Site Evaluation Results
Basewide Range Assessment Investigation
BLM Area B – Sub-Areas B-2A and B-3
Units A, B, B-2A, B-3E, B-3W, and C
Former Fort Ord
Monterey County, California

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U.S. Army Corps of Engineers Sacramento District
1325 J Street
Sacramento, California 95814-2922

Submitted by:

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

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Acronyms and Abbreviations

AR	Administrative Record
Army	United States Department of the Army
BLM	Bureau of Land Management
BRA	Basewide Range Assessment
BRAWP	Basewide Range Assessment Work Plan
CBRAR	*Final Comprehensive Basewide Range Assessment Report, Former Fort Ord, California, Revision 2*
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act of 1980
COC	contaminants of concern
DGM	Digital Geophysical Mapping
DMM	Discarded Military Munitions
EOD	Explosive Ordnance Disposal
FFE	Flame Field Expedient
FS	Feasibility Study
Gilbane	Gilbane Federal
HA	Historical Area
HMP	Habitat Management Plan
HMX	octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine
KEMRON	KEMRON Environmental Services, Inc.
LUC	Land Use Control
mg/kg	milligrams/kilogram
mm	millimeter
MD	munitions debris
MEC	munitions and explosives of concern
MRS	Munitions Response Site
RA	Risk Assessment
RDX	hexahydro-1,3,5-trinitro-1,3,5-triazine
RWA	Remedial Work Areas
Shaw	Shaw Environmental, Inc.

Soil Sampling QAPP	*Quality Assurance Project Plan, Former Fort Ord, California, Volume I, Appendix B, Soil Sampling, Basewide Range Assessment*
Site 39 ROD Amendment	*Final Record of Decision Amendment, Site 39, Former Fort Ord, California*
TM	Technical Memorandums
TNT	2,4,6-trinitrotoluene
Track 2 RI/FS	*Final, Revision 2 Track 2 Munitions Response Remedial Investigation/Feasibility Study BLM Area B and MRS-16 Former Fort Ord, California*
Track 2 ROD	*Final, Record of Decision (ROD), Track 2 Bureau of Land Management Area B and Munitions Response Site 16, Former Fort Ord, California*
USACE	United States Army Corps of Engineers

1.0 Introduction

This document presents an evaluation of the need to assess metals and explosive residues in soil in Bureau of Land Management (BLM) Area B as part of the Basewide Range Assessment (BRA) being performed at the former Fort Ord in Monterey County, California. The BRA evaluation in BLM Area B is being conducted by KEMRON Environmental Services, Inc. (KEMRON) with subcontractor support from Gilbane Federal (Gilbane) for the United States Army Corps of Engineers (USACE) under the Worldwide Environmental Remediation Services contract number W912DY-10-D-0027, Task Order CM01.

The BRA investigation program is being conducted to evaluate the potential presence of contaminants of concern (COCs) at known or suspected small arms ranges, multi-use ranges, and military munitions training areas within the former Fort Ord. Note that previous BRA activities have been conducted within BLM Area B; however, some areas were not accessible due to dense vegetation. Detailed background information regarding these activities is available in the *Final Comprehensive Basewide Range Assessment Report Former Fort Ord, California Revision 2* [CBRAR; Shaw Environmental, Inc. (Shaw), 2012] and a brief summary is provided in Section 3.1 below.

The BRA investigation program is being conducted in accordance with the requirements of the *Quality Assurance Project Plan Former Fort Ord, California, Volume I Appendix B Soil Sampling, Basewide Range Assessment* (Soil Sampling QAPP; KEMRON, 2016), and the *Draft Final Basewide Range Assessment Work Plan and Contractor Quality Control Plan Small Arms and Multi-Use Ranges Former Fort Ord, California* (BRAWP; Harding ESE/IT, 2001). Note that while BLM Area B is not located within Site 39, the guidance established for Site 39 was used for this site evaluation:

- The BRAWP (Harding ESE/IT, 2001) describes the specific data collection methods, evaluation processes, and decision criteria to be used for determination of site status regarding potentially contaminated soil; that is, where the soil sampling will be conducted, if necessary, and why.

- The Soil Sampling QAPP (KEMRON, 2016) establishes the plan to evaluate the potential presence of COCs; that is, how the soil sampling will be conducted and the samples analyzed.

The objective of the BRA investigation is to evaluate whether the COCs specified in the *Final Record of Decision Amendment Site 39 Inland Ranges Former Fort Ord, California* [Site 39 ROD Amendment; United States Department of the Army (Army), 2009], which include antimony; copper; lead; and the explosive compounds 2,4,6-trinitrotoluene (TNT); hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX); and octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX) are present in soil in areas that were not previously accessible due to dense vegetation at concentrations requiring additional characterization and/or remediation to meet established standards for protection of human health and the environment. Previous evaluations at Fort Ord have indicated that lead is the most commonly encountered metal COC and elevated concentrations of antimony and copper are only found in the presence of elevated lead. Therefore, lead is used at Fort Ord as the indicator compound for elevated concentrations of metals COCs.

This Site Evaluation (1) presents a summary of the known historical uses in BLM Area B, (2) provides a summary of previous site evaluations performed in BLM Area B that served as input to the BRA program, (3) discusses the results of the site-specific reconnaissance conducted in BLM Area B in support of the BRA investigation program, (4) relates historical and recent work to evaluation criteria established in applicable work plans and decision documents, (5) and provides conclusions and recommendations related to the status of potential COCs in soil within BLM Area B.

2.0 Site Background

The former Fort Ord is located near Monterey Bay in northwestern Monterey County, California, approximately 80 miles south of San Francisco (Figure 1). The former Army base consists of approximately 28,000 acres of land next to Monterey Bay and the cities of Seaside, Sand City, Monterey, and Del Rey Oaks to the south and Marina to the north.

BLM Area B comprises 1,597 acres in the central portion of the former Fort Ord, adjacent to the northern border of the Impact Area, that includes several Historical Areas (HAs), munitions response sites (MRSs), and areas located in-between identified MRSs (Figure 1). The Army transferred the majority of the property within BLM Area B to the BLM in 1996 as a habitat reserve. The remainder of BLM Area B is planned for future transfer to BLM. In 2012, current and future BLM lands at the former Fort Ord, including BLM Area B, were designated as the Fort Ord National Monument. BLM has identified recreational access (non-motorized) on established routes to be an important component of the current and future uses of the Fort Ord public lands managed by BLM. The areas included in BLM Area B are currently open to public access for recreation use of established trails and roads. These uses have been supported safely with past and current measures, including munitions responses and public explosives safety information and education.

Based on historical training uses and the quality, types, and depths of previous munitions responses conducted in the respective areas, BLM Area B was subdivided into eight sub-areas with uses including small arms, rifle and smoke grenades, and mortars. Military training ended prior to the official base closure in September 1994. The sub-areas B-1, B-2, B-2A, B-3, B-3A, B-4, B-5, and B-6 are shown on Figure 2.

As a result of the munitions response comprehensive evaluation of BLM Area B, the *Final Record of Decision Track 2 Bureau of Land Management Area B and Munitions Response Site 16 Former Fort Ord, California* (Track 2 ROD; Army, 2017) identified land use controls (LUCs) as the preferred remedial alternative BLM Area B sub-areas B-1, B-2, B-3A, B-4, B-5, B-6. The selected remedy for BLM Area B sub-areas B-2A and B-3 includes:

- Vegetation clearance using prescribed burning, or manual and/or mechanical cutting depending on vegetation type and removal requirements, to provide access to conduct munitions and explosives of concern (MEC) remediation;
- Technology-aided surface MEC removal and detonation (with engineering controls) of MEC identified;
- Digital geophysical mapping (DGM) in surface removal areas to provide a record of remaining anomalies to assist BLM in planning future ground-intrusive (subsurface) activities. Areas inaccessible to DGM equipment will be documented;
- Subsurface MEC remediation in selected areas to address specific reuse and risk, identified in coordination with BLM (assumes 10 percent of acreage);
- Implementation of LUCs; and
- Post-remediation habitat monitoring [habitat management plan (HMP) species and habitat data collection, management, evaluation, and reporting].

Sub-Areas B-2A and B-3 were further subdivided into Remedial Work Areas (RWAs) where the MEC remedial action was conducted. Sub-Area B-2A corresponds to Unit B-2A and Sub-Area B-3 was divided into Units A, B, B-3E, B-3W, and C (Figure 3). Note that the grid pattern on Figure 2 and Figure 3 indicates the surface MEC removal grids within BLM Area B that were established to aid in the MEC remedial action.

Unit B-3E was further subdivided into Unit B-3E and Unit B-3E-NE upon the initiation of the selected remedy to expedite the documentation approval process and re-open the area to recreational use. B-3E-NE consists of approximately 25 acres located in the eastern portion of RWA B-3E. It was evaluated during the BRA site reconnaissance as part of Unit B-3E and is included in discussions of Unit B-3E throughout this document.

2.1 Former Range Uses

The types of training identified within BLM Area B sub-areas B-2A and B-3 include artillery training, general maneuvers training, bivouac training, booby-trap training, practice land mine

training, hand grenade training, rifle grenade training, rocket training (shoulder-launched projectile training), and mortar training.

Historical uses of the MRSs or HAs that lie within or overlap sub-area B-2A and sub-area B-3 are summarized in Sections 2.1.1 and 2.1.2 as well as on Table 1. Detailed background information regarding former use is presented in the *Final, Revision 2, Track 2 Remedial Investigation/Feasibility Study, BLM Area B and MRS-16, Former Fort Ord, California* (Track 2 RI/FS; Gilbane, 2015) and the CBRAR (Shaw, 2012).

2.1.1 Sub-Area B-2A

Sub-Area B-2A/RWA Unit B-2A, which is approximately 74 acres, includes a portion of MRS-10B (HA-99), MRS-19 (HA-121), and MRS-48 (HA-178) (Table 1, Figure 4).

MRS-10B (HA-99) (Elliot Hill Region) – a combat range was identified on the western portion of this site in a 1945 training map, and a drop zone is shown in the northwest corner of the site in a 1956 training map. A Vietnam Village was identified in the northwest corner (northeast of the former drop zone) and Machine Gun Flats was identified in the central portion of this site on a 1972 training map. Soldiers were reportedly seen firing shoulder-launched projectiles and rifle grenades toward cliff faces and in canyons at the site in the 1940s and 1950s (Gilbane, 2015; Shaw, 2012).

MRS-19 (HA-121) – MRS-19 was identified as a Rifle Grenade Range. There also is evidence that this site may have been used for flame field expedient (FFE) or fougas training (Gilbane, 2015; Shaw, 2012).

MRS-48 (HA-178) – the site was identified on a 1945 Fort Ord Master Plan as a "Dummy Grenade Range" and is adjacent to a grenade training site, MRS-11, which is located next to MRS-48, east of the Area B boundary (Gilbane, 2015; Shaw, 2012).

2.1.2 Sub-Area B-3

Sub-Area B-3, which is approximately 718 acres, includes RWA Units A, B, B-3E, B-3W, and C. Unit A includes MRS-41 (HA-171), a portion of MRS-54 (HA-184H), a portion of MRS-56 (HA-186), and a portion of MRS-58 (HA-188). Unit B comprises MRS-09 (HA-97), a portion of MRS-58 (HA-188), and HA-201. No MRSs or HAs are present within Unit B-3E. Unit B-3W is comprised of MRS-27G (HA-139) and 27H (HA-140), and a portion MRS-53 (HA-183H). Unit C includes a portion of MRS-54 (HA-184H). Please refer to Table 1 and Figure 4 for a synopsis of these historical areas.

2.1.2.1 Unit A

MRS-41 (HA-171) – a one-acre site located completely within the boundaries of MRS-58 in the central portion of the former Fort Ord. MRS-41 was identified as a powder magazine within Combat Range 3, as shown on a Training Facilities Map (Gilbane, 2015; Shaw, 2012).

MRS-54 (HA-184H) – was identified based on interviews conducted with Mr. Fred Stephani, the former Fort Ord Fire Chief. According to Mr. Stephani, the southernmost canyon was used for flame-throwers and was a range for hand grenades, rifle grenades, shoulder-launched projectiles, and artillery. The target area was to the east into the canyon. Targets were set up in the canyon, and munitions were fired across Watkins Gate Road which cuts north-south through the center of the BLM Area B portion of MRS-54. Mr. Stephani indicated that the northernmost canyon included a firing point and range for hand grenades, rifle grenades, shoulder-launched projectiles, and artillery. He also stated, “that the Fort Ord Fire Department had discovered artillery rounds in the canyon” (Gilbane, 2015; Shaw, 2012).

MRS-56 (HA-186) (Hayrake Area) – the site was identified based on interviews with Mr. Stephani who indicated that this site was a used as a target area from the 1940s through the 1960s for machine guns, M-1 rifle grenades, smoke grenades, and shoulder-launched projectiles. The firing direction was to the southeast from behind the "hayrake" (a piece of farming equipment) (Gilbane, 2015; Shaw, 2012).

MRS-58 (HA-188) – this area included firing points and probably target areas for rockets according to interviews with Mr. Stephani. Rifle grenades and shoulder-launched projectiles were fired from the east from foxholes along Watkins Gate Road. Mr. Stephani also identified firing points, direction of fire, and target areas for rifle grenades. This use reportedly occurred in the 1940s and 1950s. Bivouac areas G and H are identified on the 1954 and 1958 Fort Ord training maps. The same vicinity is identified as "Engineer Field Training" on a 1972 Army training map (Gilbane, 2015; Shaw, 2012).

2.1.2.2 Unit B

MRS-09 (HA-97) – The site was identified as a practice mine and booby trap training area and close-combat course. On a 1945 training map, the MRS-09 area is identified as "Close Combat Course." On the same map, the area falls within "Combat Range 2." On the 1956, 1957, and 1958 Fort Ord training maps, the site is identified as "Mine and Booby Trap Area 2." On a 1967 training map, Range 50 is seen in the site vicinity. A 1964 map indicates that Range 50 may have been used as a munitions disposal area (Gilbane, 2015; Shaw, 2012).

MRS-58 (HA-188) – this area included firing points and probably target areas for rockets according to interviews with Mr. Stephani. Rifle grenades and shoulder-launched projectiles were fired from the east from foxholes along Watkins Gate Road. Mr. Stephani also identified firing points, direction of fire, and target areas for rifle grenades. This use reportedly occurred in the 1940s and 1950s. Bivouac areas G and H are identified on the 1954 and 1958 Fort Ord training maps. The same vicinity is identified as "Engineer Field Training" on a 1972 Army training map (Gilbane, 2015; Shaw, 2012).

HA-201 – is a Close Combat Range that was identified on a 1945 training map, but does not appear on subsequent training maps. No training features are evident on a 1949 aerial photograph (Shaw, 2012).

2.1.2.3 Unit B-3E

There is no evidence of historical former range use within this unit. There are no known MRSs or HAs.

2.1.2.4 Unit B-3W

MRSs 27G (HA-139) and 27H (HA-140) – MRS-27G (Training Site 7) was identified on a 1961 training and facilities map and the 1967 Back Country Roads map as Bivouac Area E. 1976 and 1987 ranges and training maps identified the site as Training Site 7. MRS-27H was identified as Training Site 8. These areas were used for general training and bivouacking (Gilbane, 2015; Shaw, 2012).

MRS-53 (HA-183H) – reportedly was used as a rifle grenade and shoulder-launched projectile firing range. Interviews with former Fort Ord personnel indicate that the hill west of MRS-53 was a target area for rifle grenades and ground/tube-launched projectiles in the 1940s, 1950s, and 1960s. The hill reportedly was hit by rifle grenades and shoulder-launched projectiles from the southeast. These interviews revealed that the main target was a tank hull at the intersection of two unpaved roads west of the BLM Area B boundary (Gilbane, 2015; Shaw, 2012).

2.1.2.5 Unit C

MRS-54 (HA-184H) – was identified based on interviews conducted with Mr. Fred Stephani, the former Fort Ord Fire Chief. According to Mr. Stephani, the southernmost canyon was used for flame-throwers and was a range for hand grenades, rifle grenades, shoulder-launched projectiles, and artillery. The target area was to the east into the canyon. Targets were set up in the canyon and munitions were fired across Watkins Gate Road which cuts north-south through the center of the BLM Area B portion of MRS-54. Mr. Stephani indicated that the northernmost canyon included a firing point and range for hand grenades, rifle grenades, shoulder-launched projectiles, and artillery. He also stated, “that the Fort Ord Fire Department had discovered artillery rounds in the canyon” (Gilbane, 2015; Shaw, 2012).

2.2 Remedial Investigation/Feasibility Study

The Track 2 RI/FS (Shaw, 2012) was prepared in 2015 to provide a comprehensive evaluation of BLM Area B and MRS-16 regarding potential MEC risks consistent with the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) process. The primary objectives of this evaluation were: (1) to describe the site conditions and the results of

the site evaluation, and to determine whether the existing data can be used to complete an Risk Assessment (RA); (2) if the data were useable, to complete the RA; and (3) if actionable potential risk was identified based on the RA, to evaluate remedial alternatives in an FS. The completion of the CERCLA process was also intended to support transfer of the portion of BLM Area B and MRS-16 that has not yet been transferred.

Previous munitions investigations included sampling and site walks. Table 2 lists the MEC items recovered during these previous sampling and removal activities in BLM Area B sub-areas B-2A and B-3. Further detail regarding previous MEC sampling and removal activities in BLM Area B are included in the Track 2 RI/FS (Shaw, 2012) and shown on Figure 5.

3.0 Site Work

Data from MEC removal actions were reviewed and combined with other historical data to identify former site uses and indicate areas of potential lead and explosive compound contamination in soil. MEC and munitions debris (MD) removal data – such as munitions types, locations, and densities – generated during removal operations were used to supplement sampling recommendations as described in Section 6.2. A summary of investigations/removals performed in Units A, B, B-2A, B-3E, B-3W, and C in BLM Area B is presented in the following subsections.

3.1 Previous Basewide Range Assessment

Previous investigations of the ranges that lie within or overlap sub-areas B-2A and B-3 were performed as part of the BRA program that was established to identify the locations and historical uses of former ranges at Fort Ord and to provide the framework for the range evaluation process (Shaw, 2012). The CBRAR (Shaw, 2012) summarizes previously completed BRA investigations, site status determinations, and recommendations regarding sites where investigation was still planned or in progress at the time of publication. Previous evaluations of the historical ranges associated with BLM Area B sub-areas B-2A and B-3 are briefly summarized in Sections 3.2.1 and 3.2.2. Table 2 lists the MEC items recovered during these previous evaluations. Table 3 provides the analytical results of soil sampling conducted in these

areas and Figures 6A through 6D depict the locations of the soil samples and analytical results. To coincide with current BRA standards, discussion in this document is limited to Site 39 ROD Amendment (Army, 2009) COCs and their associated protectiveness thresholds (225 milligrams per kilogram [mg/kg] for lead, 2.7 mg/kg for HMX, 3.1 mg/kg for RDX, and 5.9 mg/kg for TNT). Further detail regarding previous BRA activities in BLM Area B are included in the CBRAR (Shaw, 2012).

3.1.1 Sub-Area B2A

Sub-Area B-2A/RWA Unit B-2A includes a portion of MRS-10B (HA-99), MRS-19 (HA-121), and MRS-48 (HA-178) (Table 1, Figure 4).

MRS-10B (HA-99) (Elliot Hill Region) – Site reconnaissance was conducted in August 2001. This site was sampled in July 2002 to evaluate areas where military munitions items were identified. Soil sampling was completed as part of the historical BRA evaluation. Laboratory sample analyses included evaluation for the presence of explosive compounds based on the military munitions identified at the site and features mapped during reconnaissance, but none were detected in any of the samples. No live small arms were identified; therefore, analysis for metals was not required.

Based on the analytical results, no additional sampling and no further BRA investigation was recommended (Shaw, 2012).

MRS-19 (HA-121) – Site reconnaissance was conducted in August 2001. Soil sampling was completed in July 2002 as part of the historical BRA evaluation. Samples were analyzed by a laboratory for explosives based on features identified during reconnaissance. No live small arms were identified; therefore, analysis for metals was not required. Based on the analytical results, no additional sampling and no further BRA investigation was recommended (Shaw, 2012).

MRS-48 (HA-178) – HA-178 was identified prior to the BRA investigation in the munitions response program. Soil sampling for explosive compounds was completed in February 2003 as part of the historical BRA evaluation. No live small arms were identified; therefore, analysis for

metals was not required. Because no explosive compounds were detected during sampling at the site, no further BRA investigation was recommended (Shaw, 2012).

3.1.2 Sub-Area B-3

Sub-Area B-3 includes RWA Units A, B, B-3E, B-3W, and C. Unit A includes MRS-41 (HA-171), a portion of MRS-54 (HA-184H), a portion of MRS-56 (HA-186), and a portion of MRS-58 (HA-188). Unit B comprises MRS-09 (HA-97), a portion of MRS-58 (HA-188), and HA-201. No MRSs or HAs are present within Unit B-3E. Unit B-3W is comprised of MRS-27G (HA-139) and 27H (HA-140), and a portion MRS-53 (HA-183H). Unit C includes a portion of MRS-54 (HA-184H). Please refer to Table 1 and Figure 4 for a synopsis of these historical areas (Shaw, 2012).

3.1.2.1 Unit A

MRS-41 (HA-171) – this site lies within HA-188 and was evaluated as part of that site (Shaw, 2012). Discussion of HA-188 is provided under Unit B below.

MRS-54 (HA-184H) – No target areas or areas of significant accumulations of military munitions were identified during the site reconnaissance in September 2001; therefore, sampling for explosives and metals was not conducted as part of the historical BRA evaluation. No further BRA investigation was recommended at this site (Shaw, 2012).

MRS-56 (HA-186) (Hayrake Area) – No evidence of military munitions-related items was identified during the site reconnaissance in October 2001; therefore, sampling for explosives and metals was not conducted as part of the historical BRA evaluation. Because no evidence of military munitions use or target areas was identified, no further BRA investigation was recommended. It should be noted that access to the middle of the site was limited to roads due to very dense vegetation (Shaw, 2012).

MRS-58 (HA-188) – Site reconnaissance was conducted in December 2001. Soil sampling was completed in January 2003 and laboratory analysis was conducted as part of the historical BRA evaluation to investigate an area containing greater-than-10-percent bullets, two locations where

40 millimeter (mm) practice projectiles were encountered, and the vicinity of foxholes. Soil samples were analyzed for metals and explosives. Sample analytical results indicated the presence of explosive compounds at unusually similar concentrations at various locations throughout the site. In order to confirm the questionable results, the locations were re-sampled and the samples analyzed for explosive compounds. No explosive compounds were detected in the second sample set. Lead was detected well below 225mg/kg. No further BRA investigation was recommended for this site (Shaw, 2012).

3.1.2.2 Unit B

MRS-09 (HA-97) – Site reconnaissance was conducted in December 2001. Soil sampling was completed in January 2003 and laboratory analysis was conducted as part of the historical BRA evaluation to investigate potential contamination associated with live small arms ammunition accumulations and previous activities. Selected samples were analyzed for lead to evaluate the small arms ammunition accumulation areas. Additional samples were analyzed for explosives, based on identification of the area as an explosive ordnance disposal (EOD) range. Sample analytical results indicated the presence of explosive compounds at unusually similar concentrations at various locations throughout the site. In order to confirm the questionable results, the locations were re-sampled and the samples analyzed for explosive compounds. No explosive compounds were detected in the second sample set. Based on the non-detect results from explosives analyses and because lead was detected well below 225mg/kg, no further BRA investigation was recommended at this site. Note that access to the eastern portion of the site was limited due to thick vegetation (Shaw, 2012).

MRS-58 (HA-188) – Site reconnaissance was conducted in December 2001. Soil sampling was completed in January 2003 and laboratory analysis was conducted as part of the historical BRA evaluation to investigate an area containing greater-than-10-percent bullets, two locations where 40mm practice projectiles were encountered, and the vicinity of foxholes. Soil samples were analyzed for metals and explosives. Sample analytical results indicated the presence of explosive compounds at unusually similar concentrations at various locations throughout the site. In order to confirm the questionable results, the locations were re-sampled and the samples analyzed for explosive compounds. No explosive compounds were detected in the second sample set. Lead

was detected well below 225mg/kg. No further BRA investigation was recommended for this site (Shaw, 2012).

HA-201 – No evidence of small arms or military munitions-related items was identified during site walk performed by a UXO safety specialist in 1996 or during visits associated with reconnaissance at adjacent sites; therefore, sampling for explosives and metals was not conducted as part of the historical BRA evaluation. No further BRA investigation was recommended because the available data do not provide evidence that the site was used as a range (Shaw, 2012).

3.1.2.3 Unit B-3E

No HAs are known to have existed within this unit. Soil sampling was conducted in the eastern portion of Unit B-3E during site evaluation under the munitions response program. Four samples were collected in June 2011 and laboratory analysis for lead and explosives was conducted. No explosives were detected and lead was detected at less than 20 mg/kg.

3.1.2.4 Unit B-3W

MRS 27G (HA-139) – No evidence of small arms was identified during the site reconnaissance in November 2001. Additionally, military munitions-related items were not found in high enough densities to warrant sampling for explosives. Sampling for explosives and metals was not conducted as part of the historical BRA evaluation. No further BRA investigation was recommended at this site (Shaw, 2012).

MRS-27H (HA-140) – Because this area has the same basic footprint as HA-119, the two sites were combined, and the information on HA-140 is presented in that section of the CBRAR. HA-119 was identified prior to the BRA investigation in munitions response program. No samples were collected within the BLM Area B for the BRA investigation of HA-119.

MRS-53 (HA-183) – Site reconnaissance was conducted in October 2001. Sampling was completed in July 2002 and laboratory analysis for metals and explosives at this site was conducted as part of the historical BRA evaluation. One sample was located within BLM Area B

and was analyzed for explosives. Explosives were not detected in any of the HA-183 samples. Based on the analytical results, no further BRA investigation was recommended for HA-183 (Shaw, 2012).

3.1.2.5 Unit C

MRS-54 (HA-184H) – No target areas or areas of significant accumulations of military munitions were identified during the site reconnaissance in September 2001; therefore, sampling for explosives and metals was not recommended as part of the historical BRA evaluation. No further BRA investigation was recommended at this site (Shaw, 2012).

3.2 Munitions Removal Action in Support of the Track 2 Record of Decision

The Track 2 ROD (Army, 2017) identified the selected remedy for BLM Area B sub-areas B-2A and B-3 as follows:

- Vegetation clearance using prescribed burning or manual and/or mechanical cutting, depending on vegetation type and removal requirements, to provide access to conduct MEC remediation;
- Technology-aided surface MEC removal and detonation (with engineering controls) of MEC identified;
- DGM in surface removal areas to provide a record of remaining anomalies to assist BLM in planning future ground-intrusive (subsurface) activities. Areas inaccessible to DGM equipment will be documented;
- Subsurface MEC remediation in selected areas to address specific reuse and risk, identified in coordination with BLM (assumes 10 percent of acreage);
- Implementation of LUCs; and
- Post-remediation habitat monitoring (HMP species and habitat data collection, management, evaluation, and reporting).

The remedial action was initiated in May 2017 in accordance with *Final Site-Specific Work Plan Munitions and Explosives of Concern Remedial Action BLM Area B Former Fort Ord, California* (KEMRON, 2017). The general work flow for each RWA begins with initiating community outreach; conducting vegetation clearance; implementing technology-aided surface MEC removal; conducting DGM; and performing planned subsurface removal on trails within the RWAs.

Field efforts are still underway for all units within BLM Area B; therefore, MEC and MD removal information is subject to change in final reporting. Technical Memorandums (TM) detailing the munitions removal efforts for Units B-3E-NE, B-3E, B-3W, and C have been developed (KEMRON, 2018a; 2018b; 2019; and 2018c, respectively). The TMs for Units A, B-2A, and B are under development. A summary of the findings is provided in Sections 3.3.1 and 3.3.2. Table 4 and Figure 7 illustrate the types and locations of MEC identified as well as the relative density of MD encountered within site grids.

3.2.1 Sub-Area B-2A

A total of 13 MEC items were recovered within Sub-Area B-2A/RWA B-2A including trip flares, hand grenades, signals, and a 37mm projectile. There was 3,968 pounds of MD removed from 432 grids for an average of 9 pounds per grid. MD density ranged from 0 pounds per grid to 250 pounds per grid.

3.2.2 Sub-Area B-3

3.2.2.1 Unit A

A total of 34 MEC items were recovered within Unit A, including rifle grenades, trip flares, signals, and a 60mm projectile. There was 4,876 pounds of MD removed from 838 grids for an average of 6 pounds per grid. MD density ranged from 0 pounds per grid to 50 pounds per grid. Note that only the 200-foot perimeter of Unit A has been subject to removal activities thus far in preparation for the planned prescribed burn.

3.2.2.2 Unit B

A total of 171 MEC items were recovered within Unit B. This includes two caches – one had 63 items and the other had 35 – of discarded military munitions (DMM) consisting of practice hand grenade fuzes. Other MEC items included hand grenade fuzes, trip flares, signals, rifle grenades, smoke pots, rifle grenades, and projectiles (37mm, 40mm, 60mm, and 75mm). There was 11,018 pounds of MD removed from 1,250 grids for an average of 9 pounds per grid. MD density ranged from 0 pounds per grid to 110 pounds per grid.

3.2.2.3 Unit B-3E

A total of 34 MEC items were recovered within Unit B-3E, including trip flares, smoke grenades, signals, hand grenade fuzes, and projectiles (37mm and 75mm). There was 5,357 pounds of MD removed from 600 grids for an average of 9 pounds per grid. MD density ranged from 0 pounds per grid to 490 pounds per grid.

Small arms ammunition weight is included in the MD weight per grid. One remedial work grid (C4F3G6) exhibited a high MD weight due to the presence of approximately 450 pounds of 5.56mm small arms blanks. It is important to note that blank small arms ammunition does not contain any contaminants of concern.

3.2.2.4 Unit B-3W

A total of 37 MEC items were recovered within Unit B-3W, including hand grenade fuzes, trip flares, smoke grenades, signals, and projectiles (37mm, 40mm, and 60mm). There was 3,416 pounds of MD removed from 355 grids for an average of 10 pounds per grid. MD density ranged from 0 pounds per grid to 60 pounds per grid.

3.2.2.5 Unit C

A total of 6 MEC items were recovered within Unit C, including a trip flare, a simulator, and 37mm projectiles. There was 2,841 pounds of MD removed from 775 grids for an average of 4 pounds per grid. MD density ranged from 0 pounds per grid to 32 pounds per grid.

4.0 Site Reconnaissance Following MEC Removal

Site reconnaissance of Units A, B, B-2A, B-3E, B-3W, and C in BLM Area B was performed in accordance with BRA program protocols specified in the BRAWP (Harding ESE/IT, 2001) and the Soil Sampling QAPP (KEMRON, 2016) to evaluate site conditions in areas that were not previously accessible due to dense vegetation. Reconnaissance activities were conducted December 3, 2018 through December 6, 2018. Note that only part of Unit A was accessible for inspection during this reconnaissance as well due to only the perimeter vegetation be removed.

The BRA evaluation of Units A, B, B-2A, B-3E, B-3W, and C in BLM Area B included review of historical documentation – which incorporated interviews with Former Fort Ord Fire Chief Fred Stephani – regarding former site use, review of information regarding munitions use acquired during the MEC/MD removal actions, and detailed site reconnaissance to identify suspect site features and areas where elevated concentrations of COCs might be identified. The reconnaissance team followed a meandering path throughout the units to correlate existing data with observable site features and to identify additional indicators of potential elevated COCs, such as berms, targets, soil mounds, craters, potential firing locations, bullet accumulation areas, and other suspect physical characteristics. The meandering paths are depicted on Figure 8.

Resulting data was then integrated to identify suspect locations where elevated concentrations of COCs might be present and if sampling and analyses is appropriate. Conclusions regarding site conditions and site recommendations are described in Section 6.0 of this Site Evaluation.

Photographs of general site conditions and features are included in photologs for each unit at the end of this document. The intent of the photographs was to record identified features that were different from their surroundings and indicate military use. Physical features observed within these units included berms, bunkers, firing points, shallow pits, soil mounds, trenches, and wooden debris. As stated above, the analysis of these physical features is integrated with other data to indicate potentially suspect locations where elevated COCs may be present. Each feature was investigated during the BRA site reconnaissance for live small arms, metallic debris, and

other indicators that the surrounding soil could have been impacted by potential munitions contamination.

No significant accumulations of live small arms, bullet fragments, or other materials or physical features that typically indicate potentially elevated metals COCs were identified within Units A, B, B-2A, B-3E, B-3W, and C in BLM Area B during MEC removal actions or subsequent BRA site reconnaissance.

5.0 Decision Rules

BRA program-specific decision rules described in the BRAWP (Harding ESE/IT, 2001) for determining whether soil sampling should be performed, based on site conditions observed during site reconnaissance and evaluation of site data, includes the following.

- If the results of the site reconnaissance indicate the potential for COCs to be present, site investigation soil samples will be collected.
- If samples are collected and results indicate concentrations are at or below screening levels, no further investigation will be recommended.
- If samples are collected and results indicate concentrations above cleanup levels, the site will be recommended for further characterization.

6.0 Conclusions and Recommendations

Conclusions regarding former site use and current conditions in Units A, B, B-2A, B-3E, B-3W, and C in BLM Area B are based on the following:

- Review of historical site use maps and other available documentation.
- MEC and MD removal data such as munitions types, locations, and densities generated during removal operations.
- Identification of physical site features associated with range use such as targets, suspected targets, soil mounds, impact berms, craters, bullet accumulations, firing points, and other disturbed areas identified during the BRA site reconnaissance performed in 2018.

6.1 Conclusions

The review of historical documentation associated with the former MRSs and HAs that lie within or overlap Units A, B, B-2A, B-3E, B-3W, and C; the evaluation of the densities and types of MEC items identified during removal activities; and the BRA site reconnaissance do not indicate areas where elevated concentrations of COCs may potentially be present.

Abundant MD accumulations, target areas, and high densities of MEC were not observed. There was one anomalous high MD density grid; however, it was due to the presence of a cache of blank small arms ammunition which do not contain any COCs. The density of military munitions items across BLM Area B is much lower than in many other areas of the former Fort Ord. Results did not indicate the presence of explosives in soil in those areas where more dense concentrations of MEC were present.

Only a few bullets or bullet fragments were observed within Units A, B, B-2A, B-3E, B-3W, and C in BLM Area B by MEC removal technicians and BRA reconnaissance personnel, including areas within former range footprints. A cache of 450 pounds of blank small arms ammunitions was identified; however, blank small arms do not contain any COCs. There was a general lack of evidence that live small arms were used throughout these units.

Additionally, physical features typically associated with elevated concentrations of COCs, such as backstops, targets, craters, and potential live-fire firing locations, were not identified.

6.2 Recommendations

As the results of the site reconnaissance do not indicate the potential for COCs to be present, soil sampling and analyses for lead and explosives (HMX, RDX, and TNT) is not recommended in Units B, B-2A, B-3E, B-3W, and C in BLM Area B. As no samples need to be collected, no further investigation or characterization of these units is required. No further BRA investigation for Units B, B-2A, B-3E, B-3W, and C is recommended.

Unit A was not accessible to BRA site reconnaissance. Upon completion of munitions response activities, it is recommended to conduct the BRA site reconnaissance in the previously inaccessible area of Unit A.

7.0 References

Note: Numbers in brackets identify the corresponding Administrative Record reference ID.

Gilbane, 2015. *Final, Revision 2 Track 2 Munitions Response Remedial Investigation/Feasibility Study BLM Area B and MRS-16 Former Fort Ord, California.* [Administrative Record (AR)# OE-0802D]

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

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

KEMRON, 2017. *Final Site-Specific Work Plan Munitions and Explosives of Concern Remedial Action BLM Area B Former Fort Ord, California.* [AR# OE-0900B]

KEMRON, 2018a. *Bureau of Land Management Area B Unit B-3E-NE Munitions and Explosives of Concern Remedial Action Technical Memorandum Former Fort Ord, California, Revision A.* [AR# OE-0930]

KEMRON, 2018b. *Bureau of Land Management Area B Unit B-3E Munitions and Explosives of Concern Remedial Action Technical Memorandum Former Fort Ord, California.* [AR# OE-0936A]

KEMRON, 2018c. *Bureau of Land Management Area B Unit C Munitions and Explosives of Concern Remedial Action Technical Memorandum Former Fort Ord, California.* [AR# OE-0943]

KEMRON, 2019. *Bureau of Land Management Area B Unit B-3W Munitions and Explosives of Concern Remedial Action Technical Memorandum Former Fort Ord, California.* [AR# OE-0941A]

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

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

Army, 2017. *Final Record of Decision Track 2 Bureau of Land Management Area B and Munitions Response Site 16 Former Fort Ord, California*. [AR# OE-0897]

Tables

Table 1. Site Summary				
Unit	**Munitions Response Site**	**Historical Area**	**Name**	**BRA Recommendation**
A	MRS-41	HA-171	Powder Magazine in Combat Range 3	No further BRA action
	MRS-54	HA-184H	Canyon Target Area	No further BRA action
	MRS-56	HA-186	Hayrake Area	No further BRA action
	MRS-58	HA-188	Unnamed	No further BRA action
B	MRS-09	HA-97	MBA Training Area	No further BRA action
	MRS-58	HA-188	Unnamed	No further BRA action
	Not Applicable	HA-201	Close Combat Range	No further BRA action
B2A	MRS-10B	HA-99	Elliot Hill Region	No further BRA action
	MRS-19	HA-121	Rifle Grenade Range	No further BRA action
	MRS-48	HA-178	Former Dummy Grenade	No further BRA action
B3E	None	None	None	Not Applicable
B3W	MRS-27G	HA-139	Training Site 7	No further BRA action
	MRS-27H	HA-140	Training Site 8	No further BRA action
	MRS-53	HA-183H	Shoulder-Launched Projectile Area	No further BRA action
C	MRS-54	HA-184H	Canyon Target Area	No further BRA action

Recommendations/status designations in the Final Comprehensive Basewide Range Assessment Report (Shaw, 2012).

Table 2 MEC Items Previously Recovered and Range of Depths in and around BLM Area B Sub-Areas B-2A and B-3

Model Description	**Depth BGS** (in)	**MEC Type**	**Quantity**	**Location** (RWA)
Activator, mine, antitank, practice, M1	8	UXO	1	Buffer
Ash, Pyrotechnic	3	UXO	1	Buffer
Ash, Pyrotechnic	3	UXO	1	Buffer
Ash, Pyrotechnic	3	UXO	1	Buffer
Ash, Pyrotechnic	0	UXO	1	Buffer
Base, coupling, firing device	3	UXO	2	B
Cap, blasting, electric, M6	12	UXO	1	Buffer
Cap, blasting, electric, M6	0	UXO	1	Buffer
Cap, blasting, electric, M6	12	UXO	1	Buffer
Cap, blasting, non-electric, M7	48	UXO	1	Buffer
Cartridge, ignition, M2 series	6	DMM	1	Buffer
Charge, 0.25lbs, demolition, TNT	6	UXO	1	Buffer
Firing device, pressure, M1A1	12	UXO	1	Buffer
Firing device, pressure, M1A1	12	UXO	1	Buffer
Firing device, pull friction, M2	6	UXO	1	Buffer
Firing device, pull, M1	12	UXO	1	Buffer
Firing device, pull, M1	8	UXO	12	Buffer
Firing device, pull, M1	8	UXO	3	Buffer
Firing device, pull, M1	12	UXO	1	Buffer
Firing device, pull, M1	12	UXO	2	Buffer
Firing device, pull, M1	12	UXO	1	Buffer
Firing device, release, M5	12	UXO	2	Buffer
Firing device, release, M5	12	UXO	1	Buffer
Firing device, release, M5	12	UXO	1	Buffer
Flare, parachute, trip, M48	40	UXO	1	Buffer
Flare, surface, trip, M49 series	0	UXO	1	B
Flare, surface, trip, M49 series	1	UXO	1	B-2A
Flare, surface, trip, M49 series	48	UXO	1	Buffer
Flare, surface, trip, M49 series	2	UXO	1	Buffer
Flare, surface, trip, M49 series	2	UXO	1	Buffer
Flare, surface, trip, M49 series	6	UXO	1	Buffer
Flare, surface, trip, M49 series	4	UXO	1	Buffer
Flare, surface, trip, M49 series	0	UXO	1	Buffer
Flare, surface, trip, M49 series	2	UXO	1	Buffer
Flare, surface, trip, M49 series	12	UXO	1	Buffer
Flare, surface, trip, M49 series	12	UXO	1	Buffer
Flare, surface, trip, M49 series	0	UXO	1	Buffer
Flare, surface, trip, M49 series	1	UXO	1	Buffer
Flare, surface, trip, M49 series	21	UXO	1	Buffer
Flare, surface, trip, M49 series	2	UXO	1	Buffer
Flare, surface, trip, M49 series	0	UXO	1	Buffer
Flare, surface, trip, M49 series	0	UXO	1	Buffer
Fuze, grenade, hand, practice, M205 series	8	DMM	50	B
Fuze, grenade, hand, practice, M205 series	1	UXO	1	B-2A
Fuze, grenade, hand, practice, M205 series	2	DMM	1	Buffer
Fuze, grenade, hand, practice, M205 series	1	DMM	1	Buffer
Fuze, grenade, hand, practice, M205 series	1	DMM	1	Buffer
Fuze, grenade, hand, practice, M205 series	6	DMM	1	Buffer
Fuze, grenade, hand, practice, M205 series	3	DMM	1	Buffer
Fuze, grenade, hand, practice, M228	18	UXO	15	B-3E

Table 2 MEC Items Previously Recovered and Range of Depths in and around BLM Area B Sub-Areas B-2A and B-3

Fuze, grenade, hand, practice, M228	1	DMM	2	Buffer
Fuze, mine, antitank, practice, M604	1	UXO	1	Buffer
Fuze, projectile, point detonating, M8	3	UXO	1	Buffer
Grenade, hand, fragmentation, M67	0	UXO	1	Buffer
Grenade, hand, fragmentation, M67	6	UXO	1	Buffer
Grenade, hand, fragmentation, MK II	0	ISD	1	B-2A
Grenade, hand, fragmentation, MK II	0	UXO	1	B-2A
Grenade, hand, fragmentation, MK II	8	UXO	1	Buffer
Grenade, hand, fragmentation, MK II	12	UXO	1	Buffer
Grenade, hand, fragmentation, MK II	12	UXO	1	Buffer
Grenade, hand, fragmentation, MK II	10	UXO	1	Buffer
Grenade, hand, fragmentation, MK II	10	UXO	1	Buffer
Grenade, hand, fragmentation, MK II	10	UXO	1	Buffer
Grenade, hand, fragmentation, MK II	8	UXO	1	Buffer
Grenade, hand, fragmentation, MK II	6	UXO	1	Buffer
Grenade, hand, fragmentation, MK II	6	UXO	1	Buffer
Grenade, hand, fragmentation, MK II	8	UXO	1	Buffer
Grenade, hand, fragmentation, MK II	8	UXO	1	Buffer
Grenade, hand, fragmentation, MK II	4	UXO	1	Buffer
Grenade, hand, fragmentation, MK II	6	UXO	1	Buffer
Grenade, hand, fragmentation, MK II	10	UXO	1	Buffer
Grenade, hand, fragmentation, MK II	4	UXO	1	Buffer
Grenade, hand, Illumination, MK I	4	UXO	1	Buffer
Grenade, hand, Illumination, MK I	6	UXO	1	Buffer
Grenade, hand, practice, MK II	8	UXO	1	Buffer
Grenade, hand, practice, MK II	24	UXO	1	Buffer
Grenade, hand, practice, MK II	8	UXO	1	Buffer
Grenade, hand, practice, MK II	6	UXO	1	Buffer
Grenade, hand, practice, MK II	0	UXO	1	Buffer
Grenade, hand, riot, CS, M7A3	4	UXO	2	Buffer
Grenade, hand, riot, CS, M7A3	1	UXO	1	Buffer
Grenade, hand, riot, CS, M7A3	2	UXO	1	Buffer
Grenade, hand, riot, CS-1, ABC-M25A2	0	UXO	1	B
Grenade, hand, smoke, HC, AN-M8	3	UXO	1	Buffer
Grenade, hand, smoke, HC, AN-M8	6	UXO	1	Buffer
Grenade, hand, smoke, M18 series	6	UXO	1	Buffer
Grenade, hand, smoke, M18 series	4	UXO	1	Buffer
Grenade, hand, smoke, M18 series	3	UXO	1	Buffer
Grenade, hand, smoke, M18 series	4	DMM	1	Buffer
Grenade, Rifle (model unknown)	0	UXO	1	B-2A
Grenade, rifle, high explosive antitank, M28	20	UXO	1	Buffer
Grenade, rifle, smoke, M22 series	0	UXO	1	B-2A
Grenade, rifle, smoke, M22 series	4	UXO	1	Buffer
Igniter, time fuse, blasting, M60	12	UXO	1	Buffer
Mine, antipersonnel, practice, M8 series	0	DMM	1	B
Mine, antitank, practice, M10	24	UXO	1	Buffer
Ordnance Components	48	UXO	4	Buffer
Pot, 10lb, smoke, HC, screening, M1	5	ISD	1	B-2A
Pot, 2.5lb, smoke, HC, screening, M1	0	UXO	1	B
projectile, 3inch, stokes mortar, prac, MK I	8	UXO	1	Buffer
projectile, 3inch, stokes mortar, prac, MK I	6	UXO	1	Buffer
projectile, 3inch, stokes mortar, prac, MK I	8	UXO	1	Buffer

Table 2 MEC Items Previously Recovered and Range of Depths in and around BLM Area B Sub-Areas B-2A and B-3

projectile, 3inch, stokes mortar, prac, MK I	3	UXO	1	Buffer
projectile, 3inch, stokes mortar, prac, MK I	4	UXO	1	Buffer
projectile, 3inch, stokes mortar, prac, MK I	5	UXO	1	Buffer
projectile, 3inch, stokes mortar, prac, MK I	12	UXO	1	Buffer
projectile, 3inch, stokes mortar, prac, MK I	10	UXO	1	Buffer
projectile, 3inch, stokes mortar, prac, MK I	16	UXO	1	Buffer
projectile, 3inch, stokes mortar, prac, MK I	12	UXO	1	Buffer
projectile, 3inch, stokes mortar, prac, MK I	10	UXO	1	Buffer
projectile, 3inch, stokes mortar, prac, MK I	10	UXO	1	Buffer
projectile, 3inch, stokes mortar, prac, MK I	3	UXO	1	Buffer
projectile, 3inch, stokes mortar, prac, MK I	30	UXO	1	Buffer
projectile, 3inch, stokes mortar, prac, MK I	6	UXO	1	Buffer
projectile, 3inch, stokes mortar, prac, MK I	12	UXO	1	Buffer
projectile, 3inch, stokes mortar, prac, MK I	18	UXO	1	Buffer
projectile, 3inch, stokes mortar, prac, MK I	18	UXO	1	Buffer
projectile, 3inch, stokes mortar, prac, MK I	4	UXO	1	Buffer
projectile, 3inch, stokes mortar, prac, MK I	8	UXO	1	Buffer
projectile, 3inch, stokes mortar, prac, MK I	14	UXO	1	Buffer
Projectile, 20mm, high explosive incendiary, M56A3	0	ISD	1	Buffer
Projectile, 37mm, high explosive, MK II	6	UXO	1	Buffer
Projectile, 37mm, low explosive, MK I	1	UXO	1	B-3W
Projectile, 37mm, low explosive, MK I	5	UXO	1	Buffer
Projectile, 37mm, low explosive, MK I	4	UXO	1	Buffer
Projectile, 37mm, low explosive, MK I	3	UXO	1	Buffer
Projectile, 37mm, low explosive, MK I	4	UXO	1	Buffer
Projectile, 40mm, parachute, M583 series	24	UXO	1	Buffer
Projectile, 40mm, Practice, (model unknown)	0	UXO	1	Buffer
Projectile, 60mm, mortar, high explosive, M49 series	18	UXO	1	B
Projectile, 60mm, mortar, high explosive, M49 series	3	UXO	1	B-3E
Projectile, 60mm, mortar, high explosive, M49 series	6	UXO	1	Buffer
Projectile, 60mm, mortar, high explosive, M49 series	3	UXO	1	Buffer
Projectile, 60mm, mortar, high explosive, M49 series	4	UXO	1	Buffer
Projectile, 60mm, mortar, high explosive, M49 series	6	UXO	1	Buffer
Projectile, 60mm, mortar, high explosive, M49 series	6	UXO	1	Buffer
Projectile, 60mm, mortar, high explosive, M49 series	3	UXO	1	Buffer
Projectile, 60mm, mortar, high explosive, M49 series	10	UXO	1	Buffer
Projectile, 60mm, mortar, high explosive, M49 series	1	UXO	1	Buffer
Projectile, 60mm, mortar, high explosive, M49 series	12	UXO	1	Buffer
Projectile, 75mm, Shrapnel, MK I	8	UXO	1	Buffer
Projectile, 81mm, mortar, high explosive, M362	4	UXO	1	Buffer
Projectile, 81mm, mortar, high explosive, M43 series	12	UXO	1	Buffer
Projectile, 81mm, mortar, high explosive, M43 series	12	UXO	1	Buffer
Projectile, 81mm, mortar, high explosive, M43 series	12	UXO	1	Buffer
Projectile, 81mm, mortar, high explosive, M43 series	8	UXO	1	Buffer
Projectile, 81mm, mortar, high explosive, M43 series	12	UXO	1	Buffer
Projectile, 81mm, mortar, high explosive, M43 series	1	UXO	1	Buffer
Projectile, 81mm, mortar, high explosive, M43 series	5	UXO	1	Buffer
Projectile, 81mm, mortar, high explosive, M43 series	0	ISD	1	Buffer
Projectile, 81mm, mortar, high explosive, M43 series	0	ISD	1	Buffer
Projectile, 81mm, mortar, high explosive, M43 series	0	ISD	1	Buffer
Projectile, 81mm, mortar, practice, M43 series	27	UXO	1	B
Projectile, 81mm, mortar, practice, M43 series	13	UXO	1	Buffer

Table 2 MEC Items Previously Recovered and Range of Depths in and around BLM Area B Sub-Areas B-2A and B-3

Projectile, 81mm, mortar, practice, M43 series	12	UXO	1	Buffer
Projectile, 81mm, mortar, practice, M43 series	5	UXO	1	Buffer
Projectile, 81mm, mortar, practice, M43 series	8	UXO	1	Buffer
Projectile, 81mm, mortar, practice, M43 series	8	UXO	1	Buffer
Projectile, 81mm, mortar, practice, M43 series	12	UXO	1	Buffer
Projectile, 81mm, mortar, practice, M43 series	11	UXO	1	Buffer
Projectile, 81mm, mortar, practice, M43 series	12	UXO	1	Buffer
Projectile, 81mm, mortar, practice, M43 series	6	UXO	1	Buffer
Projectile, 81mm, mortar, training, M68	0	ISD	1	Buffer
PROJECTILES, 40MM (Model Unknown)*	0	ISD	2	Buffer
Rocket, 2.36inch, high explosive antitank, M6	4	UXO	1	A
Rocket, 2.36inch, high explosive antitank, M6	6	UXO	1	Buffer
Rocket, 2.36inch, high explosive antitank, M6	4	UXO	1	Buffer
Rocket, 2.36inch, high explosive antitank, M6	3	UXO	1	Buffer
Rocket, 2.36inch, high explosive antitank, M6	6	UXO	1	Buffer
Rocket, 2.36inch, high explosive antitank, M6	18	UXO	1	Buffer
Rocket, 2.36inch, high explosive antitank, M6	5	UXO	1	Buffer
Rocket, 2.36inch, high explosive antitank, M6	12	UXO	1	Buffer
Rocket, 2.36inch, high explosive antitank, M6	0	UXO	1	Buffer
Rocket, 2.36inch, high explosive antitank, M6	8	UXO	1	Buffer
Rocket, 2.36inch, high explosive antitank, M6	4	UXO	1	Buffer
Rocket, 2.36inch, high explosive antitank, M6	10	UXO	1	Buffer
Rocket, 2.36inch, high explosive antitank, M6	5	UXO	1	Buffer
Rocket, 35mm, subcaliber, practice, M73	0	UXO	1	Buffer
Rocket, 4.5inch, barrage, high explosive, MK III	8	UXO	1	Buffer
Rocket, 4.5inch, barrage, high explosive, MK III	8	UXO	1	Buffer
Rocket, 4.5inch, barrage, high explosive, MK III	9	UXO	1	Buffer
Signal, ground, rifle, parachute, M17 series	4	UXO	1	B-2A
Signal, ground, rifle, parachute, M17 series	3	DMM	1	Buffer
Signal, illumination, ground, M125 series	0	ISD	1	A
Signal, illumination, ground, M125 series	0	UXO	1	Buffer
Signal, illumination, ground, M126 series	0	UXO	1	B-2A
Signal, illumination, ground, M126 series	6	UXO	1	Buffer
Signal, illumination, ground, M126 series	12	UXO	1	Buffer
Signal, illumination, ground, M126 series	2	UXO	1	Buffer
Signal, illumination, ground, M126 series	11	UXO	3	Buffer
Signal, illumination, ground, parachute, M19 series	24	UXO	1	Buffer
Signal, illumination, ground, parachute, M19 series	6	UXO	1	Buffer
Signal, illumination, ground, parachute, M19 series	3	UXO	1	Buffer
Simulator, detonation, explosive, M80	3	UXO	1	Buffer
Simulator, detonation, explosive, M80	1	UXO	1	Buffer
Simulator, flash artillery, M110	0	ISD	1	B-3W
Simulator, launching, antitank guided missile and rocket, M22	48	UXO	1	Buffer
Simulator, projectile, airburst, M74 series	0	UXO	1	B
Simulator, projectile, airburst, M74 series	4	UXO	1	Buffer
Simulator, projectile, ground burst, M115A2	0	UXO	1	Buffer
Squib, electric	2	UXO	1	Buffer

Note: Buffer reference in Location column is 200 foot buffer around BLM Area B Sub Areas B-2A and B-3

Acronym List

MEC - Munitions and Explosives of Concern

UXO - Unexploded Ordnance

DMM - Discarded Military Munitions

RWA - Remedial Work Area

ISD - Insufficient Data

Table 3. Historical Soil Sampling Results

Sample Number	Sample Date	Sample Depth (ft)	Lead (mg/kg)	HMX (mg/kg)	RDX (mg/kg)	TNT (mg/kg)
BLMN-NandS-001	6/20/2011	0-0.5	12.6	ND (<0.40) U	ND (<0.40) U	ND (<0.40) U
BLMN-NandS-002	6/20/2011	0-0.5	9.62	ND (<0.40) U	ND (<0.40) U	ND (<0.40) U
BLMN-NandS-003	6/20/2011	0-0.5	7.42	ND (<0.40) U	ND (<0.40) U	ND (<0.40) U
BLMN-NandS-004	6/20/2011	0-0.5	20.1	ND (<0.40) U	ND (<0.40) U	ND (<0.40) U
HA97SI0001-1*	1/9/2003	0-0.5	1.7	1.4	**14.4**	**11**
HA97SI0001-2*	1/9/2003	1-1.5	--	1.5	**15.4**	**11.7**
HA97SI0001-3*	1/9/2003	2-2.5	--	1.4	**14.5**	**11.3**
HA97SI0002-1	1/9/2003	2-2.5	2.9	--	--	--
HA97SI0003-1	1/9/2003	2-2.5	2	--	--	--
HA97SI0004-1	1/9/2003	2-2.5	2.3	--	--	--
HA97SI0005-1*	1/9/2003	0-0.5	3.9	1.4	**15.5**	**11.9**
HA97SI0005-2*	1/9/2003	1-1.5	--	1.6	**16.7**	**12.8**
HA97SI0005-3*	1/9/2003	2-2.5	--	1.4	**14.9**	**11.6**
HA97SI0006-1*	1/9/2003	0-0.5	2.6	1.5	**15.4**	**12**
HA97SI0006-1 DUP*	1/9/2003	0-0.5	2.6	1.4	**14**	**10.8**
HA97SI0006-2*	1/9/2003	1-1.5	--	1.4	**14.6**	**11.3**
HA97SI0006-3*	1/9/2003	2-2.5	--	1.4	**14**	**10.8**
HA97SI0007-1*	1/9/2003	0-0.5	13	1.2	**12.8**	**9.93**
HA97SI0007-2*	1/9/2003	1-1.5	--	1.5	**15.7**	**12.3**
HA97SI0007-3*	1/9/2003	2-2.5	--	1.4	**15**	**11.3**
HA97SI0008-1*	1/9/2003	0-0.5	8.9	1.5	**15.8**	**12.3**
HA97SI0008-2*	1/9/2003	1-1.5	--	1.6	**15.9**	**12.6**
HA97SI0008-3*	1/9/2003	2-2.5	--	1.4	**14.4**	**11.4**
HA97SI0020-1	6/25/2003	0-0.5	--	ND (<0.20) U	ND (<0.20) U	ND (<0.20) U
HA97SI0020-2	6/25/2003	1-1.5	--	ND (<0.21) U	ND (<0.21) U	ND (<0.21) U
HA97SI0020-3	6/25/2003	2-2.5	--	ND (<0.21) U	ND (<0.21) U	ND (<0.21) U
HA97SI0021-1	6/25/2003	0-0.5	--	ND (<0.20) U	ND (<0.20) U	ND (<0.20) U
HA97SI0021-1 DUP	6/25/2003	0-0.5	--	ND (<0.20) U	ND (<0.20) U	ND (<0.20) U
HA97SI0021-2	6/25/2003	1-1.5	--	ND (<0.21) U	ND (<0.21) U	ND (<0.21) U
HA97SI0021-3	6/25/2003	2-2.5	--	ND (<0.21) U	ND (<0.21) U	ND (<0.21) U
HA97SI0022-1	6/25/2003	0-0.5	--	ND (<0.20) U	ND (<0.20) U	ND (<0.20) U
HA97SI0022-2	6/25/2003	1-1.5	--	ND (<0.20) U	ND (<0.20) U	ND (<0.20) U
HA97SI0022-3	6/25/2003	2-2.5	--	ND (<0.21) U	ND (<0.21) U	ND (<0.21) U
HA97SI0023-1	6/25/2003	0-0.5	--	ND (<0.20) U	ND (<0.20) U	ND (<0.20) U
HA97SI0023-1 DUP	6/25/2003	0-0.5	--	ND (<0.20) U	ND (<0.20) U	ND (<0.20) U
HA97SI0023-2	6/25/2003	1-1.5	--	ND (<0.21) U	ND (<0.21) U	ND (<0.21) U
HA97SI0023-3	6/25/2003	2-2.5	--	ND (<0.21) U	ND (<0.21) U	ND (<0.21) U
HA97SI0024-1	6/25/2003	0-0.5	--	ND (<0.20) U	ND (<0.20) U	ND (<0.20) U
HA97SI0024-2	6/25/2003	1-1.5	--	ND (<0.21) U	ND (<0.21) U	ND (<0.21) U
HA97SI0024-3	6/25/2003	2-2.5	--	ND (<0.21) U	ND (<0.21) U	ND (<0.21) U
HA99SI001-1E	7/22/2002	0-0.5	--	ND (<0.40) U	ND (<0.40) U	ND (<0.40) U
HA99SI002-1E	7/22/2002	0-0.5	--	ND (<0.40) U	ND (<0.40) U	ND (<0.40) U
HA121SI001-1E	7/9/2002	0-0.5	--	ND (<0.40) U	ND (<0.40) U	ND (<0.40) U
HA121SI001-1E DUP	7/9/2002	0-0.5	--	ND (<0.40) U	ND (<0.40) U	ND (<0.40) U
HA121SI002-1E	7/9/2002	0-0.5	--	ND (<0.40) U	ND (<0.40) U	ND (<0.40) U

Sample Number	Sample Date	Sample Depth (ft)	Lead (mg/kg)	HMX (mg/kg)	RDX (mg/kg)	TNT (mg/kg)
HA121SI003-1E	7/9/2002	0-0.5	--	ND (<0.40) U	ND (<0.40) U	ND (<0.40) U
HA121SI003-2E	7/9/2002	1-1.5	--	ND (<0.40) U	ND (<0.40) U	ND (<0.40) U
HA121SI003-2E DUP	7/9/2002	1-1.5	--	ND (<0.40) U	ND (<0.40) U	ND (<0.40) U
HA121SI003-3E	7/9/2002	2-2.5	--	ND (<0.40) U	ND (<0.40) U	ND (<0.40) U
HA121SI004-1E	7/9/2002	0-0.5	--	ND (<0.40) U	ND (<0.40) U	ND (<0.40) U
HA121SI005-1E	7/9/2002	0-0.5	--	ND (<0.40) U	ND (<0.40) U	ND (<0.40) U
HA121SI005-2E	7/9/2002	1-1.5	--	ND (<0.40) U	ND (<0.40) U	ND (<0.40) U
HA121SI005-3E	7/9/2002	2-2.5	--	ND (<0.40) U	ND (<0.40) U	ND (<0.40) U
HA121SI006-1E	7/9/2002	0-0.5	--	ND (<0.40) U	ND (<0.40) U	ND (<0.40) U
HA121SI007-1E	7/9/2002	0-0.5	--	ND (<0.40) U	ND (<0.40) U	ND (<0.40) U
HA121SI008-1E	7/9/2002	0-0.5	--	ND (<0.40) U	ND (<0.40) U	ND (<0.40) U
HA121SI009-1E	7/9/2002	0-0.5	--	ND (<0.40) U	ND (<0.40) U	ND (<0.40) U
HA121SI009-2E	7/9/2002	1-1.5	--	ND (<0.40) U	ND (<0.40) U	ND (<0.40) U
HA121SI009-3E	7/9/2002	2-2.5	--	ND (<0.40) U	ND (<0.40) U	ND (<0.40) U
HA121SI009-3E DUP	7/9/2002	2-2.5	--	ND (<0.40) U	ND (<0.40) U	ND (<0.40) U
H178HSC0001-1	2/11/2003	0-0.5	--	ND (<0.22) U	ND (<0.22) U	ND(<0.22) U
H178HSC0001-1 DUP	2/11/2003	0-0.5	--	ND (<0.23) U	ND (<0.23) U	ND(<0.23) U
H178HSC0001-2	2/11/2003	1-1.5	--	ND (<0.22) U	ND (<0.22) U	ND(<0.22) U
H178HSC0002-1	2/11/2003	0-0.5	--	ND (<0.28) U	ND (<0.28) U	ND(<0.28) U
H178HSC0002-2	2/11/2003	1-1.5	--	ND (<0.21) U	ND (<0.21) U	ND (<0.21) U
H178HSC0003-1	2/11/2003	0-0.5	--	ND (<0.24) U	ND (<0.24) U	ND (<0.24) U
H178HSC0003-2	2/11/2003	1-1.5	--	ND (<0.23) U	ND (<0.23) U	ND(<0.23) U
H178HSC0004-1	2/11/2003	0-0.5	--	ND (<0.24) U	ND (<0.24) U	ND (<0.24) U
H178HSC0004-2	2/11/2003	1-1.5	--	ND (<0.24) U	ND (<0.24) U	ND (<0.24) U
H178HSC0005-1	2/11/2003	0-0.5	--	ND (<0.22) U	ND (<0.22) U	ND(<0.22) U
H178HSC0005-2	2/11/2003	1-1.5	--	ND (<0.22) U	ND (<0.22) U	ND(<0.22) U
H178HSC0006-1	2/11/2003	0-0.5	--	ND (<0.26) U	ND (<0.26) U	ND (<0.26) U
H178HSC0006-2	2/11/2003	1-1.5	--	ND (<0.22) U	ND (<0.22) U	ND(<0.22) U
H178HSC0007-1	2/11/2003	0-0.5	--	ND (<0.23) U	ND (<0.23) U	ND(<0.23) U
H178HSC0007-2	2/11/2003	1-1.5	--	ND (<0.22) U	ND (<0.22) U	ND(<0.22) U
H178HSC0008-1	2/11/2003	0-0.5	--	ND (<0.23) U	ND (<0.23) U	ND(<0.23) U
H178HSC0008-2	2/11/2003	1-1.5	--	ND (<0.23) U	ND (<0.23) U	ND(<0.23) U
HA188SI0001-1*	1/9/2003	0-0.5	14	ND (<0.23) U	**14.1**	**10.8**
HA188SI0001-1 DUP*	1/9/2003	0-0.5	17	1.4	**14.1**	**11**
HA188SI0002-1*	1/9/2003	0-0.5	4.5	1.3 J	**13**	**9.97**
HA188SI0003-1*	1/9/2003	0-0.5	5.1	1.3	**14.1**	**11.1**
HA188SI0003-2*	1/9/2003	1-1.5	--	1.5	**16.2**	**12.6**
HA188SI0003-3*	1/9/2003	2-2.5	--	1.4	**14.6**	**11.4**
HA188SI0004-1*	1/9/2003	0-0.5	3.2	1.4	**14.6**	**11.4**
HA188SI0004-2*	1/9/2003	1-1.5	--	1.5	**15.7**	**11.9**
HA188SI0004-3*	1/9/2003	2-2.5	--	1.6	**16.8**	**12.5**
HA188SI0005-1*	1/9/2003	0-0.5	6.8	1.3	**14.5**	**11.1**
HA188SI0006-1	1/9/2003	0-0.5	19	--	--	--
HA188SI0007-1	1/9/2003	0-0.5	3.4	--	--	--
HA188SI0008-1	1/9/2003	0-0.5	3.8	--	--	--
HA188SI0008-1 DUP	1/9/2003	0-0.5	4.2	--	--	--

Sample Number	Sample Date	Sample Depth (ft)	Lead (mg/kg)	HMX (mg/kg)	RDX (mg/kg)	TNT (mg/kg)
HA188SI0030-1	6/26/2003	0-0.5	--	ND (<0.27) U	ND (<0.27) U	ND (<0.27) U
HA188SI0030-1 DUP	6/26/2003	0-0.5	--	ND (<0.20) U	ND (<0.20) U	ND (<0.20) U
HA188SI0030-2	6/26/2003	1-1.5	--	ND (<0.21) U	ND (<0.21) U	ND (<0.21) U
HA188SI0030-3	6/26/2003	2-2.5	--	ND (<0.21) U	ND (<0.21) U	ND (<0.21) U
HA188SI0031-1	6/26/2003	0-0.5	--	ND (<0.20) U	ND (<0.20) U	ND (<0.20) U
HA188SI0031-1 DUP	6/26/2003	2-2.5	--	ND (<0.27) U	ND (<0.27) U	ND (<0.27) U
HA188SI0031-2	6/26/2003	1-1.5	--	ND (<0.21) U	ND (<0.21) U	ND (<0.21) U
HA188SI0031-3	6/26/2003	2-2.5	--	ND (<0.21) U	ND (<0.21) U	ND (<0.21) U
HA188SI0032-1	6/26/2003	0-0.5	--	ND (<0.20) U	ND (<0.20) U	ND (<0.20) U
HA188SI0032-2	6/26/2003	1-1.5	--	ND (<0.23) U	ND (<0.23) U	ND(<0.23) U
HA188SI0032-3	6/26/2003	2-2.5	--	ND (<0.22) U	ND (<0.22) U	ND(<0.22) U
HA188SI0033-1	6/26/2003	0-0.5	--	ND (<0.21) U	ND (<0.21) U	ND (<0.21) U
HA188SI0033-2	6/26/2003	1-1.5	--	ND (<0.21) U	ND (<0.21) U	ND (<0.21) U
HA188SI0033-3	6/26/2003	2-2.5	--	ND (<0.21) U	ND (<0.21) U	ND (<0.21) U
HA188SI0034-1	6/26/2003	0-0.5	--	ND (<0.20) U	ND (<0.20) U	ND (<0.20) U
HA188SI0034-2	6/26/2003	1-1.5	--	ND (<0.28) U	ND (<0.28) U	ND (<0.28) U
HA188SI0034-3	6/26/2003	2-2.5	--	ND (<0.21) U	ND (<0.21) U	ND (<0.21) U

Notes:

mg/kg = milligrams per kilogram

HMX = Cyclotetramethylene tetranitramine

RDX = Cyclotrimethylene trinitramine

TNT = 2,4,6-Trinitrotoluene

ND (<1.0) = Not detected at the reporting limit indicated in parenthesis

-- = Not tested

J = Data are qualified as estimated. It is not possible to asess the direction of the potential bias. False positives or false negatives are unlikely to have been reported.

U = Compound was analyzed for but not detected

* = Sample analytical results indicated the presence of explosive compounds at unusually similar concentrations at various locations throughout the site. In order to confirm the questionable results, the locations were re-sampled and the samples analyzed for explosive compounds. No explosive compounds were detected in the second sample set.

Table 4. MEC Items Recovered for ROD Remedial Action

Model Description	Quantity	MEC Type	Grid ID	Location		Depth (in)
				Easting	Northing	
Signal, illumination, ground, M131	1	UXO	B3J4G8	5749285.00	2121650.00	0
Signal, illumination, ground, M131	1	UXO	B3J4G8	5749285.00	2121650.00	0
Fuze, grenade, hand, M204 series	1	DMM	B3J5A0	5750413.00	2121075.00	0
Fuze, grenade, hand, M204 series	1	DMM	B3J5A0	5750420.00	2121075.00	0
Fuze, grenade, hand, M204 series	1	DMM	B3J5A7	5750160.00	2121091.00	0
Fuze, grenade, hand, M204 series	1	DMM	B3J5A7	5750140.00	2121098.00	0
Fuze, grenade, hand, M204 series	1	DMM	B3J5A7	5750125.00	2121087.00	0
Fuze, grenade, hand, M204 series	1	DMM	B3J5A8	5750280.00	2121088.00	0
Fuze, grenade, hand, M204 series	1	DMM	B3J5A9	5750320.00	2121088.00	0
Fuze, grenade, hand, M204 series	1	DMM	B3J5B7	5750165.00	2121105.00	0
Fuze, grenade, hand, M204 series	1	DMM	B3J5B8	5750212.00	2121105.00	0
Fuze, grenade, hand, M204 series	1	DMM	B3J5B8	5750215.00	2121115.00	0
Fuze, grenade, hand, M204 series	1	DMM	B3J5B8	5750245.00	2121120.00	0
Fuze, grenade, hand, M204 series	1	DMM	B3J5B9	5750335.00	2121105.00	0
Fuze, grenade, hand, M204 series	1	DMM	B3J5B9	5750345.00	2121110.00	0
Fuze, grenade, hand, M204 series	1	DMM	B3J5C0	5750485.00	2121246.00	0
Fuze, grenade, hand, M204 series	1	DMM	B3J5D8	5750240.00	2121305.00	0
Cartridge, grenade, auxiliary, M7	1	UXO	B3J6A1	5750505.00	2121062.00	0
Cartridge, grenade, auxiliary, M7	1	UXO	B3J6A1	5750505.00	2121062.00	0
Cartridge, grenade, auxiliary, M7	1	UXO	B3J6A1	5750505.00	2121062.00	0
Cartridge, grenade, auxiliary, M7	1	UXO	B3J6A1	5750505.00	2121062.00	0
Cartridge, grenade, auxiliary, M7	1	UXO	B3J6A1	5750505.00	2121062.00	0
Cartridge, grenade, auxiliary, M7	1	UXO	B3J6A1	5750505.00	2121062.00	0
Cartridge, grenade, auxiliary, M7	1	UXO	B3J6A1	5750505.00	2121062.00	0
Cartridge, grenade, auxiliary, M7	1	UXO	B3J6A1	5750505.00	2121062.00	0
Cartridge, grenade, auxiliary, M7	1	UXO	B3J6A1	5750505.00	2121062.00	0
Cartridge, grenade, auxiliary, M7	1	UXO	B3J6A1	5750505.00	2121062.00	0
Grenade, hand, fragmentation, M26 series	1	UXO	B3J6A2	5750602.00	2121030.00	0
Fuze, grenade, hand, M206 series	1	DMM	B3J6A4	5750840.00	2121060.00	0
Grenade, hand, fragmentation, M26 series	1	UXO	B3J6A4	5750845.00	2121030.00	0
Grenade, hand, fragmentation, M26 series	1	UXO	B3J6A6	5751060.00	2121090.00	0
Cartridge, 40mm, practice, M781	1	DMM	B3WB06	5744940.00	2123432.00	2
Fuze, projectile, base detonating, practice, M38 w/o booster	1	UXO	B3WB08	5745082.00	2123562.00	8
Flare, surface, trip, M49 series	1	UXO	B3WB10	5745255.00	2123656.00	10
Rocket, 2.36inch, high explosive antitank, M6 Series	1	UXO	BLM4	5752443.00	2125847.50	4
Fuze, grenade, hand, practice, M205 series	1	DMM	C2A0F0	5745405.00	2122590.00	0
Fuze, grenade, hand, practice, M228	1	DMM	C2A0G0	5745420.00	2122685.00	0
Fuze, grenade, hand, practice, M228	1	DMM	C2A0I0	5745425.00	2122810.00	0
Fuze, grenade, hand, practice, M228	1	DMM	C2A0J0	5745485.00	2122990.00	0
Fuze, grenade, hand, practice, M228	1	DMM	C2A0J0	5745480.00	2122980.00	0
Signal, illumination, ground, white star cluster, M18A1	1	DMM	C2B0D9	5745330.00	2123375.00	0
Projectile, 37mm, low explosive, MK I	1	UXO	C2B0E0	5745445.00	2123450.00	0
Cartridge, 40mm, practice, M781	1	DMM	C2B0F5	5744945.00	2123530.00	0
Projectile, 37mm, low explosive, MK I	1	UXO	C2B0F6	5745050.00	2123540.00	0
Projectile, 37mm, low explosive, MK I	1	UXO	C2B0F7	5745120.00	2123505.00	0
Projectile, 60mm, mortar, high explosive, M49 series	1	UXO	C2B0G8	5745230.00	2123645.00	0
Projectile, 60mm, mortar, high explosive, M49 series	1	UXO	C2B0H8	5745290.00	2123712.00	0
Flare, surface, trip, M49 series	1	UXO	C3A1F5	5745940.00	2122520.00	0
Flare, surface, trip, M49 series	1	UXO	C3A1G5	5745915.00	2122635.00	0
Fuze, grenade, hand, practice, M228	1	DMM	C3A1G6	5746035.00	2122635.00	0
Grenade, hand, riot, CS, M7A3	1	UXO	C3A1H6	5746050.00	2122775.00	0
Fuze, grenade, hand, practice, M205 series	1	DMM	C3A1I3	5745720.00	2122880.00	0
Flare, surface, trip, M49 series	1	UXO	C3A1J7	5746115.00	2122905.00	0
Grenade, rifle, antitank, M9 series	1	UXO	C3A4D0	5749455.00	2122350.00	0
Flare, surface, trip, M49 series	1	UXO	C3A4J9	5749365.00	2122950.00	0
Flare, surface, trip, M49 series	1	DMM	C3A5E5	5749920.00	2122445.00	0

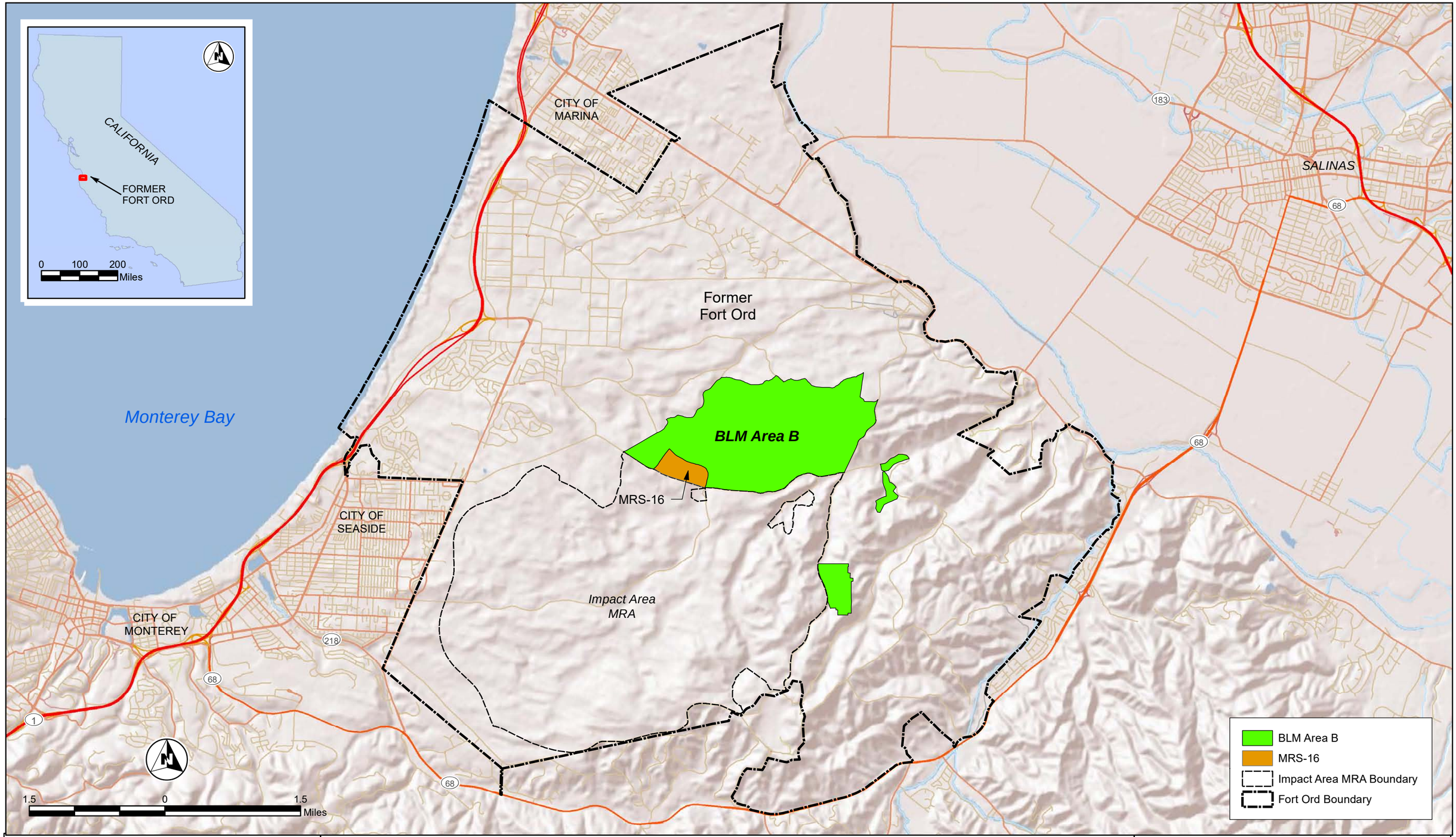
Model Description	Quantity	MEC Type	Grid ID	Location		Depth (in)
				Easting	Northing	
Projectile, 75mm, shrapnel, MK I	1	UXO	C3A5J7	5750125.00	2122945.00	0
Fuze, grenade, hand, practice, M228	1	DMM	C3B1A7	5746190.00	2123025.00	0
Flare, surface, trip, M49 series	1	DMM	C3B1B6	5746022.00	2123180.00	0
Flare, surface, trip, M49 series	1	UXO	C3B1C2	5745635.00	2123205.00	0
Flare, surface, trip, M49 series	1	UXO	C3B1C5	5745920.00	2123250.00	0
Projectile, 37mm, low explosive, MK II	1	UXO	C3B1C8	5746241.00	2123285.00	0
Fuze, grenade, hand, M206 series	1	DMM	C3B1F3	5745715.00	2123565.00	0
Flare, surface, trip, M49 series	1	DMM	C3B1G6	5746040.00	2123640.00	0
Grenade, rifle, smoke, M23 series	7	DMM	C3B1H9	5746365.00	2123745.00	0
Projectile, 37mm, low explosive, MK I	1	UXO	C3B2E2	5746625.00	2123475.00	0
Projectile, 37mm, low explosive, MK I	1	UXO	C3B2E3	5746705.00	2123480.00	0
Projectile, 37mm, low explosive, MK I	1	UXO	C3B2F2	5746610.00	2123575.00	0
Signal, illumination, ground, parachute, M19 series	1	UXO	C3B4A0	5749460.00	2123025.00	0
Mine, antipersonnel, practice, M8 series	1	UXO	C3B5D8	5750250.00	2123380.00	0
Projectile, 75mm, shrapnel, MK I	1	UXO	C3B5F0	5750420.00	2123550.00	0
Grenade, rifle, M19	1	UXO	C3B5H3	5749725.00	2123775.00	0
Grenade, rifle, M19	1	UXO	C3B5H3	5749760.00	2123770.00	0
Grenade, rifle, M19	1	UXO	C3B5H3	5749750.00	2123750.00	0
Grenade, rifle, M19	1	UXO	C3B5I2	5749680.00	2123820.00	0
Grenade, rifle, M19	1	UXO	C3B5I3	5749725.00	2123875.00	0
Grenade, rifle, M19	1	UXO	C3B5I3	5749765.00	2123865.00	0
Grenade, rifle, M19	1	UXO	C3B5I3	5749725.00	2123825.00	0
Grenade, rifle, M19	1	UXO	C3B5I3	5749775.00	2123885.00	0
Grenade, rifle, M19	1	UXO	C3B5I5	5749945.00	2123830.00	0
Signal, illumination, ground, M52A1	1	UXO	C3B5J3	5749765.00	2123975.00	0
Signal, illumination, ground, M52A1	1	UXO	C3B5J3	5749755.00	2123965.00	0
Signal, illumination, ground, white star cluster, M18A1	1	UXO	C3B6A3	5750740.00	2123060.00	0
Projectile, 60mm, mortar, high explosive, M49 series	1	UXO	C3B6B0	5751430.00	2123165.00	0
Flare, surface, trip, M49 series	1	UXO	C3B6B5	5750910.00	2123165.00	0
Projectile, 40mm, high explosive dual-purpose, M433	1	UXO	C3B6C2	5750620.00	2123270.00	0
Flare, surface, trip, M49 series	1	UXO	C3B6E2	5750665.00	2123420.00	0
Projectile, 40mm, high explosive tracer, MK II series	1	DMM	C3B6F9	5751350.00	2123560.00	0
Grenade, rifle, M19	1	UXO	C3B7I7	5752165.00	2123880.00	0
Projectile, 75mm, shrapnel, MK I	1	UXO	C3B7J4	5751860.00	2123920.00	0
Projectile, 60mm, mortar, high explosive, M49 series	1	UXO	C3B7J6	5752076.00	2123910.00	0
Signal, illumination, ground, M125 series	1	UXO	C3C1A3	5745750.00	2124025.00	0
Projectile, 37mm, low explosive, MK I	1	UXO	C3C1B5	5745925.00	2124125.00	0
Projectile, 37mm, low explosive, MK I	1	UXO	C3C2E0	5747464.00	2124452.00	0
Projectile, 37mm, low explosive, MK I	1	UXO	C3C3A7	5748152.00	2124052.00	0
Simulator, projectile, airburst, M74 series	1	UXO	C3C3B1	5747570.00	2124130.00	0
Projectile, 37mm, low explosive, MK I	1	UXO	C3C3E2	5747612.00	2124410.00	0
Projectile, 37mm, low explosive, MK I	1	UXO	C3C4H5	5748920.00	2124770.00	0
Grenade, rifle, M19	1	UXO	C3C5A0	5750445.00	2124030.00	0
Simulator, flash artillery, M110	1	UXO	C3C5E2	5749665.00	2124445.00	0
Signal, illumination, ground, parachute, M19 series	1	UXO	C3C6B6	5751040.00	2124195.00	0
Projectile, 75mm, shrapnel, MK I	1	UXO	C3C6C0	5751422.00	2124264.00	0
Flare, surface, trip, M49 series	1	UXO	C3C6C7	5751140.00	2124265.00	0
Grenade, rifle, smoke, white phosphorous, M19A1	1	UXO	C3C7A5	5751940.00	2124075.00	0
Signal, illumination, ground, M21A1	1	DMM	C3C7B3	5751727.00	2124155.00	0
Projectile, 60mm, mortar, high explosive, M49 series	1	UXO	C3C7B4	5751860.00	2124125.00	0
Flare, surface, trip, M49 series	1	UXO	C3C7D4	5751872.00	2124325.00	0
Pot, 10lb, smoke, HC, screening, M1	12	DMM	C3C7E3	5751760.00	2124430.00	0
Flare, surface, trip, M49 series	1	UXO	C3C7E4	5751850.00	2124470.00	0
Flare, surface, trip, M49 series	1	UXO	C3C7F1	5751555.00	2124510.00	0
Simulator, projectile, airburst, M74 series	1	UXO	C3C7F3	5751727.00	2124512.00	0
Projectile, 60mm, mortar, high explosive, M49 series	1	UXO	C3C7I4	5751865.00	2124855.00	0
Projectile, 60mm, mortar, high explosive, M49 series	1	UXO	C3C7J3	5751750.00	2124912.00	0

Model Description	Quantity	MEC Type	Grid ID	Location		Depth (in)
				Easting	Northing	
Projectile, 60mm, mortar, high explosive, M49 series	1	UXO	C3C8C3	5752720.00	2124285.00	0
Grenade, hand, smoke, M18 series	1	DMM	C3D0I7	5755165.00	2125815.00	0
Signal, illumination, ground, parachute, M19 series	1	UXO	C3D0J8	5755285.00	2125915.00	0
Grenade, rifle, M19	1	UXO	C3D6C6	5751025.00	2125210.00	0
Projectile, 37mm, low explosive, MK I	1	UXO	C3D7A7	5752185.00	2125060.00	0
Fuze, grenade, hand, practice, M205 series	35	DMM	C3D7C6	5752045.00	2125270.00	0
Fuze, grenade, hand, practice, M205 series	63	DMM	C3D7C6	5752045.00	2125270.00	0
Projectile, 37mm, low explosive, MK I	1	UXO	C3D7D9	5752375.00	2125390.00	0
Grenade, rifle, M19	1	UXO	C3D8E4	5752830.00	2125425.00	0
Grenade, hand, smoke, M18 series	1	UXO	C3D8G5	5752910.00	2125655.00	0
Fuze, grenade, hand, practice, M205 series	1	DMM	C3D8G7	5753145.00	2125635.00	0
Fuze, grenade, hand, practice, M205 series	1	DMM	C3D8G7	5753130.00	2125645.00	0
Grenade, hand, smoke, M18 series	1	UXO	C3D9I9	5754345.00	2125860.00	0
Projectile, 37mm, low explosive, MK I	1	UXO	C3E0C8	5755245.00	2126210.00	0
Mine, antitank, practice, M20	1	UXO	C3E0H3	5754745.00	2126710.00	0
Flare, surface, trip, M49 series	1	UXO	C3E4A5	5748995.00	2126020.00	0
Flare, surface, trip, M49 series	1	DMM	C3E9F6	5754040.00	2126590.00	0
Flare, surface, trip, M49 series	1	UXO	C4C4H2	5758645.00	2124735.00	0
Fuze, grenade, hand, practice, M228	1	DMM	C4C4I1	5758590.00	2124815.00	0
projo, 4.2inch, screening, smoke, FS, M2 series*	1	UXO	C4C4J1	5758526.20	2124918.67	8
Projectile, 37mm, low explosive, MK I	1	UXO	C4D2F4	5756825.00	2125575.00	0
Flare, surface, trip, M49 series	1	DMM	C4D2F8	5757225.00	2125510.00	0
Fuze, grenade, hand, M204 series	1	DMM	C4D2I2	5756663.00	2125890.00	0
Projectile, 37mm, low explosive, MK II	1	UXO	C4D2I8	5757248.00	2125805.00	0
Grenade, hand, fragmentation, MK II	1	UXO	C4D2J8	5757215.00	2125944.00	0
projo, 4.2inch, screening, smoke, FS, M2 series*	1	UXO	C4D3A0	5758401.96	2125032.89	16
Signal, illumination, ground, M131	1	UXO	C4D3E0	5758410.00	2125418.00	0
Projectile, 37mm, low explosive, MK I	1	UXO	C4D3H0	5758445.00	2125795.00	0
Grenade, hand, riot, CS, M7A3	1	UXO	C4D3I6	5758030.00	2125856.00	0
Signal, ground, rifle, parachute, M17 series	1	UXO	C4D3J2	5757626.00	2125940.00	0
Grenade, rifle, smoke, M22 series	1	UXO	C4D3J8	5758240.00	2125925.00	0
Flare, surface, trip, M49 series	1	DMM	C4D4A1	5758575.00	2125050.00	0
Flare, surface, trip, M49 series	1	UXO	C4D4A1	5758545.00	2125025.00	0
projo, 4.2inch, screening, smoke, FS, M2 series*	1	UXO	C4D4C2	5758605.00	2125295.00	0
Flare, surface, trip, M49 series	1	UXO	C4D4I2	5758650.00	2125850.00	0
Flare, surface, trip, M49 series	1	UXO	C4D4I2	5758610.00	2125807.00	0
Grenade, hand, fragmentation, MK II	1	UXO	C4D4J2	5758607.00	2125992.00	0
Flare, surface, trip, M49 series	1	UXO	C4E1A0	5756412.00	2126045.00	0
Fuze, grenade, hand, practice, M228	1	DMM	C4E1B0	5756445.00	2126112.00	0
Signal, illumination, ground, white star cluster, M18A1	1	DMM	C4E1C7	5756170.00	2126290.00	0
Signal, illumination, ground, white star cluster, M18A1	1	UXO	C4E1C7	5756165.00	2126265.00	0
Signal, illumination, ground, M125 series	1	DMM	C4E1D2	5755690.00	2126348.00	0
Projectile, 37mm, low explosive, MK I	1	UXO	C4E1F2	5755620.00	2126585.00	0
Grenade, hand, smoke, M18 series	1	UXO	C4E1F4	5755842.00	2126510.00	0
Fuze, grenade, hand, M204 series	1	DMM	C4E1F7	5756141.00	2126546.00	0
Projectile, 37mm, low explosive, MK I	1	UXO	C4E1F8	5756212.00	2126565.00	0
Fuze, grenade, hand, M204 series	1	DMM	C4E1I8	5756245.00	2126810.00	0
Signal, illumination, ground, M125 series	1	UXO	C4E1J5	5755995.00	2126990.00	0
Projectile, 75mm, shrapnel, MK I	1	UXO	C4E2B2	5756612.00	2126108.00	0
Projectile, 37mm, low explosive, MK I	1	UXO	C4E2B5	5756980.00	2126195.00	0
Projectile, 37mm, low explosive, MK I	1	UXO	C4E2C8	5757252.00	2126275.00	0
Projectile, 37mm, low explosive, MK I	1	UXO	C4E2D0	5757470.00	2126375.00	0
Pot, 10lb, smoke, HC, screening, M1	1	UXO	C4E2G0	5757460.00	2126609.00	0
Charge, 0.25lbs, demolition, TNT	1	UXO	C4E3B6	5758015.00	2126180.00	0
Grenade, hand, smoke, white phosphorous, M15	1	UXO	C4E3B6	5758020.00	2126185.00	0
Grenade, hand, smoke, white phosphorous, M15	1	DMM	C4E3C5	5757920.00	2126275.00	0
Grenade, hand, smoke, white phosphorous, M15	1	UXO	C4E3C8	5758225.00	2126280.00	0

Model Description	Quantity	MEC Type	Grid ID	Location		Depth (in)
				Easting	Northing	
Flare, surface, trip, M49 series	1	DMM	C4E3D4	5757845.00	2126395.00	0
Grenade, rifle, M19	1	UXO	C4E3E2	5757630.00	2126415.00	0
Projectile, 37mm, low explosive, MK I	1	UXO	C4F3A1	5757590.00	2127085.00	0
Projectile, 37mm, low explosive, MK I	1	UXO	C4F3B1	5757560.00	2127175.00	0
Simulator, flash artillery, M110	1	ISD	LC3-MA01-SH07	5746165.75	2122750.18	0
Flare, surface, trip, M49 series	1	UXO	LC3-MA06	5750996.52	2122721.50	0
Projectile, 37mm, low explosive, MK I	1	UXO	LC3-MB01-SJ04	5745845.00	2123940.00	1
Pot, 2.5lb, smoke, HC, screening, M1	1	UXO	LC3-MB07	5752395.54	2123507.26	0
Simulator, projectile, airburst, M74 series	1	UXO	LC3-MB08	5752560.15	2123595.65	0
Grenade, hand, riot, CS-1, ABC-M25A2	1	UXO	LC3-MC06	5751461.28	2124022.42	0
Mine, antipersonnel, practice, M8 series	1	DMM	LC3-MC06-SA06	5750963.00	2123953.00	0
Projectile, 60mm, mortar, high explosive, M49 series	1	UXO	LC3-MC07-SB02	5751635.00	2124155.00	18
Projectile, 81mm, mortar, practice, M43 series	1	UXO	LC3-MC07-SB02	5751655.00	2124195.00	27
Base, coupling, firing device	2	UXO	LC3-MC07-SD03	5751705.00	2124310.00	3
Fuze, grenade, hand, practice, M205 series	50	DMM	LC3-MC07-SD03	5751705.00	2124315.00	8
Signal, illumination, ground, M125 series	1	ISD	LC3-MD08-SD09	5753310.00	2125385.00	0
Projectile, 60mm, mortar, high explosive, M49 series	1	UXO	LC3-MD10-SG03	5754775.00	2125640.00	3
Grenade, hand, fragmentation, MK II	1	ISD	LC4-MC03-SG03	5757702.58	2124674.83	0
Flare, surface, trip, M49 series	1	UXO	LC4-MC03-SG07	5758107.00	2124690.00	1
Fuze, grenade, hand, practice, M228	15	UXO	LC4-MD01-SJ10	5756485.00	2125985.00	18
Grenade, rifle, smoke, M22 series	1	UXO	LC4-MD03-SI05	5757965.00	2125834.00	0
Signal, illumination, ground, M126 series	1	UXO	LC4-MD03-SI05	5757965.00	2125829.00	0
Pot, 10lb, smoke, HC, screening, M1	1	ISD	LC4-MD03-SI07	5758115.00	2125830.00	5
Fuze, grenade, hand, practice, M205 series	1	UXO	LC4-MD04-SB04	5758880.00	2125110.00	1
Signal, ground, rifle, parachute, M17 series	1	UXO	LC4-MD04-SB04	5758810.00	2125115.00	4
Grenade, hand, fragmentation, MK II	1	UXO	MRS-10B_F10	5757365.50	2125317.96	0
Grenade, rifle (model unknown)	1	UXO	MRS-19	5757365.50	2125317.96	0
Flare, surface, trip, M49 series	1	UXO	Pond41	5750089.34	2124985.06	1
Signal, illumination, ground, M125 series	1	UXO	Pond41	5750148.80	2125163.76	11
Projectile, 40mm, high explosive, M406	1	DMM	Pond60	5757001.43	2126811.34	4
Flare, surface, trip, M49 series	1	UXO	TR65-16	5745972.34	2122940.39	7
Flare, surface, trip, M49 series	1	UXO	TR65-16	5745941.73	2122930.43	4
Flare, surface, trip, M49 series	1	UXO	TR65-20	5746049.06	2123204.06	10
Flare, surface, trip, M49 series	1	UXO	TR65-21	5746151.99	2123205.63	20

Note: This table is not final as fieldwork is still underway.

Figures



Site Evaluation Results and Basewide Range Assessment Investigation for Units A, B, B-2A, B-3E, B-3W, and C in BLM Area B
Former Fort Ord, California

Figure 1

Regional Location Map
BLM Area B

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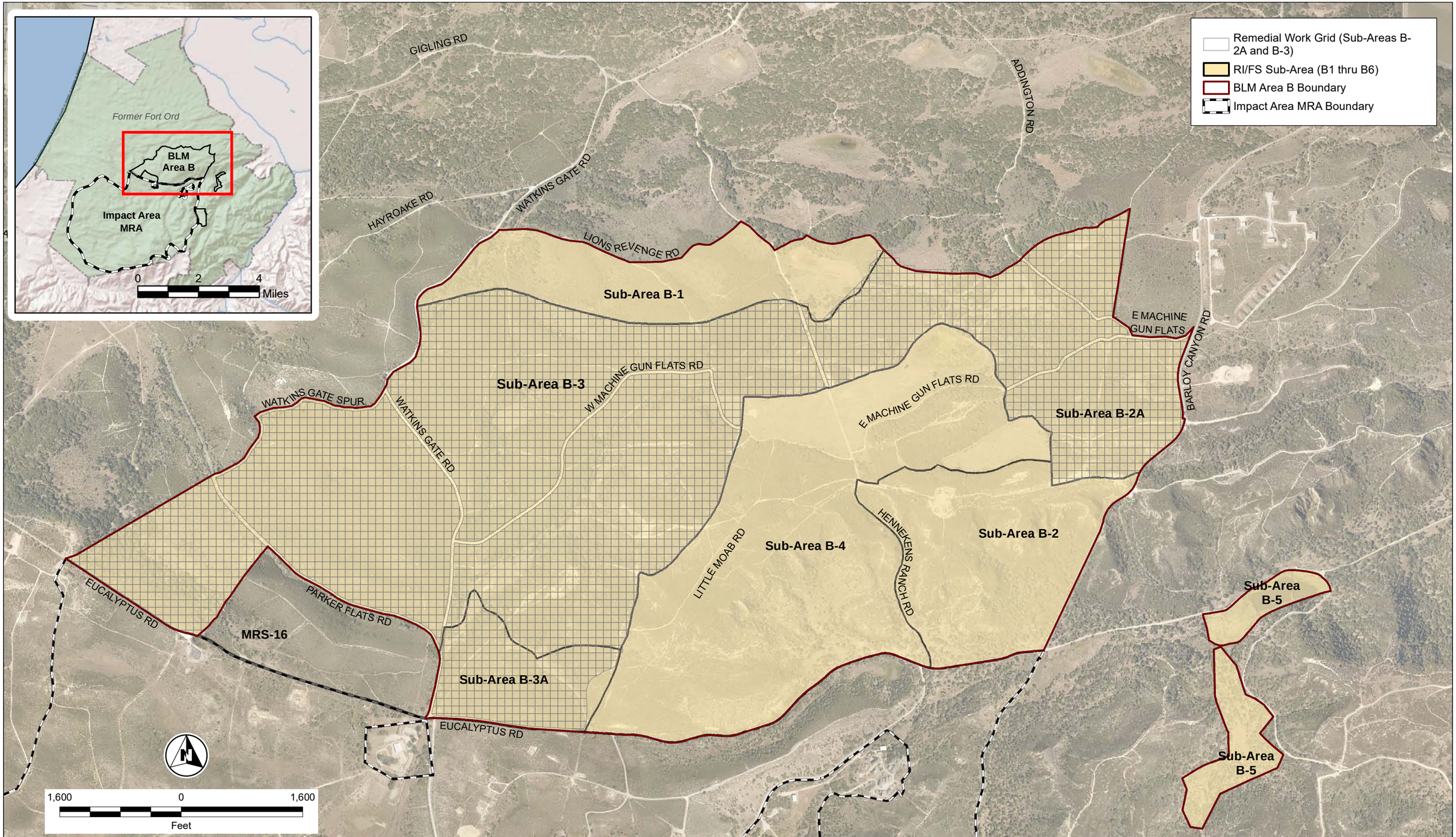

Site Evaluation Results and Basewide Range Assessment Investigation for Units A, B, B-2A, B-3E, B-3W, and C in BLM Area B
Former Fort Ord, California

Figure 2
BLM Area B RI/FS Sub-Areas

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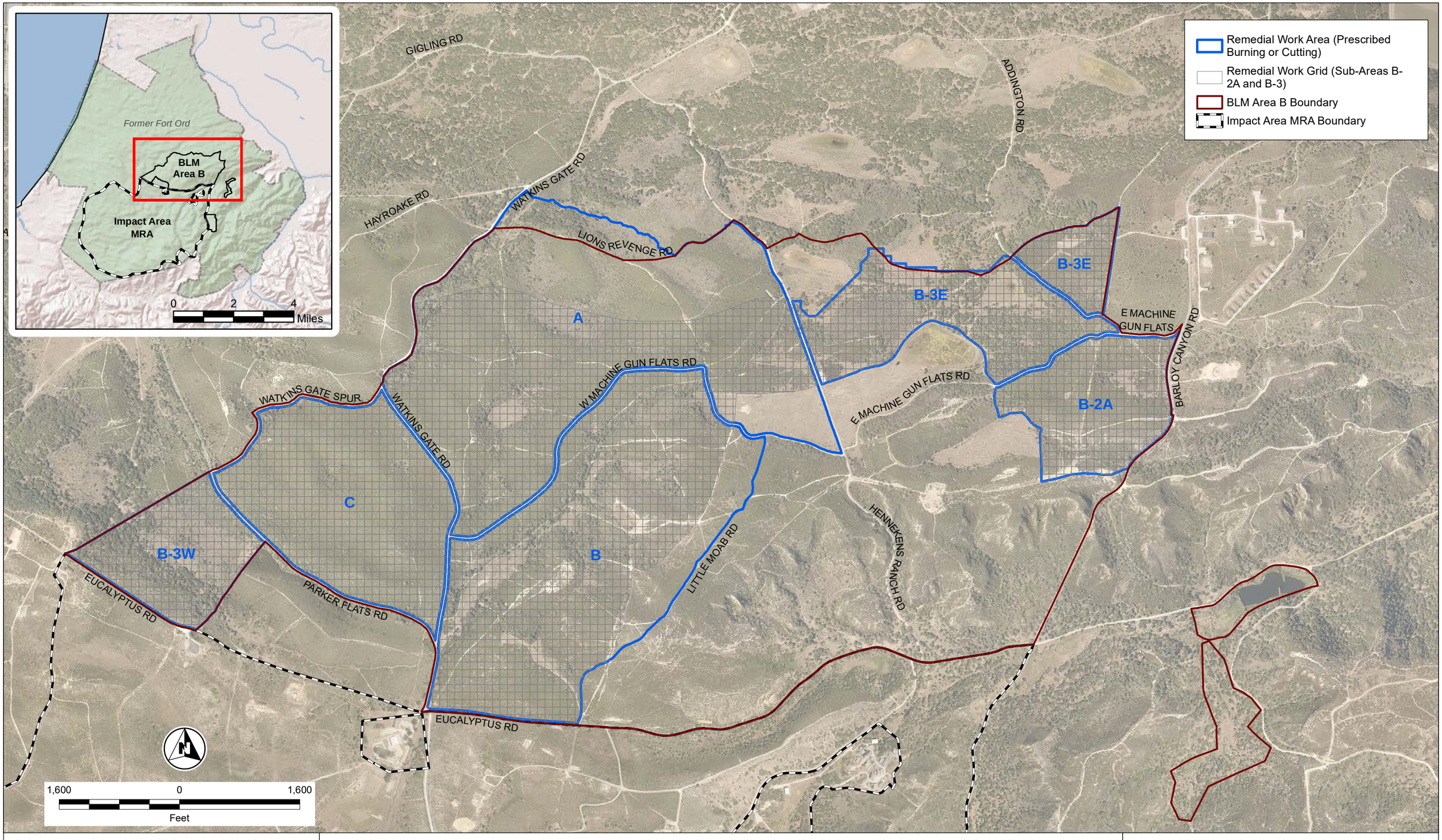

Site Evaluation Results and Basewide Range Assessment Investigation for Units A, B, B-2A, B-3E, B-3W, and C in BLM Area B
Former Fort Ord, California

Figure 3
BLM Area B Work Areas

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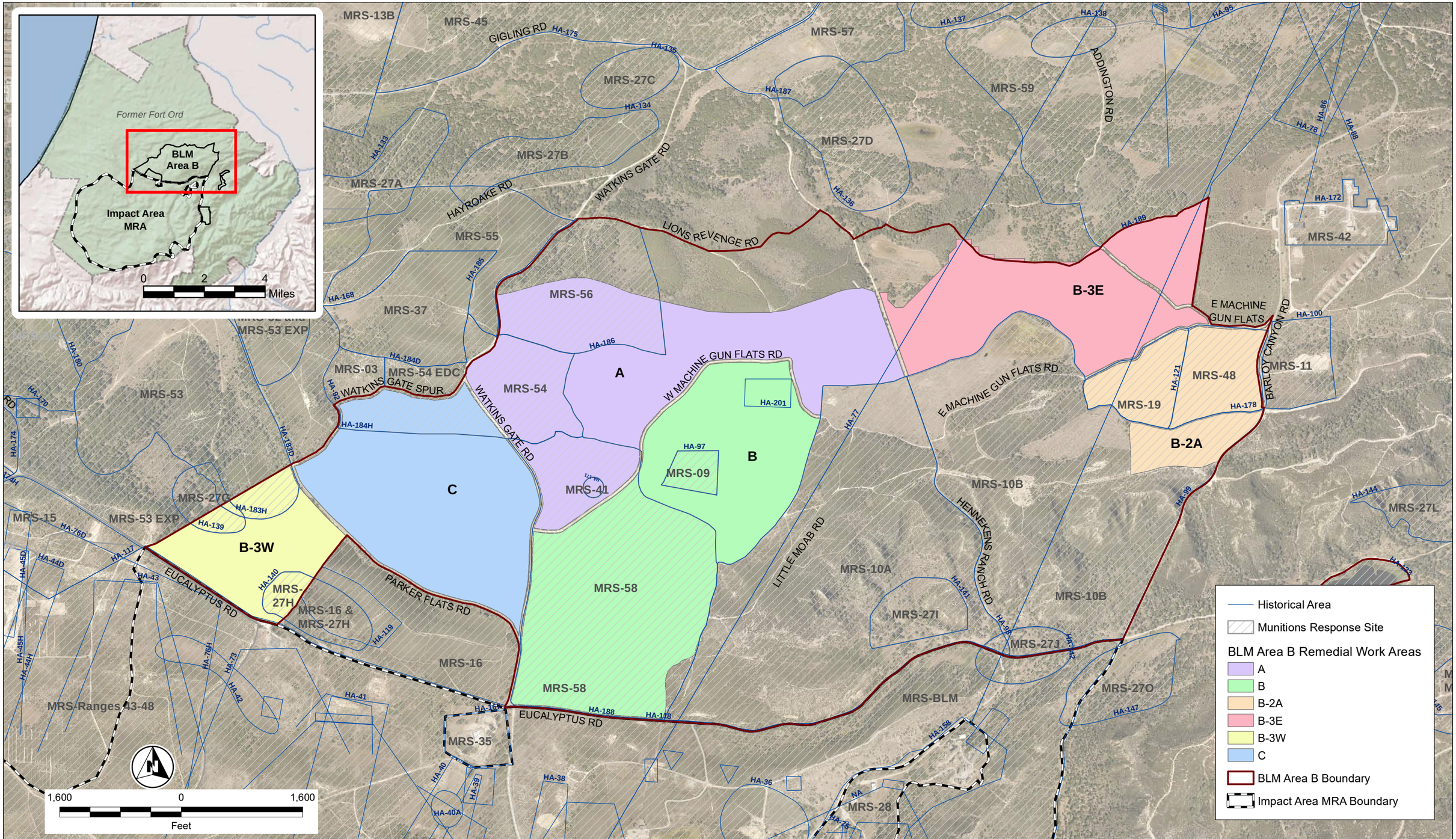

Site Evaluation Results and Basewide Range Assessment Investigation for Units A, B, B-2A, B-3E, B-3W, and C in BLM Area B
Former Fort Ord, California

Figure 4
BLM Area B Historical Areas and Muntions Response Sites

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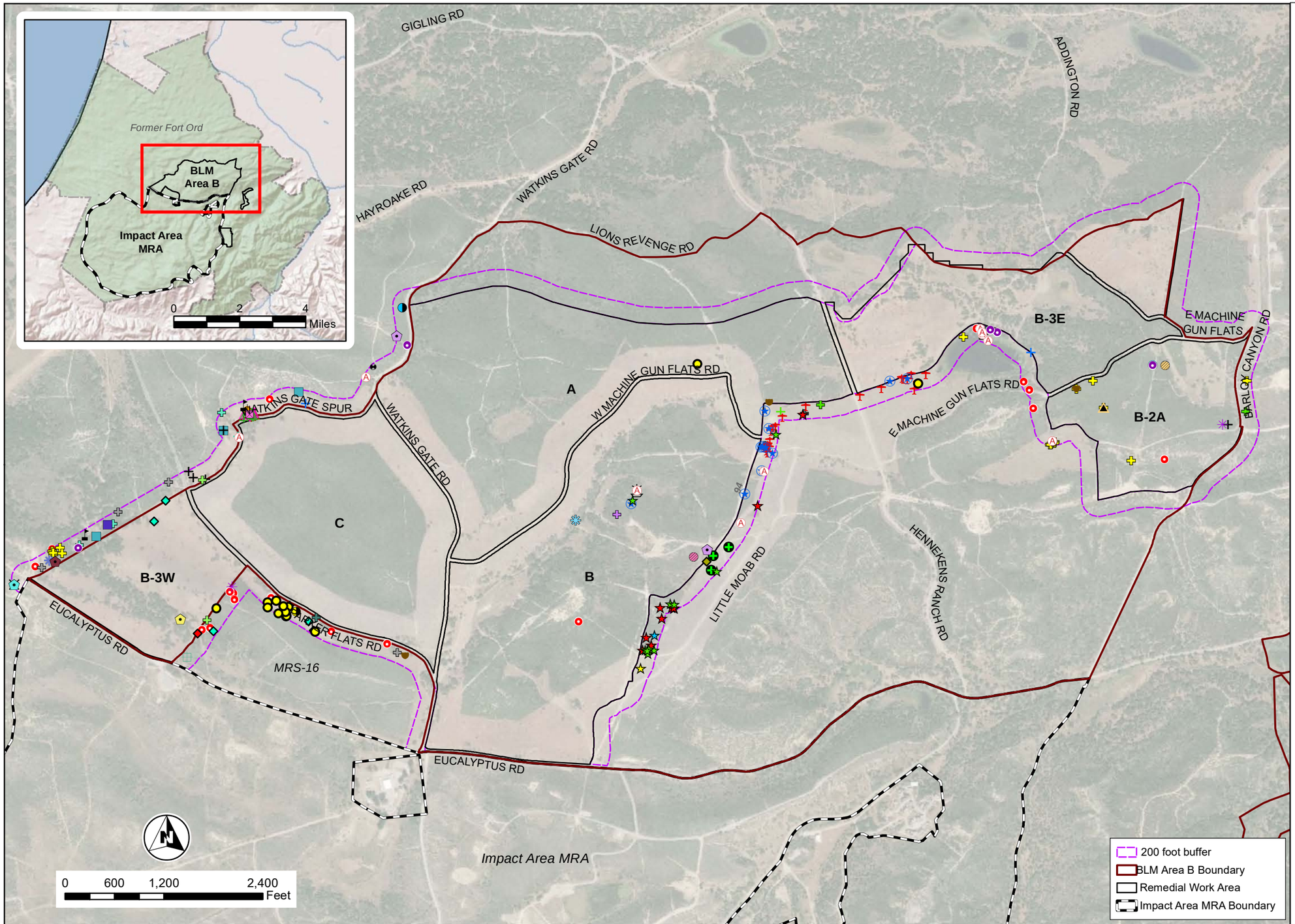

Previous MEC Removed/Encountered

- Projectile, 40mm, parachute, M583 series
- Cap, blasting, electric, M6
- Grenade, Rifle (model unknown)
- Ash, Pyrotechnic
- Base, coupling, firing device
- Cartridge, ignition, M2 series
- Firing device, pressure, M1A1
- Firing device, pull, M1
- Firing device, release, M5
- Flare, parachute, trip, M48
- Flare, surface, trip, M49 series
- Fuze, grenade, hand, practice, M205 series
- Fuze, grenade, hand, practice, M228
- Fuze, mine, antitank, practice, M604
- Fuze, projectile, point detonating, M8
- Grenade, hand, Illumination, MK I
- Grenade, hand, fragmentation, MK II
- Grenade, hand, practice, MK II
- Grenade, hand, riot, CS, M7A3
- Grenade, hand, riot, CS-1, ABC-M25A2
- Grenade, hand, smoke, HC, AN-M8
- Grenade, hand, smoke, M18 series
- Grenade, rifle, high explosive antitank, M28
- Grenade, rifle, smoke, M22 series
- Mine, antipersonnel, practice, M8 series
- Mine, antitank, practice, M10
- Ordnance Components
- Pot, 10lb, smoke, HC, screening, M1
- Pot, 2.5lb, smoke, HC, screening, M1
- Projectile, 3inch, Stokes mortar, prac, MK I
- Projectile, 20mm, high explosive incendiary, M56A3
- Projectile, 37mm, high explosive, MK II
- Projectile, 37mm, low explosive, MK I
- Projectile, 60mm, mortar, high explosive, M49 series
- Projectile, 75mm, Shrapnel, MK I
- Projectile, 81mm, mortar, high explosive, M362
- Projectile, 81mm, mortar, high explosive, M43 series
- Projectile, 81mm, mortar, practice, M43 series
- Projectile, 81mm, mortar, training, M68
- Rocket, 2.36inch, high explosive antitank, M6
- Rocket, 35mm, subcaliber, practice, M73
- Rocket, 4.5inch, barrage, high explosive, MK III
- Signal, ground, rifle, parachute, M17 series
- Signal, illumination, ground, M125 series
- Signal, illumination, ground, M126 series
- Signal, illumination, ground, parachute, M19 series
- Simulator, flash artillery, M110
- Simulator, launching, antitank guided missile and rocket, M22
- Simulator, projectile, airburst, M74 series
- Simulator, projectile, ground burst, M115A2

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Site Evaluation Results and Basewide Range Assessment Investigation for Units A, B, B-2A, B-3E, B-3W, and C in BLM Area B
Former Fort Ord, California

Figure 5

MEC Recovered as Part of Previous Actions

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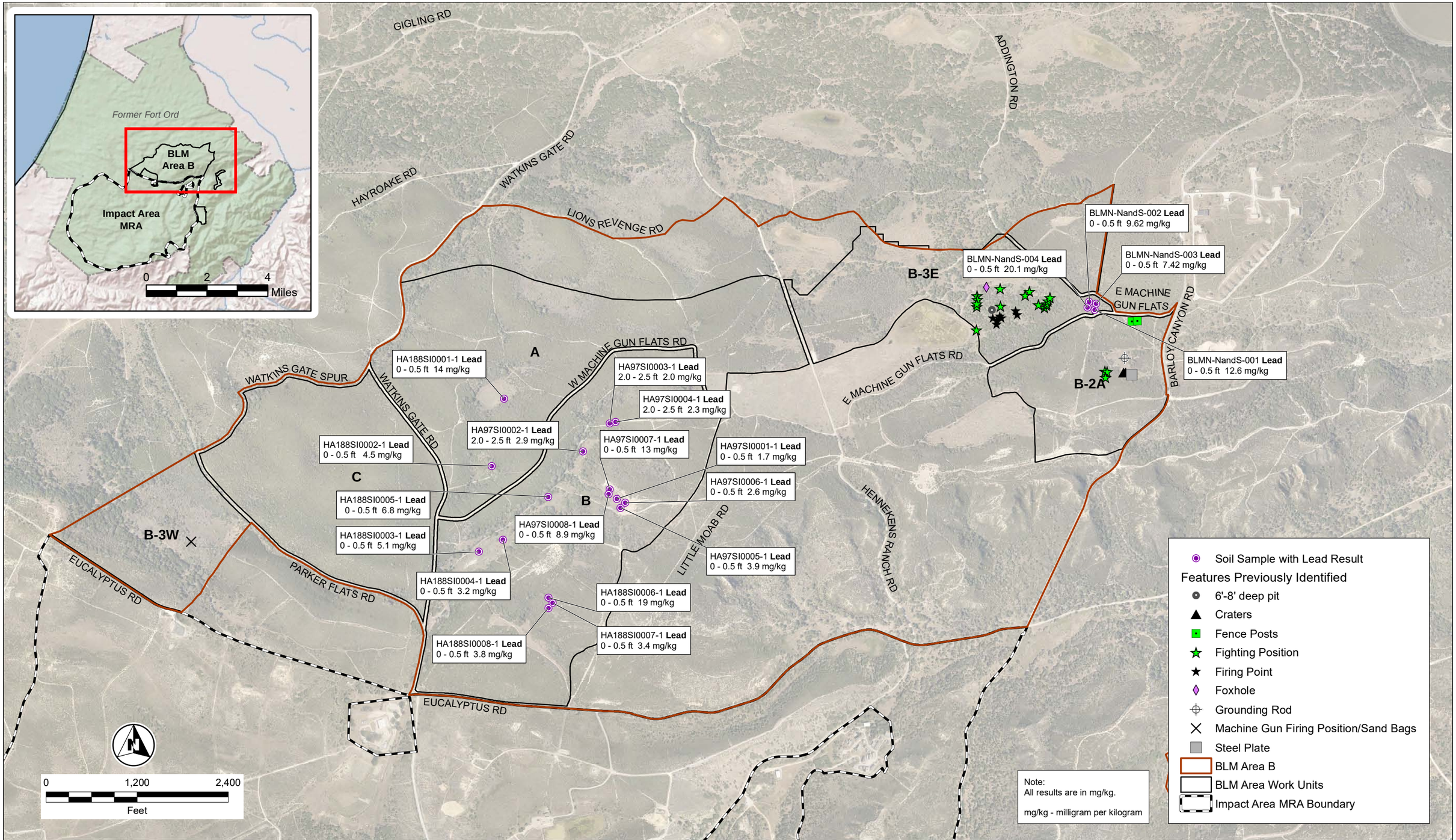

Site Evaluation Results and Basewide Range Assessment Investigation for Units A, B, B-2A, B-3E, B-3W, and C in BLM Area B
Former Fort Ord, California

Figure 6A
BLM Area B Historical Soil Sample Lead Results Locations and Previously Identified Site Features

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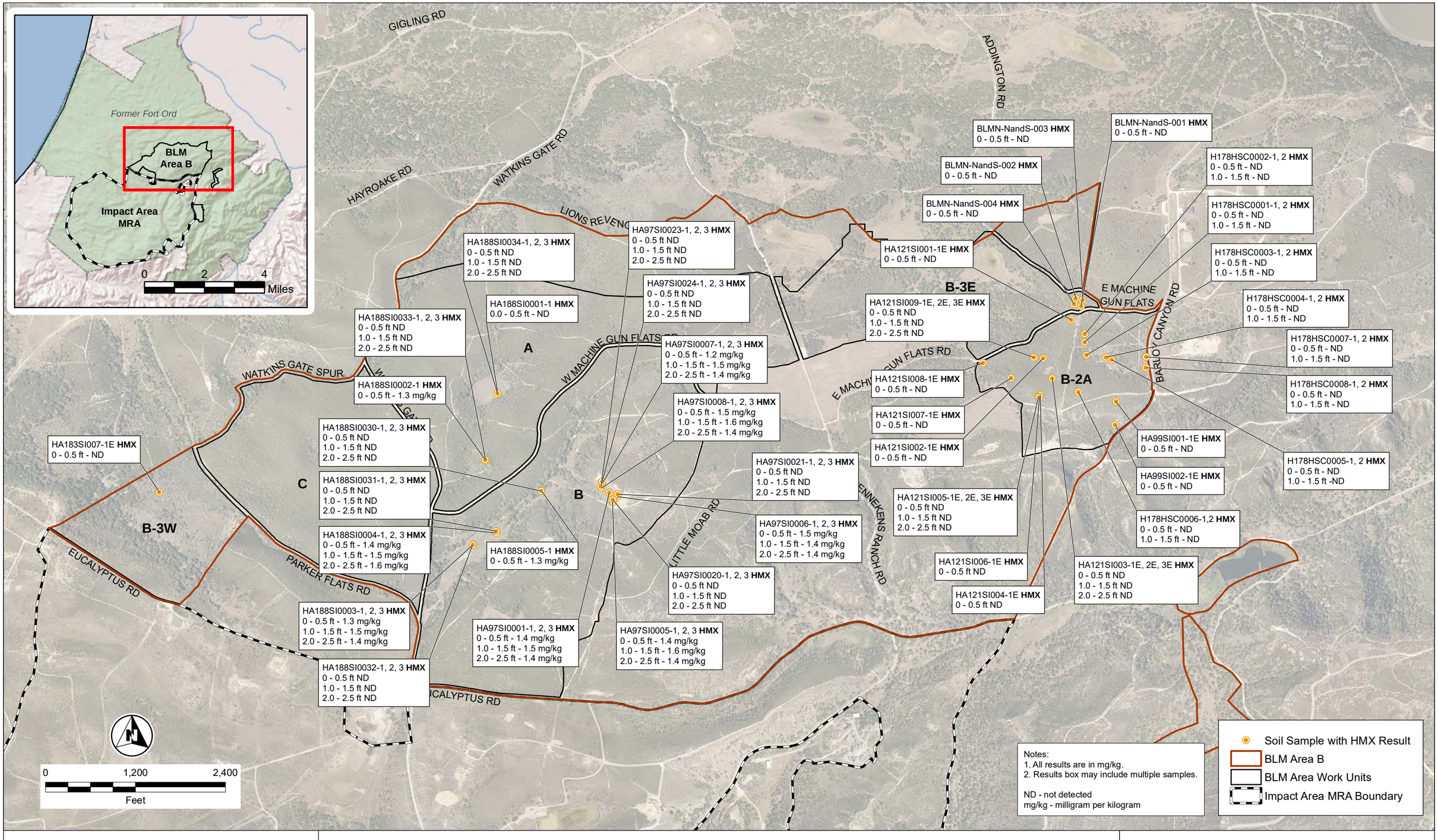

Site Evaluation Results and Basewide Range Assessment Investigation for Units A, B, B-2A, B-3E, B-3W, and C in BLM Area B
Former Fort Ord, California

Figure 6B
BLM Area B Historical Soil Sample Locations
HMX Results

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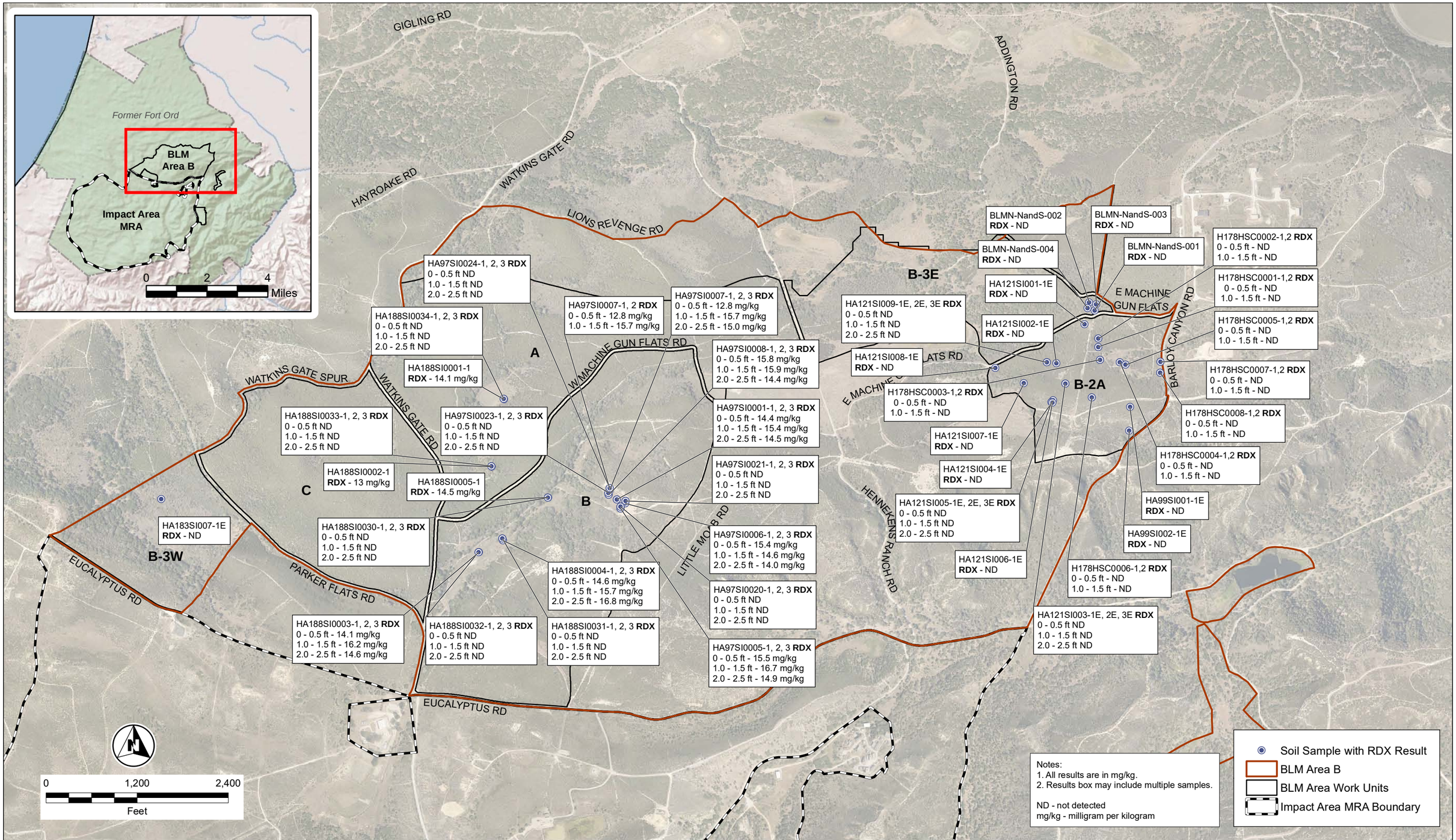

Site Evaluation Results and Basewide Range Assessment Investigation for Units A, B, B-2A, B-3E, B-3W, and C in BLM Area B
Former Fort Ord, California

Figure 6C
BLM Area B Historical Soil Sample Locations
RDX Results

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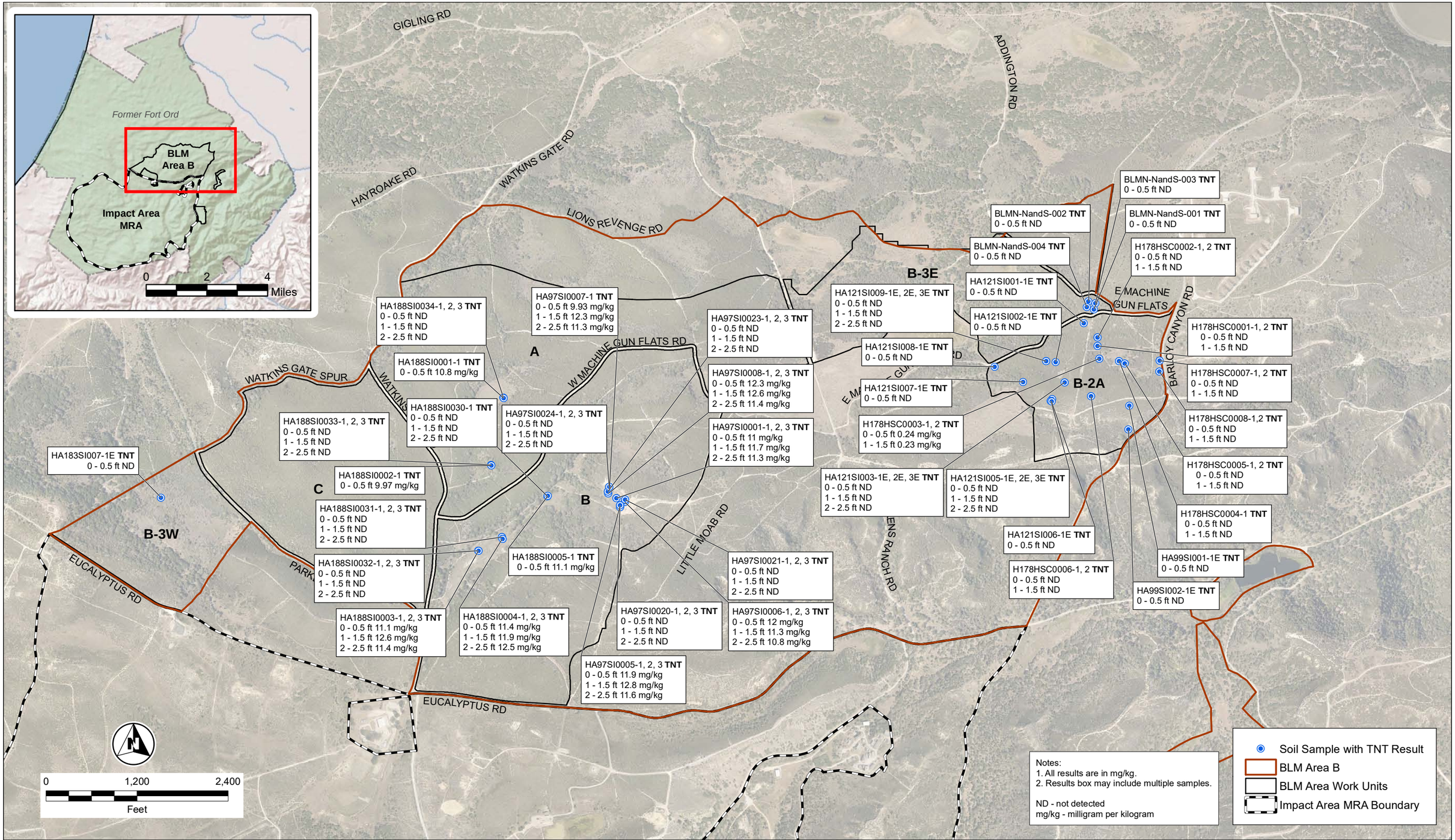
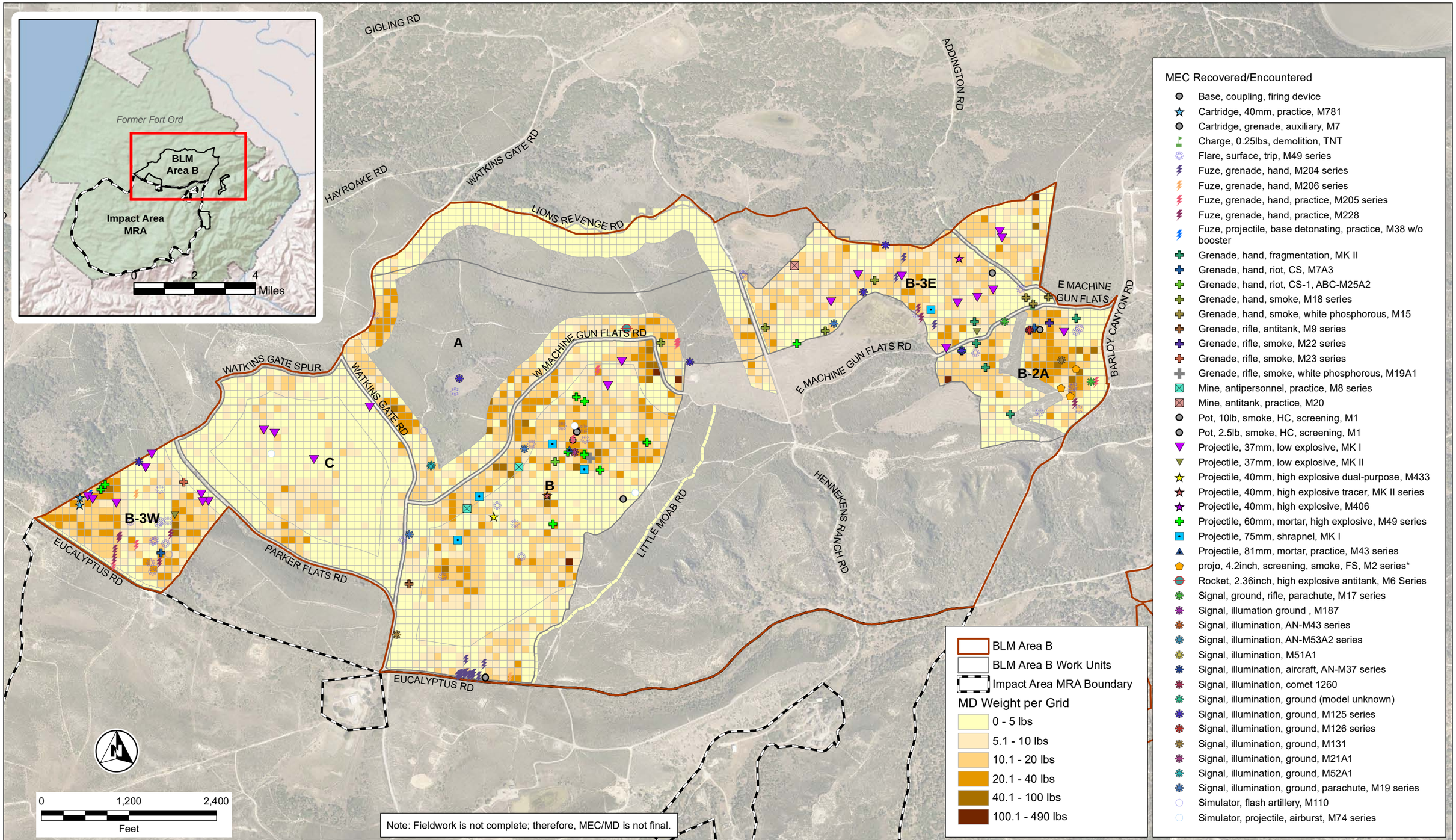


Site Evaluation Results and Basewide Range Assessment Investigation for Units A, B, B-2A, B-3E, B-3W, and C in BLM Area B
Former Fort Ord, California

Figure 6D
BLM Area B Historical Soil Sample Locations
TNT Results

G:\ArcGIS\USACE\Fort_Ord\PROJECTS\Basewide_Range_Assessment\BLM\map_docs\Report\Area B SoilSamplesTNT.mxd 6/11/2019 kcholak, Gilbane



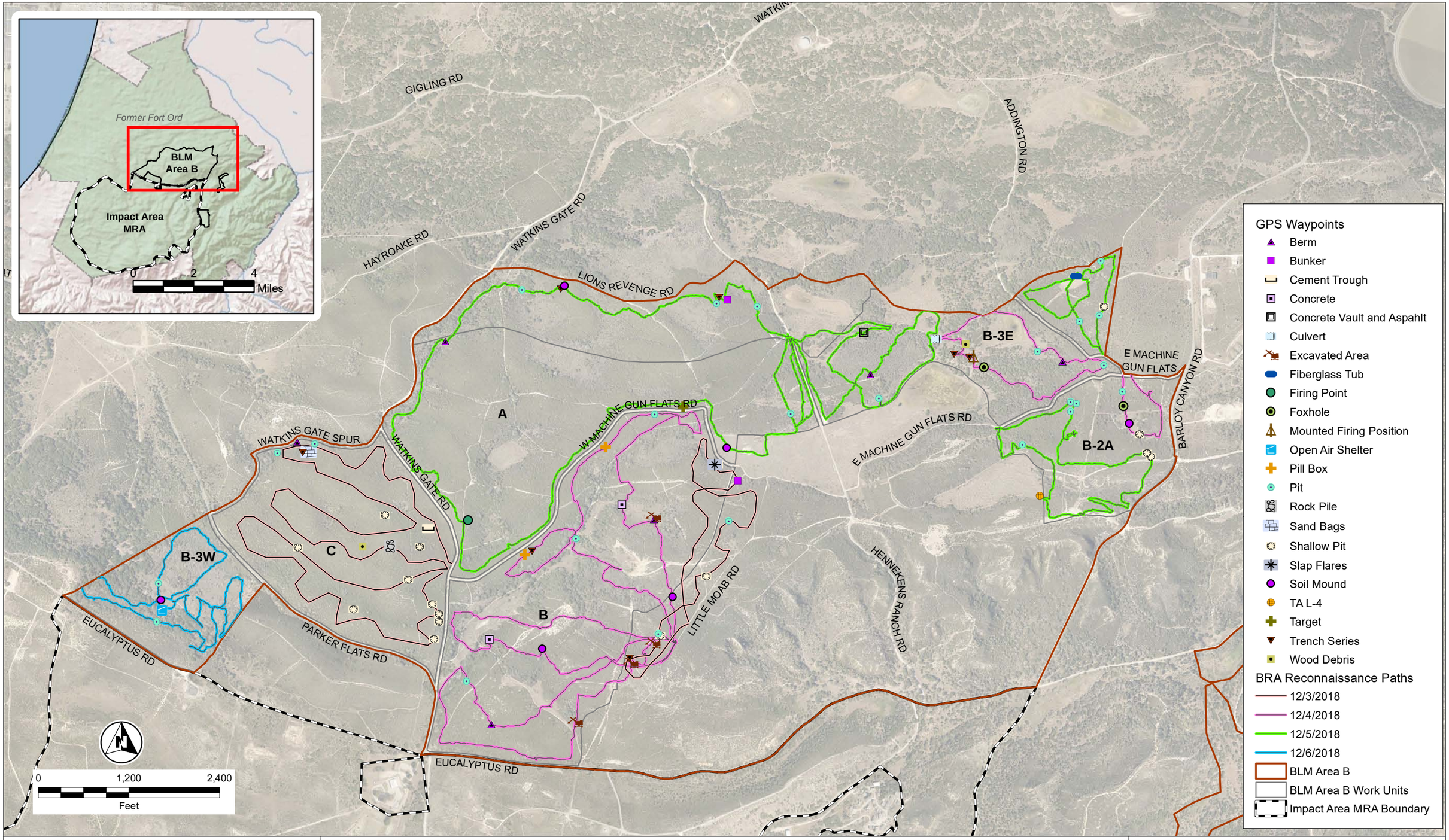
KEMRON ENVIRONMENTAL SERVICES

Gilbane

Site Evaluation Results and Basewide Range Assessment Investigation for
Units A, B, B-2A, B-3E, B-3W, and C in BLM Area B
Former Fort Ord, California

Figure 7
BLM Area B MEC/MD
Recovered in Support of ROD

G:\ArcGIS\USACE\Fort_Ord\PROJECTS\Basewide_Range_Assessment\BLM\map_docs\Report\Area B MEC_MD.mxd 5/23/2019 kcholak, Gilbane



KEMRON ENVIRONMENTAL SERVICES

Gilbane

Site Evaluation Results and Basewide Range Assessment Investigation for Units A, B, B-2A, B-3E, B-3W, and C in BLM Area B
Former Fort Ord, California

Figure 8
BRA Site Reconnaissance Path and Site Features

G:\ArcGIS\USACE\Fort_Ord\PROJECTS\Basewide_Range_Assessment\BLM\map_docs\Report\Area B Recon.mxd 3/14/2019 kcholak, Gilbane

Photographs

Photograph No. 1	Date: 12/05/2018	Time: 15:35
Site: BLM Area B – Unit A		
Description: Pit		

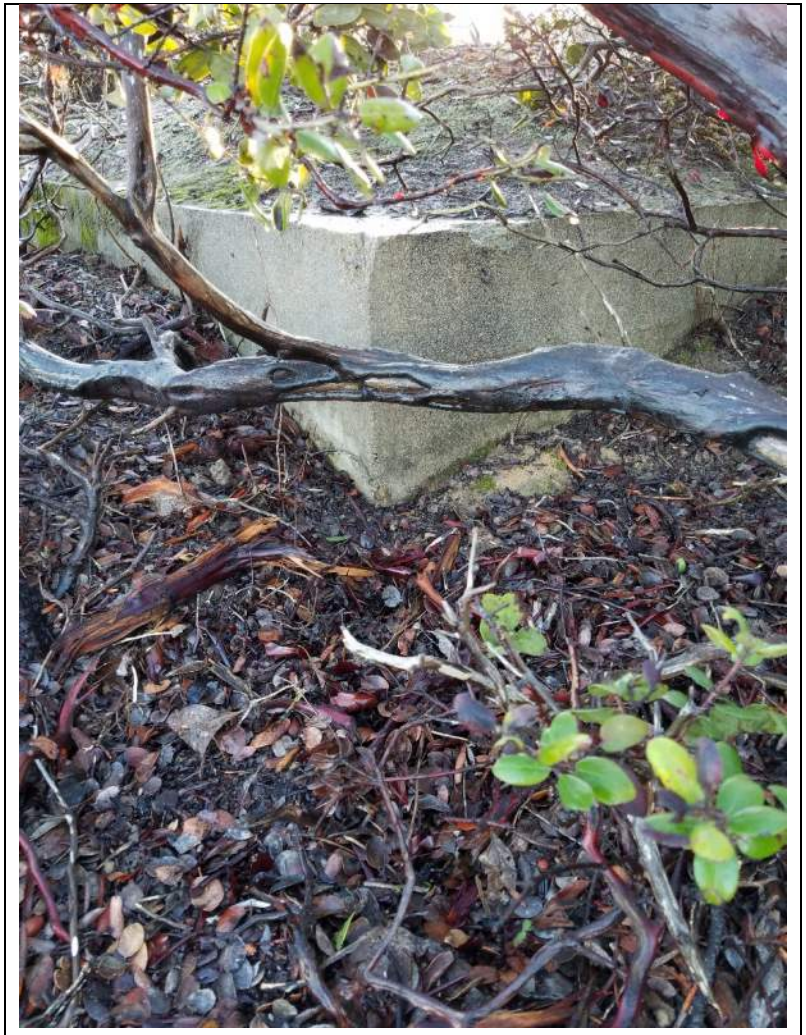
Photograph No. 2	Date: 12/06/2018	Time: 07:39
Site: BLM Area B – Unit A		
Description: Slap flare		

Photograph No. 3	Date: 12/06/2018	Time: 07:39
Site: BLM Area B – Unit A		
Description: Site conditions		

Photograph No. 4	Date: 12/06/2018	Time: 07:41
Site: BLM Area B – Unit A		
Description: Pit		

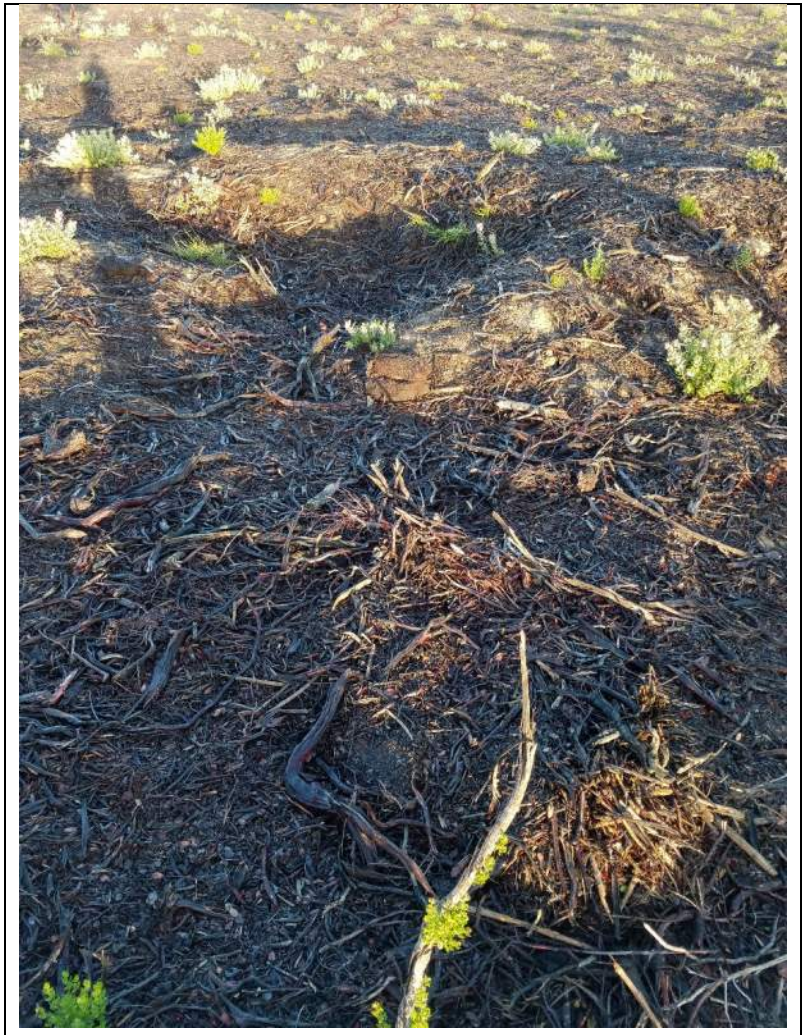
Photograph No. 5	Date: 12/06/2018	Time: 07:55
Site: BLM Area B – Unit A		
Description: Concrete bunker		

Photograph No. 6	Date: 12/06/2018	Time: 07:56
Site: BLM Area B – Unit A		
Description: Trench series		



Photograph No. 7	Date: 12/06/2018	Time: 07:57
Site: BLM Area B – Unit A		
Description: Concrete bunker		

Photograph No. 8	Date: 12/06/2018	Time: 07:58
Site: BLM Area B – Unit A		
Description: Trench series		

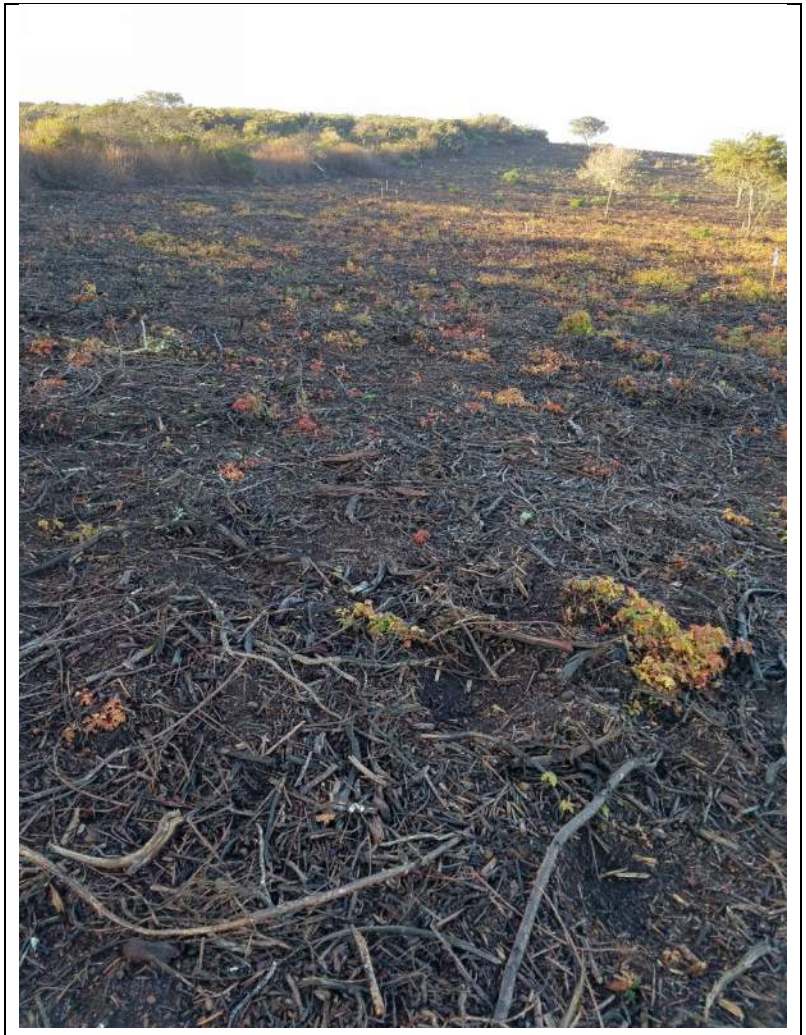


Photograph No. 9	Date: 12/06/2018	Time: 07:59
Site: BLM Area B – Unit A		
Description: Trench series		

Photograph No. 10	Date: 12/06/2018	Time: 08:07
Site: BLM Area B – Unit A		
Description: Site conditions		

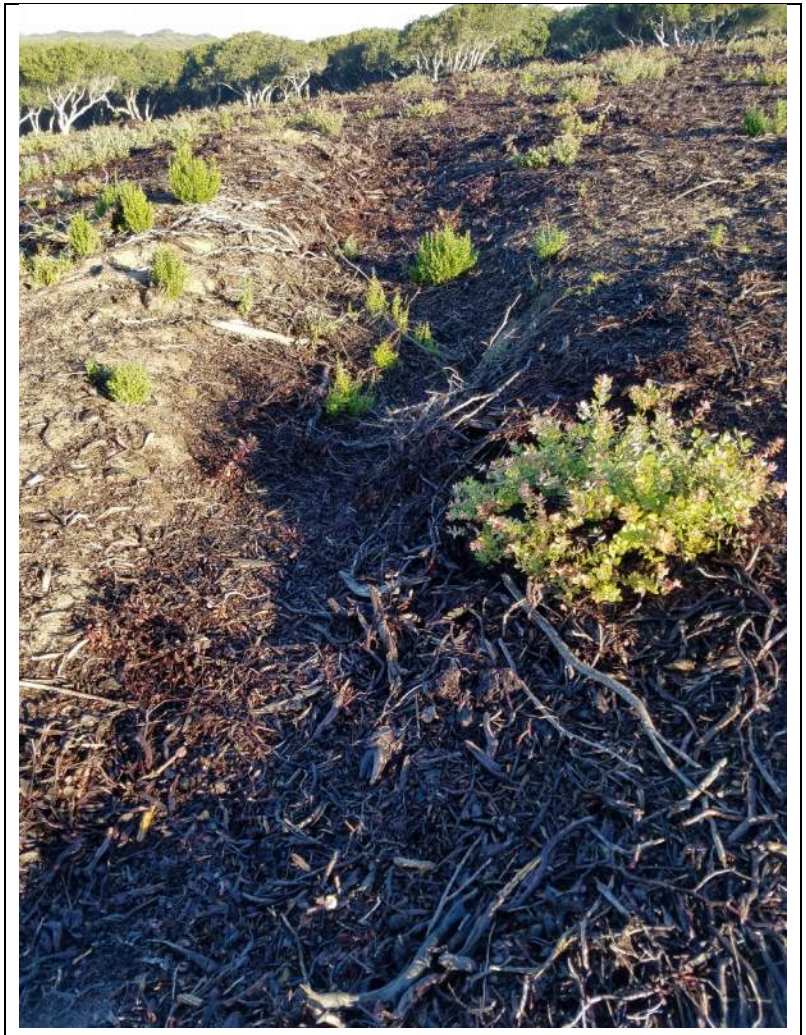
Photograph No. 11	Date: 12/06/2018	Time: 08:07
Site: BLM Area B – Unit A		
Description: Site conditions – dense poison oak		

Photograph No. 12	Date: 12/06/2018	Time: 08:07
Site: BLM Area B – Unit A		
Description: Site conditions – dense poison oak		



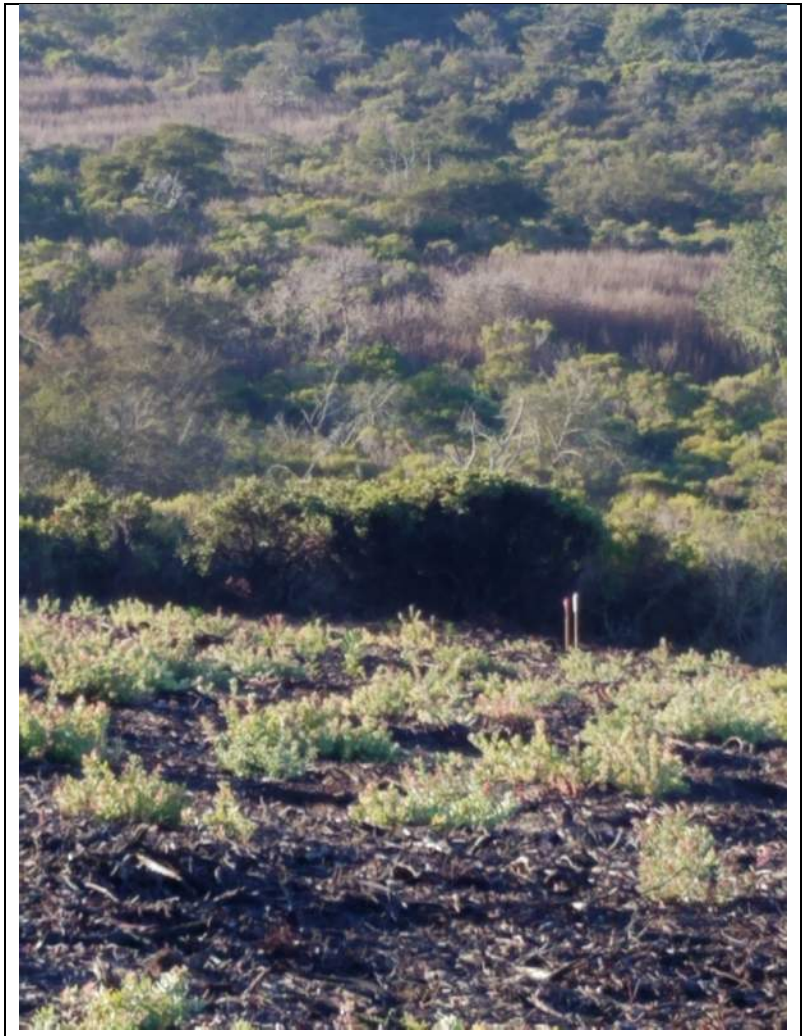
Photograph No. 13	Date: 12/06/2018	Time: 08:09
Site: BLM Area B – Unit A		
Description: Site conditions		

Photograph No. 14	Date: 12/06/2018	Time: 08:36
Site: BLM Area B – Unit A		
Description: Trench series		

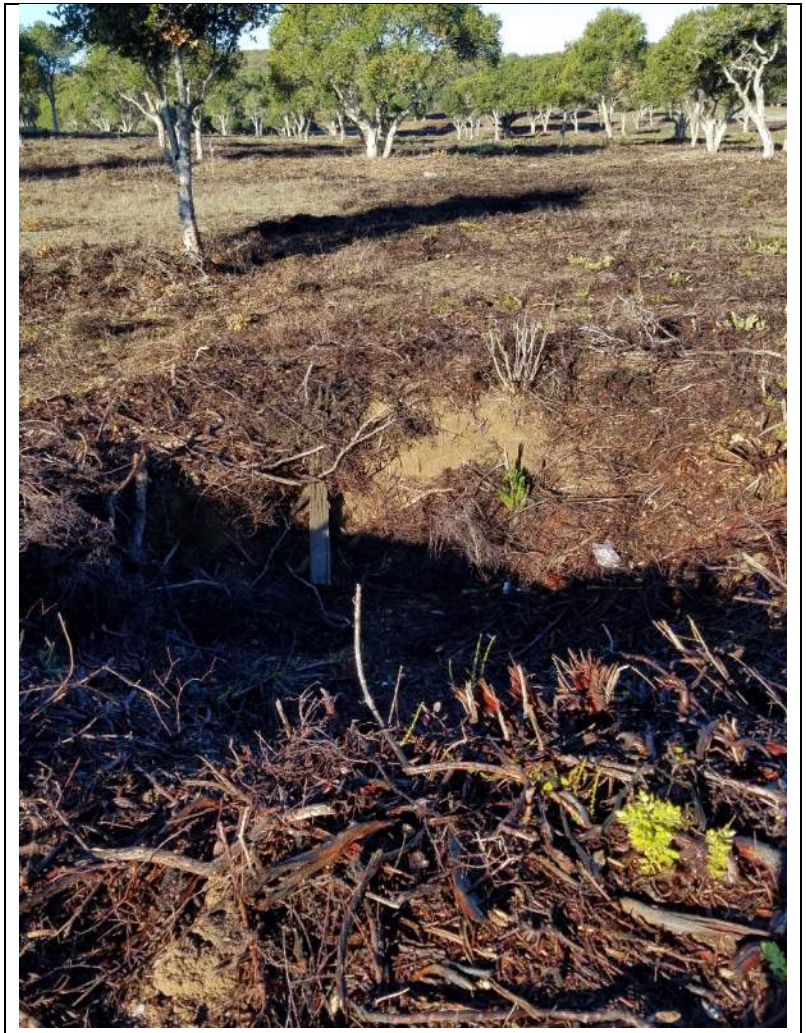


Photograph No. 15	Date: 12/06/2018	Time: 08:37
Site: BLM Area B – Unit A		
Description: Trench series		

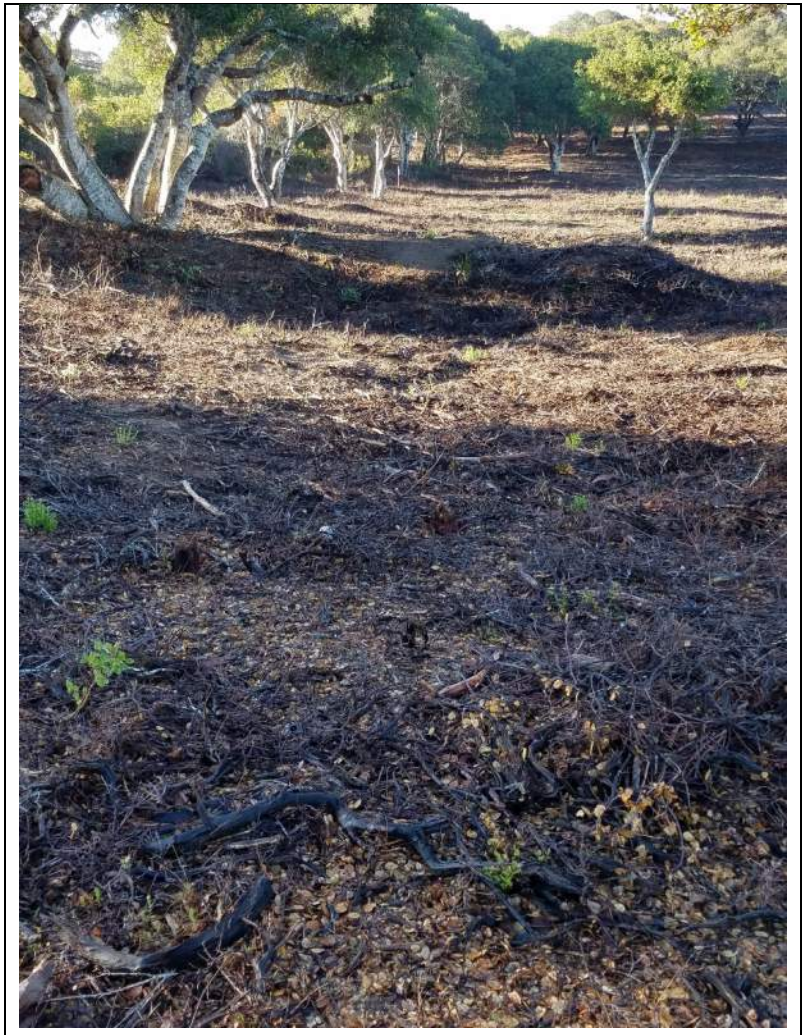
Photograph No. 16	Date: 12/06/2018	Time: 08:37
Site: BLM Area B – Unit A		
Description: Soil mound		



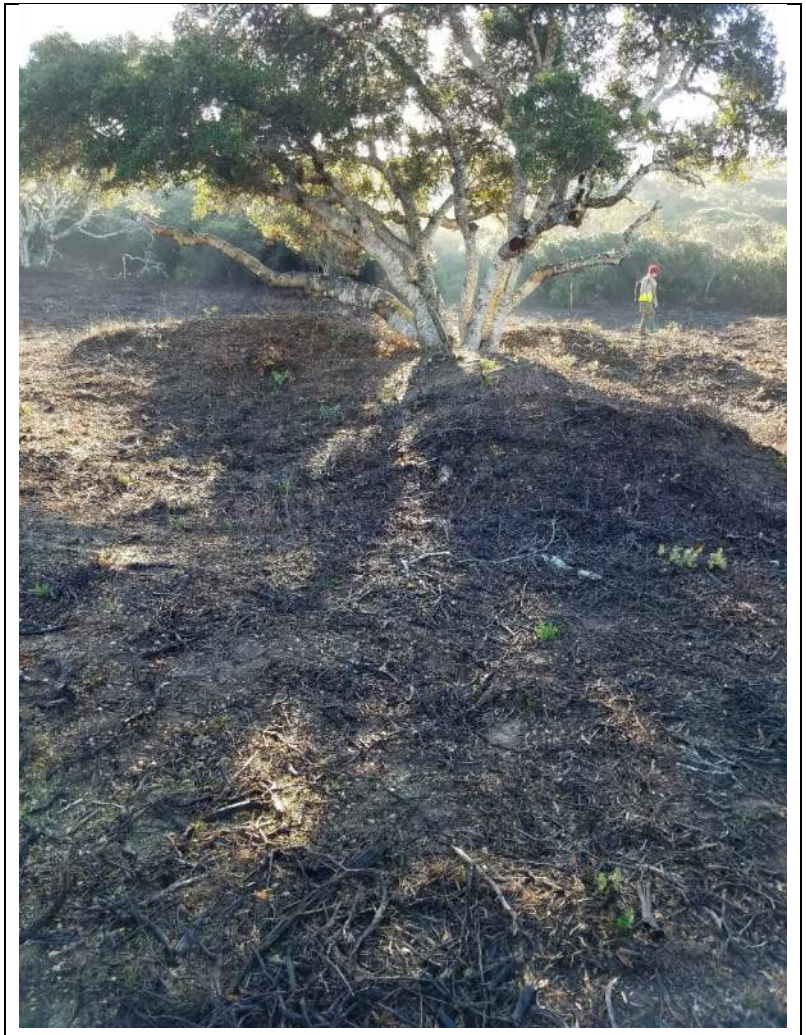
Photograph No. 17	Date: 12/06/2018	Time: 08:40
Site: BLM Area B – Unit A		
Description: Site conditions		



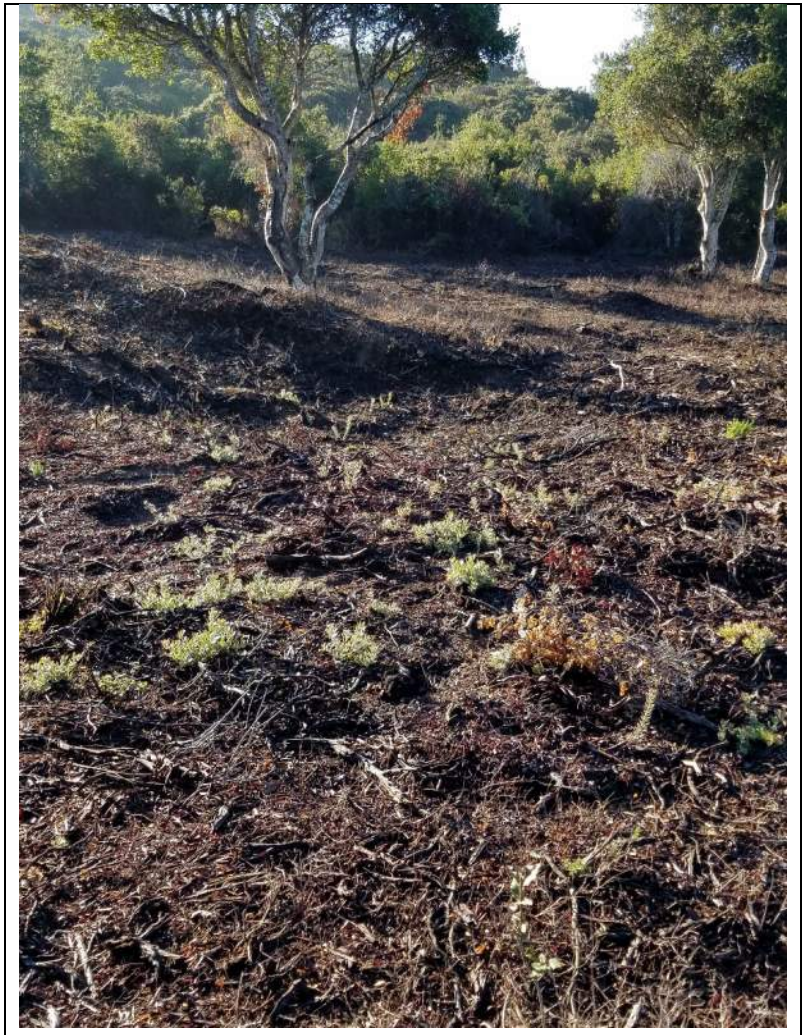
Photograph No. 18	Date: 12/06/2018	Time: 08:48
Site: BLM Area B – Unit A		
Description: Pit		



Photograph No. 19	Date: 12/06/2018	Time: 09:03
Site: BLM Area B – Unit A		
Description: Berm		



Photograph No. 20	Date: 12/06/2018	Time: 09:04
Site: BLM Area B – Unit A		
Description: Berm		



Photograph No. 21	Date: 12/06/2018	Time: 09:05
Site: BLM Area B – Unit A		
Description: Berm		

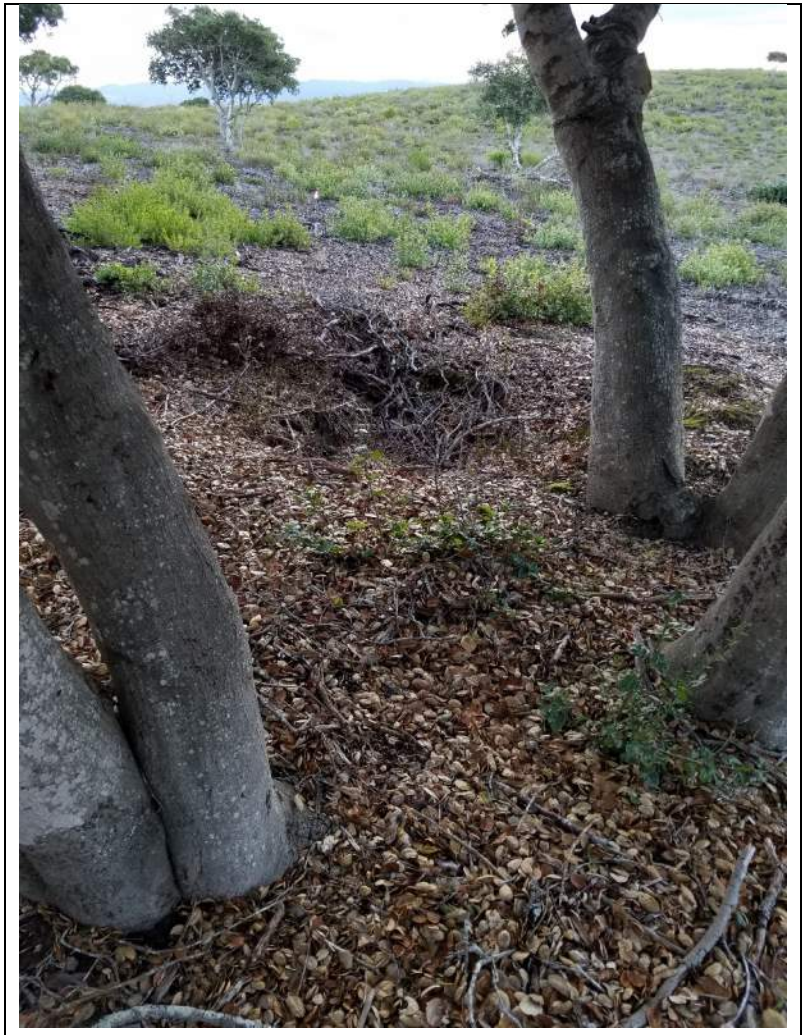
Photograph No. 22	Date: 12/06/2018	Time: 09:49
Site: BLM Area B – Unit A		
Description: Firing point with sandbags		

Photograph No. 23	Date: 12/06/2018	Time: 09:49
Site: BLM Area B – Unit A		
Description: Firing point with sandbags		

Photograph No. 24	Date: 12/06/2018	Time: 09:49
Site: BLM Area B – Unit A		
Description: Firing point with sandbags		

Photograph No. 25	Date: 12/06/2018	Time: 09:49
Site: BLM Area B – Unit A		
Description: Wooden debris		

Photograph No. 26	Date: 12/06/2018	Time: 10:35
Site: BLM Area B – Unit A		
Description: Target – no bullet accumulation		

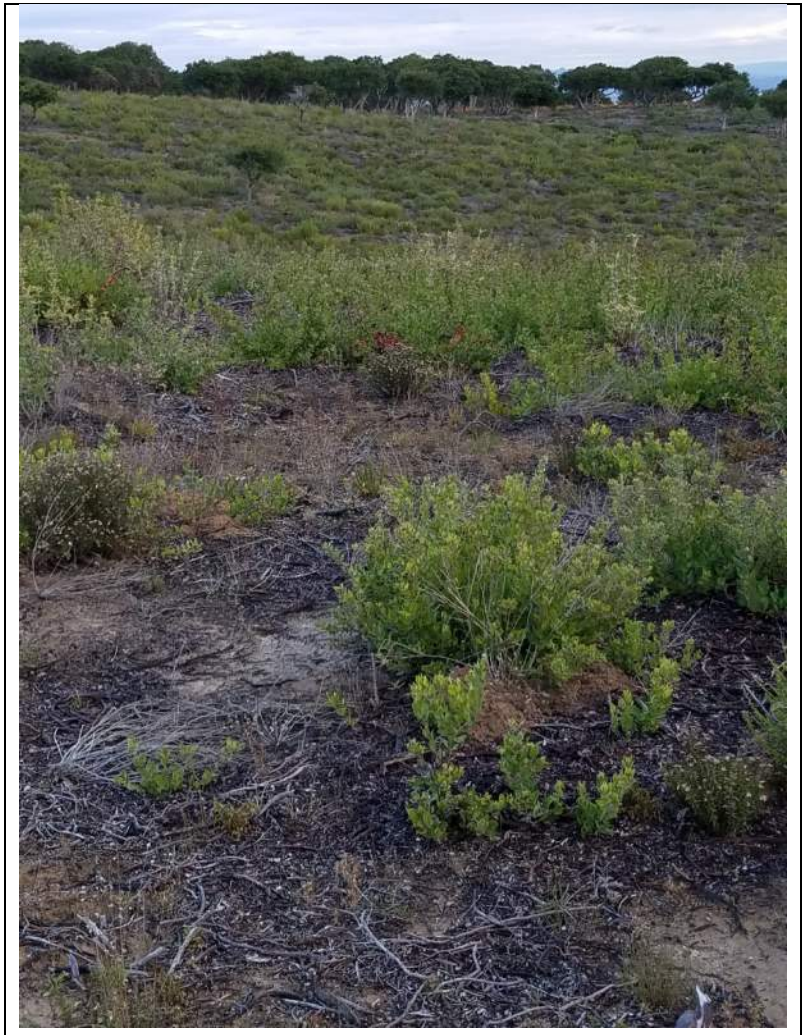


Photograph No. 1	Date: 12/05/18	Time: 07:48
Site: BLM Area B – Unit B2A		
Description: Pit		

Photograph No. 2	Date: 12/05/18	Time: 07:48
Site: BLM Area B – Unit B2A		
Description: Site conditions		

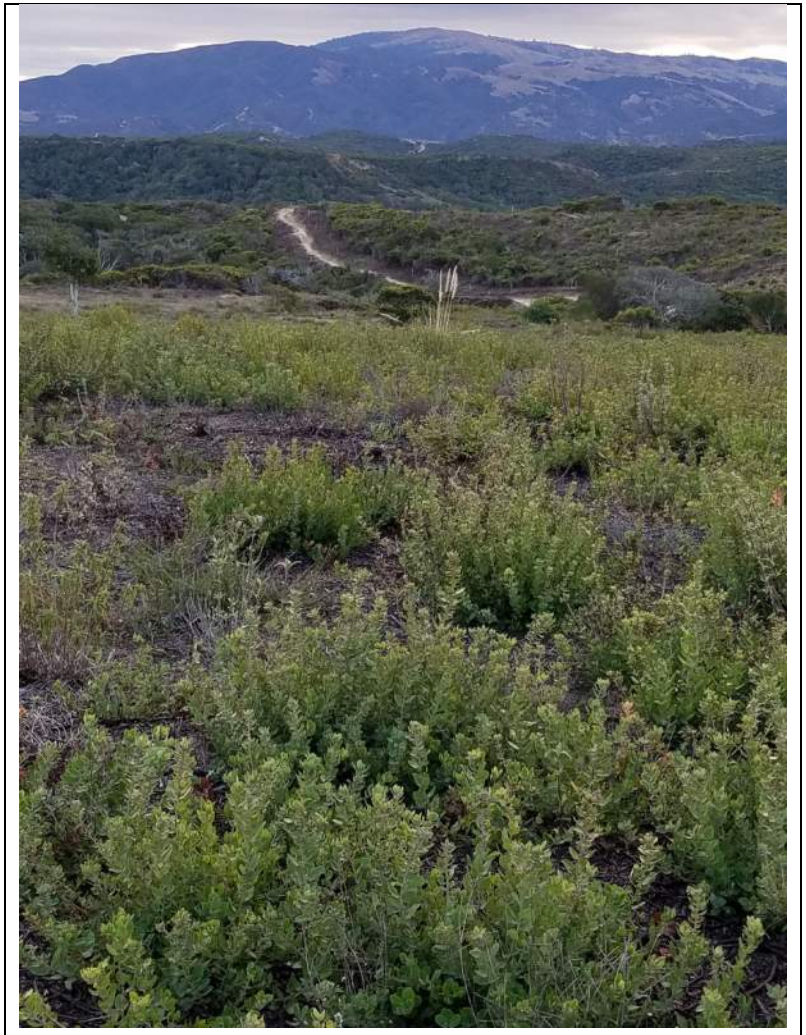
Photograph No. 3	Date: 12/05/18	Time: 07:48
Site: BLM Area B – Unit B2A		
Description: Site conditions		

Photograph No. 4	Date: 12/05/18	Time: 07:49
Site: BLM Area B – Unit B2A		
Description: Pit		



Photograph No. 5	Date: 12/05/18	Time: 07:58
Site: BLM Area B – Unit B2A		
Description: Soil mound		

Photograph No. 6	Date: 12/05/18	Time: 07:58
Site: BLM Area B – Unit B2A		
Description: Site conditions		



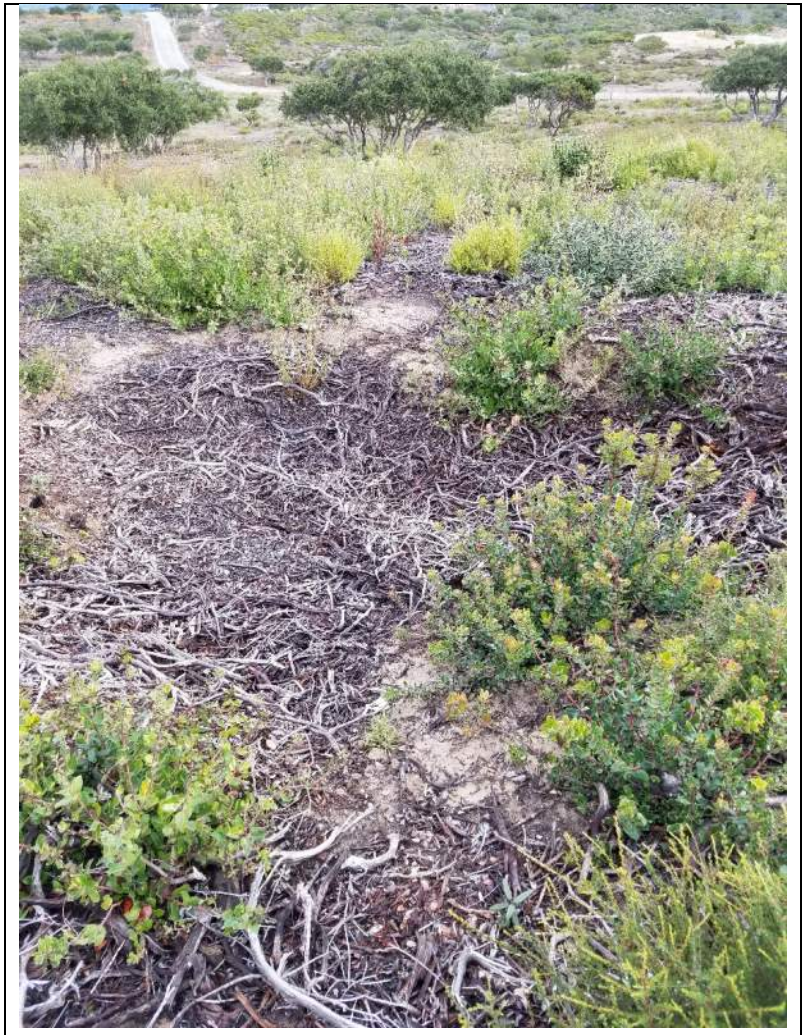
Photograph No. 7	Date: 12/05/18	Time: 07:58
Site: BLM Area B – Unit B2A		
Description: Pit		

Photograph No. 8	Date: 12/05/18	Time: 08:07
Site: BLM Area B – Unit B2A		
Description: Range sign post		

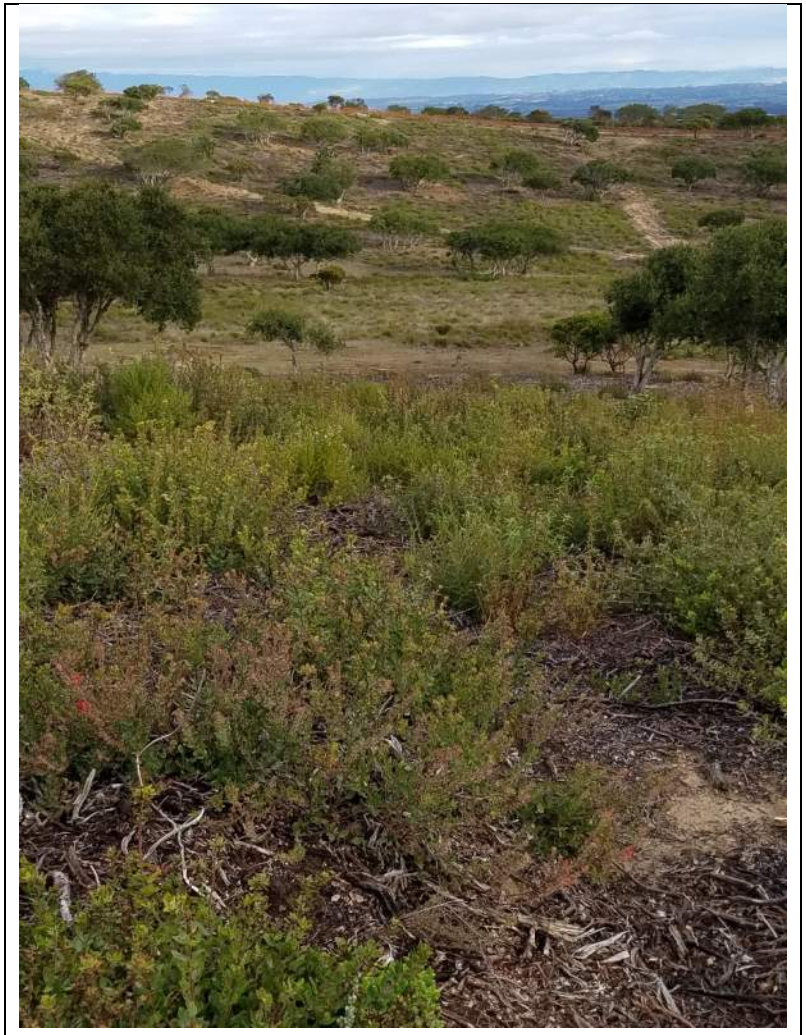
Photograph No. 9	Date: 12/05/18	Time: 08:09
Site: BLM Area B – Unit B2A		
Description: Site conditions		

Photograph No. 10	Date: 12/05/18	Time: 08:09
Site: BLM Area B – Unit B2A		
Description: Site conditions		

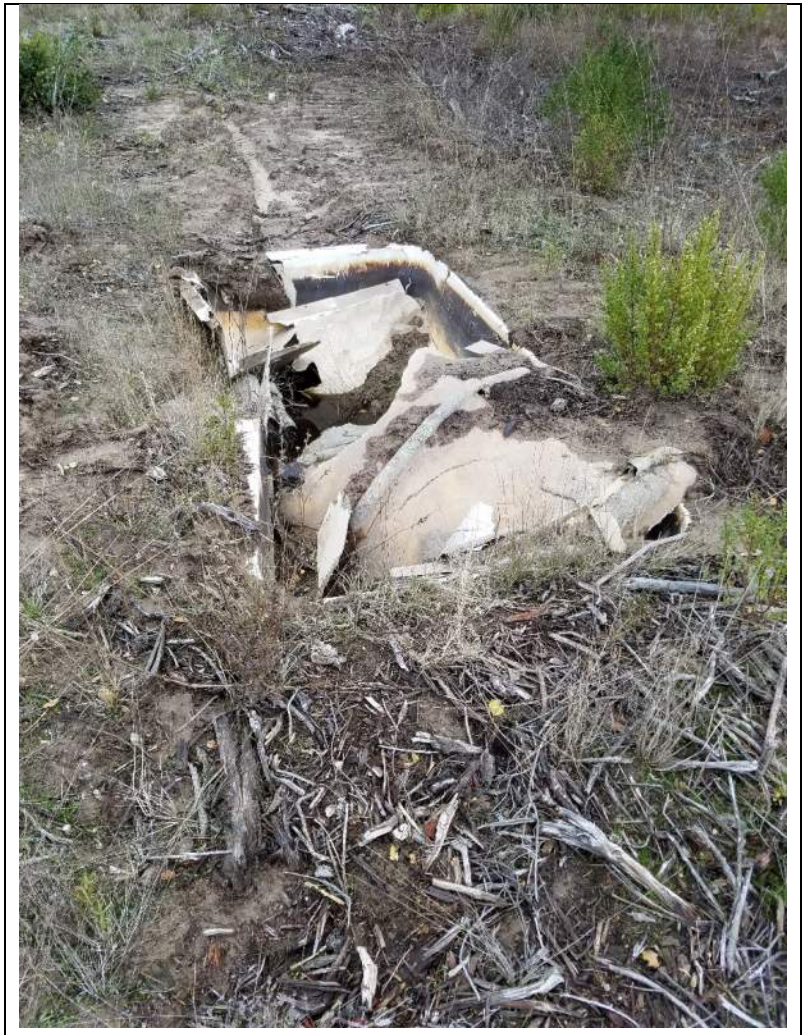
Photograph No. 11	Date: 12/05/18	Time: 08:09
Site: BLM Area B – Unit B2A		
Description: Site conditions		



Photograph No. 12	Date: 12/05/18	Time: 08:47
Site: BLM Area B – Unit B2A		
Description: Pit		



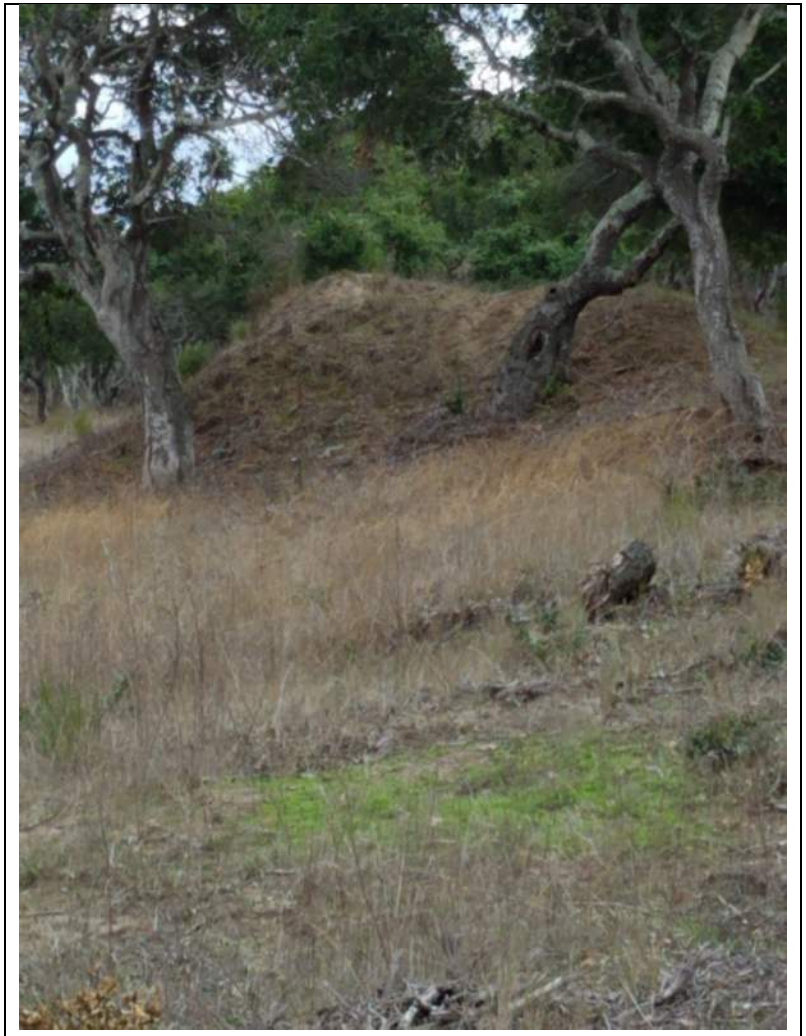
Photograph No. 13	Date: 12/05/18	Time: 08:48
Site: BLM Area B – Unit B2A		
Description: Site conditions		



Photograph No. 1	Date: 12/05/18	Time: 10:14
Site: BLM Area B – Unit B3E		
Description: Fiberglass tub		

Photograph No. 2	Date: 12/05/18	Time: 10:16
Site: BLM Area B – Unit B3E		
Description: Fiberglass tub		

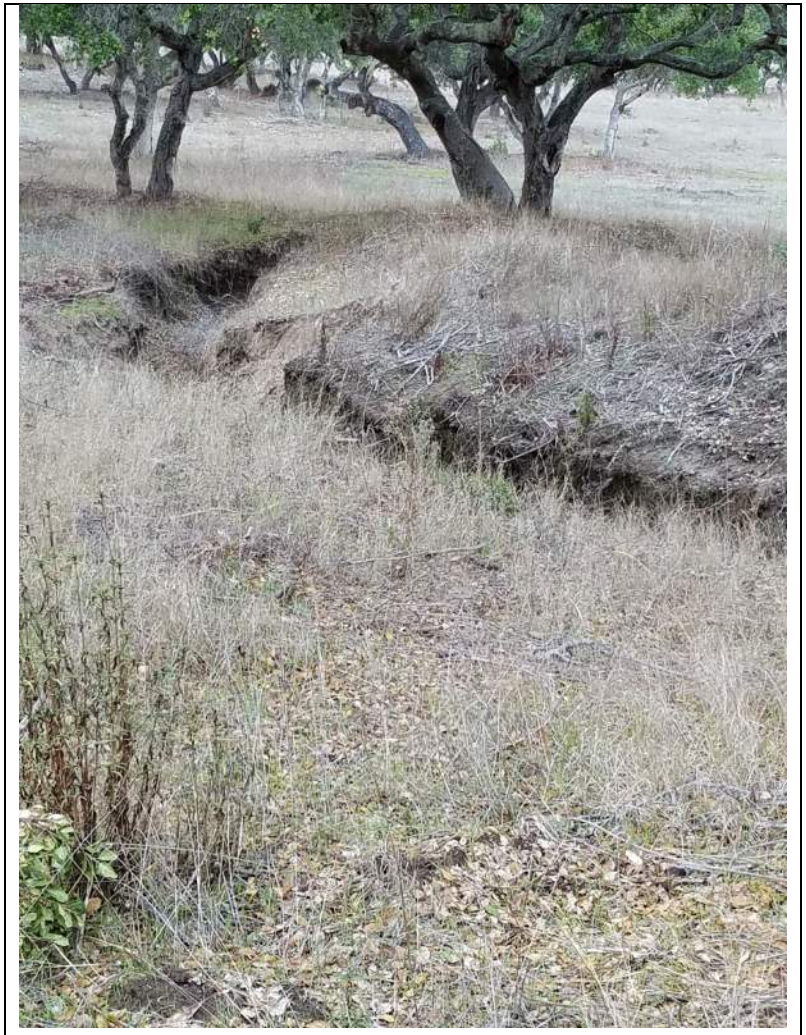
Photograph No. 3	Date: 12/05/18	Time: 10:16
Site: BLM Area B – Unit B3E		
Description: Site conditions		



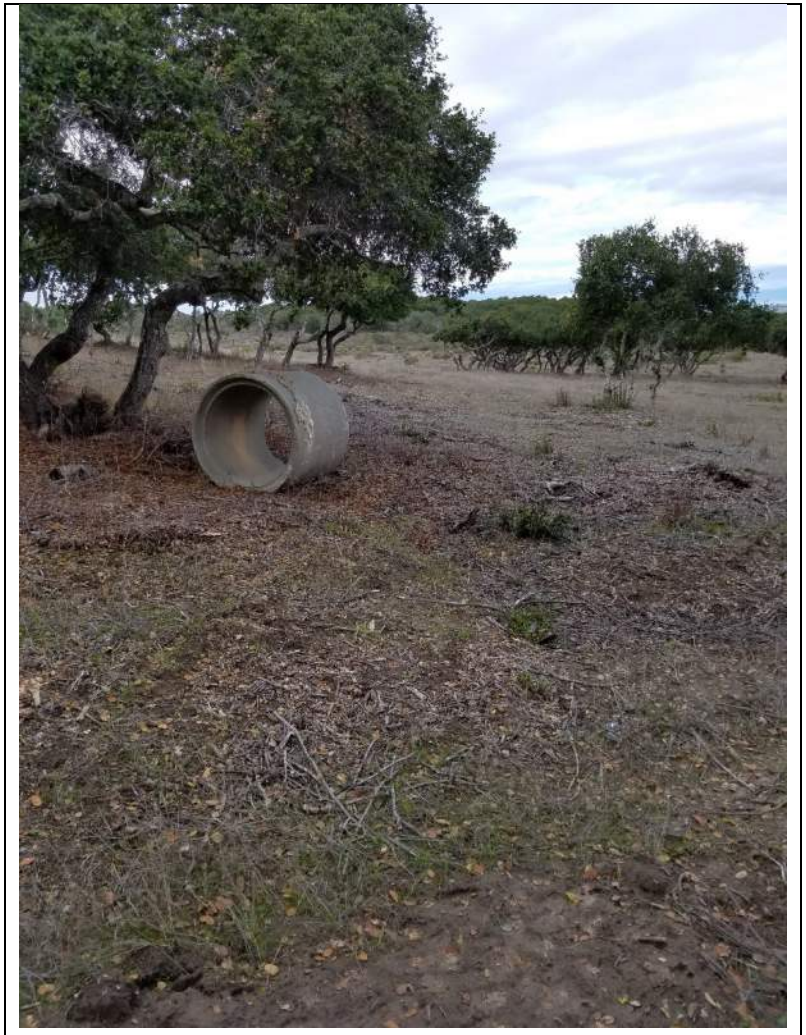
Photograph No. 4	Date: 12/05/18	Time: 12:22
Site: BLM Area B – Unit B3E		
Description: Berm		

Photograph No. 5	Date: 12/05/18	Time: 12:23
Site: BLM Area B – Unit B3E		
Description: Trench series		

Photograph No. 6	Date: 12/05/18	Time: 12:23
Site: BLM Area B – Unit B3E		
Description: Trench series		



Photograph No. 7	Date: 12/05/18	Time: 12:23
Site: BLM Area B – Unit B3E		
Description: Trench series		



Photograph No. 8	Date: 12/05/18	Time: 12:26
Site: BLM Area B – Unit B3E		
Description: Culvert		

Photograph No. 9	Date: 12/05/18	Time: 12:41
Site: BLM Area B – Unit B3E		
Description: Berm		

Photograph No. 10	Date: 12/05/18	Time: 12:42
Site: BLM Area B – Unit B3E		
Description: Berm		

Photograph No. 11	Date: 12/05/18	Time: 14:01
Site: BLM Area B – Unit B3E		
Description: Berm		

Photograph No. 12	Date: 12/05/18	Time: 14:14
Site: BLM Area B – Unit B3E		
Description: Site conditions		

Photograph No. 13	Date: 12/05/18	Time: 14:14
Site: BLM Area B – Unit B3E		
Description: Site conditions		

Photograph No. 14	Date: 12/05/18	Time: 14:55
Site: BLM Area B – Unit B3E		
Description: Cement trough		

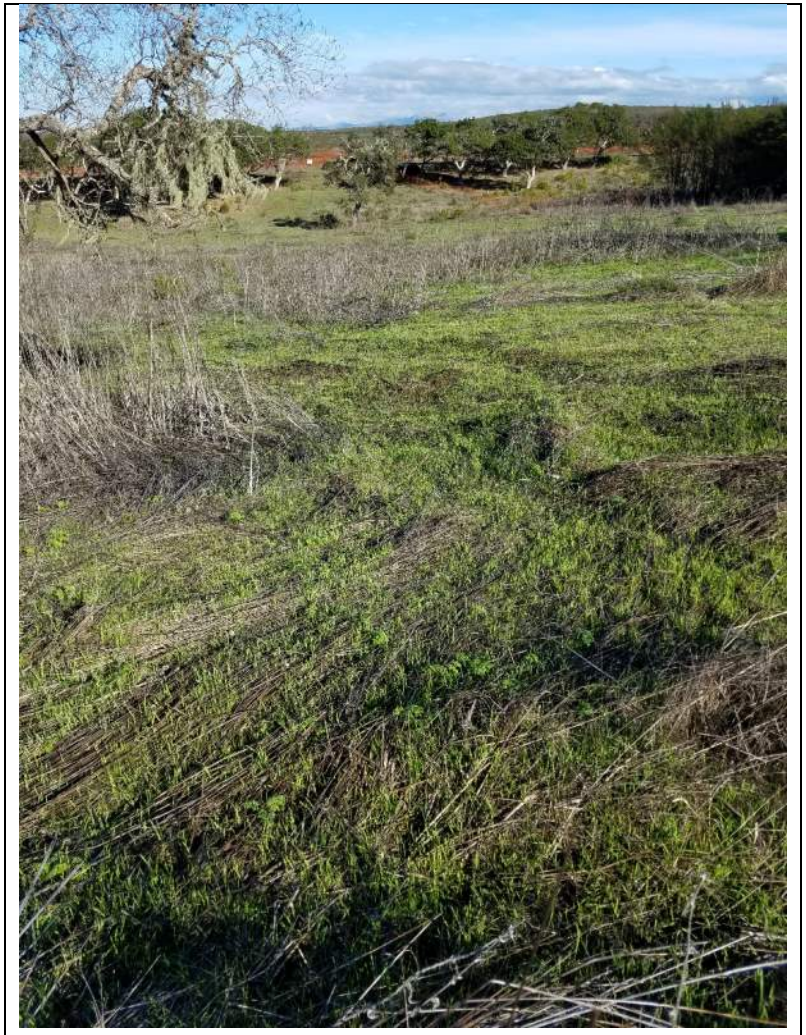
Photograph No. 1	Date: 12/06/18	Time: 12:36
Site: BLM Area B – Unit B3W		
Description: Wooden structure		

Photograph No. 2	Date: 12/06/18	Time: 12:52
Site: BLM Area B – Unit B3W		
Description: Pit		

Photograph No. 3	Date: 12/06/18	Time: 12:52
Site: BLM Area B – Unit B3W		
Description: Pit		

Photograph No. 4	Date: 12/06/18	Time: 12:53
Site: BLM Area B – Unit B3W		
Description: Pit		

Photograph No. 5	Date: 12/06/18	Time: 13:16
Site: BLM Area B – Unit B3W		
Description: Site conditions		

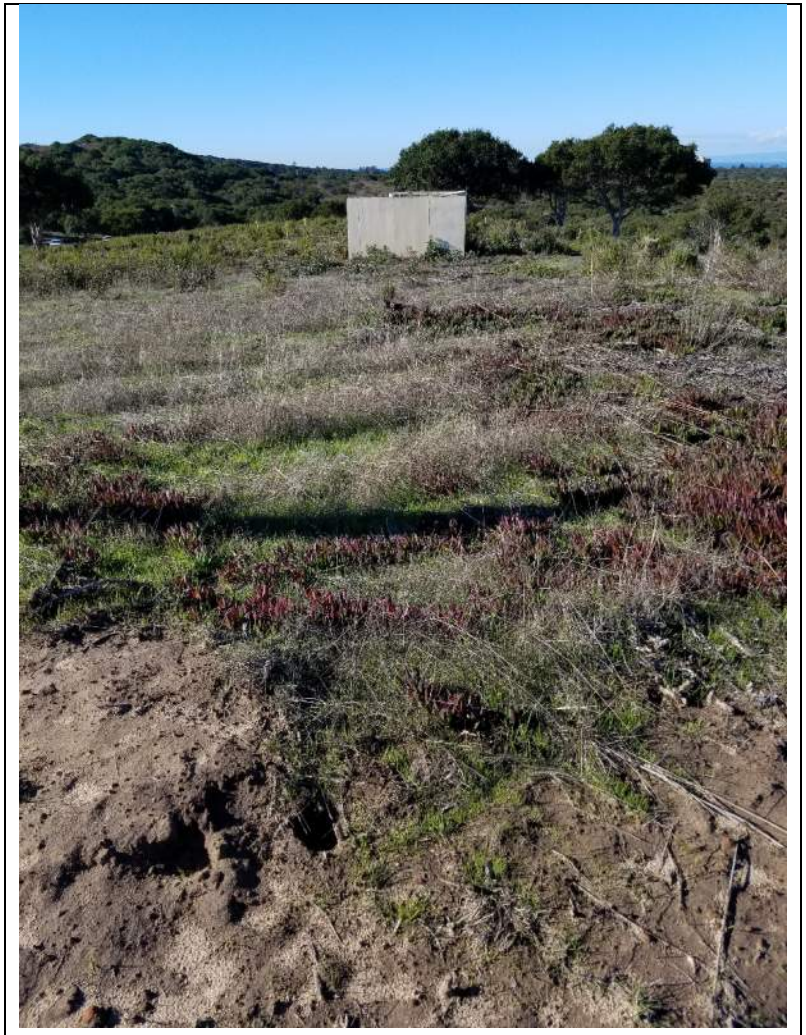


Photograph No. 6	Date: 12/06/18	Time: 13:17
Site: BLM Area B – Unit B3W		
Description: Site conditions		

Photograph No. 7	Date: 12/06/18	Time: 13:18
Site: BLM Area B – Unit B3W		
Description: Site conditions		

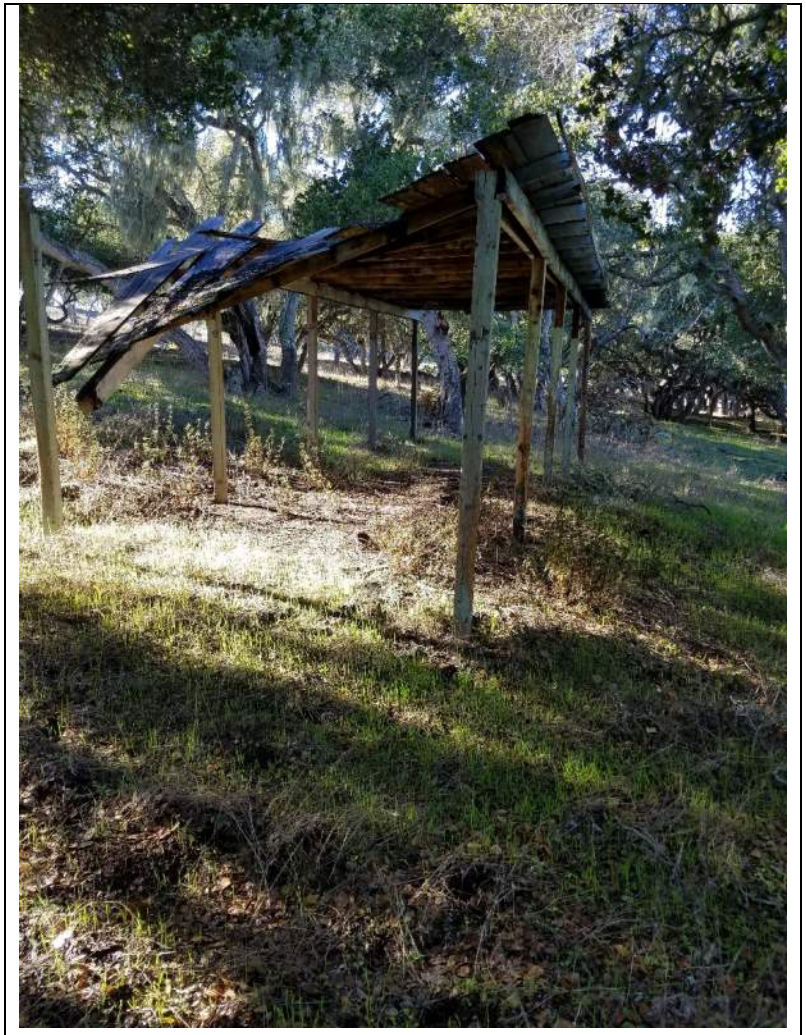
Photograph No. 8	Date: 12/06/18	Time: 13:20
Site: BLM Area B – Unit B3W		
Description: Site conditions		

Photograph No. 9	Date: 12/06/18	Time: 13:42
Site: BLM Area B – Unit B3W		
Description: Sand bag area		



Photograph No. 10	Date: 12/06/18	Time: 13:43
Site: BLM Area B – Unit B3W		
Description: Structure		

Photograph No. 11	Date: 12/06/18	Time: 13:43
Site: BLM Area B – Unit B3W		
Description: Site conditions		

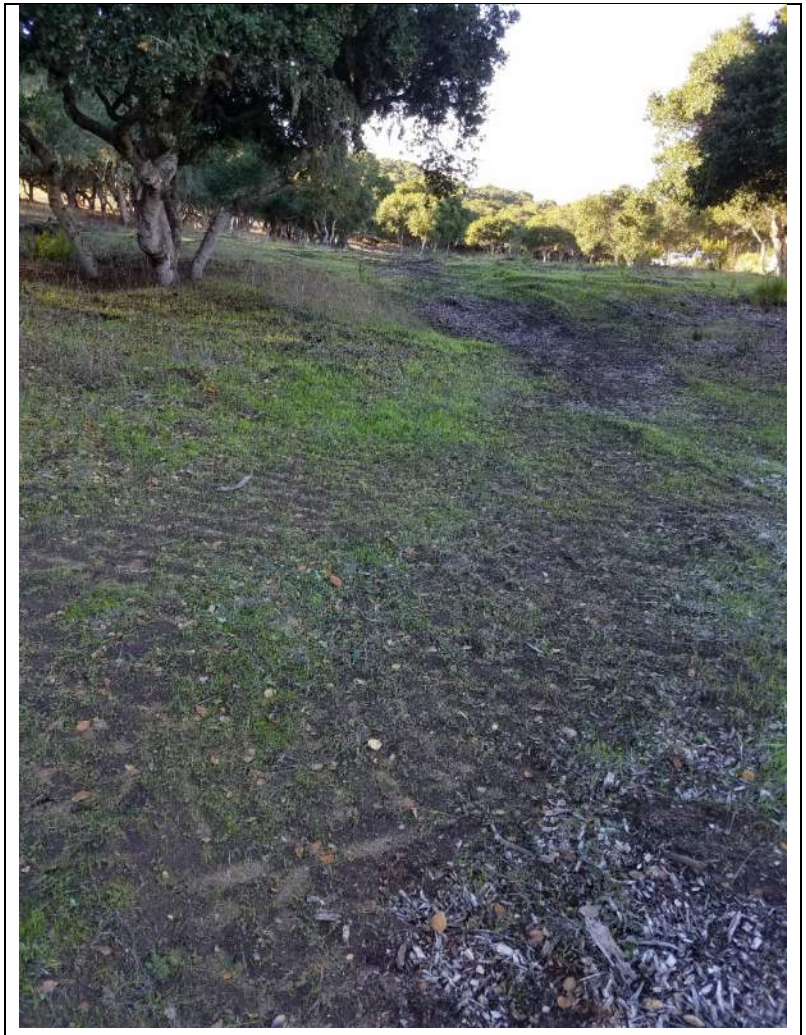


Photograph No. 12	Date: 12/06/18	Time: 13:49
Site: BLM Area B – Unit B3W		
Description: Open air shelter		

Photograph No. 13	Date: 12/06/18	Time: 13:56
Site: BLM Area B – Unit B3W		
Description: Pit		

Photograph No. 14	Date: 12/06/18	Time: 14:26
Site: BLM Area B – Unit B3W		
Description: Structure		

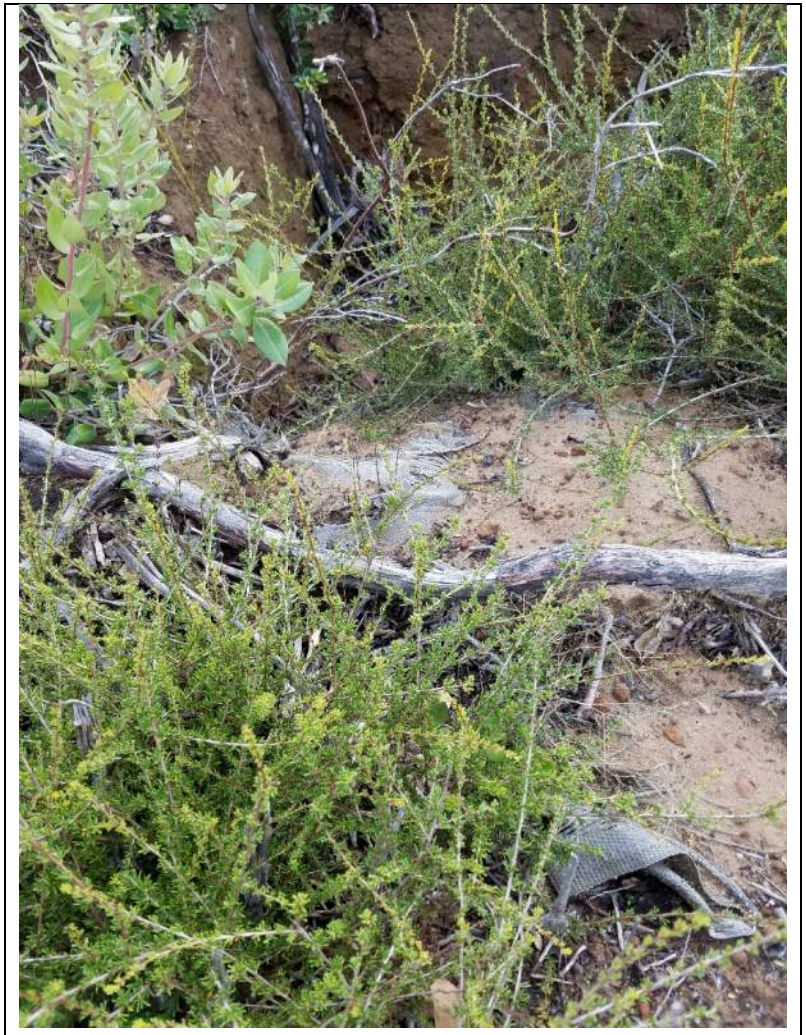
Photograph No. 15	Date: 12/06/18	Time: 14:30
Site: BLM Area B – Unit B3W		
Description: Soil mound		



Photograph No. 16	Date: 12/06/18	Time: 14:30
Site: BLM Area B – Unit B3W		
Description: Soil mound area		

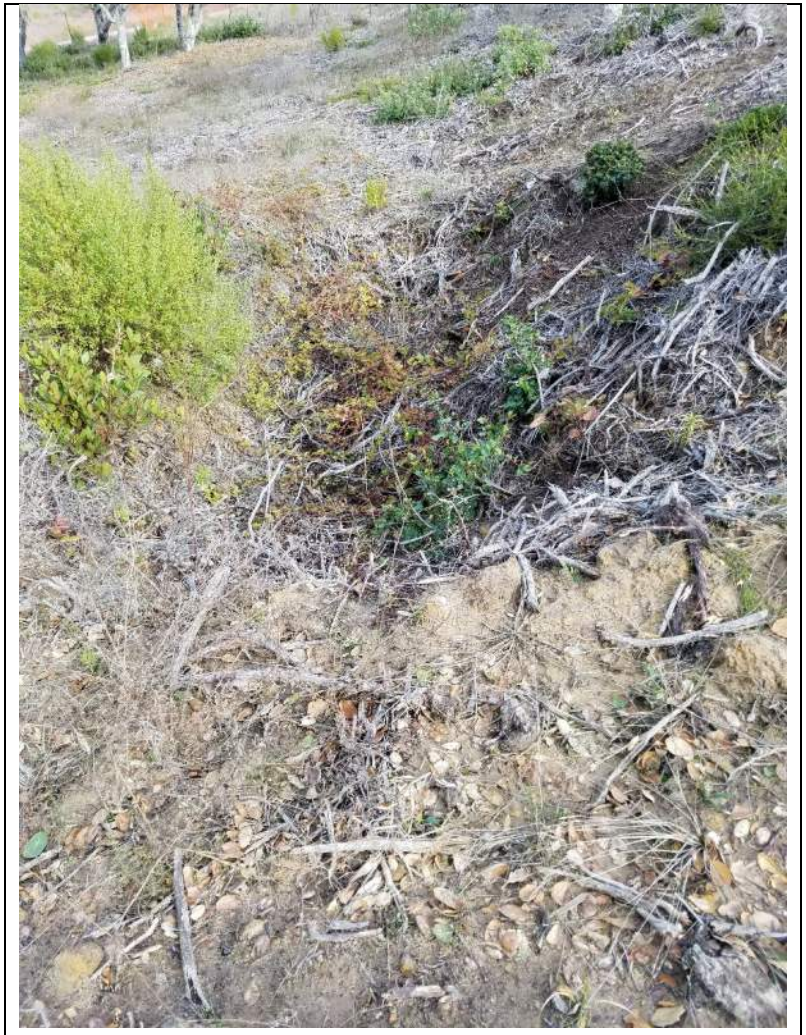
Photograph No. 17	Date: 12/06/18	Time: 14:40
Site: BLM Area B – Unit B3W		
Description: Utility pole		

Photograph No. 1	Date: 12/03/18	Time: 13:15
Site: BLM Area B – Unit B		
Description: Trench series		

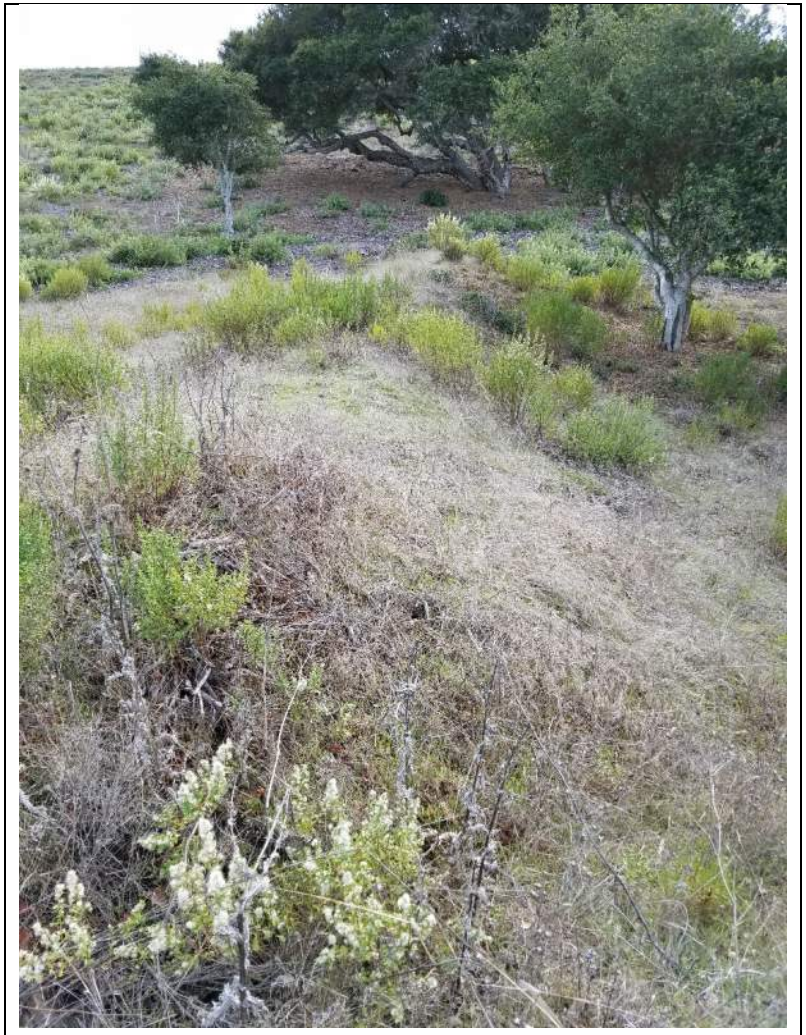


Photograph No. 2	Date: 12/03/18	Time: 13:15
Site: BLM Area B – Unit B		
Description: Sand bag area		

Photograph No. 3	Date: 12/03/18	Time: 13:16
Site: BLM Area B – Unit B		
Description: Sand bag area		

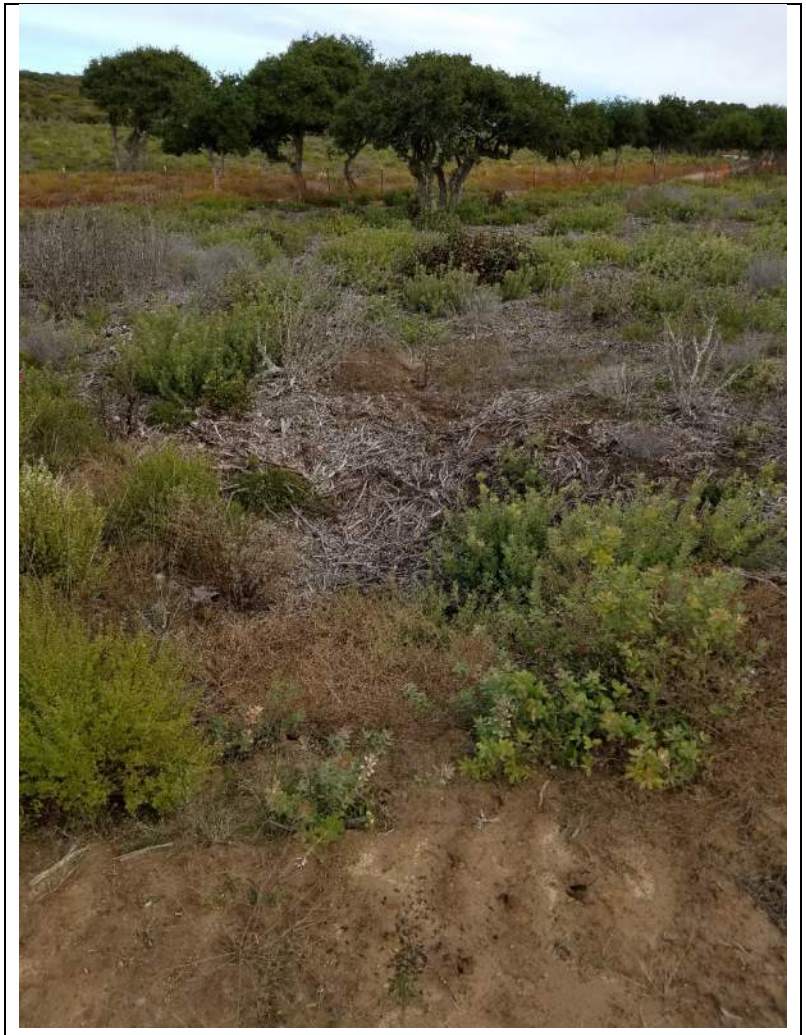


Photograph No. 4	Date: 12/03/18	Time: 13:24
Site: BLM Area B – Unit B		
Description: Shallow pit		



Photograph No. 5	Date: 12/03/18	Time: 13:39
Site: BLM Area B – Unit B		
Description: Berm		

Photograph No. 6	Date: 12/03/18	Time: 13:39
Site: BLM Area B – Unit B		
Description: Berm		



Photograph No. 7	Date: 12/03/18	Time: 13:44
Site: BLM Area B – Unit B		
Description: Site conditions		

Photograph No. 8	Date: 12/03/18	Time: 13:44
Site: BLM Area B – Unit B		
Description: Shallow pit		

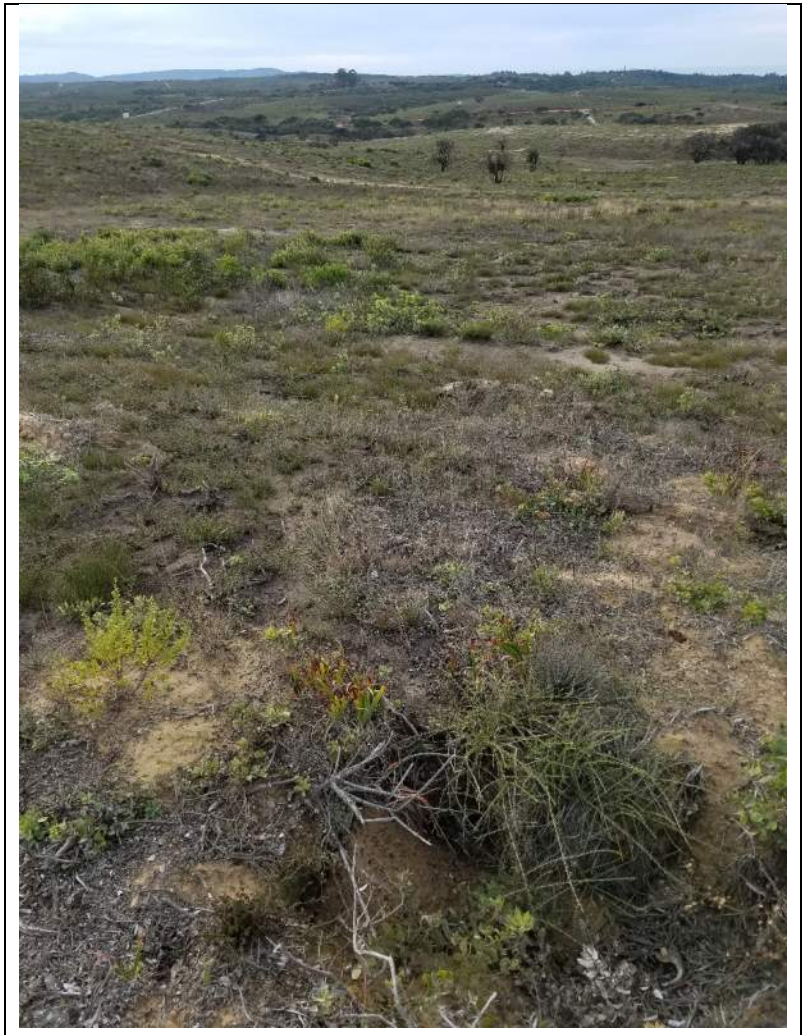
Photograph No. 9	Date: 12/03/18	Time: 14:37
Site: BLM Area B – Unit B		
Description: Concrete bunker		

Photograph No. 10	Date: 12/03/18	Time: 14:50
Site: BLM Area B – Unit B		
Description: Pit		

Photograph No. 11	Date: 12/03/18	Time: 15:14
Site: BLM Area B – Unit B		
Description: Pit		

Photograph No. 12	Date: 12/03/18	Time: 15:38
Site: BLM Area B – Unit B		
Description: Pit		

Photograph No. 13	Date: 12/03/18	Time: 15:39
Site: BLM Area B – Unit B		
Description: Pit		



Photograph No. 14	Date: 12/03/18	Time: 15:54
Site: BLM Area B – Unit B		
Description: Pit		

Photograph No. 15	Date: 12/03/18	Time: 16:00
Site: BLM Area B – Unit B		
Description: Firing point		

Photograph No. 16	Date: 12/03/18	Time: 16:01
Site: BLM Area B – Unit B		
Description: Firing point		

Photograph No. 17	Date: 12/04/18	Time: 07:58
Site: BLM Area B – Unit B		
Description: Metal debris		

Photograph No. 18	Date: 12/04/18	Time: 08:29
Site: BLM Area B – Unit B		
Description: Trench series		

Photograph No. 19	Date: 12/04/18	Time: 09:05
Site: BLM Area B – Unit B		
Description: Pit		

Photograph No. 20	Date: 12/04/18	Time: 09:09
Site: BLM Area B – Unit B		
Description: Site conditions		

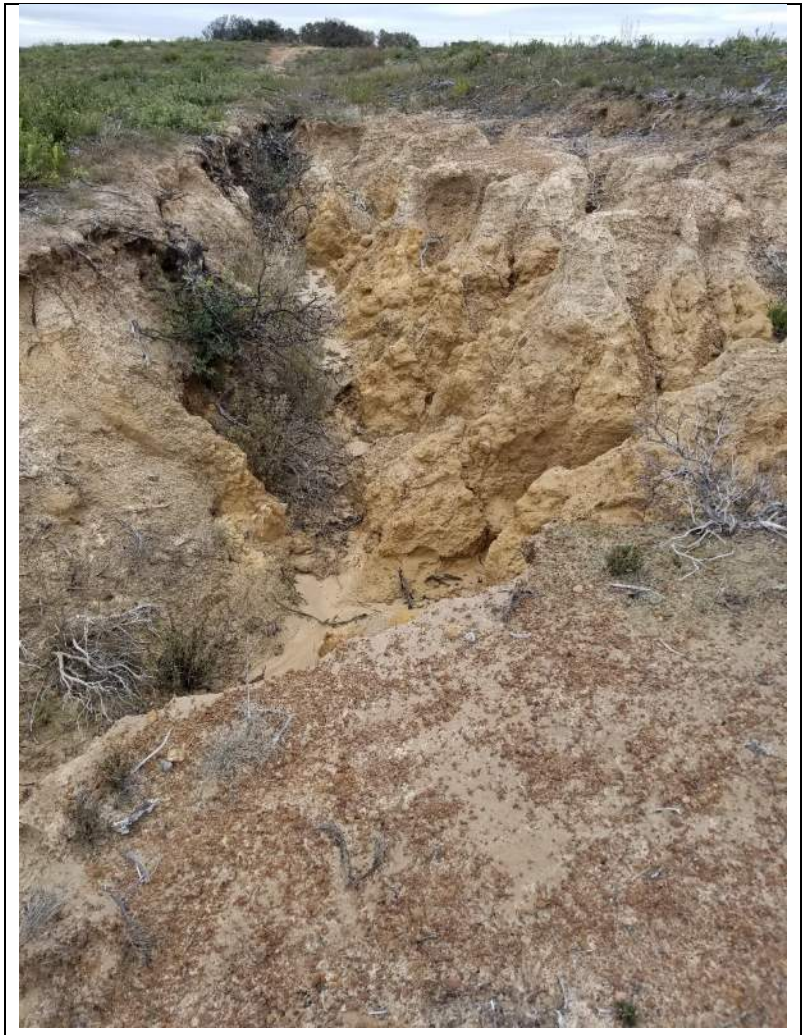
Photograph No. 21	Date: 12/04/18	Time: 09:13
Site: BLM Area B – Unit B		
Description: Soil mound		

Photograph No. 22	Date: 12/04/18	Time: 09:14
Site: BLM Area B – Unit B		
Description: Site conditions		

Photograph No. 23	Date: 12/04/18	Time: 09:35
Site: BLM Area B – Unit B		
Description: Trench series		

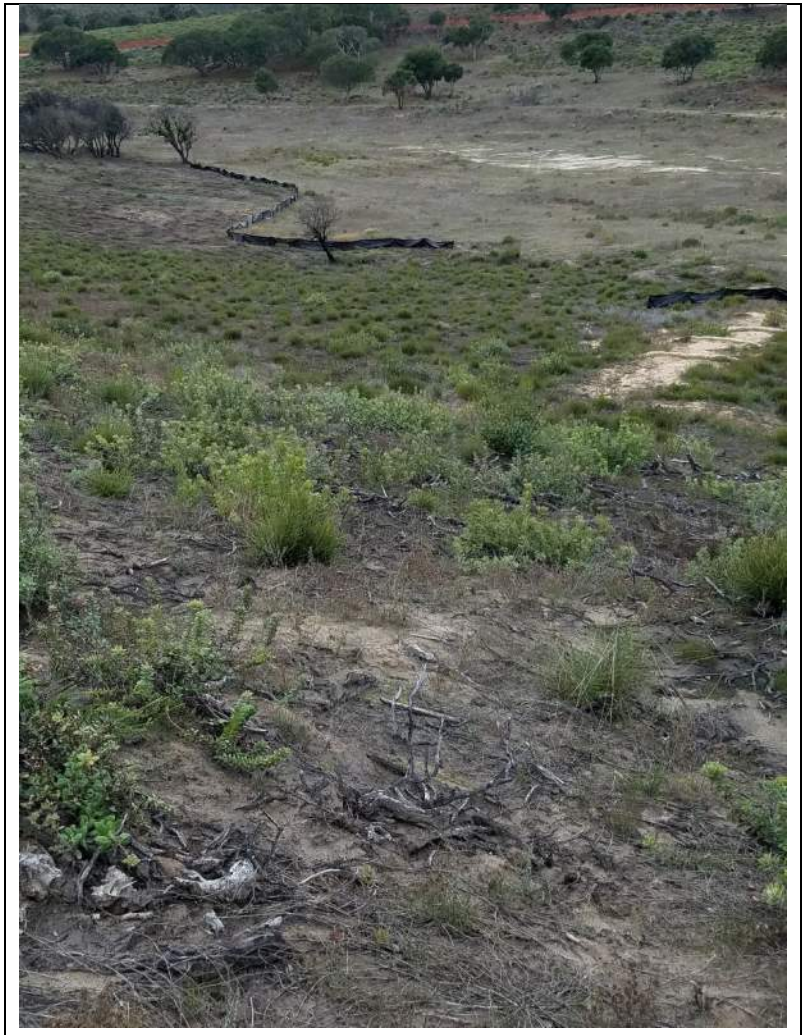
Photograph No. 24	Date: 12/04/18	Time: 09:35
Site: BLM Area B – Unit B		
Description: Trench series		

Photograph No. 25	Date: 12/04/18	Time: 10:46
Site: BLM Area B – Unit B		
Description: Erosion channel		



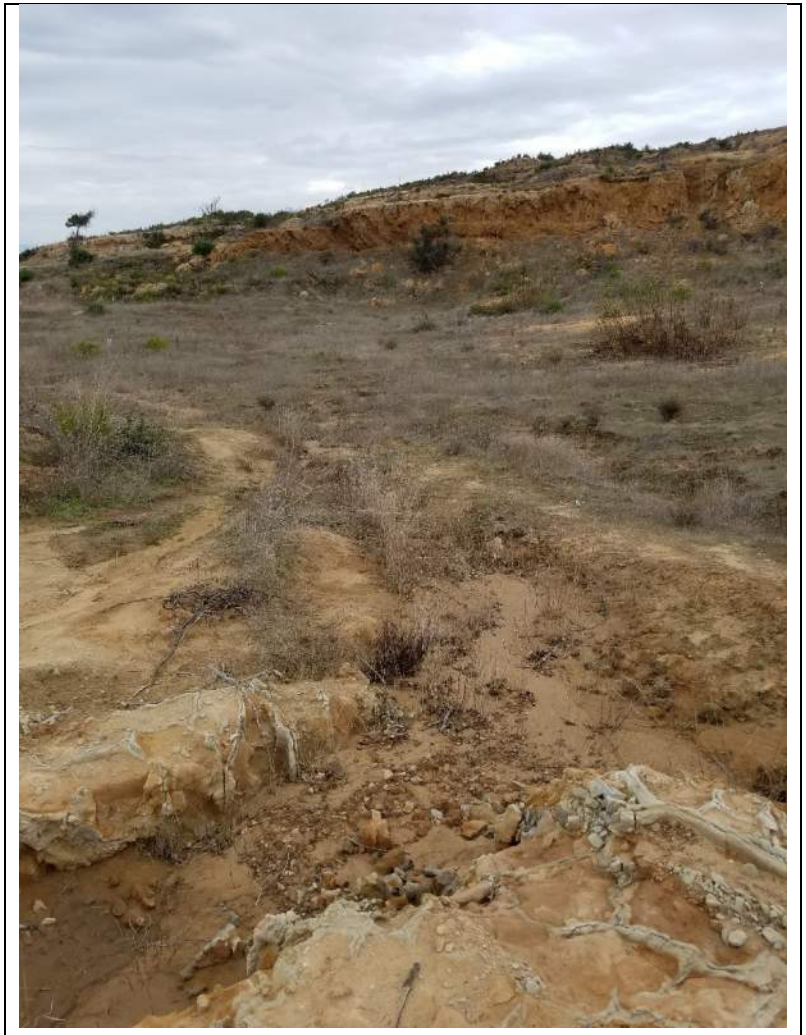
Photograph No. 26	Date: 12/04/18	Time: 10:50
Site: BLM Area B – Unit B		
Description: Erosion channel		

Photograph No. 27	Date: 12/04/18	Time: 10:50
Site: BLM Area B – Unit B		
Description: Erosion channel		

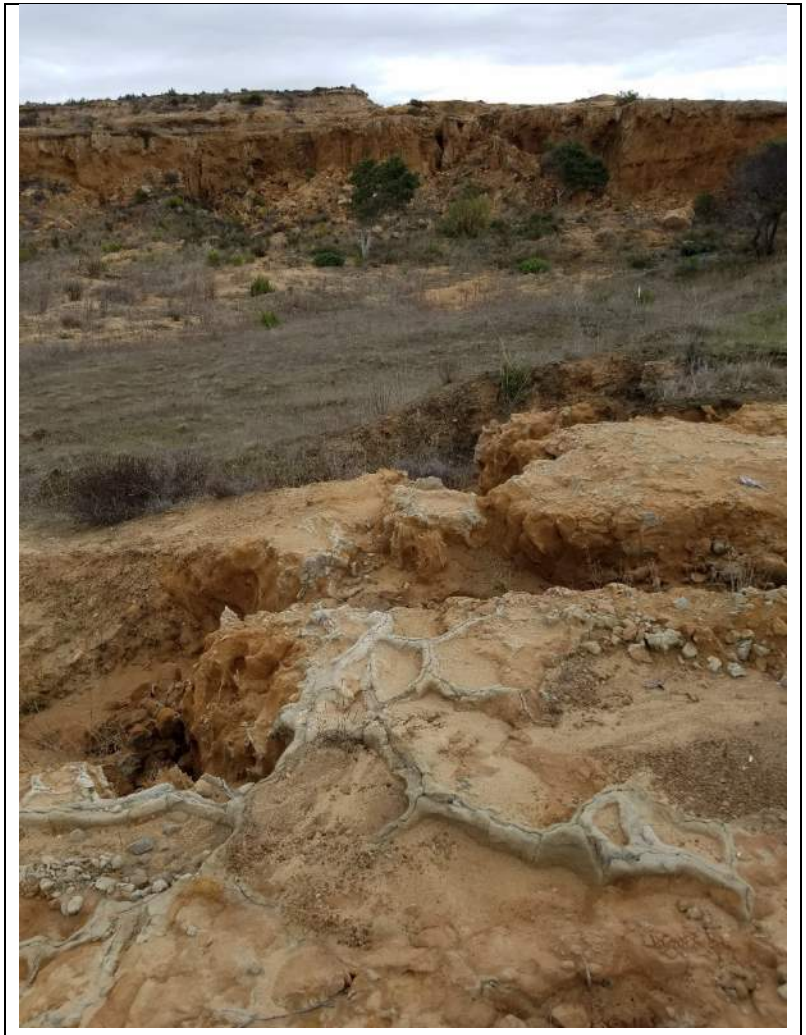


Photograph No. 28	Date: 12/04/18	Time: 10:52
Site: BLM Area B – Unit B		
Description: Site conditions		

Photograph No. 29	Date: 12/04/18	Time: 11:11
Site: BLM Area B – Unit B		
Description: Concrete pad		



Photograph No. 30	Date: 12/04/18	Time: 12:59
Site: BLM Area B – Unit B		
Description: Site conditions		



Photograph No. 31	Date: 12/04/18	Time: 12:59
Site: BLM Area B – Unit B		
Description: Site conditions		

Photograph No. 32	Date: 12/04/18	Time: 13:49
Site: BLM Area B – Unit B		
Description: Concrete bunker		

Photograph No. 33	Date: 12/04/18	Time: 13:50
Site: BLM Area B – Unit B		
Description: Debris		

Photograph No. 34	Date: 12/04/18	Time: 13:50
Site: BLM Area B – Unit B		
Description: Debris		

Photograph No. 35	Date: 12/04/18	Time: 14:24
Site: BLM Area B – Unit B		
Description: Concrete debris		

Photograph No. 1	Date: 12/03/18	Time: 08:03
Site: BLM Area B – Unit C		
Description: Site conditions		

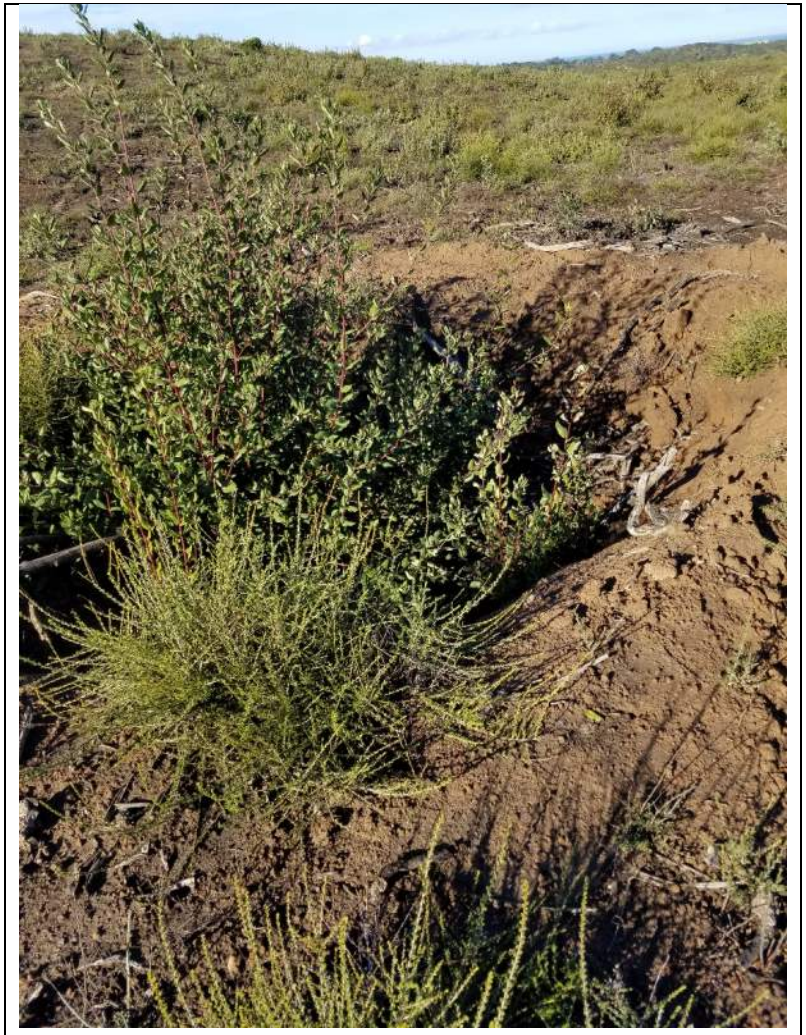
Photograph No. 2	Date: 12/03/18	Time: 08:10
Site: BLM Area B – Unit C		
Description: Pit		

Photograph No. 3	Date: 12/03/18	Time: 08:10
Site: BLM Area B – Unit C		
Description: Pit		

Photograph No. 4	Date: 12/03/18	Time: 08:10
Site: BLM Area B – Unit C		
Description: Pit		

Photograph No. 5	Date: 12/03/18	Time: 08:18
Site: BLM Area B – Unit C		
Description: Pit		

Photograph No. 6	Date: 12/03/18	Time: 09:33
Site: BLM Area B – Unit C		
Description: Pit		



Photograph No. 7	Date: 12/03/18	Time: 09:36
Site: BLM Area B – Unit C		
Description: Pit		

Photograph No. 8	Date: 12/03/18	Time: 10:33
Site: BLM Area B – Unit C		
Description: Rock pile		

Photograph No. 9	Date: 12/03/18	Time: 10:40
Site: BLM Area B – Unit C		
Description: Wooden debris		

Photograph No. 2	Date: 12/03/18	Time: 11:30
Site: BLM Area B – Unit C		
Description: Cement trough		