	ug/L	90

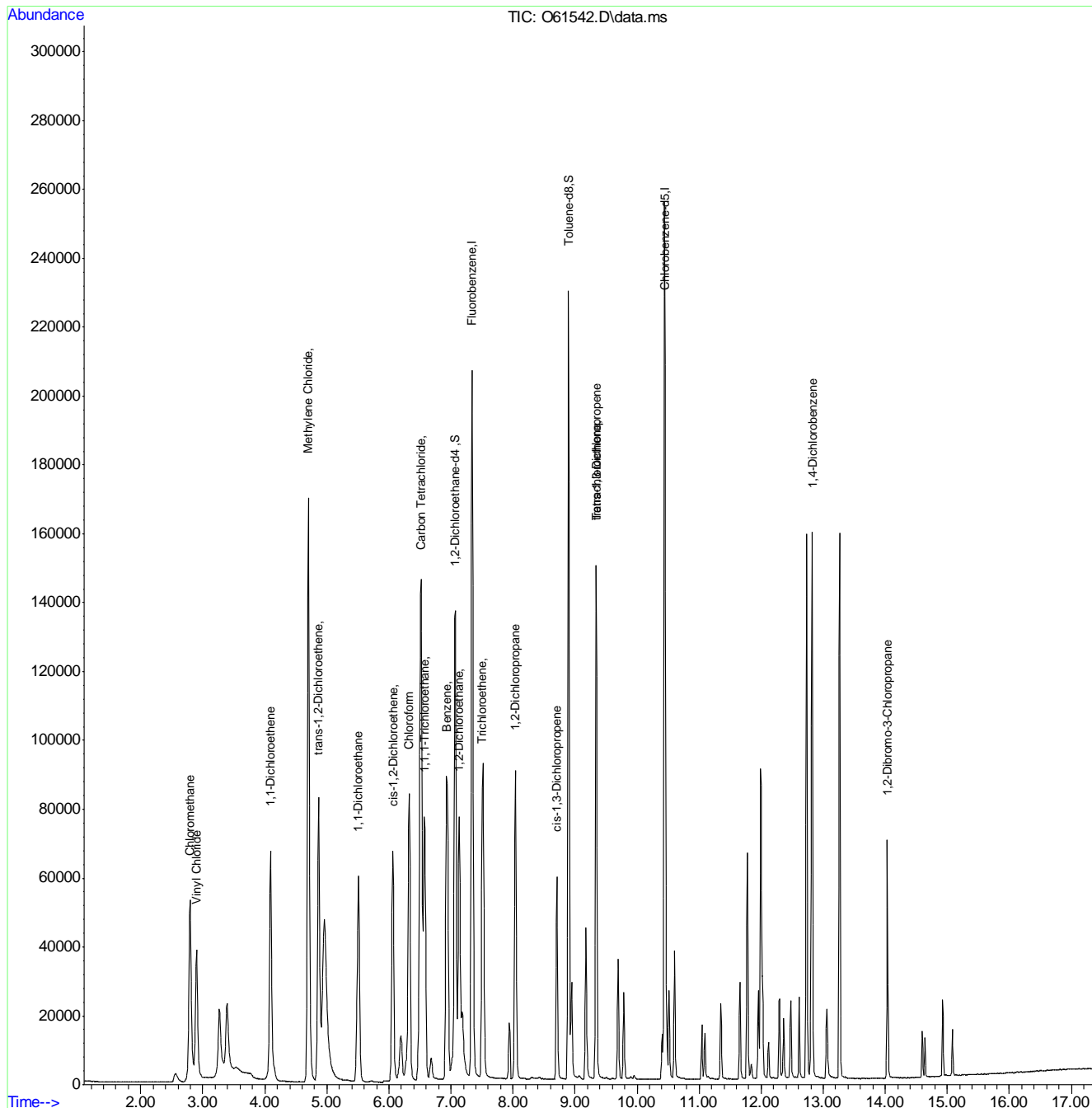
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\100220\
 Data File : O61542.D
 Acq On : 2 Oct 2020 3:15 pm
 Operator : akarig
 Sample : ic2369-3
 Misc : MS47193,VO2369,,,,,
 ALS Vial : 3 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Oct 02 15:51:32 2020
 Quant Method : C:\msdchem\2\methods\SIMCL100220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Mon Sep 21 11:01:30 2020
 Response via : Initial Calibration



7.6.3
7

Manual Integration Approval Summary

Sample Number: VO2369-IC2369 **Method:** SW846 8260B BY SIM
Lab FileID: O61542.D **Analyst approved:** 10/07/20 10:23 Akari Giraldo
Injection Time: 10/02/20 15:15 **Supervisor approved:** 10/07/20 11:47 Melissa Mangual

Parameter	CAS	Sig#	R.T. (min.)	Reason
1,4-Dichlorobenzene	106-46-7		12.82	Poorly defined baseline

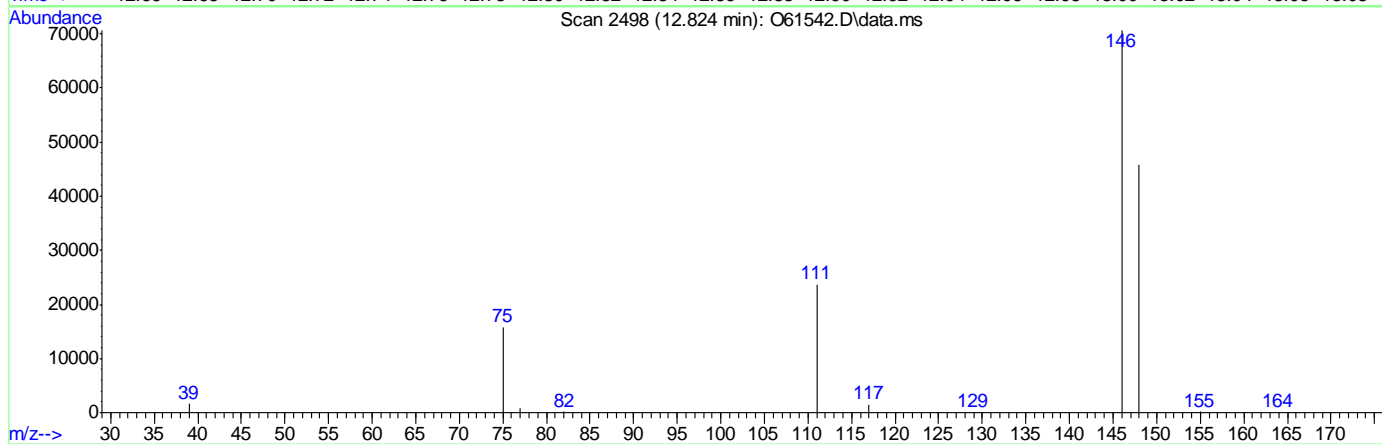
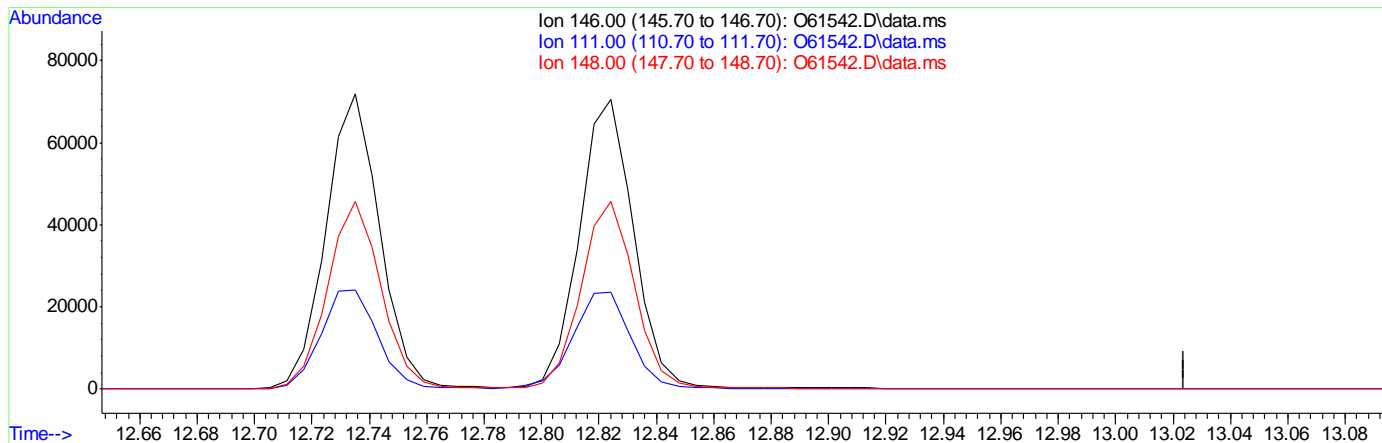
7.6.3.1

7

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\100220\
 Data File : O61542.D
 Acq On : 2 Oct 2020 3:15 pm
 Operator : akarig
 Sample : ic2369-3 Inst : MSVOA12
 Misc : MS47193,VO2369,,,,,
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Oct 02 15:50:25 2020
 Quant Method : C:\msdchem\2\methods\SIMCL100220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Mon Sep 21 11:01:30 2020
 Response via : Initial Calibration



(22) 1,4-Dichlorobenzene

12.824min 0.00ug/L d

response 0

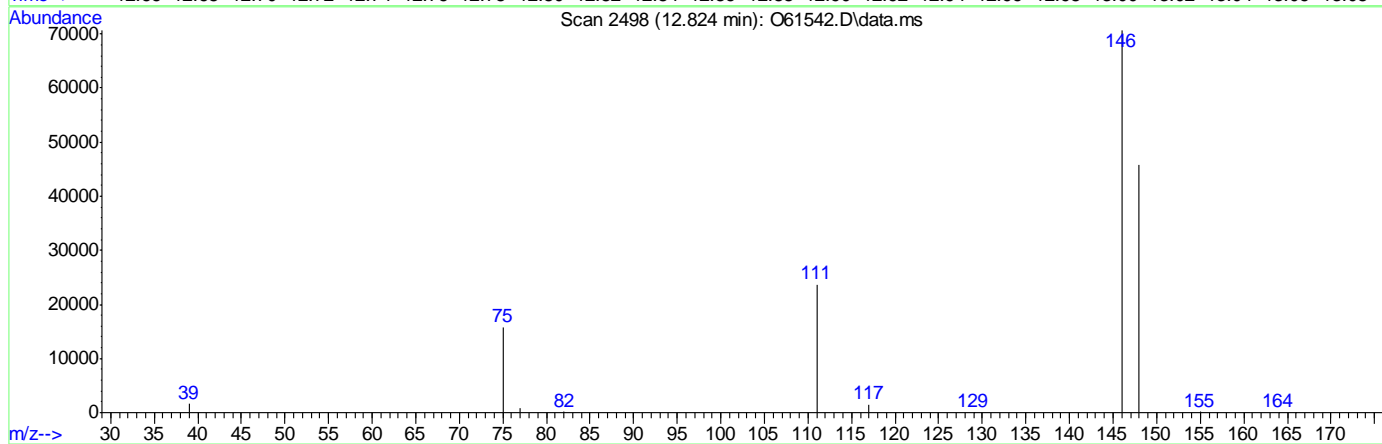
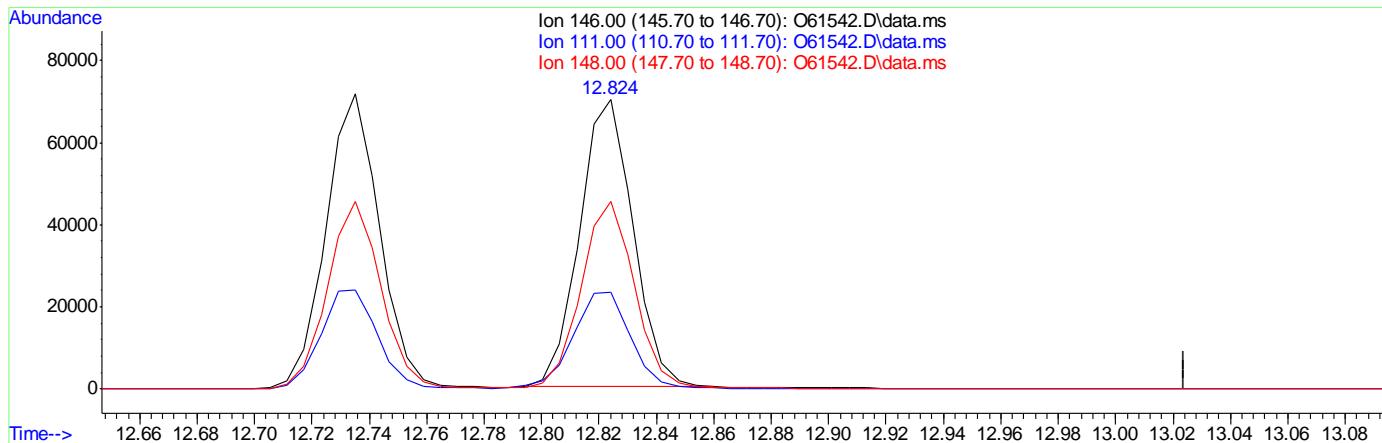
Ion	Exp%	Act%
146.00	100	0.00
111.00	34.90	0.00
148.00	64.10	0.00
0.00	0.00	0.00

7.6.3.2
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\100220\
 Data File : O61542.D
 Acq On : 2 Oct 2020 3:15 pm
 Operator : akarig
 Sample : ic2369-3 Inst : MSVOA12
 Misc : MS47193,VO2369,,,,,
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Oct 02 15:50:25 2020
 Quant Method : C:\msdchem\2\methods\SIMCL100220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Mon Sep 21 11:01:30 2020
 Response via : Initial Calibration



TIC: O61542.D\data.ms

(22) 1,4-Dichlorobenzene
 12.824min (+0.000) 2.00ug/L m
 response 91177

Ion	Exp%	Act%
146.00	100	100
111.00	34.90	33.45
148.00	64.10	64.75
0.00	0.00	0.00

7.633
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\100220\
 Data File : O61543.D
 Acq On : 2 Oct 2020 3:35 pm
 Operator : akarig
 Sample : ic2369-4 Inst : MSVOA12
 Misc : MS47193,VO2369,,,,,
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Oct 02 16:06:28 2020
 Quant Method : C:\msdchem\2\methods\SIMCL100220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Mon Sep 21 11:01:30 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.337	96	340659	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.444	117	281536	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.069	65	142733	5.11	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	102.20%	
19) Toluene-d8	8.896	98	262091	4.49	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	89.80%	
Target Compounds						
						Qvalue
2) Vinyl Chloride	2.893	62	169082	6.00	ug/L	100
3) Chloromethane	2.788	50	252564	5.93	ug/L	100
4) 1,1-Dichloroethene	4.085	61	195628	4.83	ug/L	99
5) Methylene Chloride	4.696	49	414354	5.99	ug/L	97
6) trans-1,2-Dichloroethene	4.862	61	224534	4.69	ug/L	99
7) 1,1-Dichloroethane	5.506	63	271504	4.90	ug/L	100
8) cis-1,2-Dichloroethene	6.059	96	124833	4.62	ug/L	97
9) Chloroform	6.326	83	246417	4.97	ug/L	100
10) Carbon Tetrachloride	6.503	117	178147	5.11	ug/L	99
11) 1,1,1-Trichloroethane	6.573	97	188628	4.84	ug/L	99
12) Benzene	6.931	78	435234	4.51	ug/L	94
14) 1,2-Dichloroethane	7.130	62	229876	5.13	ug/L	99
15) Trichloroethene	7.513	95	136829	4.91	ug/L	91
16) 1,2-Dichloropropane	8.039	63	143127	4.78	ug/L	96
17) cis-1,3-Dichloropropene	8.707	75	128989	4.41	ug/L	96
20) trans-1,3-Dichloropropene	9.340	75	135196	4.07	ug/L	98
21) Tetrachloroethene	9.340	166	142922	5.05	ug/L	96
22) 1,4-Dichlorobenzene	12.824	146	288328	5.02	ug/L	99
23) 1,2-Dibromo-3-Chloropr...	14.035	75	48503	4.49	ug/L	91

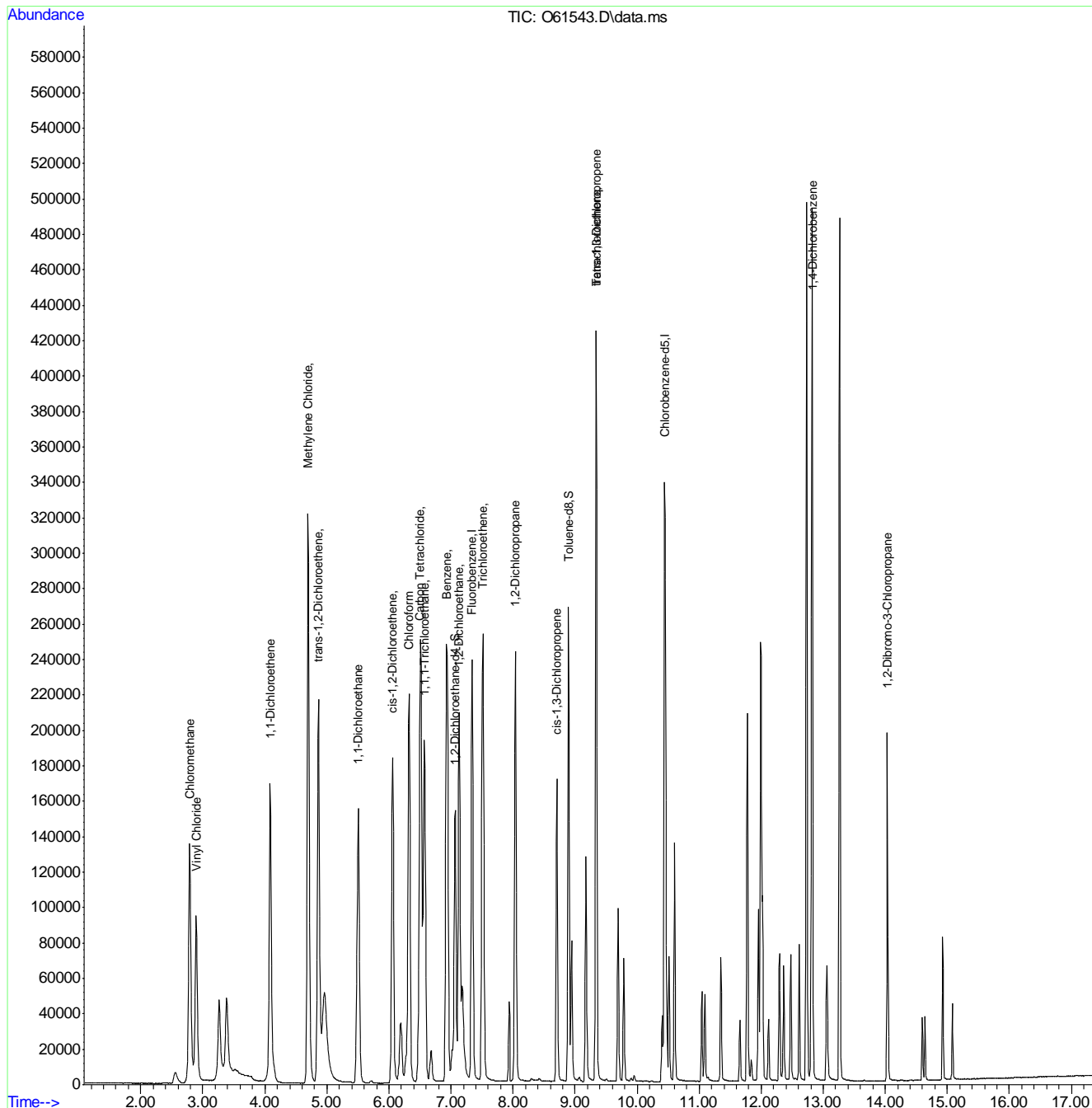
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\100220\
 Data File : O61543.D
 Acq On : 2 Oct 2020 3:35 pm
 Operator : akarig
 Sample : ic2369-4
 Misc : MS47193,VO2369,,,,,
 ALS Vial : 4 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Oct 02 16:06:28 2020
 Quant Method : C:\msdchem\2\methods\SIMCL100220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Mon Sep 21 11:01:30 2020
 Response via : Initial Calibration



7.6.4
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\100220\
 Data File : O61544.D
 Acq On : 2 Oct 2020 3:55 pm
 Operator : akarig
 Sample : icc2369-5 Inst : MSVOA12
 Misc : MS47193,VO2369,,,,,
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Oct 02 16:19:24 2020
 Quant Method : C:\msdchem\2\methods\SIMCL100220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Mon Sep 21 11:01:30 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.337	96	382487	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.442	117	330770	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.069	65	152345	4.86	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	97.20%	
19) Toluene-d8	8.896	98	303357	4.42	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	88.40%	
Target Compounds						
						Qvalue
2) Vinyl Chloride	2.889	62	345205	10.92	ug/L	100
3) Chloromethane	2.788	50	507165	11.53	ug/L	100
4) 1,1-Dichloroethene	4.085	61	411192	9.05	ug/L	99
5) Methylene Chloride	4.696	49	771651	10.52	ug/L	97
6) trans-1,2-Dichloroethene	4.862	61	498572	9.27	ug/L	98
7) 1,1-Dichloroethane	5.503	63	587163	9.44	ug/L	100
8) cis-1,2-Dichloroethene	6.059	96	289941	9.56	ug/L	99
9) Chloroform	6.325	83	531398	9.54	ug/L	99
10) Carbon Tetrachloride	6.503	117	377932	9.66	ug/L	99
11) 1,1,1-Trichloroethane	6.573	97	434389	9.92	ug/L	99
12) Benzene	6.939	78	986593	9.10	ug/L	100
14) 1,2-Dichloroethane	7.130	62	496106	9.85	ug/L	99
15) Trichloroethene	7.513	95	308517	9.85	ug/L	93
16) 1,2-Dichloropropane	8.039	63	315830	9.39	ug/L	98
17) cis-1,3-Dichloropropene	8.707	75	312686	8.99	ug/L	97
20) trans-1,3-Dichloropropene	9.344	75	323421	8.28	ug/L	98
21) Tetrachloroethene	9.338	166	315817	9.50	ug/L	99
22) 1,4-Dichlorobenzene	12.822	146	675959	9.73	ug/L	99
23) 1,2-Dibromo-3-Chloropr...	14.032	75	113556	8.95	ug/L	98

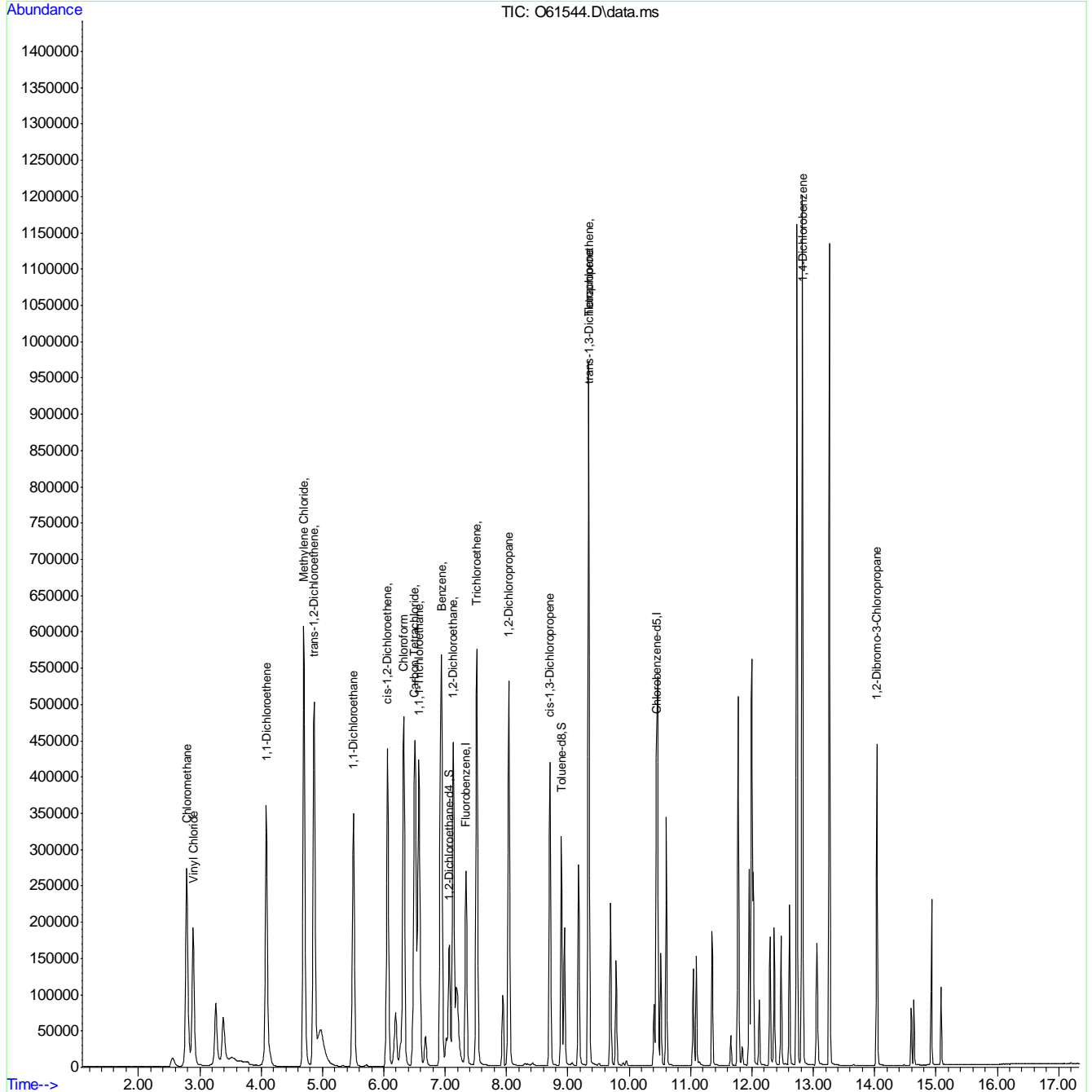
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\100220\
 Data File : O61544.D
 Acq On : 2 Oct 2020 3:55 pm
 Operator : akarig
 Sample : icc2369-5
 Misc : MS47193,VO2369,,,,,
 ALS Vial : 5 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Oct 02 16:19:24 2020
 Quant Method : C:\msdchem\2\methods\SIMCL100220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Mon Sep 21 11:01:30 2020
 Response via : Initial Calibration



7.6.5
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\100220\
 Data File : O61545.D
 Acq On : 2 Oct 2020 4:15 pm
 Operator : akarig
 Sample : ic2369-6 Inst : MSVOA12
 Misc : MS47193,VO2369,,,,,
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Oct 02 16:33:56 2020
 Quant Method : C:\msdchem\2\methods\SIMCL100220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Mon Sep 21 11:01:30 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
Internal Standards							
1) Fluorobenzene	7.345	96	424039	5.00	ug/L	0.00	
18) Chlorobenzene-d5	10.444	117	362583	5.00	ug/L	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.069	65	162958	4.69	ug/L	0.00	
Spiked Amount	5.000	Range 74 - 125	Recovery	=	93.80%		
19) Toluene-d8	8.896	98	343085	4.56	ug/L	0.00	
Spiked Amount	5.000	Range 88 - 111	Recovery	=	91.20%		
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.901	62	540840	15.43	ug/L		99
3) Chloromethane	2.795	50	791125	18.05	ug/L		100
4) 1,1-Dichloroethene	4.085	61	643649	12.78	ug/L		100
5) Methylene Chloride	4.699	49	1164294	15.25	ug/L		98
6) trans-1,2-Dichloroethene	4.869	61	806411	13.53	ug/L		97
7) 1,1-Dichloroethane	5.510	63	931956	13.51	ug/L		100
8) cis-1,2-Dichloroethene	6.065	96	481823	14.34	ug/L		99
9) Chloroform	6.332	83	839584	13.59	ug/L		98
10) Carbon Tetrachloride	6.510	117	608420	14.03	ug/L		98
11) 1,1,1-Trichloroethane	6.574	97	700979	14.44	ug/L		99
12) Benzene	6.939	78	1604884	13.35	ug/L		98
14) 1,2-Dichloroethane	7.138	62	790269	14.16	ug/L		100
15) Trichloroethene	7.513	95	498818	14.37	ug/L		93
16) 1,2-Dichloropropane	8.039	63	511701	13.72	ug/L		99
17) cis-1,3-Dichloropropene	8.707	75	539707	13.30	ug/L		97
20) trans-1,3-Dichloropropene	9.341	75	549611	12.84	ug/L		99
21) Tetrachloroethene	9.341	166	506545	13.90	ug/L		96
22) 1,4-Dichlorobenzene	12.824	146	1106572	14.13	ug/L		99
23) 1,2-Dibromo-3-Chloropr...	14.035	75	188079	13.53	ug/L		85

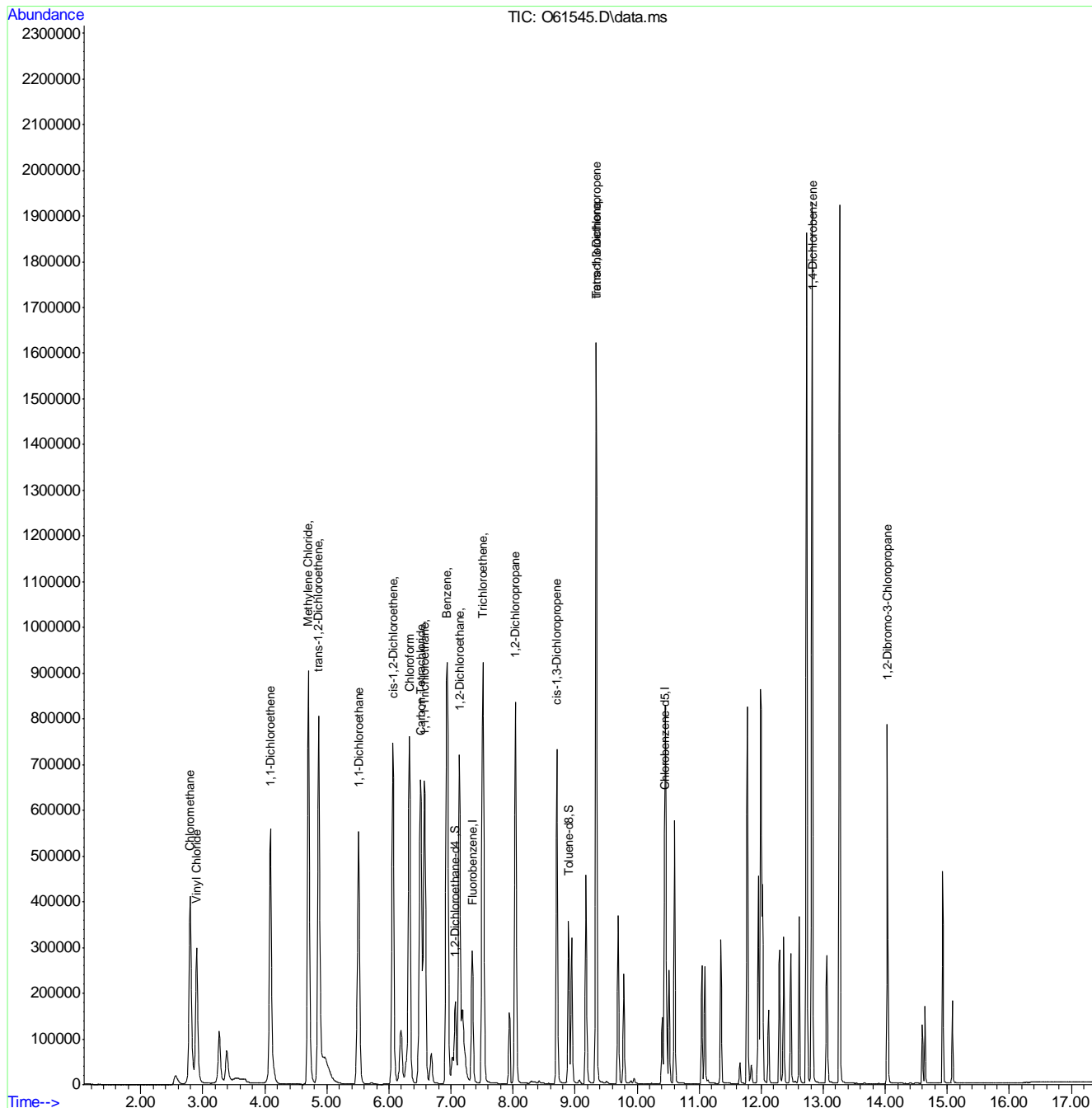
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\100220\
 Data File : O61545.D
 Acq On : 2 Oct 2020 4:15 pm
 Operator : akarig
 Sample : ic2369-6
 Misc : MS47193,VO2369,,,,,
 ALS Vial : 6 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Oct 02 16:33:56 2020
 Quant Method : C:\msdchem\2\methods\SIMCL100220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Mon Sep 21 11:01:30 2020
 Response via : Initial Calibration



9.9.7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\100220\
 Data File : O61546.D
 Acq On : 2 Oct 2020 4:36 pm
 Operator : akarig
 Sample : ic2369-7 Inst : MSVOA12
 Misc : MS47193,VO2369,,,,,
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Oct 02 16:57:46 2020
 Quant Method : C:\msdchem\2\methods\SIMCL100220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Mon Sep 21 11:01:30 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
Internal Standards							
1) Fluorobenzene	7.344	96	457460	5.00	ug/L	0.00	
18) Chlorobenzene-d5	10.444	117	384469	5.00	ug/L	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.069	65	174548	4.65	ug/L	0.00	
Spiked Amount	5.000	Range 74 - 125	Recovery	=	93.00%		
19) Toluene-d8	8.896	98	372835	4.68	ug/L	0.00	
Spiked Amount	5.000	Range 88 - 111	Recovery	=	93.60%		
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.893	62	754828	19.96	ug/L		100
3) Chloromethane	2.791	50	1074385	26.77	ug/L		100
4) 1,1-Dichloroethene	4.081	61	880106	16.20	ug/L		98
5) Methylene Chloride	4.696	49	1550076	20.19	ug/L		99
6) trans-1,2-Dichloroethene	4.862	61	1099735	17.10	ug/L		98
7) 1,1-Dichloroethane	5.503	63	1273211	17.11	ug/L		100
8) cis-1,2-Dichloroethene	6.065	96	677350	18.68	ug/L		95
9) Chloroform	6.326	83	1155318	17.34	ug/L		99
10) Carbon Tetrachloride	6.504	117	841745	17.99	ug/L		98
11) 1,1,1-Trichloroethane	6.573	97	961888	18.36	ug/L		98
12) Benzene	6.939	78	2208295	17.03	ug/L		99
14) 1,2-Dichloroethane	7.138	62	1093610	18.16	ug/L		99
15) Trichloroethene	7.513	95	691745	18.47	ug/L		92
16) 1,2-Dichloropropane	8.039	63	712113	17.70	ug/L		99
17) cis-1,3-Dichloropropene	8.707	75	787985	17.22	ug/L		99
20) trans-1,3-Dichloropropene	9.341	75	796030	17.54	ug/L		98
21) Tetrachloroethene	9.341	166	697719	18.06	ug/L		96
22) 1,4-Dichlorobenzene	12.824	146	1564305	18.36	ug/L		98
23) 1,2-Dibromo-3-Chloropr...	14.035	75	271421	18.41	ug/L		84

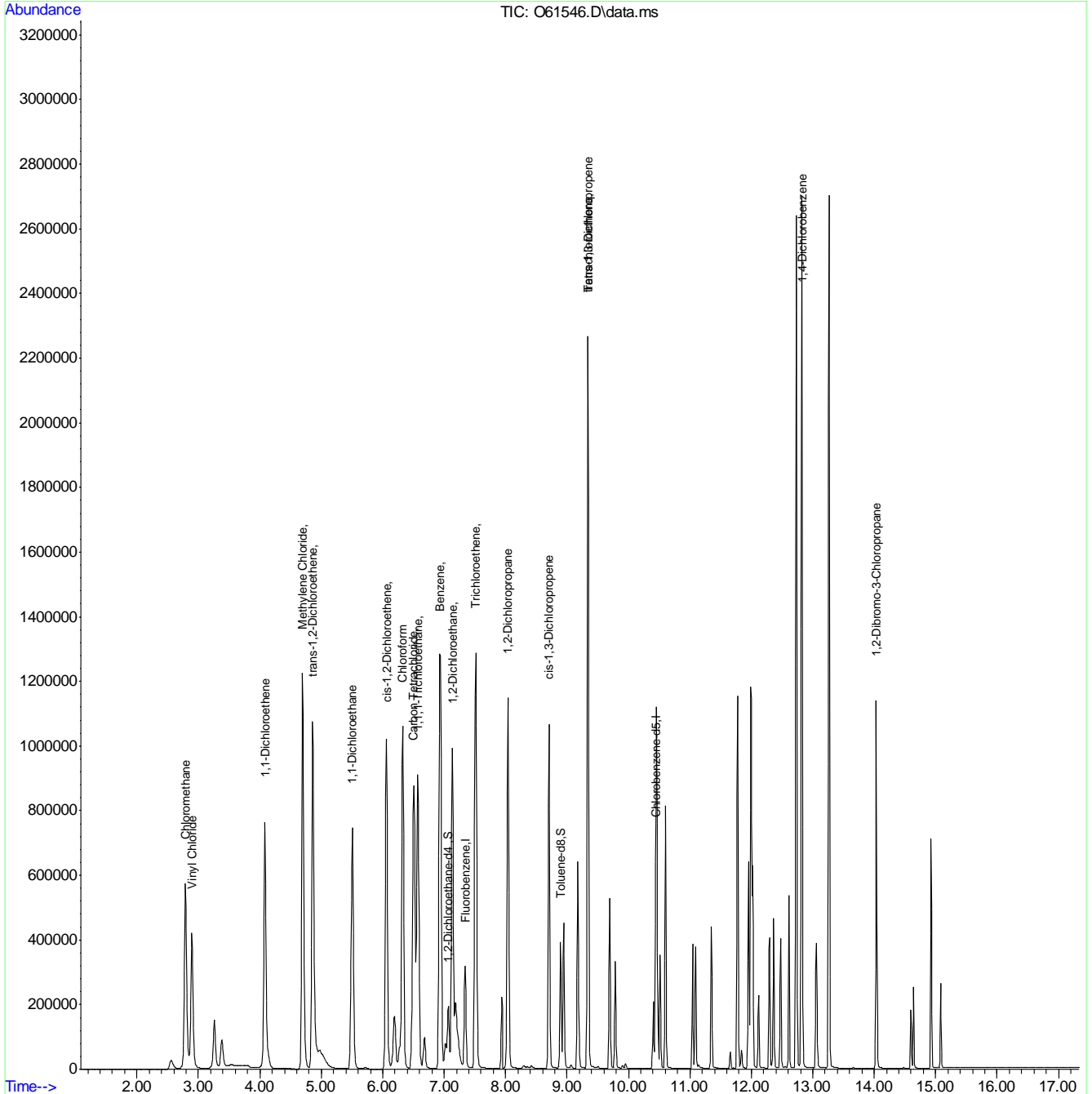
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\100220\
 Data File : O61546.D
 Acq On : 2 Oct 2020 4:36 pm
 Operator : akarig
 Sample : ic2369-7
 Misc : MS47193,VO2369,,,,,
 ALS Vial : 7 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Oct 02 16:57:46 2020
 Quant Method : C:\msdchem\2\methods\SIMCL100220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Mon Sep 21 11:01:30 2020
 Response via : Initial Calibration



7.6.7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\100220\
 Data File : O61548.D
 Acq On : 2 Oct 2020 5:23 pm
 Operator : akarig
 Sample : icv2369-5 Inst : MSVOA12
 Misc : MS47193,VO2369,,,,,
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Oct 03 15:33:09 2020
 Quant Method : C:\msdchem\2\methods\SIMCL100220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Sat Oct 03 15:33:07 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.337	96	404976	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.442	117	348974	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.061	65	157244	4.41	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	88.20%	
19) Toluene-d8	8.892	98	330233	4.87	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	97.40%	
Target Compounds						
						Qvalue
2) Vinyl Chloride	2.889	62	375232	10.17	ug/L	99
3) Chloromethane	2.787	50	528410	9.62	ug/L	99
4) 1,1-Dichloroethene	4.077	61	508437	11.87	ug/L	98
5) Methylene Chloride	4.692	49	841872	9.83	ug/L	98
6) trans-1,2-Dichloroethene	4.858	61	590404	10.43	ug/L	100
7) 1,1-Dichloroethane	5.499	63	684810	11.11	ug/L	100
8) cis-1,2-Dichloroethene	6.059	96	343867	11.25	ug/L	96
9) Chloroform	6.319	83	603374	10.80	ug/L	99
10) Carbon Tetrachloride	6.503	117	467016	11.52	ug/L	99
11) 1,1,1-Trichloroethane	6.567	97	488365	9.98	ug/L	99
12) Benzene	6.931	78	1205025	11.10	ug/L	98
14) 1,2-Dichloroethane	7.130	62	574352	11.01	ug/L	99
15) Trichloroethene	7.505	95	375238	11.65	ug/L	95
16) 1,2-Dichloropropane	8.035	63	378238	11.39	ug/L	98
17) cis-1,3-Dichloropropene	8.703	75	395377	11.89	ug/L	99
20) trans-1,3-Dichloropropene	9.338	75	405510	11.66	ug/L	99
21) Tetrachloroethene	9.338	166	379767	11.34	ug/L	98
22) 1,4-Dichlorobenzene	12.822	146	799292	11.24	ug/L	99
23) 1,2-Dibromo-3-Chloropr...	14.032	75	132892	10.82	ug/L	96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

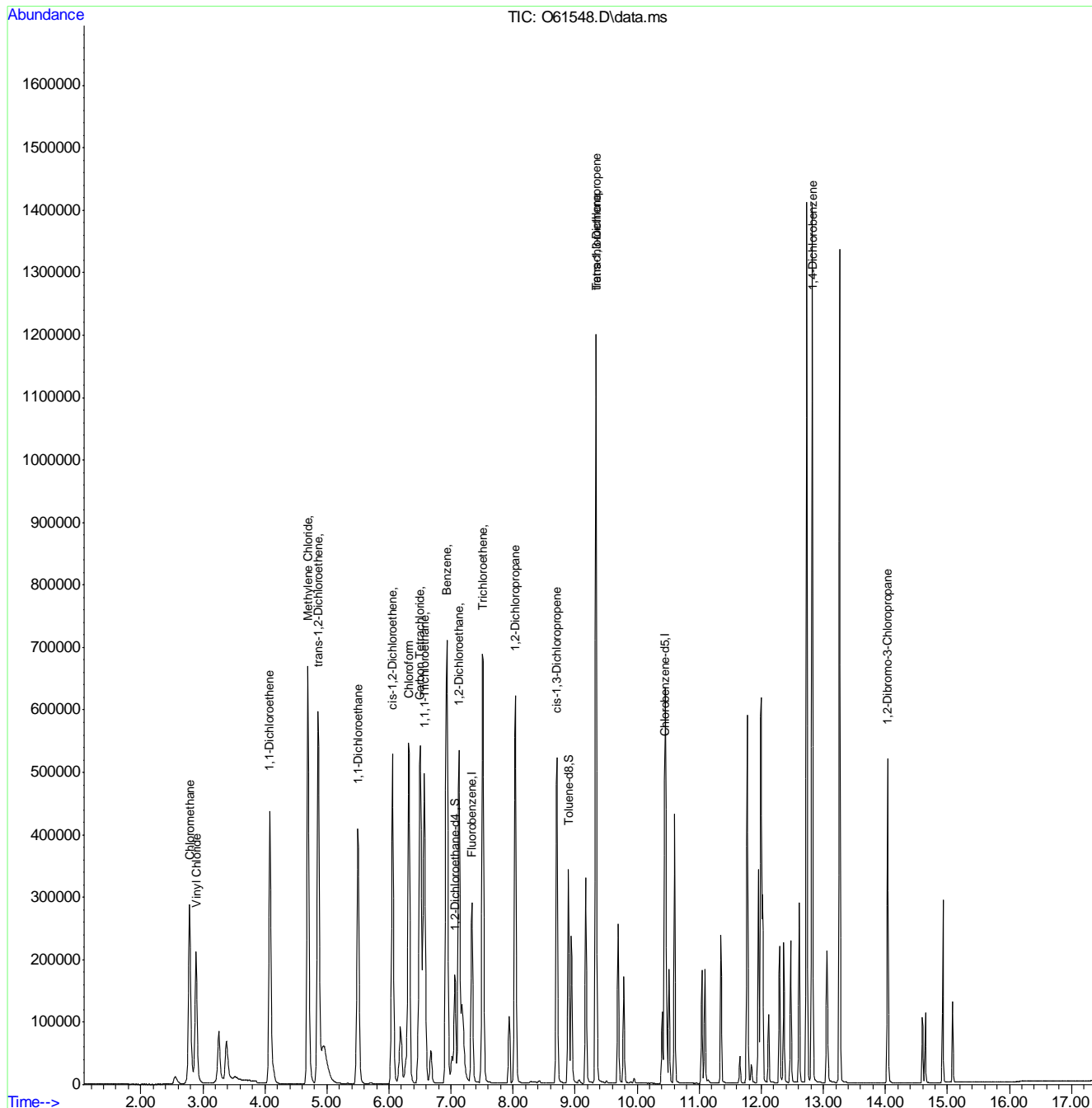
7.6.8
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\100220\
 Data File : O61548.D
 Acq On : 2 Oct 2020 5:23 pm
 Operator : akarig
 Sample : icv2369-5
 Misc : MS47193,VO2369,,,,,
 ALS Vial : 9 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Oct 03 15:33:09 2020
 Quant Method : C:\msdchem\2\methods\SIMCL100220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Sat Oct 03 15:33:07 2020
 Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\100320\
 Data File : O61554.D
 Acq On : 3 Oct 2020 3:58 pm
 Operator : akarig
 Sample : cc2369-5 Inst : MSVOA12
 Misc : MS47193,VO2370,,,,,
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Oct 03 16:39:45 2020
 Quant Method : C:\msdchem\2\methods\SIMCL100220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Sat Oct 03 15:33:07 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
Internal Standards							
1) Fluorobenzene	7.337	96	462144	5.00	ug/L	0.00	
18) Chlorobenzene-d5	10.442	117	405227	5.00	ug/L	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.061	65	178187	4.38	ug/L	0.00	
Spiked Amount	5.000	Range 74 - 125	Recovery	=	87.60%		
19) Toluene-d8	8.892	98	386359	4.91	ug/L	0.00	
Spiked Amount	5.000	Range 88 - 111	Recovery	=	98.20%		
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.893	62	404203	9.54	ug/L		99
3) Chloromethane	2.787	50	566248	8.96	ug/L		100
4) 1,1-Dichloroethene	4.081	61	542157	10.98	ug/L		99
5) Methylene Chloride	4.692	49	833046	8.25	ug/L		98
6) trans-1,2-Dichloroethene	4.858	61	630500	9.76	ug/L		100
7) 1,1-Dichloroethane	5.499	63	729248	10.28	ug/L		100
8) cis-1,2-Dichloroethene	6.052	96	372810	10.68	ug/L		99
9) Chloroform	6.319	83	652836	10.18	ug/L		100
10) Carbon Tetrachloride	6.497	117	504950	10.84	ug/L		99
11) 1,1,1-Trichloroethane	6.567	97	531823	9.53	ug/L		100
12) Benzene	6.931	78	1266163	10.22	ug/L		99
14) 1,2-Dichloroethane	7.130	62	605353	10.09	ug/L		98
15) Trichloroethene	7.505	95	388809	10.51	ug/L		96
16) 1,2-Dichloropropane	8.035	63	400768	10.52	ug/L		98
17) cis-1,3-Dichloropropene	8.703	75	423168	11.21	ug/L		99
20) trans-1,3-Dichloropropene	9.338	75	424666	10.56	ug/L		100
21) Tetrachloroethene	9.332	166	408165	10.44	ug/L		96
22) 1,4-Dichlorobenzene	12.822	146	839839	10.17	ug/L		98
23) 1,2-Dibromo-3-Chloropr...	14.032	75	141864	9.94	ug/L		95

(#) = qualifier out of range (m) = manual integration (+) = signals summed

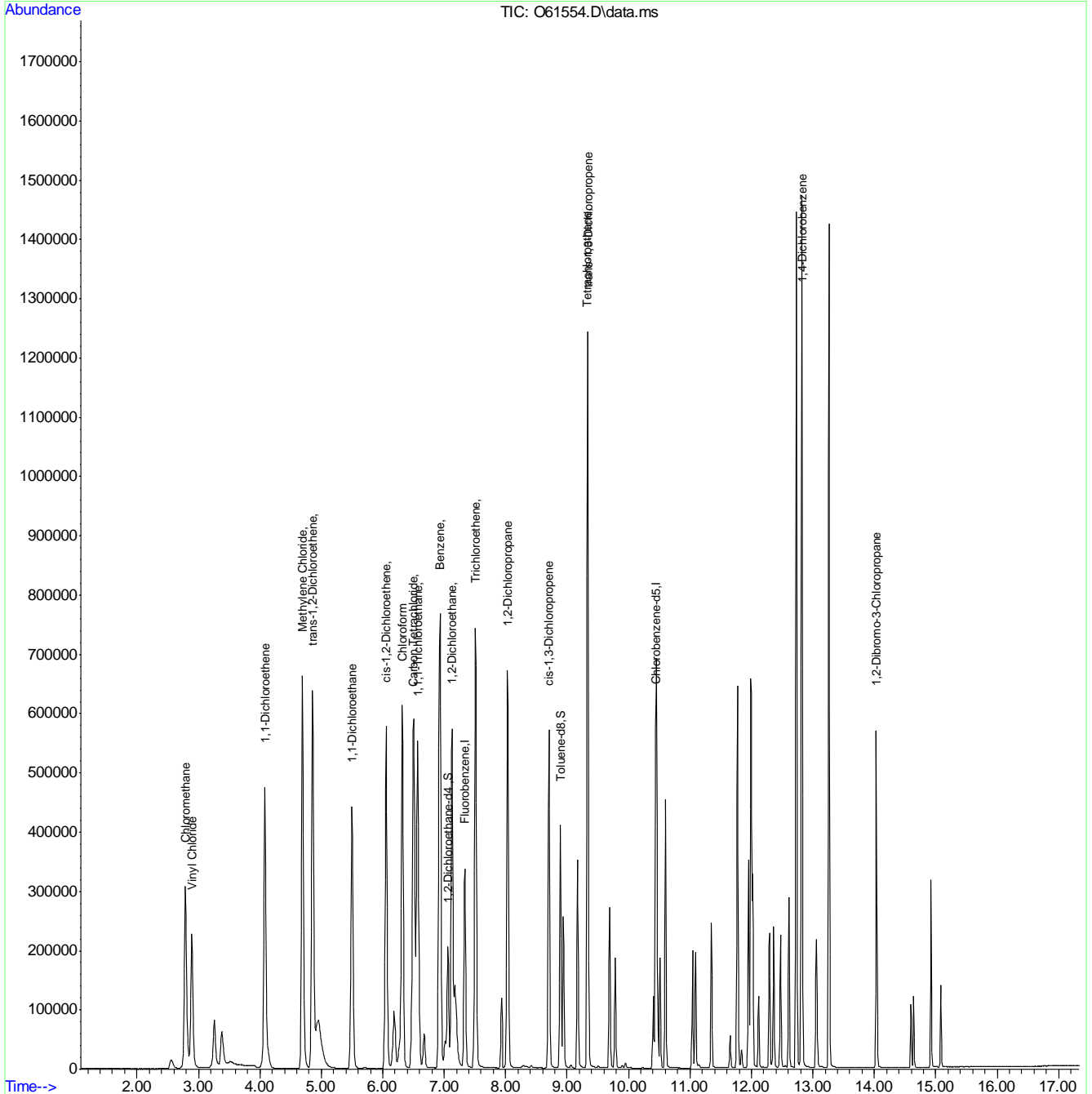
7.69
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\100320\
 Data File : O61554.D
 Acq On : 3 Oct 2020 3:58 pm
 Operator : akarig
 Sample : cc2369-5
 Misc : MS47193,VO2370,,,,,
 ALS Vial : 4 Sample Multiplier: 1

Inst : MSVOA12

Quant Time: Oct 03 16:39:45 2020
 Quant Method : C:\msdchem\2\methods\SIMCL100220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Sat Oct 03 15:33:07 2020
 Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\100320\
 Data File : O61569.D
 Acq On : 3 Oct 2020 10:05 pm
 Operator : AKARIG
 Sample : ECC2369-5 Inst : MSVOA12
 Misc : MS47343,VO2370,,,,,
 ALS Vial : 19 Sample Multiplier: 1

Quant Time: Oct 08 19:44:20 2020
 Quant Method : C:\msdchem\2\methods\SIMCL100220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Sat Oct 03 15:33:07 2020
 Response via : Initial Calibration

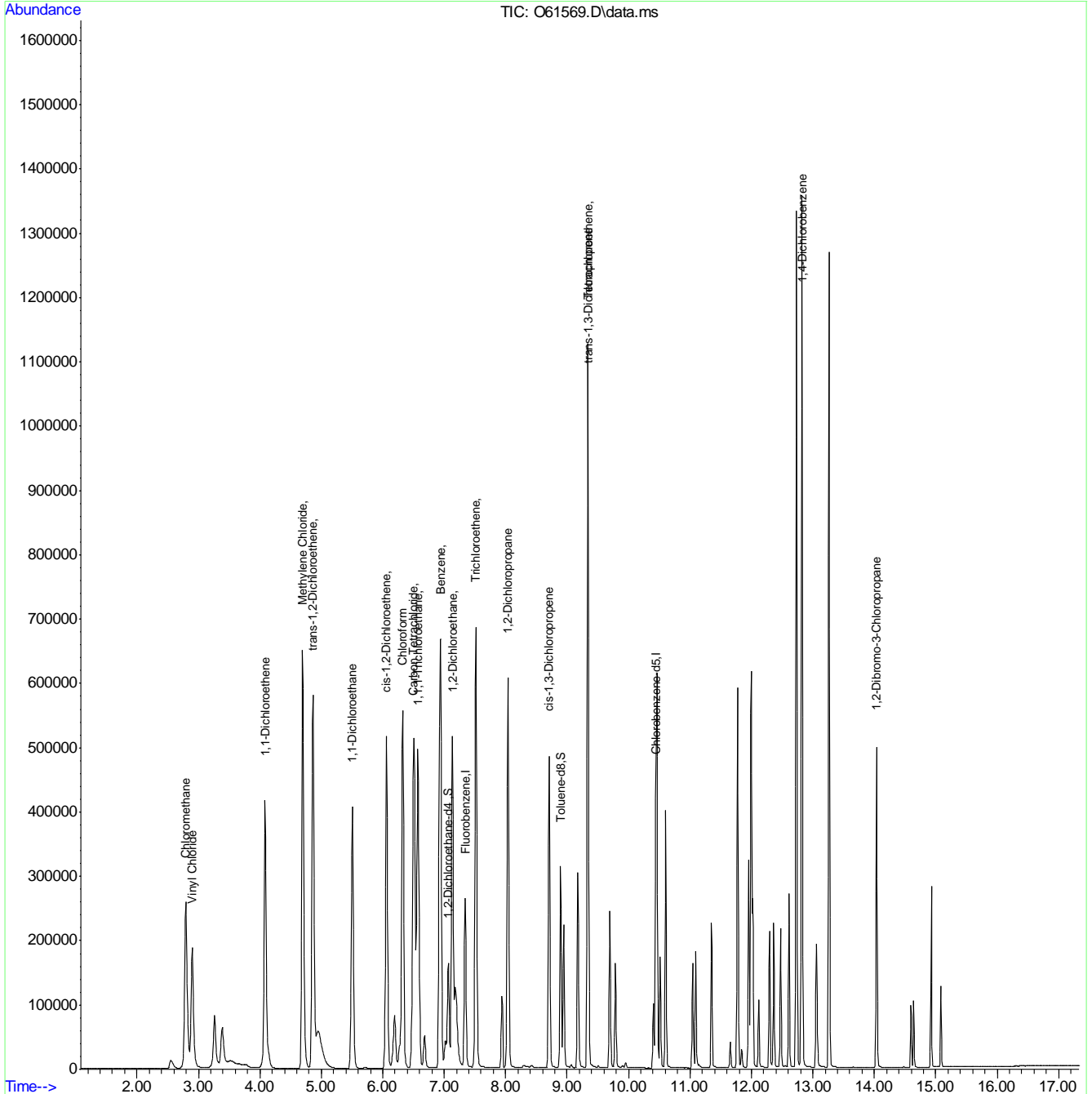
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	7.344	96	373816	5.00	ug/L	0.00
18) Chlorobenzene-d5	10.442	117	322854	5.00	ug/L	0.00
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	7.069	65	145960	4.44	ug/L	0.00
Spiked Amount	5.000	Range 74 - 125	Recovery	=	88.80%	
19) Toluene-d8	8.896	98	301712	4.81	ug/L	0.00
Spiked Amount	5.000	Range 88 - 111	Recovery	=	96.20%	
Target Compounds						
						Qvalue
2) Vinyl Chloride	2.897	62	366461	10.84	ug/L	100
3) Chloromethane	2.795	50	530951	10.62	ug/L	100
4) 1,1-Dichloroethene	4.085	61	471072	11.92	ug/L	100
5) Methylene Chloride	4.696	49	823209	10.58	ug/L	100
6) trans-1,2-Dichloroethene	4.861	61	570846	10.93	ug/L	99
7) 1,1-Dichloroethane	5.502	63	664875	11.76	ug/L	100
8) cis-1,2-Dichloroethene	6.058	96	335257	11.90	ug/L	100
9) Chloroform	6.325	83	601950	11.78	ug/L	100
10) Carbon Tetrachloride	6.503	117	451768	12.16	ug/L	100
11) 1,1,1-Trichloroethane	6.573	97	516420	11.44	ug/L	100
12) Benzene	6.939	78	1142622	11.40	ug/L	100
14) 1,2-Dichloroethane	7.138	62	557016	11.63	ug/L	98
15) Trichloroethene	7.513	95	359596	12.12	ug/L	99
16) 1,2-Dichloropropane	8.039	63	361249	11.82	ug/L	99
17) cis-1,3-Dichloropropene	8.707	75	363713	11.86	ug/L	99
20) trans-1,3-Dichloropropene	9.344	75	371670	11.55	ug/L	100
21) Tetrachloroethene	9.338	166	369699	11.99	ug/L	99
22) 1,4-Dichlorobenzene	12.822	146	771241	11.73	ug/L	100
23) 1,2-Dibromo-3-Chloropr...	14.032	75	126152	11.11	ug/L	96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\100320\
 Data File : O61569.D
 Acq On : 3 Oct 2020 10:05 pm
 Operator : AKARIG
 Sample : ECC2369-5 Inst : MSVOA12
 Misc : MS47343,VO2370,,,,,
 ALS Vial : 19 Sample Multiplier: 1

Quant Time: Oct 08 19:44:20 2020
 Quant Method : C:\msdchem\2\methods\SIMCL100220.M
 Quant Title : Standard Methods 6200B
 QLast Update : Sat Oct 03 15:33:07 2020
 Response via : Initial Calibration



7.6.10
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\100120\
 Data File : Z62655.D
 Acq On : 1 Oct 2020 10:01 am
 Operator : AKARIG
 Sample : ic2431-1
 Misc : MS47304,VZ2431,,,,,
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Oct 01 12:48:22 2020
 Quant Method : C:\msdchem\1\methods\SIMCL100120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Thu Oct 01 12:46:19 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	

Internal Standards							
1) Fluorobenzene	7.401	96	2225777	5.00	ppb	0.00	
18) Chlorobenzene-d5	10.511	117	2039325	5.00	ppb	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.123	65	717461	5.05	ppb	0.00	
Spiked Amount	5.000	Range 79 - 125	Recovery	=	101.00%		
19) Toluene-d8	8.958	98	2310011	5.30	ppb	0.00	
Spiked Amount	5.000	Range 70 - 130	Recovery	=	106.00%		
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.831	62	28258	0.10	ppb		99
3) Chloromethane	2.726	50	30914	0.13	ppb		98
4) 1,1-Dichloroethene	4.080	96	14291	0.09	ppb		96
5) Methylene Chloride	4.709	84	419797	1.36	ppb		99
6) trans-1,2-Dichloroethene	4.883	96	19172	0.09	ppb		96
7) 1,1-Dichloroethane	5.539	63	33176	0.10	ppb	#	99
8) cis-1,2-Dichloroethene	6.104	96	21567	0.10	ppb		98
9) Chloroform	6.371	83	42647	0.10	ppb		99
10) Carbon Tetrachloride	6.543	117	18965	0.08	ppb		99
11) 1,1,1-Trichloroethane	6.614	97	28789	0.09	ppb		91
12) Benzene	6.987	78	73128	0.10	ppb		96
14) 1,2-Dichloroethane	7.191	62	28033	0.10	ppb		98
15) Trichloroethene	7.564	95	20638	0.10	ppb		94
16) 1,2-Dichloropropane	8.101	63	18506m	0.10	ppb		
17) cis-1,3-Dichloropropene	8.773	75	14498	0.10	ppb		93
20) trans-1,3-Dichloropropene	9.412	75	9793	0.11	ppb		97
21) Tetrachloroethene	9.395	166	22239	0.10	ppb		98

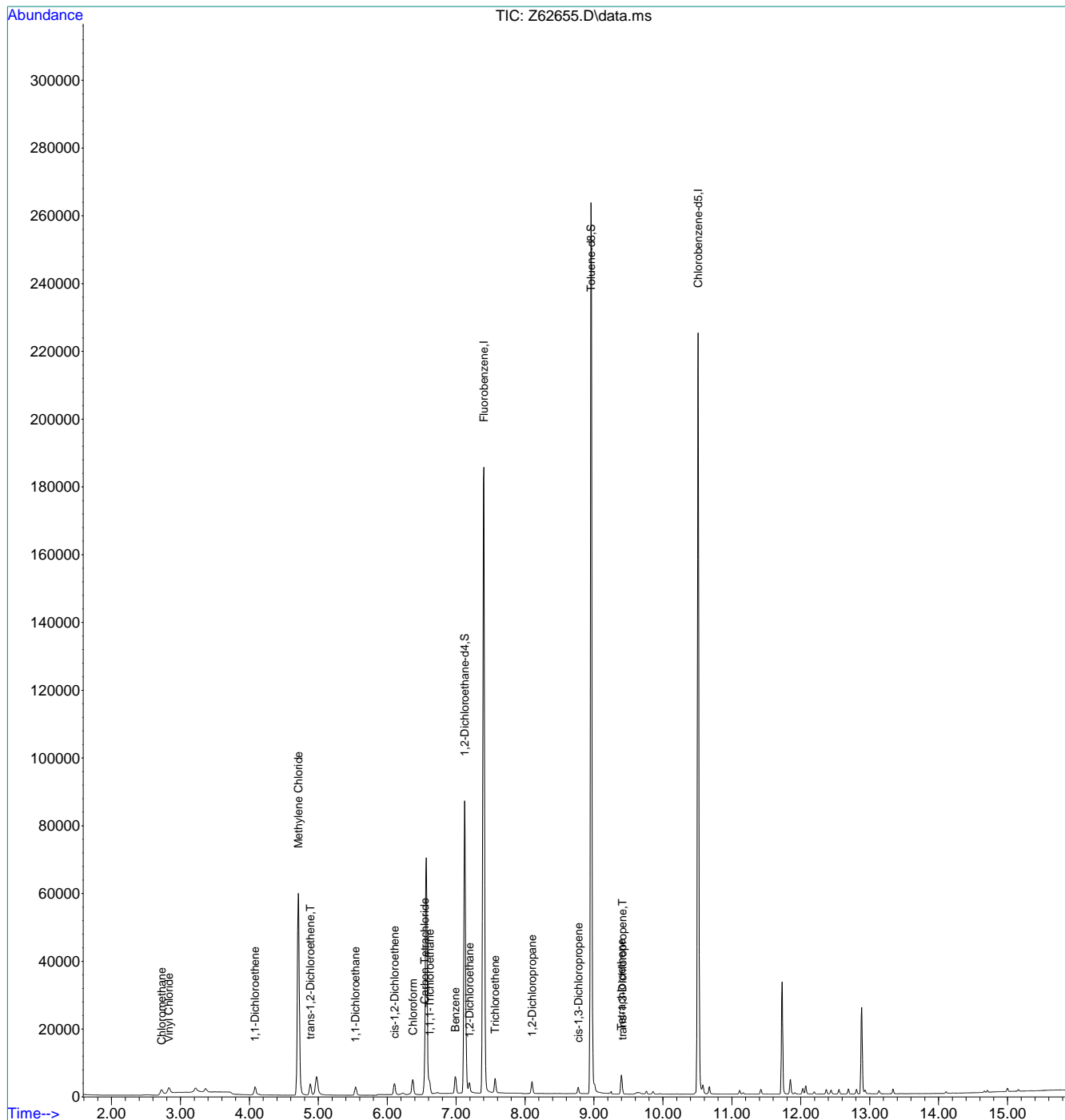
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.6.11
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\100120\
 Data File : Z62655.D
 Acq On : 1 Oct 2020 10:01 am
 Operator : AKARIG
 Sample : ic2431-1
 Misc : MS47304,VZ2431,,,,,
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Oct 01 12:48:22 2020
 Quant Method : C:\msdchem\1\methods\SIMCL100120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Thu Oct 01 12:46:19 2020
 Response via : Initial Calibration



7.6.11
7



Manual Integration Approval Summary

Sample Number: VZ2431-IC2431 **Method:** SW846 8260B BY SIM
Lab FileID: Z62655.D **Analyst approved:** 10/05/20 20:33 Stuti Patel
Injection Time: 10/01/20 10:01 **Supervisor approved:** 10/06/20 11:28 Melissa Mangual

Parameter	CAS	Sig#	R.T. (min.)	Reason
1,2-Dichloropropane	78-87-5		8.10	Poor instrument integration

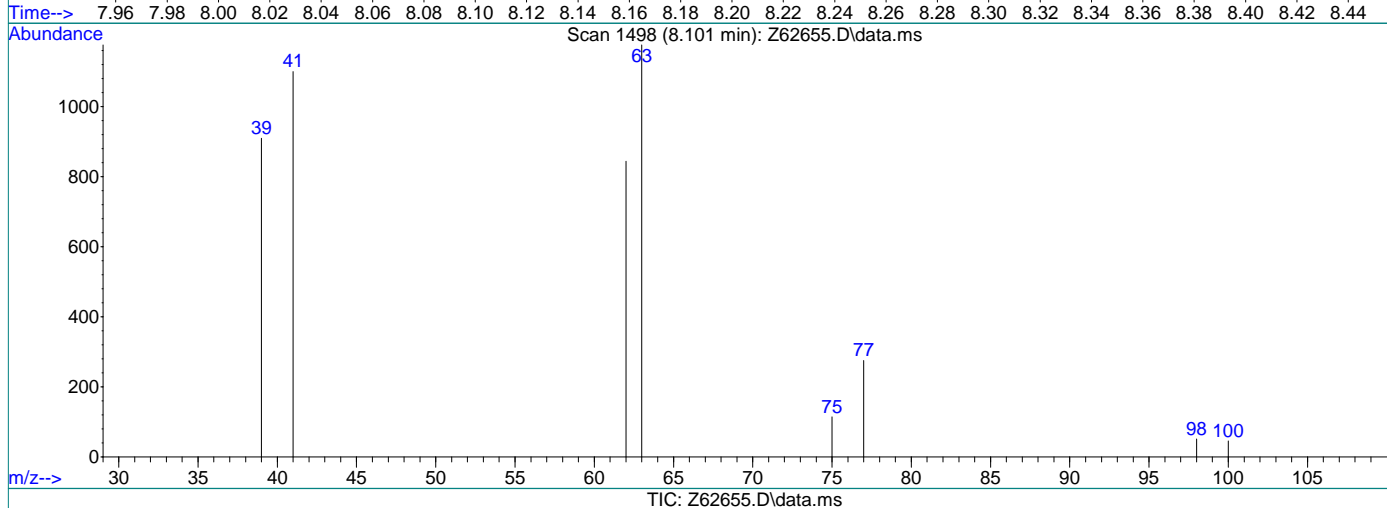
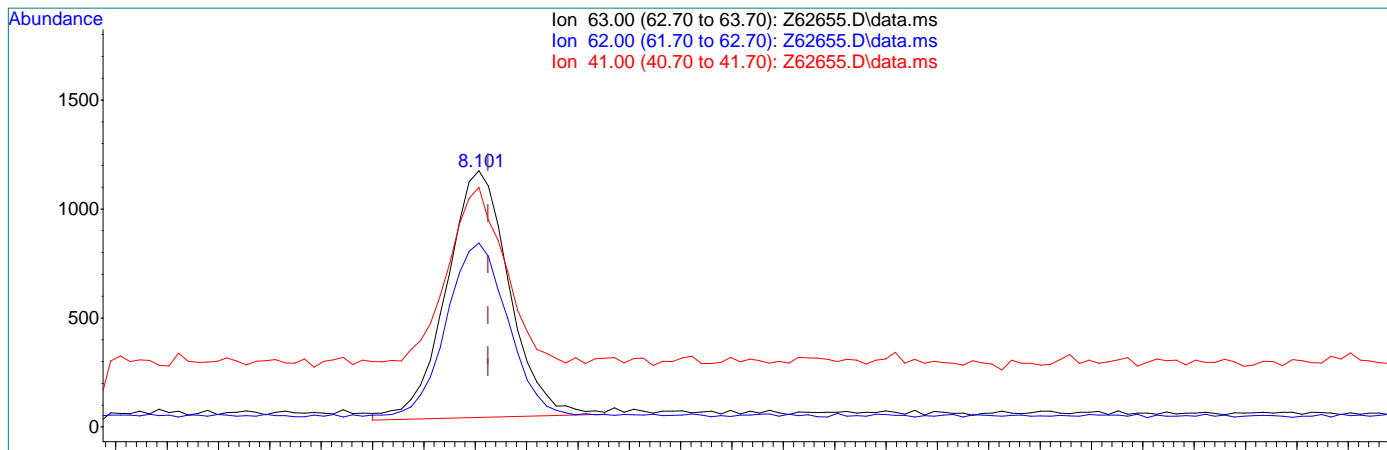
7.6.11.1

7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\100120\
 Data File : Z62655.D
 Acq On : 1 Oct 2020 10:01 am
 Operator : AKARIG
 Sample : ic2431-1
 Misc : MS47304,VZ2431,,,,,
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Oct 01 10:20:38 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Sun Sep 13 13:38:26 2020
 Response via : Initial Calibration



(16) 1,2-Dichloropropane

8.101min (-0.004) 0.12ppb

response 19297

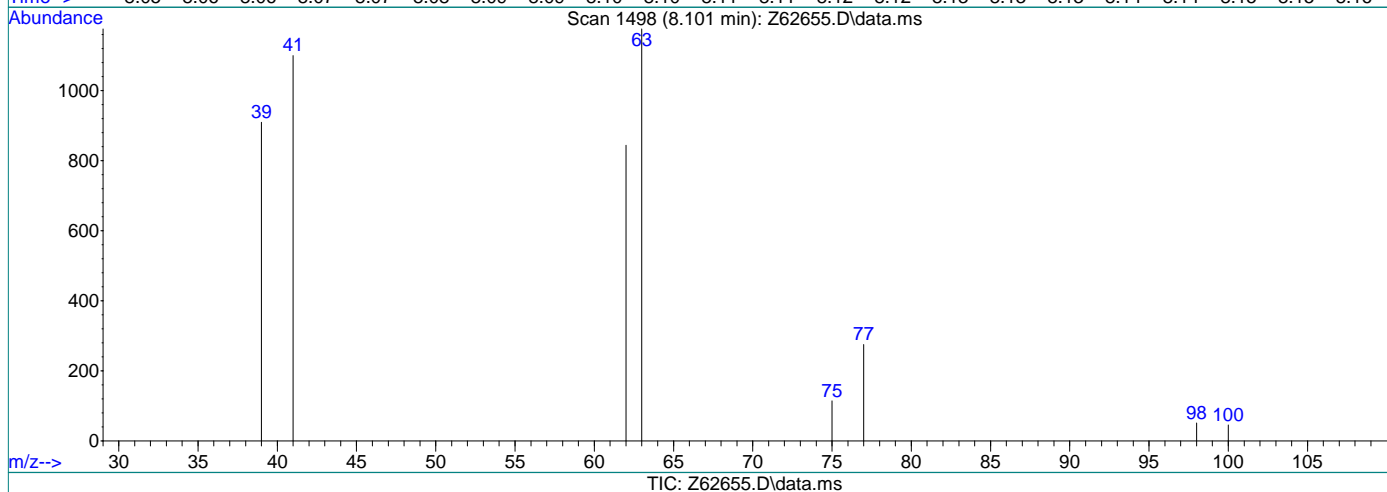
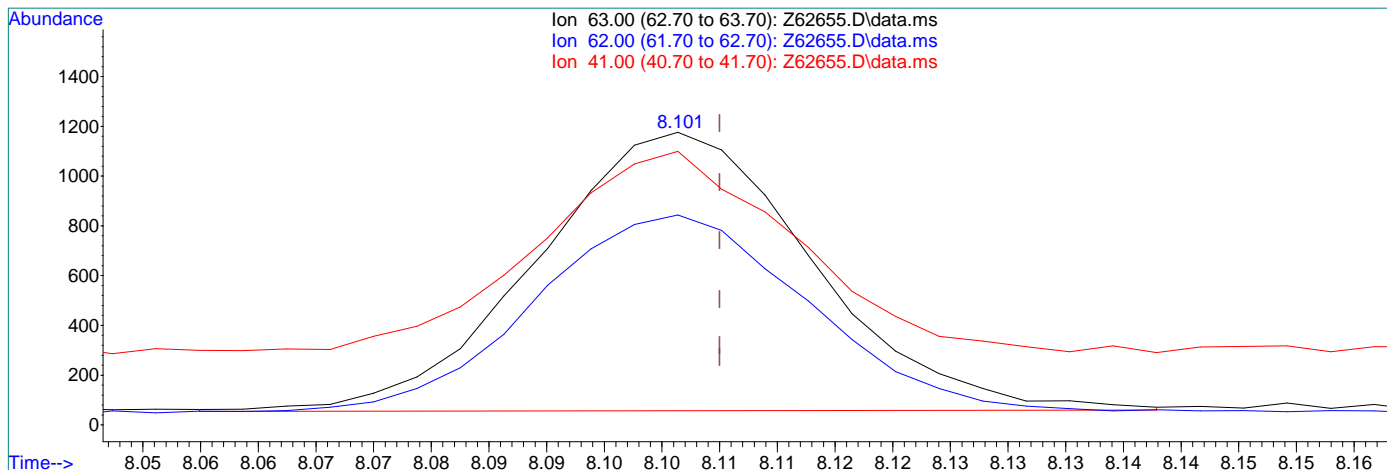
Ion	Exp%	Act%
63.00	100	100
62.00	71.60	69.96
41.00	73.70	63.96
0.00	0.00	0.00

7.6.11.2
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\100120\
 Data File : Z62655.D
 Acq On : 1 Oct 2020 10:01 am
 Operator : AKARIG
 Sample : ic2431-1
 Misc : MS47304,VZ2431,,,,,
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Oct 01 10:20:38 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Sun Sep 13 13:38:26 2020
 Response via : Initial Calibration



(16) 1,2-Dichloropropane
 8.101min (-0.004) 0.12ppb m
 response 18581

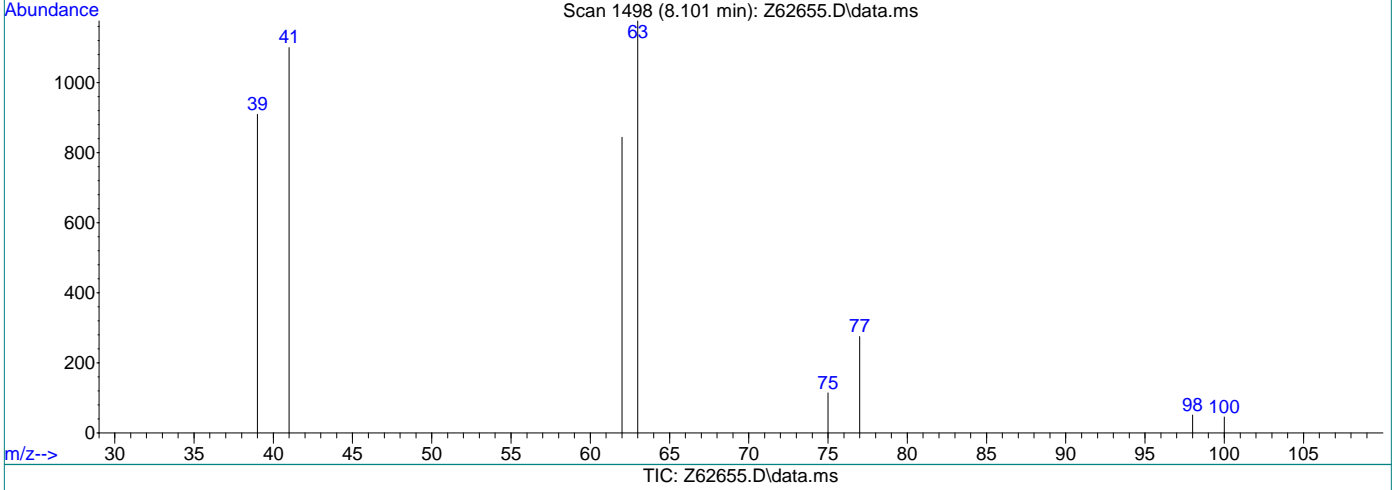
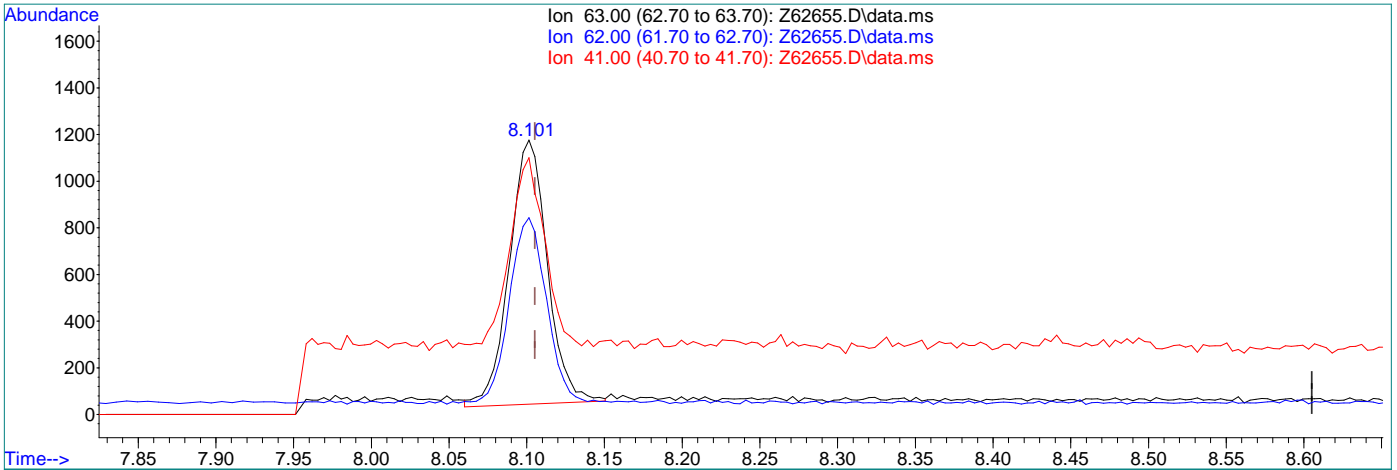
Ion	Exp%	Act%
63.00	100	100
62.00	71.60	72.65
41.00	73.70	66.42
0.00	0.00	0.00

7.6.11.3
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\100120\
 Data File : Z62655.D
 Acq On : 1 Oct 2020 10:01 am
 Operator : AKARIG
 Sample : ic2431-1
 Misc : MS47304,VZ2431,,,,,
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Oct 01 12:47:14 2020
 Quant Method : C:\msdchem\1\methods\SIMCL100120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Thu Oct 01 12:46:19 2020
 Response via : Initial Calibration



(16) 1,2-Dichloropropane

8.101min (-0.004) 0.10ppb

response 19297

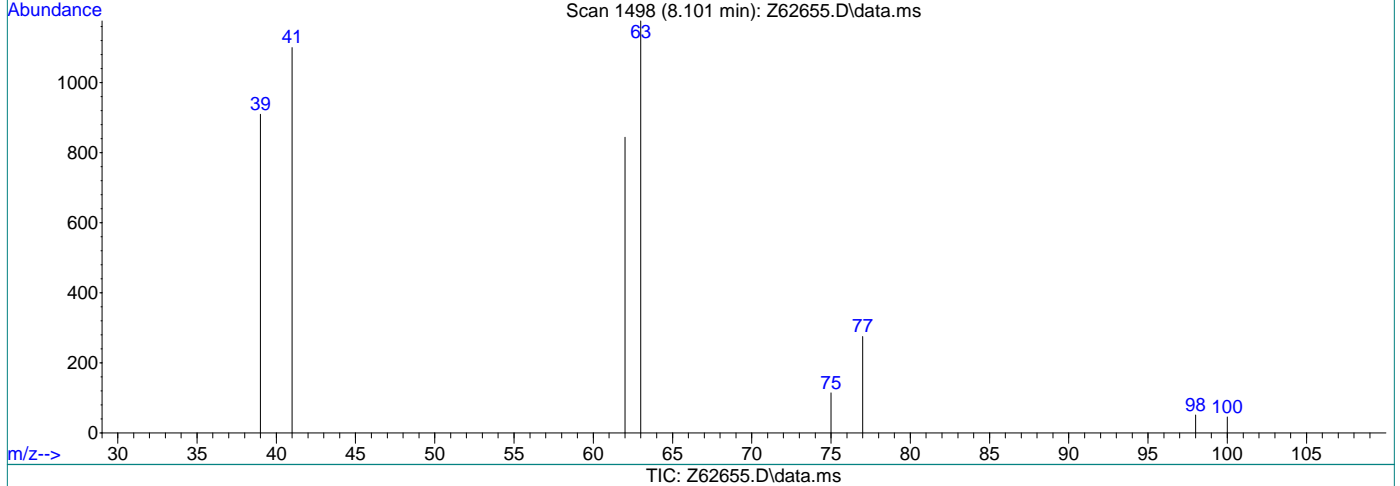
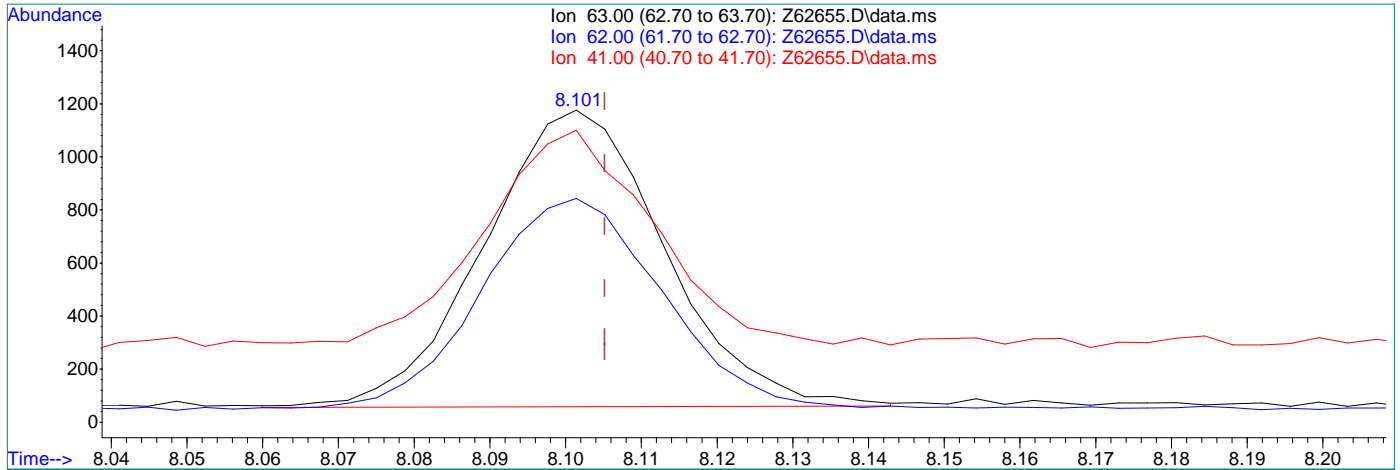
Ion	Exp%	Act%
63.00	100	100
62.00	71.20	69.96
41.00	62.00	63.96
0.00	0.00	0.00

7.6.11.4
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\100120\
 Data File : Z62655.D
 Acq On : 1 Oct 2020 10:01 am
 Operator : AKARIG
 Sample : ic2431-1
 Misc : MS47304,VZ2431,,,,,
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Oct 01 12:47:14 2020
 Quant Method : C:\msdchem\1\methods\SIMCL100120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Thu Oct 01 12:46:19 2020
 Response via : Initial Calibration



(16) 1,2-Dichloropropane
 8.101min (-0.004) 0.10ppb m
 response 18506

Ion	Exp%	Act%
63.00	100	100
62.00	71.20	72.95
41.00	62.00	66.69
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\100120\
 Data File : Z62656.D
 Acq On : 1 Oct 2020 10:20 am
 Operator : AKARIG
 Sample : ic2431-2
 Misc : MS47304,VZ2431,,,,,
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Oct 01 12:47:16 2020
 Quant Method : C:\msdchem\1\methods\SIMCL100120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Thu Oct 01 12:46:19 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	

Internal Standards							
1) Fluorobenzene	7.401	96	2101741	5.00	ppb	0.00	
18) Chlorobenzene-d5	10.511	117	1985926	5.00	ppb	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.130	65	685744	5.11	ppb	0.00	
Spiked Amount	5.000	Range	79 - 125	Recovery	=	102.20%	
19) Toluene-d8	8.961	98	2163549	5.09	ppb	0.00	
Spiked Amount	5.000	Range	70 - 130	Recovery	=	101.80%	
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.831	62	142310	0.54	ppb		99
3) Chloromethane	2.726	50	120495	0.52	ppb		98
4) 1,1-Dichloroethene	4.087	96	78536	0.53	ppb		95
5) Methylene Chloride	4.717	84	433799	1.49	ppb		99
6) trans-1,2-Dichloroethene	4.890	96	97459	0.50	ppb		95
7) 1,1-Dichloroethane	5.546	63	167344	0.51	ppb	#	100
8) cis-1,2-Dichloroethene	6.110	96	104295	0.50	ppb		99
9) Chloroform	6.377	83	196009	0.49	ppb		99
10) Carbon Tetrachloride	6.543	117	102313	0.47	ppb		100
11) 1,1,1-Trichloroethane	6.614	97	156624	0.49	ppb		98
12) Benzene	6.994	78	358957	0.50	ppb		100
14) 1,2-Dichloroethane	7.198	62	125095	0.49	ppb		100
15) Trichloroethene	7.571	95	98886	0.49	ppb		90
16) 1,2-Dichloropropane	8.105	63	84258	0.48	ppb		97
17) cis-1,3-Dichloropropene	8.773	75	51571	0.36	ppb		99
20) trans-1,3-Dichloropropene	9.411	75	30148	0.34	ppb		97
21) Tetrachloroethene	9.399	166	110218	0.51	ppb		97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\100120\
 Data File : Z62657.D
 Acq On : 1 Oct 2020 10:40 am
 Operator : AKARIG
 Sample : ic2431-3
 Misc : MS47304,VZ2431,,,,,
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Oct 01 12:47:18 2020
 Quant Method : C:\msdchem\1\methods\SIMCL100120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Thu Oct 01 12:46:19 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	

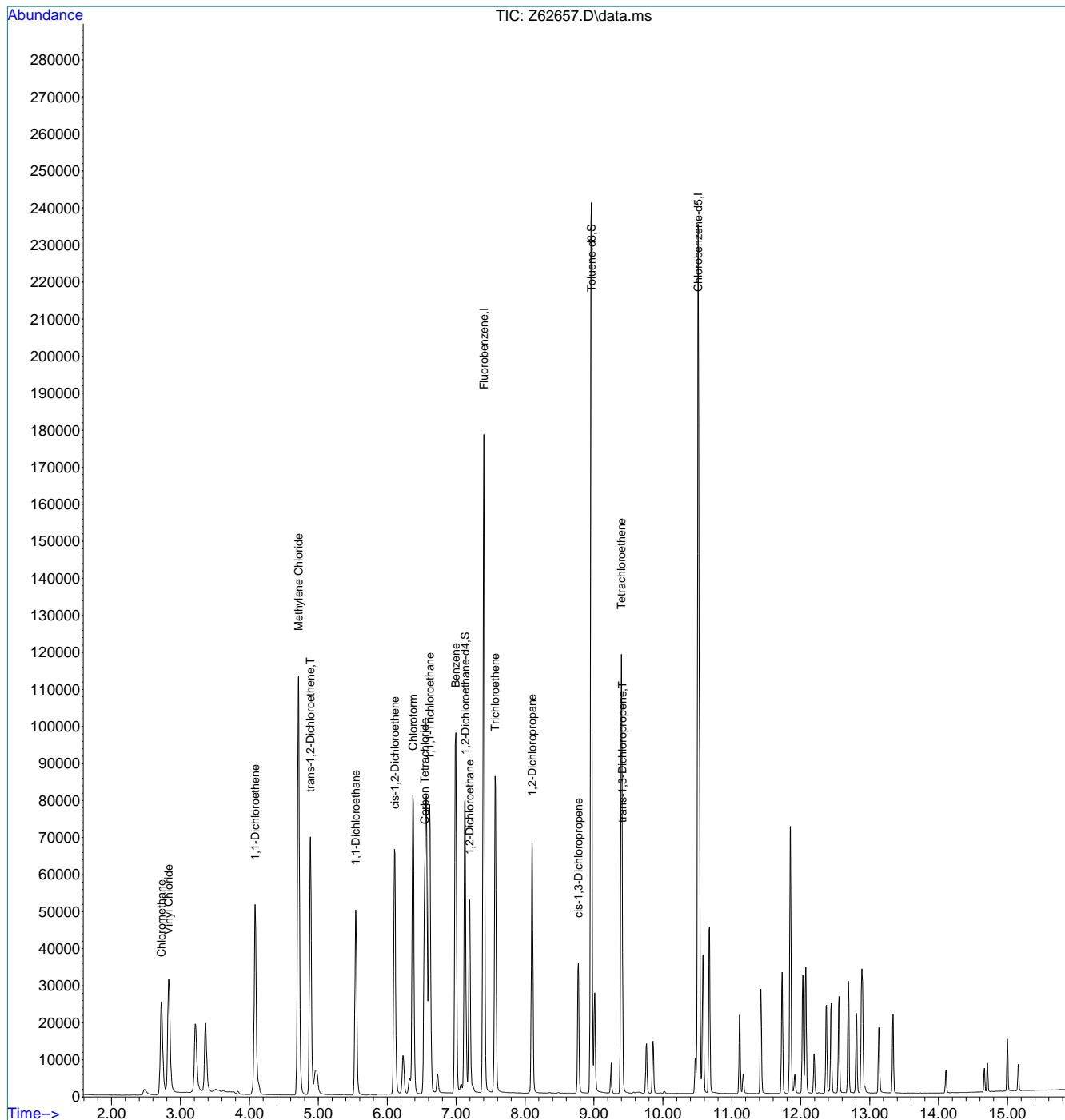
Internal Standards							
1) Fluorobenzene	7.401	96	2042151	5.00	ppb	0.00	
18) Chlorobenzene-d5	10.511	117	1978632	5.00	ppb	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.130	65	663622	5.09	ppb	0.00	
Spiked Amount	5.000	Range	79 - 125	Recovery	=	101.80%	
19) Toluene-d8	8.961	98	2104986	4.97	ppb	0.00	
Spiked Amount	5.000	Range	70 - 130	Recovery	=	99.40%	
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.827	62	531814	2.06	ppb		99
3) Chloromethane	2.722	50	451880	1.99	ppb		99
4) 1,1-Dichloroethene	4.083	96	303296	2.09	ppb		96
5) Methylene Chloride	4.713	84	784758	2.82	ppb		99
6) trans-1,2-Dichloroethene	4.886	96	386589	2.05	ppb		96
7) 1,1-Dichloroethane	5.542	63	664522	2.09	ppb	#	100
8) cis-1,2-Dichloroethene	6.110	96	417168	2.06	ppb		96
9) Chloroform	6.371	83	814265	2.11	ppb		100
10) Carbon Tetrachloride	6.543	117	411272	1.95	ppb		100
11) 1,1,1-Trichloroethane	6.614	97	637448	2.06	ppb		99
12) Benzene	6.994	78	1449199	2.07	ppb		98
14) 1,2-Dichloroethane	7.191	62	531167	2.15	ppb		100
15) Trichloroethene	7.564	95	404995	2.07	ppb		98
16) 1,2-Dichloropropane	8.101	63	361266	2.13	ppb		98
17) cis-1,3-Dichloropropene	8.773	75	282689	1.95	ppb		100
20) trans-1,3-Dichloropropene	9.411	75	188207	1.95	ppb		98
21) Tetrachloroethene	9.399	166	459421	2.13	ppb		98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\100120\
 Data File : Z62657.D
 Acq On : 1 Oct 2020 10:40 am
 Operator : AKARIG
 Sample : ic2431-3
 Misc : MS47304,VZ2431,,,,,
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Oct 01 12:47:18 2020
 Quant Method : C:\msdchem\1\methods\SIMCL100120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Thu Oct 01 12:46:19 2020
 Response via : Initial Calibration



7.6.13
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\100120\
 Data File : Z62658.D
 Acq On : 1 Oct 2020 10:59 am
 Operator : AKARIG
 Sample : ic2431-4
 Misc : MS47304,VZ2431,,,,,
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Oct 01 12:47:20 2020
 Quant Method : C:\msdchem\1\methods\SIMCL100120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Thu Oct 01 12:46:19 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	

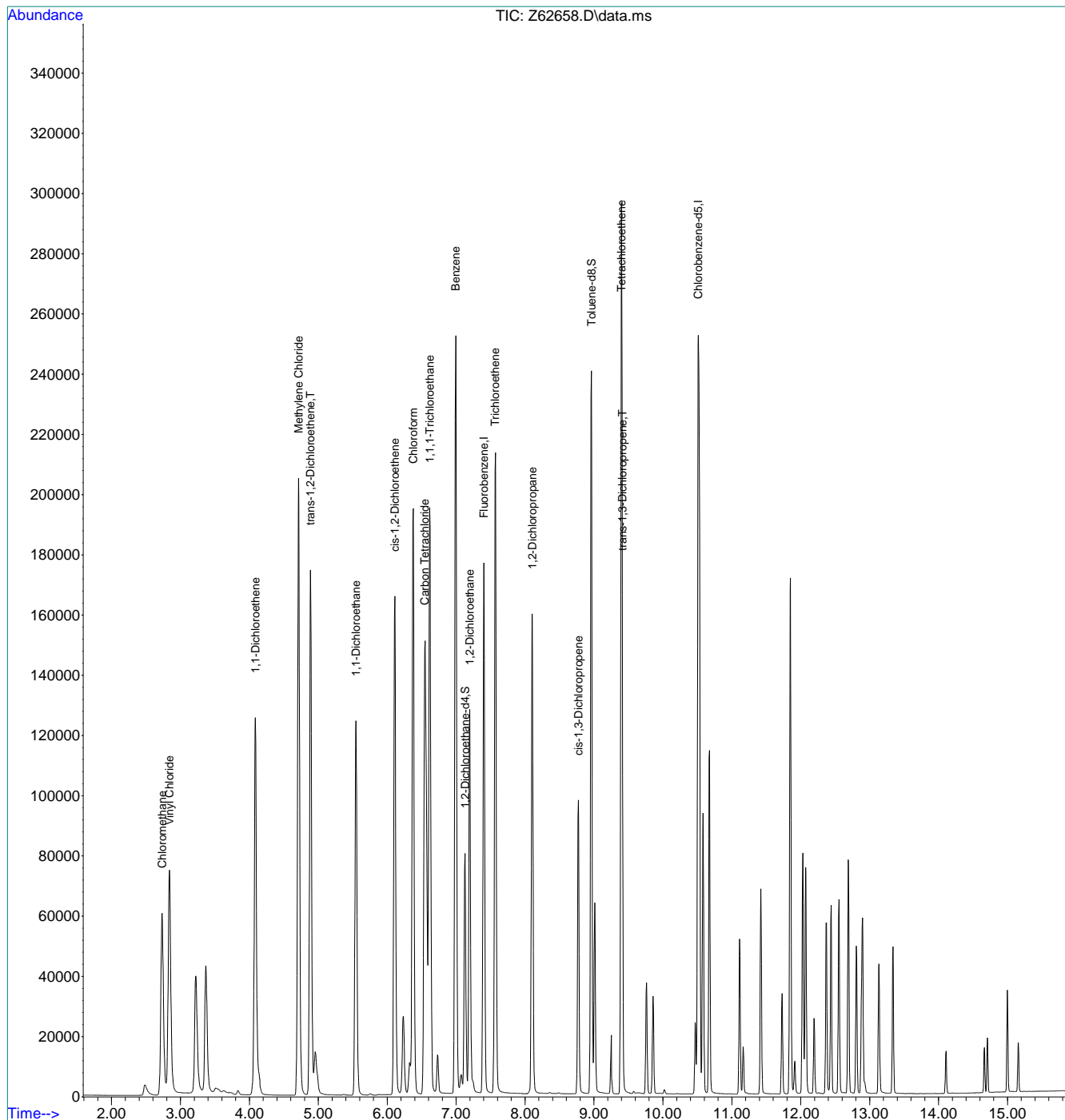
Internal Standards							
1) Fluorobenzene	7.401	96	2046513	5.00	ppb	0.00	
18) Chlorobenzene-d5	10.511	117	2001672	5.00	ppb	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.130	65	661230	5.06	ppb	0.00	
Spiked Amount	5.000	Range	79 - 125	Recovery	=	101.20%	
19) Toluene-d8	8.961	98	2104194	4.91	ppb	0.00	
Spiked Amount	5.000	Range	70 - 130	Recovery	=	98.20%	
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.839	62	1320233	5.10	ppb		99
3) Chloromethane	2.733	50	1125495	4.95	ppb		99
4) 1,1-Dichloroethene	4.087	96	765386	5.26	ppb		96
5) Methylene Chloride	4.713	84	1442310	5.34	ppb		98
6) trans-1,2-Dichloroethene	4.886	96	984446	5.22	ppb		98
7) 1,1-Dichloroethane	5.546	63	1667258	5.22	ppb	#	100
8) cis-1,2-Dichloroethene	6.110	96	1040311	5.12	ppb		98
9) Chloroform	6.377	83	1987474	5.14	ppb		100
10) Carbon Tetrachloride	6.543	117	1113689	5.27	ppb		99
11) 1,1,1-Trichloroethane	6.614	97	1651358	5.33	ppb		100
12) Benzene	6.994	78	3641471	5.19	ppb		99
14) 1,2-Dichloroethane	7.198	62	1267380	5.11	ppb		99
15) Trichloroethene	7.564	95	1010176	5.15	ppb		98
16) 1,2-Dichloropropane	8.105	63	868299	5.11	ppb		99
17) cis-1,3-Dichloropropene	8.773	75	774972	4.98	ppb		100
20) trans-1,3-Dichloropropene	9.411	75	556510	5.01	ppb		99
21) Tetrachloroethene	9.399	166	1119421	5.12	ppb		99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\100120\
 Data File : Z62658.D
 Acq On : 1 Oct 2020 10:59 am
 Operator : AKARIG
 Sample : ic2431-4
 Misc : MS47304,VZ2431,,,,,
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Oct 01 12:47:20 2020
 Quant Method : C:\msdchem\1\methods\SIMCL100120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Thu Oct 01 12:46:19 2020
 Response via : Initial Calibration



7.6.14
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\100120\
 Data File : Z62659.D
 Acq On : 1 Oct 2020 11:18 am
 Operator : AKARIG
 Sample : icc2431-5
 Misc : MS47304,VZ2431,,,,,
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Oct 01 12:47:22 2020
 Quant Method : C:\msdchem\1\methods\SIMCL100120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Thu Oct 01 12:46:19 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	

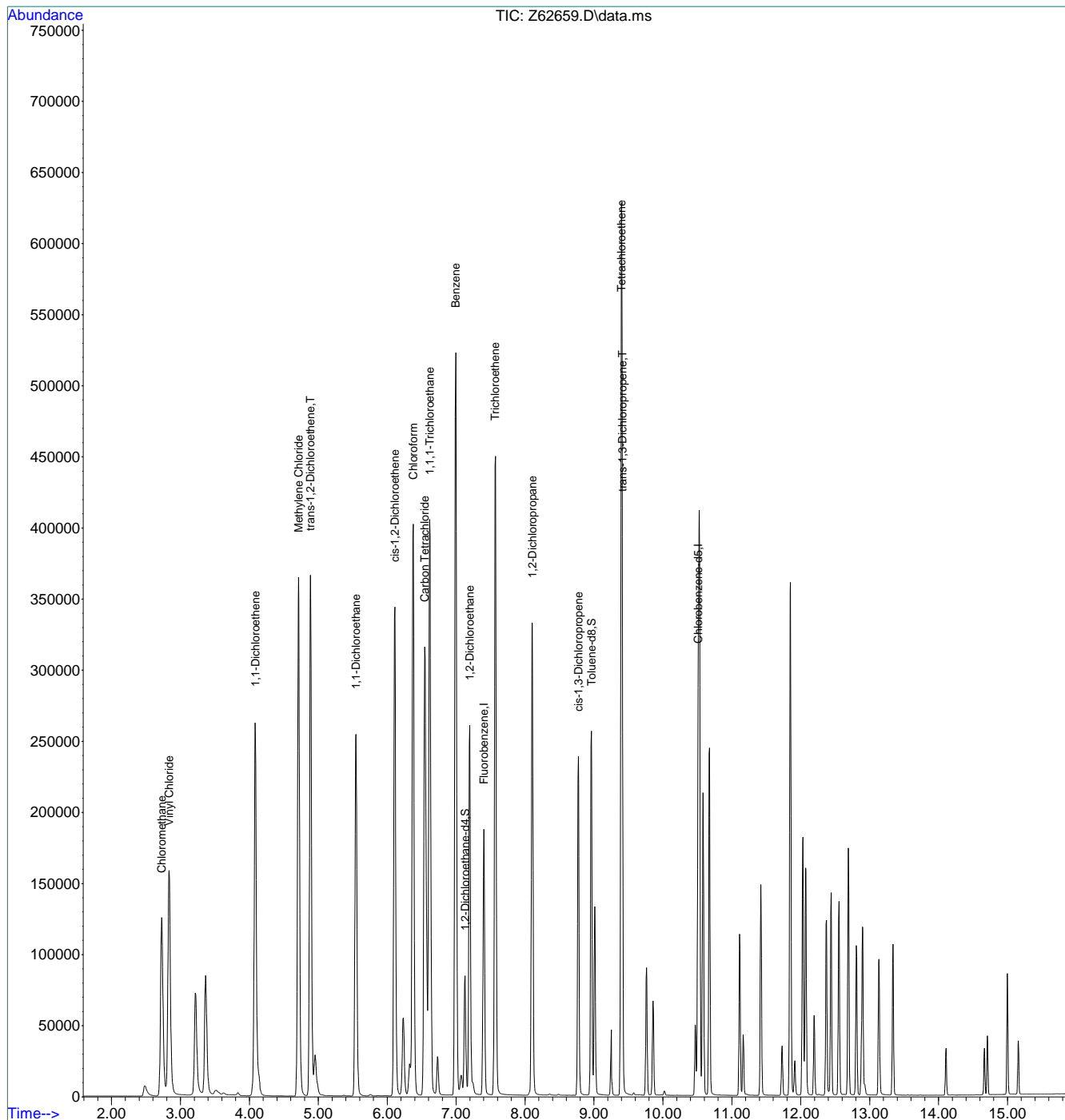
Internal Standards							
1) Fluorobenzene	7.401	96	2158955	5.00	ppb	0.00	
18) Chlorobenzene-d5	10.511	117	2125137	5.00	ppb	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.130	65	685479	4.97	ppb	0.00	
Spiked Amount	5.000	Range	79 - 125	Recovery	=	99.40%	
19) Toluene-d8	8.961	98	2219665	4.88	ppb	0.00	
Spiked Amount	5.000	Range	70 - 130	Recovery	=	97.60%	
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.835	62	2696733	9.88	ppb		100
3) Chloromethane	2.726	50	2245316	9.36	ppb		100
4) 1,1-Dichloroethene	4.087	96	1576428	10.28	ppb		100
5) Methylene Chloride	4.713	84	2548206	9.49	ppb		100
6) trans-1,2-Dichloroethene	4.886	96	2023937	10.18	ppb		100
7) 1,1-Dichloroethane	5.546	63	3398562	10.09	ppb	#	100
8) cis-1,2-Dichloroethene	6.110	96	2159027	10.07	ppb		100
9) Chloroform	6.377	83	4085128	10.01	ppb		100
10) Carbon Tetrachloride	6.543	117	2419359	10.85	ppb		100
11) 1,1,1-Trichloroethane	6.614	97	3463239	10.60	ppb		100
12) Benzene	6.994	78	7563923	10.22	ppb		100
14) 1,2-Dichloroethane	7.198	62	2581621	9.86	ppb		100
15) Trichloroethene	7.564	95	2133162	10.31	ppb		100
16) 1,2-Dichloropropane	8.105	63	1802250	10.04	ppb		100
17) cis-1,3-Dichloropropene	8.773	75	1872456	10.21	ppb		100
20) trans-1,3-Dichloropropene	9.412	75	1445243	10.18	ppb		100
21) Tetrachloroethene	9.399	166	2332783	10.05	ppb		100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\100120\
 Data File : Z62659.D
 Acq On : 1 Oct 2020 11:18 am
 Operator : AKARIG
 Sample : icc2431-5
 Misc : MS47304,VZ2431,,,,,
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Oct 01 12:47:22 2020
 Quant Method : C:\msdchem\1\methods\SIMCL100120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Thu Oct 01 12:46:19 2020
 Response via : Initial Calibration



7.6.15
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\100120\
 Data File : Z62660.D
 Acq On : 1 Oct 2020 11:37 am
 Operator : AKARIG
 Sample : ic2431-6
 Misc : MS47304,VZ2431,,,,,
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Oct 01 12:47:24 2020
 Quant Method : C:\msdchem\1\methods\SIMCL100120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Thu Oct 01 12:46:19 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	

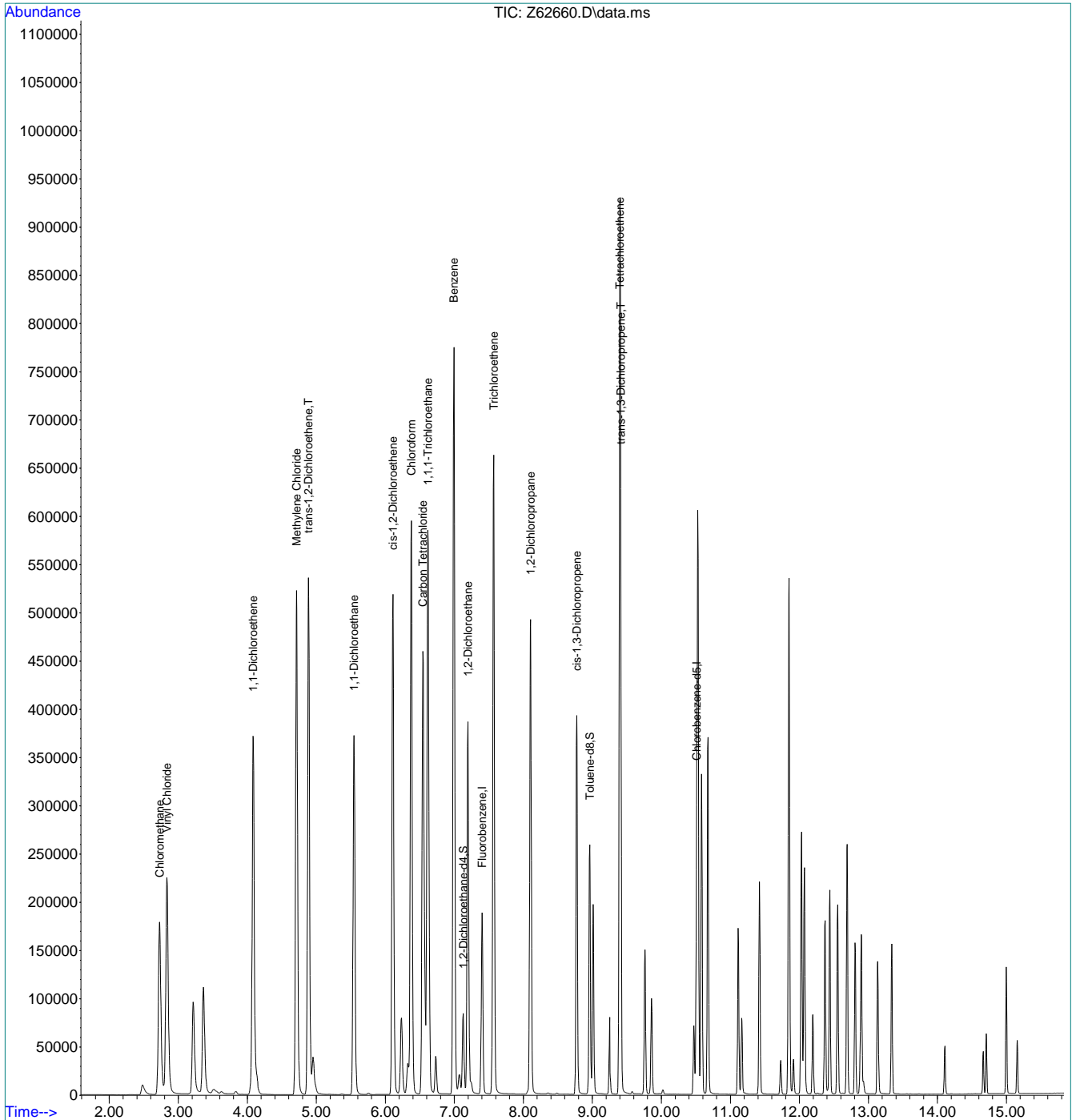
Internal Standards							
1) Fluorobenzene	7.401	96	2170216	5.00	ppb	0.00	
18) Chlorobenzene-d5	10.511	117	2126130	5.00	ppb	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.130	65	677268	4.89	ppb	0.00	
Spiked Amount	5.000	Range	79 - 125	Recovery	=	97.80%	
19) Toluene-d8	8.961	98	2228604	4.90	ppb	0.00	
Spiked Amount	5.000	Range	70 - 130	Recovery	=	98.00%	
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.835	62	3814887	13.90	ppb		99
3) Chloromethane	2.730	50	3218919	13.35	ppb		100
4) 1,1-Dichloroethene	4.083	96	2246292	14.57	ppb		97
5) Methylene Chloride	4.713	84	3637278	14.55	ppb		98
6) trans-1,2-Dichloroethene	4.886	96	2963240	14.82	ppb		98
7) 1,1-Dichloroethane	5.546	63	4947249	14.61	ppb	#	100
8) cis-1,2-Dichloroethene	6.110	96	3198702	14.85	ppb		99
9) Chloroform	6.377	83	5965409	14.55	ppb		100
10) Carbon Tetrachloride	6.543	117	3532615	15.76	ppb		100
11) 1,1,1-Trichloroethane	6.614	97	4989392	15.19	ppb		100
12) Benzene	6.994	78	11028446	14.83	ppb		100
14) 1,2-Dichloroethane	7.198	62	3813831	14.50	ppb		100
15) Trichloroethene	7.571	95	3094019	14.87	ppb		88
16) 1,2-Dichloropropane	8.105	63	2665706	14.78	ppb		100
17) cis-1,3-Dichloropropene	8.773	75	3061311	15.12	ppb		100
20) trans-1,3-Dichloropropene	9.412	75	2476953	15.04	ppb		99
21) Tetrachloroethene	9.399	166	3339747	14.39	ppb		98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\100120\
 Data File : Z62660.D
 Acq On : 1 Oct 2020 11:37 am
 Operator : AKARIG
 Sample : ic2431-6
 Misc : MS47304,VZ2431,,,,,
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Oct 01 12:47:24 2020
 Quant Method : C:\msdchem\1\methods\SIMCL100120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Thu Oct 01 12:46:19 2020
 Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\100120\
 Data File : Z62661.D
 Acq On : 1 Oct 2020 11:59 am
 Operator : AKARIG
 Sample : ic2431-7
 Misc : MS47304,VZ2431,,,,,
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Oct 01 12:51:49 2020
 Quant Method : C:\msdchem\1\methods\SIMCL100120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Thu Oct 01 12:46:19 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	

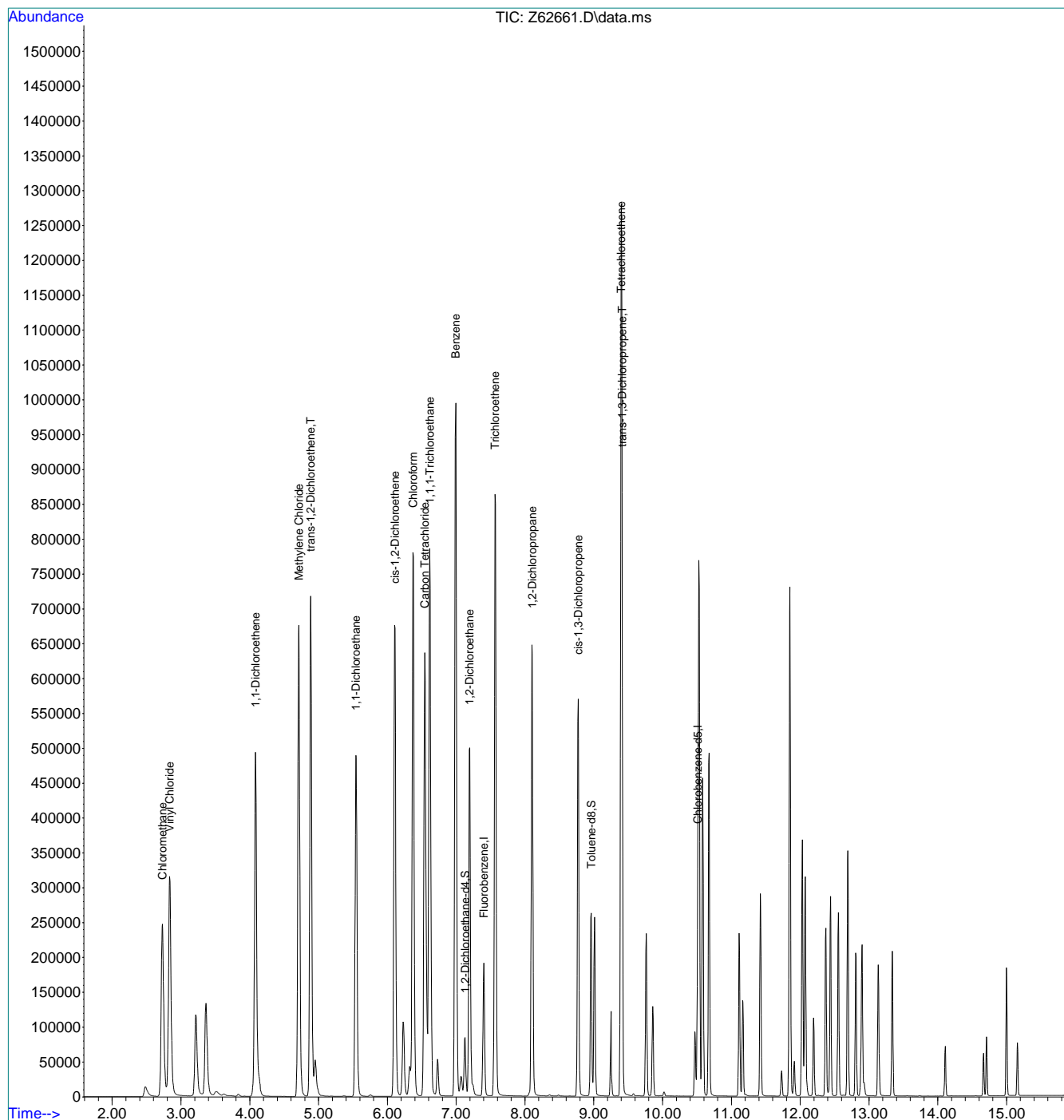
Internal Standards							
1) Fluorobenzene	7.401	96	2215762	5.00	ppb	0.00	
18) Chlorobenzene-d5	10.511	117	2161930m	5.00	ppb	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.130	65	683964	4.83	ppb	0.00	
Spiked Amount	5.000	Range	79 - 125	Recovery	=	96.60%	
19) Toluene-d8	8.961	98	2283038	4.94	ppb	0.00	
Spiked Amount	5.000	Range	70 - 130	Recovery	=	98.80%	
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.835	62	5385695	19.22	ppb		99
3) Chloromethane	2.729	50	4447966	18.07	ppb		100
4) 1,1-Dichloroethene	4.083	96	2987652	18.97	ppb		98
5) Methylene Chloride	4.713	84	4736279	20.47	ppb		99
6) trans-1,2-Dichloroethene	4.886	96	4006380	19.63	ppb		96
7) 1,1-Dichloroethane	5.542	63	6584906	19.05	ppb	#	100
8) cis-1,2-Dichloroethene	6.110	96	4288760	19.50	ppb		97
9) Chloroform	6.371	83	7913114	18.90	ppb		100
10) Carbon Tetrachloride	6.543	117	4885218	21.35	ppb		100
11) 1,1,1-Trichloroethane	6.614	97	6638529	19.80	ppb		99
12) Benzene	6.994	78	14562158	19.18	ppb		99
14) 1,2-Dichloroethane	7.191	62	5006978	18.64	ppb		100
15) Trichloroethene	7.564	95	4097842	19.29	ppb		98
16) 1,2-Dichloropropane	8.105	63	3518506	19.11	ppb		99
17) cis-1,3-Dichloropropene	8.773	75	4456580	19.85	ppb		100
20) trans-1,3-Dichloropropene	9.411	75	3792764	19.91	ppb		99
21) Tetrachloroethene	9.399	166	4402753	18.65	ppb		98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\100120\
 Data File : Z62661.D
 Acq On : 1 Oct 2020 11:59 am
 Operator : AKARIG
 Sample : ic2431-7
 Misc : MS47304,VZ2431,,,,,
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Oct 01 12:51:49 2020
 Quant Method : C:\msdchem\1\methods\SIMCL100120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Thu Oct 01 12:46:19 2020
 Response via : Initial Calibration



7.6.17
7



Manual Integration Approval Summary

Sample Number: VZ2431-IC2431 **Method:** SW846 8260B BY SIM
Lab FileID: Z62661.D **Analyst approved:** 10/05/20 20:33 Stuti Patel
Injection Time: 10/01/20 11:59 **Supervisor approved:** 10/06/20 11:28 Melissa Mangual

Parameter	CAS	Sig#	R.T. (min.)	Reason
Chlorobenzene-D5	3114-55-4		10.51	Poor instrument integration

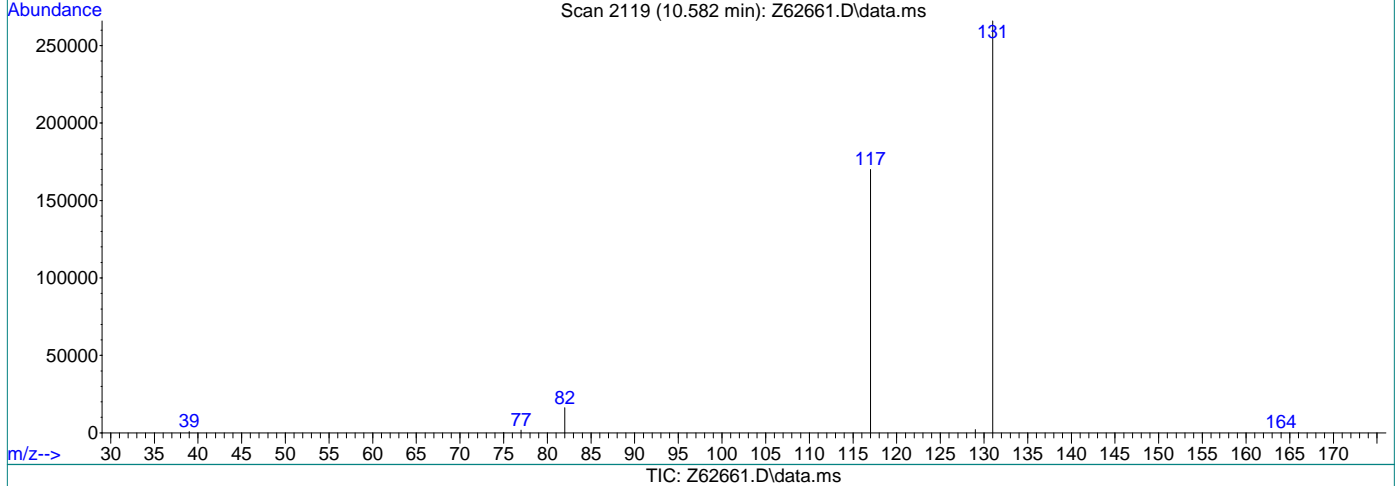
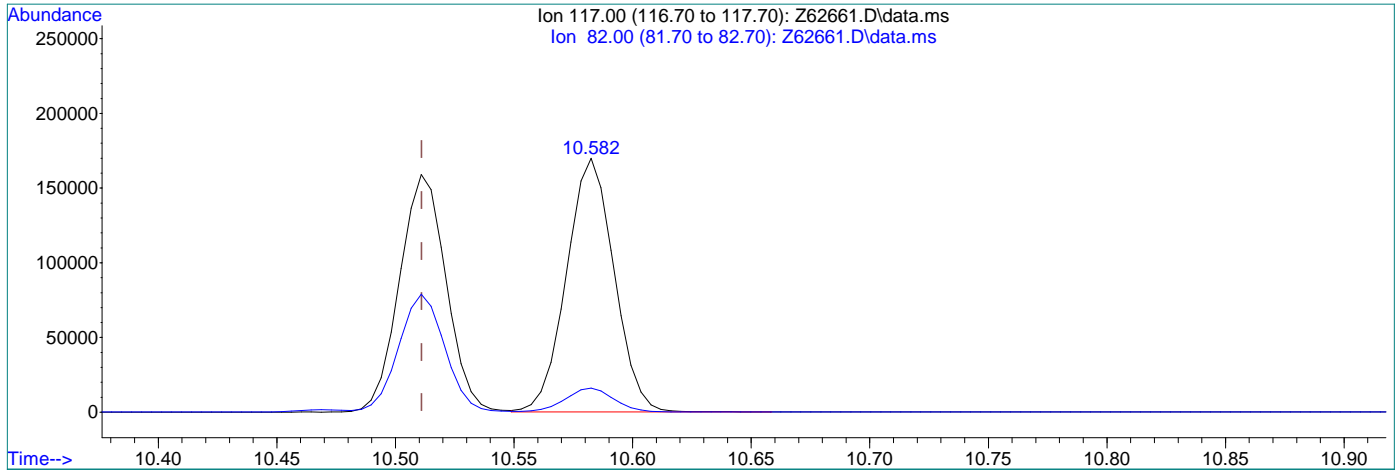
7.6.17.1

7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\100120\
 Data File : Z62661.D
 Acq On : 1 Oct 2020 11:59 am
 Operator : AKARIG
 Sample : ic2431-7
 Misc : MS47304,VZ2431,,,,,
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Oct 01 12:47:26 2020
 Quant Method : C:\msdchem\1\methods\SIMCL100120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Thu Oct 01 12:46:19 2020
 Response via : Initial Calibration



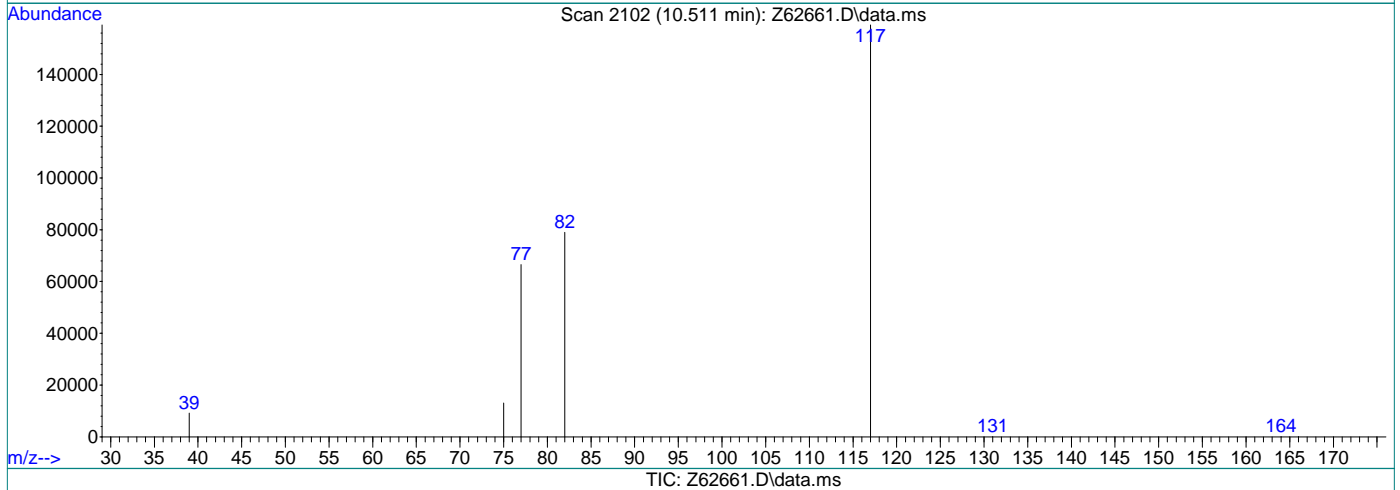
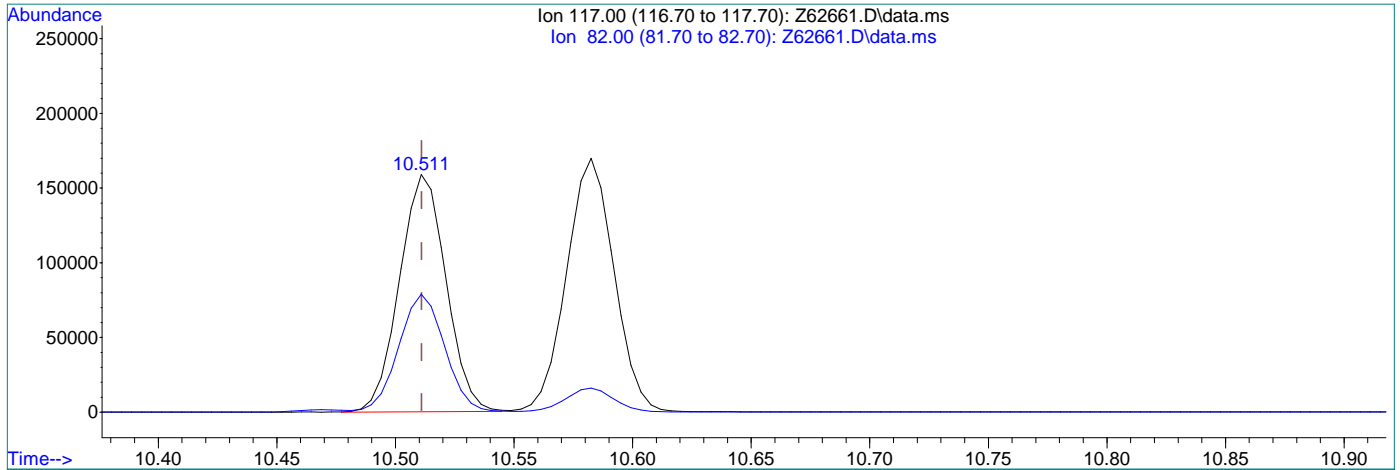
(18) Chlorobenzene-d5 (l)
 10.582min (+0.071) 5.00ppb
 response 2369980

Ion	Exp%	Act%
117.00	100	100
82.00	49.20	9.57#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\100120\
 Data File : Z62661.D
 Acq On : 1 Oct 2020 11:59 am
 Operator : AKARIG
 Sample : ic2431-7
 Misc : MS47304,VZ2431,,,,,
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Oct 01 12:47:26 2020
 Quant Method : C:\msdchem\1\methods\SIMCL100120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Thu Oct 01 12:46:19 2020
 Response via : Initial Calibration



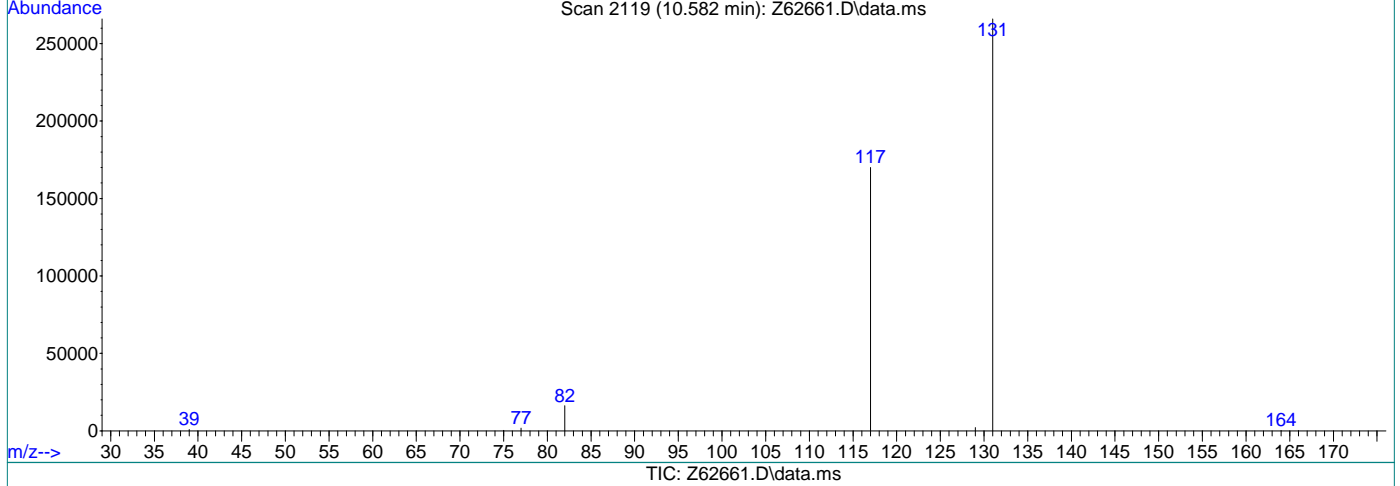
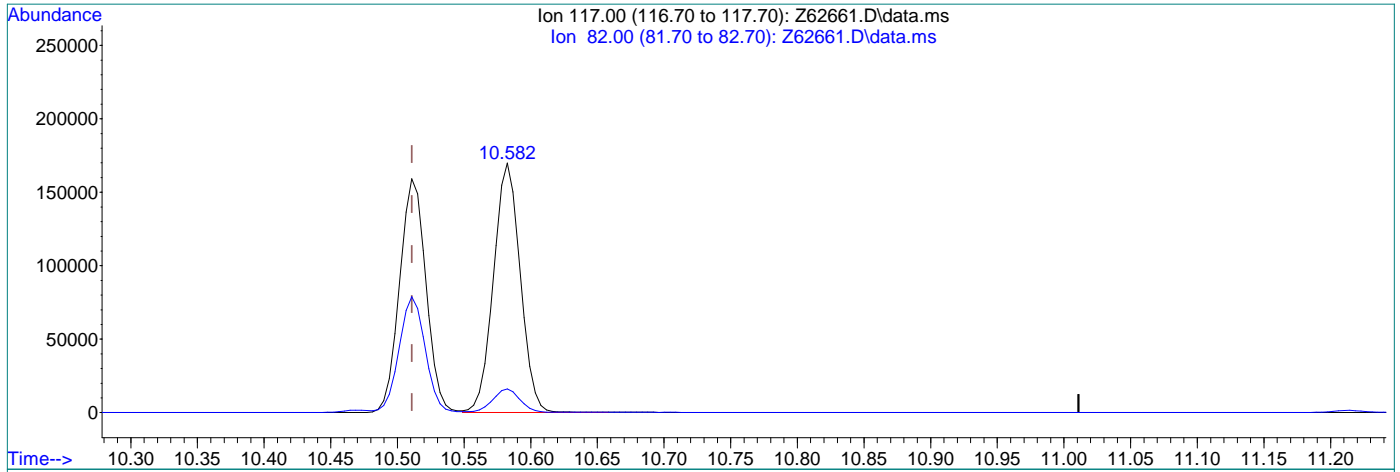
(18) Chlorobenzene-d5 (l)
 10.511min (-0.000) 5.00ppb m
 response 2161930

Ion	Exp%	Act%
117.00	100	100
82.00	49.20	10.50#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\100120\
 Data File : Z62661.D
 Acq On : 1 Oct 2020 11:59 am
 Operator : AKARIG
 Sample : ic2431-7
 Misc : MS47304,VZ2431,,,,,
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Oct 01 12:25:00 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Sun Sep 13 13:38:26 2020
 Response via : Initial Calibration



(18) Chlorobenzene-d5 (l)
 10.582min (+0.071) 5.00ppb
 response 2369980

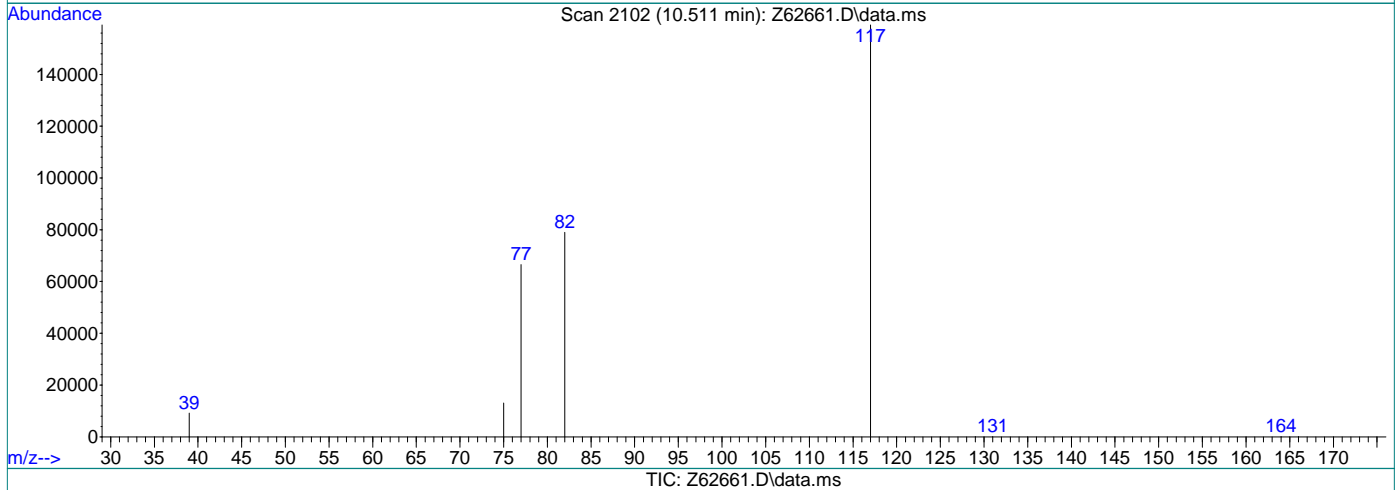
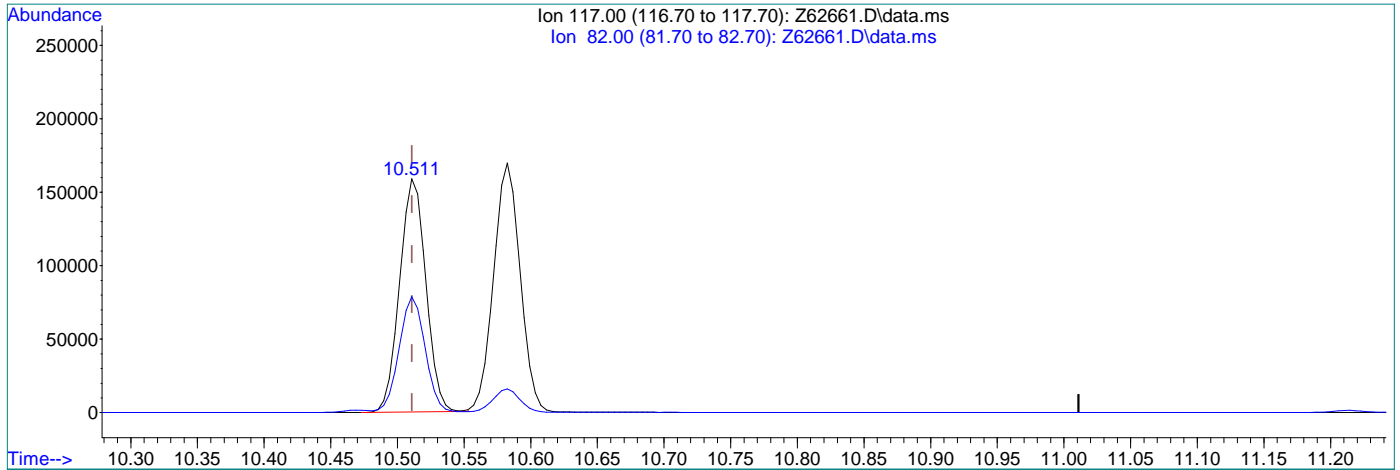
Ion	Exp%	Act%
117.00	100	100
82.00	56.00	9.57#
0.00	0.00	0.00
0.00	0.00	0.00

7.6.17.4
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\100120\
 Data File : Z62661.D
 Acq On : 1 Oct 2020 11:59 am
 Operator : AKARIG
 Sample : ic2431-7
 Misc : MS47304,VZ2431,,,,,
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Oct 01 12:25:00 2020
 Quant Method : C:\msdchem\1\methods\SIMCL091120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Sun Sep 13 13:38:26 2020
 Response via : Initial Calibration



(18) Chlorobenzene-d5 (l)
 10.511min (-0.000) 5.00ppb m
 response 2160627

Ion	Exp%	Act%
117.00	100	100
82.00	56.00	10.50#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\100120\
 Data File : Z62663.D
 Acq On : 1 Oct 2020 1:17 pm
 Operator : AKARIG
 Sample : icv2431-5
 Misc : MS47304,VZ2431,,,,,
 ALS Vial : 11 Sample Multiplier: 1

Quant Time: Oct 03 15:37:48 2020
 Quant Method : C:\msdchem\1\methods\SIMCL100120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Sat Oct 03 15:37:45 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	

Internal Standards							
1) Fluorobenzene	7.401	96	1999509	5.00	ppb	0.00	
18) Chlorobenzene-d5	10.511	117	1983678	5.00	ppb	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.123	65	630939	4.94	ppb	0.00	
Spiked Amount	5.000	Range 79 - 125	Recovery	=	98.80%		
19) Toluene-d8	8.958	98	2053030	4.84	ppb	0.00	
Spiked Amount	5.000	Range 70 - 130	Recovery	=	96.80%		
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.828	62	2552566	10.09	ppb		99
3) Chloromethane	2.722	50	2032474	9.15	ppb		100
4) 1,1-Dichloroethene	4.083	96	1598920	11.25	ppb		98
5) Methylene Chloride	4.709	84	2785871	11.55	ppb		99
6) trans-1,2-Dichloroethene	4.883	96	2075149	11.16	ppb		97
7) 1,1-Dichloroethane	5.539	63	3437975	11.02	ppb	#	100
8) cis-1,2-Dichloroethene	6.104	96	2166050	10.91	ppb		98
9) Chloroform	6.371	83	4002979	10.59	ppb		100
10) Carbon Tetrachloride	6.543	117	2632344	12.00	ppb		99
11) 1,1,1-Trichloroethane	6.614	97	3451194	11.41	ppb		99
12) Benzene	6.987	78	7653429	11.17	ppb		98
14) 1,2-Dichloroethane	7.191	62	2546884	10.51	ppb		100
15) Trichloroethene	7.564	95	2128170	11.10	ppb		93
16) 1,2-Dichloropropane	8.101	63	1812609	10.91	ppb		100
17) cis-1,3-Dichloropropene	8.773	75	2254840	11.77	ppb		100
20) trans-1,3-Dichloropropene	9.407	75	1974805	13.46	ppb		98
21) Tetrachloroethene	9.399	166	2290465	10.58	ppb		99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

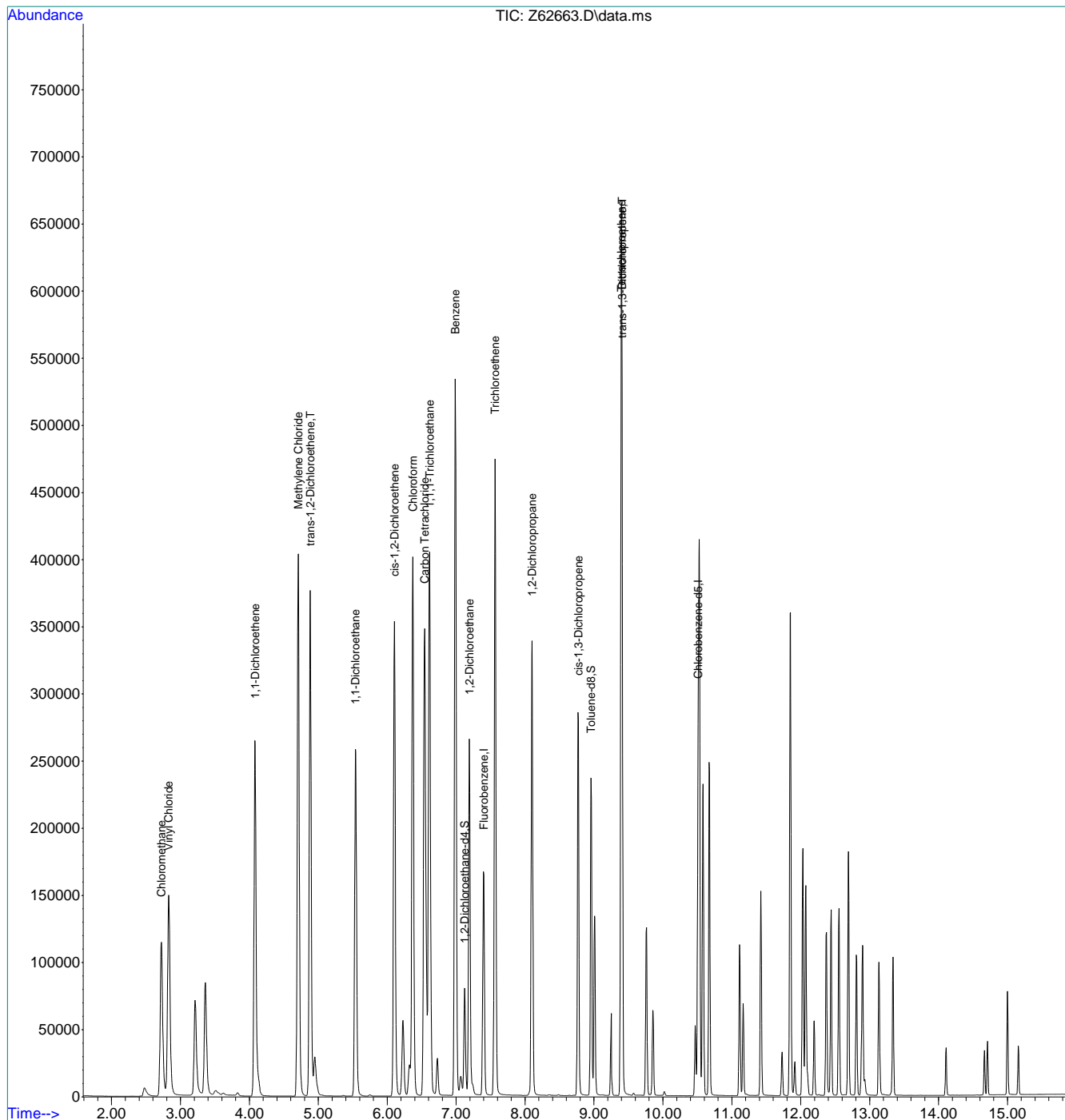
7.6.18
7



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\100120\
 Data File : Z62663.D
 Acq On : 1 Oct 2020 1:17 pm
 Operator : AKARIG
 Sample : icv2431-5
 Misc : MS47304,VZ2431,,,,,
 ALS Vial : 11 Sample Multiplier: 1

Quant Time: Oct 03 15:37:48 2020
 Quant Method : C:\msdchem\1\methods\SIMCL100120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Sat Oct 03 15:37:45 2020
 Response via : Initial Calibration



7.6.18
7



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\edessas\10-08-2020\VZ2433\
 Data File : Z62696.d
 Acq On : 7 Oct 2020 1:04 pm
 Operator : AKARIG
 Sample : cc2431-5
 Misc : MS47304,VZ2433,,,,,
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Oct 07 20:46:09 2020
 Quant Method : C:\msdchem\1\methods\SIMCL100120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Sat Oct 03 15:38:22 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	

Internal Standards							
1) Fluorobenzene	7.401	96	2888637	5.00	ppb	0.00	
18) Chlorobenzene-d5	10.511	117	2414515	5.00	ppb	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.123	65	895799	4.86	ppb	0.00	
Spiked Amount	5.000	Range 79 - 125	Recovery	=	97.20%		
19) Toluene-d8	8.957	98	2652047	5.14	ppb	0.00	
Spiked Amount	5.000	Range 70 - 130	Recovery	=	102.80%		
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.839	62	3086416	8.45	ppb		100
3) Chloromethane	2.733	50	2750976	8.57	ppb		99
4) 1,1-Dichloroethene	4.083	96	1911742	9.31	ppb		100
5) Methylene Chloride	4.709	84	3103631	8.52	ppb		99
6) trans-1,2-Dichloroethene	4.883	96	2534781	9.38	ppb		96
7) 1,1-Dichloroethane	5.542	63	4253038	9.44	ppb	#	100
8) cis-1,2-Dichloroethene	6.104	96	2666416	9.30	ppb		97
9) Chloroform	6.371	83	5077761	9.30	ppb		100
10) Carbon Tetrachloride	6.543	117	3171374	10.01	ppb		100
11) 1,1,1-Trichloroethane	6.614	97	4291017	9.82	ppb		100
12) Benzene	6.987	78	9317969	9.41	ppb		98
14) 1,2-Dichloroethane	7.191	62	3179104	9.08	ppb		99
15) Trichloroethene	7.564	95	2611327	9.43	ppb		94
16) 1,2-Dichloropropane	8.101	63	2177405	9.08	ppb		100
17) cis-1,3-Dichloropropene	8.773	75	2686556	9.71	ppb		100
20) trans-1,3-Dichloropropene	9.407	75	2372829	13.28	ppb		97
21) Tetrachloroethene	9.399	166	2833252	10.75	ppb		99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

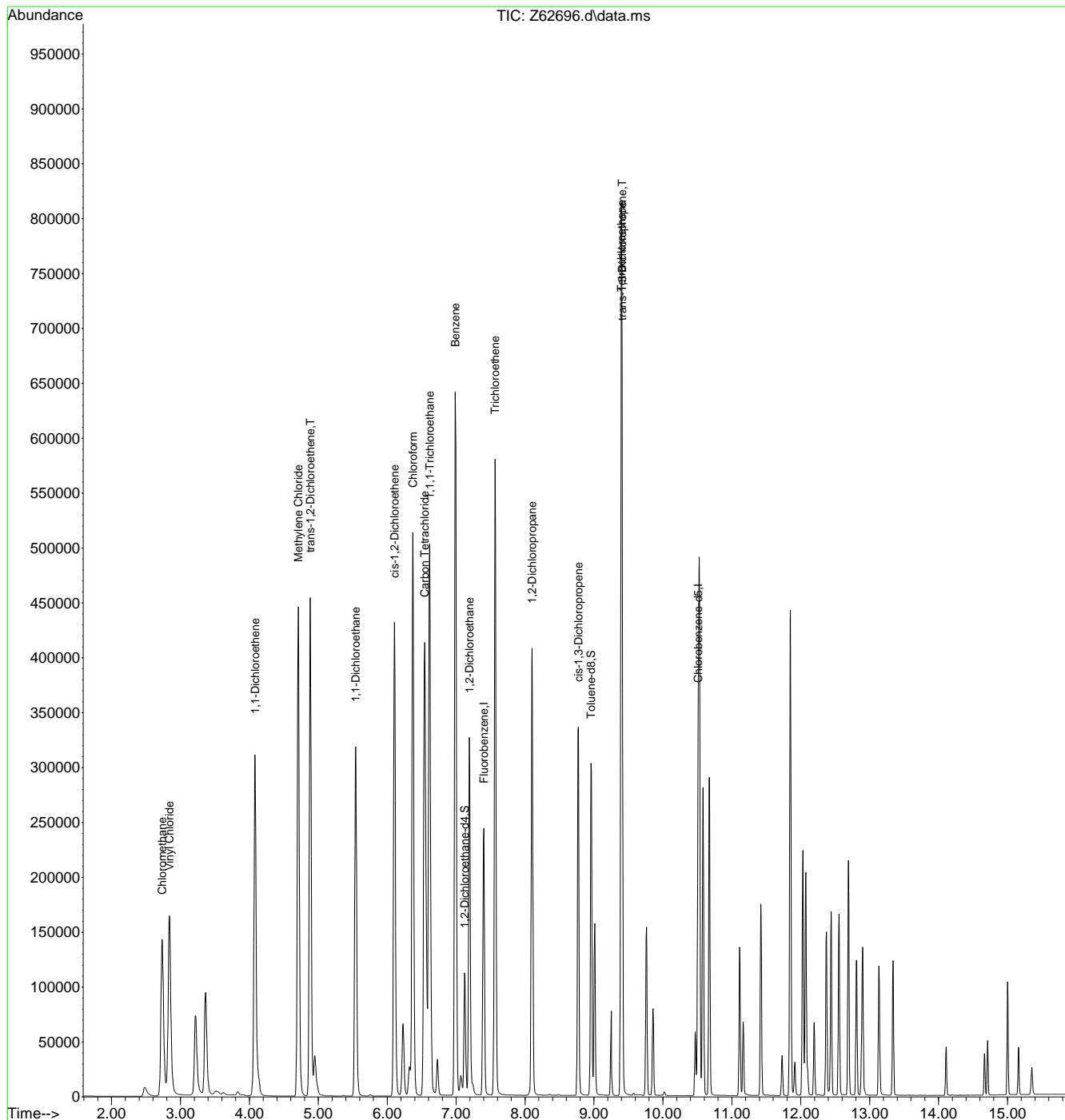
7.6.19
7



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\edessas\10-08-2020\vz2433\
 Data File : Z62696.d
 Acq On : 7 Oct 2020 1:04 pm
 Operator : AKARIG
 Sample : cc2431-5
 Misc : MS47304,VZ2433,,,,,
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Oct 07 20:46:09 2020
 Quant Method : C:\msdchem\1\methods\SIMCL100120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Sat Oct 03 15:38:22 2020
 Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\edessas\10-08-2020\VZ2433\
 Data File : Z62706.d
 Acq On : 7 Oct 2020 5:13 pm
 Operator : AKARIG
 Sample : ecc2431-5
 Misc : MS47304,VZ2433,,,,,
 ALS Vial : 13 Sample Multiplier: 1

Quant Time: Oct 07 20:46:30 2020
 Quant Method : C:\msdchem\1\methods\SIMCL100120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Sat Oct 03 15:38:22 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	

Internal Standards							
1) Fluorobenzene	7.401	96	2103691	5.00	ppb	0.00	
18) Chlorobenzene-d5	10.511	117	1786538	5.00	ppb	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.130	65	675522	5.03	ppb	0.00	
Spiked Amount	5.000	Range	79 - 125	Recovery	=	100.60%	
19) Toluene-d8	8.961	98	1908614	4.99	ppb	0.00	
Spiked Amount	5.000	Range	70 - 130	Recovery	=	99.80%	
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.843	62	2554883	9.60	ppb		100
3) Chloromethane	2.737	50	2221327	9.51	ppb		100
4) 1,1-Dichloroethene	4.083	96	1656477	11.08	ppb		99
5) Methylene Chloride	4.713	84	2506322	9.59	ppb		99
6) trans-1,2-Dichloroethene	4.886	96	2131938	10.89	ppb		96
7) 1,1-Dichloroethane	5.546	63	3595320	10.96	ppb	#	100
8) cis-1,2-Dichloroethene	6.110	96	2244875	10.75	ppb		98
9) Chloroform	6.377	83	4343088	10.93	ppb		100
10) Carbon Tetrachloride	6.543	117	2636423	11.42	ppb		99
11) 1,1,1-Trichloroethane	6.614	97	3677739	11.55	ppb		99
12) Benzene	6.994	78	7952480	11.03	ppb		99
14) 1,2-Dichloroethane	7.198	62	2774531	10.88	ppb		100
15) Trichloroethene	7.564	95	2285545	11.33	ppb		100
16) 1,2-Dichloropropane	8.105	63	1879489	10.76	ppb		99
17) cis-1,3-Dichloropropene	8.773	75	2011305	9.98	ppb		100
20) trans-1,3-Dichloropropene	9.412	75	1665960	12.78	ppb		99
21) Tetrachloroethene	9.399	166	2480560	12.72	ppb		99

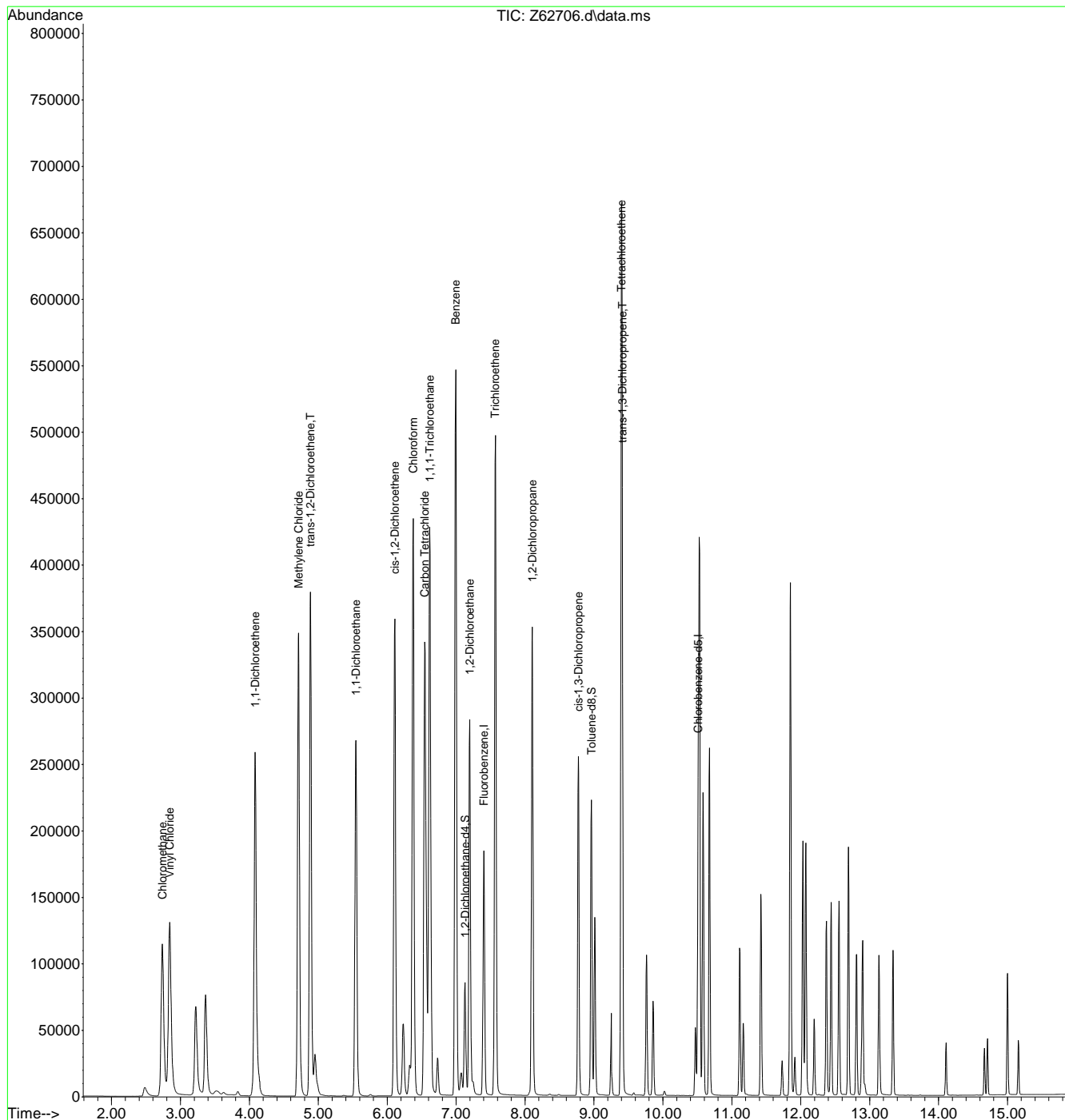
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.6.20
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\edessas\10-08-2020\vz2433\
 Data File : Z62706.d
 Acq On : 7 Oct 2020 5:13 pm
 Operator : AKARIG
 Sample : ecc2431-5
 Misc : MS47304,VZ2433,,,,,
 ALS Vial : 13 Sample Multiplier: 1

Quant Time: Oct 07 20:46:30 2020
 Quant Method : C:\msdchem\1\methods\SIMCL100120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Sat Oct 03 15:38:22 2020
 Response via : Initial Calibration



7.6.20
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\100920\
 Data File : Z62710.D
 Acq On : 9 Oct 2020 10:56 am
 Operator : AKARIG
 Sample : cc2431-5
 Misc : MS47304,VZ2434,,,,,
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Oct 10 13:33:35 2020
 Quant Method : C:\msdchem\1\methods\SIMCL100120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Sat Oct 03 15:38:22 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	

Internal Standards							
1) Fluorobenzene	7.401	96	2666799	5.00	ppb	0.00	
18) Chlorobenzene-d5	10.511	117	2275045	5.00	ppb	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.123	65	838825	4.93	ppb	0.00	
Spiked Amount	5.000	Range 79 - 125	Recovery	=	98.60%		
19) Toluene-d8	8.958	98	2456699	5.05	ppb	0.00	
Spiked Amount	5.000	Range 70 - 130	Recovery	=	101.00%		
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.839	62	2932293	8.69	ppb		99
3) Chloromethane	2.729	50	2617517	8.84	ppb		99
4) 1,1-Dichloroethene	4.079	96	1835766	9.69	ppb		99
5) Methylene Chloride	4.709	84	2999606	8.98	ppb		99
6) trans-1,2-Dichloroethene	4.883	96	2464568	9.90	ppb		95
7) 1,1-Dichloroethane	5.539	63	4148055	9.97	ppb	#	100
8) cis-1,2-Dichloroethene	6.104	96	2593064	9.79	ppb		97
9) Chloroform	6.371	83	4973283	9.87	ppb		100
10) Carbon Tetrachloride	6.537	117	3006382	10.28	ppb		100
11) 1,1,1-Trichloroethane	6.614	97	4145102	10.27	ppb		100
12) Benzene	6.987	78	9042280	9.90	ppb		98
14) 1,2-Dichloroethane	7.191	62	3096310	9.58	ppb		100
15) Trichloroethene	7.564	95	2502637	9.79	ppb		94
16) 1,2-Dichloropropane	8.101	63	2110689	9.53	ppb		99
17) cis-1,3-Dichloropropene	8.773	75	2592688	10.15	ppb		100
20) trans-1,3-Dichloropropene	9.407	75	2344257	13.74	ppb		99
21) Tetrachloroethene	9.399	166	2742123	11.04	ppb		98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

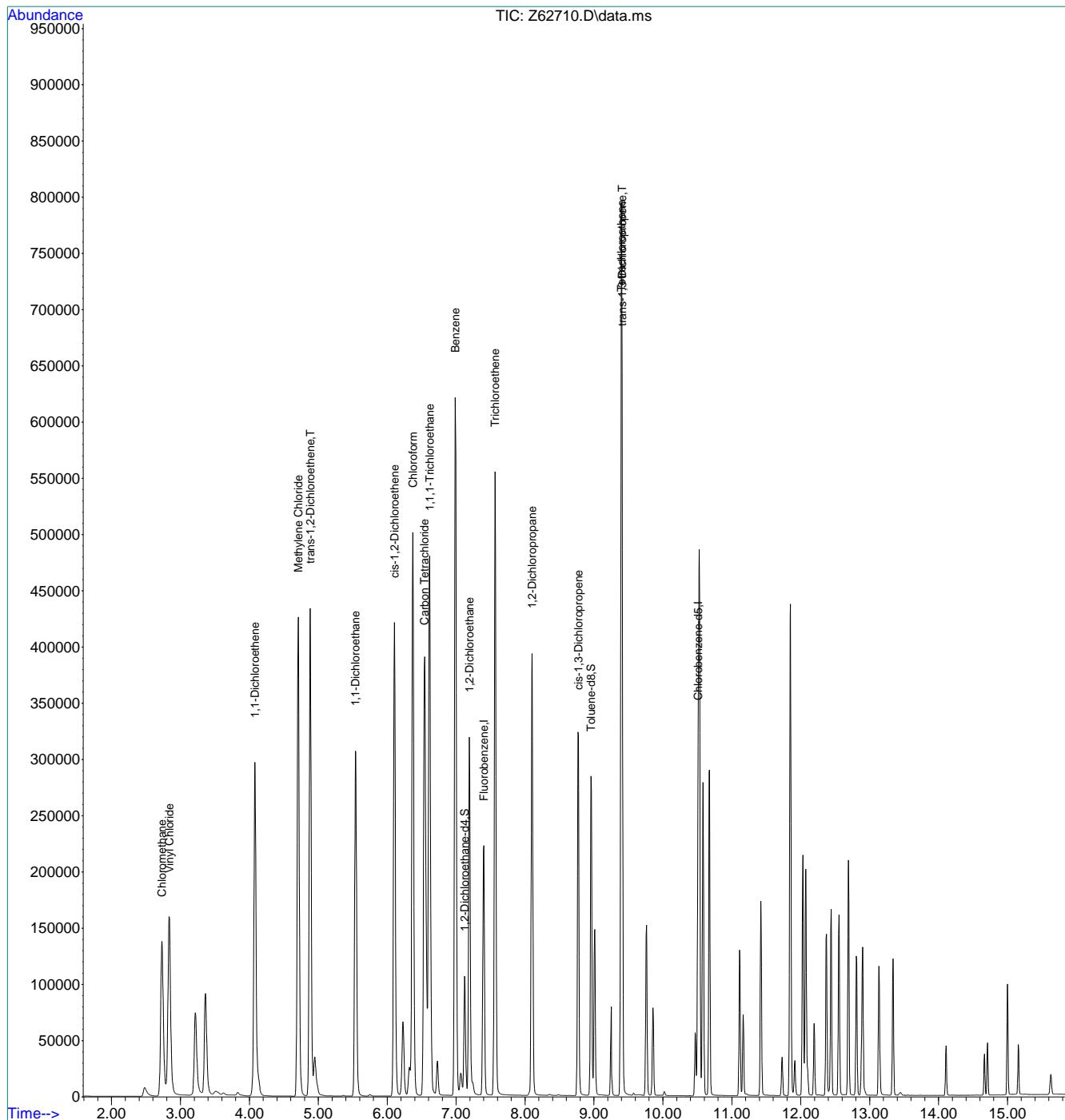
7.6.21
7



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\100920\
 Data File : Z62710.D
 Acq On : 9 Oct 2020 10:56 am
 Operator : AKARIG
 Sample : cc2431-5
 Misc : MS47304,VZ2434,,,,,
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Oct 10 13:33:35 2020
 Quant Method : C:\msdchem\1\methods\SIMCL100120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Sat Oct 03 15:38:22 2020
 Response via : Initial Calibration



7.6.21
7



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\100920\
 Data File : Z62723.D
 Acq On : 9 Oct 2020 5:18 pm
 Operator : AKARIG
 Sample : ecc2431-5
 Misc : MS47304,VZ2434,,,,,
 ALS Vial : 16 Sample Multiplier: 1

Quant Time: Oct 10 13:34:01 2020
 Quant Method : C:\msdchem\1\methods\SIMCL100120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Sat Oct 03 15:38:22 2020
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	

Internal Standards							
1) Fluorobenzene	7.401	96	2064125	5.00	ppb	0.00	
18) Chlorobenzene-d5	10.511	117	1771099	5.00	ppb	0.00	
System Monitoring Compounds							
13) 1,2-Dichloroethane-d4	7.130	65	672280	5.10	ppb	0.00	
Spiked Amount	5.000	Range	79 - 125	Recovery	=	102.00%	
19) Toluene-d8	8.961	98	1860042	4.91	ppb	0.00	
Spiked Amount	5.000	Range	70 - 130	Recovery	=	98.20%	
Target Compounds							
							Qvalue
2) Vinyl Chloride	2.843	62	2510275	9.62	ppb		100
3) Chloromethane	2.733	50	2132340	9.30	ppb		99
4) 1,1-Dichloroethene	4.087	96	1599654	10.91	ppb		99
5) Methylene Chloride	4.713	84	2527844	9.91	ppb		100
6) trans-1,2-Dichloroethene	4.886	96	2068534	10.77	ppb		97
7) 1,1-Dichloroethane	5.546	63	3516978	10.92	ppb	#	100
8) cis-1,2-Dichloroethene	6.110	96	2165629	10.57	ppb		97
9) Chloroform	6.377	83	4263730	10.93	ppb		100
10) Carbon Tetrachloride	6.543	117	2519189	11.13	ppb		100
11) 1,1,1-Trichloroethane	6.614	97	3568788	11.42	ppb		100
12) Benzene	6.994	78	7822638	11.06	ppb		100
14) 1,2-Dichloroethane	7.198	62	2727526	10.90	ppb		100
15) Trichloroethene	7.571	95	2247003	11.36	ppb		87
16) 1,2-Dichloropropane	8.105	63	1864965	10.88	ppb		99
17) cis-1,3-Dichloropropene	8.773	75	1951005	9.87	ppb		100
20) trans-1,3-Dichloropropene	9.411	75	1610068	12.54	ppb		99
21) Tetrachloroethene	9.399	166	2429302	12.56	ppb		98

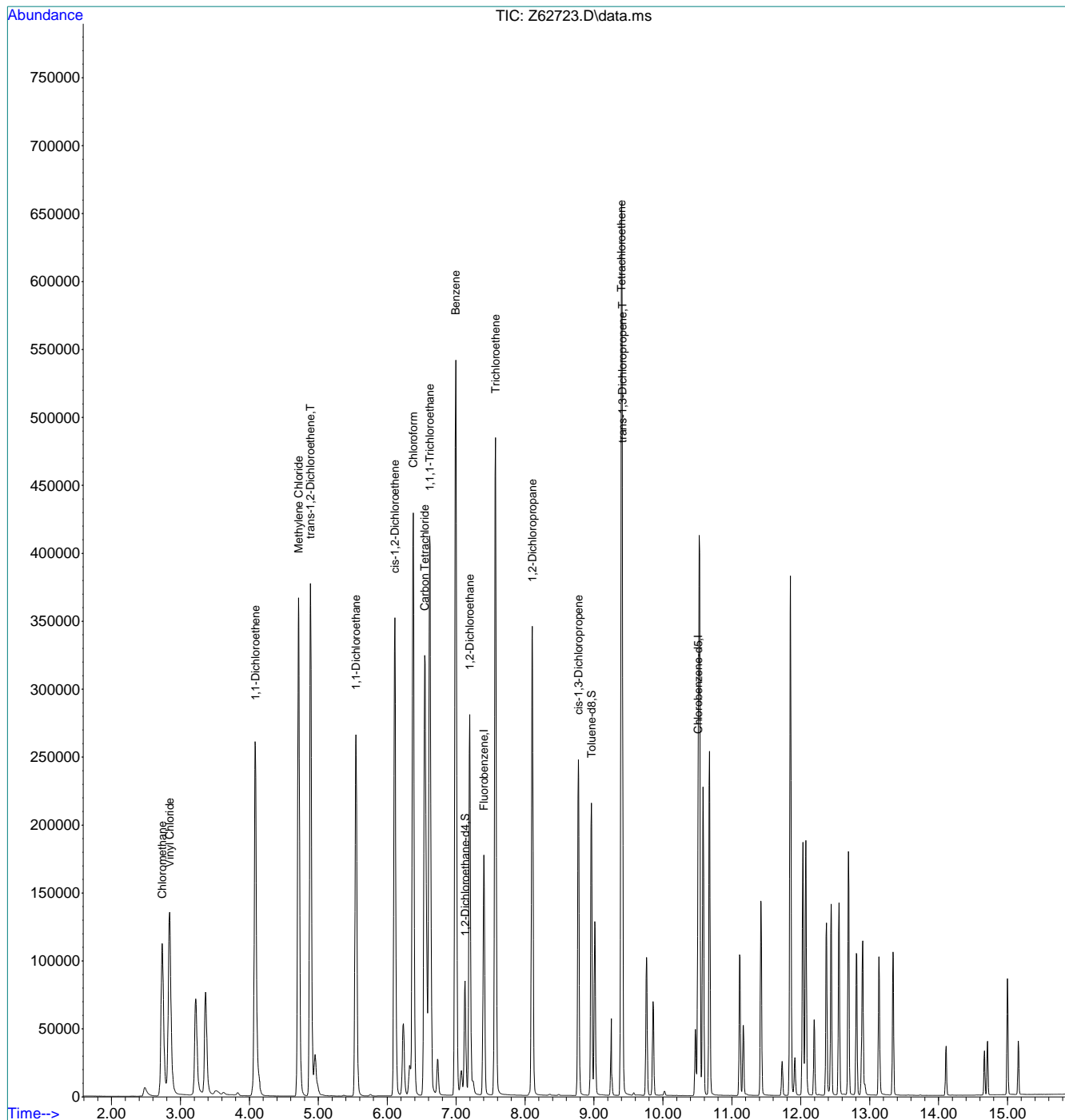
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.6.22
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\100920\
 Data File : Z62723.D
 Acq On : 9 Oct 2020 5:18 pm
 Operator : AKARIG
 Sample : ecc2431-5
 Misc : MS47304,VZ2434,,,,,
 ALS Vial : 16 Sample Multiplier: 1

Quant Time: Oct 10 13:34:01 2020
 Quant Method : C:\msdchem\1\methods\SIMCL100120.M
 Quant Title : WATER-EPA 8260B
 QLast Update : Sat Oct 03 15:38:22 2020
 Response via : Initial Calibration



Date: 10/2/2020
 COLUMN TYPE: RTX VMS
 DETECTOR: 5975 MSD
 INSTRUMENT: MSV0A12-0
 PURGE PRESSURE: 8.4PSI
 PURGE VOLUME: 5 mL
 ANALYST: AKARIG

METHODS:* SIMCLM
 METHOD FILE: SIMCL0100220.M
 CALIB. DATE: 10/2/2020
 EM VOLTAGE: 1412v
 BFB RESPONSE: 5290174
 RUN ID: VO2369

BFB: V25642b
 ICAL/C: V25606, VS0818
 ISTD/SUR: VS0799
 ICV/QC: VS0822 VS0802
 data reviewed by:

PH LOT1-12 :230814
 ph lot 0.0-3.0 : 220416a
 KI PAPER LOT:030317
 SAMPLE ID VERIFIED BY:
 AKARIG
 DATE VERIFIED: 10/02/2020

Data File	Sample ID	DIL.	VIAL #	MATRIX	ALS POS.	SAMPLE METHOD	MANUALLY INTEGRATED PEAK RATIONAL, PEAK #	PH	CL ?	RR	COMMENTS
O61532	BLK	-	-	w	1	ACQ_SIMCLB		-	-	-	
O61533	BLK	-	-	w	2	ACQ_SIMCLB		-	-	-	increased voltage
O61534	BLK	-	-	w	2	bfb		-	-	-	decreased voltage
O61535	BLK	-	-	w	3	bfb		-	-	-	cleaned sparge tube
O61536	BLK	-	-	w	4	ACQ_SIMCLB		-	-	-	
O61537	BLK	-	-	w	3	ACQ_SIMCLB		-	-	-	
O61538	BLK	-	-	w	4	ACQ_SIMCLB		-	-	-	
O61539	bfb	-	-	w	7	ACQ_SIMCLB		-	-	-	autofind 2ul passed
O61540	ic2369-1	-	-	w	8	ACQ_SIMCLB		-	-	-	1ul -> 100ml
O61541	ic2369-2	-	-	w	9	ACQ_SIMCLB		-	-	-	5ul -> 100ml
O61542	ic2369-3	-	-	w	10	ACQ_SIMCLB		-	-	-	10ul -> 50ml
O61543	ic2369-4	-	-	w	11	ACQ_SIMCLB		-	-	-	25ul -> 50ml
O61544	ic2369-5	-	-	w	12	ACQ_SIMCLB		-	-	-	50ul -> 50ml
O61545	ic2369-6	-	-	w	13	ACQ_SIMCLB		-	-	-	75ul -> 50ml
O61546	ic2369-7	-	-	w	14	ACQ_SIMCLB		-	-	-	100ul -> 50ml
O61547	blank	-	-	w	15	ACQ_SIMCLB		-	-	-	
O61548	ic2369-5	-	-	w	16	ACQ_SIMCLB		-	-	-	50ul -> 50ml

* For NELAC purposes, Method 8260 includes analyses by SOP MS005 Matrix: Designate "W" for Water, "S" for soil, "O" for Oil, "Liq" for Non-aqueous Liquid, and "TCLP" or "SPLP" for Leachate.
 Manual Integration Rational SOP QAO29: MP Missed Peak, OP Overlapping Peak, SP Split Peak, PDB Poorly Defined Baseline, BR Baseline Ripple, PI Poor Instrument



SGS -ORLANDO

MSV0A12-O-ANALYSIS LOG

Date: 10/3/2020
 COLUMN TYPE: RTX VMS
 DETECTOR: 5975 MSD
 INSTRUMENT: MSV0A12-O
 PURGE PRESSURE: 8.4PSI
 PURGE VOLUME: 5 mL
 ANALYST: AKARIG

METHODS:* SIMCLM
 METHOD FILE: SIMCL0100220.M
 CALIB. DATE: 10/2/2020
 EM VOLTAGE: 1412v
 BFB RESPONSE: 5290174
 RUN ID: VO2370

BFB: V25942b
 ICAL/CC: V25806 VS0818
 ISTD/SUR: VS0799
 ICV/QC: VS0822 VS0802
 data reviewed by:

PH LOT1-12 :230814
 ph lot 0.0-3.0 : 220416a
 KI PAPER LOT:030317
 SAMPLE ID VERIFIED BY:
 AKARIG
 DATE VERIFIED: 10/03/2020

Data File	Sample ID	DIL.	VIAL #	MATRIX	ALS POS.	SAMPLE METHOD	MANUALLY INTEGRATED PEAK RATIONAL, PEAK #	PH	CL	RR	COMMENTS
061549	BLK	-	-	w	1	ACQ_SIMCLB		-	-	-	
061550	BLK	-	-	w	2	ACQ_SIMCLB		-	-	-	
061551	bfb	-	-	w	100	bfb		-	-	-	
061552	bfb	-	-	w	100	ACQ_SIMCLB		-	-	-	
061553	cc2369-5	-	-	w	3	ACQ_SIMCLB		-	-	-	
061554	cc2369-5	-	-	w	4	ACQ_SIMCLB		-	-	-	50ul -> 50ml
061555	bs	-	-	w	5	ACQ_SIMCLB		-	-	-	50ul -> 50ml passed
061556	mb	-	-	w	6	ACQ_SIMCLB		-	-	-	20ul -> vial
061557	mb	-	-	w	7	ACQ_SIMCLB		-	-	-	
061558	fa79309-1	1x	1	w	8	ACQ_SIMCLB		1	n	-	
061559	fa79309-2	1x	1	w	9	ACQ_SIMCLB		1	n	-	
061560	fa79309-3	1x	1	w	10	ACQ_SIMCLB		1	n	1x	is fail
061561	fa79309-4	1x	1	w	11	ACQ_SIMCLB		1	n	1x	is fail
061562	fa79152-1	1x	1	w	12	ACQ_SIMCLB		1	n	-	
061563	fa79152-2	1x	1	w	13	ACQ_SIMCLB		1	n	-	
061564	fa79152-3	1x	1	w	14	ACQ_SIMCLB		1	n	-	
061565	fa79152-4	1x	1	w	15	ACQ_SIMCLB		1	n	1x	is fail
061566	fa79153-1	1x	1	w	16	ACQ_SIMCLB		1	n	-	
061567	fa79309-2MS	10X	2	w	17	ACQ_SIMCLB	10ul -> 100ML	1	n	-	20ul -> vial
061568	fa79309-2MSD	10X	2	w	18	ACQ_SIMCLB	10ul -> 100ML	1	n	-	20ul -> vial
061569	ECC2369-5			w	19	ACQ_SIMCLB					50ul -> 50ml

* For NELAC purposes, Method 8260 includes analytes by SOP MS005 Matrix: Designate "W" for Water, "S" for soil, "O" for Oil, "Liq" for Non-aqueous Liquid, and "CL.P" or "SP.L" for Leachate.
 Manual Integration Rational SOP QA029: MP Missed Peak, OP Overlapping Peak, SP Split Peak, PDB Poorly Defined Baseline, BR Baseline Ripple, PI Poor Instrument

Analyst's Signature: _____




MSVQA17-1A-ANALYSIS LOG

DATE: 10/01/20	METHOD(s):* Simcl	BFB: V25942A	PH LOT: 1 to 12 pH lot #: 200814						
COLUMN TYPE: RTX-VMS	METHOD FILE(s): simcl100120.m	ICAL/CC: vs0846/vs0806	0 to 3 pH lot#: 220416						
DETECTOR: 5975C MSD	CALIB. DATE: 10/01/20	ISTD/SURR: vs0791	KI PAPER LOT: 060117						
INSTRUMENT: MSVQA15-Z	EM VOLTAGE: 1871V	ICV/QC: vs0847/vs0802	Processed BY:						
PURGE PRESSURE: 9.7psi	BFB Response: 26563050	AFA: VS0418A	akarig						
PURGE VOLUME: 5 ml	Run id	VZ2431	DATE VERIFIED: 10/01/2020						
ANALYST: akarig	VIAL #	MATRIX	ALS POS.	SAMPLE METHOD	MANUALLY INTEGRATED PEAKS RATIONAL. PEAK #	PH	CL	RR	COMMENTS
Z62662	blk	w	1	acq_simcl0214		-	-	-	✓
Z62663		w				-	-	-	
Z62664	bfb	w	100	bfb		-	-	-	Passed Autofind ✓
Z62665	ic2431-1	w	3	acq_simcl0214		-	-	-	1ul -> 100ml
Z62666	ic2431-2	w	4	acq_simcl0214		-	-	-	5ul -> 100ml
Z62667	ic2431-3	w	5	acq_simcl0214		-	-	-	10ul -> 50ml
Z62668	ic2431-4	w	6	acq_simcl0214		-	-	-	25ul -> 50ml
Z62669	ic2431-5	w	7	acq_simcl0214		-	-	-	50ul -> 50ml
Z62660	ic2431-6	w	8	acq_simcl0214		-	-	-	75ul -> 50ml
Z62661	ic2431-7	w	9	acq_simcl0214		-	-	-	100ul -> 50ml
Z62662	blk	w	10	acq_simcl0214		-	-	-	
Z62663	icv2431-5	w	11	acq_simcl0214		-	-	-	50ul -> 50ml
Z62664	icv2431-5	w	12	acq_simcl0214		-	-	-	50ul -> 50ml

* For NELAC purposes, Method 8260 includes analytes by SOP MS005. Matrix: Designate "W" for Water, "S" for Soil, "O" for Oil, "Liq" for Non-aqueous Liquid, and "TCLP" or "SPLP" for Leachate. Manual Integration. Rationale SOP QA029. MP Missed Peak, OP Overlapping Peak, SP Split Peak, PDB Poorly Defined Baseline, BR Baseline Ripple, PI Poor Instrument Integration

Analyst's Signature: 

SGS -ORLANDO

MSV0A17-1A-ANALYSIS LOG

DATE: 10/07/20	METHOD(s): * Simcl	BFB: V25942A	PH LOT: 1 to 12 pH lot #: 200814
COLUMN TYPE: RTX-VMS	METHOD FILE(S): simcl100120.m	ICAL/CC: vs0846/vs0806	0 to 3 pH lot#: 220416
DETECTOR: 5975C MSD	CALIB. DATE: 10/01/20	ISTD/SURR: vs0791	KI PAPER LOT: 060117
INSTRUMENT: MSV0A15-Z	EM VOLTAGE: 1871V	ICV/QC: vs0847/vs0802	Processed BY: Edesas
PURGE PRESSURE: 9.7psi	BFB Response: 28577060	AFA: VS0418A	akarig
PURGE VOLUME: 5 ml	Run id	VZ2433	DATE VERIFIED: 10/07/2020
ANALYST: akarig			

Data File	Sample ID	DIL.	VIAL #	MATRIX	ALS POS.	SAMPLE METHOD	MANUALLY INTEGRATED PEAKS RATIONAL, PEAK #	PH	CL	RR	COMMENTS
Z62693	blk	-	-	w	1	acq_simcl0214		-	-	-	✓
Z62694	blk	-	-	w	2	acq_simcl0214		-	-	-	Passed Autofind ✓
Z62695	bfb	-	-	w	100	bfb		-	-	-	50ul -> 50ml passed
Z62696	cc2431-5	-	-	w	3	acq_simcl0214		-	-	-	20ul -> 40ml passed
Z62697	bs	-	-	w	4	acq_simcl0214		-	-	-	CH2C12 hit, not used
Z62698	mb	-	-	w	5	acq_simcl0214		-	-	-	CH2C12 hit
Z62699	mb	-	-	w	6	acq_simcl0214		-	-	-	CH2C12 hit
Z62700	fa79152-1	1x	2	w	7	acq_simcl0214	#3(Pil)	1	n	✓	
Z62701	fa79152-2	1x	2	w	8	acq_simcl0214		1	n	✓	
Z62702	fa79152-3	1x	2	w	9	acq_simcl0214		1	n	ND ✓	
Z62703	fa79153-1	1x	2	w	10	acq_simcl0214		1	n	ND ✓	
Z62704	fa79152-1.ms	10x	2	w	11	acq_simcl0214	10ml -> 100ml	1	n		20ul -> 40ml
Z62705	fa79152-1.ms	10x	2	w	12	acq_simcl0214	10ml -> 100ml	1	n		20ul -> 40ml
Z62706	ecc2431-5			w	13	acq_simcl0214					50ul -> 50ml

* For NELAC purposes, Method 8260 includes analytes by SOP MS005. Matrix Designate "W" for Water, "S" for Soil, "O" for Oil, "Liq" for Non-aqueous Liquid, and "TCLP" or "SPLP" for Leachate. Manual Integration Rationale SOP QA029: MP Missed Peak, OP Overlapping Peak, SP Split Peak, PDB Poorly Defined Baseline, BR Baseline Ripple, PII Poor Instrument Integration.

Analyst's Signature:  Karan G.

MSVOA17-1A-ANALYSIS LOG

SGS -ORLANDO

DATE: 10/09/20		METHOD(s):* Simcl		VZ2434		PH LOT: 1 to 12 pH lot #: 200814					
COLUMN TYPE: RTX-VMS		METHOD FILE(s): simcl100120.m		BFB: V25942A		0 to 3 pH lot#: 220416					
DETECTOR: 5975C.MSD		CALIB. DATE: 10/01/20		ICV/QC: vs0847/vs0856		KI PAPER LOT: 060117					
INSTRUMENT: MSVOA15-z		EM VOLTAGE: 1871V		AFA: VS0418A		Processed BY: stutip					
PURGE PRESSURE: 9.7psi		BFB Response: 19645245		ISTD/SURR: vs0791		akartig					
PURGE VOLUME: 5 mL		Run id		DATE VERIFIED: 10/09/2020		COMMENTS					
ANALYST: akartig/stutip		Run id		DATE VERIFIED: 10/09/2020		COMMENTS					
Data File	Sample ID	DIL.	VIAL #	MATRIX	ALS POS.	SAMPLE METHOD	MANUALLY INTEGRATED PEAKS RATIONAL, PEAK #	PH	CL	RR	COMMENTS
Z62707	blk	-	-	w	1	acq_simcl0214		-	-	-	✓
Z62708	blk	-	-	w	2	acq_simcl0214		-	-	-	
Z62709	bfb	-	-	w	100	bfb		-	-	-	Passed Autofind✓
Z62710	cc2431-5	-	-	w	3	acq_simcl0214		-	-	-	50ul -> 50ml passed
Z62711	bs	-	-	w	4	acq_simcl0214		-	-	-	20ul -> 40ml passed
Z62712	mb	-	-	w	5	acq_simcl0214	do not use	-	-	-	
Z62713	mb	-	-	w	6	acq_simcl0214	do not use	-	-	-	
Z62714	mb	-	-	w	7	acq_simcl0214	do not use	-	-	-	
Z62715	mb	-	-	w	7	acq_simcl0214	passed	-	-	-	
Z62716	fa79152-4	1x	2	w	9	acq_simcl0214		1	n	-	
Z62717	fa79309-1	1x	2	w	10	acq_simcl0214		1	n	-	
Z62718	fa79309-2	1x	3	w	11	acq_simcl0214		1	n	-	
Z62719	fa79309-3	1x	2	w	12	acq_simcl0214		1	n	-	
Z62720	fa79309-4	1x	2	w	13	acq_simcl0214		1	n	-	
Z62721	fa79309-1ms	10x	2	w	14	acq_simcl0214	10ml -> 100ml	1	n	-	20ul -> 40ml
Z62722	fa79309-1msd	10x	2	w	15	acq_simcl0214	10ml -> 100ml	1	n	-	20ul -> 40ml
Z62723	ecc2431-5			w	16	acq_simcl0214					50ul -> 50ml

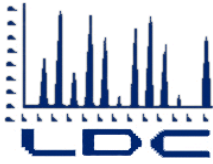
* For NELAC purposes, Method 8260 includes analytes by SOP MS005. Matrix: Designate "W" for Water, "S" for Soil, "O" for Oil, "Liq" for Non-aqueous Liquid, and "TCLP" or "SPLP" for Leachate. Manual Integration Rationale SOP QA029: MP Missed Peak, OP Overlapping Peak, SP Split Peak, PDB Poorly Defined Baseline, BR Baseline Ripple, PI Poor Instrument Integration.

VZ2434 040918

Page 1 of 1

Analyst's Signature: _____

**Third Quarter 2020
Landfill Gas Laboratory Data
Validation Summary Reports**



LABORATORY DATA CONSULTANTS, INC.

2701 Loker Ave. West, Suite 220, Carlsbad, CA 92010 Bus: 760-827-1100 Fax: 760-827-1099

AHTNA
296 12th Street
Marina, CA 93933
ATTN: Mr. Eric A. Schmidt
Eschmidt@ahtna.net

August 21, 2020

SUBJECT: Fort Ord, OU2, Data Validation

Dear Mr. Schmidt,

Enclosed are the final validation reports for the fractions listed below. These SDGs were received on July 10, 2020. Attachment 1 is a summary of the samples that were reviewed for each analysis.

LDC Project #48567:

SDG

Fraction

2006116, 2006216
2006218, 200965

Volatiles, Fixed Gases, Sulfur Gases

The data validation was performed under Stage 2B & 4 guidelines. The analyses were validated using the following documents, as applicable to each method:

- Quality Assurance Project Plan Former Fort Ord, California, Volume I Appendix D, Revision 4, Operable Unit 2 Landfills; April 2020
- U.S. Department of Defense Quality Systems Manual for Environmental Laboratories, Version 5.1; 2017
- USACE Guidance for Evaluating Performance-Based Chemical Data; EM-200-1-10, June 2005
- EPA SW 846, Third Edition, Test Methods for Evaluating Solid Waste, update 1, July 1992; update IIA, August 1993; update II, September 1994; update IIB, January 1995; update III, December 1996; update IIIA, April 1998; IIIB, November 2004; update IV, February 2007; update V, July 2014

Please feel free to contact us if you have any questions.

Sincerely,

Pei Geng
Pgeng@lab-data.com
Project Manager/Senior Chemist

**Data Validation Report
Fort Ord OU2, Annual Source Test**

SDGs: 2006116, 2006216, 2006218, and 200965

Prepared for

Ahtna Environmental Inc.
296 12th Street
Marina, California 93933-6001

Prepared by

Laboratory Data Consultants, Inc
2701 Loker Ave West, Suite 220
Carlsbad, CA 92010

August 21, 2020

INTRODUCTION

This Data Validation Report (DVR) presents Stage 2B and 4 data validation results for samples collected during the June 2020 sampling period. Data validation was performed in accordance with the Quality Assurance Project Plan (QAPP) Former Fort Ord, California, Volume I Appendix D, Revision 4, Operable Unit 2 Landfills (April 2020), the U.S. Department of Defense (DoD) Quality Systems Manual (QSM) for Environmental Laboratories, Version 5.1 (2017), and the USACE Guidance for Evaluating Performance-Based Chemical Data (EM-200-1-10, June 2005). Where specific guidance is not available, the data has been evaluated in a conservative manner consistent with industry standards using professional experience.

The analyses were performed by the following methods:

Volatiles (VOCs) by Environmental Protection Agency (EPA) Method TO-15

Fixes Gases by ASTM Method D1945

Sulfur Gases by ASTM Method D5504

The sample identification and methods of analyses performed on each sample is presented in Attachment 1. Overall data qualification summary is presented in Attachment 2. Stage 2B Automated Data Review outliers are presented in Enclosure I. DVRs for samples on which Stage 4 validation was performed are presented in Enclosure II.

All sample results were subjected to Stage 2B data validation, which comprises an evaluation of quality control (QC) summary results for sample holding times, initial and continuing calibrations, surrogates, internal standards, duplicate sample analysis (DUP), laboratory control sample/laboratory control sample duplicates (LCS/LCSD), laboratory blanks, and field duplicate samples. Approximately 20 percent of samples were subjected to Stage 4 evaluation as indicated in Attachment 1, which comprised a review of the QC summary forms as well as the raw data, to confirm sample quantitation and identification.

Automated data review was performed on all QC summary results using the Automated Data Review (ADR.net) software program (LDC, 2013). Quality assurance (QA)/QC criteria specified in the QAPP, DoD QSM, and EM-200-1-10 were incorporated with the program's reference library to assess compliance with project requirements.

The following are definitions of the data qualifiers utilized during data validation:

- J+ (Estimated, High Bias): The compound or analyte was analyzed for and positively identified by the laboratory; however the reported concentration is estimated, displaying high bias, due to non-conformances discovered during data validation.
- J- (Estimated, Low Bias): The compound or analyte was analyzed for and positively identified by the laboratory; however the reported concentration is estimated, displaying low bias, due to non-conformances discovered during data validation.
- J (Estimated, Bias Indeterminate): The compound or analyte was analyzed for and positively identified by the laboratory; however the reported concentration is estimated due to non-conformances discovered during data validation. Bias is indeterminate.
- U (Non-detected): The compound or analyte was analyzed for and positively identified by the laboratory; however the analyte should be considered non-detect at the reported concentration due to the presence of contaminants detected in the associated blank(s).
- UJ (Non-detected estimated): The compound or analyte was reported as not detected by the laboratory; however the reported quantitation/detection limit is estimated due to non-conformances discovered during data validation.
- R (Rejected): The sample results were rejected due to gross non-conformances discovered during data validation. Data qualified as rejected is not usable.
- NA (Not applicable): The non-conformance discovered during data validation demonstrates a high bias, while the affected compound or analyte in the associated sample(s) was reported as not detected by the laboratory and did not warrant the qualification of the data.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

I. Sample Receipt & Technical Holding Times

All canisters and tedlar bags were properly pressurized and handled.

All technical holding time requirements were met.

II. Instrument Performance Check

Instrument performance was checked at the frequency required by the method.

All criteria for the instrument performance check were met.

III. Initial Calibration and Initial Calibration Verification

All criteria for the initial calibration and initial calibration verifications of each method were met.

IV. Continuing Calibration

All criteria for the continuing calibration of each method were met.

V. Laboratory Blanks

Laboratory blanks were performed as required by the methods. No contaminant concentrations were detected in the laboratory blanks except for one blank for 2-propanol and ethanol and one blank for oxygen. The associated sample results were not detected or were significantly greater than the concentrations found in the blanks, therefore no data were qualified. The details are presented in Enclosures I and II.

All canisters were cleaned as required by the method. Canister blank analyses were performed for every sample canister. No volatile contaminants were found in the canister blanks.

VI. Field Blanks

No field blanks were identified in these SDGs.

VII. Surrogates

Although surrogates were not required by the method, surrogate analysis was performed by the laboratory. All surrogate recoveries (%R) were within QC limits.

VIII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) analysis was not required per the methods.

IX. Duplicate Sample Analysis

Duplicate (DUP) sample analysis was performed on an associated project sample. Results were within QC limits.

X. Laboratory Control Samples

Laboratory control samples (LCS) and laboratory control sample duplicates (LCSD) were analyzed as required by the methods. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits except for two LCS/LCSD pairs for ethanol. The associated sample results were qualified as detected estimated (J) or non-detected estimated (UJ) as applicable. The details regarding the qualification of data are provided in Enclosures I and II.

XI. Field Duplicates

Five field duplicate pairs were collected and analyzed for all methods. No data were qualified based on field duplicate RPDs outside the QC limits. The field duplicate result comparisons are provided in Enclosures I and II.

XII. Internal Standards

All internal standard areas and retention times were within QC limits.

XIII. Compound Quantitation

The laboratory reporting limits were evaluated. All laboratory reporting limits met the specified requirements.

All compound quantitations met validation criteria with the following exceptions:

SDG/ Method	Sample	Compound	Finding	Flag	A or P
2006116/ TO-15	TTU-FM-111 TTU-FM-112	2-Propanol Toluene	The certification of tedlar bag were reported at 42.8 ppbv for 2-propanol and 1.8ppbv for toluene to indicate high bias.	J (all detects) J (all detects)	A

All compounds reported below the limit of quantitation (LOQ) as detected by the laboratory were qualified as detected estimated (J). The details regarding the qualification of data are provided in Enclosures I and II.

XIV. Overall Assessment of Data

The analysis was conducted within all specifications of the method. No results were rejected in these SDGs.

Due to LCS/LCSD %R, data were qualified as estimated in twenty-four samples.

Due to tedlar bag certification, data were qualified as estimated in two samples.

Due to results below the LOQ, data were qualified as estimated in thirty samples.

The quality control criteria reviewed, other than those discussed above, were met and are considered acceptable.

Data flags are summarized and are presented as Attachment 2.

Attachment 1
Sample Cross Reference

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
04-Jun-2020	TTU-FM-111	2006116A-01A	N	Gen Prep	TO-15	Stage 2B
04-Jun-2020	TTU-FM-112	2006116A-02A	FD	Gen Prep	TO-15	Stage 4
04-Jun-2020	TTU-FO-113	2006116A-03A	N	Gen Prep	TO-15	Stage 2B
04-Jun-2020	TTU-FO-113DUP	2006116A-03AA	DUP	Gen Prep	TO-15	Stage 2B
04-Jun-2020	TTU-FM-111	2006116BR1-01A	N	Gen Prep	ASTM D-1945	Stage 2B
04-Jun-2020	TTU-FM-112	2006116BR1-02A	FD	Gen Prep	ASTM D-1945	Stage 4
04-Jun-2020	TTU-FM-112DUP	2006116BR1-02AA	DUP	Gen Prep	ASTM D-1945	Stage 4
04-Jun-2020	TTU-D-114	2006216-01A	N	Gen Prep	TO-15	Stage 2B
04-Jun-2020	TTU-D-114DUP	2006216-01AA	DUP	Gen Prep	TO-15	Stage 2B
05-Jun-2020	TTU-EF-115	2006216-02A	N	Gen Prep	TO-15	Stage 2B
04-Jun-2020	TTU-ET-116	2006216-03A	N	Gen Prep	TO-15	Stage 2B
05-Jun-2020	TTU-VF-117	2006216-04A	N	Gen Prep	TO-15	Stage 2B
03-Jun-2020	OU2GM6080	2006218-01A	N	Gen Prep	TO-15	Stage 2B
03-Jun-2020	OU2GM6080DUP	2006218-01AA	DUP	Gen Prep	TO-15	Stage 2B
03-Jun-2020	OU2GM6081	2006218-02A	N	Gen Prep	TO-15	Stage 2B
03-Jun-2020	OU2GM6082	2006218-03A	N	Gen Prep	TO-15	Stage 2B
03-Jun-2020	OU2GM6083	2006218-04A	N	Gen Prep	TO-15	Stage 2B
03-Jun-2020	OU2GM6084	2006218-05A	N	Gen Prep	TO-15	Stage 2B
03-Jun-2020	OU2GM6085	2006218-06A	N	Gen Prep	TO-15	Stage 2B
03-Jun-2020	OU2GM6086	2006218-07A	N	Gen Prep	TO-15	Stage 2B
03-Jun-2020	OU2GM6087	2006218-08A	N	Gen Prep	TO-15	Stage 4
03-Jun-2020	OU2GM6088	2006218-09A	N	Gen Prep	TO-15	Stage 2B
03-Jun-2020	OU2GM6089	2006218-10A	N	Gen Prep	TO-15	Stage 2B
03-Jun-2020	OU2GM6090	2006218-11A	N	Gen Prep	TO-15	Stage 2B
03-Jun-2020	OU2GM6091	2006218-12A	N	Gen Prep	TO-15	Stage 2B
03-Jun-2020	OU2GM6092	2006218-13A	FD	Gen Prep	TO-15	Stage 2B

N = Normal Sample DUP = Laboratory Duplicate FD = Field Duplicate

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
03-Jun-2020	OU2GM6093	2006218-14A	N	Gen Prep	TO-15	Stage 2B
03-Jun-2020	OU2GM6094	2006218-15A	N	Gen Prep	TO-15	Stage 2B
03-Jun-2020	OU2GM6095	2006218-16A	FD	Gen Prep	TO-15	Stage 2B
04-Jun-2020	OU2GM6096	2006218-17A	N	Gen Prep	TO-15	Stage 2B
04-Jun-2020	OU2GM6097	2006218-18A	N	Gen Prep	TO-15	Stage 2B
04-Jun-2020	OU2GM6098	2006218-19A	FD	Gen Prep	TO-15	Stage 2B
04-Jun-2020	OU2GM6099	2006218-20A	N	Gen Prep	TO-15	Stage 2B
04-Jun-2020	OU2GM6100	2006218-21A	N	Gen Prep	TO-15	Stage 2B
04-Jun-2020	OU2GM6101	2006218-22A	N	Gen Prep	TO-15	Stage 2B
04-Jun-2020	OU2GM6102	2006218-23A	N	Gen Prep	TO-15	Stage 2B
04-Jun-2020	OU2GM6102DUP	2006218-23AA	DUP	Gen Prep	TO-15	Stage 2B
04-Jun-2020	OU2GM6103	2006218-24A	N	Gen Prep	TO-15	Stage 2B
04-Jun-2020	TTU-FM-111S	200965-8741	N	Gen Prep	ASTM D-5504	Stage 4
04-Jun-2020	TTU-FM-112S	200965-8742	FD	Gen Prep	ASTM D-5504	Stage 2B

Attachment 2
Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: 200965, 2006116A, 2006116B,

Laboratory: AAC, ATL

EDD Filename: Prep200965_Rev2_, Prep2006116A_,
Prep2006116B_, Prep2006216_, Prep2006218_

eQAPP Name: AHTNA_FortOrd_OU2_Landfill_200810

SDG: 2006116A

Method Category: VOA

Method: TO-15

Matrix: AIR

Sample ID: TTU-FM-111

Collected: 6/4/2020 2:00:00 PM **Analysis Type:** RES

Dilution: 397

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,2,4-Trimethylpentane	150	J	120	LOD	200	LOQ	PPBV	J	RI
ACETONE	1400	J	400	LOD	2000	LOQ	PPBV	J	RI
CYCLOHEXANE	140	J	120	LOD	200	LOQ	PPBV	J	RI
ETHYL BENZENE	180	J	120	LOD	200	LOQ	PPBV	J	RI
FREON 114	140	J	120	LOD	200	LOQ	PPBV	J	RI
HEXANE	180	J	120	LOD	200	LOQ	PPBV	J	RI
M,P-XYLENE	130	J	120	LOD	200	LOQ	PPBV	J	RI
METHYLENE CHLORIDE	300	J	280	LOD	2000	LOQ	PPBV	J	RI
TOLUENE	710		120	LOD	200	LOQ	PPBV	J	ProfJudg
2-PROPANOL	4400		280	LOD	790	LOQ	PPBV	J	ProfJudg

Sample ID: TTU-FM-112

Collected: 6/4/2020 2:00:00 PM **Analysis Type:** RES

Dilution: 442

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,2,4-Trimethylpentane	150	J	130	LOD	220	LOQ	PPBV	J	RI
2-PROPANOL	5800		310	LOD	880	LOQ	PPBV	J	ProfJudg
ACETONE	1800	J	440	LOD	2200	LOQ	PPBV	J	RI
CYCLOHEXANE	140	J	130	LOD	220	LOQ	PPBV	J	RI
ETHYL BENZENE	160	J	130	LOD	220	LOQ	PPBV	J	RI
Freon 12	180	J	130	LOD	220	LOQ	PPBV	J	RI
HEXANE	170	J	130	LOD	220	LOQ	PPBV	J	RI
METHYLENE CHLORIDE	400	J	310	LOD	2200	LOQ	PPBV	J	RI
TOLUENE	700		130	LOD	220	LOQ	PPBV	J	ProfJudg

Sample ID: TTU-FO-113

Collected: 6/4/2020 1:54:00 PM **Analysis Type:** RES

Dilution: 2.18

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	9.2	J	2.2	LOD	11	LOQ	PPBV	J	RI
CHLOROBENZENE	0.72	J	0.65	LOD	1.1	LOQ	PPBV	J	RI
CYCLOHEXANE	0.87	J	0.65	LOD	1.1	LOQ	PPBV	J	RI

* denotes a non-reportable result

Project Name and Number: 21065 - FORT ORD LANDFILL

8/21/2020 10:50:14 AM

ADR version 1.9.0.325

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Data Qualifier Summary

Lab Reporting Batch ID: 200965, 2006116A, 2006116B,

Laboratory: AAC, ATL

EDD Filename: Prep200965_Rev2_, Prep2006116A_,
Prep2006116B_, Prep2006216_, Prep2006218_

eQAPP Name: AHTNA_FortOrd_OU2_Landfill_200810

SDG: 2006116A

Method Category: VOA

Method: TO-15

Matrix: AIR

Sample ID: TTU-FO-113

Collected: 6/4/2020 1:54:00 PM **Analysis Type:** RES

Dilution: 2.18

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ETHYL BENZENE	0.70	J	0.65	LOD	1.1	LOQ	PPBV	J	RI
HEXANE	0.98	J	0.65	LOD	1.1	LOQ	PPBV	J	RI
M,P-XYLENE	0.83	J	0.65	LOD	1.1	LOQ	PPBV	J	RI

SDG: 2006116B

Method Category: VOA

Method: ASTM D-1945

Matrix: AIR

Sample ID: TTU-FM-111

Collected: 6/4/2020 2:00:00 PM **Analysis Type:** RES

Dilution: 1.00

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BUTANE	2.4	J	10	LOD	10	LOQ	PPMV	J	RI
C6+	58	J	100	LOD	100	LOQ	PPMV	J	RI
ETHANE	1.8	J	10	LOD	10	LOQ	PPMV	J	RI

Sample ID: TTU-FM-112

Collected: 6/4/2020 2:00:00 PM **Analysis Type:** RES

Dilution: 1.00

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BUTANE	2.4	J	10	LOD	10	LOQ	PPMV	J	RI
C6+	62	J	100	LOD	100	LOQ	PPMV	J	RI
ETHANE	1.5	J	10	LOD	10	LOQ	PPMV	J	RI

SDG: 2006216

* denotes a non-reportable result

Project Name and Number: 21065 - FORT ORD LANDFILL

8/21/2020 10:50:14 AM

ADR version 1.9.0.325

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Data Qualifier Summary

Lab Reporting Batch ID: 200965, 2006116A, 2006116B,

Laboratory: AAC, ATL

EDD Filename: Prep200965_Rev2_, Prep2006116A_,
Prep2006116B_, Prep2006216_, Prep2006218_

eQAPP Name: AHTNA_FortOrd_OU2_Landfill_200810

SDG: 2006216

Method Category: VOA

Method: TO-15

Matrix: AIR

Sample ID: TTU-D-114

Collected: 6/4/2020 2:10:00 PM **Analysis Type:** RES

Dilution: 3.28

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4-ETHYLTOLUENE	12	J	9.8	LOD	16	LOQ	PPBV	J	RI
ACETONE	52	J	49	LOD	66	LOQ	PPBV	J	RI
1,3,5-TRIMETHYLBENZENE	10	J	9.8	LOD	16	LOQ	PPBV	J	RI

Sample ID: TTU-EF-115

Collected: 6/5/2020 12:56:00 PM **Analysis Type:** RES

Dilution: 3.06

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TRICHLOROETHENE	12	J	9.2	LOD	15	LOQ	PPBV	J	RI

Sample ID: TTU-ET-116

Collected: 6/4/2020 2:18:00 PM **Analysis Type:** RES

Dilution: 3.16

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHLOROBENZENE	12	J	9.5	LOD	16	LOQ	PPBV	J	RI
ETHYL BENZENE	13	J	9.5	LOD	16	LOQ	PPBV	J	RI

SDG: 2006218

Method Category: VOA

Method: TO-15

Matrix: AIR

Sample ID: OU2GM6080

Collected: 6/3/2020 9:39:00 AM **Analysis Type:** RES

Dilution: 1.49

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	2.2	J	0.74	LOD	7.4	LOQ	PPBV	J	RI
ETHANOL	0.74	U	0.74	LOD	3.0	LOQ	PPBV	UJ	Lcs

Sample ID: OU2GM6081

Collected: 6/3/2020 10:05:00 AM **Analysis Type:** RES

Dilution: 1.46

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	3.0	J	0.73	LOD	7.3	LOQ	PPBV	J	RI
CHLOROFORM	0.38	J	0.29	LOD	0.73	LOQ	PPBV	J	RI

* denotes a non-reportable result

Project Name and Number: 21065 - FORT ORD LANDFILL

8/21/2020 10:50:14 AM

ADR version 1.9.0.325

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Data Qualifier Summary

Lab Reporting Batch ID: 200965, 2006116A, 2006116B,

Laboratory: AAC, ATL

EDD Filename: Prep200965_Rev2_, Prep2006116A_,
Prep2006116B_, Prep2006216_, Prep2006218_

eQAPP Name: AHTNA_FortOrd_OU2_Landfill_200810

SDG: 2006218

Method Category: VOA

Method: TO-15

Matrix: AIR

Sample ID:OU2GM6081		6/3/2020 10:05:00 Collected:AM			Analysis Type: RES			Dilution: 1.46	
Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ETHANOL	0.73	U	0.73	LOD	2.9	LOQ	PPBV	UJ	Lcs

Sample ID:OU2GM6082		6/3/2020 10:20:00 Collected:AM			Analysis Type: RES			Dilution: 1.66	
Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	4.8	J	0.83	LOD	8.3	LOQ	PPBV	J	RI
ETHANOL	0.83	U	0.83	LOD	3.3	LOQ	PPBV	UJ	Lcs

Sample ID:OU2GM6083		6/3/2020 10:35:00 Collected:AM			Analysis Type: RES			Dilution: 1.58	
Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	3.8	J	0.79	LOD	7.9	LOQ	PPBV	J	RI
ETHANOL	0.79	U	0.79	LOD	3.2	LOQ	PPBV	UJ	Lcs
TETRACHLOROETHENE	0.67	J	0.40	LOD	0.79	LOQ	PPBV	J	RI

Sample ID:OU2GM6084		6/3/2020 11:05:00 Collected:AM			Analysis Type: RES			Dilution: 1.60	
Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	2.1	J	0.80	LOD	8.0	LOQ	PPBV	J	RI
CHLOROFORM	0.32	J	0.32	LOD	0.80	LOQ	PPBV	J	RI
ETHANOL	0.80	U	0.80	LOD	3.2	LOQ	PPBV	UJ	Lcs
TOLUENE	0.72	J	0.40	LOD	0.80	LOQ	PPBV	J	RI

Sample ID:OU2GM6085		6/3/2020 11:14:00 Collected:AM			Analysis Type: RES			Dilution: 1.65	
Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	4.1	J	0.82	LOD	8.2	LOQ	PPBV	J	RI
ETHANOL	0.82	U	0.82	LOD	3.3	LOQ	PPBV	UJ	Lcs
M,P-XYLENE	0.68	J	0.41	LOD	0.82	LOQ	PPBV	J	RI

* denotes a non-reportable result

Project Name and Number: 21065 - FORT ORD LANDFILL

8/21/2020 10:50:14 AM

ADR version 1.9.0.325

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Data Qualifier Summary

Lab Reporting Batch ID: 200965, 2006116A, 2006116B,

Laboratory: AAC, ATL

EDD Filename: Prep200965_Rev2_, Prep2006116A_,
Prep2006116B_, Prep2006216_, Prep2006218_

eQAPP Name: AHTNA_FortOrd_OU2_Landfill_200810

SDG: 2006218

Method Category: VOA

Method: TO-15

Matrix: AIR

6/3/2020 11:30:00
Sample ID:OU2GM6086 **Collected:**AM **Analysis Type:**RES **Dilution:** 1.58

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	2.0	J	0.79	LOD	7.9	LOQ	PPBV	J	RI
ETHANOL	0.79	U	0.79	LOD	3.2	LOQ	PPBV	UJ	Lcs
FREON 113	0.42	J	0.40	LOD	0.79	LOQ	PPBV	J	RI

6/3/2020 11:40:00
Sample ID:OU2GM6087 **Collected:**AM **Analysis Type:**RES **Dilution:** 1.59

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ETHANOL	0.80	U	0.80	LOD	3.2	LOQ	PPBV	UJ	Lcs
FREON 113	0.73	J	0.40	LOD	0.80	LOQ	PPBV	J	RI

6/3/2020 1:25:00 PM
Sample ID:OU2GM6088 **Collected:**6/3/2020 1:25:00 PM **Analysis Type:**RES **Dilution:** 1.66

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	3.8	J	0.83	LOD	8.3	LOQ	PPBV	J	RI
ETHANOL	0.83	U	0.83	LOD	3.3	LOQ	PPBV	UJ	Lcs

6/3/2020 1:40:00 PM
Sample ID:OU2GM6089 **Collected:**6/3/2020 1:40:00 PM **Analysis Type:**RES **Dilution:** 1.82

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	5.8	J	0.91	LOD	9.1	LOQ	PPBV	J	RI
BENZENE	0.55	J	0.46	LOD	0.91	LOQ	PPBV	J	RI
CHLOROFORM	0.55	J	0.36	LOD	0.91	LOQ	PPBV	J	RI
ETHANOL	0.91	U	0.91	LOD	3.6	LOQ	PPBV	UJ	Lcs
M,P-XYLENE	0.52	J	0.46	LOD	0.91	LOQ	PPBV	J	RI

6/3/2020 1:55:00 PM
Sample ID:OU2GM6090 **Collected:**6/3/2020 1:55:00 PM **Analysis Type:**RES **Dilution:** 1.56

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	3.0	J	0.78	LOD	7.8	LOQ	PPBV	J	RI
CARBON DISULFIDE	1.2	J	0.78	LOD	3.1	LOQ	PPBV	J	RI

* denotes a non-reportable result

Project Name and Number: 21065 - FORT ORD LANDFILL

8/21/2020 10:50:14 AM

ADR version 1.9.0.325

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Data Qualifier Summary

Lab Reporting Batch ID: 200965, 2006116A, 2006116B,

Laboratory: AAC, ATL

EDD Filename: Prep200965_Rev2_, Prep2006116A_,
Prep2006116B_, Prep2006216_, Prep2006218_

eQAPP Name: AHTNA_FortOrd_OU2_Landfill_200810

SDG: 2006218

Method Category: VOA

Method: TO-15

Matrix: AIR

Sample ID: OU2GM6090

Collected: 6/3/2020 1:55:00 PM **Analysis Type:** RES

Dilution: 1.56

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ETHANOL	0.78	U	0.78	LOD	3.1	LOQ	PPBV	UJ	Lcs
TETRACHLOROETHENE	0.55	J	0.39	LOD	0.78	LOQ	PPBV	J	RI

Sample ID: OU2GM6091

Collected: 6/3/2020 2:35:00 PM **Analysis Type:** RES

Dilution: 1.89

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	3.1	J	0.94	LOD	9.4	LOQ	PPBV	J	RI
ETHANOL	0.94	U	0.94	LOD	3.8	LOQ	PPBV	UJ	Lcs

Sample ID: OU2GM6092

Collected: 6/3/2020 2:40:00 PM **Analysis Type:** RES

Dilution: 1.93

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	1.6	J	0.96	LOD	9.6	LOQ	PPBV	J	RI
ETHANOL	0.96	U	0.96	LOD	3.9	LOQ	PPBV	UJ	Lcs

Sample ID: OU2GM6093

Collected: 6/3/2020 2:53:00 PM **Analysis Type:** RES

Dilution: 1.70

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	1.5	J	0.85	LOD	8.5	LOQ	PPBV	J	RI
ETHANOL	0.85	U	0.85	LOD	3.4	LOQ	PPBV	UJ	Lcs

Sample ID: OU2GM6094

Collected: 6/3/2020 3:15:00 PM **Analysis Type:** RES

Dilution: 1.64

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	1.6	J	0.82	LOD	8.2	LOQ	PPBV	J	RI
ETHANOL	0.82	U	0.82	LOD	3.3	LOQ	PPBV	UJ	Lcs

* denotes a non-reportable result

Project Name and Number: 21065 - FORT ORD LANDFILL

8/21/2020 10:50:14 AM

ADR version 1.9.0.325

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Data Qualifier Summary

Lab Reporting Batch ID: 200965, 2006116A, 2006116B,

Laboratory: AAC, ATL

EDD Filename: Prep200965_Rev2_, Prep2006116A_,
Prep2006116B_, Prep2006216_, Prep2006218_

eQAPP Name: AHTNA_FortOrd_OU2_Landfill_200810

SDG: 2006218

Method Category: VOA

Method: TO-15

Matrix: AIR

Sample ID: OU2GM6095

Collected: 6/3/2020 3:20:00 PM **Analysis Type:** RES

Dilution: 1.60

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	2.0	J	0.80	LOD	8.0	LOQ	PPBV	J	RI
ETHANOL	0.80	U	0.80	LOD	3.2	LOQ	PPBV	UJ	Lcs

Sample ID: OU2GM6096

Collected: 6/4/2020 8:37:00 AM **Analysis Type:** RES

Dilution: 1.56

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	1.4	J	0.78	LOD	7.8	LOQ	PPBV	J	RI
CARBON DISULFIDE	1.7	J	0.78	LOD	3.1	LOQ	PPBV	J	RI
ETHANOL	0.78	U	0.78	LOD	3.1	LOQ	PPBV	UJ	Lcs
TOLUENE	0.63	J	0.39	LOD	0.78	LOQ	PPBV	J	RI
VINYL CHLORIDE	0.42	J	0.39	LOD	0.78	LOQ	PPBV	J	RI

Sample ID: OU2GM6097

Collected: 6/4/2020 9:00:00 AM **Analysis Type:** RES

Dilution: 1.55

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	2.9	J	0.78	LOD	7.8	LOQ	PPBV	J	RI
ETHANOL	0.78	U	0.78	LOD	3.1	LOQ	PPBV	UJ	Lcs

Sample ID: OU2GM6098

Collected: 6/4/2020 9:05:00 AM **Analysis Type:** RES

Dilution: 1.55

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	3.2	J	0.78	LOD	7.8	LOQ	PPBV	J	RI
ETHANOL	0.78	U	0.78	LOD	3.1	LOQ	PPBV	UJ	Lcs

Sample ID: OU2GM6099

Collected: 6/4/2020 9:15:00 AM **Analysis Type:** RES

Dilution: 1.56

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	2.0	J	0.78	LOD	7.8	LOQ	PPBV	J	RI
CARBON DISULFIDE	3.0	J	0.78	LOD	3.1	LOQ	PPBV	J	RI
CHLOROFORM	0.62	J	0.31	LOD	0.78	LOQ	PPBV	J	RI

* denotes a non-reportable result

Project Name and Number: 21065 - FORT ORD LANDFILL

8/21/2020 10:50:14 AM

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Data Qualifier Summary

Lab Reporting Batch ID: 200965, 2006116A, 2006116B,

Laboratory: AAC, ATL

EDD Filename: Prep200965_Rev2_, Prep2006116A_,
Prep2006116B_, Prep2006216_, Prep2006218_

eQAPP Name: AHTNA_FortOrd_OU2_Landfill_200810

SDG: 2006218

Method Category: VOA

Method: TO-15

Matrix: AIR

Sample ID: OU2GM6099

Collected: 6/4/2020 9:15:00 AM **Analysis Type:** RES

Dilution: 1.56

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ETHANOL	0.78	U	0.78	LOD	3.1	LOQ	PPBV	UJ	Lcs
TOLUENE	0.42	J	0.39	LOD	0.78	LOQ	PPBV	J	RI

Sample ID: OU2GM6100

Collected: 6/4/2020 10:40:00

Analysis Type: RES

Dilution: 1.67

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	4.2	J	0.84	LOD	8.4	LOQ	PPBV	J	RI
ETHANOL	0.84	U	0.84	LOD	3.3	LOQ	PPBV	UJ	Lcs
HEXANE	0.45	J	0.42	LOD	0.84	LOQ	PPBV	J	RI
M,P-XYLENE	0.50	J	0.42	LOD	0.84	LOQ	PPBV	J	RI
TETRACHLOROETHENE	0.66	J	0.42	LOD	0.84	LOQ	PPBV	J	RI

Sample ID: OU2GM6101

Collected: 6/4/2020 10:50:00

Analysis Type: RES

Dilution: 1.60

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	2.6	J	0.80	LOD	8.0	LOQ	PPBV	J	RI
ETHANOL	0.80	U	0.80	LOD	3.2	LOQ	PPBV	UJ	Lcs

Sample ID: OU2GM6102

Collected: 6/4/2020 11:07:00

Analysis Type: RES

Dilution: 1.41

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	1.8	J	0.70	LOD	7.0	LOQ	PPBV	J	RI
ETHANOL	0.70	U	0.70	LOD	2.8	LOQ	PPBV	UJ	Lcs
FREON 113	0.40	J	0.35	LOD	0.70	LOQ	PPBV	J	RI

Sample ID: OU2GM6103

Collected: 6/4/2020 11:18:00

Analysis Type: RES

Dilution: 1.54

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	1.5	J	0.77	LOD	7.7	LOQ	PPBV	J	RI
ETHANOL	0.77	U	0.77	LOD	3.1	LOQ	PPBV	UJ	Lcs

* denotes a non-reportable result

Project Name and Number: 21065 - FORT ORD LANDFILL

8/21/2020 10:50:14 AM

ADR version 1.9.0.325

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Data Qualifier Summary

Lab Reporting Batch ID: 200965, 2006116A, 2006116B,

Laboratory: AAC, ATL

EDD Filename: Prep200965_Rev2_, Prep2006116A_,
Prep2006116B_, Prep2006216_, Prep2006218_

eQAPP Name: AHTNA_FortOrd_OU2_Landfill_200810

SDG: 2006218

* denotes a non-reportable result

Project Name and Number: 21065 - FORT ORD LANDFILL

8/21/2020 10:50:14 AM

ADR version 1.9.0.325

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Data Qualifier Summary

Lab Reporting Batch ID: 200965, 2006116A, 2006116B,

Laboratory: AAC, ATL

EDD Filename: Prep200965_Rev2_, Prep2006116A_,
Prep2006116B_, Prep2006216_, Prep2006218_

eQAPP Name: AHTNA_FortOrd_OU2_Landfill_200810

Reason Code Legend

<i>Reason Code</i>	<i>Description</i>
Lcs	Laboratory Control Spike Lower Estimation
Ld	Laboratory Duplicate Precision
Mb	Method Blank Contamination
ProfJudg	Professional Judgment
RI	Reporting Limit Trace Value

* denotes a non-reportable result

Project Name and Number: 21065 - FORT ORD LANDFILL

8/21/2020 10:50:14 AM

ADR version 1.9.0.325

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Enclosure I

Stage 2B ADR Outliers

(Including Manual Review Outliers)

Quality Control Outlier Reports

2006116

Method Blank Outlier Report

Lab Reporting Batch ID: 2006116BR1

Laboratory: ATL

EDD Filename: Prep2006116BR1_

eQAPP Name: AHTNA_FortOrd_OU2_Landfill_200810

Method: ASTM D-1945

Matrix: AIR

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
2006116BR1-03A	6/4/2020 10:57:00 PM	OXYGEN	120 PPMV	TTU-FM-111 TTU-FM-112

Reporting Limit Outliers

Lab Reporting Batch ID: 2006116A

Laboratory: ATL

EDD Filename: Prep2006116A_

eQAPP Name: AHTNA_FortOrd_OU2_Landfill_200810

Method: TO-15
Matrix: AIR

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
TTU-FM-111	2,2,4-Trimethylpentane	J	150	200	LOQ	PPBV	J (all detects)
	ACETONE	J	1400	2000	LOQ	PPBV	
	CYCLOHEXANE	J	140	200	LOQ	PPBV	
	ETHYL BENZENE	J	180	200	LOQ	PPBV	
	FREON 114	J	140	200	LOQ	PPBV	
	HEXANE	J	180	200	LOQ	PPBV	
	M,P-XYLENE	J	130	200	LOQ	PPBV	
	METHYLENE CHLORIDE	J	300	2000	LOQ	PPBV	
TTU-FM-112	2,2,4-Trimethylpentane	J	150	220	LOQ	PPBV	J (all detects)
	ACETONE	J	1800	2200	LOQ	PPBV	
	CYCLOHEXANE	J	140	220	LOQ	PPBV	
	ETHYL BENZENE	J	160	220	LOQ	PPBV	
	Freon 12	J	180	220	LOQ	PPBV	
	HEXANE	J	170	220	LOQ	PPBV	
	METHYLENE CHLORIDE	J	400	2200	LOQ	PPBV	
TTU-FO-113	ACETONE	J	9.2	11	LOQ	PPBV	J (all detects)
	CHLOROBENZENE	J	0.72	1.1	LOQ	PPBV	
	CYCLOHEXANE	J	0.87	1.1	LOQ	PPBV	
	ETHYL BENZENE	J	0.70	1.1	LOQ	PPBV	
	HEXANE	J	0.98	1.1	LOQ	PPBV	
	M,P-XYLENE	J	0.83	1.1	LOQ	PPBV	

Reporting Limit Outliers

Lab Reporting Batch ID: 2006116BR1

Laboratory: ATL

EDD Filename: 2006116BR1_

eQAPP Name: AHTNA_FortOrd_OU2_Landfill_200810

Method: ASTM D-1945

Matrix: AIR

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
TTU-FM-111	BUTANE	J	2.4	10	LOQ	PPMV	J (all detects)
	C6+	J	58	100	LOQ	PPMV	
	ETHANE	J	1.8	10	LOQ	PPMV	
TTU-FM-112	BUTANE	J	2.4	10	LOQ	PPMV	J (all detects)
	C6+	J	62	100	LOQ	PPMV	
	ETHANE	J	1.5	10	LOQ	PPMV	

Field Duplicate RPD Report

Lab Reporting Batch ID: 2006116A

Laboratory: ATL

EDD Filename: Prep2006116A_

eQAPP Name: AHTNA_FortOrd_OU2_Landfill_200810

Method: TO-15

Matrix: AIR

Analyte	Concentration (PPBV)		Sample RPD	eQAPP RPD	Flag
	TTU-FM-111	TTU-FM-112			
2,2,4-Trimethylpentane	150	150	0	30.00	No Qualifiers Applied
2-PROPANOL	4400	5800	27	30.00	
ACETONE	1400	1800	25	30.00	
CYCLOHEXANE	140	140	0	30.00	
ETHANOL	2400	3300	32	30.00	
ETHYL BENZENE	180	160	12	30.00	
FREON 114	140	130 U	200	30.00	
Freon 12	200	180	11	30.00	
HEPTANE	360	310	15	30.00	
HEXANE	180	170	6	30.00	
M,P-XYLENE	130	130 U	200	30.00	
METHYLENE CHLORIDE	300	400	29	30.00	
TOLUENE	710	700	1	30.00	

Field Duplicate RPD Report

Lab Reporting Batch ID: 2006116BR1

Laboratory: ATL

EDD Filename: 2006116BR1_

eQAPP Name: AHTNA_FortOrd_OU2_Landfill_200810

Method: ASTM D-1945

Matrix: AIR

Analyte	Concentration (PPMV)		Sample RPD	eQAPP RPD	Flag
	TTU-FM-111	TTU-FM-112			
BUTANE	2.4	2.4	0	30.00	No Qualifiers Applied
C6+	58	62	7	30.00	
Carbon Dioxide	300000	290000	3	30.00	
ETHANE	1.8	1.5	18	30.00	
ISOBUTANE	12	12	0	30.00	
METHANE	400000	390000	3	30.00	
NITROGEN	320000	330000	3	30.00	
NMOC REF. TO METHANE (MW=16)	430	450	5	30.00	
OXYGEN	7600	11000	37	30.00	
PROPANE	13	12	8	30.00	

LDC #: 48567A48
 SDG #: 2006116
 Laboratory: Eurofins Air Toxics

VALIDATION COMPLETENESS WORKSHEET
 ADR

Date: 7/1/20
 Page: 1 of 1
 Reviewer: [Signature]
 2nd Reviewer: KUC

METHOD: GC/MS Volatiles (EPA Method TO-15)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Sample receipt/Technical holding times	A	
II.	GC/MS Instrument performance check	A	
III.	Initial calibration/ICV	A/A	REC ≤ 30%, CV ≤ 30%
IV.	Continuing calibration / [Signature]	A	CV ≤ 30/50%
V.	Laboratory Blanks	N	
VI.	Field blanks	N	
VII.	Surrogate spikes	N	
VIII.	Matrix spike/Matrix spike duplicates	N	
IX.	Laboratory control samples	N	
X.	Field duplicates	N	
XI.	Internal standards	A	
XII.	Compound quantitation RL/LOQ/LODs	T/N	
XIII.	Target compound identification	N	
XIV.	System performance	N	
XV.	Leak Check Compounds	N	
XVI.	Overall assessment of data	N	

Note: A = Acceptable ND = No compounds detected D = Duplicate SB=Source blank
 N = Not provided/applicable R = Rinsate TB = Trip blank OTHER:
 SW = See worksheet FB = Field blank EB = Equipment blank

**Indicates sample underwent Stage 4 validation

	Client ID	Lab ID	Matrix	Date
1	TTU-FM-111	2006116-01	Air	06/04/20
2	TTU-FM-112**	2006116-02**	Air	06/04/20
3	TTU-FO-113	2006116-03	Air	06/04/20
4	TTU-FO-113DUP	2006116-03DUP	Air	06/04/20
5				
6				
7				
8				

Notes:

Folker bag				

TARGET COMPOUND WORKSHEET

METHOD: VOA

A. Chloromethane	AA. Tetrachloroethene	AAA. 1,3,5-Trimethylbenzene	AAAA. Ethyl tert-butyl ether	A1. 1,3-Butadiene
B. Bromomethane	BB. 1,1,2,2-Tetrachloroethane	BBB. 4-Chlorotoluene	BBBB. tert-Amyl methyl ether	B1. Hexane
C. Vinyl chloride	CC. Toluene	CCC. tert-Butylbenzene	CCCC. 1-Chlorohexane	C1. Heptane
D. Chloroethane	DD. Chlorobenzene	DDD. 1,2,4-Trimethylbenzene	DDDD. Isopropyl alcohol	D1. Propylene
E. Methylene chloride	EE. Ethylbenzene	EEE. sec-Butylbenzene	EEEE. Acetonitrile	E1. Freon 11
F. Acetone	FF. Styrene	FFF. 1,3-Dichlorobenzene	FFFF. Acrolein	F1. Freon 12
G. Carbon disulfide	GG. Xylenes, total	GGG. p-Isopropyltoluene	GGGG. Acrylonitrile	G1. Freon 113
H. 1,1-Dichloroethene	HH. Vinyl acetate	HHH. 1,4-Dichlorobenzene	HHHH. 1,4-Dioxane	H1. Freon 114
I. 1,1-Dichloroethane	II. 2-Chloroethylvinyl ether	III. n-Butylbenzene	IIII. Isobutyl alcohol	I1. 2-Nitropropane
J. 1,2-Dichloroethene, total	JJ. Dichlorodifluoromethane	JJJ. 1,2-Dichlorobenzene	JJJJ. Methacrylonitrile	J1. Dimethyl disulfide
K. Chloroform	KK. Trichlorofluoromethane	KKK. 1,2,4-Trichlorobenzene	KKKK. Propionitrile	K1. 2,3-Dimethyl pentane
L. 1,2-Dichloroethane	LL. Methyl-tert-butyl ether	LLL. Hexachlorobutadiene	LLLL. Ethyl ether	L1. 2,4-Dimethyl pentane
M. 2-Butanone	MM. 1,2-Dibromo-3-chloropropane	MMM. Naphthalene	MMMM. Benzyl chloride	M1. 3,3-Dimethyl pentane
N. 1,1,1-Trichloroethane	NN. Methyl ethyl ketone	NNN. 1,2,3-Trichlorobenzene	NNNN. Iodomethane	N1. 2-Methylpentane
O. Carbon tetrachloride	OO. 2,2-Dichloropropane	OOO. 1,3,5-Trichlorobenzene	OOOO. 1,1-Difluoroethane	O1. 3-Methylpentane
P. Bromodichloromethane	PP. Bromochloromethane	PPP. trans-1,2-Dichloroethene	PPPP. Tetrahydrofuran	P1. 3-Ethylpentane
Q. 1,2-Dichloropropane	QQ. 1,1-Dichloropropene	QQQ. cis-1,2-Dichloroethene	QQQQ. Methyl acetate	Q1. 2,2-Dimethylpentane
R. cis-1,3-Dichloropropene	RR. Dibromomethane	RRR. m,p-Xylenes	RRRR. Ethyl acetate	R1. 2,2,3-Trimethylbutane
S. Trichloroethene	SS. 1,3-Dichloropropane	SSS. o-Xylene	SSSS. Cyclohexane	S1. 2,2,4-Trimethylpentane
T. Dibromochloromethane	TT. 1,2-Dibromoethane	TTT. 1,1,2-Trichloro-1,2,2-trifluoroethane	TTTT. Methylcyclohexane	T1. 2-Methylhexane
U. 1,1,2-Trichloroethane	UU. 1,1,1,2-Tetrachloroethane	UUU. 1,2-Dichlorotetrafluoroethane	UUUU. Allyl chloride	U1. Nonanal
V. Benzene	VV. Isopropylbenzene	VVV. 4-Ethyltoluene	VVVV. Methyl methacrylate	V1. 2-Methylnaphthalene
W. trans-1,3-Dichloropropene	WW. Bromobenzene	WWW. Ethanol	WWWW. Ethyl methacrylate	W1. Methanol
X. Bromoform	XX. 1,2,3-Trichloropropane	XXX. Di-isopropyl ether	XXXX. cis-1,4-Dichloro-2-butene	X1. 1,2,3-Trimethylbenzene
Y. 4-Methyl-2-pentanone	YY. n-Propylbenzene	YYY. tert-Butanol	YYYY. trans-1,4-Dichloro-2-butene	Y1. 2-Propanol
Z. 2-Hexanone	ZZ. 2-Chlorotoluene	ZZZ. tert-Butyl alcohol	ZZZZ. Pentachloroethane	Z1.

LDC #: 48567A51
 SDG #: 2006116
 Laboratory: Eurofins Air Toxics

VALIDATION COMPLETENESS WORKSHEET
 ADR

Date: 7/7/20
 Page: 1 of 1
 Reviewer: [Signature]
 2nd Reviewer: KUC

METHOD: GC Fixed Gases (Method ~~RSK-175~~) *A STM D1945*

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Sample receipt/Technical holding times	A	
II.	Initial calibration/ICV	A/A	Not reviewed for Stage 2A validation <i>R50=157.101/1570</i>
III.	Continuing calibration	A	Not reviewed for Stage 2A validation <i>CE/1570</i>
IV.	Laboratory Blanks	N	
V.	Field blanks		
VI.	Surrogate spikes		
VII.	Matrix spike/Matrix spike duplicates		
VIII.	Laboratory control samples		
IX.	Field duplicates		
X.	Compound quantitation RL/LOQ/LODs		Not reviewed for Stage 2A validation
XI.	Target compound identification		Not reviewed for Stage 2A validation
XII.	Overall assessment of data		

Note: A = Acceptable ND = No compounds detected D = Duplicate SB=Source blank
 N = Not provided/applicable R = Rinsate TB = Trip blank OTHER:
 SW = See worksheet FB = Field blank EB = Equipment blank

**Indicates sample underwent Stage 4 validation

	Client ID	Lab ID	Matrix	Date
1	TTU-FM-111	2006116-01	Air	06/04/20
2	TTU-FM-112**	2006116-02**	Air	06/04/20
3	TTU-FM-112DUP	2006116-02DUP	Air	06/04/20
4				
5				
6				
7				
8				
9				
10				
11				
12				

Notes:

Quality Control Outlier Reports

2006216

Reporting Limit Outliers

Lab Reporting Batch ID: 2006216

Laboratory: ATL

EDD Filename: Prep2006216_

eQAPP Name: AHTNA_FortOrd_OU2_Landfill_200810

Method: TO-15

Matrix: AIR

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
TTU-D-114	1,3,5-TRIMETHYLBENZENE	J	10	16	LOQ	PPBV	J (all detects)
	4-ETHYLTOLUENE	J	12	16	LOQ	PPBV	
	ACETONE	J	52	66	LOQ	PPBV	
TTU-EF-115	TRICHLOROETHENE	J	12	15	LOQ	PPBV	J (all detects)
TTU-ET-116	CHLOROBENZENE	J	12	16	LOQ	PPBV	J (all detects)
	ETHYL BENZENE	J	13	16	LOQ	PPBV	

LDC #: 48567B48
 SDG #: 2006216
 Laboratory: Eurofins Air Toxics

VALIDATION COMPLETENESS WORKSHEET
 ADR

Date: 6/10
 Page: 1 of 1
 Reviewer: [Signature]
 2nd Reviewer: [Signature]

METHOD: GC/MS Volatiles (EPA Method TO-15)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Sample receipt/Technical holding times	A	
II.	GC/MS Instrument performance check	A	
III.	Initial calibration/ICV	NA	$RSR \leq 30\%$ $ICV \leq 30\%$
IV.	Continuing calibration / <u>ending</u>	A	$CV - CCV \leq 30/50\%$
V.	Laboratory Blanks/Canister BLK	NA	by sample
VI.	Field blanks	N	
VII.	Surrogate spikes	N	
VIII.	Matrix spike/Matrix spike duplicates	N	
IX.	Laboratory control samples	N	
X.	Field duplicates	N	
XI.	Internal standards	A	
XII.	Compound quantitation RL/LOQ/LODs	N	
XIII.	Target compound identification	N	
XIV.	System performance	N	
XV.	Leak Check Compounds	N	
XVI.	Overall assessment of data	N	

Note: A = Acceptable ND = No compounds detected D = Duplicate SB=Source blank
 N = Not provided/applicable R = Rinsate TB = Trip blank OTHER:
 SW = See worksheet FB = Field blank EB = Equipment blank

	Client ID	Lab ID	Matrix	Date
1	TTU-D-114	2006216-01	Air	06/04/20
2	TTU-EF-115	2006216-02	Air	06/04/20
3	TTU-ET-116	2006216-03	Air	06/04/20
4	TTU-VF-117	2006216-04	Air	06/04/20
5	TTU-D-114DUP	2006216-01DUP	Air	06/04/20
6				
7				
8				

Notes:

Quality Control Outlier Reports

2006218

Method Blank Outlier Report

Lab Reporting Batch ID: 2006218

Laboratory: ATL

EDD Filename: Prep2006218_

eQAPP Name: AHTNA_FortOrd_OU2_Landfill_200810

Method: TO-15
Matrix: AIR

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
2006218-25A	6/12/2020 12:37:00 PM	2-PROPANOL ETHANOL	0.72 PPBV 1.1 PPBV	OU2GM6080 OU2GM6081 OU2GM6082 OU2GM6083 OU2GM6084 OU2GM6085 OU2GM6086 OU2GM6087 OU2GM6088 OU2GM6089 OU2GM6090 OU2GM6091 OU2GM6092 OU2GM6093 OU2GM6094 OU2GM6095 OU2GM6096 OU2GM6097 OU2GM6098 OU2GM6099

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: 2006218

Laboratory: ATL

EDD Filename: Prep2006218_

eQAPP Name: AHTNA_FortOrd_OU2_Landfill_200810

Method: TO-15
Matrix: AIR

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
2006218-27A 2006218-27AA (OU2GM6080 OU2GM6081 OU2GM6082 OU2GM6083 OU2GM6084 OU2GM6085 OU2GM6086 OU2GM6087 OU2GM6088 OU2GM6089 OU2GM6090 OU2GM6091 OU2GM6092 OU2GM6093 OU2GM6094 OU2GM6095 OU2GM6096 OU2GM6097 OU2GM6098 OU2GM6099)	ETHANOL	-	-	59.00-125.00	-	ETHANOL	J- (all detects) UJ (all non-detects)
2006218-27B (OU2GM6100 OU2GM6101 OU2GM6102 OU2GM6103)	ETHANOL	-	-	59.00-125.00	-	ETHANOL	J-(all detects) UJ(all non-detects)

Reporting Limit Outliers

Lab Reporting Batch ID: 2006218

Laboratory: ATL

EDD Filename: Prep2006218_

eQAPP Name: AHTNA_FortOrd_OU2_Landfill_200810

Method: TO-15
Matrix: AIR

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
OU2GM6080	ACETONE	J	2.2	7.4	LOQ	PPBV	J (all detects)
OU2GM6081	ACETONE CHLOROFORM	J J	3.0 0.38	7.3 0.73	LOQ LOQ	PPBV PPBV	J (all detects)
OU2GM6082	ACETONE	J	4.8	8.3	LOQ	PPBV	J (all detects)
OU2GM6083	ACETONE TETRACHLOROETHENE	J J	3.8 0.67	7.9 0.79	LOQ LOQ	PPBV PPBV	J (all detects)
OU2GM6084	ACETONE CHLOROFORM TOLUENE	J J J	2.1 0.32 0.72	8.0 0.80 0.80	LOQ LOQ LOQ	PPBV PPBV PPBV	J (all detects)
OU2GM6085	ACETONE M,P-XYLENE	J J	4.1 0.68	8.2 0.82	LOQ LOQ	PPBV PPBV	J (all detects)
OU2GM6086	ACETONE FREON 113	J J	2.0 0.42	7.9 0.79	LOQ LOQ	PPBV PPBV	J (all detects)
OU2GM6087	FREON 113	J	0.73	0.80	LOQ	PPBV	J (all detects)
OU2GM6088	ACETONE	J	3.8	8.3	LOQ	PPBV	J (all detects)
OU2GM6089	ACETONE BENZENE CHLOROFORM M,P-XYLENE	J J J J	5.8 0.55 0.55 0.52	9.1 0.91 0.91 0.91	LOQ LOQ LOQ LOQ	PPBV PPBV PPBV PPBV	J (all detects)
OU2GM6090	ACETONE CARBON DISULFIDE TETRACHLOROETHENE	J J J	3.0 1.2 0.55	7.8 3.1 0.78	LOQ LOQ LOQ	PPBV PPBV PPBV	J (all detects)
OU2GM6091	ACETONE	J	3.1	9.4	LOQ	PPBV	J (all detects)
OU2GM6092	ACETONE	J	1.6	9.6	LOQ	PPBV	J (all detects)
OU2GM6093	ACETONE	J	1.5	8.5	LOQ	PPBV	J (all detects)
OU2GM6094	ACETONE	J	1.6	8.2	LOQ	PPBV	J (all detects)
OU2GM6095	ACETONE	J	2.0	8.0	LOQ	PPBV	J (all detects)
OU2GM6096	ACETONE CARBON DISULFIDE TOLUENE VINYL CHLORIDE	J J J J	1.4 1.7 0.63 0.42	7.8 3.1 0.78 0.78	LOQ LOQ LOQ LOQ	PPBV PPBV PPBV PPBV	J (all detects)
OU2GM6097	ACETONE	J	2.9	7.8	LOQ	PPBV	J (all detects)
OU2GM6098	ACETONE	J	3.2	7.8	LOQ	PPBV	J (all detects)
OU2GM6099	ACETONE CARBON DISULFIDE CHLOROFORM TOLUENE	J J J J	2.0 3.0 0.62 0.42	7.8 3.1 0.78 0.78	LOQ LOQ LOQ LOQ	PPBV PPBV PPBV PPBV	J (all detects)
OU2GM6100	ACETONE HEXANE M,P-XYLENE TETRACHLOROETHENE	J J J J	4.2 0.45 0.50 0.66	8.4 0.84 0.84 0.84	LOQ LOQ LOQ LOQ	PPBV PPBV PPBV PPBV	J (all detects)
OU2GM6101	ACETONE	J	2.6	8.0	LOQ	PPBV	J (all detects)
OU2GM6102	ACETONE FREON 113	J J	1.8 0.40	7.0 0.70	LOQ LOQ	PPBV PPBV	J (all detects)

Project Name and Number: 21065 - FORT ORD LANDFILL

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ADR version 1.9.0.325

Page 1 of 2

Reporting Limit Outliers

Lab Reporting Batch ID: 2006218

Laboratory: ATL

EDD Filename: Prep2006218_

eQAPP Name: AHTNA_FortOrd_OU2_Landfill_200810

Method: TO-15

Matrix: AIR

<i>SampleID</i>	<i>Analyte</i>	<i>Lab Qual</i>	<i>Result</i>	<i>Reporting Limit</i>	<i>RL Type</i>	<i>Units</i>	<i>Flag</i>
OU2GM6103	ACETONE	J	1.5	7.7	LOQ	PPBV	J (all detects)

Field Duplicate RPD Report

Lab Reporting Batch ID: 2006218

Laboratory: ATL

EDD Filename: Prep2006218_

eQAPP Name: AHTNA_FortOrd_OU2_Landfill_200810

Method: TO-15

Matrix: AIR

Analyte	Concentration (PPBV)		Sample RPD	eQAPP RPD	Flag
	OU2GM6091	OU2GM6092			
ACETONE	3.1	1.6	64	30.00	No Qualifiers Applied
FREON 114	6.8	7.6	11	30.00	
Freon 12	10	11	10	30.00	
Analyte	Concentration (PPBV)		Sample RPD	eQAPP RPD	Flag
	OU2GM6094	OU2GM6095			
ACETONE	1.6	2.0	22	30.00	No Qualifiers Applied
CHLOROFORM	1.3	1.3	0	30.00	
FREON 114	5.4	4.8	12	30.00	
Freon 12	40	40	0	30.00	
Analyte	Concentration (PPBV)		Sample RPD	eQAPP RPD	Flag
	OU2GM6097	OU2GM6098			
ACETONE	2.9	3.2	10	30.00	No Qualifiers Applied
FREON 114	4.0	4.4	10	30.00	
Freon 12	55	55	0	30.00	

LDC #: 48567C48
 SDG #: 2006218
 Laboratory: Eurofins Air Toxics

VALIDATION COMPLETENESS WORKSHEET

Stage 2 ~~AX~~ ~~ADR~~

Date: 7/1/20
 Page: 1 of 2
 Reviewer: [Signature]
 2nd Reviewer: [Signature]

METHOD: GC/MS Volatiles (EPA Method TO-15)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Sample receipt/Technical holding times	A	
II.	GC/MS Instrument performance check	A	Not reviewed for Stage 2A validation
III.	Initial calibration/ICV	A A	Not reviewed for Stage 2A validation
IV.	Continuing calibration	A	Not reviewed for Stage 2A validation
V.	Laboratory Blanks	N	
VI.	Field blanks		
VII.	Surrogate spikes		Not reviewed for Stage 2A validation
VIII.	Matrix spike/Matrix spike duplicates		
IX.	Laboratory control samples		
X.	Field duplicates		D=12+13, 15+16, 18+19
XI.	Internal standards	A	
XII.	Compound quantitation RL/LOQ/LODs	N	Not reviewed for Stage 2A validation
XIII.	Target compound identification		Not reviewed for Stage 2A validation
XIV.	System performance		Not reviewed for Stage 2A validation
XV.	Leak Check Compounds		
XVI.	Overall assessment of data		

Note: A = Acceptable ND = No compounds detected D = Duplicate SB=Source blank
 N = Not provided/applicable R = Rinsate TB = Trip blank OTHER:
 SW = See worksheet FB = Field blank EB = Equipment blank

**Indicates sample underwent Stage 4 validation

	Client ID	Lab ID	Matrix	Date
1	OU2GM6080	2006218-01	Air	06/03/20
2	OU2GM6081	2006218-02	Air	06/03/20
3	OU2GM6082	2006218-03	Air	06/03/20
4	OU2GM6083	2006218-04	Air	06/03/20
5	OU2GM6084	2006218-05	Air	06/03/20
6	OU2GM6085	2006218-06	Air	06/03/20
7	OU2GM6086	2006218-07	Air	06/03/20
8	OU2GM6087**	2006218-08**	Air	06/03/20
9	OU2GM6088	2006218-09	Air	06/03/20
10	OU2GM6089	2006218-10	Air	06/03/20
11	OU2GM6090	2006218-11	Air	06/03/20
12	OU2GM6091	2006218-12	Air	06/03/20
13	OU2GM6092	2006218-13	Air	06/03/20

LDC #: 48567C48
 SDG #: 2006218
 Laboratory: Eurofins Air Toxics

VALIDATION COMPLETENESS WORKSHEET

~~Stage 2A/4~~

Date: 7/1/20
 Page: 2 of 2
 Reviewer: [Signature]
 2nd Reviewer: [Signature]

METHOD: GC/MS Volatiles (EPA Method TO-15)

14	OU2GM6093	2006218-14	Air	06/03/20
15	OU2GM6094	2006218-15	Air	06/03/20
16	OU2GM6095	2006218-16	Air	06/03/20
17	OU2GM6096	2006218-17	Air	06/04/20
18	OU2GM6097	2006218-18	Air	06/04/20
19	OU2GM6098	2006218-19	Air	06/04/20
20	OU2GM6099	2006218-20	Air	06/04/20
21	OU2GM6100	2006218-21	Air	06/04/20
22	OU2GM6101	2006218-22	Air	06/04/20
23	OU2GM6102	2006218-23	Air	06/04/20
24	OU2GM6103	2006218-24	Air	06/04/20
25	OU2GM6080DUP	2006218-01DUP	Air	06/03/20
26	OU2GM6102DUP	2006218-23DUP	Air	06/04/20
27				
28				
29				

Notes:

Quality Control Outlier Reports

200965

Field Duplicate RPD Report

Lab Reporting Batch ID: 200965

Laboratory: AAC

EDD Filename: 200965_Rev2_

eQAPP Name: AHTNA_FortOrd_OU2_Landfill_200810

Method: ASTM D-5504

Matrix: AIR

Analyte	Concentration (ppmV)		Sample RPD	eQAPP RPD	Flag
	TTU-FM-111S	TTU-FM-112S			
HYDROGEN SULFIDE	0.451	0.442	2	30.00	No Qualifiers Applied

METHOD: GC Sulfur Gases (ASTM D5504)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Sample receipt/Technical holding times	A	
II.	Initial calibration/ICV	A-A	r^2 - $100 \leq 3070$
III.	Continuing calibration	A	$CCV \leq 3070$
IV.	Laboratory Blanks	N	
V.	Field blanks		
VI.	Surrogate spikes		
VII.	Matrix spike/Matrix spike duplicates		
VIII.	Laboratory control samples		
IX.	Field duplicates		Not reviewed for Stage 2B validation
X.	Compound quantitation RL/LOQ/LODs		Not reviewed for Stage 2B validation
XI.	Target compound identification		
XII.	Overall assessment of data		

Note: A = Acceptable ND = No compounds detected D = Duplicate SB=Source blank
 N = Not provided/applicable R = Rinsate TB = Trip blank OTHER:
 SW = See worksheet FB = Field blank EB = Equipment blank

**Indicates sample underwent Stage 4 validation

	Client ID	Lab ID	Matrix	Date
1	TTU-FM-111S**	200965-8741**	Air	06/04/20
2	TTU-FM-112S	200965-8742	Air	06/04/20
3				
4				
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11				
12				

Notes:

Enclosure II

Stage 4 Data Validation Reports

**Laboratory Data Consultants, Inc.
Data Validation Report**

Project/Site Name: Fort Ord, OU2

LDC Report Date: July 28, 2020

Parameters: Volatiles

Validation Level: Stage 4

Laboratory: Eurofins

Sample Delivery Group (SDG): 2006116

Sample Identification	Laboratory Sample Identification	Matrix	Collection Date
TTU-FM-112	2006116-02	Air	06/04/20

Introduction

This Data Validation Report (DVR) presents data validation findings and results for the associated samples listed on the cover page. Data validation was performed in accordance with the Quality Assurance Project Plan, Former Fort Ord, California, Volume I, Appendix D, Revision 4, Operable Unit 2 Landfills (April 2020), the U.S. Department of Defense (DoD) Quality Systems Manual (QSM) for Environmental Laboratories, Version 5.1 (2017), and the USACE Guidance for Evaluating Performance-Based Chemical Data (June 2005). Where specific guidance was not available, the data has been evaluated in a conservative manner consistent with industry standards using professional experience.

The analyses were performed by the following method:

Volatile Organic Compounds (VOCs) by Environmental Protection Agency (EPA) Method TO-15

All sample results were subjected to Stage 4 data validation, which is comprised of the quality control (QC) summary forms as well as the raw data, to confirm sample quantitation and identification.

The following are definitions of the data qualifiers utilized during data validation:

- J+ (Estimated, High Bias): The compound or analyte was analyzed for and positively identified by the laboratory; however the reported concentration is estimated, displaying high bias, due to non-conformances discovered during data validation.
- J- (Estimated, Low Bias): The compound or analyte was analyzed for and positively identified by the laboratory; however the reported concentration is estimated, displaying low bias, due to non-conformances discovered during data validation.
- J (Estimated, Bias Indeterminate): The compound or analyte was analyzed for and positively identified by the laboratory; however the reported concentration is estimated due to non-conformances discovered during data validation. Bias is indeterminate.
- U (Non-detected): The compound or analyte was analyzed for and positively identified by the laboratory; however the compound or analyte should be considered non-detected at the reported concentration due to the presence of contaminants detected in the associated blank(s).
- UJ (Non-detected estimated): The compound or analyte was reported as not detected by the laboratory; however the reported quantitation/detection limit is estimated due to non-conformances discovered during data validation.
- R (Rejected): The sample results were rejected due to gross non-conformances discovered during data validation. Data qualified as rejected is not usable.
- NA (Not Applicable): The non-conformance discovered during data validation demonstrates a high bias, while the affected compound or analyte in the associated sample(s) was reported as not detected by the laboratory and did not warrant the qualification of the data.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

I. Sample Receipt and Technical Holding Times

The tedlar bags were properly pressurized and handled.

All technical holding time requirements were met.

II. GC/MS Instrument Performance Check

A bromofluorobenzene (BFB) tune was performed at 24 hour intervals.

All ion abundance requirements were met.

III. Initial Calibration and Initial Calibration Verification

An initial calibration was performed as required by the method.

The percent relative standard deviations (%RSD) were less than or equal to 30.0% for all compounds.

The percent differences (%D) of the initial calibration verification (ICV) standard were less than or equal to 30.0% for all compounds.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

The percent differences (%D) were less than or equal to 30.0% for all compounds.

The percent differences (%D) of the ending continuing calibration verifications (CCVs) were less than or equal to 50.0% for all compounds.

V. Laboratory Blanks

Laboratory blanks were analyzed as required by the method. No contaminants were found in the laboratory blanks.

VI. Field Blanks

No field blanks were identified in this SDG.

VII. Surrogates

Although surrogates were not required by the method, surrogate analysis was performed by the laboratory. Surrogate recoveries (%R) were within QC limits with the following exceptions:

Sample	Surrogate	%R (Limits)	Affected Compound	Flag	A or P
TTU-FM-112	Bromofluorobenzene	127 (85-116)	All compounds	J+ (all detects)	A

VIII. Duplicate Sample Analysis

Duplicate (DUP) sample analysis was performed on an associated project sample. Results were within QC limits.

IX. Laboratory Control Samples

Laboratory control samples (LCS) and laboratory control samples duplicates (LCSD) were analyzed as required by the method. Percent recoveries (%R) were within QC limits. Relative percent differences (RPD) were within QC limits.

X. Field Duplicates

Samples TTU-FM-111 and TTU-FM-112 were identified as field duplicates. No results were detected in any of the samples with the following exceptions:

Compound	Concentration (ppbv)		RPD (Limits)
	TTU-FM-111	TTU-FM-112	
2,2,4-Trimethylpentane	150	150	0 (≤ 30)
2-Propanol	4400	5800	27 (≤ 30)
Acetone	1400	1800	25 (≤ 30)
Cyclohexane	140	140	0 (≤ 30)
Ethanol	2400	3300	32 (≤ 30)
Ethylbenzene	180	160	12 (≤ 30)
Freon 114	140	130U	200 (≤ 30)
Freon 12	200	180	11 (≤ 30)
Heptane	360	310	15 (≤ 30)
Hexane	180	170	6 (≤ 30)
m,p-Xylene	130	130U	200 (≤ 30)

Compound	Concentration (ppbv)		RPD (Limits)
	TTU-FM-111	TTU-FM-112	
Methylene chloride	300	400	29 (≤ 30)
Toluene	710	700	1 (≤ 30)

XI. Internal Standards

All internal standard areas and retention times were within QC limits.

XII. Compound Quantitation

All compound quantitations met validation criteria with the following exceptions:

Sample	Compound	Finding	Flag	A or P
All samples in SDG 2006116	2-Propanol Toluene	The certification of tedlar bag were reported at 42.8 ppbv for 2-propanol and 1.8ppbv for toluene to indicate high bias.	J (all detects) J (all detects)	A

All compounds reported below the limit of quantitation (LOQ) were qualified as follows:

Sample	Finding	Flag	A or P
TTU-FM-112	All compounds reported below the LOQ.	J (all detects)	A

XIII. Target Compound Identifications

All target compound identifications met validation criteria.

XIV. System Performance

The system performance was acceptable.

XV. Overall Assessment of Data

The analysis was conducted within all specifications of the method. No results were rejected in this SDG.

Due to surrogate %R, tedlar bag certification, and results below the LOQ, data were qualified as estimated in one sample.

The quality control criteria reviewed, other than those discussed above, were met and are considered acceptable.

**Fort Ord, OU2
 Volatiles - Data Qualification Summary - SDG 2006116**

Sample	Compound	Flag*	A or P	Reason
TTU-FM-112	All compounds	J+ (all detects)	A	Surrogates (%R)
TTU-FM-112	2-Propanol Toluene	J (all detects) J (all detects)	A	Compound quantitation
TTU-FM-112	All compounds reported below the LOQ.	J (all detects)	A	Compound quantitation

*A non-biased (J) flag will always supersede biased (J+ or J-) flags since it is not possible to assess the direction of the potential bias.

**Fort Ord, OU2
 Volatiles - Laboratory Blank Data Qualification Summary - SDG 2006116**

No Sample Data Qualified in this SDG

**Fort Ord, OU2
 Volatiles - Field Blank Data Qualification Summary - SDG 2006116**

No Sample Data Qualified in this SDG

LDC #: 48567A48
 SDG #: 2006116
 Laboratory: Eurofins Air Toxics

VALIDATION COMPLETENESS WORKSHEET

Stage 4

Date: 7/2/20
 Page: 1 of 1
 Reviewer: [Signature]
 2nd Reviewer: KIC

METHOD: GC/MS Volatiles (EPA Method TO-15)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Sample receipt/Technical holding times	A	
II.	GC/MS Instrument performance check	A	
III.	Initial calibration/ICV	A, A	150 ≤ 39% 101 ≤ 39%
IV.	Continuing calibration	A	
V.	Laboratory Blanks	A	
VI.	Field blanks	N	
VII.	Surrogate spikes	SW	
VIII.	Matrix spike/Matrix spike duplicates	A	
IX.	Laboratory control samples	A	100% to
X.	Field duplicates	SW	5-1+2
XI.	Internal standards	A	
XII.	Compound quantitation RL/LOQ/LODs	SW	
XIII.	Target compound identification	A	
XIV.	System performance	A	
XV.	Leak Check Compounds	N	
XVI.	Overall assessment of data	A	

Note: A = Acceptable ND = No compounds detected D = Duplicate SB=Source blank
 N = Not provided/applicable R = Rinsate TB = Trip blank OTHER:
 SW = See worksheet FB = Field blank EB = Equipment blank

**Indicates sample underwent Stage 4 validation

	Client ID	Lab ID	Matrix	Date
1	TTU-FM-111	2006116-01	Air	06/04/20
2	TTU-FM-112**	2006116-02**	Air	06/04/20
3	TTU-FO-113	2006116-03	Air	06/04/20
4	TTU-FO-113DUP	2006116-03DUP	Air	06/04/20
5				
6				
7				
8				

Notes:

Method: Volatiles (EPA Method TO-15)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
Were all technical holding times met?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was canister pressure criteria met?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
II. GC/MS Instrument performance check				
Were the BFB performance results reviewed and found to be within the specified criteria?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were all samples analyzed within the 24 hour clock criteria?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
IIIa. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were all percent relative standard deviations (%RSD) \leq 30%?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
IIIb. Initial calibration verification				
Was an initial calibration verification standard analyzed after every ICAL for each instrument?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were all percent differences (%D) \leq 30% or percent recoveries (%R) 70-130%?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
IV. Continuing calibration				
Was a continuing calibration standard analyzed at least once every 24 hours for each instrument?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were all percent differences (%D) \leq 30% or percent recoveries (%R) 70-130%?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
V. Laboratory Blanks/Canister Blanks				
Was a laboratory blank associated with every sample in this SDG?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was a laboratory blank analyzed at least once every 24 hours for each matrix and concentration?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was there contamination in the laboratory blanks? If yes, please see the Blanks validation findings worksheet.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Was a canister blank analyzed for every canister?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Was there contamination in the canister blanks? If yes, please see the Canister Blanks validation findings worksheet.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
VI. Field Blanks				
Were field blanks identified in this SDG?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Were target compounds detected in the field blanks?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
VII. Surrogate spikes (Optional)				
Were all surrogate percent recoveries (%R) within QC limits?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
VIII. Laboratory Duplicate				
Was a laboratory duplicate analyzed for this SDG?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were the relative percent differences (RPD) within the QC limits?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

VALIDATION FINDINGS CHECKLIST

Validation Area	Yes	No	NA	Findings/Comments
IX. Laboratory control samples				
Was an LCS analyzed for this SDG?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was an LCS analyzed per analytical batch?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
X. Field duplicates				
Were field duplicate pairs identified in this SDG?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were target compounds detected in the field duplicates?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
XI. Internal standards				
Were internal standard area counts within $\pm 40\%$ from the associated calibration standard?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were retention times within ± 20.0 seconds from the associated calibration standard?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
XII. Compound quantitation				
Did the laboratory LOQs/RLs meet the QAPP LOQs/RLs?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the compound?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were compound quantitation and RLs adjusted to reflect all sample dilutions applicable to level IV validation?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
XIII. Target compound identification				
Were relative retention times (RRT's) within ± 0.06 RRT units of the standard?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Did compound spectra meet specified EPA "Functional Guidelines" criteria?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were chromatogram peaks verified and accounted for?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
XIV. System performance				
System performance was found to be acceptable.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
XV. Leak check compounds				
Was a leak check compound used to evaluate sample integrity and included in the laboratory analyte list?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Was the leak check compound detected in the samples? If yes, please see leak check validation findings worksheet.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
XV. Overall assessment of data				
Overall assessment of data was found to be acceptable.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

TARGET COMPOUND WORKSHEET

METHOD: VOA

A. Chloromethane	AA. Tetrachloroethene	AAA. 1,3,5-Trimethylbenzene	AAAA. Ethyl tert-butyl ether	A1. 1,3-Butadiene
B. Bromomethane	BB. 1,1,2,2-Tetrachloroethane	BBB. 4-Chlorotoluene	BBBB. tert-Amyl methyl ether	B1. Hexane
C. Vinyl chloride	CC. Toluene	CCC. tert-Butylbenzene	CCCC. 1-Chlorohexane	C1. Heptane
D. Chloroethane	DD. Chlorobenzene	DDD. 1,2,4-Trimethylbenzene	DDDD. Isopropyl alcohol	D1. Propylene
E. Methylene chloride	EE. Ethylbenzene	EEE. sec-Butylbenzene	EEEE. Acetonitrile	E1. Freon 11
F. Acetone	FF. Styrene	FFF. 1,3-Dichlorobenzene	FFFF. Acrolein	F1. Freon 12
G. Carbon disulfide	GG. Xylenes, total	GGG. p-Isopropyltoluene	GGGG. Acrylonitrile	G1. Freon 113
H. 1,1-Dichloroethene	HH. Vinyl acetate	HHH. 1,4-Dichlorobenzene	HHHH. 1,4-Dioxane	H1. Freon 114
I. 1,1-Dichloroethane	II. 2-Chloroethylvinyl ether	III. n-Butylbenzene	IIII. Isobutyl alcohol	I1. 2-Nitropropane
J. 1,2-Dichloroethene, total	JJ. Dichlorodifluoromethane	JJJ. 1,2-Dichlorobenzene	JJJJ. Methacrylonitrile	J1. Dimethyl disulfide
K. Chloroform	KK. Trichlorofluoromethane	KKK. 1,2,4-Trichlorobenzene	KKKK. Propionitrile	K1. 2,3-Dimethyl pentane
L. 1,2-Dichloroethane	LL. Methyl-tert-butyl ether	LLL. Hexachlorobutadiene	LLLL. Ethyl ether	L1. 2,4-Dimethyl pentane
M. 2-Butanone	MM. 1,2-Dibromo-3-chloropropane	MMM. Naphthalene	MMMM. Benzyl chloride	M1. 3,3-Dimethyl pentane
N. 1,1,1-Trichloroethane	NN. Methyl ethyl ketone	NNN. 1,2,3-Trichlorobenzene	NNNN. Iodomethane	N1. 2-Methylpentane
O. Carbon tetrachloride	OO. 2,2-Dichloropropane	OOO. 1,3,5-Trichlorobenzene	OOOO. 1,1-Difluoroethane	O1. 3-Methylpentane
P. Bromodichloromethane	PP. Bromochloromethane	PPP. trans-1,2-Dichloroethene	PPPP. Tetrahydrofuran	P1. 3-Ethylpentane
Q. 1,2-Dichloropropane	QQ. 1,1-Dichloropropene	QQQ. cis-1,2-Dichloroethene	QQQQ. Methyl acetate	Q1. 2,2-Dimethylpentane
R. cis-1,3-Dichloropropene	RR. Dibromomethane	RRR. m,p-Xylenes	RRRR. Ethyl acetate	R1. 2,2,3-Trimethylbutane
S. Trichloroethene	SS. 1,3-Dichloropropane	SSS. o-Xylene	SSSS. Cyclohexane	S1. 2,2,4-Trimethylpentane
T. Dibromochloromethane	TT. 1,2-Dibromoethane	TTT. 1,1,2-Trichloro-1,2,2-trifluoroethane	TTTT. Methylcyclohexane	T1. 2-Methylhexane
U. 1,1,2-Trichloroethane	UU. 1,1,1,2-Tetrachloroethane	UUU. 1,2-Dichlorotetrafluoroethane	UUUU. Allyl chloride	U1. Nonanal
V. Benzene	VV. Isopropylbenzene	VVV. 4-Ethyltoluene	VVVV. Methyl methacrylate	V1. 2-Methylnaphthalene
W. trans-1,3-Dichloropropene	WW. Bromobenzene	WWW. Ethanol	WWWWW. Ethyl methacrylate	W1. Methanol
X. Bromoform	XX. 1,2,3-Trichloropropane	XXX. Di-isopropyl ether	XXXX. cis-1,4-Dichloro-2-butene	X1. 1,2,3-Trimethylbenzene
Y. 4-Methyl-2-pentanone	YY. n-Propylbenzene	YYY. tert-Butanol	YYYY. trans-1,4-Dichloro-2-butene	Y1. 2-Propanol
Z. 2-Hexanone	ZZ. 2-Chlorotoluene	ZZZ. tert-Butyl alcohol	ZZZZ. Pentachloroethane	Z1.

LDC#: 48567A48

VALIDATION FINDINGS WORKSHEET
Field Duplicates

Page: 1 of 1
 Reviewer: [Signature]
 2nd Reviewer: [Signature]

METHOD: GCMS VOA (EPA Method TO-15)

Compound	Concentration (ppbv)		(≤ 30)
	1	2	RPD
S1	150	150	0
Y1	4400	5800	27
F	1400	1800	25
SSSS	140	140	0
WWW	2400	3300	32
EE	180	160	12
H1	140	130U	200
F1	200	180	11
C1	360	310	15
B1	180	170	6
RRR	130	130U	200
E	300	400	29
CC	710	700	1

VALIDATION FINDINGS WORKSHEET

Initial Calibration Calculation Verification

METHOD: GC/MS VOA (EPA Method TO-15)

The Relative Response Factor (RRF), average RRF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

$$RRF = (A_x)(C_{is}) / (A_{is})(C_x)$$

average RRF = sum of the RRFs/number of standards

$$\%RSD = 100 * (S/X)$$

A_x = Area of compound,

C_x = Concentration of compound,

S = Standard deviation of the RRFs

X = Mean of the RRFs

A_{is} = Area of associated internal standard

C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Reported	Recalculated	Reported	Recalculated	Reported	Recalculated
				RRF (50 std)	RRF (50 std)	Average RRF (initial)	Average RRF (initial)	%RSD	%RSD
1	ICAL (Msdj)	5/19/20	E (1st internal standard)	1.35223	1.35223	1.36167	1.36167	6.595	6.595
			CC (2nd internal standard)	1.26815	1.26815	1.26248	1.26248	1.404	1.404
			AA (3rd internal standard)	0.65790	0.65790	0.68565	0.68565	9.167	9.167
2			(1st internal standard)						
			(2nd internal standard)						
			(3rd internal standard)						
3			(1st internal standard)						
			(2nd internal standard)						
			(3rd internal standard)						
4			(1st internal standard)						
			(2nd internal standard)						
			(3rd internal standard)						

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

VALIDATION FINDINGS WORKSHEET Continuing Calibration Results Verification

METHOD: GC/MS VOA (EPA TO-15)

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the compounds identified below using the following calculation:

% Difference = $100 * (\text{ave. RRF} - \text{RRF}) / \text{ave. RRF}$
 $\text{RRF} = (A_x)(C_{is}) / (A_{is})(C_x)$

Where: ave. RRF = initial calibration average RRF
 RRF = continuing calibration RRF
 A_x = Area of compound, A_{is} = Area of associated internal standard
 C_x = Concentration of compound, C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference internal Standard)	Average RRF (initial)	Reported	Recalculated	Reported	Recalculated
					RRF (CC)	RRF (CC)	%D	%D
1	j060902a	6/9/20	E (1st internal standard)	1.36167	1.25415	1.25415	7.89616	7.895
			CC (2nd internal standard)	1.26248	1.20754	1.20754	4.35175	4.351
			AA (3rd internal standard)	0.68565	0.68349	0.68349	0.31575	0.316
2			QQQ (1st internal standard)					
			S (2nd internal standard)					
			AA (3rd internal standard)					
3			QQQ (1st internal standard)					
			S (2nd internal standard)					
			AA (3rd internal standard)					
4			QQQ (1st internal standard)					
			S (2nd internal standard)					
			AA (3rd internal standard)					

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

METHOD: GC/MS Volatiles (EPA Method TO-15)

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found

SS = Surrogate Spiked

Sample ID: 2

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Toluene-d8	25.00	25.296	101	101	
Bromofluorobenzene	↓	31.795	127	127	
1,2-Dichloroethane-d4		26.338	105	105	
Octafluorotoluene					

Sample ID: _____

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Toluene-d8					
Bromofluorobenzene					
1,2-Dichloroethane-d4					
Octafluorotoluene					

Sample ID: _____

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Toluene-d8					
Bromofluorobenzene					
1,2-Dichloroethane-d4					
Octafluorotoluene					

Sample ID: _____

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Toluene-d8					
Bromofluorobenzene					
1,2-Dichloroethane-d4					
Octafluorotoluene					

Sample ID: _____

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Toluene-d8					
Bromofluorobenzene					
1,2-Dichloroethane-d4					
Octafluorotoluene					

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample Results Verification

METHOD: GC/MS VOA (EPA Method TO-15)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the laboratory control sample and laboratory control sample duplicate (if applicable) were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * SSC/SA

Where: SSC = Spiked sample concentration
 SA = Spike added

RPD = | LCS - LCSD | * 2 / (LCS + LCSD)

LCS = Laboratory control sample percent recovery

LCSD = Laboratory control sample duplicate percent recovery

LCS ID: j060903a/j060904a

Compound	Spike Added		Spiked Sample Concentration		LCS		LCSD		LCS/LCSD	
	<u>(77.5)</u>		<u>(77.5)</u>		Percent Recovery		Percent Recovery		RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc	Reported	Recalc	Reported	Recalculated
1,1-Dichloroethene	<u>50.0</u>	<u>50.0</u>	<u>51.50</u>	<u>53.262</u>	<u>103</u>	<u>103</u>	<u>106</u>	<u>106</u>	<u>2.9</u>	<u>2.0</u>
Trichloroethene	↓	↓	<u>44.975</u>	<u>46.022</u>	<u>90</u>	<u>90</u>	<u>92</u>	<u>92</u>	<u>2.2</u>	<u>2.2</u>
Benzene	↓	↓	<u>45.938</u>	<u>45.580</u>	<u>92</u>	<u>92</u>	<u>91</u>	<u>91</u>	<u>1.1</u>	<u>1.1</u>
Toluene	↓	↓	<u>46.554</u>	<u>47.251</u>	<u>93</u>	<u>93</u>	<u>94</u>	<u>94</u>	<u>1.1</u>	<u>1.1</u>
Chlorobenzene	↓	↓	<u>47.630</u>	<u>48.169</u>	<u>95</u>	<u>95</u>	<u>96</u>	<u>96</u>	<u>1.0</u>	<u>1.0</u>

Comments: Refer to Laboratory Control Sample findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

**Laboratory Data Consultants, Inc.
Data Validation Report**

Project/Site Name: Fort Ord, OU2

LDC Report Date: July 28, 2020

Parameters: Fixed Gases

Validation Level: Stage 4

Laboratory: Eurofins

Sample Delivery Group (SDG): 2006116

Sample Identification	Laboratory Sample Identification	Matrix	Collection Date
TTU-FM-112	2006116-02	Air	06/04/20
TTU-FM-112DUP	2006116-02DUP	Air	06/04/20

Introduction

This Data Validation Report (DVR) presents data validation findings and results for the associated samples listed on the cover page. Data validation was performed in accordance with the Quality Assurance Project Plan, Former Fort Ord, California, Volume I, Appendix D, Revision 4, Operable Unit 2 Landfills (April 2020), the U.S. Department of Defense (DoD) Quality Systems Manual (QSM) for Environmental Laboratories, Version 5.1 (2017), and the USACE Guidance for Evaluating Performance-Based Chemical Data (June 2005). Where specific guidance was not available, the data has been evaluated in a conservative manner consistent with industry standards using professional experience.

The analyses were performed by the following method:

Fixed Gases by American Society for Testing and Materials (ASTM) Method D-1945

All sample results were subjected to Stage 4 data validation, which is comprised of the quality control (QC) summary forms as well as the raw data, to confirm sample quantitation and identification.

The following are definitions of the data qualifiers utilized during data validation:

- J+ (Estimated, High Bias): The compound or analyte was analyzed for and positively identified by the laboratory; however the reported concentration is estimated, displaying high bias, due to non-conformances discovered during data validation.
- J- (Estimated, Low Bias): The compound or analyte was analyzed for and positively identified by the laboratory; however the reported concentration is estimated, displaying low bias, due to non-conformances discovered during data validation.
- J (Estimated, Bias Indeterminate): The compound or analyte was analyzed for and positively identified by the laboratory; however the reported concentration is estimated due to non-conformances discovered during data validation. Bias is indeterminate.
- U (Non-detected): The compound or analyte was analyzed for and positively identified by the laboratory; however the compound or analyte should be considered non-detected at the reported concentration due to the presence of contaminants detected in the associated blank(s).
- UJ (Non-detected estimated): The compound or analyte was reported as not detected by the laboratory; however the reported quantitation/detection limit is estimated due to non-conformances discovered during data validation.
- R (Rejected): The sample results were rejected due to gross non-conformances discovered during data validation. Data qualified as rejected is not usable.
- NA (Not Applicable): The non-conformance discovered during data validation demonstrates a high bias, while the affected compound or analyte in the associated sample(s) was reported as not detected by the laboratory and did not warrant the qualification of the data.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

I. Sample Receipt and Technical Holding Times

The tedlar bags were properly pressurized and handled.

All technical holding time requirements were met.

II. Initial Calibration and Initial Calibration Verification

An initial calibration was performed as required by the method.

The percent relative standard deviations (%RSD) were less than or equal to 15.0% for all compounds.

The percent differences (%D) of the initial calibration verification (ICV) standard were less than or equal to 15.0% for all compounds.

III. Continuing Calibration

Continuing calibration was performed at the required frequencies.

The percent differences (%D) were less than or equal to 15.0% for all compounds.

IV. Laboratory Blanks

Laboratory blanks were analyzed as required by the method. No contaminants were found in the laboratory blanks with the following exceptions:

Blank ID	Analysis Date	Compound	Concentration	Associated Samples
2006116B-03A	06/04/20	Oxygen	120 ppmv	All samples in SDG 2006116

Sample concentrations were compared to concentrations detected in the laboratory blanks. The sample concentrations were either not detected or were significantly greater (>5X blank contaminants) than the concentrations found in the associated laboratory blanks.

V. Field Blanks

No field blanks were identified in this SDG.

VI. Duplicate Sample Analysis

Duplicate (DUP) sample analysis was performed on an associated project sample. Results were within QC limits.

VII. Laboratory Control Samples

Laboratory control samples (LCS) and laboratory control samples duplicates (LCSD) were analyzed as required by the method. Percent recoveries (%R) were within QC limits. Relative percent differences (RPD) were within QC limits.

VIII. Field Duplicates

Samples TTU-FM-111 and TTU-FM-112 were identified as field duplicates. No results were detected in any of the samples with the following exceptions:

Compound	Concentration (ppmv)		RPD (Limits)
	TTU-FM-111	TTU-FM-112	
Oxygen	7600	11000	37 (≤30)
Nitrogen	320000	330000	3 (≤30)
Methane	400000	390000	3 (≤30)
Carbon dioxide	300000	290000	3 (≤30)
Ethane	1.8	1.5	18 (≤30)
Propane	13	12	8 (≤30)
Isobutane	12	12	0 (≤30)
Butane	2.4	2.4	0 (≤30)
C6+	58	62	7 (≤30)
NMOC ref to Methane	430	450	5 (≤30)

IX. Compound Quantitation

All compound quantitations met validation criteria.

All compounds reported below the limit of quantitation (LOQ) were qualified as follows:

Sample	Finding	Flag	A or P
TTU-FM-112	All compounds reported below the LOQ.	J (all detects)	A

X. Target Compound Identifications

All target compound identifications were within validation criteria.

XI. Overall Assessment of Data

The analysis was conducted within all specifications of the method. No results were rejected in this SDG.

Due to results below the LOQ, data were qualified as estimated in one sample.

The quality control criteria reviewed, other than those discussed above, were met and are considered acceptable.

**Fort Ord, OU2
Fixed Gases - Data Qualification Summary - SDG 2006116**

Sample	Compound	Flag	A or P	Reason
TTU-FM-112	All compounds reported below the LOQ.	J (all detects)	A	Compound quantitation

**Fort Ord, OU2
Fixed Gases - Laboratory Blank Data Qualification Summary - SDG 2006116**

No Sample Data Qualified in this SDG

**Fort Ord, OU2
Fixed Gases - Field Blank Data Qualification Summary - SDG 2006116**

No Sample Data Qualified in this SDG

LDC #: 48567A51
 SDG #: 2006116
 Laboratory: Eurofins Air Toxics

VALIDATION COMPLETENESS WORKSHEET

Stage 4

ASTM D-1945

Date: 7/7/20
 Page: 1 of 1
 Reviewer: [Signature]
 2nd Reviewer: [Signature]

METHOD: GC Fixed Gases (Method BSK 175)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Sample receipt/Technical holding times	A	
II.	Initial calibration/ICV	A+A	RSD ≤ 15% . 1σ ≤ 15%
III.	Continuing calibration	A	CCV ≤ 15%
IV.	Laboratory Blanks	N	
V.	Field blanks	N	
VI.	Surrogate spikes	N	
VII.	Lab Matrix spike/Matrix spike duplicates	A	
VIII.	Laboratory control samples	A	LCS/D
IX.	Field duplicates	N	D=1+
X.	Compound quantitation RL/LOQ/LODs	A	
XI.	Target compound identification	A	
XII.	Overall assessment of data	A	

Note: A = Acceptable ND = No compounds detected D = Duplicate SB=Source blank
 N = Not provided/applicable R = Rinsate TB = Trip blank OTHER:
 SW = See worksheet FB = Field blank EB = Equipment blank

**Indicates sample underwent Stage 4 validation

	Client ID	Lab ID	Matrix	Date
1	TTU-FM-111	2006116-01	Air	06/04/20
2	TTU-FM-112**	2006116-02**	Air	06/04/20
3	TTU-FM-112DUP	2006116-02DUP	Air	06/04/20
4				
5				
6				
7				
8				
9				
10				
11				
12				

Notes:

Method: GC HPLC

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
Were all technical holding times met?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was cooler temperature criteria met?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
IIa. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were all percent relative standard deviations (%RSD) \leq <u>15</u> 20%?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was a curve fit used for evaluation? If yes, did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990 ?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Were the RT windows properly established?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
IIb. Initial calibration verification				
Was an initial calibration verification standard analyzed after each initial calibration for each instrument?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were all percent differences (%D) \leq <u>15</u> 20%?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
III. Continuing calibration				
Was a continuing calibration analyzed daily?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were all percent differences (%D) \leq <u>15</u> 20%?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were all the retention times within the acceptance windows?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
IV. Laboratory Blanks				
Was a laboratory blank associated with every sample in this SDG?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was a laboratory blank analyzed for each matrix and concentration?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was there contamination in the laboratory blanks? If yes, please see the Blanks validation findings worksheet.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
V. Field Blanks				
Were field blanks identified in this SDG?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Were target compounds detected in the field blanks?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
VI. Surrogate spikes				
Were all surrogate percent recovery (%R) within the QC limits?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
If the percent recovery (%R) of one or more surrogates was outside QC limits, was a reanalysis performed to confirm %R?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
If any %R was less than 10 percent, was a reanalysis performed to confirm %R?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

VALIDATION FINDINGS CHECKLIST

Validation Area	Yes	No	NA	Findings/Comments
Was an LCS analyzed per extraction batch?	/			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	/			
IX. Field duplicates				
Were field duplicate pairs identified in this SDG?	/			
Were target compounds detected in the field duplicates?	/			
X. Compound quantitation				
Did the laboratory LOQs/RLs meet the QAPP LOQs/RLs?	/			
Were compound quantitation and RLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	/			
XI. Target compound identification				
Were the retention times of reported detects within the RT windows?	/			
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	/			

VALIDATION FINDINGS WORKSHEET

Blanks

METHOD: GC HPLC

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

- Y N N/A Were all samples associated with a given method blank?
- Y N N/A Was a method blank performed for each matrix and whenever a sample extraction procedure was performed?
- Y N N/A Was a method blank performed with each extraction batch?
- Y N N/A Were any contaminants found in the method blanks? If yes, please see findings below.

Level IV/D Only

- Y N N/A (Gasoline and aromatics only) Was a method blank analyzed with each 24 hour batch?
- Y N N/A Was a method blank analyzed for each analytical / extraction batch of ≤20 samples?

Blank extraction date: _____ Blank analysis date: 6/4/20 Associated samples: A11

Conc. units: ppm V

Compound	Blank ID	Sample Identification					
	<u>2006116B-03A</u>						
<u>Oxygen</u>	<u>120</u>						

Blank extraction date: _____ Blank analysis date: _____ Associated samples: _____

Conc. units: _____

Compound	Blank ID	Sample Identification					

ALL CIRCLED RESULTS WERE NOT QUALIFIED. ALL RESULTS NOT CIRCLED WERE QUALIFIED BY THE FOLLOWING STATEMENT:
 All contaminants within five times the method blank concentration were qualified as not detected, "U".

VALIDATION FINDINGS WORKSHEET
Field Duplicates

METHOD: GC Fixed Gases (ASTM D1945)

Y/N/NA Were field duplicate pairs identified in this SDG?

Y/N/NA Were target analytes detected in the field duplicate pairs?

Compound	Concentration (ppmv)		RPD (≤30%)
	1	2	
Oxygen	7600	11000	37
Nitrogen	320000	330000	3
Methane	400000	390000	3
Carbon Dioxide	300000	290000	3
Ethane	1.8	1.5	18
Propane	13	12	8
Isobutane	12	12	0
Butane	2.4	2.4	0
C6+	58	62	7
NMOC ref to Methane	430	450	5

VALIDATION FINDINGS WORKSHEET Initial Calibration Calculation Verification

METHOD: GC _____ HPLC _____

The calibration factors (CF) and relative standard deviation (%RSD) were recalculated using the following calculations:

CF = A/C
Average CF = sum of the CF/number of standards
%RSD = 100 * (S/X)

Where: A = Area of compound
C = Concentration of compound
S = Standard deviation of calibration factors
X = Mean of calibration factors

#	Standard ID	Calibration Date	Compound	Reported	Recalculated	Reported	Recalculated	Reported	Recalculated
				CF (0.0001 std)	CF (0.0001 std)	Ave CF (initial)	Ave CF (initial)	%RSD	%RSD
1	ICAL	2/1/19	Methane	210010000	210010000	216371155	216371155	8.134	8.134
	GC10	4/16/20	Carbon Dioxide	613675405	613675405	732905593	732905593	9.659	9.659
2									
3									
4									

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

VALIDATION FINDINGS WORKSHEET Continuing Calibration Results Verification

METHOD: GC_HPLC

The percent difference (%D) of the initial calibration average Calibration Factors (CF) and the continuing calibration CF were recalculated for the compounds identified below using the following calculation:

% Difference = $100 * (\text{ave. CF} - \text{CF}) / \text{ave. CF}$

Where: ave. CF = initial calibration average CF
CF = continuing calibration CF
A = Area of compound
C = Concentration of compound

#	Standard ID	Calibration Date	Compound	Average CF(lcal)/ CCV Conc.	Reported	Recalculated	Reported	Recalculated
					CF/ Conc. CCV	CF/ Conc. CCV	%D	%D
1	10060501	6/4/20	Methane	216371155	228853365	228853365	5.76889	5.769
			Carbon Dioxide	732905593	766963226	766963226	4.64693	4.647
2								
3								
4								

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample/Laboratory Control Sample Duplicate Results Verification

METHOD: GC HPLC

The percent recoveries (%R) and Relative Percent difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * (SSC-SC)/SA

Where: SSC = Spiked sample concentration

SC = Concentration

SA = Spike added

RPD = |SSCLCS - SSCLCSD| * 2 / (SSCLCS + SSCLCSD)

LCS = Laboratory control sample percent recovery

LCSD = Laboratory control sample duplicate percent recovery

LCS/LCSD samples: 10060528/100605020

Compound	Spike Added (70)		Spiked Sample Concentration (70)		LCS		LCSD		LCS/LCSD	
	LCS	LCSD	LCS	LCSD	Percent Recovery		Percent Recovery		RPD	
					Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)										
Diesel (8015)										
Benzene (8021B)										
Methane (RSK-175)	10.1	10.0	10.4	10.8	103	103	107	107	3.8	3.8
2,4-D (8151)										
Dinoseb (8151)										
Naphthalene (8310)										
Anthracene (8310)										
HMX (8330)										
2,4,6-Trinitrotoluene (8330)										

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicate findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

VALIDATION FINDINGS WORKSHEET

Sample Calculation Verification

METHOD: GC HPLC

Y N N/A
Y N N/A

Were all reported results recalculated and verified for all level IV samples?
 Were all recalculated results for detected target compounds within 10% of the reported results?

Concentration = $\frac{(A)(F_v)(D_f)}{(RF)(V_s \text{ or } W_s)(\%S/100)}$

Example:

Sample ID. 2 Compound Name Mothall

- A= Area or height of the compound to be measured
- Fv= Final Volume of extract
- Df= Dilution Factor
- RF= Average response factor of the compound
In the initial calibration
- Vs= Initial volume of the sample
- Ws= Initial weight of the sample
- %S= Percent Solid

Concentration = $\frac{(8458888596)(1)}{(216371155)}$

= 39.1 %

= 39.1000 FMV

#	Sample ID	Compound	Reported Concentrations (<u>70</u>)	Recalculated Results Concentrations (<u> </u>)	Qualifications
	<u>2</u>	<u>Mothall</u>	<u>39.0</u>		

Comments: _____

**Laboratory Data Consultants, Inc.
Data Validation Report**

Project/Site Name: Fort Ord, OU2

LDC Report Date: July 28, 2020

Parameters: Volatiles

Validation Level: Stage 4

Laboratory: Eurofins

Sample Delivery Group (SDG): 2006218

Sample Identification	Laboratory Sample Identification	Matrix	Collection Date
OU2GM6087	2006218-08	Air	06/03/20

Introduction

This Data Validation Report (DVR) presents data validation findings and results for the associated samples listed on the cover page. Data validation was performed in accordance with the Quality Assurance Project Plan, Former Fort Ord, California, Volume I, Appendix D, Revision 4, Operable Unit 2 Landfills (April 2020), the U.S. Department of Defense (DoD) Quality Systems Manual (QSM) for Environmental Laboratories, Version 5.1 (2017), and the USACE Guidance for Evaluating Performance-Based Chemical Data (June 2005). Where specific guidance was not available, the data has been evaluated in a conservative manner consistent with industry standards using professional experience.

The analyses were performed by the following method:

Volatile Organic Compounds (VOCs) by Environmental Protection Agency (EPA) Method TO-15

All sample results were subjected to Stage 4 data validation, which is comprised of the quality control (QC) summary forms as well as the raw data, to confirm sample quantitation and identification.

The following are definitions of the data qualifiers utilized during data validation:

- J+ (Estimated, High Bias): The compound or analyte was analyzed for and positively identified by the laboratory; however the reported concentration is estimated, displaying high bias, due to non-conformances discovered during data validation.
- J- (Estimated, Low Bias): The compound or analyte was analyzed for and positively identified by the laboratory; however the reported concentration is estimated, displaying low bias, due to non-conformances discovered during data validation.
- J (Estimated, Bias Indeterminate): The compound or analyte was analyzed for and positively identified by the laboratory; however the reported concentration is estimated due to non-conformances discovered during data validation. Bias is indeterminate.
- U (Non-detected): The compound or analyte was analyzed for and positively identified by the laboratory; however the compound or analyte should be considered non-detected at the reported concentration due to the presence of contaminants detected in the associated blank(s).
- UJ (Non-detected estimated): The compound or analyte was reported as not detected by the laboratory; however the reported quantitation/detection limit is estimated due to non-conformances discovered during data validation.
- R (Rejected): The sample results were rejected due to gross non-conformances discovered during data validation. Data qualified as rejected is not usable.
- NA (Not Applicable): The non-conformance discovered during data validation demonstrates a high bias, while the affected compound or analyte in the associated sample(s) was reported as not detected by the laboratory and did not warrant the qualification of the data.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

I. Sample Receipt and Technical Holding Times

The canisters were properly pressurized and handled.

All technical holding time requirements were met.

II. GC/MS Instrument Performance Check

A bromofluorobenzene (BFB) tune was performed at 24 hour intervals.

All ion abundance requirements were met.

III. Initial Calibration and Initial Calibration Verification

An initial calibration was performed as required by the method.

The percent relative standard deviations (%RSD) were less than or equal to 30.0% for all compounds.

The percent differences (%D) of the initial calibration verification (ICV) standard were less than or equal to 30.0% for all compounds.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

The percent differences (%D) were less than or equal to 30.0% for all compounds.

The percent differences (%D) of the ending continuing calibration verifications (CCVs) were less than or equal to 50.0% for all compounds.

V. Laboratory Blanks

Laboratory blanks were analyzed as required by the method. No contaminants were found in the laboratory blanks.

Canister blank analyses were performed for every sample canister. No contaminants were found in the canister blanks with the following exceptions:

VI. Field Blanks

No field blanks were identified in this SDG.

VII. Surrogates

Although surrogates were not required by the method, surrogate analysis was performed by the laboratory. Surrogate recoveries (%R) were within QC limits.

VIII. Duplicate Sample Analysis

Duplicate (DUP) sample analysis was performed on an associated project sample. Results were within QC limits.

IX. Laboratory Control Samples

Laboratory control samples (LCS) and laboratory control samples duplicates (LCSD) were analyzed as required by the method. Percent recoveries (%R) were within QC limits. Relative percent differences (RPD) were within QC limits.

X. Field Duplicates

No field duplicates were identified in this SDG.

XI. Internal Standards

All internal standard areas and retention times were within QC limits.

XII. Compound Quantitation

All compound quantitations met validation criteria.

All compounds reported below the limit of quantitation (LOQ) were qualified as follows:

Sample	Finding	Flag	A or P
OU2GM6087	All compounds reported below the LOQ.	J (all detects)	A

XIII. Target Compound Identifications

All target compound identifications met validation criteria.

XIV. System Performance

The system performance was acceptable.

XV. Overall Assessment of Data

The analysis was conducted within all specifications of the method. No results were rejected in this SDG.

Due to results below the LOQ, data were qualified as estimated in one sample.

The quality control criteria reviewed, other than those discussed above, were met and are considered acceptable.

**Fort Ord, OU2
Volatiles - Data Qualification Summary - SDG 2006218**

Sample	Compound	Flag	A or P	Reason
OU2GM6087	All compounds reported below the LOQ.	J (all detects)	A	Compound quantitation

**Fort Ord, OU2
Volatiles - Laboratory Blank Data Qualification Summary - SDG 2006218**

No Sample Data Qualified in this SDG

**Fort Ord, OU2
Volatiles - Field Blank Data Qualification Summary - SDG 2006218**

No Sample Data Qualified in this SDG

LDC #: 48567C48
 SDG #: 2006218
 Laboratory: Eurofins Air Toxics

VALIDATION COMPLETENESS WORKSHEET

Stage 4

Date: 7/1/20
 Page: 1 of 2
 Reviewer: [Signature]
 2nd Reviewer: [Signature]

METHOD: GC/MS Volatiles (EPA Method TO-15)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Sample receipt/Technical holding times	A	
II.	GC/MS Instrument performance check	A	
III.	Initial calibration/ICV	A/A	RSD < 30% . 10/15 < 30%
IV.	Continuing calibration / ending	A	CCV < 30/50%
V.	Laboratory Blanks / Rinsate	A/A	RW sample
VI.	Field blanks	N	
VII.	Surrogate spikes	A	
VIII.	Matrix spike/Matrix spike duplicates / Lab prep	A	
IX.	Laboratory control samples	A	LCs/0
X.	Field duplicates	N	
XI.	Internal standards	A	
XII.	Compound quantitation RL/LOQ/LODs	A	
XIII.	Target compound identification	A	
XIV.	System performance	A	
XV.	Leak Check Compounds	N	
XVI.	Overall assessment of data	A	

Note: A = Acceptable ND = No compounds detected D = Duplicate SB=Source blank
 N = Not provided/applicable R = Rinsate TB = Trip blank OTHER:
 SW = See worksheet FB = Field blank EB = Equipment blank

**Indicates sample underwent Stage 4 validation

	Client ID	Lab ID	Matrix	Date
1	OU2GM6080	2006218-01	Air	06/03/20
2	OU2GM6081	2006218-02	Air	06/03/20
3	OU2GM6082	2006218-03	Air	06/03/20
4	OU2GM6083	2006218-04	Air	06/03/20
5	OU2GM6084	2006218-05	Air	06/03/20
6	OU2GM6085	2006218-06	Air	06/03/20
7	OU2GM6086	2006218-07	Air	06/03/20
8	OU2GM6087**	2006218-08**	Air	06/03/20
9	OU2GM6088	2006218-09	Air	06/03/20
10	OU2GM6089	2006218-10	Air	06/03/20
11	OU2GM6090	2006218-11	Air	06/03/20
12	OU2GM6091	2006218-12	Air	06/03/20
13	OU2GM6092	2006218-13	Air	06/03/20

LDC #: 48567C48
 SDG #: 2006218
 Laboratory: Eurofins Air Toxics

VALIDATION COMPLETENESS WORKSHEET

Stage 4

Date: 6/10
 Page: 2 of 2
 Reviewer: [Signature]
 2nd Reviewer: [Signature]

METHOD: GC/MS Volatiles (EPA Method TO-15)

	Client ID	Lab ID	Matrix	Date
14	OU2GM6093	2006218-14	Air	06/03/20
15	OU2GM6094	2006218-15	Air	06/03/20
16	OU2GM6095	2006218-16	Air	06/03/20
17	OU2GM6096	2006218-17	Air	06/04/20
18	OU2GM6097	2006218-18	Air	06/04/20
19	OU2GM6098	2006218-19	Air	06/04/20
20	OU2GM6099	2006218-20	Air	06/04/20
21	OU2GM6100	2006218-21	Air	06/04/20
22	OU2GM6101	2006218-22	Air	06/04/20
23	OU2GM6102	2006218-23	Air	06/04/20
24	OU2GM6103	2006218-24	Air	06/04/20
25	OU2GM6080DUP	2006218-01DUP	Air	06/03/20
26	OU2GM6102DUP	2006218-23DUP	Air	06/04/20
27				
28				
29				

Notes:

Method: Volatiles (EPA Method TO-15)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
Were all technical holding times met?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was canister pressure criteria met?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
II. GC/MS Instrument performance check				
Were the BFB performance results reviewed and found to be within the specified criteria?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were all samples analyzed within the 24 hour clock criteria?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
IIIa. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were all percent relative standard deviations (%RSD) < 30%?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
IIIb. Initial calibration verification				
Was an initial calibration verification standard analyzed after every ICAL for each instrument?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were all percent differences (%D) < 30% or percent recoveries (%R) 70-130%?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
IV. Continuing calibration				
Was a continuing calibration standard analyzed at least once every 24 hours for each instrument?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were all percent differences (%D) < 30% or percent recoveries (%R) 70-130%?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
V. Laboratory Blanks/Canister Blanks				
Was a laboratory blank associated with every sample in this SDG?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was a laboratory blank analyzed at least once every 24 hours for each matrix and concentration?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was there contamination in the laboratory blanks? If yes, please see the Blanks validation findings worksheet.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Was a canister blank analyzed for every canister?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was there contamination in the canister blanks? If yes, please see the Canister Blanks validation findings worksheet.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
VI. Field Blanks				
Were field blanks identified in this SDG?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Were target compounds detected in the field blanks?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
VII. Surrogate spikes (Optional)				
Were all surrogate percent recoveries (%R) within QC limits?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
VIII. Laboratory Duplicate				
Was a laboratory duplicate analyzed for this SDG?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were the relative percent differences (RPD) within the QC limits?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Validation Area	Yes	No	NA	Findings/Comments
IX. Laboratory control samples				
Was an LCS analyzed for this SDG?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was an LCS analyzed per analytical batch?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
X. Field duplicates				
Were field duplicate pairs identified in this SDG?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Were target compounds detected in the field duplicates?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
XI. Internal standards				
Were internal standard area counts within $\pm 40\%$ from the associated calibration standard?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were retention times within ± 20.0 seconds from the associated calibration standard?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
XII. Compound quantitation				
Did the laboratory LOQs/RLs meet the QAPP LOQs/RLs?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the compound?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were compound quantitation and RLs adjusted to reflect all sample dilutions applicable to level IV validation?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
XIII. Target compound identification				
Were relative retention times (RRT's) within ± 0.06 RRT units of the standard?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Did compound spectra meet specified EPA "Functional Guidelines" criteria?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were chromatogram peaks verified and accounted for?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
XIV. System performance				
System performance was found to be acceptable.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
XV. Leak check compounds				
Was a leak check compound used to evaluate sample integrity and included in the laboratory analyte list?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Was the leak check compound detected in the samples? If yes, please see leak check validation findings worksheet.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
XV. Overall assessment of data				
Overall assessment of data was found to be acceptable.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

TARGET COMPOUND WORKSHEET

METHOD: VOA

A. Chloromethane	AA. Tetrachloroethene	AAA. 1,3,5-Trimethylbenzene	AAAA. Ethyl tert-butyl ether	A1. 1,3-Butadiene
B. Bromomethane	BB. 1,1,2,2-Tetrachloroethane	BBB. 4-Chlorotoluene	BBBB. tert-Amyl methyl ether	B1. Hexane
C. Vinyl chloride	CC. Toluene	CCC. tert-Butylbenzene	CCCC. 1-Chlorohexane	C1. Heptane
D. Chloroethane	DD. Chlorobenzene	DDD. 1,2,4-Trimethylbenzene	DDDD. Isopropyl alcohol	D1. Propylene
E. Methylene chloride	EE. Ethylbenzene	EEE. sec-Butylbenzene	EEEE. Acetonitrile	E1. Freon 11
F. Acetone	FF. Styrene	FFF. 1,3-Dichlorobenzene	FFFF. Acrolein	F1. Freon 12
G. Carbon disulfide	GG. Xylenes, total	GGG. p-Isopropyltoluene	GGGG. Acrylonitrile	G1. Freon 113
H. 1,1-Dichloroethene	HH. Vinyl acetate	HHH. 1,4-Dichlorobenzene	HHHH. 1,4-Dioxane	H1. Freon 114
I. 1,1-Dichloroethane	II. 2-Chloroethylvinyl ether	III. n-Butylbenzene	IIII. Isobutyl alcohol	I1. 2-Nitropropane
J. 1,2-Dichloroethene, total	JJ. Dichlorodifluoromethane	JJJ. 1,2-Dichlorobenzene	JJJJ. Methacrylonitrile	J1. Dimethyl disulfide
K. Chloroform	KK. Trichlorofluoromethane	KKK. 1,2,4-Trichlorobenzene	KKKK. Propionitrile	K1. 2,3-Dimethyl pentane
L. 1,2-Dichloroethane	LL. Methyl-tert-butyl ether	LLL. Hexachlorobutadiene	LLLL. Ethyl ether	L1. 2,4-Dimethyl pentane
M. 2-Butanone	MM. 1,2-Dibromo-3-chloropropane	MMM. Naphthalene	MMMM. Benzyl chloride	M1. 3,3-Dimethyl pentane
N. 1,1,1-Trichloroethane	NN. Methyl ethyl ketone	NNN. 1,2,3-Trichlorobenzene	NNNN. Iodomethane	N1. 2-Methylpentane
O. Carbon tetrachloride	OO. 2,2-Dichloropropane	OOO. 1,3,5-Trichlorobenzene	OOOO. 1,1-Difluoroethane	O1. 3-Methylpentane
P. Bromodichloromethane	PP. Bromochloromethane	PPP. trans-1,2-Dichloroethene	PPPP. Tetrahydrofuran	P1. 3-Ethylpentane
Q. 1,2-Dichloropropane	QQ. 1,1-Dichloropropene	QQQ. cis-1,2-Dichloroethene	QQQQ. Methyl acetate	Q1. 2,2-Dimethylpentane
R. cis-1,3-Dichloropropene	RR. Dibromomethane	RRR. m,p-Xylenes	RRRR. Ethyl acetate	R1. 2,2,3-Trimethylbutane
S. Trichloroethene	SS. 1,3-Dichloropropane	SSS. o-Xylene	SSSS. Cyclohexane	S1. 2,2,4-Trimethylpentane
T. Dibromochloromethane	TT. 1,2-Dibromoethane	TTT. 1,1,2-Trichloro-1,2,2-trifluoroethane	TTTT. Methylcyclohexane	T1. 2-Methylhexane
U. 1,1,2-Trichloroethane	UU. 1,1,1,2-Tetrachloroethane	UUU. 1,2-Dichlorotetrafluoroethane	UUUU. Allyl chloride	U1. Nonanal
V. Benzene	VV. Isopropylbenzene	VVV. 4-Ethyltoluene	VVVV. Methyl methacrylate	V1. 2-Methylnaphthalene
W. trans-1,3-Dichloropropene	WW. Bromobenzene	WWW. Ethanol	WWWW. Ethyl methacrylate	W1. Methanol
X. Bromoform	XX. 1,2,3-Trichloropropane	XXX. Di-isopropyl ether	XXXX. cis-1,4-Dichloro-2-butene	X1. 1,2,3-Trimethylbenzene
Y. 4-Methyl-2-pentanone	YY. n-Propylbenzene	YYY. tert-Butanol	YYYY. trans-1,4-Dichloro-2-butene	Y1. 2-Propanol
Z. 2-Hexanone	ZZ. 2-Chlorotoluene	ZZZ. tert-Butyl alcohol	ZZZZ. Pentachloroethane	Z1.

LDC # 1052748

VALIDATION FINDINGS WORKSHEET

Blanks

Page: 6 of 8
 Reviewer: [Signature]
 2nd Reviewer: [Signature]

METHOD: GC/MS VOA (EPA TO-15)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

- N N/A Was a method blank associated with every sample in this SDG?
- N N/A Was a method blank analyzed at least once every 12 hours for each matrix and concentration?
- N N/A Was there contamination in the method blanks? If yes, please see the qualifications below.

Blank analysis date: 6/17/20

Conc. units: ppbV

Associated Samples: A11

Compound	Blank ID	Sample Identification							
	<u>2006718-25A</u>								
Dichloromethane									
<u>Y1</u>	<u>0.72</u>								
<u>WWW</u>	<u>1.1</u>								
RL									

Blank analysis date: _____

Conc. units: _____

Associated Samples: _____

Compound	Blank ID	Sample Identification							
Dichloromethane									
RL									

CIRCLED RESULTS WERE NOT QUALIFIED. ALL RESULTS NOT CIRCLED WERE QUALIFIED BY THE FOLLOWING STATEMENT:

Note: Common contaminants such as Methylene chloride, Acetone, 2-Butanone, and TICs that were detected in samples within ten times the associated method blank concentration were qualified as not detected, "U". Other contaminants within five times the method blank concentration were also qualified as not detected, "U".

VALIDATION FINDINGS WORKSHEET Initial Calibration Calculation Verification

METHOD: GC/MS VOA (EPA Method TO-15)

The Relative Response Factor (RRF), average RRF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

$$RRF = (A_x)(C_{is}) / (A_{is})(C_x)$$

average RRF = sum of the RRFs/number of standards

$$\%RSD = 100 * (S/X)$$

A_x = Area of compound,

C_x = Concentration of compound,

S = Standard deviation of the RRFs

X = Mean of the RRFs

A_{is} = Area of associated internal standard

C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Reported	Recalculated	Reported	Recalculated	Reported	Recalculated
				RRF (50 std)	RRF (50 std)	Average RRF (initial)	Average RRF (initial)	%RSD	%RSD
1	ICAL (Msdp)	4/17/20	C (1st internal standard)	1.02133	1.02133	1.00005	1.00005	11.613	11.613
			S (2nd internal standard)	0.40083	0.40083	0.38967	0.38967	6.790	6.790
			AA (3rd internal standard)	0.69289	0.69289	0.67297	0.67297	3.057	3.057
2			(1st internal standard)						
			(2nd internal standard)						
			(3rd internal standard)						
3			(1st internal standard)						
			(2nd internal standard)						
			(3rd internal standard)						
4			(1st internal standard)						
			(2nd internal standard)						
			(3rd internal standard)						

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

VALIDATION FINDINGS WORKSHEET Continuing Calibration Results Verification

METHOD: GC/MS VOA (EPA TO-15)

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. RRF - RRF)/ave. RRF
 $RRF = (A_x)(C_{is}) / (A_{is})(C_x)$

Where: ave. RRF = initial calibration average RRF
 RRF = continuing calibration RRF
 A_x = Area of compound, A_{is} = Area of associated internal standard
 C_x = Concentration of compound, C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference internal Standard)	Average RRF (initial)	Reported	Recalculated	Reported	Recalculated
					RRF (CC)	RRF (CC)	%D	%D
1	P061202	6/12/20	C (1st internal standard)	1.00005	0.70704	0.70704	29.29950	29.300
			S (2nd internal standard)	0.38967	0.35224	0.35224	9.60527	9.606
			AA (3rd internal standard)	0.67297	0.63207	0.63207	6.07765	6.078
2			QQQ (1st internal standard)					
			S (2nd internal standard)					
			AA (3rd internal standard)					
3			QQQ (1st internal standard)					
			S (2nd internal standard)					
			AA (3rd internal standard)					
4			QQQ (1st internal standard)					
			S (2nd internal standard)					
			AA (3rd internal standard)					

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

METHOD: GC/MS Volatiles (EPA Method TO-15)

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:
% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: 8

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Toluene-d8	250	26022	104	104	
Bromofluorobenzene	↓	26257	105	105	
1,2-Dichloroethane-d4		25849	103	103	
Octafluorotoluene					

Sample ID: _____

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Toluene-d8					
Bromofluorobenzene					
1,2-Dichloroethane-d4					
Octafluorotoluene					

Sample ID: _____

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Toluene-d8					
Bromofluorobenzene					
1,2-Dichloroethane-d4					
Octafluorotoluene					

Sample ID: _____

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Toluene-d8					
Bromofluorobenzene					
1,2-Dichloroethane-d4					
Octafluorotoluene					

Sample ID: _____

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Toluene-d8					
Bromofluorobenzene					
1,2-Dichloroethane-d4					
Octafluorotoluene					

VALIDATION FINDINGS WORKSHEET Laboratory Control Sample Results Verification

METHOD: GC/MS VOA (EPA Method TO-15)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the laboratory control sample and laboratory control sample duplicate (if applicable) were recalculated for the compounds identified below using the following calculation:

% Recovery = $100 * \text{SSC} / \text{SA}$ Where: SSC = Spiked sample concentration
SA = Spike added

RPD = $| \text{LCS} - \text{LCSD} | * 2 / (\text{LCS} + \text{LCSD})$ LCS = Laboratory control sample percent recovery LCSD = Laboratory control sample duplicate percent recovery

LCS ID: P061203a/P061204a

Compound	Spike Added (770 V)		Spiked Sample Concentration (770 V)		LCS		LCSD		LCS/LCSD	
	LCS	LCSD	LCS	LCSD	Percent Recovery		Percent Recovery		RPD	
					Reported	Recalc	Reported	Recalc	Reported	Recalculated
1,1-Dichloroethene										
Trichloroethene	50.0	50.0	43.438	44.165	87	87	88	88	1.1	1.1
Benzene	↓	↓	41.576	41.900	83	83	84	84	1.2	1.2
Toluene	↓	↓	43.846	43.780	88	88	88	88	0	0
Chlorobenzene										

Comments: Refer to Laboratory Control Sample findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

**Laboratory Data Consultants, Inc.
Data Validation Report**

Project/Site Name: Fort Ord, OU2
LDC Report Date: July 28, 2020
Parameters: Sulfur Gases
Validation Level: Stage 4
Laboratory: Atmospheric Analysis & Consulting, Inc.
Sample Delivery Group (SDG): 200965

Sample Identification	Laboratory Sample Identification	Matrix	Collection Date
TTU-FM-111S	200965-8741	Air	06/04/20

Introduction

This Data Validation Report (DVR) presents data validation findings and results for the associated samples listed on the cover page. Data validation was performed in accordance with the Quality Assurance Project Plan, Former Fort Ord, California, Volume I, Appendix D, Revision 4, Operable Unit 2 Landfills (April 2020), the U.S. Department of Defense (DoD) Quality Systems Manual (QSM) for Environmental Laboratories, Version 5.1 (2017), and the USACE Guidance for Evaluating Performance-Based Chemical Data (June 2005). Where specific guidance was not available, the data has been evaluated in a conservative manner consistent with industry standards using professional experience.

The analyses were performed by the following method:

Sulfur Gases by American Society for Testing and Materials (ASTM) Method D-5504

All sample results were subjected to Stage 4 data validation, which is comprised of the quality control (QC) summary forms as well as the raw data, to confirm sample quantitation and identification.

The following are definitions of the data qualifiers utilized during data validation:

- J+ (Estimated, High Bias): The compound or analyte was analyzed for and positively identified by the laboratory; however the reported concentration is estimated, displaying high bias, due to non-conformances discovered during data validation.
- J- (Estimated, Low Bias): The compound or analyte was analyzed for and positively identified by the laboratory; however the reported concentration is estimated, displaying low bias, due to non-conformances discovered during data validation.
- J (Estimated, Bias Indeterminate): The compound or analyte was analyzed for and positively identified by the laboratory; however the reported concentration is estimated due to non-conformances discovered during data validation. Bias is indeterminate.
- U (Non-detected): The compound or analyte was analyzed for and positively identified by the laboratory; however the compound or analyte should be considered non-detected at the reported concentration due to the presence of contaminants detected in the associated blank(s).
- UJ (Non-detected estimated): The compound or analyte was reported as not detected by the laboratory; however the reported quantitation/detection limit is estimated due to non-conformances discovered during data validation.
- R (Rejected): The sample results were rejected due to gross non-conformances discovered during data validation. Data qualified as rejected is not usable.
- NA (Not Applicable): The non-conformance discovered during data validation demonstrates a high bias, while the affected compound or analyte in the associated sample(s) was reported as not detected by the laboratory and did not warrant the qualification of the data.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

I. Sample Receipt and Technical Holding Times

The tedlar bags were properly pressurized and handled.

All technical holding time requirements were met.

II. Initial Calibration and Initial Calibration Verification

An initial calibration was performed as required by the method.

A curve fit, based on the initial calibration, was established for quantitation. The coefficient of determination (r^2) was greater than or equal to 0.990.

The percent differences (%D) of the initial calibration verification (ICV) standard were less than or equal to 30.0% for all compounds.

III. Continuing Calibration

Continuing calibration was performed at the required frequencies.

The percent differences (%D) were less than or equal to 30.0% for all compounds.

IV. Laboratory Blanks

Laboratory blanks were analyzed as required by the method. No contaminants were found in the laboratory blanks.

V. Field Blanks

No field blanks were identified in this SDG.

VI. Surrogates

Surrogates were not required by the method.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) sample analysis was performed on an associated project sample. Percent recoveries (%R) were within QC limits. Relative percent differences (RPD) were within QC limits.

VIII. Laboratory Control Samples

Laboratory control samples (LCS) and laboratory control samples duplicates (LCSD) were not performed for this SDG.

IX. Field Duplicates

Samples TTU-FM-111S and TTU-FM-112S were identified as field duplicates. No results were detected in any of the samples with the following exceptions:

Compound	Concentration (ppmv)		RPD (Limits)
	TTU-FM-111S	TTU-FM-112S	
Hydrogen sulfide	0.451	0.442	2 (≤30)

X. Compound Quantitation

All compound quantitations met validation criteria.

XI. Target Compound Identifications

All target compound identifications were within validation criteria.

XII. Overall Assessment of Data

The analysis was conducted within all specifications of the method. No results were rejected in this SDG.

The quality control criteria reviewed were met and are considered acceptable.

**Fort Ord, OU2
Sulfur Gases - Data Qualification Summary - SDG 200965**

No Sample Data Qualified in this SDG

**Fort Ord, OU2
Sulfur Gases - Laboratory Blank Data Qualification Summary - SDG 200965**

No Sample Data Qualified in this SDG

**Fort Ord, OU2
Sulfur Gases - Field Blank Data Qualification Summary - SDG 200965**

No Sample Data Qualified in this SDG

METHOD: GC Sulfur Gases (ASTM D5504)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Sample receipt/Technical holding times	A	
II.	Initial calibration/ICV	A/A	1 ² . 1CV ≤ 30%
III.	Continuing calibration	A	2CV ≤ 30%
IV.	Laboratory Blanks	A	
V.	Field blanks	N	
VI.	Surrogate spikes	N	
VII.	Lab Matrix spike/ Matrix spike duplicates MS/MSO	A	
VIII.	Laboratory control samples	A N	LC5
IX.	Field duplicates	SW	D=H2
X.	Compound quantitation RL/LOQ/LODs	A	
XI.	Target compound identification	A	
XII.	Overall assessment of data	A	

Note: A = Acceptable ND = No compounds detected D = Duplicate SB=Source blank
 N = Not provided/applicable R = Rinsate TB = Trip blank OTHER:
 SW = See worksheet FB = Field blank EB = Equipment blank

**Indicates sample underwent Stage 4 validation

	Client ID	Lab ID	Matrix	Date
1	TTU-FM-111S**	200965-8741**	Air	06/04/20
2	TTU-FM-112S	200965-8742	Air	06/04/20
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				

Notes:

Method: GC HPLC

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
Were all technical holding times met?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was cooler temperature criteria met?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
IIa. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were all percent relative standard deviations (%RSD) \leq 20%?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Was a curve fit used for evaluation? If yes, did the initial calibration meet the curve fit acceptance criteria of \geq 0.990?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were the RT windows properly established?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
IIb. Initial calibration verification				
Was an initial calibration verification standard analyzed after each initial calibration for each instrument?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were all percent differences (%D) $<$ 20% ^{15.30} ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
III. Continuing calibration				
Was a continuing calibration analyzed daily?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were all percent differences (%D) $<$ 20% ³⁰ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were all the retention times within the acceptance windows?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
IV. Laboratory Blanks				
Was a laboratory blank associated with every sample in this SDG?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was a laboratory blank analyzed for each matrix and concentration?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was there contamination in the laboratory blanks? If yes, please see the Blanks validation findings worksheet.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
V. Field Blanks				
Were field blanks identified in this SDG?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Were target compounds detected in the field blanks?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
VI. Surrogate spikes				
Were all surrogate percent recovery (%R) within the QC limits?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
If the percent recovery (%R) of one or more surrogates was outside QC limits, was a reanalysis performed to confirm %R?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
If any %R was less than 10 percent, was a reanalysis performed to confirm %R?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

Validation Area	Yes	No	NA	Findings/Comments
Was an LCS analyzed per extraction batch?			/	
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?			/	
IX. Field duplicates				
Were field duplicate pairs identified in this SDG?	/			
Were target compounds detected in the field duplicates?	/			
X. Compound quantitation				
Did the laboratory LOQs/RLs meet the QAPP LOQs/RLs?	/			
Were compound quantitation and RLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	/			
XI. Target compound identification				
Were the retention times of reported detects within the RT windows?	/			
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	/			

LDC#: 48567A50

VALIDATION FINDINGS WORKSHEET
Field Duplicates

Page: 1 of 1
Reviewer: PG
2nd Reviewer: KIC

METHOD: GC Sulfur Gases (ASTM D5504)

N NA Were field duplicate pairs identified in this SDG?

N NA Were target analytes detected in the field duplicate pairs?

Compound	Concentration (ppmv)		RPD (≤30%)
	1	2	
Hydrogen Sulfide	0.451	0.442	2

V:\FIELD DUPLICATES\Field Duplicates\FD_Organics\2020\48567A50_Ford.wpd

LDC: 10567052

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Page: 1 of 1
Reviewwe: [Signature]
2nd Reviewer: [Signature]

Method: GC Sulfur Gases (ASTM D5504)

Calibration Date	Analyte	Standard	(X) Concentration	(Y) Area
4/20/2020	H2S	1	0.000	0
		2	10.500	94
		3	261.500	2297
		4	1046.000	9312
		5	2615.000	23213
		6	5230.000	47579

Linear through the origin

	<i>calculated</i>	<i>Reported</i>
Constant	0.000000	0.0000
X Coefficient(s)	9.04804494	9.0481
Correlation Coefficient	0.999949	
Coefficient of Determination (r ²)	0.999898	0.9998

VALIDATION FINDINGS WORKSHEET Continuing Calibration Results Verification

METHOD: GC / HPLC

The percent difference (%D) of the initial calibration average Calibration Factors (CF) and the continuing calibration CF were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. CF - CF)/ave. CF

Where: ave. CF = initial calibration average CF
CF = continuing calibration CF
A = Area of compound
C = Concentration of compound

#	Standard ID	Calibration Date	Compound	Average CF(Ical)/ CCV Conc.	Reported	Recalculated	Reported	Recalculated
					CF/ Conc. CCV	CF/ Conc. CCV	%D	%D
1	<u>51920002</u>	<u>6/5/20</u>	<u>H₂S</u>	<u>523</u>	<u>509</u>	<u>509</u>	<u>97.4</u>	<u>97.4</u>
2								
3								
4								

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

VALIDATION FINDINGS WORKSHEET

Sample Calculation Verification

METHOD: GC HPLC

- Y N N/A Were all reported results recalculated and verified for all level IV samples?
 Y N N/A Were all recalculated results for detected target compounds within 10% of the reported results?

Concentration = $\frac{(A)(F_v)(D_f)}{(RF)(V_s \text{ or } W_s)(\%S/100)}$

Example:

Sample ID: 1 Compound Name H₂S

- A= Area or height of the compound to be measured
- Fv= Final Volume of extract
- Df= Dilution Factor
- RF= Average response factor of the compound
In the initial calibration
- Vs= Initial volume of the sample
- Ws= Initial weight of the sample
- %S= Percent Solid

Concentration = $\frac{(817)(5)}{(9.0481)(1000)}$
 = 0.451 ppmV

#	Sample ID	Compound	Reported Concentrations (ppmV)	Recalculated Results Concentrations	Qualifications
	1	H ₂ S	0.451		

Comments: _____

Appendix F

Extraction Wells and Select Monitoring Wells COC Trends

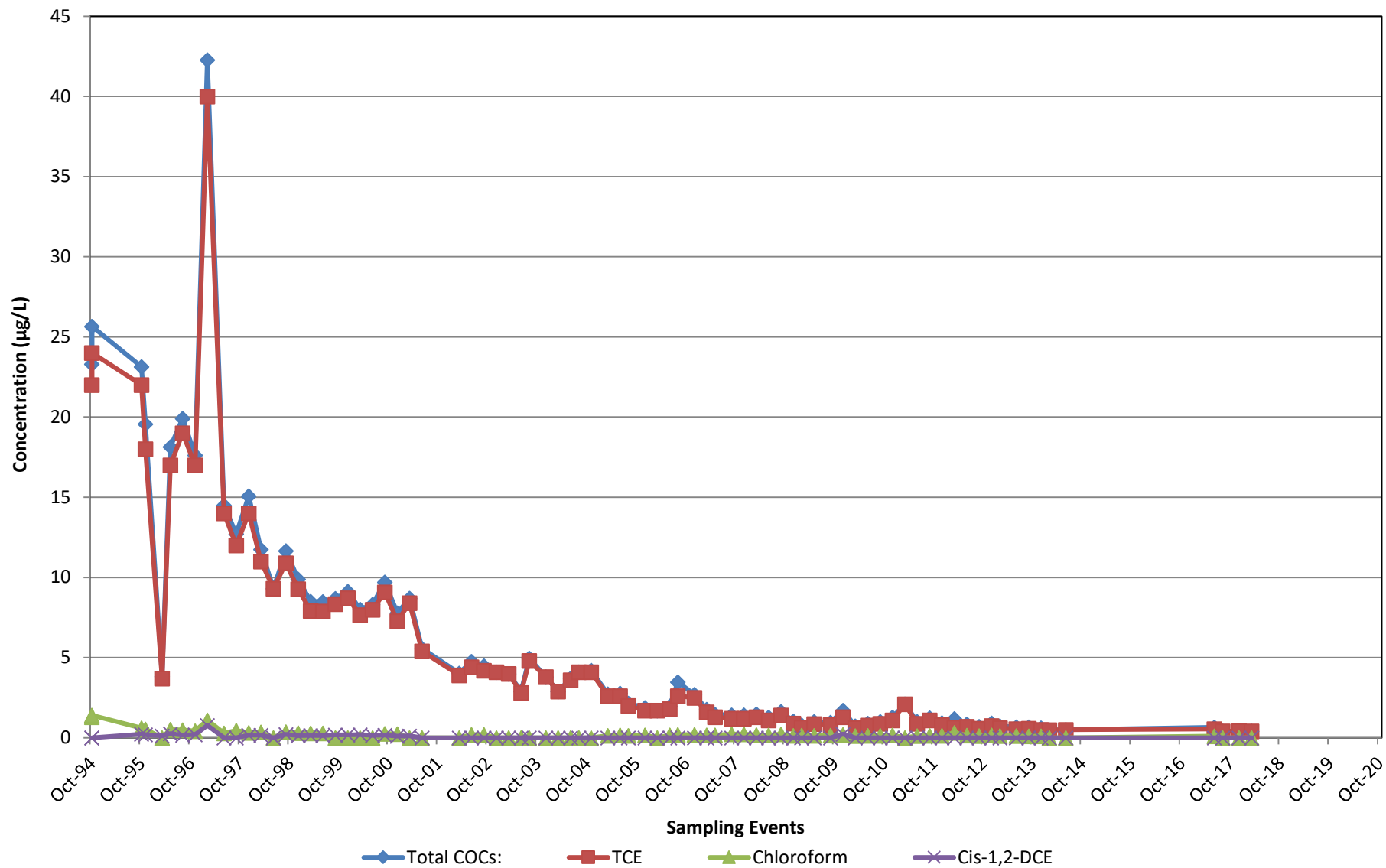
Figures

A-Aquifer

1. EW-OU2-02-A
2. EW-OU2-04-A
3. EW-OU2-05-A
4. EW-OU2-06-A
5. EW-OU2-09-A
6. EW-OU2-10-A
7. EW-OU2-11-AR
8. EW-OU2-12-A
9. EW-OU2-13-A
10. EW-OU2-15-A
11. EW-OU2-16-A
12. EW-OU2-17-A
13. EW-OU2-18-A
14. EW-OU2-19-A
15. EW-OU2-20-A
16. MW-BW-13-A
17. MW-BW-50-A
18. MW-OU2-01-A
19. MW-OU2-02-A
20. MW-OU2-04-A
21. MW-OU2-05-A
22. MW-OU2-06-AR
23. MW-OU2-07-A
24. MW-OU2-08-A
25. MW-OU2-12-A
26. MW-OU2-25-A
27. MW-OU2-27-A
28. MW-OU2-28-A
29. MW-OU2-34-A
30. MW-OU2-40-A
31. MW-OU2-44-A
32. MW-OU2-45-A
33. MW-OU2-46-A
34. MW-OU2-73-A
35. MW-OU2-74-A
36. MW-OU2-75-A
37. MW-OU2-79-A
38. MW-OU2-80-A
39. MW-OU2-81-A
40. MW-OU2-83-A

Upper 180-Foot Aquifer

41. EW-OU2-01-180
42. EW-OU2-02-180R
43. EW-OU2-03-180
44. EW-OU2-05-180
45. EW-OU2-06-180
46. EW-OU2-08-180
47. EW-OU2-09-180
48. EW-OU2-10-180
49. EW-OU2-11-180
50. EW-OU2-12-180
51. MW-BW-02-180
52. MW-BW-14-180
53. MW-OU2-06-180R2
54. MW-OU2-07-180R
55. MW-OU2-20-180
56. MW-OU2-23-180
57. MW-OU2-24-180
58. MW-OU2-28-180
59. MW-OU2-39-180
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68. MW-OU2-61-180
69. MW-OU2-62-180
70. MW-OU2-63-180
71. MW-OU2-81-180

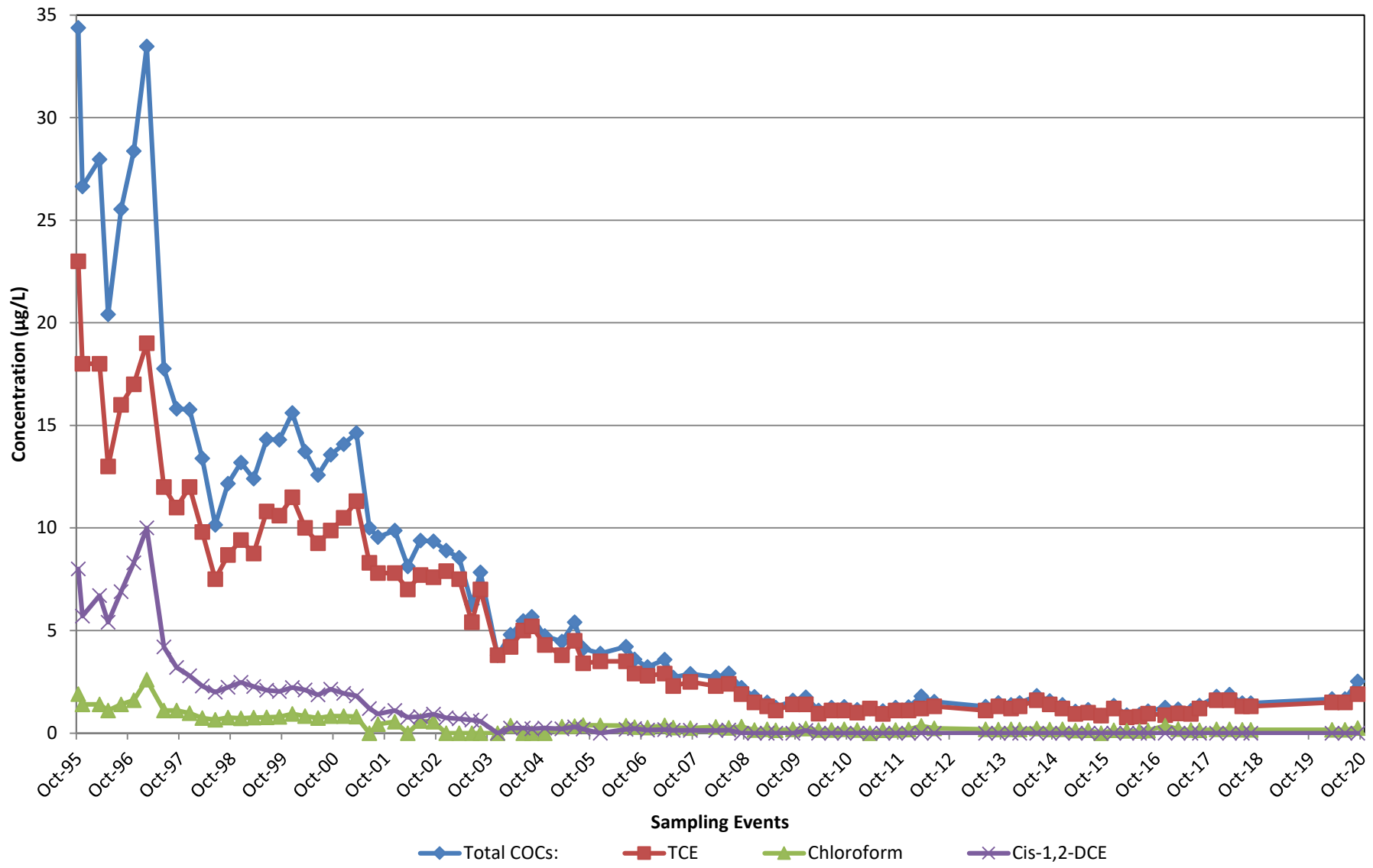


EW-OU2-02-A (Hydraulic Zone 4)

Operable Unit 2 Remedy Monitoring and Operations and Maintenance
 Fourth Quarter 2019 through Third Quarter 2020, Former Fort Ord, California

Figure:

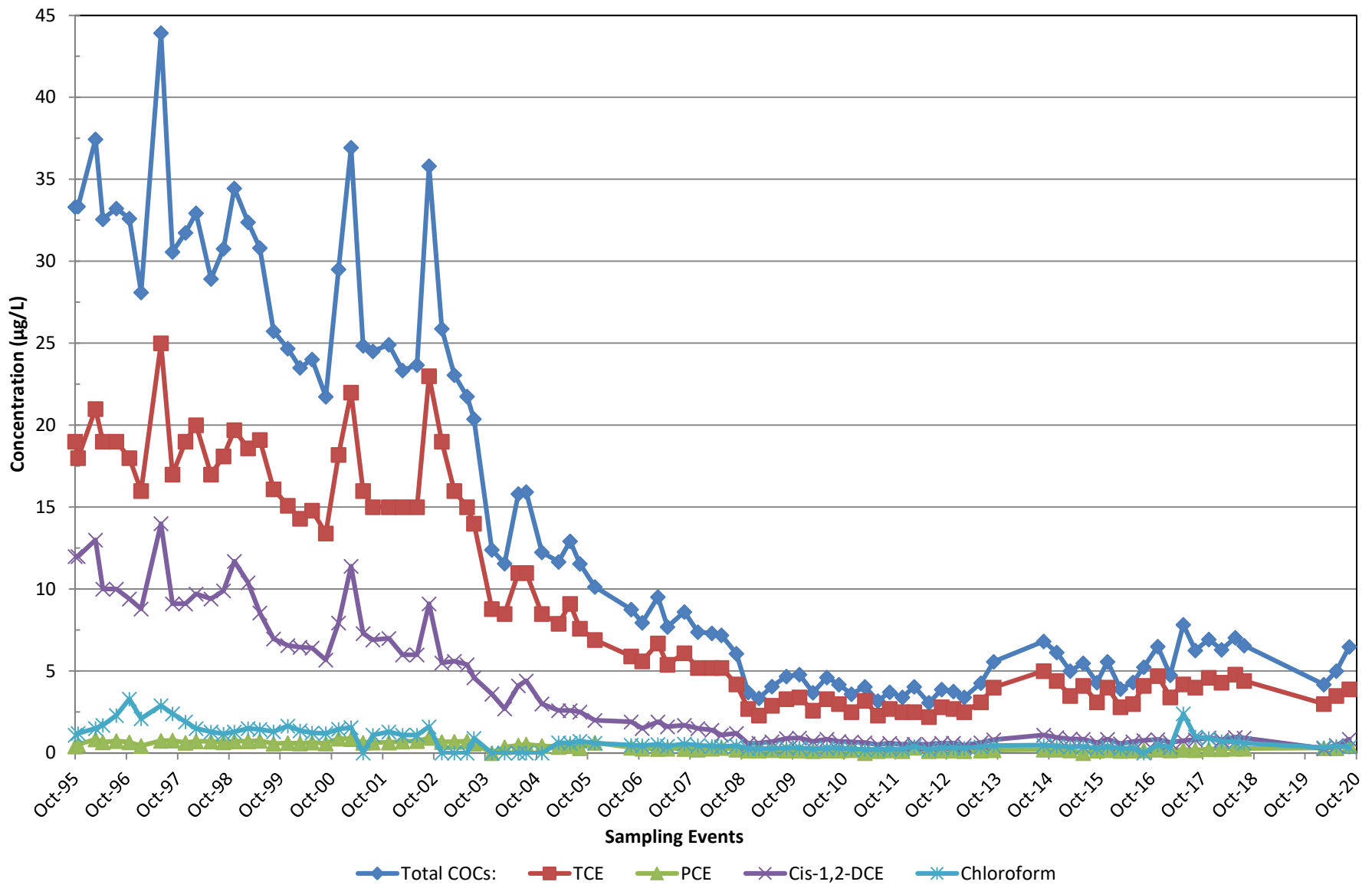
F1



EW-OU2-04-A (Hydraulic Zone 4)

Operable Unit 2 Remedy Monitoring and Operations and Maintenance
 Fourth Quarter 2019 through Third Quarter 2020, Former Fort Ord, California

Figure:
F2

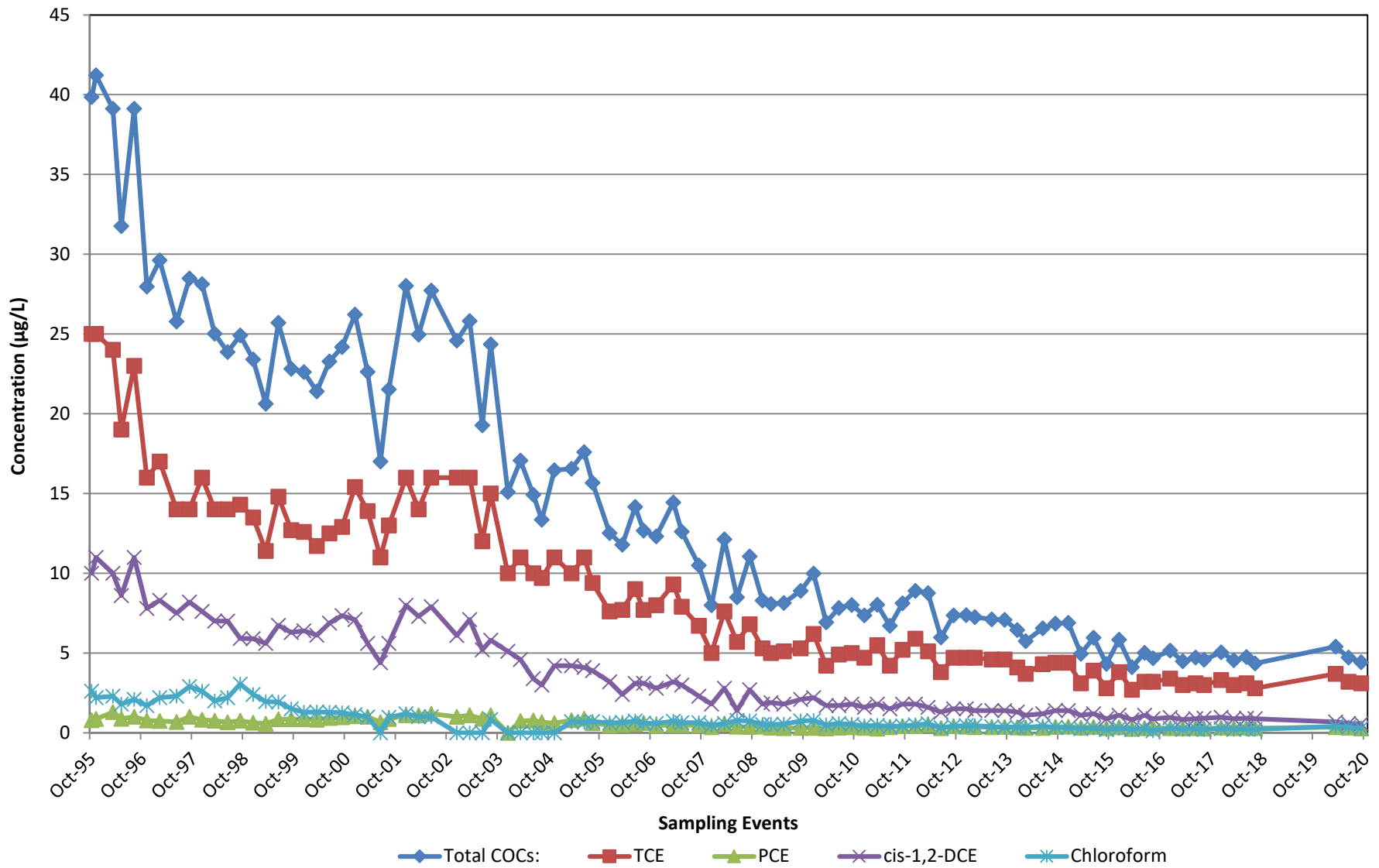


EW-OU2-05-A (Hydraulic Zone 4)

Operable Unit 2 Remedy Monitoring and Operations and Maintenance
 Fourth Quarter 2019 through Third Quarter 2020, Former Fort Ord, California

Figure:

F3

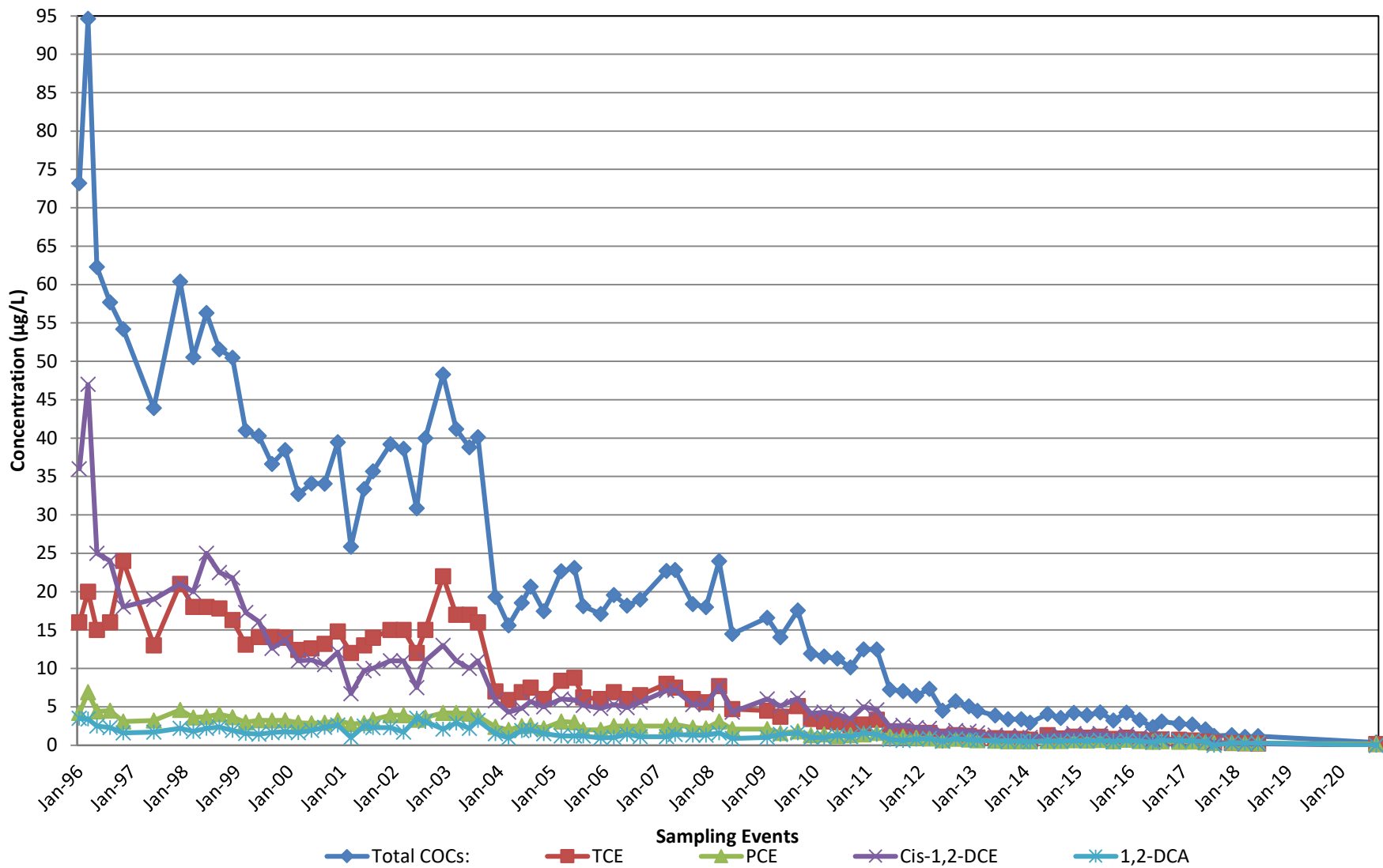


EW-OU2-06-A (Hydraulic Zone 4)

Operable Unit 2 Remedy Monitoring and Operations and Maintenance
 Fourth Quarter 2019 through Third Quarter 2020, Former Fort Ord, California

Figure:

F4

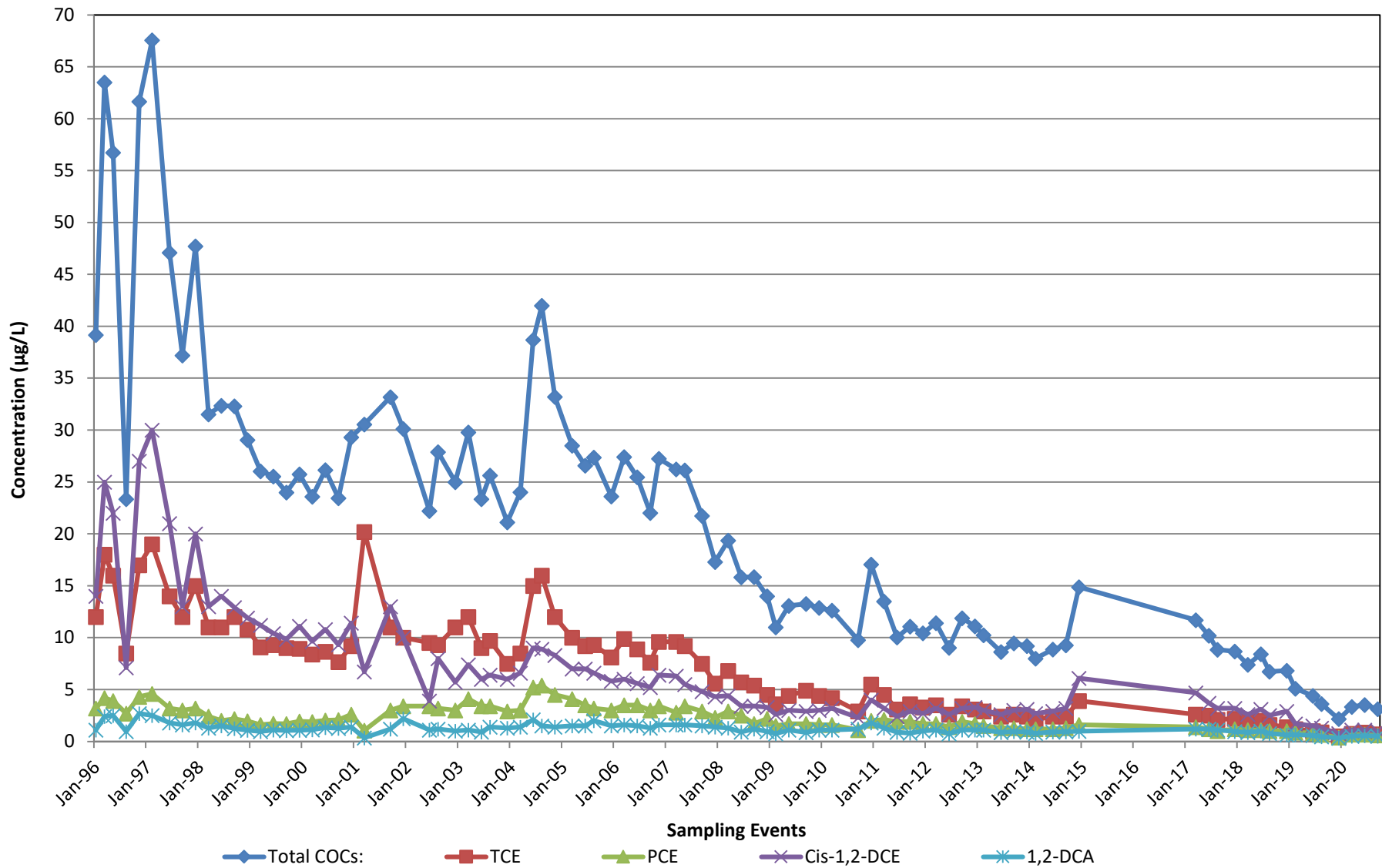


EW-OU2-09-A (Hydraulic Zone 3)

Operable Unit 2 Remedy Monitoring and Operations and Maintenance
 Fourth Quarter 2019 through Third Quarter 2020, Former Fort Ord, California

Figure:

F5

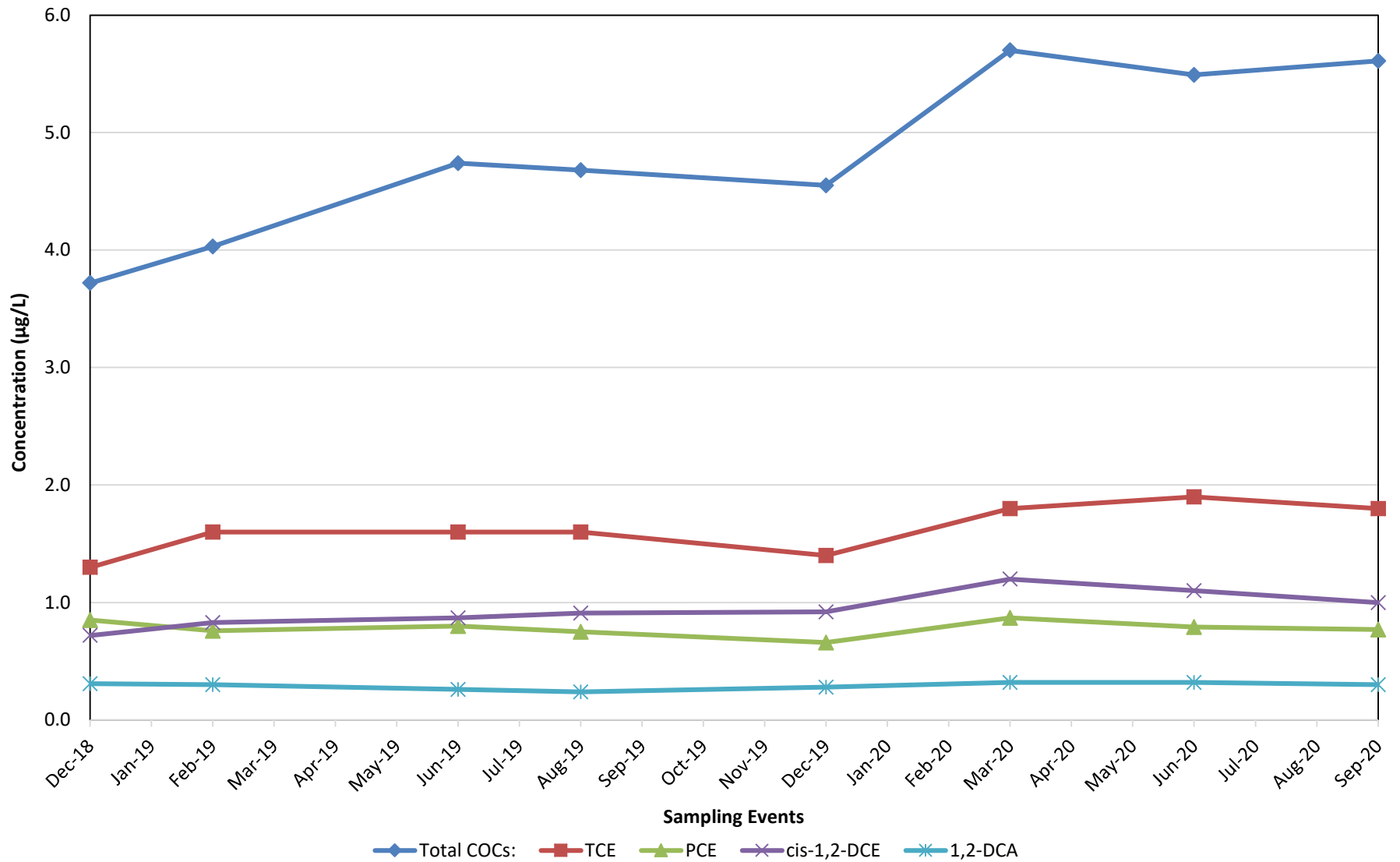


EW-OU2-10-A (Hydraulic Zone 3)

Operable Unit 2 Remedy Monitoring and Operations and Maintenance
 Fourth Quarter 2019 through Third Quarter 2020, Former Fort Ord, California

Figure:

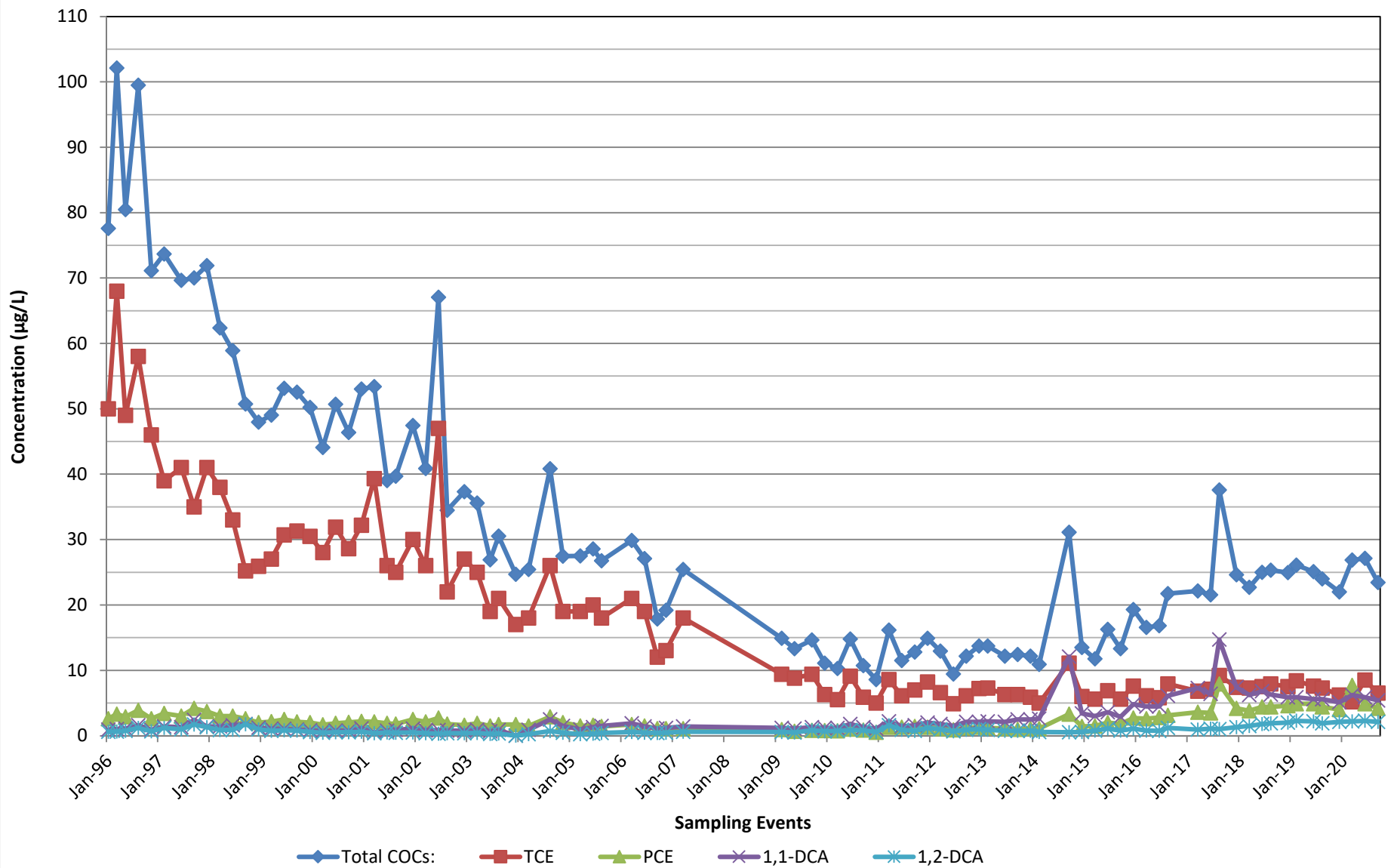
F6



EW-OU2-11-AR (Hydraulic Zone 3)

Operable Unit 2 Remedy Monitoring and Operations and Maintenance
 Fourth Quarter 2019 through Third Quarter 2020, Former Fort Ord, California

Figure:
F7



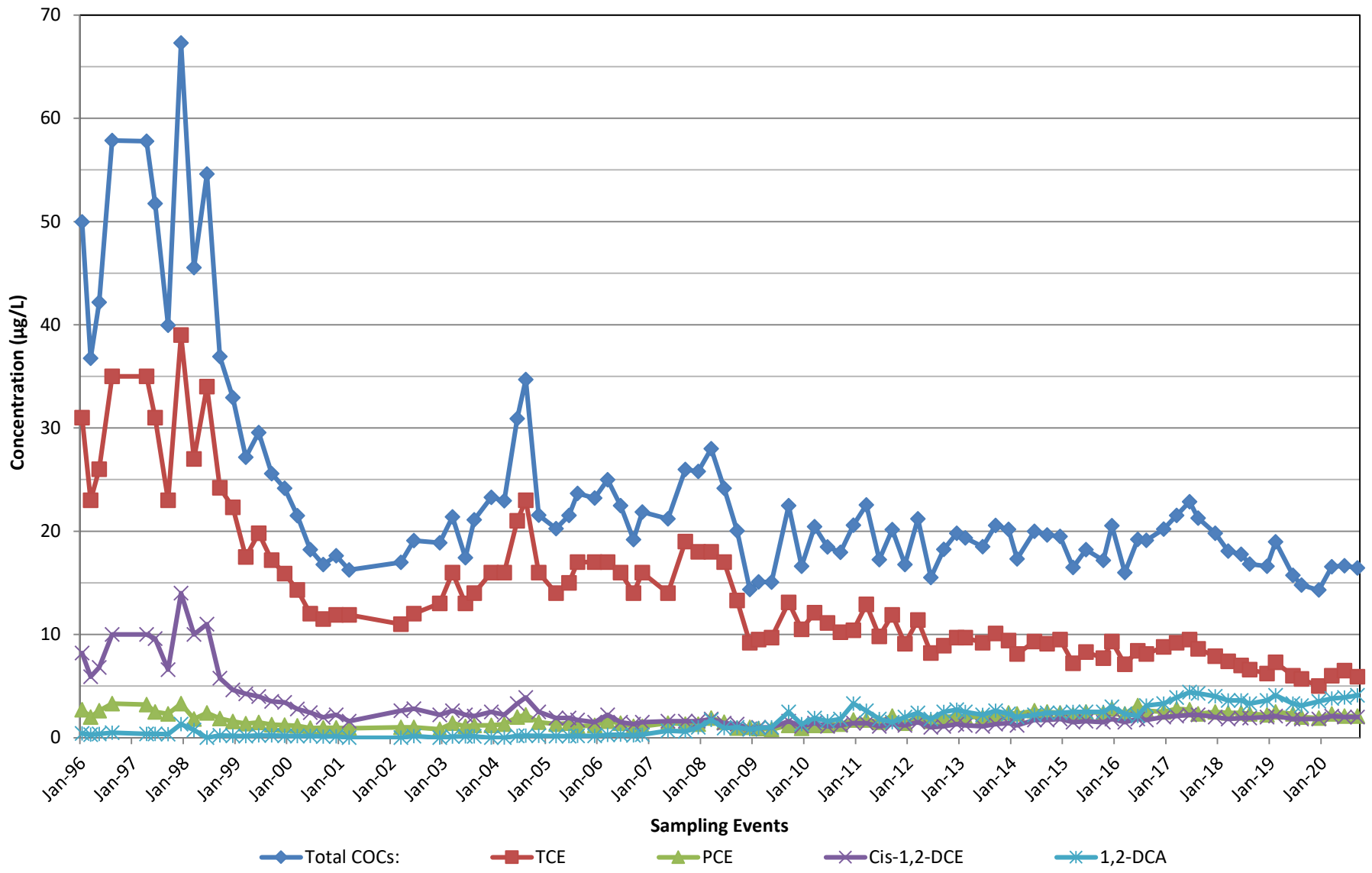
Ahtna

EW-OU2-12-A (Hydraulic Zone 3)

Operable Unit 2 Remedy Monitoring and Operations and Maintenance
 Fourth Quarter 2019 through Third Quarter 2020, Former Fort Ord, California

Figure:

F8

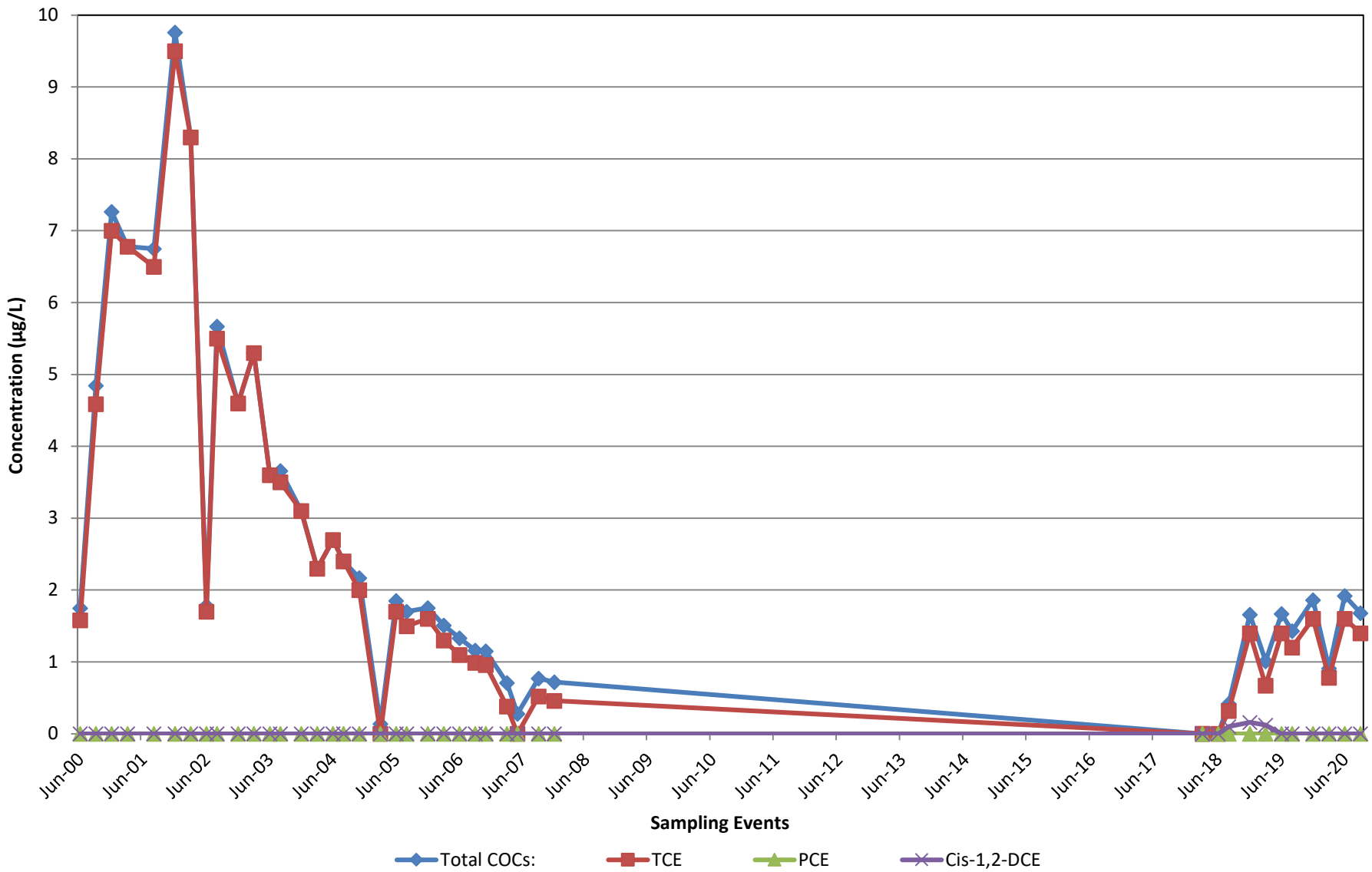


EW-OU2-13-A (Hydraulic Zone 3)

Operable Unit 2 Remedy Monitoring and Operations and Maintenance
 Fourth Quarter 2019 through Third Quarter 2020, Former Fort Ord, California

Figure:

F9

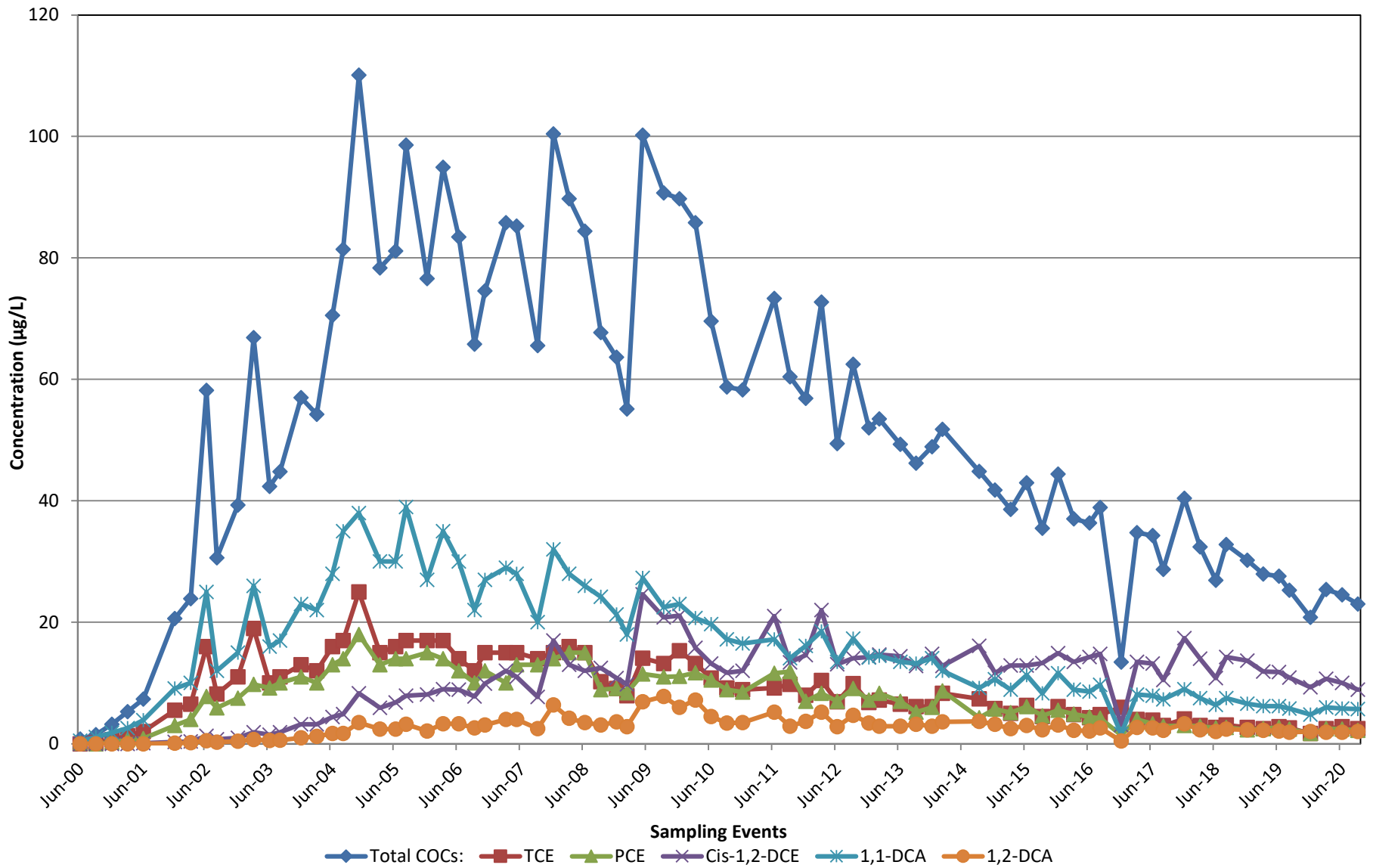


EW-OU2-15-A (Hydraulic Zone 2)

Operable Unit 2 Remedy Monitoring and Operations and Maintenance
 Fourth Quarter 2019 through Third Quarter 2020, Former Fort Ord, California

Figure:

F10

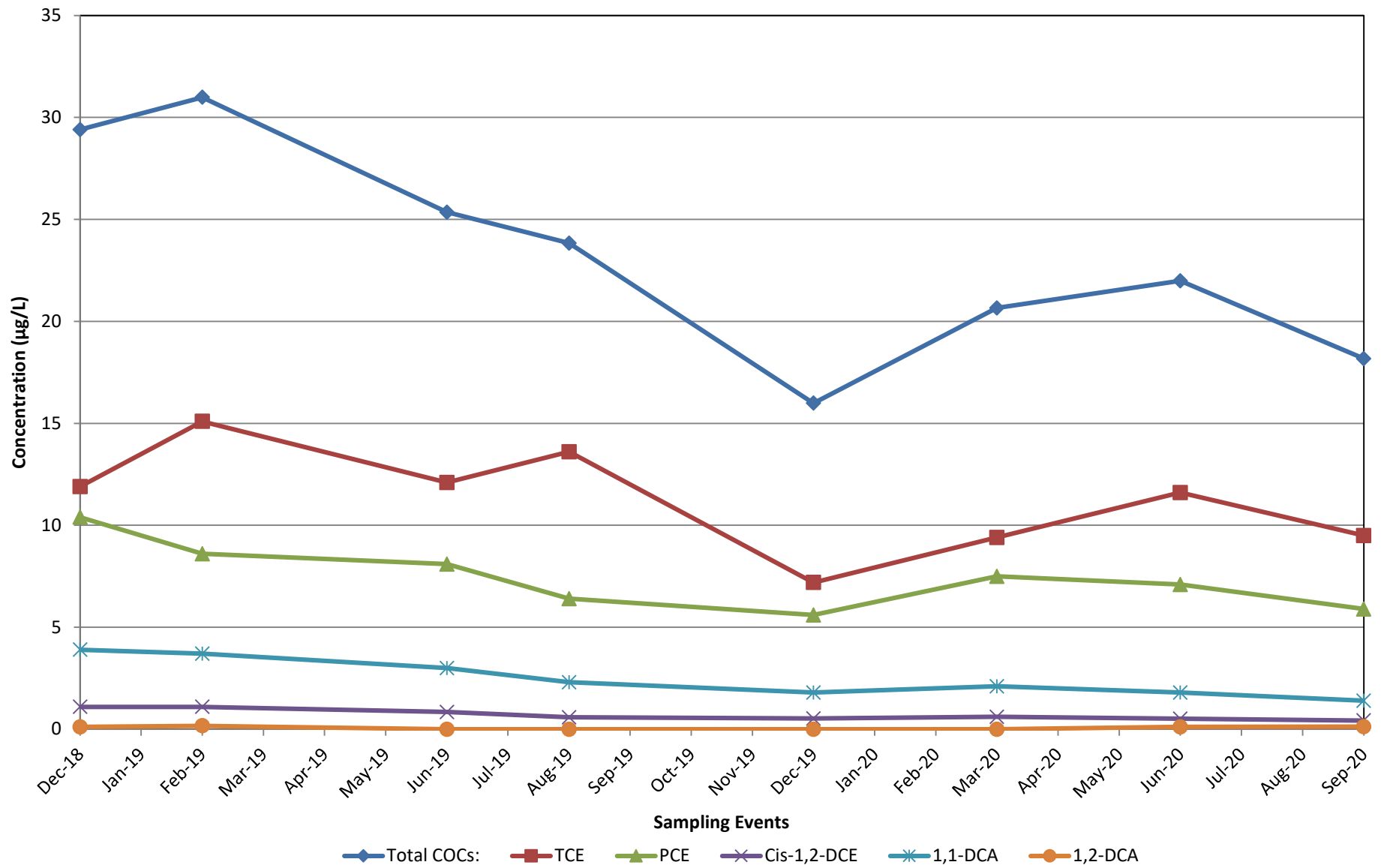


EW-OU2-16-A (Hydraulic Zone 1)

Operable Unit 2 Remedy Monitoring and Operations and Maintenance
 Fourth Quarter 2019 through Third Quarter 2020, Former Fort Ord, California

Figure:

F11

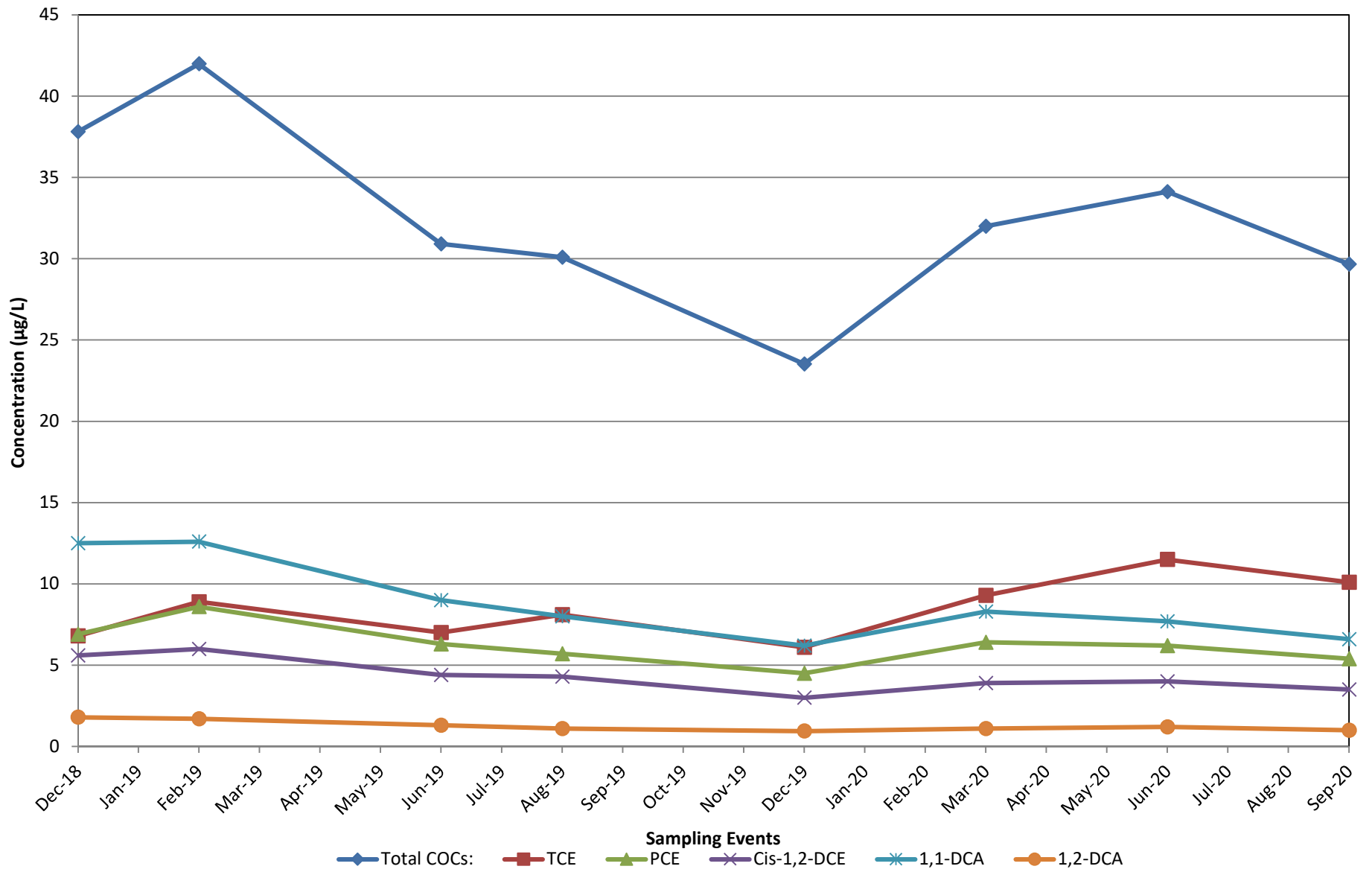


EW-OU2-17-A (Hydraulic Zone 1)

Operable Unit 2 Remedy Monitoring and Operations and Maintenance
 Fourth Quarter 2019 through Third Quarter 2020, Former Fort Ord, California

Figure:

F12

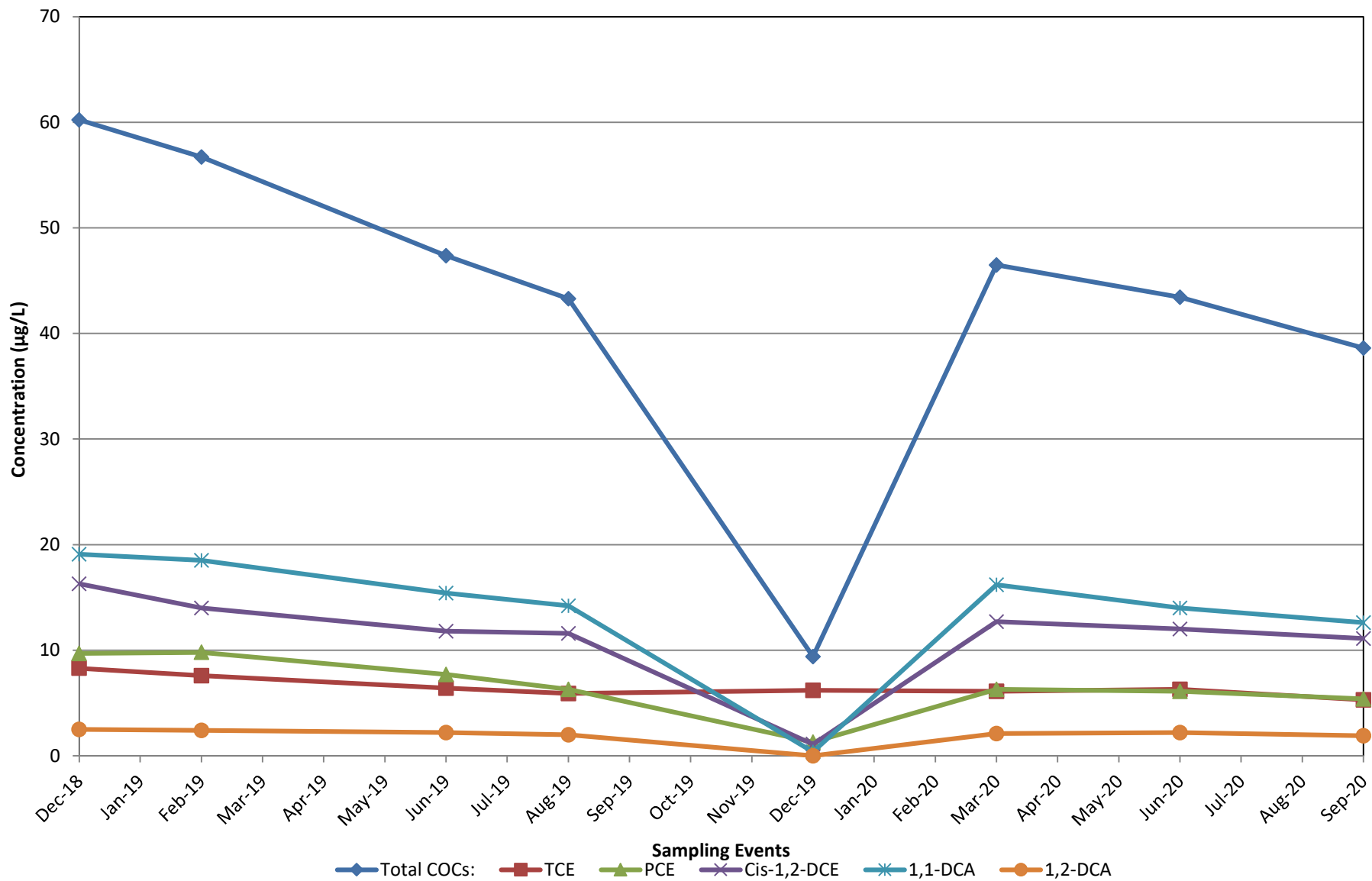


EW-OU2-18-A (Hydraulic Zone 1)

Operable Unit 2 Remedy Monitoring and Operations and Maintenance
 Fourth Quarter 2019 through Third Quarter 2020, Former Fort Ord, California

Figure:

F13

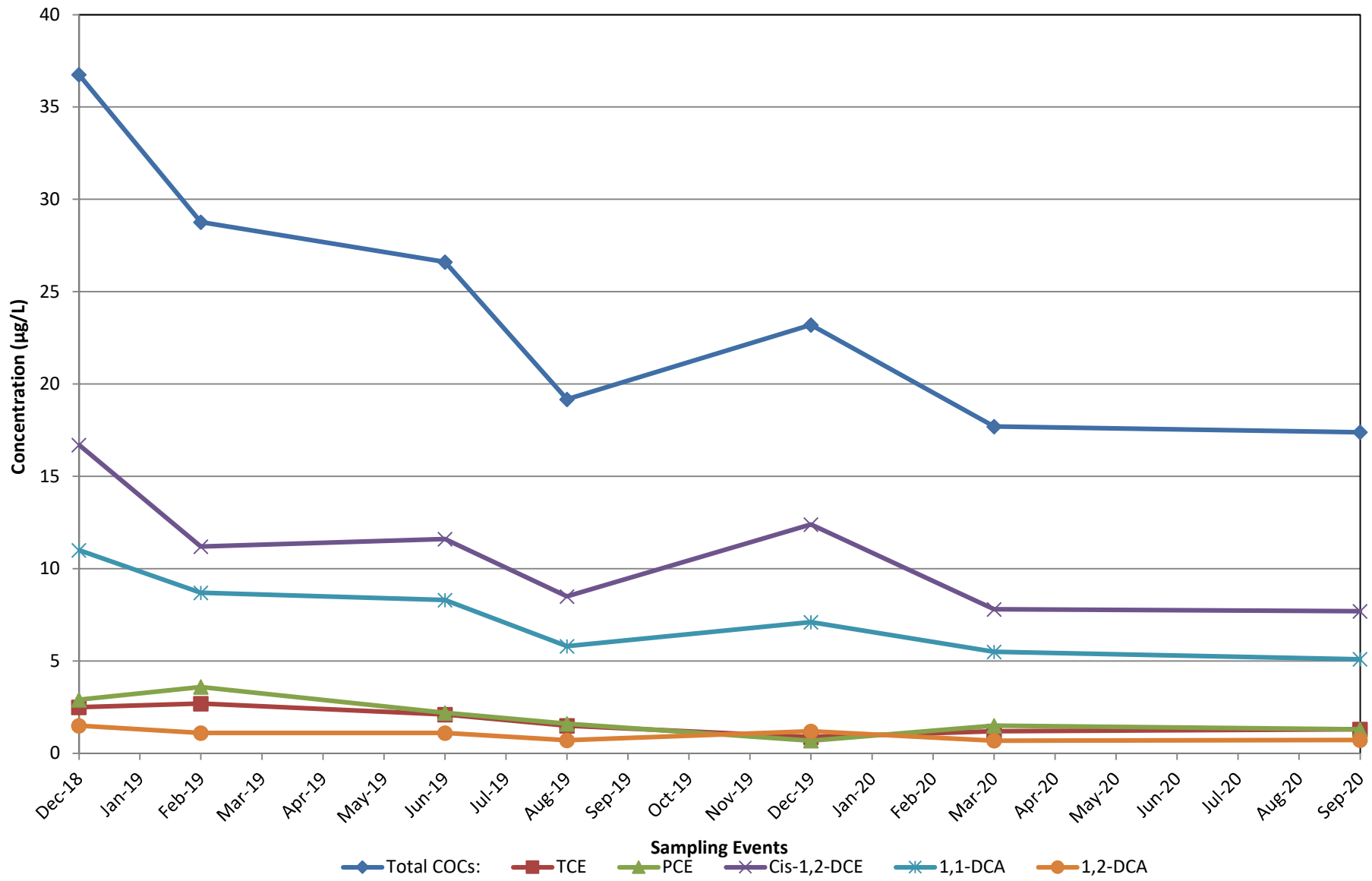


EW-OU2-19-A (Hydraulic Zone 1)

Operable Unit 2 Remedy Monitoring and Operations and Maintenance
 Fourth Quarter 2019 through Third Quarter 2020, Former Fort Ord, California

Figure:

F14

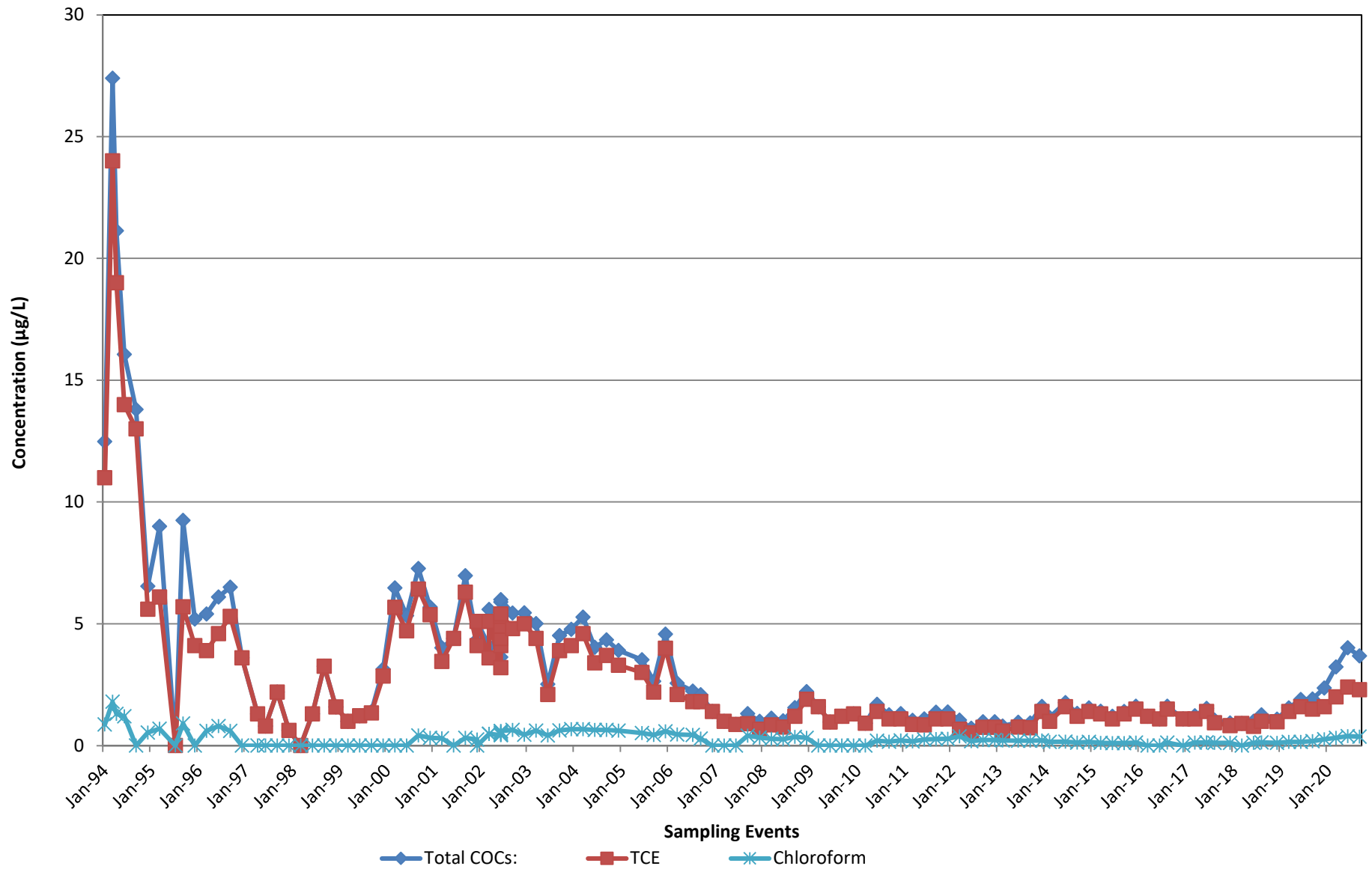


EW-OU2-20-A (Hydraulic Zone 1)

Operable Unit 2 Remedy Monitoring and Operations and Maintenance
 Fourth Quarter 2019 through Third Quarter 2020, Former Fort Ord, California

Figure:

F15

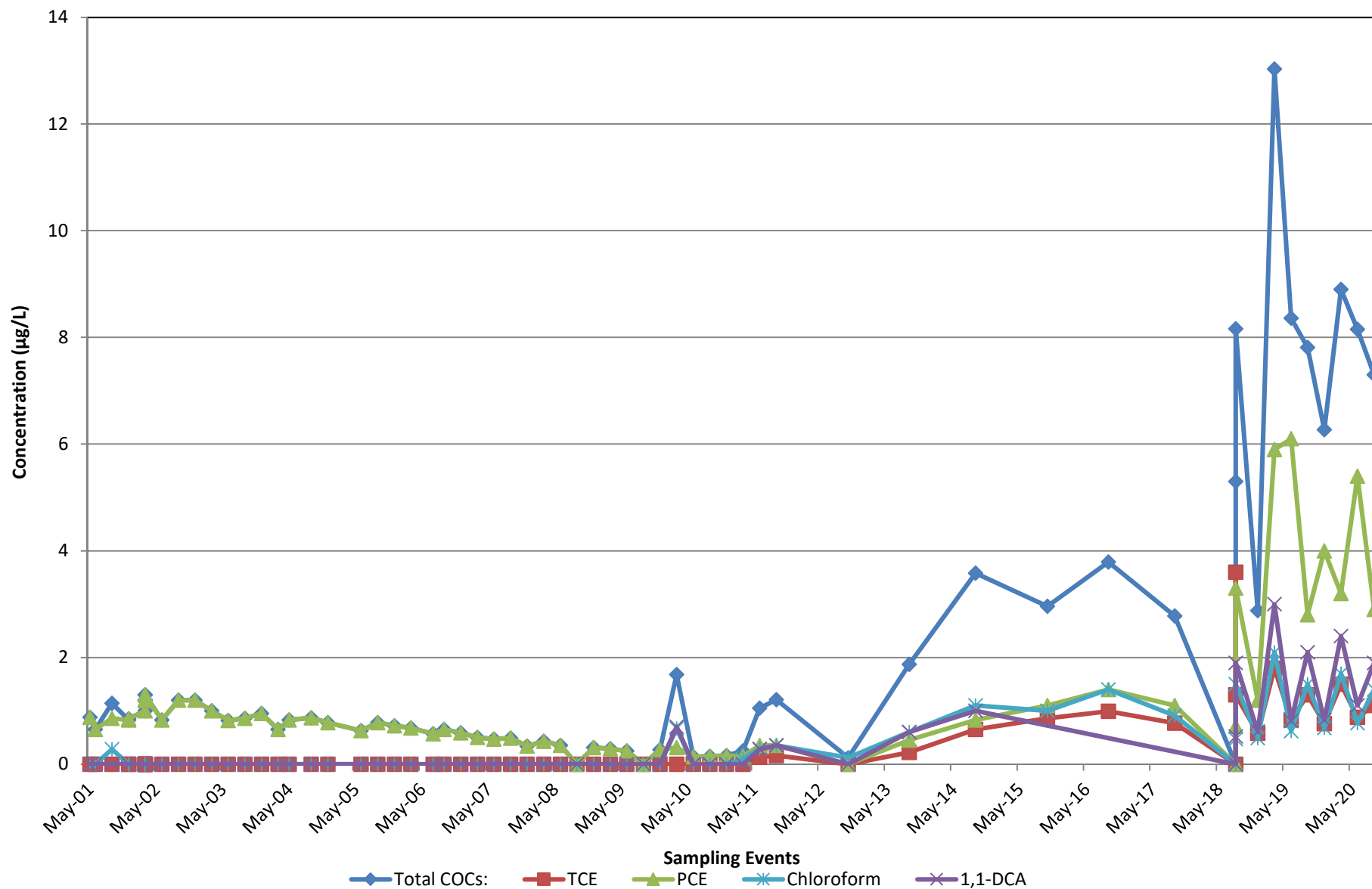


MW-BW-13-A (north of Hydraulic Zone 4)

Operable Unit 2 Remedy Monitoring and Operations and Maintenance
 Fourth Quarter 2019 through Third Quarter 2020, Former Fort Ord, California

Figure:

F16

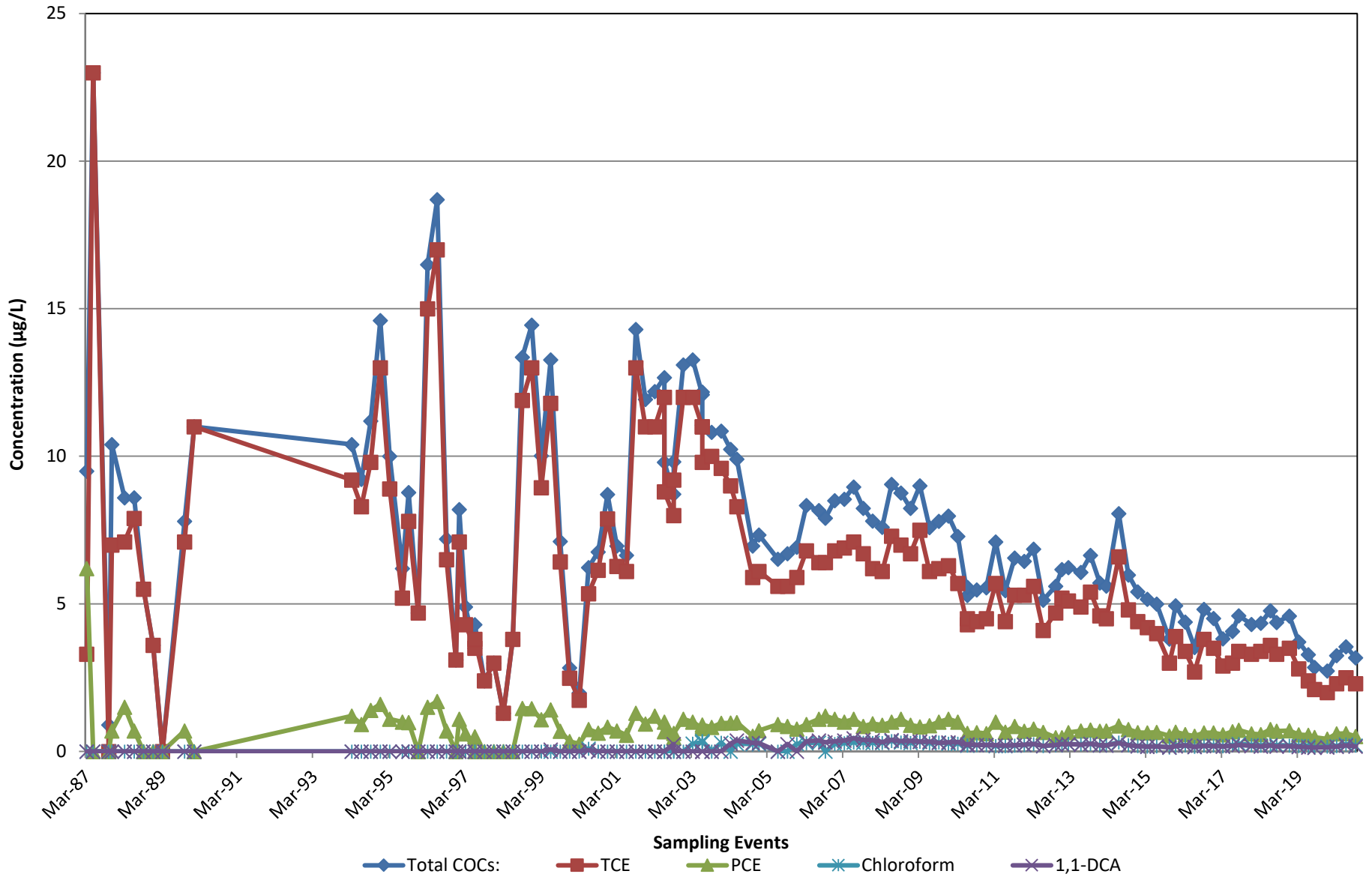


MW-BW-50-A (Hydraulic Zone 5)

Operable Unit 2 Remedy Monitoring and Operations and Maintenance
 Fourth Quarter 2019 through Third Quarter 2020, Former Fort Ord, California

Figure:

F17



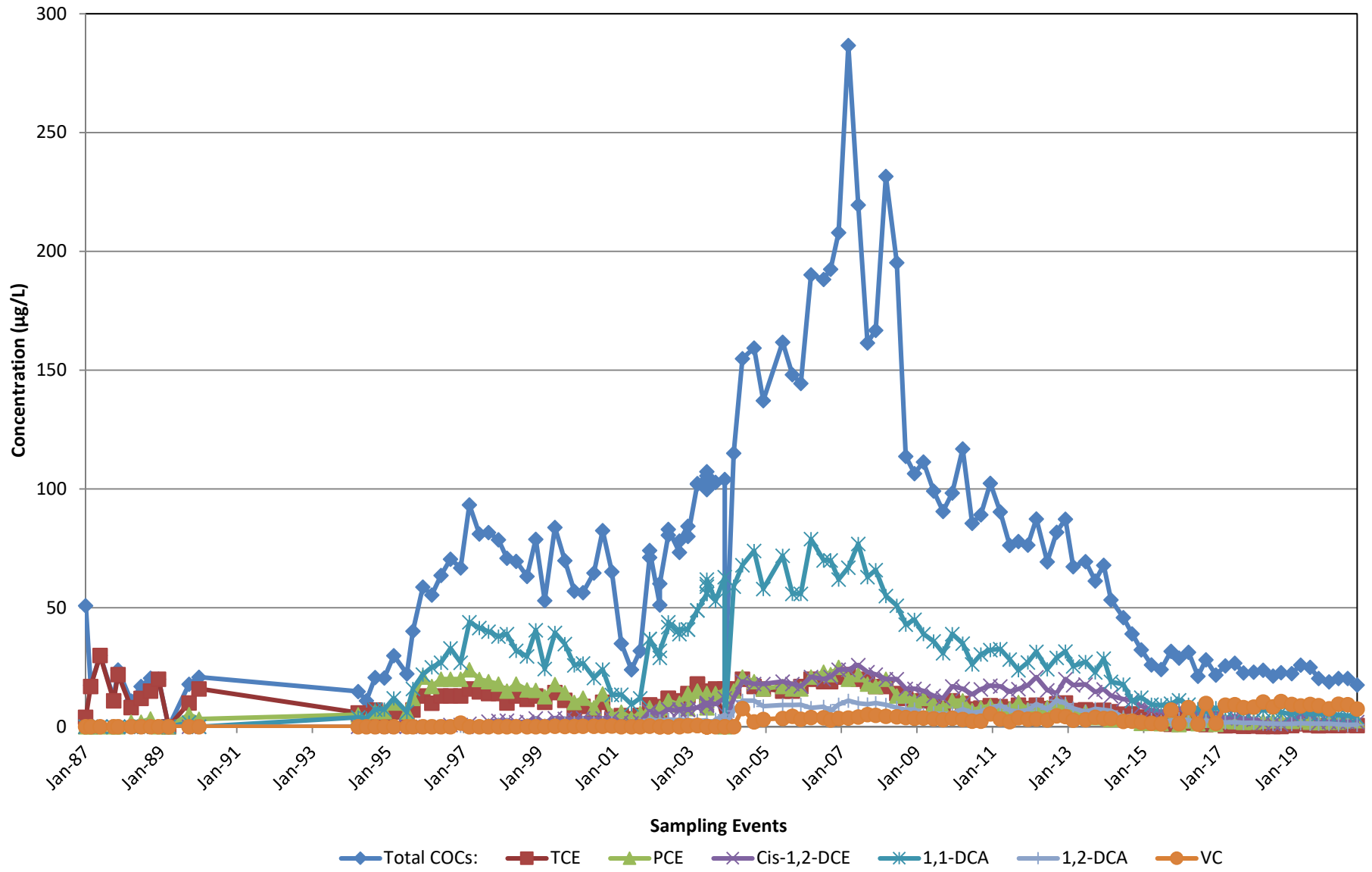
Ahtna

MW-OU2-01-A (Hydraulic Zone 1)

Operable Unit 2 Remedy Monitoring and Operations and Maintenance
Fourth Quarter 2019 through Third Quarter 2020, Former Fort Ord, California

Figure:

F18



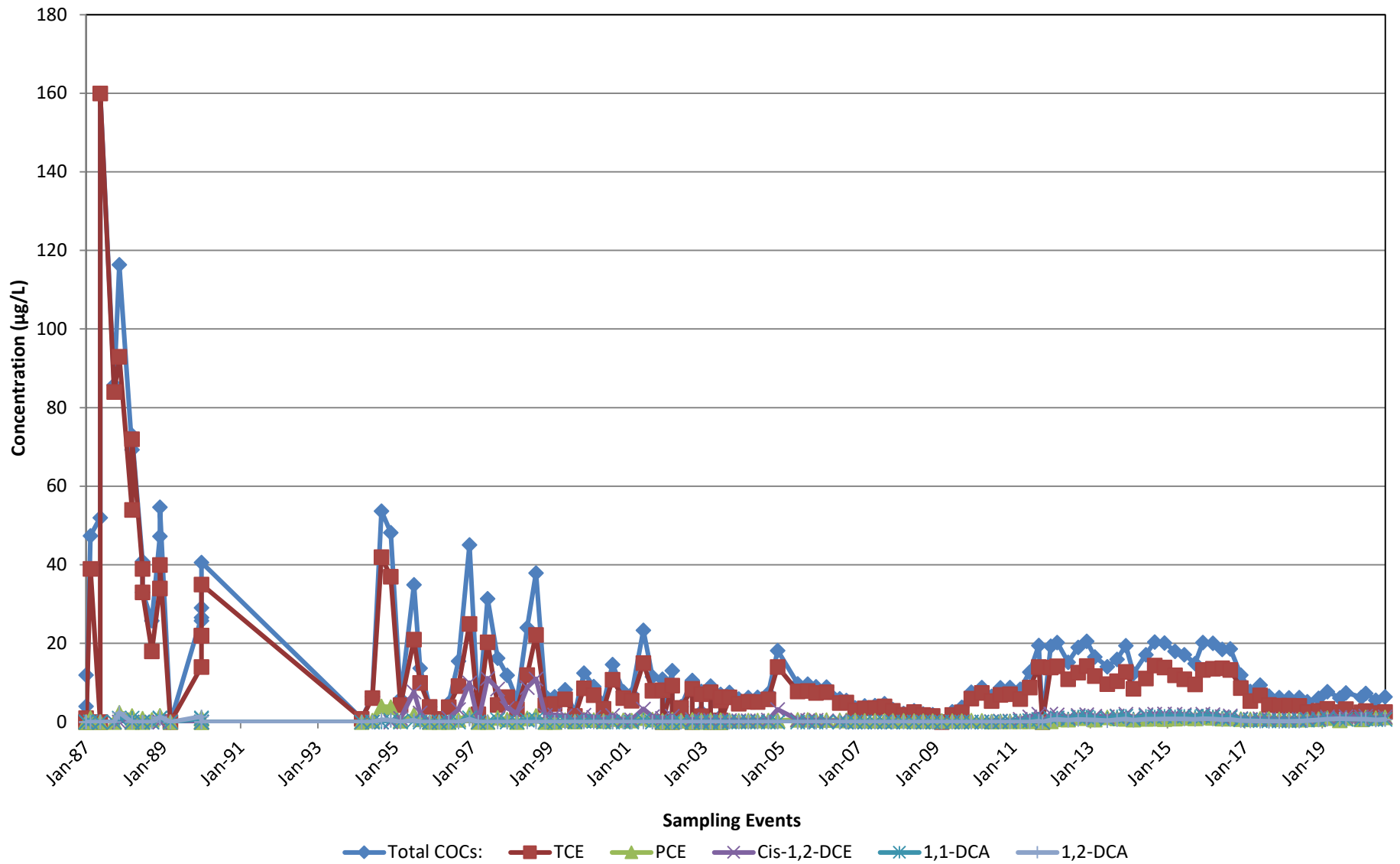
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MW-OU2-02-A (Hydraulic Zone 1)

Operable Unit 2 Remedy Monitoring and Operations and Maintenance
Fourth Quarter 2019 through Third Quarter 2020, Former Fort Ord, California

Figure:

F19



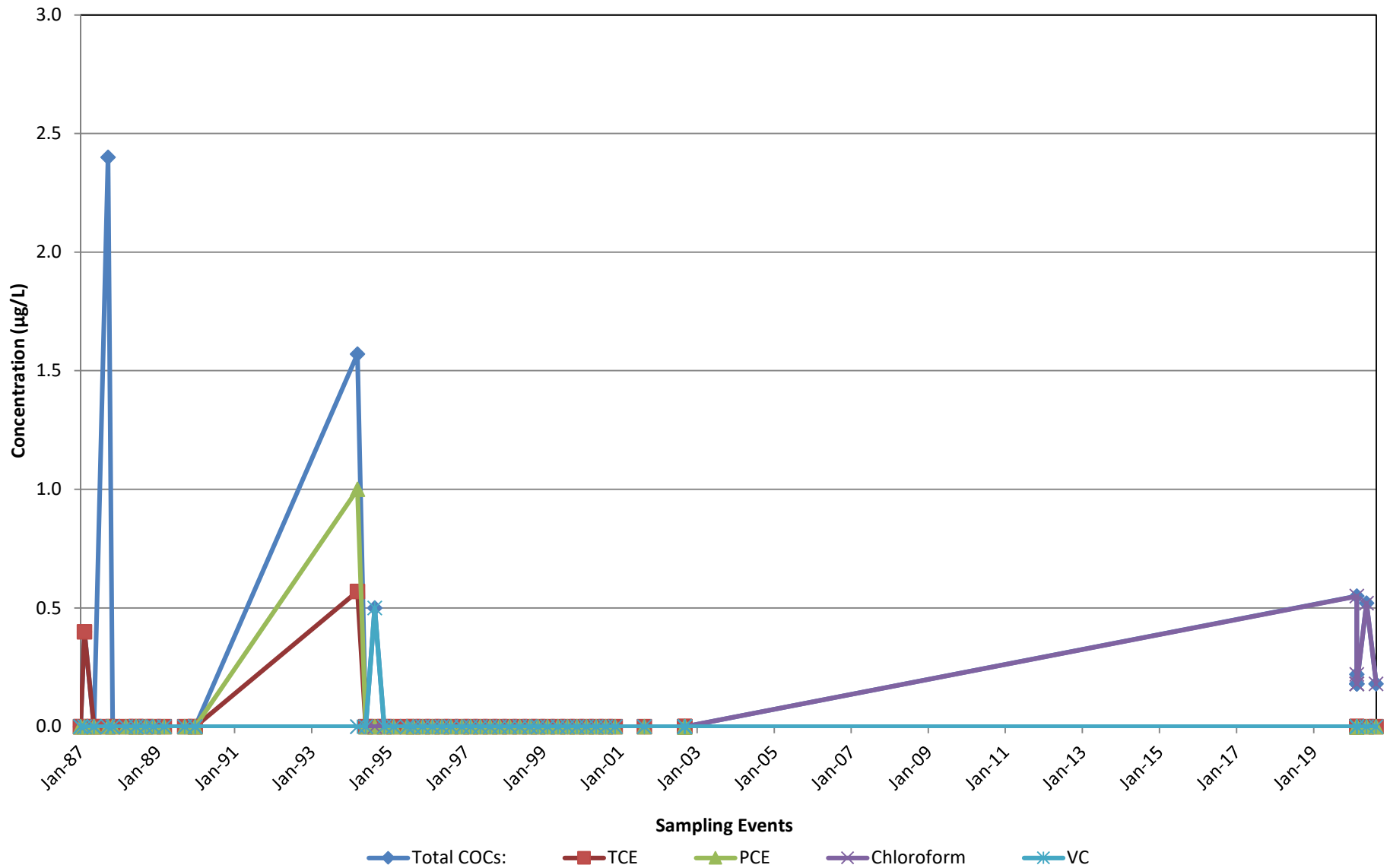
Ahtna

MW-OU2-04-A (Hydraulic Zone 5)

Operable Unit 2 Remedy Monitoring and Operations and Maintenance
Fourth Quarter 2019 through Third Quarter 2020, Former Fort Ord, California

Figure:

F20

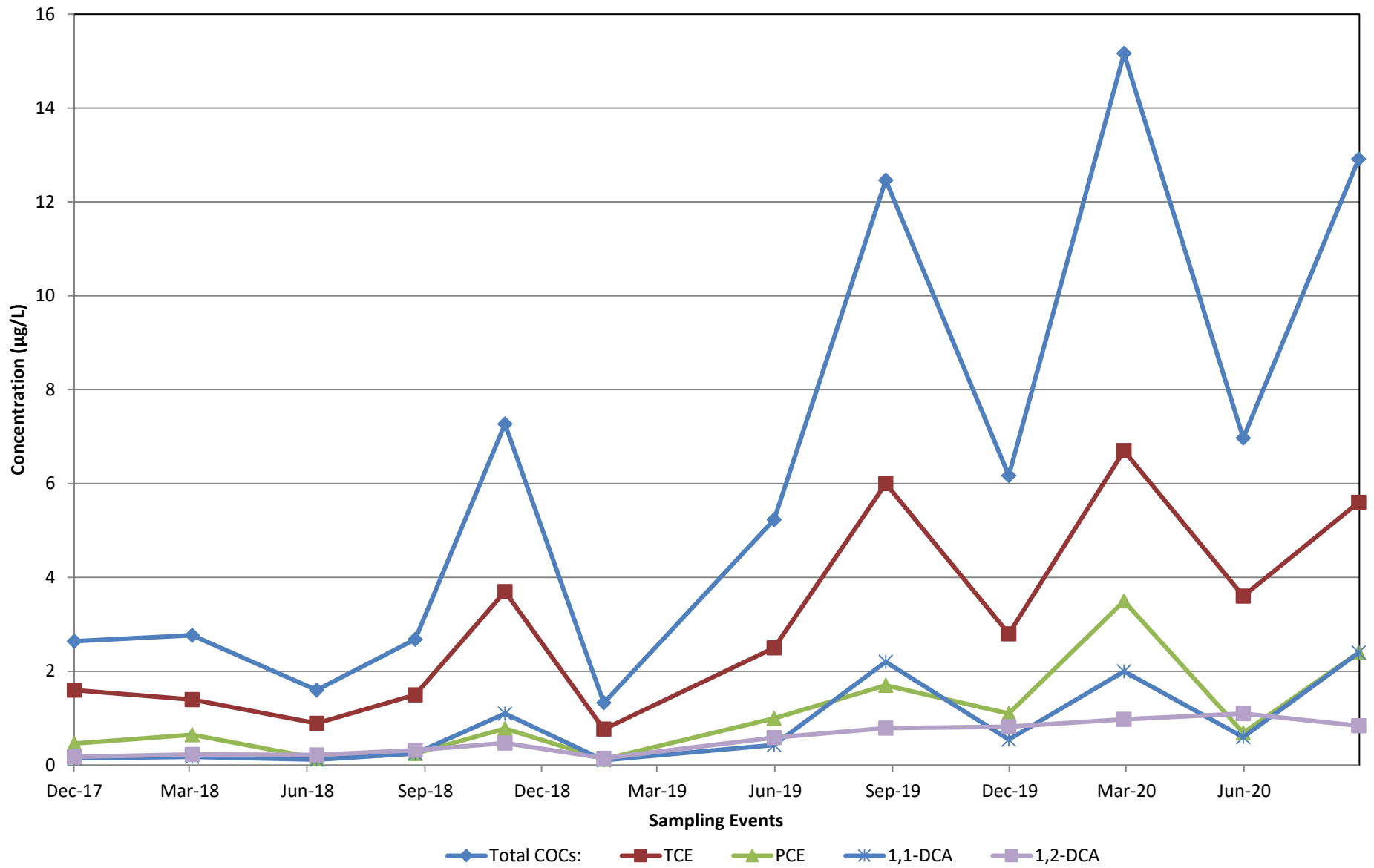


MW-OU2-05-A (northwest of Hydraulic Zone 5)

Operable Unit 2 Remedy Monitoring and Operations and Maintenance
Fourth Quarter 2019 through Third Quarter 2020, Former Fort Ord, California

Figure:

F21

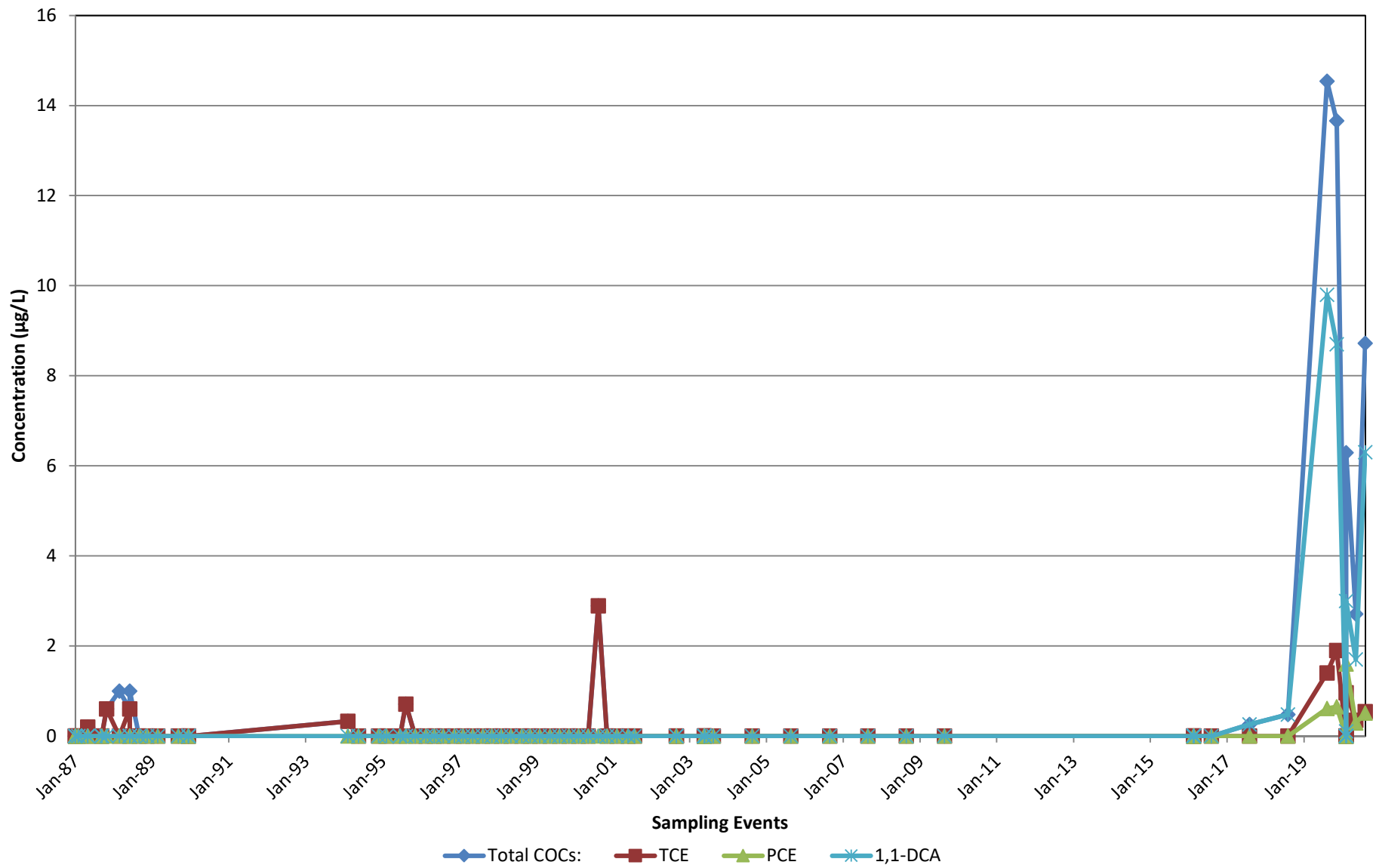


MW-OU2-06-AR (Hydraulic Zone 5)

Operable Unit 2 Remedy Monitoring and Operations and Maintenance
 Fourth Quarter 2019 through Third Quarter 2020, Former Fort Ord, California

Figure:

F22

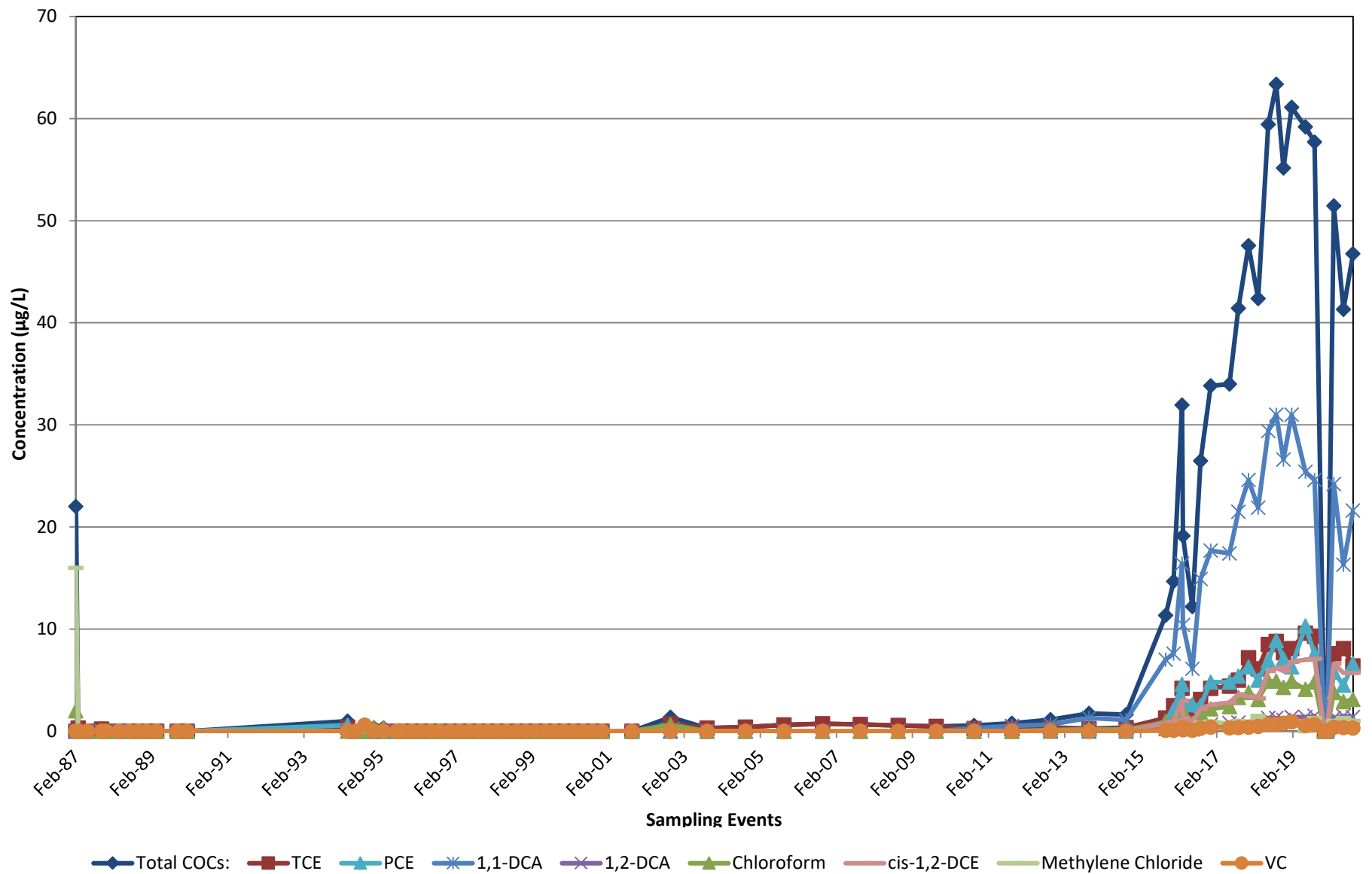


MW-OU2-07-A (Hydraulic Zone 5)

Operable Unit 2 Remedy Monitoring and Operations and Maintenance
 Fourth Quarter 2019 through Third Quarter 2020, Former Fort Ord, California

Figure:

F23

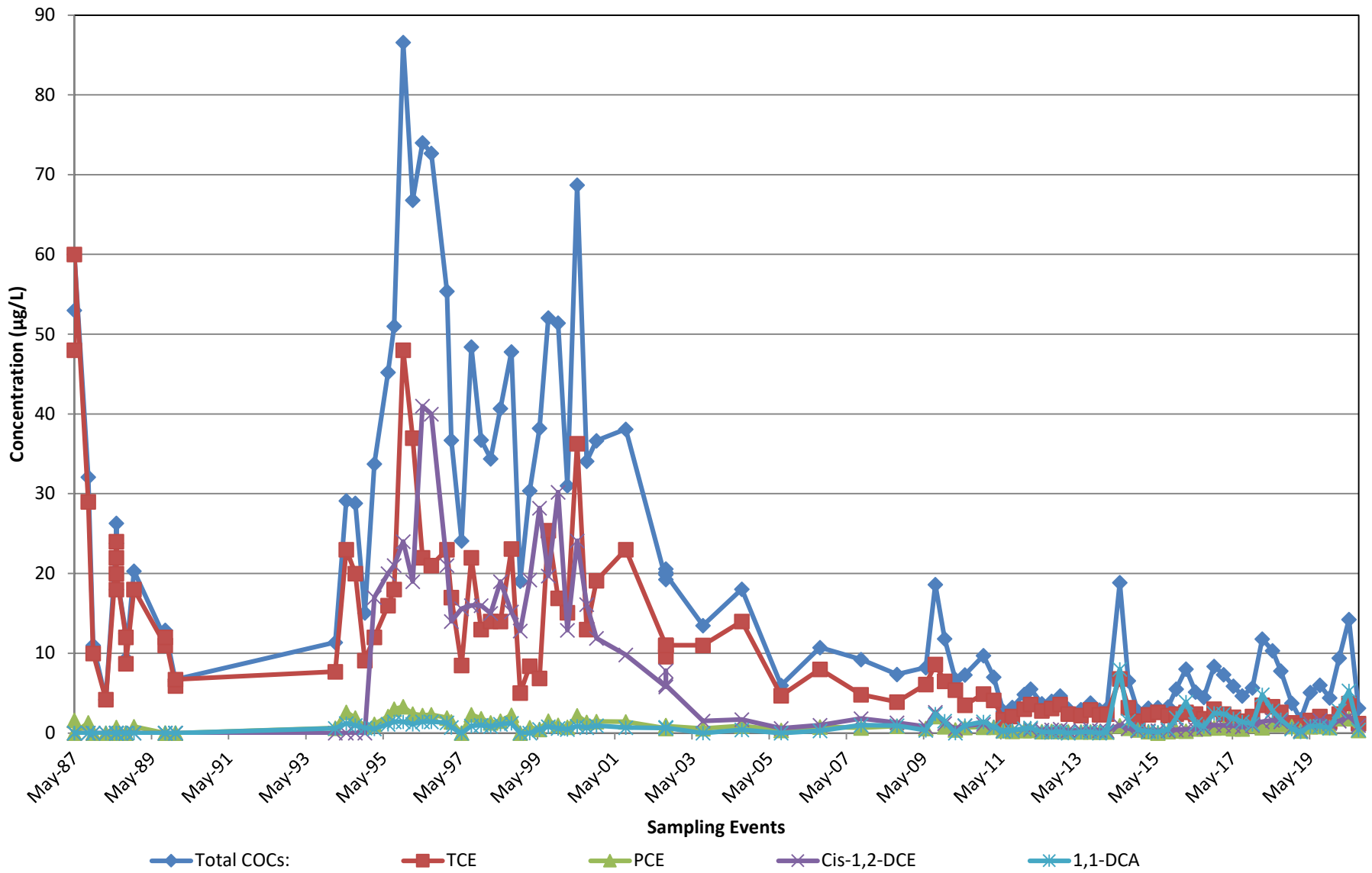


MW-OU2-08-A (Hydraulic Zone 5)

Operable Unit 2 Remedy Monitoring and Operations and Maintenance
 Fourth Quarter 2019 through Third Quarter 2020, Former Fort Ord, California

Figure:

F24



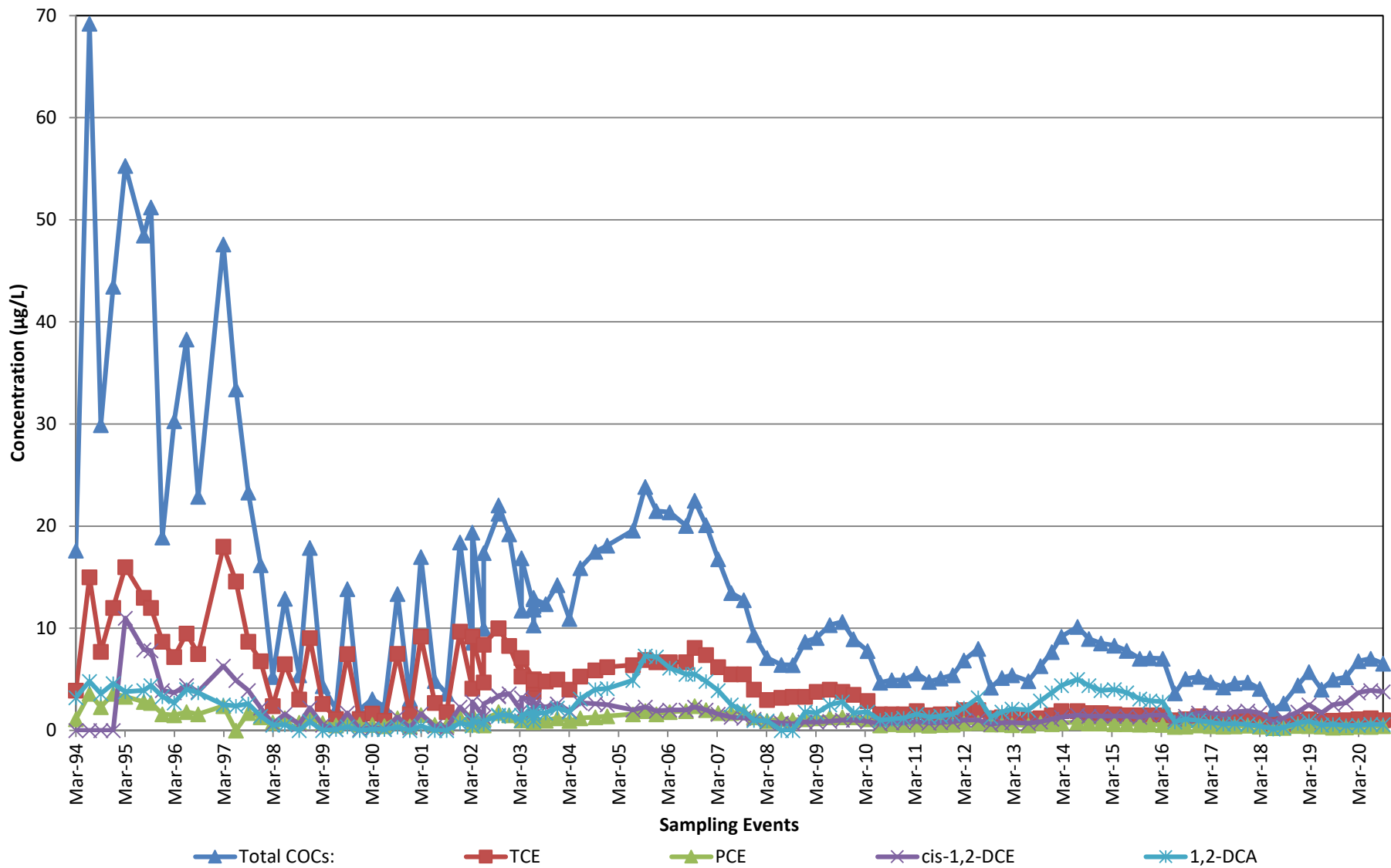
Ahtna

MW-OU2-12-A (Hydraulic Zone 3)

Operable Unit 2 Remedy Monitoring and Operations and Maintenance
 Fourth Quarter 2019 through Third Quarter 2020, Former Fort Ord, California

Figure:

F25

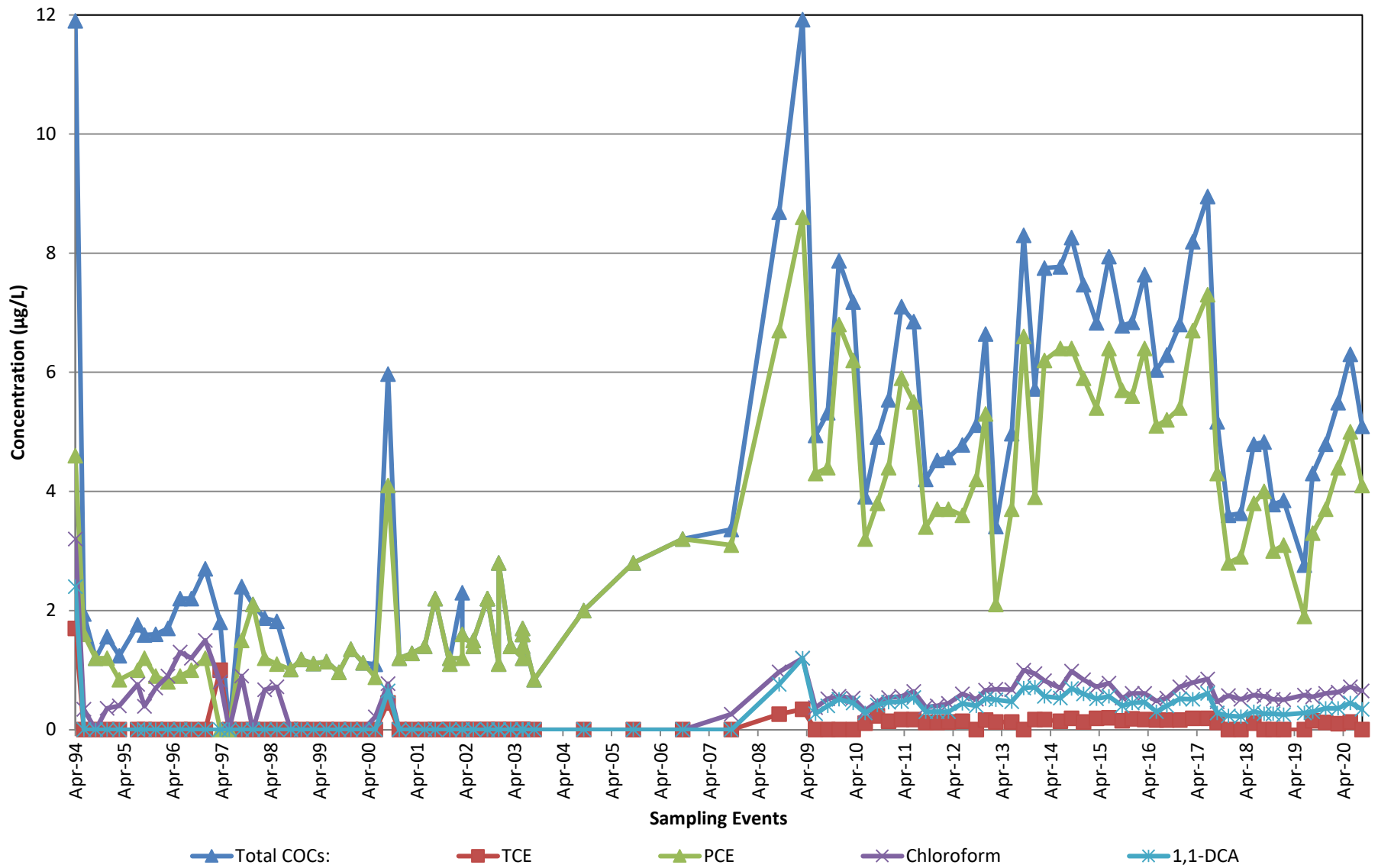


MW-OU2-25-A (Hydraulic Zone 3)

Operable Unit 2 Remedy Monitoring and Operations and Maintenance
 Fourth Quarter 2019 through Third Quarter 2020, Former Fort Ord, California

Figure:

F26

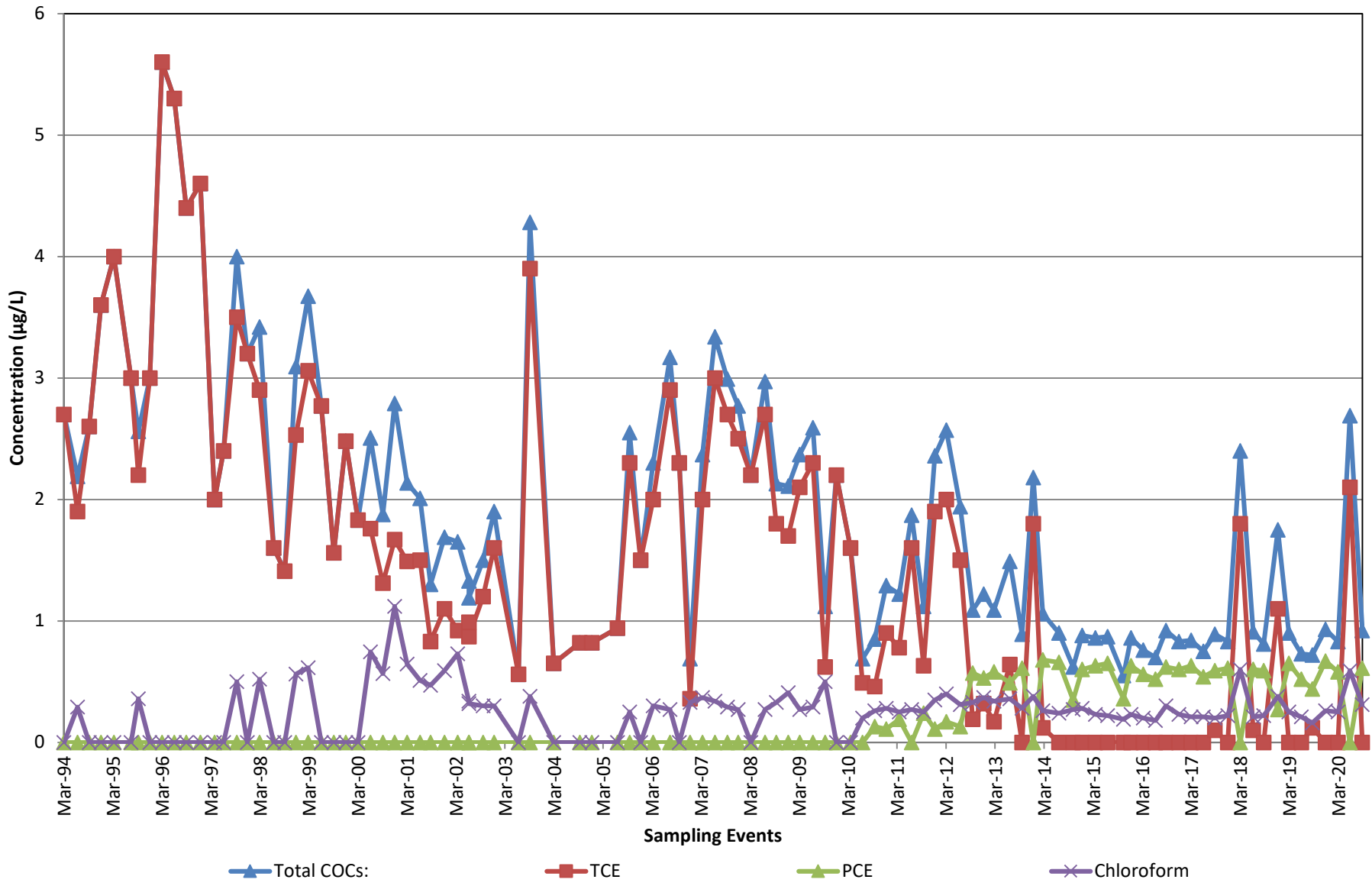


MW-OU2-27-A (Hydraulic Zone 2)

Operable Unit 2 Remedy Monitoring and Operations and Maintenance
 Fourth Quarter 2019 through Third Quarter 2020, Former Fort Ord, California

Figure:

F27

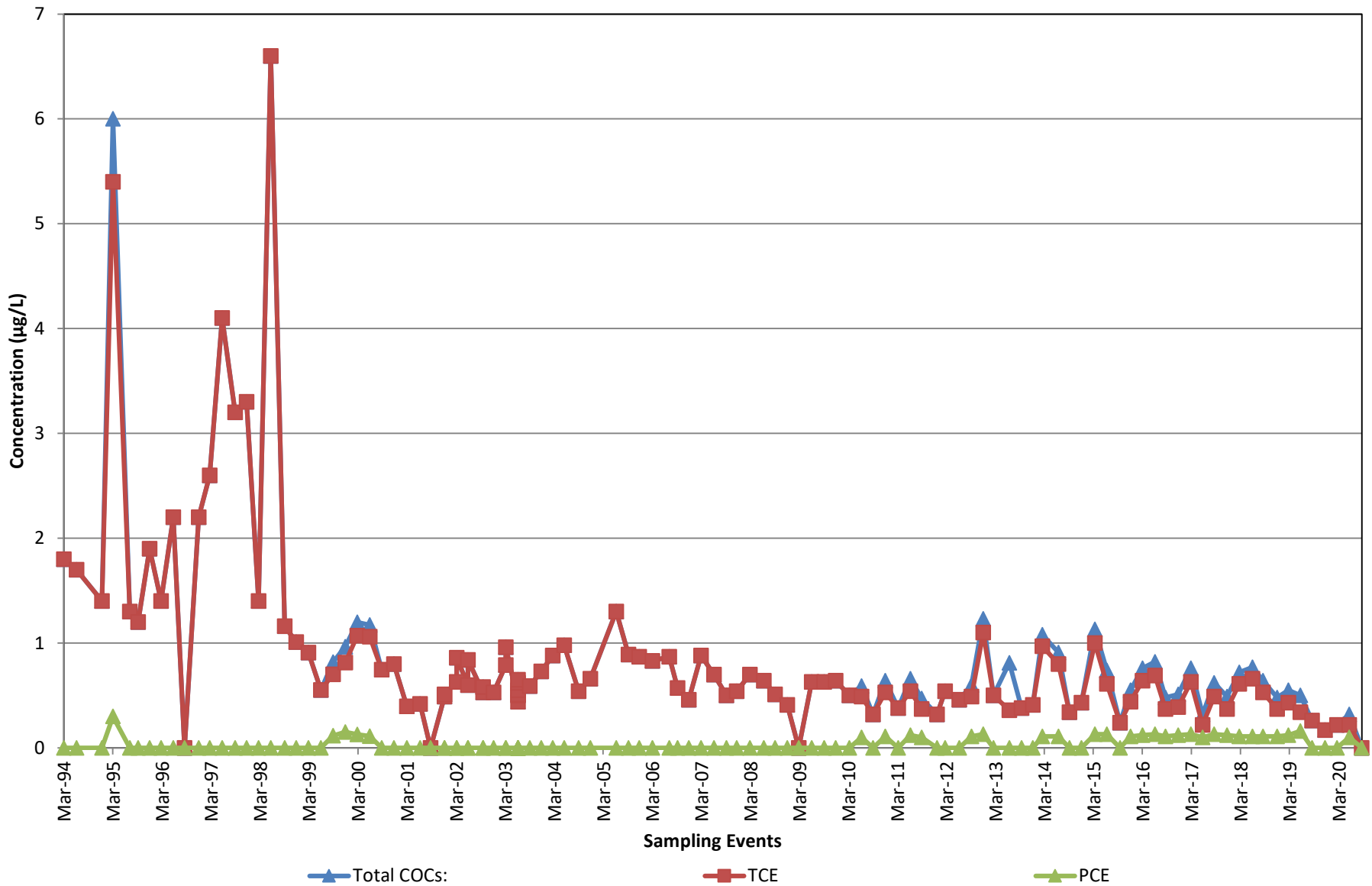


MW-OU2-28-A (Hydraulic Zone 2)

Operable Unit 2 Remedy Monitoring and Operations and Maintenance
 Fourth Quarter 2019 through Third Quarter 2020, Former Fort Ord, California

Figure:

F28

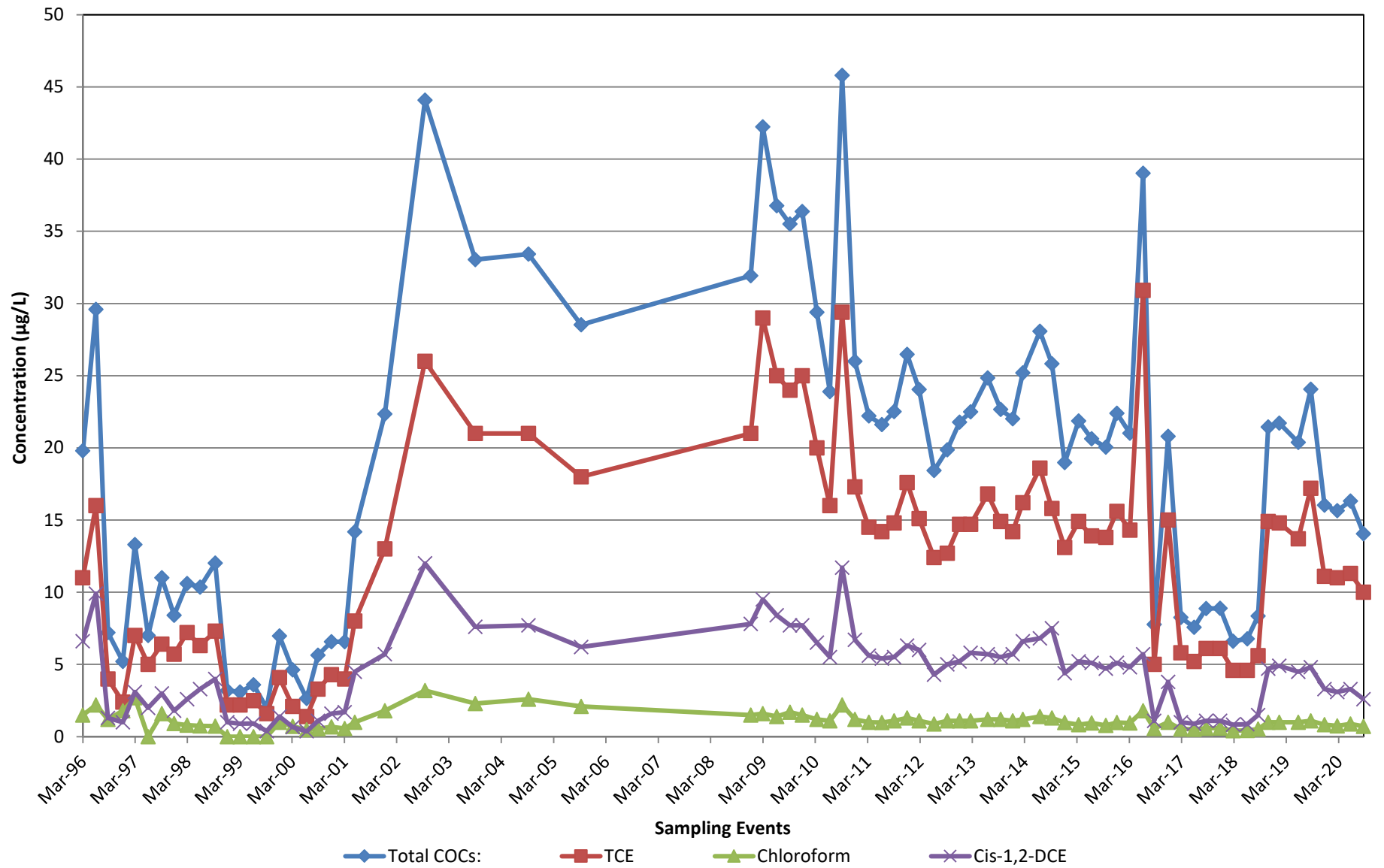


MW-OU2-34-A (south of Hydraulic Zone 4)

Operable Unit 2 Remedy Monitoring and Operations and Maintenance
 Fourth Quarter 2019 through Third Quarter 2020, Former Fort Ord, California

Figure:

F29

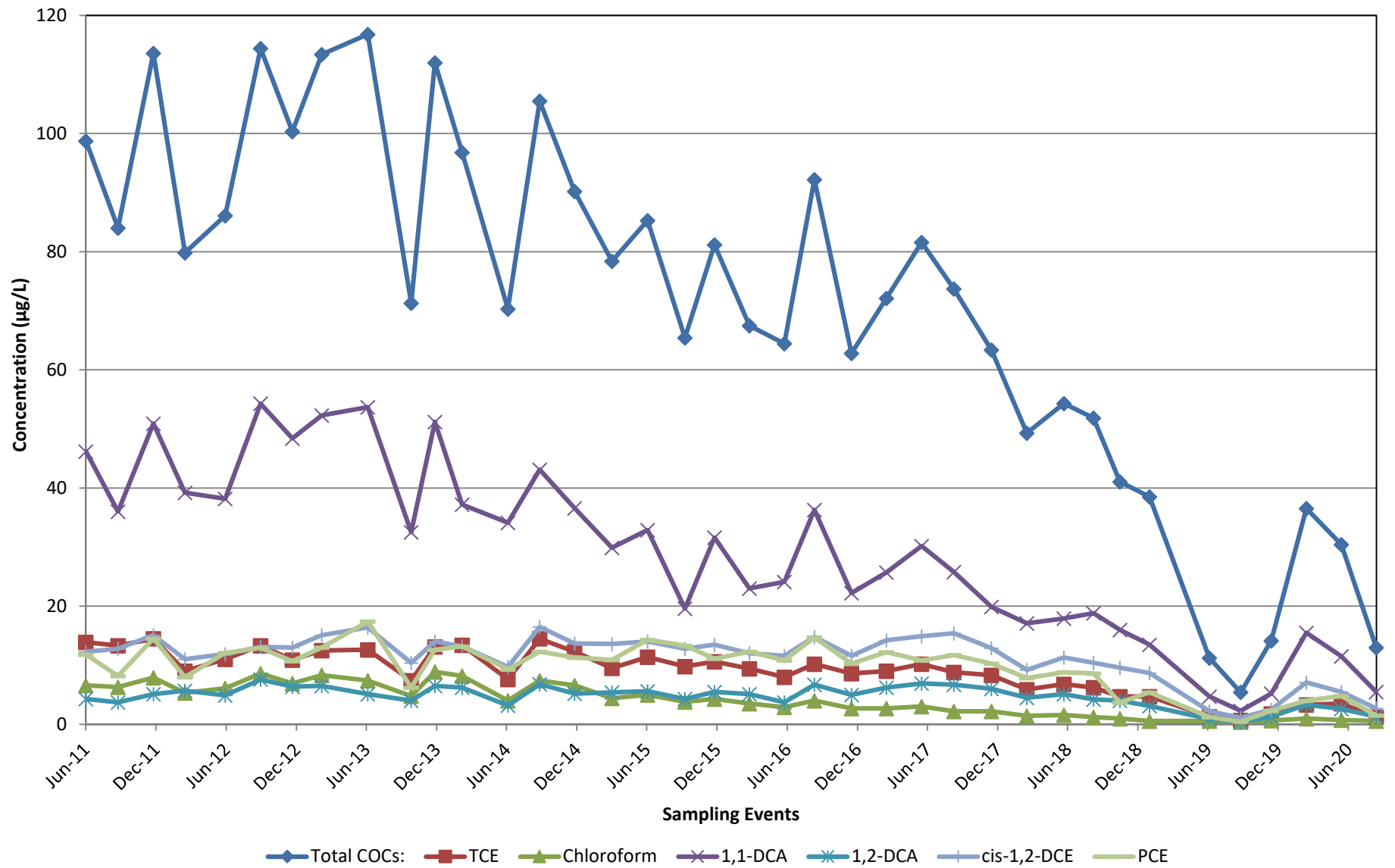


MW-OU2-40-A (Hydraulic Zone 4)

Operable Unit 2 Remedy Monitoring and Operations and Maintenance
 Fourth Quarter 2019 through Third Quarter 2020, Former Fort Ord, California

Figure:

F30



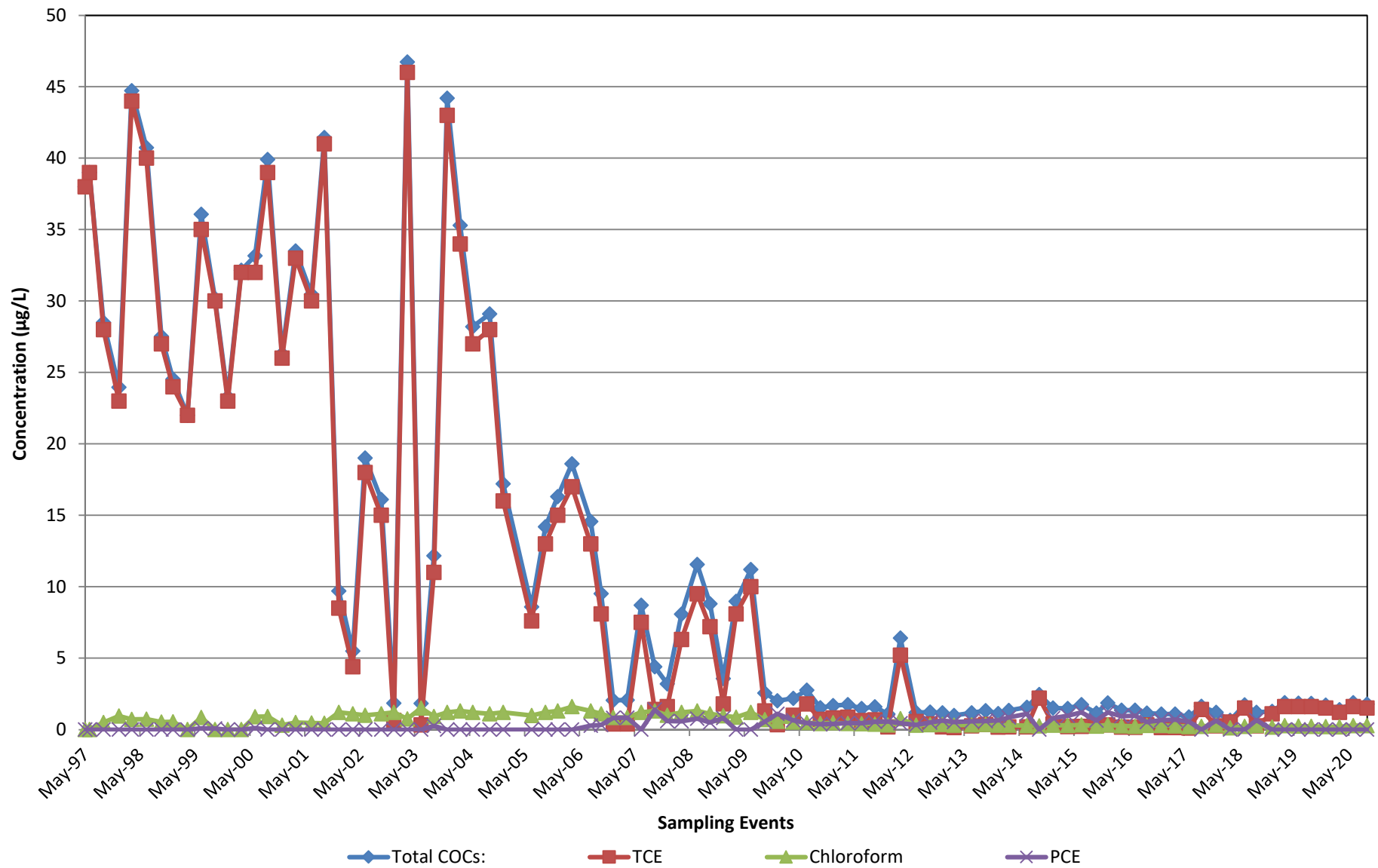
Ahtna

MW-OU2-44-A (Hydraulic Zone 1)

Operable Unit 2 Remedy Monitoring and Operations and Maintenance
 Fourth Quarter 2019 through Third Quarter 2020, Former Fort Ord, California

Figure:

F31



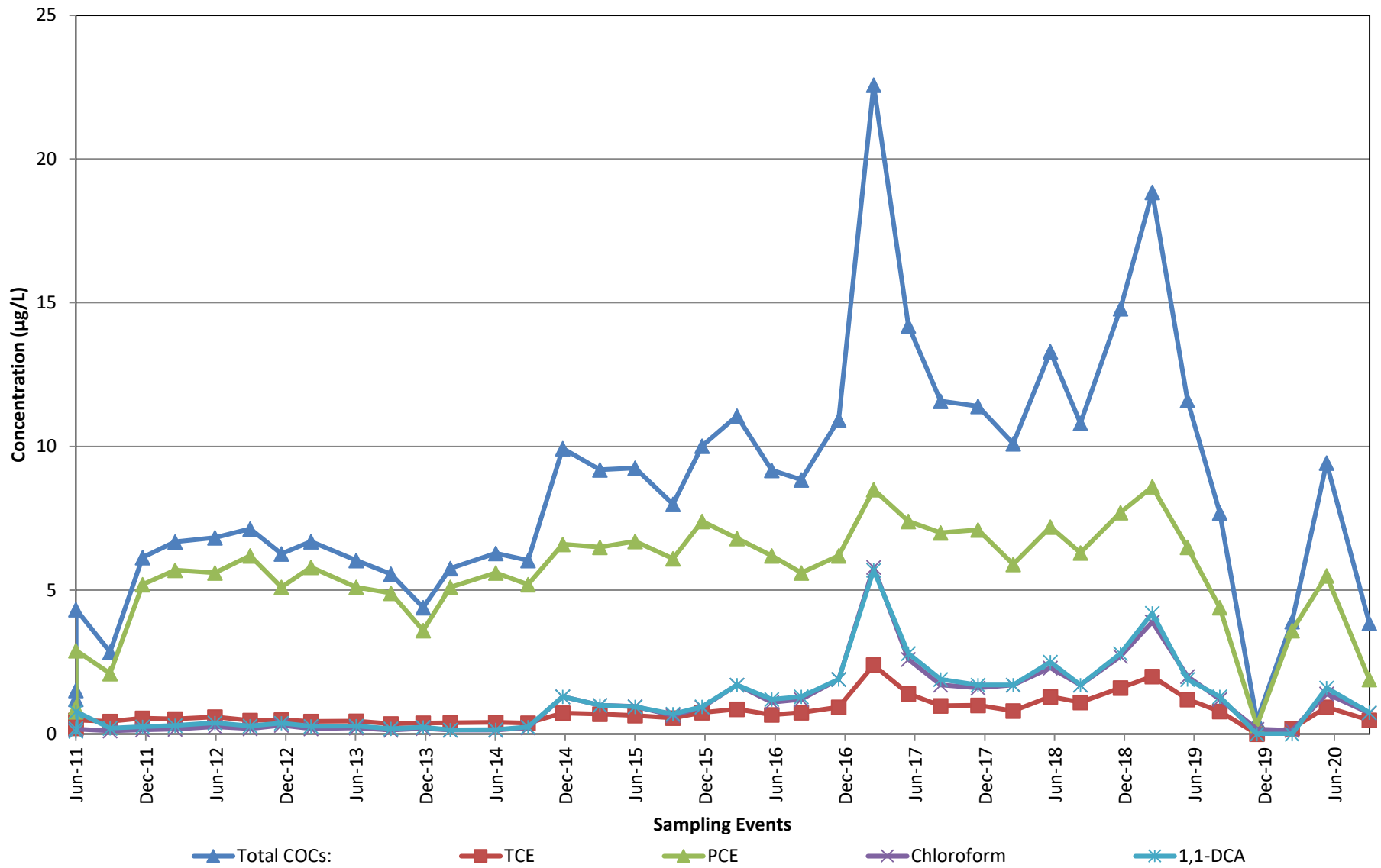
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MW-OU2-45-A (Hydraulic Zone 2)

Operable Unit 2 Remedy Monitoring and Operations and Maintenance
Fourth Quarter 2019 through Third Quarter 2020, Former Fort Ord, California

Figure:

F32

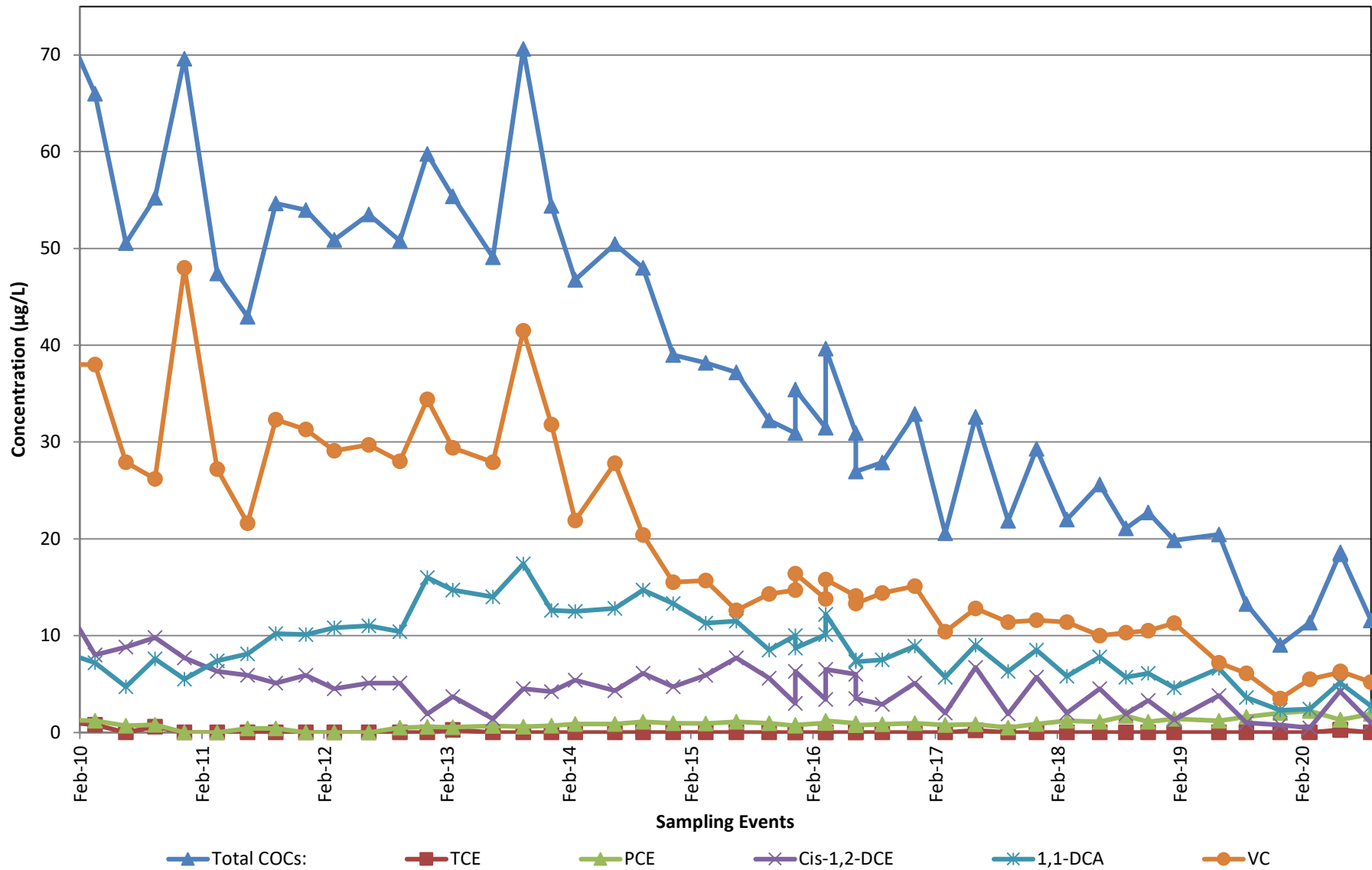


MW-OU2-46-A (Hydraulic Zone 1)

Operable Unit 2 Remedy Monitoring and Operations and Maintenance
 Fourth Quarter 2019 through Third Quarter 2020, Former Fort Ord, California

Figure:

F33

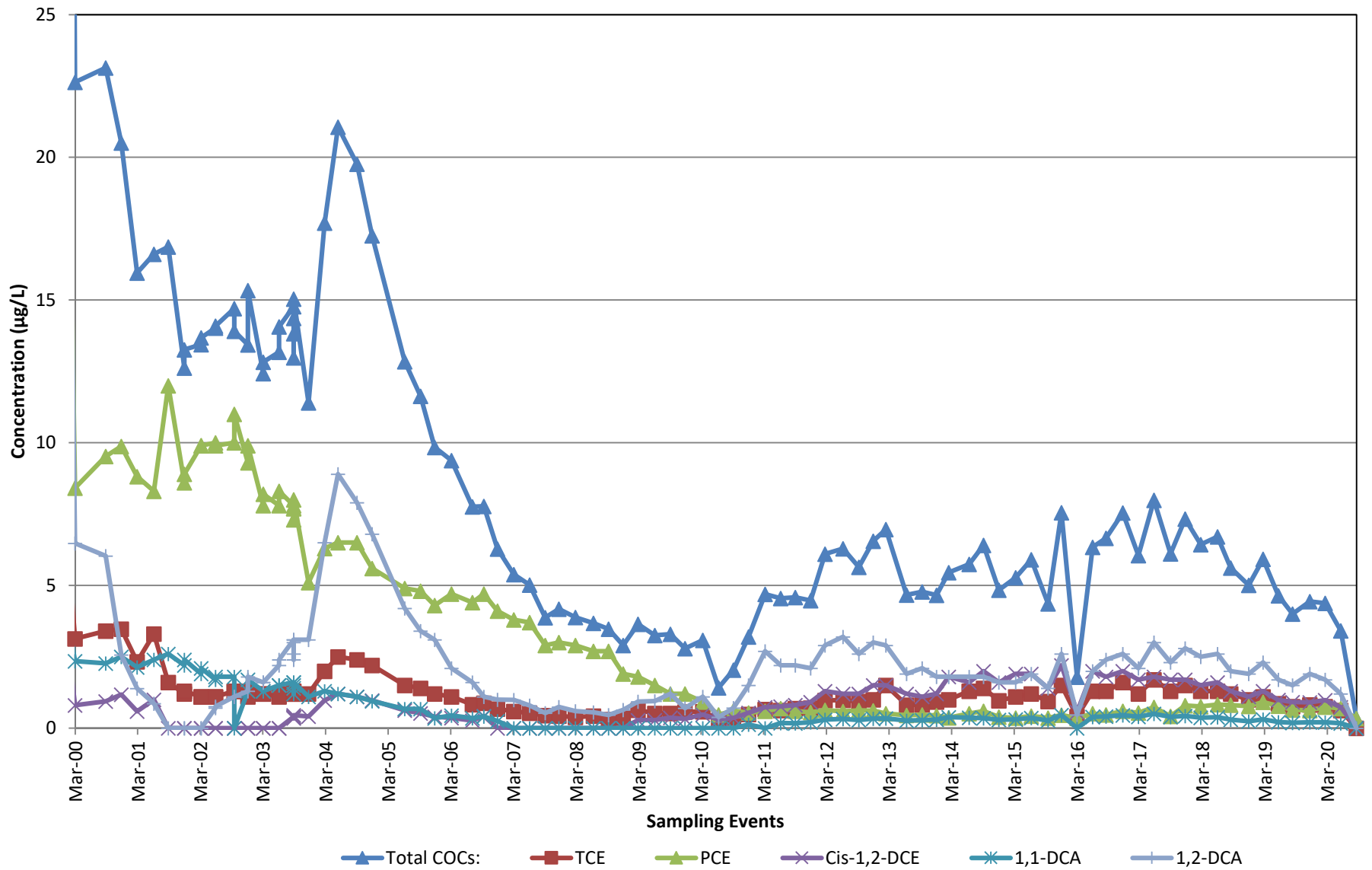


MW-OU2-73-A (Hydraulic Zone 1)

Operable Unit 2 Remedy Monitoring and Operations and Maintenance
 Fourth Quarter 2019 through Third Quarter 2020, Former Fort Ord, California

Figure:

F34



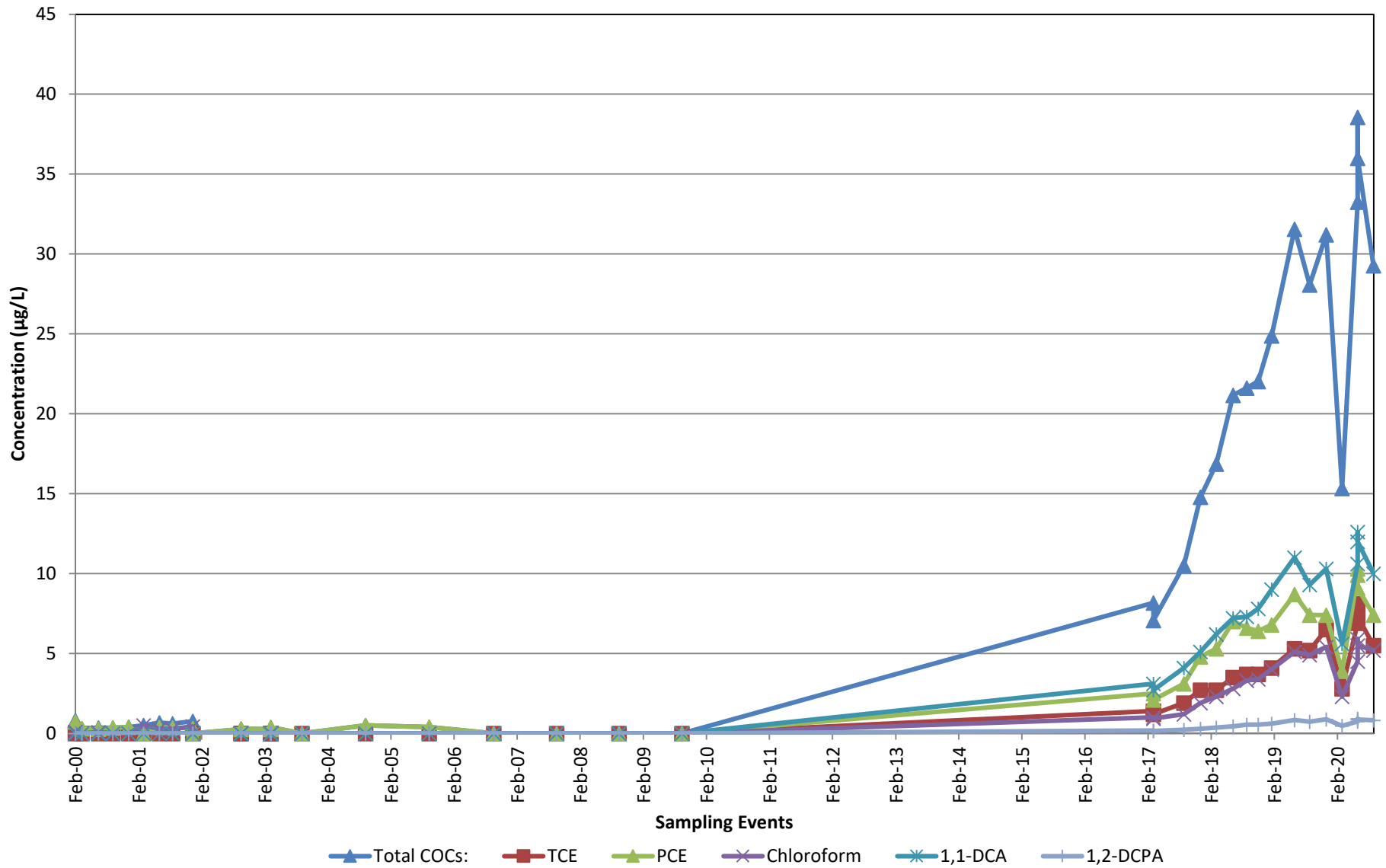
Ahtna

MW-OU2-74-A (Hydraulic Zone 1)

Operable Unit 2 Remedy Monitoring and Operations and Maintenance
 Fourth Quarter 2019 through Third Quarter 2020, Former Fort Ord, California

Figure:

F35

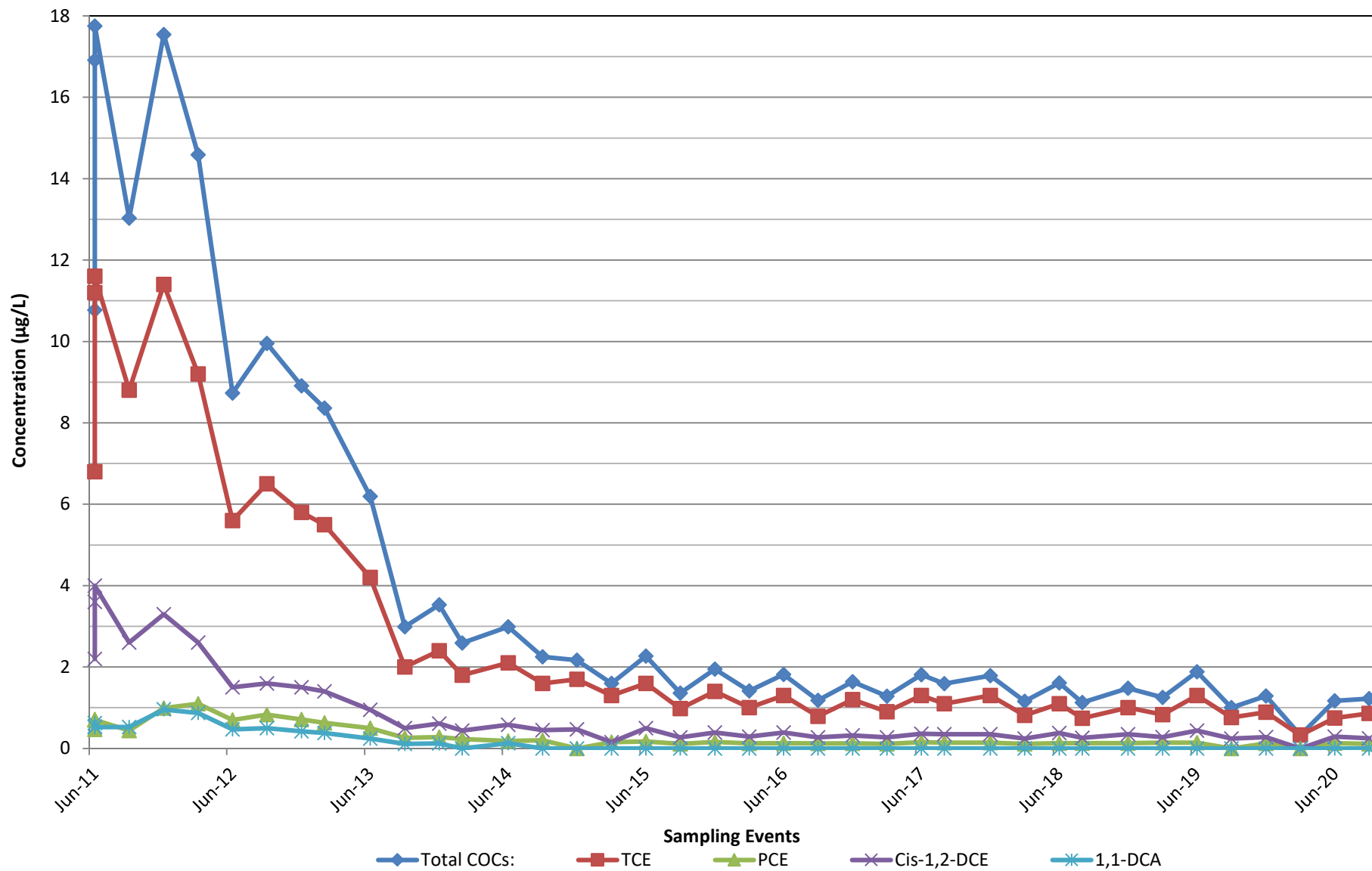


MW-OU2-75-A (Hydraulic Zone 5)

Operable Unit 2 Remedy Monitoring and Operations and Maintenance
 Fourth Quarter 2019 through Third Quarter 2020, Former Fort Ord, California

Figure:

F36

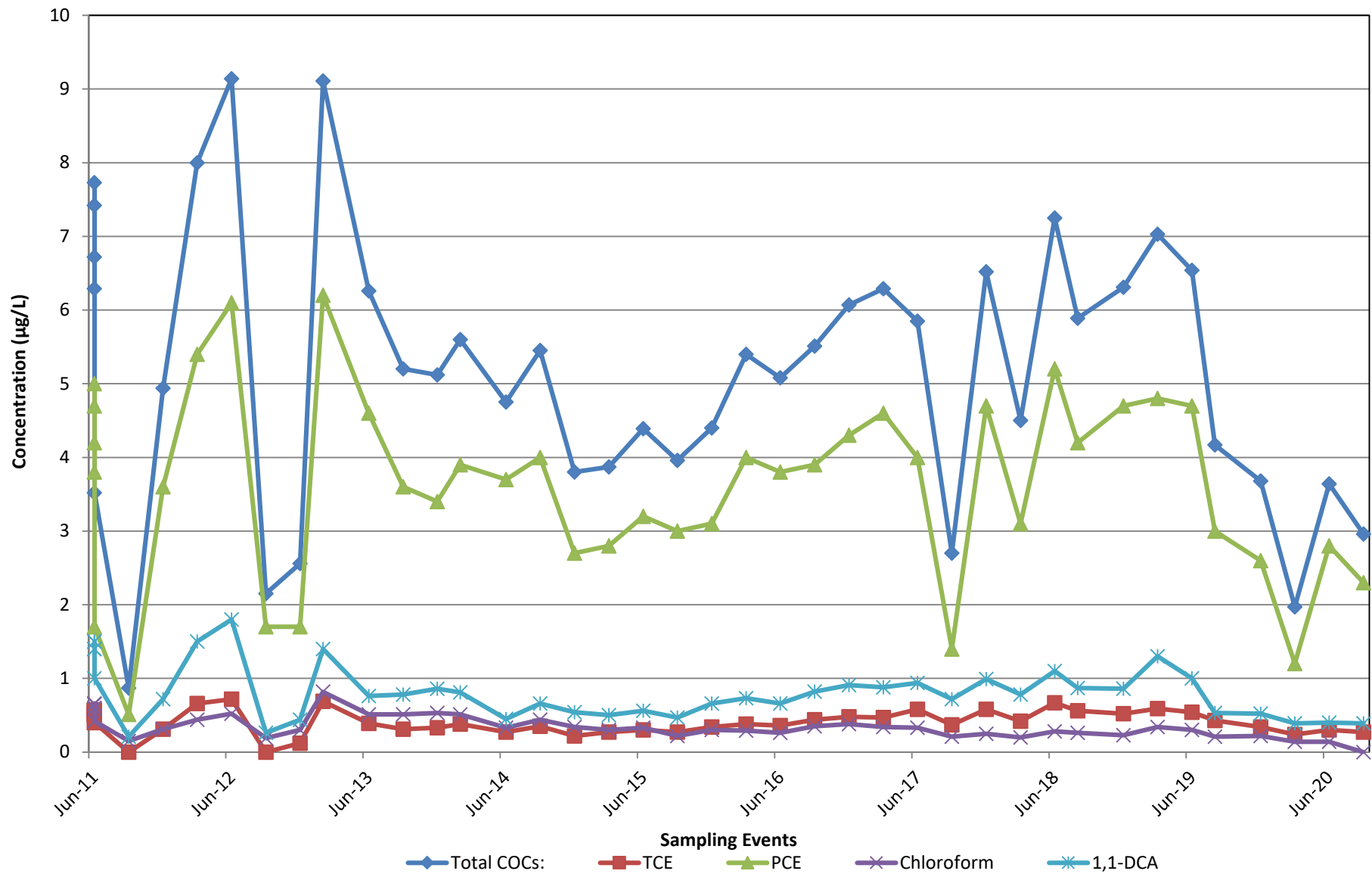


MW-OU2-79-A (Hydraulic Zone 4)

Operable Unit 2 Remedy Monitoring and Operations and Maintenance
Fourth Quarter 2019 through Third Quarter 2020, Former Fort Ord, California

Figure:

F37

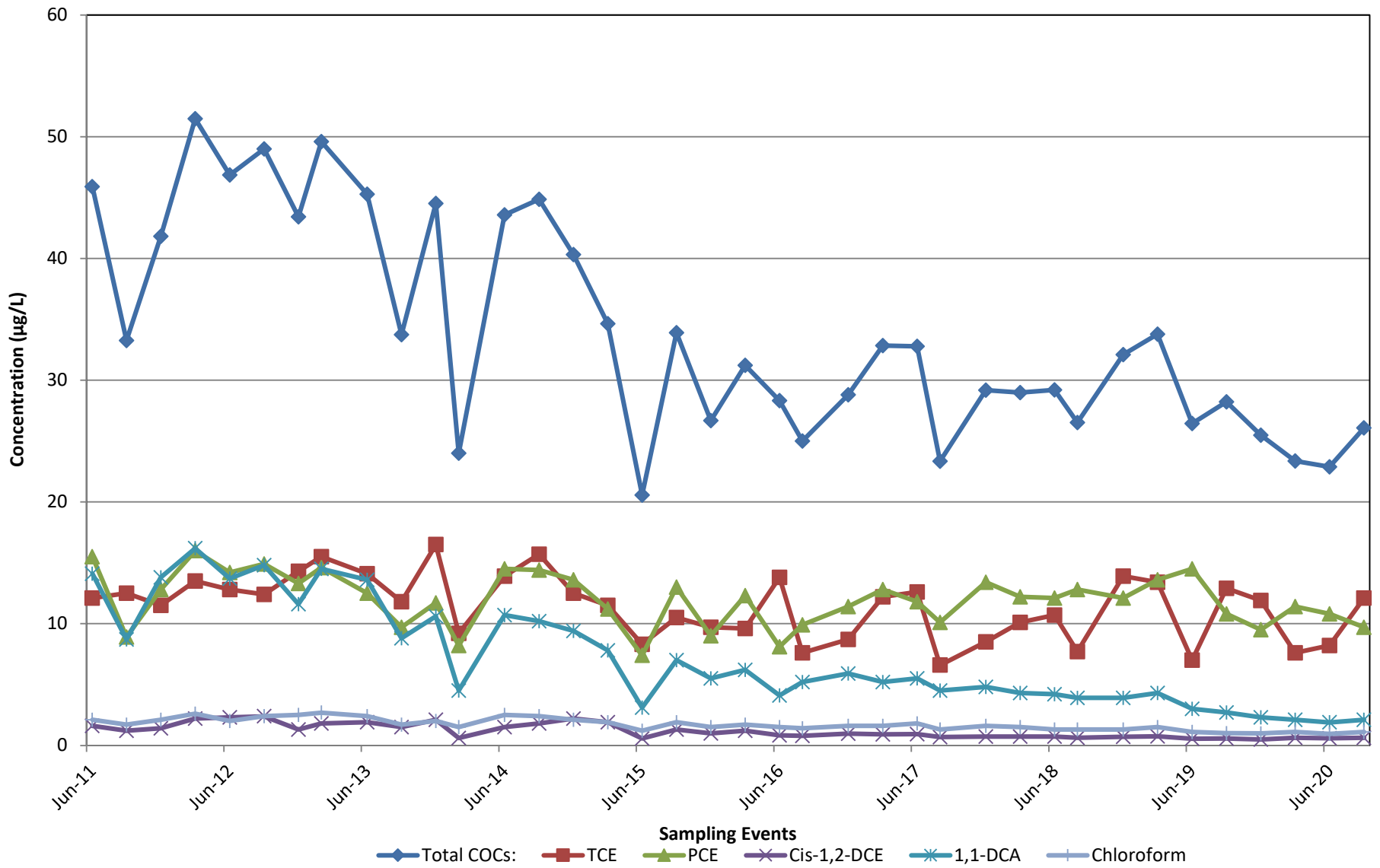


MW-OU2-80-A (Hydraulic Zone 1)

Operable Unit 2 Remedy Monitoring and Operations and Maintenance
 Fourth Quarter 2019 through Third Quarter 2020, Former Fort Ord, California

Figure:

F38

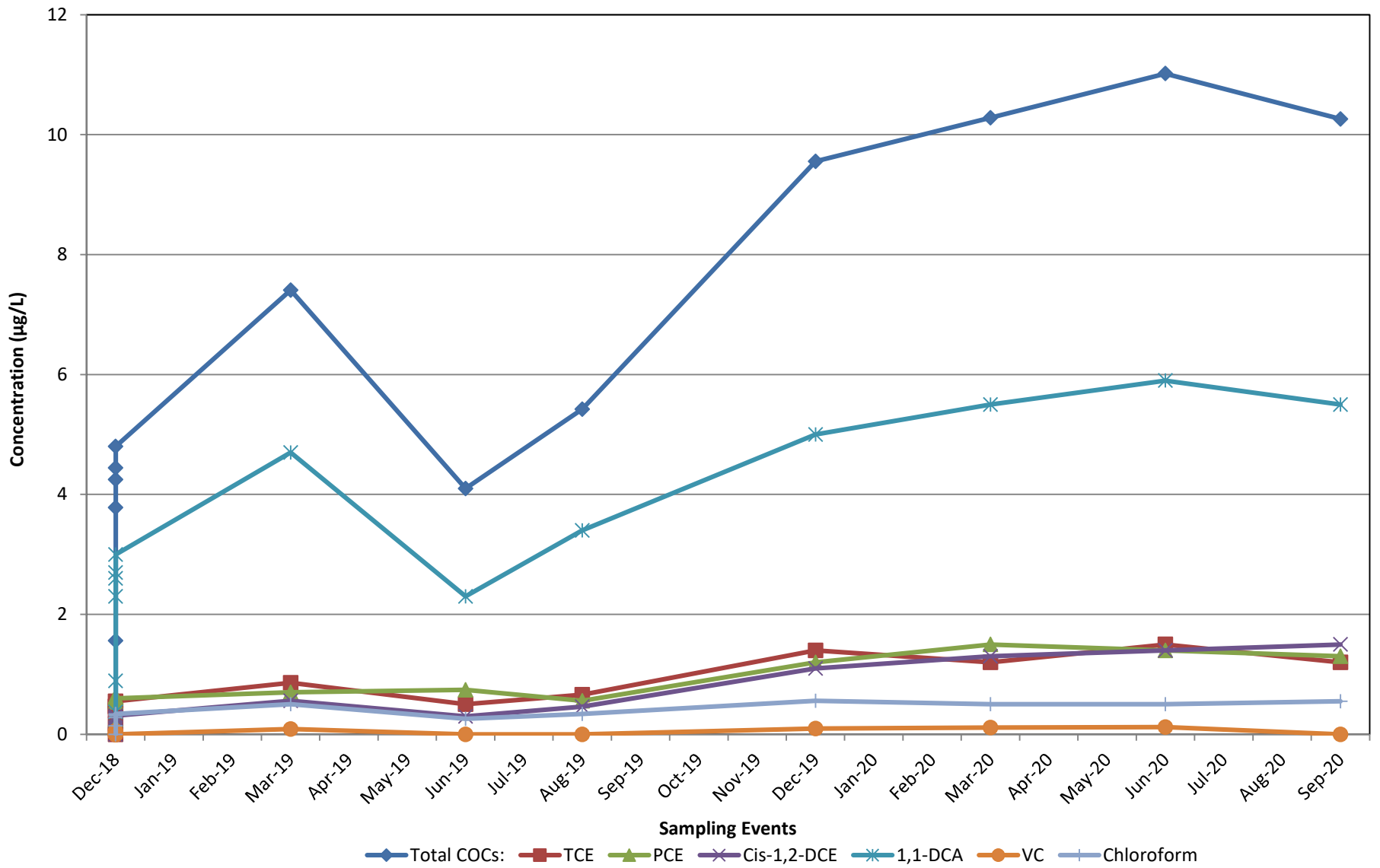


MW-OU2-81-A (Hydraulic Zone 5)

Operable Unit 2 Remedy Monitoring and Operations and Maintenance
 Fourth Quarter 2019 through Third Quarter 2020, Former Fort Ord, California

Figure:

F39

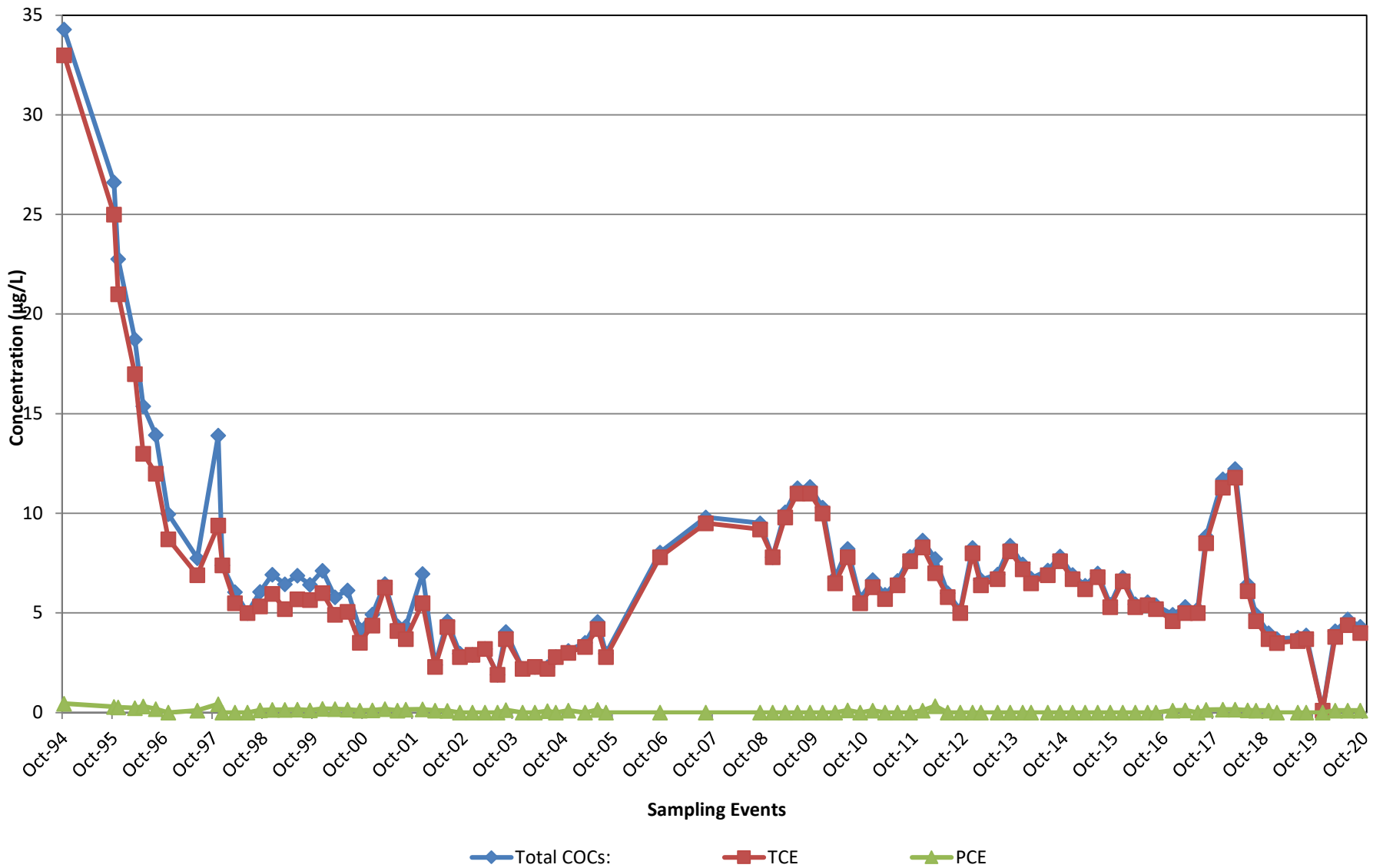


MW-OU2-83-A (Hydraulic Zone 5)

Operable Unit 2 Remedy Monitoring and Operations and Maintenance
 Fourth Quarter 2019 through Third Quarter 2020, Former Fort Ord, California

Figure:

F40

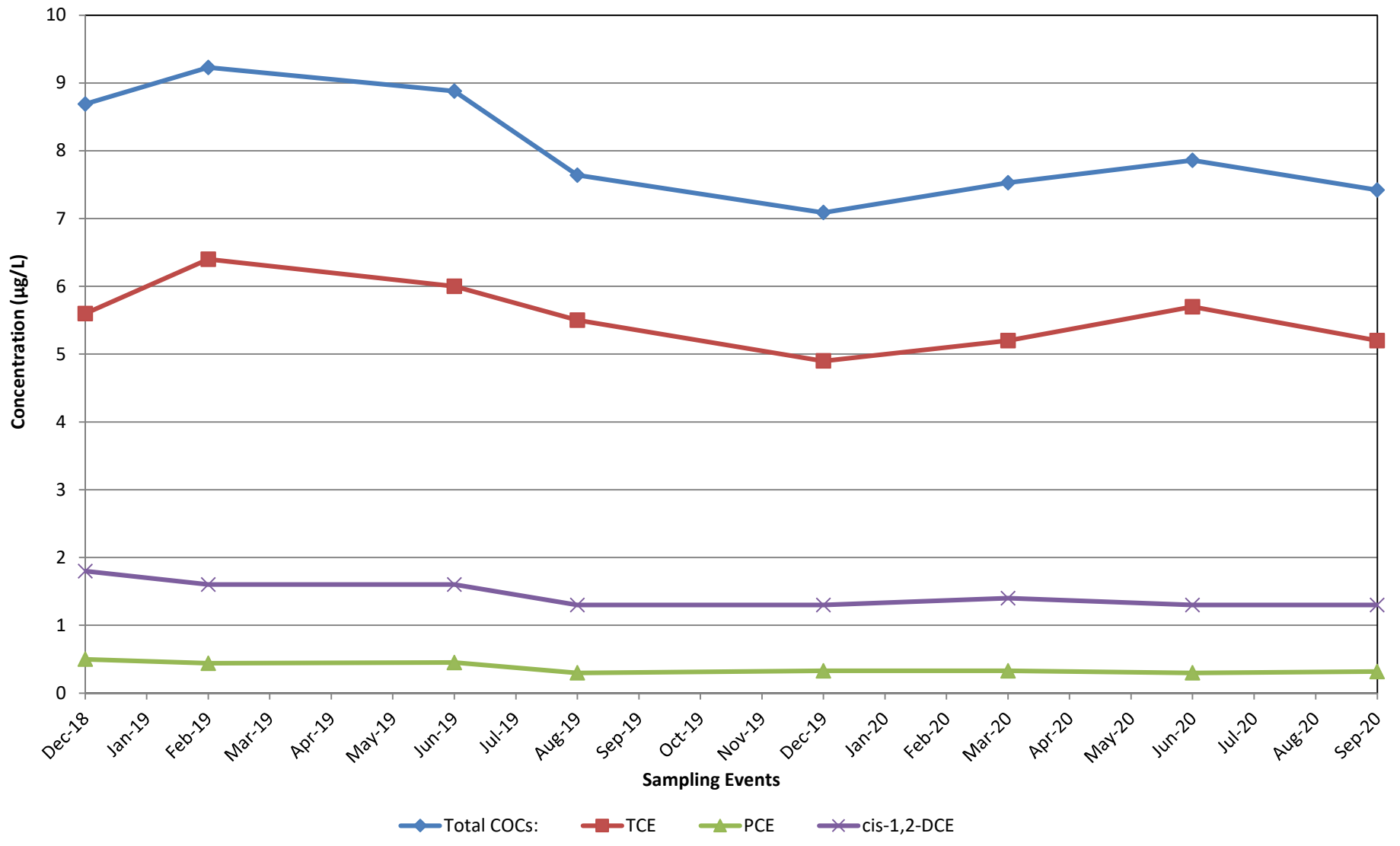


EW-OU2-01-180 (Hydraulic Zone 9)

Operable Unit 2 Remedy Monitoring and Operations and Maintenance
 Fourth Quarter 2019 through Third Quarter 2020, Former Fort Ord, California

Figure:

F41

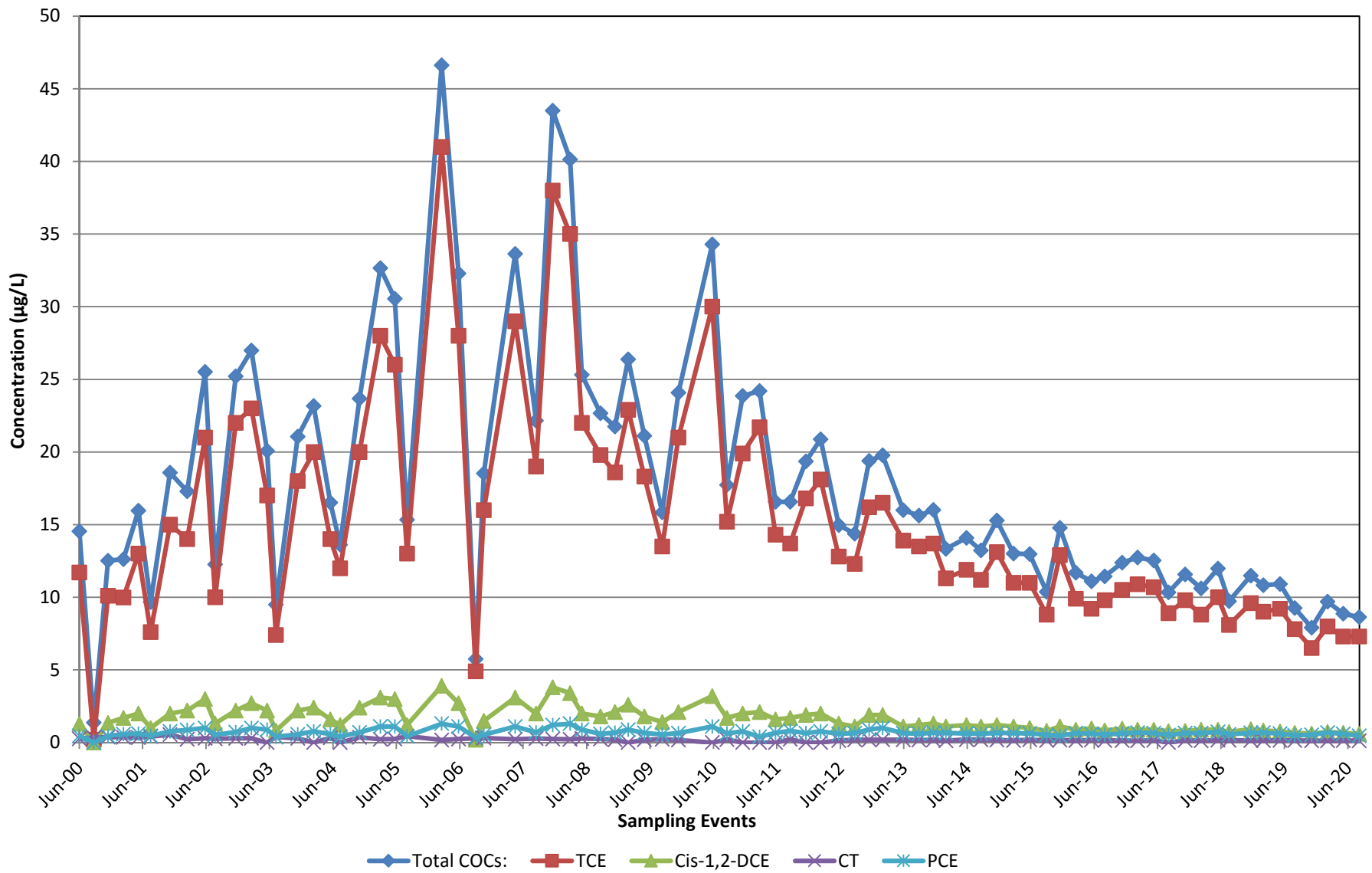


EW-OU2-02-180R (Hydraulic Zone 9)

Operable Unit 2 Remedy Monitoring and Operations and Maintenance
Fourth Quarter 2019 through Third Quarter 2020, Former Fort Ord, California

Figure:

F42

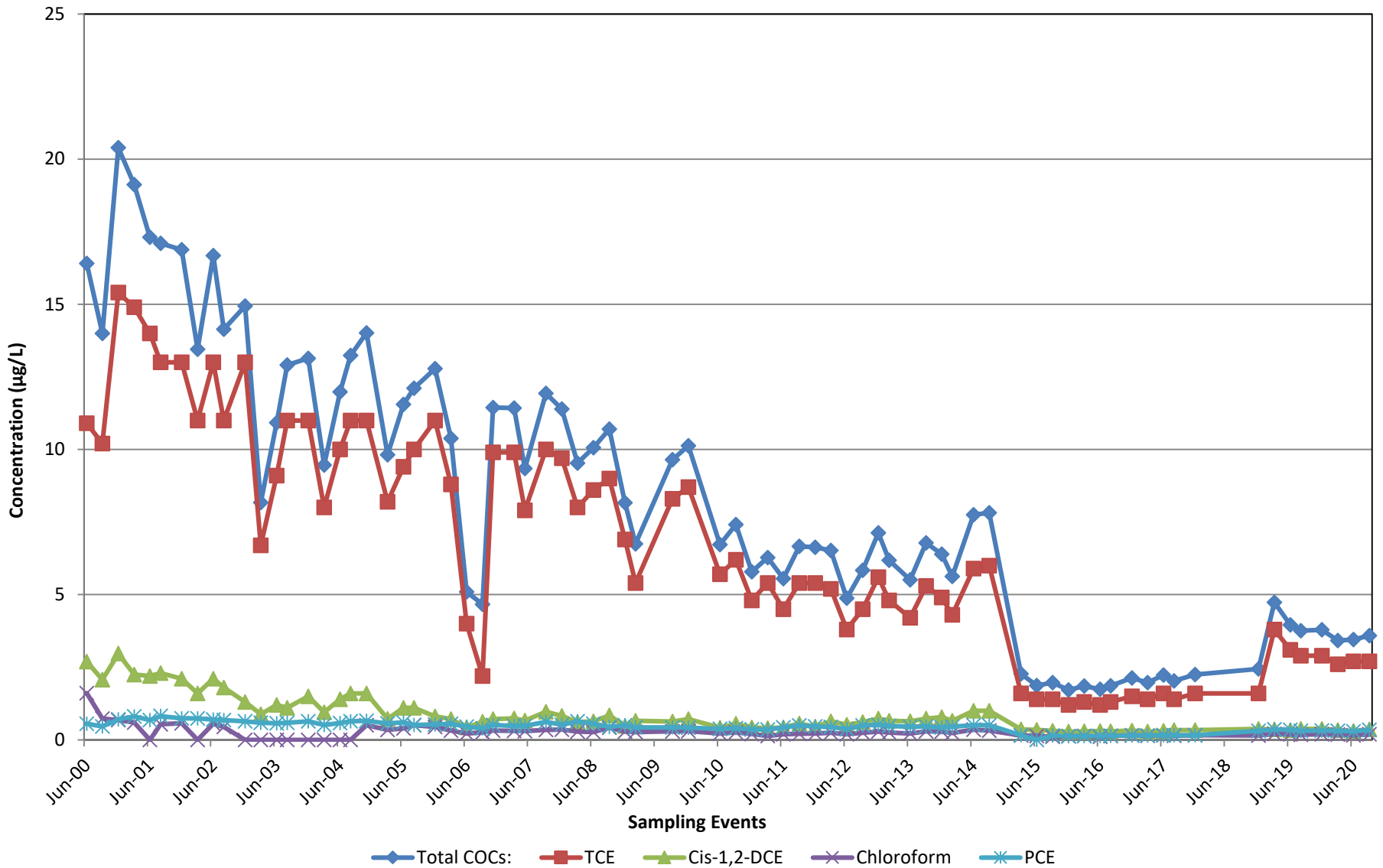


EW-OU2-03-180 (Hydraulic Zone 6)

Operable Unit 2 Remedy Monitoring and Operations and Maintenance
 Fourth Quarter 2019 through Third Quarter 2020, Former Fort Ord, California

Figure:

F43

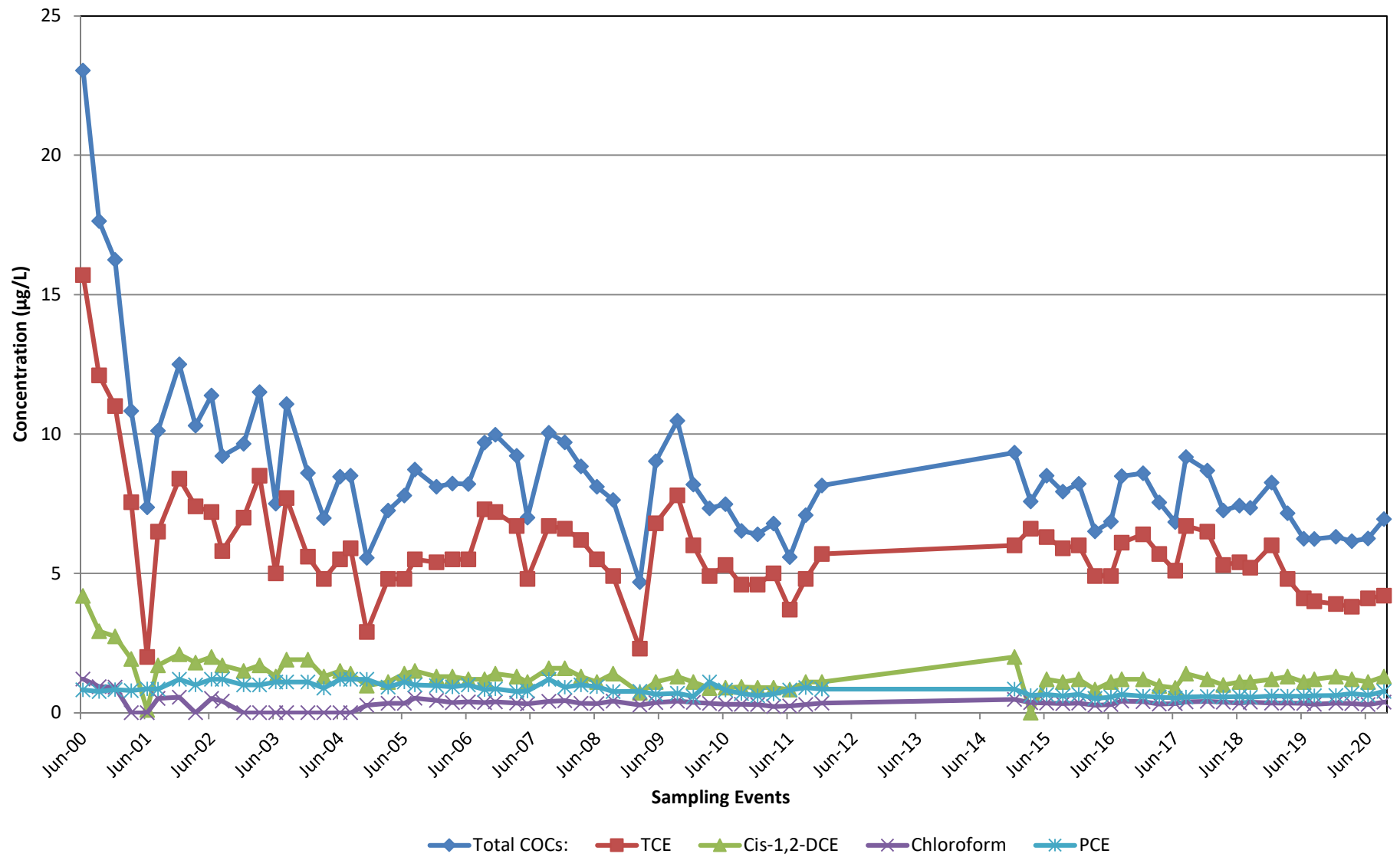


EW-OU2-05-180 (Hydraulic Zone 7)

Operable Unit 2 Remedy Monitoring and Operations and Maintenance
 Fourth Quarter 2019 through Third Quarter 2020, Former Fort Ord, California

Figure:

F44



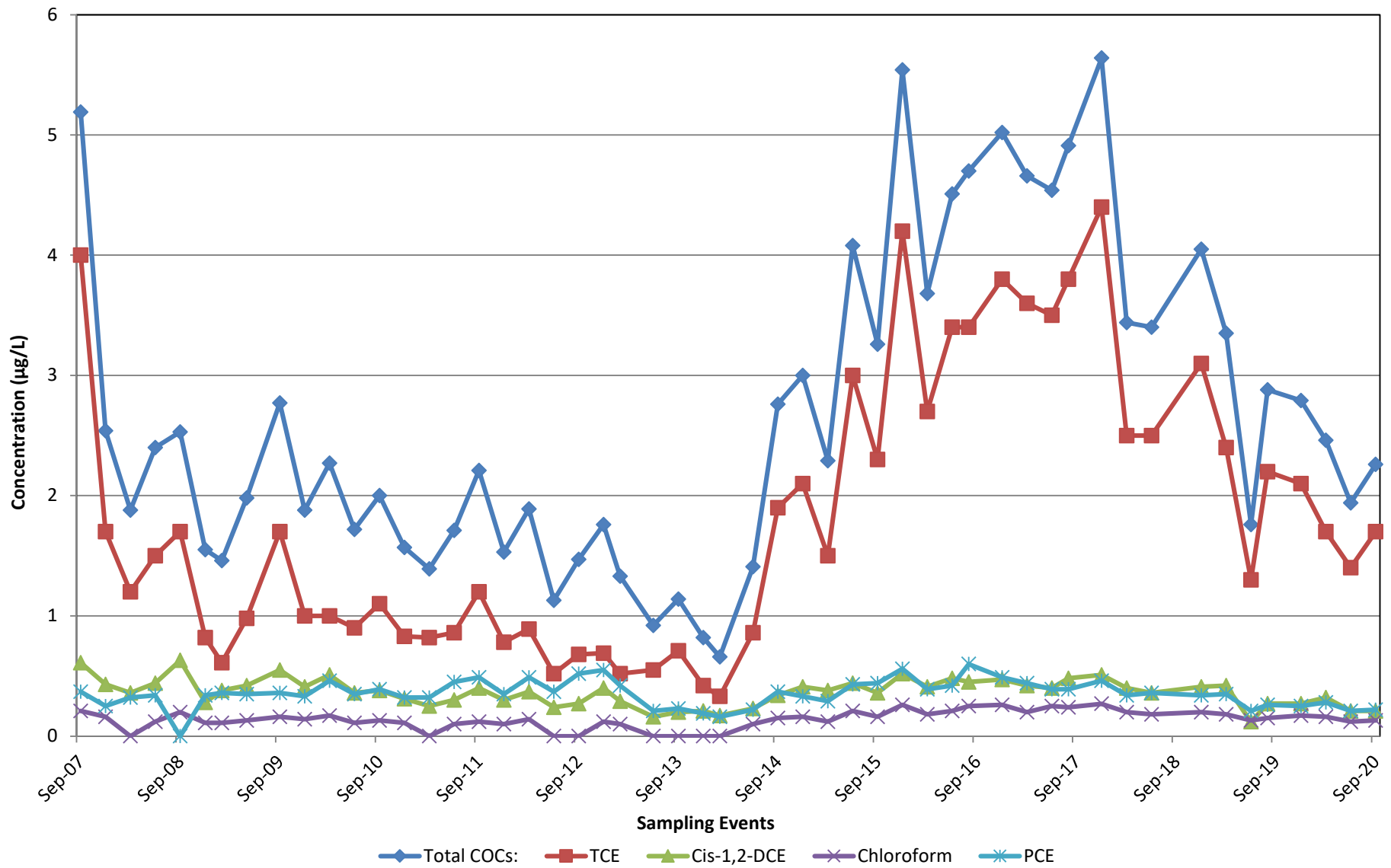
Ahtna

EW-OU2-06-180 (Hydraulic Zone 7)

Operable Unit 2 Remedy Monitoring and Operations and Maintenance
Fourth Quarter 2019 through Third Quarter 2020, Former Fort Ord, California

Figure:

F45

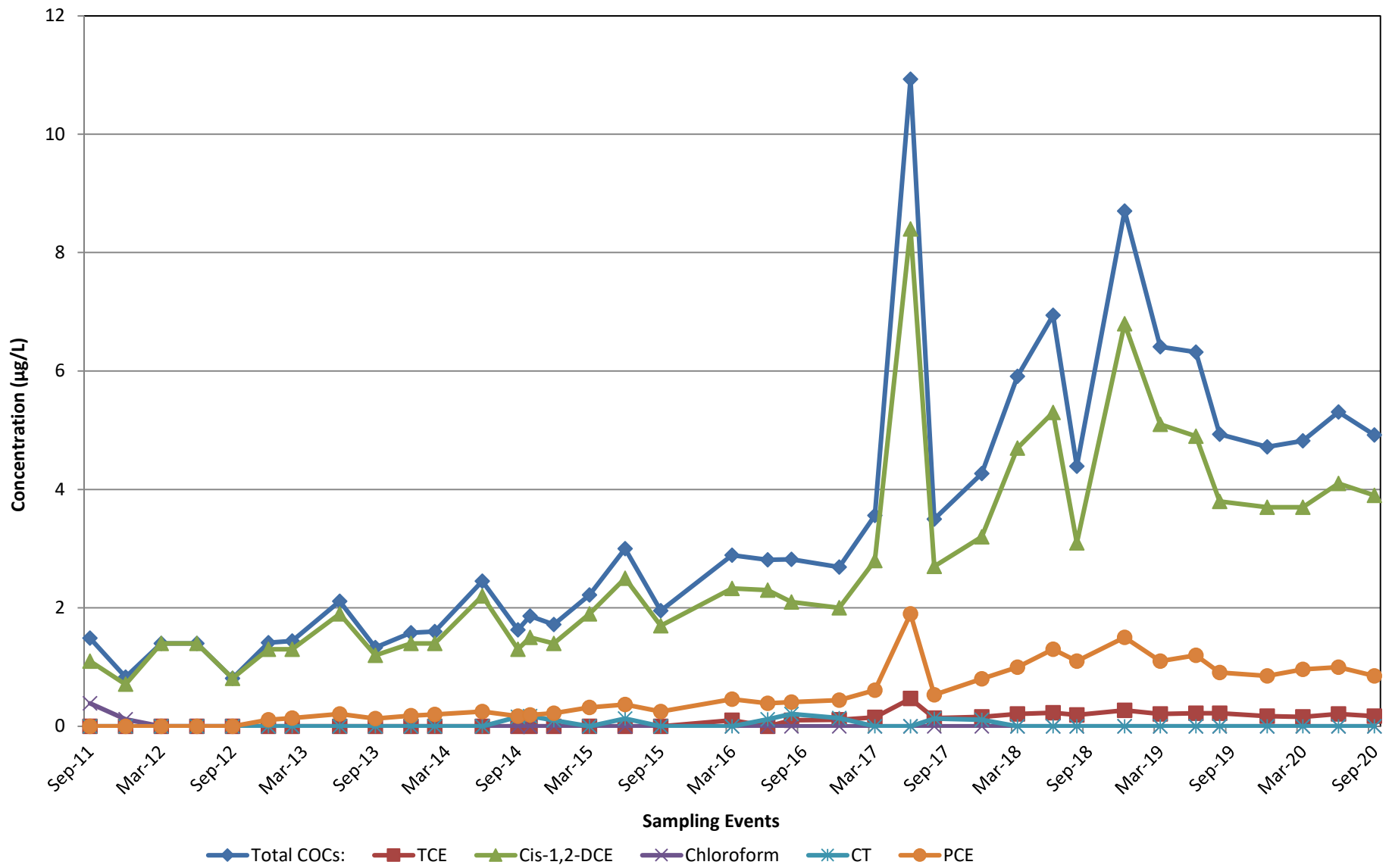


EW-OU2-08-180 (Hydraulic Zone 8)

Operable Unit 2 Remedy Monitoring and Operations and Maintenance
 Fourth Quarter 2019 through Third Quarter 2020, Former Fort Ord, California

Figure:

F46

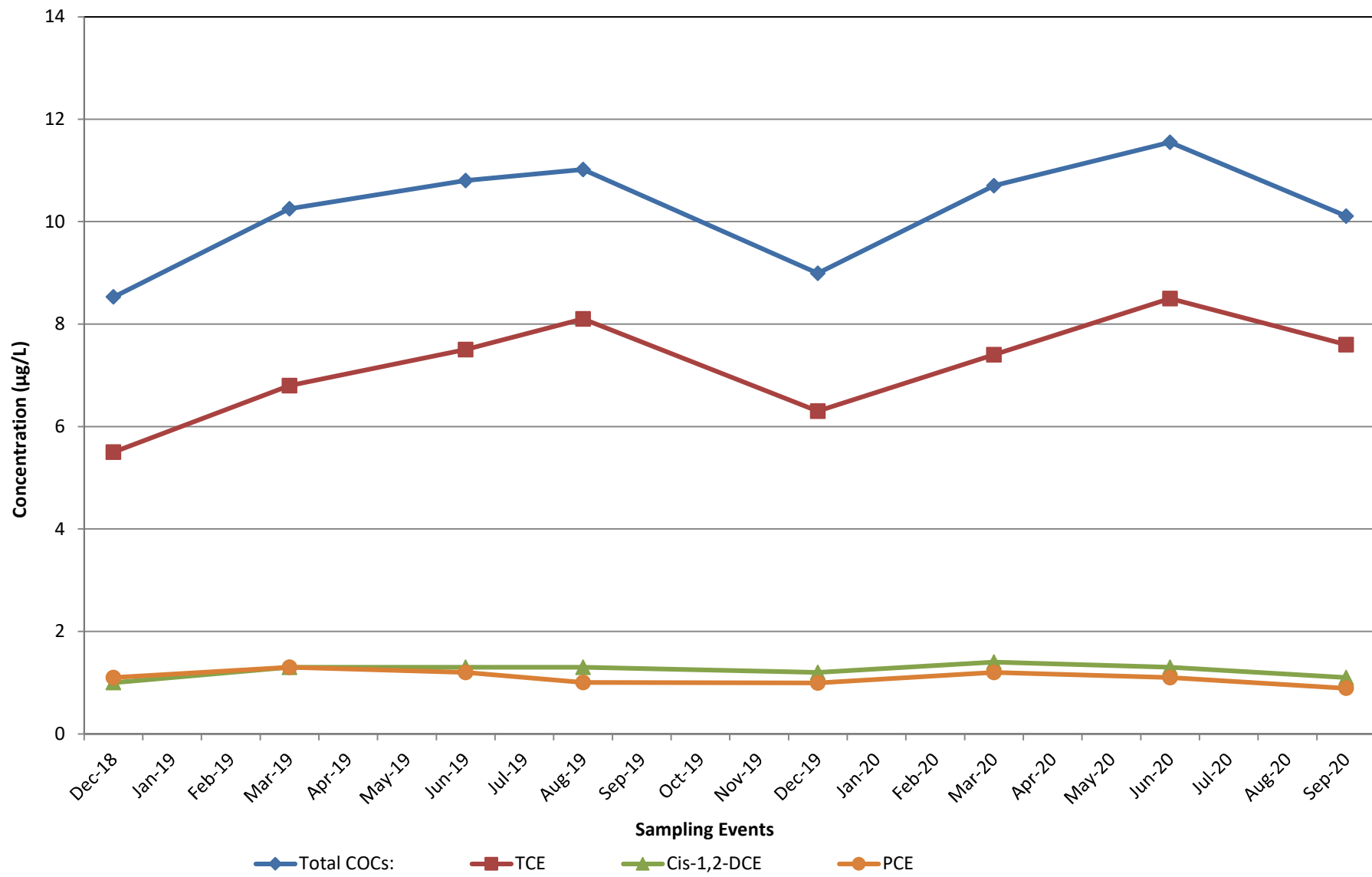


EW-OU2-09-180 (Hydraulic Zone 8)

Operable Unit 2 Remedy Monitoring and Operations and Maintenance
 Fourth Quarter 2019 through Third Quarter 2020, Former Fort Ord, California

Figure:

F47

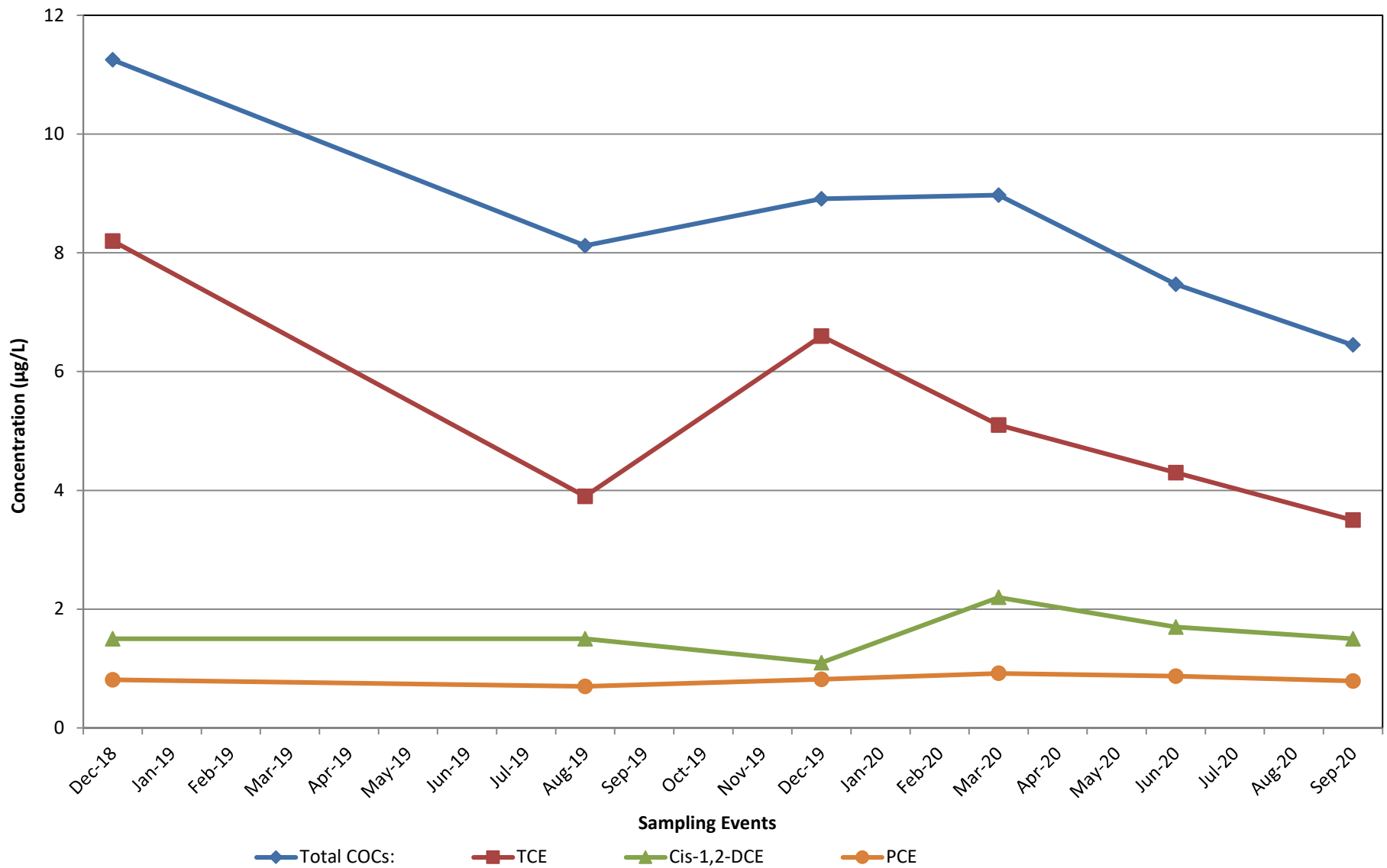


EW-OU2-10-180 (Hydraulic Zone 7)

Operable Unit 2 Remedy Monitoring and Operations and Maintenance
 Fourth Quarter 2019 through Third Quarter 2020, Former Fort Ord, California

Figure:

F48

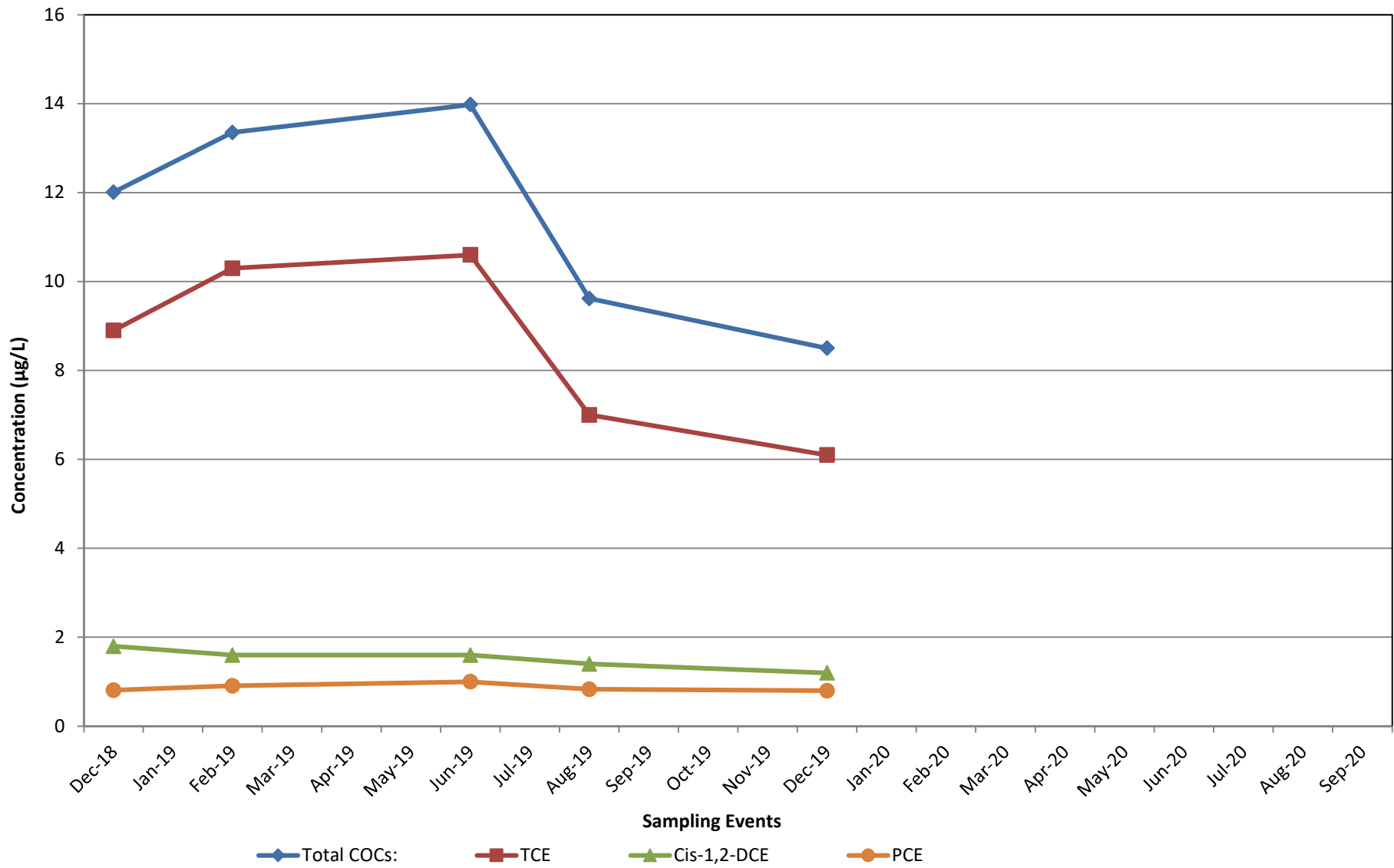


EW-OU2-11-180 (Hydraulic Zone 7)

Operable Unit 2 Remedy Monitoring and Operations and Maintenance
Fourth Quarter 2019 through Third Quarter 2020, Former Fort Ord, California

Figure:

F49

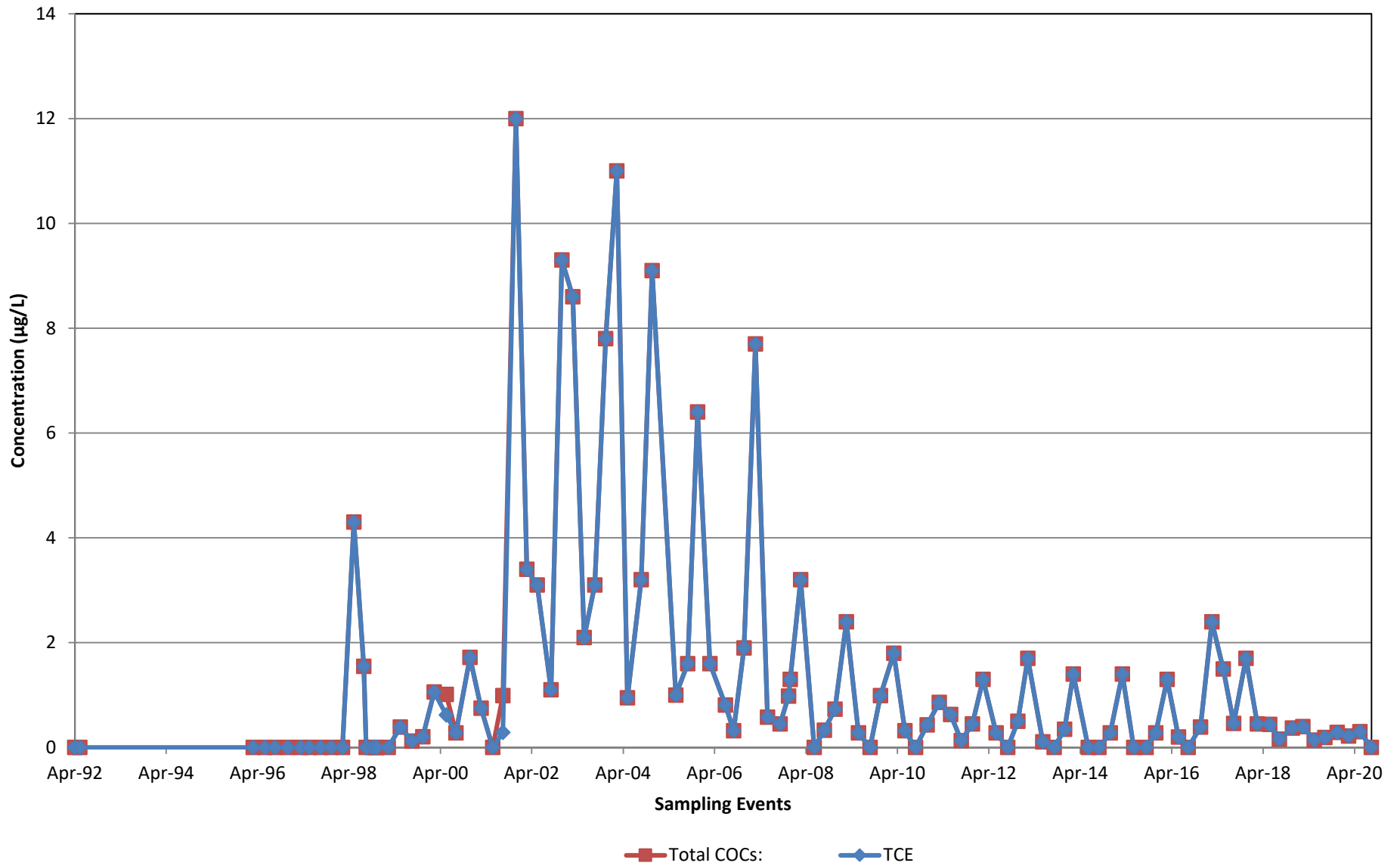


EW-OU2-12-180 (Hydraulic Zone 7)

Operable Unit 2 Remedy Monitoring and Operations and Maintenance
 Fourth Quarter 2019 through Third Quarter 2020, Former Fort Ord, California

Figure:

F50

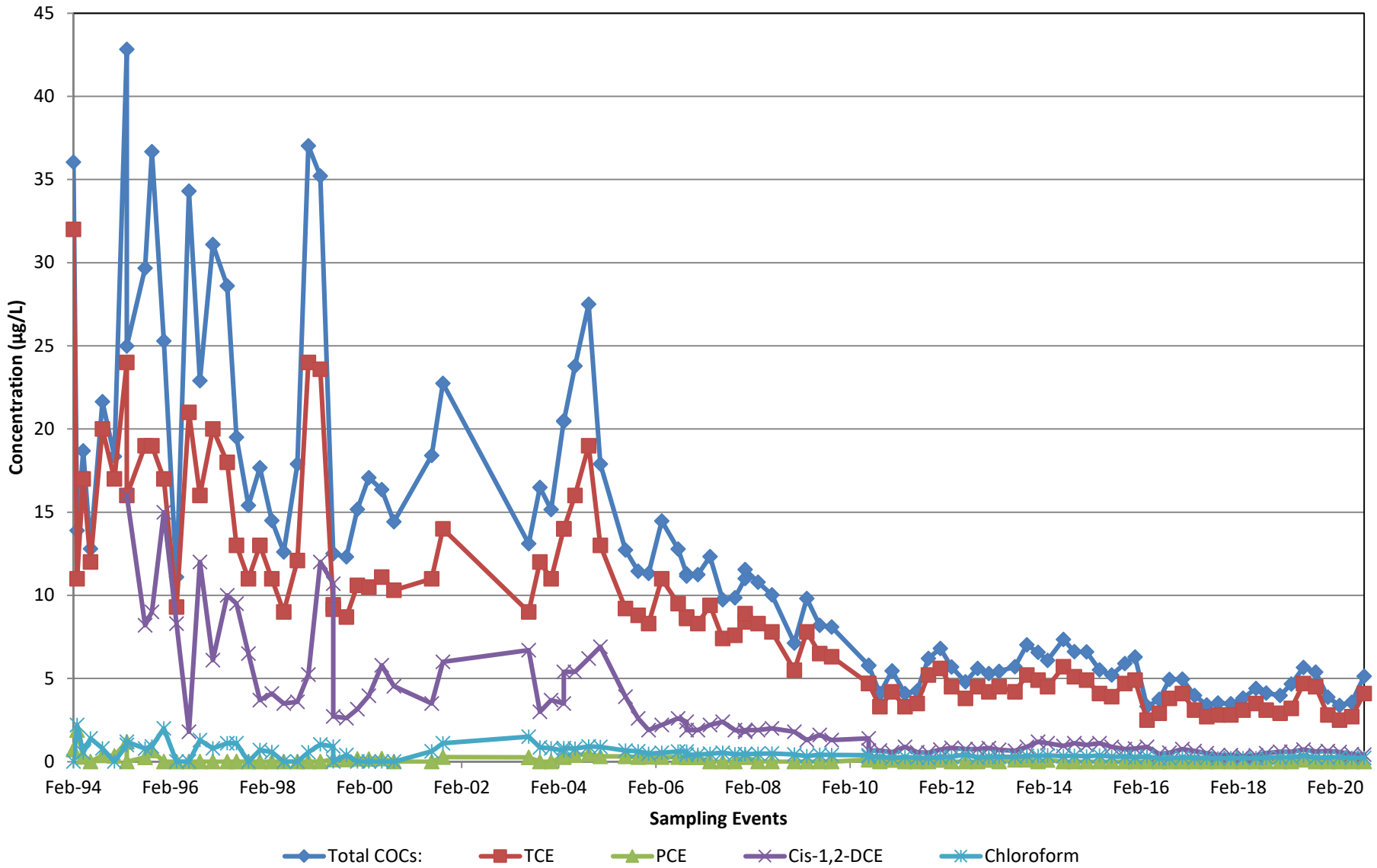


MW-BW-02-180 (east of Hydraulic Zone 8)

Operable Unit 2 Remedy Monitoring and Operations and Maintenance
 Fourth Quarter 2019 through Third Quarter 2020, Former Fort Ord, California

Figure:

F51

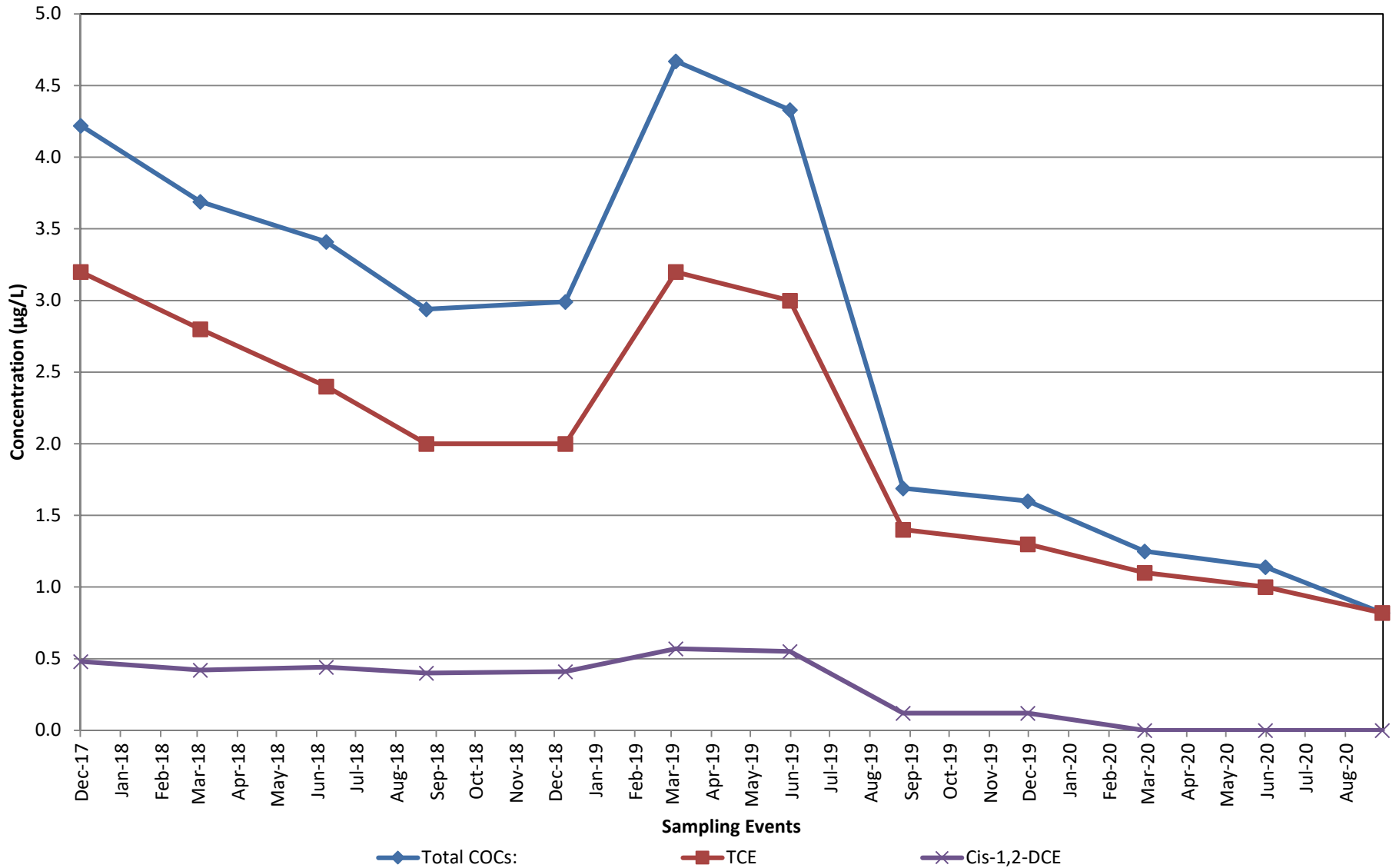


MW-BW-14-180 (Hydraulic Zone 9)

Operable Unit 2 Remedy Monitoring and Operations and Maintenance
 Fourth Quarter 2019 through Third Quarter 2020, Former Fort Ord, California

Figure:

F52

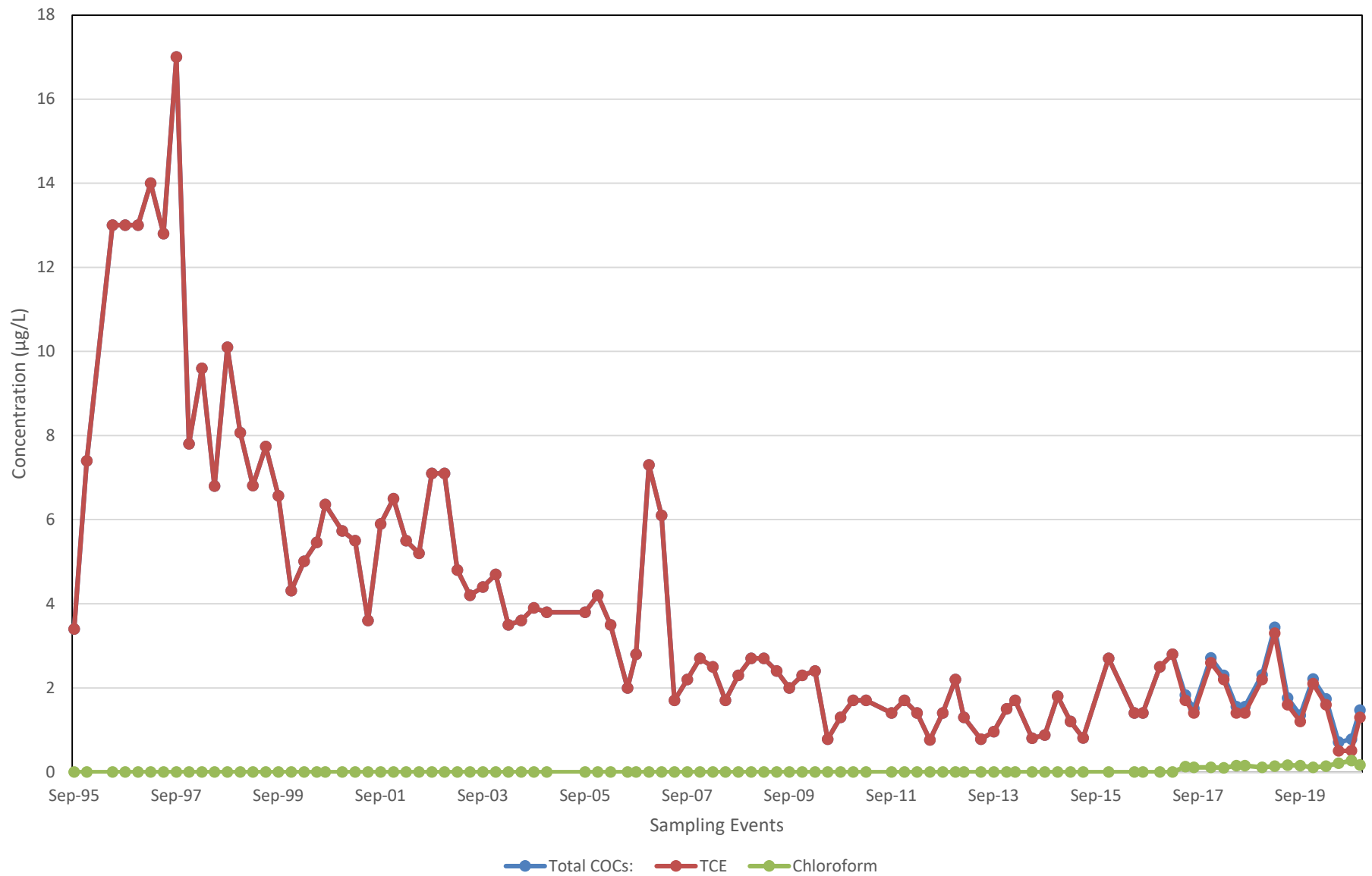


MW-OU2-06-180R2 (Hydraulic Zone 9)

Operable Unit 2 Remedy Monitoring and Operations and Maintenance
Fourth Quarter 2019 through Third Quarter 2020, Former Fort Ord, California

Figure:

F53

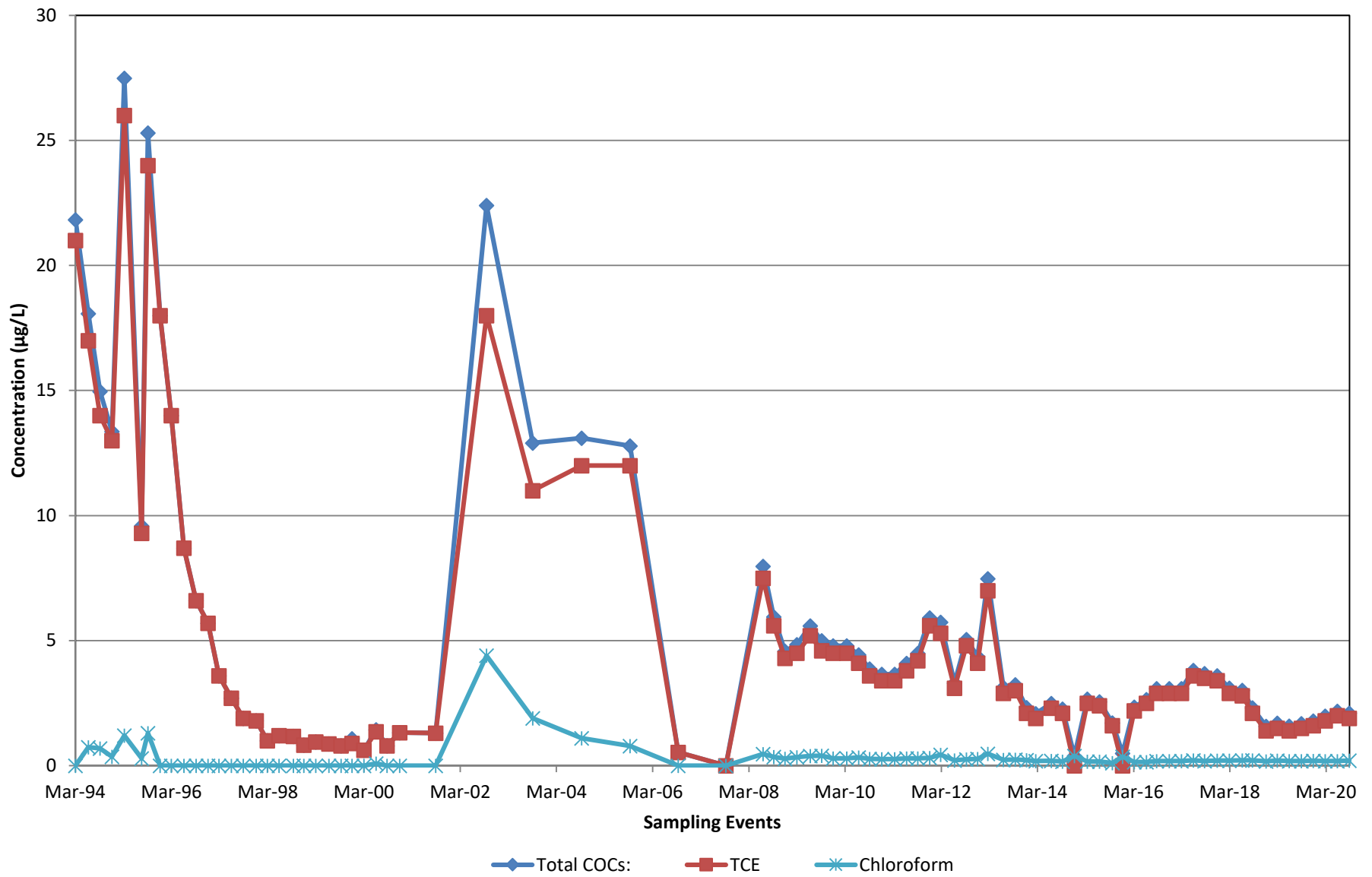


MW-OU2-07-180R (north of Hydraulic Zone 7)

Operable Unit 2 Remedy Monitoring and Operations and Maintenance
 Fourth Quarter 2019 through Third Quarter 2020, Former Fort Ord, California

Figure:

F54

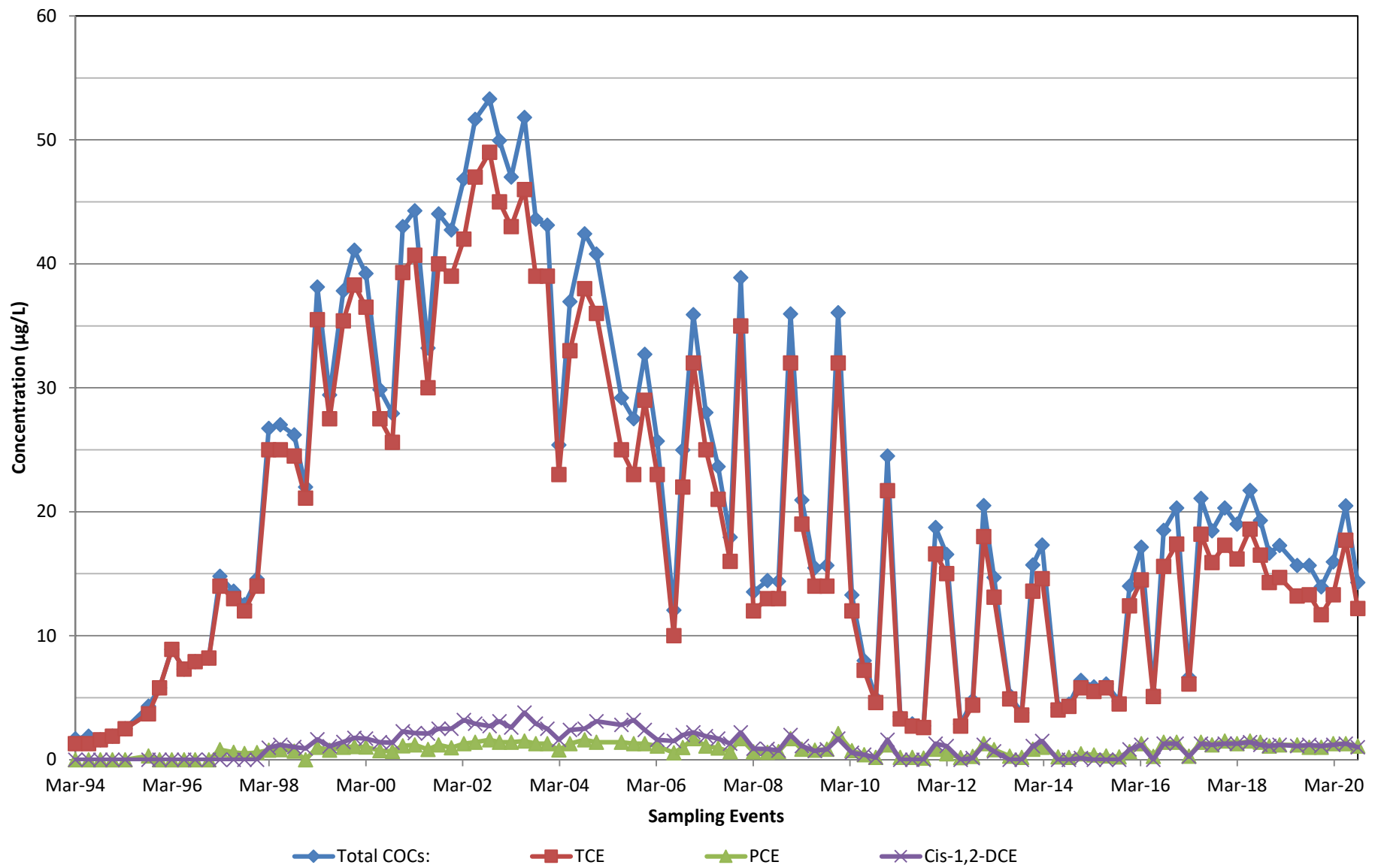


MW-OU2-20-180 (Hydraulic Zone 9)

Operable Unit 2 Remedy Monitoring and Operations and Maintenance
 Fourth Quarter 2019 through Third Quarter 2020, Former Fort Ord, California

Figure:

F55



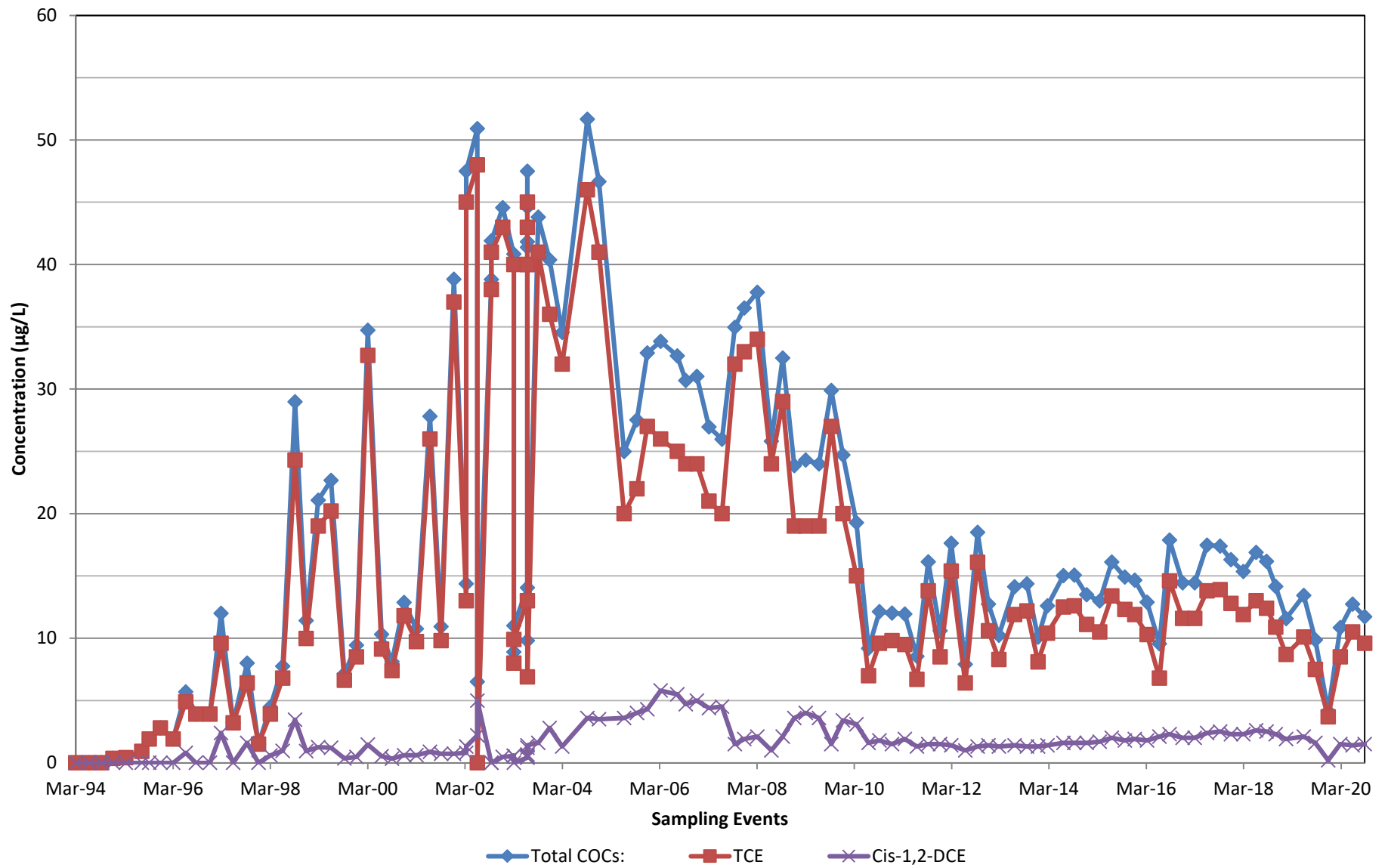
Ahtna

MW-OU2-23-180 (Hydraulic Zone 6)

Operable Unit 2 Remedy Monitoring and Operations and Maintenance
 Fourth Quarter 2019 through Third Quarter 2020, Former Fort Ord, California

Figure:

F56



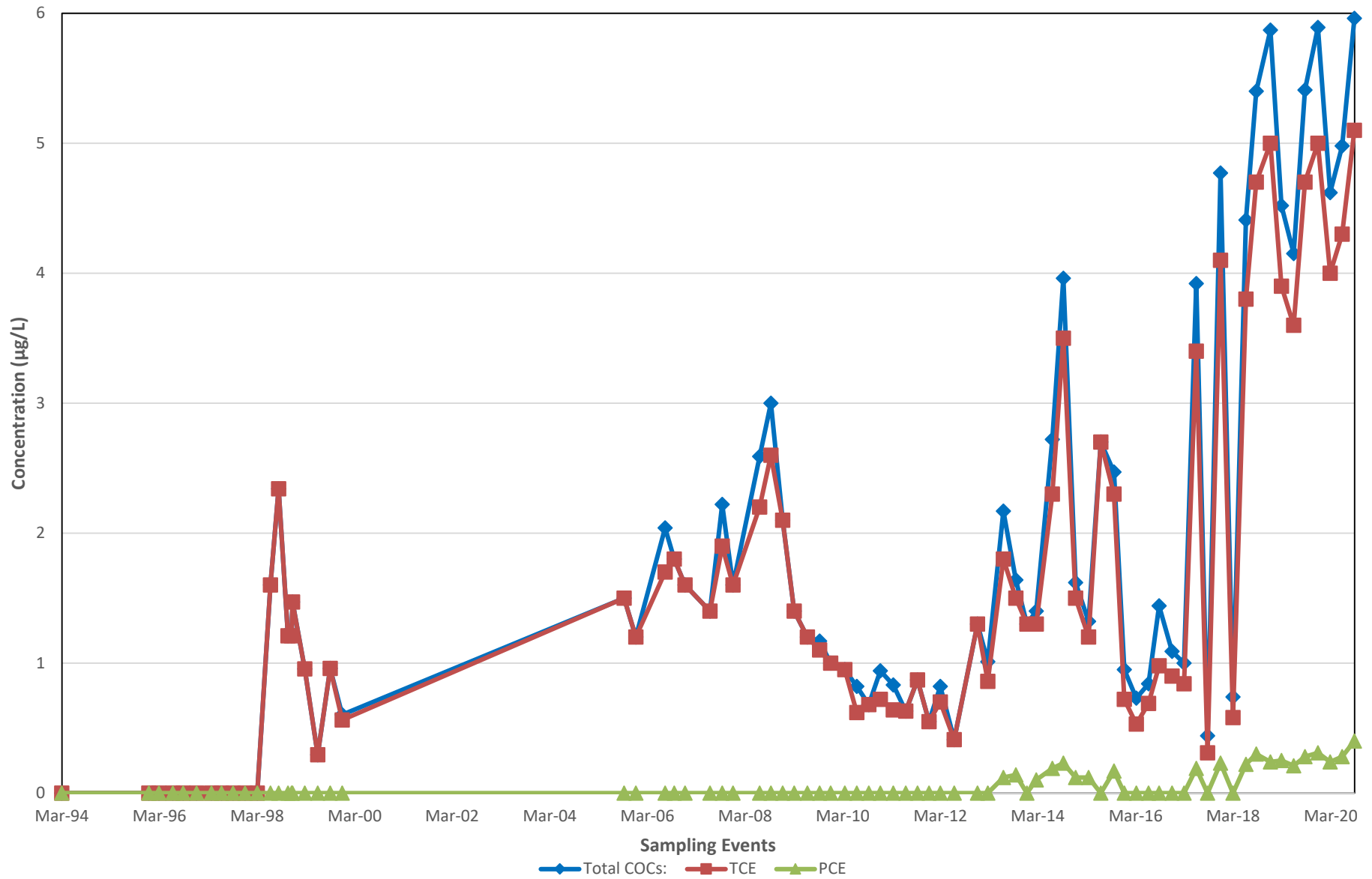
Ahtna

MW-OU2-24-180 (Hydraulic Zone 7)

Operable Unit 2 Remedy Monitoring and Operations and Maintenance
 Fourth Quarter 2019 through Third Quarter 2020, Former Fort Ord, California

Figure:

F57



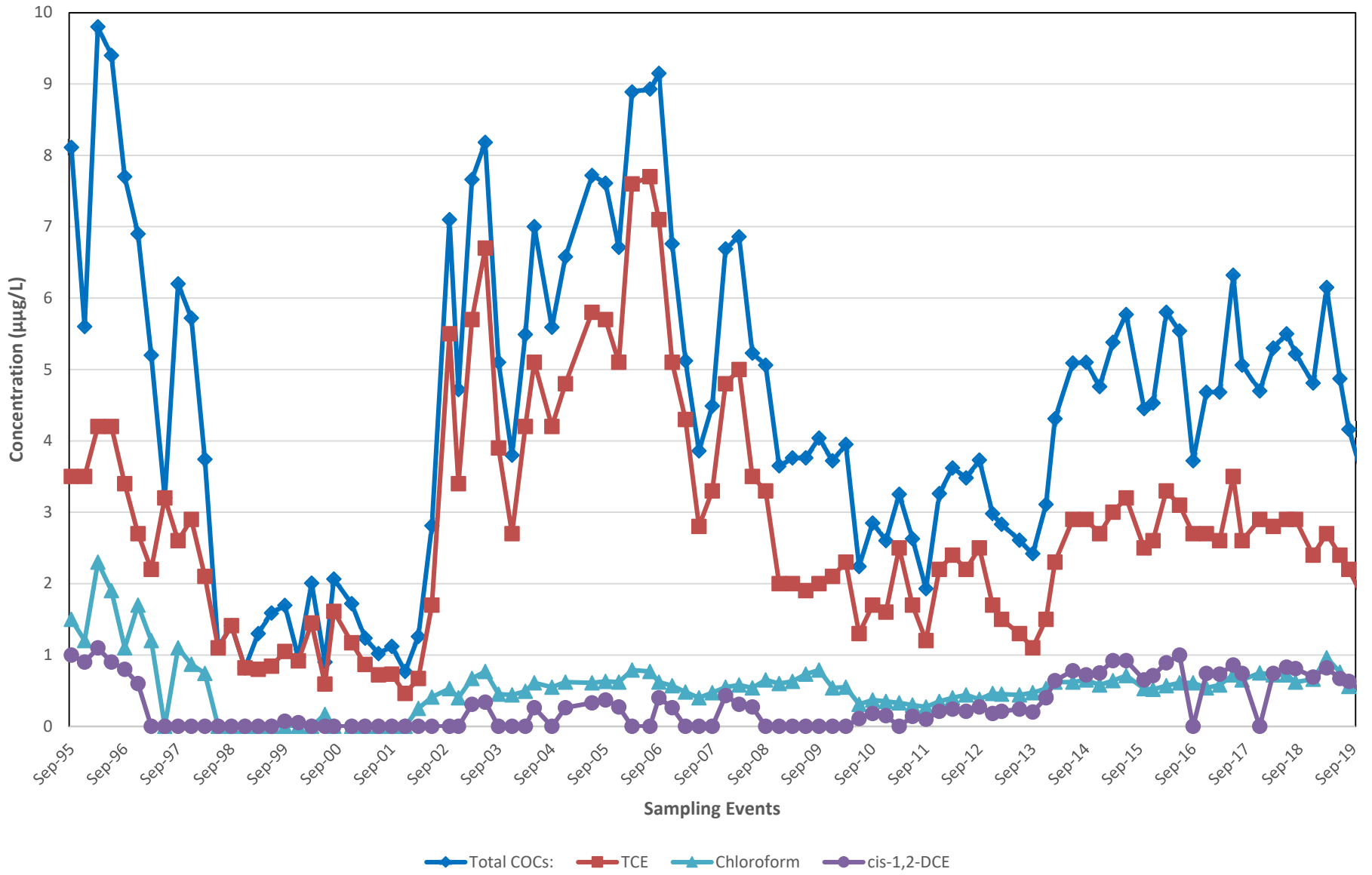
Ahtna

MW-OU2-28-180 (Hydraulic Zone 8)

Operable Unit 2 Remedy Monitoring and Operations and Maintenance
Fourth Quarter 2019 through Third Quarter 2020, Former Fort Ord, California

Figure:

F58

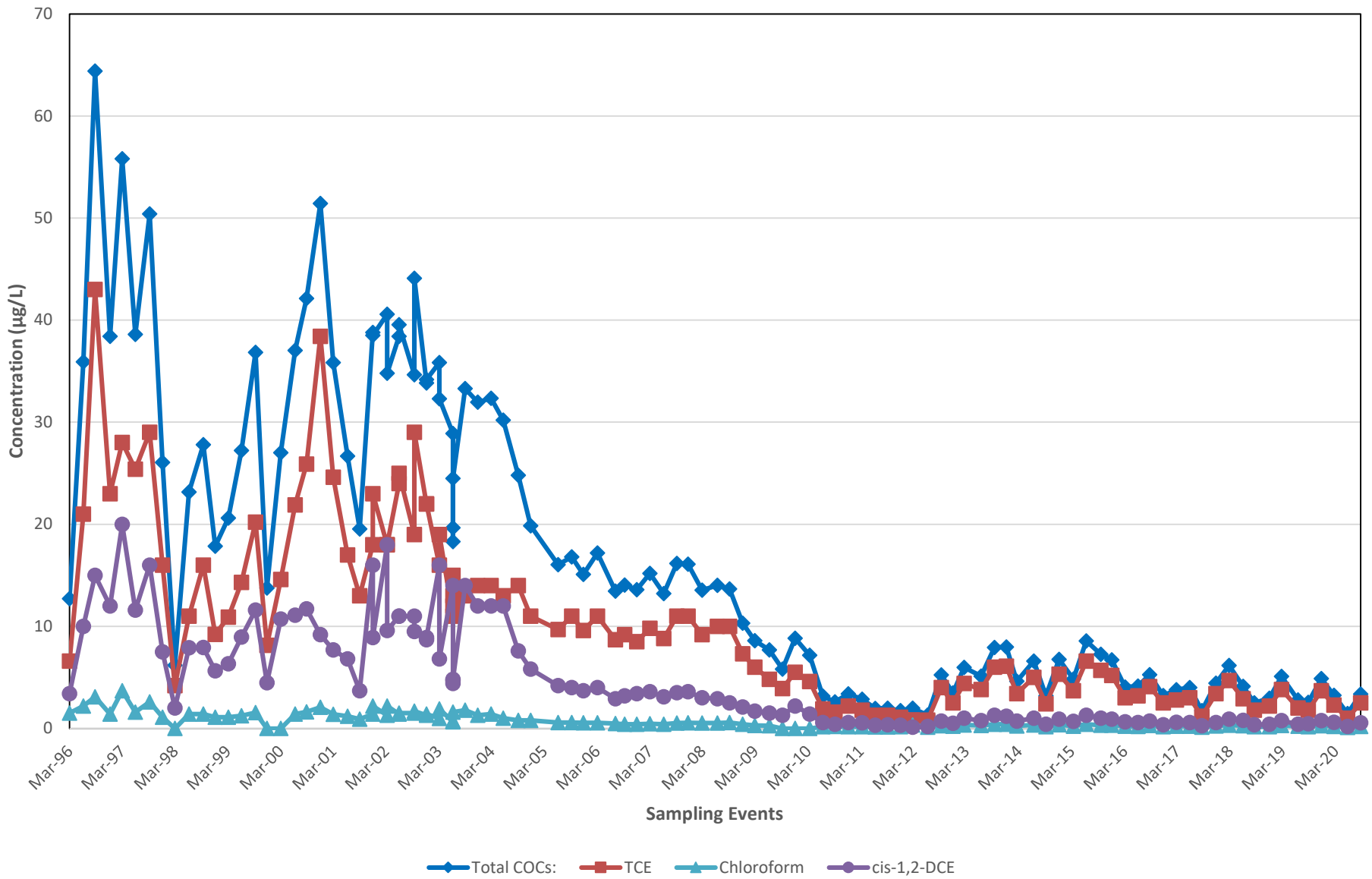


MW-OU2-39-180 (Hydraulic Zone 7)

Operable Unit 2 Remedy Monitoring and Operations and Maintenance
 Fourth Quarter 2019 through Third Quarter 2020, Former Fort Ord, California

Figure:

F59



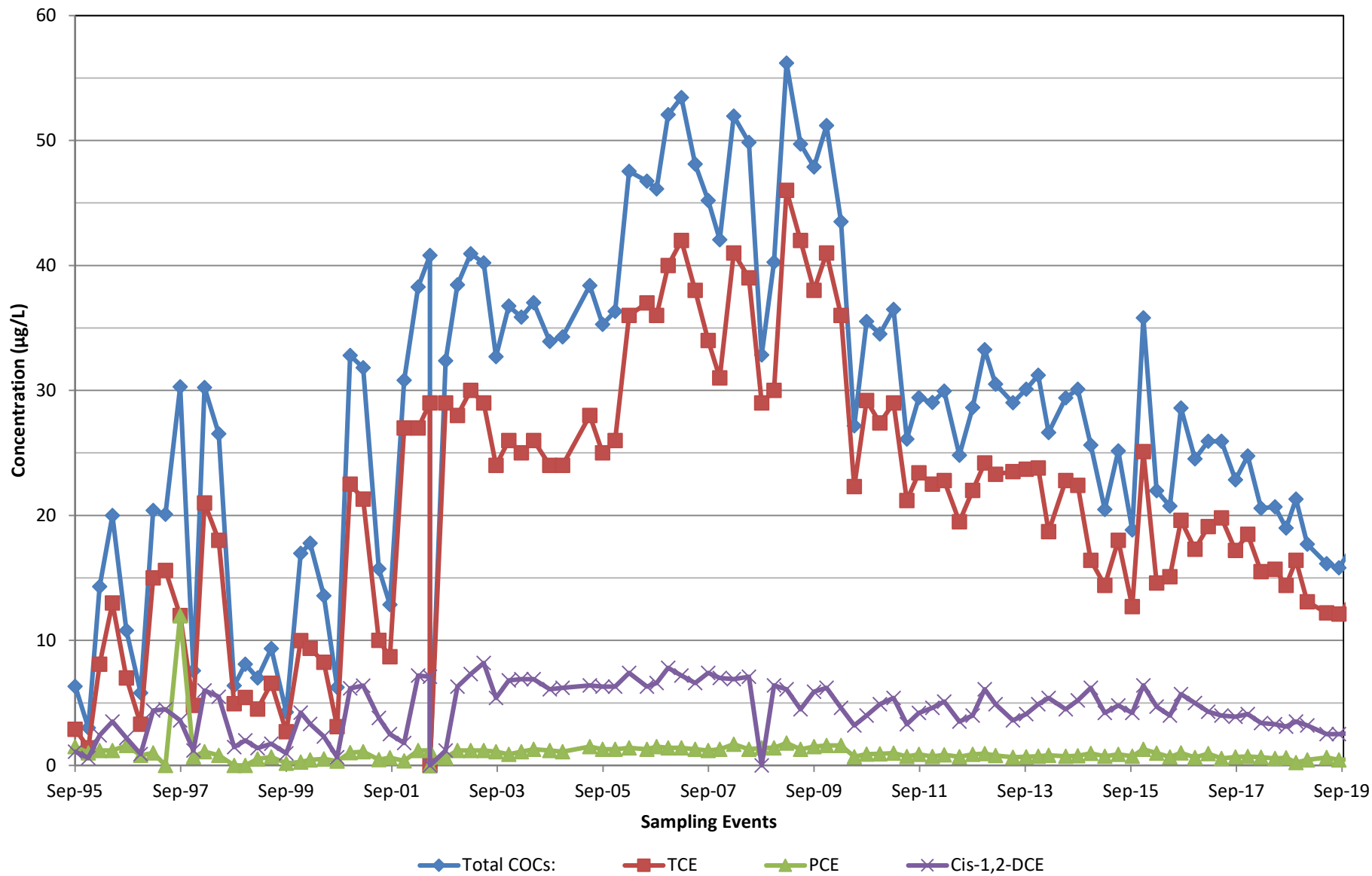
Ahtna

MW-OU2-43-180 (Hydraulic Zone 9)

Operable Unit 2 Remedy Monitoring and Operations and Maintenance
 Fourth Quarter 2019 through Third Quarter 2020, Former Fort Ord, California

Figure:

F60



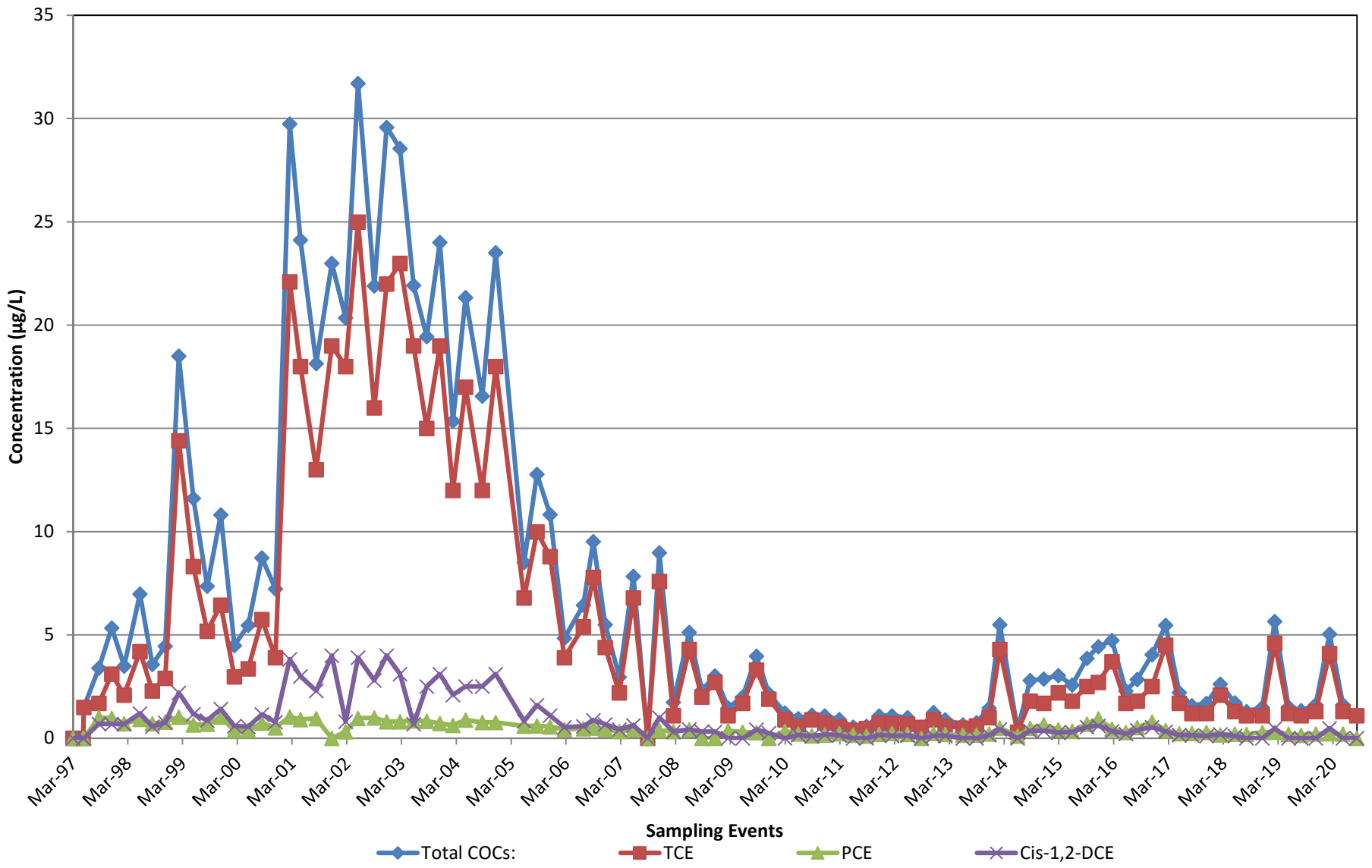
Ahtna

MW-OU2-44-180 (Hydraulic Zone 7)

Operable Unit 2 Remedy Monitoring and Operations and Maintenance
Fourth Quarter 2019 through Third Quarter 2020, Former Fort Ord, California

Figure:

F61

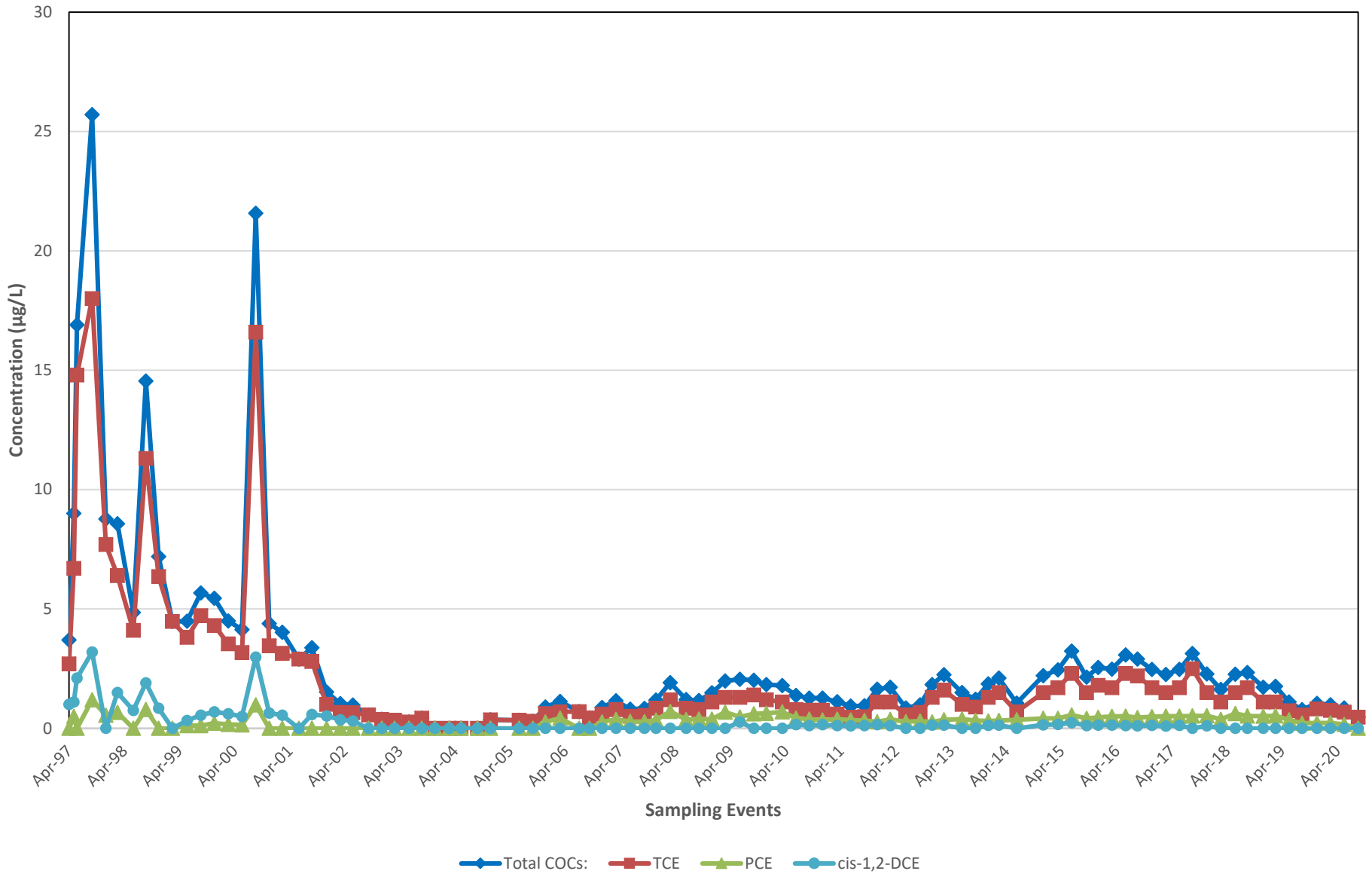


MW-OU2-46-180 (Hydraulic Zone 8)

Operable Unit 2 Remedy Monitoring and Operations and Maintenance
 Fourth Quarter 2019 through Third Quarter 2020, Former Fort Ord, California

Figure:

F62

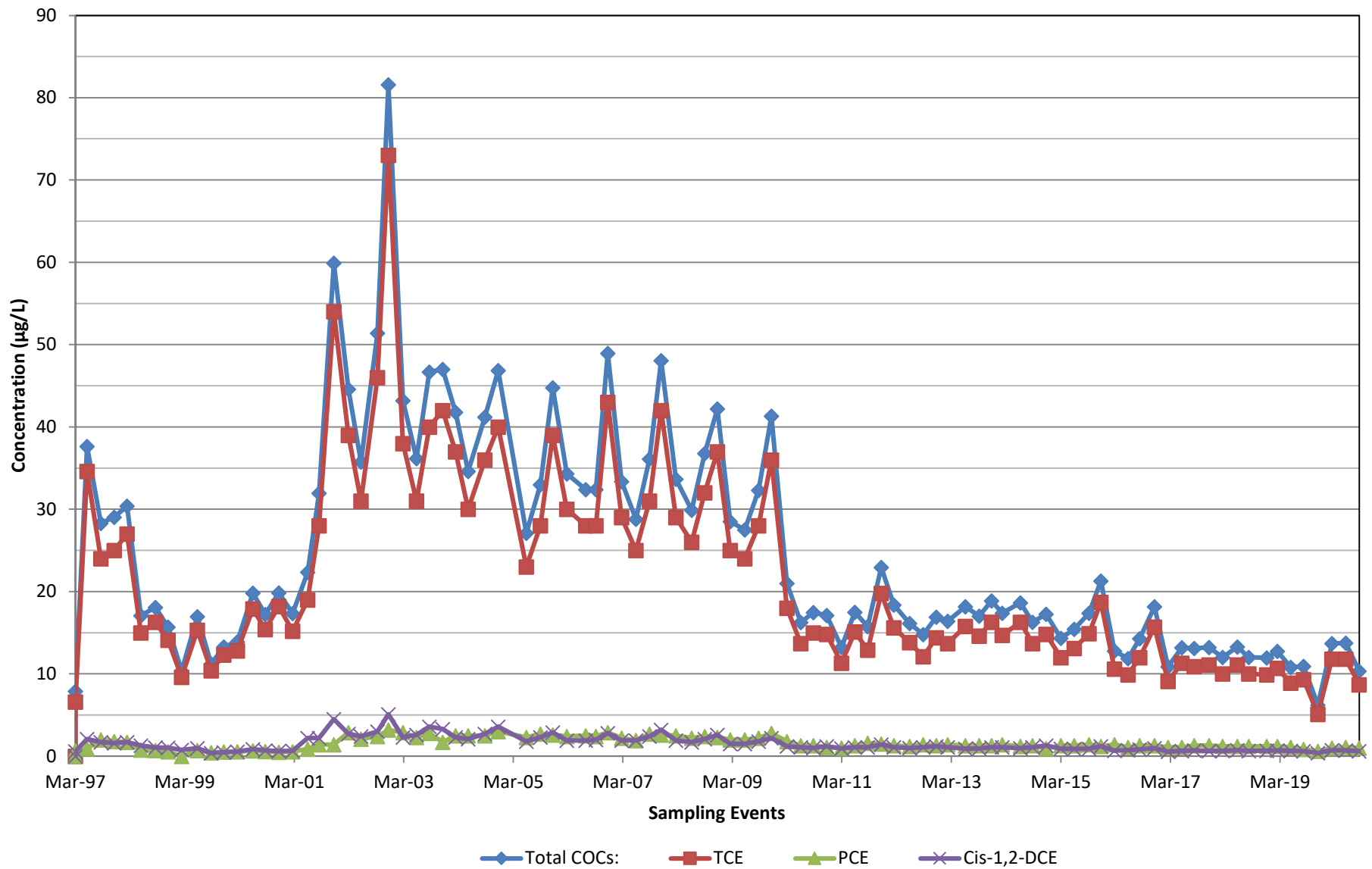


MW-OU2-47-180 (Hydraulic Zone 7)

Operable Unit 2 Remedy Monitoring and Operations and Maintenance
 Fourth Quarter 2019 through Third Quarter 2020, Former Fort Ord, California

Figure:

F63



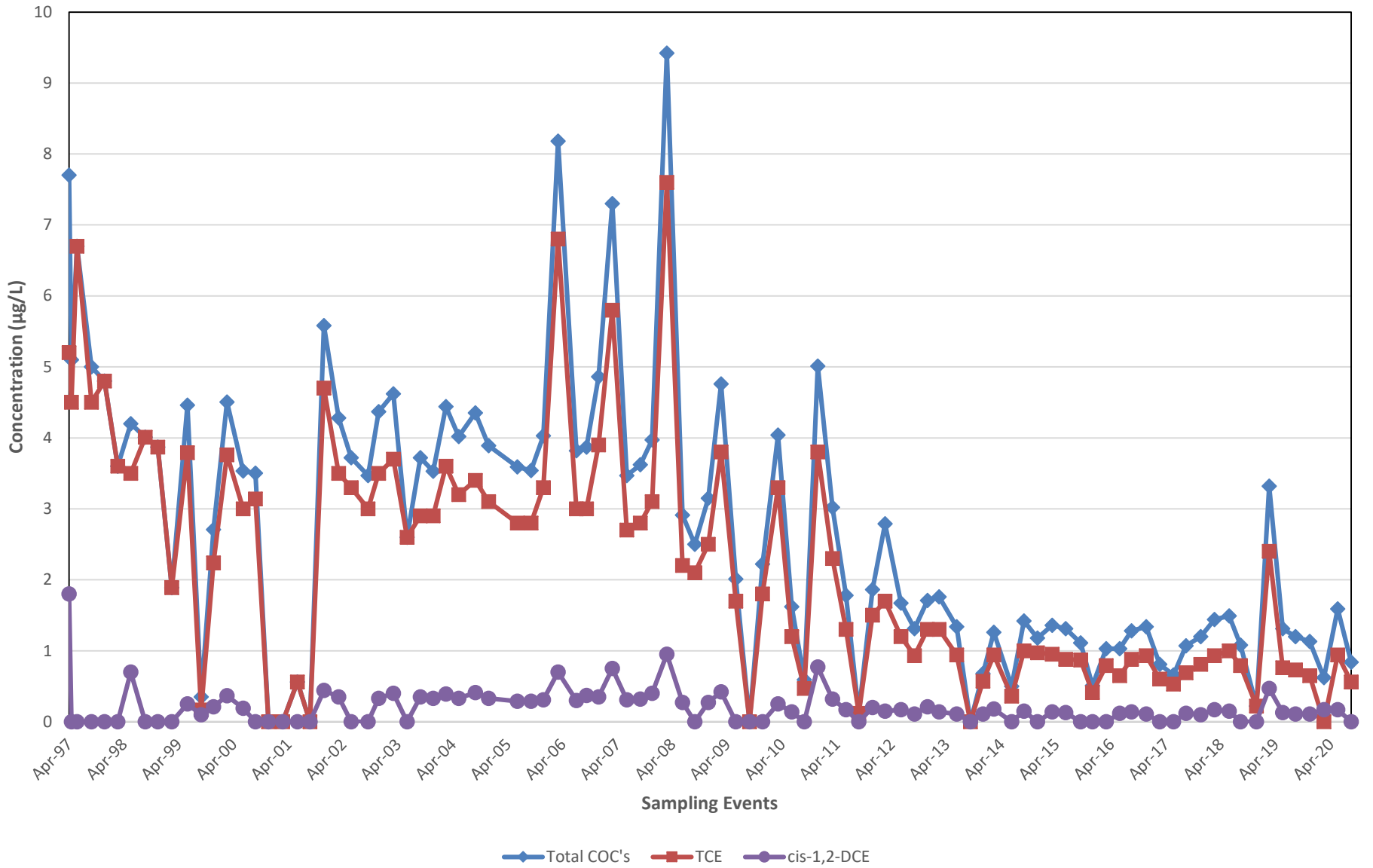
Ahtna

MW-OU2-50-180 (Hydraulic Zone 6)

Operable Unit 2 Remedy Monitoring and Operations and Maintenance
 Fourth Quarter 2019 through Third Quarter 2020, Former Fort Ord, California

Figure:

F64

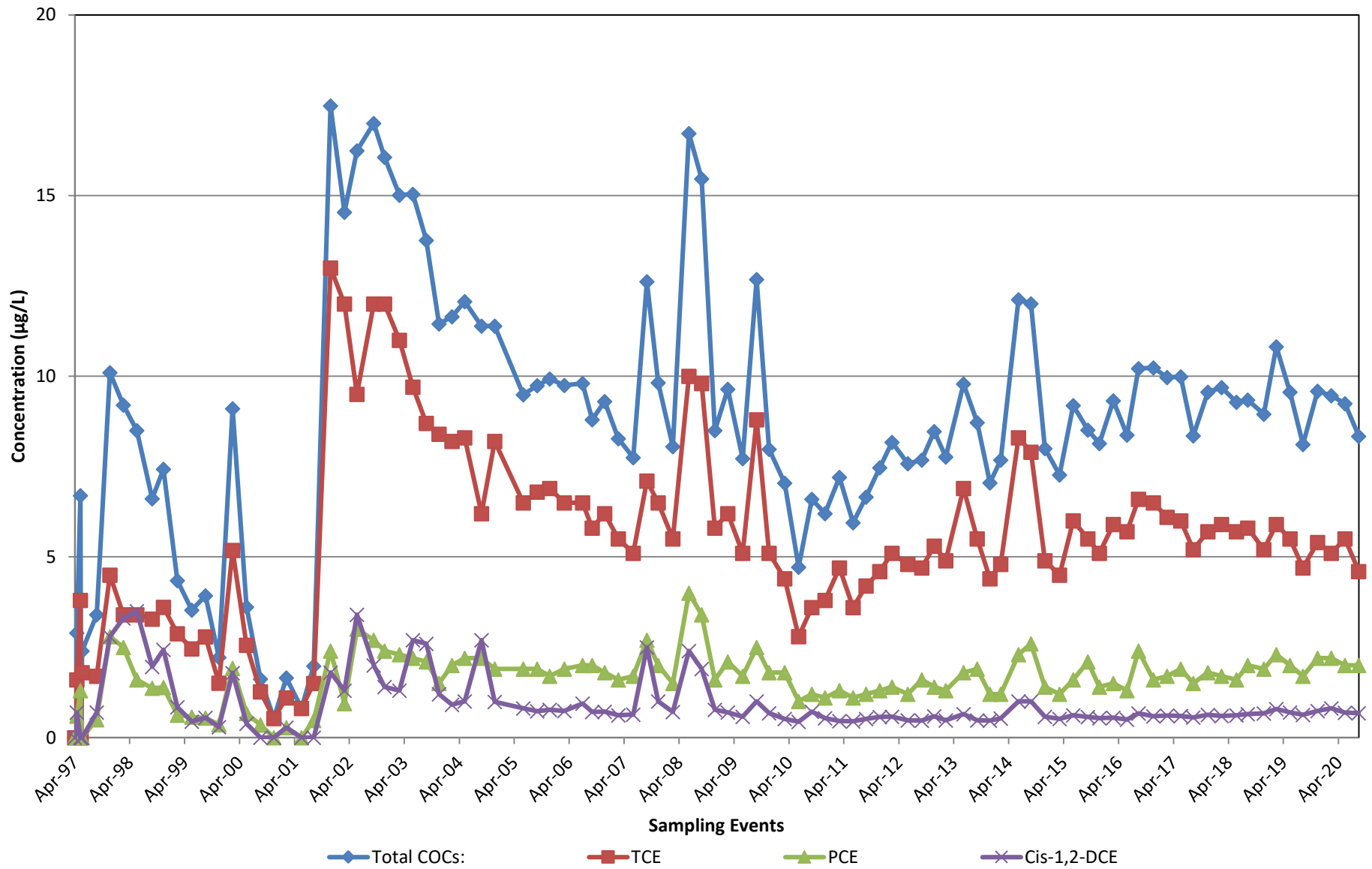


MW-OU2-51-180 (Hydraulic Zone 6)

Operable Unit 2 Remedy Monitoring and Operations and Maintenance
 Fourth Quarter 2019 through Third Quarter 2020, Former Fort Ord, California

Figure:

F65



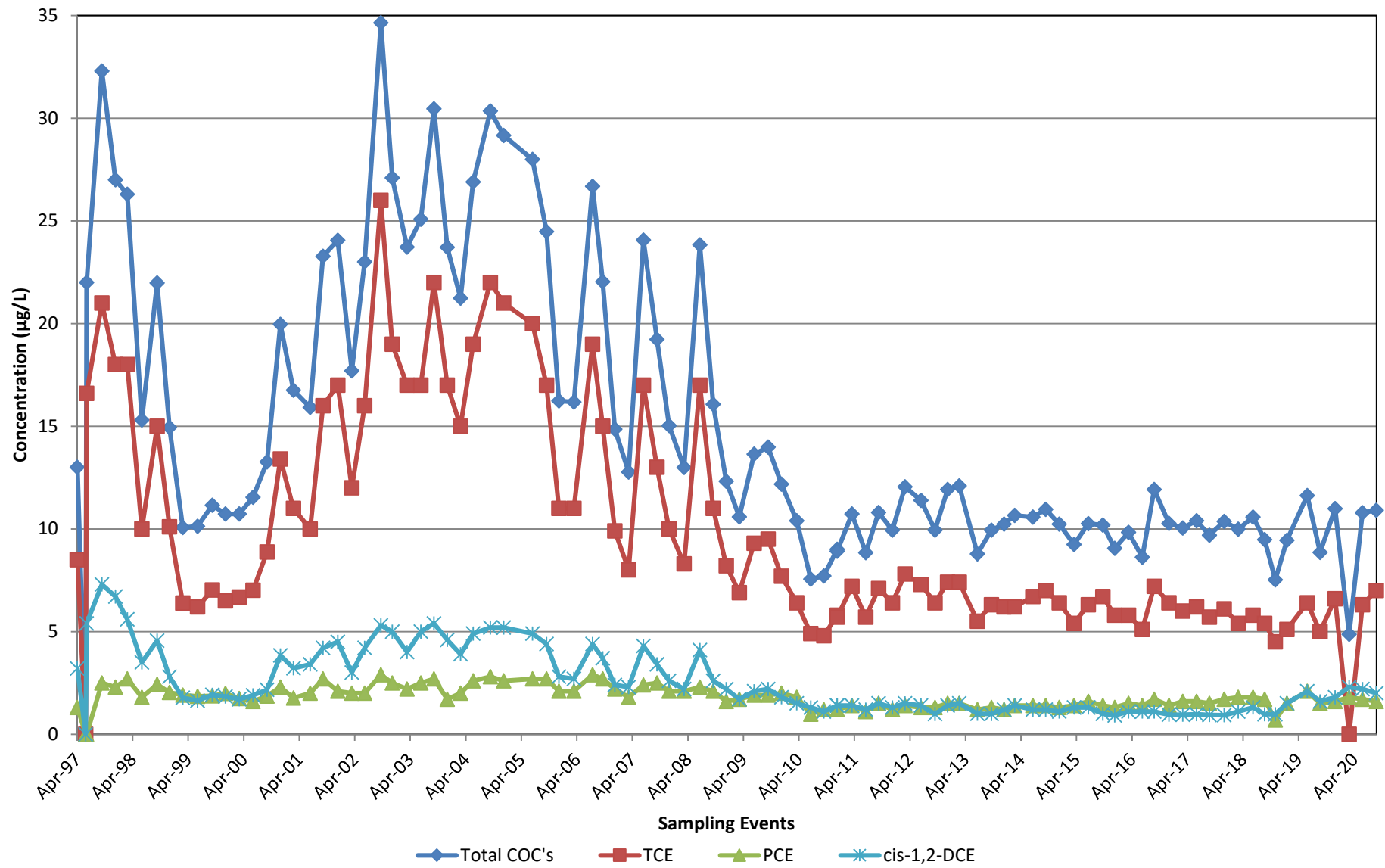
Ahtna

MW-OU2-53-180 (Hydraulic Zone 7)

Operable Unit 2 Remedy Monitoring and Operations and Maintenance
 Fourth Quarter 2019 through Third Quarter 2020, Former Fort Ord, California

Figure:

F66

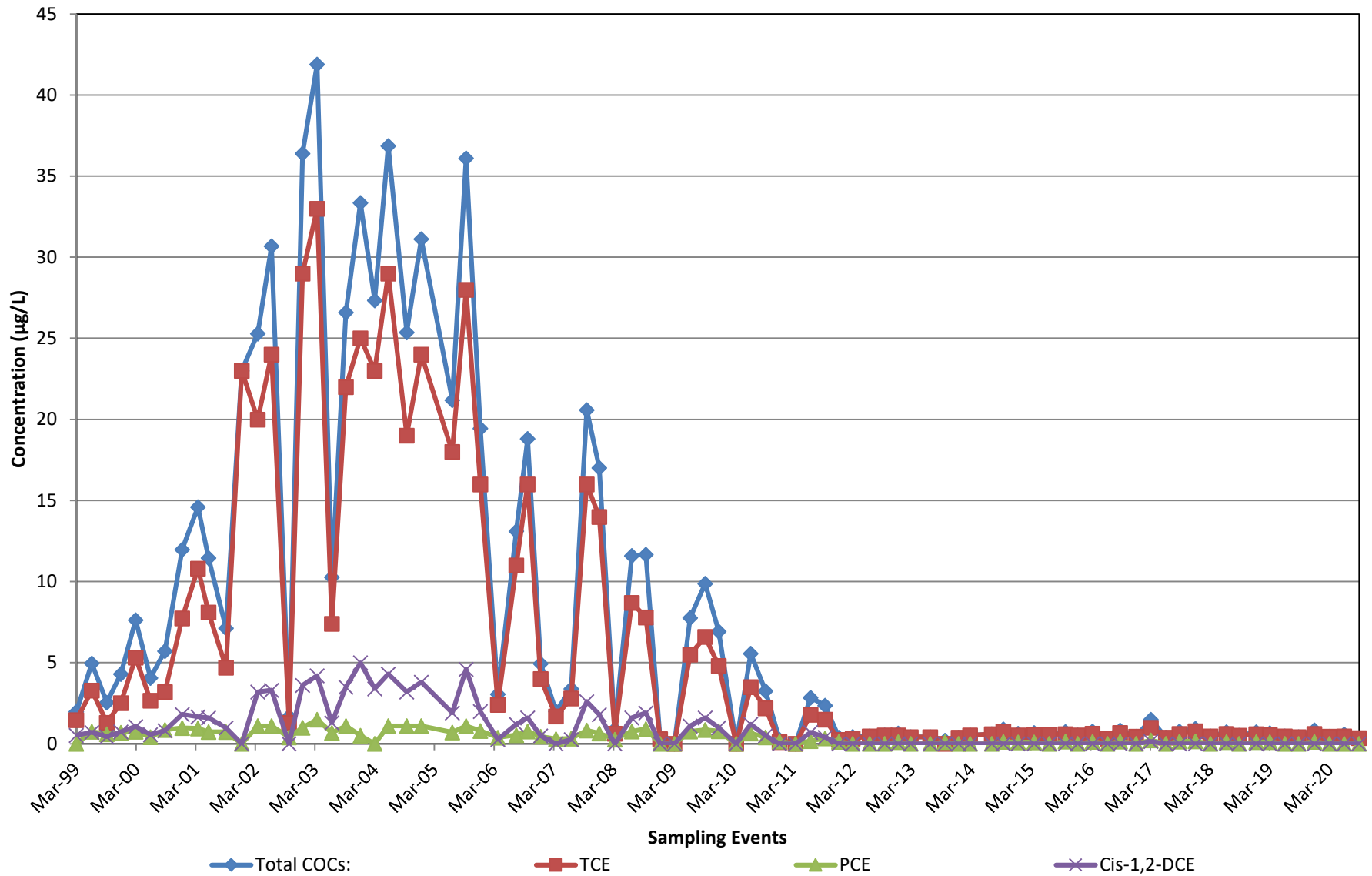


MW-OU2-56-180 (Hydraulic Zone 7)

Operable Unit 2 Remedy Monitoring and Operations and Maintenance
 Fourth Quarter 2019 through Third Quarter 2020, Former Fort Ord, California

Figure:

F67

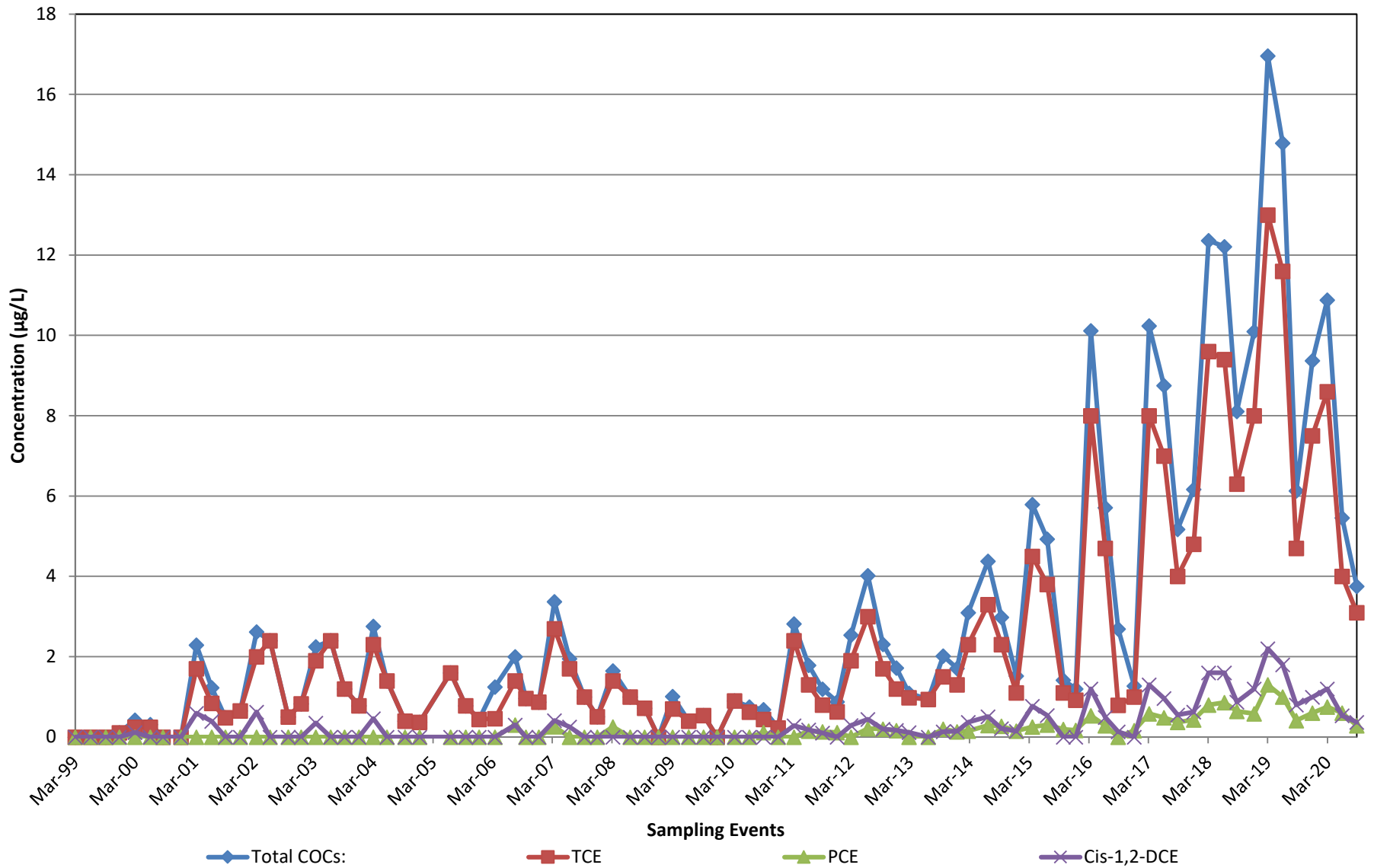


MW-OU2-61-180 (Hydraulic Zone 8)

Operable Unit 2 Remedy Monitoring and Operations and Maintenance
 Fourth Quarter 2019 through Third Quarter 2020, Former Fort Ord, California

Figure:

F68

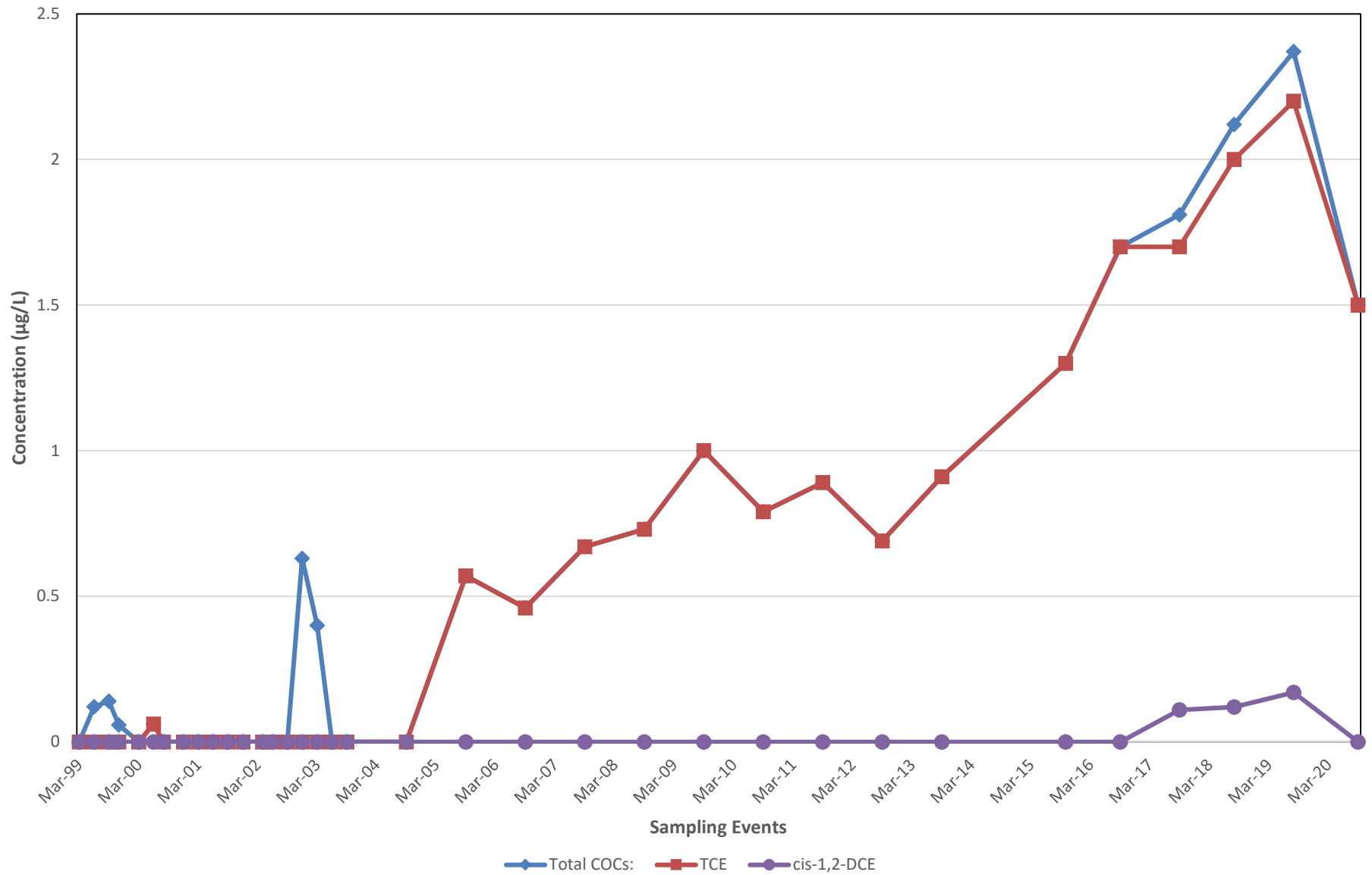


MW-OU2-62-180 (Hydraulic Zone 8)

Operable Unit 2 Remedy Monitoring and Operations and Maintenance
 Fourth Quarter 2019 through Third Quarter 2020, Former Fort Ord, California

Figure:

F69

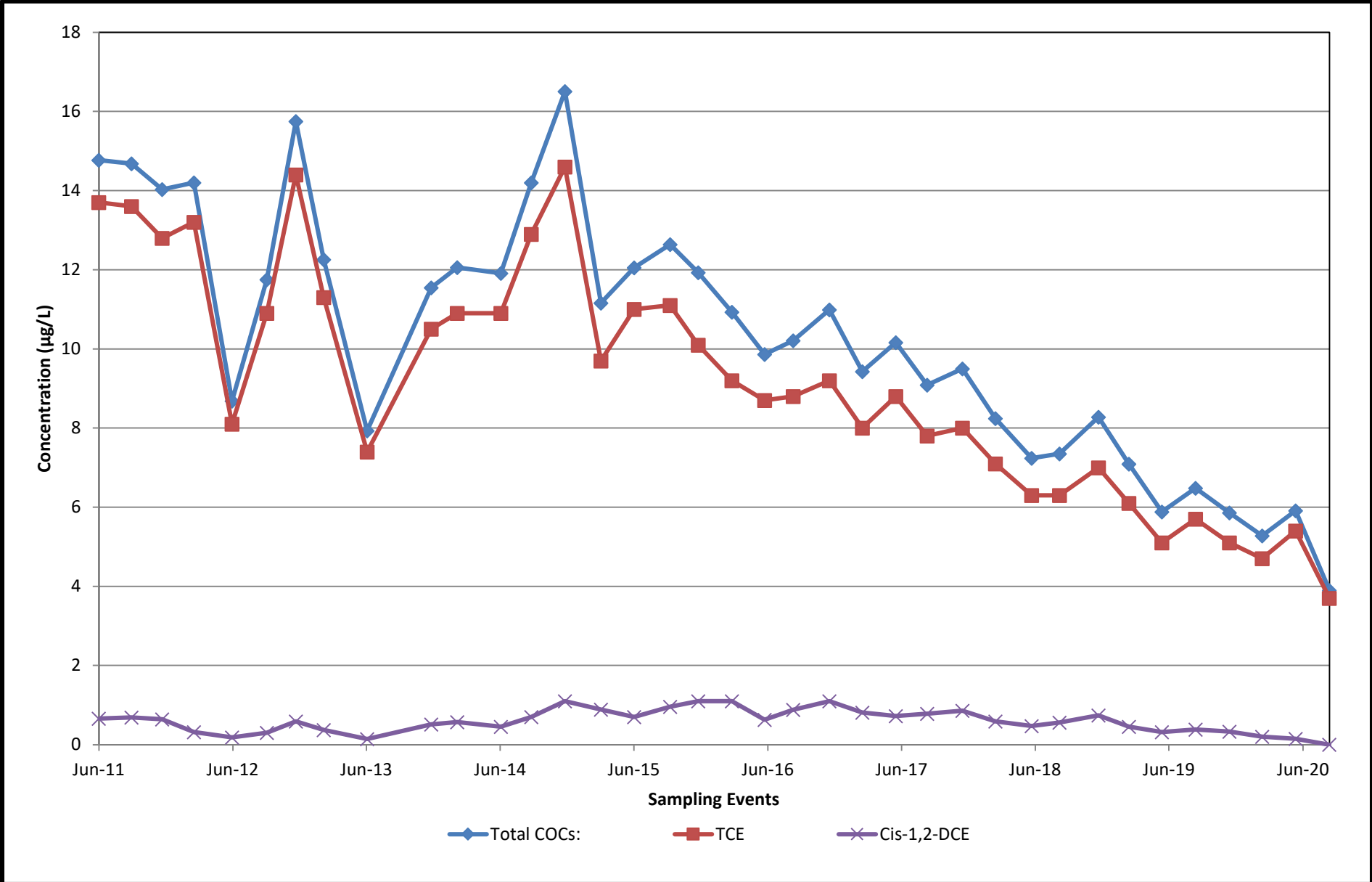


MW-OU2-63-180 (north of Hydraulic Zone 7)

Operable Unit 2 Remedy Monitoring and Operations and Maintenance
 Fourth Quarter 2019 through Third Quarter 2020, Former Fort Ord, California

Figure:

F70



MW-OU2-81-180 (Hydraulic Zone 7)

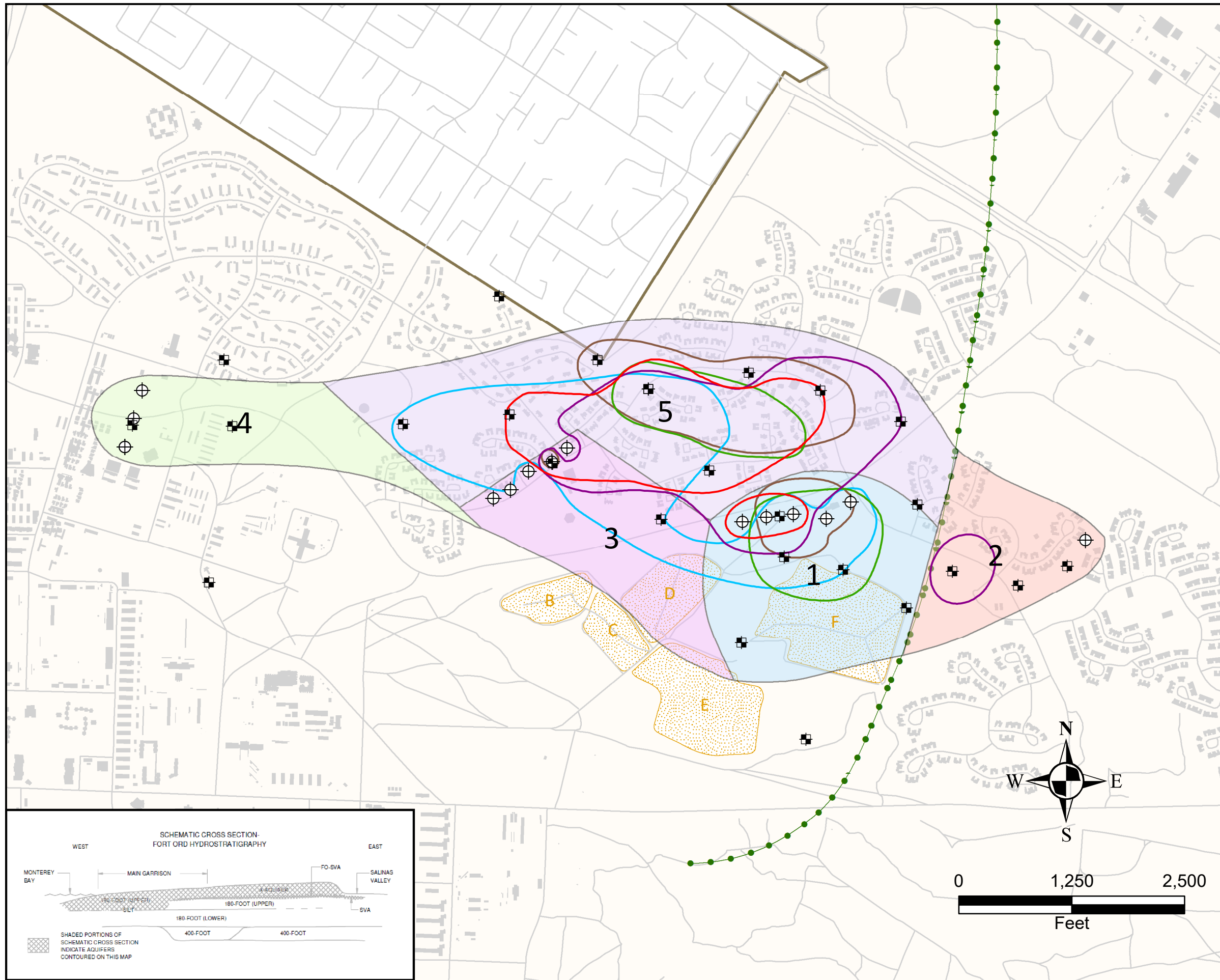
Operable Unit 2 Remedy Monitoring and Operations and Maintenance
 Fourth Quarter 2019 through Third Quarter 2020, Former Fort Ord, California

Figure:

F71

Appendix G

Hydraulic Zone Maps



EXPLANATION

- OU2-A Extraction Well
- OU2-A Monitoring Well

OU2-A Aquifer Hydraulic Zones (1-5)

- OU2 Hydraulic Zone 1
- OU2 Hydraulic Zone 2
- OU2 Hydraulic Zone 3
- OU2 Hydraulic Zone 4
- OU2 Hydraulic Zone 5

Chemical of Concern (COC) Aquifer Cleanup Level (ACL) Exceedance Contour in µg/L.

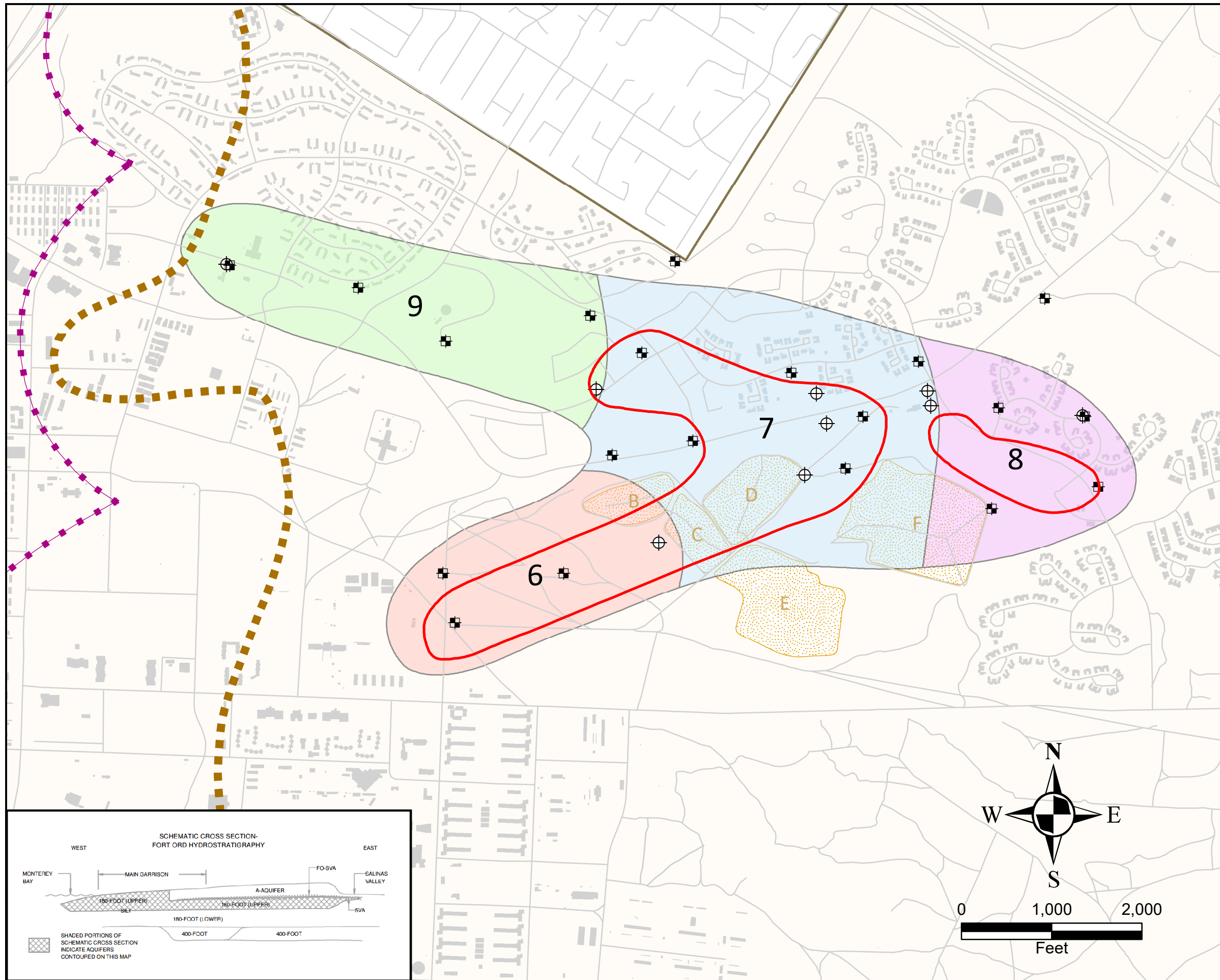
- 5 3Q2020 Trichloroethene (TCE) Plume Extent
- 3 3Q2020 Tetrachloroethene (PCE) Plume Extent
- 5 3Q2020 1,1-Dichloroethane (1,1-DCA) Plume Extent
- 0.5 3Q2020 1,2-Dichloroethane (1,2-DCA) Plume Extent
- 0.1 3Q2020 Vinyl Chloride (VC) Plume Extent

- Approximate location of the A-Aquifer Groundwater Divide
- OU2 Landfill Areas B through F
- Facilities
- Roads
- Former Fort Ord Boundary

NOTES:
 (1) Groundwater samples were collected between August 31st, 2020 and September 23rd, 2020.
 (2) Contours are based on one interpretation of the data that were available at the time this report was prepared; other interpretations may be possible.
 (3) Contours based on highest value obtained from multiple bags where applicable.
 (4) Contours near wells not sampled this quarter are inferred from previous analytical data.

**OPERABLE UNIT 2 HYDRAULIC ZONE MAP
 A-AQUIFER**

Operable Unit 2 Remedy Monitoring and Operations and Maintenance, Fourth Quarter 2019 - Third Quarter 2020
 Former Fort Ord, California



Explanation

- OU2 Upper 180-Foot Aquifer Extraction Well
- OU2 Upper 180-Foot Aquifer Monitoring Well

OU2 Upper 180-Foot Aquifer Hydraulic Zones (6-9)

- OU2 Hydraulic Zone 6
- OU2 Hydraulic Zone 7
- OU2 Hydraulic Zone 8
- OU2 Hydraulic Zone 9

Chemical of Concern (COC) Aquifer Cleanup Level (ACL) Exceedance Contour in µg/L.

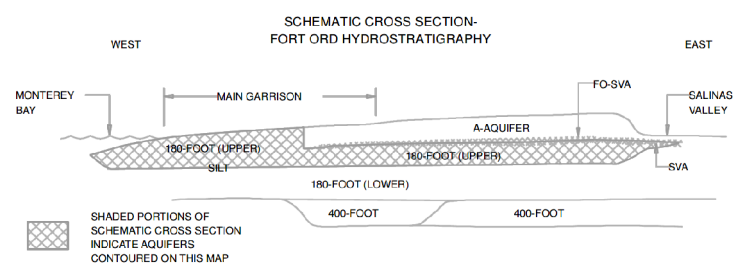
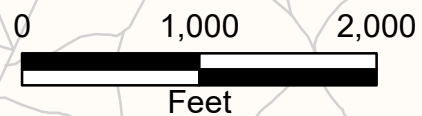
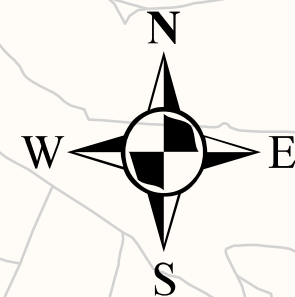
- 5 Trichloroethene (TCE)
- Approximate location of the Upper 180-Foot Aquifer Groundwater Divide
- Roads
- Facilities
- Approximate extent of landfill areas
- Approximate Edge of Fort Ord - Salinas Valley Aquitard
- Former Fort Ord Boundary

NOTES:

- (1) Groundwater samples were collected between August 31st, 2020 and September 23rd, 2020.
- (2) Contours are based on one interpretation of the data that were available at the time this report was prepared; other interpretations may be possible.
- (3) Contours based on highest value obtained from multiple bags where applicable.

**OPERABLE UNIT 2 HYDRAULIC ZONE MAP
UPPER 180-FOOT AQUIFER**

Operable Unit 2 Remedy Monitoring and Operations and Maintenance, Fourth Quarter 2019 - Third Quarter 2020
Former Fort Ord, California



Appendix H

Response to Comments on the Draft Report

**Response to Comments submitted by the United States Environmental Protection Agency (USEPA)
Region IX¹**

GENERAL COMMENT 1: Trend graphs in Appendix F (Extraction Wells and Select Monitoring Wells COC Trends) identify increasing concentration trends at various wells [e.g., see Figure F10 (EW-OU2-15-A), F16 (MW-BW-13-A), F36 (MW-OU2-75-A), etc.]; however, these trends are not identified on the plume maps (Figures 32 through 35, 42 through 45). To increase transparency and aid in data interpretation, it is recommended that increasing concentration trends be identified on Figures 32 through 35 and 42 through 45 (e.g., with an “up” arrow next to the applicable wells). Please revise Figures 32 through 35 and 42 through 45 to identify wells with increasing contaminant concentration trends or provide a figure for each aquifer with this information.

RESPONSE TO GENERAL COMMENT 1: It is unclear how the suggested changes will increase transparency or aid in data interpretation. To the contrary, modifying Figures 32 through 35 and 42 through 45 as suggested would increase their complexity and make them more difficult to interpret and therefore less transparent. No revisions were made per the comment.

GENERAL COMMENT 2: Section 8.3 (Groundwater Extraction and Treatment) includes a recommendation for “Expansion of the eastern extraction well network to the north with the addition of up eight [sic] new A-Aquifer extraction wells;” however, it is unclear where the new extraction wells are proposed to be located, and a figure showing their proposed locations is not included in the Draft Operable Unit 2 Remedy Monitoring and Operations and Maintenance, Fourth Quarter 2019 through Third Quarter 2020, Former Fort Ord, California dated June 2021 (the Draft Report). Please clarify where the new extraction wells are proposed, provide rationale for the selected locations, and include a supporting figure.

RESPONSE TO GENERAL COMMENT 2: The requested information is outside the scope of the Draft Report. If the recommendation for extraction wells is implemented, a work plan will be developed to describe the well locations and rationale based on a detailed analysis of groundwater conditions, including groundwater modeling to optimize well locations.

GENERAL COMMENT 3: Section 7.2.2 (Progress with Respect to Long-Term Goals) states, “there is a persistent COC [contaminant of concern] mass in A-Aquifer Hydraulic Zones 2 and 5 and Upper 180-Foot Aquifer Hydraulic Zone 8 that is outside of the current extraction well network capture areas and may need to be addressed separately;” however, it is unclear what actions proposed in Section 8.3 (Groundwater Extraction and Treatment) address this issue, as this is not discussed. Alternatively, it is unclear if additional actions, not currently proposed, are potentially warranted. Please clarify what actions proposed in Section 8.3 address the referenced issue, and/or if actions in addition to these may also be warranted at a future date (and clarify the timing of such additional actions).

RESPONSE TO GENERAL COMMENT 3: Additional information was added to Section 8.3 describing the recommended changes for the groundwater remedy to address persistent chemical of concern (COC) mass in Hydraulic Zones 5 and 8. There are no recommendations for system modifications to address COC mass in Hydraulic Zone 2 at this time because, while the COC (primarily tetrachloroethene [PCE])

¹ In a letter dated July 30, 2021 (Administrative Record No. OU2-729.3). The comments are reproduced here as provided to the Army and there have been no changes to spelling, grammar, or punctuation.

concentrations are persistent, they are also near the Aquifer Cleanup Level (ACL) (see Appendix F, Figure F27) and there is no indication additional actions would be needed with respect to long-term goals.

GENERAL COMMENT 4: It is unclear if additional investigation is warranted in the vicinity of EW-OU2-09-180. According to Section 7.2 (Groundwater Remedy), “increasing concentrations of cis-1,2-DCE [dichloroethene] and PCE [tetrachloroethene] [at extraction well EW-OU2-09-180] with no corresponding increase in CT [carbon tetrachloride] concentrations suggest this extraction well may be capturing a different, previously unidentified VOC [volatile organic compound] plume. Continued evaluation of this area is warranted to...assess the presence of other VOCs, particularly cis-1,2-DCE.” However, it is unclear if and when additional investigation into the potential source of VOCs at EW-OU2-09-180 will be conducted. Please review the Draft Report to evaluate if additional investigation into the potential source of VOCs at EW-OU2-09-180 is warranted, and if so, when will this be conducted.

RESPONSE TO GENERAL COMMENT 4: The Draft Report is not suggesting additional investigation is warranted at this time, only that continued evaluation is warranted. Regardless, a recommendation for additional investigation into an unidentified VOC source at EW-OU2-09-180 is within the scope of Operable Unit Carbon Tetrachloride Plume (OUCTP), not Operable Unit 2 (OU2), and would be addressed the OUCTP Annual Report, if appropriate. No revisions were made per the comment.

GENERAL COMMENT 5: Review of Figures 32 through 35 indicates that the extent of contamination is not defined downgradient of MW-OU2-40-A. Trichloroethene (TCE) concentrations exceed the Aquifer Cleanup Level (ACL) at this well, but no wells are located downgradient of this well to define the plume. Please revise the Draft Report to propose the installation of a well downgradient of MW-OU2-40-A or explain why this is not necessary.

RESPONSE TO GENERAL COMMENT 5: The extent of contamination downgradient of MW-OU2-40-A is defined by downgradient wells screened in the Upper 180-Foot Aquifer. A previously existing downgradient monitoring well, MW-OU2-33-A, did not have TCE concentrations above the ACL even when MW-OU2-40-A TCE concentrations were higher than what they are currently (MW-OU2-33-A was decommissioned in 2018 due to low concentrations). As shown on Figures 27 through 30 and Figures 32 through 35, MW-OU2-40-A is near the edge of the Fort Ord-Salinas Valley Aquitard (FO-SVA). Groundwater migrating west to the edge of the FO-SVA then enters the Upper 180-Foot Aquifer and migrates to the east, as shown on Figures 37 through 40. Text was added to Section 7.2.2 to describe that MW-OU2-40-A is located upgradient of the edge of the FO-SVA and the Upper 180-Foot Aquifer groundwater divide, and A-Aquifer groundwater migrates into the Upper 180-Foot Aquifer in this area.

GENERAL COMMENT 6: Review of Figure F16 [MW-BW-13-A (north of Hydraulic Zone 4)] indicates the TCE concentrations may be increasing at well MW-BW-13-A; however, this is not discussed in the text in the Draft Report (i.e., in sections that pertain to evaluation of Hydraulic Zone 4). Please revise the Draft Report to evaluate if concentrations of TCE are increasing at MW-BW-13-A, and what the implications of this may be.

RESPONSE TO GENERAL COMMENT 6: There are currently no implications. TCE concentrations at MW-BW-13-A have been below the ACL since 2003 and concentrations observed during the reporting period are within the historical concentration range. This well serves to bound the northern extent of Hydraulic Zone 4 (Figure G1) and this well will continue to be monitored quarterly per the Groundwater Quality Assurance Project Plan (QAPP; Administrative Record No. BW-2785L). Should COC concentrations in this

well approach or exceed the ACL in the future, the implications will be evaluated. No revisions were made per the comment.

SPECIFIC COMMENT 1: Section 7.1, Landfills Remedy, Page 55, and Table 33, Concentrations of VOCs in Compliance Probes and Statistical Summary: The Draft Report does not explain the data presented in Table 33; therefore, the significance of the detections of VOCs shown in this table are unclear. Section 7.1 only states that “Analytical results for samples collected from the 21 compliance probes during the annual VOC monitoring indicate VOCs were mostly ND [non-detect] at or above the LOQ [limit of quantitation].” A discussion of the detections should also be included, and the text should discuss whether they are indicative of any issues. Please revise Section 7.1 explain what the data in Table 33 indicate, particularly the detections of VOCs, and why these detections are or are not indicative of an issue.

RESPONSE TO SPECIFIC COMMENT 1: The text in Section 7.1 was revised per the comment. Additionally, per Section 3.2.3 (DQO #3: Compliance Perimeter Probes) in Worksheet #11 of the Landfills QAPP Revision 4 (AEI, 2020), there are three compounds (vinyl chloride, PCE, and chloroform) that may trigger a change in the frequency of monitoring. A comparison of historical data with current data for these three compounds is provided in Tables 20, 21, and 22 of the Draft Report (now Tables 21, 22, and 23). Based on the results presented in these tables, no changes to the monitoring program were required during the reporting period and this information was also added to Section 7.1. Accordingly, Section 5.5.1 of the Draft Report was revised to provide additional background information regarding indicator compounds. Note that Table 33 is now Table 20 and also referenced in Section 5.5.1.

SPECIFIC COMMENT 2: Section 7.2.1, Progress with Respect to Short-Term Goals, Page 57: This section describes changes to the extraction well network that were made in 2016 and 2018 to improve COC plume capture and increase COC mass removal; however, it is unclear if these changes did, in fact, result in improved COC plume capture and increased COC mass removal, as this is not discussed. Please revise this section to evaluate if the changes to the extraction well network made in 2016 and 2018 improved COC plume capture and increased COC mass removal or reference where this information may be found in the Draft Report.

RESPONSE TO SPECIFIC COMMENT 2: The text in Section 7.2.1 was revised per the comment.

SPECIFIC COMMENT 3: Section 7.2.2, Progress with Respect to Long-Term Goals, Page 59: The text states, “Five Hydraulic Zone 5 monitoring wells have COC concentrations above ACLs with increasing trends (Appendix F, Figures F17, F21 through F24, F36, and F40);” however, seven wells are referenced. Please revise the text to address this discrepancy.

RESPONSE TO SPECIFIC COMMENT 3: The text in Section 7.2.2 was corrected to state seven wells instead of five.

SPECIFIC COMMENT 4: Section 7.2.2, Progress with Respect to Long-Term Goals, Page 59: This section states, “The TCE concentration trends in Hydraulic Zone 6 are decreasing or flat..., indicating Hydraulic Zone 6 may be a limiting factor for achieving long-term goals, primarily due to persistent TCE concentrations above the ACL at upgradient wells MW-OU2-23-180 and MW-OU2-50-180;” however, it is unclear if additional actions are warranted to address this issue, as this is not discussed. Please

evaluate if additional actions are warranted to ensure that long-term goals are achieved in Hydraulic Zone 6.

RESPONSE TO SPECIFIC COMMENT 4: Text was added to Section 7.2.2 stating that no additional actions are recommended at this time because Hydraulic Zone 6 is captured by online extraction well EW-OU2-03-180.

SPECIFIC COMMENT 5: Section 7.2.2, Progress with Respect to Long-Term Goals, Page 60: Figure F58 [MW-OU2-28-180 (Hydraulic Zone 8)] depicts increasing TCE and PCE concentration trends at MW-OU2-28-180; however, this is not discussed in Section 7.2.2. Please revise Section 7.2.2 to include an evaluation of the increasing contaminant concentration trends at MW-OU2-28-180, and the implications of these trends with respect to meeting the long-term goals.

RESPONSE TO SPECIFIC COMMENT 5: The text in Section 7.2.2 was revised per the comment.

SPECIFIC COMMENT 6: Section 8.3, Groundwater Extraction and Treatment, Page 62: According to Section 7.2.2 (Progress with Respect to Long-Term Goals), “additional remedial actions are recommended for Hydraulic Zone 5 (see Sections 6.6 and 8.0).” While numerous changes to the groundwater treatment system are proposed in Section 8.3, the text does not clearly explain which changes will address the plume capture issues at Hydraulic Zone 5. Please revise Section 8.3 to explain which of the proposed changes to the groundwater treatment system are related to resolving plume capture issues at Hydraulic Zone 5, and how the proposed changes are expected to address this issue.

RESPONSE TO SPECIFIC COMMENT 6: The text in Section 8.3 was revised per the comment.

SPECIFIC COMMENT 7: Section 8.3, Groundwater Extraction and Treatment, Page 62: This section states, “Implement optimization recommendations for the OU2 GWTP [groundwater treatment plant] as listed under separate cover;” however, it is unclear what recommendations this statement is referring to, as no specific references are provided. Please revise this section to specify the recommendations listed under separate cover that are planned for implementation and reference the specific documents in which they may be found.

RESPONSE TO SPECIFIC COMMENT 7: The text in Section 8.3 was revised to reference the appropriate document.

SPECIFIC COMMENT 8: Figures 32 through 35: TCE is present at concentrations above the ACL at MW-OU2-40-A; however, the TCE ACL contour line does not include this well (or one is not located around this well). Please revise Figures 32 through 35 to include MW-OU2-40-A within the TCE ACL contour line.

RESPONSE TO SPECIFIC COMMENT 8: The figures were not revised. As noted in Section 6.5.1.2, COC ACL exceedance contours in Figures 32 through 35 and 42 through 45 are not drawn around single wells with COC concentrations above their ACLs if the well is outside the main COC plume and there are insufficient data to establish the extent of a plume contour. Regardless, all wells with detected concentrations of TCE above the ACL are indicated by bolded font in the figures. All wells with detected concentrations of COCs above their ACLs are indicated by bolded font in the associated tables.

Response to Comments submitted by the Department of Toxic Substances Control (DTSC) Geologic Services Unit (GSU)²

COMMENT 1: TCE Concentrations in Lower 180-Foot Aquifer and Hydraulic Zone 8. The Report should be revised to include recommendations to address the plume migration east of Hydraulic Zone 8 in the Upper 180-Foot Aquifer. The Report states that the plume is extended beyond the capture area of the existing extraction network and may be approaching the suspected discontinuity in the Intermediate 180-Foot Aquitard, which could be the source of trichloroethene (TCE) into the Lower 180-Foot Aquifer. Therefore, GSU does not concur with the recommendation that no new extraction wells are recommended at this time in Hydraulic Zone 8. To meet the requirements of the selected remedy (ROD, Army 1994), additional extraction well(s) should be proposed to facilitate the capture and cleanup of the portion of the TCE contaminant plume extending beyond the existing extraction well network, and to reduce the potential migration of TCE into the Lower 180-Foot Aquifer.

RESPONSE TO COMMENT 1: As agreed to by the Fort Ord BRAC Cleanup Team (BCT) and noted in Section 7.2 of the Report, the presence of TCE in the Lower 180-Foot Aquifer (and its source) will be addressed in the 5th Five-Year Review Report for Fort Ord Superfund Site, which is scheduled to be complete in September 2022. Therefore, Section 8.3 was revised to include a recommendation for evaluation of the OU2 groundwater remedy with respect to TCE in the Lower 180-Foot Aquifer based on the conclusions of the Five-Year Review Report. Text was also added to Section 7.2.2 to note that TCE concentrations at monitoring well MW-OU2-62-180 have been on a declining trend since First Quarter 2019, with concentrations below the ACL in the last two quarters of the reporting period. This suggests the operation of upgradient extraction wells may have mitigated the source of TCE in Hydraulic Zone 8 and a recommendation for additional extraction wells in this area would not be appropriate at this time.

COMMENT 2: Expansion of Extraction Well Network. GSU concurs with the recommendation to expand the extraction well network to the north with the addition of eight new A-Aquifer wells to the north of the eastern extraction network. A workplan should be prepared with includes well placement, development, and proposed sampling for review.

RESPONSE TO COMMENT 2: Comment acknowledged. A footnote was added to Section 8.3 stating a work plan will be prepared if recommendations for new wells are implemented.

COMMENT 3: Well Decommissioning. GSU concurs with the proposed wells identified for decommissioning. The three wells have obstructions within the well casing and are not needed for sampling or depth to water measurements.

RESPONSE TO COMMENT 3: Comment acknowledged.

² In a letter dated August 11, 2021 (Administrative Record No. OU2-729.4). The comments are reproduced here as provided to the Army and there have been no changes to spelling, grammar, or punctuation.

Response to Comments submitted by the Central Coast Regional Water Quality Control Board (CCRWQCB)³

COMMENT 1: Section 8.3, Groundwater Extraction and Treatment – This section states that groundwater monitoring data indicate significant COC mass remains in the A-Aquifer and the Upper 180-Foot Aquifer, primarily in the area north of the Fort Ord Landfills. Additionally, Section 7.2.2, Progress with Respect to Long-term Goals, Upper 180-Foot Aquifer, Hydraulic Zone 8, indicates that 1) the historical trichloroethene (TCE) plume extent in this zone increased due to TCE migration east beyond the capture area of the existing extraction well networks; and 2) the TCE plume in this area is migrating towards the area of the suspected discontinuity in the Intermediate 180-Foot Aquitard, which may be a source of TCE to the Lower 180-Foot Aquifer. The recommendations in Section 8.3 include expansion of the eastern extraction well network to the north with the addition of up eight new A-Aquifer extraction wells to capture COC plumes migrating to the north of the eastern extraction well network but does not include addressing the significant COC mass remaining in the Upper 180-Foot Aquifer. Section 7.2, Groundwater Remedy, indicates that the TCE in the Lower 180-Foot Aquifer will be addressed in the 5th Five-Year Review Report to be completed in September 2022.

Please revise the Report to include a recommended expansion of the extraction well network in the Upper 180-Foot Aquifer to address the remaining COC mass in this aquifer and reduce the potential for migration of TCE in to the Lower 180-Foot Aquifer.

RESPONSE TO COMMENT 1: As noted in the comment (and agreed to by the Fort Ord BCT), the presence of TCE in the Lower 180-Foot Aquifer (and its source) will be addressed in the 5th Five-Year Review Report. Therefore, Section 8.3 was revised to include a recommendation for evaluation of the OU2 groundwater remedy with respect to TCE in the Lower 180-Foot Aquifer based on the conclusions of the Five-Year Review Report. Text was also added to Section 7.2.2 to note that TCE concentrations at monitoring well MW-OU2-62-180 have been on a declining trend since First Quarter 2019, with concentrations below the ACL in the last two quarters of the reporting period. This suggests the operation of upgradient extraction wells may have mitigated the source of TCE in Hydraulic Zone 8 and a recommendation for additional extraction wells in this area would not be appropriate at this time.

Text Section 8.3 was revised to include the recommendation for additional groundwater extraction as part of the OUCTP Upper 180-Foot Aquifer groundwater remedy.

COMMENT 2: Section 8.5.2, Well Decommissioning – We concur with the recommendation to decommission MW-OU2-26-A, MW-OU2-37-A, and MW-OU2-37-180 as these wells have obstructions, have been removed from the Groundwater Quality Assurance Project Plan (QAPP), and are not needed for sampling or water level measurements. Please provide a Work Plan for review and agency approval prior to well decommissioning.

RESPONSE TO COMMENT 2: Comment acknowledged. A footnote was added to Section 8.5.2 stating a work plan will be prepared if the recommendations for well decommissioning are implemented.

³ In a letter dated July 26, 2021 (Administrative Record No. OU2-729.2). The comments are reproduced here as provided to the Army and there have been no changes to spelling, grammar, or punctuation.