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Final

Work Plan Technical Memorandum No. 2 Anomaly Investigation Results and Sampling Investigation

**Military Munitions Response Program
Project 7, Boat Basin, Visitors Information Center**

**Wallops Flight Facility Formerly Used Defense Site
Wallops Island, Virginia**

February 2016

Prepared by:

U.S. ARMY CORPS OF ENGINEERS
Baltimore, Maryland

FINAL

**WORK PLAN TECHNICAL MEMORANDUM NO. 2
ANOMALY INVESTIGATION RESULTS AND SAMPLING
INVESTIGATION**

**MILITARY MUNITIONS RESPONSE PROGRAM
PROJECT 7, BOAT BASIN, VISITORS INFORMATION CENTER
WALLOPS FLIGHT FACILITY FORMERLY USED DEFENSE SITE
WALLOPS ISLAND, VIRGINIA**

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The views, opinions, and/or findings contained in this report are those of the author(s) and should not be construed as an official Department of the Army position, policy, or decision, unless so designated by other documentation.

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LIST OF ACRONYMS

ASTM	American Society for Testing and Materials
BB	Boat Basin
bgs	below ground surface
BTV	background threshold value
DERP	Defense Environmental Restoration Program
DGM	digital geophysical mapping
DGPS	differential global positioning system
DMM	discarded military munitions
DPT	direct push technology
Eco-SSL	ecological soil screening level
FCA	Former Circular Area
FUDS	Formerly Used Defense Site
GBA	Gun Butts Area
GPS	global positioning system
HTRW	hazardous, toxic and radioactive waste
ID	identification
ISO	Industry Standard Object
IVS	instrument verification strip
MC	munitions constituents
MD	munitions debris
MDAS	material documented as safe
MEC	munitions and explosives of concern
mg/kg	milligrams per kilogram
mm	millimeter
MPPEH	material potentially presenting an explosive hazard
NAD	North American Datum
NASA	National Aeronautics and Space Administration
PAH	polycyclic aromatic hydrocarbon
PBA	Pyrotechnics Burn Area
PDA	personal digital assistant
QC	quality control
RI	remedial investigation
SARA	Superfund Amendments and Reauthorization Act of 1986
SI	site inspection
SOW	scope of work
SSHO	Site Safety and Health Officer
SUXOS	Senior Unexploded Ordnance Supervisor
USACE	U.S. Army Corps of Engineers
UXO	unexploded ordnance
VC	Visitors Information Center
VOC	volatile organic compound
WESTON®	Weston Solutions, Inc.
WFF-FUDS	Wallops Flight Facility Formerly Used Defense Site

1. INTRODUCTION

Weston Solutions, Inc. (WESTON®) was authorized by the U.S. Army Corps of Engineers (USACE) to perform a remedial investigation (RI) at the Boat Basin, Visitors Information Center at the Wallops Flight Facility Formerly Used Defense Site (WFF-FUDS) located in Accomack County, Virginia. The Boat Basin, Visitors Information Center is a USACE FUDS property pursuant to the Environmental Restoration Defense Account and the Defense Environmental Restoration Program (DERP), Chapter 160 of the Superfund Amendments and Reauthorization Act of 1986 (SARA). As part of the USACE FUDS program, the USACE, Baltimore District is responsible for execution of the USACE FUDS activities at the WFF-FUDS.

As part of the RI, an intrusive investigation of subsurface anomalies was performed to determine the nature and extent of munitions and explosives of concern (MEC), munitions debris (MD) and other ordnance-related subsurface materials. This Technical Memorandum describes the field activities and the results of the anomaly investigation conducted from June 16 through July 2, 2014, and presents the work plan for the follow-on munitions constituents (MC) and hazardous, toxic and radioactive waste (HTRW) sampling program. The HTRW investigation is related to any non-MEC/MD solid or liquid materials that could cause environmental contamination to various media.

1.1 SCOPE OF WORK

As detailed in the Final Work Plan (WESTON, 2013) for the field investigations, the scope of work (SOW) associated with the Delivery Order includes the following anomaly investigation and associated activities:

- Anomaly investigations to determine the nature and extent of MEC/MD contamination.
- MC and HTRW investigation to determine the nature and extent of potential MC and HTRW contamination.

2. ANOMALY INVESTIGATION PROCEDURES

A summary of the procedures for the anomaly investigation activities conducted between June 16 and July 2, 2014 are included in the following subsections. The field personnel included the following:

- Senior Unexploded Ordnance Supervisor (SUXOS).
- Unexploded Ordnance (UXO) Safety Officer/Quality Control (UXO SO/QC).
- UXO Technician III.
- UXO Technician II.
- UXO Technician I.
- Site Safety and Health Officer (SSHO)/Geologist.

2.1 UTILITY CLEARANCE

Underground utility clearance outside the fence along Route 175 was performed by Miss Utility locators and was completed by June 16, 2014. Utility clearance at the Visitors Center was performed by the National Aeronautics and Space Administration (NASA) locator personnel in several stages, between June 16 and 25, 2014, as dig locations were marked in the field.

2.2 INSTRUMENT VERIFICATION STRIP

An instrument verification strip (IVS) was used to test the Schonstedt magnetometers during anomaly investigation activities. The IVS was previously “seeded” with known surrogate ordnance items in the grassy area near the Boat Basin, as part of the geophysical activities completed in July/August 2013. The IVS was seeded, over approximately 100 feet, with surrogates of the predominant MEC-sized item (20 millimeters [mm]) found at the site, Industry Standard Objects (ISOs), and two survey nails. The MEC-sized items were inert 20mm. The surrogate ISOs consisted of Schedule 40, welded steel pipe manufactured to an American Society for Testing and Materials (ASTM) specification. The small ISO has a nominal diameter of 1 inch and a length of 4 inches.

2.3 REACQUISITION

Single point anomalies, identified during the geophysical survey and selected for intrusive investigation in Technical Memorandum No. 1, were reacquired by global positioning system (GPS) and marked in the field with pin flags. Each single point anomaly was assigned and tracked with a unique identification (ID) number. A Trimble Real Time Kinematic (RTK)-GPS base station

with Bluetooth-enabled R6 antenna/receiver was used for reacquisition. The RTK-GPS provides up to centimeter-scale positional accuracy in areas with minimal canopy cover.

An RTK-GPS base station control point was previously established by a Virginia-licensed surveyor for the July/August 2013 field work. Positions were located based on the North American Datum (NAD) 83, Virginia State Plane South coordinate system with units in U.S. Survey Feet.

A Trimble GeoXH 6000 differential global positioning system (DGPS) was used to mark the previously selected grid and transect locations. Each grid and transect was labeled with a unique ID. The Trimble GeoXH uses an integrated beacon with floodlight technology to differentially correct positioning data in real-time to provide sub-meter accuracy. Positions were recorded in Virginia State Plane South, NAD 83 coordinate system with units in U.S. Survey Feet.

Because of the canopy cover at many of the transect and grid locations, the RTK-GPS could not be used to record the mag and dig locations. Therefore, the GeoXH 600 DGPS was used to record the anomaly locations along the transects and grids.

2.4 BRUSH CLEARING

Prior to performing intrusive work along the transects and grids in the wooded areas, minimal brush clearing was performed to facilitate field work. Brush and trees with a diameter of 1 inch or less were cleared along the former digital geophysical mapping (DGM) and planned mag and dig transects and grid areas.

2.5 INTRUSIVE OPERATIONS

Hand digging of single point anomalies was performed by UXO personnel. A Schonstedt magnetic locator was used to determine and verify the location of subsurface material. Items identified during the survey were inspected, treated for material potentially presenting an explosive hazard (MPPEH) if necessary, and stored in locked drums for recycling. Each dig location was backfilled to grade upon completion.

The results of the dig locations were tracked in personal digital assistants (PDAs) and uploaded to a database each day. The DGM dig targets were tracked by previously determined IDs. Items found

along transects and grids were given unique IDs and recorded with a Trimble GeoXH 6000 DGPS as they were located in the field.

2.6 TEST PIT OPERATIONS

Test pits were completed by a qualified heavy equipment operator using a mini-excavator. The test pits were inspected for MD, MEC, and HTRW. Each test pit was dug to native soil. The materials and soils observed at each location were recorded in a test pit log. Each test pit was backfilled to grade upon completion.

2.7 DIVE OPERATIONS

A dive subcontractor, VR Habilis, performed an intrusive investigation of anomalies located in the Boat Basin. The divers mobilized to the Boat Basin on June 28 and completed dive operations on June 29 and 30, 2014. The dive operations focused on an investigation of anomaly clusters and a transect at the Boat Basin. The dig locations were determined using a GPS. The subsurface items were located and identified by UXO diver personnel. Data from each location were recorded on a log and presented in a report.

2.8 SOIL SAMPLING

Soil samples were collected at locations with a cluster of MD or at suspect locations with potential MC. Soil samples were collected with disposable spoons and bowls and analyzed for explosives and select metals (antimony, copper, iron, lead, magnesium, strontium, and zinc).

2.9 EXPLOSIVES HANDLING

Explosive materials were delivered as needed for treating MEC items by personnel from Reactives Management Corporation with a Virginia Blaster's License. No explosive materials were stored on-site.

3. RESULTS OF ANOMALY INVESTIGATION

The results of the intrusive investigation of subsurface anomalies at the Boat Basin, Visitors Information Center are discussed below by investigation area:

- Visitors Information Center (VC).
- Gun Butts Area (GBA).
- Boat Basin (BB).
- Pyrotechnics Burn Area (PBA).
- Former Circular Area (FCA).

The investigation areas and the dig results summary are presented on **Figures 1** and **2**, respectively, in **Appendix A**. All figures are included in **Appendix A**. The dig locations and data are presented in **Appendix B**. Photographs of field activities are provided in **Appendix C**.

3.1 VISITORS INFORMATION CENTER

Results from the DGM survey in July/August 2013 indicated that the area of the Visitors Information Center included numerous anomalies. The limits of some of the anomalies also appeared to extend into the woods at the southern and northeast boundaries of the Visitors Information Center. It is possible that soil containing MD was graded into the areas that are now wooded.

Anomalies were investigated by hand dig methods to determine the nature and extent of potential MD at the Visitors Information Center. The hand dig methods included investigation of single point anomalies in the mowed areas and mag and dig transects in the woods to the south and northeast of the Visitors Information Center.

A total of 180 DGM dig locations were completed in the mowed areas by hand digging at the Visitors Information Center on June 22 and 23, 2014 (**Appendix B, Figure 3**). Four transects were investigated by mag and dig methods to determine the nature and extent of MD in the wooded areas to the south (GBA-AT01 and GBA-AT02) and northeast (VC-AT-03 and VC-AT-04) of the Visitors Information Center on June 30 and July 1, 2014 (**Figures 3** and **4**).

Six of the DGM dig locations in the mowed area contained MD (**Appendix B**). The MD were generally small pieces of 20mm, 30mm or unidentifiable fragments. Five of the MD were located north of the Visitors Information Center near the parking lot (**Figure 3**). The other MD were located

south of the Visitors Information Center. No MD was found between the fence and Route 175. All other locations contained non-MD scrap metal or underground utilities. No MEC items were found in the digs at the Visitors Information Center.

A summary of the findings of the single point anomaly digs around the Visitors Information Center include the following (**Appendix B**):

- Six munitions debris (MD) items (20mm/30mm fragments and projectiles) were found at six dig locations.
- One hundred and sixty-four locations contained non-MD scrap metal items.
- Ten locations contained utilities.

Based on finding several MD along transects in the woods southwest of the Visitors Information Center, the additional transects (GBA-AT-18 and GBA-AT-19) were completed in the wooded area, which extends from the Gun Butts Area (**Appendix B, Figure 4**). No additional MD was located along these two additional transects southwest of the Visitors Information Center.

The dig results at the Visitors Information Center indicated that there are likely additional MD fragments scattered throughout the mowed areas, although they may be more concentrated in some areas. The transects completed northeast of the Visitors Information Center in the woods indicated there is no MD in that area. The transects completed south of the Visitors Information Center in the woods indicated that MD is located between the woods/mowed area boundary and extends less than 100 feet south into the woods. The extent of the MD at the Visitors Information Center is shown on **Figure 5**. Although it is unlikely that MEC is located at the Visitors Center due to the nature of the limited amount of MD encountered in that area, it is possible that MEC could exist at the Visitors Center.

3.2 GUN BUTTS AREA

The Gun Butts Area was investigated by hand digging anomalies in the mowed grassy areas, surrounding wooded areas, and the area slightly downrange in the marsh to determine the nature and extent of MEC and MD. The mowed areas were investigated between June 23 and 29, 2014 by digging single point anomalies selected from the 2013 DGM results (**Figure 4**). The nature and extent of MD in the wooded areas around the Gun Butts were investigated by mag and dig methods along transects and grids on June 29 and 30, 2014. The transects on the south side of the Gun Butts

extended to the south side of the Visitors Center. Digs of several DGM anomalies were completed in the marsh area southeast of the Gun Butts on June 30, 2014. The investigation included the following:

- One hundred and eighty single point anomalies in the mowed areas.
- Seven single point anomalies in the Gun Butts marsh.
- Fourteen mag and dig transects (GBA-AT-01 through GBA-AT-14) (approximately 1,900 feet of transects).
- Two 50-foot by 50-foot grids (GB-G-01 and GB-B-02).

Six of the single point anomalies located along a DGM transect and planned for investigation in the marsh southeast of the Gun Butts were not investigated. However, the three non-seed points from nearby DGM grids in the marsh were investigated and did not contain MD (**Figure 4**).

The six target anomalies from a DGM transect were inadvertently missed during the intrusive investigation because of a tracking error in the field. Although there were six target anomalies that were missed and not completed as part of the investigation, the area of the spreading of the MD/MEC is confined to the Gun Butts Area northwest of the marsh. Also, no MD was found at the three non-seed items located in DGM grids in the marsh. Although this has been identified as a data gap, it is expected that this data gap will be closed through investigation of this area during the remedial action, if one is required based on the results of the remedial investigation.

Numerous MD were found in the woods south of Gun Butt No. 2 along transect GBA-AT-01 and grid GBA-AG-01 (**Appendix B, Figure 4**). Numerous MD were also found in the woods northeast of Gun Butt No. 1 along transect GBA-AT-14 and in grid GBA-AG-02. Therefore, the following additional transects were completed in the wooded area to determine the horizontal extent of MD (**Figure 4**):

- GBA-AT-15, GBA-AT-16, and GBA-AT-17 to the northeast.
- GBA-AT-18 and GBA-AT-19 to the south.

No additional MD was located along the two outermost additional transects to the northeast (GBA-AT-16 and GBA-AT-17) and the south (GBA-AT-18 and GBA-AT-19) around the Gun Butts (**Figure 4**).

Numerous MD items were located at dig locations in single point anomalies, transects, and grids in the Gun Butts Area. One of the dig locations (GBA-AT-12-102), along transect GBA-AT-12, contained a 20mm projectile discarded military munitions (DMM) MEC item. The MEC item was removed and properly destroyed with donor explosives on June 30, 2014. The MD were generally small pieces of 20mm, 30mm, or unidentifiable fragments. All other dig locations contained non-MD scrap metal or underground utilities.

A summary of the dig findings includes the following:

- Two hundred and ninety-three MD (20mm/30mm fragments and projectiles).
- One 20mm projectile DMM MEC item along transect GBA-AT-12 to the northeast of the Gun Butts.
- One hundred and sixty-eight non-MD scrap metal items.
- Two locations identified as utilities in the mowed area.

A few items removed from the Gun Butts Area were crimped munition casings that could not be completely cleared of dirt. Because these items were open, crimped casings without a projectile, they were destroyed only as a precaution to adhere to regulations regarding the inspection of MPPEH. Five soil samples (GBA-2967-6, GBA-2968-6, GBA-2966-6, GBA-2965-6, and GBA-2964-6) and one duplicate (GBA-2964-DUP) were collected beneath MPPEH items in the mowed areas between Gun Butts No. 1 and 2 (**Figure 4**). No suspected contamination (stained soils) was observed in the field during the collection of the samples. The samples were analyzed for explosives and a limited metals list (**Table 3-1**). The MPPEH items were later destroyed, inspected after demolition operations, and recycled as MDAS. There was a requirement to adhere to regulations regarding the inspection of MPPEH cavities; however, there were no safety concerns for these items. Because of an oversight, a soil sample was not collected at the MEC item at the time of discovery; however, a soil sample will be collected during the next field investigation phase to close this potential data gap.

The sample results indicated that no metals, other than iron, or explosives were detected above the EPA Region 3 residential or industrial soil screening levels (**Table 3-2, Figure 6**). Iron was detected above the EPA Region 3 residential soil screening level. Several metals and 2-nitrotoluene were detected above the ecological soil screening levels (Eco-SSLs) and/or the background

threshold values (BTVs). Copper, iron, lead, strontium, and zinc were detected above the Eco-SSLs and/or BTVs in soil samples at the Gun Butts, as summarized below:

- Copper was detected above the BTV (33 milligrams per kilogram [mg/kg]) and the Eco-SSL (28 mg/kg) at four sample locations (GBA-2965-6, GBA-2966-6, GBA-2967-6, and GBA-2968-6) at concentrations between 47.1 and 70.5 mg/kg.
- Iron was detected above the EPA Region 3 residential soil screening level (5,500 mg/kg) at four sample locations (GBA-2964-6, GBA-2964-DUP-6 [duplicate sample], GBA-2965-6, GBA-2966-6 and GBA-2968-6) at concentrations between 5,510 and 17,400 mg/kg. Iron was detected above the Eco-SSL (12 mg/kg) and below the BTV (10,900 mg/kg) at four sample locations (GBA-2964-6, GBA-2964-DUP-6 [duplicate sample], GBA-2965-6, GBA-2967-6 and GBA-2968-6) at concentrations between 4,660 and 6,980 mg/kg. Iron was detected above the BTV (10,900 mg/kg) and the Eco-SSL (12 mg/kg) at one sample location (GBA-2966-6) at a concentration of 17,400 mg/kg.
- Lead was detected above the Eco-SSL (11 mg/kg) and below the BTV (124 mg/kg) at two sample locations (GBA-2967-6 and GBA-2968-6) at concentrations of 22.4 and 77.9 mg/kg, respectively.
- Strontium was detected above the BTV (no value) and below the Eco-SSL (12 mg/kg) at all five sample locations at concentrations between 3.04 and 8.30 mg/kg.
- Zinc was detected above the Eco-SSL (46 mg/kg) and the BTV (104 mg/kg) at five sample locations (GBA-2964-5, GBA-2964-DUP-6 [duplicate sample], GBA-2965-6, GBA-2966-6, GBA-2967-6, and GBA-2968-6) at concentrations between 112 and 1,310 mg/kg.

2-Nitrotoluene was the only explosive compound detected in soil samples at the Gun Butts. There is no BTV for 2-nitrotoluene, which is not naturally occurring. 2-nitrotoluene was detected in four sample locations (GBA-2964-6, GBA-2964-DUP-6 [duplicate sample], GBA-2965-6, GBA-2966-6, and GBA-2968-6) at concentrations between 0.341 and 0.664 mg/kg (**Table 3-2, Figure 6**).

Location GBA-2968 had the highest levels of lead (77.9 mg/kg), zinc (1,310 mg/kg), and 2-nitrotoluene (0.664 mg/kg) (**Table 3-2, Figure 6**). Location GBA-2966 had the highest levels of iron (17,400 mg/kg), copper (70.5 mg/kg), and strontium (8.3 mg/kg).

Although there was an MD clearance performed at the Gun Butts Area in 2006 (TetraTech, 2006), the 2014 dig results indicated that there are likely numerous additional MD at the Gun Butts. Significant MD is likely located in the mowed grassy areas. The MD appears to extend slightly into the wooded areas, approximately 100 feet to the south of Gun Butt No. 2 and approximately

100 feet to the northeast of Gun Butt No.1. Since a MEC item was located at the Gun Butts, there could be additional MEC at the Gun Butts Area. The extent of the potential MPPEH/MEC/MD at the Gun Butts Area is shown on **Figure 5**.

It is unclear whether high explosives (HE) ammunition was used at the Gun Butts Area. Experimental testing of aircraft gun-type weapons, associated accessories, and lot proof testing of non-explosive aircraft ammunition was performed at the Test Cell/Gun Laboratory Range Area (USACE, 2005). Although the Focused Archive Search Report found no documentation indicating the use of high explosive ammunition or fuzes at the Test Cell/Gun Laboratory Range Area, one energetic/live 20mm projectile DMM MEC round was found during this sampling investigation.

3.3 BOAT BASIN

The nature and extent of MD at the Boat Basin was investigated by hand digs on land and underwater. Seven transects (BB-AT-01, BB-AT-02, BB-AT-03, BB-AT-04, BB-AT-05, BB-AT-06 and BB-AT-07) were investigated by mag and dig methods to determine the nature and extent of MD around the Boat Basin on June 25, 2014 (**Appendix B, Figure 7**). The seven transects totaled approximately 1,400 feet. Based on the findings of MD at transects BB-AT-05 and BB-AT-06 on the south side of the Boat Basin, an additional, meandering transect (BB-AC-01) was added to determine the southern extent of MD. Transect BB-AC-01 was comprised of four parallel transects, extending up to approximately 70 feet south of BB-AT-05 and BB-AT-06. No additional MD was located along the additional transect, BB-AC-01. No MD was located along the transects on the north, east or west side of the Boat Basin.

Twenty-three MD items were found along transects BB-AT-05 and BB-AT-06 (**Figure 7**). The MD includes the following:

- Twenty-two 20mm casings.
- One 2.75-inch by 6-inch MD projectile, determined likely to be either an M89 75mm smoke or shrapnel munition.

The origin of the 2.75-inch MD item is unknown. The Focused Archive Search Report (November 2005) for the area did not indicate the testing of this type of round. The MD item contained a scored rotating band, which indicates the item was fired from a gun. No similar munition items have been found in the vicinity.

Two soil samples (BB-AT105-SB101-00 and BB-AT105-SB102-00) were collected beneath MD items along transect BB-AT-05/BB-AT-06 (**Figure 7, Table 3-1**). No suspected contamination (stained soil) was observed at these locations. The samples were analyzed for explosives and metals.

The sample results indicated that no metals or explosives were detected above the EPA Region 3 residential or industrial soil screening levels (**Table 3-2, Figure 6**). However, copper, iron and zinc were detected above the Eco-SSLs and/or BTVs in soil samples at the Boat Basin, as summarized below:

- Copper was detected above the Eco-SSL (28 mg/kg) and the BTV (33 mg/kg) in one sample (BB-AT-5-SB101-00) at a concentration of 56.7 mg/kg.
- Iron was detected above the Eco-SSL (12 mg/kg) and below the BTV (10,900 mg/kg) at both sample locations (BB-AT-5-SB101-00 and BB-AT-5-SB102-00) at concentrations of 4,330 and 2,460 mg/kg, respectively.
- Strontium was detected above the BTV (no value) and below the Eco-SSL (12 mg/kg) at both sample locations (BB-AT-5-SB101-00 and BB-AT-5-SB102-00) at concentrations of 2.2 and 2.46 mg/kg, respectively.
- Zinc was detected above the Eco-SSL (46 mg/kg) and the BTV (104 mg/kg) at sample location BB-AT-5-SB102-00 at a concentration of 177 mg/kg. Zinc was detected above the Eco-SSL, but below the BTV, at sample location BB-AT-5-SB101-00 at a concentration of 95.6 mg/kg.

The only explosive compound detected in a soil sample at the Boat Basin was 2-Nitrotoluene (**Table 3-2, Figure 6**). There is no BTV or Eco-SSL for 2-nitrotoluene, which is not naturally occurring. 2-Nitrotoluene was detected in one sample (BB-AT-5-SB102-00) at a concentration of 0.0802 mg/kg.

A dive team completed intrusive investigations at 13 clusters (Clusters 1 through 13) in the Boat Basin (**Figure 7**). One transect (BB-AT-08) was completed by mag and dig methods under water along the east bank of the Boat Basin. No MD was found in any of the underwater digs. The dig report for the underwater investigation is included in **Appendix D**. A summary of items located in the Boat Basin (**Appendix B**) includes the following:

- Steel cans; guy wire anchor; small, friable pieces of metal; welding rods; fence pieces; fish trap; tractor tire; rebar; plywood; pipe; bilge pump; “hot rocks” (high concentrations of naturally occurring ferrous material); small metal shards; Marshall mat; metal posts; and crusty “hot” layer (sediment layer with high concentrations of ferrous material).

The dig results at the Boat Basin indicated that there could be additional MD on land on the south side of the Boat Basin. No MD were located underwater in the Boat Basin. No MEC items were found underwater or on land at the Boat Basin; however, the 2.75-inch MD item and additional MD that were found on the south bank indicate that MEC cannot be ruled out for this area. The extent of the MD at the Boat Basin is shown on **Figure 5**.

3.4 PYROTECHNICS BURN AREA

Previous site inspection (SI) activities at the Pyrotechnics Burn Area identified three burnt pyrotechnics items in a small burn pile within a fenced area (HFA, 2012). The July/August 2013 geophysics investigation determined the area contained a burial pit-like feature around the fenced area. The burial pit-like feature extended to the northwest. A combination of single point anomaly digs, mag and dig transects, mag and dig grids and test pits were completed in June/July 2014 to characterize the nature and extent of debris at the Pyrotechnics Burn Area.

A total of 113 DGM dig locations were completed by hand digging at the Pyrotechnics Burn Area on June 25, 2014 (**Appendix B, Figure 8**). Approximately 103 of the dig locations were located outside the high response/high density area (the burial pit-like feature) to determine whether they contained munitions-related material kicked-out from burning activities.

Three transects (PBA-AT-01, PBA-AT-02, and PBA-AT-03) and one grid (GBA-AG-03) were investigated to the northwest of the Pyrotechnics Burn Area (**Appendix B, Figure 8**). The area was investigated to determine the nature and extent of the anomalies located in the northwest corner of the Pyrotechnics Burn Area.

Three test pits were completed at the Pyrotechnics Burn Area to investigate the suspected burial pit feature, based on the high response/high density areas determined from the 2013 DGM investigation (**Figure 8**). The test pits were completed on June 25, 2014 with a mini-excavator to determine the nature and vertical extent of the anomalies, including potential MEC and HTRW.

Prior to beginning the test pits at the Pyrotechnics Burn Area, the fencing from a small fenced-in area, which is the likely location of burn activities, was removed, and the surface debris in that area was inspected (**Figure 8**). The fenced-in area contained evidence of former burning and included some grayish-whitish ash-like residue that appeared to be from burned flares on the ground surface. Test Pit-03 cuts across the fenced-in area. No additional materials related to burning activities were observed. The test pit log is included in **Appendix E**.

No MD or MEC was encountered by the UXO team at the hand dig or test pit locations at the Pyrotechnics Burn Area. All of the items found at the Pyrotechnics Burn Area were classified by the UXO personnel as non-MD scrap metal or as nails, rebar, wire, etc. if the metal material could be identified. No HTRW was observed in the test pits. A log of the test pits is included in **Appendix E**.

Native soil and groundwater were encountered at 2 feet below ground surface (ft bgs) in each test pit at the Pyrotechnics Burn Area. A summary of the test pit findings includes the following:

- Test Pit 1: Nails, pipe, concrete fragments, scrap metal, and wood boards.
- Test Pit 2: Nails, pipe, concrete fragments, scrap metal, wood boards, railroad ties, and wire.
- Test Pit 3: No intact debris found. Only small, non-MD rusted fragments in surface soil and grass sod were identified. No additional metallic debris was identified below the surface soil and sod.

The test pit results did not indicate the presence of HTRW or MD at the Pyro Burn Area (**Appendix E**).

3.5 FORMER CIRCULAR AREA

The Former Circular Area was investigated for MD and HTRW on June 30, 2014 by digging three test pits to determine the nature and extent of subsurface anomalies and debris (**Figure 9**). Concrete debris, construction debris, Marston matting, pipes, and poles were observed on the ground surface during the DGM survey in July/August 2013.

Each test pit at the Former Circular Area was completed to native soil at 2 ft bgs. No MD or HTRW were found in the test pits. The debris found on the surface appeared to be lying in a former shallow

ditch or trench. A log of the test pits is included in **Appendix E**. A summary of the test pit findings includes the following:

- Test Pit 1: Small concrete debris.
- Test Pit 2: Cinder blocks, bricks, broken concrete pipes, metal pipes, nails, wood boards, railroad ties, and wire.
- Test Pit 3: Metal matting, cans, and metal pipe.

The test pit results did not indicate the presence of HTRW or MD at the Former Circular Area (**Appendix E**).

3.6 DEMOLITION OPERATIONS

Demolition activities were performed on June 30, 2014 to destroy a 20mm projectile DMM MEC item found at the Gun Butts Area and additional MPPEH removed from the Gun Butts Area. All explosive items were delivered to the Boat Basin by Reactives Management Corporation on the day of the demolition. The demolition occurred at the Pyrotechnics Burn Area. Not all of the items were properly destroyed on the initial detonation; therefore, a second detonation was performed, which properly demolished each item. All materials were inspected and verified as materials documented as safe (MDAS) and temporarily stored in a locked 55-gallon drum at the Boat Basin.

- A soil sample (PBA-shot-SB101-00) was collected at the demolition location to verify that no MC was released from the demolition (**Figure 6**). The sample results indicated that no metals or explosives were detected above the EPA Region 3 residential or industrial soil screening level or BTVs (**Table 3-2, Figure 6**). Iron was detected above the Eco-SSL (12 mg/kg), but below the BTV (10,900 mg/kg) at a concentration of 3,000 mg/kg. Strontium was detected above the BTV (no value) and below the Eco-SSL (12 mg/kg) at a concentration of 1.11 mg/kg.

No other Eco-SSLs or BTVs were exceeded in the sample.

3.7 MATERIAL HANDLING

MD recovered from the area was stored temporarily at the Boat Basin in a locked steel drum that contained only munition-related debris (MDAS). Items that were considered MEC or MPPEH were treated on-site to eliminate any potential explosive materials and then were stored in the drum of MDAS. Non-munitions scrap metal was segregated and stored in a separate steel drum. All MDAS

and scrap metal was picked up by a recycler on August 14, 2014. The completed MDAS form is included in **Appendix F**.

**Table 3-1
 June/July 2014 Soil Sampling Program**

Sample ID	Dig Location	Sample Date	Area	Depth (ft bgs)	Analysis	Rationale
GBA-2967-6	GBA-4565	6/24/14	Gun Butts Area	0.5	Sb, Cu, Fe, Pb, Mg, Sr, Zn, Explosives	20mm MPPEH casing
GBA-2968-6	GBA-4496			0.5		20mm MPPEH casing
GBA-2966-6	GBA-4048			0.5		20mm MPPEH casing
GBA-2965-6	GBA-3768			0.5		20mm MPPEH casing
GBA-2964-6	GBA-3938			0.5		20mm MPPEH casing
GBA-2964-DUP	GBA-3938			0.5		Duplicate of GBA-2964-6
PBA-shot-SB101-00	Pyro Burn Area	7/1/14	Pyro Burn Area	1.5		Detonation point of MEC
BB-AT05-SB101-00	BB-AT05-103		Boat Basin	0.5		2.75 in. projectile body
BB-AT05-SB102-00	BB-AT05-102		Boat Basin	0.5		Cluster of 20mm casings

Table 3-2
 June/July 2014 Soil Sample Results

Sample ID	EPA 3 Res Soil ¹	EPA 3 Ind Soil ¹	ECO SSL ²	BTV ³	Boat Basin		Gun Butts Area						Pyro Burn Area
					BB-AT05- SB101- 00	BB-AT05- SB102- 00	GBA- 2964-6	GBA- 2964- DUP-6	GBA- 2965-6	GBA- 2966-6	GBA- 2967-6	GBA- 2968-6	PBA-shot- SB101-00
					7/1/14	7/1/14	6/24/14	6/24/14	6/24/14	6/24/14	6/24/14	6/24/14	7/1/14
Analyte/Depth (ft bgs)					0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1.5
Metals (mg/kg)													
Antimony	3.1	47	0.27	---	ND	ND	ND	ND	ND	ND	ND	ND	ND
Copper	310	4,700	28	33	56.7	ND	21.7	23.0	47.1	70.5	63.7	55.7	ND
Iron	5,500	82,000	12 ⁴	10,900	4,330	2,460	6,330	6,980	5,510	17,400	4,660	5,420	3,000
Lead	400	800	11	124	ND	ND	ND	ND	ND	ND	22.4	77.9	ND
Magnesium	180	2,600	4,400 ⁴	1,450	ND	ND	ND	ND	ND	ND	ND	ND	ND
Strontium	4,700	70,000	12 ⁴	---	2.2	2.46	5.12	4.33	3.04	8.30	3.47	3.97	1.11
Zinc	2,300	35,000	46	104	95.6	177	51.9	49.0	182	112	157	1,310	ND
Explosives (mg/kg)													
1,3,5-Trinitrobenzene	220	3,200	376,000 ⁵	---	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dinitrobenzene	0.62	8.2	655,000 ⁵	---	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4,6-Trinitrotoluene	3.6	52	---	---	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dinitrotoluene	1.7	7.4	1,280,000 ⁵	---	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,6-Dinitrotoluene	0.36	1.5	32,800 ⁵	---	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Amino-4,6-dinitrotoluene	15	230	---	---	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Nitrotoluene	3.2	15	---	---	ND	0.0802	0.586	0.341	0.544	0.390	ND	0.664	ND
3-Nitrotoluene	0.62	8.2	---	---	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Amino-2,6-dinitrotoluene	15	230	---	---	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Nitrotoluene	25	140	---	---	ND	ND	ND	ND	ND	ND	ND	ND	ND
HMX	380	5,700	---	---	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nitrobenzene	5.1	22	1,310,000 ⁵	---	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nitroglycerin	0.62	8.2	---	---	ND	ND	ND	ND	ND	ND	ND	ND	ND
PETN	12	160	---	---	ND	ND	ND	ND	ND	ND	ND	ND	ND
RDX	6	28	---	---	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetryl	12	160	---	---	ND	ND	ND	ND	ND	ND	ND	ND	ND

Legend

- ¹ EPA Region III Risk-Based Screening Levels for Soil, May 2014.
 - ² Ecological Soil Screening Levels, EPA OSWER, (EPA, 2003, 2005b-h, 2006, 2007a-h, and 2008).
 - ³ Background Threshold Value from Background Soil and Groundwater Investigation Report for the Main Base NASA Wallops Flight Facility, May 2004.
 - ⁴ EPA Region 3 BTAG Screening Levels, 1995.
 - ⁵ EPA Region 5 RCRA Ecological Screening Levels, August 22, 2003.
- EPA: Environmental Protection Agency
 ft: feet
 bgs: below ground surface
 ND: non-detect
- | | |
|--|---------------------------------|
| | Exceeded ECO-SSL |
| | Exceeded BTV |
| | Exceeded EPA 3 Residential Soil |

4. SAMPLING PROGRAM

The following sections discuss the recommended follow-on sampling activities to investigate potential MC and HTRW constituents at the Boat Basin, Visitors Information Center. All sample locations are shown on the figures in **Appendix A**.

4.1 BOAT BASIN

No exceedances of any constituents above the EPA Region 3 residential or industrial soil screening level were detected in the two soil samples collected in July 2014 at the Boat Basin. Copper and zinc were detected above the BTV by less than a factor of 2. No staining was observed during the June/July 2014 sampling. Because no munitions related items were observed during the dive operations for the identified anomalies within the Boat Basin, no sediment or surface water sampling of the Boat Basin is warranted. If additional sampling in the uplands area shows significant contamination, then sediment and surface water sampling may be performed.

Based on the exceedances of ecological screening levels at the two previous soil sample locations (BB-7-SB04 and BB-7-SB05) collected on the southern end of the Boat Basin where MD was found at depths of 6 inches bgs, additional soil sampling to further characterize this area is warranted. A total of five direct push technology (DPT) borings (BB-7-SB01 through BB-7-SB05) will be completed to characterize the MC in soil at the Boat Basin. The DPT soil borings will be advanced to approximately 8 ft bgs or the water table, whichever is shallower (**Figure 7, Figure 11**).

Soil samples will be collected from all DPT locations (BB-7-SB01 through BB-7-SB05) (**Table 4-1**). Groundwater samples will be collected from one DPT location (BB-7-SB02) (**Table 4-2**). Soil samples will be collected from depth intervals of 0 to 2 feet and 3 to 5 feet and analyzed for metals and explosives. Groundwater samples will be analyzed for total metals, dissolved metals, explosives, and perchlorate. The soil sampling procedures, DPT well sampling procedures, sample depth intervals and analyses are described in the Work Plan (USACE, 2014).

4.2 GUN BUTTS AREA

There was no staining observed during the June 2014 sample collection at the Gun Butts Area at locations biased towards removed MPPEH. At these five biased locations, iron was the only constituent that exceeded the EPA Region 3 residential soil screening levels in the samples

collected in June 2014 at the Gun Butts Area. No constituents exceeded the EPA Region 3 industrial soil screening levels. The ecological screening level and BTV were exceeded for copper in four of the five samples collected in the area between the two gun butts. Iron exceeded its BTV in one sample (GBA-2966-6) while zinc exceeded its ecological screening level and BTV in three samples.

A 20mm projectile DMM MEC lone item was observed in the Gun Butts Area, as well as MD throughout the Area. The distribution of MD is likely related to grading of the former berm. Additional biased sampling will be performed to determine the concentrations and impacts of MC from MD/MEC spread throughout the Gun Butts Area. The sample locations will be biased to get sample data at various areas of the Gun Butts Area where it is suspected the berm material was spread, including upgradient, downgradient, within the site and along the borders. To further assess the nature and extent of contamination in the area where the previous five soil samples were collected, additional samples will be collected due to concentrations of copper, iron, and zinc detected greater than ecological screening levels and BTVs.

A total of 25 DPT borings (GBA-7-SB01 through GBA-7-SB24) will be completed to characterize the MC in soil at the Gun Butts Area as follows:

- Six DPT borings (GBA-7-SB01 through GBA-7-SB06) within Gun Butt No. 1 to assess impacts to the Gun Butt No. 1 from grading of the former berm and firing activities
- Six DPT borings (GBA-7-SB07 through GBA-7-SB12) within Gun Butt No. 2 to assess impacts to the Gun Butt No. 2 from grading of the former berm and firing activities.
- Four DPT borings (GBA-7-SB13 through GBA-7-SB16) surrounding the area where the previous five soil samples were collected during the intrusive investigations to better define the nature and extent of contamination in this area
- Eight DPT borings (GBA-7-SB17 through GBA-7-SB24) spread geographically across the Gun Butts Area to assess impacts to this area from grading of the former berm and firing activities. This area is within the identified MD area noted on Figure 5.
- One DPT boring (GBS-7-SB25) at the location of the removed 20mm projectile DMM MEC lone item at Gun Butt No. 1 to assess impacts from potential MC leakage.

The DPT soil borings will be advanced to approximately 8 ft bgs or the water table, whichever is shallower (**Figure 10, Figure 11**). Groundwater samples will be collected at the Gun Butts Area to determine if there are impacts to groundwater from MC. Groundwater samples will be collected from 10 of the DPT locations (GBA-7-SB02, GBA-7-SB03, GBA-7-SB04, GBA-7-SB05, GBA-7-

SB06, GBA-7-SB08, GBA-7-SB10, GBA-7-SB20, GBA-7-SB24 and GBA-7-SB25). Seven DPT groundwater samples will be related to Gun Butt No. 1, and three groundwater samples will be related to Gun Butt No. 2. A groundwater sample will be collected at the upgradient and downgradient portion of each area, as well as downgradient of each area. An additional DPT groundwater sample will be collected downgradient of the area where the five samples were collected during the intrusive investigations. One DPT groundwater sample (GBS-7-SB25) will be collected at the location of the removed 20mm projectile DMM MEC lone item at Gun Butt No. 1 to assess impacts from potential MC leakage.

Soil samples will be collected from all DPT locations (GBA-7-SB01 through GBA-7-SB28) (**Table 4-1**). Soil samples will be collected from depth intervals of 0 to 2 feet and 3 to 5 feet and analyzed for metals and explosives. Groundwater samples will be collected from temporary DPT wells from 10 of the DPT borings and will be analyzed for total metals, dissolved metals, explosives, and perchlorate (**Table 4-2**). Four of the DPT wells will be located within the footprints of Gun Butts No. 1 and No. 2, one DTP well will be located on the downgradient edge of the area where soil samples were collected during the intrusive investigations, and two DPT wells will be located downgradient of each Gun Butt. The soil sampling procedures, DPT well sampling procedures, sample depth intervals and analyses are described in the Work Plan (USACE, 2014).

4.3 FORMER CIRCULAR AREA

No MEC/MD and no indication of any staining was observed during the June/July 2014 investigation at the Former Circular Area. The types of debris found in the area do not indicate a potential source of contamination. The debris found included concrete, cinder blocks, bricks, broken concrete pipes, metal pipes, nails, wood boards, railroad ties, wire, metal matting, and cans. The debris area is not associated with munitions related activities and will not be evaluated further under the MMRP; however, HTRW sampling is recommended for this area and should be conducted under a separate investigation to determine whether there has been a CERCLA release.

4.4 PYROTECHNICS BURN AREA

Several soil and groundwater samples will be collected at biased locations to determine whether there is any contamination related to burn activities or anomaly areas. Nine soil borings will be advanced by DPT soil boring methods to characterize the site for potential contamination related to

burn activities (**Figure 8, Figure 11**). Three DPT borings (PBA-7-SB04, PBA-7-SB05, PBA-7-SB06) will be located within or immediately surrounding the former fenced-in area where the burn activities occurred. Four DPT borings (PBA-7-SB01, PBA-7-SB02, PBA-7-SB03, PBA-7-SB07, PBA-7-SB09) will be located at areas with high anomaly response. Since the water table is very shallow along the marsh, about 2 ft bgs, one soil sample will be collected from 0 to 2 ft bgs at each location. Groundwater samples will be collected at five temporary DPT wells (PBA-7-SB01, PBA-7-SB05, PBA-7-SB06, PBA-7-SB08, PBA-7-SB09) to screen the site for potential contamination related to the burn activities and anomalies. PBA-7-SB08 is a down-gradient DPT well location. The soil and groundwater samples to be collected are shown in **Tables 4-1 and 4-2**, respectively. To investigate potential contamination from pyrotechnic materials and unknown chemicals that may have been used to aid the burning process, the following analyses will be performed on soil and groundwater samples, as indicated in the Work Plan (USACE, 2014): volatile organic compounds (VOCs), polycyclic aromatic hydrocarbons (PAHs), dioxins/furans, perchlorates (groundwater only), explosives, and metals.

4.5 VISITORS INFORMATION CENTER

No indication of staining was observed during the June/July 2014 investigation at the Visitors Information Center. The debris found at the Visitors Information Center did not indicate a potential source of contamination. MD was found at only six locations, which indicates soil from the spreading of the Gun Butts berm did not occur or was only negligible at the Visitors Center.

Based on the presence of MD in a small area on the north side of the Visitors Information Center area, soil sampling to characterize this area is warranted. Two direct push technology (DPT) borings (VIC-7-SB01 and VIC-7-SB02) will be completed to characterize the MC in soil at an area within the Visitors Information Center where the presence of MD was noted. The DPT soil borings will be advanced to approximately 8 ft bgs or the water table, whichever is shallower (**Figure 3, Figure 11**).

Soil samples will be collected from both DPT locations (VIC-7-SB01 and VIC-7-SB02) (**Table 4-1**). Groundwater samples will be collected from one DPT location (VIC-7-SB01) (**Table 4-2**). Soil samples will be collected from depth intervals of 0 to 2 feet and 3 to 5 feet and analyzed for metals and explosives. Groundwater samples will be collected from temporary DPT

wells from the DPT boring (VIC-7-SB01) and will be analyzed for total metals, dissolved metals, explosives, and perchlorate. The soil sampling procedures, DPT well sampling procedures, sample depth intervals and analyses are described in the Work Plan (USACE, 2014).

**Table 4-1
Proposed Soil Sampling Program**

Location	Number of DPT Soil Boring Locations	Soil Sample Depths (ft bgs)	Rationale	Analysis
Boat Basin	5 (BB-7-SB01, BB-7-SB02, BB-7-SB03, BB-7-SB04, BB-7-SB05)	0-2, 3-5	Investigate potential MC	Metals (Sb, Cu, Fe, Pb, Mg, Sr, Zn) Explosives
Gun Butt No. 1	7 (GBA-7-SB01, GBA-7-SB02, GBA-7-SB03, GBA-7-SB04, GBA-7-SB05, GBA-7-SB06, GBA-7-SB)	0-2, 3-5	Investigate potential MC spread from the former berm area	
Gun Butt No. 1	GBA-7-SB25	0-2, 3-5	Investigate potential MC at location of the recovered 20mm projectile DMM MEC	
Gun Butt No. 2	6 (GBA-7-SB07, GBA-7-SB08, GBA-7-SB09, GBA-7-SB10, GBA-7-SB11, GBA-7-SB12)	0-2, 3-5	Investigate potential MC spread from the former berm area	
Gun Butts Area - Potential MPPEH	4 (GBA-7-SB13, GBA-7-SB14, GBA-7-SB15, GBA-7-SB16)	0-2, 3-5	Investigate potential MC spread from potential MPPEH items	
Gun Butts Area	8 (GBA-7-SB17, GBA-7-SB18, GBA-7-SB19, GBA-7-SB20, GBA-7-SB21, GBA-7-SB22, GBA-7-SB23, GBA-7-SB24)	0-2, 3-5	Investigate potential MC spread from the former berm area	
Pyro Burn Area	9 (PBA-7-SB01, PBA-7-SB02, PBA-7-SB03, PBA-7-SB04, PBA-7-SB05, PBA-7-SB06, PBA-7-SB07, PBA-7-SB08, PBA-7-SB09)	0-2	Investigate pyrotechnics burn residue	
Visitors Information Center	2 (VIC-7-SB01 and VIC-7-SB02)	0-2, 3-5	Investigate potential MC	Metals (Sb, Cu, Fe, Pb, Mg, Sr, Zn), Explosives

**Table 4-2
 Proposed Groundwater Sampling Program**

Location	Number of DPT Ground-water Locations	Groundwater Depth (ft bgs)	Rationale	Analysis
Boat Basin	1 (BB-7-SB02)	Top of water table at approximately 5 ft bgs	Investigate potential MC	Total and Dissolved Metals (Sb, Cu, Fe, Pb, Mg, Sr, Zn) Explosives, Perchlorate
Gun Butt No. 1	5 (GBA-7-SB02, GBA-7-SB03, GBA-7-SB04, GBA-7-SB05, GBA-7-SB06)	Top of water table at approximately 8 ft bgs	Investigate potential MC spread from the former berm area	
Gun Butt No. 2	2 (GBA-7-SB08 and GBA-7-SB10)	Top of water table at approximately 8 ft bgs	Investigate potential MC spread from the former berm area	
Gun Butts Area - Potential MPPEH	1 (GBA-7-SB14)	Top of water table at approximately 8 ft bgs	Investigate potential MC spread from potential MPPEH items	
Gun Butts Area	2 (GBA-7-SB20 and GBA-7-SB24)	Top of water table at approximately 8 ft bgs	Investigate potential MC spread from the former berm area	
Pyro Burn Area	5 (PBA-7-SB01, PBA-7-SB05, PBA-7-SB06, PBA-7-SB08, PBA-7-SB09)	Top of water table at 2 ft bgs	Investigate pyrotechnics burn residue	VOCs, PAHs, Dioxins/Furans, Total and Dissolved Metals (Sb, Cu, Fe, Pb, Mg, Sr, Zn), Explosives, Perchlorate
Visitors Information Center	1 (VIC-7-SB01)	Top of water table at approximately 8 ft bgs	Investigate potential MC	Total and Dissolved Metals (Sb, Cu, Fe, Pb, Mg, Sr, Zn), Explosives, Perchlorate

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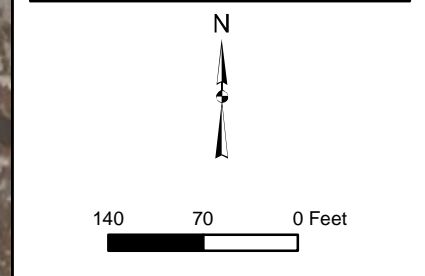
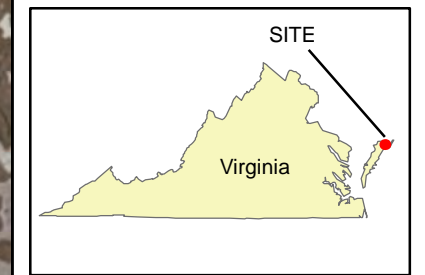
WESTON (Weston Solution, Inc.). 2013. *Draft Final Work Plan. Military Munitions Response Program Project 7, Boat Basin, Visitors Information Center, Munitions Response Site, Remedial Investigation, Former Chincoteague Naval Auxiliary Air Station Formerly Used Defense Site*. September 2013.

**APPENDIX A
FIGURES**



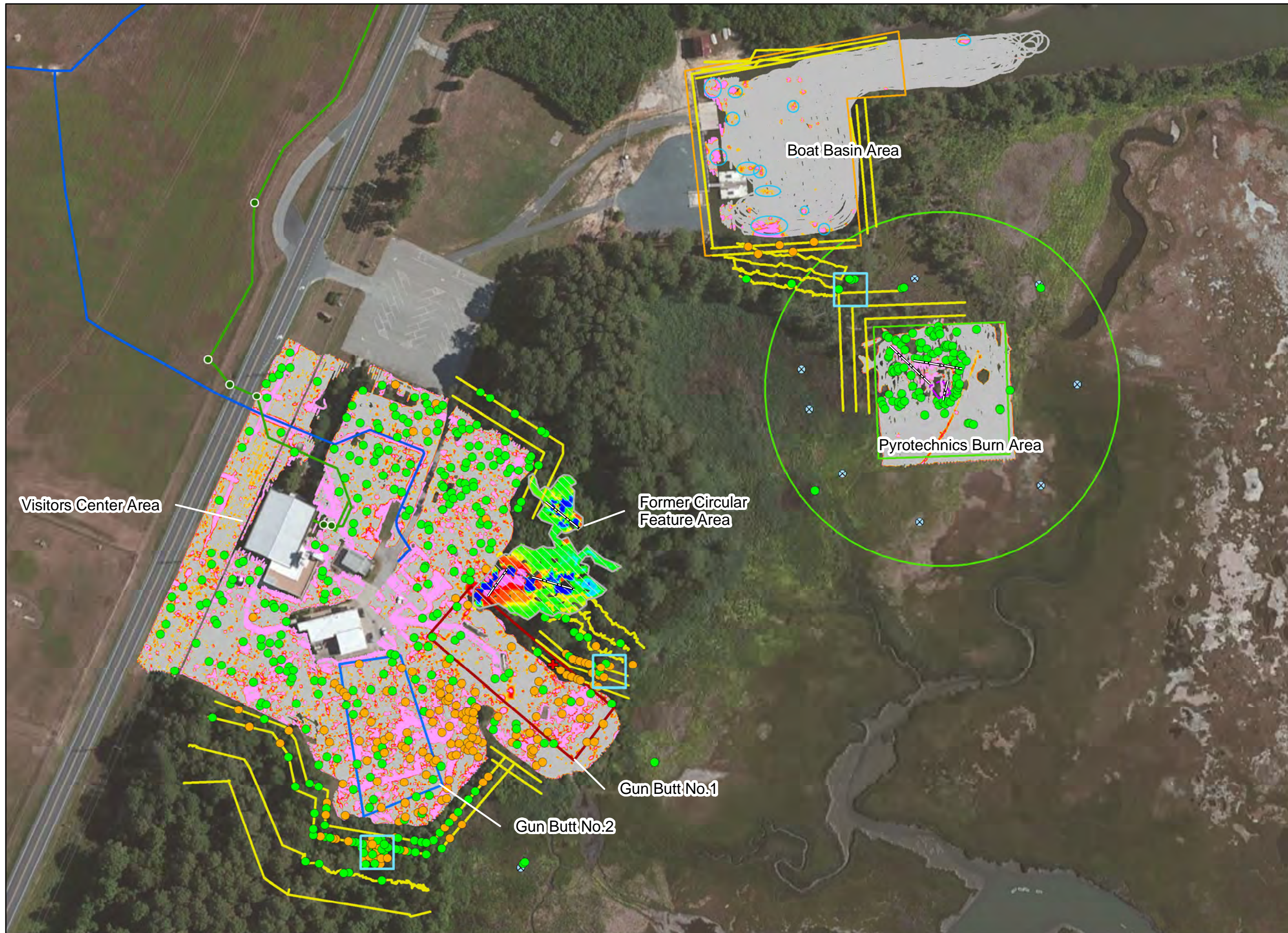
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- Pyrotechnics Burn Area
 - - - Gun Butts Area
 - - - Visitors Center Area
 - ▨ EM31 Survey Boundary of Former Circular Feature
 - Boat Basin Area
 - ▭ Gun Butt No. 1
 - ▭ Gun Butt No. 2

Imagery Source: ESRI, Imagery Mapping Service, 2013



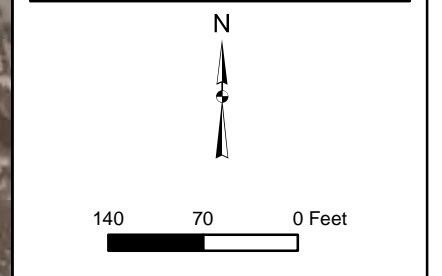
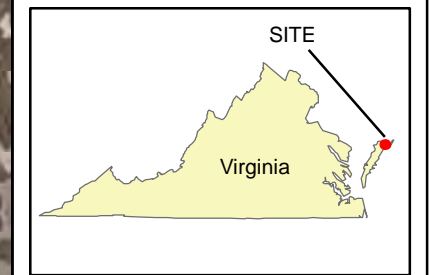
Prepared By: 
Baltimore District

Figure 1
Site Map
 Project 7 Boat Basin,
 Visitors Information Center
 Wallops Island, VA



- Legend**
- + MEC
 - Non-Munitions Related Debris
 - Munitions Debris
 - ⊗ Seed
 - Sewer Line Junctions
 - Sewer Lines
 - Water Lines
 - Test Pit Location
 - Analog Mag & Dig Transects
 - Dig Locations
 - Fenced Area
 - EM31 Survey Boundary of Former Circular Feature
 - Analog Mag & Dig Grids
 - Pyrotechnics Burn Area
 - Boat Basin Area
 - Gun Butt No. 1
 - Gun Butt No. 2

Imagery Source: ESRI, Imagery Mapping Service, 2013



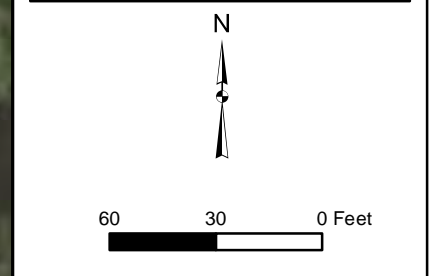
Prepared By: 
Baltimore District

Figure 2
Dig Results Summary
Project 7 Boat Basin,
Visitors Information Center
Wallops Island, VA



- Legend**
- DPT Soil Boring (Proposed)
 - DPT Soil & Groundwater Boring (Proposed)
 - MEC
 - Non-Munitions Related Debris
 - Munitions Debris
 - Sewer Line Junctions
 - Gun Butts Area
 - Visitors Center Area
 - Sewer Lines
 - Water Lines
 - Test Pit Location
 - Analog Mag & Dig Transects
 - EM31 Survey Boundary of Former Circular Feature
 - Analog Mag & Dig Grids
 - Gun Butt No. 1
 - Gun Butt No. 2

Imagery Source: ESRI, Imagery Mapping Service, 2013



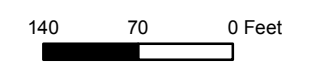
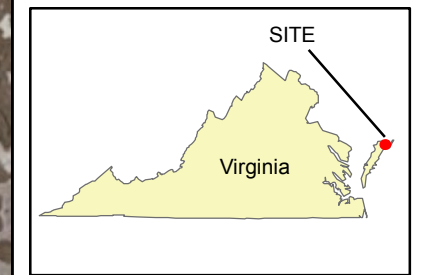
Prepared By: 
Baltimore District

Figure 3
 Visitors Information Center
 Project 7
 Wallops Island, VA



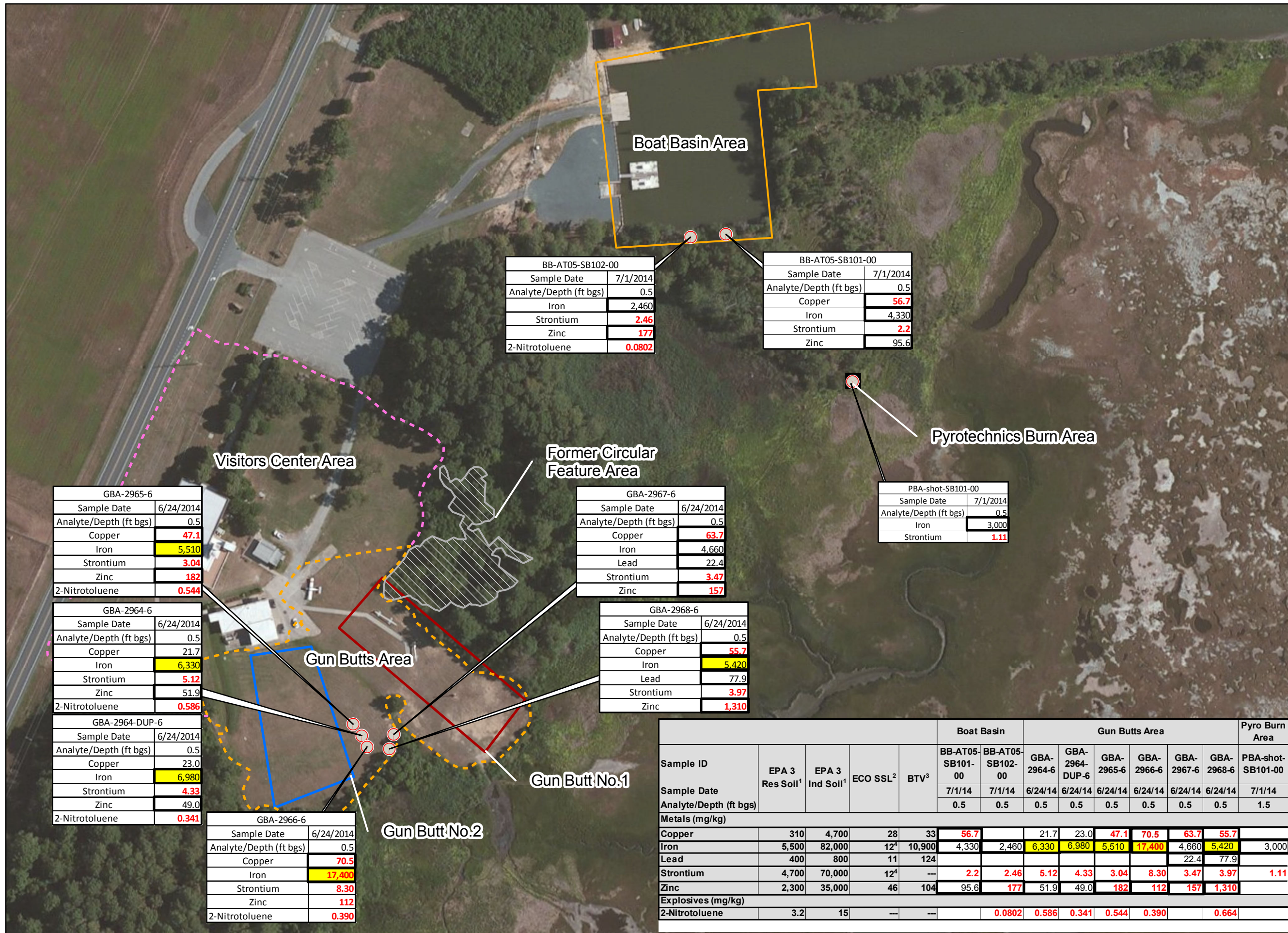
- Legend**
- Pyrotechnics Burn Area
 - MEC
 - MD
 - Potential MPPEH
 - EM31 Survey Boundary of Former Circular Feature
 - Boat Basin Area
 - Gun Butt No. 1
 - Gun Butt No. 2

Imagery Source: ESRI, Imagery Mapping Service, 2013



Prepared By: 
Baltimore District

Figure 5
 MEC/MD Limits
 Project 7 Boat Basin,
 Visitors Information Center
 Wallops Island, VA



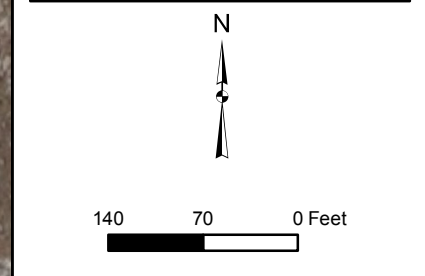
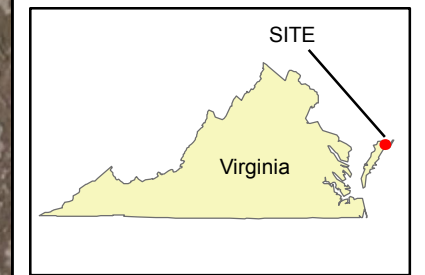
Legend

- Soil Sample Location
- Pyrotechnics Burn Area
- Gun Butts Area
- Visitors Center Area
- EM31 Survey Boundary of Historical Circular Feature
- Boat Basin Area
- Gun Butt No. 1
- Gun Butt No. 2

¹EPA Region III Risk-Based Screening Levels for Soil, May 2014.
²Ecological Soil Screening Levels, EPA OSWER, (USEPA, 2003, 2005b-h, 2006, 2007a-h, and 2008).
³Background Threshold Value from Background Soil and Groundwater Investigation Report for the Main Base NASA Wallops Flight Facility, May 2004.
⁴EPA Region 3 BTAG Screening Levels, 1995.
⁵EPA Region 5 RCRA Ecological Screening Levels, August 22, 2003.
 EPA: Environmental Protection Agency
 ft: feet
 bgs: below ground surface
 ND: non-detect

Exceeded ECO-SSL
 Exceeded BTV
 Exceeded EPA 3 Residential Soil

Imagery Source: ESRI, Imagery Mapping Service, 2013



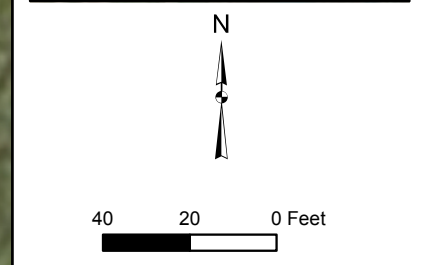
Prepared By: Baltimore District

Figure 6
 Analytical Results
 Project 7 Boat Basin,
 Visitors Information Center
 Wallops Island, VA



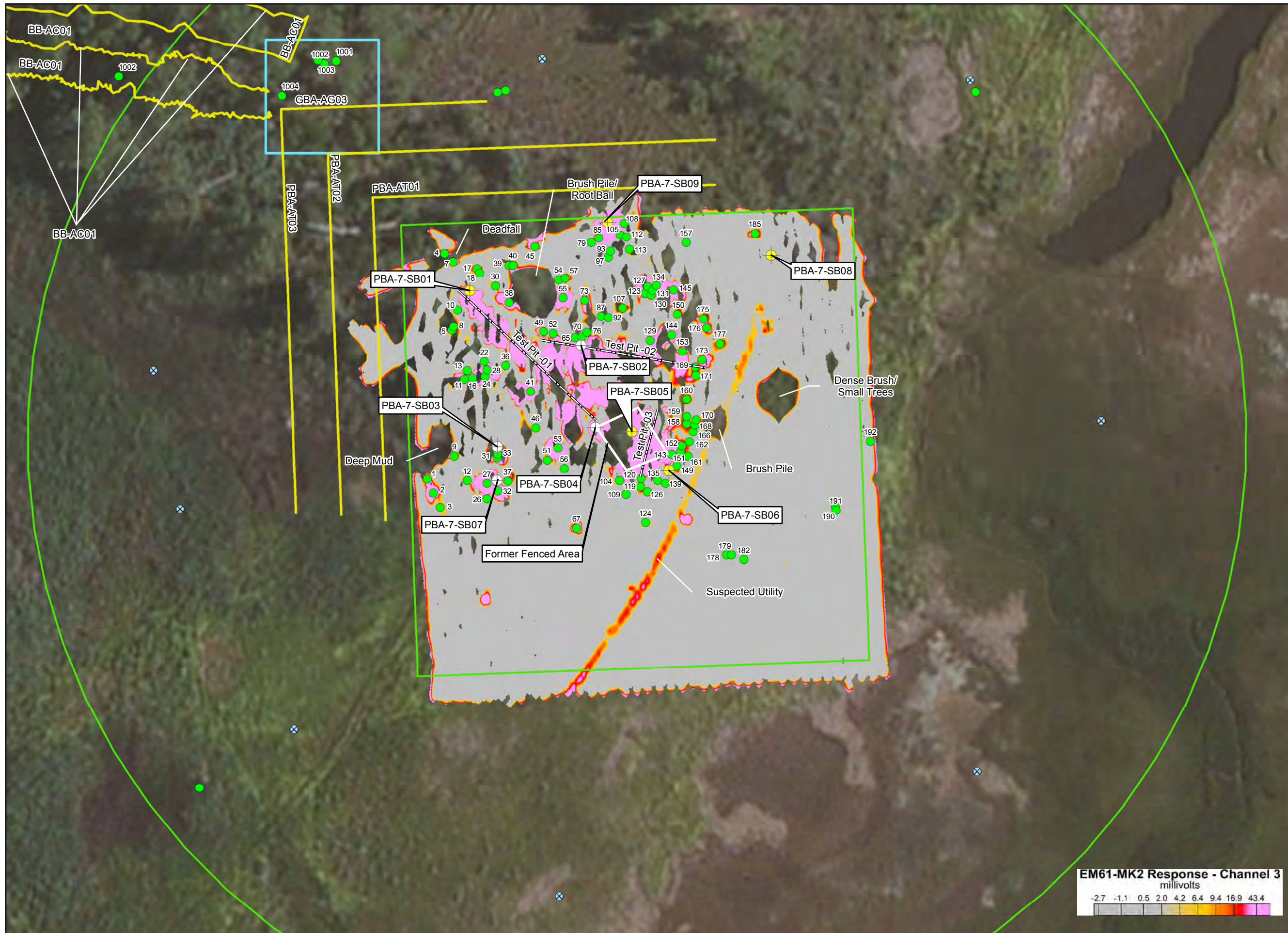
- Legend**
- DPT Soil Boring (Proposed)
 - DPT Soil & Groundwater Boring (Proposed)
 - Seed
 - Soil Sample Location
 - Analog Mag & Dig Transects
 - Dig Locations
 - Analog Mag & Dig Grids
 - Pyrotechnics Burn Area
 - Boat Basin Area

Imagery Source: ESRI, Imagery Mapping Service, 2013



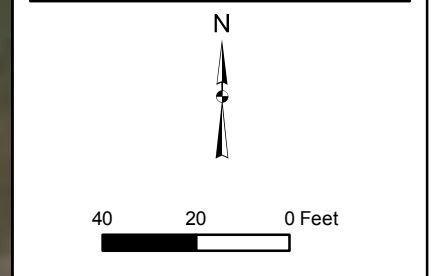
Prepared By: 
Baltimore District

Figure 7
 Boat Basin Area
 Project 7
 Wallops Island, VA



- Legend**
- DPT Soil Boring (Proposed)
 - DPT Soil & Groundwater Boring (Proposed)
 - Non-Munitions Related Debris
 - Seed
 - Test Pit Location
 - Analog Mag & Dig Transects
 - Former Fenced Area
 - Analog Mag & Dig Grids
 - Pyrotechnics Burn Area

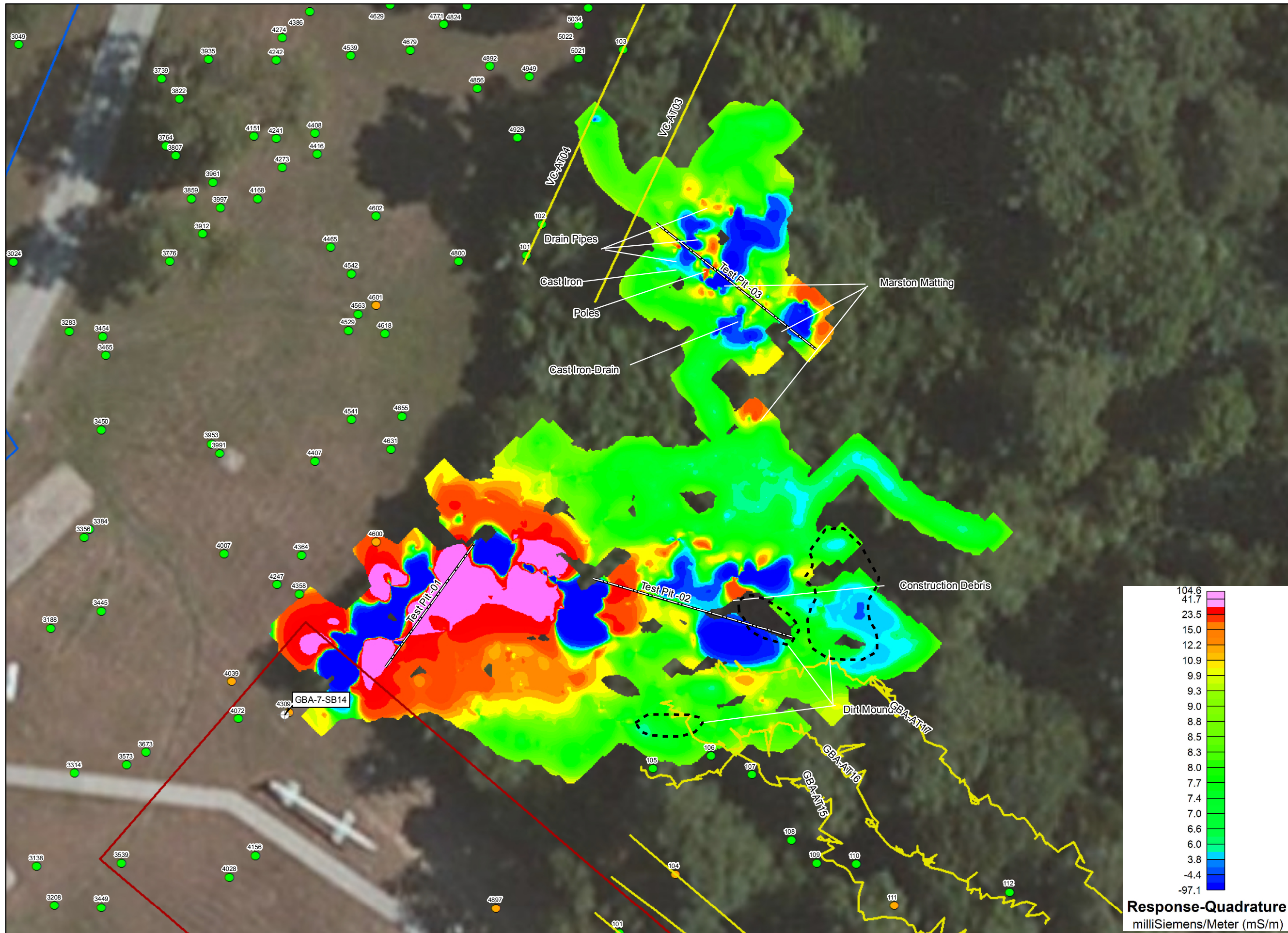
Imagery Source: ESRI, Imagery Mapping Service, 2013



Prepared By: 
Baltimore District

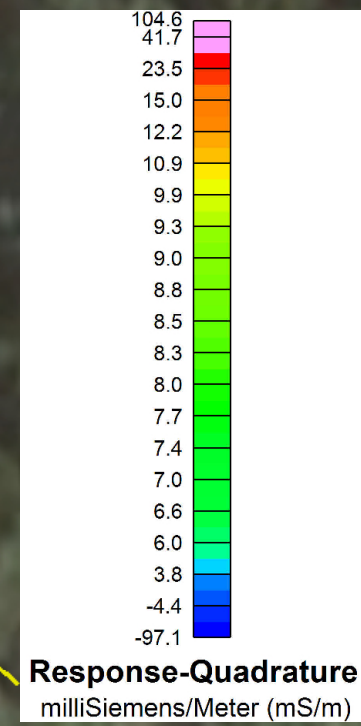
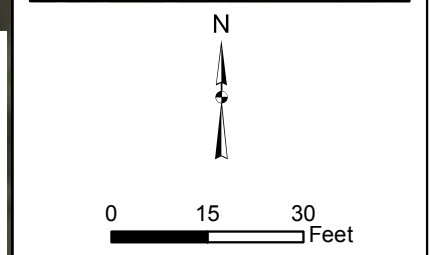
Figure 8
 Pyrotechnics Burn Area
 Project 7
 Wallops Island, VA





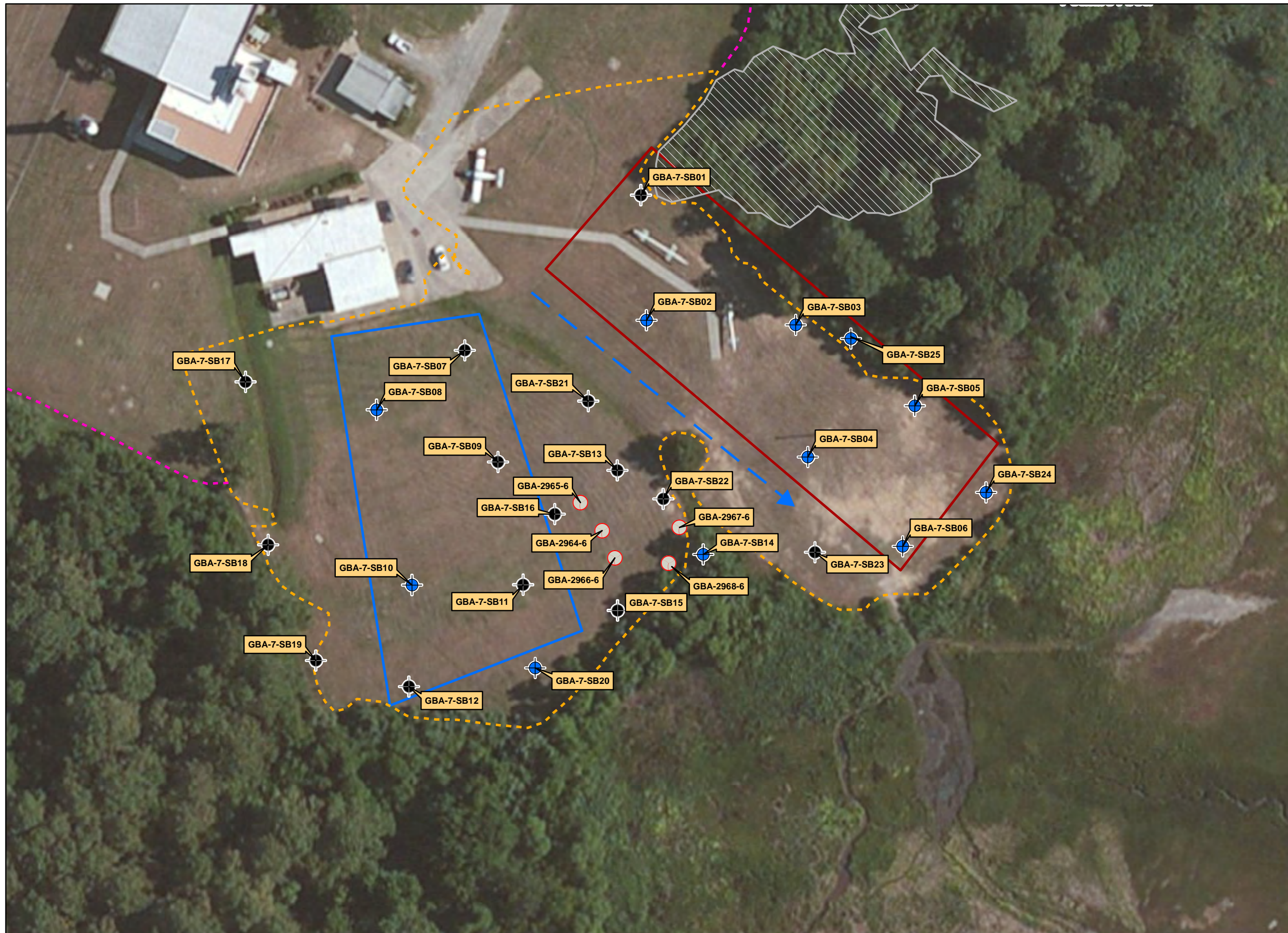
- Legend**
- DPT Soil Boring (Proposed)
 - Munitions Debris
 - Non-Munitions Related Debris
 - Test Pit Location
 - Analog Mag & Dig Transects
 - Gun Butt No. 1

Imagery Source: ESRI, Imagery Mapping Service, 2013



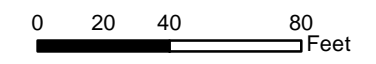
Prepared By: Baltimore District

Figure 9
Former Circular Area
Project 7
Wallops Island, VA



- Legend**
- Soil Sample Location
 - DPT Soil Boring (Proposed)
 - DPT Soil & Groundwater Boring (Proposed)
 - Gun Butts Area EM-61 Boundary
 - Visitors Center Area EM-61 Boundary
 - EM31 Survey Boundary of Historical Circular Feature
 - Gun Butt No. 1
 - Gun Butt No. 2
 - Groundwater Flow Direction (approximate)

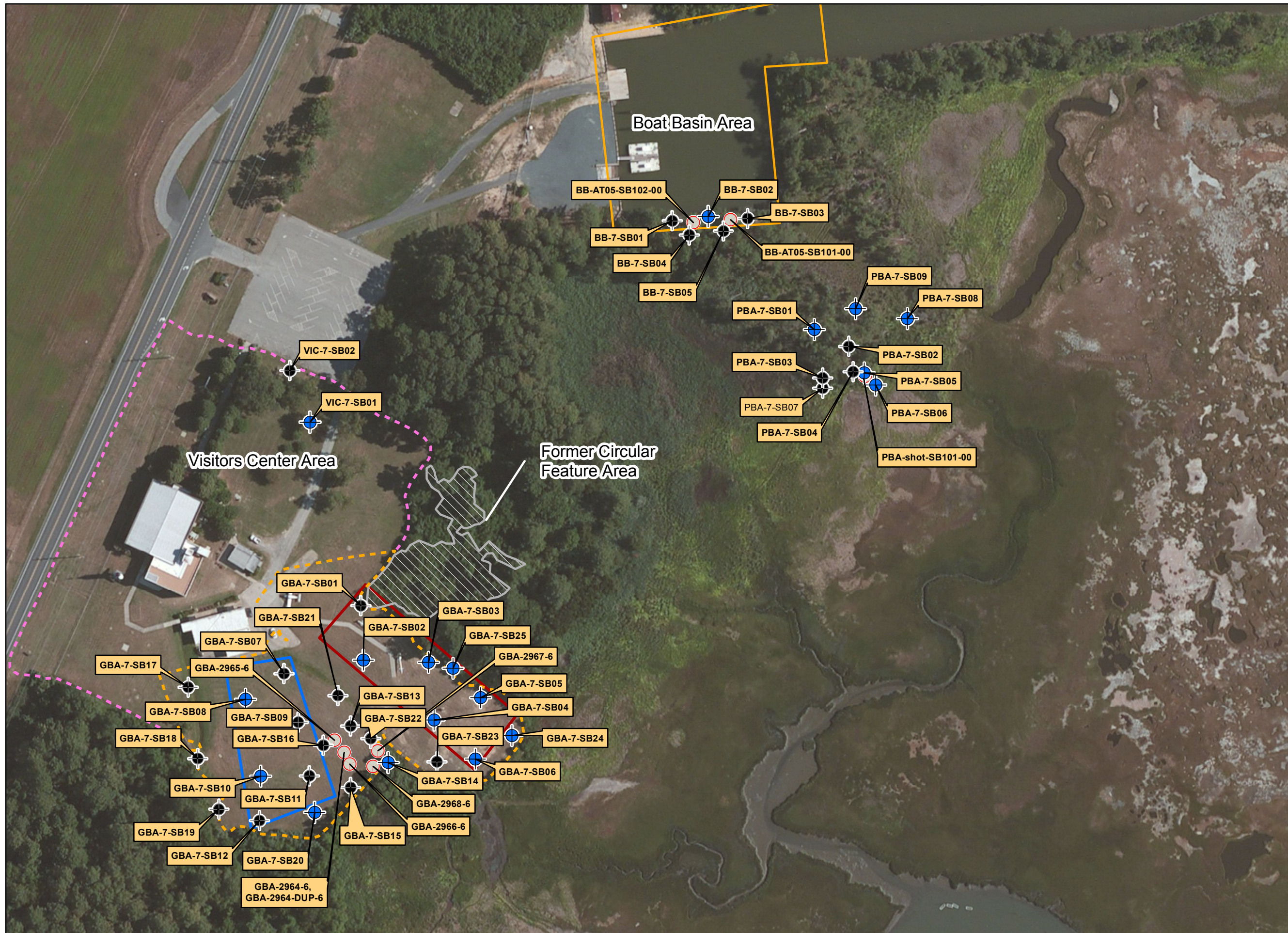
Imagery Source: ESRI, Imagery Mapping Service, 2013



Prepared By:

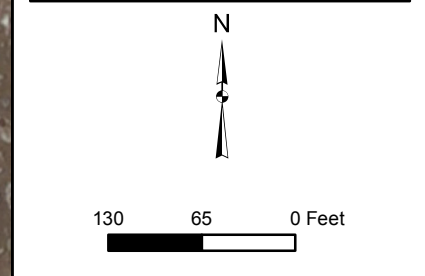
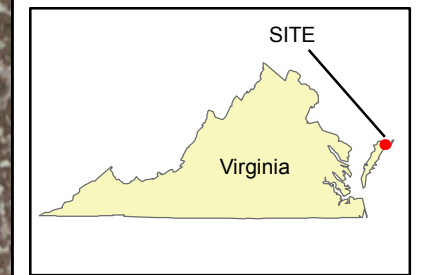
Baltimore District

Figure 10
 Gun Butts Sample Locations -
 Completed and Proposed
 Project 7
 Wallops Island, VA



- Legend**
- Soil Sample Location
 - DPT Soil Boring (Proposed)
 - DPT Soil & Groundwater Boring (Proposed)
 - Gun Butts Area
 - Visitors Center Area
 - EM31 Survey Boundary of Historical Circular Feature
 - Boat Basin Area
 - Gun Butt No. 1
 - Gun Butt No. 2

Imagery Source: ESRI, Imagery Mapping Service, 2013



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Baltimore District

Figure 11
 Sample Locations
 Project 7 Boat Basin,
 Visitors Information Center
 Wallops Island, VA

**APPENDIX B
DIG RESULTS**

DIG RESULTS
PROJECT 7 - VISITORS CENTER
JUNE/JULY 2014

Area/ID					Description					Munition			Measurements			Other				
AOOC	Target No.	Target ID	Dig Date	Transect/ Grid ID	Detection Method	Item	Item Count	Comments	Item Category	MEC Description	MEC Part	MEC Condition	Depth (in)	Approximate Weight (lbs)	Length (in)	Status	Northing ¹	Easting ¹	Response Amplitude (mv)	Item No.
Boat Basin (Land)																				
Boat Basin	-	-	6/25/14	BB-AT05	Analog (transect)	Projectile	8	-	MD	20-mm	Empty Casing	Inert	6	0.50	-	Removed	3879815.97	12360935.45	-	101
Boat Basin	-	-	6/25/14	BB-AT05	Analog (transect)	Projectile	7	-	MD	20-mm	Empty Casing	Inert	6	0.50	-	Removed	3879818.24	12360983.27	-	102
Boat Basin	-	-	6/25/14	BB-AT05	Analog (transect)	Projectile	1	2.75" x 6" cylinder with rotating band	MD	Unknown	Body	Inert	6	1.00	-	Removed	3879822.94	12361035.56	-	103
Boat Basin	-	-	6/25/14	BB-AT06	Analog (transect)	Projectile	3	-	MD	20-mm	Empty Casing	Inert	6	0.10	-	Removed	3879808.33	12361003.50	-	101
Boat Basin	-	-	6/25/14	BB-AT06	Analog (transect)	Projectile	4	-	MD	20-mm	Empty Casing	Inert	6	0.10	-	Removed	3879805.16	12360950.51	-	102
Boat Basin	-	-	7/1/14	BB-AC01	Analog (transect)	Construction Debris	11	-	NMRD	-	-	-	2	4.50	-	Left in place	37.9394060	-75.4550270	-	1001
Boat Basin	-	-	7/1/14	BB-AC01	Analog (transect)	Non-MD SM	4	-	NMRD	-	-	-	2	0.50	-	Removed	37.9393800	-75.4547900	-	1002
Boat Basin	MD Subtotals:						23							2.20						
Boat Basin	Subtotals:						38							7.20						
Boat Basin (Water)																				
Boat Basin	-	BB-AT08	6/30/14	-	DGM	Pieces of broken can (same as previous cans found), small metal shards, piece of Marshall mat, visible metal posts protruding from the water.				-	-	-	-	-	-	Removed	3880015.22	12361090.23	-	-
Boat Basin	-	Cluster 1	6/29/14	-	DGM	Contact too deep to prosecute. Two additional contacts, very large and also too deep to reach. (Three distinct contacts total.)				-	-	-	-	-	-	Left in place	3880133.50	12361262.71	-	-
Boat Basin	-	Cluster 2	6/29/14	-	DGM	Broken steel can, approximately 4" diameter by 7 inches long. Layer of crusted material that rang off as "hot", but once broken through, it disintegrated.				-	-	-	-	-	-	Removed	3880032.74	12361003.28	-	-
Boat Basin	-	Cluster 3	6/29/14	-	DGM	Instrument response then scattered response after digging through crusted layer.				-	-	-	-	-	-	Left in place	3879961.99	12361007.57	-	-
Boat Basin	-	Cluster 4	6/29/14	-	DGM	Pieces of steel can disintegrated upon handling, fragments.				-	-	-	-	-	-	Left in place	3879874.08	12361020.43	-	-
Boat Basin	-	Cluster 5	6/29/14	-	DGM	Guy wire anchor, protruding out of the water.				-	-	-	-	-	-	Left in place	3879846.20	12361050.45	-	-
Boat Basin	-	Cluster 6	6/29/14	-	DGM	Metal fragments, most likely pieces of can.				-	-	-	-	-	-	Left in place	3879851.56	12360966.83	-	-
Boat Basin	-	Cluster 7	6/30/14	-	DGM	Fence pieces and pieces of rotted out fish trap.				-	-	-	-	-	-	Left in place	3879903.79	12360964.68	-	-
Boat Basin	-	Cluster 8	6/30/14	-	DGM	Small pieces of metal, broken can.				-	-	-	-	-	-	Left in place	3879933.04	12360952.89	-	-
Boat Basin	-	Cluster 9	6/30/14	-	DGM	Welding rod, can that crumbled while handling.				-	-	-	-	-	-	Removed	3879937.48	12360934.67	-	-

DIG RESULTS
PROJECT 7 - VISITORS CENTER
JUNE/JULY 2014

Area/ID					Description					Munition			Measurements			Other				
AOC	Target No.	Target ID	Dig Date	Transect/ Grid ID	Detection Method	Item	Item Count	Comments	Item Category	MEC Description	MEC Part	MEC Condition	Depth (in)	Approximate Weight (lbs)	Length (in)	Status	Northing ¹	Easting ¹	Response Amplitude (mv)	Item No.
Boat Basin	-	Cluster 10	6/30/14	-	DGM	Large tractor tire (steel belted), ¾" diameter rebar, large contact deeper than 3 feet, pieces of plywood with hardwood attached, additional cylinder ¾" diameter approximately 2 foot long and another piece of pipe stuck in the bottom.				-	-	-	-	-	-	Left in place	3879955.55	12360889.64	-	-
Boat Basin	-	Cluster 11	6/29/14	-	DGM	"Hot rocks", verified with surface Schonstedt.				-	-	-	-	-	-	Left in place	3880013.44	12360911.08	-	-
Boat Basin	-	Cluster 12	6/29/14	-	DGM	Bilge pump, "hot rocks".				-	-	-	-	-	-	Removed	3880054.79	12360915.37	-	-
Boat Basin	-	Cluster 13	6/29/14	-	DGM	Welding rod, "hot rocks".				-	-	-	-	-	-	Removed	3880060.61	12360881.06	-	-
Gun Butts and Gun Butts Marsh																				
Gun Butts	1008	GBA-1008	6/29/14	-	DGM	Nail	1	-	NMRD	-	-	-	2	0.02	4	Removed	3879156.25	12360238.00	156	1
Gun Butts	1026	GBA-1026	6/29/14	-	DGM	Wire	1	-	NMRD	-	-	-	3	0.02	11	Removed	3879162.25	12360240.50	171	1
Gun Butts	1044	GBA-1044	6/29/14	-	DGM	Non-MD SM	1	-	NMRD	-	-	-	4	0.02	4	Removed	3879174.00	12360242.75	15	1
Gun Butts	1074	GBA-1074	6/29/14	-	DGM	Non-MD SM	1	-	NMRD	-	-	-	3	0.02	1	Removed	3879123.50	12360246.75	6	1
Gun Butts	1170	GBA-1170	6/29/14	-	DGM	Nail	1	-	NMRD	-	-	-	3	0.02	4	Removed	3879084.25	12360261.50	10	1
Gun Butts	1269	GBA-1269	6/23/14	-	DGM	Wire	1	-	NMRD	-	-	-	3	0.10	11	Removed	3879157.75	12360274.75	7	1
Gun Butts	1313	GBA-1313	6/23/14	-	DGM	Wire	1	-	NMRD	-	-	-	6	0.10	13	Removed	3879138.25	12360280.25	37	1
Gun Butts	1320	GBA-1320	6/29/14	-	DGM	Hot rock	1	-	NMRD	-	-	-	2	0.10	3	Removed	3879029.75	12360280.75	42	1
Gun Butts	1379	GBA-1379	6/23/14	-	DGM	Nail	5	-	NMRD	-	-	-	4	0.02	4	Removed	3879157.00	12360286.00	48	1
Gun Butts	1411	GBA-1411	6/23/14	-	DGM	Projectile	1	-	MD	20-mm	Projectile	Inert	3	0.02	2	Removed	3879082.75	12360289.50	9	1
Gun Butts	1451	GBA-1451	6/24/14	-	DGM	Non-MD SM	1	-	NMRD	-	-	-	2	0.02	1	Removed	3879042.25	12360293.50	18	1
Gun Butts	1497	GBA-1497	6/24/14	-	DGM	Projectile	1	-	MD	20-mm	Body	Inert	2	0.01	2	Removed	3879064.75	12360297.25	41	1
Gun Butts	1579	GBA-1579	6/23/14	-	DGM	Projectile	1	-	MD	20-mm	Body	Inert	2	0.10	3	Removed	3879153.50	12360305.50	7	1
Gun Butts	1613	GBA-1613	6/24/14	-	DGM	Nail	1	-	NMRD	-	-	-	2	0.01	4	Removed	3879039.50	12360309.00	50	1
Gun Butts	1658	GBA-1658	6/24/14	-	DGM	Projectile	1	-	MD	20-mm	Body	Inert	3	0.02	1	Removed	3879145.50	12360313.00	8	1
Gun Butts	1693	GBA-1693	6/24/14	-	DGM	Projectile	1	-	MD	20-mm	Body	Inert	2	0.10	3	Removed	3879001.00	12360317.75	44	1
Gun Butts	1707	GBA-1707	6/24/14	-	DGM	Projectile	1	-	MD	20-mm	Body	Inert	2	0.10	3	Removed	3879140.75	12360319.00	15	1
Gun Butts	1727	GBA-1727	6/24/14	-	DGM	Projectile	1	-	MD	20-mm	Activator	Inert	2	0.02	2	Removed	3878953.50	12360321.25	68	1
Gun Butts	1746	GBA-1746	6/24/14	-	DGM	Non-MD SM	1	-	NMRD	-	-	-	2	0.10	3	Removed	3879121.25	12360323.00	81	1
Gun Butts	1752	GBA-1752	6/24/14	-	DGM	Projectile	1	-	MD	20-mm	Body	Inert	2	0.02	2	Removed	3879134.75	12360323.50	20	1
Gun Butts	1886	GBA-1886	6/24/14	-	DGM	Non-MD SM	1	-	NMRD	-	-	-	2	0.02	2	Removed	3879143.25	12360333.25	18	1
Gun Butts	1891	GBA-1891	6/24/14	-	DGM	Nail	1	-	NMRD	-	-	-	2	0.01	4	Removed	3879106.50	12360333.50	8	1
Gun Butts	1894	GBA-1894	6/24/14	-	DGM	Nail	1	-	NMRD	-	-	-	1	0.01	4	Removed	3878992.25	12360333.75	458	1
Gun Butts	1965	GBA-1965	6/24/14	-	DGM	Non-MD SM	1	-	NMRD	-	-	-	4	0.02	4	Removed	3879031.50	12360339.25	109	1

**DIG RESULTS
PROJECT 7 - VISITORS CENTER
JUNE/JULY 2014**

Area/ID					Description					Munition			Measurements			Other				
AOC	Target No.	Target ID	Dig Date	Transect/ Grid ID	Detection Method	Item	Item Count	Comments	Item Category	MEC Description	MEC Part	MEC Condition	Depth (in)	Approximate Weight (lbs)	Length (in)	Status	Northing ¹	Easting ¹	Response Amplitude (mv)	Item No.
Gun Butts	1971	GBA-1971	6/24/14	-	DGM	Rebar	1	-	NMRD	-	-	-	8	8.00	10	Left in place	3879123.75	12360339.75	9	1
Gun Butts	2000	GBA-2000	6/23/14	-	DGM	Projectile	1	-	MD	20-mm	Body	Inert	3	0.10	3	Removed	3879184.00	12360342.75	162	1
Gun Butts	2002	GBA-2002	6/24/14	-	DGM	Projectile	1	-	MD	20-mm	Activator	Inert	2	0.10	2	Removed	3879067.00	12360343.00	87	1
Gun Butts	2084	GBA-2084	6/24/14	-	DGM	Projectile	1	-	MD	20-mm	Activator	Inert	2	0.10	2	Removed	3879109.00	12360350.50	11	1
Gun Butts	2126	GBA-2126	6/24/14	-	DGM	Projectile	1	-	MD	20-mm	Body	Inert	2	0.02	3	Removed	3879036.13	12360354.38	38	1
Gun Butts	2169	GBA-2169	6/24/14	-	DGM	Wire	1	-	NMRD	-	-	-	2	0.02	6	Removed	3878965.50	12360358.25	10	1
Gun Butts	2187	GBA-2187	6/24/14	-	DGM	Non-MD SM	1	-	NMRD	-	-	-	1	0.01	1	Removed	3879011.50	12360359.75	67	1
Gun Butts	2191	GBA-2191	6/23/14	-	DGM	Rebar	1	-	NMRD	-	-	-	6	5.00	19	Removed	3879144.75	12360360.00	116	1
Gun Butts	2200	GBA-2200	6/24/14	-	DGM	Projectile	1	-	MD	20-mm	Body	Inert	2	0.02	2	Removed	3879095.00	12360360.50	26	1
Gun Butts	2245	GBA-2245	6/24/14	-	DGM	Non-MD SM	1	-	NMRD	-	-	-	2	0.10	3	Removed	3878977.00	12360364.25	141	1
Gun Butts	2287	GBA-2287	6/24/14	-	DGM	Projectile	1	-	MD	20-mm	Body	Inert	2	0.10	3	Removed	3879054.75	12360367.75	70	1
Gun Butts	2312	GBA-2312	6/24/14	-	DGM	Projectile	1	-	MD	20-mm	Body	Inert	2	0.10	3	Removed	3879064.75	12360370.00	170	1
Gun Butts	2317	GBA-2317	6/24/14	-	DGM	Projectile	1	-	MD	20-mm	Body	Inert	8	0.10	3	Removed	3879005.00	12360370.25	836	1
Gun Butts	2329	GBA-2329	6/29/14	-	DGM	Nail	1	-	NMRD	-	-	-	3	0.02	5	Removed	3879044.00	12360371.00	81	1
Gun Butts	2392	GBA-2392	6/29/14	-	DGM	Projectile	1	-	MD	20-mm	Body	Inert	3	0.10	3	Removed	3878965.25	12360376.25	8	1
Gun Butts	2408	GBA-2408	6/24/14	-	DGM	Non-MD SM	3	-	NMRD	-	-	-	2	0.02	1	Removed	3879031.75	12360377.50	67	1
Gun Butts	2410	GBA-2410	6/24/14	-	DGM	Pipe	1	1x4 pipe	NMRD	-	-	-	3	0.10	4	Removed	3879056.75	12360377.75	250	1
Gun Butts	2444	GBA-2444	6/23/14	-	DGM	Non-MD SM	1	-	NMRD	-	-	-	3	0.10	2	Removed	3879168.00	12360380.00	127	1
Gun Butts	2447	GBA-2447	6/24/14	-	DGM	Projectile	1	-	MD	20-mm	Body	Inert	2	0.10	3	Removed	3879068.25	12360380.75	32	1
Gun Butts	2449	GBA-2449	6/24/14	-	DGM	Projectile	1	-	MD	20-mm	Body	Inert	3	0.10	3	Removed	3879048.25	12360381.00	41	1
Gun Butts	2497	GBA-2497	6/23/14	-	DGM	Projectile	1	-	MD	30-mm	Body	Inert	3	0.10	3	Removed	3879142.25	12360384.50	108	1
Gun Butts	2550	GBA-2550	6/24/14	-	DGM	Projectile	1	-	MD	20-mm	Activator	Inert	2	0.02	2	Removed	3879073.50	12360388.50	37	1
Gun Butts	2583	GBA-2583	6/23/14	-	DGM	Non-MD SM	1	-	NMRD	-	-	-	3	0.02	4	Removed	3879199.50	12360391.00	18	1
Gun Butts	2617	GBA-2617	6/23/14	-	DGM	Nail	1	-	NMRD	-	-	-	3	0.10	4	Removed	3879143.00	12360393.25	16	1
Gun Butts	2618	GBA-2618	6/23/14	-	DGM	Non-MD SM	1	-	NMRD	-	-	-	2	0.02	3	Removed	3879186.75	12360393.25	31	1
Gun Butts	2676	GBA-2676	6/23/14	-	DGM	Non-MD SM	1	-	NMRD	-	-	-	3	0.10	3	Removed	3879197.50	12360397.25	34	1
Gun Butts	2761	GBA-2761	6/29/14	-	DGM	Projectile	1	-	MD	20-mm	Body	Inert	2	0.10	2	Removed	3878943.75	12360403.00	26	1
Gun Butts	2844	GBA-2844	6/23/14	-	DGM	Projectile	1	-	MD	20-mm	Body	Inert	3	0.10	2	Removed	3879177.50	12360407.25	36	1
Gun Butts	2854	GBA-2854	6/23/14	-	DGM	Projectile	1	-	MD	20-mm	Body	Inert	4	0.10	3	Removed	3879059.00	12360407.75	8	1
Gun Butts	2899	GBA-2899	6/29/14	-	DGM	Projectile	1	-	MD	20-mm	Body	Inert	3	0.10	3	Removed	3879003.75	12360411.25	25	1
Gun Butts	2906	GBA-2906	6/29/14	-	DGM	Non-MD SM	1	-	NMRD	-	-	-	3	0.10	1	Removed	3878947.00	12360411.75	14	1
Gun Butts	2915	GBA-2915	6/29/14	-	DGM	Projectile	1	-	MD	30-mm	Body	Inert	2	0.10	3	Removed	3878972.50	12360412.75	69	1

**DIG RESULTS
PROJECT 7 - VISITORS CENTER
JUNE/JULY 2014**

Area/ID					Description					Munition			Measurements			Other				
AOC	Target No.	Target ID	Dig Date	Transect/ Grid ID	Detection Method	Item	Item Count	Comments	Item Category	MEC Description	MEC Part	MEC Condition	Depth (in)	Approximate Weight (lbs)	Length (in)	Status	Northing ¹	Easting ¹	Response Amplitude (mv)	Item No.
Gun Butts	2918	GBA-2918	6/29/14	-	DGM	Projectile	1	-	MD	20-mm	Body	Inert	3	0.10	3	Removed	3878951.25	12360413.00	39	1
Gun Butts	2919	GBA-2919	6/23/14	-	DGM	Projectile	1	-	MD	20-mm	Body	Inert	3	0.10	3	Removed	3879126.50	12360413.00	18	1
Gun Butts	2927	GBA-2927	6/25/14	-	DGM	Projectile	1	-	MD	20-mm	Body	Inert	2	0.10	3	Removed	3879055.50	12360413.50	12	1
Gun Butts	2956	GBA-2956	6/23/14	-	DGM	Projectile	1	-	MD	30-mm	Body	Inert	3	0.10	3	Removed	3879079.25	12360415.25	105	1
Gun Butts	3003	GBA-3003	6/29/14	-	DGM	Non-MD SM	1	-	NMRD	-	-	-	4	0.10	2	Removed	3879067.25	12360418.00	61	1
Gun Butts	3037	GBA-3037	6/23/14	-	DGM	Projectile	1	-	MD	20-mm	Body	Inert	3	0.10	3	Removed	3879040.00	12360420.00	27	1
Gun Butts	3089	GBA-3089	6/23/14	-	DGM	Projectile	1	-	MD	20-mm	Body	Inert	3	0.10	3	Removed	3879171.50	12360423.50	26	1
Gun Butts	3138	GBA-3138	6/24/14	-	DGM	Nail	1	-	NMRD	-	-	-	2	0.01	4	Removed	3879223.50	12360426.50	8	1
Gun Butts	3153	GBA-3153	6/29/14	-	DGM	Nail	1	-	NMRD	-	-	-	3	0.02	4	Removed	3879159.75	12360428.00	39	1
Gun Butts	3177	GBA-3177	6/29/14	-	DGM	Wire	1	-	NMRD	-	-	-	2	0.02	6	Removed	3878981.50	12360429.75	9	1
Gun Butts	3188	GBA-3188	6/24/14	-	DGM	Wire	1	-	NMRD	-	-	-	2	0.01	2	Removed	3879300.25	12360431.00	240	1
Gun Butts	3205	GBA-3205	6/29/14	-	DGM	Projectile	1	-	MD	20-mm	Body	Inert	2	0.10	3	Removed	3878957.50	12360432.25	74	1
Gun Butts	3208	GBA-3208	6/24/14	-	DGM	Pipe	1	-	NMRD	-	-	-	18	4.50	30	Left in place	3879210.75	12360432.25	60	1
Gun Butts	3298	GBA-3298	6/29/14	-	DGM	Non-MD SM	1	-	NMRD	-	-	-	2	0.10	2	Removed	3878956.50	12360438.00	53	1
Gun Butts	3313	GBA-3313	6/29/14	-	DGM	Hot rock	1	-	NMRD	-	-	-	2	0.02	3	Removed	3879145.25	12360438.75	6	1
Gun Butts	3314	GBA-3314	6/24/14	-	DGM	Rebar	1	-	NMRD	-	-	-	8	5.00	20	Removed	3879253.50	12360438.75	178	1
Gun Butts	3324	GBA-3324	6/29/14	-	DGM	Projectile	1	-	MD	20-mm	Body	Inert	2	0.10	3	Removed	3878961.25	12360439.25	76	1
Gun Butts	3329	GBA-3329	6/23/14	-	DGM	Projectile	1	-	MD	20-mm	Body	Inert	2	0.10	2	Removed	3879049.75	12360439.50	21	1
Gun Butts	3348	GBA-3348	6/23/14	-	DGM	Bolt	1	-	NMRD	-	-	-	3	0.10	6	Removed	3879111.00	12360441.25	104	1
Gun Butts	3356	GBA-3356	6/23/14	-	DGM	Nail	1	-	NMRD	-	-	-	3	0.01	4	Removed	3879329.50	12360441.75	45	1
Gun Butts	3397	GBA-3397	6/23/14	-	DGM	Projectile	1	-	MD	20-mm	Body	Inert	2	0.10	2	Removed	3879015.25	12360444.75	103	1
Gun Butts	3445	GBA-3445	6/23/14	-	DGM	Rebar	1	-	NMRD	-	-	-	3	4.50	26	Removed	3879305.75	12360447.25	2033	1
Gun Butts	3449	GBA-3449	6/24/14	-	DGM	Nail	1	-	NMRD	-	-	-	2	0.02	4	Removed	3879210.25	12360447.50	15	1
Gun Butts	3467	GBA-3467	6/23/14	-	DGM	Projectile	1	-	MD	20-mm	Projectile	Inert	2	0.10	3	Removed	3879041.00	12360448.75	30	1
Gun Butts	3475	GBA-3475	6/29/14	-	DGM	Non-MD SM	1	-	NMRD	-	-	-	2	0.02	0	Removed	3878983.25	12360449.25	8	1
Gun Butts	3488	GBA-3488	6/25/14	-	DGM	Projectile	1	-	MD	20-mm	Body	Inert	2	0.10	3	Removed	3879107.75	12360450.25	113	1
Gun Butts	3525	GBA-3525	6/29/14	-	DGM	Non-MD SM	1	-	NMRD	-	-	-	2	0.02	1	Removed	3879166.50	12360452.75	211	1
Gun Butts	3539	GBA-3539	6/24/14	-	DGM	Nail	1	-	NMRD	-	-	-	3	0.01	4	Removed	3879224.50	12360454.00	38	1
Gun Butts	3554	GBA-3554	6/25/14	-	DGM	Projectile	1	-	MD	20-mm	Body	Inert	4	0.10	0	Removed	3879095.00	12360454.75	68	1
Gun Butts	3559	GBA-3559	6/23/14	-	DGM	Nail	1	-	NMRD	-	-	-	2	0.01	4	Removed	3879008.25	12360455.00	13	1
Gun Butts	3573	GBA-3573	6/24/14	-	DGM	Non-MD SM	1	-	NMRD	-	-	-	4	0.01	1	Removed	3879256.25	12360455.50	68	1
Gun Butts	3590	GBA-3590	6/23/14	-	DGM	Projectile	1	-	MD	20-mm	Body	Inert	2	0.10	2	Removed	3879033.75	12360456.50	18	1

DIG RESULTS
PROJECT 7 - VISITORS CENTER
JUNE/JULY 2014

Area/ID					Description					Munition			Measurements			Other				
AOC	Target No.	Target ID	Dig Date	Transect/ Grid ID	Detection Method	Item	Item Count	Comments	Item Category	MEC Description	MEC Part	MEC Condition	Depth (in)	Approximate Weight (lbs)	Length (in)	Status	Northing ¹	Easting ¹	Response Amplitude (mv)	Item No.
Gun Butts	3636	GBA-3636	6/23/14	-	DGM	Projectile	1	-	MD	20-mm	Body	Inert	2	0.10	3	Removed	3879037.00	12360459.75	6	1
Gun Butts	3673	GBA-3673	6/23/14	-	DGM	Nail	1	-	NMRD	-	-	-	3	0.01	4	Removed	3879260.25	12360461.75	12	1
Gun Butts	3699	GBA-3699	6/25/14	-	DGM	Projectile	1	-	MD	20-mm	Body	Inert	3	0.10	2	Removed	3879146.00	12360464.00	118	1
Gun Butts	3701	GBA-3701	6/29/14	-	DGM	Projectile	1	-	MD	20-mm	Body	Inert	1	0.02	1	Removed	3879113.00	12360464.50	60	1
Gun Butts	3722	GBA-3722	6/25/14	-	DGM	Projectile	1	-	MD	20-mm	Body	Inert	3	0.10	3	Removed	3879136.50	12360466.00	36	1
Gun Butts	3731	GBA-3731	6/29/14	-	DGM	Projectile	1	-	MD	20-mm	Body	Inert	1	0.02	1	Removed	3879139.00	12360466.50	48	1
Gun Butts	3732	GBA-3732	6/23/14	-	DGM	Projectile	1	-	MD	20-mm	Projectile	Inert	3	0.10	3	Removed	3879153.00	12360466.50	29	1
Gun Butts	3742	GBA-3742	6/23/14	-	DGM	Nail	1	-	NMRD	-	-	-	3	0.01	4	Removed	3879028.00	12360467.25	77	1
Gun Butts	3760	GBA-3760	6/29/14	-	DGM	Projectile	1	-	MD	20-mm	Body	Inert	2	0.10	2	Removed	3878976.00	12360468.25	145	1
Gun Butts	3768	GBA-3768	6/23/14	-	DGM	Projectile	1	-	MD	20-mm Crimped Casing	Body	Inert	2	0.10	3	Removed	3879079.50	12360468.75	273	1
Gun Butts	3840	GBA-3840	6/29/14	-	DGM	Projectile	1	-	MD	20-mm	Body	Inert	3	0.02	1	Removed	3879128.25	12360474.50	21	1
Gun Butts	3850	GBA-3850	6/29/14	-	DGM	Projectile	1	-	MD	20-mm	Body	Inert	2	0.10	2	Removed	3879184.00	12360475.50	9	1
Gun Butts	3854	GBA-3854	6/23/14	-	DGM	Projectile	1	-	MD	20-mm	Projectile	Inert	2	0.10	3	Removed	3878978.50	12360476.00	69	1
Gun Butts	3860	GBA-3860	6/23/14	-	DGM	Projectile	1	-	MD	20-mm	Body	Inert	2	0.02	2	Removed	3878993.50	12360476.75	90	1
Gun Butts	3885	GBA-3885	6/29/14	-	DGM	Projectile	1	-	MD	20-mm	Body	Inert	1	0.02	3	Removed	3879128.00	12360478.25	25	1
Gun Butts	3901	GBA-3901	6/29/14	-	DGM	Projectile	1	-	MD	20-mm	Body	Inert	2	0.02	3	Removed	3879133.25	12360479.50	27	1
Gun Butts	3906	GBA-3906	6/23/14	-	DGM	Projectile	1	-	MD	20-mm	Body	Inert	2	0.10	2	Removed	3879007.50	12360479.75	65	1
Gun Butts	3909	GBA-3909	6/29/14	-	DGM	Projectile	1	-	MD	20-mm	Body	Inert	2	0.02	3	Removed	3879146.25	12360480.00	87	1
Gun Butts	3916	GBA-3916	6/23/14	-	DGM	Projectile	1	-	MD	20-mm	Projectile	Inert	2	0.10	2	Removed	3879088.75	12360480.25	624	1
Gun Butts	3924	GBA-3924	6/23/14	-	DGM	Rebar	1	-	NMRD	-	-	-	9	4.50	18	Left in place	3879191.75	12360480.75	24	1
Gun Butts	3938	GBA-3938	6/25/14	-	DGM	Projectile	1	-	MD	20-mm Crimped Casing	Body	Inert	3	0.10	3	Removed	3879062.00	12360482.25	35	1
Gun Butts	3963	GBA-3963	6/23/14	-	DGM	Projectile	1	-	MD	20-mm Crimped Casing	Body	Inert	3	0.10	3	Removed	3879043.50	12360483.75	164	1
Gun Butts	3990	GBA-3990	6/29/14	-	DGM	Non-MD SM	1	-	NMRD	-	-	-	2	0.02	1	Removed	3879157.25	12360485.50	36	1
Gun Butts	4007	GBA-4007	6/23/14	-	DGM	Non-MD SM	1	-	NMRD	-	-	-	8	1.00	4	Removed	3879324.25	12360487.00	25	1
Gun Butts	4023	GBA-4023	6/25/14	-	DGM	Projectile	1	-	MD	20-mm	Body	Inert	3	0.10	2	Removed	3879107.25	12360488.50	43	1
Gun Butts	4028	GBA-4028	6/24/14	-	DGM	Wire	1	-	NMRD	-	-	-	3	0.02	2	Removed	3879220.00	12360488.75	19	1
Gun Butts	4039	GBA-4039	6/24/14	-	DGM	Projectile	1	-	MD	20-mm	Body	Inert	3	0.02	2	Removed	3879283.00	12360489.50	63	1
Gun Butts	4048	GBA-4048	6/23/14	-	DGM	Projectile	1	-	MD	20-mm	Body	Inert	3	0.10	3	Removed	3879045.00	12360490.25	146	1
Gun Butts	4050	GBA-4050	6/25/14	-	DGM	Projectile	1	-	MD	20-mm	Body	Inert	4	0.10	2	Removed	3879120.50	12360490.25	41	1
Gun Butts	4072	GBA-4072	6/23/14	-	DGM	Non-MD SM	1	-	NMRD	-	-	-	3	0.01	4	Removed	3879271.00	12360491.50	142	1

DIG RESULTS
PROJECT 7 - VISITORS CENTER
JUNE/JULY 2014

Area/ID					Description					Munition			Measurements			Other				
AOC	Target No.	Target ID	Dig Date	Transect/ Grid ID	Detection Method	Item	Item Count	Comments	Item Category	MEC Description	MEC Part	MEC Condition	Depth (in)	Approximate Weight (lbs)	Length (in)	Status	Northing ¹	Easting ¹	Response Amplitude (mv)	Item No.
Gun Butts	4127	GBA-4127	6/23/14	-	DGM	Projectile	1	-	MD	-	-	Inert	3	0.10	0	Removed	3879062.50	12360494.75	18	1
Gun Butts	4156	GBA-4156	6/24/14	-	DGM	Non-MD SM	1	-	NMRD	-	-	-	3	0.01	1	Removed	3879227.00	12360497.00	9	1
Gun Butts	4182	GBA-4182	6/29/14	-	DGM	Projectile	1	-	MD	20-mm	Body	Inert	1	0.02	3	Removed	3879153.75	12360498.50	67	1
Gun Butts	4197	GBA-4197	6/23/14	-	DGM	Projectile	1	-	MD	20-mm	Body	Inert	2	0.10	2	Removed	3879106.88	12360500.13	50	1
Gun Butts	4237	GBA-4237	6/23/14	-	DGM	Projectile	1	-	MD	-	-	Inert	3	0.10	3	Removed	3879054.75	12360503.75	58	1
Gun Butts	4247	GBA-4247	6/23/14	-	DGM	Non-MD SM	1	-	NMRD	-	-	-	4	0.10	5	Removed	3879314.25	12360504.00	225	1
Gun Butts	4267	GBA-4267	6/23/14	-	DGM	Projectile	1	-	MD	20-mm	Body	Inert	2	0.10	2	Removed	3879110.50	12360505.50	115	1
Gun Butts	4309	GBA-4309	6/29/14	-	DGM	Projectile	1	-	MD	20-mm	Body	Inert	1	0.02	3	Removed	3879273.00	12360508.00	62	1
Gun Butts	4312	GBA-4312	6/25/14	-	DGM	Projectile	1	-	MD	20-mm	Body	Inert	2	0.10	1	Removed	3879052.25	12360508.25	37	1
Gun Butts	4358	GBA-4358	6/23/14	-	DGM	Rebar	1	-	NMRD	-	-	-	4	4.50	12	Removed	3879311.25	12360511.25	78	1
Gun Butts	4364	GBA-4364	6/23/14	-	DGM	Nail	1	-	NMRD	-	-	-	3	0.01	4	Removed	3879323.75	12360512.00	10	1
Gun Butts	4375	GBA-4375	6/23/14	-	DGM	Non-MD SM	1	-	NMRD	-	-	-	2	0.10	1	Removed	3879127.75	12360513.50	85	1
Gun Butts	4389	GBA-4389	6/23/14	-	DGM	Projectile	1	-	MD	20-mm	Body	Inert	2	0.10	2	Removed	3879111.75	12360514.75	180	1
Gun Butts	4417	GBA-4417	6/29/14	-	DGM	Projectile	1	-	MD	20-mm	Body	Inert	2	0.02	1	Removed	3879070.25	12360517.25	88	1
Gun Butts	4427	GBA-4427	6/23/14	-	DGM	Projectile	1	-	MD	20-mm	Body	Inert	2	0.10	2	Removed	3879117.00	12360518.25	140	1
Gun Butts	4439	GBA-4439	6/23/14	-	DGM	Projectile	1	-	MD	20-mm	Body	Inert	4	0.10	2	Removed	3879118.75	12360519.25	135	1
Gun Butts	4440	GBA-4440	6/29/14	-	DGM	Projectile	1	-	MD	20-mm	Body	Inert	2	0.02	2	Removed	3879140.75	12360519.25	76	1
Gun Butts	4470	GBA-4470	6/23/14	-	DGM	Projectile	1	-	MD	20-mm	Body	Inert	1	0.10	2	Removed	3879117.25	12360521.75	141	1
Gun Butts	4496	GBA-4496	6/23/14	-	DGM	Projectile	1	-	MD	20-mm Crimped Casing	-	Inert	3	0.02	2	Removed	3879041.75	12360524.00	51	1
Gun Butts	4565	GBA-4565	6/29/14	-	DGM	Projectile	1	-	MD	20-mm Crimped Casing	Body	Inert	1	0.02	3	Removed	3879064.00	12360530.75	80	1
Gun Butts	4600	GBA-4600	6/29/14	-	DGM	Projectile	1	-	MD	20-mm	Body	Inert	2	0.02	3	Removed	3879328.00	12360536.00	47	1
Gun Butts	4673	GBA-4673	6/29/14	-	DGM	Non-MD SM	1	-	NMRD	-	-	-	2	0.02	1	Removed	3879084.00	12360546.75	212	1
Gun Butts	4691	GBA-4691	6/29/14	-	DGM	Non-MD SM	1	-	NMRD	-	-	-	2	0.02	1	Removed	3879095.75	12360548.75	227	1
Gun Butts	4693	GBA-4693	6/24/14	-	DGM	Other	1	utility	NMRD	-	-	-	6	0.01	9	Left in place	3879160.88	12360549.25	16	1
Gun Butts	4738	GBA-4738	6/29/14	-	DGM	Projectile	1	-	MD	20-mm	Body	Inert	1	0.10	3	Removed	3879103.00	12360554.00	92	1
Gun Butts	4808	GBA-4808	6/29/14	-	DGM	Non-MD SM	1	-	NMRD	-	-	-	2	0.02	1	Removed	3879162.50	12360563.75	10	1
Gun Butts	4873	GBA-4873	6/29/14	-	DGM	Non-MD SM	1	-	NMRD	-	-	-	2	0.02	1	Removed	3879169.50	12360570.75	126	1
Gun Butts	4897	GBA-4897	6/29/14	-	DGM	Projectile	1	-	MD	20-mm	Body	Inert	2	0.10	3	Removed	3879210.00	12360574.50	29	1
Gun Butts	4901	GBA-4901	6/29/14	-	DGM	Projectile	1	-	MD	20-mm	Body	Inert	1	0.10	3	Removed	3879064.25	12360575.25	505	1
Gun Butts	4925	GBA-4925	6/29/14	-	DGM	Projectile	1	-	MD	20-mm	Body	Inert	2	0.10	3	Removed	3879075.25	12360581.50	31	1
Gun Butts	4927	GBA-4927	6/29/14	-	DGM	Non-MD SM	1	-	NMRD	-	-	-	2	0.02	2	Removed	3879092.00	12360581.50	6	1

DIG RESULTS
PROJECT 7 - VISITORS CENTER
JUNE/JULY 2014

Area/ID					Description					Munition			Measurements			Other				
AOC	Target No.	Target ID	Dig Date	Transect/ Grid ID	Detection Method	Item	Item Count	Comments	Item Category	MEC Description	MEC Part	MEC Condition	Depth (in)	Approximate Weight (lbs)	Length (in)	Status	Northing ¹	Easting ¹	Response Amplitude (mv)	Item No.
Gun Butts	4931	GBA-4931	6/29/14	-	DGM	Non-MD SM	1	-	NMRD	-	-	-	2	0.10	3	Removed	3879084.75	12360582.00	34	1
Gun Butts	4936	GBA-4936	6/29/14	-	DGM	Non-MD SM	1	-	NMRD	-	-	-	1	0.02	1	Removed	3879061.25	12360583.00	28	1
Gun Butts	5028	GBA-5028	6/29/14	-	DGM	Projectile	1	-	MD	20-mm	Body	Inert	2	0.10	3	Removed	3879078.75	12360602.50	60	1
Gun Butts	5033	GBA-5033	6/29/14	-	DGM	Projectile	1	-	MD	20-mm	Body	Inert	2	0.10	3	Removed	3879055.50	12360604.25	24	1
Gun Butts	5036	GBA-5036	6/29/14	-	DGM	Projectile	1	-	MD	20-mm	Body	Inert	2	0.10	3	Removed	3879046.25	12360604.75	53	1
Gun Butts	5042	GBA-5042	6/29/14	-	DGM	Projectile	1	-	MD	20-mm	Body	Inert	3	0.10	3	Removed	3879049.75	12360605.75	6	1
Gun Butts	5053	GBA-5053	6/29/14	-	DGM	Projectile	1	-	MD	20-mm	Body	Inert	2	0.10	3	Removed	3879176.75	12360607.00	18	1
Gun Butts	5057	GBA-5057	6/29/14	-	DGM	Projectile	1	-	MD	20-mm	Body	Inert	2	0.10	3	Removed	3879052.25	12360608.25	39	1
Gun Butts	5059	GBA-5059	6/29/14	-	DGM	Projectile	1	-	MD	20-mm	Activator	Inert	2	0.10	3	Removed	3879142.75	12360609.25	12	1
Gun Butts	5068	GBA-5068	6/29/14	-	DGM	Projectile	1	-	MD	20-mm	Body	Inert	1	0.10	3	Removed	3879029.00	12360612.25	41	1
Gun Butts	5069	GBA-5069	6/29/14	-	DGM	Projectile	1	-	MD	20-mm	Body	Inert	1	0.10	3	Removed	3879103.00	12360612.25	25	1
Gun Butts	5081	GBA-5081	6/29/14	-	DGM	Projectile	1	-	MD	20-mm	Body	Inert	2	0.10	3	Removed	3879069.25	12360614.25	26	1
Gun Butts	5089	GBA-5089	6/29/14	-	DGM	Projectile	1	-	MD	20-mm	Body	Inert	2	0.10	0	Removed	3879156.50	12360616.25	25	1
Gun Butts	5114	GBA-5114	6/29/14	-	DGM	Projectile	1	-	MD	20-mm	Activator	Inert	1	0.10	3	Removed	3879034.25	12360622.00	31	1
Gun Butts	5117	GBA-5117	6/29/14	-	DGM	Nail	1	-	NMRD	-	-	-	2	0.01	4	Removed	3879144.13	12360622.88	11	1
Gun Butts	5121	GBA-5121	6/29/14	-	DGM	Non-MD SM	1	-	NMRD	-	-	-	1	0.01	1	Removed	3879063.00	12360624.75	27	1
Gun Butts	5135	GBA-5135	6/29/14	-	DGM	Projectile	1	-	MD	20-mm	Body	Inert	1	0.10	3	Removed	3879080.00	12360629.75	8	1
Gun Butts	5170	GBA-5170	6/29/14	-	DGM	Non-MD SM	1	-	NMRD	-	-	-	1	0.02	1	Removed	3879062.75	12360639.00	48	1
Gun Butts	5213	GBA-5213	6/29/14	-	DGM	Projectile	1	-	MD	20-mm	Body	Inert	1	0.02	2	Removed	3879126.50	12360646.50	9	1
Gun Butts	5228	GBA-5228	6/29/14	-	DGM	Projectile	1	-	MD	20-mm	Body	Inert	2	0.02	2	Removed	3879107.25	12360651.50	685	1
Gun Butts	5256	GBA-5256	6/29/14	-	DGM	Projectile	1	-	MD	20-mm	Body	Inert	1	0.10	3	Removed	3879130.75	12360657.75	48	1
Gun Butts	5286	GBA-5286	6/29/14	-	DGM	Wire	1	-	NMRD	-	-	-	0	0.02	10	Removed	3879126.75	12360665.00	199	1
Gun Butts	5330	GBA-5330	6/29/14	-	DGM	Projectile	1	-	MD	20-mm	Body	Inert	1	0.10	2	Removed	3879127.00	12360678.75	997	1
Gun Butts	5332	GBA-5332	6/29/14	-	DGM	Projectile	1	-	MD	20-mm	Body	Inert	2	0.10	2	Removed	3879100.25	12360679.50	29	1
Gun Butts	5360	GBA-5360	6/29/14	-	DGM	Projectile	1	-	MD	20-mm	Body	Inert	2	0.10	3	Removed	3879064.75	12360689.25	13	1
Gun Butts	5371	GBA-5371	6/29/14	-	DGM	Projectile	1	-	MD	20-mm	Body	Inert	2	0.10	3	Removed	3879101.00	12360692.25	218	1
Gun Butts	5375	GBA-5375	6/29/14	-	DGM	Non-MD SM	1	-	NMRD	-	-	-	2	0.01	1	Removed	3879139.25	12360694.75	41	1
Gun Butts	5392	GBA-5392	6/29/14	-	DGM	Projectile	1	-	MD	20-mm	Body	Inert	1	0.10	3	Removed	3879065.25	12360700.75	12	1
Gun Butts	5418	GBA-5418	6/29/14	-	DGM	Projectile	1	-	MD	20-mm	Body	Inert	2	0.10	3	Removed	3879092.13	12360714.38	14	1
Gun Butts	5431	GBA-5431	6/29/14	-	DGM	Pipe	1	utility	NMRD	-	-	-	18	0.50	24	Left in place	3879123.50	12360727.25	35	1
Gun Butts	971	GBA-971	6/29/14	-	DGM	Wire	1	-	NMRD	-	-	-	2	0.02	10	Removed	3879172.00	12360233.25	215	1
Gun Butts Marsh	1	GB-G01-1	7/1/14	-	DGM	Other	1	oil filter	NMRD	-	-	-	4	2.00	4	Removed	3879034.00	12360792.25	167	1

DIG RESULTS
PROJECT 7 - VISITORS CENTER
JUNE/JULY 2014

Area/ID					Description					Munition			Measurements			Other				
AOC	Target No.	Target ID	Dig Date	Transect/ Grid ID	Detection Method	Item	Item Count	Comments	Item Category	MEC Description	MEC Part	MEC Condition	Depth (in)	Approximate Weight (lbs)	Length (in)	Status	Northing ¹	Easting ¹	Response Amplitude (mv)	Item No.
Gun Butts Marsh	1	GB-G01-1	7/1/14	-	DGM	QC 1" x 4" pipe	1	-	Seed	-	-	-	3	1.00	4	Removed	3879034.00	12360792.25	167	2
Gun Butts Marsh	2	GB-G02-2	7/1/14	-	DGM	QC 1" x 4" pipe	1	-	Seed	-	-	-	2	1.00	4	Removed	3878873.51	12360588.50	53	1
Gun Butts Marsh	2	GB-G02-2	7/1/14	-	DGM	QC 1" x 4" pipe	1	-	Seed	-	-	-	2	1.00	4	Removed	3878873.51	12360588.50	53	2
Gun Butts Marsh	3	GB-G02-3	7/1/14	-	DGM	Non-MD SM	1	-	NMRD	-	-	-	3	0.02	1	Removed	3878879.75	12360592.50	7	1
Gun Butts Marsh	4	GB-G02-4	7/1/14	-	DGM	Non-MD SM	1	-	NMRD	-	-	-	3	0.02	1	Removed	3878882.25	12360595.00	10	1
Gun Butts Marsh	1	GB-G03-1	7/1/14	-	DGM	QC 1" x 4" pipe	1	-	Seed	-	-	-	3	0.50	4	Removed	3878727.75	12360593.00	153	1
Gun Butts	-	-	6/30/14	GBA-AG02	Analog (grid)	Non-MD SM	1	-	NMRD	-	-	-	2	0.10	-	Removed	3879179.80	12360697.31	-	101
Gun Butts	-	-	6/30/14	GBA-AG02	Analog (grid)	Non-MD SM	1	-	NMRD	-	-	-	2	0.01	-	Removed	3879181.57	12360718.44	-	102
Gun Butts	-	-	6/30/14	GBA-AG02	Analog (grid)	Cable	1	-	NMRD	-	-	-	0	20.00	-	Left in place	3879168.16	12360709.35	-	103
Gun Butts	-	-	6/30/14	GBA-AG02	Analog (grid)	Projectile	1	-	MD	20-mm	Body	Inert	12	0.10	-	Removed	3879185.50	12360678.75	-	104
Gun Butts	-	-	6/30/14	GBA-AG02	Analog (grid)	Projectile	1	-	MD	20-mm	Frag	Inert	4	0.10	-	Removed	3879183.13	12360687.49	-	105
Gun Butts	-	-	6/30/14	GBA-AG02	Analog (grid)	Projectile	1	-	MD	20-mm	Body	Inert	1	0.02	-	Removed	3879160.35	12360715.95	-	106
Gun Butts	-	-	6/30/14	GBA-AG02	Analog (grid)	Projectile	1	-	MD	20-mm	Frag	Inert	3	0.10	-	Removed	3879181.12	12360693.35	-	107
Gun Butts	-	-	6/30/14	GBA-AG02	Analog (grid)	Projectile	1	-	MD	20-mm	Frag	Inert	3	0.10	-	Removed	3879175.50	12360711.13	-	108
Gun Butts	-	-	6/29/14	GBA-AT01	Analog (transect)	Non-MD SM	1	-	NMRD	-	-	-	1	0.10	-	Removed	3878891.43	12360445.34	-	1001
Gun Butts	-	-	6/29/14	GBA-AT01	Analog (transect)	Non-MD SM	1	-	NMRD	-	-	-	1	0.10	-	Removed	3878894.42	12360428.80	-	1002
Gun Butts	-	-	6/29/14	GBA-AT01	Analog (transect)	Projectile	1	-	MD	20-mm	Body	Inert	1	0.02	-	Removed	3878931.92	12360473.50	-	1003
Gun Butts	-	-	6/29/14	GBA-AT01	Analog (transect)	Non-MD SM	1	-	NMRD	-	-	-	2	0.10	-	Removed	3878939.92	12360479.91	-	1004
Gun Butts	-	-	6/29/14	GBA-AT01	Analog (transect)	Non-MD SM	1	-	NMRD	-	-	-	2	0.10	-	Removed	3878898.15	12360404.91	-	1005
Gun Butts	-	-	6/29/14	GBA-AT01	Analog (transect)	Non-MD SM	1	-	NMRD	-	-	-	1	-	-	Removed	3878899.03	12360399.59	-	1006
Gun Butts	-	-	6/29/14	GBA-AT01	Analog (transect)	Non-MD SM	1	-	NMRD	-	-	-	3	0.10	-	Removed	3878908.48	12360342.69	-	1007
Gun Butts	-	-	6/29/14	GBA-AT01	Analog (transect)	Non-MD SM	1	-	NMRD	-	-	-	3	0.10	-	Removed	3878909.58	12360337.57	-	1008
Gun Butts	-	-	6/29/14	GBA-AT01	Analog (transect)	Non-MD SM	1	-	NMRD	-	-	-	3	0.10	-	Removed	3878910.31	12360331.67	-	1009
Gun Butts	-	-	6/29/14	GBA-AT01	Analog (transect)	Projectile	1	-	MD	20-mm	Body	Inert	3	0.10	-	Removed	3878910.97	12360326.65	-	1010
Gun Butts	-	-	6/29/14	GBA-AT01	Analog (transect)	Projectile	1	-	MD	20-mm	Body	Inert	3	0.10	-	Removed	3878914.26	12360307.86	-	1011
Gun Butts	-	-	6/29/14	GBA-AT01	Analog (transect)	Projectile	1	-	MD	20-mm	Body	Inert	2	0.10	-	Removed	3878914.63	12360303.05	-	1012
Gun Butts	-	-	6/29/14	GBA-AT01	Analog (transect)	Non-MD SM	3	-	NMRD	-	-	-	4	0.10	-	Removed	3878916.27	12360298.78	-	1013
Gun Butts	-	-	6/29/14	GBA-AT01	Analog (transect)	Non-MD SM	1	-	NMRD	-	-	-	3	0.10	-	Removed	3878908.48	12360444.95	-	1014
Gun Butts	-	-	6/29/14	GBA-AT01	Analog (transect)	Projectile	3	-	MD	20-mm	Body	Inert	3	0.10	-	Removed	3878917.99	12360284.29	-	1015
Gun Butts	-	-	6/29/14	GBA-AT01	Analog (transect)	Non-MD SM	2	-	NMRD	-	-	-	3	0.10	-	Removed	3878919.82	12360273.27	-	1016
Gun Butts	-	-	6/29/14	GBA-AT01	Analog (transect)	Non-MD SM	3	-	NMRD	-	-	-	3	0.10	-	Removed	3878929.66	12360273.24	-	1017
Gun Butts	-	-	6/29/14	GBA-AT01	Analog (transect)	Non-MD SM	2	-	NMRD	-	-	-	3	0.10	-	Removed	3878954.12	12360275.05	-	1018

DIG RESULTS
PROJECT 7 - VISITORS CENTER
JUNE/JULY 2014

Area/ID					Description					Munition			Measurements			Other				
AOC	Target No.	Target ID	Dig Date	Transect/ Grid ID	Detection Method	Item	Item Count	Comments	Item Category	MEC Description	MEC Part	MEC Condition	Depth (in)	Approximate Weight (lbs)	Length (in)	Status	Northing ¹	Easting ¹	Response Amplitude (mv)	Item No.
Gun Butts	-	-	6/29/14	GBA-AT01	Analog (transect)	Non-MD SM	1	-	NMRD	-	-	-	3	0.10	-	Removed	3878994.35	12360245.76	-	1019
Gun Butts	-	-	6/29/14	GBA-AT01	Analog (transect)	Non-MD SM	1	-	NMRD	-	-	-	2	0.10	-	Removed	3879038.83	12360235.38	-	1020
Gun Butts	-	-	6/29/14	GBA-AT01	Analog (transect)	Projectile	1	-	MD	20-mm	Body	Inert	2	0.10	-	Removed	3879060.28	12360222.57	-	1021
Gun Butts	-	-	6/29/14	GBA-AT01	Analog (transect)	Projectile	1	-	MD	20-mm	Body	Inert	2	0.10	-	Removed	3879085.38	12360176.17	-	1022
Gun Butts	-	-	6/29/14	GBA-AT01	Analog (transect)	Non-MD SM	1	-	NMRD	-	-	-	3	0.10	-	Removed	3879098.86	12360119.76	-	1023
Gun Butts	-	-	6/29/14	GBA-AT02	Analog (transect)	Projectile	1	-	MD	20-mm	Body	Inert	2	0.10	-	Removed	3879111.44	12360159.46	-	1001
Gun Butts	-	-	6/29/14	GBA-AT02	Analog (transect)	Non-MD SM	1	-	NMRD	-	-	-	4	0.10	-	Removed	3879096.67	12360198.60	-	1002
Gun Butts	-	-	6/29/14	GBA-AT02	Analog (transect)	Projectile	1	-	MD	20-mm	Body	Inert	1	0.10	-	Removed	3879079.65	12360235.80	-	1003
Gun Butts	-	-	6/29/14	GBA-AT02	Analog (transect)	Non-MD SM	1	-	NMRD	-	-	-	2	0.10	-	Removed	3878999.07	12360267.83	-	1004
Gun Butts	-	-	6/29/14	GBA-AT02	Analog (transect)	Non-MD SM	2	-	NMRD	-	-	-	3	0.10	-	Removed	3878994.05	12360281.55	-	1005
Gun Butts	-	-	6/29/14	GBA-AT02	Analog (transect)	Projectile	1	-	MD	20-mm	Body	Inert	3	0.10	-	Removed	3878969.67	12360293.88	-	1006
Gun Butts	-	-	6/29/14	GBA-AT02	Analog (transect)	Non-MD SM	1	-	NMRD	-	-	-	2	0.02	-	Removed	3878961.26	12360293.00	-	1007
Gun Butts	-	-	6/29/14	GBA-AT02	Analog (transect)	Projectile	2	-	MD	20-mm	Body	Inert	2	0.10	-	Removed	3878951.72	12360292.12	-	1008
Gun Butts	-	-	6/29/14	GBA-AT02	Analog (transect)	Non-MD SM	1	-	NMRD	-	-	-	2	0.02	-	Removed	3878935.68	12360290.65	-	1009
Gun Butts	-	-	6/29/14	GBA-AT02	Analog (transect)	Projectile	3	-	MD	20-mm	Body	Inert	0	0.02	-	Removed	3878916.74	12360398.19	-	1010
Gun Butts	-	-	6/29/14	GBA-AT02	Analog (transect)	Non-MD SM	4	-	NMRD	-	-	-	2	0.10	-	Removed	3878916.01	12360402.33	-	1011
Gun Butts	-	-	6/29/14	GBA-AT02	Analog (transect)	Rebar	2	-	NMRD	-	-	-	0	8.00	-	Removed	3878911.83	12360427.46	-	1012
Gun Butts	-	-	6/29/14	GBA-AT02	Analog (transect)	Non-MD SM	1	-	NMRD	-	-	-	2	0.02	-	Removed	3878909.68	12360438.15	-	1013
Gun Butts	-	-	6/29/14	GBA-AT02	Analog (transect)	Non-MD SM	1	-	NMRD	-	-	-	2	0.02	-	Removed	3878916.97	12360291.54	-	1014
Gun Butts	-	-	6/29/14	GBA-AT03	Analog (transect)	Nail	2	-	NMRD	-	-	-	3	0.02	-	Removed	3878900.30	12360468.77	-	1001
Gun Butts	-	-	6/29/14	GBA-AT03	Analog (transect)	Rebar	1	-	NMRD	-	-	-	1	3.50	-	Removed	3878923.91	12360466.18	-	1002
Gun Butts	-	-	6/29/14	GBA-AT03	Analog (transect)	Wire	1	-	NMRD	-	-	-	2	0.10	-	Removed	3878896.12	12360416.89	-	1003
Gun Butts	-	-	6/29/14	GBA-AT03	Analog (transect)	Projectile	1	-	MD	20-mm	Body	Inert	2	0.10	-	Removed	3878896.94	12360412.17	-	1004
Gun Butts	-	-	6/29/14	GBA-AT03	Analog (transect)	Projectile	1	-	MD	20-mm	Body	Inert	4	0.10	-	Removed	3878947.98	12360486.54	-	1005
Gun Butts	-	-	6/29/14	GBA-AT03	Analog (transect)	Rebar	1	-	NMRD	-	-	-	2	2.00	-	Removed	3878956.07	12360493.71	-	1006
Gun Butts	-	-	6/29/14	GBA-AT03	Analog (transect)	Rebar	1	-	NMRD	-	-	-	2	1.50	-	Removed	3878974.44	12360509.57	-	1007
Gun Butts	-	-	6/29/14	GBA-AT03	Analog (transect)	Non-MD SM	2	-	NMRD	-	-	-	2	0.50	-	Removed	3878986.79	12360519.85	-	1008
Gun Butts	-	-	6/29/14	GBA-AT03	Analog (transect)	Projectile	1	-	MD	20-mm	Body	Inert	4	0.10	-	Removed	3879000.66	12360531.81	-	1009
Gun Butts	-	-	6/29/14	GBA-AT03	Analog (transect)	Projectile	1	-	MD	20-mm	Frag	Inert	2	0.10	-	Removed	3879009.77	12360539.78	-	1010
Gun Butts	-	-	6/29/14	GBA-AT04	Analog (transect)	Non-MD SM	1	-	NMRD	-	-	-	6	1.00	-	Removed	3878912.69	12360456.57	-	1001
Gun Butts	-	-	6/29/14	GBA-AT04	Analog (transect)	Projectile	8	-	MD	20-mm	Frag	Inert	4	1.00	-	Removed	3878915.33	12360481.22	-	1002
Gun Butts	-	-	6/29/14	GBA-AT04	Analog (transect)	Projectile	3	-	MD	20-mm	Frag	Inert	3	0.50	-	Removed	3878936.65	12360499.54	-	1003

DIG RESULTS
PROJECT 7 - VISITORS CENTER
JUNE/JULY 2014

Area/ID					Description					Munition			Measurements			Other				
AOC	Target No.	Target ID	Dig Date	Transect/ Grid ID	Detection Method	Item	Item Count	Comments	Item Category	MEC Description	MEC Part	MEC Condition	Depth (in)	Approximate Weight (lbs)	Length (in)	Status	Northing ¹	Easting ¹	Response Amplitude (mv)	Item No.
Gun Butts	-	-	6/29/14	GBA-AT07	Analog (transect)	Projectile	1	-	MD	20-mm	Frag	Inert	2	0.10	-	Removed	3879061.48	12360508.49	-	1001
Gun Butts	-	-	6/29/14	GBA-AT07	Analog (transect)	Projectile	6	-	MD	20-mm	Frag	Inert	2	0.10	-	Removed	3879056.83	12360511.24	-	1002
Gun Butts	-	-	6/29/14	GBA-AT07	Analog (transect)	Projectile	7	-	MD	20-mm	Frag	Inert	2	0.10	-	Removed	3879048.63	12360516.70	-	1003
Gun Butts	-	-	6/29/14	GBA-AT08	Analog (transect)	Projectile	6	-	MD	20-mm	Frag	Inert	2	0.10	-	Removed	3879065.94	12360522.49	-	1001
Gun Butts	-	-	6/29/14	GBA-AT08	Analog (transect)	Projectile	5	-	MD	20-mm	Frag	Inert	1	0.10	-	Removed	3879069.34	12360514.87	-	1002
Gun Butts	-	-	6/29/14	GBA-AT08	Analog (transect)	Projectile	4	-	MD	20-mm	Frag	Inert	2	0.10	-	Removed	3879078.89	12360505.91	-	1003
Gun Butts	-	-	6/29/14	GBA-AT09	Analog (transect)	Projectile	8	-	MD	20-mm	Frag	Inert	0	0.10	-	Removed	3879086.38	12360512.31	-	1001
Gun Butts	-	-	6/29/14	GBA-AT09	Analog (transect)	Projectile	8	-	MD	20-mm	Frag	Inert	1	0.10	-	Removed	3879081.09	12360517.67	-	1002
Gun Butts	-	-	6/29/14	GBA-AT10	Analog (transect)	Projectile	7	-	MD	20-mm	Frag	Inert	1	0.10	-	Removed	3879096.75	12360506.20	-	1001
Gun Butts	-	-	6/29/14	GBA-AT10	Analog (transect)	Projectile	6	-	MD	20-mm	Frag	Inert	1	0.10	-	Removed	3879095.25	12360516.06	-	1002
Gun Butts	-	-	6/29/14	GBA-AT11	Analog (transect)	Projectile	11	-	MD	20-mm	Frag	Inert	1	0.10	-	Removed	3879107.82	12360510.46	-	1001
Gun Butts	-	-	6/29/14	GBA-AT11	Analog (transect)	Projectile	13	-	MD	20-mm	Frag	Inert	1	0.10	-	Removed	3879106.57	12360516.85	-	1002
Gun Butts	-	-	6/30/14	GBA-AT12	Analog (transect)	Non-MD SM	3	-	NMRD	-	-	-	1	0.10	-	Removed	3879199.36	12360614.85	-	101
Gun Butts	-	-	6/30/14	GBA-AT12	Analog (transect)	Projectile	2	-	DMM/MEC	20-mm	Projectile	Live	1	0.10	-	Demolished	3879180.08	12360638.56	-	102
Gun Butts	-	-	6/30/14	GBA-AT12	Analog (transect)	Projectile	3	-	MD	20-mm	Frag	Inert	2	0.10	-	Removed	3879171.33	12360649.51	-	103
Gun Butts	-	-	6/30/14	GBA-AT12	Analog (transect)	Projectile	1	-	MD	20-mm	Body	Inert	2	0.10	-	Removed	3879163.63	12360659.29	-	104
Gun Butts	-	-	6/30/14	GBA-AT12	Analog (transect)	Projectile	2	-	MD	20-mm	Body	Inert	2	0.10	-	Removed	3879160.96	12360666.87	-	105
Gun Butts	-	-	6/30/14	GBA-AT12	Analog (transect)	Projectile	1	-	MD	20-mm	Body	Inert	2	0.10	-	Removed	3879157.60	12360675.64	-	106
Gun Butts	-	-	6/30/14	GBA-AT12	Analog (transect)	Projectile	3	-	MD	20-mm	Body	Inert	2	0.10	-	Removed	3879155.91	12360680.02	-	107
Gun Butts	-	-	6/30/14	GBA-AT12	Analog (transect)	Projectile	1	-	MD	20-mm	Frag	Inert	2	0.02	-	Removed	3879149.02	12360700.39	-	108
Gun Butts	-	-	6/30/14	GBA-AT12	Analog (transect)	Projectile	9	-	MD	20-mm	Frag	Inert	2	0.10	-	Removed	3879146.22	12360706.88	-	109
Gun Butts	-	-	6/30/14	GBA-AT12	Analog (transect)	Projectile	1	-	MD	30-mm	Body	Inert	6	0.10	-	Removed	3879179.64	12360759.89	-	110
Gun Butts	-	-	6/30/14	GBA-AT13	Analog (transect)	Projectile	1	-	MD	20-mm	Body	Inert	1	0.10	-	Removed	3879162.66	12360708.37	-	101
Gun Butts	-	-	6/30/14	GBA-AT13	Analog (transect)	Projectile	8	-	MD	20-mm	Frag	Inert	2	0.10	-	Removed	3879166.33	12360697.86	-	102
Gun Butts	-	-	6/30/14	GBA-AT13	Analog (transect)	Projectile	3	-	MD	20-mm	Frag	Inert	2	0.10	-	Removed	3879186.98	12360673.51	-	103
Gun Butts	-	-	6/30/14	GBA-AT13	Analog (transect)	Projectile	4	-	MD	20-mm	Frag	Inert	2	0.10	-	Removed	3879184.25	12360682.95	-	104
Gun Butts	-	-	6/30/14	GBA-AT14	Analog (transect)	Projectile	2	-	MD	20-mm	Body	Inert	2	0.02	-	Removed	3879196.75	12360658.22	-	101
Gun Butts	-	-	6/30/14	GBA-AT14	Analog (transect)	Rebar	1	-	NMRD	-	-	-	8	7.50	-	Removed	3879192.88	12360662.67	-	102
Gun Butts	-	-	6/30/14	GBA-AT14	Analog (transect)	Projectile	1	-	MD	20-mm	Body	Inert	2	0.10	-	Removed	3879188.69	12360668.29	-	103
Gun Butts	-	-	6/30/14	GBA-AT14	Analog (transect)	Projectile	1	-	MD	20-mm	Body	Inert	2	0.10	-	Removed	3879177.27	12360725.08	-	104
Gun Butts	-	-	7/1/14	GBA-AT14	Analog (transect)	Non-MD SM	1	-	NMRD	-	-	-	2	0.10	-	Removed	3879252.18	12360625.84	-	105
Gun Butts	-	-	7/1/14	GBA-AT14	Analog (transect)	Non-MD SM	1	-	NMRD	-	-	-	2	0.10	-	Removed	3879256.42	12360644.46	-	106

DIG RESULTS
PROJECT 7 - VISITORS CENTER
JUNE/JULY 2014

Area/ID					Description					Munition			Measurements			Other				
AOC	Target No.	Target ID	Dig Date	Transect/ Grid ID	Detection Method	Item	Item Count	Comments	Item Category	MEC Description	MEC Part	MEC Condition	Depth (in)	Approximate Weight (lbs)	Length (in)	Status	Northing ¹	Easting ¹	Response Amplitude (mv)	Item No.
Gun Butts	-	-	7/1/14	GBA-AT14	Analog (transect)	Non-MD SM	1	-	NMRD	-	-	-	2	0.10	-	Removed	3879250.29	12360657.64	-	107
Gun Butts	-	-	7/1/14	GBA-AT14	Analog (transect)	Non-MD SM	1	-	NMRD	-	-	-	2	0.10	-	Removed	3879229.20	12360670.44	-	108
Gun Butts	-	-	7/1/14	GBA-AT14	Analog (transect)	Non-MD SM	1	-	NMRD	-	-	-	2	0.10	-	Removed	3879221.81	12360678.47	-	109
Gun Butts	-	-	7/1/14	GBA-AT14	Analog (transect)	Construction Debris	1	-	NMRD	-	-	-	2	0.10	-	Removed	3879221.49	12360691.18	-	110
Gun Butts	-	-	7/1/14	GBA-AT14	Analog (transect)	Projectile	1	-	MD	20-mm	Body	Inert	2	0.10	-	Removed	3879208.04	12360703.44	-	111
Gun Butts	-	-	7/1/14	GBA-AT14	Analog (transect)	Non-MD SM	1	-	NMRD	-	-	-	2	0.10	-	Removed	3879212.53	12360740.81	-	112
Gun Butts	-	-	7/1/14	GBA-AT18	Analog (transect)	Cable	1	-	NMRD	-	-	-	2	4.50	-	Left in place	3878851.54	12360377.68	-	1001
Gun Butts	-	-	7/1/14	GBA-AT18	Analog (transect)	Non-MD SM	1	-	NMRD	-	-	-	3	1.00	-	Removed	3878863.14	12360327.50	-	1002
Gun Butts	-	-	7/1/14	GBA-AT18	Analog (transect)	Non-MD SM	1	-	NMRD	-	-	-	2	0.50	-	Removed	3878862.31	12360319.38	-	1003
Gun Butts	-	-	7/1/14	GBA-AT18	Analog (transect)	Non-MD SM	1	-	NMRD	-	-	-	2	0.10	-	Removed	3878877.11	12360282.27	-	1004
Gun Butts	-	-	7/1/14	GBA-AT18	Analog (transect)	Nail Pit	1	-	NMRD	-	-	-	3	0.02	-	Removed	3878880.46	12360261.60	-	1005
Gun Butts Marsh	-	-	6/30/14	GB-G01	Analog (grid)	Projectile	1	-	MD	20-mm	Body	Inert	2	0.10	-	Removed	3878906.72	12360353.04	-	101
Gun Butts Marsh	-	-	6/30/14	GB-G01	Analog (grid)	Projectile	1	-	MD	20-mm	Body	Inert	3	0.10	-	Removed	3878876.83	12360375.07	-	102
Gun Butts Marsh	-	-	6/30/14	GB-G01	Analog (grid)	Projectile	1	-	MD	30-mm	Body	Inert	2	0.10	-	Removed	3878905.89	12360361.15	-	103
Gun Butts Marsh	-	-	6/30/14	GB-G01	Analog (grid)	Projectile	1	-	MD	20-mm	Body	Inert	1	0.10	-	Removed	3878889.70	12360374.26	-	104
Gun Butts Marsh	-	-	6/30/14	GB-G01	Analog (grid)	Projectile	5	-	MD	20-mm	Frag	Inert	2	0.10	-	Removed	3878884.76	12360349.71	-	105
Gun Butts Marsh	-	-	6/30/14	GB-G01	Analog (grid)	Wire	1	-	NMRD	-	-	-	1	0.10	-	Removed	3878912.96	12360377.08	-	106
Gun Butts Marsh	-	-	6/30/14	GB-G01	Analog (grid)	Projectile	1	-	MD	20-mm	Body	Inert	2	0.10	-	Removed	3878890.51	12360381.27	-	107
Gun Butts Marsh	-	-	6/30/14	GB-G01	Analog (grid)	Projectile	1	-	MD	20-mm	Body	Inert	1	0.10	-	Removed	3878906.11	12360356.53	-	108
Gun Butts Marsh	-	-	6/30/14	GB-G01	Analog (grid)	Projectile	1	-	MD	20-mm	Body	Inert	2	0.10	-	Removed	3878884.12	12360363.87	-	109
Gun Butts Marsh	-	-	6/30/14	GB-G01	Analog (grid)	Projectile	1	-	MD	20-mm	Frag	Inert	3	0.10	-	Removed	3878914.83	12360363.09	-	110
Gun Butts Marsh	-	-	6/30/14	GB-G01	Analog (grid)	Projectile	1	-	MD	20-mm	Frag	Inert	1	0.10	-	Removed	3878895.96	12360369.55	-	111
Gun Butts Marsh	-	-	6/30/14	GB-G01	Analog (grid)	Rebar	1	-	NMRD	-	-	-	0	4.50	-	Left in place	3878900.65	12360356.70	-	112
Gun Butts Marsh	-	-	6/30/14	GB-G01	Analog (grid)	Projectile	1	-	MD	20-mm	Body	Inert	1	0.10	-	Removed	3878906.11	12360356.53	-	113
Gun Butts Marsh	-	-	6/30/14	GB-G01	Analog (grid)	Projectile	4	-	MD	20-mm	Frag	Inert	2	0.10	-	Removed	3878892.66	12360357.54	-	114
Gun Butts Marsh	-	-	6/30/14	GB-G01	Analog (grid)	Projectile	1	-	MD	20-mm	Frag	Inert	2	0.10	-	Removed	3878887.78	12360358.17	-	115
Gun Butts Marsh	-	-	6/30/14	GB-G01	Analog (grid)	Projectile	1	-	MD	20-mm	Body	Inert	1	0.10	-	Removed	3878898.64	12360351.00	-	116
Gun Butts Marsh	-	-	6/30/14	GB-G01	Analog (grid)	Non-MD SM	1	-	NMRD	-	-	-	2	0.10	-	Removed	3878895.23	12360380.83	-	117
Gun Butts Marsh	-	-	6/30/14	GB-G01	Analog (grid)	Non-MD SM	1	-	NMRD	-	-	-	1	0.10	-	Removed	3878906.03	12360368.57	-	118
Gun Butts Marsh	-	-	6/30/14	GB-G01	Analog (grid)	Projectile	1	-	MD	20-mm	Body	Inert	1	0.10	-	Removed	3878904.45	12360373.03	-	119
Gun Butts Marsh	-	-	6/30/14	GB-G01	Analog (grid)	Projectile	1	-	MD	20-mm	Frag	Inert	2	0.10	-	Removed	3878885.24	12360376.92	-	120
Gun Butts Marsh	-	-	6/30/14	GB-G01	Analog (grid)	Non-MD SM	1	-	NMRD	-	-	-	2	0.10	-	Removed	3878876.12	12360353.16	-	121

DIG RESULTS
PROJECT 7 - VISITORS CENTER
JUNE/JULY 2014

Area/ID					Description					Munition			Measurements			Other					
AOC	Target No.	Target ID	Dig Date	Transect/ Grid ID	Detection Method	Item	Item Count	Comments	Item Category	MEC Description	MEC Part	MEC Condition	Depth (in)	Approximate Weight (lbs)	Length (in)	Status	Northing ¹	Easting ¹	Response Amplitude (mv)	Item No.	
Gun Butts Marsh	-	-	6/30/14	GB-G01	Analog (grid)	Projectile	1	-	MD	20-mm	Frag	Inert	1	0.10	-	Removed	387885.43	12360385.96	-	122	
Gun Butts Marsh	-	-	6/30/14	GB-G01	Analog (grid)	Non-MD SM	2	-	NMRD	-	-	-	1	0.50	-	Removed	3878901.08	12360347.35	-	123	
Gun Butts Marsh	-	-	6/30/14	GB-G01	Analog (grid)	Non-MD SM	1	-	NMRD	-	-	-	4	0.10	-	Removed	3878912.71	12360371.47	-	124	
Gun Butts Marsh	-	-	6/30/14	GB-G01	Analog (grid)	Construction Debris	5	-	NMRD	-	-	-	0	2.50	-	Left in place	3878906.94	12360348.42	-	125	
Gun Butts Marsh	-	-	6/30/14	GB-G01	Analog (grid)	Bolt	1	-	NMRD	-	-	-	1	0.10	-	Removed	3878891.40	12360363.64	-	126	
Gun Butts Marsh	-	-	6/30/14	GB-G01	Analog (grid)	Non-MD SM	4	-	NMRD	-	-	-	3	0.10	-	Removed	3878898.66	12360377.73	-	127	
Gun Butts Marsh	-	-	6/30/14	GB-G01	Analog (grid)	Non-MD SM	1	-	NMRD	-	-	-	1	0.50	-	Removed	3878901.63	12360387.26	-	128	
Gun Butts Marsh	-	-	6/30/14	GB-G01	Analog (grid)	Cable	1	-	NMRD	-	-	-	0	20.00	-	Left in place	3878906.55	12360381.62	-	129	
Gun Butts Marsh	-	-	6/30/14	GB-G01	Analog (grid)	Projectile	1	-	MD	30-mm	Frag	Inert	1	0.10	-	Removed	3878906.31	12360362.87	-	130	
Gun Butts Marsh	-	-	6/30/14	GB-G01	Analog (grid)	Non-MD SM	1	-	NMRD	-	-	-	2	0.10	-	Removed	3878893.79	12360350.01	-	131	
Gun Butts Marsh	-	-	6/30/14	GB-G01	Analog (grid)	Construction Debris	1	-	NMRD	-	-	-	0	40.00	-	Left in place	3878876.93	12360366.99	-	132	
Gun Butts	MD/MEC Subtotals:						293							16							
Gun Butts	Subtotals:						467							184							
Pyro Burn Area																					
Pyro Burn Area	2	PBA-002	6/25/14	-	DGM	Non-MD SM	1	-	NMRD	-	-	-	4	0.10	6	Removed	3879578.00	12361140.00	352	1	
Pyro Burn Area	3	PBA-003	6/25/14	-	DGM	Non-MD SM	1	-	NMRD	-	-	-	3	0.02	5	Removed	3879571.75	12361143.00	7	1	
Pyro Burn Area	4	PBA-004	6/25/14	-	DGM	Wire	1	-	NMRD	-	-	-	0	0.01	5	Removed	3879684.00	12361145.00	56	1	
Pyro Burn Area	5	PBA-005	6/25/14	-	DGM	Non-MD SM	1	-	NMRD	-	-	-	3	0.02	1	Removed	3879650.25	12361148.25	63	1	
Pyro Burn Area	7	PBA-007	6/25/14	-	DGM	Non-MD SM	1	-	NMRD	-	-	-	1	0.01	1	Removed	3879680.50	12361148.75	177	1	
Pyro Burn Area	8	PBA-008	6/25/14	-	DGM	Non-MD SM	1	-	NMRD	-	-	-	0	0.02	1	Removed	3879651.75	12361149.00	46	1	
Pyro Burn Area	9	PBA-009	6/25/14	-	DGM	Nail	4	-	NMRD	-	-	-	2	0.02	4	Removed	3879594.50	12361149.25	77	1	
Pyro Burn Area	10	PBA-010	6/25/14	-	DGM	Nail	1	-	NMRD	-	-	-	0	0.01	4	Removed	3879659.25	12361150.75	6	1	
Pyro Burn Area	11	PBA-011	6/25/14	-	DGM	Non-MD SM	1	-	NMRD	-	-	-	0	2.00	18	Left in place	3879628.50	12361153.75	774	1	
Pyro Burn Area	12	PBA-012	6/25/14	-	DGM	Non-MD SM	1	-	NMRD	-	-	-	2	0.02	2	Removed	3879583.50	12361155.00	14	1	
Pyro Burn Area	13	PBA-013	6/25/14	-	DGM	Non-MD SM	1	-	NMRD	-	-	-	9	1.50	11	Left in place	3879632.25	12361155.00	6	1	
Pyro Burn Area	16	PBA-016	6/25/14	-	DGM	Rebar	1	-	NMRD	-	-	-	1	1.50	16	Left in place	3879629.00	12361157.25	3623	1	
Pyro Burn Area	17	PBA-017	6/25/14	-	DGM	Non-MD SM	1	-	NMRD	-	-	-	0	0.02	6	Removed	3879677.38	12361159.38	113	1	
Pyro Burn Area	18	PBA-018	6/25/14	-	DGM	Non-MD SM	1	-	NMRD	-	-	-	2	0.01	2	Removed	3879675.50	12361160.50	90	1	
Pyro Burn Area	22	PBA-022	6/25/14	-	DGM	Non-MD SM	1	-	NMRD	-	-	-	1	0.02	1	Removed	3879636.25	12361162.50	6	1	
Pyro Burn Area	24	PBA-024	6/25/14	-	DGM	Rebar	1	-	NMRD	-	-	-	0	1.50	11	Left in place	3879629.75	12361163.00	5390	1	
Pyro Burn Area	26	PBA-026	6/25/14	-	DGM	Non-MD SM	1	-	NMRD	-	-	-	4	5.00	16	Left in place	3879575.50	12361163.75	9	1	

DIG RESULTS
PROJECT 7 - VISITORS CENTER
JUNE/JULY 2014

Area/ID					Description					Munition			Measurements			Other				
AOC	Target No.	Target ID	Dig Date	Transect/ Grid ID	Detection Method	Item	Item Count	Comments	Item Category	MEC Description	MEC Part	MEC Condition	Depth (in)	Approximate Weight (lbs)	Length (in)	Status	Northing ¹	Easting ¹	Response Amplitude (mv)	Item No.
Pyro Burn Area	27	PBA-027	6/25/14	-	DGM	Non-MD SM	1	-	NMRD	-	-	-	8	3.50	18	Left in place	3879582.25	12361163.75	10479	1
Pyro Burn Area	28	PBA-028	6/25/14	-	DGM	Rebar	1	-	NMRD	-	-	-	1	1.50	12	Left in place	3879632.50	12361163.75	4209	1
Pyro Burn Area	30	PBA-030	6/25/14	-	DGM	Non-MD SM	1	-	NMRD	-	-	-	3	0.02	3	Removed	3879669.75	12361167.50	27	1
Pyro Burn Area	31	PBA-031	6/25/14	-	DGM	Non-MD SM	1	-	NMRD	-	-	-	6	4.50	19	Left in place	3879593.75	12361168.25	538	1
Pyro Burn Area	32	PBA-032	6/25/14	-	DGM	Non-MD SM	1	-	NMRD	-	-	-	8	5.00	12	Left in place	3879579.00	12361168.50	1246	1
Pyro Burn Area	33	PBA-033	6/25/14	-	DGM	Non-MD SM	1	-	NMRD	-	-	-	6	5.00	19	Left in place	3879595.50	12361168.50	423	1
Pyro Burn Area	36	PBA-036	6/25/14	-	DGM	Nail	1	-	NMRD	-	-	-	1	0.01	4	Removed	3879634.50	12361172.00	15	1
Pyro Burn Area	37	PBA-037	6/25/14	-	DGM	Nail	1	-	NMRD	-	-	-	2	0.01	4	Removed	3879583.25	12361173.00	6	1
Pyro Burn Area	38	PBA-038	6/25/14	-	DGM	Non-MD SM	1	-	NMRD	-	-	-	2	0.02	1	Removed	3879662.50	12361173.50	352	1
Pyro Burn Area	39	PBA-039	6/25/14	-	DGM	Non-MD SM	1	-	NMRD	-	-	-	1	0.50	5	Removed	3879679.00	12361173.50	35	1
Pyro Burn Area	40	PBA-040	6/25/14	-	DGM	Non-MD SM	1	-	NMRD	-	-	-	2	0.50	4	Removed	3879679.00	12361175.25	73	1
Pyro Burn Area	41	PBA-041	6/25/14	-	DGM	Non-MD SM	1	-	NMRD	-	-	-	1	5.00	26	Left in place	3879623.00	12361183.00	10947	1
Pyro Burn Area	45	PBA-045	6/25/14	-	DGM	Non-MD SM	1	-	NMRD	-	-	-	2	1.50	6	Removed	3879687.25	12361185.00	178	1
Pyro Burn Area	46	PBA-046	6/25/14	-	DGM	Non-MD SM	1	-	NMRD	-	-	-	0	0.02	3	Removed	3879607.00	12361185.25	13	1
Pyro Burn Area	49	PBA-049	6/25/14	-	DGM	Survey Monument	1	-	NMRD	-	-	-	0	5.00	16	Removed	3879649.50	12361188.75	982	1
Pyro Burn Area	51	PBA-051	6/25/14	-	DGM	Nail	1	-	NMRD	-	-	-	8	0.01	4	Removed	3879592.75	12361190.50	21	1
Pyro Burn Area	52	PBA-052	6/25/14	-	DGM	Non-MD SM	1	-	NMRD	-	-	-	1	0.02	1	Removed	3879648.75	12361193.00	41	1
Pyro Burn Area	53	PBA-053	6/25/14	-	DGM	Non-MD SM	1	-	NMRD	-	-	-	8	20.00	29	Left in place	3879598.00	12361195.25	11048	1
Pyro Burn Area	54	PBA-054	6/25/14	-	DGM	Non-MD SM	1	-	NMRD	-	-	-	1	0.50	4	Removed	3879672.50	12361195.50	7	1
Pyro Burn Area	55	PBA-055	6/25/14	-	DGM	Non-MD SM	1	-	NMRD	-	-	-	2	1.50	8	Removed	3879664.50	12361197.38	10623	1
Pyro Burn Area	56	PBA-056	6/25/14	-	DGM	Non-MD SM	1	-	NMRD	-	-	-	2	0.10	3	Removed	3879589.00	12361198.00	8	1
Pyro Burn Area	57	PBA-057	6/25/14	-	DGM	Non-MD SM	1	-	NMRD	-	-	-	1	1.00	3	Removed	3879673.25	12361198.25	49	1
Pyro Burn Area	65	PBA-065	6/25/14	-	DGM	Non-MD SM	1	-	NMRD	-	-	-	1	0.50	6	Removed	3879647.00	12361202.75	80	1
Pyro Burn Area	67	PBA-067	6/25/14	-	DGM	Pipe	1	1x4 pipe	NMRD	-	-	-	3	0.10	4	Removed	3879562.50	12361203.50	217	1
Pyro Burn Area	70	PBA-070	6/25/14	-	DGM	Non-MD SM	1	-	NMRD	-	-	-	1	0.50	4	Removed	3879647.25	12361205.75	28	1
Pyro Burn Area	73	PBA-073	6/25/14	-	DGM	Non-MD SM	1	-	NMRD	-	-	-	1	0.02	1	Removed	3879663.50	12361207.00	93	1
Pyro Burn Area	76	PBA-076	6/25/14	-	DGM	Non-MD SM	1	-	NMRD	-	-	-	1	1.50	16	Removed	3879649.25	12361208.00	9	1
Pyro Burn Area	79	PBA-079	6/25/14	-	DGM	Non-MD SM	1	-	NMRD	-	-	-	1	0.50	4	Removed	3879689.00	12361210.00	9	1
Pyro Burn Area	85	PBA-085	6/25/14	-	DGM	Non-MD SM	1	-	NMRD	-	-	-	2	0.50	4	Removed	3879691.00	12361213.25	2135	1
Pyro Burn Area	87	PBA-087	6/25/14	-	DGM	Non-MD SM	1	-	NMRD	-	-	-	2	1.50	7	Removed	3879656.25	12361214.25	11	1
Pyro Burn Area	92	PBA-092	6/25/14	-	DGM	Non-MD SM	1	-	NMRD	-	-	-	3	1.50	5	Removed	3879655.75	12361217.50	6	1

DIG RESULTS
PROJECT 7 - VISITORS CENTER
JUNE/JULY 2014

Area/ID					Description					Munition			Measurements			Other				
AOC	Target No.	Target ID	Dig Date	Transect/ Grid ID	Detection Method	Item	Item Count	Comments	Item Category	MEC Description	MEC Part	MEC Condition	Depth (in)	Approximate Weight (lbs)	Length (in)	Status	Northing ¹	Easting ¹	Response Amplitude (mv)	Item No.
Pyro Burn Area	93	PBA-093	6/25/14	-	DGM	Non-MD SM	1	-	NMRD	-	-	-	0	0.01	1	Removed	3879682.50	12361217.50	10	1
Pyro Burn Area	97	PBA-097	6/25/14	-	DGM	Non-MD SM	1	-	NMRD	-	-	-	0	0.02	2	Removed	3879685.13	12361218.50	20	1
Pyro Burn Area	1	PBA-100	6/25/14	-	DGM	Non-MD SM	1	-	NMRD	-	-	-	2	0.02	4	Removed	3879584.25	12361137.25	78	1
Pyro Burn Area	104	PBA-104	6/25/14	-	DGM	Non-MD SM	1	-	NMRD	-	-	-	3	0.10	3	Removed	3879583.50	12361222.50	22	1
Pyro Burn Area	105	PBA-105	6/25/14	-	DGM	Non-MD SM	1	-	NMRD	-	-	-	0	0.10	2	Removed	3879692.25	12361222.75	35	1
Pyro Burn Area	107	PBA-107	6/25/14	-	DGM	Non-MD SM	1	-	NMRD	-	-	-	1	1.00	5	Removed	3879660.00	12361223.75	40	1
Pyro Burn Area	108	PBA-108	6/25/14	-	DGM	Non-MD SM	1	-	NMRD	-	-	-	1	0.10	1	Removed	3879697.50	12361224.50	876	1
Pyro Burn Area	109	PBA-109	6/25/14	-	DGM	Non-MD SM	1	-	NMRD	-	-	-	0	0.02	1	Removed	3879577.50	12361225.25	14	1
Pyro Burn Area	112	PBA-112	6/25/14	-	DGM	Non-MD SM	1	-	NMRD	-	-	-	1	0.02	1	Removed	3879691.50	12361225.50	21	1
Pyro Burn Area	113	PBA-113	6/25/14	-	DGM	Non-MD SM	1	-	NMRD	-	-	-	0	0.10	3	Removed	3879686.00	12361226.75	16	1
Pyro Burn Area	119	PBA-119	6/25/14	-	DGM	Wire	3	-	NMRD	-	-	-	0	0.10	4	Removed	3879580.75	12361231.75	81	1
Pyro Burn Area	120	PBA-120	6/25/14	-	DGM	Wire	3	-	NMRD	-	-	-	0	0.02	9	Removed	3879584.50	12361232.00	83	1
Pyro Burn Area	123	PBA-123	6/25/14	-	DGM	Non-MD SM	1	-	NMRD	-	-	-	0	0.02	1	Removed	3879666.50	12361233.75	754	1
Pyro Burn Area	124	PBA-124	6/25/14	-	DGM	Nail	3	-	NMRD	-	-	-	0	0.02	4	Removed	3879565.00	12361234.00	11	1
Pyro Burn Area	126	PBA-126	6/25/14	-	DGM	Wire	1	-	NMRD	-	-	-	0	0.02	6	Removed	3879578.50	12361234.75	11	1
Pyro Burn Area	127	PBA-127	6/25/14	-	DGM	Non-MD SM	1	-	NMRD	-	-	-	0	0.10	1	Removed	3879669.50	12361235.00	2243	1
Pyro Burn Area	129	PBA-129	6/25/14	-	DGM	Non-MD SM	1	-	NMRD	-	-	-	0	1.00	6	Removed	3879645.75	12361236.00	969	1
Pyro Burn Area	130	PBA-130	6/25/14	-	DGM	Non-MD SM	1	-	NMRD	-	-	-	0	0.01	1	Removed	3879665.75	12361236.50	555	1
Pyro Burn Area	131	PBA-131	6/25/14	-	DGM	Non-MD SM	1	-	NMRD	-	-	-	0	0.01	1	Removed	3879667.75	12361237.00	1371	1
Pyro Burn Area	134	PBA-134	6/25/14	-	DGM	Rebar	1	-	NMRD	-	-	-	0	1.00	6	Removed	3879670.00	12361238.75	1236	1
Pyro Burn Area	135	PBA-135	6/25/14	-	DGM	Wire	1	-	NMRD	-	-	-	1	0.10	10	Removed	3879583.50	12361239.25	13	1
Pyro Burn Area	139	PBA-139	6/25/14	-	DGM	Nail	1	-	NMRD	-	-	-	0	0.02	10	Removed	3879582.25	12361242.75	24	1
Pyro Burn Area	143	PBA-143	6/25/14	-	DGM	Wire	1	-	NMRD	-	-	-	0	0.01	5	Removed	3879595.25	12361245.50	2486	1
Pyro Burn Area	144	PBA-144	6/25/14	-	DGM	Non-MD SM	1	-	NMRD	-	-	-	0	0.01	1	Removed	3879648.25	12361245.50	1055	1
Pyro Burn Area	145	PBA-145	6/25/14	-	DGM	Non-MD SM	1	-	NMRD	-	-	-	0	0.02	2	Removed	3879668.00	12361246.25	3157	1
Pyro Burn Area	149	PBA-149	6/25/14	-	DGM	Non-MD SM	1	-	NMRD	-	-	-	0	0.02	1	Removed	3879590.25	12361247.75	51	1
Pyro Burn Area	150	PBA-150	6/25/14	-	DGM	Non-MD SM	1	-	NMRD	-	-	-	0	0.02	1	Removed	3879657.25	12361248.00	40	1
Pyro Burn Area	151	PBA-151	6/25/14	-	DGM	Non-MD SM	1	-	NMRD	-	-	-	1	0.02	1	Removed	3879596.25	12361249.50	59	1
Pyro Burn Area	152	PBA-152	6/25/14	-	DGM	Non-MD SM	1	-	NMRD	-	-	-	0	0.01	1	Removed	3879599.00	12361250.00	49	1
Pyro Burn Area	153	PBA-153	6/25/14	-	DGM	Non-MD SM	1	-	NMRD	-	-	-	2	0.02	1	Removed	3879640.75	12361250.25	307	1
Pyro Burn Area	157	PBA-157	6/25/14	-	DGM	Non-MD SM	1	-	NMRD	-	-	-	2	0.02	1	Removed	3879689.00	12361252.00	10	1

DIG RESULTS
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Area/ID					Description					Munition			Measurements			Other				
AOC	Target No.	Target ID	Dig Date	Transect/ Grid ID	Detection Method	Item	Item Count	Comments	Item Category	MEC Description	MEC Part	MEC Condition	Depth (in)	Approximate Weight (lbs)	Length (in)	Status	Northing ¹	Easting ¹	Response Amplitude (mv)	Item No.
Pyro Burn Area	158	PBA-158	6/25/14	-	DGM	Wire	1	-	NMRD	-	-	-	0	0.10	6	Removed	3879608.75	12361252.25	23	1
Pyro Burn Area	159	PBA-159	6/25/14	-	DGM	Non-MD SM	1	-	NMRD	-	-	-	0	0.02	1	Removed	3879612.00	12361252.25	41	1
Pyro Burn Area	160	PBA-160	6/25/14	-	DGM	Non-MD SM	1	-	NMRD	-	-	-	0	0.02	1	Removed	3879619.50	12361252.25	79	1
Pyro Burn Area	161	PBA-161	6/25/14	-	DGM	Wire	1	-	NMRD	-	-	-	0	0.02	6	Removed	3879594.50	12361252.75	10	1
Pyro Burn Area	162	PBA-162	6/25/14	-	DGM	Wire	1	-	NMRD	-	-	-	0	0.01	6	Removed	3879600.75	12361253.25	7	1
Pyro Burn Area	166	PBA-166	6/25/14	-	DGM	Wire	1	-	NMRD	-	-	-	0	0.02	5	Removed	3879605.25	12361255.00	21	1
Pyro Burn Area	168	PBA-168	6/25/14	-	DGM	Wire	1	-	NMRD	-	-	-	0	0.02	6	Removed	3879608.25	12361255.75	45	1
Pyro Burn Area	169	PBA-169	6/25/14	-	DGM	Non-MD SM	1	-	NMRD	-	-	-	0	0.01	1	Removed	3879633.75	12361256.00	33	1
Pyro Burn Area	170	PBA-170	6/25/14	-	DGM	Non-MD SM	1	-	NMRD	-	-	-	2	0.10	1	Removed	3879610.50	12361256.25	9	1
Pyro Burn Area	171	PBA-171	6/25/14	-	DGM	Non-MD SM	1	-	NMRD	-	-	-	0	3.50	24	Removed	3879630.25	12361256.25	92	1
Pyro Burn Area	173	PBA-173	6/25/14	-	DGM	Non-MD SM	1	-	NMRD	-	-	-	0	0.01	1	Removed	3879637.00	12361259.00	302	1
Pyro Burn Area	175	PBA-175	6/25/14	-	DGM	Non-MD SM	1	-	NMRD	-	-	-	2	0.02	1	Removed	3879655.25	12361259.50	94	1
Pyro Burn Area	176	PBA-176	6/25/14	-	DGM	Non-MD SM	1	-	NMRD	-	-	-	1	0.01	1	Removed	3879651.25	12361261.13	66	1
Pyro Burn Area	177	PBA-177	6/25/14	-	DGM	Non-MD SM	1	-	NMRD	-	-	-	0	0.01	1	Removed	3879644.25	12361267.00	50	1
Pyro Burn Area	178	PBA-178	6/25/14	-	DGM	Non-MD SM	1	-	NMRD	-	-	-	0	0.01	1	Removed	3879550.50	12361269.75	16	1
Pyro Burn Area	179	PBA-179	6/25/14	-	DGM	Non-MD SM	1	-	NMRD	-	-	-	0	0.02	1	Removed	3879550.50	12361272.00	6	1
Pyro Burn Area	182	PBA-182	6/25/14	-	DGM	Non-MD SM	1	-	NMRD	-	-	-	0	0.01	1	Removed	3879548.50	12361277.50	16	1
Pyro Burn Area	185	PBA-185	6/25/14	-	DGM	Non-MD SM	1	-	NMRD	-	-	-	1	0.01	1	Removed	3879693.00	12361282.50	75	1
Pyro Burn Area	190	PBA-190	6/25/14	-	DGM	Nail	1	-	NMRD	-	-	-	0	0.02	4	Removed	3879572.00	12361318.00	18	1
Pyro Burn Area	191	PBA-191	6/25/14	-	DGM	Nail	1	-	NMRD	-	-	-	0	0.01	4	Removed	3879570.50	12361318.25	13	1
Pyro Burn Area	192	PBA-192	6/25/14	-	DGM	Nail	1	-	NMRD	-	-	-	0	0.01	4	Removed	3879601.00	12361333.50	17	1
Pyro Burn Area	1	PBA-G01-1	7/1/14	-	DGM	Non-MD SM	1	-	NMRD	-	-	-	1	0.02	1	Removed	3879755.50	12361168.50	48	1
Pyro Burn Area	2	PBA-G01-2	7/1/14	-	DGM	Non-MD SM	1	-	NMRD	-	-	-	1	0.02	1	Removed	3879756.25	12361172.00	8	1
Pyro Burn Area	3	PBA-G01-3	7/1/14	-	DGM	QC 1" x 4" pipe	1	-	Seed	-	-	-	1	0.50	4	Removed	3879770.31	12361188.32	60	1
Pyro Burn Area	1	PBA-G02-1	7/1/14	-	DGM	QC 1" x 4" pipe	1	-	Seed	-	-	-	2	0.50	4	Removed	3879761.00	12361377.75	114	1
Pyro Burn Area	3	PBA-G02-3	7/1/14	-	DGM	Non-MD SM	1	-	NMRD	-	-	-	2	0.02	1	Removed	3879755.66	12361380.08	4	1
Pyro Burn Area	2	PBA-G03-2	7/1/14	-	DGM	QC 1" x 4" pipe	1	-	Seed	-	-	-	2	0.50	1	Removed	3879610.10	12361435.71	75	1
Pyro Burn Area	1	PBA-G04-1	7/1/14	-	DGM	QC 1" x 4" pipe	1	-	Seed	-	-	-	2	0.02	4	Removed	3879455.00	12361380.75	376	1
Pyro Burn Area	1	PBA-G05-1	7/1/14	-	DGM	QC 1" x 4" pipe	1	-	Seed	-	-	-	2	0.50	0	Removed	3879399.75	12361195.75	101	1
Pyro Burn Area	1	PBA-G06-1	7/1/14	-	DGM	Non-MD SM	1	-	NMRD	-	-	-	2	0.02	1	Removed	3879447.50	12361036.50	6	1
Pyro Burn Area	3	PBA-G06-3	7/1/14	-	DGM	QC 1" x 4" pipe	1	-	Seed	-	-	-	2	0.50	3	Removed	3879473.50	12361078.25	62	1

DIG RESULTS
PROJECT 7 - VISITORS CENTER
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Area/ID					Description					Munition			Measurements			Other				
AOC	Target No.	Target ID	Dig Date	Transect/ Grid ID	Detection Method	Item	Item Count	Comments	Item Category	MEC Description	MEC Part	MEC Condition	Depth (in)	Approximate Weight (lbs)	Length (in)	Status	Northing ¹	Easting ¹	Response Amplitude (mv)	Item No.
Pyro Burn Area	3	PBA-G06-3	7/1/14	-	DGM	QC 1" x 4" pipe	1	-	Seed	-	-	-	3	0.50	4	Removed	3879473.50	12361078.25	62	2
Pyro Burn Area	1	PBA-G07-1	7/1/14	-	DGM	QC 1" x 4" pipe	1	-	Seed	-	-	-	3	0.50	4	Removed	3879571.00	12361028.00	176	1
Pyro Burn Area	1	PBA-G08-1	7/1/14	-	DGM	QC 1" x 4" pipe	1	-	Seed	-	-	-	2	0.50	4	Removed	3879632.20	12361016.20	61	1
Pyro Burn Area	-	-	7/1/14	PBA-AT01	Analog (transect)	Non-MD SM	1	-	NMRD	-	-	-	3	0.10	-	Removed	3879766.54	12361097.48	-	1001
Pyro Burn Area	-	-	7/1/14	PBA-AT01	Analog (transect)	Non-MD SM	1	-	NMRD	-	-	-	2	0.10	-	Removed	3879765.29	12361092.32	-	1002
Pyro Burn Area	-	-	7/1/14	PBA-AT01	Analog (transect)	Non-MD SM	1	-	NMRD	-	-	-	3	0.10	-	Removed	3879767.01	12361089.38	-	1003
Pyro Burn Area	-	-	7/1/14	PBA-AT01	Analog (transect)	Non-MD SM	1	-	NMRD	-	-	-	2	0.10	-	Removed	3879751.20	12361073.45	-	1004
Pyro Burn Area	MD Sub Totals:						0							0.00						
Pyro Burn Area	Sub Totals:						Digs:	126							86.13					
Visitor Center																				
Visitor Center	9	VC-0009	6/23/14	-	DGM	Other	1	utility	NMRD	-	-	-	0	0.00	0	Left in place	3879229.00	12360040.00	27	1
Visitor Center	13	VC-0013	6/23/14	-	DGM	Other	1	utility	NMRD	-	-	-	0	0.00	6	Left in place	3879244.50	12360048.50	23	1
Visitor Center	17	VC-0017	6/23/14	-	DGM	Other	1	utility	NMRD	-	-	-	18	0.00	0	Left in place	3879269.00	12360055.50	28	1
Visitor Center	22	VC-0022	6/23/14	-	DGM	Other	1	utility	NMRD	-	-	-	0	0.00	0	Left in place	3879285.25	12360057.50	15	1
Visitor Center	29	VC-0029	6/23/14	-	DGM	Nail	1	-	NMRD	-	-	-	6	0.01	4	Removed	3879173.00	12360061.50	11	1
Visitor Center	68	VC-0068	6/23/14	-	DGM	Other	1	utility	NMRD	-	-	-	18	0.00	0	Left in place	3879301.00	12360074.50	9	1
Visitor Center	123	VC-0123	6/23/14	-	DGM	Other	1	utility	NMRD	-	-	-	18	0.00	0	Left in place	3879215.25	12360094.25	11	1
Visitor Center	144	VC-0144	6/23/14	-	DGM	Nail	1	-	NMRD	-	-	-	4	0.02	4	Removed	3879272.75	12360100.75	10	1
Visitor Center	151	VC-0151	6/23/14	-	DGM	Non-MD SM	1	-	NMRD	-	-	-	4	0.10	6	Removed	3879311.75	12360103.25	7	1
Visitor Center	178	VC-0178	6/23/14	-	DGM	Nail	1	nail	NMRD	-	-	-	4	0.02	4	Removed	3879276.00	12360110.25	17	1
Visitor Center	201	VC-0201	6/23/14	-	DGM	Other	1	1x4 pipe	NMRD	-	-	-	3	1.00	4	Removed	3879187.75	12360114.00	264	1
Visitor Center	214	VC-0214	6/23/14	-	DGM	Nail	1	-	NMRD	-	-	-	2	0.01	4	Removed	3879352.75	12360117.50	7	1
Visitor Center	215	VC-0215	6/23/14	-	DGM	Nail	1	-	NMRD	-	-	-	4	0.02	4	Removed	3879335.00	12360117.75	26	1
Visitor Center	240	VC-0240	6/23/14	-	DGM	Nail Pit	1	nails	NMRD	-	-	-	4	0.10	4	Removed	3879250.50	12360122.50	7	1
Visitor Center	257	VC-0257	6/23/14	-	DGM	Nail	1	-	NMRD	-	-	-	3	0.01	4	Removed	3879245.00	12360125.75	7	1
Visitor Center	269	VC-0269	6/23/14	-	DGM	Other	1	utility power line	NMRD	-	-	-	18	0.00	0	Left in place	3879432.75	12360129.50	33	1
Visitor Center	275	VC-0275	6/23/14	-	DGM	Rebar	1	-	NMRD	-	-	-	4	2.00	30	Removed	3879288.25	12360130.25	546	1
Visitor Center	287	VC-0287	6/23/14	-	DGM	Rebar	1	-	NMRD	-	-	-	4	1.00	10	Removed	3879181.75	12360132.75	184	1
Visitor Center	295	VC-0295	6/23/14	-	DGM	Other	1	utility	NMRD	-	-	-	18	0.00	0	Left in place	3879279.50	12360134.75	40	1
Visitor Center	308	VC-0308	6/23/14	-	DGM	Nail	1	-	NMRD	-	-	-	4	0.01	4	Removed	3879348.75	12360137.50	15	1

DIG RESULTS
PROJECT 7 - VISITORS CENTER
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Area/ID					Description					Munition			Measurements			Other				
AOC	Target No.	Target ID	Dig Date	Transect/ Grid ID	Detection Method	Item	Item Count	Comments	Item Category	MEC Description	MEC Part	MEC Condition	Depth (in)	Approximate Weight (lbs)	Length (in)	Status	Northing ¹	Easting ¹	Response Amplitude (mv)	Item No.
Visitor Center	362	VC-0362	6/23/14	-	DGM	Other	1	grounding rod and nail	NMRD	-	-	-	6	1.00	10	Removed	3879305.75	12360146.63	11	1
Visitor Center	372	VC-0372	6/23/14	-	DGM	Nail Pit	1	-	NMRD	-	-	-	3	0.50	4	Removed	3879172.25	12360148.00	129	1
Visitor Center	383	VC-0383	6/23/14	-	DGM	Wire	1	-	NMRD	-	-	-	3	0.10	5	Removed	3879313.00	12360149.75	208	1
Visitor Center	460	VC-0460	6/23/14	-	DGM	Nail	1	-	NMRD	-	-	-	3	0.01	4	Removed	3879336.50	12360159.75	27	1
Visitor Center	485	VC-0485	6/23/14	-	DGM	Other	1	utility	NMRD	-	-	-	18	0.00	0	Left in place	3879513.00	12360164.25	19	1
Visitor Center	490	VC-0490	6/23/14	-	DGM	Non-MD SM	1	-	NMRD	-	-	-	2	0.10	3	Removed	3879339.25	12360166.00	6	1
Visitor Center	492	VC-0492	6/23/14	-	DGM	Nail	1	-	NMRD	-	-	-	4	0.02	4	Removed	3879217.25	12360166.25	21	1
Visitor Center	544	VC-0544	6/23/14	-	DGM	Nail	1	-	NMRD	-	-	-	6	0.01	4	Removed	3879538.00	12360175.25	8	1
Visitor Center	549	VC-0549	6/23/14	-	DGM	Other	1	grease gun handle	NMRD	-	-	-	4	1.00	13	Removed	3879311.25	12360175.75	602	1
Visitor Center	579	VC-0579	6/23/14	-	DGM	Frag	1	30mm fragments	MD	-	-	Inert	6	0.10	3	Removed	3879255.00	12360181.25	10	1
Visitor Center	581	VC-0581	6/23/14	-	DGM	Rebar	1	-	NMRD	-	-	-	6	1.50	10	Removed	3879155.75	12360181.75	214	1
Visitor Center	642	VC-0642	6/23/14	-	DGM	Other	1	drill bit	NMRD	-	-	-	4	0.02	6	Removed	3879325.25	12360190.00	111	1
Visitor Center	649	VC-0649	6/23/14	-	DGM	Nail	1	-	NMRD	-	-	-	2	0.01	4	Removed	3879119.50	12360191.38	23	1
Visitor Center	671	VC-0671	6/23/14	-	DGM	Nail	1	-	NMRD	-	-	-	3	0.01	4	Removed	3879211.25	12360193.25	21	1
Visitor Center	672	VC-0672	6/23/14	-	DGM	Wire	1	-	NMRD	-	-	-	4	0.10	18	Removed	3879221.50	12360193.50	6	1
Visitor Center	674	VC-0674	6/23/14	-	DGM	Wire	1	-	NMRD	-	-	-	6	0.02	9	Removed	3879124.75	12360194.00	94	1
Visitor Center	707	VC-0707	6/23/14	-	DGM	Wire	1	-	NMRD	-	-	-	4	0.10	9	Removed	3879275.50	12360199.00	11	1
Visitor Center	720	VC-0720	6/23/14	-	DGM	Wire	1	wire	NMRD	-	-	-	0	0.10	6	Removed	3879122.00	12360200.75	80	1
Visitor Center	723	VC-0723	6/23/14	-	DGM	Wire	1	-	NMRD	-	-	-	2	0.00	30	Removed	3879611.00	12360200.75	421	1
Visitor Center	731	VC-0731	6/23/14	-	DGM	Nail	1	-	NMRD	-	-	-	4	0.01	3	Removed	3879589.25	12360202.25	9	1
Visitor Center	741	VC-0741	6/23/14	-	DGM	Other	1	water line	NMRD	-	-	-	18	0.00	0	Left in place	3879200.25	12360204.00	155	1
Visitor Center	762	VC-0762	6/23/14	-	DGM	Rebar	1	-	NMRD	-	-	-	8	2.50	18	Removed	3879215.50	12360206.50	14	1
Visitor Center	793	VC-0793	6/23/14	-	DGM	Non-MD SM	1	-	NMRD	-	-	-	2	0.50	6	Removed	3879619.75	12360210.75	129	1
Visitor Center	801	VC-0801	6/23/14	-	DGM	Wire	1	-	NMRD	-	-	-	3	0.10	13	Removed	3879274.00	12360211.50	37	1
Visitor Center	807	VC-0807	6/23/14	-	DGM	Wire	1	wire	NMRD	-	-	-	0	0.10	6	Removed	3879187.00	12360212.50	21	1
Visitor Center	816	VC-0816	6/23/14	-	DGM	Wire	1	wire	NMRD	-	-	-	4	0.10	6	Removed	3879269.25	12360213.75	17	1
Visitor Center	862	VC-0862	6/23/14	-	DGM	Nail	1	-	NMRD	-	-	-	4	0.01	4	Removed	3879214.25	12360220.25	13	1
Visitor Center	871	VC-0871	6/23/14	-	DGM	Other	1	old brush cutter	NMRD	-	-	-	0	1.50	10	Removed	3879174.25	12360221.00	341	1
Visitor Center	872	VC-0872	6/23/14	-	DGM	Other	1	utility/sign pole	NMRD	-	-	-	9	0.01	0	Left in place	3879624.75	12360221.00	1144	1
Visitor Center	893	VC-0893	6/23/14	-	DGM	Nail	1	-	NMRD	-	-	-	4	0.01	4	Removed	3879227.75	12360223.50	15	1

DIG RESULTS
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Area/ID					Description					Munition			Measurements			Other				
AOC	Target No.	Target ID	Dig Date	Transect/ Grid ID	Detection Method	Item	Item Count	Comments	Item Category	MEC Description	MEC Part	MEC Condition	Depth (in)	Approximate Weight (lbs)	Length (in)	Status	Northing ¹	Easting ¹	Response Amplitude (mv)	Item No.
Visitor Center	895	VC-0895	6/23/14	-	DGM	Nail	1	-	NMRD	-	-	-	4	0.01	4	Removed	3879536.00	12360223.75	12	1
Visitor Center	898	VC-0898	6/23/14	-	DGM	Nail	1	nails	NMRD	-	-	-	3	0.02	4	Removed	3879190.50	12360224.00	62	1
Visitor Center	905	VC-0905	6/23/14	-	DGM	Other	1	utility	NMRD	-	-	-	18	0.00	0	Left in place	3879634.00	12360224.75	13	1
Visitor Center	927	VC-0927	6/23/14	-	DGM	Wire	1	-	NMRD	-	-	-	4	0.10	9	Removed	3879268.75	12360227.75	38	1
Visitor Center	959	VC-0959	6/23/14	-	DGM	Rebar	1	-	NMRD	-	-	-	8	1.00	8	Removed	3879248.00	12360231.75	349	1
Visitor Center	984	VC-0984	6/23/14	-	DGM	Other	1	20 mm link	NMRD	-	-	-	24	0.10	3	Removed	3879179.50	12360235.75	89	1
Visitor Center	1005	VC-1005	6/23/14	-	DGM	Other	1	utility	NMRD	-	-	-	4	0.01	0	Left in place	3879634.50	12360237.25	25	1
Visitor Center	1006	VC-1006	6/23/14	-	DGM	Other	1	utility	NMRD	-	-	-	4	0.00	0	Left in place	3879657.50	12360237.25	24	1
Visitor Center	1059	VC-1059	6/23/14	-	DGM	Other	1	utility/water line	NMRD	-	-	-	18	0.00	0	Left in place	3879506.50	12360243.75	120	1
Visitor Center	1279	VC-1279	6/23/14	-	DGM	Other	1	1x4 pipe	NMRD	-	-	-	3	1.00	4	Removed	3879365.50	12360276.25	135	1
Visitor Center	1302	VC-1302	6/23/14	-	DGM	Other	1	utility	NMRD	-	-	-	8	0.01	0	Left in place	3879614.00	12360278.75	17	1
Visitor Center	1376	VC-1376	6/23/14	-	DGM	Non-MD SM	1	-	NMRD	-	-	-	3	0.50	5	Removed	3879318.00	12360285.75	23	1
Visitor Center	1387	VC-1387	6/23/14	-	DGM	Rebar	1	-	NMRD	-	-	-	6	2.00	18	Removed	3879325.25	12360286.75	107	1
Visitor Center	1404	VC-1404	6/23/14	-	DGM	Rebar	1	-	NMRD	-	-	-	6	2.00	18	Removed	3879281.50	12360289.00	65	1
Visitor Center	1409	VC-1409	6/23/14	-	DGM	Rebar	1	-	NMRD	-	-	-	3	1.50	8	Removed	3879359.75	12360289.25	199	1
Visitor Center	1426	VC-1426	6/23/14	-	DGM	Non-MD SM	1	-	NMRD	-	-	-	6	0.50	4	Removed	3879290.25	12360290.75	79	1
Visitor Center	1473	VC-1473	6/23/14	-	DGM	Nail	1	-	NMRD	-	-	-	6	0.01	4	Removed	3879310.50	12360295.25	7	1
Visitor Center	1571	VC-1571	6/23/14	-	DGM	Wire	1	-	NMRD	-	-	-	2	0.01	6	Removed	3879511.00	12360304.25	743	1
Visitor Center	1606	VC-1606	6/23/14	-	DGM	Rebar	1	-	NMRD	-	-	-	3	1.50	18	Removed	3879293.75	12360308.25	195	1
Visitor Center	1646	VC-1646	6/23/14	-	DGM	Other	1	utility	NMRD	-	-	-	0	0.00	0	Left in place	3879445.75	12360311.75	12	1
Visitor Center	1726	VC-1726	6/23/14	-	DGM	Other	1	utility	NMRD	-	-	-	18	0.00	0	Left in place	3879466.25	12360321.00	10	1
Visitor Center	1753	VC-1753	6/23/14	-	DGM	Other	1	metal culvert	NMRD	-	-	-	0	16.00	18	Left in place	3879559.00	12360323.50	275	1
Visitor Center	1816	VC-1816	6/23/14	-	DGM	Rebar	1	-	NMRD	-	-	-	6	1.50	18	Removed	3879501.00	12360328.25	197	1
Visitor Center	1867	VC-1867	6/23/14	-	DGM	Other	1	cable clamp	NMRD	-	-	-	3	0.02	3	Removed	3879576.75	12360331.75	41	1
Visitor Center	1877	VC-1877	6/23/14	-	DGM	Nail	1	-	NMRD	-	-	-	3	0.01	4	Removed	3879384.75	12360332.50	11	1
Visitor Center	1907	VC-1907	6/23/14	-	DGM	Non-MD SM	1	metals	NMRD	-	-	-	8	0.50	5	Removed	3879397.25	12360334.25	25	1
Visitor Center	1978	VC-1978	6/23/14	-	DGM	Nail	1	-	NMRD	-	-	-	4	0.01	4	Removed	3879436.00	12360340.50	8	1
Visitor Center	1998	VC-1998	6/23/14	-	DGM	Non-MD SM	1	-	NMRD	-	-	-	6	0.10	4	Removed	3879493.50	12360342.25	26	1
Visitor Center	2022	VC-2022	6/23/14	-	DGM	Other	1	pliers	NMRD	-	-	-	3	0.10	8	Removed	3879551.00	12360344.00	115	1
Visitor Center	2064	VC-2064	6/23/14	-	DGM	Wire	1	-	NMRD	-	-	-	1	0.02	12	Removed	3879600.25	12360348.50	522	1
Visitor Center	2070	VC-2070	6/23/14	-	DGM	Nail	1	-	NMRD	-	-	-	2	0.01	4	Removed	3879516.75	12360348.75	8	1

DIG RESULTS
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Area/ID					Description					Munition			Measurements			Other				
AOC	Target No.	Target ID	Dig Date	Transect/ Grid ID	Detection Method	Item	Item Count	Comments	Item Category	MEC Description	MEC Part	MEC Condition	Depth (in)	Approximate Weight (lbs)	Length (in)	Status	Northing ¹	Easting ¹	Response Amplitude (mv)	Item No.
Visitor Center	2122	VC-2122	6/23/14	-	DGM	Other	1	utility	NMRD	-	-	-	18	0.00	0	Left in place	3879415.75	12360353.75	48	1
Visitor Center	2124	VC-2124	6/23/14	-	DGM	Nail	1	-	NMRD	-	-	-	1	0.01	4	Removed	3879457.00	12360353.75	11	1
Visitor Center	2264	VC-2264	6/23/14	-	DGM	Other	1	1x8 pipe	NMRD	-	-	-	6	2.50	7	Removed	3879492.50	12360365.50	86	1
Visitor Center	2309	VC-2309	6/23/14	-	DGM	Nail	1	-	NMRD	-	-	-	3	0.01	4	Removed	3879503.25	12360369.50	6	1
Visitor Center	2313	VC-2313	6/23/14	-	DGM	Barbed-wire	1	-	NMRD	-	-	-	3	0.50	19	Removed	3879550.00	12360370.00	6	1
Visitor Center	2333	VC-2333	6/23/14	-	DGM	Non-MD SM	1	-	NMRD	-	-	-	6	3.50	6	Removed	3879513.25	12360371.25	211	1
Visitor Center	2345	VC-2345	6/23/14	-	DGM	Wire	1	-	NMRD	-	-	-	4	0.02	11	Removed	3879542.75	12360372.25	10	1
Visitor Center	2356	VC-2356	6/23/14	-	DGM	Nail	1	-	NMRD	-	-	-	4	0.01	4	Removed	3879507.00	12360373.25	7	1
Visitor Center	2409	VC-2409	6/23/14	-	DGM	Non-MD SM	1	-	NMRD	-	-	-	2	0.10	2	Removed	3879608.25	12360377.50	179	1
Visitor Center	2427	VC-2427	6/23/14	-	DGM	Wire	1	-	NMRD	-	-	-	3	0.02	7	Removed	3879470.38	12360379.00	86	1
Visitor Center	2533	VC-2533	6/23/14	-	DGM	Rebar	1	-	NMRD	-	-	-	4	2.00	18	Removed	3879509.25	12360387.00	18	1
Visitor Center	2645	VC-2645	6/23/14	-	DGM	Nail	1	-	NMRD	-	-	-	2	0.01	4	Removed	3879574.25	12360395.25	6	1
Visitor Center	2661	VC-2661	6/23/14	-	DGM	Wire	1	-	NMRD	-	-	-	4	0.50	11	Removed	3879449.50	12360396.00	17	1
Visitor Center	2691	VC-2691	6/23/14	-	DGM	Frag	1	-	MD	-	-	Inert	2	0.10	2	Removed	3879609.50	12360397.75	87	1
Visitor Center	2698	VC-2698	6/23/14	-	DGM	Non-MD SM	1	metal rod	NMRD	-	-	-	6	2.50	12	Removed	3879482.50	12360398.25	66	1
Visitor Center	2707	VC-2707	6/23/14	-	DGM	Rebar	1	-	NMRD	-	-	-	4	1.50	10	Removed	3879562.25	12360398.50	9	1
Visitor Center	2737	VC-2737	6/23/14	-	DGM	Non-MD SM	1	-	NMRD	-	-	-	4	1.00	5	Removed	3879529.00	12360400.75	65	1
Visitor Center	2845	VC-2845	6/23/14	-	DGM	Nail	1	-	NMRD	-	-	-	1	0.01	4	Removed	3879445.25	12360407.25	26	1
Visitor Center	2881	VC-2881	6/23/14	-	DGM	Nail	1	-	NMRD	-	-	-	1	0.50	4	Removed	3879557.50	12360409.75	15	1
Visitor Center	2931	VC-2931	6/23/14	-	DGM	Other	1	metal plate	NMRD	-	-	-	6	0.01	0	Left in place	3879409.00	12360413.50	170	1
Visitor Center	2941	VC-2941	6/23/14	-	DGM	Wire	1	-	NMRD	-	-	-	3	0.10	9	Removed	3879475.00	12360414.25	32	1
Visitor Center	2952	VC-2952	6/23/14	-	DGM	Nail	1	-	NMRD	-	-	-	3	0.01	4	Removed	3879535.25	12360414.75	40	1
Visitor Center	2992	VC-2992	6/23/14	-	DGM	Nail	1	-	NMRD	-	-	-	2	0.01	4	Removed	3879551.25	12360417.25	12	1
Visitor Center	3024	VC-3024	6/23/14	-	DGM	Other	1	utility/water line	NMRD	-	-	-	18	0.01	0	Left in place	3879418.25	12360419.00	24	1
Visitor Center	3049	VC-3049	6/23/14	-	DGM	Wire	1	-	NMRD	-	-	-	6	0.02	8	Removed	3879488.25	12360420.75	12	1
Visitor Center	3119	VC-3119	6/23/14	-	DGM	Frag	1	-	MD	-	-	Inert	4	0.02	2	Removed	3879537.50	12360425.00	6	1
Visitor Center	3146	VC-3146	6/23/14	-	DGM	Nail	1	light pole	NMRD	-	-	-	4	0.02	4	Removed	3879589.50	12360427.25	148	1
Visitor Center	3214	VC-3214	6/23/14	-	DGM	Rebar	1	-	NMRD	-	-	-	3	1.50	9	Removed	3879562.00	12360432.50	139	1
Visitor Center	3283	VC-3283	6/23/14	-	DGM	Pipe	1	-	NMRD	-	-	-	2	5.00	27	Left in place	3879396.00	12360437.00	3639	1
Visitor Center	3375	VC-3375	6/23/14	-	DGM	Wire	1	-	NMRD	-	-	-	3	0.01	6	Removed	3879590.75	12360443.00	40	1
Visitor Center	3384	VC-3384	6/23/14	-	DGM	Non-MD SM	1	-	NMRD	-	-	-	4	1.00	6	Removed	3879332.00	12360443.50	57	1

DIG RESULTS
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Area/ID					Description					Munition			Measurements			Other				
AOC	Target No.	Target ID	Dig Date	Transect/ Grid ID	Detection Method	Item	Item Count	Comments	Item Category	MEC Description	MEC Part	MEC Condition	Depth (m)	Approximate Weight (lbs)	Length (m)	Status	Northing ¹	Easting ¹	Response Amplitude (mv)	Item No.
Visitor Center	3401	VC-3401	6/23/14	-	DGM	Frag	1	-	MD	-	-	Inert	4	0.10	3	Removed	3879537.75	12360445.00	15	1
Visitor Center	3423	VC-3423	6/23/14	-	DGM	Wire	1	-	NMRD	-	-	-	4	0.01	9	Removed	3879579.25	12360446.00	27	1
Visitor Center	3447	VC-3447	6/23/14	-	DGM	Non-MD SM	1	-	NMRD	-	-	-	6	0.01	9	Removed	3879522.75	12360447.25	74	1
Visitor Center	3450	VC-3450	6/23/14	-	DGM	Rebar	1	-	NMRD	-	-	-	3	2.00	48	Removed	3879364.25	12360447.50	1400	1
Visitor Center	3454	VC-3454	6/23/14	-	DGM	Bolt	1	-	NMRD	-	-	-	3	0.50	4	Removed	3879394.25	12360447.75	20	1
Visitor Center	3465	VC-3465	6/23/14	-	DGM	Non-MD SM	1	-	NMRD	-	-	-	4	1.50	9	Removed	3879388.13	12360448.88	56	1
Visitor Center	3486	VC-3486	6/23/14	-	DGM	Wire	1	-	NMRD	-	-	-	3	0.01	12	Removed	3879568.75	12360450.00	60	1
Visitor Center	3639	VC-3639	6/23/14	-	DGM	Projectile	1	-	MD	20-mm	Body	Inert	3	0.10	2	Removed	3879579.75	12360459.75	17	1
Visitor Center	3666	VC-3666	6/23/14	-	DGM	Nail	1	-	NMRD	-	-	-	3	0.01	5	Removed	3879538.25	12360461.25	21	1
Visitor Center	3683	VC-3683	6/23/14	-	DGM	Wire	1	-	NMRD	-	-	-	2	0.01	10	Removed	3879570.50	12360462.50	57	1
Visitor Center	3698	VC-3698	6/23/14	-	DGM	Wire	1	-	NMRD	-	-	-	2	0.02	13	Removed	3879549.75	12360463.75	48	1
Visitor Center	3739	VC-3739	6/23/14	-	DGM	Other	1	-	NMRD	-	-	-	4	1.50	0	Left in place	3879477.25	12360466.75	22	1
Visitor Center	3764	VC-3764	6/23/14	-	DGM	Non-MD SM	1	-	NMRD	-	-	-	2	0.10	5	Removed	3879455.75	12360468.25	71	1
Visitor Center	3776	VC-3776	6/23/14	-	DGM	Other	1	drill bit	NMRD	-	-	-	4	0.10	14	Removed	3879418.50	12360469.50	288	1
Visitor Center	3782	VC-3782	6/23/14	-	DGM	Wire	1	-	NMRD	-	-	-	3	0.02	11	Removed	3879577.25	12360469.75	10	1
Visitor Center	3807	VC-3807	6/23/14	-	DGM	Wire	1	-	NMRD	-	-	-	2	0.01	9	Removed	3879452.50	12360471.25	13	1
Visitor Center	3822	VC-3822	6/23/14	-	DGM	Non-MD SM	1	-	NMRD	-	-	-	2	0.50	5	Removed	3879470.75	12360472.50	18	1
Visitor Center	3859	VC-3859	6/23/14	-	DGM	Other	1	-	NMRD	-	-	-	2	2.50	4	Left in place	3879438.75	12360476.50	2149	1
Visitor Center	3912	VC-3912	6/23/14	-	DGM	Nail	1	-	NMRD	-	-	-	3	0.01	4	Removed	3879427.25	12360480.00	14	1
Visitor Center	3935	VC-3935	6/23/14	-	DGM	Nail	1	-	NMRD	-	-	-	3	0.10	4	Removed	3879483.50	12360482.00	9	1
Visitor Center	3953	VC-3953	6/23/14	-	DGM	Hot rock	1	-	NMRD	-	-	-	1	0.10	5	Removed	3879359.75	12360483.00	8	1
Visitor Center	3961	VC-3961	6/23/14	-	DGM	Non-MD SM	1	-	NMRD	-	-	-	2	0.50	5	Removed	3879444.00	12360483.50	111	1
Visitor Center	3991	VC-3991	6/23/14	-	DGM	Bolt	1	-	NMRD	-	-	-	4	0.10	6	Removed	3879356.50	12360485.50	22	1
Visitor Center	3997	VC-3997	6/23/14	-	DGM	Nail	1	-	NMRD	-	-	-	4	0.02	7	Removed	3879435.75	12360485.75	63	1
Visitor Center	4047	VC-4047	6/23/14	-	DGM	Wire	1	-	NMRD	-	-	-	3	0.01	13	Removed	3879537.75	12360490.00	23	1
Visitor Center	4099	VC-4099	6/23/14	-	DGM	Wire	1	-	NMRD	-	-	-	3	0.01	9	Removed	3879535.00	12360492.75	19	1
Visitor Center	4151	VC-4151	6/23/14	-	DGM	Non-MD SM	1	-	NMRD	-	-	-	3	0.50	5	Removed	3879458.75	12360496.50	8	1
Visitor Center	4168	VC-4168	6/23/14	-	DGM	Hot rock	1	-	NMRD	-	-	-	3	2.00	6	Removed	3879438.75	12360497.75	18	1
Visitor Center	4178	VC-4178	6/23/14	-	DGM	Wire	1	-	NMRD	-	-	-	3	0.01	0	Removed	3879551.00	12360498.25	131	1
Visitor Center	4201	VC-4201	6/23/14	-	DGM	Wire	1	-	NMRD	-	-	-	3	0.01	10	Removed	3879541.25	12360499.75	70	1
Visitor Center	4241	VC-4241	6/23/14	-	DGM	Pipe	1	-	NMRD	-	-	-	2	3.00	18	Left in place	3879458.00	12360503.75	2450	1



DIG RESULTS
PROJECT 7 - VISITORS CENTER
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Area/ID					Description					Munition			Measurements			Other				
AOC	Target No.	Target ID	Dig Date	Transect/ Grid ID	Detection Method	Item	Item Count	Comments	Item Category	MEC Description	MEC Part	MEC Condition	Depth (in)	Approximate Weight (lbs)	Length (in)	Status	Northing ¹	Easting ¹	Response Amplitude (mv)	Item No.
Visitor Center	4242	VC-4242	6/23/14	-	DGM	Non-MD SM	1	-	NMRD	-	-	-	2	0.10	6	Removed	3879483.25	12360503.75	16	1
Visitor Center	4273	VC-4273	6/23/14	-	DGM	Hot rock	1	-	NMRD	-	-	-	3	1.50	8	Removed	3879448.75	12360505.75	16	1
Visitor Center	4274	VC-4274	6/23/14	-	DGM	Hot rock	1	-	NMRD	-	-	-	4	1.50	7	Removed	3879490.50	12360505.75	7	1
Visitor Center	4346	VC-4346	6/23/14	-	DGM	Non-MD SM	1	-	NMRD	-	-	-	4	0.01	4	Removed	3879515.00	12360510.25	29	1
Visitor Center	4356	VC-4356	6/23/14	-	DGM	Wire	1	-	NMRD	-	-	-	3	0.01	12	Removed	3879541.25	12360511.00	26	1
Visitor Center	4386	VC-4386	6/23/14	-	DGM	Nail	1	-	NMRD	-	-	-	3	0.01	4	Removed	3879499.00	12360514.50	8	1
Visitor Center	4407	VC-4407	6/23/14	-	DGM	Pipe	1	-	NMRD	-	-	-	3	0.50	4	Removed	3879354.00	12360516.25	93	1
Visitor Center	4408	VC-4408	6/23/14	-	DGM	Non-MD SM	1	grounding wire	NMRD	-	-	-	6	0.50	5	Left in place	3879459.75	12360516.25	28	1
Visitor Center	4416	VC-4416	6/23/14	-	DGM	Pipe	1	-	NMRD	-	-	-	4	0.50	4	Removed	3879453.00	12360517.00	274	1
Visitor Center	4465	VC-4465	6/23/14	-	DGM	Non-MD SM	1	-	NMRD	-	-	-	3	0.50	5	Removed	3879423.00	12360521.25	98	1
Visitor Center	4469	VC-4469	6/23/14	-	DGM	Wire	1	-	NMRD	-	-	-	3	0.01	12	Removed	3879548.25	12360521.50	14	1
Visitor Center	4503	VC-4503	6/23/14	-	DGM	Non-MD SM	1	-	NMRD	-	-	-	3	0.10	4	Removed	3879515.75	12360524.25	9	1
Visitor Center	4529	VC-4529	6/23/14	-	DGM	Non-MD SM	1	-	NMRD	-	-	-	2	1.50	5	Removed	3879396.25	12360527.00	66	1
Visitor Center	4539	VC-4539	6/23/14	-	DGM	Rebar	1	-	NMRD	-	-	-	4	1.50	11	Removed	3879484.75	12360527.75	180	1
Visitor Center	4541	VC-4541	6/23/14	-	DGM	Non-MD SM	1	-	NMRD	-	-	-	2	1.50	5	Removed	3879367.50	12360528.00	248	1
Visitor Center	4542	VC-4542	6/23/14	-	DGM	Non-MD SM	1	-	NMRD	-	-	-	3	1.00	7	Removed	3879414.50	12360528.00	197	1
Visitor Center	4563	VC-4563	6/23/14	-	DGM	Rebar	1	-	NMRD	-	-	-	2	5.00	48	Removed	3879401.50	12360530.25	513	1
Visitor Center	4601	VC-4601	6/23/14	-	DGM	Projectile	1	-	MD	20-mm	Body	Inert	3	0.10	2	Removed	3879404.25	12360536.00	57	1
Visitor Center	4602	VC-4602	6/23/14	-	DGM	Non-MD SM	1	-	NMRD	-	-	-	2	0.50	8	Removed	3879433.00	12360536.00	43	1
Visitor Center	4618	VC-4618	6/23/14	-	DGM	Non-MD SM	1	-	NMRD	-	-	-	3	0.50	5	Removed	3879395.25	12360538.75	11	1
Visitor Center	4629	VC-4629	6/23/14	-	DGM	Nail	1	-	NMRD	-	-	-	3	0.01	4	Removed	3879501.00	12360540.50	6	1
Visitor Center	4631	VC-4631	6/23/14	-	DGM	Non-MD SM	1	-	NMRD	-	-	-	4	0.10	5	Removed	3879358.00	12360540.75	77	1
Visitor Center	4655	VC-4655	6/23/14	-	DGM	Bolt	1	spoon	NMRD	-	-	-	2	0.10	5	Removed	3879368.50	12360544.25	48	1
Visitor Center	4679	VC-4679	6/23/14	-	DGM	Bolt	1	-	NMRD	-	-	-	6	0.10	4	Removed	3879486.50	12360547.00	7	1
Visitor Center	4735	VC-4735	6/23/14	-	DGM	Nail	1	-	NMRD	-	-	-	3	0.01	4	Removed	3879506.50	12360553.75	44	1
Visitor Center	4771	VC-4771	6/23/14	-	DGM	Rebar	1	-	NMRD	-	-	-	6	1.50	20	Removed	3879494.75	12360557.75	94	1
Visitor Center	4800	VC-4800	6/23/14	-	DGM	Non-MD SM	1	-	NMRD	-	-	-	3	0.10	4	Removed	3879418.50	12360562.50	10	1
Visitor Center	4815	VC-4815	6/23/14	-	DGM	Wire	1	-	NMRD	-	-	-	4	0.02	13	Removed	3879527.25	12360564.25	52	1
Visitor Center	4822	VC-4822	6/23/14	-	DGM	Rebar	1	-	NMRD	-	-	-	3	1.50	6	Removed	3879522.75	12360565.00	212	1
Visitor Center	4824	VC-4824	6/23/14	-	DGM	Nail	1	-	NMRD	-	-	-	3	0.01	4	Removed	3879500.75	12360565.25	15	1
Visitor Center	4856	VC-4856	6/23/14	-	DGM	Nail	1	-	NMRD	-	-	-	2	0.01	4	Removed	3879474.25	12360568.63	29	1

**DIG RESULTS
PROJECT 7 - VISITORS CENTER
JUNE/JULY 2014**

Area/ID					Description					Munition			Measurements			Other				
AOC	Target No.	Target ID	Dig Date	Transect/ Grid ID	Detection Method	Item	Item Count	Comments	Item Category	MEC Description	MEC Part	MEC Condition	Depth (m)	Approximate Weight (lbs)	Length (m)	Status	Northing ¹	Easting ¹	Response Amplitude (mv)	Item No.
Visitor Center	4892	VC-4892	6/23/14	-	DGM	Wire	1	-	NMRD	-	-	-	4	0.02	11	Removed	3879481.25	12360572.75	24	1
Visitor Center	4928	VC-4928	6/23/14	-	DGM	Pipe	1	utility pipe	NMRD	-	-	-	15	0.02	24	Left in place	3879458.25	12360581.50	122	1
Visitor Center	4949	VC-4949	6/23/14	-	DGM	Non-MD SM	1	metal flakes	NMRD	-	-	-	3	0.10	4	Removed	3879478.00	12360585.50	89	1
Visitor Center	5021	VC-5021	6/23/14	-	DGM	Nail	1	-	NMRD	-	-	-	3	0.10	4	Removed	3879483.75	12360601.25	14	1
Visitor Center	5022	VC-5022	6/23/14	-	DGM	Rebar	1	-	NMRD	-	-	-	6	2.00	12	Removed	3879494.50	12360601.25	126	1
Visitor Center	5034	VC-5034	6/23/14	-	DGM	Other	1	metal sign	NMRD	-	-	-	0	2.50	30	Left in place	3879500.00	12360604.25	11	1
Visitor Center	-	-	6/30/14	VC-AT03	Analog (transect)	Non-MD SM	1	-	NMRD	-	-	-	2	4.50	-	Left in place	3879532.01	12360626.34	-	101
Visitor Center	-	-	6/30/14	VC-AT03	Analog (transect)	Non-MD SM	4	-	NMRD	-	-	-	1	4.50	-	Left in place	3879535.83	12360620.44	-	102
Visitor Center	-	-	6/30/14	VC-AT03	Analog (transect)	Non-MD SM	3	-	NMRD	-	-	-	2	1.00	-	Removed	3879561.85	12360580.07	-	103
Visitor Center	-	-	6/30/14	VC-AT03	Analog (transect)	Wire	1	-	NMRD	-	-	-	1	0.50	-	Removed	3879585.78	12360542.66	-	104
Visitor Center	-	-	6/30/14	VC-AT03	Analog (transect)	Non-MD SM	1	-	NMRD	-	-	-	1	0.50	-	Removed	3879594.78	12360527.94	-	105
Visitor Center	-	-	6/30/14	VC-AT04	Analog (transect)	Non-MD SM	1	-	NMRD	-	-	-	0	0.50	-	Removed	3879417.73	12360585.01	-	101
Visitor Center	-	-	6/30/14	VC-AT04	Analog (transect)	Rebar	1	-	NMRD	-	-	-	1	2.50	-	Removed	3879427.72	12360589.88	-	102
Visitor Center	-	-	6/30/14	VC-AT04	Analog (transect)	Asphalt	6	-	NMRD	-	-	-	1	0.02	-	Removed	3879483.95	12360616.06	-	103
Visitor Center	MD Sub Totals:						6							0.52						
Visitor Center	Sub Totals:						198							119.31						

Legend:

- Note 1: NAD 1983 HARN State Plane Virginia South
MD: Munitions debris
MEC: Munitions explosives constituent
NMRD: Non munitions related debris
Non-MD SM Non-munitions scrap metal
DGM: Digital geophysical mapping
-  MD
 DMM/MEC

**APPENDIX C
PHOTOGRAPHIC LOG**



Photograph 1: Dive operations at the Boat Basin facing east.



Photograph 2: North side of Boat Basin along transects BB-AT04.

Project 7 – Boat Basin, Visitors Information Center. Wallops Island, Virginia
Photographic Log

Date:
June/July 2014

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Photograph 3: Test Pit 1 at the Former Circular Area facing southwest.



Photograph 4: Test Pit 1 at the Former Circular Area facing northeast.

Project 7 – Boat Basin, Visitors Information Center. Wallops Island, Virginia

Photographic Log

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Photograph 5: Test Pit 2 at the Former Circular Area facing east.



Photograph 6: Test Pit 3 at the Former Circular Area facing northwest.

Project 7 – Boat Basin, Visitors Information Center. Wallops Island, Virginia
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Photograph 7: Test Pit 3 at the Former Circular Area facing southeast.



Photograph 8: Open field at the Gun Butts Area, south of the Visitor Center. Targets marked with pin flags for anomaly investigation.

Project 7 – Boat Basin, Visitors Information Center. Wallops Island, Virginia
Photographic Log

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Photograph 9: Test Pit 1 at the Pyrotechnic Burn Area facing northwest.



Photograph 10: Test Pit 3 at the Pyrotechnic Burn Area facing northeast.

Project 7 – Boat Basin, Visitors Information Center. Wallops Island, Virginia
Photographic Log

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June/July 2014

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Photograph 11: Test Pit 3 at the Pyrotechnic Burn Area, facing northeast.



Photograph 12: Soil profile along Test Pit 3 at the Pyrotechnic Burn Area.



Photograph 13: Dig locations for investigation marked with pin flags at the north lawn of the Visitors Information Center, facing southeast.



Photograph 14: 20mm projectile found at the Gun Butts Area.

Project 7 – Boat Basin, Visitors Information Center. Wallops Island, Virginia
Photographic Log

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Photograph 15: 20mm projectile found along transect GBA-AT12 at the Gun Butts area.



Photograph 16: 2.75 inch MD cylinder with rotating bands found along transect BB-AT05 on south side of Boat Basin.



Photograph 17: Typical munitions debris (MD) found at the site.



Photograph 18: MPPEH items prepared for demolition.

**APPENDIX D
DIVE REPORT**

UXO PRODUCTION REPORT

for

**Boat Basin MRS RI
Wallops Flight Facility
Wallops Island, Virginia**

PREPARED FOR:

**Weston Solutions, Inc.
1400 Weston Way
West Chester, PA 19380**



Prepared By:

VRHabilis, LLC



**11124 Kingston Pike, Suite 119-404
Knoxville, TN 37934
(865) 381-1021**

July, 2, 2014



From: VRHabilis, LLC
11124 Kingston Pike, Ste. 119-404
Knoxville, TN 37934

Date: July 3rd, 2014

To: Anthony Pace
Greg Zynda
Weston Solutions Inc.

Subject: Wallops Flight Facility, Boat Basin
Wallops Island, VA

Attached: UXO Production Reports 062914 and 063014

Tony, Greg

Enclosed please find the revised VRHabilis' report for the RI conducted at the Wallops Boat Basin.

VRHabilis conducted Surface Supplied dives within the boat basin over a two-day period and found no ordnance of any kind. Industrial and cultural debris was located in all but one location, (Cluster #1). In that location the contact was deeper than the length of the Schonstedt housing and the divers arm. In Cluster #6, the guy wire anchor was protruding from the surface and the Marshall mats could be seen at the water's edge. Metal fragments were the only other thing found.

The following items were found on Transect BB-AT08;

1. Pieces of a broken can,
2. Small metal shards,
3. Piece of Marshall Matt,
4. Visible metal post protruding from water causing instrument response.

All Clusters and contacts are documented on the UXO Production reports dated 062914 and 063014. USACE and Weston personnel confirmed findings and agreed with findings.

All photos taken will be available on VRHabilis FTP site.

We look forward to working with you again in Fort Lee.

Thank you for your assistance,

Best Regards,

X

Scott Alogna
Diving Program Manager



UXO PRODUCTION REPORT

Project Name: Wallops Flight Facility, Boat Basin Report No: 1
 Project No: 1 Location: Wallops Island, VA Date: 06/29/14

I. Definable Feature of Work

- | | | | |
|---|---|--|---|
| <input type="checkbox"/> Project Management | <input type="checkbox"/> Geophysical Mapping | <input type="checkbox"/> Data Management | <input type="checkbox"/> Brush Clearing |
| <input checked="" type="checkbox"/> Intrusive Investigation | <input type="checkbox"/> UXO Avoidance | <input type="checkbox"/> Demolition | <input type="checkbox"/> Survey |
| <input type="checkbox"/> Surface Clearance | <input checked="" type="checkbox"/> Anomaly Reacquisition | <input type="checkbox"/> Transect Activity | <input type="checkbox"/> Scrap Processing |
| <input type="checkbox"/> GIS Management | <input type="checkbox"/> Mobilization/Demobilization | <input checked="" type="checkbox"/> Diving | <input type="checkbox"/> Other: |

II. Type of Work

- UXO NON-UXO

II. TEAM MEMBERS/ TEAM LEADER

Scott Alogna, Elliott Adler, Tom Rancich, Kim Heckhausen, Nathan Marez

III. Activities: # of Grids, transects, anomalies or other features of work completed.

Items found per Anomaly Cluster;

- #1. Three distinct contacts total. All large and too deep to prosecute.
- #2. Steel can approximately, 4" diameter by 7 inches long, broken (photo), The clusters in this area all had a layer of crusted material that rang off as hot but, once you broke through it, it disintegrated.
- #3. Instrument response then scattered response after digging through crusted layer.
- #4. Pieces of steel can disintegrated upon handling, fragments.
- #5. Guy wire anchor (protruding out of the water) extended approximately 8 feet beyond.
- #6. Only small metals fragments throughout this area. Most likely pieces of same type of can or canister.
- #11 Hot rocks, verified with surface Schonstedt.
- #12. Bilge pump.
- #13. Welding rod. This area, 11 and 12 all had hot rocks, but nothing else noted.

Elliott Adler

Signature: 

Date: 07/02/14

X. UXOQC/ PM Review

- Acceptable Unacceptable NCR #:

Comments:.

Name:

Signature:

Date:

XI. Distribution

- PM SUXOS UXOSO UXO Quality Manager Management

**APPENDIX E
TEST PIT LOGS**

TEST PIT LOGS
PROJECT 7 – VISITORS INFORMATION CENTER, BOAT BASIN
JUNE/JULY 2014

Pyrotechnics Burn Area

Location: Test Pit 1
Date: 6/25/14
Total depth: 2 feet (ft.)
Water table: 2 ft.

- 0 – 4 inches (in.) below ground surface (bgs)
 - Soils are light brown sandy silt with no grading, organic content high with root matting, loose and moist.
 - Debris: nails, pipe, concrete fragments, scrap metal, wood boards.
- 4 in. – 1 ft bgs
 - Soils are orange-ish silty-sand grading to all sand, no structure or organic materials present, loose and wet.
 - Debris: wood boards.
- 1' – 2' bgs
 - Soils are light grey medium sand with dark grey striations, loose and wet, saturated at 2'.
 - No debris.

Pyrotechnics Burn Area

Location: Test Pit 2
Date: 6/25/14
Total depth: 2 ft.
Water table: 2 ft.

- 0 – 4 inches (in.) below ground surface (bgs)
 - Soils are light brown sandy silt with no grading, organic content high with root matting, loose and moist.
 - Debris: nails, pipe, concrete fragments, scrap metal, wood boards.
- 4 in. – 1 ft bgs
 - Soils are orange-ish silty sand grading to all sand, no structure or organic materials present, loose and wet.
 - Debris: wood boards.
- 1 – 2 ft. bgs
 - Soils are light grey medium sand with dark grey striations, loose and wet, saturated at 2'.
 - No debris.

Pyrotechnics Burn Area

Location: Test Pit 3
Date: 6/25/14
Total depth: 1 ft.
Water table: 1 ft.

TEST PIT LOGS
PROJECT 7 – VISITORS INFORMATION CENTER, BOAT BASIN
JUNE/JULY 2014

- 0 - 4"
 - Soils are light brown sandy silt with no grading, organic content high with root matting, loose and moist.
 - Small, non-MD rusted fragments in surface soil and grass sod. No intact debris.
- 4" – 1'
 - Soils are light grey medium sand with dark grey striations, loose and wet, saturated at 2'. No debris.

Former Circular Area

Location: Test Pit 1

Date: 6/30/14

Total depth: 2 feet (ft.)

Water table: 2 ft.

Debris: small concrete pieces on surface.

- 0 – 3 in.
 - Soils are dark brown silty clay with leaf cover, no structure or grading, dry and loose.
 - Debris: cinder blocks, bricks, partial concrete pipes, metal pipes, nails, wood boards, rail road ties, wire.
- 3" – 1.5'
 - Soils are light brown sandy silt with no structure, grading to sand with depth, dry and friable.
 - Debris: cinder blocks, bricks, partial concrete pipes, metal pipes, nails, wood boards, rail road ties, wire.
- 1.5' – 2'
 - Soils are organe-ish fine sand, well sorted, dry, friable.
 - Debris: bricks, cinder blocks, partial concrete pipe.

Former Circular Area

Location: Test Pit 2

Date: 6/30/14

Total depth: 2 ft.

Water table: 2 ft.

- 0 – 3 in.
 - Soils are a dark brown silty clay with a leaf litter cover and roots. The soils are loose and dry with no structure.
 - Debris: cinder blocks, bricks, partial concrete pipes, metal pipes, nails, wood boards, rail road ties, wire
- 3" – 1.5'
 - Soils are a light brown sandy silt grading to sand, friable and dry.
 - Debris: cinder blocks, bricks, partial concrete pipes, metal pipes, nails, wood boards, rail road ties, wire

TEST PIT LOGS
PROJECT 7 – VISITORS INFORMATION CENTER, BOAT BASIN
JUNE/JULY 2014

- 1.5' – 2'
 - Fine sand, well sorted, orange, dry, friable, no structure.
 - Debris: bricks, cinder blocks, partial concrete pipe.

Former Circular Area

Location: Test Pit 3
Date: 6/30/14
Total depth: 2 feet (ft.)
Water table: 2 ft.

- Surface
 - Leaf litter.
 - Debris: metal matting and cans, metal pipe under leaf litter bit not in the soil layer.
- 0 – 3 in.
 - Soils are dark brown silty-clay with organics, loose and dry.
 - Debris: No debris
- 3" – 1.5'
 - Soils are light brown sandy-silt grading to sand, dry, friable.
 - Debris: No debris.
- 1.5' – 2'
 - Soils are orange-ish fine sand, well sorted, dry, friable.
 - Debris: No debris.

**APPENDIX F
MDAS LOG**
