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September 15, 2015

Mr. Daniel Zogaib Southern California Cleanup Operations Department of Toxic Substances Control 5796 Corporate Avenue Cypress, CA 90630

Subject: Submittal of the 2015 Munitions and Explosives of Concern Inspection Report, Potrero Canyon (Lockheed Martin Beaumont Site 1), Beaumont, California

Dear Mr. Zogaib:

Please find enclosed one hard copy of the body of the report and two compact disks with the report body and appendices of the 2015 Munitions and Explosives of Concern Inspection Report, Potrero Canyon (Lockheed Martin Beaumont Site 1), Beaumont, California for your review and approval or comment.

If you have any questions regarding this submittal, please contact me at 818-847-9901 or brian.thorne@Imco.com.

Sincerely,

Bi 7.U\_ Brian T. Thorne

Project Lead

Enclosure: 2015 Munitions and Explosives of Concern Inspection Report, Potrero Canyon (Lockheed Martin Beaumont Site 1), Beaumont, California

Mr. Gene Matsushita, LMC (electronic copy) CC:

Ms. Barbara Melcher, CDM Smith (electronic copy)

Mr. Tom Villeneuve, Tetra Tech (electronic copy)

BUR182 Beau1 Trans MEC inspection rpt

# 2015 Annual Munitions and Explosives of Concern Inspection Report Potrero Canyon (Lockheed Martin Beaumont Site 1) Beaumont, California







# 2015 MUNITIONS AND EXPLOSIVES OF CONCERN INSPECTION REPORT POTRERO CANYON (LOCKHEED MARTIN BEAUMONT SITE 1) BEAUMONT, CALIFORNIA

Prepared for:

Lockheed Martin Corporation

Prepared by:

Tetra Tech, Inc.

September 2015

Ralph Brooks

**UXO** Project Manager

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# **ABBREVIATIONS AND ACRONYMS**

AOC area of concern

GPS global positioning system

HCP Habitat Conservation Plan

HDT Riverside County Sheriff's Hazardous Devices Team

ID identification

LMC Lockheed Martin Corporation

MEC munitions and explosives of concern

MD munitions debris

MPPEH material potentially presenting an explosive hazard

site Potrero Canyon (Lockheed Martin Beaumont Site 1)

Tetra Tech, Inc.

TP target practice round

TPLZ terraced projectile landing zone

USFWS United States Fish and Wildlife Service

UXO unexploded ordnance

# **SECTION 1 INTRODUCTION**

This Munitions and Explosives of Concern Inspection Report has been prepared by Tetra Tech, Inc. on behalf of Lockheed Martin Corporation, and presents the results of the 2015 munitions and explosives of concern inspection of Potrero Canyon (Lockheed Martin Beaumont Site 1). The site is located in an undeveloped area south of the City of Beaumont, Riverside County, California (Figure 1). Most of the site is within the Beaumont City limits. Currently, the site is inactive with the exception of remedial activities performed under Consent Order 88/89-034 and Operation and Maintenance Agreement 93/94-025 with the California Department of Toxic Substances Control. California's Wildlife Conservation Board, Department of Fish and Game, Resources Agency owns approximately 94% (8,552 acres) of Potrero Canyon. The remaining 565 acres, referred to as the conservation easement, were retained by Lockheed Martin Corporation (Figure 2).

Munitions and explosives of concern investigations and removal at the site have been completed. While all reasonable steps to mitigate the risk have been taken, there is potential for residual munitions and explosives of concern to be present. As a result, Lockheed Martin Corporation has implemented a munitions and explosives of concern inspection program. The inspection program is intended to check those areas where munitions and explosives of concern were found or where inert projectiles are known to remain, and to assess whether any have been exposed by erosion or other forces. If inert projectiles or munitions and explosives of concern are found, they are removed and/or disposed of appropriately. Inspections have been conducted annually since 2011 to assess if munitions and explosives of concern have been uncovered or exposed by various natural causes. The areas designated for inspection include: the streambeds in Area A (Eastern Aerojet Range), Area D (Lockheed Propulsion Company Ballistics Test Range), and Area G (Helicopter Weapons Test Area), and the Phalanx Target berm located in Area B (Rocket Motor Production Area), the berm at the base of the terraced projectile landing zone located in Area D, and the landfill located in Area H (Sanitary Landfill) (Figures 3 through 7). The locations for inspection are based on recommendations from the Munitions and Explosives of Concern Awareness Training Plan (Tetra Tech, 2011).

Based on site history and the findings from the first three inspections, a modified inspection schedule was proposed in the 2013 Munitions and Explosives of Concern Inspection Report (Tetra Tech, 2013). The proposed changes were submitted to the California Department of Toxic Substances

Control in October 2013, and were approved with no comments on the proposed modifications. The 2015 inspection followed the annual and biennial inspection schedule presented in Table 1.

Additional modifications to the inspection schedule will be proposed based on the findings from future inspections. All proposed modifications to the inspection schedule will require the approval of California Department of Toxic Substances Control.

The objectives of this report are to:

- Briefly summarize the site history.
- Describe the inspection methodology utilized.
- Report findings and disposal activities.

This Report is organized into the following sections: 1) Introduction, 2) Inspection Methodology, 3) Summary of Inspection Results, 4) Conclusions and Recommendations, and 5) References. Tables and figures are numbered sequentially in the order of their appearance in the document, and are presented at the end of the report body following Section 5.

#### 1.1 SITE HISTORY

Historically, the site was used primarily for ranching. Between 1960 and 1963, the various parcels that make up the site were purchased by either Grand Central Rocket or Lockheed Propulsion Company. In the early 1960s Grand Central Rocket was acquired by the Lockheed Propulsion Company, bringing all of the parcels under their ownership. The property was developed and used as a remote test facility for early space and defense programs. During the active industrial life of the site from 1960 until 1974, Lockheed Propulsion Company used the facility for solid propellant mixing, testing, and disposal, as well as for ballistics testing. Explosives were used in their work; however, most munitions used on-site were reportedly practice rounds that did not contain high explosives. After 1974, the site was vacant except for occasional use by third-party lessees. All activity ceased at the site in 1991, except for ongoing environmental activities.

Based on historical data, the site has been divided into nine Operational Areas reflecting the types of activities known to have occurred on-site. Munitions and explosives of concern related activities were conducted in eight of the Operational Areas, as follows:

Area A - Eastern Aerojet Range

Area B - Rocket Motor Production Area

Area C - Burn Pit Area

Area D - Lockheed Propulsion Company Ballistics Test Range

Area F - Lockheed Propulsion Company Test Services Area

Area G - Helicopter Weapons Test Area

Area H - Sanitary Landfill

Area I – Western Aerojet Range

Figure 2 shows the eight Operational Areas included in the munitions investigations and the areas of concern that were investigated.

# 1.2 SUMMARY OF PREVIOUS MUNITIONS AND EXPLOSIVES OF CONCERN EVALUATIONS AND REMOVALS

Munitions and explosives of concern investigations were initiated in 2005 when two small belts of 20mm linked practice ammunition were found during the repair of a stream crossing in Area D. In November 2006, all munitions debris collected during the investigations conducted to that point was radiologically tested and no depleted uranium was identified. Removal actions were performed in 2006 and 2007. Supplemental investigations were performed in 2009 and 2010. No further investigations or removals are planned at this time. Routine post removal action inspections are performed and are discussed in Section 1.3.

Munitions and explosives of concern investigations or removal actions have been performed at 28 areas of concern (Figure 2). All munitions debris items found during the investigations were dual inspected, certified safe, and disposed of by a certified recycler. All munitions and explosives of concern items found during the investigation were treated on- site with donor explosives. A summary of what has been found to date in the eight operational areas during the munitions and explosives of concern investigations and removal actions is presented below.

Aerojet conducted ballistics testing in Area A. Munitions and explosives of concern investigations and the removal action resulted in the discovery and removal of inert 27.5mm and 30mm projectiles, 16mm tungsten penetrators and an inert 76mm rocket. Fragments from high explosive 30mm projectiles and several unexploded 30mm projectiles were also found.

General Dynamics reportedly tested Phalanx Gatling guns and 2.75-inch Viper Bazookas in Area B. The bazooka rockets reportedly carried explosive and shaped charges. The Gatling guns fired inert 20mm and 30mm rounds. Munitions and explosives of concern investigations resulted in the discovery and removal of inert 20mm and 30mm projectiles in the Phalanx gun target berm and possible munitions fragments from the rockets. No munitions and explosives of concern were found during the investigation. It was determined that a removal action was not warranted at the Area B areas of concern and 20mm and 30mm projectiles (presumed to be inert) are still present.

Lockheed Martin Corporation conducted disposal activities in Area C (Burn Pit Area). Historical records indicate that industrial solvents and rocket fuel constituents were placed in pits along with off-specification solid rocket fuel and burned. Small aluminum cups containing high melting explosive (cyclo-1, 3, 5, 7-tetramethylene-2, 4, 6, 8-tetranitramine) were reportedly burned in the pits as well. Munitions and explosives of concern investigations resulted in the discovery and removal of a 30mm inert projectile (likely a projectile that missed the Phalanx gun target berm), a handful of expended 30mm cartridge activated devices, and a small amount of thick-walled fragments. The origin of the cartridges is unknown and the fragments are thought to have come from rocket fuel mixer blowout panel tests conducted adjacent to the Burn Pit Area. At least one of the blowout panel tests resulted in an explosion that destroyed the test equipment. No munitions and explosives of concern were found. Based on the findings this area is not included in the routine inspections.

Lockheed Martin Corporation tested several weapons platforms in Area D including a Navy five-inch gun, an Army 155mm gun, 40mm and 37mm guns, land mines, and incendiary bombs. During munitions and explosives of concern investigations inert projectiles and some munitions fragments were found. Unfired large caliber burster tubes and 20mm practice rounds were also found along the streambed. These unfired items were classified as munitions and explosives of concern because the propellant in them represented a potential explosive hazard. A removal was conducted in the area of the streambed.

No munitions testing was reported to have been conducted in Area F (Lockheed Propulsion Company Test Services Area). A magazine for the storage of igniters was reportedly located in the area and small remnants of solid rocket propellant were reported to have been found at the rocket motor washout area. The magazine could not be located at the site and was likely removed when the

facility was closed. The remnants of solid rocket fuel were reportedly removed in the early 1990s; none were observed during the munitions and explosives of concern investigations. Based on the findings this area is not included in the routine inspections.

Lockheed Martin Corporation performed helicopter weapons testing in Area G. Various calibers of weapons were tested (40mm grenade launcher, 30mm cannon, and 7.62mm machine gun). All munitions fired were reportedly inert or practice rounds. The areas of concern at this testing site were investigated and all of the projectiles recovered during the investigation were inert. No munitions and explosives of concern were found during the investigation. It was determined that a removal action was not warranted at the Area G areas of concern and projectiles (presumed to be inert) are still present.

No munitions testing was reported to have been conducted in Area H. Investigations did not result in the discovery of any munitions-related items on the surface of the landfill, but belted 7.62mm machine gun ammunition used in Area G was reportedly disposed of in the landfill. No munitions and explosives of concern were found.

Munitions were tested in Area I (Western Aerojet Range). Incendiary bomb tests were conducted at the southern end of the range and 27.5mm projectiles and 16mm tungsten penetrators were tested along the length of the range. Thick-walled munitions fragments and inert projectiles were found during the investigations. No munitions and explosives of concern were found during the investigation. Based on the findings this area is not included in the routine inspections.

#### 1.3 POST REMOVAL ACTION ROUTINE INSPECTION AREAS

As discussed above, while all reasonable steps to mitigate the risk have been taken, potential for residual munitions and explosives of concern remains. The majority of the munitions and explosives of concern uncovered to date were found near the ground surface but munitions and explosives of concern detection equipment has depth limitations. Therefore, erosion could expose errant or buried munitions and explosives of concern. The inspection program is intended to check those areas where munitions and explosives of concern were found or where inert projectiles are known to remain, and to assess whether any have been exposed and pose a threat. During the course of previous investigations, six of the 28 areas investigated were found to contain munitions and explosives of concern. Therefore,

these six areas of concern were included in a routine inspection program intended to look for and continue to evaluate the potential for residual munitions and explosives of concern. In the other 22 areas, there is no evidence of potential munitions and explosives of concern contamination. The six areas of concern chosen for inspection are described below:

Area A Streambed – There are four areas of concern in Area A but only the streambed is a concern with respect to erosion. Potrero Creek runs adjacent to the Target Impact Area, area of concern. No munitions and explosives of concern were found in the Area A Streambed area of concern but they were found in the Target Impact Area, area of concern. The banks of the streambed continue to erode material from the former Target Impact Area, area of concern. Further, secondary erosion features that drain into Potrero Creek have also developed. Some of these secondary features have developed in the Target Impact Area, area of concern, as well. As a result, the Area A Streambed area of concern and the secondary erosion features have been included in the munitions and explosives of concern inspection program. The area of concern is presented in Figure 3.

Area B Phalanx Target Berm – The Phalanx Gatling Gun is a high volume or rapid fire gun. A large number of metallic objects were detected below the surface of the target berm. During the previous munitions and explosives of concern investigations, projectiles were removed and examined from five different locations in the face of the berm. It was reported that only inert practice rounds were used during the testing of the Phalanx Gun. Inert 20mm and 30mm projectiles were recovered from the berm. No munitions and explosives of concern were recovered from the berm. The berm is steeply sloped and somewhat prone to erosion. Inert items resembling much more hazardous live munitions may erode out of the berm and collect near the base where they may be found by site users. As a result, the Phalanx Target Berm area of concern has been included in the munitions and explosives of concern inspection program to allow removal of the inert practice projectiles as they erode out of the berm. The area of concern is presented in Figure 4.

Area D Berm at the base of the Terraced Projectile Landing Zone – While no explosive projectiles were reported to have been tested at this range, fragments were found near a presumed target located up range of the berm and appeared to have been generated by explosive, not mechanical, means. The berm was investigated and detected items were removed. No munitions and explosives of concern were found, but the detection equipment has depth limitations. The berm is steeply sloped and somewhat prone to erosion. With time, undetected objects deeper in the berm could be brought

to the surface by erosion. As a result, the berm at the base of the terraced projectile landing zone has been included in the munitions and explosives of concern inspection program. The area of concern is presented in Figure 5.

Area D Streambed – Bedsprings Creek bisects Area D. While no known munitions and explosives of concern activities were conducted in the drainage it appears some munitions-related items were discarded here. Several unfired burster tubes and 20 mm practice ammunition were found in the streambed. These items are considered munitions and explosives of concern. A 100% survey/removal was conducted in the accessible area of the streambed. With time, undetected objects buried in the area could be exposed by erosion. As a result, the Area D streambed area of concern has been included in the munitions and explosives of concern inspection program. The area of concern is presented in Figure 5.

Area G Streambed – Potrero Creek meanders through the Helicopter Weapons Test Area. The streambed is located between the firing point and the range. It was reported that weapons were checked prior to testing by firing them into the southern bank of the streambed. It was also reported that only inert practice rounds were used during the testing. Investigations in Area G resulted in the recovery of small arms brass, mechanically generated 30mm fragments, and inert 40mm projectiles. No munitions and explosives of concern were found in the Area G Streambed. Due to erosion of the stream bank, inert items resembling much more hazardous live munitions may erode out and collect in the streambed where they may be found by site users. As a result, the Area G Streambed area of concern has been included in the munitions and explosives of concern inspection program to allow the removal of the inert practice projectiles if they erode out of the stream bank. The area of concern is presented in Figure 6.

Area H Sanitary Landfill – The landfill is closed and covered; however, there is anecdotal information that small arms ammunition (7.62mm) was placed in the landfill. While temporary erosion protection measures are in place, the surface of the landfill is sloped at approximately six percent and has been subject to some erosion in the past. With time erosion could expose the contents of the landfill. As a result, the Area H Sanitary Landfill area of concern has been included in the munitions and explosives of concern inspection program. Temporary erosion control measures as well as quarterly inspection will continue to be utilized until a final solution is in place. The area of concern is presented in Figure 7.

Table 2 contains a summary of the six areas of concern that have been included in the inspections, an evaluation of the types of munitions/ammunition that may have been used in each area and may potentially be present, and a summary of what has been discovered during prior routine inspections. The inspections have been conducted annually since 2011. During the first two years' inspections, only anomalies proud of the surface were inspected. Subsurface inspections were added in 2013.

# **SECTION 2 INSPECTION METHODOLOGY**

This section of the report discusses the methodology utilized for the inspections. It includes both the surface and the subsurface inspections. It also discusses compliance with the Habitat Conservation Plan (HCP).

#### 2.1 SURFACE INSPECTIONS

Instrument-aided munitions and explosives of concern (MEC) surface inspections are conducted near the end of the rainy season in early April and include annual and biennial tasks as shown in Table 1. The annual tasks are performed in Areas A and D and include both surface and subsurface investigations within the streambeds and secondary erosion features along the banks of the streambeds. The biennial investigations occur in odd numbered years and include surface investigations in the streambeds and secondary erosion features in Area G, the Phalanx target berm located in Area B, the berm at the base of the terraced projectile landing zone (TPLZ) located in Area D, and the Landfill located in Area H. The inspections are conducted using a White's Spectrum XLT all metals detector in tandem with a Schonstedt GA-52Cx ferrous metal detector which is used to increase survey depth below ground surface.

Detection equipment employed to conduct the instrument-aided surface surveys are tested using the blanket test. The blanket test is performed by taking a ferrous metallic object the size of a 20 mm projectile and placing it under a cover (a tarp). The instrument is turned on and set at the level that will be used for detection during the survey. The instrument is then swept back and forth over the area where the metallic object is located; if the instrument detects the object, it is accepted for use; if not, it is rejected and repaired or replaced. All equipment utilized during the field event are tested daily, and the test results are documented in the daily field reports.

Each area designated for inspection is surveyed using the instrument-aided on-line surface survey method. The survey team forms up in a line at the established base line (one of the survey area edges). The technicians then step off from the base line one at a time in an echeloned line, with the first technician following the left or right boundary of the area to be surveyed, dropping flags on the opposite side as he progressed. As each following technician moves forward, they pick up the

previous technician's flag and drop a flag on the opposite side for the next technician in line to follow. The last technician in line leaves dropped flags to mark a path for the team to follow during the next pass. This process is repeated until the entire area is surveyed.

If suspect MEC, material potentially presenting an explosive hazard (MPPEH), or munitions debris (MD) is encountered at the surface, its location is recorded using a global positioning system (GPS) instrument and the unexploded ordnance (UXO) team attempts to identify the item and to gather additional information such as munitions type, fuze type by function, and condition of the suspect MEC, MPPEH, or MD (e.g., fired, unfired, armed, unarmed). The item is marked with a yellow survey marker flag and given a unique identification (ID) number. All available information about the item is recorded in the logbook/Daily MEC Accountability Log, including suspect MEC location, description, and ID number, additionally a digital photograph is taken of each item. In the event that MEC or MPPEH has been encountered, Tetra Tech UXO personnel will maintain site access control and ensured personnel safety until the Riverside County Sheriff's Hazardous Devices Team (HDT) arrived and take control of the site. Tetra Tech will supply the GPS coordinates and available information for each item to the Riverside County Sheriff's HDT upon their arrival. If the item is determined to be MD or scrap metal, the item is collected and stored for subsequent offsite disposal.

On completion of the field evaluation, recovery, and disposal of suspect MEC or MPPEH by the Riverside County Sheriff's HDT, the detector-aided surface survey will continue as described until all areas requiring periodic inspection are completed.

When subsurface target anomalies are detected, the location is recorded with a GPS instrument and the coordinates are recorded on the target anomaly dig sheet for subsequent investigation.

#### 2.2 SUBSURFACE INSPECTION

In Areas A and D, the inspection team will excavate select anomalies detected during the inspection to confirm the completeness of the removal actions taken in these areas. Historically potentially hazardous munitions-related materials were found in both of these Operational Areas; therefore, the potential for residual MEC is possible. Historically scrap metal was found in all the areas investigated including these two. Therefore, not all of the anomalies detected would necessarily be

investigated. The inspection team will excavate up to 20 anomalies detected across the two areas and inspect them to determine their nature.

If suspect MEC, MPPEH, or MD is encountered during subsurface inspection, the UXO team will attempt to identify the item and to gather additional information such as munitions type, fuze type by function, and condition (e.g., fired, unfired, armed, unarmed). The item is marked with a yellow survey marker flag and given a unique ID number. All available information about the item is recorded in the logbook/Daily MEC Accountability Log, including suspect MEC location, description, and ID number, additionally a digital photograph is taken of each item. For excavated items determined to be MEC or MPPEH, the Riverside County Sheriff's HDT is contacted for disposal and Tetra Tech UXO personnel maintained site access control and ensured personnel and public safety until the HDT arrived and took control of the site. If the item is determined to be MD or scrap metal, the item is collected and stored for subsequent offsite disposal.

#### 2.3 HABITAT CONSERVATION

All inspection activities are performed in accordance with the United States Fish and Wildlife Service (USFWS)-approved HCP [USFWS, 2005] and subsequent clarifications (LMC, 2006a, 2006b, and 2006c) of the HCP. Stephens' kangaroo rat awareness training is provided to the field teams prior to site entry. A nesting bird survey is performed by a biologist within each MEC inspection area before any activities are started. Locations within the inspection areas identified as potential nesting locations are flagged. MEC inspection activities are not performed within these flagged areas. Prior to any excavation activities the area is inspected by a biologist to ensure that there were no impacts to Stephens' kangaroo rats.

# **SECTION 3 SUMMARY OF INSPECTION RESULTS**

The annual inspection for munitions and explosives of concern (MEC) was performed in early April 2015. Section 3.1 describes the results of the instrument-aided surface survey and any associated subsurface investigations.

#### 3.1 ANNUAL INSPECTION RESULTS

Instrument-aided surface surveys were conducted at all six areas of concern (AOCs) between 9 April 2015 and 14 April 2015. Each morning prior to initiating the surveys, the magnetometers were tested. The blanket tests confirmed that all of the instruments were performing correctly, with documentation for this provided in Appendix A.

A total of 16 subsurface anomalies were selected for intrusive investigation in Area A, and a total of six subsurface anomalies were selected for intrusive investigation in Area D. Each anomaly location was recorded with a handheld GPS (Figure 8). A summary of the anomalies discovered during the inspection including coordinates and excavation details can be found on the Manual Target Excavation Results Dig Sheet (Appendix A).

The 16 target anomalies excavated in Area A were determined to be scrap metal all but one of these was removed for offsite disposal. The remaining item was too large to dig and remove by hand. No MEC or munitions related material were discovered in Area A.

Two surface anomalies recovered in Area D were determined to be munitions related. The first anomaly was suspected to be a 20mm target practice (TP) round but could not be positively identified as such with absolute confidence because of its condition. Based on the items condition it was classified as MPPEH (Appendix B, Photos 14, 15, and 16). The 20mm TP cartridges have reasonably identifiable characteristics and do not have a fuze or contain explosives, only propellant powder. Differentiation of the High Explosive (HE) from the TP variety is not always certain, particularly when the cartridges are in a degraded condition; therefore, this cartridge was presumed to be the HE variety and treated accordingly. The Riverside County Sheriff's Hazardous Devices Team was notified of the presence of these potentially hazardous items, and they responded to treat them on-site using donor explosives. The second surface anomaly located in Area D was determined

to be MD, a 20mm cartridge base, containing no primer or propellant (Appendix B, Photos 17 and 18). The MPPEH and MD items were located in the streambed near the road crossing within the Area D riverbed. Five of the subsurface anomalies in Area D were investigated and determined to be scrap metal which were removed and disposed of offsite. The sixth anomaly was unable to be investigated because of its proximity to a Stephens' kangaroo rat burrow.

Detector-aided surface surveys were performed within the remaining inspection areas: helicopter weapons test area in Area G, the Phalanx target berm located in Area B, the berm at the base of the terraced projectile landing zone (TPLZ) located in Area D, and the Landfill located in Area H. Identified surface debris included scrap metal, construction debris, municipal trash, and geological anomalies. The surface debris were collected and stored for subsequent offsite disposal. No munitions or munitions related material were recovered in these inspection areas.

A nesting bird survey was performed by a biologist within each MEC inspection area before any activities were started. Locations within the inspection areas identified as potential nesting locations were flagged and a 25 meter buffer zone was set up around each nest site. An attempt was made to identify the species of the nesting bird (Figure 9). Based on observation of nest type and location and the species of birds seen in the vicinity of the nests, the species of nesting birds identified in the survey include:

- Three Bullock's oriole nests
- Two California towhee nests
- One Common raven nest
- One Mourning dove nest
- Three Northern rough-winged swallow nests
- One Phainopepla nest

One stick nest had both common ravens and red-tailed hawks flying nearby so a determination between the two species could not be made for this nest. The species could not be determined for three additional stick nests and one cup nest, these nests may have been unoccupied. MEC inspection activities were not performed within the 25 meter buffer zone around the nests. Prior to any excavation of subsurface anomalies the area is inspected by a biologist to ensure that there were no impacts to Stephens' kangaroo rats.

# **SECTION 4 CONCLUSIONS AND RECOMMENDATIONS**

All six munitions and explosives of concern areas of concern were examined during the 2015 munitions and explosives of concern inspection. A number of surface anomalies were located and inspected in all six areas of concern but only munitions related items were recorded. Subsurface anomalies were identified in two of the areas of concern: the streambeds in the Operational Areas A and D. A total of 24 anomalies were recorded (22 subsurface anomalies and two surface anomalies), as follows:

- Area A streambed had 16 subsurface anomalies: The 16 anomalies were identified as scrap metal.
- Area D streambed had two surface and six subsurface anomalies:
  - One surface anomaly was identified as a 20mm cannon cartridge (Target Practice) -MPPEH.
  - o One surface anomaly was identified as a cartridge base munitions debris (MD).
  - o Five of the subsurface anomalies were identified as scrap metal or geological anomalies.
  - One subsurface anomaly was unable to be investigated because of its proximity to an SKR burrow.

One 20 mm projectile in poor condition was recovered and treated by detonation by the Riverside County Sheriff's Hazardous Devices Team. It was determined to be inert. One munitions debris item was dual inspected and certified as free of an explosive hazard.

The discovery of subsurface metallic anomalies in the inspection areas is not unanticipated since metallic anomalies, some related to munitions and explosives of concern, were found in these areas during the assessment and removal work previously conducted. In those areas that were surveyed for assessment purposes only and a removal action was not required, only a small portion of the area of concern was surveyed. Regardless of the level of survey performed, finding metallic anomalies in these areas is not unanticipated. It is possible that metallic debris was present at depths below the detection capabilities of the geophysical instrumentation used for the assessments and that natural

erosion processes may be moving this debris closer to the surface. It is also possible that metallic objects were transported into the area. Therefore, the presence of subsurface metallic anomalies is not necessarily indicative of munitions-related material.

Instrument-aided surface inspections have been conducted for five years, and this is the third year subsurface investigations were performed as well. Prior to the 2014 inspection, these inspections and investigations had yielded no munitions and explosives of concern in the six areas of concern evaluated. This includes the two areas of concern in Area A and Area D where previous munitions and explosives of concern removal activities were conducted. This year munitions debris were found in the streambed in Area D.

The goal of the routine inspections is the discovery and removal of potentially hazardous munitions which may become exposed over time. Based on site history and the findings from the five routine inspections conducted to date, it is recommended that the inspection schedule presented in Table 1 be followed for the 2016 inspection with no recommended changes.

## **SECTION 5 REFERENCES**

- 1. Lockheed Martin Corporation (LMC), 2006a. Clarification of Effects on Stephens' Kangaroo Rat from Characterization Activities at Beaumont Site 1 (Potrero Creek) and Site 2 (Laborde Canyon). August 3, 2006.
- 2. Lockheed Martin Corporation, 2006b. Clarification Concerning Treatment of Unexploded Ordinance (UXO) Discovered During Munitions and Explosives of Concern (MEC) Characterization at Beaumont Site 1 (Potrero Creek) and at the Immediately Adjacent Metropolitan Water District (MWD) Parcel, Riverside County, California; and Analysis of Effects of Treatment Activities for the Federally-Endangered Stephens' Kangaroo Rat (SKR). August 3, 2006.
- 3. Lockheed Martin Corporation, 2006c. Clarification of Mapping Activities Proposed under the Low-Effect Habitat Conservation Plan for the Federally-Endangered Stephens' Kangaroo Rat at Beaumont Site 1 (Potrero Creek) and Site 2 (Laborde Canyon) Riverside County, California (mapping methodology included). December 8, 2006.
- 4. Tetra Tech, 2011. Munitions and Explosives of Concern (MEC) Awareness Training Plan, Former Beaumont Site 1, Beaumont, California, March
- 5. Tetra Tech, 2014. 2014 Munitions and Explosives of Concern Inspection Report Potrero Canyon (Lockheed Martin Beaumont Site 1), Beaumont, California, May 2014
- 6. United States Fish and Wildlife Service (USFWS), 2005. Endangered Species Act Incidental Take Permit for Potrero Creek and Laborde Canyon Properties Habitat Conservation Plan. October 14, 2005.

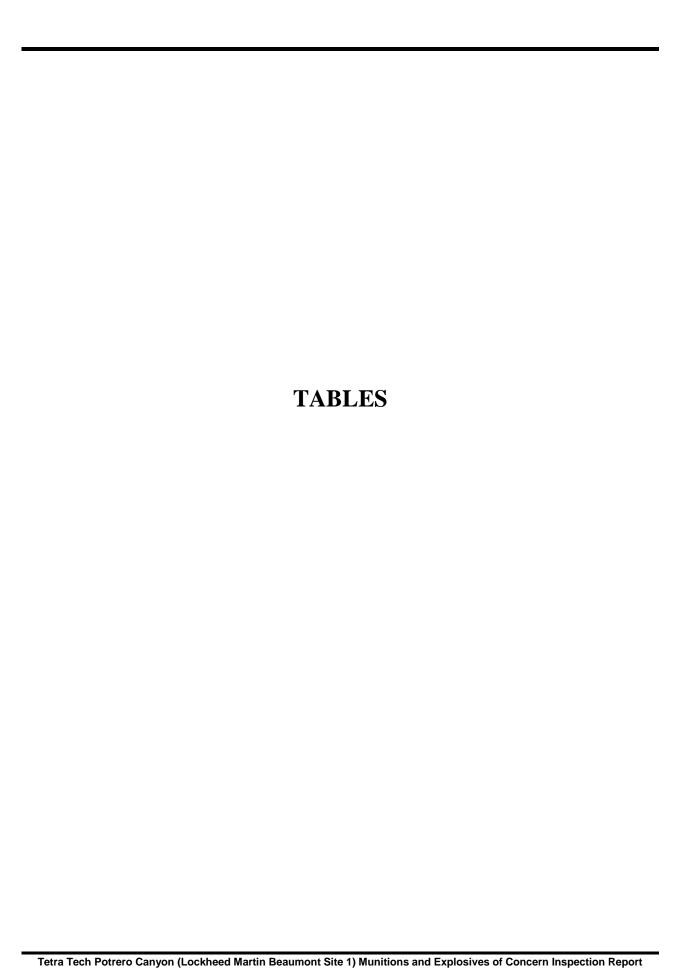


Table 1 Munitions and Explosives of Concern Inspection Schedule

Operational Area	Inspection Area	Inspection Schedule	Inspection Rationale
A	Streambed and Secondary Erosion Features	Annual instrument (all metals) aided surface inspections. Subsurface investigation of up to 20% of metallic anomalies detected during the inspection.	Because unexploded ordnance was found in this Operational Area during the munitions and explosives of concern investigation and removal phases, inspections should continue more frequently.
В	Phalanx Target Berm	Biennial instrument (all metals) aided surface inspections.	Investigations support that only inert projectiles were fired at this area of concern. Inert projectiles are still present but exposure by natural causes appears to be limited.
D	Berm at the Base of the Terraced Projectile Landing Zone	Biennial instrument (all metals) aided surface inspections.	No munitions-related items have been recovered from this berm and erosion of the berm appears to be limited.
D	Streambed and Secondary Erosion Features	Annual instrument (all metals) aided surface inspections. Subsurface investigation of up to 20% of metallic anomalies detected during the inspection.	Because material potentially presenting an explosive hazard was found in this Operational Area during the munitions and explosives of concern investigation and removal phases, the munitions and explosives of concern inspections should continue more frequently.
G	Streambed and Secondary Erosion Features  Biennial instrument (all metals) aided surface inspections.		Investigations support that only inert projectiles were fired at this area of concern. Inert projectiles are still present but exposure by natural causes appears to be limited.
Н	H Landfill Continue routine inspections to ensure the landfill cap is not being compromised and waste is not being exposed.  Biennial instrument (all metals) aided surface inspections.		Small arms munitions are reported to have been buried in the landfill but no munitions-related items have been recovered from the landfill and erosion of the interim cap appears to be limited.

Note: Up to 20 anomalies from the annual inspection areas of concern in Operational Areas A and D will be excavated during subsurface investigations.

Table 2 Summary of Historical Use and Munitions and Explosives of Concern Evaluation by Area of Concern

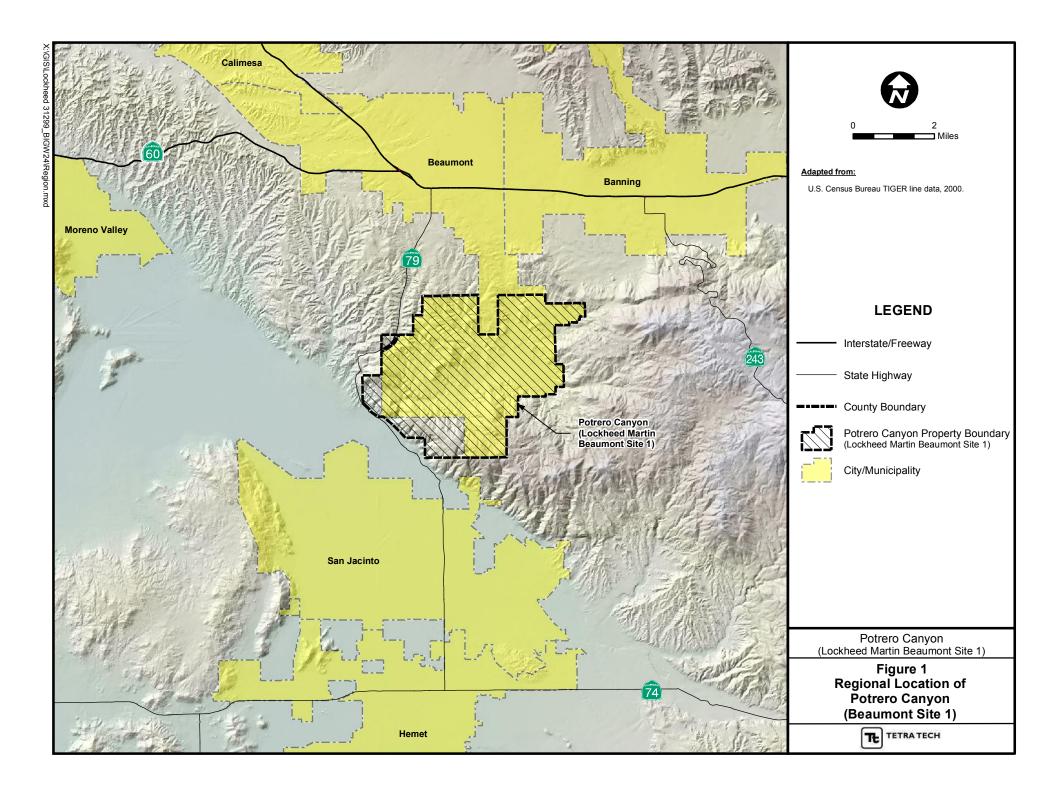
Operational Area	Inspection Area	Documented Historical Use	MEC Related Finds During the Investigations or Removals (2005 through 2010)	Potential Residual MEC/MD	Inspection Results (2011 through 2014)
A	None known (the streambed is immediately adjacent to the Secondary Erosion Features Area and erosion the Target Impact Area)		None (726 targets dug)	30mm high explosive projectiles and MD from adjacent range/target area	One 30mm projectile base (MD) was recovered during the 2014 subsurface investigation.
В	Phalanx Target Berm	Impact area for Phalanx gun tests	Inert 20mm & 30mm TP projectiles; mechanical frag	Inert 20mm & 30mm projectiles and fragments	No MEC or MD has been discovered proud of the surface or during recent subsurface inspections.
D	Berm at the Base of the Terraced Projectile Landing Zone (TPLZ)	TPLZ impact area (gun range)	None found	20mm, 37mm, 40mm, 155mm, and 5 inch TP projectiles and MD	No MEC or MD has been discovered proud of the surface or during recent subsurface inspections.
D	Streambed and Secondary Erosion Features	None known (potential disposal)	20mm TP rounds; 20mm TP projectiles, & live Primers/Igniters	20mm TP rounds, 20mm TP projectiles, & live Primers/Igniters	One 20 mm cartridge (MEC), two 20mm linked cartridges (MEC), one inert 30mm cartridge base, and one unknown munition item (MD) were recovered during 2014 subsurface inspections. One inert 20mm cartridge (MD), was recovered during the 2013 surface inspection.
Secondary		30mm & 40mm TP projectiles	30mm & 40mm TP projectiles	No MEC or MD has been discovered proud of the surface or during recent subsurface inspections but inert 40mm grenades have been recovered during other activities conducted on the impact range above the streambed.	

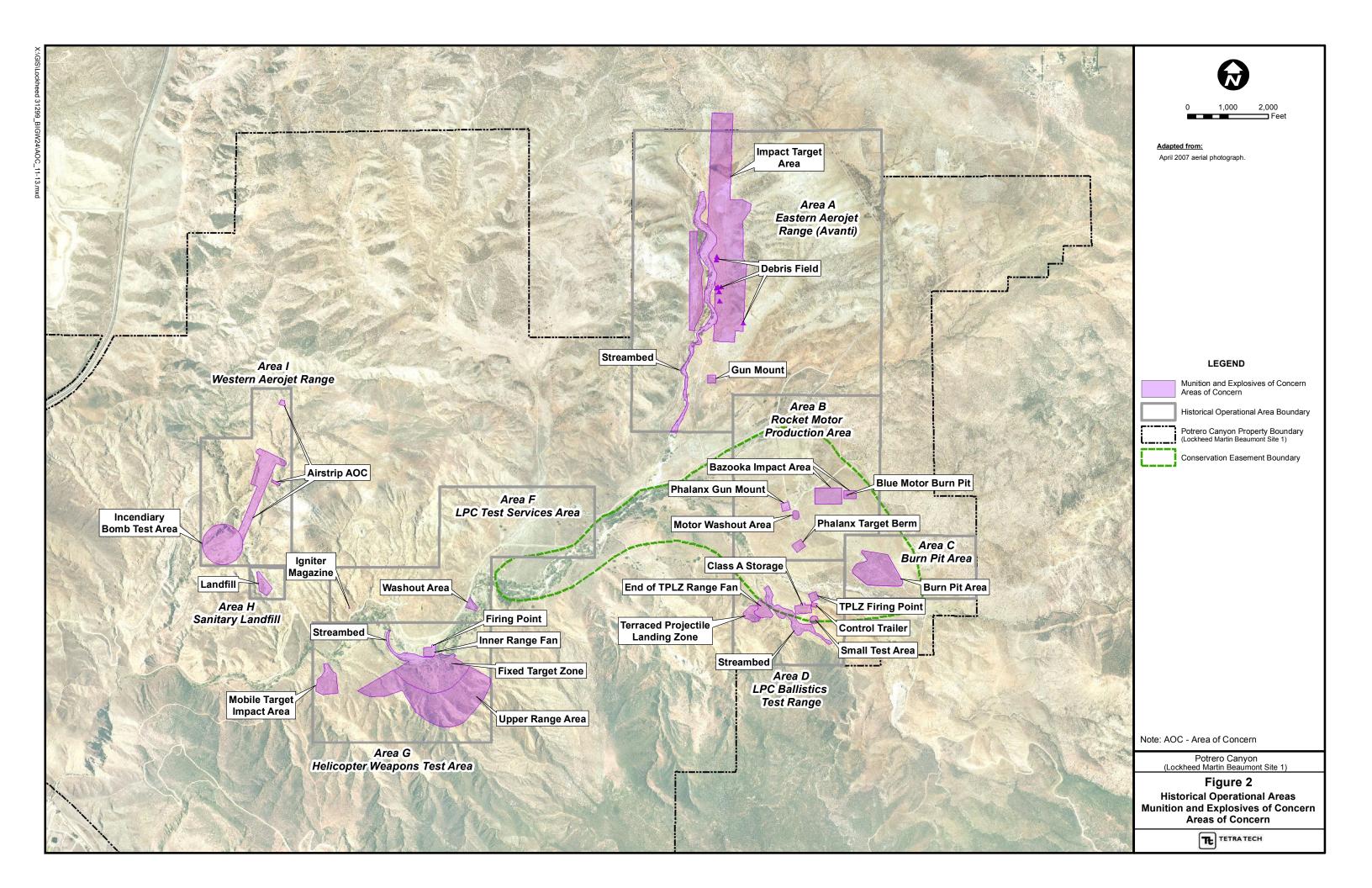
Operational Area	Inspection Area	Documented Historical Use	MEC Related Finds During the Investigations or Removals (2005 through 2010)	Potential Residual MEC/MD	Inspection Results (2011 through 2014)
Н	Landfill	Sanitary landfill; anecdotal info that small arms rounds were buried here	None found	7.62mm belted ammunition	No MEC or MD has been discovered proud of the surface; subsurface inspections are not being performed at the landfill.

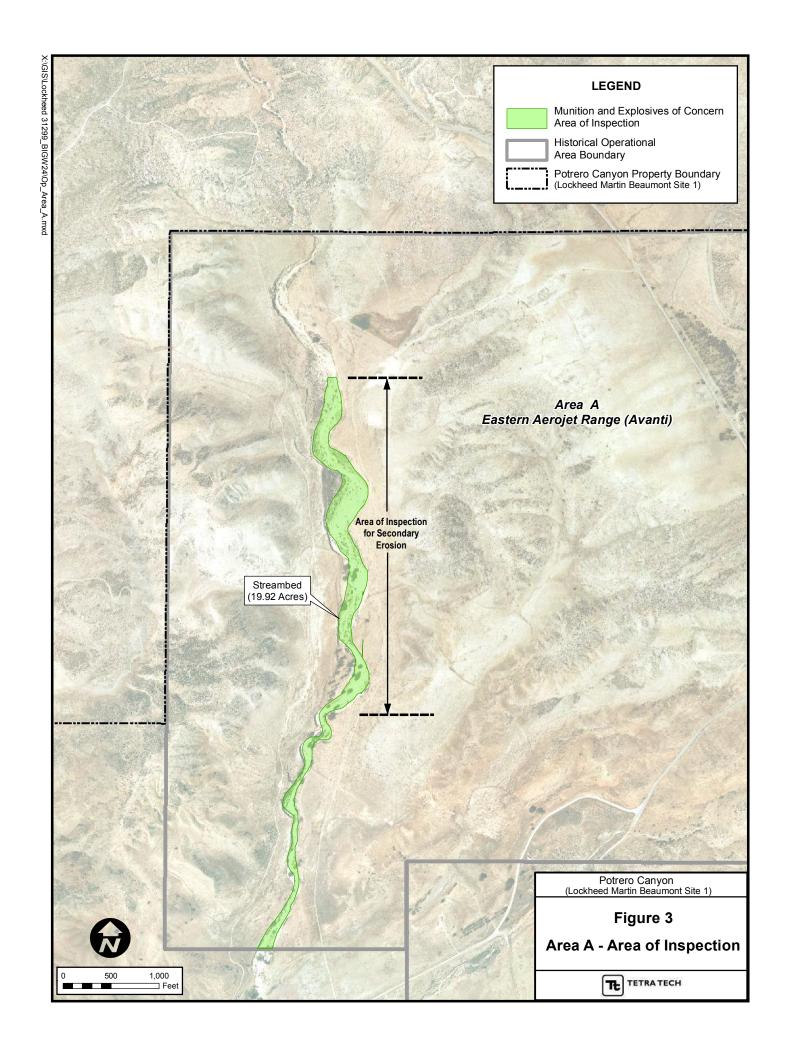
Table 3 Summary of Anomalies Discovered During the 2015 Routine MEC Inspection

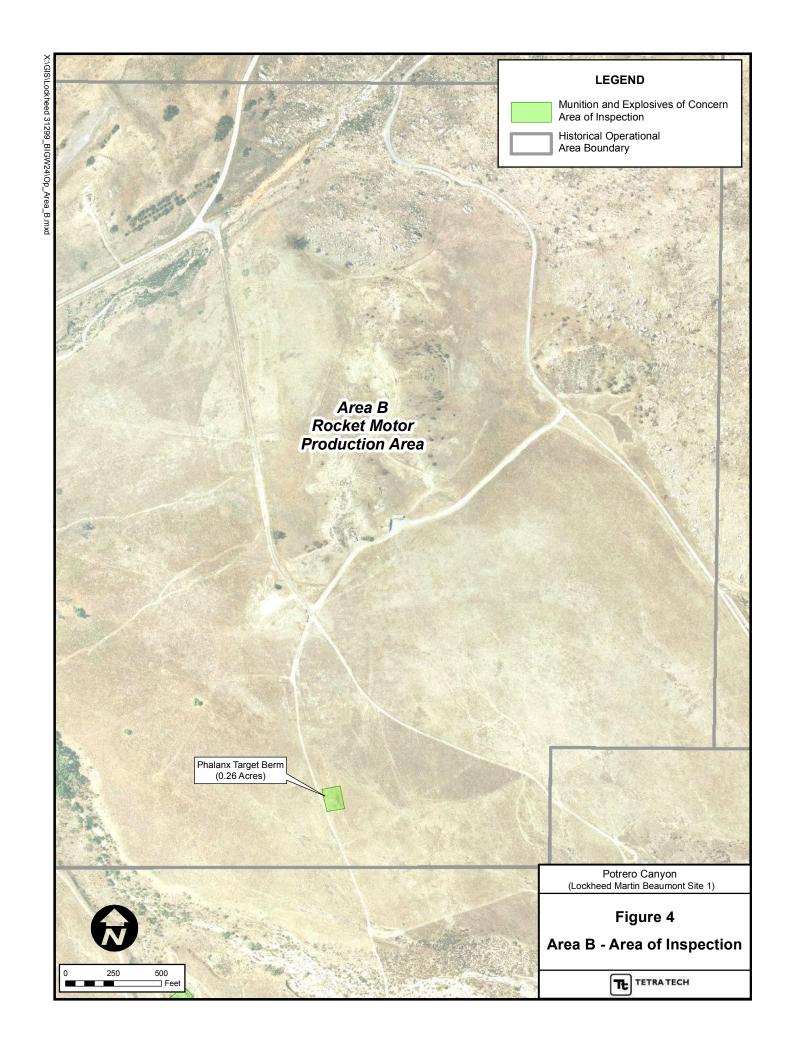
Operational Area	Number of Munitions Related Surface Anomalies Recovered	Number of Subsurface Anomalies Recovered	Types of Items Recovered	
Area A - Eastern Aerojet Range	0	16	Scrap metal	16 locations (subsurface)
Area B – Phalanx Target Berm	0	NA	None	
Area D - LPC Ballistics Test Range – Steam Bed	2	5	Scrap metal Geological Anomaly MD MEC	5 (subsurface)  one location (subsurface)  one 20 mm cartridge base (surface)  one 20 mm cartridge (surface)
Area D - LPC Ballistics Test Range – Terraced Projectile Landing Zone	0	NA	None	
Area G - Helicopter Weapons Test Area	0	NA	None	
Area H - Landfill	0	NA	None	

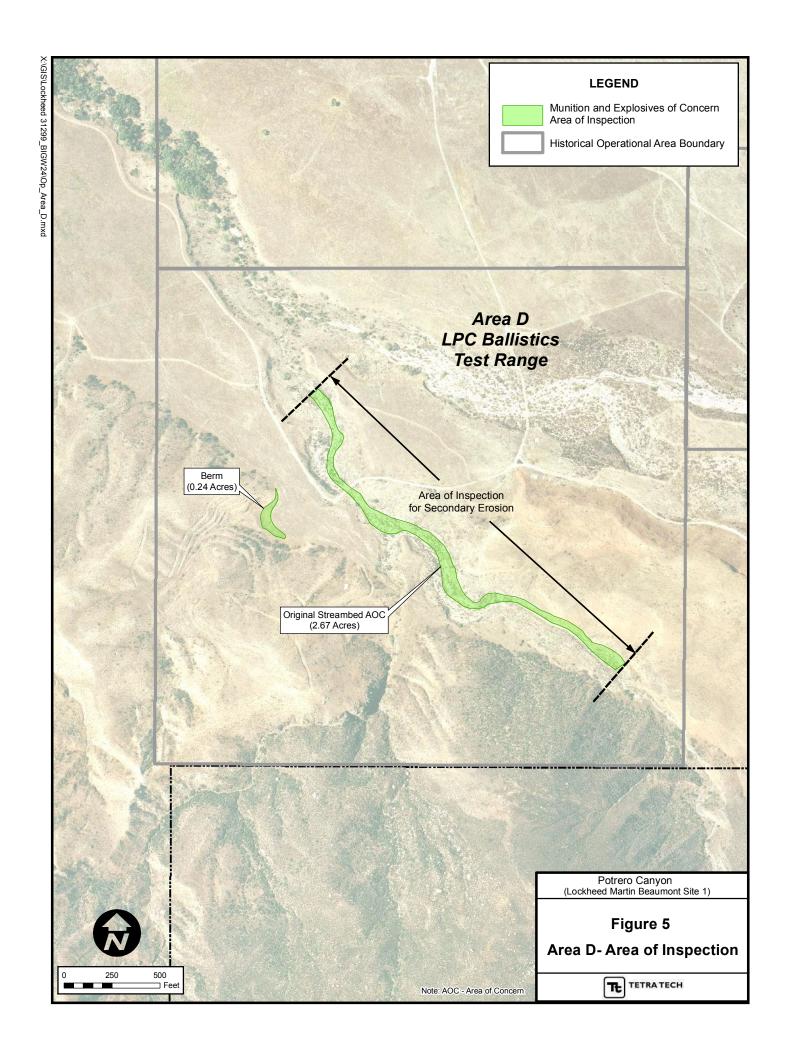
# **FIGURES**

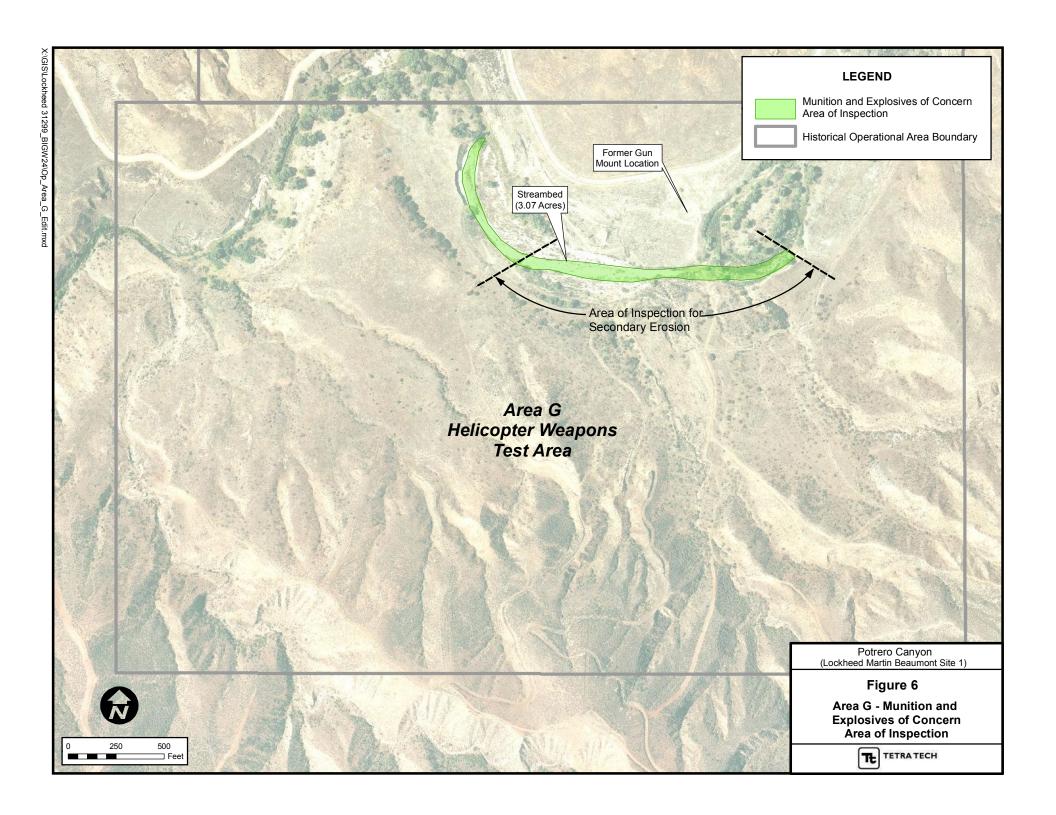


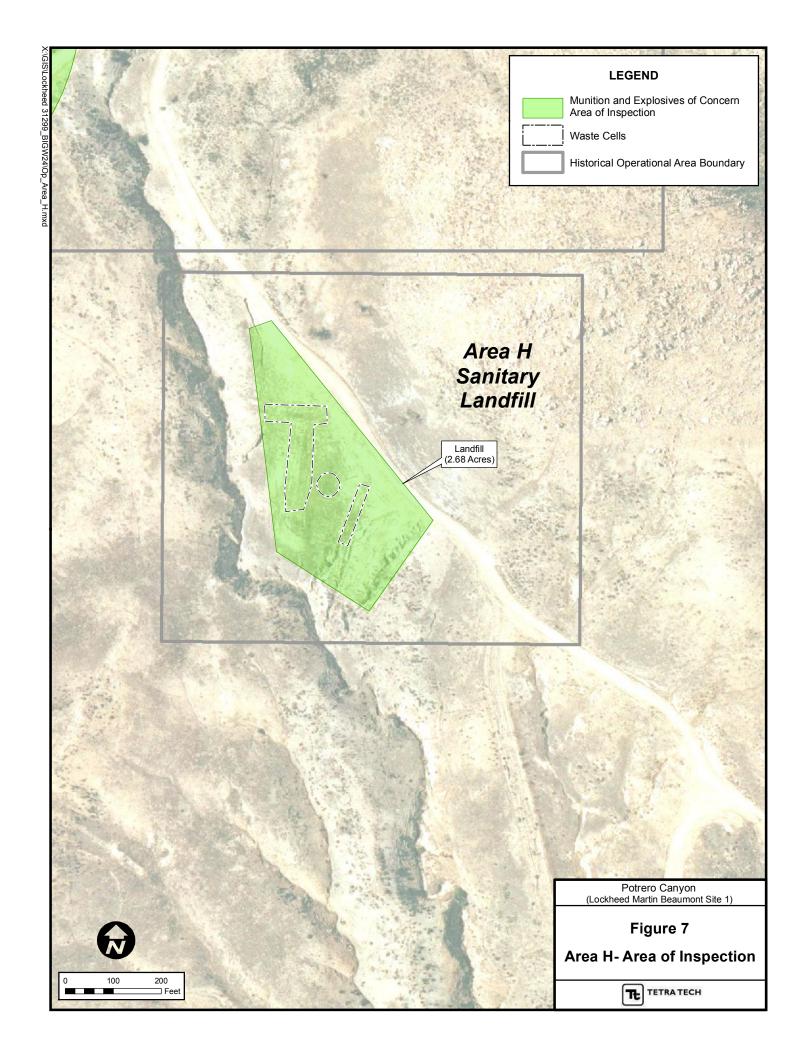


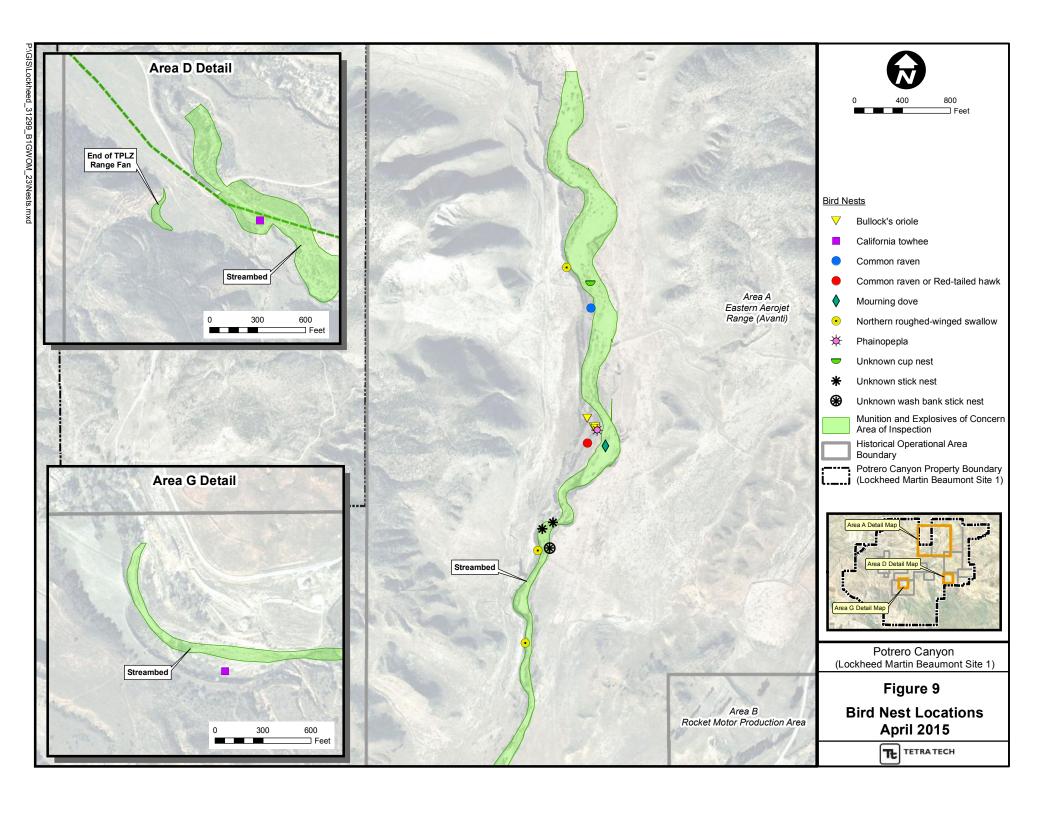


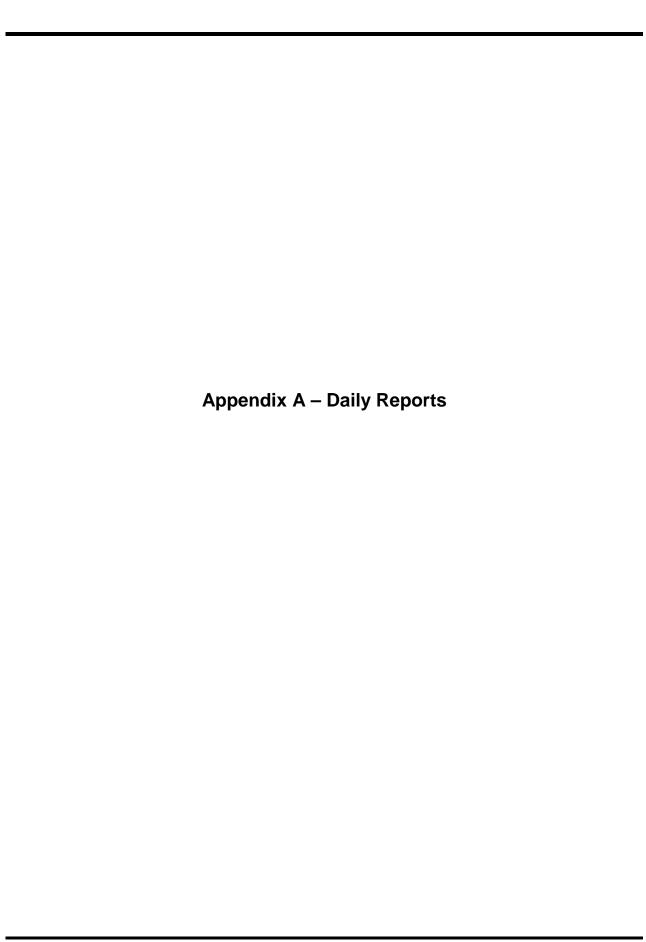














FIELD ACTIVITY SUBJECT: UXO Survey		Date: 9 Apr 2015	
PROJECT NO: 112IC07540	TASK CODES: 8.B		
SUMMARY OF DAILY PROGRESS: (Update Definable Feature of Work - Worksheet 12)			
<b>Mobilization/Set Preparation</b> : Personnel mobilized on 4/08/2015. All personnel attended initial site briefing at the local Tetra Tech office.			
Site Survey: Conducted a site walk of the survey are	eas.		
<b>GPS Positional Data</b> : Site data coordinates were downloaded to the GPS to outline the boundaries of each investigation area.			
Detector Aided Surveys: N/A			
Intrusive Operation: N/A			
MEC Management (Treatment): N/A			
MPPEH Management (Inspections): N/A			
MPPEH Management (Certification): N/A			
MPPEH Management (Disposal): N/A			
Demobilization: N/A			
Other: N/A			
LIST OF MEC ITEMS ID, MPPEH ITEM ID, MDAS, OR	NONE		
Item ID Description	Item ID Desci	ription	
NONE			



Facility/Location: Beaumont, CA. Lockheed Site

FIELD ACTIVITY SUBJECT: UXO Survey	Date: 9 Apr 2015	
DESCRIPTION OF DAILY ACTIVITIES AND EVENTS:		
Training was conducted at the local Tetra Tech. Planning documents were reviewed by the field team, activities to be performed were discussed in detail including Biological surveys. The training was conducted by Mr. Chris Patrick (Field Supervisor), Syd Rodgers (SUXOS), Mark Ladd (UXOQC/SO) and Mr. Pete Jimenez (Biologist).		
Personnel mobilized to the site for the transfer of site access keys and during our investigation.	the issue of tools that will be utilized	
After Mr. Patrick and Mr. Jimenez departed an in depth safety briefing was conducted by the UXO Safety officer.		
The remainder of the day was used to procure, inventory and prepare the UXO survey on 10 Apr 15.	tools and equipment for the start of	
16:00 HRS all field activities were terminated for the day.		
IMPORTANT PHONE CALLS/DECISIONS: NONE		
FIELD TASK MODIFICATIONS: NONE		
WEATHER CONDITIONS: Sunny, High of 71 degrees with a low of 39 degrees.		
VISITORS ON SITE: NONE		
PERSONNEL ON SITE: Syd Rodgers (SUXOS), Mark Ladd (QC/Safety), Norm Piper (Tech II), Tye Turner (Tech II)		
SIGNATURE: Syd Rodgers DATE: 9 Apr 2015		

Page 2 of 2 Updated: 3/31/2011



FIELD ACTIVITY SUBJECT: UXO Survey		Date: 10 Apr 2015	
<b>PROJECT NO</b> : 112IC07540	TASK CODES: 8.B		
SUMMARY OF DAILY PROGRESS: (Update Definable	Feature of Work - Work	sheet 12)	
Mobilization/Site Preparation: N/A			
Site Survey: A bird survey of nesting birds was condu	ucted at all five sites to be	investigated by Biologists.	
<b>GPS Positional Data</b> : GPS Data was to identify the boundaries of the investigation area during the UXO detectoraided surface survey.			
<b>Detector-Aided Surveys</b> : Detector-aided surface sur	veys were performed witl	nin area H.	
Intrusive Operation: N/A			
MEC Management (Treatment): N/A			
MPPEH Management (Inspections): N/A			
MPPEH Management (Certification): N/A			
MPPEH Management (Disposal): N/A			
Demobilization: N/A			
Other: N/A			
LIST OF MEC ITEMS ID, MPPEH ITEM ID, MDAS, OR	NONE		
Item ID Description	Item ID Descrip	tion	
NONE			



Facility/Location: Beaumont, CA. Lockheed Site

FIELD ACTIVITY SUBJECT: UXO Survey	Date: 10 Apr 2015		
DESCRIPTION OF DAILY ACTIVITIES AND EVENTS:			
07:00 All personnel arrived at the designated meeting location.			
Safety Officer conducted an in depth tailgate safety meeting due to non UXO personnel on site. Two Biologists were on site to locate and mark nesting bird locations that we could not disturb during our investigation.			
UXO survey instruments were checked in accordance with the work pla	an.		
We all started at Area H (Dump site). While the UXO team checked inst detector-aided surface survey the Biologists struck out in advance of the for nesting areas.	• •		
Once Area H was completed the UXO team performed UXO escort duti completed in Area D to allow the UXO survey to be started 4/11/15.	es in Area D. The Bird inspection was		
16:30 Field activities were terminated. Equipment was secured for the	e day.		
17:00 Personnel departed the site.			
IMPORTANT PHONE CALLS/DECISIONS: NONE			
FIELD TASK MODIFICATIONS: NONE			
WEATHER CONDITIONS: High of 80 degrees with a low of 40 degrees, Clear with winds Westerly @ 4 mph.			
VISITORS ON SITE: NONE			
PERSONNEL ON SITE: Syd Rodgers (SUXOS), Mark Ladd (QC/Safety), Norm Piper (Tech II), Tye Turner (Tech II), Pete Jimenez (Biologist), Brian Sandstorm (Biologist)			
SIGNATURE: Syd Rodgers DATE: 10 Apr 2015			

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Facility/Location: Beaumont, CA. Lockheed Site

FIELD ACTIVITY SUBJECT: UXO Survey	Date: 11 Apr 2015

PROJECT NO: 112IC07540 TASK CODES: 8.B

SUMMARY OF DAILY PROGRESS: (Update Definable Feature of Work - Worksheet 12)

Mobilization/Site Preparation: N/A

Site Survey: N/A

GPS Positional Data: Target anomaly location data was recorded using the handheld GPS.

Detector Aided Surface Surveys: Detector-aided surveys were conducted in Area D (River Bed) and Area B

(Phalanx Target Berm).

Intrusive Operation: N/A

MEC Management (Treatment): N/A

**MPPEH Management (Inspections)**: Recovered 20 mm projectile TP, due to items condition determined MPPEH until verified by demolition. 20 mm cartridge case was dual inspected and secured in the MDAS container.

Notifications were made of MPPEH. Riverside Bomb Squad will respond to the item on 4/13/15.

MPPEH Management (Certification): N/A

MPPEH Management (Disposal): N/A

**Demobilization:** N/A

**Construction Support: N/A** 

Other: N/A

LIST OF MEC ITEMS ID, MPPEH ITEM ID, MDAS, OR NONE

Item ID Description Item ID Description

LH-015-001, (1ea) 20mm projectile, (MPPEH) 11S0502212/UTM3746112

LH-018-002, 20mm Cartridge Case (MDAS) 11S0502212/UTM3746112

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FIELD ACTIVITY SUBJECT: UXO Survey	Date: 11 Apr 2015		
DESCRIPTION OF DAILY ACTIVITIES AND EVENTS:			
07:00 UXO team arrived at the designated assembly area, Team Safety briefing. At the end of the safety brief the SUXOS assigned daily tasks.	Officer presented the daily safety		
The UXO team proceeded to Area D, upon arrival the team checked instrumentation IAW current Work Plan and began the UXO detector-aided survey. Moving from the road the team started on the shortest section of Area D first, approximately 50' from the road the team encountered 1ea 20mm projectile (MPPEH) located exposed on the ground surface. The item was later verified as an inert TP round however based on the item's condition it was treated as MPPEH. Notifications were made in accordance with the approved planning documents. In close proximity to the first item remains of a 20mm cartridge case (MDAS) were recovered on the ground surface. A total of 4 additional flags were placed on the NW section at identified subsurface target anomalies which will be manual excavated. A Biological survey will need to be performed at each target anomaly location prior to intrusive activities. After lunch the team proceeded to the SE section of the river bed and identified 2 subsurface anomalies which were flagged for intrusive investigation. A Biological survey will need to be performed at each target anomaly location prior to intrusive activities.			
Area D was completed at approximately 15:30 HRS.			
The team then proceeded to Area B (Phalanx Target Berm). A detector No munition related items were identified.	-aided surface survey was performed.		
The MPPEH and MDAS items were secured for the day. Riverside Bomb Squad will respond on Monday 4/13/15.			
17:00 UXO team secured for the day.			
IMPORTANT PHONE CALLS/DECISIONS: Notification were made regarding the recovery of the 20mm projectile.			
FIELD TASK MODIFICATIONS: NONE			
WEATHER CONDITIONS: High 75 degrees with a low of 46 degrees. Partly Cloudy with no winds.			
VISITORS ON SITE: NONE			
PERSONNEL ON SITE: Syd Rodgers (SUXOS), Mark Ladd (QC/Safety), Norm Piper (Tech II), Tye Turner (Tech II)			
SIGNATURE: Syd Rodgers DATE: 11 Apr 2015			



FIELD ACTIVITY SUBJECT: UXO Survey		Date: 12 Apr 2015	
PROJECT NO: 112IC07540	TASK CODES: 8.B		
SUMMARY OF DAILY PROGRESS: (Update Definable	Feature of Work - Works	sheet 12)	
Mobilization/Set Preparation: N/A			
Site Survey: N/A			
GPS Positional Data: Target anomaly location data v	vas collected with the har	ndheld GPS.	
Detector Aided Surveys: Detector-aided surveys wer	e performed in Area A.		
Intrusive Operation: N/A			
Donor Explosives Handling/Storage: N/A			
MEC Management (Treatment): N/A			
MPPEH Management (Inspections): N/A			
MPPEH Management (Certification): N/A			
MPPEH Management (Disposal): N/A			
Demobilization: N/A			
Other: N/A			
LIST OF MEC ITEMS ID, MPPEH ITEM ID, MDAS, OR N			
Item ID Description	Item ID Desci	ription	
None			



FIELD ACTIVITY SUBJECT: UXO Survey	Date: 12 Apr 2015	
DESCRIPTION OF DAILY ACTIVITIES AND EVENTS:		
07:00 All personnel arrived at the assembly point. With all personnel prodaily safety briefing.	resent the Safety Officer conducted our	
The UXO team proceeded to Area A. Prior to the start of the detector-a checked in accordance with the work plan.	ided survey instrumentation was	
With the instrumentation verified the UXO team proceeded to the Area GPS.	A large riverbed start point using the	
The sweep team conducted a meandering path detector-aided survey in a South to North direction on the east side of the river bed. Once the team reached the end of the investigation area the detector-aided surface survey was performed in a North to South direction on the west side of the river bed. The UXO technicians flagged and GPS'd 20 percent of anomalies identified during the detector-aided survey.		
A total of 17ea flags were placed at subsurface contacts during the detector-aided survey. No intrusive operations were performed today. A Biologist will be present on 4/13/15 to inspect the select target anomalies at Areas A and D to verify the locations are acceptable for manual intrusive investigation activity.		
16:30 The field team received a debrief and secured equipment for the	day.	
17:00 The site was secured for the day.		
IMPORTANT PHONE CALLS/DECISIONS: NONE		
FIELD TASK MODIFICATONS: NONE		
WEATHER CONDITIONS: High of 82 degrees and a low of 47 degrees. Mostly clear with 0 winds predicted.		
VISITORS ON SITE: NONE		
PERSONNEL ON SITE: Syd Rodgers (SUXOS), Mark Ladd (QC/Safety), Norm Piper (Tech II), Tye Turner (Tech II)		
SIGNATURE: Syd Rodgers DATE: 12 Apr 2015		



Facility/Location: Beaumont, CA. Lockheed Site

FIELD ACTIVITY SUBJECT: UXO Survey		Date: 13 Apr 2015
PROJECT NO: 112IC07540	TASK CODES: 8.B	
CURANA DV OF DAUV DD OCDECC (U. d. e. D. C. eld. F. et e. e. (W. d. W. elebert 42)		-h - + 42\

SUMMARY OF DAILY PROGRESS: (Update Definable Feature of Work - Worksheet 12)

Mobilization/Set Preparation: N/A

**Site Survey**: The site Biologist inspected each location selected for intrusive investigation to ensure no animal burrows were located within the area. One location was removed from the dig list due to the presence of a burrow.

**GPS Positional Data**: GPS was used to locate target anomaly locations for Biologist inspection.

**Detector Aided Surveys**: Detector-aided surveys were performed at each intrusively investigated target anomaly location. Post demolition detector-aided surveys were performed at the demolition location.

Intrusive Operation: Manual Intrusive Investigation of select target anomalies was performed in Areas A and D.

MEC Management (Treatment): N/A

**MPPEH Management (Inspections)**: Post demolition operations - 20mm TP projectile body and 20mm cartridge case fragments were determined MDAS, turned over to Riverside Bomb Squad and removed from the site.

MPPEH Management (Certification): N/A

**MPPEH Management (Disposal)**: 20mm (MPPEH) and 20mm Cartridge Case (MDAS) recovered in Area D was turned over to Riverside County Sherriff Department (Bomb Squad) for disposal.

**Demobilization: N/A** 

Other: N/A

LIST OF MEC ITEMS ID, MPPEH ITEM ID, MDAS, OR NONE

Item ID Description Item ID Description

None



Pete Jimenez (Biologist)

**PSIGNATURE: Syd Rodgers** 

### TETRA TECH MRP FF.2 DAILY MEC ACTIVITY LOG

Facility/Location: Beaumont, CA. Lockheed Site

Date: 13 Apr 2015 FIELD ACTIVITY SUBJECT: UXO Survey **DESCRIPTION OF DAILY ACTIVITIES AND EVENTS:** 07:00 UXO team assembled at the designated location and was presented the daily safety briefing by the **Tetra Tech UXO Safety Officer.** Detector-aided survey instrumentation was checked in accordance with the work plan. The site Biologist and UXO escort inspected target anomaly locations for potential SKR burrows. One target location was marked with SKR burrows and was designated a non-dig area. One flag was removed and could not be located. A total of 6 sub-surface anomalies were intrusively investigated within area D. While manual intrusive operations were being conducted at Area D the UXO Safety Officer and the Biologist departed for Area A to inspect target anomaly locations for potential SKR burrows. Area D intrusive operations were completed at approximately 11:30 HRS, no additional ordnance related materials were found at Area D. The UXO dig team departed for Area A. After lunch the UXO dig team started manual intrusive operations at Area A. SUXOS made an appointment with the Riverside Sherriff's Department Bomb Squad to turn over the two recovered munitions items for final disposition. 1530 The Bomb Squad arrived, took possession of the MPPEH item and made the determination to destroy it on site. The demolition activities were performed by the Riverside Bomb Squad within the wide portion of the Area A river bed due to the limited brush. The treated 20 mm projectile was confirmed a TP round. The UXO team performed post demolition detector-aided surveys of the demolition shot location. Recovered MDAS was turned over to the Riverside Bomb Squad and was removed from site. 17:00 All personnel secured equipment and departed for the day. IMPORTANT PHONE CALLS/DECISIONS: Appointment made with Riverside County Sherriff's Department Bomb Squad to dispose of MPPEH/MDAS items. FIELD TASK MODIFICATIONS: NONE WEATHER CONDITIONS: High today of 81 degrees dropping to a low of 50. Mostly clear with NE winds at 4mph. VISITORS ON SITE: Riverside County Sherriff Department (Bomb Squad) See Visitors log. PERSONNEL ON SITE: Syd Rodgers (SUXOS), Mark Ladd (QC/Safety), Norm Piper (Tech II), Tye Turner (Tech II),

**DATE: 13 Apr 2015** 



FIELD ACTIVITY SUBJECT: UXO Survey		Date: 14 Apr 2015	
PROJECT NO: 112IC07540	TASK CODES: 8.B		
SUMMARY OF DAILY PROGRESS: (Update Definable	Feature of Work - Works	sheet 12)	
Mobilization/Set Preparation: N/A			
Site Survey: N/A			
GPS Positional Data: N/A			
<b>Detector Aided Surveys</b> : Detector-aided surface surv	ey was conducted in Are	a G.	
Intrusive Operation: N/A			
MEC Management (Treatment): N/A			
MPPEH Management (Inspections): N/A			
MPPEH Management (Certification): N/A			
MPPEH Management (Disposal): N/A			
<b>Demobilization</b> : All personnel to demobilize on 04/1	5/15.		
Other: N/A			
LIST OF MEC ITEMS ID, MPPEH ITEM ID, MDAS, OR N			
Item ID Description	Item ID Desci	ription	
None			



FIELD ACTIVITY SUBJECT: UXO Survey	Date: 14 Apr 2015	
DESCRIPTION OF DAILY ACTIVITIES AND EVENTS:		
07:00 All personnel reported to the assembly location for the daily safety briefing conducted by the UXO Safety Officer.		
All personnel departed for Area G.		
After instrument check out the UXO team started the UXO detector-aic	led surface survey.	
Approximately 12:30 HRS the UXO detector-aided surface survey was comaterials were encountered.	ompleted. No ordnance related	
SUXOS contacted Mr. Pete Jimenez (Biologist) to meet us at the entran gate and return tools and equipment.	ce gate to turn over the keys to the	
The UXO team returned to the hotel to finalize project field reports, cle equipment for shipment back to Stone Mountain GA.	an tools and equipment and prepare	
17:00 The team secured for the day.		
All planned field activities have been completed.		
All UXO personnel will Demobilize on 04/15/15.		
IMPORTANT PHONE CALLS/DECISIONS: NONE		
FIELD TASK MODIFICATONS: NONE		
WEATHER CONDITIONS: High of 77 degrees and a low of 50. Mostly clear. Winds from the East @ 13 mph.		
VISITORS ON SITE: NONE		
PERSONNEL ON SITE: Syd Rodgers (SUXOS), Mark Ladd (QC/Safety), No Pete Jimenez (Biologist), Jose Santoyo (Biologist)	rm Piper (Tech II), Tye Turner (Tech II),	
PSIGNATURE: Syd Rodgers	DATE: 14 Apr 2015	



# TETRA TECH MRP FF.21 DAILY SAFETY LOG

Facility/Location: Beaumont, CA

Site(s): Lockheed Site

FIELD ACTIVITY SUBJECT: UXO Survey		Date	9 April 2015
<b>PROJECT NO</b> .: 112IC07540	TASK CODES: 8.B		
SUMMARY OF DAILY ACTIVITIES AND EVENTS:			
Held the initial Safety Brief on the Lockheed site and discuteam reviewed the SSHP. Special emphasis was placed of Chaps were made available to each team member. The hospital were established and driven. A site walk was perfebilden holes, trespassers). Required PPE was provided as	on the potential for encountering routes to both an immediate co- formed and potential hazards we	g Rattle are facilit re identifi	Snakes. Snake y and the local
VISITORS ON SITE (indicate if received Site-Specific Training):	None		
VISITORS ON SITE (Indicate in received Site-Specific Training). Notice			
CHANGES FROM PLANS AND SPECIFICATIONS, AND OTHER SPECIAL ORDERS AND IMPORTANT DECISIONS: None			
WEATHER CONDITIONS: (temp, wind, humidity, precipitation)	IMPORTANT TELEPHONE CA	LLS: Nor	ie
Today was sunny with temp ranging from 50 to 75 degrees			
PERSONNEL ON SITE: See Tailgate Safety Brief			
SIGNATURE: Mark Ladd		DATE: 9	April 2015

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### MRP FF.22 DAILY TAILGATE SAFETY BRIEFING/TRAINING RECORD

	Name	Signature	Position	
1. Briefing(s) Given By:	MARK LADD	(MA)	SAFETY/QC OFFICER	
Date: 9 Apr 15	Time: 0700	Team #: N/A		
2. Reason for Briefing:				
Initial Safety Briefing XXX Daily Safety Briefing New Task Briefing: Periodic Safety Meeting: List Today's Project Tas	ng	New Site Procedure: New Site Information: Review of Site Information Other: (Specify) atures of work – See Worksheet 12.): Construction Support		
I. Safety Topics: (Check /	All That Apply – per AH	A or Work Permit)		
X Site Safety PersonnelX Site/Work Area DescriptionX Physical Hazards Chemical/Biological HazardsX Heat/Cold Stress Work/Support ZonesX PPE		Decontamination Proc  X Emergency Response. On-Site Injuries/Illness Reporting Procedures X Directions to Medical I Drug and Alcohol Polic Medical Monitoring X Evacuation/Egress Pro X Communications Confined Spaces Other:	/Equipment Facility Cies	
B. Personnel Attending				
Name	Si	gnature	Position	
SYD ROGERS	Syl	Sux:		
NORM PIPER	Kh V	TECI	- <del></del>	
TYE TURNER				



# TETRA TECH MRP FF.21 DAILY SAFETY LOG

Facility/Location: Beaumont, CA

Site(s): Lockheed Site

FIELD ACTIVITY SUBJECT: UXO Survey		Date	10 April 2015				
PROJECT NO.: 112IC07540	TASK CODES: 8.B						
SUMMARY OF DAILY ACTIVITIES AND EVENTS:							
Held the Tailgate Safety Brief. Observed the team wearing all required PPE including snake bite chaps. The team used good safe work practices during the detector-aided surface survey. Reminded team members to hydrate as necessary and to use slow deliberate pace while walking in walled and sloped areas. No deficiencies noted.							
VISITORS ON SITE: None							
CHANGES FROM PLANS AND SPECIFICATIONS, AND OT None	HER SPECIAL ORDERS AND	MPORTA	NT DECISIONS:				
WEATHER CONDITIONS: (temp, wind, humidity, precipitation)	IMPORTANT TELEPHONE CA	LLS: Nor	ne				
Today was sunny with temp ranging from 45 to 75 degrees							
PERSONNEL ON SITE: See Tailgate Safety Brief							
SIGNATURE: Mark Ladd		<b>DATE</b> : 10	) April 2015				

Page 1 of 1 Last Revised: 2/18/2011



### MRP FF.22 DAILY TAILGATE SAFETY BRIEFING/TRAINING RECORD

	Name	Signature	Position		
1. Briefing(s) Given By:	MARK LADD		SAFETY/QC OFFICER		
Date: 10 Apr 15	Time: 0700	Team #: N/A			
2. Reason for Briefing:					
Initial Safety Briefing		New Site Proce	dure:		
XXX Daily Safety Briefing	I	New Site Inform	nation:		
New Task Briefing:_		Review of Site	nformation		
Periodic Safety Meet	ing	Other: (Specify	)		
3. List Today's Project Ta	asks (reference definable f	eatures of work – See Wor	ksheet 12.): Construction Support		
4. Safety Topics: (Check	All That Apply - per AH	A or Work Permit)			
X Site Safety Personne		Decontamination F			
_X Site/Work Area Desc	ription	X Emergency Respo			
_X Physical Hazards		On-Site Injuries/Illr			
Chemical/Biological	Hazards	Reporting Procedu	-		
_X Heat/Cold Stress		X Directions to Medi	-		
Work/Support Zones	i	Drug and Alcohol Policies  Medical Monitoring			
X PPE X Safe Work Practices		1 <del></del>	X Evacuation/Egress Procedures		
Air Monitoring		I —	X Communications		
Task Training		Confined Spaces			
OE Precautions		Other:			
5. Remarks: NONE		<u>. i</u>			
6. Personnel Attending					
Name	S	ignature	Position		
SYD ROGERS	\$66	rolz s	uxso		
NORM PIPER		TECH III			
TYE TURNER	1. 16.0	т	ECH II		



### MRP FF.22 DAILY TAILGATE SAFETY BRIEFING/TRAINING RECORD

Facility/Location: Beaumont, Ca. Lockheed Site

Name	Signature	Position
VETER SYSTEME	1.	
Except Consistence	1	Restricted Bridged
		,

Last Revised: 3/31/2011



# TETRA TECH MRP FF.21 DAILY SAFETY LOG

Facility/Location: Beaumont, CA

Site(s): Lockheed Site

FIELD ACTIVITY SUBJECT: UXO Survey		Date	11 April 2015				
PROJECT NO.: 112IC07540	TASK CODES: 8.B	l					
SUMMARY OF DAILY ACTIVITIES AND EVENTS:							
Held the Tailgate Safety Brief. Observed the team wearing all required PPE including snake bite chaps. Identified MPPEH and MDAS items were handled using proper UXO procedures. Notifications were made in accordance with the planning documents. No deficiencies noted.							
VISITORS ON SITE (indicate if received Site-Specific Training): I	None						
CHANGES FROM PLANS AND SPECIFICATIONS, AND OT None	HER SPECIAL ORDERS AND	IMPORTA	NT DECISIONS:				
<b>WEATHER CONDITIONS</b> : (temp, wind, humidity, precipitation)  Today was sunny with temp ranging from 45 to 75 degrees	IMPORTANT TELEPHONE C made to report MPPEH.	ALLS: N	otifications were				
PERSONNEL ON SITE: See Tailgate Safety Brief							
SIGNATURE: Mark Ladd		DATE: 11	April 2015				

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## MRP FF.22 DAILY TAILGATE SAFETY BRIEFING/TRAINING RECORD

and the state of t	Name	Signatur	е	Position	
1. Briefing(s) Given By:	MARK LADD	(mile		SAFETY/QC OFFICER	
Date: // Apr 15	Time: 0700	Team #: N/A			
2. Reason for Briefing:					
Initial Safety Briefing	9	New Site Pr	ocedure:		
XXX Daily Safety Briefing	}	New Site In	formation:_		
New Task Briefing:		Review of S	ite Informa	tion	
Periodic Safety Meet	ing	Other: (Spe	cify)		
3. List Today's Project Ta	asks (reference definable fo	eatures of work – See	Worksheet 1	2.): Construction Support	
4. Safety Topics: (Check	All That Apply – per AHA	A or Work Permit)			
X Site Safety Personne	əl	Decontaminati	on Procedu	res	
X Site/Work Area Desc	ription	_X Emergency Re	spo <b>nse</b> /Equ	uipment	
_X Physical Hazards		On-Site Injuries	On-Site Injuries/Illness		
Chemical/Biological	Hazards	Reporting Proc			
X Heat/Cold Stress		X Directions to N	·		
Work/Support Zones			Drug and Alcohol Policies		
_X PPE		Medical Monitoring			
_X Safe Work Practices			X Evacuation/Egress Procedures		
Air Monitoring		X Communicatio	Confined Spaces		
Task Training		27778	<b>es</b>		
OE Precautions	***************************************	Other:			
5. Remarks: NONE					
6. Personnel Attending			1		
Name	Si	gnature		Position	
SYD ROGERS	Spela	Spelsonles			
NORM PIPER	NA	1/2		l	
TYE TURNER	type	tye Jew			
			1		



# TETRA TECH MRP FF.21 DAILY SAFETY LOG

Facility/Location: Beaumont, CA

Site(s): Lockheed Site

FIELD ACTIVITY SUBJECT: UXO Survey		Date	12 April 2015
<b>PROJECT NO</b> .: 112IC07540	TASK CODES: 8.B		
SUMMARY OF DAILY ACTIVITIES AND EVENTS:			
Held the Tailgate Safety Brief. Advised team to always rem spotted in the work area. The team also discussed the riverbeds. Personnel will not go within close proximity to team used good safe work practices and hydrated appropria	possibility of collapsing sidew the walls while performing dete	alls while	surveying the
VISITORS ON SITE (indicate if received Site-Specific Training): I	None		
CHANGES FROM PLANS AND SPECIFICATIONS, AND OT None	HER SPECIAL ORDERS AND I	MPORTA	NT DECISIONS:
WEATHER CONDITIONS: (temp, wind, humidity, precipitation)	IMPORTANT TELEPHONE CA	LLS: Nor	ie
Today was sunny with temp ranging from 45 to 82 degrees			
PERSONNEL ON SITE: See Tailgate Safety Brief	•		
SIGNATURE: Mark Ladd		DATE: 12	? April 2015

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### MRP FF.22 DAILY TAILGATE SAFETY BRIEFING/TRAINING RECORD

	Name	Signatur	e	Position		
1. Briefing(s) Given By:	MARK LADD		· · · · · · · · · · · · · · · · · · ·	SAFETY/QC OFFICER		
,	MARK LABS					
Date: 12 Apr 15	Time: 0700	Team #: N/A				
2. Reason for Briefing:						
Initial Safety Briefing	<u> </u>	New Site Pr	New Site Procedure:			
XXX Daily Safety Briefing		New Site In	formation:_			
New Task Briefing:		Review of S	ite Informat	ion		
Periodic Safety Meeti	ng	Other: (Spe	cify)			
3. List Today's Project Ta	sks (reference definable	features of work – See	Worksheet 1	2.): Construction Support		
4. Safety Topics: (Check	All That Apply – per AH	A or Work Permit)				
X Site Safety Personne		Decontamination	on Procedur	es		
X Site/Work Area Descri	ription	X Emergency Re	sponse/Equ	ipment		
X Physical Hazards		On-Site Injuries	s/Illness			
Chemical/Biological I	lazards	Reporting Proc	porting Procedures			
_X Heat/Cold Stress		X Directions to N	Medical Facility			
Work/Support Zones		Drug and Alcol	nol Policies			
_X PPE		Medical Monito	ring			
_X Safe Work Practices		X Evacuation/Eg	X Evacuation/Egress Procedures			
Air Monitoring		X Communicatio	Communications			
Task Training		Confined Space	Spaces			
OE Precautions		Other:				
5. Remarks: NONE		·				
6. Personnel Attending				<del></del>		
Name	S	ignature		Position		
SYD ROGERS	Syst 2	or a second	suxso			
NORM PIPER	1	2.	TECH III			
TYE TURNER		fun	TECH II			
	- 1 A-					



#### TETRA TECH MRP FF.21 DAILY SAFETY LOG

Facility/Location: Beaumont, CA

Site(s): Lockheed Site

FIELD ACTIVITY SUBJECT: UXO Survey		Date	13 April 2015				
PROJECT NO.: 112IC07540	TASK CODES: 8.B						
SUMMARY OF DAILY ACTIVITIES AND EVENTS:							
Held the Tailgate Safety Brief on the Lockheed site. Observed chaps. Observed the team using proper UXO digging anomalies.							
Provided a site specific safety brief to the Riverside Sherriff log. Once briefed, Tetra Tech personnel went on stand Riverside Bomb Squad.							
No discrepancies noted.							
VISITORS ON SITE (indicate if received Site-Specific Training):	Scott Larsen, Mark Wiarson, Dav	e Werkso	n				
CHANGES FROM PLANS AND SPECIFICATIONS, AND OTNONE	THER SPECIAL ORDERS AND I	MPORTA	NT DECISIONS:				
WEATHER CONDITIONS: (temp, wind, humidity, precipitation)	IMPORTANT TELEPHONE CA	LLS: None	Э				
Today was sunny with temp ranging from 45 to 85 degrees							
PERSONNEL ON SITE: See Tailgate Safety Brief							
SIGNATURE: Mark Ladd		<b>DATE</b> : 13	April 2015				

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# MRP FF.22 DAILY TAILGATE SAFETY BRIEFING/TRAINING RECORD

		Signature	Position	
1. Briefing(s) Given By:	MARK LADD	Chill	SAFETY/QC OFFICER	
Date: 13 Apr 15	Time: 0700	Team #: N/A		
2. Reason for Briefing:				
Initial Safety Briefing XXX Daily Safety Briefing New Task Briefing: Periodic Safety Meet  3. List Today's Project Ta	ing	New Site Procedure:  New Site Information:  Review of Site Information  Other: (Specify)  Teatures of work – See Worksheet 12.): Construction Support		
4. Safety Topics: (Check	All That Apply – per AH	A or Work Permit)		
X Site/Work Area DescriptionX Emer _X Physical Hazards On-S Chemical/Biological Hazards Repo _X Heat/Cold Stress X Direct _ Work/Support Zones Drug _X PPE Medic _X Safe Work Practices X Evac _ Air Monitoring X Commarks Training Configure OE Precautions Other  5. Remarks: NONE			ress Procedures ns	
6. Personnel Attending Name	S	ignature	Position	
SYD ROGERS	April	of the second	suxso	
NORM PIPER	PRM PIPER		TECH III	
TYE TURNER		in	TECH II	
PETER JIMENEL		,	Bistokist	



#### TETRA TECH MRP FF.21 DAILY SAFETY LOG

Facility/Location: Beaumont, CA

Site(s): Lockheed Site

FIELD ACTIVITY SUBJECT: UXO Survey		Date	14 April 2015				
PROJECT NO.: 112IC07540	TASK CODES: 8.B						
SUMMARY OF DAILY ACTIVITIES AND EVENTS:							
Held the Tailgate Safety Brief on the Lockheed site. Observed the team wearing all required PPE including snake bite chaps. The team used good safe work practices during the survey. There were no discrepancies noted.							
All field activities have been completed for this operation.							
WISITORS ON SITE (indicate if procing d Site Consider Training)	None						
VISITORS ON SITE (indicate if received Site-Specific Training):	none						
CHANGES FROM PLANS AND SPECIFICATIONS, AND O'None	THER SPECIAL ORDERS AND	MPORTA	NT DECISIONS:				
WEATHER CONDITIONS: (temp, wind, humidity, precipitation)	IMPORTANT TELEPHONE CA	LLS: Non	e				
Today was sunny with temp ranging from 45 to 85 degrees							
PERSONNEL ON SITE: See Tailgate Safety Brief							
SIGNATURE: Mark Ladd		DATE: 14	April 2015				

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### MRP FF.22 DAILY TAILGATE SAFETY BRIEFING/TRAINING RECORD

Facility/Location: Beaumont, Ca. Lockheed Site

	Name	Signature	,	Position	
1. Briefing(s) Given By:	MARK LADD	mits		SAFETY/QC OFFICER	
Date: 14 RAR 15	Time: 0700	Team #: N/A			
2. Reason for Briefing:					
Initial Safety Briefing		New Site Pro	ocedure:		
XXX Daily Safety Briefing		New Site Inf	ormation:		
New Task Briefing:		Review of S	ite Informa	tion	
Periodic Safety Meet	ing	Other: (Spec	cify)		
3. List Today's Project Ta	sks (reference definable	features of work – See V	Vorksheet '	12.): Construction Support	
4. Safety Topics: (Check	All That Apply – per AH	A or Work Permit)			
X Site Safety Personne		Decontamination			
X Site/Work Area Desc	ription	X Emergency Res	-	uipment	
X Physical Hazards		On-Site Injuries			
Chemical/Biological	Hazards	Reporting Proce			
X Heat/Cold Stress		X Directions to M	•		
Work/Support Zones		Drug and Alcoh			
_X PPE		Medical Monitor	<del>-</del>		
X Safe Work Practices Air Monitoring			Evacuation/Egress Procedures Communications		
Task Training		Confined Spaces			
OE Precautions		Other:	:5		
5. Remarks: NONE					
. Romano. Horaz					
6. Personnel Attending					
Name	S	ignature		Position	
SYD ROGERS	Lide;	Col of	suxso		
NORM PIPER	Nr.	in Ri		<b>F</b>	
TYE TURNER	Ty.	fire-	TECH II		
Jose R Santo	go men Il	Andy	Andy Tech D		
PELL JIMEVEZ			31-100	157	

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#### MRP FF.4 VISITOR'S LOG

Facility/Location: Beaumont, CA.

	Time		DRINT NAME	SIGNATURE	ORGANIZATION	PHONE #	RAC
DATE	In	Out	PRINT NAME	SIGNATURE	ORGANIZATION	PHONE #	KAC
4/B	1500		SCOTT LARSEN.	Aug )-	RIV. Co. SHEKITE	937-448 17/2	2-4
4/13	1500		MARK CHURRSON	A.	//	901 712 3241	1-4
4/13	1500		MARK CHURKSON  BAVE WERKSON	All -	0	951 755 GHY	L-4
,							

Page	of	
Page	. ot _	

Tt.	DAILY QUAL	ITY CONTROL	REPOF	<b>X</b> T
Project Name: UXO Survey			Report No:	001
Project No: 112IC07540	Location: Lockhee	ed Site	- Date: 10 Ap	r 15
I. Personnel Present (Reference/atta	ch SUXOS's daily report if a	pplicable): See Daily Tailgate	Safety Form	
II. Definable Feature of Work (see Q	uality Control Plan and revis	se list as needed)		
<ul> <li>✓ Mob/Site Preparation</li> <li>✓ Site Survey</li> <li>✓ GPS Positional Data</li> <li>✓ Detector-Aided Survey</li> <li>✓ Intrusive Operation</li> </ul>			er:	
III. Quality Control Activities (Include	e Daily QC activities and res	sults and reference/attach inspe	ction/surveilla	ince reports):
Prior to field activities all field person Blanket Test. Observed the team u White's all metals detector. No deficie	ısing proper techniques du			
V. Problems Encountered / Correcti	ve Actions Taken			
None				
VI. Directions Given / Received:				
None				
VII. Special Notes / Lessons Learne	d			
None				
VIII. Visitors:				
Yes (see Visitor's Log/Daily Acti	vity Log) 🔀 No			
IX. Approval				
Name and Signature: Mark Ladd		Title/Company: Tetra Tech QC	C/Safety	Date: 10 Apr 15
SGS Superborning			Re	evised March 2011

TŁ	DAILY QUAL	ITY CONTROL F	REPOF	RT
Project Name: UXO Survey			Report No:	002
Project No: 112IC07540	Location: Lockhee	d Site	Date: 11 Ap	or 15
I. Personnel Present (Reference/atta	ch SUXOS's daily report if a	pplicable): See Daily Tailgate S	Safety Form	1
II. Definable Feature of Work (see Q	uality Control Plan and revis	e list as needed)		
			r:	
III. Quality Control Activities (Include	e Daily QC activities and res	ults and reference/attach inspec	tion/surveilla	ance reports):
Observed the team perform equipme surface surveys at Area D. Performed				
IV. Problems Encountered / Correct	ive Actions Taken			
None				
V. Directions Given / Received:				
None				
VI. Special Notes / Lessons Learned	i			
None				
VII. Visitors:				
Yes (see Visitor's Log/Daily Acti	vity Log) 🔲 No			
IX. Approval				
Name and Signature: Mark Ladd		Title/Company: Tetra Tech QC/	/Safety	Date: 11 Apr 15
SGS Do 10 sept. Do 10 right			Re	evised March 2011

TŁ	DAILY QUAL	ITY CONTROL	REPOF	RT.
Project Name: UXO Survey			Report No:	003
Project No: 112IC07540	Location: Lockhee	d Site	Date: 12 Ap	or 15
I. Personnel Present (Reference/atta	ch SUXOS's daily report if a	pplicable): See Daily Tailgate	Safety Form	1
II. Definable Feature of Work (see Q	uality Control Plan and revis	e list as needed)		
	☐ MPPEH Manaq ☐ Demobilization ☐ ☐ ☐ ☐ ☐		er	
III. Quality Control Activities (Include	e Daily QC activities and res	ults and reference/attach inspec	ction/surveilla	ance reports):
Observed the team perform equipme surface surveys at Area A. Performed				
IV. Problems Encountered / Correct	ive Actions Taken			
None				
V. Directions Given / Received:				
None				
VI. Special Notes / Lessons Learned	1			
None				
VII. Visitors:				
Yes (see Visitor's Log/Daily Acti	vity Log) 🔲 No			
IX. Approval				
Name and Signature: Mark Ladd		Title/Company: Tetra Tech QC	/Safety	Date: 12 Apr 15
SGS Do it safe. Do it right			R€	evised March 2011

Tt.	DAILY QUAL	ITY CONTROL REPO	RT
Project Name: UXO Survey		Report No	o: 004
Project No: 112IC07540	Location: Lockhe	•	
,		applicable): See Daily Tailgate Safety For	
II. Definable Feature of Work (see Q	uality Control Plan and revi	se list as needed)	
<ul> <li>Mob/Site Preparation</li> <li>Site Survey</li> <li>GPS Positional Data</li> <li>Detector-Aided Survey</li> <li>Intrusive Operation</li> </ul>			
III. Quality Control Activities (Include	e Daily QC activities and re	sults and reference/attach inspection/surve	llance reports):
D. No discrepancies noted. Areas documentation of recovered anomaly requested by the Riverside Bomb Squ	for intrusive investigation debris. The UXO team wa ad. Observed team perfor med detector-aided QC of	est. Performed QC of intrusively investiga have been cleared with the site biologis on stand-by during demolition activities. In UXO detector aided-survey of demolition demolition area. No deficiencies noted. Ponoved from the site.	st. Collected photo No assistance was a area at the request
IV. Problems Encountered / Correct	ive Actions Taken		
None			
V. Directions Given / Received:			
None			
VI. Special Notes / Lessons Learned	ı		
None			
VII. Visitors:			
Yes (see Visitor's Log/Daily Acti	vity Log) 🔲 No		
IX. Approval			
Name and Signature: Mark Ladd		Title/Company: Tetra Tech QC/Safety	Date: 13 Apr 15
Second Personal Perso			Revised March 2011

#### MRP FF.15

Facility/Location: Beaumont, CA

Tt.	DAILY QUAL	ITY CONTROL REPO	RT
Project Name: UXO Survey		Report N	o: 005
Project No: 112IC07540	Location: Lockhee	· ·	
		applicable): See Daily Tailgate Safety Fo	•
II. Definable Feature of Work (see Qu	uality Control Plan and revis	se list as needed)	
	☐ MPPEH Mar ☑ Demobilizati ☐ ☐ ☐		
III. Quality Control Activities (Include	e Daily QC activities and res	sults and reference/attach inspection/surve	illance reports):
	nt checks using a Blanket	Test. Observed the team using proper to	· ·
IV. Problems Encountered / Correct	ive Actions Taken		
None			
V. Directions Given / Received:			
None			
VI. Special Notes / Lessons Learned			
None			
VII. Visitors:			
Yes (see Visitor's Log/Daily Acti	vity Log) 🔀 No		
IX. Approval			
Name and Signature: Mark Ladd		Title/Company: Tetra Tech QC/Safety	Date: 14 Apr 15
on the state of th			Revised March 2011



## TETRA TECH MRP FF.11 DIG SHEET - MANUAL TARGET EXCAVATION RESULTS

Facility/Location: Beaumont California

Site(s): Lockheed Site

Location	Coordi	inates (1)		Excavation		Muniti	Munitions-Related Items				ons Items		No Finds
or Anomaly Number	<b>N</b> 11S	E UTM	Detection Equip.	Dimensions (L x W x D) (inches)/(feet)	Number of Dig Locations	Number and Description	MEC/ MPPEH/ MDAS	Explosive Weight (lbs)	Disposition Date	Number and Description	Approx. Weight (lbs)	Disposition Date	Anomaly Deeper than '? (Y/N)
LH-014- 001	0502212	3746112	Schon/ White's	Surface	0	20mm TP	MPPEH	0	4/11/15				N
LH-017- 002	0505729	3746280	Schon/ White's	Surface	0	20mm Cartridge Base	MDAS	0	4/11/15				N
LH-024- 003	0505725	3746291	Schon/ White's	6"x6"x2"	1					½"x1" Scrap Metal	.25	4/13/15	N
LH-025- 004	0505726	3746309	Schon/ White's	6"x6"x6"	1					Barbed Wire 8"	.25	4/13/15	N
LH-026- 005	0505726	3746309	Schon/ White's	6"x6"x3"	1					2"x3' Metal Post	10	4/13/15	N
LH-027- 006	0505793	3746272	Schon/ White's	6"x6"x4"	1					Tin Can	<.5	4/13/15	N
LH-028- 007	0505015	3747577	Schon/ White's	6"x6"x6"	1					Geological Anomaly	<.5	4/13/15	N
LH-029- 008	0505027	347601	Schon/ White's	6"x6"x6"	1					Barbed Wire 6"	<.5	4/13/15	N

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## TETRA TECH MRP FF.11 DIG SHEET - MANUAL TARGET EXCAVATION RESULTS

Facility/Location: Beaumont California

Site(s): Lockheed Site

Location	Coordi	nates (1)		Excavation		Muniti	ons-Related I	Items		Non-Muniti	ons Items		No Finds
or Anomaly Number	<b>N</b> 11S	E UTM	Detection Equip.	Dimensions (L x W x D) (inches)/(feet)	Number of Dig Locations	Number and Description	MEC/ MPPEH/ MDAS	Explosive Weight (lbs)	Disposition Date	Number and Description	Approx. Weight (lbs)	Disposition Date	Anomaly Deeper than '? (Y/N)
LH-030- 009	0505033	3747637	Schon/ White's	6"x6"x6"	1					Scrap Metal 6" Semi Circle	1.0	4/13/15	N
LH-031- 010	0505086	3747918	Schon/ White's	6"x6"x6"	1					Wire 6"	<.5	4/13/15	N
LH-032- 011	0505090	3747992	Schon/ White's	6"x6"x6"	1					Scrap Metal Left in Place	10>	4/13/15	N
LH-033- 012	0505094	3747991	Schon/ White's	6"x6"x6"	1					Metal Spring	<.5	4/13/15	N
LH-034- 013	0505077	3748084	Schon/ White's	6"x6"x6"	1					Aluminum Can	<.5	4/13/15	N
LH-035- 014	0505174	3748344	Schon/ White's	6"x6"x6"	1					Scrap Metal 8"x2"	1.0	4/13/15	N
LH-036- 015	0505233	3748559	Schon/ White's	6"x6"x6"	1					Wire 1"	<.5	4/13/15	N
LH-037- 016	0505275	3748612	Schon/ White's	6"x6"x6"	1					Barbed Wire 8"	<.5	4/13/15	N
LH-038- 017	0505299	3748650	Schon/ White's	6"x6"x6"	1					Rebar 2'	1.0	4/13/15	N
LH-039- 018	0505300	3748789	Schon/ White's	6"x6"x6"	1					Barbed Wire 16"	1.0	4/13/15	N

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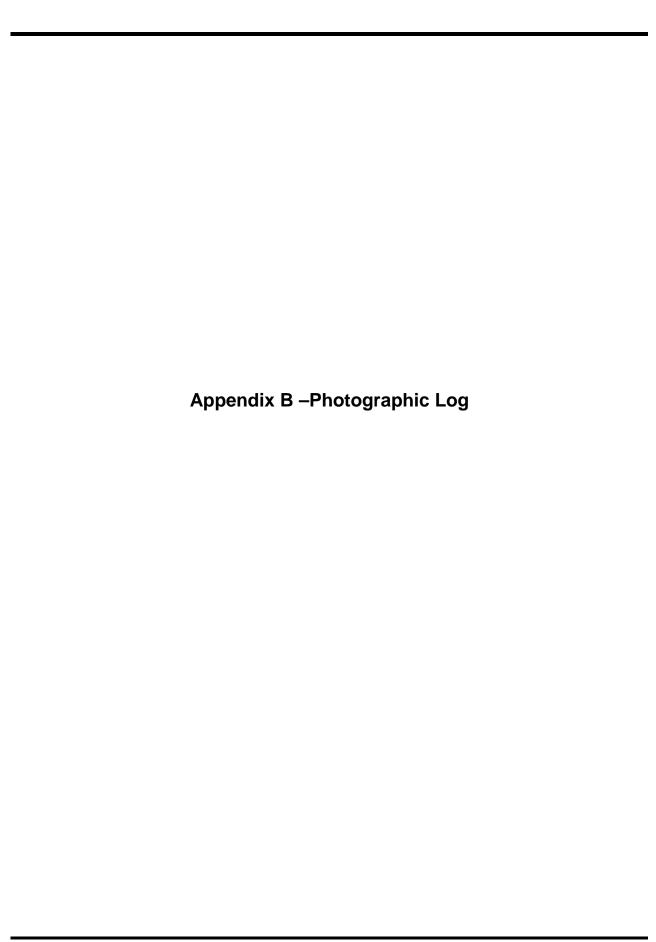
## TETRA TECH MRP FF.11 DIG SHEET - MANUAL TARGET EXCAVATION RESULTS

Facility/Location: Beaumont California

Site(s): Lockheed Site

Location	Coordi	nates (1)		Excavation		Muniti	ons-Related l	tems		Non-Muniti	ons Items		No Finds
Or Anomaly Number	<b>N</b> 11S	E UTM	Detection Equip.	Dimensions (L x W x D) (inches)/(feet)	Number of Dig Locations	Number and Description	MEC/ MPPEH/ MDAS	Explosive Weight (lbs)	Disposition Date	Number and Description	Approx. Weight (lbs)	Disposition Date	Anomaly Deeper than '? (Y/N)
LH-040- 041	0505238	3748912	Schon/ White's	6"x6"x6"	1					Barbed Wire 1'	.5	4/13/15	N
LH-041- 042	0505295	3748958	Schon/ White's	6"x6"x6"	1					Pipe 5'x1"	.5	4/13/15	N
LH-042- 043	0505280	3749003	Schon/ White's	6"x6"x6"	1					C Clamp	2.0	4/13/15	N
LH-043- 044	0505233	3748976	Schon/ White's	6"x6"x6"	1					Barbed Wire 6"	<.5	4/13/15	N
LH-044- 045	0505242	3748603	Schon/ White's	6"x6"x6"	1					Metal Stake 18"x1.5"	5.0	4/13/15	N

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**PHOTO - 003** 

Item No.: NA

COORDINATES:

N/A

**DESCRIPTION:** 

Inspection Area H



PHOTO - 004

Item No.: NA

**COORDINATES:** 

NA

**DESCRIPTION:** 

Field Team Preparing Survey Equipment



PHOTO - 005

Item No.: NA

COORDINATES:

NA

**DESCRIPTION:** 

Detector-Aided Surveys - Area H



PHOTO - 006

Item No.: NA

COORDINATES:

NΑ

**DESCRIPTION:** 

Detector-Aided Surveys - Area H



PHOTO - 007

Item No.: NA

COORDINATES:

NA

**DESCRIPTION:** 

Detector-Aided Surveys - Area D



PHOTO - 008

Item No.: NA

COORDINATES:

NΑ

**DESCRIPTION:** 

Detector-Aided Surveys - Area D



PHOTO - 011

Item No.: NA

**COORDINATES:** 

NA

**DESCRIPTION:** 

Equipment Check - Area D



PHOTO - 013

Item No.: NA

COORDINATES:

NA

**DESCRIPTION:** 

Equipment Check - Area D



**PHOTO - 014** 

Item No.: 01

COORDINATES:

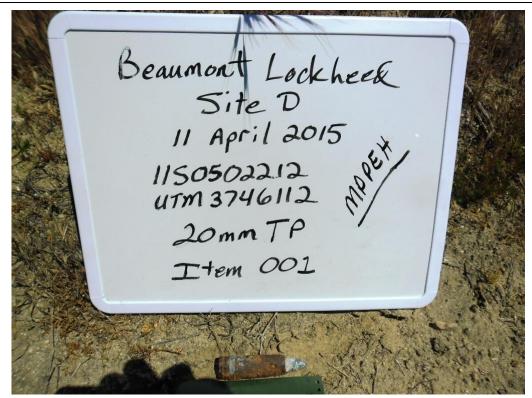
11S0502212E UTM3746112N

**DESCRIPTION:** 

20mm TP Round - Area

D

Depth: Surface



**PHOTO - 015** 

Item No.: 01

**COORDINATES:** 

11S0502212E UTM3746112N

**DESCRIPTION:** 

20mm TP Round - Area

D

**Depth: Surface** 



**PHOTO - 016** 

Item No.: 01

**COORDINATES:** 

11S0502212E UTM3746112N

**DESCRIPTION:** 

20mm TP Round - Area

D

Depth: Surface



**PHOTO - 017** 

Item No.: 02

**COORDINATES:** 

11S0505729E UTM3746280N

**DESCRIPTION:** 

20mm Cartridge Case Base – Area D

**Depth: Surface** 

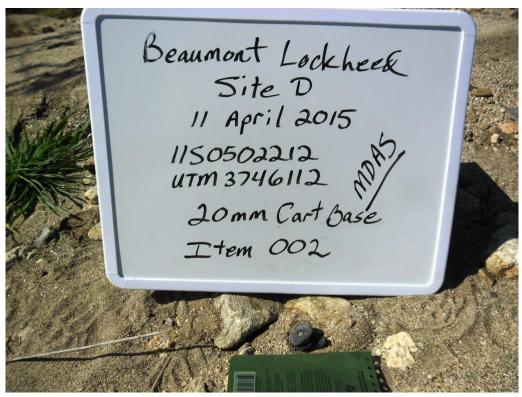


PHOTO - 018

Item No.: 02

COORDINATES:

11S0505729E UTM3746280N

**DESCRIPTION:** 

20mm Cartridge Case Base – Area D

**Depth: Surface** 



PHOTO - 019

Item No.: NA

COORDINATES:

NΑ

**DESCRIPTION:** 

**Detector-Aided Surveys** - Area A



PHOTO - 020

Item No.: NA

COORDINATES:

NA

**DESCRIPTION:** 

Detector-Aided Surveys - Area A



PHOTO - 022

Item No.: NA

COORDINATES:

NΑ

**DESCRIPTION:** 

**Detector-Aided Surveys** - Area A



**PHOTO - 024** 

Item No.: 03

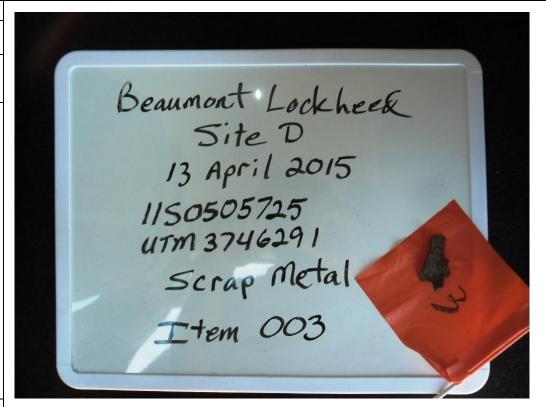
COORDINATES:

11S0505725E UTM3746291N

DESCRIPTION:

Scrap Metal -Area D

Depth: 2 Inches



**PHOTO - 025** 

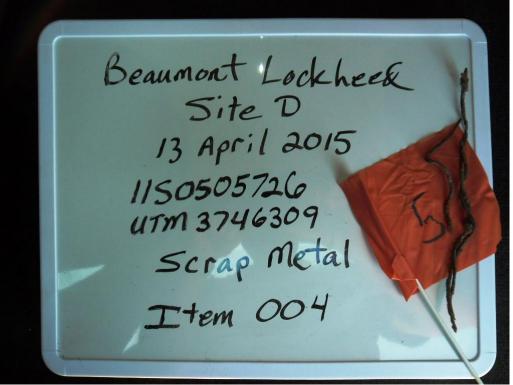
Item No.: 04

**COORDINATES:** 

11S0505726E UTM3746309N

DESCRIPTION:

**Scrap Metal** 



**PHOTO - 026** 

Item No.: 05

COORDINATES:

11S0505726E UTM3746309N

**DESCRIPTION:** 

Scrap Metal

**Depth: 3 Inches** 



**PHOTO - 027** 

Item No.: 06

**COORDINATES:** 

11S0505793E UTM3746272N

**DESCRIPTION:** 

Scrap Metal



**PHOTO - 028** 

Item No.: 07

COORDINATES: 11S0505015E

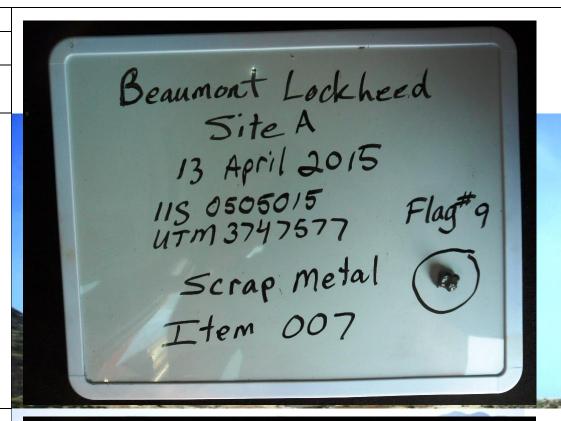
11S0505015E UTM3747577N

**DESCRIPTION:** 

Geological Anomaly -

Area D

**Depth: 6 Inches** 



**PHOTO - 029** 

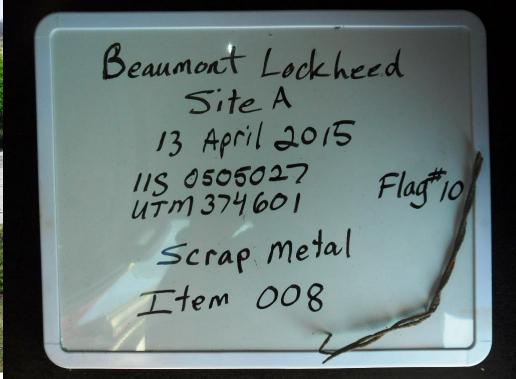
Item No.: 08

COORDINATES:

11S0505027E UTM347601N

**DESCRIPTION:** 

Scrap Metal - Area D



**PHOTO - 030** 

Item No.: 09

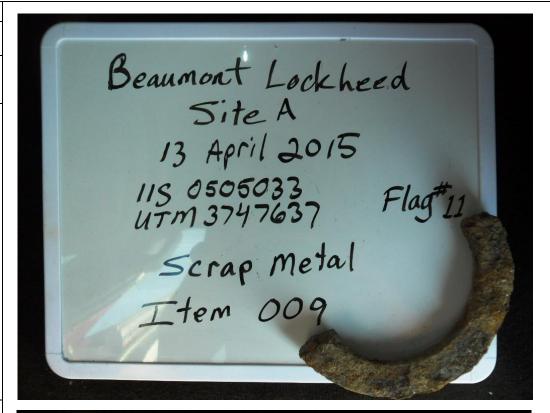
**COORDINATES:** 

11S0505033E UTM3747637N

**DESCRIPTION:** 

Scrap Metal - Area A

Depth: 6 Inches



**PHOTO - 031** 

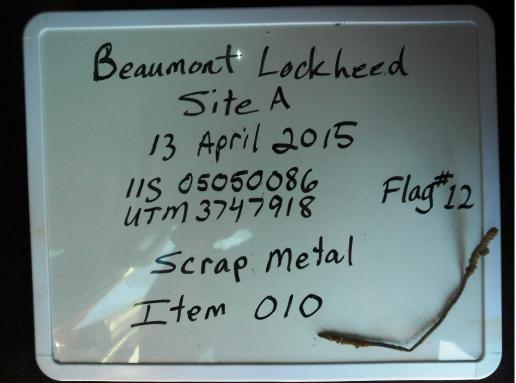
Item No.: 10

**COORDINATES:** 

11S0505086E UTM3747918N

**DESCRIPTION:** 

Scrap Metal - Area A



**PHOTO - 032** 

Item No.: 11

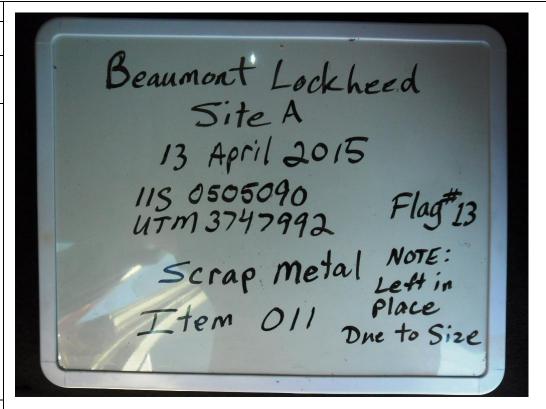
**COORDINATES:** 

11S0505090E UTM3747992N

**DESCRIPTION:** 

Scrap Metal - Area A

Depth: 6 Inches



**PHOTO - 033** 

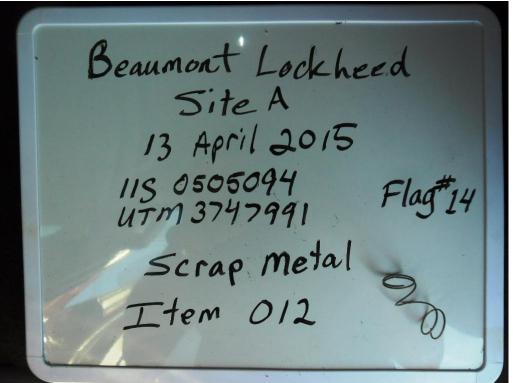
Item No.: 12

**COORDINATES:** 

11S0505094E UTM3747991N

**DESCRIPTION:** 

Scrap Metal - Area A



**PHOTO - 034** 

Item No.: 13

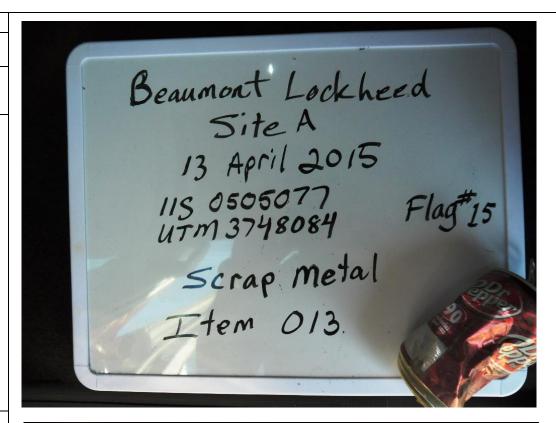
**COORDINATES:** 

11S0505077E UTM3748084N

**DESCRIPTION:** 

Scrap Metal - Area A

Depth: 6 Inches



**PHOTO - 035** 

Item No.: 14

**COORDINATES:** 

11S0505174E UTM3748344N

**DESCRIPTION:** 

Scrap Metal - Area A



**PHOTO - 036** 

Item No.: 15

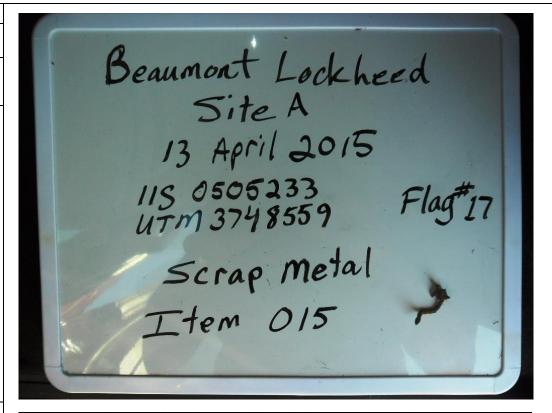
**COORDINATES:** 

11S0505233E UTM3748559N

**DESCRIPTION:** 

Scrap Metal - Area A

Depth: 6 Inches



**PHOTO - 037** 

Item No.: 16

**COORDINATES:** 

11S0505275E UTM3748612N

**DESCRIPTION:** 

Scrap Metal - Area A



**PHOTO - 038** 

Item No.: 17

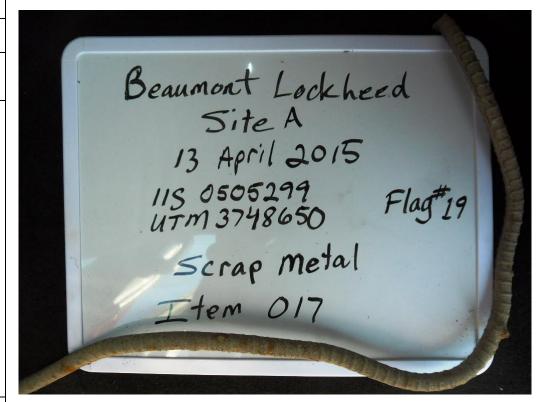
**COORDINATES:** 

11S0505299E UTM3748650N

**DESCRIPTION:** 

Scrap Metal - Area A

Depth: 6 Inches



**PHOTO - 039** 

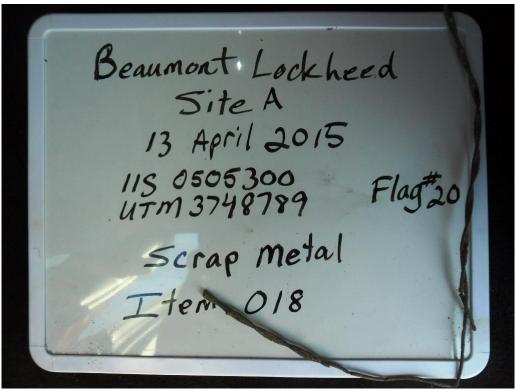
Item No.: 18

**COORDINATES:** 

11S0505300E UTM3748789N

**DESCRIPTION:** 

Scrap Metal - Area A



**PHOTO - 040** 

Item No.: 19

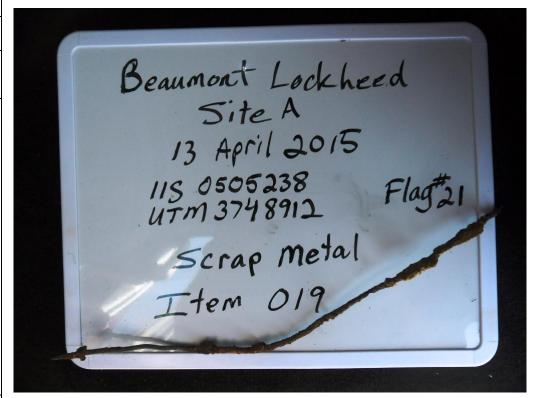
**COORDINATES:** 

11S0505238E UTM3748912N

**DESCRIPTION:** 

Scrap Metal - Area A

Depth: 6 Inches



**PHOTO - 041** 

Item No.: 20

**COORDINATES:** 

11S0505295E UTM3748958N

**DESCRIPTION:** 

Scrap Metal – Area A



**PHOTO - 042** 

Item No.: 21

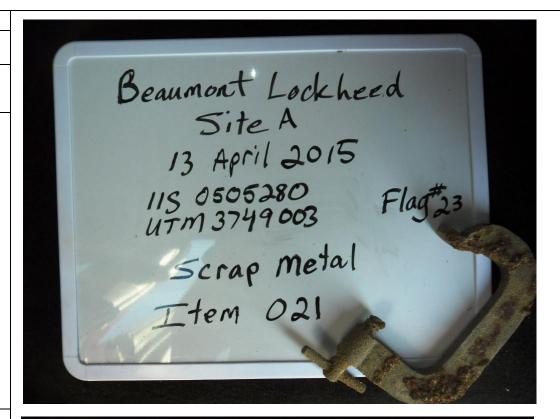
**COORDINATES:** 

11S0505280E UTM3749003N

**DESCRIPTION:** 

Scrap Metal - Area A

Depth: 6 Inches



**PHOTO - 043** 

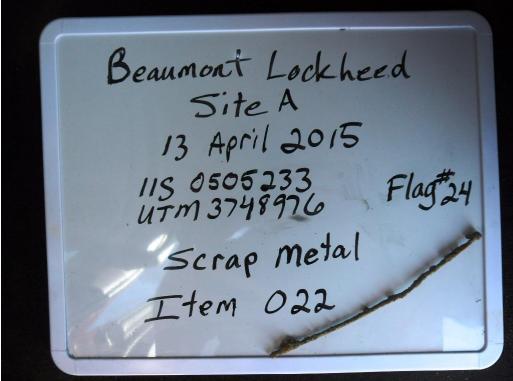
Item No.: 22

**COORDINATES:** 

11S0505233E UTM3748976N

**DESCRIPTION:** 

Scrap Metal - Area A



**PHOTO - 044** 

Item No.: 23

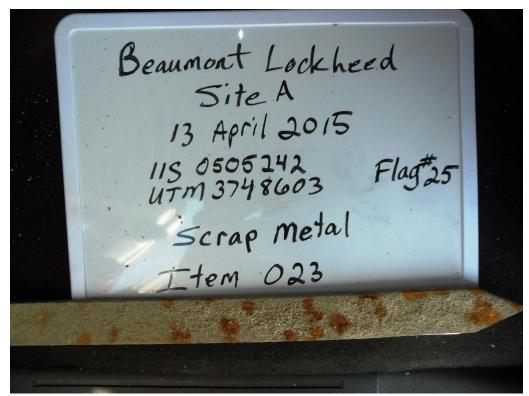
**COORDINATES:** 

11S0505242E UTM3748603N

**DESCRIPTION:** 

Scrap Metal - Area A

Depth: 6 Inches



**PHOTO - 047** 

Item No.: NA

COORDINATES:

NΑ

**DESCRIPTION:** 

Detector-Aided Survey

– Area G

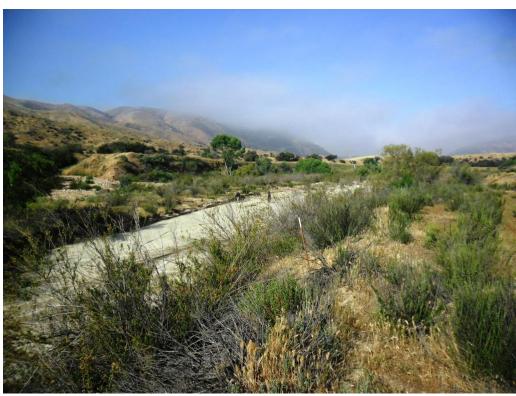


PHOTO - 051

Item No.: NA

COORDINATES:

NA

**DESCRIPTION:** 

Detector-Aided Survey

– Area G



PHOTO - 052

Item No.: NA

COORDINATES:

NA

**DESCRIPTION:** 

Detector-Aided Survey

– Area G

