TECHNICAL MEMORANDUM CH2MHILL

Focused Site Inspection, Site UXO-06 Borrow Pit Expansion Area—Phase 1, Marine Corps Base Camp Lejeune, North Carolina

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Introduction

This Technical Memorandum presents a summary of the Focused Site Inspection (SI) results for Phase 1 of the Borrow Pit Expansion Area (BPEA) at Marine Corps Base Camp Lejeune (MCB CamLej). The BPEA is located within Military Munitions Response Program (MMRP) Site Unexploded Ordnance (UXO)-06, the Former Fortified Beach Assault Area, and consists of three separate areas--Phase 1A, Phase 1, and Phase 2 (**Figure 1**).

A site-wide Preliminary Assessment/Site Inspection (PA/SI) was conducted between 2007 and 2008. The PA/SI concluded that the only identified human health risk pertained to potential exposure of future residents to groundwater, and that there were no adverse effects to ecological receptors; however, small arms ammunition and material potentially presenting an explosive hazard (MPPEH) were discovered during the field investigation activities (CH2M HILL, 2009a). Because MPPEH was discovered and because MCB CamLej is planning to expand the borrow pit, additional investigation activities were conducted.

The objectives of the Focused SI were to:

- Evaluate the potential presence and nature of impacts to the environment resulting from historical activities and the potential for human health and ecological risks in the Phase 1 BPEA that was not investigated as part of the previous PA/SI activities.
- Evaluate the nature and extent of potential munitions and explosives of concern (MEC) contamination and reduce potential exposure of site workers to MEC. Also, assess the presence and nature of any resulting munitions constituent (MC) soil contamination.

Location and Description

Site UXO-06 (Archive Search Report [ASR] Range No. 2.65, D-27) encompasses a total of 177 acres located in the French Creek area of the "Mainside" of MCB CamLej, south of McHugh Boulevard and west of Sneads Ferry Road (**Figure 1).** The BPEA lies within Site UXO-06, and occupies 54 acres to the south of Gonzalez Boulevard. Prior to the Focused SI, the

Phase 1 BPEA was mostly wooded. In preparation for the investigation and planning for future expansion of the borrow pit, the majority of the vegetation was removed.

Site History

Site UXO-06 was used from 1953 until 1977 as a training area for fortified beach assault and assault of fortified positions. During initial site operations from 1953 to 1970, the range was authorized to use blank small arms, demolition charges, practice rockets, flame throwers, smoke grenades, and pyrotechnics (USACE, 2001). From 1970 until range closure in 1977, the range was authorized to use blank small arms, 3.5-inch practice rockets, thickened and unthickened fuel, half-pound demolition charges, practice rifle grenades, and smoke and white phosphorus (WP) hand grenades (USACE, 2001). All fire was reportedly directed away from service roads and main thoroughfares. The potential MEC hazards associated with this former range include UXO and munitions constituents (MC). It is anticipated that potential MEC would have originally been deposited at or near the ground surface, but over the years, site activities (e.g., construction of the access roads) may have caused the MEC to become buried to unknown depths.

Investigation Activities

The investigation at the Phase 1 BPEA was conducted in accordance with the *Focused Site Inspection Work Plan Addendum for UXO-06 Base Borrow Pit Expansion, Marine Corps Base Camp Lejeune, Jacksonville, North Carolina* (CH2M HILL, 2009b). Field activities included land surveying, vegetation clearing, buried utility locating, digital geophysical mapping (DGM), collection of surface and subsurface soil samples, and MEC intrusive investigation.

In order to facilitate investigation activities, the site boundary, DGM grid layout, and decision units (DUs) were surveyed and marked in the field. In addition, the Phase 1 BPEA was cleared of vegetation. The DGM survey was conducted using a single coil EM61-MK2[1], linked to a robotic total station (RTS) system. The purpose of the DGM survey was to identify geophysical anomalies that could represent potential subsurface MEC. In addition, buried utility clearance was performed within a 20-foot radius of each subsurface soil sample location prior to any drilling activities.

In September 2009, environmental sampling was conducted at the Phase 1 BPEA. Three composite surface soil samples were collected from three separate DUs (designated as MR06-DU02-SS[01,02,03] through MR06-DU04-SS[01,02,03]). The DUs were configured to cover as much of the Phase 1 BPEA as possible. The surface soil samples were collected from a depth of 0 to 2 inches below ground surface (bgs) using the multi-increment (MI) sampling procedure. Subsurface soil samples were collected from three locations (designated as MR06-IS65 through MR06-IS67), one from each DU, just above the water table using direct-push technology. Subsurface soil sample depths ranged from 8 to 22 feet bgs. Soil boring logs are provided in **Attachment A**.

[1] The EM61-MK2 is a high-resolution time-domain electromagnetic instrument designed to detect shallow ferrous and non-ferrous metallic objects with high spatial resolution.

All soil samples were submitted to Empirical Laboratories under chain-of-custody and analyzed for explosives residues (SW-846 United States Environmental Protection Agency [USEPA] Method 8330), pentaerythritol tetranitrate (PETN) (SW-846 USEPA Method 8330), nitroglycerine (SW-846 USEPA Method 8332), perchlorate (SW-846 USEPA Method 6850), and Target Analyte List (TAL) metals (SW-846 USEPA Method 6010B) in accordance with the Focused SI Work Plan Addendum (CH2M HILL, 2009b). The results of the analytical data were validated by DataQual Environmental Services, LLC.

Investigation Results

Digital Geophysical Mapping

All of the Phase 1 BPEA that was accessible to DGM was geophysically surveyed using an EM61-MK2. The western edge of the Phase 1 BPEA and two small areas within the Phase 1 BPEA could not be geophysically surveyed because of the terrain. Handheld magnetometers (Schonstedt GA-52Cx) were used in these areas to identify anomalies (**Figure 2**). A total of 435 geophysical anomalies with a signal greater than 3 millivolts (mV) were identified from the DGM as potentially representing subsurface MEC (**Figure 2**); the distribution of geophysical anomalies was found to be more concentrated along the eastern and southern boundary of the Phase 1 BPEA. No anomalies were identified in the areas where the handheld magnetometers were utilized.

MEC Intrusive Investigation

All 435 geophysical anomalies identified as representing potential subsurface MEC were intrusively investigated. A total of 432 items were found during the intrusive investigation; at two anomaly locations no items were found and one item found was shared between two anomaly location (F4D5I3-00012 and F4D5I3-00013). The results of the MEC intrusive investigation are provided in **Tables 1** and **2**.

Only one MEC item, a MKI, illuminating hand grenade at anomaly location F4D5G3-00005, was discovered in the Phase 1 BPEA (**Figure 3**). This MEC item was detonated at the controlled detonation area (CDA) within the Phase 2 BPEA. A sample was not collected from anomaly location F4D5G3-00005 because the MEC item was not blown in place and there were no visual indications that MC was released from the item. All other items found were identified as either MPPEH, quality control (QC) seeds, or non-MPPEH debris. Total items for each group are presented below along with an approximate percentage of the total anomalies investigated.

- 111 MPPEH items (approximately 26 percent of the anomalies investigated)
- 4 QC seeds[2] (approximately 1 percent of the anomalies investigated)
- 316 non-MPPEH items (approximately 73 percent of the anomalies investigated)

MPPEH and non-MPPEH debris are currently being held at their respective storage areas (**Figure 3**) and will be disposed of at a later date after the 100 percent inspection and 100 percent re-inspection has been completed.

[2] None of the QC seeds were missed during the DGM or MEC intrusive investigation

Environmental Sampling

Surface Soil

Laboratory analytical results for the surface soil samples were compared to the North Carolina Soil Screening Levels (NC SSLs) (NCDENR, 2009), the adjusted USEPA Soil Regional Screening Levels (RSL) (USEPA, 2009) and two times the mean MCB CamLej background surface soil concentrations (Baker, 2001). The RSLs based on noncarcinogenic effects were adjusted by dividing by 10 to account for exposure to multiple constituents. The RSLs based on carcinogenic effects were used as presented in the USEPA RSL table.

Table 3 presents a summary of the surface soil results compared to the regulatory standards. Samples containing concentrations of target analytes exceeding two times the mean background concentration and at least one other criterion are shown on **Figure 4**. A summary of the analytical results is also provided below.

- **Explosives residues** were detected in surface soil samples but the concentrations did not exeed the regulatory standards. **Perchlorate** was not detected in any of the surface soil samples.
- **Arsenic** concentrations only exceeded the adjusted Residential Soil RSL (0.39 milligrams per kilogram [mg/kg]) and two times the mean background concentration (0.626 mg/kg) in one sample collected from MR06-DU02. None of the detected concentrations exceeded the adjusted Industrial Soil RSL or the NC SSLs.
- **Iron** concentrations exceeded the NC SSLs (151 mg/kg) in every surface soil sample; however, none of the concentrations were above two times the mean background concentration or the adjusted soil RSLs.

Subsurface Soil

The laboratory analytical results for the subsurface soil samples were compared to the NC SSLs (NCDENR, 2009), the adjusted USPEA Soil RSLs (USEPA, 2009), and two times the mean MCB CamLej background subsurface soil concentrations (Baker, 2001). The adjusted USEPA Soil RSLs based on noncarcinogenic effects were adjusted by dividing by 10 to account for exposure to multiple constituents; the RSLs based on carcinogenic effects were used as presented in the USEPA RSL table.

Table 4 presents a summary of the subsurface soil results compared to the regulatory standards**.** Samples containing concentrations of target analytes exceeding two times the mean background concentration and at least one other criterion are shown on **Figure 4**. A summary of the analytical results is also provided below.

- No **explosives residue** constituents (including perchlorate) were detected in the subsurface soil samples.
- **Aluminum** concentrations exceeded the adjusted Residential Soil RSLs (7,700 mg/kg) and two times the mean background concentration (10,369 mg/kg) in the subsurface soil sample collected from MR06-IS67. None of the detected concentrations exceeded the adjusted Industrial Soil RSLs.

- **Arsenic** concentrations exceeded the adjusted Residential Soil RSL (0.39 mg/kg) in all subsurface soil samples but none of the concentrations exceeded two times the mean background concentration, the NC SSL, or the adjusted Industrial Soil RSL.
- **Chromium** concentrations exceeded the adjusted Industrial Soil RSL (5.6 mg/kg) but only the subsurface soil sample collected from MR06-IS66 (25.9 mg/kg) exceeded two times the mean background concentration (14.5 mg/kg).
- **Iron** concentrations exceeded the NC SSL (151 mg/kg) in all subsurface soil samples but none of the concentrations exceeded two times the mean background concentration or the adjusted Soil RSLs.

Human Health Risk Screening

A conservative preliminary human health risk screening including a comparison of the data to USEPA RSLs (USEPA, 2009) and MCB CamLej base-wide background concentrations (inorganics only), and a risk-ratio comparison for the constituents that exceed those criteria, was performed to assess the potential for human health risks associated with exposure to soil. The results of the human health risk screening provide a preliminary indication of potential risks from chemicals of potential concern (COPCs), and are used to help evaluate whether the site requires further evaluation (e.g., a Baseline risk assessment or additional data collection).

The human health screening results are presented in **Tables 5** through **6b**. Based on the available data for the Phase 1 BPEA, the human health screening did not result in the retention of any COPCs for surface soil or for total soil; therefore, exposure to surface soil or combined surface and subsurface soil would not be expected to result in any unacceptable human health risks. However, the MEC item (MKI, illuminating hand grenade) that was discovered produces intense light and heat when it bursts. The item potentially could have resulted in burns or damage to the retina if the illumination grenade was viewed directly as it burned.

Ecological Risk Screening

Analytical results for surface and subsurface soil were screened against ecological screening values intended to be protective of ecological receptors (**Table 7** and **8**). Results from the ecological risk screening indicated that no ecological risks are expected.

Conclusions and Recommendations

The environmental investigation in the Phase 1 BPEA was conducted to evaluate the potential presence of MC contamination and to evaluate risk to human health and ecological receptors. Concentrations of explosives residues detected did not exceed regulatory standards and perchlorate was not detected in soil, which indicates that historical activities at UXO-06 did not impact the soil. The human health and the ecological risk screenings conducted for the Phase 1 BPEA concluded that soil is not anticipated to pose any unacceptable risk to human health or ecological receptors; therefore, no further evaluation

of soil is recommended. A comprehensive PA/SI Report will be submitted at a later date that includes this investigation and other activities for Site UXO-06.

A MEC intrusive investigation was conducted to remove the source of all geophysical anomalies representing potential subsurface MEC; therefore, no further MEC investigations are recommended for the Phase 1 BPEA. The purpose of the intrusive investigation was to significantly reduce the risk of encountering subsurface MEC. Only one MEC item, a MKI, illuminating hand grenade, was discovered and detonated at the CDA. The item is not a high explosive. However, because it is not possible to provide 100 percent assurance that all MEC items have been removed, it would be prudent to provide "3R" (Recognize, Retreat, Report) training to all site operators who will be excavating borrow material from this area and to provide on-call support from MCB CamLej Explosive Ordnance Disposal (EOD) or a qualified UXO contractor for inspection and disposal of suspected MEC that may be unearthed.

References

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North Carolina Department of the Environment and Natural Resources (NCDENR). 2009. *North Carolina Department of Environment and Natural Resources, Division of Waste Management Superfund Section, Inactive Hazardous Sites Branch*. Soil Remediation Goals. October.

United States Army Corps of Engineers (USACE). 2001. *Final Range Identification and Preliminary Range Assessment, Marine Corps Base Camp Lejeune, Onslow, North Carolina.* St. Louis District. December.

United States Environmental Protection Agency (USEPA). 2009. *Regional Screening Levels for Chemicals at Superfund Sites.* December.

Tables

TABLE 1
Phase I MEC Intrusive Investigation Dig Results
Site UXO-06 Borrow Pit Expansion Area
MCB CamLej, North Carolina

Grid	Anomaly ID	Amplitude (mV)	Dig Date	Northing	Easting	Item Group	Item Class	Category	Filler	Fuze	Quantity	Depth (inches)	Weight (Pounds)	Action Taken	Demo Required?	Comments	Additional Item(s)
F4D5G3	F4D5G3-00001	706.8	1/4/2010	287529.2	3836101.2	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	4	2	Scrap Bin	None		
F4D5G3	F4D5G3-00002	394.8	1/4/2010	287532.4	3836103.6	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	6	4	Scrap Bin	None		
F4D5G3	F4D5G3-00003	288.7	1/4/2010	287531	3836101.5	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	1	1	Scrap Bin	None		
F4D5G3	F4D5G3-00004	202.2	1/4/2010	287547.3	3836120.3	MPPEH	Grenade	Other (See Comments)	N/A	Unfuzed	1	1	0.1	Consolidation Point	Demil	Grenade spoon	
F4D5G3	F4D5G3-00005	108.2	1/4/2010	287531.4	3836100.4	UXO	Grenade	MKI, Illuminating Hand Grenade	Illum	Other (See Comments)	1	2	0.25	CDA	Demo	Fuze unknown, blown on January 4, 2009 at the CDA	
F4D5G3	F4D5G3-00006	94.4	1/4/2010	287542	3836113.8	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	1	0.3	Scrap Bin	None		
F4D5G3	F4D5G3-00007	93.2	1/4/2010	287545.2	3836121.2	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	5	3	Scrap Bin	None		
F4D5G3	F4D5G3-00008	40.4	1/4/2010	287535.4	3836108.4	MPPEH	Grenade	Other (See Comments)	None (empty)	Unfuzed	1	2	0.2	Consolidation Point	Demil	40mm Illum Grenade Cartridge Case	
F4D5G3	F4D5G3-00009	19.7	1/4/2010	287539.7	3836112.8	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	3	0.2	Scrap Bin	None		
F4D5G3	F4D5G3-00010	16.3	1/4/2010	287531.4	3836105.2	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	0	2	Scrap Bin	None		
F4D5G3	F4D5G3-00011	8.1	1/4/2010	287540	3836114.6	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	4	0.3	Scrap Bin	None		
F4D5G3	F4D5G3-00012	7.9	1/4/2010	287548.6	3836127.6	MPPEH	Grenade	Other (See Comments)	None (empty)	N / A	1	6	0.1	Consolidation Point	Demil	40mm Grenade Cartridge	
F4D5G3	F4D5G3-00013	7.1	1/4/2010	287535.8	3836111.8	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	10	0.2	Scrap Bin	None		
F4D5G3	F4D5G3-00014	6	1/4/2010	287543.2	3836121.2	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	1	0.1	Scrap Bin	None		
F4D5G3	F4D5G3-00015	5.8	1/4/2010	287542.4	3836103.5	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	2	0.2	Scrap Bin	None		
F4D5G3	F4D5G3-00016	5.3	1/4/2010	287547.2	3836116.4	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	1	0.1	Scrap Bin	None		
F4D5G3	F4D5G3-00017	5.1	1/4/2010	287543	3836120.6	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	1	0.1	Scrap Bin	None		
F4D5G3	F4D5G3-00018	4.3	1/4/2010	287538.8	3836116	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	1	0.1	Scrap Bin	None		
F4D5G3	F4D5G3-00019	3.8	1/4/2010	287541.6	3836120	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	1	0.1	Scrap Bin	None		
F4D5G3	F4D5G3-00020	3.6	1/4/2010	287537.2	3836112.2	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	1	0.1	Scrap Bin	None		
F4D5G3	F4D5G3-00021	3.5	1/4/2010	287542.6	3836118.8	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	1	0.1	Scrap Bin	None		
F4D5G3	F4D5G3-00022	3.5	1/4/2010	287545.8	3836124.8	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	1	0.1	Scrap Bin	None		
F4D5G3	F4D5G3-00023	3.4	1/4/2010	287540.2	3836102.2	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	3	0.1	Scrap Bin	None		
F4D5G3	F4D5G3-00024	3.3	1/4/2010	287534.4	3836109.6	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	2	0.1	Scrap Bin	None		
F4D5G3	F4D5G3-00025	3.3	1/4/2010	287546	3836110.6	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	1	0.1	Scrap Bin	None		
F4D5G3	F4D5G3-00026	3.2	1/4/2010	287539.9	3836101.3	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	2	0.1	Scrap Bin	None		
F4D5G3	F4D5G3-00027	3.2	1/4/2010	287545.6	3836115	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	2	0.1	Scrap Bin	None		
F4D5G3	F4D5G3-00028	3.2	1/4/2010	287543.9	3836119.8	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	1	0.1	Scrap Bin	None		
F4D5G3	F4D5G3-00029	3.2	1/4/2010	287537.4	3836100.6	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	1	0.1	Scrap Bin	None		
F4D5G3	F4D5G3-00030	3.1	1/4/2010	287536.8	3836101	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	1	0.1	Scrap Bin	None		
F4D5G3	F4D5G3-00031	3.1	1/4/2010	287546.8	3836122.6	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	3	0.1	Scrap Bin	None		
F4D5G3	F4D5G3-00032	3	1/4/2010	287543.2	3836104.6	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	2	0.1	Scrap Bin	None		
F4D5G3V	F4D5G3V-00001	9.33	1/26/2010	287546	3836105.2	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	1	0.2	Scrap Bin	None		
F4D5G3V	F4D5G3V-00002	3.87	1/26/2010	287549.8	3836112	No Contact	No Contact	N / A	N / A	N / A	0	0	0	Left in Place	None		
F4D5G3V	F4D5G3V-00003	3.73	1/26/2010	287548.2	3836109.4	No Contact	No Contact	N / A	N / A	N / A	0	0	0	Left in Place	None		
F4D5G3V	F4D5G3V-00004	3.54	1/26/2010	287546	3836103.8	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	1	0.1	Scrap Bin	None		
F4D5G3V	F4D5G3V-00005	3.3	1/26/2010	287547.8	3836107.6	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	6	0.2	Scrap Bin	None		
F4D5H3	F4D5H3-00001	82.5	1/4/2010	287550.4	3836126.8	MPPEH	Grenade	Other (See Comments)	None (empty)	Unfuzed	1	0	1	Consolidation Point	Demil	40mm Grenade Cartridge	
F4D5H3	F4D5H3-00002	72.6	1/4/2010	287578.8	3836126.4	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	5	2	Scrap Bin	None		
F4D5H3	F4D5H3-00003	66.2	1/4/2010	287584.7	3836130.9	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	3	0.2	Scrap Bin	None		
F4D5H3	F4D5H3-00004	52.6	1/4/2010	287583.4	3836130.5	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	3	0.2	Scrap Bin	None		
F4D5H3	F4D5H3-00005	39	1/4/2010	287583	3836134.6	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	2	0.2	Scrap Bin	None		
F4D5H3	F4D5H3-00006	37	1/4/2010	287585.4	3836132.6	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	6	0.5	Scrap Bin	None		
F4D5H3	F4D5H3-00007	31.8	1/4/2010	287596	3836130.4	MPPEH	Rocket	Other (See Comments)	None (empty)	Unfuzed	1	6	0.2	Consolidation Point	Demil	Tail fin shroud	
F4D5H3	F4D5H3-00008	24.3	1/4/2010	287598.6	3836129.2	MPPEH	Rocket	Other (See Comments)	N / A	Other (See Comments)	1	1	0.1	Consolidation Point	Demil	Warhead and Unknown Fuze	
F4D5H3	F4D5H3-00009	24.3	1/4/2010	287585.3	3836146.7	QC	QC Seed	QC Seed Item	N / A	N / A	1	4	0.2	Consolidation Point	None	QC Seed #22	
F4D5H3	F4D5H3-00010	23.2	1/4/2010	287584	3836134.2	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	3	0.2	Scrap Bin	None		
F4D5H3	F4D5H3-00011	21.1	1/4/2010	287586.2	3836126.6	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	4	0.2	Scrap Bin	None		
F4D5H3	F4D5H3-00012	21	1/4/2010	287595.6	3836131	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	3	0.1	Scrap Bin	None		
F4D5H3	F4D5H3-00013	19.5	1/4/2010	287585.8	3836127.2	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	2	0.1	Scrap Bin	None		
F4D5H3	F4D5H3-00014	17.5	1/4/2010	287589.1	3836141.2	MPPEH	Grenade	Other (See Comments)	None (empty)	Unfuzed	1	2	0.1	Consolidation Point	Demil	40mm Grenade Cartridge Case	
F4D5H3	F4D5H3-00015	15.6	1/4/2010	287566.4	3836128.6	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	1	0.1	Scrap Bin	None		
F4D5H3	F4D5H3-00016	15.2	1/4/2010	287598.6	3836129.8	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	2	0.1	Scrap Bin	None		
F4D5H3	F4D5H3-00017	14.6	1/4/2010	287588.4	3836133	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	1	0.1	Scrap Bin	None		
F4D5H3	F4D5H3-00018	14.1	1/4/2010	287588.3	3836133.9	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	4	0.2	Scrap Bin	None		
F4D5H3	F4D5H3-00019	10.4	1/4/2010	287553.4	3836117.6	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	1	0.1	Scrap Bin	None		
F4D5H3	F4D5H3-00020	7.1	1/4/2010	287598.8	3836130.6	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	1	0.1	Scrap Bin	None		
F4D5H3	F4D5H3-00021	6.4	1/4/2010	287565.8	3836146.4	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	1	0.1	Scrap Bin	None		

Generated by: James Frank
Checked by: Paul Weber

TABLE 1
Phase I MEC Intrusive Investigation Dig Results
Site UXO-06 Borrow Pit Expansion Area
MCB CamLej, North Carolina

Grid	Anomaly ID	Amplitude (mV)	Dig Date	Northing	Easting	Item Group	Item Class	Category	Filler	Fuze	Quantity	Depth (inches)	Weight (Pounds)	Action Taken	Demo Required?	Comments	Additional Item(s)
F4D5H3	F4D5H3-00022	6	1/4/2010	287560.2	3836126.6	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	1	0.1	Scrap Bin	None		
F4D5H3	F4D5H3-00023	6	1/4/2010	287560.9	3836130.9	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	2	0.1	Scrap Bin	None		
F4D5H3	F4D5H3-00024	5.8	1/4/2010	287596.2	3836132.6	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	1	0.1	Scrap Bin	None		
F4D5H3	F4D5H3-00025	5.5	1/4/2010	287559.9	3836140.3	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	1	0.1	Scrap Bin	None		
F4D5H3	F4D5H3-00026	5.4	1/4/2010	287584	3836127.6	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	4	0.1	Scrap Bin	None		
F4D5H3	F4D5H3-00027	5.4	1/4/2010	287559.4	3836126.6	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	1	0.1	Scrap Bin	None		
F4D5H3	F4D5H3-00028	5.3	1/4/2010	287595.3	3836128	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	1	0.1	Scrap Bin	None		
F4D5H3	F4D5H3-00029	5.1	1/4/2010	287596.4	3836129	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	1	0.1	Scrap Bin	None		
F4D5H3	F4D5H3-00030	5	1/4/2010	287571.3	3836129.4	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	1	0.1	Scrap Bin	None		
F4D5H3	F4D5H3-00031	5	1/4/2010	287599.6	3836132	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	3	0.2	Scrap Bin	None		
F4D5H3	F4D5H3-00032	5	1/4/2010	287567.2	3836129.8	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	1	0.1	Scrap Bin	None		
F4D5H3	F4D5H3-00033	4.8	1/4/2010	287564.9	3836141.5	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	1	0.1	Scrap Bin	None		
F4D5H3	F4D5H3-00034	4.7	1/4/2010	287564.2	3836127.2	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	1	0.1	Scrap Bin	None		
F4D5H3	F4D5H3-00035	4.4	1/4/2010	287558.6	3836126.2	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	1	0.1	Scrap Bin	None		
F4D5H3	F4D5H3-00036	4.3	1/4/2010	287553	3836131.6	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	1	0.1	Scrap Bin	None		
F4D5H3	F4D5H3-00037	4.3	1/4/2010	287561.4	3836123.2	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	1	0.1	Scrap Bin	None		
F4D5H3	F4D5H3-00038	4.3	1/4/2010	287555.2	3836124.6	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	1	0.1	Scrap Bin	None		
F4D5H3	F4D5H3-00039	4.3	1/4/2010	287559.8	3836138.8	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	1	0.1	Scrap Bin	None		
F4D5H3	F4D5H3-00040	4.2	1/4/2010	287551.4	3836130	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	1	0.1	Scrap Bin	None		
F4D5H3	F4D5H3-00041	4.1	1/4/2010	287580.4	3836130.8	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	1	0.1	Scrap Bin	None		
F4D5H3	F4D5H3-00042	4.1	1/4/2010	287564.6	3836145.8	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	1	0.1	Scrap Bin	None		
F4D5H3	F4D5H3-00043	4	1/4/2010	287558.2	3836130.4	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	1	0.1	Scrap Bin	None		
F4D5H3	F4D5H3-00044	4	1/4/2010	287595	3836131.8	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	1	0.1	Scrap Bin	None		
F4D5H3	F4D5H3-00045	3.8	1/4/2010	287561.1	3836126.4	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	1	0.1	Scrap Bin	None		
F4D5H3	F4D5H3-00046	3.8	1/4/2010	287562.6	3836126.8	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	1	0.1	Scrap Bin	None		
F4D5H3	F4D5H3-00047	3.6	1/4/2010	287559.6	3836138.2	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	1	0.1	Scrap Bin	None		
F4D5H3	F4D5H3-00048	3.6	1/4/2010	287577.4	3836130	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	1	0.1	Scrap Bin	None		
F4D5H3	F4D5H3-00049	3.6	1/4/2010	287568.4	3836128.6	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	1	0.1	Scrap Bin	None		
F4D5H3	F4D5H3-00050	3.6	1/4/2010	287558.4	3836137.6	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	1	0.1	Scrap Bin	None		
F4D5H3	F4D5H3-00051	3.4	1/4/2010	287597.2	3836128.2	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	1	0.1	Scrap Bin	None		
F4D5H3	F4D5H3-00052	3.4	1/4/2010	287565.6	3836128	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	1	0.1	Scrap Bin	None		
F4D5H3	F4D5H3-00053	3.4	1/4/2010	287551	3836116.2	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	0	0.1	Scrap Bin	None		
F4D5H3	F4D5H3-00054	3.4	1/4/2010	287559.4	3836131.8	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	5	0.1	Scrap Bin	None		
F4D5H3	F4D5H3-00055	3.3	1/4/2010	287560.2	3836130.8	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	4	0.1	Scrap Bin	None		
F4D5H3	F4D5H3-00056	3.2	1/4/2010	287590.6	3836140.2	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	2	0.3	Scrap Bin	None		
F4D5H3	F4D5H3-00057	3.2	1/4/2010	287574.5	3836130	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	1	0.1	Scrap Bin	None		
F4D5H3	F4D5H3-00058	3.2	1/4/2010	287596.8	3836131.8	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	1	0.1	Scrap Bin	None		
F4D5H3	F4D5H3-00059	3.1	1/4/2010	287564.6	3836149.2	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	1	0.1	Scrap Bin	None		
F4D5H3	F4D5H3-00060	3.1	1/4/2010	287571	3836140.6	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	6	0.2	Scrap Bin	None		
F4D5H3V	F4D5H3V-00001	358.66	1/26/2010	287576.4	3836120.8	MPPEH	Rocket	M29A2, Rocket, 3.5 Inch Practice	None (empty)	M405 (M29)	1	3	4	Consolidation Point	Demil		
F4D5H3V	F4D5H3V-00002	174.71	1/26/2010	287553.8	3836114.8	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	0	1	Scrap Bin	None		
F4D5H3V	F4D5H3V-00003	97.07	1/26/2010	287566.4	3836119.2	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	4	0.1	Scrap Bin	None		
F4D5H3V	F4D5H3V-00004	38.89	1/26/2010	287552.6	3836114	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	1	0.25	Scrap Bin	None		
F4D5H3V	F4D5H3V-00005	6.94	1/26/2010	287599.2	3836128	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	2	0.1	Scrap Bin	None		
F4D5H3V	F4D5H3V-00006	3.71	1/26/2010	287595	3836126.6	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	3	0.1	Scrap Bin	None		
F4D5H3V	F4D5H3V-00007	3.51	1/26/2010	287597.8	3836127.2	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	2	0.1	Scrap Bin	None		
F4D5H3V	F4D5H3V-00008	3.19	1/26/2010	287551.3	3836112.8	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	3	0.1	Scrap Bin	None		
F4D5H3V	F4D5H3V-00009	3.11	1/26/2010	287583	3836122.6	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	4	0.2	Scrap Bin	None		
F4D5H4	F4D5H4-00001	114.6	1/4/2010	287597	3836171.8	MPPEH	Flare	M127A1, Star Parachute	None (empty)	Unfuzed	1	4	0.5	Consolidation Point	Demil		
F4D5H4	F4D5H4-00002	42.3	1/4/2010	287593.8	3836175.4	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	3	0.2	Scrap Bin	None		
F4D5H4	F4D5H4-00003	7.2	1/4/2010	287594	3836152.8	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	2	0.2	Scrap Bin	None		
F4D5H4	F4D5H4-00004	6.6	1/4/2010	287597.2	3836156	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	3	0.1	Scrap Bin	None		
F4D5H4	F4D5H4-00005	6.6	1/4/2010	287595.8	3836177	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	1	0.1	Scrap Bin	None		
F4D5H4	F4D5H4-00006	6.6	1/4/2010	287594	3836176.6	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	1	0.1	Scrap Bin	None		
F4D5H4	F4D5H4-00007	6.4	1/4/2010	287593.4	3836151.6	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	4	0.2	Scrap Bin	None		
F4D5H4	F4D5H4-00008	4.4	1/4/2010	287590.2	3836153.6	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	4	0.1	Scrap Bin	None		
F4D5H4	F4D5H4-00009	4.2	1/4/2010	287589.4	3836169.8	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	0	0.1	Scrap Bin	None		
F4D5H4	F4D5H4-00010	4.1	1/4/2010	287598.2	3836180	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	1	0.1	Scrap Bin	None		
F4D5H4	F4D5H4-00011	3.8	1/4/2010	287576.9	3836154.9	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	1	0.1	Scrap Bin	None		
F4D5H4	F4D5H4-00012	3.7	1/4/2010	287582.4	3836165.5	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	2	0.1	Scrap Bin	None		
F4D5H4	F4D5H4-00013	3.5	1/4/2010	287587.6	3836152.6	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	4	0.1	Scrap Bin	None		
F4D5H4	F4D5H4-00014	3.4	1/4/2010	287586.3	3836169.5	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	2	0.1	Scrap Bin	None		

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Phase I MEC Intrusive Investigation Dig Results
Site UXO-06 Borrow Pit Expansion Area
MCB CamLej, North Carolina

Grid	Anomaly ID	Amplitude (mV)	Dig Date	Northing	Easting	Item Group	Item Class	Category	Filler	Fuze	Quantity	Depth (inches)	Weight (Pounds)	Action Taken	Demo Required?	Comments	Additional Item(s)
F4D5H4	F4D5H4-00015	3.4	1/4/2010	287590.4	3836158.2	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	4	0.2	Scrap Bin	None		
F4D5H4	F4D5H4-00016	3.3	1/4/2010	287599.3	3836163.9	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	4	0.1	Scrap Bin	None		
F4D5H4	F4D5H4-00017	3.2	1/4/2010	287597.8	3836161.4	MPPEH	Flare	M127A1, Star Parachute	None (empty)	Unfuzed	1	4	0.2	Consolidation Point	Demil		
F4D5H4	F4D5H4-00018	3.2	1/4/2010	287577.4	3836160.6	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	2	0.1	Scrap Bin	None		
F4D5H4	F4D5H4-00019	3.2	1/4/2010	287581	3836165.6	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	0	0.1	Scrap Bin	None		
F4D5H4	F4D5H4-00020	3.1	1/4/2010	287599.4	3836154.8	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	1	0.1	Scrap Bin	None		
F4D5H4	F4D5H4-00021	3.1	1/4/2010	287594.8	3836150.4	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	4	0.1	Scrap Bin	None		
F4D5H4	F4D5H4-00022	3.1	1/4/2010	287593.5	3836160.4	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	1	0.1	Scrap Bin	None		
F4D5H4	F4D5H4-00023	3	1/4/2010	287570.9	3836151.7	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	1	0.1	Scrap Bin	None		
F4D5I3	F4D5I3-00001	300.5	1/4/2010	287604.2	3836139.8	MPPEH	Flare	M127A1, Star Parachute	None (empty)	Unfuzed	2	6	0.4	Consolidation Point	Demil		
F4D5I3	F4D5I3-00002	255	1/4/2010	287614.4	3836147.4	MPPEH	Flare	M127A1, Star Parachute	None (empty)	Unfuzed	1	0	0.2	Consolidation Point	Demil		
F4D5I3	F4D5I3-00003	242.7	1/4/2010	287602.4	3836144.6	MPPEH	Flare	M127A1, Star Parachute	None (empty)	Unfuzed	1	0	0.1	Consolidation Point	Demil		
F4D5I3	F4D5I3-00004	114.2	1/4/2010	287635.6	3836147.3	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	6	0.1	Scrap Bin	None		
F4D5I3	F4D5I3-00005	53.6	1/4/2010	287632	3836144	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	4	3	Scrap Bin	None		
F4D5I3	F4D5I3-00006	50.3	1/4/2010	287624.4	3836143.2	MPPEH	Rocket	M29A2, Rocket, 3.5 Inch Practice	None (empty)	Unfuzed	1	6	0.5	Consolidation Point	Demil	Warhead Only	
F4D5I3	F4D5I3-00007	40.9	1/4/2010	287613	3836146.6	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	1	0.2	Scrap Bin	None		
F4D5I3	F4D5I3-00008	40.5	1/4/2010	287632.6	3836145.6	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	1	0.1	Scrap Bin	None		
F4D5I3	F4D5I3-00009	35.9	1/4/2010	287636.6	3836147.8	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	6	0.1	Scrap Bin	None		
F4D5I3	F4D5I3-00010	28.9	1/4/2010	287633.4	3836144.8	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	1	0.1	Scrap Bin	None		
F4D5I3	F4D5I3-00011	19.3	1/4/2010	287625.2	3836141.8	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	1	0.1	Scrap Bin	None		
F4D5I3	F4D5I3-00012	15.1	1/4/2010	287607	3836147.4	MPPEH	Rocket	35mm Subcal M73	None (empty)	Unfuzed	1	1	0.2	Consolidation Point	Demil	Shared with F4D5I3-00013	
F4D5I3	F4D5I3-00013	14.4	1/4/2010	287608	3836147.2	SHD	Shared	Shared	N / A	N / A	1	0	0	N / A	None	Shared with F4D5I3-00012	
F4D5I3	F4D5I3-00014	14	1/4/2010	287636.4	3836149.2	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	6	0.1	Scrap Bin	None		
F4D5I3	F4D5I3-00015	7.9	1/4/2010	287632.6	3836147	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	1	0.1	Scrap Bin	None		
F4D5I3	F4D5I3-00016	7.1	1/4/2010	287601.6	3836130.8	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	6	0.2	Scrap Bin	None		
F4D5I3	F4D5I3-00017	6.7	1/4/2010	287619.8	3836144.2	MPPEH	Grenade	Hand, Smoke AN-M8	None (empty)	Unfuzed	1	1	0.2	Consolidation Point	Demil	Expended	
F4D5I3	F4D5I3-00018	6.2	1/4/2010	287633.2	3836147.6	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	6	0.2	Scrap Bin	None		
F4D5I3	F4D5I3-00019	4.2	1/4/2010	287634.6	3836149	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	1	0.1	Scrap Bin	None		
F4D5I3	F4D5I3-00020	3.6	1/4/2010	287611.5	3836148.6	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	2	0.1	Scrap Bin	None		
F4D5I3	F4D5I3-00021	3.4	1/4/2010	287603.8	3836131.4	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	4	0.3	Scrap Bin	None		
F4D5I3	F4D5I3-00022	3.3	1/4/2010	287611.5	3836145.5	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	1	0.1	Scrap Bin	None		
F4D5I3	F4D5I3-00023	3.3	1/4/2010	287633.2	3836149.3	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	1	0.1	Scrap Bin	None		
F4D5I3	F4D5I3-00024	3.3	1/4/2010	287605.2	3836130.6	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	5	0.2	Scrap Bin	None		
F4D5I3	F4D5I3-00025	3.2	1/4/2010	287605.2	3836134	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	3	0.3	Scrap Bin	None		
F4D5I4	F4D5I4-00001	2182	1/5/2010	287646.6	3836172.2	MPPEH	Rocket	M29A2, Rocket, 3.5 Inch Practice	None (empty)	M405 (M29)	1	7	9	Consolidation Point	Demil	4 partial rockets	* Additional Item(s) at Flag (see Table 4)
F4D5I4	F4D5I4-00002	1163.9	1/4/2010	287601.6	3836177.6	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	1	0.1	Scrap Bin	None		
F4D5I4	F4D5I4-00003	937.4	1/5/2010	287646	3836168.2	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	3	6	Scrap Bin	None		
F4D5I4	F4D5I4-00004	683	1/5/2010	287630.8	3836174.8	MPPEH	Rocket	M29A2, Rocket, 3.5 Inch Practice	None (empty)	M405 (M29)	1	1	5	Consolidation Point	Demil		
F4D5I4	F4D5I4-00005	406	1/5/2010	287629.2	3836195.8	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	0	0.1	Scrap Bin	None		
F4D5I4	F4D5I4-00006	397.1	1/5/2010	287645	3836173.2	MPPEH	Rocket	M29A2, Rocket, 3.5 Inch Practice	None (empty)	Unfuzed	1	8	2	Consolidation Point	Demil		
F4D5I4	F4D5I4-00007	385.6	1/5/2010	287635.6	3836154.2	MPPEH	Rocket	M29A2, Rocket, 3.5 Inch Practice	None (empty)	M405 (M29)	1	0	5	Consolidation Point	Demil		
F4D5I4	F4D5I4-00008	381.9	1/5/2010	287606.7	3836183.1	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	10	2.5	Scrap Bin	None		
F4D5I4	F4D5I4-00009	361.3	1/5/2010	287623.2	3836191.6	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	0	0.5	Scrap Bin	None		
F4D5I4	F4D5I4-00010	335	1/5/2010	287646.6	3836174.3	MPPEH	Rocket	M29A2, Rocket, 3.5 Inch Practice	None (empty)	M405 (M29)	1	2	0.5	Consolidation Point	Demil	Fuze only	
F4D5I4	F4D5I4-00011	286.4	1/5/2010	287608.6	3836183.8	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	12	0.5	Scrap Bin	None		
F4D5I4	F4D5I4-00012	251.5	1/5/2010	287647.8	3836184.4	MPPEH	Rocket	M29A2, Rocket, 3.5 Inch Practice	None (empty)	M405 (M29)	1	3	3	Consolidation Point	Demil		
F4D5I4	F4D5I4-00013	224.5	1/4/2010	287613.8	3836154.6	MPPEH	Flare	M127A1, Star Parachute	None (empty)	Unfuzed	1	0	0.2	Consolidation Point	Demil		
F4D5I4	F4D5I4-00014	179.5	1/5/2010	287628	3836150.6	MPPEH	Rocket	2.36 In Practice M6	None (empty)	Unfuzed	1	4	3.2	Consolidation Point	Demil		
F4D5I4	F4D5I4-00015	158.3	1/5/2010	287648	3836197.6	MPPEH	Rocket	M29A2, Rocket, 3.5 Inch Practice	None (empty)	M405 (M29)	1	2	2.5	Consolidation Point	Demil		
F4D5I4	F4D5I4-00016	147.5	1/14/2010	287640.8	3836155.6	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	1	0.1	Scrap Bin	None		
F4D5I4	F4D5I4-00017	146.4	1/4/2010	287612.8	3836155.6	MPPEH	Flare	M127A1, Star Parachute	None (empty)	Unfuzed	1	0	0.2	Consolidation Point	Demil		
F4D5I4	F4D5I4-00018	134.4	1/5/2010	287648.8	3836174.8	MPPEH	Rocket	M29A2, Rocket, 3.5 Inch Practice	None (empty)	Unfuzed	1	12	0.5	Consolidation Point	Demil	Rocket parts	
F4D5I4	F4D5I4-00019	121.9	1/5/2010	287646.6	3836170.8	MPPEH	Rocket	M29A2, Rocket, 3.5 Inch Practice	None (empty)	Unfuzed	1	1	0.2	Consolidation Point	Demil	Fin shroud only	
F4D5I4	F4D5I4-00020	102.8	1/5/2010	287649.9	3836174	MPPEH	Rocket	M29A2, Rocket, 3.5 Inch Practice	None (empty)	Unfuzed	1	3	0.5	Consolidation Point	Demil	Warhead Only	
F4D5I4	F4D5I4-00021	102.5	1/5/2010	287645	3836170	MPPEH	Rocket	M29A2, Rocket, 3.5 Inch Practice	None (empty)	M405 (M29)	1	4	2.5	Consolidation Point	Demil	Warhead with fuze	
F4D5I4	F4D5I4-00022	36.4	1/5/2010	287639	3836196.8	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	5	0.5	Scrap Bin	None		
F4D5I4	F4D5I4-00023	32.5	1/5/2010	287631.4	3836183.6	QC	QC Seed	QC Seed Item	N / A	N / A	1	6	0.5	Consolidation Point	None	QC Seed #30	
F4D5I4	F4D5I4-00024	17.9	1/5/2010	287636.8	3836153.4	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	3	0.2	Scrap Bin	None		
F4D5I4	F4D5I4-00025	17.7	1/5/2010	287633.8	3836157	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	3	0.4	Scrap Bin	None		
F4D5I4	F4D5I4-00026	17.5	1/5/2010	287644.2	3836169.1	MPPEH	Rocket	M29A2, Rocket, 3.5 Inch Practice	None (empty)	Unfuzed	1	2	0.2	Consolidation Point	Demil	Fin shroud	* Additional Item(s) at Flag (see Table 4)

Generated by: James Frank
Checked by: Paul Weber

TABLE 1
Phase I MEC Intrusive Investigation Dig Results
Site UXO-06 Borrow Pit Expansion Area
MCB CamLej, North Carolina

Grid	Anomaly ID	Amplitude (mV)	Dig Date	Northing	Easting	Item Group	Item Class	Category	Filler	Fuze	Quantity	Depth (inches)	Weight (Pounds)	Action Taken	Demo Required?	Comments	Additional Item(s)
F4D5I4	F4D5I4-00027	16.5	1/5/2010	287649.6	3836175.6	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	6	0.1	Scrap Bin	None		
F4D5I4	F4D5I4-00028	15	1/5/2010	287611.5	3836181.9	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	1	0.1	Scrap Bin	None		
F4D5I4	F4D5I4-00029	14.6	1/5/2010	287640.7	3836196.4	MPPEH	Grenade	Other (See Comments)	None (empty)	Unfuzed	1	3	0.2	Consolidation Point	Demil	40mm grenade parts	
F4D5I4	F4D5I4-00030	13.7	1/5/2010	287641.4	3836174.6	MPPEH	Rocket	Other (See Comments)	N / A	N / A	1	3	0.1	Consolidation Point	Demil	Fin only	
F4D5I4	F4D5I4-00031	11.2	1/4/2010	287601.8	3836169.4	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	3	0.4	Scrap Bin	None		
F4D5I4	F4D5I4-00032	10.6	1/5/2010	287606.8	3836190	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	1	0.1	Scrap Bin	None		
F4D5I4	F4D5I4-00033	10.5	1/5/2010	287634.6	3836157.6	MPPEH	Grenade	Other (See Comments)	None (empty)	Unfuzed	1	3	0.2	Consolidation Point	Demil	40mm grenade parts	
F4D5I4	F4D5I4-00034	10.1	1/5/2010	287639.4	3836160	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	3	0.5	Scrap Bin	None		
F4D5I4	F4D5I4-00035	9.6	1/5/2010	287629.8	3836161.4	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	4	0.5	Scrap Bin	None		
F4D5I4	F4D5I4-00036	9.5	1/5/2010	287624.9	3836189.4	MPPEH	Grenade	Other (See Comments)	None (empty)	Unfuzed	1	2	0.2	Consolidation Point	Demil	40mm grenade body	
F4D5I4	F4D5I4-00037	8.9	1/5/2010	287614.4	3836175	MPPEH	Flare	M127A1, Star Parachute	None (empty)	Unfuzed	1	3	0.1	Consolidation Point	Demil		
F4D5I4	F4D5I4-00038	8.5	1/4/2010	287604.6	3836160.2	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	3	0.2	Scrap Bin	None		
F4D5I4	F4D5I4-00039	7.8	1/4/2010	287600.3	3836178.6	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	1	0.1	Scrap Bin	None		
F4D5I4	F4D5I4-00040	7	1/5/2010	287616.3	3836173.7	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	4	0.3	Scrap Bin	None		
F4D5I4	F4D5I4-00041	6.7	1/5/2010	287635.2	3836150.6	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	2	0.1	Scrap Bin	None		
F4D5I4	F4D5I4-00042	5.4	1/5/2010	287635.4	3836152.2	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	3	0.2	Scrap Bin	None		
F4D5I4	F4D5I4-00043	5.3	1/5/2010	287626.2	3836185.6	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	6	0.3	Scrap Bin	None		
F4D5I4	F4D5I4-00044	5.1	1/4/2010	287600.8	3836182.8	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	1	0.1	Scrap Bin	None		
F4D5I4	F4D5I4-00045	5	1/5/2010	287615.2	3836192	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	3	0.1	Scrap Bin	None		
F4D5I4	F4D5I4-00046	4.8	1/5/2010	287638	3836156.4	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	3	0.2	Scrap Bin	None		
F4D5I4	F4D5I4-00047	4.4	1/4/2010	287615.2	3836173	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	1	0.2	Scrap Bin	None		
F4D5I4	F4D5I4-00048	4.4	1/5/2010	287646.4	3836197.6	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	3	0.2	Scrap Bin	None		
F4D5I4	F4D5I4-00049	4.4	1/5/2010	287643.9	3836164.4	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	2	0.2	Scrap Bin	None		
F4D5I4	F4D5I4-00050	4.3	1/5/2010	287634	3836154	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	3	0.2	Scrap Bin	None		
F4D5I4	F4D5I4-00051	4.1	1/5/2010	287647.8	3836190.8	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	2	0.1	Scrap Bin	None		
F4D5I4	F4D5I4-00052	4.1	1/4/2010	287600.4	3836180.8	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	1	0.1	Scrap Bin	None		
F4D5I4	F4D5I4-00053	4	1/14/2010	287639.2	3836150.6	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	1	0.1	Scrap Bin	None		
F4D5I4	F4D5I4-00054	4	1/5/2010	287635.2	3836184.8	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	2	0.1	Scrap Bin	None		
F4D5I4	F4D5I4-00055	3.9	1/4/2010	287613.7	3836163.7	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	1	0.1	Scrap Bin	None		
F4D5I4	F4D5I4-00056	3.8	1/5/2010	287642	3836163.2	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	2	0.3	Scrap Bin	None		
F4D5I4	F4D5I4-00057	3.8	1/5/2010	287615.2	3836193.2	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	3	0.3	Scrap Bin	None		
F4D5I4	F4D5I4-00058	3.8	1/5/2010	287615.2	3836183.4	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	3	0.1	Scrap Bin	None		
F4D5I4	F4D5I4-00059	3.6	1/5/2010	287614.2	3836180.3	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	4	0.1	Scrap Bin	None		
F4D5I4	F4D5I4-00060	3.5	1/5/2010	287648.6	3836189.4	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	3	0.2	Scrap Bin	None		
F4D5I4	F4D5I4-00061	3.5	1/4/2010	287602.4	3836161.7	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	8	0.2	Scrap Bin	None		
F4D5I4	F4D5I4-00062	3.5	1/5/2010	287615.2	3836190.4	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	4	0.3	Scrap Bin	None		
F4D5I4	F4D5I4-00063	3.4	1/5/2010	287636	3836151.2	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	4	0.1	Scrap Bin	None		
F4D5I4	F4D5I4-00064	3.4	1/4/2010	287605.5	3836151.1	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	1	0.1	Scrap Bin	None		
F4D5I4	F4D5I4-00065	3.4	1/5/2010	287638.7	3836157.8	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	4	0.3	Scrap Bin	None		
F4D5I4	F4D5I4-00066	3.4	1/5/2010	287650	3836184.6	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	3	0.3	Scrap Bin	None		
F4D5I4	F4D5I4-00067	3.2	1/5/2010	287636	3836165.2	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	3	0.3	Scrap Bin	None		
F4D5I4	F4D5I4-00068	3.2	1/5/2010	287631.7	3836153.1	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	4	0.2	Scrap Bin	None		
F4D5I4	F4D5I4-00069	3.2	1/5/2010	287622.4	3836157.8	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	3	0.1	Scrap Bin	None		
F4D5I4	F4D5I4-00070	3.1	1/5/2010	287611	3836194.7	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	1	0.1	Scrap Bin	None		
F4D5I4	F4D5I4-00071	3.1	1/5/2010	287631.6	3836196	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	2	0.1	Scrap Bin	None		
F4D5I4	F4D5I4-00072	3.1	1/5/2010	287626.4	3836181.5	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	3	0.2	Scrap Bin	None		
F4D5I4	F4D5I4-00073	3.1	1/5/2010	287642	3836162.2	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	2	0.3	Scrap Bin	None		
F4D5I4	F4D5I4-00074	3.1	1/5/2010	287645.7	3836175.9	MPPEH	Rocket	M29A2, Rocket, 3.5 Inch Practice	None (empty)	Unfuzed	1	2	0.2	Consolidation Point	Demil	Warhead only	
F4D5I5	F4D5I5-00001	1127.5	1/6/2010	287646.6	3836207.8	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	5	2	Scrap Bin	None		
F4D5I5	F4D5I5-00002	718.5	1/6/2010	287648.6	3836226.6	MPPEH	Rocket	M29A2, Rocket, 3.5 Inch Practice	None (empty)	M405 (M29)	1	1	6	Consolidation Point	Demil		
F4D5I5	F4D5I5-00003	216.1	1/6/2010	287644.4	3836219	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	2	0.2	Scrap Bin	None		
F4D5I5	F4D5I5-00004	189.7	1/6/2010	287646.4	3836222.6	MPPEH	Rocket	2.36 In Practice M6	None (empty)	Unfuzed	1	2	5	Consolidation Point	Demil	No nose cone	
F4D5I5	F4D5I5-00005	123	1/6/2010	287638.2	3836221	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	4	1	Scrap Bin	None		
F4D5I5	F4D5I5-00006	121.3	1/6/2010	287621.4	3836205.9	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	8	0.2	Scrap Bin	None		
F4D5I5	F4D5I5-00007	83.8	1/6/2010	287620.1	3836204.4	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	2	0.3	Scrap Bin	None		
F4D5I5	F4D5I5-00008	67.8	1/6/2010	287637.6	3836222	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	6	1	Scrap Bin	None		
F4D5I5	F4D5I5-00009	64.6	1/6/2010	287620.8	3836214.4	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	4	0.1	Scrap Bin	None		
F4D5I5	F4D5I5-00010	62.9	1/6/2010	287629.4	3836211.4	MPPEH	Rocket	M29A2, Rocket, 3.5 Inch Practice	None (empty)	Unfuzed	1	4	0.3	Consolidation Point	Demil	Fin shroud only	
F4D5I5	F4D5I5-00011	62.3	1/6/2010	287644.2	3836206	MPPEH	Flare	M127A1, Star Parachute	None (empty)	Unfuzed	1	3	0.3	Consolidation Point	Demil		
F4D5I5	F4D5I5-00012	42.7	1/6/2010	287635.6	3836230.1	MPPEH	Rocket	M29A2, Rocket, 3.5 Inch Practice	None (empty)	M405 (M29)	1	3	0.1	Consolidation Point	Demil	Fuze only	
F4D5I5	F4D5I5-00013	25.6	1/6/2010	287648	3836236.8	MPPEH	Grenade	Other (See Comments)	None (empty)	Unfuzed	1	4	0.2	Consolidation Point	Demil	40mm grenade parts	
F4D5I5	F4D5I5-00014	22.6	1/6/2010	287622.4	3836204.6	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	2	0.1	Scrap Bin	None		

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Site UXO-06 Borrow Pit Expansion Area
MCB CamLej, North Carolina

Grid	Anomaly ID	Amplitude (mV)	Dig Date	Northing	Easting	Item Group	Item Class	Category	Filler	Fuze	Quantity	Depth (inches)	Weight (Pounds)	Action Taken	Demo Required?	Comments	Additional Item(s)
F4D5I5	F4D5I5-00015	20	1/6/2010	287648	3836204.2	MPPEH	Grenade	Other (See Comments)	None (empty)	Unfuzed	1	6	0.2	Consolidation Point	Demil	40mm grenade body	
F4D5I5	F4D5I5-00016	18.2	1/6/2010	287619.7	3836210.4	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	0	0.1	Scrap Bin	None		
F4D5I5	F4D5I5-00017	17.7	1/6/2010	287644	3836215.4	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	1	0.1	Scrap Bin	None		
F4D5I5	F4D5I5-00018	17.1	1/6/2010	287644.8	3836200.2	MPPEH	Grenade	Other (See Comments)	None (empty)	Unfuzed	1	2	0.1	Consolidation Point	Demil	40mm grenade body	
F4D5I5	F4D5I5-00019	16.9	1/6/2010	287636.8	3836218.8	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	1	0.3	Scrap Bin	None		
F4D5I5	F4D5I5-00020	14.8	1/6/2010	287648.6	3836232.8	MPPEH	Grenade	Other (See Comments)	None (empty)	Unfuzed	1	1	0.1	Consolidation Point	Demil	40mm grenade nose cap	
F4D5I5	F4D5I5-00021	14.2	1/6/2010	287627.8	3836206.2	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	8	0.2	Scrap Bin	None		
F4D5I5	F4D5I5-00022	14.2	1/6/2010	287639	3836228.4	MPPEH	Grenade	M20A1, Grenade, Rifle, Star, Cluster, Green	None (empty)	Unfuzed	1	2	0.3	Consolidation Point	Demil		
F4D5I5	F4D5I5-00023	11.5	1/6/2010	287641	3836206	MPPEH	Grenade	Other (See Comments)	None (empty)	Unfuzed	1	2	0.2	Consolidation Point	Demil	40mm grenade body	
F4D5I5	F4D5I5-00024	9.9	1/21/2010	287626.2	3836217.5	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	30	0.1	Scrap Bin	None		
F4D5I5	F4D5I5-00025	9.1	1/6/2010	287633.8	3836225.2	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	6	0.2	Scrap Bin	None		
F4D5I5	F4D5I5-00026	8.9	1/6/2010	287639.2	3836238	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	2	0.2	Scrap Bin	None		
F4D5I5	F4D5I5-00027	7.8	1/6/2010	287649.4	3836203	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	1	0.2	Scrap Bin	None		
F4D5I5	F4D5I5-00028	7.4	1/6/2010	287621	3836212.7	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	2	0.1	Scrap Bin	None		
F4D5I5	F4D5I5-00029	6.8	1/6/2010	287623.2	3836218.4	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	4	0.2	Scrap Bin	None		
F4D5I5	F4D5I5-00030	6.3	1/6/2010	287643.2	3836214.8	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	3	0.3	Scrap Bin	None		
F4D5I5	F4D5I5-00031	6.2	1/6/2010	287617.2	3836210.5	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	1	0.1	Scrap Bin	None		
F4D5I5	F4D5I5-00032	6.1	1/6/2010	287631.4	3836226.2	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	5	0.1	Scrap Bin	None		
F4D5I5	F4D5I5-00033	5.8	1/6/2010	287646.4	3836213.2	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	3	0.3	Scrap Bin	None		
F4D5I5	F4D5I5-00034	5.7	1/6/2010	287632.8	3836227.4	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	3	0.1	Scrap Bin	None		
F4D5I5	F4D5I5-00035	5.4	1/6/2010	287625.8	3836201.6	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	1	0.1	Scrap Bin	None		
F4D5I5	F4D5I5-00036	5.3	1/6/2010	287640.6	3836215	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	2	0.1	Scrap Bin	None		
F4D5I5	F4D5I5-00037	5.3	1/6/2010	287624.8	3836209.8	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	3	0.1	Scrap Bin	None		
F4D5I5	F4D5I5-00038	5	1/6/2010	287649.4	3836213	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	1	0.1	Scrap Bin	None		
F4D5I5	F4D5I5-00039	4.4	1/6/2010	287649.4	3836222.6	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	3	0.2	Scrap Bin	None		
F4D5I5	F4D5I5-00040	4.4	1/6/2010	287634.6	3836203.8	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	6	0.5	Scrap Bin	None		
F4D5I5	F4D5I5-00041	4.2	1/6/2010	287635.4	3836223.6	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	4	0.1	Scrap Bin	None		
F4D5I5	F4D5I5-00042	4	1/6/2010	287648.9	3836211.5	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	2	0.1	Scrap Bin	None		
F4D5I5	F4D5I5-00043	3.9	1/6/2010	287637.4	3836244.8	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	1	0.1	Scrap Bin	None		
F4D5I5	F4D5I5-00044	3.9	1/6/2010	287632	3836236	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	1	0.1	Scrap Bin	None		
F4D5I5	F4D5I5-00045	3.8	1/6/2010	287632.1	3836237.3	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	1	0.1	Scrap Bin	None		
F4D5I5	F4D5I5-00046	3.7	1/6/2010	287640.2	3836247.6	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	1	0.2	Scrap Bin	None		
F4D5I5	F4D5I5-00047	3.7	1/6/2010	287637.6	3836203.4	MPPEH	Grenade	Other (See Comments)	None (empty)	Unfuzed	1	3	0.1	Consolidation Point	Demil	40mm grenade parts	
F4D5I5	F4D5I5-00048	3.7	1/6/2010	287635.2	3836239.6	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	1	0.1	Scrap Bin	None		
F4D5I5	F4D5I5-00049	3.7	1/6/2010	287631.6	3836225.4	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	1	0.1	Scrap Bin	None		
F4D5I5	F4D5I5-00050	3.6	1/6/2010	287630.7	3836221.9	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	2	0.1	Scrap Bin	None		
F4D5I5	F4D5I5-00051	3.5	1/6/2010	287639.2	3836216.8	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	3	0.2	Scrap Bin	None		
F4D5I5	F4D5I5-00052	3.5	1/6/2010	287628.6	3836214.8	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	1	0.1	Scrap Bin	None		
F4D5I5	F4D5I5-00053	3.4	1/6/2010	287641.2	3836247.4	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	6	0.1	Scrap Bin	None		
F4D5I5	F4D5I5-00054	3.4	1/6/2010	287633.2	3836220	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	4	0.2	Scrap Bin	None		
F4D5I5	F4D5I5-00055	3.4	1/6/2010	287633.7	3836239.8	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	4	0.2	Scrap Bin	None		
F4D5I5	F4D5I5-00056	3.4	1/6/2010	287625.8	3836215.6	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	6	1	Scrap Bin	None		
F4D5I5	F4D5I5-00057	3.4	1/6/2010	287647.8	3836242.8	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	1	0.1	Scrap Bin	None		
F4D5I5	F4D5I5-00058	3.3	1/6/2010	287645	3836240.8	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	1	0.1	Scrap Bin	None		
F4D5I5	F4D5I5-00059	3.3	1/6/2010	287628.7	3836221.5	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	1	0.1	Scrap Bin	None		
F4D5I5	F4D5I5-00060	3.3	1/6/2010	287638.1	3836246.9	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	1	0.1	Scrap Bin	None		
F4D5I5	F4D5I5-00061	3.2	1/6/2010	287630.8	3836220.4	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	2	0.1	Scrap Bin	None		
F4D5I5	F4D5I5-00062	3.2	1/6/2010	287634.6	3836206.5	MPPEH	Grenade	Other (See Comments)	None (empty)	Unfuzed	1	3	0.5	Consolidation Point	Demil	Grenade spoon	* Additional Item(s) at Flag (see Table 4)
F4D5I5	F4D5I5-00063	3.2	1/6/2010	287635.1	3836218.4	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	1	0.1	Scrap Bin	None		
F4D5I5	F4D5I5-00064	3.2	1/6/2010	287646.4	3836220.6	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	1	0.1	Scrap Bin	None		
F4D5I5	F4D5I5-00065	3.2	1/6/2010	287640.4	3836220.2	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	4	0.2	Scrap Bin	None		
F4D5I5	F4D5I5-00066	3.2	1/6/2010	287642.7	3836249.2	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	4	0.3	Scrap Bin	None		
F4D5I5	F4D5I5-00067	3.1	1/6/2010	287628.2	3836225.1	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	1	0.1	Scrap Bin	None		
F4D5I5	F4D5I5-00068	3.1	1/6/2010	287621.6	3836216	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	5	0.2	Scrap Bin	None		
F4D5I5	F4D5I5-00069	3.1	1/6/2010	287634.4	3836233.3	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	1	0.1	Scrap Bin	None		
F4D5I5	F4D5I5-00070	3.1	1/6/2010	287631.8	3836217.6	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	1	0.1	Scrap Bin	None		
F4D5I6	F4D5I6-00001	25.7	1/6/2010	287645.4	3836251.2	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	1	0.1	Scrap Bin	None		
F4D5I6	F4D5I6-00002	4.6	1/6/2010	287647.6	3836254.6	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	1	0.2	Scrap Bin	None		
F4D5I6	F4D5I6-00003	3	1/6/2010	287647.5	3836251.4	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	1	0.5	Scrap Bin	None		
F4D5J4	F4D5J4-00001	386.6	1/5/2010	287655.4	3836189.8	MPPEH	Rocket	M29A2, Rocket, 3.5 Inch Practice	None (empty)	M405 (M29)	1	2	3	Consolidation Point	Demil		
F4D5J4	F4D5J4-00002	85.8	1/5/2010	287651	3836175.8	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	0	2	Scrap Bin	None		

Generated by: James Frank
Checked by: Paul Weber

TABLE 1
Phase I MEC Intrusive Investigation Dig Results
Site UXO-06 Borrow Pit Expansion Area
MCB CamLej, North Carolina

Grid	Anomaly ID	Amplitude (mV)	Dig Date	Northing	Easting	Item Group	Item Class	Category	Filler	Fuze	Quantity	Depth (inches)	Weight (Pounds)	Action Taken	Demo Required?	Comments	Additional Item(s)
F4D5J4	F4D5J4-00003	53.5	1/5/2010	287656.4	3836183.6	MPPEH	Rocket	M29A2, Rocket, 3.5 Inch Practice	None (empty)	Unfuzed	1	4	2	Consolidation Point	Demil	Warhead only	
F4D5J4	F4D5J4-00004	36.1	1/5/2010	287664.2	3836195.2	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	2	0.4	Scrap Bin	None		
F4D5J4	F4D5J4-00005	17.6	1/5/2010	287660.6	3836196.4	MPPEH	Grenade	Other (See Comments)	None (empty)	Unfuzed	1	4	0.4	Consolidation Point	Demil	Grenade spoon	
F4D5J4	F4D5J4-00006	9.1	1/5/2010	287657.8	3836187.8	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	2	0.2	Scrap Bin	None		
F4D5J4	F4D5J4-00007	7.8	1/5/2010	287658.4	3836187.2	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	2	0.2	Scrap Bin	None		
F4D5J4	F4D5J4-00008	7.7	1/5/2010	287654.6	3836181.6	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	6	0.2	Scrap Bin	None		
F4D5J4	F4D5J4-00009	7.3	1/5/2010	287657.8	3836189.2	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	3	0.4	Scrap Bin	None		
F4D5J4	F4D5J4-00010	5.4	1/5/2010	287663	3836194.8	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	2	0.2	Scrap Bin	None		
F4D5J4	F4D5J4-00011	5	1/5/2010	287651.9	3836178.9	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	3	0.4	Scrap Bin	None		
F4D5J4	F4D5J4-00012	4.8	1/5/2010	287654.6	3836197.8	MPPEH	Flare	M127A1, Star Parachute	None (empty)	Unfuzed	1	3	0.1	Consolidation Point	Demil		
F4D5J4	F4D5J4-00013	3.1	1/5/2010	287666.4	3836198.8	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	5	0.2	Scrap Bin	None		
F4D5J5	F4D5J5-00001	666.1	1/6/2010	287665.6	3836240.5	MPPEH	Rocket	M29A2, Rocket, 3.5 Inch Practice	None (empty)	M405 (M29)	1	2	4	Consolidation Point	Demil		
F4D5J5	F4D5J5-00002	428	1/6/2010	287666.4	3836239.4	MPPEH	Rocket	M29A2, Rocket, 3.5 Inch Practice	None (empty)	M405 (M29)	1	3	3	Consolidation Point	Demil		
F4D5J5	F4D5J5-00003	376.3	1/6/2010	287671.8	3836215.2	MPPEH	Rocket	M29A2, Rocket, 3.5 Inch Practice	None (empty)	M405 (M29)	1	2	3	Consolidation Point	Demil		
F4D5J5	F4D5J5-00004	343.8	1/6/2010	287669.2	3836240.6	MPPEH	Rocket	M29A2, Rocket, 3.5 Inch Practice	None (empty)	M405 (M29)	1	0	3	Consolidation Point	Demil		* Additional Item(s) at Flag (see Table 4)
F4D5J5	F4D5J5-00005	318.7	1/6/2010	287670.2	3836243.8	MPPEH	Rocket	M29A2, Rocket, 3.5 Inch Practice	None (empty)	M405 (M29)	1	2	5	Consolidation Point	Demil		
F4D5J5	F4D5J5-00006	203.8	1/6/2010	287660	3836239.6	MPPEH	Rocket	M29A2, Rocket, 3.5 Inch Practice	None (empty)	Unfuzed	1	4	4	Consolidation Point	Demil	Rocket motor and warhead	
F4D5J5	F4D5J5-00007	180.3	1/6/2010	287653.2	3836229.4	MPPEH	Rocket	M29A2, Rocket, 3.5 Inch Practice	None (empty)	M405 (M29)	1	3	4	Consolidation Point	Demil		
F4D5J5	F4D5J5-00008	177	1/6/2010	287661.2	3836232.3	MPPEH	Rocket	M29A2, Rocket, 3.5 Inch Practice	None (empty)	M405 (M29)	1	4	2	Consolidation Point	Demil		
F4D5J5	F4D5J5-00009	165.2	1/6/2010	287678.4	3836236	MPPEH	Flare	M127A1, Star Parachute	None (empty)	Unfuzed	1	2	0.1	Consolidation Point	Demil		
F4D5J5	F4D5J5-00010	126.5	1/21/2010	287678.3	3836244.3	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	10	0.1	Scrap Bin	None		
F4D5J5	F4D5J5-00011	78.8	1/21/2010	287677.4	3836244.9	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	8	0.1	Scrap Bin	None		
F4D5J5	F4D5J5-00012	66.1	1/6/2010	287679.6	3836247.9	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	0	0.1	Scrap Bin	None		
F4D5J5	F4D5J5-00013	64.4	1/6/2010	287671.5	3836218.1	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	6	2	Scrap Bin	None		
F4D5J5	F4D5J5-00014	53.4	1/6/2010	287666.4	3836213	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	2	1	Scrap Bin	None		
F4D5J5	F4D5J5-00015	44.1	1/6/2010	287661.4	3836223	MPPEH	Grenade	40mm Parachute M583	None (empty)	Unfuzed	1	2	0.1	Consolidation Point	Demil		
F4D5J5	F4D5J5-00016	41.8	1/6/2010	287657.1	3836202.9	MPPEH	Flare	M127A1, Star Parachute	None (empty)	Unfuzed	1	0	0.1	Consolidation Point	Demil	Launch tube body	
F4D5J5	F4D5J5-00017	39.3	1/6/2010	287669.4	3836236.2	MPPEH	Rocket	M29A2, Rocket, 3.5 Inch Practice	None (empty)	Unfuzed	1	2	0.1	Consolidation Point	Demil	Nose cone only	
F4D5J5	F4D5J5-00018	39.2	1/6/2010	287670	3836248.7	QC	QC Seed	QC Seed Item	N / A	N / A	1	4	0.2	Consolidation Point	None	QC Seed #21	
F4D5J5	F4D5J5-00019	38.6	1/6/2010	287652	3836221.1	QC	QC Seed	QC Seed Item	N / A	N / A	1	2	0.2	Consolidation Point	None	QC Seed #25	
F4D5J5	F4D5J5-00020	36.3	1/21/2010	287666.7	3836204	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	7	0.1	Scrap Bin	None		
F4D5J5	F4D5J5-00021	31.5	1/7/2010	287680.6	3836243.8	MPPEH	Rocket	M29A2, Rocket, 3.5 Inch Practice	None (empty)	M405 (M29)	1	4	0.3	Consolidation Point	Demil	Fuze only	
F4D5J5	F4D5J5-00022	26.8	1/6/2010	287656.2	3836242	MPPEH	Rocket	M29A2, Rocket, 3.5 Inch Practice	None (empty)	Unfuzed	1	3	0.2	Consolidation Point	Demil	Nose cone only	
F4D5J5	F4D5J5-00023	19.4	1/7/2010	287658.4	3836222	MPPEH	Grenade	Other (See Comments)	None (empty)	Unfuzed	1	3	0.2	Consolidation Point	Demil	40mm grenade pieces	
F4D5J5	F4D5J5-00024	18.7	1/6/2010	287654.6	3836217.8	MPPEH	Grenade	Other (See Comments)	None (empty)	Unfuzed	1	1	0.4	Consolidation Point	Demil	40mm grenade body & nose cap	
F4D5J5	F4D5J5-00025	18	1/6/2010	287653.3	3836236.2	MPPEH	Grenade	Other (See Comments)	None (empty)	Unfuzed	1	3	0.2	Consolidation Point	Demil	40mm grenade parts	
F4D5J5	F4D5J5-00026	17.6	1/6/2010	287665	3836234.6	MPPEH	Grenade	Other (See Comments)	None (empty)	Unfuzed	1	4	0.1	Consolidation Point	Demil	40mm cartridge case	
F4D5J5	F4D5J5-00027	15.4	1/6/2010	287669.7	3836217.6	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	2	0.1	Scrap Bin	None		
F4D5J5	F4D5J5-00028	13.2	1/6/2010	287667.4	3836213.9	MPPEH	Grenade	Other (See Comments)	None (empty)	Unfuzed	1	4	0.1	Consolidation Point	Demil	40mm grenade parts	
F4D5J5	F4D5J5-00029	13.1	1/7/2010	287655.4	3836209.4	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	1	0.4	Scrap Bin	None		
F4D5J5	F4D5J5-00030	12.3	1/7/2010	287685.4	3836239.8	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	1	0.1	Scrap Bin	None		
F4D5J5	F4D5J5-00031	12.2	1/6/2010	287670	3836204.7	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	1	0.1	Scrap Bin	None		
F4D5J5	F4D5J5-00032	10.9	1/6/2010	287656.2	3836219.6	MPPEH	Rocket	M29A2, Rocket, 3.5 Inch Practice	None (empty)	Unfuzed	1	2	0.5	Consolidation Point	Demil	Nose cone only	
F4D5J5	F4D5J5-00033	10.4	1/7/2010	287690.6	3836248	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	2	0.1	Scrap Bin	None		
F4D5J5	F4D5J5-00034	10.1	1/6/2010	287665.2	3836231.8	MPPEH	Grenade	Other (See Comments)	None (empty)	Unfuzed	1	2	0.1	Consolidation Point	Demil	40mm grenade parts	
F4D5J5	F4D5J5-00035	9.7	1/6/2010	287660.6	3836230.4	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	2	0.1	Scrap Bin	None		
F4D5J5	F4D5J5-00036	8.8	1/6/2010	287660.6	3836228.8	MPPEH	Rocket	35mm Subcal M73	None (empty)	Unfuzed	1	3	0.4	Consolidation Point	Demil		
F4D5J5	F4D5J5-00037	7.6	1/6/2010	287677	3836227.2	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	12	0.4	Scrap Bin	None		
F4D5J5	F4D5J5-00038	7.2	1/7/2010	287658.4	3836205	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	1	0.1	Scrap Bin	None		
F4D5J5	F4D5J5-00039	7.2	1/6/2010	287663.6	3836232.6	MPPEH	Rocket	M29A2, Rocket, 3.5 Inch Practice	None (empty)	Unfuzed	1	4	0.3	Consolidation Point	Demil	Rocket fragments	
F4D5J5	F4D5J5-00040	7	1/7/2010	287688.2	3836242.1	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	3	0.1	Scrap Bin	None		
F4D5J5	F4D5J5-00041	6.9	1/7/2010	287655	3836249.9	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	0	0.1	Scrap Bin	None		
F4D5J5	F4D5J5-00042	6.7	1/6/2010	287672.4	3836237	MPPEH	Flare	M127A1, Star Parachute	None (empty)	Unfuzed	1	8	0.3	Consolidation Point	Demil		
F4D5J5	F4D5J5-00043	6.4	1/6/2010	287665.8	3836204.7	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	5	0.2	Scrap Bin	None		
F4D5J5	F4D5J5-00044	5.6	1/7/2010	287655.6	3836248.6	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	4	0.2	Scrap Bin	None		
F4D5J5	F4D5J5-00045	4	1/6/2010	287674.2	3836219.4	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	6	0.1	Scrap Bin	None		
F4D5J5	F4D5J5-00046	4	1/7/2010	287686.8	3836247.6	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	18	0.1	Scrap Bin	None		
F4D5J5	F4D5J5-00047	3.9	1/7/2010	287650.1	3836203.4	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	1	0.1	Scrap Bin	None		
F4D5J5	F4D5J5-00048	3.5	1/7/2010	287680.8	3836245.6	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	3	0.2	Scrap Bin	None	40mm nose cone	
F4D5J5	F4D5J5-00049	3.4	1/7/2010	287668.5	3836203.9	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	5	0.3	Scrap Bin	None		

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TABLE 1
Phase I MEC Intrusive Investigation Dig Results
Site UXO-06 Borrow Pit Expansion Area
MCB CamLej, North Carolina

Grid	Anomaly ID	Amplitude (mV)	Dig Date	Northing	Easting	Item Group	Item Class	Category	Filler	Fuze	Quantity	Depth (inches)	Weight (Pounds)	Action Taken	Demo Required?	Comments	Additional Item(s)
F4D5J5	F4D5J5-00050	3.2	1/6/2010	287678.6	3836231.6	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	3	0.1	Scrap Bin	None		
F4D5J5	F4D5J5-00051	3.2	1/6/2010	287676.2	3836234.2	MPPEH	Grenade	Other (See Comments)	None (empty)	Unfuzed	1	4	0.1	Consolidation Point	Demil	40mm grenade parts	
F4D5J5	F4D5J5-00052	3.1	1/7/2010	287650.3	3836249.9	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	2	0.1	Scrap Bin	None		
F4D5J5	F4D5J5-00053	3.1	1/7/2010	287653.7	3836248.4	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	0	0.1	Scrap Bin	None		
F4D5J5	F4D5J5-00054	3.1	1/6/2010	287657.5	3836201.6	MPPEH	Grenade	Other (See Comments)	None (empty)	Unfuzed	1	2	0.2	Consolidation Point	Demil	Grenade fuze striker	
F4D5J5	F4D5J5-00055	3	1/26/2010	287676.8	3836247.4	MPPEH	Grenade	40mm Parachute M583	N / A	N / A	1	30	0.25	Consolidation Point	Demil		
F4D5J6	F4D5J6-00001	3711.2	1/6/2010	287687.9	3836255.1	Non-MPPEH Debris	Other (See Comments)	Other (See Comments)	N / A	N / A	1	0	0	Left in Place	None	Monitoring well	
F4D5J6	F4D5J6-00002	489	1/6/2010	287665.8	3836270.4	MPPEH	Rocket	M29A2, Rocket, 3.5 Inch Practice	None (empty)	Unfuzed	1	0	2	Consolidation Point	Demil	Warhead only	
F4D5J6	F4D5J6-00003	252.7	1/6/2010	287673.6	3836265.2	MPPEH	Rocket	M29A2, Rocket, 3.5 Inch Practice	None (empty)	M405 (M29)	1	6	4	Consolidation Point	Demil		
F4D5J6	F4D5J6-00004	205.1	1/6/2010	287678.8	3836280.4	MPPEH	Rocket	M29A2, Rocket, 3.5 Inch Practice	None (empty)	M405 (M29)	1	4	3	Consolidation Point	Demil		
F4D5J6	F4D5J6-00005	168.8	1/6/2010	287676.6	3836280.4	MPPEH	Rocket	M29A2, Rocket, 3.5 Inch Practice	None (empty)	Unfuzed	1	6	5	Consolidation Point	Demil	Warhead only	
F4D5J6	F4D5J6-00006	144.6	1/6/2010	287684.4	3836269.4	MPPEH	Rocket	M29A2, Rocket, 3.5 Inch Practice	None (empty)	M405 (M29)	1	2	3	Consolidation Point	Demil		
F4D5J6	F4D5J6-00007	136.1	1/6/2010	287675.4	3836277.2	MPPEH	Rocket	M29A2, Rocket, 3.5 Inch Practice	None (empty)	Unfuzed	1	2	0.3	Consolidation Point	Demil		
F4D5J6	F4D5J6-00008	91.6	1/6/2010	287674.8	3836280.6	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	30	0.1	Scrap Bin	None		
F4D5J6	F4D5J6-00009	83.4	1/6/2010	287674.4	3836263.8	MPPEH	Rocket	M29A2, Rocket, 3.5 Inch Practice	None (empty)	Unfuzed	1	6	2	Consolidation Point	Demil	Motor only	
F4D5J6	F4D5J6-00010	81.3	1/6/2010	287678.8	3836260	MPPEH	Rocket	M29A2, Rocket, 3.5 Inch Practice	None (empty)	Unfuzed	1	2	1	Consolidation Point	Demil	Motor only	
F4D5J6	F4D5J6-00011	66.8	1/6/2010	287682.2	3836264.4	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	12	5	Scrap Bin	None		
F4D5J6	F4D5J6-00012	65.3	1/6/2010	287672.4	3836277.4	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	1	0.1	Scrap Bin	None		
F4D5J6	F4D5J6-00013	63.6	1/6/2010	287684	3836261.8	MPPEH	Rocket	M29A2, Rocket, 3.5 Inch Practice	None (empty)	M405 (M29)	1	12	6	Consolidation Point	Demil		
F4D5J6	F4D5J6-00014	58.3	1/6/2010	287673	3836276.6	MPPEH	Rocket	M29A2, Rocket, 3.5 Inch Practice	None (empty)	Unfuzed	1	5	1	Consolidation Point	Demil	Motor only	
F4D5J6	F4D5J6-00015	49.2	1/6/2010	287681.1	3836255.2	MPPEH	Rocket	M29A2, Rocket, 3.5 Inch Practice	None (empty)	Unfuzed	1	7	0.2	Consolidation Point	Demil	Fins and shroud	
F4D5J6	F4D5J6-00016	48.7	1/6/2010	287683.8	3836263.2	MPPEH	Rocket	M29A2, Rocket, 3.5 Inch Practice	None (empty)	Unfuzed	1	6	0.1	Consolidation Point	Demil	Finish round	
F4D5J6	F4D5J6-00017	43.5	1/6/2010	287677.4	3836274.4	MPPEH	Rocket	M29A2, Rocket, 3.5 Inch Practice	None (empty)	Unfuzed	1	6	0.3	Consolidation Point	Demil		
F4D5J6	F4D5J6-00018	32.5	1/6/2010	287671.8	3836281	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	3	0.3	Scrap Bin	None		
F4D5J6	F4D5J6-00019	29.5	1/6/2010	287683	3836251.2	MPPEH	Rocket	M29A2, Rocket, 3.5 Inch Practice	None (empty)	Unfuzed	1	2	0.1	Consolidation Point	Demil	3.5 inch venturi	
F4D5J6	F4D5J6-00020	20.2	1/6/2010	287682.2	3836262.8	MPPEH	Rocket	M29A2, Rocket, 3.5 Inch Practice	None (empty)	Unfuzed	1	0	0.2	Consolidation Point	Demil	Nose cone only	
F4D5J6	F4D5J6-00021	19.5	1/6/2010	287683.1	3836271.1	MPPEH	Rocket	M29A2, Rocket, 3.5 Inch Practice	None (empty)	Unfuzed	1	4	0.1	Consolidation Point	Demil	Nose cone only	
F4D5J6	F4D5J6-00022	19.3	1/6/2010	287683	3836266.8	MPPEH	Rocket	M29A2, Rocket, 3.5 Inch Practice	None (empty)	Unfuzed	1	0	0.2	Consolidation Point	Demil	Nose cone only	
F4D5J6	F4D5J6-00023	17	1/6/2010	287667.6	3836269.7	MPPEH	Grenade	Other (See Comments)	None (empty)	Unfuzed	1	3	0.1	Consolidation Point	Demil	40mm grenade parts	
F4D5J6	F4D5J6-00024	15.9	1/6/2010	287678.2	3836252.8	MPPEH	Rocket	M29A2, Rocket, 3.5 Inch Practice	None (empty)	M405 (M29)	1	23	5	Consolidation Point	Demil		
F4D5J6	F4D5J6-00025	15.8	1/6/2010	287675.4	3836251	MPPEH	Rocket	M29A2, Rocket, 3.5 Inch Practice	None (empty)	Unfuzed	1	2	0.5	Consolidation Point	Demil	Nose cone only	
F4D5J6	F4D5J6-00026	13.5	1/6/2010	287671.6	3836277.4	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	1	0.1	Scrap Bin	None		
F4D5J6	F4D5J6-00027	12.7	1/6/2010	287679.6	3836278.2	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	5	0.3	Scrap Bin	None		
F4D5J6	F4D5J6-00028	11.7	1/6/2010	287683.8	3836270.8	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	1	0.2	Scrap Bin	None		
F4D5J6	F4D5J6-00029	11.4	1/6/2010	287692.6	3836263.4	MPPEH	Rocket	M29A2, Rocket, 3.5 Inch Practice	None (empty)	Unfuzed	1	22	1	Consolidation Point	Demil	Motor only	
F4D5J6	F4D5J6-00030	11.1	1/6/2010	287685.6	3836268.3	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	3	0.3	Scrap Bin	None		
F4D5J6	F4D5J6-00031	10.8	1/6/2010	287668.6	3836276.4	MPPEH	Rocket	M29A2, Rocket, 3.5 Inch Practice	None (empty)	Unfuzed	1	2	0.1	Consolidation Point	Demil	Nose cone only	
F4D5J6	F4D5J6-00032	10.6	1/6/2010	287669.4	3836277.2	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	1	0.1	Scrap Bin	None		
F4D5J6	F4D5J6-00033	10.6	1/6/2010	287654.1	3836264.2	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	1	0.1	Scrap Bin	None		
F4D5J6	F4D5J6-00034	10	1/6/2010	287652.5	3836264.9	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	2	0.1	Scrap Bin	None		
F4D5J6	F4D5J6-00035	9.3	1/6/2010	287681.2	3836262.2	MPPEH	Rocket	M29A2, Rocket, 3.5 Inch Practice	None (empty)	Unfuzed	1	3	0.1	Consolidation Point	Demil	Nose cone only	
F4D5J6	F4D5J6-00036	8.9	1/6/2010	287689.2	3836251	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	1	0.1	Scrap Bin	None		
F4D5J6	F4D5J6-00037	8.4	1/6/2010	287681.4	3836252.8	MPPEH	Rocket	35mm Subcal M73	None (empty)	Unfuzed	1	8	0.3	Consolidation Point	Demil		
F4D5J6	F4D5J6-00038	8	1/6/2010	287680.1	3836279.3	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	1	0.1	Scrap Bin	None		
F4D5J6	F4D5J6-00039	7.5	1/6/2010	287670.8	3836276.6	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	1	0.1	Scrap Bin	None		
F4D5J6	F4D5J6-00040	7	1/6/2010	287664.8	3836250.1	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	0	0.1	Scrap Bin	None		
F4D5J6	F4D5J6-00041	6.9	1/6/2010	287684.8	3836276.6	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	6	0.1	Scrap Bin	None		
F4D5J6	F4D5J6-00042	6.5	1/6/2010	287679.5	3836254.6	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	1	0.1	Scrap Bin	None		
F4D5J6	F4D5J6-00043	6.4	1/6/2010	287665.7	3836265.8	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	1	0.1	Scrap Bin	None		
F4D5J6	F4D5J6-00044	6	1/6/2010	287680.4	3836270.6	MPPEH	Rocket	M29A2, Rocket, 3.5 Inch Practice	None (empty)	Unfuzed	1	7	0.1	Consolidation Point	Demil	Nose cone only	
F4D5J6	F4D5J6-00045	5.9	1/6/2010	287686.4	3836275.4	MPPEH	Rocket	35mm Subcal M73	None (empty)	Unfuzed	1	6	0.3	Consolidation Point	Demil		
F4D5J6	F4D5J6-00046	5.6	1/6/2010	287667.8	3836267	MPPEH	Grenade	Other (See Comments)	None (empty)	Unfuzed	1	2	0.1	Consolidation Point	Demil	40mm grenade parts	
F4D5J6	F4D5J6-00047	5.3	1/6/2010	287682.2	3836253.6	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	1	0.1	Scrap Bin	None		
F4D5J6	F4D5J6-00048	4.6	1/6/2010	287658	3836257	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	5	0.1	Scrap Bin	None		
F4D5J6	F4D5J6-00049	4.5	1/6/2010	287681	3836254.1	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	2	0.2	Scrap Bin	None		
F4D5J6	F4D5J6-00050	4.5	1/6/2010	287690.2	3836266.6	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	1	0.1	Scrap Bin	None		
F4D5J6	F4D5J6-00051	4	1/6/2010	287671.6	3836283.2	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	1	0.1	Scrap Bin	None		
F4D5J6	F4D5J6-00052	3.7	1/6/2010	287654.2	3836262.9	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	1	0.1	Scrap Bin	None		
F4D5J6	F4D5J6-00053	3.6	1/6/2010	287651.5	3836261.7	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	1	0.1	Scrap Bin	None		
F4D5J6	F4D5J6-00054	3.5	1/6/2010	287655.9	3836263.9	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	0	0.1	Scrap Bin	None		
F4D5J6	F4D5J6-00055	3.5	1/6/2010	287678.2	3836278.4	MPPEH	Rocket	35mm Subcal M73	None (empty)	Unfuzed	1	4	0.1	Consolidation Point	Demil		

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Phase I MEC Intrusive Investigation Dig Results
Site UXO-06 Borrow Pit Expansion Area
MCB CamLej, North Carolina

Grid	Anomaly ID	Amplitude (mV)	Dig Date	Northing	Easting	Item Group	Item Class	Category	Filler	Fuze	Quantity	Depth (inches)	Weight (Pounds)	Action Taken	Demo Required?	Comments	Additional Item(s)
F4D5J6	F4D5J6-00056	3.5	1/6/2010	287684.8	3836264.8	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	4	0.2	Scrap Bin	None		
F4D5J6	F4D5J6-00057	3.4	1/6/2010	287671.8	3836274.2	MPPEH	Rocket	M29A2, Rocket, 3.5 Inch Practice	None (empty)	Unfuzed	1	3	0.2	Consolidation Point	Demil	Rocket fragments	
F4D5J6	F4D5J6-00058	3.4	1/6/2010	287658.7	3836264.5	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	0	0.1	Scrap Bin	None		
F4D5J6	F4D5J6-00059	3.4	1/6/2010	287655.8	3836261.6	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	1	0.1	Scrap Bin	None		
F4D5J6	F4D5J6-00060	3.4	1/6/2010	287651.5	3836263.4	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	1	0.1	Scrap Bin	None		
F4D5J6	F4D5J6-00061	3.3	1/6/2010	287652.1	3836260.5	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	1	0.1	Scrap Bin	None		
F4D5J6	F4D5J6-00062	3.2	1/6/2010	287685	3836265.6	MPPEH	Grenade	Other (See Comments)	None (empty)	Unfuzed	1	3	0.1	Consolidation Point	Demil	40mm grenade parts	
F4D5J6	F4D5J6-00063	3.2	1/6/2010	287658.8	3836256.4	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	2	0.1	Scrap Bin	None		
F4D5J6	F4D5J6-00064	3.2	1/6/2010	287657.3	3836255.9	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	2	0.1	Scrap Bin	None		
F4D5J6	F4D5J6-00065	3.1	1/6/2010	287662.8	3836268.8	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	1	0.1	Scrap Bin	None		
F4D5J6	F4D5J6-00066	3.1	1/6/2010	287663.6	3836268.2	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	0	0.1	Scrap Bin	None		

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TABLE 2
Phase I MEC Intrusive Investigation Dig Results - Additional Items
Site UXO-06 Borrow Pit Expansion Area
MCB CamLej, North Carolina

Anomaly ID	Grid	Dig Date	Item Group	Item Class	Item Category	Filler	Fuze	Quantity	Depth	Weight	Action Taken	Demo Required?	Comments
F4D5I4-00001	F4D5I4	1/5/2010	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	0	20	Scrap Bin	None	
F4D5I4-00026	F4D5I4	1/5/2010	MPPEH	Grenade	Other (See Comments)	None (empty)	unfuzed	1	3	0.1	Consolidation Point	Demil	Grenade fuze top
F4D5I5-00062	F4D5I5	1/6/2010	Non-MPPEH Debris	Scrap	N / A	N / A	N / A	1	3	0.4	Scrap Bin	None	
F4D5J5-00004	F4D5J5	1/6/2010	MPPEH	Rocket	M29A2, Rocket, 3.5 Inch Practice	None (empty)	unfuzed	1	1	1	Consolidation Point	Demil	

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TABLE 3
Phase I Surface Soil Detected Results
Site UXO-06 Borrow Pit Expansion Area
MCB CamLej, North Carolina

Station ID	**Camp Lejeune Background SS 2X Mean**	**NC SSLs**	**Adjusted Industrial Soil RSLs**	**Adjusted Residential Soil RSLs**	MR06-DU02		
Sample ID					MR06-DU02-SS01-09C	MR06-DU02-SS02-09C	MR06-DU02-SS03-09C
Sample Date					09/08/09	09/08/09	09/08/09
Chemical Name							
Semivolatile Organic Compounds (µg/kg)							
No Detections							
Explosives (µg/kg)							
Nitroglycerin	--	--	6,200	610	500 U	500 U	500 U
Tetryl	--	--	250,000	24,000	250 U	250 U	67 J
Total Metals (mg/kg)							
Arsenic	0.626	5.44	1.6	0.39	0.66	0.42 J	0.45 J
Barium	14.5	1,648	19,000	1,500	10	8.9	9.7
Copper	4.83	704	4,100	310	5.9	5.1	3.8
Iron	3,245	151	72,000	5,500	1,210	1,020	1,130
Manganese	13.7	65.2	2,300	180	21.5	18.2	13.2
Mercury	0.081	1.1	31	2.3	0.021 J	0.033 U	0.019 J
Potassium	116	--	--	--	164 J	127 J	154 J
Zinc	10.8	13,060	31,000	2,300	6.6	6.1	5.4

Notes:
Shading indicates exceedance of two times the mean base background concentration for surface soil
Bold border indicates exceedance of NC SSLs
Bold text indicates exceedance of Adjusted Industrial Soil RSLs
Underline indicates exceedance of Adjusted Residential Soil RSLs
RSLs were adjusted for noncarcinogens to account for exposure to multiple constituents
NA - Not analyzed
J - Analyte present, value may or may not be accurate or precise
U - The material was analyzed for, but not detected
UJ - Analyte not detected, quantitation limit may be inaccurate
mg/kg - Milligrams per kilogram
µg/kg - Micrograms per kilogram

Generated by: James Frank
Checked by: Paul Weber

TABLE 3
Phase I Surface Soil Detected Results
Site UXO-06 Borrow Pit Expansion Area
MCB CamLej, North Carolina

Station ID	**Camp Lejeune Background SS 2X Mean**	**NC SSLs**	**Adjusted Industrial Soil RSLs**	**Adjusted Residential Soil RSLs**	MR06-DU03			
Sample ID					MR06-DU03-SS01-09C	MR06-DU03-SS01D-09C	MR06-DU03-SS02-09C	MR06-DU03-SS03-09C
Sample Date					09/08/09	09/08/09	09/08/09	09/08/09
Chemical Name								
Semivolatile Organic Compounds (µg/kg)								
No Detections								
Explosives (µg/kg)								
Nitroglycerin	--	--	6,200	610	500 U	500 U	500 U	500 U
Tetryl	--	--	250,000	24,000	250 U	250 U	250 U	250 U
Total Metals (mg/kg)								
Arsenic	0.626	5.44	1.6	0.39	0.37 J	0.33 J	0.37 J	0.44 J
Barium	14.5	1,648	19,000	1,500	17.6	15.4	13.7	16
Copper	4.83	704	4,100	310	2.7 J	2.1 J	4.2 J	3.8 J
Iron	3,245	151	72,000	5,500	534	612	451	596
Manganese	13.7	65.2	2,300	180	47.2	37.8	31.1	49.2
Mercury	0.081	1.1	31	2.3	0.033 J	0.021 J	0.039 J	0.041 J
Potassium	116	--	--	--	149 J	136 J	115 J	171 J
Zinc	10.8	13,060	31,000	2,300	14.3 J	9.8 J	9.6 J	20 J

Notes:
Shading indicates exceedance of two times the mean base background concentration for surface soil
Bold border indicates exceedance of NC SSLs
Bold text indicates exceedance of Adjusted Industrial Soil RSLs
Underline indicates exceedance of Adjusted Residential Soil RSLs
RSLs were adjusted for noncarcinogens to account for exposure to multiple constituents
NA - Not analyzed
J - Analyte present, value may or may not be accurate or precise
U - The material was analyzed for, but not detected
UJ - Analyte not detected, quantitation limit may be inaccurate
mg/kg - Milligrams per kilogram
µg/kg - Micrograms per kilogram

Generated by: James Frank
Checked by: Paul Weber

TABLE 3
Phase I Surface Soil Detected Results
Site UXO-06 Borrow Pit Expansion Area
MCB CamLej, North Carolina

Station ID	**Camp Lejeune Background SS 2X Mean**	**NC SSLs**	**Adjusted Industrial Soil RSLs**	**Adjusted Residential Soil RSLs**	MR06-DU04		
Sample ID					MR06-DU04-SS01-09C	MR06-DU04-SS02-09C	MR06-DU04-SS03-09C
Sample Date					09/08/09	09/08/09	09/08/09
Chemical Name							
Semivolatile Organic Compounds (µg/kg)							
No Detections							
Explosives (µg/kg)							
Nitroglycerin	--	--	6,200	610	500 U	410 J	500 U
Tetryl	--	--	250,000	24,000	250 U	250 U	250 U
Total Metals (mg/kg)							
Arsenic	0.626	5.44	1.6	0.39	0.91 U	0.49 J	0.53 J
Barium	14.5	1,648	19,000	1,500	13.2	12.5	11.1
Copper	4.83	704	4,100	310	1.5	2.4	1.5 J
Iron	3,245	151	72,000	5,500	674	565	837
Manganese	13.7	65.2	2,300	180	38.2	24.2	14.9
Mercury	0.081	1.1	31	2.3	0.44	0.021 J	0.025 J
Potassium	116	--	--	--	154 J	150 J	159 J
Zinc	10.8	13,060	31,000	2,300	8.3	7.2	6.1 J

Notes:
Shading indicates exceedance of two times the mean base background concentration for surface soil
Bold border indicates exceedance of NC SSLs
Bold text indicates exceedance of Adjusted Industrial Soil RSLs
Underline indicates exceedance of Adjusted Residential Soil RSLs
RSLs were adjusted for noncarcinogens to account for exposure to multiple constituents
NA - Not analyzed
J - Analyte present, value may or may not be accurate or precise
U - The material was analyzed for, but not detected
UJ - Analyte not detected, quantitation limit may be inaccurate
mg/kg - Milligrams per kilogram
µg/kg - Micrograms per kilogram

Generated by: James Frank
Checked by: Paul Weber

TABLE 4
Phase I Subsurface Soil Detected Results
Site UXO-06 Borrow Pit Expansion Area
MCB CamLej, North Carolina

Station ID	**Camp Lejeune Background SB 2X Mean**	**NC SSLs**	**Adjusted Industrial Soil RSLs**	**Adjusted Residential Soil RSLs**	MR06-IS65		MR06-IS66	MR06-IS67
Sample ID					MR06-IS65-20-22-09C	MR06-IS65D-20-22-09C	MR06-IS66-21-22-09C	MR06-IS67-8-9-09C
Sample Date					09/09/09	09/09/09	09/09/09	09/09/09
Chemical Name								
Semivolatile Organic Compounds (µg/kg)								
No Detections								
Explosives (µg/kg)								
No Detections								
Total Metals (mg/kg)								
Aluminum	10,369	--	99,000	7,700	2,890	3,710	4,440	16,500
Arsenic	2.12	5.44	1.6	0.39	0.63	0.67	0.77	0.9
Barium	16.6	1,648	19,000	1,500	4.5	5.4	7.2	19.3
Chromium	14.5	--	5.6	0.29	**9.1**	**10.7**	**25.9**	**10.9**
Copper	2.56	704	4,100	310	5 J	5.9 J	7.1 J	1.7 J
Iron	5,439	151	72,000	5,500	1,230	1,550	2,910	3,240
Magnesium	363	--	--	--	79.1 J	97 J	112 J	372
Manganese	9.25	65.2	2,300	180	5	5.6	12.2	5.6
Nickel	2.27	130	2,000	150	2.5	2.9	5.2	2.8
Potassium	361	--	--	--	167 J	206 J	254 J	484 J
Zinc	6.59	13,060	31,000	2,300	88 J	106 J	99.1 J	5 J

Notes:
Shading indicates exceedance of two times the mean base background concentration for subsurface soil
Bold border indicates exceedance of NC SSLs
Bold text indicates exceedance of Adjusted Industrial Soil RSLs
Underline indicates exceedance of Adjusted Residential Soil RSLs
RSLs were adjusted for noncarcinogens to account for exposure to multiple constituents
NA - Not analyzed
J - Analyte present, value may or may not be accurate or precise
U - The material was analyzed for, but not detected
UJ - Analyte not detected, quantitation limit may be inaccurate
mg/kg - Milligrams per kilogram
µg/kg - Micrograms per kilogram

Generated by: James Frank
Checked by: Paul Weber

TABLE 5
Step 1: Occurrence, Distribution, and Selection of COPCs - Surface Soil
Site UXO-06 Borrow Pit Expansion Area
MCB CamLej, North Carolina

Scenario Timeframe: Current/Future
Medium: Surface Soil
Exposure Medium: Surface Soil

Exposure Point	CAS Number	Chemical	Minimum [1] Concentration Qualifier	Maximum [1] Concentration Qualifier	Units	Location of Maximum Concentration	Detection Frequency	Range of Detection Limits	Concentration [2] Used for Screening	Background [3] Value	Screening [4] Toxicity Value	Potential ARAR/TBC Value	Potential ARAR/TBC Source	COPC Flag	Rationale for [5] Contaminant Deletion or Selection
Surface Soil															
	121-14-2	2,4-Dinitrotoluene	ND	ND	MG/KG		0/9	0.25 - 0.25	2.5E-01	NA	1.6E+00 C*	1.6E+00	NC SRG	NO	DLBSL
	606-20-2	2,6-Dinitrotoluene	ND	ND	MG/KG		0/9	0.25 - 0.25	2.5E-01	NA	6.1E+00 N	1.2E+01	NC SRG	NO	DLBSL
	98-95-3	Nitrobenzene	ND	ND	MG/KG		0/9	0.25 - 0.25	2.5E-01	NA	4.8E+00 C*	4.4E+00	NC SRG	NO	DLBSL
	99-35-4	1,3,5-Trinitrobenzene	ND	ND	MG/KG		0/9	0.25 - 0.25	2.5E-01	NA	2.2E+02 N	4.4E+02	NC SRG	NO	DLBSL
	99-65-0	1,3-Dinitrobenzene	ND	ND	MG/KG		0/9	0.25 - 0.25	2.5E-01	NA	6.1E-01 N	1.2E+00	NC SRG	NO	DLBSL
	118-96-7	2,4,6-Trinitrotoluene	ND	ND	MG/KG		0/9	0.25 - 0.25	2.5E-01	NA	1.9E+01 C**	7.2E+00	NC SRG	NO	DLBSL
	35572-78-2	2-Amino-4,6-dinitrotoluene	ND	ND	MG/KG		0/9	0.25 - 0.25	2.5E-01	NA	1.5E+01 N	3.0E+01	NC SRG	NO	DLBSL
	88-72-2	2-Nitrotoluene	ND	ND	MG/KG		0/9	0.25 - 0.25	2.5E-01	NA	2.9E+00 C*	2.9E+00	NC SRG	NO	DLBSL
	99-08-1	3-Nitrotoluene	ND	ND	MG/KG		0/9	0.25 - 0.25	2.5E-01	NA	6.1E-01 N	2.4E+02	NC SRG	NO	DLBSL
	19406-51-0	4-Amino-2,6-dinitrotoluene	ND	ND	MG/KG		0/9	0.25 - 0.25	2.5E-01	NA	1.5E+01 N	3.0E+01	NC SRG	NO	DLBSL
	99-99-0	4-Nitrotoluene	ND	ND	MG/KG		0/9	0.25 - 0.25	2.5E-01	NA	3.0E+01 C**	3.0E+01	NC SRG	NO	DLBSL
	2691-41-0	HMX	ND	ND	MG/KG		0/9	0.25 - 0.25	2.5E-01	NA	3.8E+02 N	7.6E+02	NC SRG	NO	DLBSL
	55-63-0	Nitroglycerin	4.1E-01 J	4.1E-01 J	MG/KG	MR06-DU04-SS02-09C	1/9	0.5 - 0.5	4.1E-01	NA	6.1E-01 N	1.2E+00	NC SRG	NO	BSL
	14797-73-0	Perchlorate	ND	ND	MG/KG		0/9	0.0023 - 0.0038	3.8E-03	NA	5.5E+00 N	1.1E+01	NC SRG	NO	DLBSL
	78-11-5	PETN	ND	ND	MG/KG		0/9	0.6 - 0.6	6.0E-01	NA	NA	NA	NA	NO	NTX
	121-82-4	RDX	ND	ND	MG/KG		0/9	0.25 - 0.25	2.5E-01	NA	5.5E+00 C*	5.5E+00	NC SRG	NO	DLBSL
	479-45-8	Tetryl	6.7E-02 J	6.7E-02 J	MG/KG	MR06-DU02-SS03-09C	1/9	0.25 - 0.25	6.7E-02	NA	2.4E+01 N	4.8E+01	NC SRG	NO	BSL
	7429-90-5	Aluminum	9.7E+02	3.8E+03	MG/KG	MR06-DU02-SS03-09C	9/9	11.3 - 19	3.8E+03	5.5E+03	7.7E+03 N	1.5E+04	NC SRG	NO	BSL
	7440-36-0	Antimony	ND	ND	MG/KG		0/9	0.85 - 1.4	5.7E+00	4.5E-01	3.1E+00 N	6.2E+00	NC SRG	YES	DLASL
	7440-38-2	Arsenic	3.7E-01 J	6.6E-01	MG/KG	MR06-DU02-SS01-09C	8/9	0.33 - 0.91	6.6E-01	6.3E-01	3.9E-01 C*	5.4E+00	NC SRG	YES	ASL
	7440-39-3	Barium	8.9E+00	1.8E+01	MG/KG	MR06-DU03-SS01-09C	9/9	2.3 - 19	1.8E+01	1.5E+01	1.5E+03 N	1.6E+03	NC SRG	NO	BSL
	7440-41-7	Beryllium	ND	ND	MG/KG		0/9	0.28 - 0.46	4.8E-01	1.0E-01	1.6E+01 N	3.2E+01	NC SRG	NO	DLBSL
	7440-43-9	Cadmium	ND	ND	MG/KG		0/9	0.28 - 0.46	4.8E-01	3.3E-02	7.0E+00 N	2.6E+00	NC SRG	NO	DLBSL
	7440-70-2	Calcium	2.5E+02 J	2.1E+03	MG/KG	MR06-DU03-SS03-09C	9/9	283 - 476	2.1E+03	6.4E+03	NA	NA	NA	NO	NUT
	7440-47-3	Chromium	1.3E+00	3.5E+00	MG/KG	MR06-DU02-SS01-09C	9/9	0.57 - 0.95	3.5E+00	6.1E+00	2.9E-01 C	2.8E+02	NC SRG	YES	ASL
	7440-48-4	Cobalt	ND	ND	MG/KG		0/9	0.85 - 1.4	4.8E+00	2.9E-01	2.3E+00 N	4.6E+00	NC SRG	YES	DLASL

Generated by: Geanine Howard-Peebles
Checked by: Paul Weber

TABLE 5
Step 1: Occurrence, Distribution, and Selection of COPCs - Surface Soil
Site UXO-06 Borrow Pit Expansion Area
MCB CamLej, North Carolina

Scenario Timeframe: Current/Future
Medium: Surface Soil
Exposure Medium: Surface Soil

Exposure Point	CAS Number	Chemical	Minimum [1] Concentration Qualifier	Maximum [1] Concentration Qualifier	Units	Location of Maximum Concentration	Detection Frequency	Range of Detection Limits	Concentration [2] Used for Screening	Background [3] Value	Screening [4] Toxicity Value	Potential ARAR/TBC Value	Potential ARAR/TBC Source	COPC Flag	Rationale for [5] Contaminant Deletion or Selection
	7440-50-8	Copper	1.5E+00	5.9E+00	MG/KG	MR06-DU02-SS01-09C	9/9	0.57 - 2.4	5.9E+00	4.8E+00	3.1E+02 N	7.0E+02	NC SRG	NO	BSL
	7439-89-6	Iron	4.5E+02	1.2E+03	MG/KG	MR06-DU02-SS01-09C	9/9	5.7 - 9.5	1.2E+03	3.2E+03	5.5E+03 N	1.5E+02	NC SRG	NO	BSL
	7439-92-1	Lead	4.2E+00 J	6.3E+00 J	MG/KG	MR06-DU03-SS02-09C	9/9	0.17 - 0.95	6.3E+00	1.2E+01	4.0E+02 N	2.7E+02	NC SRG	NO	BSL
	7439-95-4	Magnesium	9.8E+01 J	1.4E+02 J	MG/KG	MR06-DU03-SS01-09C	9/9	283 - 476	1.4E+02	2.4E+02	NA	NA	NA	NO	NUT
	7439-96-5	Manganese	1.3E+01	4.9E+01	MG/KG	MR06-DU03-SS03-09C	9/9	0.85 - 1.4	4.9E+01	1.4E+01	1.8E+02 N	6.5E+01	NC SRG	NO	BSL
	7439-97-6	Mercury	1.9E-02 J	4.4E-01	MG/KG	MR06-DU04-SS01-09C	8/9	0.031 - 0.065	4.4E-01	8.1E-02	2.3E+00 N	1.1E+00	NC SRG	NO	BSL
	7440-02-0	Nickel	6.6E-01	1.0E+00	MG/KG	MR06-DU03-SS01D-09C	9/9	0.57 - 3.8	1.0E+00	1.2E+00	1.5E+02 N	1.3E+02	NC SRG	NO	BSL
	7440-09-7	Potassium	1.2E+02 J	1.7E+02 J	MG/KG	MR06-DU03-SS03-09C	9/9	283 - 476	1.7E+02	1.2E+02	NA	NA	NA	NO	NUT
	7782-49-2	Selenium	2.7E-01 J	4.5E-01 J	MG/KG	MR06-DU03-SS01-09C	8/9	0.28 - 3.3	4.5E-01	5.6E-01	3.9E+01 N	5.2E+00	NC SRG	NO	BSL
	7440-22-4	Silver	ND	ND	MG/KG		0/9	0.57 - 0.91	9.5E-01	1.4E-01	3.9E+01 N	3.0E+00	NC SRG	NO	DLBSL
	7440-23-5	Sodium	ND	ND	MG/KG		0/9	283 - 456	4.8E+02	8.1E+01	NA	NA	NA	NO	NUT
	7440-28-0	Thallium	ND	ND	MG/KG		0/9	0.45 - 2.4	2.4E+00	3.6E-01	NA	1.0E+00	NC SRG	NO	NTX
	7440-62-2	Vanadium	1.9E+00 J	4.8E+00	MG/KG	MR06-DU02-SS01-09C	9/9	0.85 - 4.8	4.8E+00	8.9E+00	3.9E+01 N	7.8E+01	NC SRG	NO	BSL
	7440-66-6	Zinc	5.4E+00	2.0E+01 J	MG/KG	MR06-DU03-SS03-09C	9/9	1.4 - 5.7	2.0E+01	1.1E+01	2.3E+03 N	1.3E+04	NC SRG	NO	BSL

[1] Minimum/Maximum detected concentrations.
[2] Maximum concentration is used for screening.
[3] Background values are two times the arithmetic mean basewide background soil concentrations.
Background values are from *Final Base Background Soil Study Report, Marine Corps Base Camp Lejeune, North Carolina*, Baker Environmental, April 25, 2001.
[4] Oak Ridge National Laboratory (ORNL). December 10, 2009. Regional Screening Levels (RSLs) for Chemical Contaminants at Superfund Sites. [Online].
Available: http://epa-prgs.ornl.gov/chemicals/index.shtml. Adjusted (noncarcinogenic RSLs adjusted by dividing by 10) residential soil RSLs.
[5] Rationale Codes
Selection Reason: Above Screening Levels (ASL)
Detection Limit Above Screening Level (DLASL), not quantitatively evaluated in HHRA
Deletion Reason: Below Screening Level (BSL)
Detection Limit Below Screening Level (DLBSL)
No Toxicity Information (NTX)

COPC = Chemical of Potential Concern
ARAR/TBC = Applicable or Relevant and Appropriate Requirement/
To Be Considered
NC SRG = North Carolina Department of Environment and Natural Resources, Division
of Waste Management Superfund Section, Inactive Hazardous Sites Branch Soil
Remediation Goals (SRGs), October 2009.
ND = Non-detect
NA = Not available/not applicable.
J = Estimated Value
C = Carcinogenic
C* = N screening level < 100x C screening level, therefore
N screening value/10 used as screening level
C** = N screening level < 10x C screening level, therefore
N screening value/10 used as screening level
N = Noncarcinogenic

Generated by: Geanine Howard-Peebles
Checked by: Paul Weber

TABLE 5a
Step 2: Risk Ratio Screening for Surface Soil, Maximum Detected Concentration
Site UXO-06 Borrow Pit Expansion Area
MCB CamLej, North Carolina

Analyte	Detection Frequency	Maximum Detected Concentration	Sample Location of Maximum Detected Concentration	Residential Soil RSL	Acceptable Risk Level	Corresponding Hazard Index[a]	Corresponding Cancer Risk[b]	Target Organ
Metals (mg/kg)								
Arsenic	8 / 9	6.6E-01	MR06-DU02-SS01-09C	3.9E-01	1E-06	NA	2E-06	NA
Chromium	9 / 9	3.5E+00	MR06-DU02-SS01-09C	2.9E-01	1E-06	NA	1E-05	NA
Cumulative Corresponding Hazard Index[c]						**NA**		
Cumulative Corresponding Cancer Risk[d]							**1E-05**	

[a] Corresponding Hazard Index equals maximum detected concentration divided by the RSL divided by the acceptable risk level.
[b] Corresponding Cancer Risk equals maximum detected concentration divided by the RSL divided by the acceptable risk level.
[c] Cumulative Corresponding Hazard Index equals sum of Corresponding Hazard Indices for each constituent.
[d] Cumulative Corresponding Cancer Risk equals sum of Corresponding Cancer Risks for each constituent.
Oak Ridge National Laboratory (ORNL). December 10, 2009. Regional Screening Levels (RSLs) for Chemical Contaminants at Superfund Sites. [Online]. Available: http://epa-prgs.ornl.gov/chemicals/index.shtml.
Constituent selected as COPC if it contributes to an overall Hazard Index by target organ greater than 0.5 or Cumulative Corresponding Cancer Risk greater than 5E-05, otherwise, constituent not selected as COPC.
Constituents selected as COPCs are indicated by shading.
COPC = Constituent of Potential Concern
mg/kg = milligrams per kilogram
NA = Not available/not applicable

Generated by: Geanine Howard-Peebles
Checked by: Paul Weber

TABLE 6
Step 1: Occurrence, Distribution, and Selection of COPCs - Total Soil
Site UXO-06 Borrow Pit Expansion Area
MCB CamLej, North Carolina

Scenario Timeframe: Current/Future
Medium: Total Soil*
Exposure Medium: Total Soil*

Exposure Point	CAS Number	Chemical	Minimum [1] Concentration Qualifier	Maximum [1] Concentration Qualifier	Units	Location of Maximum Concentration	Detection Frequency	Range of Detection Limits	Concentration [2] Used for Screening	Background [3] Value	Screening [4] Toxicity Value	Potential ARAR/TBC Value	Potential ARAR/TBC Source	COPC Flag	Rationale for [5] Contaminant Deletion or Selection
Total Soil*															
	121-14-2	2,4-Dinitrotoluene	ND	ND	MG/KG		0/12	0.25 - 0.25	2.5E-01	NA	1.6E+00 C*	1.6E+00	NC SRG	NO	DLBSL
	606-20-2	2,6-Dinitrotoluene	ND	ND	MG/KG		0/12	0.25 - 0.25	2.5E-01	NA	6.1E+00 N	1.2E+01	NC SRG	NO	DLBSL
	98-95-3	Nitrobenzene	ND	ND	MG/KG		0/12	0.25 - 0.25	2.5E-01	NA	4.8E+00 C*	4.4E+00	NC SRG	NO	DLBSL
	99-35-4	1,3,5-Trinitrobenzene	ND	ND	MG/KG		0/12	0.25 - 0.25	2.5E-01	NA	2.2E+02 N	4.4E+02	NC SRG	NO	DLBSL
	99-65-0	1,3-Dinitrobenzene	ND	ND	MG/KG		0/12	0.25 - 0.25	2.5E-01	NA	6.1E-01 N	1.2E+00	NC SRG	NO	DLBSL
	118-96-7	2,4,6-Trinitrotoluene	ND	ND	MG/KG		0/12	0.25 - 0.25	2.5E-01	NA	1.9E+01 C**	7.2E+00	NC SRG	NO	DLBSL
	35572-78-2	2-Amino-4,6-dinitrotoluene	ND	ND	MG/KG		0/12	0.25 - 0.25	2.5E-01	NA	1.5E+01 N	3.0E+01	NC SRG	NO	DLBSL
	88-72-2	2-Nitrotoluene	ND	ND	MG/KG		0/12	0.25 - 0.25	2.5E-01	NA	2.9E+00 C*	2.9E+00	NC SRG	NO	DLBSL
	99-08-1	3-Nitrotoluene	ND	ND	MG/KG		0/12	0.25 - 0.25	2.5E-01	NA	6.1E-01 N	2.4E+02	NC SRG	NO	DLBSL
	19406-51-0	4-Amino-2,6-dinitrotoluene	ND	ND	MG/KG		0/12	0.25 - 0.25	2.5E-01	NA	1.5E+01 N	3.0E+01	NC SRG	NO	DLBSL
	99-99-0	4-Nitrotoluene	ND	ND	MG/KG		0/12	0.25 - 0.25	2.5E-01	NA	3.0E+01 C**	3.0E+01	NC SRG	NO	DLBSL
	2691-41-0	HMX	ND	ND	MG/KG		0/12	0.25 - 0.25	2.5E-01	NA	3.8E+02 N	7.6E+02	NC SRG	NO	DLBSL
	55-63-0	Nitroglycerin	4.1E-01 J	4.1E-01 J	MG/KG	MR06-DU04-SS02-09C	1/12	0.5 - 0.5	4.1E-01	NA	6.1E-01 N	1.2E+00	NC SRG	NO	BSL
	14797-73-0	Perchlorate	ND	ND	MG/KG		0/12	0.0023 - 0.0038	3.8E-03	NA	5.5E+00 N	1.1E+01	NC SRG	NO	DLBSL
	78-11-5	PETN	ND	ND	MG/KG		0/12	0.6 - 0.6	6.0E-01	NA	NA	NA	NA	NO	NTX
	121-82-4	RDX	ND	ND	MG/KG		0/12	0.25 - 0.25	2.5E-01	NA	5.5E+00 C*	5.5E+00	NC SRG	NO	DLBSL
	479-45-8	Tetryl	6.7E-02 J	6.7E-02 J	MG/KG	MR06-DU02-SS03-09C	1/12	0.25 - 0.25	6.7E-02	NA	2.4E+01 N	4.8E+01	NC SRG	NO	BSL
	7429-90-5	Aluminum	9.7E+02	1.7E+04	MG/KG	MR06-IS67-8-9-09C	12/12	10.9 - 19	1.7E+04	5.5E+03	7.7E+03 N	1.5E+04	NC SRG	YES	ASL
	7440-36-0	Antimony	ND	ND	MG/KG		0/12	0.82 - 1.4	5.7E+00	3.6E-01	3.1E+00 N	6.2E+00	NC SRG	YES	DLASL
	7440-38-2	Arsenic	3.7E-01 J	9.0E-01	MG/KG	MR06-IS67-8-9-09C	11/12	0.33 - 0.95	9.0E-01	6.3E-01	3.9E-01 C*	5.4E+00	NC SRG	YES	ASL
	7440-39-3	Barium	5.4E+00	1.9E+01	MG/KG	MR06-IS67-8-9-09C	12/12	2.2 - 19	1.9E+01	1.4E+01	1.5E+03 N	1.6E+03	NC SRG	NO	BSL
	7440-41-7	Beryllium	1.1E-01 J	1.1E-01 J	MG/KG	MR06-IS67-8-9-09C	1/12	0.27 - 0.48	1.1E-01	1.0E-01	1.6E+01 N	3.2E+01	NC SRG	NO	BSL
	7440-43-9	Cadmium	ND	ND	MG/KG		0/12	0.27 - 0.48	4.8E-01	2.3E-02	7.0E+00 N	2.6E+00	NC SRG	NO	DLBSL
	7440-70-2	Calcium	7.7E+01 J	2.1E+03	MG/KG	MR06-DU03-SS03-09C	10/12	272 - 476	2.1E+03	4.4E+02	NA	NA	NA	NO	NUT
	7440-47-3	Chromium	1.3E+00	2.6E+01	MG/KG	MR06-IS66-21-22-09C	12/12	0.57 - 0.95	2.6E+01	6.1E+00	2.9E-01 C	2.8E+02	NC SRG	YES	ASL
	7440-48-4	Cobalt	3.2E-01 J	6.4E-01 J	MG/KG	MR06-IS67-8-9-09C	2/12	0.82 - 4.8	6.4E-01	2.9E-01	2.3E+00 N	4.6E+00	NC SRG	NO	BSL
	7440-50-8	Copper	1.5E+00	7.1E+00 J	MG/KG	MR06-IS66-21-22-09C	12/12	0.57 - 2.4	7.1E+00	2.6E+00	3.1E+02 N	7.0E+02	NC SRG	NO	BSL
	7439-89-6	Iron	4.5E+02	3.2E+03	MG/KG	MR06-IS67-8-9-09C	12/12	5.7 - 9.5	3.2E+03	3.2E+03	5.5E+03 N	1.5E+02	NC SRG	NO	BSL
	7439-92-1	Lead	2.0E+00 J	6.3E+00 J	MG/KG	MR06-DU03-SS02-09C	12/12	0.17 - 0.95	6.3E+00	8.5E+00	4.0E+02 N	2.7E+02	NC SRG	NO	BSL
	7439-95-4	Magnesium	9.7E+01 J	3.7E+02	MG/KG	MR06-IS67-8-9-09C	12/12	283 - 476	3.7E+02	2.4E+02	NA	NA	NA	NO	NUT
	7439-96-5	Manganese	5.6E+00	4.9E+01	MG/KG	MR06-DU03-SS03-09C	12/12	0.85 - 1.4	4.9E+01	9.2E+00	1.8E+02 N	6.5E+01	NC SRG	NO	BSL
	7439-97-6	Mercury	1.9E-02 J	4.4E-01	MG/KG	MR06-DU04-SS01-09C	8/12	0.031 - 0.065	4.4E-01	7.1E-02	2.3E+00 N	1.1E+00	NC SRG	NO	BSL
	7440-02-0	Nickel	6.6E-01	5.2E+00	MG/KG	MR06-IS66-21-22-09C	12/12	0.54 - 3.8	5.2E+00	1.2E+00	1.5E+02 N	1.3E+02	NC SRG	NO	BSL
	7440-09-7	Potassium	1.2E+02 J	4.8E+02 J	MG/KG	MR06-IS67-8-9-09C	12/12	283 - 476	4.8E+02	1.2E+02	NA	NA	NA	NO	NUT
	7782-49-2	Selenium	2.7E-01 J	4.5E-01 J	MG/KG	MR06-DU03-SS01-09C	9/12	0.27 - 3.3	4.5E-01	5.0E-01	3.9E+01 N	5.2E+00	NC SRG	NO	BSL

Generated by: Geanine Howard-Peebles
Checked by: Paul Weber

TABLE 6
Step 1: Occurrence, Distribution, and Selection of COPCs - Total Soil
Site UXO-06 Borrow Pit Expansion Area
MCB CamLej, North Carolina

Scenario Timeframe: Current/Future
Medium: Total Soil*
Exposure Medium: Total Soil*

Exposure Point	CAS Number	Chemical	Minimum [1] Concentration Qualifier	Maximum [1] Concentration Qualifier	Units	Location of Maximum Concentration	Detection Frequency	Range of Detection Limits	Concentration [2] Used for Screening	Background [3] Value	Screening [4] Toxicity Value	Potential ARAR/TBC Value	Potential ARAR/TBC Source	COPC Flag	Rationale for [5] Contaminant Deletion or Selection
	7440-22-4	Silver	ND	ND	MG/KG		0/12	0.54 - 0.95	9.5E-01	1.3E-01	3.9E+01 N	3.0E+00	NC SRG	NO	DLBSL
	7440-23-5	Sodium	ND	ND	MG/KG		0/12	283 - 476	4.8E+02	6.8E+01	NA	NA	NA	NO	NUT
	7440-28-0	Thallium	ND	ND	MG/KG		0/12	0.43 - 2.4	2.4E+00	3.6E-01	NA	1.0E+00	NC SRG	NO	NTX
	7440-62-2	Vanadium	1.9E+00 J	1.1E+01 J	MG/KG	MR06-IS67-8-9-09C	12/12	0.85 - 4.8	1.1E+01	8.9E+00	3.9E+01 N	7.8E+01	NC SRG	NO	BSL
	7440-66-6	Zinc	5.0E+00 J	1.1E+02 J	MG/KG	MR06-IS65D-20-22-09C	12/12	1.4 - 5.7	1.1E+02	6.6E+00	2.3E+03 N	1.3E+04	NC SRG	NO	BSL

* Surface soil & subsurface soil combined
[1] Minimum/Maximum detected concentrations.
[2] Maximum concentration is used for screening.
[3] Background values are minimum of two times the arithmetic mean basewide background concentrations for surface soil and subsurface soil.
Background values are from *Final Base Background Soil Study Report, Marine Corps Base Camp Lejeune, North Carolina* , Baker Environmental, April 25, 2001.
[4] Oak Ridge National Laboratory (ORNL). December 10, 2009. Regional Screening Levels (RSLs) for Chemical Contaminants at Superfund Sites. [Online].
Available: http://epa-prgs.ornl.gov/chemicals/index.shtml. Adjusted (noncarcinogenic RSLs adjusted by dividing by 10) residential soil RSLs.
[5] Rationale Coc
Selection Reason: Above Screening Levels (ASL)
Detection Limit Above Screening Level (DLASL), not quantitatively evaluated in HHRA
Deletion Reason: Below Screening Level (BSL)
Detection Limit Below Screening Level (DLBSL)
No Toxicity Information (NTX)

COPC = Chemical of Potential Concern
ARAR/TBC = Applicable or Relevant and Appropriate Requirement/
To Be Considered
NC SRG = North Carolina Department of Environment and Natural Resources, Division
of Waste Management Superfund Section, Inactive Hazardous Sites Branch Soil
Remediation Goals (SRGs), October 2009.
ND = Non-detect
NA = Not available/not applicable.
J = Estimated Value
C = Carcinogenic
C* = N screening level < 100x C screening level, therefore
N screening value/10 used as screening level
C** = N screening level < 10x C screening level, therefore
N screening value/10 used as screening level
N = Noncarcinogenic

Generated by: Geanine Howard-Peebles
Checked by: Paul Weber

TABLE 6a
Step 2: Risk Ratio Screening for Total Soil, Maximum Detected Concentration
Site UXO-06 Borrow Pit Expansion Area
MCB CamLej, North Carolina

Analyte	Detection Frequency	Maximum Detected Concentration	Sample Location of Maximum Detected Concentration	Residential Soil RSL	Acceptable Risk Level	Corresponding Hazard Index[a]	Corresponding Cancer Risk[b]	Target Organ
Metals (mg/kg)								
Aluminum	12 / 12	1.7E+04	MR06-IS67-8-9-09C	7.7E+04	1E+00	0.2	NA	Nervous System
Arsenic	11 / 12	9.0E-01	MR06-IS67-8-9-09C	3.9E-01	1E-06	NA	2E-06	NA
Chromium	12 / 12	2.6E+01	MR06-IS66-21-22-09C	2.9E-01	1E-06	NA	9E-05	NA
Cumulative Corresponding Hazard Index[c]						**0.2**		
Cumulative Corresponding Cancer Risk[d]							**9E-05**	

[a] Corresponding Hazard Index equals maximum detected concentration divided by the RSL divided by the acceptable risk level.
[b] Corresponding Cancer Risk equals maximum detected concentration divided by the RSL divided by the acceptable risk level.
[c] Cumulative Corresponding Hazard Index equals sum of Corresponding Hazard Indices for each constituent.
[d] Cumulative Corresponding Cancer Risk equals sum of Corresponding Cancer Risks for each constituent.
Oak Ridge National Laboratory (ORNL). December 10, 2009. Regional Screening Levels (RSLs) for Chemical Contaminants at Superfund Sites. [Online]. Available: http://epa-prgs.ornl.gov/chemicals/index.shtml.
Constituent selected as COPC if it contributes to an overall Hazard Index by target organ greater than 0.5 or Cumulative Corresponding Cancer Risk greater than 5E-05, otherwise, constituent not selected as COPC.
Constituents selected as COPCs are indicated by shading.
COPC = Constituent of Potential Concern
mg/kg = milligrams per kilogram
NA = Not available/not applicable

Generated by: Geanine Howard-Peebles
Checked by: Paul Weber

TABLE 6b
Step 3: Risk Ratio Screening for Total Soil, 95% UCL
Site UXO-06 Borrow Pit Expansion Area
MCB CamLej, North Carolina

Analyte	Detection Frequency	95% UCL		95% UCL Rationale	Residential Soil RSL	Acceptable Risk Level	Corresponding Hazard Index[a]	Corresponding Cancer Risk[b]	Target Organ
Metals (mg/kg)									
Arsenic	11 / 12	6.5E-01	95% KM-t	1, 2, 3	3.9E-01	1.0E-06	NA	2E-06	NA
Chromium	12 / 12	1.5E+01	95% Cheb-m	4	2.9E-01	1.0E-06	NA	5E-05	NA
Cumulative Corresponding Hazard Index[c]							**NA**		
Cumulative Corresponding Cancer Risk[d]								**5E-05**	

[a] Corresponding Hazard Index equals 95% UCL divided by the RSL divided by the acceptable risk level.
[b] Corresponding Cancer Risk equals 95% UCL divided by the RSL divided by the acceptable risk level.
[c] Cumulative Corresponding Hazard Index equals sum of Corresponding Hazard Indices for each constituent
[d] Cumulative Corresponding Cancer Risk equals sum of Corresponding Cancer Risks for each constituent

Oak Ridge National Laboratory (ORNL). December 10, 2009. Regional Screening Levels (RSLs) for Chemical Contaminants at Superfund Sites. [Online].
Available: http://epa-prgs.ornl.gov/chemicals/index.shtml.

Constituent selected as COPC if it contributes to an overall Hazard Index by target organ greater than 0.5 or Cumulative Corresponding Cancer Risk greater than 5E-05.

Constituents selected as COPCs are indicated by shading.

mg/kg = milligrams per kilogram

HI = Hazard Index

ProUCL, Version 4.00.04 used to determine distribution of data and calculate 95% UCL, following recommendations in users guide (USEPA. February 2009. ProUCL, Version 4.0. Prepared by Lockheed Martin Environmental Services).

Options: 95% Kaplan-Meier (t) UCL (95% KM-t); 95% Chebyshev (Mean, Sd) UCL (95% Cheb-m)

Upper Confidence Limit (UCL) Rationale:

(1) Shapiro-Wilk W Test/Lilliefors test indicates data are log-normally distributed.
(2) Anderson-Darling Test indicates data are gamma distributed.
(3) Kolmogorov-Smirnov Test indicates data are gamma distributed.
(4) Distribution tests are inconclusive (data are not normal, log-normal, or gamma-distributed).

Generated by: Geanine Howard-Peebles
Checked by: Paul Weber

TABLE 7
Site UXO-6 Ecological Risk Screening for Surface Soil
Site UXO-06 Borrow Pit Expansion Area
MCB CamLej, North Carolina

Chemical	Range of Non-Detect Values	Frequency of Detection	Maximum Concentration Detected	Sample ID of Maximum Detected Concentration	Screening Value	Frequency of Exceedance[1]	Maximum Hazard Quotient[2]	2 x Mean Background	Maximum Exceeds 2 x Mean Background?	Retain?	Rationale
Semivolatile Organic Compounds (UG/KG)											
2,4-Dinitrotoluene	250 - 250	0 / 9	--	--	NSV	-- / --	NSV	--	--	No	No screening value, not detected
2,6-Dinitrotoluene	250 - 250	0 / 9	--	--	NSV	-- / --	NSV	--	--	No	No screening value, not detected
Nitrobenzene	250 - 250	0 / 9	--	--	40,000	-- / --	0.0063	--	--	No	HQs less than one, not detected
Explosives (UG/KG)											
1,3,5-Trinitrobenzene	250 - 250	0 / 9	--	--	NSV	-- / --	NSV	--	--	No	No screening value, not detected
1,3-Dinitrobenzene	250 - 250	0 / 9	--	--	NSV	-- / --	NSV	--	--	No	No screening value, not detected
2,4,6-Trinitrotoluene	250 - 250	0 / 9	--	--	NSV	-- / --	NSV	--	--	No	No screening value, not detected
2-Amino-4,6-dinitrotoluene	250 - 250	0 / 9	--	--	NSV	-- / --	NSV	--	--	No	No screening value, not detected
2-Nitrotoluene	250 - 250	0 / 9	--	--	NSV	-- / --	NSV	--	--	No	No screening value, not detected
3-Nitrotoluene	250 - 250	0 / 9	--	--	NSV	-- / --	NSV	--	--	No	No screening value, not detected
4-Amino-2,6-dinitrotoluene	250 - 250	0 / 9	--	--	NSV	-- / --	NSV	--	--	No	No screening value, not detected
4-Nitrotoluene	250 - 250	0 / 9	--	--	NSV	-- / --	NSV	--	--	No	No screening value, not detected
HMX	250 - 250	0 / 9	--	--	NSV	-- / --	NSV	--	--	No	No screening value, not detected
Nitroglycerin	500 - 500	1 / 9	410	MR06-DU04-SS02-09C	NSV	-- / --	NSV	--	--	No	No screening value, only 1 detection
Perchlorate	2.30 - 3.80	0 / 9	--	--	NSV	-- / --	NSV	--	--	No	No screening value, not detected
PETN	600 - 600	0 / 9	--	--	NSV	-- / --	NSV	--	--	No	No screening value, not detected
RDX	250 - 250	0 / 9	--	--	NSV	-- / --	NSV	--	--	No	No screening value, not detected
Tetryl	250 - 250	1 / 9	67.0	MR06-DU02-SS03-09C	NSV	-- / --	NSV	--	--	No	No screening value, only 1 detection
Inorganics (MG/KG)											
Aluminum	-- - --	9 / 9	3,790	MR06-DU02-SS03-09C	50.0	9 / 9	75.8	5487	No	No	Consistent with background
Antimony	0.85 - 1.40	0 / 9	--	--	0.27	-- / --	5.19	0.447	Yes	No	Not detected
Arsenic	0.91 - 0.91	8 / 9	0.66	MR06-DU02-SS01-09C	18.0	0 / 9	0.037	0.626	Yes	No	HQs less than one
Barium	-- - --	9 / 9	17.6	MR06-DU03-SS01-09C	330	0 / 9	0.053	14.5	Yes	No	HQs less than one
Beryllium	0.28 - 0.46	0 / 9	--	--	21.0	-- / --	0.022	0.103	Yes	No	HQs less than one, not detected
Cadmium	0.28 - 0.46	0 / 9	--	--	0.36	-- / --	1.28	0.033	Yes	No	Not detected
Calcium [3]	-- - --	9 / 9	2,110	MR06-DU03-SS03-09C	NSV	-- / --	NSV	6360	No	No	Consistent with background
Chromium	-- - --	9 / 9	3.50	MR06-DU02-SS01-09C	26.0	0 / 9	0.13	6.05	No	No	Consistent with background
Cobalt	0.85 - 1.40	0 / 9	--	--	13.0	-- / --	0.11	0.294	Yes	No	HQs less than one, not detected
Copper	-- - --	9 / 9	5.90	MR06-DU02-SS01-09C	28.0	0 / 9	0.21	4.83	Yes	No	HQs less than one
Iron	-- - --	9 / 9	1,210	MR06-DU02-SS01-09C	200	9 / 9	6.05	3245	No	No	Consistent with background
Lead	-- - --	9 / 9	6.30	MR06-DU03-SS02-09C	11.0	0 / 9	0.57	12.3	No	No	Consistent with background
Magnesium [3]	-- - --	9 / 9	144	MR06-DU03-SS01-09C	NSV	-- / --	NSV	238	No	No	Consistent with background
Manganese	-- - --	9 / 9	49.2	MR06-DU03-SS03-09C	220	0 / 9	0.22	13.7	Yes	No	HQs less than one
Mercury	0.033 - 0.033	8 / 9	0.44	MR06-DU04-SS01-09C	0.10	1 / 9	4.40	0.081	Yes	No	Only 1 of 9 samples exceeded
Nickel	-- - --	9 / 9	1.00	MR06-DU03-SS01-09C	38.0	0 / 9	0.026	1.21	No	No	Consistent with background
Potassium [3]	-- - --	9 / 9	171	MR06-DU03-SS03-09C	NSV	-- / --	NSV	116	Yes	No	Macronutrient
Selenium	0.43 - 0.43	8 / 9	0.45	MR06-DU03-SS01-09C	0.52	0 / 9	0.87	0.563	No	No	Consistent with background
Silver	0.57 - 0.91	0 / 9	--	--	4.20	-- / --	0.22	0.14	Yes	No	HQs less than one, not detected
Sodium [3]	283 - 456	0 / 9	--	--	NSV	-- / --	NSV	80.9	Yes	No	Macronutrient
Thallium	0.45 - 0.73	0 / 9	--	--	1.00	-- / --	0.73	0.36	Yes	No	HQs less than one, not detected
Vanadium	-- - --	9 / 9	4.80	MR06-DU02-SS01-09C	7.80	0 / 9	0.62	8.9	No	No	Consistent with background
Zinc	-- - --	9 / 9	20.0	MR06-DU03-SS03-09C	46.0	0 / 9	0.43	10.8	Yes	No	HQs less than one

NOTES
NSV - No Screening Value
1 - Count of detected samples exceeding or equaling Screening Value
2 - Shaded cells indicate hazard quotient based on reporting limits
3 - Macronutrient - Not considered to be a COPC
HQ - hazard quotient
MG/KG - Milligrams per kilogram
UG/KG - Micrograms per kilogram

Generated By: Jon Weier
Checked By: Paul Weber

TABLE 8
Site UXO-6 Ecological Risk Screening for Subsurface Soil
Site UXO-06 Borrow Pit Expansion Area
MCB CamLej, North Carolina

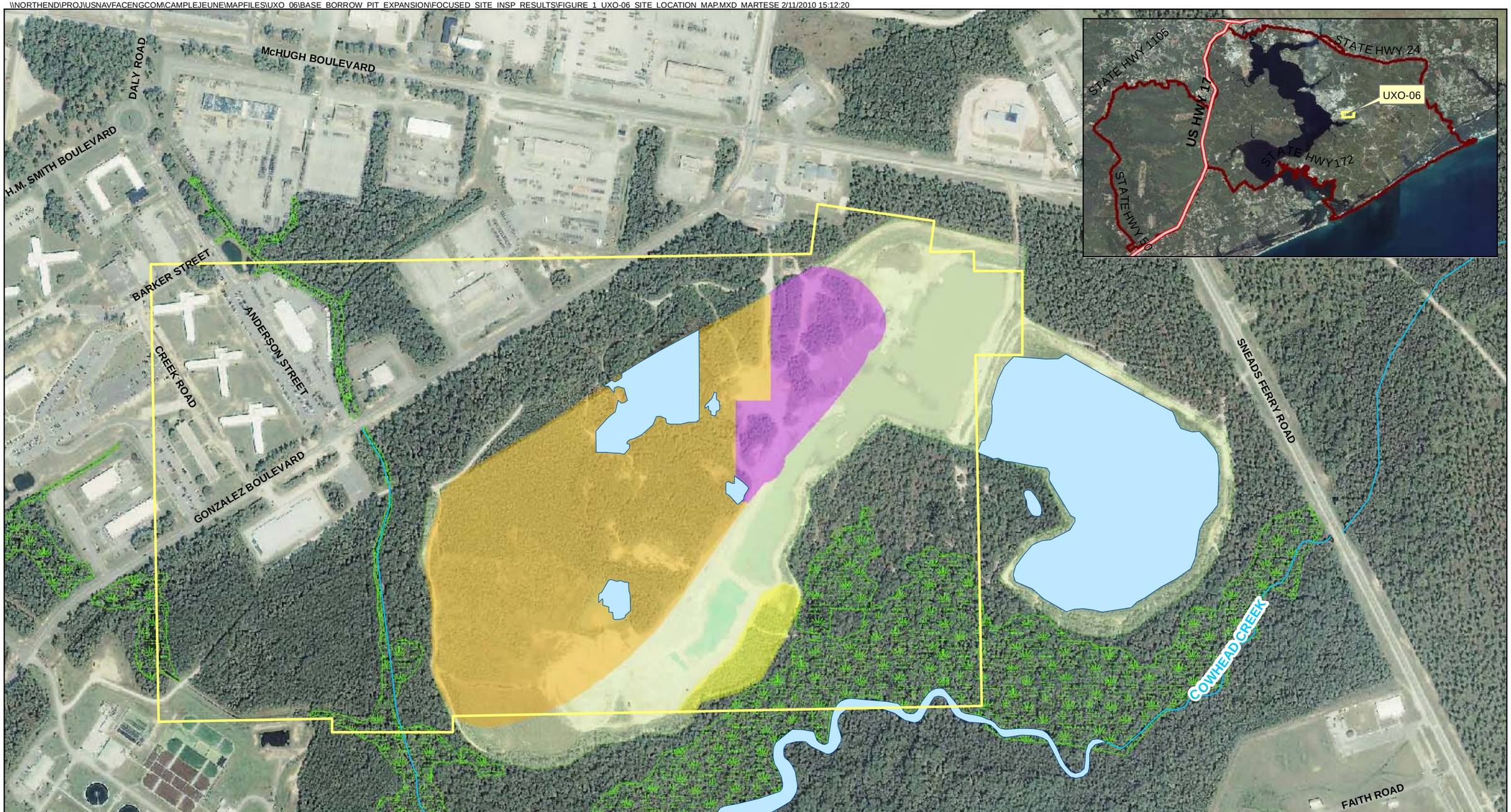
Chemical	Range of Non-Detect Values	Frequency of Detection	Maximum Concentration Detected	Sample ID of Maximum Detected Concentration	Screening Value	Frequency of Exceedance[1]	Maximum Hazard Quotient[2]	2 x Mean Background	Maximum Exceeds 2 x Mean Background?	Retain?	Rationale
Semivolatile Organic Compounds (UG/KG)											
2,4-Dinitrotoluene	250 - 250	0 / 3	--	--	NSV	-- / --	NSV	--	--	No	No screening value, not detected
2,6-Dinitrotoluene	250 - 250	0 / 3	--	--	NSV	-- / --	NSV	--	--	No	No screening value, not detected
Nitrobenzene	250 - 250	0 / 3	--	--	40,000	-- / --	0.0063	--	--	No	HQs less than one, not detected
Explosives (UG/KG)											
1,3,5-Trinitrobenzene	250 - 250	0 / 3	--	--	NSV	-- / --	NSV	--	--	No	No screening value, not detected
1,3-Dinitrobenzene	250 - 250	0 / 3	--	--	NSV	-- / --	NSV	--	--	No	No screening value, not detected
2,4,6-Trinitrotoluene	250 - 250	0 / 3	--	--	NSV	-- / --	NSV	--	--	No	No screening value, not detected
2-Amino-4,6-dinitrotoluene	250 - 250	0 / 3	--	--	NSV	-- / --	NSV	--	--	No	No screening value, not detected
2-Nitrotoluene	250 - 250	0 / 3	--	--	NSV	-- / --	NSV	--	--	No	No screening value, not detected
3-Nitrotoluene	250 - 250	0 / 3	--	--	NSV	-- / --	NSV	--	--	No	No screening value, not detected
4-Amino-2,6-dinitrotoluene	250 - 250	0 / 3	--	--	NSV	-- / --	NSV	--	--	No	No screening value, not detected
4-Nitrotoluene	250 - 250	0 / 3	--	--	NSV	-- / --	NSV	--	--	No	No screening value, not detected
HMX	250 - 250	0 / 3	--	--	NSV	-- / --	NSV	--	--	No	No screening value, not detected
Nitroglycerin	500 - 500	0 / 3	--	--	NSV	-- / --	NSV	--	--	No	No screening value, not detected
Perchlorate	2.29 - 2.44	0 / 3	--	--	NSV	-- / --	NSV	--	--	No	No screening value, not detected
PETN	600 - 600	0 / 3	--	--	NSV	-- / --	NSV	--	--	No	No screening value, not detected
RDX	250 - 250	0 / 3	--	--	NSV	-- / --	NSV	--	--	No	No screening value, not detected
Tetryl	250 - 250	0 / 3	--	--	NSV	-- / --	NSV	--	--	No	No screening value, not detected
Inorganics (MG/KG)											
Aluminum	-- - --	3 / 3	16,500	MR06-IS67-8-9-09C	50.0	3 / 3	330	10369	Yes	No	Within background range
Antimony	0.83 - 0.89	0 / 3	--	--	0.27	-- / --	3.30	0.36	Yes	No	No detected
Arsenic	-- - --	3 / 3	0.90	MR06-IS67-8-9-09C	18.0	0 / 3	0.050	2.12	No	No	Consistent with background
Barium	-- - --	3 / 3	19.3	MR06-IS67-8-9-09C	330	0 / 3	0.058	16.6	Yes	No	HQs less than one, not detected
Beryllium	0.28 - 0.29	1 / 3	0.11	MR06-IS67-8-9-09C	21.0	0 / 3	0.0052	0.165	No	No	Consistent with background
Cadmium	0.28 - 0.30	0 / 3	--	--	0.36	-- / --	0.83	0.023	Yes	No	HQs less than one, not detected
Calcium [3]	277 - 288	1 / 3	77.1	MR06-IS67-8-9-09C	NSV	-- / --	NSV	441	No	No	Consistent with background
Chromium	-- - --	3 / 3	25.9	MR06-IS66-21-22-09C	26.0	0 / 3	1.00	14.5	Yes	No	HQs equal to or less than one, not detected
Cobalt	0.86 - 0.86	2 / 3	0.64	MR06-IS67-8-9-09C	13.0	0 / 3	0.049	0.822	No	No	Consistent with background
Copper	-- - --	3 / 3	7.10	MR06-IS66-21-22-09C	28.0	0 / 3	0.25	2.56	Yes	No	HQs less than one, not detected
Iron	-- - --	3 / 3	3,240	MR06-IS67-8-9-09C	200	3 / 3	16.2	5439	No	No	Consistent with background
Lead	-- - --	3 / 3	4.50	MR06-IS67-8-9-09C	11.0	0 / 3	0.41	8.49	No	No	Consistent with background
Magnesium [3]	-- - --	3 / 3	372	MR06-IS67-8-9-09C	NSV	-- / --	NSV	363	Yes	No	Macronutrient
Manganese	-- - --	3 / 3	12.2	MR06-IS66-21-22-09C	220	0 / 3	0.055	9.25	Yes	No	HQs less than one, not detected
Mercury	0.033 - 0.042	0 / 3	--	--	0.10	-- / --	0.42	0.071	Yes	No	HQs less than one, not detected
Nickel	-- - --	3 / 3	5.20	MR06-IS66-21-22-09C	38.0	0 / 3	0.14	2.27	Yes	No	HQs less than one, not detected
Potassium [3]	-- - --	3 / 3	484	MR06-IS67-8-9-09C	NSV	-- / --	NSV	361	Yes	No	Macronutrient
Selenium	0.28 - 0.29	1 / 3	0.39	MR06-IS67-8-9-09C	0.52	0 / 3	0.75	0.505	No	No	Consistent with background
Silver	0.55 - 0.59	0 / 3	--	--	4.20	-- / --	0.14	0.129	Yes	No	HQs less than one, not detected
Sodium [3]	277 - 296	0 / 3	--	--	NSV	-- / --	NSV	68.3	Yes	No	Macronutrient
Thallium	0.44 - 0.47	0 / 3	--	--	1.00	-- / --	0.47	0.38	Yes	No	HQs less than one, not detected
Vanadium	-- - --	3 / 3	10.8	MR06-IS67-8-9-09C	7.80	1 / 3	1.38	17.2	No	No	Consistent with background
Zinc	-- - --	3 / 3	106	MR06-IS65-20-22-09C	46.0	2 / 3	2.30	6.59	Yes	No	Low magnitude of exceedance

NOTES
NSV - No Screening Value
1 - Count of detected samples exceeding or equaling Screening Value
2 - Shaded cells indicate hazard quotient based on reporting limits
3 - Macronutrient - Not considered to be a COPC
HQ - hazard quotient
MG/KG - Milligrams per kilogram
UG/KG - Micrograms per kilogram

Generated By: Jon Weier
Checked By: Paul Weber

Figures

\\NORTHEND\PROJ\USNAVFACENGCOM\CAMPLEJEUNE\MAPFILES\UXO_06\BASE_BORROW_PIT_EXPANSION\FOCUSED_SITE_INSP_RESULTS\FIGURE_1_UXO-06_SITE_LOCATION_MAP.MXD MARTESE 2/11/2010 15:12:20



Legend

- UXO-06 Site Boundary
- Phase 1 Borrow Pit Expansion Area
- Phase 1A Borrow Pit Expansion Area
- Phase 2 Borrow Pit Expansion Area
- Active Borrow Pit
- Surface Water Body
- Stream
- Jurisdictional Wetlands

N

0 225 450 900 Feet

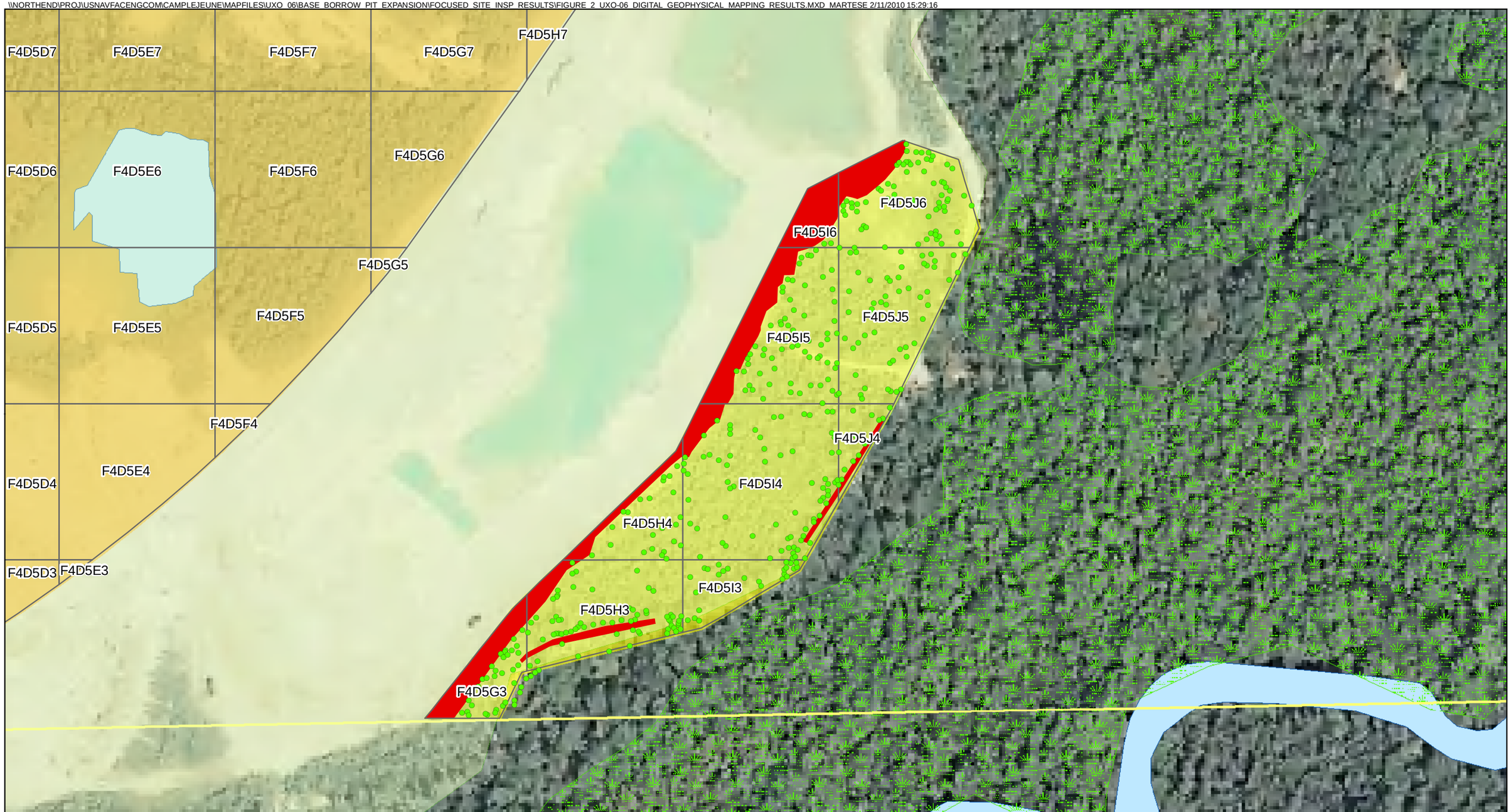
1 inch = 450 feet

Figure 1
Site Map
Site UXO-06 Base Borrow Pit Expansion Area
MCB CamLej
North Carolina

CH2MHILL

Generated by: *James Frank* Checked by: *Paul Weber*

\\NORTHEND\PROJ\USNAVFACENGCOM\CAMPLEJEUNE\MAPFILES\UXO_06\BASE_BORROW_PIT_EXPANSION\FOCUSED_SITE_INSP_RESULTS\FIGURE_2_UXO-06_DIGITAL_GEOPHYSICAL_MAPPING_RESULTS.MXD MARTESE 2/11/2010 15:29:16



Legend

- Geophysical Anomaly (greater than 3mV)
- Mag and Dig Areas (Area inaccessible for DGM)
- UXO-06 Site Boundary
- Active Borrow Pit
- Phase 1 Borrow Pit Expansion Area
- Phase 2 Borrow Pit Expansion Area
- Surface Water Body
- Jurisdictional Wetlands
- Grids

N

0 50 100 200 Feet

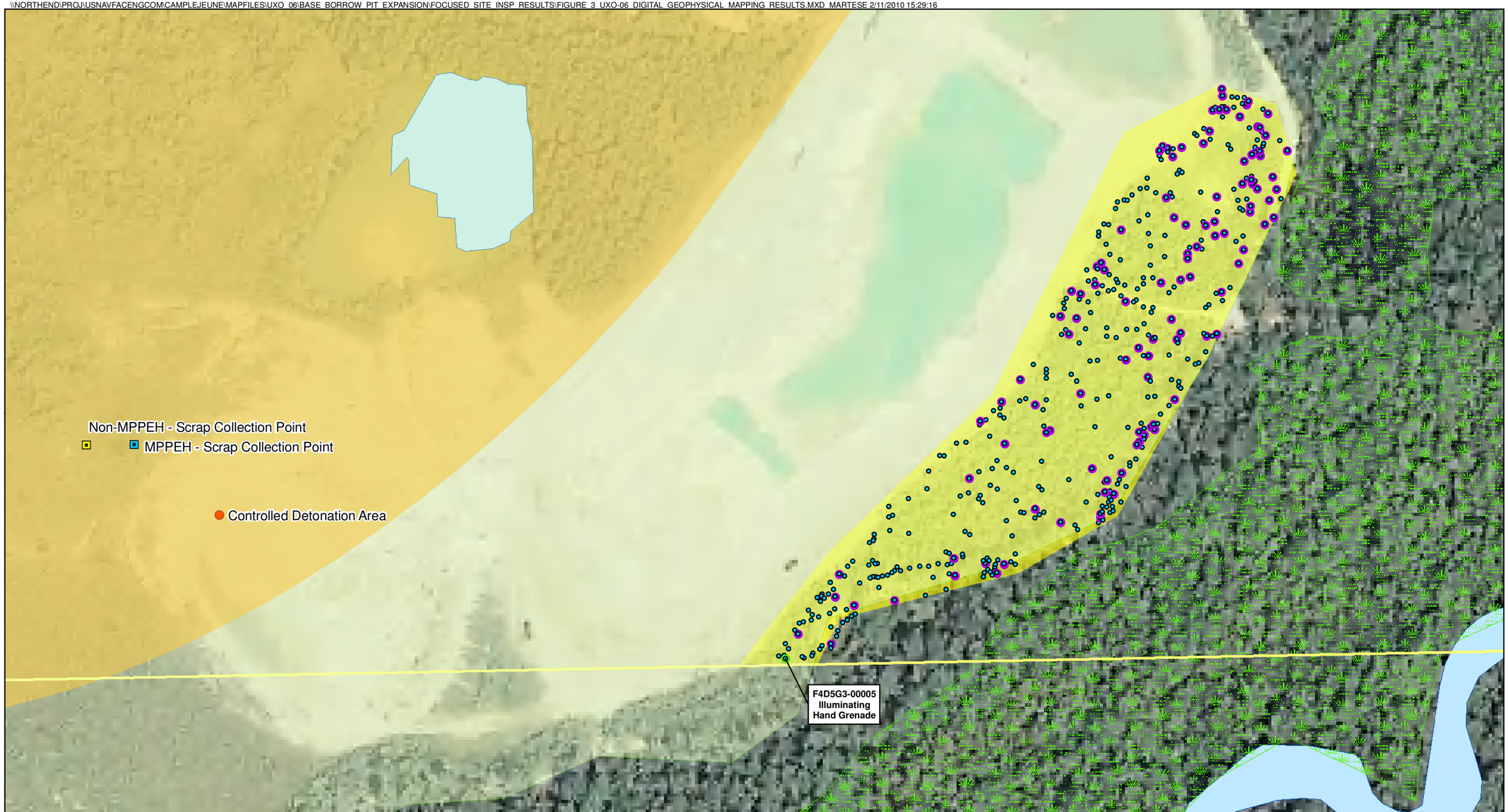
1 inch = 100 feet

Figure 2
Digital Geophysical Mapping Results
Site UXO-06 Borrow Pit Expansion Area
MCB CamLej
North Carolina

CH2MHILL

Generated by: *James Frank* Checked by: *Paul Weber*

\\NORTHEND\PROJ\USNAVFACENGCOM\CAMPLEJEUNE\MAPFILES\UXO_06\BASE_BORROW_PIT_EXPANSION\FOCUSED_SITE_INSP_RESULTS\FIGURE_3_UXO-06_DIGITAL_GEOPHYSICAL_MAPPING_RESULTS.MXD MARTESE 2/11/2010 15:29:16



Legend

- Investigated Anomaly
- Investigated Anomaly - MPPEH
- Investigated Anomaly MEC (Blown at CDA)
- Controlled Detonation Area
- MPPEH - Scrap Collection Point
- Non-MPPEH - Scrap Collection Point
- UXO-06 Site Boundary
- Phase 1 Borrow Pit Expansion Area
- Phase 2 Borrow Pit Expansion Area
- Surface Water Body
- Jurisdictional Wetlands
- Active Borrow Pit

N

0 50 100 200 Feet

1 inch = 100 feet

Figure 3
MEC Intrusive Investigation Results
Site UXO-06 Borrow Pit Expansion Area
MCB CamLej
North Carolina

CH2MHILL

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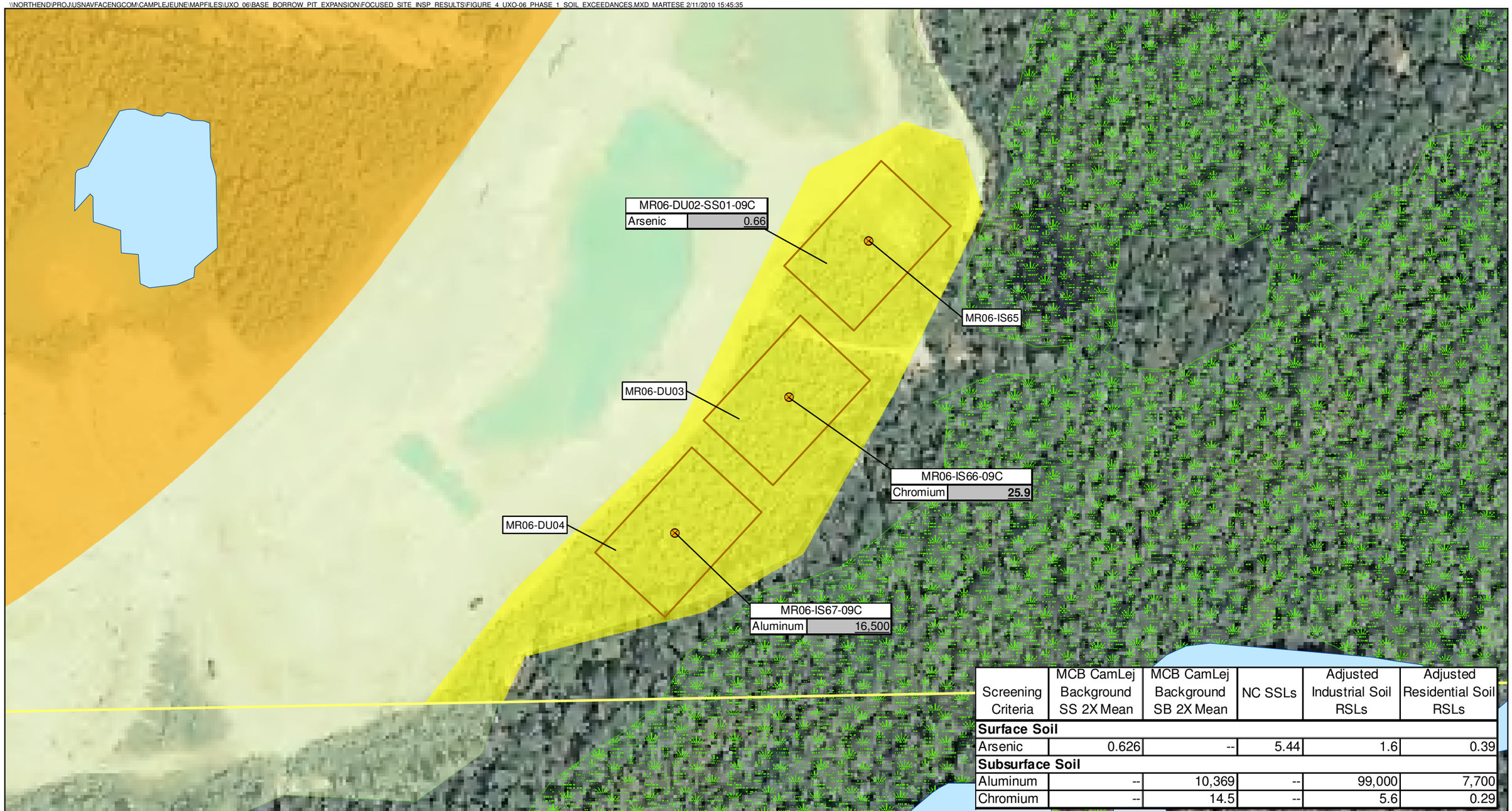
\\NORTHEND\PROJ\USNAVFACENGCOM\CAMPLEJEUNE\MAPFILES\UXO_06\BASE_BORROW_PIT_EXPANSION\FOCUSED_SITE_INSP_RESULTS\FIGURE_4_UXO-06_PHASE_1_SOIL_EXCEEDANCES.MXD MARTESE 2/11/2010 15:45:35



Screening Criteria	MCB CamLej Background SS 2X Mean	MCB CamLej Background SB 2X Mean	NC SSLs	Adjusted Industrial Soil RSLs	Adjusted Residential Soil RSLs
Surface Soil					
Arsenic	0.626	--	5.44	1.6	0.39
Subsurface Soil					
Aluminum	--	10,369	--	99,000	7,700
Chromium	--	14.5	--	5.6	0.29

Legend
- Decision Units for Surface Soils (30m x 46m)
- Subsurface/In Situ Soil Sample (SB/IS)
- UXO-06 Site Boundary
- Phase 1 Borrow Pit Expansion Area
- Phase 2 Borrow Pit Expansion Area
- Active Borrow Pit
- Surface Water Body
- Jurisdictional Wetlands

Notes:
- All measurements are in milligrams per kilogram (mg/kg)
- Data displayed for metals exceed both the Base background and an additional screening criteria
- Shading indicates exceedance of two times the mean base background criteria
- Bold border indicates exceedance of NC SSLs
- **Bold text indicates exceedance of Adjusted Industrial Soil RSLs**
- Underline indicates exceedance of Adjusted Residential Soil RSLs
- RSLs were adjusted for noncarcinogens to account for exposure to multiple constituents

N

0 50 100 200 Feet

1 inch = 100 feet

Figure 4
Phase 1 Soil Exceedances
Site UXO-06 Borrow Pit Expansion Area
MCB CamLej
North Carolina

CH2MHILL

Generated by: *James Frank* Checked by: *Paul Weber*

Attachment A

Boring Number: MR06-IS65

Client: NAVFAC
Project: UXO-06 Borrow Pit Expansion
Location: MCB Camp Lejeune
Project Number: 377812.XO.MS.01

Driller: Zebra Environmental
Drilling Method: DPT
Sampling Method: macro-core
Logged by: B. Propst
Start/Finish Date: 9/9/09; 1045/1130

Depth (ft)	Sample #	Sample Type	Recovery (inches)	SPT (6"-12"-6")	Soil Log	Soil Description	PID (ppm)	Comments
						Ground Surface		
0	DP-1	DP	60			**Silty Sand (SM)** Light gray, moist, loose, fine grained **Silty Sand (SM)** Tan, dry, loose, fine grained		PID readings collected from ambient air during drilling activities
						Clayey Sand (SC) Yellow-orange, dry, medium dense, fine grained	0.0	
5	DP-2	DP	42			**Sand (SP)** Tan, dry, loose, fine grained **No recovery** **Sand (SP)** Same as 4.5-5'	0.0	
10	DP-3	DP	48			**Sand (SP)** Orange, moist, loose, fine grained **No recovery** **Sand (SP)** Very light tan to white, moist, loose, fine grained	0.0	
15	DP-4	DP	48			**Sand (SP)** White with orange bands, dry to moist, loose to medium dense, fine grained **No recovery** **Sand (SP)** White with trace gray clay lenses (<5mm) between 17-19.5', moist, loose, fine grained	0.0	
20	DP-5	DP	60			**Silty Sand (SM)** Light gray with some brown, moist, loose to medium dense, fine grained **Sand (SP)** White, moist , medium dense to loose, fine grained	0.0	Collect soil sample MR06-IS65-20-22-09C at 20 ft bgs Terminate boring at 25 ft bgs
25								

Boring Number: MR06-IS66

Client: NAVFAC
Project: UXO-06 Borrow Pit Expansion
Location: MCB Camp Lejeune
Project Number: 377812.XO.MS.01

Driller: Zebra Environmental
Drilling Method: DPT
Sampling Method: macro-core
Logged by: B. Propst
Start/Finish Date: 9/9/09; 1300/1340

Depth (ft)	Sample #	Sample Type	Recovery (inches)	SPT (6"-12"-6")	Soil Log	Soil Description	PID (ppm)	Comments
						Ground Surface		
0	DP-1	DP	36			**Silty Sand (SM)** Brown-orange, dry, loose, fine grained		PID readings collected from ambient air during drilling activities
						Clayey Sand (SC) Yellow-orange, dry , medium dense, fine grained		
						Sand (SP) Tan, dry, loose, fine grained	0.0	
5						**No recovery**		
	DP-2	DP	42			**Silty Sand (SM)** Light tan, dry to moist, loose, fine grained	0.0	
						Sand (SP) Light tan, dry to moist, loose, fine grained		
10	DP-3	DP	60				0.0	
						Sand (SP) White, moist, loose to medium dense, fine grained		
15						**No recovery**		
	DP-4	DP	60			**Sand (SP)** Same as 13.5-18', becoming wet	0.0	
						Sand (SP) White with trace light gray lenses, moist, loose to medium dense, fine grained		
20						**Sand (SP)** White with orange bands, dry to moist, loose to medium dense, fine grained		
	DP-5	DP	48					Collect soil sample MR06-IS66-21-22-09C at 21 ft bgs
							0.0	Terminate boring at 25 ft bgs
25								

Boring Number: MR06-IS67

Client: NAVFAC
Project: UXO-06 Borrow Pit Expansion
Location: MCB Camp Lejeune
Project Number: 377812.XO.MS.01

Driller: Zebra Environmental
Drilling Method: DPT
Sampling Method: macro-core
Logged by: B. Propst
Start/Finish Date: 9/9/09; 1355/1420

Depth (ft)	Sample #	Sample Type	Recovery (inches)	SPT (6"-12"-6")	Soil Log	Soil Description	PID (ppm)	Comments
						Ground Surface		
0						**No recovery**		
						Sand (SP) Light gray, dry, loose, fine grained		PID readings collected from ambient air during drilling activities
	DP-1	DP	48			**Silty Sand (SM)** Tan, dry, medium dense, fine grained		
						Clayey Silty Sand (SC) Yellow-orange, dry, soft, fine grained	0.0	
5						**Sand (SP)** Tan, dry, loose, fine grained		
						Clayey Silty Sand (SC) Same as 4-5'	0.0	
	DP-2	DP	60			**Sand (SP)** Tan, moist, medium dense, fine grained		
						Silty Sand (SM) Tan, moist, loose, fine grained		Collect soil sample MR06-IS67-8-9-09C at 8 ft bgs
						Sand (SP) Tan, moist, loose, fine grained		
10						**Sand (SP)** Tan, wet, loose, fine grained		
	DP-3	DP	60			**Sandy Clay (CL)** Tan, moist, hard, fine grained	0.0	
						Sand (SP) White, dry to moist, loose, fine grained		
15								Terminate boring at 15 ft
20								